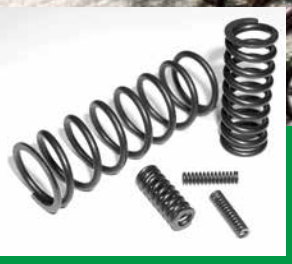

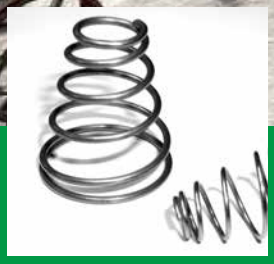

Compression Springs
PRODUCT CATALOG 19

SUPERIOR **SOLUTIONS**. SUPERIOR **SELECTION**.

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SPEC®
Stock Precision Engineered Components

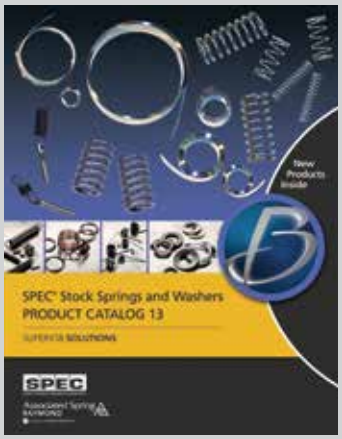
COMPRESSION SPRINGS

Associated Spring RAYMOND

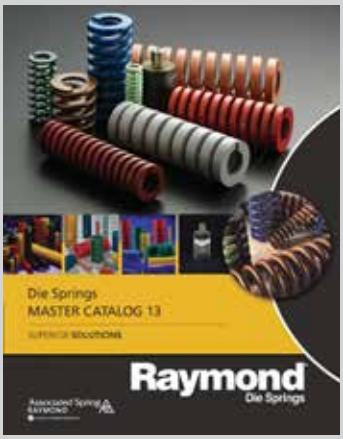
Associated Spring RAYMOND has a storied history of supplying leading edge innovators with solutions for over 135 years. Our engineering team today builds on the knowledge and expertise of supplying both traditional and cutting edge industries with solutions for motion control, pressure & vibration, among others. Additionally, we can manufacture to your print (special order component) if you have already designed a solution or provide you with a standard product from our superior catalog of options.

For information on our policies or to learn more about design applications and industry terminology, visit **WWW.ASRAYMOND.COM/FAQ**

In addition to the products described in this catalog, Associated Spring RAYMOND – a worldwide leader in the design, manufacture and sale of springs – also offers a full line of struts, stock springs, washers, hardware and tool & die components.



SPEC Stock Springs & Washers Product Catalog



Die Springs Master Catalog

SPD Master Hardware Catalog & Technical Reference

Associated Spring
RAYMOND
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Raymond® SPEC® Stock Precision Engineered Components CloverDome
m-Struts® UNMATCHED PERFORMANCE SPD n-Struts® FLUID PERFORMANCE EVERYTIME

Precision Catalog and Custom Design Solutions

RAYMOND® DIE SPRINGS

Raymond® Die Springs & Gas Springs provide the Tool & Die and OEM industries with quality parts without compromise. Built to the highest standards, our springs provide competitive advantage for our customers.

MECHANICAL WIRE SPRINGS & WIRE FORMS

SPEC® Mechanical Wire Springs are coiled spring products in a variety of cross sections and forms. When comparing coil springs to flat/stamped springs, they offer increased travel, but with lower loads.

FLAT SPRING SOLUTIONS

SPEC® offers a comprehensive range of flat spring products and custom solutions for limited space/high force applications. DIN 2093, Belleville, Clover® Dome, curved, finger, wave, and multi-wave type springs are offered in a variety of materials and finishes.

RETAINING RINGS

SPEC® Retaining Rings hold shafts in place and springs in bores. Common types for both internal and external fixing are offered. Our standard retaining rings are offered in plain, black oil and zinc plated finishes.

COMPOSITE SPRINGS/SPECIALTY SPRINGS

SPEC® Composite Springs, offered in various configurations and durometers, provide a solution where corrosion, vibration and/or magnetism prevent the use of metallic materials. SPEC® specialty springs are offered in standard type stocked parts, but have infinite possibilities through our engineered solution services.

NITROGEN GAS SPRINGS (N-STRUTS®)

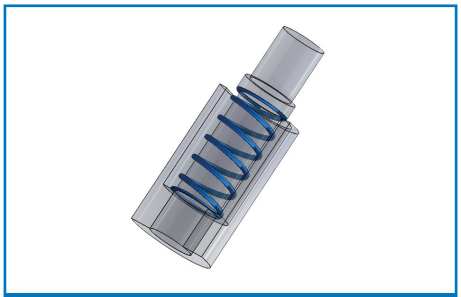
SPD n-Struts® are nitrogen gas struts engineered to deliver optimal performance in various applications & environments. Standard parts are offered in coated steel, stainless steel and various locking types available in the catalog. Also, our engineers can help design & manufacture a custom solution.

MECHANICAL STRUTS (M-STRUTS®)

Mechanical struts (m-Struts®) offer a seal-less, gas-less, and oil-less solution for strut applications. Catalog Struts are offered in a variety of configurations and materials to suit standard needs. In addition, our Special Order Department can engineer solutions beyond the standard catalog offering.

ENGINEERED HARDWARE

SPD standard selection of Engineered Hardware encompasses a variety of product groups including drawer slides, hinges, handles, latches and locks. SPD hardware is offered in a multitude of materials and finishes and can be customized through our Special Order Department to fit your custom n-Strut or m-Strut needs.



CUSTOM ENGINEERED SOLUTIONS

Our world-class capabilities and design expertise enable us to engineer a multitude of custom solutions for integrated systems, applications and engineered components. Our expertise is in systems that provide counter-balance, isolation, rotation and translation.

Visit us at ASRAYMOND.COM

Associated Spring RAYMOND
370 W. Dussel Drive-Suite A
Maumee, OH 43537-1604
springsales@asraymond.com
800.872.7732

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INTRODUCING the Largest Selection of Compression Springs Available Anywhere!

- Over 34,000 Standard Catalog Compression Spring Options
- Nearly Every Feasible Option from .047 to 2.82 OD
- Reduced Cost and Lead Time Compared to Custom Designs

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FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

COMPRESSION SPRINGS

Stock sizes in music wire and stainless steel
Associated Spring Raymond provides design engineers, draftsmen, production and maintenance departments with a broad variety of precision-engineered helical compression springs. They are reliable, inexpensive and efficient – the right combination for general-purpose use throughout industry.

Material
Part numbers starting with **C** in the following pages:
Music wire: ASTM A228 **or** AMS 5112
Stainless steel: Type 302 per ASTM A313 **or** AMS 5688 spring temper (Chemical and Physical only)

Part numbers starting with **D** in the following pages:
Music wire: DIN 17223 **or** EN 10270-1 **or** JIS G4314 SWP-A/B **or** AMS 5112
Stainless steel: Type 301, 302 **or** 304 per DIN 17224 **or** EN 10270-3 **or** JIS G4314 SUS 302/304 **or** AMS 5688 spring temper (chemical and physical only)

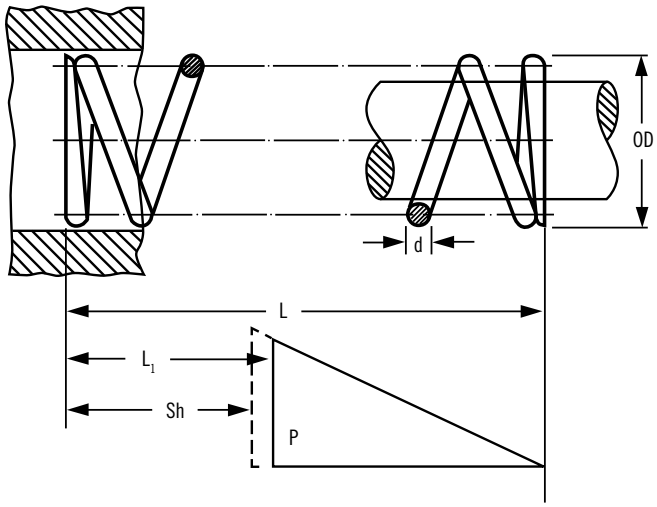
Music wire will be furnished unless stainless steel is specified.
When inquiring or ordering, please use letter "**M**" or letter "**S**" as suffix to designate music wire or stainless steel, respectively.

Music wire springs are not recommended for applications where the temperature exceeds 121 degrees C. (250 degrees F.). Stainless steel is not recommended above 260 degrees C. (500 degrees F.).

Stainless steel is **slightly magnetic** due to cold working during manufacturing. Stainless steel springs may have a slight residue of nickel on the surface of the wire. This is normal and will not affect the function of the part.

Wire diameter is prior to forming.
No charge for certificate of compliance when requested; certificate of chemical analysis available only for part numbers starting with **C** in the following pages (an additional charge applies).

Coil Direction (helix)
Right hand. Coil count is for reference only.



Free Length
Free length is reference only.

Ends
Parts are squared and ground unless denoted with with an *.
Parts ending with an * are squared and not ground.
However, springs with wire diameter ≤ 0.020" (.5mm) may be squared, not ground.

Tolerances
Part numbers starting with **C** in the following pages:

O.D. (English)	O.D. (Metric)
0.057 to 0.119" +/- 0.003"	1.45 to 3.02 mm +/- 0.08 mm
0.120 to 0.240" +/- 0.005"	3.05 to 6.10 mm +/- 0.13 mm
0.241 to 0.500" +/- 0.008"	6.12 to 12.70 mm +/- 0.20 mm
0.501 to 1.000" +/- 0.015"	12.73 to 25.40 mm +/- 0.38 mm
1.001 to 1.225" +/- 0.020"	25.43 to 31.12 mm +/- 0.51 mm
1.226 to 1.460" +/- 0.030"	31.14 to 37.08 mm +/- 0.76 mm
1.461 to 2.000" +/- 0.040"	37.11 to 50.80 mm +/- 1.02 mm

Part numbers starting with **D** in the following pages:
All dimensions, loads and rates listed are to DIN 2095 (Grade 2).

Loads & Spring Rate
Load and rate values are shown for both music wire and stainless steel in their respective columns.

Load P at L_1 and spring rate R are +/- 10.0% – load at any other point is for reference only.

For normal service, springs should not be compressed below L_1 (may take set beyond L_1). Load values at lengths other than L_1 can be approximated by multiplying the proposed deflection by the rate R. P = (L – Lx) x R where Lx is the new load height. Load at Lx should be reference only. Contact our engineering department if more stringent requirements are needed.

Surface Finish
Music wire: oil
Stainless steel: Only part numbers starting with C on the following pages are passivated. All others are plain wire.
Special finishes available upon request. See page 311 for alternative finishes.

Packaging
Parts are bulk-packed. Due to physical characteristics, tangling can occur during transit on wire sizes under .035" (.89mm). Please inquire about special packaging when ordering.

OD= Outside diameter
d = Wire diameter
Sh = Approx Solid Height
L = Free length (reference use only)
L_1 = Loaded length (minimum working length)
P = Load at L_1

SPEC Compression springs are also available in various materials such as:
- Hard Drawn Steel
- Oil Tempered Wire
- Chrome Vanadium
- Chrome Silicon
- Phosphor Bronze
- Inconel®
- Monel®
- Beryllium Copper
- Elgiloy®
- Zinc Coated Music Wire

Part numbers in bold represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D10100*	0.047	1.20	0.008	0.20	0.079	2.00	0.055	1.40	0.051	1.30	0.58	2.57	28.06	4.91
D10110*	0.047	1.20	0.008	0.20	0.106	2.70	0.075	1.90	0.067	1.70	0.58	2.57	17.83	3.12
D10120*	0.047	1.20	0.008	0.20	0.154	3.90	0.102	2.60	0.091	2.30	0.58	2.57	11.60	2.03
D10130*	0.047	1.20	0.008	0.20	0.217	5.50	0.142	3.60	0.122	3.10	0.58	2.57	7.89	1.38
D10140*	0.047	1.20	0.008	0.20	0.307	7.80	0.197	5.00	0.169	4.30	0.58	2.57	5.26	0.92
D10150*	0.055	1.40	0.008	0.20	0.091	2.30	0.059	1.50	0.051	1.30	0.51	2.27	16.17	2.83
D10160*	0.055	1.40	0.008	0.20	0.126	3.20	0.075	1.90	0.067	1.70	0.51	2.27	10.34	1.81
D10170*	0.055	1.40	0.008	0.20	0.181	4.60	0.106	2.70	0.091	2.30	0.51	2.27	6.63	1.16
D10180*	0.055	1.40	0.008	0.20	0.256	6.50	0.146	3.70	0.122	3.10	0.51	2.27	4.57	0.80
D10190*	0.055	1.40	0.008	0.20	0.366	9.30	0.201	5.10	0.169	4.30	0.51	2.27	3.09	0.54
C0057-006-0120-M*	0.057	1.45	0.006	0.15	0.120	3.05	0.059	1.50	0.044	1.12	0.23	1.02	3.80	0.67
C0057-006-0190-M*	0.057	1.45	0.006	0.15	0.190	4.83	0.085	2.16	0.060	1.52	0.23	1.02	2.20	0.39
C0057-006-0250-M*	0.057	1.45	0.006	0.15	0.250	6.35	0.106	2.69	0.075	1.91	0.23	1.02	1.60	0.28
C0057-006-0310-M*	0.057	1.45	0.006	0.15	0.310	7.87	0.133	3.38	0.088	2.24	0.23	1.02	1.30	0.23
C0057-006-0380-M*	0.057	1.45	0.006	0.15	0.380	9.65	0.171	4.34	0.100	2.54	0.23	1.02	1.10	0.19
C0057-006-0440-M*	0.057	1.45	0.006	0.15	0.440	11.18	0.184	4.67	0.118	3.00	0.23	1.02	0.90	0.16
C0057-006-0500-M*	0.057	1.45	0.006	0.15	0.500	12.70	0.213	5.41	0.130	3.30	0.23	1.02	0.80	0.14
C0057-006-0560-M*	0.057	1.45	0.006	0.15	0.560	14.22	0.273	6.93	0.129	3.28	0.23	1.02	0.80	0.14
C0057-006-0620-M*	0.057	1.45	0.006	0.15	0.620	15.75	0.291	7.39	0.142	3.61	0.23	1.02	0.70	0.12
C0057-007-0120-M*	0.057	1.45	0.007	0.18	0.120	3.05	0.066	1.68	0.053	1.35	0.38	1.69	7.00	1.23
C0057-007-0190-M*	0.057	1.45	0.007	0.18	0.190	4.83	0.095	2.41	0.074	1.88	0.38	1.69	4.00	0.70
C0057-007-0250-M*	0.057	1.45	0.007	0.18	0.250	6.35	0.127	3.23	0.089	2.26	0.38	1.69	3.10	0.54
C0057-007-0310-M*	0.057	1.45	0.007	0.18	0.310	7.87	0.152	3.86	0.108	2.74	0.38	1.69	2.40	0.42
C0057-007-0380-M*	0.057	1.45	0.007	0.18	0.380	9.65	0.180	4.57	0.130	3.30	0.38	1.69	1.90	0.33
C0057-007-0440-M*	0.057	1.45	0.007	0.18	0.440	11.18	0.216	5.49	0.143	3.63	0.38	1.69	1.70	0.30
C0057-007-0500-M*	0.057	1.45	0.007	0.18	0.500	12.70	0.247	6.27	0.158	4.01	0.38	1.69	1.50	0.26
C0057-007-0560-M*	0.057	1.45	0.007	0.18	0.560	14.22	0.266	6.76	0.179	4.55	0.38	1.69	1.30	0.23
C0057-007-0620-M*	0.057	1.45	0.007	0.18	0.620	15.75	0.303	7.70	0.188	4.78	0.38	1.69	1.20	0.21
C0057-008-0120-M*	0.057	1.45	0.008	0.20	0.120	3.05	0.072	1.83	0.061	1.55	0.60	2.67	12.50	2.19
C0057-008-0190-M*	0.057	1.45	0.008	0.20	0.190	4.83	0.107	2.72	0.086	2.18	0.60	2.67	7.20	1.26
C0057-008-0250-M*	0.057	1.45	0.008	0.20	0.250	6.35	0.137	3.48	0.106	2.69	0.60	2.67	5.30	0.93
C0057-008-0310-M*	0.057	1.45	0.008	0.20	0.310	7.87	0.167	4.24	0.127	3.23	0.60	2.67	4.20	0.74
C0057-008-0380-M*	0.057	1.45	0.008	0.20	0.380	9.65	0.203	5.16	0.150	3.81	0.60	2.67	3.40	0.60
C0057-008-0440-M*	0.057	1.45	0.008	0.20	0.440	11.18	0.233	5.92	0.172	4.37	0.60	2.67	2.90	0.51
C0057-008-0500-M*	0.057	1.45	0.008	0.20	0.500	12.70	0.260	6.60	0.195	4.95	0.60	2.67	2.50	0.44
C0057-008-0560-M*	0.057	1.45	0.008	0.20	0.560	14.22	0.287	7.29	0.217	5.51	0.60	2.67	2.20	0.39
C0057-008-0620-M*	0.057	1.45	0.008	0.20	0.620	15.75	0.320	8.13	0.224	5.69	0.60	2.67	2.00	0.35
D10350*	0.057	1.45	0.010	0.25	0.094	2.40	0.071	1.80	0.064	1.63	0.92	4.11	39.71	6.95
D10360*	0.057	1.45	0.010	0.25	0.130	3.30	0.094	2.40	0.084	2.13	0.92	4.11	25.26	4.42
D10370*	0.057	1.45	0.010	0.25	0.185	4.70	0.130	3.30	0.113	2.88	0.92	4.11	16.34	2.86
D10380*	0.057	1.45	0.010	0.25	0.260	6.60	0.177	4.50	0.153	3.88	0.92	4.11	11.09	1.94
D10390*	0.057	1.45	0.010	0.25	0.370	9.40	0.248	6.30	0.212	5.38	0.92	4.11	7.54	1.32
C0059-010-0125-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.125**	**3.18**	**0.088**	**2.22**	**0.085**	**2.16**	**0.90**	**4.00**	**23.99**	**4.20**
C0059-010-0188-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.188**	**4.76**	**0.125**	**3.19**	**0.120**	**3.05**	**0.90**	**4.00**	**14.47**	**2.53**
C0059-010-0250-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.250**	**6.35**	**0.163**	**4.15**	**0.155**	**3.95**	**0.90**	**4.00**	**10.36**	**1.81**
C0059-010-0313-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.313**	**7.94**	**0.201**	**5.11**	**0.191**	**4.84**	**0.90**	**4.00**	**8.07**	**1.41**
C0059-010-0375-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.375**	**9.53**	**0.239**	**6.07**	**0.226**	**5.73**	**0.90**	**4.00**	**6.61**	**1.16**
C0059-010-0438-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.438**	**11.11**	**0.277**	**7.03**	**0.261**	**6.63**	**0.90**	**4.00**	**5.59**	**0.98**
C0059-010-0500-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.500**	**12.70**	**0.315**	**7.99**	**0.296**	**7.52**	**0.90**	**4.00**	**4.85**	**0.85**
C0059-010-0563-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.563**	**14.29**	**0.353**	**8.96**	**0.331**	**8.42**	**0.90**	**4.00**	**4.28**	**0.75**
C0059-010-0625-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.625**	**15.88**	**0.390**	**9.92**	**0.366**	**9.31**	**0.90**	**4.00**	**3.83**	**0.67**
C0059-010-0688-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.688**	**17.46**	**0.428**	**10.88**	**0.402**	**10.20**	**0.90**	**4.00**	**3.47**	**0.61**
C0059-010-0750-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.750**	**19.05**	**0.466**	**11.84**	**0.437**	**11.10**	**0.90**	**4.00**	**3.17**	**0.55**
C0059-010-0813-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.813**	**20.64**	**0.504**	**12.80**	**0.472**	**11.99**	**0.90**	**4.00**	**2.91**	**0.51**
C0059-010-0875-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.875**	**22.23**	**0.542**	**13.76**	**0.507**	**12.88**	**0.90**	**4.00**	**2.70**	**0.47**
C0059-010-0938-M*	**0.059**	**1.50**	**0.010**	**0.25**	**0.938**	**23.81**	**0.580**	**14.73**	**0.542**	**13.78**	**0.90**	**4.00**	**2.51**	**0.44**
C0063-010-0125-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.125**	**3.18**	**0.089**	**2.25**	**0.073**	**1.85**	**0.89**	**3.95**	**24.42**	**4.27**
C0063-010-0188-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.188**	**4.78**	**0.128**	**3.24**	**0.101**	**2.55**	**0.89**	**3.95**	**14.68**	**2.57**
C0063-010-0250-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.250**	**6.35**	**0.166**	**4.21**	**0.128**	**3.24**	**0.89**	**3.95**	**10.54**	**1.84**
C0063-010-0313-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.313**	**7.95**	**0.205**	**5.20**	**0.155**	**3.94**	**0.89**	**3.95**	**8.20**	**1.44**
C0063-010-0375-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.375**	**9.53**	**0.243**	**6.17**	**0.182**	**4.63**	**0.89**	**3.95**	**6.72**	**1.18**
C0063-010-0438-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.438**	**11.13**	**0.282**	**7.17**	**0.210**	**5.33**	**0.89**	**3.95**	**5.69**	**1.00**
C0063-010-0500-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.500**	**12.70**	**0.320**	**8.14**	**0.237**	**6.01**	**0.89**	**3.95**	**4.94**	**0.86**
C0063-010-0563-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.563**	**14.30**	**0.359**	**9.12**	**0.265**	**6.72**	**0.89**	**3.95**	**4.35**	**0.76**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D20100*	0.055	1.40	0.48	2.14	23.37	4.09
D20110*	0.075	1.90	0.48	2.14	14.86	2.60
D20120*	0.102	2.60	0.48	2.14	9.66	1.69
D20130*	0.142	3.60	0.48	2.14	6.57	1.15
D20140*	0.197	5.00	0.48	2.14	4.40	0.77
D20150*	0.059	1.50	0.43	1.89	13.49	2.36
D20160*	0.075	1.90	0.43	1.89	8.63	1.51
D20170*	0.106	2.70	0.43	1.89	5.54	0.97
D20180*	0.146	3.70	0.43	1.89	3.83	0.67
D20190*	0.201	5.10	0.43	1.89	2.57	0.45
C0057-006-0120-S*	0.076	1.94	0.14	0.62	3.17	0.55
C0057-006-0190-S*	0.115	2.91	0.14	0.62	1.83	0.32
C0057-006-0250-S*	0.146	3.71	0.14	0.62	1.33	0.23
C0057-006-0310-S*	0.182	4.63	0.14	0.62	1.08	0.19
C0057-006-0380-S*	0.229	5.82	0.14	0.62	0.92	0.16
C0057-006-0440-S*	0.255	6.49	0.14	0.62	0.75	0.13
C0057-006-0500-S*	0.292	7.43	0.14	0.62	0.67	0.12
C0057-006-0560-S*	0.352	8.95	0.14	0.62	0.67	0.12
C0057-006-0620-S*	0.383	9.72	0.14	0.62	0.58	0.10
C0057-007-0120-S*	0.083	2.10	0.22	0.97	5.83	1.02
C0057-007-0190-S*	0.125	3.17	0.22	0.97	3.33	0.58
C0057-007-0250-S*	0.166	4.21	0.22	0.97	2.58	0.45
C0057-007-0310-S*	0.201	5.11	0.22	0.97	2.00	0.35
C0057-007-0380-S*	0.243	6.16	0.22	0.97	1.58	0.28
C0057-007-0440-S*	0.286	7.28	0.22	0.97	1.42	0.25
C0057-007-0500-S*	0.326	8.28	0.22	0.97	1.25	0.22
C0057-007-0560-S*	0.359	9.12	0.22	0.97	1.08	0.19
C0057-007-0620-S*	0.403	10.22	0.22	0.97	1.00	0.18
C0057-008-0120-S*	0.089	2.27	0.32	1.43	10.41	1.82
C0057-008-0190-S*	0.136	3.47	0.32	1.43	6.00	1.05
C0057-008-0250-S*	0.177	4.50	0.32	1.43	4.41	0.77
C0057-008-0310-S*	0.218	5.54	0.32	1.43	3.50	0.61
C0057-008-0380-S*	0.267	6.77	0.32	1.43	2.83	0.50
C0057-008-0440-S*	0.307	7.80	0.32	1.43	2.42	0.42
C0057-008-0500-S*	0.346	8.79	0.32	1.43	2.08	0.36
C0057-008-0560-S*	0.385	9.78	0.32	1.43	1.83	0.32
C0057-008-0620-S*	0.427	10.86	0.32	1.43	1.67	0.29
D20350*	0.071	1.80	0.77	3.43	33.09	5.79
D20360*	0.094	2.40	0.77	3.43	21.03	3.68
D20370*	0.130	3.30	0.77	3.43	13.60	2.38
D20380*	0.177	4.50	0.77	3.43	9.26	1.62
D20390*	0.248	6.30	0.77	3.43	6.29	1.10
C0059-010-0125-S*	**0.093**	**2.35**	**0.68**	**3.01**	**20.86**	**3.65**
C0059-010-0188-S*	**0.134**	**3.40**	**0.68**	**3.01**	**12.58**	**2.20**
C0059-010-0250-S*	**0.175**	**4.44**	**0.68**	**3.01**	**9.01**	**1.58**
C0059-010-0313-S*	**0.216**	**5.49**	**0.68**	**3.01**	**7.01**	**1.23**
C0059-010-0375-S*	**0.257**	**6.54**	**0.68**	**3.01**	**5.74**	**1.00**
C0059-010-0438-S*	**0.299**	**7.58**	**0.68**	**3.01**	**4.86**	**0.85**
C0059-010-0500-S*	**0.340**	**8.63**	**0.68**	**3.01**	**4.22**	**0.74**
C0059-010-0563-S*	**0.381**	**9.68**	**0.68**	**3.01**	**3.72**	**0.65**
C0059-010-0625-S*	**0.422**	**10.72**	**0.68**	**3.01**	**3.33**	**0.58**
C0059-010-0688-S*	**0.463**	**11.77**	**0.68**	**3.01**	**3.01**	**0.53**
C0059-010-0750-S*	**0.504**	**12.81**	**0.68**	**3.01**	**2.75**	**0.48**
C0059-010-0813-S*	**0.546**	**13.86**	**0.68**	**3.01**	**2.53**	**0.44**
C0059-010-0875-S*	**0.587**	**14.91**	**0.68**	**3.01**	**2.34**	**0.41**
C0059-010-0938-S*	**0.628**	**15.95**	**0.68**	**3.01**	**2.18**	**0.38**
C0063-010-0125-S*	**0.094**	**2.38**	**0.64**	**2.84**	**20.34**	**3.56**
C0063-010-0188-S*	**0.136**	**3.45**	**0.64**	**2.84**	**12.23**	**2.14**
C0063-010-0250-S*	**0.177**	**4.50**	**0.64**	**2.84**	**8.78**	**1.54**
C0063-010-0313-S*	**0.220**	**5.58**	**0.64**	**2.84**	**6.83**	**1.20**
C0063-010-0375-S*	**0.261**	**6.63**	**0.64**	**2.84**	**5.60**	**0.98**
C0063-010-0438-S*	**0.303**	**7.71**	**0.64**	**2.84**	**4.74**	**0.83**
C0063-010-0500-S*	**0.345**	**8.76**	**0.64**	**2.84**	**4.12**	**0.72**
C0063-010-0563-S*	**0.387**	**9.83**	**0.64**	**2.84**	**3.62**	**0.63**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0063-010-0625-M*	**0.063**	**1.60**	**0.010**	**0.25**	**0.625**	**15.88**	**0.398**	**10.10**	**0.291**	**7.40**	**0.89**	**3.95**	**3.90**	**0.68**	**C0063-010-0625-S***	**0.429**	**10.89**	**0.64**	**2.84**	**3.25**	**0.57**
D10200*	0.071	1.80	0.008	0.20	0.118	3.00	0.059	1.50	0.051	1.30	0.40	1.80	6.86	1.20	D20200*	0.059	1.50	0.34	1.50	5.71	1.00
D10210*	0.071	1.80	0.008	0.20	0.173	4.40	0.079	2.00	0.067	1.70	0.40	1.80	4.40	0.77	D20210*	0.079	2.00	0.34	1.50	3.66	0.64
D10220*	0.071	1.80	0.008	0.20	0.252	6.40	0.110	2.80	0.091	2.30	0.40	1.80	2.80	0.49	D20220*	0.110	2.80	0.34	1.50	2.34	0.41
D10230*	0.071	1.80	0.008	0.20	0.362	9.20	0.150	3.80	0.122	3.10	0.40	1.80	1.94	0.34	D20230*	0.150	3.80	0.34	1.50	1.60	0.28
D10240*	0.071	1.80	0.008	0.20	0.524	13.30	0.209	5.30	0.169	4.30	0.40	1.80	1.31	0.23	D20240*	0.209	5.30	0.34	1.50	1.09	0.19
D10400*	0.073	1.85	0.010	0.25	0.118	3.00	0.071	1.80	0.064	1.63	0.76	3.37	16.74	2.93	D20400*	0.071	1.80	0.63	2.81	13.94	2.44
D10410*	0.073	1.85	0.010	0.25	0.169	4.30	0.094	2.40	0.084	2.13	0.76	3.37	10.63	1.86	D20410*	0.094	2.40	0.63	2.81	8.86	1.55
D10420*	0.073	1.85	0.010	0.25	0.244	6.20	0.134	3.40	0.113	2.88	0.76	3.37	6.86	1.20	D20420*	0.134	3.40	0.63	2.81	5.71	1.00
D10430*	0.073	1.85	0.010	0.25	0.343	8.70	0.181	4.60	0.153	3.88	0.76	3.37	4.74	0.83	D20430*	0.181	4.60	0.63	2.81	3.94	0.69
D10440*	0.073	1.85	0.010	0.25	0.492	12.50	0.256	6.50	0.212	5.38	0.76	3.37	3.14	0.55	D20440*	0.256	6.50	0.63	2.81	2.63	0.46
D10600*	0.076	1.92	0.013	0.32	0.122	3.10	0.091	2.30	0.082	2.08	1.48	6.57	44.91	7.86	D20600*	0.091	2.30	1.23	5.47	37.43	6.55
D10610*	0.076	1.92	0.013	0.32	0.173	4.40	0.122	3.10	0.107	2.72	1.48	6.57	28.57	5.00	D20610*	0.122	3.10	1.23	5.47	23.83	4.17
D10620*	0.076	1.92	0.013	0.32	0.248	6.30	0.165	4.20	0.145	3.68	1.48	6.57	18.51	3.24	D20620*	0.165	4.20	1.23	5.47	15.43	2.70
D10630*	0.076	1.92	0.013	0.32	0.343	8.70	0.228	5.80	0.195	4.96	1.48	6.57	12.57	2.20	D20630*	0.228	5.80	1.23	5.47	10.46	1.83
D10640*	0.076	1.92	0.013	0.32	0.492	12.50	0.319	8.10	0.271	6.88	1.48	6.57	8.51	1.49	D20640*	0.319	8.10	1.23	5.47	7.09	1.24
D10250*	0.087	2.20	0.008	0.20	0.157	4.00	0.059	1.50	0.051	1.30	0.33	1.49	3.49	0.61	D20250*	0.059	1.50	0.28	1.24	2.91	0.51
D10260*	0.087	2.20	0.008	0.20	0.232	5.90	0.083	2.10	0.067	1.70	0.33	1.49	2.17	0.38	D20260*	0.083	2.10	0.28	1.24	1.83	0.32
D10270*	0.087	2.20	0.008	0.20	0.343	8.70	0.114	2.90	0.091	2.30	0.33	1.49	1.43	0.25	D20270*	0.114	2.90	0.28	1.24	1.20	0.21
D10280*	0.087	2.20	0.008	0.20	0.496	12.60	0.157	4.00	0.122	3.10	0.33	1.49	1.03	0.18	D20280*	0.157	4.00	0.28	1.24	0.86	0.15
D10290*	0.087	2.20	0.008	0.20	0.720	18.30	0.220	5.60	0.169	4.30	0.33	1.49	0.69	0.12	D20290*	0.220	5.60	0.28	1.24	0.57	0.10
C0088-008-0120-M*	0.088	2.24	0.008	0.20	0.120	3.05	0.060	1.52	0.043	1.09	0.38	1.69	6.30	1.10	C0088-008-0120-S*	0.079	2.01	0.21	0.95	5.25	0.92
C0088-008-0190-M*	0.088	2.24	0.008	0.20	0.190	4.83	0.081	2.06	0.055	1.40	0.38	1.69	3.50	0.61	C0088-008-0190-S*	0.117	2.96	0.21	0.95	2.92	0.51
C0088-008-0250-M*	0.088	2.24	0.008	0.20	0.250	6.35	0.104	2.64	0.064	1.63	0.38	1.69	2.60	0.46	C0088-008-0250-S*	0.151	3.84	0.21	0.95	2.17	0.38
C0088-008-0310-M*	0.088	2.24	0.008	0.20	0.310	7.87	0.129	3.28	0.073	1.85	0.38	1.69	2.10	0.37	C0088-008-0310-S*	0.188	4.77	0.21	0.95	1.75	0.31
C0088-008-0380-M*	0.088	2.24	0.008	0.20	0.380	9.65	0.156	3.96	0.084	2.13	0.38	1.69	1.70	0.30	C0088-008-0380-S*	0.229	5.81	0.21	0.95	1.42	0.25
C0088-008-0440-M*	0.088	2.24	0.008	0.20	0.440	11.18	0.187	4.75	0.092	2.34	0.38	1.69	1.50	0.26	C0088-008-0440-S*	0.269	6.82	0.21	0.95	1.25	0.22
C0088-008-0500-M*	0.088	2.24	0.008	0.20	0.500	12.70	0.208	5.28	0.101	2.57	0.38	1.69	1.30	0.23	C0088-008-0500-S*	0.302	7.68	0.21	0.95	1.08	0.19
C0088-008-0560-M*	0.088	2.24	0.008	0.20	0.560	14.22	0.215	5.46	0.115	2.92	0.38	1.69	1.10	0.19	C0088-008-0560-S*	0.326	8.29	0.21	0.95	0.92	0.16
C0088-008-0620-M*	0.088	2.24	0.008	0.20	0.620	15.75	0.240	6.10	0.119	3.02	0.38	1.69	1.00	0.18	C0088-008-0620-S*	0.363	9.22	0.21	0.95	0.83	0.15
C0088-010-0120-M*	0.088	2.24	0.010	0.25	0.120	3.05	0.071	1.80	0.060	1.52	0.60	2.67	12.30	2.15	C0088-010-0120-S*	0.081	2.05	0.40	1.80	10.25	1.79
C0088-010-0190-M*	0.088	2.24	0.010	0.25	0.190	4.83	0.102	2.59	0.081	2.06	0.60	2.67	6.80	1.19	C0088-010-0190-S*	0.119	3.01	0.40	1.80	5.66	0.99
C0088-010-0250-M*	0.088	2.24	0.010	0.25	0.250	6.35	0.130	3.30	0.098	2.49	0.60	2.67	5.00	0.88	C0088-010-0250-S*	0.153	3.89	0.40	1.80	4.17	0.73
C0088-010-0310-M*	0.088	2.24	0.010	0.25	0.310	7.87	0.152	3.86	0.118	3.00	0.60	2.67	3.80	0.67	C0088-010-0310-S*	0.182	4.63	0.40	1.80	3.17	0.55
C0088-010-0380-M*	0.088	2.24	0.010	0.25	0.380	9.65	0.198	5.03	0.130	3.30	0.60	2.67	3.30	0.58	C0088-010-0380-S*	0.233	5.92	0.40	1.80	2.75	0.48
C0088-010-0440-M*	0.088	2.24	0.010	0.25	0.440	11.18	0.226	5.74	0.147	3.73	0.60	2.67	2.80	0.49	C0088-010-0440-S*	0.267	6.78	0.40	1.80	2.33	0.41
C0088-010-0500-M*	0.088	2.24	0.010	0.25	0.500	12.70	0.239	6.07	0.172	4.37	0.60	2.67	2.30	0.40	C0088-010-0500-S*	0.289	7.35	0.40	1.80	1.92	0.34
C0088-010-0560-M*	0.088	2.24	0.010	0.25	0.560	14.22	0.274	6.96	0.185	4.70	0.60	2.67	2.10	0.37	C0088-010-0560-S*	0.329	8.36	0.40	1.80	1.75	0.31
C0088-010-0620-M*	0.088	2.24	0.010	0.25	0.620	15.75	0.304	7.72	0.201	5.11	0.60	2.67	1.90	0.33	C0088-010-0620-S*	0.365	9.27	0.40	1.80	1.58	0.28
C0088-010-0690-M*	0.088	2.24	0.010	0.25	0.690	17.53	0.337	8.56	0.213	5.41	0.60	2.67	1.70	0.30	C0088-010-0690-S*	0.405	10.28	0.40	1.80	1.42	0.25
C0088-010-0750-M*	0.088	2.24	0.010	0.25	0.750	19.05	0.375	9.53	0.228	5.79	0.60	2.67	1.60	0.28	C0088-010-0750-S*	0.447	11.35	0.40	1.80	1.33	0.23
C0088-010-0875-M*	**0.088**	**2.24**	**0.010**	**0.25**	**0.875**	**22.23**	**0.424**	**10.77**	**0.251**	**6.37**	**0.65**	**2.91**	**1.45**	**0.25**	**C0088-010-0875-S***	**0.486**	**12.33**	**0.47**	**2.09**	**1.21**	**0.21**
C0088-010-1000-M*	**0.088**	**2.24**	**0.010**	**0.25**	**1.000**	**25.40**	**0.497**	**12.62**	**0.276**	**7.01**	**0.65**	**2.91**	**1.30**	**0.23**	**C0088-010-1000-S***	**0.566**	**14.37**	**0.47**	**2.09**	**1.08**	**0.19**
C0088-012-0120-M*	0.088	2.24	0.012	0.31	0.120	3.05	0.077	1.96	0.075	1.91	1.07	4.76	24.60	4.31	C0088-012-0120-S*	0.087	2.21	0.68	3.02	20.49	3.59
C0088-012-0190-M*	0.088	2.24	0.012	0.31	0.190	4.83	0.116	2.95	0.100	2.54	1.07	4.76	14.50	2.54	C0088-012-0190-S*	0.134	3.40	0.68	3.02	12.08	2.11
C0088-012-0250-M*	0.088	2.24	0.012	0.31	0.250	6.35	0.148	3.76	0.123	3.12	1.07	4.76	10.50	1.84	C0088-012-0250-S*	0.172	4.38	0.68	3.02	8.75	1.53
C0088-012-0310-M*	0.088	2.24	0.012	0.31	0.310	7.87	0.176	4.47	0.148	3.76	1.07	4.76	8.00	1.40	C0088-012-0310-S*	0.208	5.28	0.68	3.02	6.66	1.17
C0088-012-0380-M*	0.088	2.24	0.012	0.31	0.380	9.65	0.216	5.49	0.172	4.37	1.07	4.76	6.50	1.14	C0088-012-0380-S*	0.254	6.46	0.68	3.02	5.41	0.95
C0088-012-0440-M*	0.088	2.24	0.012	0.31	0.440	11.18	0.252	6.40	0.191	4.85	1.07	4.76	5.70	1.00	C0088-012-0440-S*	0.297	7.54	0.68	3.02	4.75	0.83
C0088-012-0500-M*	0.088	2.24	0.012	0.31	0.500	12.70	0.282	7.16	0.215	5.46	1.07	4.76	4.90	0.86	C0088-012-0500-S*	0.334	8.47	0.68	3.02	4.08	0.71
C0088-012-0560-M*	0.088	2.24	0.012	0.31	0.560	14.22	0.317	8.05	0.235	5.97	1.07	4.76	4.40	0.77	C0088-012-0560-S*	0.375	9.51	0.68	3.02	3.67	0.64
C0088-012-0620-M*	0.088	2.24	0.012	0.31	0.620	15.75	0.338	8.59	0.265	6.73	1.07	4.76	3.80	0.67	C0088-012-0620-S*	0.405	10.30	0.68	3.02	3.17	0.55
C0088-012-0690-M*	0.088	2.24	0.012	0.31	0.690	17.53	0.384	9.75	0.266	6.76	1.07	4.76	3.50	0.61	C0088-012-0690-S*	0.457	11.61	0.68	3.02	2.92	0.51
C0088-012-0750-M*	0.088	2.24	0.012	0.31	0.750	19.05	0.416	10.57	0.293	7.44	1.07	4.76	3.20	0.56	C0088-012-0750-S*	0.495	12.57	0.68	3.02	2.67	0.47
C0088-012-0875-M*	**0.088**	**2.24**	**0.012**	**0.31**	**0.875**	**22.23**	**0.486**	**12.34**	**0.343**	**8.72**	**1.09**	**4.85**	**2.80**	**0.49**	**C0088-012-0875-S***	**0.536**	**13.61**	**0.79**	**3.52**	**2.33**	**0.41**
C0088-012-1000-M*	**0.088**	**2.24**	**0.012**	**0.31**	**1.000**	**25.40**	**0.546**	**13.87**	**0.394**	**10.02**	**1.09**	**4.85**	**2.40**	**0.42**	**C0088-012-1000-S***	**0.604**	**15.35**	**0.79**	**3.52**	**2.00**	**0.35**
D10450*	0.089	2.25	0.010	0.25	0.146	3.70	0.075	1.90	0.064	1.63	0.63	2.81	8.57	1.50	D20450*	0.075	1.90	0.53	2.34	7.14	1.25
D10460*	0.089	2.25	0.010	0.25	0.217	5.50	0.098	2.50	0.084	2.13	0.63	2.81	5.43	0.95	D20460*	0.098	2.50	0.53	2.34	4.51	0.79
D10470*	0.089	2.25	0.010	0.25	0.315	8.00	0.138	3.50	0.113	2.88	0.63	2.81	3.49	0.61	D20470*	0.138	3.50	0.53	2.34	2.91	0.51
D10480*	0.089	2.25	0.010	0.25	0.449	11.40	0.185	4.70	0.153	3.88	0.63	2.81	2.40	0.42	D20480*	0.185	4.70	0.53	2.34	2.00	0.35
D10490*	0.089	2.25	0.010	0.25	0.654	16.60	0.264	6.70	0.212	5.38	0.63	2.81	1.66	0.29	D20490*	0.264	6.70	0.53	2.34	1.37	0.24
D10650*	0.091	2.32	0.013	0.32	0.146	3.70	0.091	2.30	0.082	2.08	1.27	5.63	22.97	4.02	D20650*	0.091	2.30	1.05	4.69	19.14	3.35
D10660*	0.091	2.32	0.013	0.32	0.209	5.30	0.122	3.10	0.107	2.72	1.27	5.63	14.69	2.57	D20660*	0.122	3.10	1.05	4.69	12.23	2.14
D10670*	0.091	2.32	0.013	0.32	0.303	7.70	0.169	4.30	0.145	3.68	1.27	5.63	9.49	1.66	D20670*	0.169	4.30	1.05	4.69	7.89	1.38

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D10680*	0.091	2.32	0.013	0.32	0.429	10.90	0.232	5.90	0.195	4.96	1.27	5.63	6.46	1.13
D10690*	0.091	2.32	0.013	0.32	0.614	15.60	0.323	8.20	0.271	6.88	1.27	5.63	4.40	0.77
C0094-010-0125-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.125**	**3.18**	**0.074**	**1.87**	**0.051**	**1.28**	**0.61**	**2.73**	**11.95**	**2.09**
C0094-010-0188-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.188**	**4.78**	**0.102**	**2.60**	**0.066**	**1.68**	**0.61**	**2.73**	**7.19**	**1.26**
C0094-010-0250-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.250**	**6.35**	**0.131**	**3.32**	**0.081**	**2.05**	**0.61**	**2.73**	**5.16**	**0.90**
C0094-010-0313-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.313**	**7.95**	**0.161**	**4.09**	**0.094**	**2.40**	**0.61**	**2.73**	**4.05**	**0.71**
C0094-010-0375-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.375**	**9.53**	**0.191**	**4.86**	**0.108**	**2.73**	**0.61**	**2.73**	**3.35**	**0.59**
C0094-010-0438-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.438**	**11.13**	**0.223**	**5.66**	**0.121**	**3.06**	**0.61**	**2.73**	**2.86**	**0.50**
C0094-010-0500-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.500**	**12.70**	**0.255**	**6.48**	**0.133**	**3.38**	**0.61**	**2.73**	**2.51**	**0.44**
C0094-010-0563-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.563**	**14.30**	**0.285**	**7.23**	**0.147**	**3.73**	**0.61**	**2.73**	**2.21**	**0.39**
C0094-010-0625-M*	**0.094**	**2.39**	**0.010**	**0.25**	**0.625**	**15.88**	**0.314**	**7.99**	**0.160**	**4.07**	**0.61**	**2.73**	**1.98**	**0.35**
C0094-012-0125-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.125**	**3.18**	**0.084**	**2.14**	**0.062**	**1.58**	**1.03**	**4.56**	**25.28**	**4.42**
C0094-012-0188-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.188**	**4.78**	**0.119**	**3.02**	**0.083**	**2.12**	**1.03**	**4.56**	**14.80**	**2.59**
C0094-012-0250-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.250**	**6.35**	**0.153**	**3.90**	**0.102**	**2.59**	**1.03**	**4.56**	**10.61**	**1.86**
C0094-012-0313-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.313**	**7.95**	**0.188**	**4.77**	**0.121**	**3.07**	**1.03**	**4.56**	**8.20**	**1.44**
C0094-012-0375-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.375**	**9.53**	**0.222**	**5.64**	**0.139**	**3.54**	**1.03**	**4.56**	**6.70**	**1.17**
C0094-012-0438-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.438**	**11.13**	**0.257**	**6.52**	**0.158**	**4.02**	**1.03**	**4.56**	**5.65**	**0.99**
C0094-012-0500-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.500**	**12.70**	**0.290**	**7.37**	**0.177**	**4.50**	**1.03**	**4.56**	**4.89**	**0.86**
C0094-012-0563-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.563**	**14.30**	**0.325**	**8.26**	**0.196**	**4.97**	**1.03**	**4.56**	**4.31**	**0.75**
C0094-012-0625-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.625**	**15.88**	**0.359**	**9.13**	**0.214**	**5.44**	**1.03**	**4.56**	**3.86**	**0.68**
C0094-012-0688-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.688**	**17.48**	**0.393**	**9.99**	**0.234**	**5.93**	**1.03**	**4.56**	**3.48**	**0.61**
C0094-012-0750-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.750**	**19.05**	**0.423**	**10.76**	**0.255**	**6.47**	**1.03**	**4.56**	**3.14**	**0.55**
C0094-012-0875-M*	**0.094**	**2.39**	**0.012**	**0.31**	**0.875**	**22.23**	**0.491**	**12.47**	**0.293**	**7.44**	**1.03**	**4.56**	**2.67**	**0.47**
C0094-012-1000-M*	**0.094**	**2.39**	**0.012**	**0.31**	**1.000**	**25.40**	**0.560**	**14.22**	**0.330**	**8.39**	**1.03**	**4.56**	**2.33**	**0.41**
D10850*	0.094	2.40	0.016	0.40	0.138	3.50	0.106	2.70	0.102	2.60	1.67	7.45	53.20	9.31
D10860*	0.094	2.40	0.016	0.40	0.197	5.00	0.146	3.70	0.134	3.40	1.67	7.45	33.60	5.88
D10870*	0.094	2.40	0.016	0.40	0.276	7.00	0.201	5.10	0.181	4.60	1.67	7.45	21.89	3.83
D10880*	0.094	2.40	0.016	0.40	0.394	10.00	0.276	7.00	0.244	6.20	1.67	7.45	14.91	2.61
D10890*	0.094	2.40	0.016	0.40	0.551	14.00	0.390	9.90	0.339	8.60	1.67	7.45	10.06	1.76
C0102-010-0250-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.250**	**6.35**	**0.111**	**2.82**	**0.079**	**2.00**	**0.57**	**2.53**	**4.10**	**0.72**
C0102-010-0313-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.313**	**7.95**	**0.135**	**3.43**	**0.092**	**2.34**	**0.57**	**2.53**	**3.20**	**0.56**
C0102-010-0375-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.375**	**9.53**	**0.156**	**3.96**	**0.106**	**2.69**	**0.57**	**2.53**	**2.60**	**0.46**
C0102-010-0438-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.438**	**11.13**	**0.179**	**4.55**	**0.120**	**3.04**	**0.57**	**2.53**	**2.20**	**0.39**
C0102-010-0500-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.500**	**12.70**	**0.200**	**5.09**	**0.134**	**3.39**	**0.57**	**2.53**	**1.90**	**0.33**
C0102-010-0563-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.563**	**14.30**	**0.228**	**5.80**	**0.146**	**3.70**	**0.57**	**2.53**	**1.70**	**0.30**
C0102-010-0625-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.625**	**15.88**	**0.246**	**6.24**	**0.161**	**4.08**	**0.57**	**2.53**	**1.50**	**0.26**
C0102-010-0750-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.750**	**19.05**	**0.276**	**7.00**	**0.193**	**4.90**	**0.57**	**2.53**	**1.20**	**0.21**
C0102-010-0875-M*	**0.102**	**2.59**	**0.010**	**0.25**	**0.875**	**22.23**	**0.358**	**9.08**	**0.208**	**5.28**	**0.57**	**2.53**	**1.10**	**0.19**
C0102-010-1000-M*	**0.102**	**2.59**	**0.010**	**0.25**	**1.000**	**25.40**	**0.368**	**9.33**	**0.247**	**6.27**	**0.57**	**2.53**	**0.90**	**0.16**
C0102-011-0250-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.250**	**6.35**	**0.128**	**3.25**	**0.088**	**2.22**	**0.74**	**3.31**	**6.10**	**1.07**
C0102-011-0313-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.313**	**7.95**	**0.155**	**3.93**	**0.103**	**2.62**	**0.74**	**3.31**	**4.70**	**0.82**
C0102-011-0375-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.375**	**9.53**	**0.184**	**4.67**	**0.117**	**2.98**	**0.74**	**3.31**	**3.90**	**0.68**
C0102-011-0438-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.438**	**11.13**	**0.212**	**5.39**	**0.132**	**3.36**	**0.74**	**3.31**	**3.30**	**0.58**
C0102-011-0500-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.500**	**12.70**	**0.234**	**5.94**	**0.150**	**3.81**	**0.74**	**3.31**	**2.80**	**0.49**
C0102-011-0563-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.563**	**14.30**	**0.265**	**6.73**	**0.164**	**4.16**	**0.74**	**3.31**	**2.50**	**0.44**
C0102-011-0625-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.625**	**15.88**	**0.287**	**7.28**	**0.181**	**4.60**	**0.74**	**3.31**	**2.20**	**0.39**
C0102-011-0750-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.750**	**19.05**	**0.336**	**8.54**	**0.214**	**5.43**	**0.74**	**3.31**	**1.80**	**0.32**
C0102-011-0875-M*	**0.102**	**2.59**	**0.011**	**0.28**	**0.875**	**22.23**	**0.410**	**10.40**	**0.236**	**6.00**	**0.74**	**3.31**	**1.60**	**0.28**
C0102-011-1000-M*	**0.102**	**2.59**	**0.011**	**0.28**	**1.000**	**25.40**	**0.468**	**11.89**	**0.265**	**6.73**	**0.74**	**3.31**	**1.40**	**0.25**
C0102-012-0250-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.250**	**6.35**	**0.138**	**3.51**	**0.098**	**2.50**	**0.95**	**4.23**	**8.50**	**1.49**
C0102-012-0313-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.313**	**7.95**	**0.162**	**4.12**	**0.120**	**3.04**	**0.95**	**4.23**	**6.30**	**1.10**
C0102-012-0375-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.375**	**9.53**	**0.192**	**4.88**	**0.137**	**3.48**	**0.95**	**4.23**	**5.20**	**0.91**
C0102-012-0438-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.438**	**11.13**	**0.222**	**5.64**	**0.155**	**3.93**	**0.95**	**4.23**	**4.40**	**0.77**
C0102-012-0500-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.500**	**12.70**	**0.250**	**6.34**	**0.173**	**4.40**	**0.95**	**4.23**	**3.80**	**0.67**
C0102-012-0563-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.563**	**14.30**	**0.275**	**6.98**	**0.194**	**4.93**	**0.95**	**4.23**	**3.30**	**0.58**
C0102-012-0625-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.625**	**15.88**	**0.308**	**7.83**	**0.210**	**5.32**	**0.95**	**4.23**	**3.00**	**0.53**
C0102-012-0750-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.750**	**19.05**	**0.370**	**9.39**	**0.244**	**6.19**	**0.95**	**4.23**	**2.50**	**0.44**
C0102-012-0875-M*	**0.102**	**2.59**	**0.012**	**0.31**	**0.875**	**22.23**	**0.422**	**10.73**	**0.283**	**7.19**	**0.95**	**4.23**	**2.10**	**0.37**
C0102-012-1000-M*	**0.102**	**2.59**	**0.012**	**0.31**	**1.000**	**25.40**	**0.472**	**11.98**	**0.324**	**8.23**	**0.95**	**4.23**	**1.80**	**0.32**
D10300*	0.106	2.70	0.008	0.20	0.213	5.40	0.063	1.60	0.051	1.30	0.27	1.20	1.77	0.31
D10310*	0.106	2.70	0.008	0.20	0.323	8.20	0.087	2.20	0.067	1.70	0.27	1.20	1.14	0.20
D10320*	0.106	2.70	0.008	0.20	0.488	12.40	0.122	3.10	0.091	2.30	0.27	1.20	0.74	0.13
D10330*	0.106	2.70	0.008	0.20	0.705	17.90	0.165	4.20	0.122	3.10	0.27	1.20	0.46	0.08
D10340*	0.106	2.70	0.008	0.20	1.031	26.20	0.232	5.90	0.169	4.30	0.27	1.20	0.34	0.06

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D20680*	0.232	5.90	1.05	4.69	5.37	0.94
D20690*	0.323	8.20	1.05	4.69	3.66	0.64
C0094-010-0125-S*	**0.081**	**2.05**	**0.44**	**1.97**	**9.95**	**1.74**
C0094-010-0188-S*	**0.114**	**2.90**	**0.44**	**1.97**	**5.99**	**1.05**
C0094-010-0250-S*	**0.147**	**3.74**	**0.44**	**1.97**	**4.30**	**0.75**
C0094-010-0313-S*	**0.182**	**4.62**	**0.44**	**1.97**	**3.37**	**0.59**
C0094-010-0375-S*	**0.217**	**5.50**	**0.44**	**1.97**	**2.79**	**0.49**
C0094-010-0438-S*	**0.252**	**6.41**	**0.44**	**1.97**	**2.38**	**0.42**
C0094-010-0500-S*	**0.288**	**7.33**	**0.44**	**1.97**	**2.09**	**0.37**
C0094-010-0563-S*	**0.323**	**8.20**	**0.44**	**1.97**	**1.84**	**0.32**
C0094-010-0625-S*	**0.357**	**9.06**	**0.44**	**1.97**	**1.65**	**0.29**
C0094-012-0125-S*	**0.090**	**2.28**	**0.74**	**3.31**	**21.06**	**3.69**
C0094-012-0188-S*	**0.128**	**3.24**	**0.74**	**3.31**	**12.33**	**2.16**
C0094-012-0250-S*	**0.166**	**4.21**	**0.74**	**3.31**	**8.84**	**1.55**
C0094-012-0313-S*	**0.204**	**5.18**	**0.74**	**3.31**	**6.83**	**1.20**
C0094-012-0375-S*	**0.242**	**6.13**	**0.74**	**3.31**	**5.58**	**0.98**
C0094-012-0438-S*	**0.280**	**7.10**	**0.74**	**3.31**	**4.71**	**0.82**
C0094-012-0500-S*	**0.317**	**8.05**	**0.74**	**3.31**	**4.07**	**0.71**
C0094-012-0563-S*	**0.355**	**9.03**	**0.74**	**3.31**	**3.59**	**0.63**
C0094-012-0625-S*	**0.393**	**9.99**	**0.74**	**3.31**	**3.22**	**0.56**
C0094-012-0688-S*	**0.431**	**10.95**	**0.74**	**3.31**	**2.90**	**0.51**
C0094-012-0750-S*	**0.465**	**11.82**	**0.74**	**3.31**	**2.62**	**0.46**
C0094-012-0875-S*	**0.540**	**13.72**	**0.74**	**3.31**	**2.22**	**0.39**
C0094-012-1000-S*	**0.616**	**15.65**	**0.74**	**3.31**	**1.94**	**0.34**
D20850*	0.106	2.70	1.40	6.21	44.34	7.76
D20860*	0.146	3.70	1.40	6.21	28.00	4.90
D20870*	0.201	5.10	1.40	6.21	18.23	3.19
D20880*	0.276	7.00	1.40	6.21	12.40	2.17
D20890*	0.390	9.90	1.40	6.21	8.40	1.47
C0102-010-0250-S*	**0.130**	**3.31**	**0.41**	**1.82**	**3.42**	**0.60**
C0102-010-0313-S*	**0.159**	**4.05**	**0.41**	**1.82**	**2.67**	**0.47**
C0102-010-0375-S*	**0.186**	**4.72**	**0.41**	**1.82**	**2.17**	**0.38**
C0102-010-0438-S*	**0.215**	**5.45**	**0.41**	**1.82**	**1.83**	**0.32**
C0102-010-0500-S*	**0.241**	**6.13**	**0.41**	**1.82**	**1.58**	**0.28**
C0102-010-0563-S*	**0.274**	**6.96**	**0.41**	**1.82**	**1.42**	**0.25**
C0102-010-0625-S*	**0.297**	**7.55**	**0.41**	**1.82**	**1.25**	**0.22**
C0102-010-0750-S*	**0.340**	**8.65**	**0.41**	**1.82**	**1.00**	**0.18**
C0102-010-0875-S*	**0.428**	**10.88**	**0.41**	**1.82**	**0.92**	**0.16**
C0102-010-1000-S*	**0.454**	**11.53**	**0.41**	**1.82**	**0.75**	**0.13**
C0102-011-0250-S*	**0.144**	**3.66**	**0.54**	**2.40**	**5.08**	**0.89**
C0102-011-0313-S*	**0.175**	**4.46**	**0.54**	**2.40**	**3.92**	**0.69**
C0102-011-0375-S*	**0.209**	**5.31**	**0.54**	**2.40**	**3.25**	**0.57**
C0102-011-0438-S*	**0.242**	**6.15**	**0.54**	**2.40**	**2.75**	**0.48**
C0102-011-0500-S*	**0.269**	**6.84**	**0.54**	**2.40**	**2.33**	**0.41**
C0102-011-0563-S*	**0.304**	**7.73**	**0.54**	**2.40**	**2.08**	**0.36**
C0102-011-0625-S*	**0.331**	**8.41**	**0.54**	**2.40**	**1.83**	**0.32**
C0102-011-0750-S*	**0.391**	**9.93**	**0.54**	**2.40**	**1.50**	**0.26**
C0102-011-0875-S*	**0.471**	**11.96**	**0.54**	**2.40**	**1.33**	**0.23**
C0102-011-1000-S*	**0.538**	**13.67**	**0.54**	**2.40**	**1.17**	**0.20**
C0102-012-0250-S*	**0.152**	**3.87**	**0.69**	**3.07**	**7.08**	**1.24**
C0102-012-0313-S*	**0.181**	**4.61**	**0.69**	**3.07**	**5.25**	**0.92**
C0102-012-0375-S*	**0.216**	**5.47**	**0.69**	**3.07**	**4.33**	**0.76**
C0102-012-0438-S*	**0.250**	**6.34**	**0.69**	**3.07**	**3.67**	**0.64**
C0102-012-0500-S*	**0.282**	**7.16**	**0.69**	**3.07**	**3.17**	**0.55**
C0102-012-0563-S*	**0.312**	**7.92**	**0.69**	**3.07**	**2.75**	**0.48**
C0102-012-0625-S*	**0.349**	**8.85**	**0.69**	**3.07**	**2.50**	**0.44**
C0102-012-0750-S*	**0.418**	**10.62**	**0.69**	**3.07**	**2.08**	**0.36**
C0102-012-0875-S*	**0.480**	**12.19**	**0.69**	**3.07**	**1.75**	**0.31**
C0102-012-1000-S*	**0.539**	**13.70**	**0.69**	**3.07**	**1.50**	**0.26**
D20300*	0.063	1.60	0.22	1.00	1.49	0.26
D20310*	0.087	2.20	0.22	1.00	0.97	0.17
D20320*	0.122	3.10	0.22	1.00	0.63	0.11
D20330*	0.165	4.20	0.22	1.00	0.40	0.07
D20340*	0.232	5.90	0.22	1.00	0.29	0.05

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D10500*	0.108	2.75	0.010	0.25	0.193	4.90	0.075	1.90	0.064	1.63	0.52	2.31	4.40	0.77
D10510*	0.108	2.75	0.010	0.25	0.287	7.30	0.102	2.60	0.084	2.13	0.52	2.31	2.80	0.49
D10520*	0.108	2.75	0.010	0.25	0.429	10.90	0.142	3.60	0.113	2.88	0.52	2.31	1.77	0.31
D10530*	0.108	2.75	0.010	0.25	0.618	15.70	0.197	5.00	0.153	3.88	0.52	2.31	1.26	0.22
D10540*	0.108	2.75	0.010	0.25	0.902	22.90	0.276	7.00	0.212	5.38	0.52	2.31	0.80	0.14
D10700*	0.111	2.82	0.013	0.32	0.185	4.70	0.094	2.40	0.082	2.08	1.05	4.69	11.77	2.06
D10710*	0.111	2.82	0.013	0.32	0.268	6.80	0.126	3.20	0.107	2.72	1.05	4.69	7.49	1.31
D10720*	0.111	2.82	0.013	0.32	0.394	10.00	0.173	4.40	0.145	3.68	1.05	4.69	4.86	0.85
D10730*	0.111	2.82	0.013	0.32	0.559	14.20	0.240	6.10	0.195	4.96	1.05	4.69	3.31	0.58
D10740*	0.111	2.82	0.013	0.32	0.811	20.60	0.335	8.50	0.271	6.88	1.05	4.69	2.17	0.38
D10900*	0.114	2.90	0.016	0.40	0.169	4.30	0.110	2.80	0.102	2.60	1.61	7.16	27.26	4.77
D10910*	0.114	2.90	0.016	0.40	0.248	6.30	0.154	3.90	0.134	3.40	1.61	7.16	17.37	3.04
D10920*	0.114	2.90	0.016	0.40	0.358	9.10	0.213	5.40	0.181	4.60	1.61	7.16	11.20	1.96
D10930*	0.114	2.90	0.016	0.40	0.512	13.00	0.295	7.50	0.244	6.20	1.61	7.16	7.60	1.33
D10940*	0.114	2.90	0.016	0.40	0.728	18.50	0.417	10.60	0.339	8.60	1.61	7.16	5.14	0.90
C0118-016-0250-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.250**	**6.35**	**0.148**	**3.76**	**0.136**	**3.46**	**1.77**	**7.89**	**17.36**	**3.04**
C0118-016-0313-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.313**	**7.94**	**0.179**	**4.54**	**0.163**	**4.14**	**1.77**	**7.89**	**13.26**	**2.32**
C0118-016-0375-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.375**	**9.53**	**0.210**	**5.33**	**0.189**	**4.81**	**1.77**	**7.89**	**10.72**	**1.88**
C0118-016-0438-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.438**	**11.11**	**0.241**	**6.11**	**0.216**	**5.49**	**1.77**	**7.89**	**9.00**	**1.58**
C0118-016-0500-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.500**	**12.70**	**0.271**	**6.89**	**0.243**	**6.16**	**1.77**	**7.89**	**7.76**	**1.36**
C0118-016-0563-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.563**	**14.29**	**0.302**	**7.68**	**0.269**	**6.84**	**1.77**	**7.89**	**6.82**	**1.19**
C0118-016-0625-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.625**	**15.88**	**0.333**	**8.46**	**0.296**	**7.51**	**1.77**	**7.89**	**6.08**	**1.06**
C0118-016-0688-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.688**	**17.46**	**0.364**	**9.25**	**0.322**	**8.19**	**1.77**	**7.89**	**5.48**	**0.96**
C0118-016-0750-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.750**	**19.05**	**0.395**	**10.03**	**0.349**	**8.86**	**1.77**	**7.89**	**5.00**	**0.87**
C0118-016-0813-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.813**	**20.64**	**0.426**	**10.82**	**0.376**	**9.54**	**1.77**	**7.89**	**4.59**	**0.80**
C0118-016-0875-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.875**	**22.23**	**0.457**	**11.60**	**0.402**	**10.21**	**1.77**	**7.89**	**4.24**	**0.74**
C0118-016-0938-M*	**0.118**	**3.00**	**0.016**	**0.41**	**0.938**	**23.81**	**0.488**	**12.39**	**0.429**	**10.89**	**1.77**	**7.89**	**3.94**	**0.69**
C0118-016-1000-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.000**	**25.40**	**0.519**	**13.17**	**0.455**	**11.57**	**1.77**	**7.89**	**3.68**	**0.64**
C0118-016-1125-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.125**	**28.58**	**0.580**	**14.74**	**0.509**	**12.92**	**1.77**	**7.89**	**3.26**	**0.57**
C0118-016-1250-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.250**	**31.75**	**0.642**	**16.31**	**0.562**	**14.27**	**1.77**	**7.89**	**2.92**	**0.51**
C0118-016-1375-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.375**	**34.93**	**0.704**	**17.88**	**0.615**	**15.62**	**1.77**	**7.89**	**2.64**	**0.46**
C0118-016-1500-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.500**	**38.10**	**0.766**	**19.45**	**0.668**	**16.97**	**1.77**	**7.89**	**2.42**	**0.42**
C0118-016-1625-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.625**	**41.28**	**0.828**	**21.02**	**0.721**	**18.32**	**1.77**	**7.89**	**2.22**	**0.39**
C0118-016-1750-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.750**	**44.45**	**0.889**	**22.59**	**0.774**	**19.67**	**1.77**	**7.89**	**2.06**	**0.36**
C0118-016-1875-M*	**0.118**	**3.00**	**0.016**	**0.41**	**1.875**	**47.63**	**0.951**	**24.16**	**0.828**	**21.02**	**1.77**	**7.89**	**1.92**	**0.34**
C0118-016-2000-M*	**0.118**	**3.00**	**0.016**	**0.41**	**2.000**	**50.80**	**1.013**	**25.73**	**0.881**	**22.37**	**1.77**	**7.89**	**1.80**	**0.31**
C0118-018-0250-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.250**	**6.35**	**0.164**	**4.17**	**0.156**	**3.97**	**2.45**	**10.92**	**28.59**	**5.00**
C0118-018-0313-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.313**	**7.94**	**0.199**	**5.06**	**0.188**	**4.78**	**2.45**	**10.92**	**21.68**	**3.79**
C0118-018-0375-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.375**	**9.53**	**0.234**	**5.95**	**0.220**	**5.59**	**2.45**	**10.92**	**17.46**	**3.06**
C0118-018-0438-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.438**	**11.11**	**0.270**	**6.85**	**0.252**	**6.40**	**2.45**	**10.92**	**14.61**	**2.56**
C0118-018-0500-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.500**	**12.70**	**0.305**	**7.74**	**0.284**	**7.21**	**2.45**	**10.92**	**12.57**	**2.20**
C0118-018-0563-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.563**	**14.29**	**0.340**	**8.63**	**0.315**	**8.01**	**2.45**	**10.92**	**11.02**	**1.93**
C0118-018-0625-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.625**	**15.88**	**0.375**	**9.52**	**0.347**	**8.82**	**2.45**	**10.92**	**9.82**	**1.72**
C0118-018-0688-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.688**	**17.46**	**0.410**	**10.41**	**0.379**	**9.63**	**2.45**	**10.92**	**8.85**	**1.55**
C0118-018-0750-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.750**	**19.05**	**0.445**	**11.31**	**0.411**	**10.44**	**2.45**	**10.92**	**8.05**	**1.41**
C0118-018-0813-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.813**	**20.64**	**0.480**	**12.20**	**0.443**	**11.24**	**2.45**	**10.92**	**7.39**	**1.29**
C0118-018-0875-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.875**	**22.23**	**0.515**	**13.09**	**0.475**	**12.05**	**2.45**	**10.92**	**6.83**	**1.19**
C0118-018-0938-M*	**0.118**	**3.00**	**0.018**	**0.46**	**0.938**	**23.81**	**0.550**	**13.98**	**0.506**	**12.86**	**2.45**	**10.92**	**6.34**	**1.11**
C0118-018-1000-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.000**	**25.40**	**0.586**	**14.87**	**0.538**	**13.67**	**2.45**	**10.92**	**5.92**	**1.04**
C0118-018-1125-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.125**	**28.58**	**0.656**	**16.66**	**0.602**	**15.28**	**2.45**	**10.92**	**5.23**	**0.92**
C0118-018-1250-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.250**	**31.75**	**0.726**	**18.44**	**0.665**	**16.90**	**2.45**	**10.92**	**4.69**	**0.82**
C0118-018-1375-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.375**	**34.93**	**0.796**	**20.23**	**0.729**	**18.52**	**2.45**	**10.92**	**4.24**	**0.74**
C0118-018-1500-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.500**	**38.10**	**0.867**	**22.01**	**0.793**	**20.13**	**2.45**	**10.92**	**3.88**	**0.68**
C0118-018-1625-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.625**	**41.28**	**0.937**	**23.80**	**0.856**	**21.75**	**2.45**	**10.92**	**3.57**	**0.62**
C0118-018-1750-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.750**	**44.45**	**1.007**	**25.58**	**0.920**	**23.36**	**2.45**	**10.92**	**3.30**	**0.58**
C0118-018-1875-M*	**0.118**	**3.00**	**0.018**	**0.46**	**1.875**	**47.63**	**1.077**	**27.36**	**0.983**	**24.98**	**2.45**	**10.92**	**3.08**	**0.54**
C0118-018-2000-M*	**0.118**	**3.00**	**0.018**	**0.46**	**2.000**	**50.80**	**1.148**	**29.15**	**1.047**	**26.59**	**2.45**	**10.92**	**2.88**	**0.50**
C0118-020-0188-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.188**	**4.76**	**0.139**	**3.53**	**0.137**	**3.48**	**3.33**	**14.82**	**68.56**	**12.00**
C0118-020-0250-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.250**	**6.35**	**0.179**	**4.54**	**0.175**	**4.43**	**3.28**	**14.57**	**46.01**	**8.05**
C0118-020-0313-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.313**	**7.94**	**0.218**	**5.53**	**0.211**	**5.37**	**3.28**	**14.57**	**34.62**	**6.06**
C0118-020-0375-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.375**	**9.53**	**0.257**	**6.53**	**0.248**	**6.30**	**3.28**	**14.57**	**27.75**	**4.86**
C0118-020-0438-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.438**	**11.11**	**0.296**	**7.52**	**0.285**	**7.23**	**3.28**	**14.57**	**23.16**	**4.05**
C0118-020-0500-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.500**	**12.70**	**0.335**	**8.51**	**0.321**	**8.16**	**3.28**	**14.57**	**19.87**	**3.48**
C0118-020-0563-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.563**	**14.29**	**0.374**	**9.50**	**0.358**	**9.09**	**3.28**	**14.57**	**17.40**	**3.04**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D20500*	0.075	1.90	0.43	1.93	3.66	0.64
D20510*	0.102	2.60	0.43	1.93	2.34	0.41
D20520*	0.142	3.60	0.43	1.93	1.49	0.26
D20530*	0.197	5.00	0.43	1.93	1.03	0.18
D20540*	0.276	7.00	0.43	1.93	0.69	0.12
D20700*	0.094	2.40	0.88	3.91	9.83	1.72
D20710*	0.126	3.20	0.88	3.91	6.23	1.09
D20720*	0.173	4.40	0.88	3.91	4.06	0.71
D20730*	0.240	6.10	0.88	3.91	2.74	0.48
D20740*	0.335	8.50	0.88	3.91	1.83	0.32
D20900*	0.110	2.80	1.34	5.96	22.69	3.97
D20910*	0.154	3.90	1.34	5.96	14.46	2.53
D20920*	0.213	5.40	1.34	5.96	9.31	1.63
D20930*	0.295	7.50	1.34	5.96	6.34	1.11
D20940*	0.417	10.60	1.34	5.96	4.29	0.75
C0118-016-0250-S*	**0.159**	**4.05**	**1.37**	**6.08**	**15.09**	**2.64**
C0118-016-0313-S*	**0.194**	**4.92**	**1.37**	**6.08**	**11.53**	**2.02**
C0118-016-0375-S*	**0.228**	**5.80**	**1.37**	**6.08**	**9.32**	**1.63**
C0118-016-0438-S*	**0.263**	**6.68**	**1.37**	**6.08**	**7.83**	**1.37**
C0118-016-0500-S*	**0.297**	**7.55**	**1.37**	**6.08**	**6.75**	**1.18**
C0118-016-0563-S*	**0.332**	**8.43**	**1.37**	**6.08**	**5.93**	**1.04**
C0118-016-0625-S*	**0.366**	**9.30**	**1.37**	**6.08**	**5.28**	**0.92**
C0118-016-0688-S*	**0.401**	**10.18**	**1.37**	**6.08**	**4.77**	**0.83**
C0118-016-0750-S*	**0.435**	**11.05**	**1.37**	**6.08**	**4.34**	**0.76**
C0118-016-0813-S*	**0.470**	**11.93**	**1.37**	**6.08**	**3.99**	**0.70**
C0118-016-0875-S*	**0.504**	**12.80**	**1.37**	**6.08**	**3.69**	**0.65**
C0118-016-0938-S*	**0.539**	**13.68**	**1.37**	**6.08**	**3.43**	**0.60**
C0118-016-1000-S*	**0.573**	**14.56**	**1.37**	**6.08**	**3.20**	**0.56**
C0118-016-1125-S*	**0.642**	**16.31**	**1.37**	**6.08**	**2.83**	**0.50**
C0118-016-1250-S*	**0.711**	**18.06**	**1.37**	**6.08**	**2.54**	**0.44**
C0118-016-1375-S*	**0.780**	**19.81**	**1.37**	**6.08**	**2.30**	**0.40**
C0118-016-1500-S*	**0.849**	**21.56**	**1.37**	**6.08**	**2.10**	**0.37**
C0118-016-1625-S*	**0.918**	**23.31**	**1.37**	**6.08**	**1.93**	**0.34**
C0118-016-1750-S*	**0.987**	**25.06**	**1.37**	**6.08**	**1.79**	**0.31**
C0118-016-1875-S*	**1.056**	**26.81**	**1.37**	**6.08**	**1.67**	**0.29**
C0118-016-2000-S*	**1.125**	**28.56**	**1.37**	**6.08**	**1.56**	**0.27**
C0118-018-0250-S*	**0.173**	**4.40**	**1.90**	**8.47**	**24.86**	**4.35**
C0118-018-0313-S*	**0.212**	**5.37**	**1.90**	**8.47**	**18.85**	**3.30**
C0118-018-0375-S*	**0.250**	**6.34**	**1.90**	**8.47**	**15.18**	**2.66**
C0118-018-0438-S*	**0.288**	**7.31**	**1.90**	**8.47**	**12.71**	**2.22**
C0118-018-0500-S*	**0.326**	**8.27**	**1.90**	**8.47**	**10.93**	**1.91**
C0118-018-0563-S*	**0.364**	**9.24**	**1.90**	**8.47**	**9.58**	**1.68**
C0118-018-0625-S*	**0.402**	**10.21**	**1.90**	**8.47**	**8.53**	**1.49**
C0118-018-0688-S*	**0.440**	**11.18**	**1.90**	**8.47**	**7.69**	**1.35**
C0118-018-0750-S*	**0.478**	**12.14**	**1.90**	**8.47**	**7.00**	**1.23**
C0118-018-0813-S*	**0.516**	**13.11**	**1.90**	**8.47**	**6.43**	**1.13**
C0118-018-0875-S*	**0.554**	**14.08**	**1.90**	**8.47**	**5.94**	**1.04**
C0118-018-0938-S*	**0.592**	**15.04**	**1.90**	**8.47**	**5.52**	**0.97**
C0118-018-1000-S*	**0.630**	**16.01**	**1.90**	**8.47**	**5.15**	**0.90**
C0118-018-1125-S*	**0.707**	**17.95**	**1.90**	**8.47**	**4.55**	**0.80**
C0118-018-1250-S*	**0.783**	**19.88**	**1.90**	**8.47**	**4.07**	**0.71**
C0118-018-1375-S*	**0.859**	**21.82**	**1.90**	**8.47**	**3.69**	**0.65**
C0118-018-1500-S*	**0.935**	**23.75**	**1.90**	**8.47**	**3.37**	**0.59**
C0118-018-1625-S*	**1.011**	**25.68**	**1.90**	**8.47**	**3.10**	**0.54**
C0118-018-1750-S*	**1.087**	**27.62**	**1.90**	**8.47**	**2.87**	**0.50**
C0118-018-1875-S*	**1.164**	**29.55**	**1.90**	**8.47**	**2.68**	**0.47**
C0118-018-2000-S*	**1.240**	**31.49**	**1.90**	**8.47**	**2.50**	**0.44**
C0118-020-0188-S*	**0.145**	**3.67**	**2.55**	**11.36**	**59.62**	**10.43**
C0118-020-0250-S*	**0.186**	**4.73**	**2.55**	**11.36**	**40.01**	**7.00**
C0118-020-0313-S*	**0.228**	**5.78**	**2.55**	**11.36**	**30.10**	**5.27**
C0118-020-0375-S*	**0.269**	**6.84**	**2.55**	**11.36**	**24.13**	**4.22**
C0118-020-0438-S*	**0.311**	**7.89**	**2.55**	**11.36**	**20.14**	**3.52**
C0118-020-0500-S*	**0.352**	**8.95**	**2.55**	**11.36**	**17.28**	**3.02**
C0118-020-0563-S*	**0.394**	**10.00**	**2.55**	**11.36**	**15.13**	**2.65**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0118-020-0625-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.625**	**15.88**	**0.413**	**10.50**	**0.395**	**10.03**	**3.28**	**14.57**	**15.47**	**2.71**
C0118-020-0688-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.688**	**17.46**	**0.452**	**11.49**	**0.431**	**10.96**	**3.28**	**14.57**	**13.93**	**2.44**
C0118-020-0750-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.750**	**19.05**	**0.491**	**12.48**	**0.468**	**11.89**	**3.28**	**14.57**	**12.67**	**2.22**
C0118-020-0813-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.813**	**20.64**	**0.530**	**13.47**	**0.505**	**12.82**	**3.28**	**14.57**	**11.62**	**2.03**
C0118-020-0875-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.875**	**22.23**	**0.570**	**14.47**	**0.541**	**13.75**	**3.28**	**14.57**	**10.73**	**1.88**
C0118-020-0938-M*	**0.118**	**3.00**	**0.020**	**0.51**	**0.938**	**23.81**	**0.609**	**15.46**	**0.578**	**14.69**	**3.28**	**14.57**	**9.96**	**1.74**
C0118-020-1000-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.000**	**25.40**	**0.648**	**16.45**	**0.615**	**15.62**	**3.28**	**14.57**	**9.30**	**1.63**
C0118-020-1125-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.125**	**28.58**	**0.726**	**18.44**	**0.688**	**17.48**	**3.28**	**14.57**	**8.21**	**1.44**
C0118-020-1250-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.250**	**31.75**	**0.804**	**20.42**	**0.762**	**19.35**	**3.28**	**14.57**	**7.35**	**1.29**
C0118-020-1375-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.375**	**34.93**	**0.882**	**22.41**	**0.835**	**21.21**	**3.28**	**14.57**	**6.65**	**1.16**
C0118-020-1500-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.500**	**38.10**	**0.960**	**24.39**	**0.908**	**23.07**	**3.28**	**14.57**	**6.07**	**1.06**
C0118-020-1625-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.625**	**41.28**	**1.039**	**26.38**	**0.982**	**24.94**	**3.28**	**14.57**	**5.59**	**0.98**
C0118-020-1750-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.750**	**44.45**	**1.117**	**28.36**	**1.055**	**26.80**	**3.28**	**14.57**	**5.17**	**0.91**
C0118-020-1875-M*	**0.118**	**3.00**	**0.020**	**0.51**	**1.875**	**47.63**	**1.195**	**30.35**	**1.129**	**28.66**	**3.28**	**14.57**	**4.82**	**0.84**
C0118-021-0188-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.188**	**4.76**	**0.137**	**3.49**	**0.135**	**3.42**	**3.74**	**16.64**	**74.45**	**13.03**
C0118-021-0250-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.250**	**6.35**	**0.178**	**4.53**	**0.174**	**4.41**	**3.74**	**16.64**	**52.08**	**9.11**
C0118-021-0313-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.313**	**7.94**	**0.219**	**5.57**	**0.213**	**5.40**	**3.74**	**16.64**	**40.05**	**7.01**
C0118-021-0375-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.375**	**9.53**	**0.260**	**6.60**	**0.252**	**6.39**	**3.74**	**16.64**	**32.53**	**5.69**
C0118-021-0438-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.438**	**11.11**	**0.301**	**7.64**	**0.291**	**7.38**	**3.74**	**16.64**	**27.39**	**4.79**
C0118-021-0500-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.500**	**12.70**	**0.342**	**8.68**	**0.330**	**8.37**	**3.74**	**16.64**	**23.65**	**4.14**
C0118-021-0563-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.563**	**14.29**	**0.383**	**9.72**	**0.369**	**9.36**	**3.74**	**16.64**	**20.81**	**3.64**
C0118-021-0625-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.625**	**15.88**	**0.424**	**10.76**	**0.408**	**10.35**	**3.74**	**16.64**	**18.58**	**3.25**
C0118-021-0688-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.688**	**17.46**	**0.465**	**11.80**	**0.447**	**11.34**	**3.74**	**16.64**	**16.78**	**2.94**
C0118-021-0750-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.750**	**19.05**	**0.506**	**12.84**	**0.486**	**12.33**	**3.74**	**16.64**	**15.30**	**2.68**
C0118-021-0813-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.813**	**20.64**	**0.546**	**13.88**	**0.525**	**13.32**	**3.74**	**16.64**	**14.06**	**2.46**
C0118-021-0875-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.875**	**22.23**	**0.587**	**14.92**	**0.563**	**14.31**	**3.74**	**16.64**	**13.01**	**2.28**
C0118-021-0938-M	**0.118**	**3.00**	**0.021**	**0.53**	**0.938**	**23.81**	**0.628**	**15.96**	**0.602**	**15.30**	**3.74**	**16.64**	**12.10**	**2.12**
C0118-021-1000-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.000**	**25.40**	**0.669**	**17.00**	**0.641**	**16.29**	**3.74**	**16.64**	**11.31**	**1.98**
C0118-021-1125-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.125**	**28.58**	**0.751**	**19.08**	**0.719**	**18.27**	**3.74**	**16.64**	**10.00**	**1.75**
C0118-021-1250-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.250**	**31.75**	**0.833**	**21.16**	**0.797**	**20.25**	**3.74**	**16.64**	**8.97**	**1.57**
C0118-021-1375-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.375**	**34.93**	**0.915**	**23.23**	**0.875**	**22.23**	**3.74**	**16.64**	**8.13**	**1.42**
C0118-021-1500-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.500**	**38.10**	**0.997**	**25.31**	**0.953**	**24.21**	**3.74**	**16.64**	**7.43**	**1.30**
C0118-021-1625-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.625**	**41.28**	**1.078**	**27.39**	**1.031**	**26.19**	**3.74**	**16.64**	**6.84**	**1.20**
C0118-021-1750-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.750**	**44.45**	**1.160**	**29.47**	**1.109**	**28.17**	**3.74**	**16.64**	**6.34**	**1.11**
C0118-021-1875-M	**0.118**	**3.00**	**0.021**	**0.53**	**1.875**	**47.63**	**1.242**	**31.55**	**1.187**	**30.15**	**3.74**	**16.64**	**5.91**	**1.03**
C0118-022-0188-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.188**	**4.76**	**0.142**	**3.61**	**0.141**	**3.57**	**4.24**	**18.87**	**93.12**	**16.30**
C0118-022-0250-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.250**	**6.35**	**0.185**	**4.69**	**0.182**	**4.62**	**4.24**	**18.87**	**64.87**	**11.35**
C0118-022-0313-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.313**	**7.94**	**0.227**	**5.77**	**0.223**	**5.66**	**4.24**	**18.87**	**49.77**	**8.71**
C0118-022-0375-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.375**	**9.53**	**0.270**	**6.86**	**0.264**	**6.71**	**4.24**	**18.87**	**40.37**	**7.07**
C0118-022-0438-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.438**	**11.11**	**0.313**	**7.94**	**0.305**	**7.75**	**4.24**	**18.87**	**33.96**	**5.94**
C0118-022-0500-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.500**	**12.70**	**0.355**	**9.02**	**0.346**	**8.79**	**4.24**	**18.87**	**29.31**	**5.13**
C0118-022-0563-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.563**	**14.29**	**0.398**	**10.11**	**0.387**	**9.84**	**4.24**	**18.87**	**25.77**	**4.51**
C0118-022-0625-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.625**	**15.88**	**0.441**	**11.19**	**0.428**	**10.88**	**4.24**	**18.87**	**23.00**	**4.03**
C0118-022-0688-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.688**	**17.46**	**0.483**	**12.27**	**0.470**	**11.93**	**4.24**	**18.87**	**20.77**	**3.63**
C0118-022-0750-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.750**	**19.05**	**0.526**	**13.36**	**0.511**	**12.97**	**4.24**	**18.87**	**18.93**	**3.31**
C0118-022-0813-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.813**	**20.64**	**0.569**	**14.44**	**0.552**	**14.02**	**4.24**	**18.87**	**17.39**	**3.04**
C0118-022-0875-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.875**	**22.23**	**0.611**	**15.53**	**0.593**	**15.06**	**4.24**	**18.87**	**16.08**	**2.81**
C0118-022-0938-M	**0.118**	**3.00**	**0.022**	**0.56**	**0.938**	**23.81**	**0.654**	**16.61**	**0.634**	**16.11**	**4.24**	**18.87**	**14.96**	**2.62**
C0118-022-1000-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.000**	**25.40**	**0.697**	**17.69**	**0.675**	**17.15**	**4.24**	**18.87**	**13.98**	**2.45**
C0118-022-1125-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.125**	**28.58**	**0.782**	**19.86**	**0.757**	**19.24**	**4.24**	**18.87**	**12.36**	**2.16**
C0118-022-1250-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.250**	**31.75**	**0.867**	**22.03**	**0.840**	**21.33**	**4.24**	**18.87**	**11.08**	**1.94**
C0118-022-1375-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.375**	**34.93**	**0.953**	**24.20**	**0.922**	**23.42**	**4.24**	**18.87**	**10.04**	**1.76**
C0118-022-1500-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.500**	**38.10**	**1.038**	**26.36**	**1.004**	**25.51**	**4.24**	**18.87**	**9.18**	**1.61**
C0118-022-1625-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.625**	**41.28**	**1.123**	**28.53**	**1.086**	**27.59**	**4.24**	**18.87**	**8.45**	**1.48**
C0118-022-1750-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.750**	**44.45**	**1.209**	**30.70**	**1.169**	**29.68**	**4.24**	**18.87**	**7.83**	**1.37**
C0118-022-1875-M	**0.118**	**3.00**	**0.022**	**0.56**	**1.875**	**47.63**	**1.294**	**32.86**	**1.251**	**31.77**	**4.24**	**18.87**	**7.30**	**1.28**
C0118-023-0188-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.188**	**4.76**	**0.146**	**3.72**	**0.146**	**3.71**	**4.78**	**21.26**	**116.00**	**20.30**
C0118-023-0250-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.250**	**6.35**	**0.191**	**4.84**	**0.189**	**4.80**	**4.78**	**21.26**	**80.46**	**14.08**
C0118-023-0313-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.313**	**7.94**	**0.235**	**5.97**	**0.232**	**5.90**	**4.78**	**21.26**	**61.59**	**10.78**
C0118-023-0375-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.375**	**9.53**	**0.279**	**7.09**	**0.275**	**7.00**	**4.78**	**21.26**	**49.89**	**8.73**
C0118-023-0438-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.438**	**11.11**	**0.324**	**8.22**	**0.319**	**8.09**	**4.78**	**21.26**	**41.93**	**7.34**
C0118-023-0500-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.500**	**12.70**	**0.368**	**9.34**	**0.362**	**9.19**	**4.78**	**21.26**	**36.15**	**6.33**
C0118-023-0563-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.563**	**14.29**	**0.412**	**10.47**	**0.405**	**10.28**	**4.78**	**21.26**	**31.78**	**5.56**
C0118-023-0625-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.625**	**15.88**	**0.456**	**11.59**	**0.448**	**11.38**	**4.78**	**21.26**	**28.35**	**4.96**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0118-020-0625-S*	**0.435**	**11.06**	**2.55**	**11.36**	**13.45**	**2.35**
C0118-020-0688-S*	**0.477**	**12.11**	**2.55**	**11.36**	**12.11**	**2.12**
C0118-020-0750-S*	**0.518**	**13.16**	**2.55**	**11.36**	**11.02**	**1.93**
C0118-020-0813-S*	**0.560**	**14.22**	**2.55**	**11.36**	**10.10**	**1.77**
C0118-020-0875-S*	**0.601**	**15.27**	**2.55**	**11.36**	**9.33**	**1.63**
C0118-020-0938-S*	**0.643**	**16.33**	**2.55**	**11.36**	**8.66**	**1.52**
C0118-020-1000-S*	**0.684**	**17.38**	**2.55**	**11.36**	**8.09**	**1.42**
C0118-020-1125-S*	**0.767**	**19.49**	**2.55**	**11.36**	**7.14**	**1.25**
C0118-020-1250-S*	**0.850**	**21.60**	**2.55**	**11.36**	**6.39**	**1.12**
C0118-020-1375-S*	**0.933**	**23.71**	**2.55**	**11.36**	**5.78**	**1.01**
C0118-020-1500-S*	**1.016**	**25.82**	**2.55**	**11.36**	**5.28**	**0.92**
C0118-020-1625-S*	**1.099**	**27.93**	**2.55**	**11.36**	**4.86**	**0.85**
C0118-020-1750-S*	**1.182**	**30.03**	**2.55**	**11.36**	**4.50**	**0.79**
C0118-020-1875-S*	**1.265**	**32.14**	**2.55**	**11.36**	**4.19**	**0.73**
C0118-021-0188-S	**0.142**	**3.62**	**2.92**	**12.99**	**64.74**	**11.33**
C0118-021-0250-S	**0.186**	**4.71**	**2.92**	**12.99**	**45.29**	**7.93**
C0118-021-0313-S	**0.229**	**5.81**	**2.92**	**12.99**	**34.82**	**6.09**
C0118-021-0375-S	**0.272**	**6.90**	**2.92**	**12.99**	**28.29**	**4.95**
C0118-021-0438-S	**0.315**	**8.00**	**2.92**	**12.99**	**23.82**	**4.17**
C0118-021-0500-S	**0.358**	**9.09**	**2.92**	**12.99**	**20.57**	**3.60**
C0118-021-0563-S	**0.401**	**10.19**	**2.92**	**12.99**	**18.10**	**3.17**
C0118-021-0625-S	**0.444**	**11.28**	**2.92**	**12.99**	**16.16**	**2.83**
C0118-021-0688-S	**0.487**	**12.38**	**2.92**	**12.99**	**14.59**	**2.55**
C0118-021-0750-S	**0.530**	**13.47**	**2.92**	**12.99**	**13.30**	**2.33**
C0118-021-0813-S	**0.574**	**14.57**	**2.92**	**12.99**	**12.23**	**2.14**
C0118-021-0875-S	**0.617**	**15.66**	**2.92**	**12.99**	**11.31**	**1.98**
C0118-021-0938-S	**0.660**	**16.76**	**2.92**	**12.99**	**10.52**	**1.84**
C0118-021-1000-S	**0.703**	**17.86**	**2.92**	**12.99**	**9.83**	**1.72**
C0118-021-1125-S	**0.789**	**20.05**	**2.92**	**12.99**	**8.70**	**1.52**
C0118-021-1250-S	**0.875**	**22.24**	**2.92**	**12.99**	**7.80**	**1.37**
C0118-021-1375-S	**0.962**	**24.43**	**2.92**	**12.99**	**7.07**	**1.24**
C0118-021-1500-S	**1.048**	**26.62**	**2.92**	**12.99**	**6.46**	**1.13**
C0118-021-1625-S	**1.134**	**28.81**	**2.92**	**12.99**	**5.95**	**1.04**
C0118-021-1750-S	**1.220**	**31.00**	**2.92**	**12.99**	**5.52**	**0.97**
C0118-021-1875-S	**1.307**	**33.19**	**2.92**	**12.99**	**5.14**	**0.90**
C0118-022-0188-S	**0.147**	**3.72**	**3.32**	**14.76**	**80.98**	**14.17**
C0118-022-0250-S	**0.191**	**4.86**	**3.32**	**14.76**	**56.41**	**9.87**
C0118-022-0313-S	**0.236**	**5.99**	**3.32**	**14.76**	**43.28**	**7.57**
C0118-022-0375-S	**0.280**	**7.12**	**3.32**	**14.76**	**35.11**	**6.14**
C0118-022-0438-S	**0.325**	**8.26**	**3.32**	**14.76**	**29.53**	**5.17**
C0118-022-0500-S	**0.370**	**9.39**	**3.32**	**14.76**	**25.48**	**4.46**
C0118-022-0563-S	**0.414**	**10.53**	**3.32**	**14.76**	**22.41**	**3.92**
C0118-022-0625-S	**0.459**	**11.66**	**3.32**	**14.76**	**20.00**	**3.50**
C0118-022-0688-S	**0.504**	**12.80**	**3.32**	**14.76**	**18.06**	**3.16**
C0118-022-0750-S	**0.548**	**13.93**	**3.32**	**14.76**	**16.46**	**2.88**
C0118-022-0813-S	**0.593**	**15.06**	**3.32**	**14.76**	**15.12**	**2.65**
C0118-022-0875-S	**0.638**	**16.20**	**3.32**	**14.76**	**13.98**	**2.45**
C0118-022-0938-S	**0.682**	**17.33**	**3.32**	**14.76**	**13.01**	**2.28**
C0118-022-1000-S	**0.727**	**18.47**	**3.32**	**14.76**	**12.15**	**2.13**
C0118-022-1125-S	**0.816**	**20.73**	**3.32**	**14.76**	**10.75**	**1.88**
C0118-022-1250-S	**0.906**	**23.00**	**3.32**	**14.76**	**9.64**	**1.69**
C0118-022-1375-S	**0.995**	**25.27**	**3.32**	**14.76**	**8.73**	**1.53**
C0118-022-1500-S	**1.084**	**27.54**	**3.32**	**14.76**	**7.98**	**1.40**
C0118-022-1625-S	**1.174**	**29.81**	**3.32**	**14.76**	**7.35**	**1.29**
C0118-022-1750-S	**1.263**	**32.08**	**3.32**	**14.76**	**6.81**	**1.19**
C0118-022-1875-S	**1.352**	**34.34**	**3.32**	**14.76**	**6.35**	**1.11**
C0118-023-0188-S	**0.150**	**3.82**	**3.75**	**16.66**	**100.87**	**17.65**
C0118-023-0250-S	**0.196**	**4.99**	**3.75**	**16.66**	**69.96**	**12.24**
C0118-023-0313-S	**0.243**	**6.16**	**3.75**	**16.66**	**53.56**	**9.37**
C0118-023-0375-S	**0.289**	**7.33**	**3.75**	**16.66**	**43.38**	**7.59**
C0118-023-0438-S	**0.335**	**8.50**	**3.75**	**16.66**	**36.46**	**6.38**
C0118-023-0500-S	**0.381**	**9.67**	**3.75**	**16.66**	**31.44**	**5.50**
C0118-023-0563-S	**0.427**	**10.84**	**3.75**	**16.66**	**27.63**	**4.84**
C0118-023-0625-S	**0.473**	**12.02**	**3.75**	**16.66**	**24.65**	**4.31**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0118-023-0688-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.688**	**17.46**	**0.501**	**12.72**	**0.491**	**12.48**	**4.78**	**21.26**	**25.59**	**4.48**
C0118-023-0750-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.750**	**19.05**	**0.545**	**13.84**	**0.534**	**13.57**	**4.78**	**21.26**	**23.32**	**4.08**
C0118-023-0813-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.813**	**20.64**	**0.589**	**14.97**	**0.577**	**14.67**	**4.78**	**21.26**	**21.41**	**3.75**
C0118-023-0875-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.875**	**22.23**	**0.634**	**16.09**	**0.621**	**15.76**	**4.78**	**21.26**	**19.80**	**3.46**
C0118-023-0938-M	**0.118**	**3.00**	**0.023**	**0.58**	**0.938**	**23.81**	**0.678**	**17.22**	**0.664**	**16.86**	**4.78**	**21.26**	**18.41**	**3.22**
C0118-023-1000-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.000**	**25.40**	**0.722**	**18.34**	**0.707**	**17.95**	**4.78**	**21.26**	**17.21**	**3.01**
C0118-023-1125-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.125**	**28.58**	**0.811**	**20.60**	**0.793**	**20.15**	**4.78**	**21.26**	**15.21**	**2.66**
C0118-023-1250-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.250**	**31.75**	**0.899**	**22.85**	**0.879**	**22.34**	**4.78**	**21.26**	**13.63**	**2.39**
C0118-023-1375-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.375**	**34.93**	**0.988**	**25.10**	**0.966**	**24.53**	**4.78**	**21.26**	**12.35**	**2.16**
C0118-023-1500-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.500**	**38.10**	**1.077**	**27.35**	**1.052**	**26.72**	**4.78**	**21.26**	**11.29**	**1.98**
C0118-023-1625-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.625**	**41.28**	**1.165**	**29.60**	**1.138**	**28.91**	**4.78**	**21.26**	**10.40**	**1.82**
C0118-023-1750-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.750**	**44.45**	**1.254**	**31.85**	**1.225**	**31.11**	**4.78**	**21.26**	**9.63**	**1.69**
C0118-023-1875-M	**0.118**	**3.00**	**0.023**	**0.58**	**1.875**	**47.63**	**1.342**	**34.10**	**1.311**	**33.30**	**4.78**	**21.26**	**8.97**	**1.57**
D11100*	0.118	3.00	0.020	0.50	0.173	4.40	0.138	3.50	0.128	3.25	2.34	10.40	66.17	11.58
D11110*	0.118	3.00	0.020	0.50	0.240	6.10	0.185	4.70	0.167	4.25	2.34	10.40	42.40	7.42
D11120*	0.118	3.00	0.020	0.50	0.343	8.70	0.256	6.50	0.226	5.75	2.34	10.40	27.43	4.80
D11130*	0.118	3.00	0.020	0.50	0.472	12.00	0.354	9.00	0.305	7.75	2.34	10.40	18.69	3.27
D11140*	0.118	3.00	0.020	0.50	0.689	17.50	0.504	12.80	0.423	10.75	2.34	10.40	12.63	2.21
C0120-010-0250-M*	0.120	3.05	0.010	0.25	0.250	6.35	0.101	2.57	0.064	1.63	0.48	2.14	3.20	0.56
C0120-010-0310-M*	0.120	3.05	0.010	0.25	0.310	7.87	0.118	3.00	0.073	1.85	0.48	2.14	2.50	0.44
C0120-010-0380-M*	0.120	3.05	0.010	0.25	0.380	9.65	0.140	3.56	0.083	2.11	0.48	2.14	2.00	0.35
C0120-010-0440-M*	0.120	3.05	0.010	0.25	0.440	11.18	0.158	4.01	0.092	2.34	0.48	2.14	1.70	0.30
C0120-010-0500-M*	0.120	3.05	0.010	0.25	0.500	12.70	0.180	4.57	0.101	2.57	0.48	2.14	1.50	0.26
C0120-010-0560-M*	0.120	3.05	0.010	0.25	0.560	14.22	0.217	5.51	0.109	2.77	0.48	2.14	1.40	0.25
C0120-010-0620-M*	0.120	3.05	0.010	0.25	0.620	15.75	0.220	5.59	0.118	3.00	0.48	2.14	1.20	0.21
C0120-010-0690-M*	0.120	3.05	0.010	0.25	0.690	17.53	0.256	6.50	0.129	3.28	0.48	2.14	1.10	0.19
C0120-010-0750-M*	0.120	3.05	0.010	0.25	0.750	19.05	0.270	6.86	0.137	3.48	0.48	2.14	1.00	0.18
C0120-010-0810-M*	0.120	3.05	0.010	0.25	0.810	20.57	0.277	7.04	0.146	3.71	0.48	2.14	0.90	0.16
C0120-010-0880-M*	0.120	3.05	0.010	0.25	0.880	22.35	0.347	8.81	0.156	3.96	0.48	2.14	0.90	0.16
C0120-010-0940-M*	0.120	3.05	0.010	0.25	0.940	23.88	0.343	8.71	0.165	4.19	0.48	2.14	0.80	0.14
C0120-010-1000-M*	0.120	3.05	0.010	0.25	1.000	25.40	0.314	7.98	0.174	4.42	0.48	2.14	0.70	0.12
C0120-010-1120-M*	0.120	3.05	0.010	0.25	1.120	28.45	0.434	11.02	0.192	4.88	0.48	2.14	0.70	0.12
C0120-010-1250-M*	0.120	3.05	0.010	0.25	1.250	31.75	0.452	11.48	0.211	5.36	0.48	2.14	0.60	0.11
C0120-010-1500-M*	0.120	3.05	0.010	0.25	1.500	38.10	0.540	13.72	0.248	6.30	0.48	2.14	0.50	0.09
C0120-011-0250-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.250**	**6.35**	**0.117**	**2.97**	**0.073**	**1.85**	**0.64**	**2.84**	**4.80**	**0.84**
C0120-011-0313-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.313**	**7.95**	**0.140**	**3.57**	**0.085**	**2.17**	**0.64**	**2.84**	**3.70**	**0.65**
C0120-011-0375-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.375**	**9.53**	**0.162**	**4.12**	**0.097**	**2.47**	**0.64**	**2.84**	**3.00**	**0.53**
C0120-011-0438-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.438**	**11.13**	**0.192**	**4.89**	**0.107**	**2.71**	**0.64**	**2.84**	**2.60**	**0.46**
C0120-011-0500-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.500**	**12.70**	**0.210**	**5.33**	**0.120**	**3.05**	**0.64**	**2.84**	**2.20**	**0.39**
C0120-011-0563-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.563**	**14.30**	**0.244**	**6.19**	**0.129**	**3.26**	**0.64**	**2.84**	**2.00**	**0.35**
C0120-011-0625-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.625**	**15.88**	**0.270**	**6.86**	**0.139**	**3.53**	**0.64**	**2.84**	**1.80**	**0.32**
C0120-011-0750-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.750**	**19.05**	**0.294**	**7.46**	**0.169**	**4.29**	**0.64**	**2.84**	**1.40**	**0.25**
C0120-011-0875-M*	**0.120**	**3.05**	**0.011**	**0.28**	**0.875**	**22.23**	**0.343**	**8.71**	**0.191**	**4.85**	**0.64**	**2.84**	**1.20**	**0.21**
C0120-011-1000-M*	**0.120**	**3.05**	**0.011**	**0.28**	**1.000**	**25.40**	**0.419**	**10.65**	**0.205**	**5.21**	**0.64**	**2.84**	**1.10**	**0.19**
C0120-012-0250-M*	0.120	3.05	0.012	0.31	0.250	6.35	0.124	3.15	0.081	2.06	0.79	3.51	6.30	1.10
C0120-012-0310-M*	0.120	3.05	0.012	0.31	0.310	7.87	0.152	3.86	0.093	2.36	0.79	3.51	5.00	0.88
C0120-012-0380-M*	0.120	3.05	0.012	0.31	0.380	9.65	0.181	4.60	0.107	2.72	0.79	3.51	4.00	0.70
C0120-012-0440-M*	0.120	3.05	0.012	0.31	0.440	11.18	0.207	5.26	0.119	3.02	0.79	3.51	3.40	0.60
C0120-012-0500-M*	0.120	3.05	0.012	0.31	0.500	12.70	0.237	6.02	0.131	3.33	0.79	3.51	3.00	0.53
C0120-012-0560-M*	0.120	3.05	0.012	0.31	0.560	14.22	0.256	6.50	0.143	3.63	0.79	3.51	2.60	0.46
C0120-012-0620-M*	0.120	3.05	0.012	0.31	0.620	15.75	0.291	7.39	0.155	3.94	0.79	3.51	2.40	0.42
C0120-012-0690-M*	0.120	3.05	0.012	0.31	0.690	17.53	0.317	8.05	0.169	4.29	0.79	3.51	2.10	0.37
C0120-012-0750-M*	0.120	3.05	0.012	0.31	0.750	19.05	0.355	9.02	0.181	4.60	0.79	3.51	2.00	0.35
C0120-012-0810-M*	0.120	3.05	0.012	0.31	0.810	20.57	0.370	9.40	0.193	4.90	0.79	3.51	1.80	0.32
C0120-012-0880-M*	0.120	3.05	0.012	0.31	0.880	22.35	0.415	10.54	0.207	5.26	0.79	3.51	1.70	0.30
C0120-012-0940-M*	0.120	3.05	0.012	0.31	0.940	23.88	0.413	10.49	0.219	5.56	0.79	3.51	1.50	0.26
C0120-012-1000-M*	0.120	3.05	0.012	0.31	1.000	25.40	0.473	12.01	0.231	5.87	0.79	3.51	1.50	0.26
C0120-012-1120-M*	0.120	3.05	0.012	0.31	1.120	28.45	0.507	12.88	0.255	6.48	0.79	3.51	1.30	0.23
C0120-012-1250-M*	0.120	3.05	0.012	0.31	1.250	31.75	0.592	15.04	0.281	7.14	0.79	3.51	1.20	0.21
C0120-012-1500-M*	0.120	3.05	0.012	0.31	1.500	38.10	0.710	18.03	0.331	8.41	0.79	3.51	1.00	0.18
C0120-014-0250-M*	0.120	3.05	0.014	0.36	0.250	6.35	0.138	3.51	0.101	2.57	1.23	5.47	11.00	1.93
C0120-014-0310-M*	0.120	3.05	0.014	0.36	0.310	7.87	0.167	4.24	0.117	2.97	1.23	5.47	8.60	1.51
C0120-014-0380-M*	0.120	3.05	0.014	0.36	0.380	9.65	0.202	5.13	0.136	3.45	1.23	5.47	6.90	1.21
C0120-014-0440-M*	0.120	3.05	0.014	0.36	0.440	11.18	0.232	5.89	0.152	3.86	1.23	5.47	5.90	1.03

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0118-023-0688-S	**0.519**	**13.19**	**3.75**	**16.66**	**22.25**	**3.89**
C0118-023-0750-S	**0.565**	**14.36**	**3.75**	**16.66**	**20.27**	**3.55**
C0118-023-0813-S	**0.611**	**15.53**	**3.75**	**16.66**	**18.62**	**3.26**
C0118-023-0875-S	**0.657**	**16.70**	**3.75**	**16.66**	**17.22**	**3.01**
C0118-023-0938-S	**0.704**	**17.87**	**3.75**	**16.66**	**16.01**	**2.80**
C0118-023-1000-S	**0.750**	**19.04**	**3.75**	**16.66**	**14.96**	**2.62**
C0118-023-1125-S	**0.842**	**21.38**	**3.75**	**16.66**	**13.23**	**2.32**
C0118-023-1250-S	**0.934**	**23.72**	**3.75**	**16.66**	**11.85**	**2.07**
C0118-023-1375-S	**1.026**	**26.07**	**3.75**	**16.66**	**10.74**	**1.88**
C0118-023-1500-S	**1.118**	**28.41**	**3.75**	**16.66**	**9.82**	**1.72**
C0118-023-1625-S	**1.211**	**30.75**	**3.75**	**16.66**	**9.04**	**1.58**
C0118-023-1750-S	**1.303**	**33.09**	**3.75**	**16.66**	**8.38**	**1.47**
C0118-023-1875-S	**1.395**	**35.43**	**3.75**	**16.66**	**7.80**	**1.37**
D21100*	0.138	3.50	1.95	8.66	55.14	9.65
D21110*	0.185	4.70	1.95	8.66	35.31	6.18
D21120*	0.256	6.50	1.95	8.66	22.86	4.00
D21130*	0.354	9.00	1.95	8.66	15.54	2.72
D21140*	0.504	12.80	1.95	8.66	10.51	1.84
C0120-010-0250-S*	0.137	3.48	0.30	1.34	2.67	0.47
C0120-010-0310-S*	0.165	4.20	0.30	1.34	2.08	0.36
C0120-010-0380-S*	0.199	5.06	0.30	1.34	1.67	0.29
C0120-010-0440-S*	0.227	5.77	0.30	1.34	1.42	0.25
C0120-010-0500-S*	0.259	6.58	0.30	1.34	1.25	0.22
C0120-010-0560-S*	0.302	7.66	0.30	1.34	1.17	0.20
C0120-010-0620-S*	0.319	8.10	0.30	1.34	1.00	0.18
C0120-010-0690-S*	0.361	9.18	0.30	1.34	0.92	0.16
C0120-010-0750-S*	0.388	9.87	0.30	1.34	0.83	0.15
C0120-010-0810-S*	0.408	10.37	0.30	1.34	0.75	0.13
C0120-010-0880-S*	0.478	12.15	0.30	1.34	0.75	0.13
C0120-010-0940-S*	0.488	12.40	0.30	1.34	0.67	0.12
C0120-010-1000-S*	0.484	12.28	0.30	1.34	0.58	0.10
C0120-010-1120-S*	0.604	15.33	0.30	1.34	0.58	0.10
C0120-010-1250-S*	0.647	16.45	0.30	1.34	0.50	0.09
C0120-010-1500-S*	0.777	19.73	0.30	1.34	0.42	0.07
C0120-011-0250-S*	**0.135**	**3.42**	**0.46**	**2.05**	**4.00**	**0.70**
C0120-011-0313-S*	**0.163**	**4.14**	**0.46**	**2.05**	**3.08**	**0.54**
C0120-011-0375-S*	**0.190**	**4.83**	**0.46**	**2.05**	**2.50**	**0.44**
C0120-011-0438-S*	**0.225**	**5.71**	**0.46**	**2.05**	**2.17**	**0.38**
C0120-011-0500-S*	**0.248**	**6.30**	**0.46**	**2.05**	**1.83**	**0.32**
C0120-011-0563-S*	**0.286**	**7.26**	**0.46**	**2.05**	**1.67**	**0.29**
C0120-011-0625-S*	**0.317**	**8.05**	**0.46**	**2.05**	**1.50**	**0.26**
C0120-011-0750-S*	**0.354**	**8.99**	**0.46**	**2.05**	**1.17**	**0.20**
C0120-011-0875-S*	**0.413**	**10.49**	**0.46**	**2.05**	**1.00**	**0.18**
C0120-011-1000-S*	**0.496**	**12.60**	**0.46**	**2.05**	**0.92**	**0.16**
C0120-012-0250-S*	0.153	3.88	0.51	2.27	5.25	0.92
C0120-012-0310-S*	0.188	4.77	0.51	2.27	4.17	0.73
C0120-012-0380-S*	0.227	5.77	0.51	2.27	3.33	0.58
C0120-012-0440-S*	0.260	6.61	0.51	2.27	2.83	0.50
C0120-012-0500-S*	0.296	7.52	0.51	2.27	2.50	0.44
C0120-012-0560-S*	0.325	8.25	0.51	2.27	2.17	0.38
C0120-012-0620-S*	0.365	9.28	0.51	2.27	2.00	0.35
C0120-012-0690-S*	0.399	10.13	0.51	2.27	1.75	0.31
C0120-012-0750-S*	0.444	11.28	0.51	2.27	1.67	0.29
C0120-012-0810-S*	0.470	11.95	0.51	2.27	1.50	0.26
C0120-012-0880-S*	0.520	13.22	0.51	2.27	1.42	0.25
C0120-012-0940-S*	0.532	13.52	0.51	2.27	1.25	0.22
C0120-012-1000-S*	0.592	15.05	0.51	2.27	1.25	0.22
C0120-012-1120-S*	0.650	16.50	0.51	2.27	1.08	0.19
C0120-012-1250-S*	0.740	18.81	0.51	2.27	1.00	0.18
C0120-012-1500-S*	0.889	22.57	0.51	2.27	0.83	0.15
C0120-014-0250-S*	0.164	4.16	0.79	3.52	9.16	1.60
C0120-014-0310-S*	0.200	5.07	0.79	3.52	7.16	1.25
C0120-014-0380-S*	0.242	6.16	0.79	3.52	5.75	1.01
C0120-014-0440-S*	0.279	7.09	0.79	3.52	4.91	0.86

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0120-014-0500-M*	0.120	3.05	0.014	0.36	0.500	12.70	0.263	6.68	0.168	4.27	1.23	5.47	5.20	0.91
C0120-014-0560-M*	0.120	3.05	0.014	0.36	0.560	14.22	0.291	7.39	0.184	4.67	1.23	5.47	4.60	0.81
C0120-014-0620-M*	0.120	3.05	0.014	0.36	0.620	15.75	0.320	8.13	0.200	5.08	1.23	5.47	4.10	0.72
C0120-014-0690-M*	0.120	3.05	0.014	0.36	0.690	17.53	0.355	9.02	0.219	5.56	1.23	5.47	3.70	0.65
C0120-014-0750-M*	0.120	3.05	0.014	0.36	0.750	19.05	0.385	9.78	0.235	5.97	1.23	5.47	3.40	0.60
C0120-014-0810-M*	0.120	3.05	0.014	0.36	0.810	20.57	0.414	10.52	0.251	6.38	1.23	5.47	3.10	0.54
C0120-014-0880-M*	0.120	3.05	0.014	0.36	0.880	22.35	0.456	11.58	0.269	6.83	1.23	5.47	2.90	0.51
C0120-014-0940-M*	0.120	3.05	0.014	0.36	0.940	23.88	0.484	12.29	0.285	7.24	1.23	5.47	2.70	0.47
C0120-014-1000-M*	0.120	3.05	0.014	0.36	1.000	25.40	0.508	12.90	0.301	7.65	1.23	5.47	2.50	0.44
C0120-014-1120-M*	0.120	3.05	0.014	0.36	1.120	28.45	0.561	14.25	0.333	8.46	1.23	5.47	2.20	0.39
C0120-014-1250-M*	0.120	3.05	0.014	0.36	1.250	31.75	0.632	16.05	0.368	9.35	1.23	5.47	2.00	0.35
C0120-014-1500-M*	0.120	3.05	0.014	0.36	1.500	38.10	0.776	19.71	0.434	11.02	1.23	5.47	1.70	0.30
C0120-016-0190-M*	0.120	3.05	0.016	0.41	0.190	4.83	0.118	3.00	0.101	2.57	1.84	8.18	25.60	4.48
C0120-016-0250-M*	0.120	3.05	0.016	0.41	0.250	6.35	0.145	3.68	0.119	3.02	1.84	8.18	17.50	3.06
C0120-016-0310-M*	0.120	3.05	0.016	0.41	0.310	7.87	0.179	4.55	0.139	3.53	1.84	8.18	14.00	2.45
C0120-016-0380-M*	0.120	3.05	0.016	0.41	0.380	9.65	0.217	5.51	0.163	4.14	1.84	8.18	11.30	1.98
C0120-016-0440-M*	0.120	3.05	0.016	0.41	0.440	11.18	0.246	6.25	0.187	4.75	1.84	8.18	9.50	1.66
C0120-016-0500-M*	0.120	3.05	0.016	0.41	0.500	12.70	0.280	7.11	0.208	5.28	1.84	8.18	8.30	1.45
C0120-016-0560-M*	0.120	3.05	0.016	0.41	0.560	14.22	0.308	7.82	0.231	5.87	1.84	8.18	7.30	1.28
C0120-016-0620-M*	0.120	3.05	0.016	0.41	0.620	15.75	0.342	8.69	0.251	6.38	1.84	8.18	6.60	1.16
C0120-016-0690-M*	0.120	3.05	0.016	0.41	0.690	17.53	0.375	9.53	0.281	7.14	1.84	8.18	5.80	1.02
C0120-016-0750-M*	0.120	3.05	0.016	0.41	0.750	19.05	0.404	10.26	0.303	7.70	1.84	8.18	5.30	0.93
C0120-016-1000-M*	0.120	3.05	0.016	0.41	1.000	25.40	0.551	14.00	0.378	9.60	1.84	8.18	4.10	0.72
C0120-016-1120-M*	0.120	3.05	0.016	0.41	1.120	28.45	0.609	15.47	0.419	10.64	1.84	8.18	3.60	0.63
C0120-016-1250-M*	0.120	3.05	0.016	0.41	1.250	31.75	0.675	17.15	0.463	11.76	1.84	8.18	3.20	0.56
C0120-016-1500-M*	0.120	3.05	0.016	0.41	1.500	38.10	0.843	21.41	0.544	13.82	1.84	8.18	2.80	0.49
C0120-018-0190-M*	0.120	3.05	0.018	0.46	0.190	4.83	0.128	3.25	0.117	2.97	2.56	11.39	41.30	7.23
C0120-018-0250-M*	0.120	3.05	0.018	0.46	0.250	6.35	0.159	4.04	0.139	3.53	2.56	11.39	28.20	4.94
C0120-018-0310-M*	0.120	3.05	0.018	0.46	0.310	7.87	0.193	4.90	0.166	4.22	2.56	11.39	21.90	3.83
C0120-018-0380-M*	0.120	3.05	0.018	0.46	0.380	9.65	0.237	6.02	0.194	4.93	2.56	11.39	17.90	3.13
C0120-018-0440-M*	0.120	3.05	0.018	0.46	0.440	11.18	0.271	6.88	0.220	5.59	2.56	11.39	15.20	2.66
C0120-018-0500-M*	0.120	3.05	0.018	0.46	0.500	12.70	0.305	7.75	0.248	6.30	2.56	11.39	13.10	2.29
C0120-018-0560-M*	0.120	3.05	0.018	0.46	0.560	14.22	0.336	8.53	0.279	7.09	2.56	11.39	11.40	2.00
C0120-018-0620-M*	0.120	3.05	0.018	0.46	0.620	15.75	0.378	9.60	0.297	7.54	2.56	11.39	10.60	1.86
C0120-018-0690-M*	0.120	3.05	0.018	0.46	0.690	17.53	0.414	10.52	0.332	8.43	2.56	11.39	9.30	1.63
C0120-018-0750-M*	0.120	3.05	0.018	0.46	0.750	19.05	0.448	11.38	0.359	9.12	2.56	11.39	8.50	1.49
C0120-018-1000-M*	0.120	3.05	0.018	0.46	1.000	25.40	0.600	15.24	0.455	11.56	2.56	11.39	6.40	1.12
C0120-018-1120-M*	0.120	3.05	0.018	0.46	1.120	28.45	0.671	17.04	0.505	12.83	2.56	11.39	5.70	1.00
C0120-018-1250-M*	0.120	3.05	0.018	0.46	1.250	31.75	0.748	19.00	0.559	14.20	2.56	11.39	5.10	0.89
C0120-018-1500-M*	0.120	3.05	0.018	0.46	1.500	38.10	0.890	22.61	0.663	16.84	2.56	11.39	4.20	0.74
C0120-020-0250-M*	0.120	3.05	0.020	0.51	0.250	6.35	0.176	4.47	0.163	4.14	3.31	14.72	44.80	7.84
C0120-020-0310-M*	0.120	3.05	0.020	0.51	0.310	7.87	0.215	5.46	0.192	4.88	3.31	14.72	34.80	6.09
C0120-020-0380-M*	0.120	3.05	0.020	0.51	0.380	9.65	0.260	6.60	0.226	5.74	3.31	14.72	27.70	4.85
C0120-020-0440-M*	0.120	3.05	0.020	0.51	0.440	11.18	0.299	7.59	0.256	6.50	3.31	14.72	23.50	4.11
C0120-020-0500-M*	0.120	3.05	0.020	0.51	0.500	12.70	0.338	8.59	0.285	7.24	3.31	14.72	20.40	3.57
C0120-020-0560-M*	0.120	3.05	0.020	0.51	0.560	14.22	0.377	9.58	0.314	7.98	3.31	14.72	18.10	3.17
C0120-020-0620-M*	0.120	3.05	0.020	0.51	0.620	15.75	0.416	10.57	0.344	8.74	3.31	14.72	16.20	2.84
C0120-020-0690-M*	0.120	3.05	0.020	0.51	0.690	17.53	0.461	11.71	0.378	9.60	3.31	14.72	14.50	2.54
C0120-020-0750-M*	0.120	3.05	0.020	0.51	0.750	19.05	0.500	12.70	0.407	10.34	3.31	14.72	13.20	2.31
C0120-020-0810-M*	0.120	3.05	0.020	0.51	0.810	20.57	0.539	13.69	0.437	11.10	3.31	14.72	12.20	2.14
C0120-020-0880-M*	0.120	3.05	0.020	0.51	0.880	22.35	0.584	14.83	0.471	11.96	3.31	14.72	11.20	1.96
C0120-020-0940-M*	0.120	3.05	0.020	0.51	0.940	23.88	0.623	15.82	0.500	12.70	3.31	14.72	10.40	1.82
C0120-020-1000-M*	0.120	3.05	0.020	0.51	1.000	25.40	0.662	16.81	0.530	13.46	3.31	14.72	9.80	1.72
C0120-020-1120-M*	0.120	3.05	0.020	0.51	1.120	28.45	0.739	18.77	0.588	14.94	3.31	14.72	8.70	1.52
C0120-020-1250-M*	0.120	3.05	0.020	0.51	1.250	31.75	0.824	20.93	0.652	16.56	3.31	14.72	7.80	1.37
C0120-020-1500-M*	0.120	3.05	0.020	0.51	1.500	38.10	0.985	25.02	0.774	19.66	3.31	14.72	6.40	1.12
C0120-022-0250-M	0.120	3.05	0.022	0.56	0.250	6.35	0.187	4.75	0.171	4.34	4.48	19.93	70.60	12.36
C0120-022-0310-M	0.120	3.05	0.022	0.56	0.310	7.87	0.226	5.74	0.209	5.31	4.48	19.93	53.30	9.33
C0120-022-0380-M	0.120	3.05	0.022	0.56	0.380	9.65	0.272	6.91	0.252	6.40	4.48	19.93	41.50	7.26
C0120-022-0440-M	0.120	3.05	0.022	0.56	0.440	11.18	0.317	8.05	0.280	7.11	4.48	19.93	36.40	6.37
C0120-022-0500-M	0.120	3.05	0.022	0.56	0.500	12.70	0.356	9.04	0.319	8.10	4.48	19.93	31.10	5.44
C0120-022-0560-M	0.120	3.05	0.022	0.56	0.560	14.22	0.401	10.19	0.346	8.79	4.48	19.93	28.20	4.94
C0120-022-0620-M	0.120	3.05	0.022	0.56	0.620	15.75	0.440	11.18	0.384	9.75	4.48	19.93	24.90	4.36
C0120-022-0690-M	0.120	3.05	0.022	0.56	0.690	17.53	0.479	12.17	0.442	11.23	4.48	19.93	21.20	3.71

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0120-014-0500-S*	0.317	8.06	0.79	3.52	4.33	0.76
C0120-014-0560-S*	0.354	8.98	0.79	3.52	3.83	0.67
C0120-014-0620-S*	0.388	9.87	0.79	3.52	3.42	0.60
C0120-014-0690-S*	0.433	11.01	0.79	3.52	3.08	0.54
C0120-014-0750-S*	0.471	11.96	0.79	3.52	2.83	0.50
C0120-014-0810-S*	0.504	12.79	0.79	3.52	2.58	0.45
C0120-014-0880-S*	0.553	14.04	0.79	3.52	2.42	0.42
C0120-014-0940-S*	0.588	14.94	0.79	3.52	2.25	0.39
C0120-014-1000-S*	0.620	15.75	0.79	3.52	2.08	0.36
C0120-014-1120-S*	0.688	17.49	0.79	3.52	1.83	0.32
C0120-014-1250-S*	0.775	19.69	0.79	3.52	1.67	0.29
C0120-014-1500-S*	0.941	23.91	0.79	3.52	1.42	0.25
C0120-016-0190-S*	0.136	3.45	1.15	5.13	21.32	3.73
C0120-016-0250-S*	0.171	4.34	1.15	5.13	14.58	2.55
C0120-016-0310-S*	0.211	5.36	1.15	5.13	11.66	2.04
C0120-016-0380-S*	0.257	6.54	1.15	5.13	9.41	1.65
C0120-016-0440-S*	0.294	7.47	1.15	5.13	7.91	1.38
C0120-016-0500-S*	0.333	8.46	1.15	5.13	6.91	1.21
C0120-016-0560-S*	0.370	9.41	1.15	5.13	6.08	1.06
C0120-016-0620-S*	0.410	10.42	1.15	5.13	5.50	0.96
C0120-016-0690-S*	0.451	11.46	1.15	5.13	4.83	0.85
C0120-016-0750-S*	0.489	12.41	1.15	5.13	4.41	0.77
C0120-016-1000-S*	0.662	16.82	1.15	5.13	3.42	0.60
C0120-016-1120-S*	0.735	18.68	1.15	5.13	3.00	0.53
C0120-016-1250-S*	0.817	20.76	1.15	5.13	2.67	0.47
C0120-016-1500-S*	1.005	25.54	1.15	5.13	2.33	0.41
C0120-018-0190-S*	0.144	3.65	1.59	7.08	34.40	6.02
C0120-018-0250-S*	0.182	4.63	1.59	7.08	23.49	4.11
C0120-018-0310-S*	0.223	5.66	1.59	7.08	18.24	3.19
C0120-018-0380-S*	0.273	6.94	1.59	7.08	14.91	2.61
C0120-018-0440-S*	0.314	7.98	1.59	7.08	12.66	2.22
C0120-018-0500-S*	0.354	8.99	1.59	7.08	10.91	1.91
C0120-018-0560-S*	0.392	9.97	1.59	7.08	9.50	1.66
C0120-018-0620-S*	0.440	11.17	1.59	7.08	8.83	1.55
C0120-018-0690-S*	0.484	12.31	1.59	7.08	7.75	1.36
C0120-018-0750-S*	0.525	13.34	1.59	7.08	7.08	1.24
C0120-018-1000-S*	0.701	17.81	1.59	7.08	5.33	0.93
C0120-018-1120-S*	0.785	19.93	1.59	7.08	4.75	0.83
C0120-018-1250-S*	0.875	22.23	1.59	7.08	4.25	0.74
C0120-018-1500-S*	1.045	26.54	1.59	7.08	3.50	0.61
C0120-020-0250-S*	0.193	4.90	2.13	9.47	37.32	6.53
C0120-020-0310-S*	0.237	6.01	2.13	9.47	28.99	5.07
C0120-020-0380-S*	0.288	7.31	2.13	9.47	23.07	4.04
C0120-020-0440-S*	0.331	8.41	2.13	9.47	19.58	3.43
C0120-020-0500-S*	0.375	9.52	2.13	9.47	16.99	2.97
C0120-020-0560-S*	0.419	10.64	2.13	9.47	15.08	2.64
C0120-020-0620-S*	0.462	11.74	2.13	9.47	13.49	2.36
C0120-020-0690-S*	0.514	13.05	2.13	9.47	12.08	2.11
C0120-020-0750-S*	0.556	14.13	2.13	9.47	11.00	1.93
C0120-020-0810-S*	0.601	15.25	2.13	9.47	10.16	1.78
C0120-020-0880-S*	0.652	16.56	2.13	9.47	9.33	1.63
C0120-020-0940-S*	0.694	17.63	2.13	9.47	8.66	1.52
C0120-020-1000-S*	0.739	18.78	2.13	9.47	8.16	1.43
C0120-020-1120-S*	0.826	20.99	2.13	9.47	7.25	1.27
C0120-020-1250-S*	0.922	23.43	2.13	9.47	6.50	1.14
C0120-020-1500-S*	1.101	27.96	2.13	9.47	5.33	0.93
C0120-022-0250-S	0.203	5.16	2.76	12.27	58.81	10.29
C0120-022-0310-S	0.248	6.30	2.76	12.27	44.40	7.77
C0120-022-0380-S	0.300	7.63	2.76	12.27	34.57	6.05
C0120-022-0440-S	0.349	8.87	2.76	12.27	30.32	5.31
C0120-022-0500-S	0.394	10.00	2.76	12.27	25.91	4.53
C0120-022-0560-S	0.443	11.24	2.76	12.27	23.49	4.11
C0120-022-0620-S	0.487	12.37	2.76	12.27	20.74	3.63
C0120-022-0690-S	0.534	13.56	2.76	12.27	17.66	3.09

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0120-022-0750-M	0.120	3.05	0.022	0.56	0.750	19.05	0.528	13.41	0.461	11.71	4.48	19.93	20.20	3.54	C0120-022-0750-S	0.586	14.89	2.76	12.27	16.83	2.95
C0120-022-0810-M	0.120	3.05	0.022	0.56	0.810	20.57	0.570	14.48	0.494	12.55	4.48	19.93	18.70	3.27	C0120-022-0810-S	0.633	16.08	2.76	12.27	15.58	2.73
C0120-022-0940-M	0.120	3.05	0.022	0.56	0.940	23.88	0.655	16.64	0.566	14.38	4.48	19.93	15.70	2.75	C0120-022-0940-S	0.729	18.52	2.76	12.27	13.08	2.29
C0120-022-1000-M	0.120	3.05	0.022	0.56	1.000	25.40	0.695	17.65	0.600	15.24	4.48	19.93	14.70	2.57	C0120-022-1000-S	0.775	19.68	2.76	12.27	12.25	2.14
C0120-022-1120-M	0.120	3.05	0.022	0.56	1.120	28.45	0.792	20.12	0.667	16.94	4.48	19.93	13.70	2.40	C0120-022-1120-S	0.878	22.31	2.76	12.27	11.41	2.00
C0120-022-1250-M	0.120	3.05	0.022	0.56	1.250	31.75	0.867	22.02	0.739	18.77	4.48	19.93	11.70	2.05	C0120-022-1250-S	0.967	24.56	2.76	12.27	9.75	1.71
C0120-022-1500-M	0.120	3.05	0.022	0.56	1.500	38.10	1.038	26.37	0.879	22.33	4.48	19.93	9.70	1.70	C0120-022-1500-S	1.159	29.43	2.76	12.27	8.08	1.41
C0120-024-0250-M	**0.120**	**3.05**	**0.024**	**0.61**	**0.250**	**6.35**	**0.199**	**5.04**	**0.177**	**4.49**	**5.52**	**24.57**	**107.40**	**18.80**	**C0120-024-0250-S**	**0.204**	**5.17**	**4.15**	**18.44**	**89.46**	**15.66**
C0120-024-0310-M	0.120	3.05	0.024	0.61	0.310	7.87	0.242	6.15	0.229	5.82	5.63	25.04	82.30	14.40	C0120-024-0310-S	0.259	6.57	3.52	15.64	68.56	12.00
C0120-024-0380-M	0.120	3.05	0.024	0.61	0.380	9.65	0.293	7.44	0.271	6.88	5.63	25.04	64.90	11.36	C0120-024-0380-S	0.315	8.00	3.52	15.64	54.06	9.46
C0120-024-0440-M	0.120	3.05	0.024	0.61	0.440	11.18	0.338	8.59	0.307	7.80	5.63	25.04	55.00	9.63	C0120-024-0440-S	0.363	9.23	3.52	15.64	45.82	8.02
C0120-024-0500-M	0.120	3.05	0.024	0.61	0.500	12.70	0.382	9.70	0.343	8.71	5.63	25.04	47.70	8.35	C0120-024-0500-S	0.411	10.45	3.52	15.64	39.73	6.95
C0120-024-0560-M	0.120	3.05	0.024	0.61	0.560	14.22	0.426	10.82	0.379	9.63	5.63	25.04	42.10	7.37	C0120-024-0560-S	0.460	11.68	3.52	15.64	35.07	6.14
C0120-024-0620-M	0.120	3.05	0.024	0.61	0.620	15.75	0.471	11.96	0.415	10.54	5.63	25.04	37.70	6.60	C0120-024-0620-S	0.508	12.90	3.52	15.64	31.40	5.50
C0120-024-0690-M	0.120	3.05	0.024	0.61	0.690	17.53	0.522	13.26	0.457	11.61	5.63	25.04	33.60	5.88	C0120-024-0690-S	0.564	14.33	3.52	15.64	27.99	4.90
C0120-024-0750-M	0.120	3.05	0.024	0.61	0.750	19.05	0.567	14.40	0.493	12.52	5.63	25.04	30.70	5.37	C0120-024-0750-S	0.612	15.56	3.52	15.64	25.57	4.47
C0120-024-0810-M	0.120	3.05	0.024	0.61	0.810	20.57	0.611	15.52	0.529	13.44	5.63	25.04	28.30	4.95	C0120-024-0810-S	0.661	16.78	3.52	15.64	23.57	4.12
C0120-024-0880-M	0.120	3.05	0.024	0.61	0.880	22.35	0.663	16.84	0.571	14.50	5.63	25.04	25.90	4.53	C0120-024-0880-S	0.717	18.21	3.52	15.64	21.57	3.77
C0120-024-0940-M	0.120	3.05	0.024	0.61	0.940	23.88	0.707	17.96	0.607	15.42	5.63	25.04	24.20	4.24	C0120-024-0940-S	0.766	19.44	3.52	15.64	20.16	3.53
C0120-024-1000-M	0.120	3.05	0.024	0.61	1.000	25.40	0.751	19.08	0.643	16.33	5.63	25.04	22.60	3.96	C0120-024-1000-S	0.813	20.66	3.52	15.64	18.83	3.30
C0120-024-1120-M	0.120	3.05	0.024	0.61	1.120	28.45	0.840	21.34	0.715	18.16	5.63	25.04	20.10	3.52	C0120-024-1120-S	0.910	23.11	3.52	15.64	16.74	2.93
C0120-024-1250-M	0.120	3.05	0.024	0.61	1.250	31.75	0.936	23.77	0.793	20.14	5.63	25.04	17.90	3.13	C0120-024-1250-S	1.014	25.76	3.52	15.64	14.91	2.61
C0120-024-1500-M	0.120	3.05	0.024	0.61	1.500	38.10	1.121	28.47	0.943	23.95	5.63	25.04	14.90	2.61	C0120-024-1500-S	1.217	30.90	3.52	15.64	12.41	2.17
C0125-014-0250-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.250**	**6.35**	**0.126**	**3.20**	**0.105**	**2.66**	**1.21**	**5.39**	**9.77**	**1.71**	**C0125-014-0250-S***	**0.141**	**3.58**	**0.89**	**3.95**	**8.14**	**1.42**
C0125-014-0313-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.313**	**7.95**	**0.154**	**3.91**	**0.122**	**3.10**	**1.21**	**5.39**	**7.61**	**1.33**	**C0125-014-0313-S***	**0.173**	**4.39**	**0.89**	**3.95**	**6.34**	**1.11**
C0125-014-0375-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.375**	**9.53**	**0.181**	**4.60**	**0.139**	**3.53**	**1.21**	**5.39**	**6.25**	**1.09**	**C0125-014-0375-S***	**0.205**	**5.20**	**0.89**	**3.95**	**5.21**	**0.91**
C0125-014-0438-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.438**	**11.13**	**0.209**	**5.31**	**0.156**	**3.97**	**1.21**	**5.39**	**5.29**	**0.93**	**C0125-014-0438-S***	**0.237**	**6.01**	**0.89**	**3.95**	**4.41**	**0.77**
C0125-014-0500-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.500**	**12.70**	**0.236**	**6.00**	**0.173**	**4.40**	**1.21**	**5.39**	**4.59**	**0.80**	**C0125-014-0500-S***	**0.268**	**6.80**	**0.89**	**3.95**	**3.82**	**0.67**
C0125-014-0563-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.563**	**14.30**	**0.264**	**6.70**	**0.191**	**4.84**	**1.21**	**5.39**	**4.05**	**0.71**	**C0125-014-0563-S***	**0.300**	**7.62**	**0.89**	**3.95**	**3.37**	**0.59**
C0125-014-0625-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.625**	**15.88**	**0.291**	**7.40**	**0.208**	**5.27**	**1.21**	**5.39**	**3.63**	**0.64**	**C0125-014-0625-S***	**0.332**	**8.42**	**0.89**	**3.95**	**3.02**	**0.53**
C0125-014-0688-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.688**	**17.48**	**0.320**	**8.12**	**0.225**	**5.70**	**1.21**	**5.39**	**3.29**	**0.58**	**C0125-014-0688-S***	**0.364**	**9.25**	**0.89**	**3.95**	**2.74**	**0.48**
C0125-014-0750-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.750**	**19.05**	**0.346**	**8.79**	**0.242**	**6.15**	**1.21**	**5.39**	**3.00**	**0.53**	**C0125-014-0750-S***	**0.395**	**10.03**	**0.89**	**3.95**	**2.50**	**0.44**
C0125-014-0813-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.813**	**20.65**	**0.374**	**9.50**	**0.259**	**6.58**	**1.21**	**5.39**	**2.76**	**0.48**	**C0125-014-0813-S***	**0.427**	**10.85**	**0.89**	**3.95**	**2.30**	**0.40**
C0125-014-0875-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.875**	**22.23**	**0.402**	**10.21**	**0.276**	**7.01**	**1.21**	**5.39**	**2.56**	**0.45**	**C0125-014-0875-S***	**0.459**	**11.65**	**0.89**	**3.95**	**2.13**	**0.37**
C0125-014-0938-M*	**0.125**	**3.18**	**0.014**	**0.36**	**0.938**	**23.83**	**0.429**	**10.90**	**0.293**	**7.45**	**1.21**	**5.39**	**2.38**	**0.42**	**C0125-014-0938-S***	**0.490**	**12.46**	**0.89**	**3.95**	**1.98**	**0.35**
C0125-014-1000-M*	**0.125**	**3.18**	**0.014**	**0.36**	**1.000**	**25.40**	**0.457**	**11.60**	**0.310**	**7.88**	**1.21**	**5.39**	**2.23**	**0.39**	**C0125-014-1000-S***	**0.522**	**13.27**	**0.89**	**3.95**	**1.86**	**0.33**
C0125-014-1125-M*	**0.125**	**3.18**	**0.014**	**0.36**	**1.125**	**28.58**	**0.513**	**13.03**	**0.344**	**8.73**	**1.21**	**5.39**	**1.98**	**0.35**	**C0125-014-1125-S***	**0.587**	**14.91**	**0.89**	**3.95**	**1.65**	**0.29**
C0125-014-1250-M*	**0.125**	**3.18**	**0.014**	**0.36**	**1.250**	**31.75**	**0.566**	**14.37**	**0.379**	**9.64**	**1.21**	**5.39**	**1.77**	**0.31**	**C0125-014-1250-S***	**0.648**	**16.46**	**0.89**	**3.95**	**1.47**	**0.26**
C0125-014-1375-M*	**0.125**	**3.18**	**0.014**	**0.36**	**1.375**	**34.93**	**0.623**	**15.81**	**0.413**	**10.48**	**1.21**	**5.39**	**1.61**	**0.28**	**C0125-014-1375-S***	**0.713**	**18.12**	**0.89**	**3.95**	**1.34**	**0.23**
C0125-014-1500-M*	**0.125**	**3.18**	**0.014**	**0.36**	**1.500**	**38.10**	**0.676**	**17.17**	**0.448**	**11.38**	**1.21**	**5.39**	**1.47**	**0.26**	**C0125-014-1500-S***	**0.775**	**19.69**	**0.89**	**3.95**	**1.22**	**0.21**
C0125-014-1750-M*	**0.125**	**3.18**	**0.014**	**0.36**	**1.750**	**44.45**	**0.740**	**18.81**	**0.539**	**13.68**	**1.21**	**5.39**	**1.20**	**0.21**	**C0125-014-1750-S***	**0.862**	**21.90**	**0.89**	**3.95**	**1.00**	**0.18**
C0125-015-0250-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.250**	**6.35**	**0.134**	**3.40**	**0.119**	**3.02**	**1.39**	**6.20**	**12.00**	**2.10**	**C0125-015-0250-S***	**0.142**	**3.61**	**1.08**	**4.80**	**10.00**	**1.75**
C0125-015-0310-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.310**	**7.87**	**0.168**	**4.26**	**0.150**	**3.80**	**1.19**	**5.32**	**8.40**	**1.47**	**C0125-015-0310-S***	**0.168**	**4.26**	**1.00**	**4.43**	**7.00**	**1.23**
C0125-015-0340-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.340**	**8.64**	**0.216**	**5.49**	**0.204**	**5.18**	**0.68**	**3.03**	**5.50**	**0.96**	**C0125-015-0340-S***	**0.216**	**5.49**	**0.57**	**2.53**	**4.58**	**0.80**
C0125-015-0380-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.380**	**9.65**	**0.198**	**5.02**	**0.174**	**4.42**	**1.24**	**5.51**	**6.80**	**1.19**	**C0125-015-0380-S***	**0.198**	**5.02**	**1.03**	**4.59**	**5.66**	**0.99**
C0125-015-0410-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.410**	**10.41**	**0.222**	**5.63**	**0.158**	**4.00**	**1.47**	**6.54**	**7.80**	**1.37**	**C0125-015-0410-S***	**0.244**	**6.19**	**1.08**	**4.80**	**6.50**	**1.14**
C0125-015-0440-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.440**	**11.18**	**0.270**	**6.86**	**0.252**	**6.41**	**0.71**	**3.17**	**4.20**	**0.74**	**C0125-015-0440-S***	**0.270**	**6.86**	**0.59**	**2.64**	**3.50**	**0.61**
C0125-015-0530-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.530**	**13.46**	**0.284**	**7.21**	**0.252**	**6.41**	**1.03**	**4.60**	**4.20**	**0.74**	**C0125-015-0530-S***	**0.284**	**7.21**	**0.86**	**3.83**	**3.50**	**0.61**
C0125-015-0630-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.630**	**16.00**	**0.299**	**7.59**	**0.252**	**6.41**	**1.39**	**6.19**	**4.20**	**0.74**	**C0125-015-0630-S***	**0.321**	**8.16**	**1.08**	**4.80**	**3.50**	**0.61**
C0125-015-0720-M*	**0.125**	**3.18**	**0.015**	**0.38**	**0.720**	**18.29**	**0.335**	**8.50**	**0.280**	**7.11**	**1.43**	**6.34**	**3.70**	**0.65**	**C0125-015-0720-S***	**0.370**	**9.39**	**1.08**	**4.80**	**3.08**	**0.54**
C0125-016-0250-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.250**	**6.35**	**0.154**	**3.91**	**0.117**	**2.98**	**1.76**	**7.82**	**18.29**	**3.20**	**C0125-016-0250-S***	**0.165**	**4.19**	**1.30**	**5.77**	**15.24**	**2.67**
C0125-016-0313-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.313**	**7.95**	**0.189**	**4.80**	**0.137**	**3.47**	**1.76**	**7.82**	**14.19**	**2.48**	**C0125-016-0313-S***	**0.203**	**5.16**	**1.30**	**5.77**	**11.82**	**2.07**
C0125-016-0375-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.375**	**9.53**	**0.224**	**5.68**	**0.156**	**3.95**	**1.76**	**7.82**	**11.62**	**2.03**	**C0125-016-0375-S***	**0.241**	**6.12**	**1.30**	**5.77**	**9.68**	**1.69**
C0125-016-0438-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.438**	**11.13**	**0.259**	**6.58**	**0.175**	**4.44**	**1.76**	**7.82**	**9.82**	**1.72**	**C0125-016-0438-S***	**0.279**	**7.10**	**1.30**	**5.77**	**8.18**	**1.43**
C0125-016-0500-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.500**	**12.70**	**0.294**	**7.46**	**0.194**	**4.92**	**1.76**	**7.82**	**8.52**	**1.49**	**C0125-016-0500-S***	**0.317**	**8.06**	**1.30**	**5.77**	**7.10**	**1.24**
C0125-016-0563-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.563**	**14.30**	**0.329**	**8.35**	**0.213**	**5.41**	**1.76**	**7.82**	**7.51**	**1.31**	**C0125-016-0563-S***	**0.356**	**9.03**	**1.30**	**5.77**	**6.26**	**1.10**
C0125-016-0625-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.625**	**15.88**	**0.363**	**9.23**	**0.232**	**5.90**	**1.76**	**7.82**	**6.72**	**1.18**	**C0125-016-0625-S***	**0.393**	**9.99**	**1.30**	**5.77**	**5.60**	**0.98**
C0125-016-0688-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.688**	**17.48**	**0.399**	**10.13**	**0.251**	**6.39**	**1.76**	**7.82**	**6.08**	**1.06**	**C0125-016-0688-S***	**0.432**	**10.97**	**1.30**	**5.77**	**5.06**	**0.89**
C0125-016-0750-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.750**	**19.05**	**0.433**	**11.00**	**0.271**	**6.87**	**1.76**	**7.82**	**5.55**	**0.97**	**C0125-016-0750-S***	**0.469**	**11.92**	**1.30**	**5.77**	**4.62**	**0.81**
C0125-016-0813-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.813**	**20.65**	**0.469**	**11.91**	**0.290**	**7.35**	**1.76**	**7.82**	**5.11**	**0.89**	**C0125-016-0813-S***	**0.508**	**12.91**	**1.30**	**5.77**	**4.26**	**0.75**
C0125-016-0938-M*	**0.125**	**3.18**	**0.016**	**0.41**	**0.938**	**23.83**	**0.538**	**13.67**	**0.328**	**8.34**	**1.76**	**7.82**	**4.40**	**0.77**	**C0125-016-0938-S***	**0.584**	**14.84**	**1.30**	**5.77**	**3.67**	**0.64**
C0125-016-1000-M*	**0.125**	**3.18**	**0.016**	**0.41**	**1.000**	**25.40**	**0.573**	**14.56**	**0.347**	**8.81**	**1.76**	**7.82**	**4.12**	**0.72**	**C0125-016-1000-S***	**0.622**	**15.80**	**1.30**	**5.77**	**3.43**	**0.60**
C0125-016-1250-M*	**0.125**	**3.18**	**0.016**	**0.41**	**1.250**	**31.75**	**0.712**	**18.09**	**0.424**	**10.77**	**1.76**	**7.82**	**3.27**	**0.57**	**C0125-016-1250-S***	**0.774**	**19.65**	**1.30**	**5.77**	**2.72**	**0.48**
C0125-016-1500-M*	**0.125**	**3.18**	**0.016**	**0.41**	**1.500**	**38.10**	**0.853**	**21.68**	**0.500**	**12.69**	**1.76**	**7.82**	**2.72**	**0.48**	**C0125-016-1500-S***	**0.927**	**23.56**	**1.30**	**5.77**	**2.27**	**0.40**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0125-017-0250-M*	**0.125**	**3.18**	**0.017**	**0.43**	**0.250**	**6.35**	**0.155**	**3.95**	**0.131**	**3.32**	**2.08**	**9.26**	**22.00**	**3.85**
C0125-017-0310-M*	**0.125**	**3.18**	**0.017**	**0.43**	**0.310**	**7.87**	**0.180**	**4.57**	**0.160**	**4.06**	**2.08**	**9.26**	**16.00**	**2.80**
C0125-017-0380-M*	**0.125**	**3.18**	**0.017**	**0.43**	**0.380**	**9.65**	**0.220**	**5.59**	**0.184**	**4.68**	**2.08**	**9.26**	**13.00**	**2.28**
C0125-017-0410-M*	**0.125**	**3.18**	**0.017**	**0.43**	**0.410**	**10.41**	**0.230**	**5.84**	**0.208**	**5.29**	**1.98**	**8.80**	**11.00**	**1.93**
C0125-017-0560-M*	**0.125**	**3.18**	**0.017**	**0.43**	**0.560**	**14.22**	**0.316**	**8.03**	**0.287**	**7.28**	**1.78**	**7.92**	**7.30**	**1.28**
C0125-018-0250-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.250**	**6.35**	**0.164**	**4.17**	**0.138**	**3.52**	**2.44**	**10.84**	**28.47**	**4.98**
C0125-018-0313-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.313**	**7.95**	**0.202**	**5.14**	**0.163**	**4.13**	**2.44**	**10.84**	**22.00**	**3.85**
C0125-018-0375-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.375**	**9.53**	**0.240**	**6.08**	**0.186**	**4.73**	**2.44**	**10.84**	**18.00**	**3.15**
C0125-018-0410-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.410**	**10.41**	**0.242**	**6.15**	**0.223**	**5.66**	**2.35**	**10.46**	**14.00**	**2.45**
C0125-018-0500-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.500**	**12.70**	**0.314**	**7.98**	**0.234**	**5.94**	**2.44**	**10.84**	**13.13**	**2.30**
C0125-018-0563-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.563**	**14.30**	**0.352**	**8.94**	**0.258**	**6.56**	**2.44**	**10.84**	**11.56**	**2.02**
C0125-018-0625-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.625**	**15.88**	**0.389**	**9.89**	**0.282**	**7.16**	**2.44**	**10.84**	**10.34**	**1.81**
C0125-018-0688-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.688**	**17.48**	**0.427**	**10.85**	**0.306**	**7.77**	**2.44**	**10.84**	**9.34**	**1.63**
C0125-018-0750-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.750**	**19.05**	**0.464**	**11.79**	**0.330**	**8.37**	**2.44**	**10.84**	**8.53**	**1.49**
C0125-018-0813-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.813**	**20.65**	**0.502**	**12.75**	**0.354**	**8.98**	**2.44**	**10.84**	**7.84**	**1.37**
C0125-018-0938-M*	**0.125**	**3.18**	**0.018**	**0.46**	**0.938**	**23.83**	**0.577**	**14.65**	**0.402**	**10.20**	**2.44**	**10.84**	**6.75**	**1.18**
C0125-018-1000-M*	**0.125**	**3.18**	**0.018**	**0.46**	**1.000**	**25.40**	**0.614**	**15.60**	**0.425**	**10.80**	**2.44**	**10.84**	**6.32**	**1.11**
C0125-018-1250-M*	**0.125**	**3.18**	**0.018**	**0.46**	**1.250**	**31.75**	**0.764**	**19.41**	**0.520**	**13.22**	**2.44**	**10.84**	**5.02**	**0.88**
C0125-018-1500-M*	**0.125**	**3.18**	**0.018**	**0.46**	**1.500**	**38.10**	**0.914**	**23.21**	**0.616**	**15.66**	**2.44**	**10.84**	**4.16**	**0.73**
C0125-023-0250-M	**0.125**	**3.18**	**0.023**	**0.58**	**0.250**	**6.35**	**0.187**	**4.76**	**0.169**	**4.29**	**4.76**	**21.19**	**76.00**	**13.30**
C0125-023-0440-M	**0.125**	**3.18**	**0.023**	**0.58**	**0.440**	**11.18**	**0.311**	**7.91**	**0.296**	**7.51**	**4.76**	**21.19**	**37.00**	**6.48**
C0125-023-0630-M	**0.125**	**3.18**	**0.023**	**0.58**	**0.630**	**16.00**	**0.439**	**11.16**	**0.414**	**10.53**	**4.76**	**21.19**	**25.00**	**4.38**
C0125-023-0690-M	**0.125**	**3.18**	**0.023**	**0.58**	**0.690**	**17.53**	**0.479**	**12.18**	**0.464**	**11.80**	**4.63**	**20.60**	**22.00**	**3.85**
C0125-023-0780-M	**0.125**	**3.18**	**0.023**	**0.58**	**0.780**	**19.81**	**0.546**	**13.87**	**0.530**	**13.46**	**4.44**	**19.76**	**19.00**	**3.33**
D10550*	0.136	3.45	0.010	0.25	0.280	7.10	0.079	2.00	0.064	1.63	0.41	1.84	2.06	0.36
D10560*	0.136	3.45	0.010	0.25	0.421	10.70	0.110	2.80	0.084	2.13	0.41	1.84	1.37	0.24
D10570*	0.136	3.45	0.010	0.25	0.634	16.10	0.150	3.80	0.113	2.88	0.41	1.84	0.91	0.16
D10580*	0.136	3.45	0.010	0.25	0.917	23.30	0.209	5.30	0.153	3.88	0.41	1.84	0.63	0.11
D10590*	0.136	3.45	0.010	0.25	1.343	34.10	0.295	7.50	0.212	5.38	0.41	1.84	0.40	0.07
D10750*	0.139	3.52	0.013	0.32	0.248	6.30	0.098	2.50	0.082	2.08	0.85	3.79	5.54	0.97
D10760*	0.139	3.52	0.013	0.32	0.370	9.40	0.130	3.30	0.107	2.72	0.85	3.79	3.54	0.62
D10770*	0.139	3.52	0.013	0.32	0.551	14.00	0.181	4.60	0.145	3.68	0.85	3.79	2.29	0.40
D10780*	0.139	3.52	0.013	0.32	0.791	20.10	0.248	6.30	0.195	4.96	0.85	3.79	1.60	0.28
D10790*	0.139	3.52	0.013	0.32	1.154	29.30	0.350	8.90	0.271	6.88	0.85	3.79	1.09	0.19
C0140-010-0280-M*	**0.140**	**3.56**	**0.010**	**0.25**	**0.280**	**7.11**	**0.123**	**3.13**	**0.100**	**2.55**	**0.16**	**0.70**	**1.00**	**0.18**
C0140-010-0500-M*	**0.140**	**3.56**	**0.010**	**0.25**	**0.500**	**12.70**	**0.186**	**4.73**	**0.137**	**3.48**	**0.20**	**0.91**	**0.65**	**0.11**
C0140-010-0590-M*	**0.140**	**3.56**	**0.010**	**0.25**	**0.590**	**14.99**	**0.283**	**7.18**	**0.240**	**6.09**	**0.10**	**0.45**	**0.33**	**0.06**
C0140-010-0750-M*	**0.140**	**3.56**	**0.010**	**0.25**	**0.750**	**19.05**	**0.249**	**6.33**	**0.169**	**4.29**	**0.25**	**1.11**	**0.50**	**0.09**
C0140-010-0880-M*	**0.140**	**3.56**	**0.010**	**0.25**	**0.880**	**22.35**	**0.276**	**7.01**	**0.178**	**4.51**	**0.28**	**1.26**	**0.47**	**0.08**
C0140-010-0940-M*	**0.140**	**3.56**	**0.010**	**0.25**	**0.940**	**23.88**	**0.335**	**8.51**	**0.240**	**6.09**	**0.20**	**0.89**	**0.33**	**0.06**
C0140-010-1130-M*	**0.140**	**3.56**	**0.010**	**0.25**	**1.130**	**28.70**	**0.409**	**10.39**	**0.296**	**7.51**	**0.19**	**0.83**	**0.26**	**0.05**
C0140-012-0380-M*	**0.140**	**3.56**	**0.012**	**0.31**	**0.380**	**9.65**	**0.139**	**3.54**	**0.102**	**2.58**	**0.67**	**3.00**	**2.80**	**0.49**
C0140-012-0440-M*	**0.140**	**3.56**	**0.012**	**0.31**	**0.440**	**11.18**	**0.228**	**5.80**	**0.201**	**5.10**	**0.23**	**1.04**	**1.10**	**0.19**
C0140-012-0880-M*	**0.140**	**3.56**	**0.012**	**0.31**	**0.880**	**22.35**	**0.308**	**7.81**	**0.217**	**5.51**	**0.57**	**2.55**	**1.00**	**0.18**
C0140-012-0910-M*	**0.140**	**3.56**	**0.012**	**0.31**	**0.910**	**23.11**	**0.299**	**7.59**	**0.201**	**5.10**	**0.67**	**2.99**	**1.10**	**0.19**
C0140-016-0440-M*	**0.140**	**3.56**	**0.016**	**0.41**	**0.440**	**11.18**	**0.240**	**6.08**	**0.155**	**3.95**	**1.58**	**7.04**	**7.90**	**1.38**
C0140-016-1000-M*	**0.140**	**3.56**	**0.016**	**0.41**	**1.000**	**25.40**	**0.548**	**13.91**	**0.288**	**7.30**	**1.58**	**7.04**	**3.50**	**0.61**
C0140-016-1030-M*	**0.140**	**3.56**	**0.016**	**0.41**	**1.030**	**26.16**	**0.550**	**13.97**	**0.302**	**7.67**	**1.58**	**7.04**	**3.30**	**0.58**
C0140-016-1130-M*	**0.140**	**3.56**	**0.016**	**0.41**	**1.130**	**28.70**	**0.584**	**14.82**	**0.512**	**12.99**	**0.98**	**4.37**	**1.80**	**0.32**
C0140-016-1380-M*	**0.140**	**3.56**	**0.016**	**0.41**	**1.380**	**35.05**	**0.668**	**16.96**	**0.569**	**14.46**	**1.14**	**5.07**	**1.60**	**0.28**
C0140-016-1500-M*	**0.140**	**3.56**	**0.016**	**0.41**	**1.500**	**38.10**	**0.661**	**16.79**	**0.539**	**13.68**	**1.43**	**6.34**	**1.70**	**0.30**
C0140-020-0310-M*	**0.140**	**3.56**	**0.020**	**0.51**	**0.310**	**7.87**	**0.201**	**5.10**	**0.167**	**4.23**	**2.94**	**13.09**	**27.00**	**4.73**
C0140-020-0470-M*	**0.140**	**3.56**	**0.020**	**0.51**	**0.470**	**11.94**	**0.296**	**7.51**	**0.278**	**7.06**	**2.27**	**10.09**	**13.00**	**2.28**
D10950*	0.142	3.60	0.016	0.40	0.220	5.60	0.110	2.80	0.102	2.60	1.43	6.37	13.03	2.28
D10960*	0.142	3.60	0.016	0.40	0.327	8.30	0.154	3.90	0.134	3.40	1.43	6.37	8.29	1.45
D10970*	0.142	3.60	0.016	0.40	0.472	12.00	0.213	5.40	0.181	4.60	1.43	6.37	5.37	0.94
D10980*	0.142	3.60	0.016	0.40	0.689	17.50	0.295	7.50	0.244	6.20	1.43	6.37	3.66	0.64
D10990*	0.142	3.60	0.016	0.40	1.004	25.50	0.417	10.60	0.339	8.60	1.43	6.37	2.46	0.43
D11150*	0.146	3.70	0.020	0.50	0.217	5.50	0.146	3.70	0.128	3.25	2.25	10.00	31.83	5.57
D11160*	0.146	3.70	0.020	0.50	0.311	7.90	0.201	5.10	0.167	4.25	2.25	10.00	20.17	3.53
D11170*	0.146	3.70	0.020	0.50	0.453	11.50	0.280	7.10	0.226	5.75	2.25	10.00	13.03	2.28
D11180*	0.146	3.70	0.020	0.50	0.630	16.00	0.386	9.80	0.305	7.75	2.25	10.00	8.91	1.56
D11190*	0.146	3.70	0.020	0.50	0.925	23.50	0.551	14.00	0.423	10.75	2.25	10.00	6.00	1.05
C0148-016-0250-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.250**	**6.35**	**0.124**	**3.16**	**0.107**	**2.72**	**1.50**	**6.66**	**11.90**	**2.08**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0125-017-0250-S*	**0.166**	**4.22**	**1.54**	**6.85**	**18.33**	**3.21**
C0125-017-0310-S*	**0.194**	**4.94**	**1.54**	**6.85**	**13.33**	**2.33**
C0125-017-0380-S*	**0.238**	**6.04**	**1.54**	**6.85**	**10.83**	**1.90**
C0125-017-0410-S*	**0.242**	**6.15**	**1.54**	**6.85**	**9.16**	**1.60**
C0125-017-0560-S*	**0.316**	**8.03**	**1.48**	**6.60**	**6.08**	**1.06**
C0125-018-0250-S*	**0.174**	**4.41**	**1.81**	**8.04**	**23.72**	**4.15**
C0125-018-0313-S*	**0.214**	**5.44**	**1.81**	**8.04**	**18.33**	**3.21**
C0125-018-0375-S*	**0.254**	**6.46**	**1.81**	**8.04**	**14.99**	**2.62**
C0125-018-0410-S*	**0.255**	**6.48**	**1.81**	**8.04**	**11.66**	**2.04**
C0125-018-0500-S*	**0.335**	**8.50**	**1.81**	**8.04**	**10.94**	**1.91**
C0125-018-0563-S*	**0.375**	**9.53**	**1.81**	**8.04**	**9.63**	**1.69**
C0125-018-0625-S*	**0.415**	**10.54**	**1.81**	**8.04**	**8.61**	**1.51**
C0125-018-0688-S*	**0.456**	**11.57**	**1.81**	**8.04**	**7.78**	**1.36**
C0125-018-0750-S*	**0.496**	**12.59**	**1.81**	**8.04**	**7.11**	**1.24**
C0125-018-0813-S*	**0.536**	**13.62**	**1.81**	**8.04**	**6.53**	**1.14**
C0125-018-0938-S*	**0.616**	**15.66**	**1.81**	**8.04**	**5.62**	**0.98**
C0125-018-1000-S*	**0.657**	**16.68**	**1.81**	**8.04**	**5.26**	**0.92**
C0125-018-1250-S*	**0.818**	**20.77**	**1.81**	**8.04**	**4.18**	**0.73**
C0125-018-1500-S*	**0.978**	**24.85**	**1.81**	**8.04**	**3.47**	**0.61**
C0125-023-0250-S	**0.194**	**4.92**	**3.57**	**15.88**	**63.31**	**11.08**
C0125-023-0440-S	**0.324**	**8.23**	**3.57**	**15.88**	**30.82**	**5.39**
C0125-023-0630-S	**0.459**	**11.65**	**3.57**	**15.88**	**20.83**	**3.65**
C0125-023-0690-S	**0.495**	**12.58**	**3.57**	**15.88**	**18.33**	**3.21**
C0125-023-0780-S	**0.554**	**14.08**	**3.57**	**15.88**	**15.83**	**2.77**
D20550*	0.079	2.00	0.34	1.53	1.71	0.30
D20560*	0.110	2.80	0.34	1.53	1.14	0.20
D20570*	0.150	3.80	0.34	1.53	0.74	0.13
D20580*	0.209	5.30	0.34	1.53	0.51	0.09
D20590*	0.295	7.50	0.34	1.53	0.34	0.06
D20750*	0.098	2.50	0.71	3.16	4.63	0.81
D20760*	0.130	3.30	0.71	3.16	2.97	0.52
D20770*	0.181	4.60	0.71	3.16	1.89	0.33
D20780*	0.248	6.30	0.71	3.16	1.31	0.23
D20790*	0.350	8.90	0.71	3.16	0.91	0.16
C0140-010-0280-S*	**0.123**	**3.13**	**0.13**	**0.58**	**0.83**	**0.15**
C0140-010-0500-S*	**0.186**	**4.73**	**0.17**	**0.76**	**0.54**	**0.09**
C0140-010-0590-S*	**0.283**	**7.18**	**0.10**	**0.45**	**0.33**	**0.06**
C0140-010-0750-S*	**0.249**	**6.33**	**0.21**	**0.93**	**0.42**	**0.07**
C0140-010-0880-S*	**0.276**	**7.01**	**0.24**	**1.05**	**0.39**	**0.07**
C0140-010-0940-S*	**0.335**	**8.51**	**0.17**	**0.74**	**0.27**	**0.05**
C0140-010-1130-S*	**0.409**	**10.39**	**0.16**	**0.69**	**0.22**	**0.04**
C0140-012-0380-S*	**0.160**	**4.07**	**0.51**	**2.28**	**2.33**	**0.41**
C0140-012-0440-S*	**0.228**	**5.80**	**0.19**	**0.86**	**0.92**	**0.16**
C0140-012-0880-S*	**0.308**	**7.81**	**0.48**	**2.12**	**0.83**	**0.15**
C0140-012-0910-S*	**0.351**	**8.91**	**0.51**	**2.28**	**0.92**	**0.16**
C0140-016-0440-S*	**0.263**	**6.67**	**1.17**	**5.19**	**6.58**	**1.15**
C0140-016-1000-S*	**0.599**	**15.23**	**1.17**	**5.19**	**2.92**	**0.51**
C0140-016-1030-S*	**0.605**	**15.37**	**1.17**	**5.19**	**2.75**	**0.48**
C0140-016-1130-S*	**0.584**	**14.82**	**0.82**	**3.64**	**1.50**	**0.26**
C0140-016-1380-S*	**0.668**	**16.96**	**0.95**	**4.22**	**1.33**	**0.23**
C0140-016-1500-S*	**0.675**	**17.15**	**1.17**	**5.19**	**1.42**	**0.25**
C0140-020-0310-S*	**0.212**	**5.40**	**2.19**	**9.76**	**22.49**	**3.94**
C0140-020-0470-S*	**0.296**	**7.51**	**1.89**	**8.40**	**10.83**	**1.90**
D20950*	0.110	2.80	1.19	5.31	10.86	1.90
D20960*	0.154	3.90	1.19	5.31	6.91	1.21
D20970*	0.213	5.40	1.19	5.31	4.46	0.78
D20980*	0.295	7.50	1.19	5.31	3.03	0.53
D20990*	0.417	10.60	1.19	5.31	2.06	0.36
D21150*	0.146	3.70	1.87	8.33	26.51	4.64
D21160*	0.201	5.10	1.87	8.33	16.80	2.94
D21170*	0.280	7.10	1.87	8.33	10.86	1.90
D21180*	0.386	9.80	1.87	8.33	7.43	1.30
D21190*	0.551	14.00	1.87	8.33	4.97	0.87
C0148-016-0250-S*	**0.138**	**3.51**	**1.11**	**4.93**	**9.91**	**1.73**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

(OD) 0.148 - 0.156

MUSIC WIRE															STAINLESS STEEL							
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0148-016-0313-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.313**	**7.95**	**0.150**	**3.80**	**0.125**	**3.18**	**1.50**	**6.69**	**9.20**	**1.61**	**C0148-016-0313-S***	**0.168**	**4.28**	**1.11**	**4.93**	**7.66**	**1.34**
C0148-016-0375-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.375**	**9.53**	**0.175**	**4.43**	**0.142**	**3.61**	**1.50**	**6.69**	**7.50**	**1.31**	**C0148-016-0375-S***	**0.198**	**5.02**	**1.11**	**4.93**	**6.25**	**1.09**
C0148-016-0438-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.438**	**11.13**	**0.203**	**5.16**	**0.158**	**4.01**	**1.50**	**6.69**	**6.40**	**1.12**	**C0148-016-0438-S***	**0.230**	**5.84**	**1.11**	**4.93**	**5.33**	**0.93**
C0148-016-0500-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.500**	**12.70**	**0.227**	**5.76**	**0.176**	**4.46**	**1.50**	**6.69**	**5.50**	**0.96**	**C0148-016-0500-S***	**0.258**	**6.55**	**1.11**	**4.93**	**4.58**	**0.80**
C0148-016-0563-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.563**	**14.30**	**0.256**	**6.51**	**0.191**	**4.85**	**1.50**	**6.69**	**4.90**	**0.86**	**C0148-016-0563-S***	**0.291**	**7.40**	**1.11**	**4.93**	**4.08**	**0.71**
C0148-016-0625-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.625**	**15.88**	**0.283**	**7.20**	**0.207**	**5.25**	**1.50**	**6.69**	**4.40**	**0.77**	**C0148-016-0625-S***	**0.323**	**8.19**	**1.11**	**4.93**	**3.67**	**0.64**
C0148-016-0688-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.688**	**17.48**	**0.303**	**7.68**	**0.227**	**5.76**	**1.50**	**6.69**	**3.90**	**0.68**	**C0148-016-0688-S***	**0.347**	**8.81**	**1.11**	**4.93**	**3.25**	**0.57**
C0148-016-0750-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.750**	**19.05**	**0.332**	**8.44**	**0.242**	**6.14**	**1.50**	**6.69**	**3.60**	**0.63**	**C0148-016-0750-S***	**0.380**	**9.66**	**1.11**	**4.93**	**3.00**	**0.53**
C0148-016-0813-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.813**	**20.65**	**0.357**	**9.08**	**0.259**	**6.58**	**1.50**	**6.69**	**3.30**	**0.58**	**C0148-016-0813-S***	**0.410**	**10.41**	**1.11**	**4.93**	**2.75**	**0.48**
C0148-016-0938-M*	**0.148**	**3.76**	**0.016**	**0.41**	**0.938**	**23.83**	**0.420**	**10.66**	**0.288**	**7.31**	**1.50**	**6.69**	**2.90**	**0.51**	**C0148-016-0938-S***	**0.479**	**12.17**	**1.11**	**4.93**	**2.42**	**0.42**
C0148-016-1000-M*	**0.148**	**3.76**	**0.016**	**0.41**	**1.000**	**25.40**	**0.443**	**11.26**	**0.305**	**7.75**	**1.50**	**6.69**	**2.70**	**0.47**	**C0148-016-1000-S***	**0.507**	**12.88**	**1.11**	**4.93**	**2.25**	**0.39**
C0148-016-1250-M*	**0.148**	**3.76**	**0.016**	**0.41**	**1.250**	**31.75**	**0.534**	**13.57**	**0.378**	**9.60**	**1.50**	**6.69**	**2.10**	**0.37**	**C0148-016-1250-S***	**0.616**	**15.65**	**1.11**	**4.93**	**1.75**	**0.31**
C0148-016-1500-M*	**0.148**	**3.76**	**0.016**	**0.41**	**1.500**	**38.10**	**0.665**	**16.89**	**0.433**	**10.99**	**1.50**	**6.69**	**1.80**	**0.32**	**C0148-016-1500-S***	**0.761**	**19.32**	**1.11**	**4.93**	**1.50**	**0.26**
C0148-018-0250-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.250**	**6.35**	**0.143**	**3.64**	**0.122**	**3.10**	**2.09**	**9.29**	**19.60**	**3.43**	**C0148-018-0250-S***	**0.155**	**3.94**	**1.55**	**6.89**	**16.33**	**2.86**
C0148-018-0313-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.313**	**7.95**	**0.176**	**4.46**	**0.142**	**3.61**	**2.09**	**9.29**	**15.20**	**2.66**	**C0148-018-0313-S***	**0.191**	**4.84**	**1.55**	**6.89**	**12.66**	**2.22**
C0148-018-0375-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.375**	**9.53**	**0.207**	**5.25**	**0.161**	**4.10**	**2.09**	**9.29**	**12.40**	**2.17**	**C0148-018-0375-S***	**0.225**	**5.72**	**1.55**	**6.89**	**10.33**	**1.81**
C0148-018-0438-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.438**	**11.13**	**0.237**	**6.02**	**0.182**	**4.61**	**2.09**	**9.29**	**10.40**	**1.82**	**C0148-018-0438-S***	**0.259**	**6.58**	**1.55**	**6.89**	**8.66**	**1.52**
C0148-018-0500-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.500**	**12.70**	**0.268**	**6.80**	**0.201**	**5.10**	**2.09**	**9.29**	**9.00**	**1.58**	**C0148-018-0500-S***	**0.293**	**7.45**	**1.55**	**6.89**	**7.50**	**1.31**
C0148-018-0563-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.563**	**14.30**	**0.302**	**7.67**	**0.219**	**5.56**	**2.09**	**9.29**	**8.00**	**1.40**	**C0148-018-0563-S***	**0.331**	**8.40**	**1.55**	**6.89**	**6.66**	**1.17**
C0148-018-0625-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.625**	**15.88**	**0.331**	**8.40**	**0.240**	**6.08**	**2.09**	**9.29**	**7.10**	**1.24**	**C0148-018-0625-S***	**0.363**	**9.22**	**1.55**	**6.89**	**5.91**	**1.03**
C0148-018-0688-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.688**	**17.48**	**0.362**	**9.18**	**0.260**	**6.59**	**2.09**	**9.29**	**6.40**	**1.12**	**C0148-018-0688-S***	**0.397**	**10.09**	**1.55**	**6.89**	**5.33**	**0.93**
C0148-018-0750-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.750**	**19.05**	**0.396**	**10.06**	**0.277**	**7.03**	**2.09**	**9.29**	**5.90**	**1.03**	**C0148-018-0750-S***	**0.435**	**11.04**	**1.55**	**6.89**	**4.91**	**0.86**
C0148-018-0813-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.813**	**20.65**	**0.426**	**10.82**	**0.297**	**7.55**	**2.09**	**9.29**	**5.40**	**0.95**	**C0148-018-0813-S***	**0.469**	**11.90**	**1.55**	**6.89**	**4.50**	**0.79**
C0148-018-0938-M*	**0.148**	**3.76**	**0.018**	**0.46**	**0.938**	**23.83**	**0.484**	**12.29**	**0.339**	**8.61**	**2.09**	**9.29**	**4.60**	**0.81**	**C0148-018-0938-S***	**0.534**	**13.56**	**1.55**	**6.89**	**3.83**	**0.67**
C0148-018-1000-M*	**0.148**	**3.76**	**0.018**	**0.46**	**1.000**	**25.40**	**0.514**	**13.06**	**0.359**	**9.11**	**2.09**	**9.29**	**4.30**	**0.75**	**C0148-018-1000-S***	**0.567**	**14.41**	**1.55**	**6.89**	**3.58**	**0.63**
C0148-018-1250-M*	**0.148**	**3.76**	**0.018**	**0.46**	**1.250**	**31.75**	**0.653**	**16.59**	**0.428**	**10.86**	**2.09**	**9.29**	**3.50**	**0.61**	**C0148-018-1250-S***	**0.719**	**18.25**	**1.55**	**6.89**	**2.92**	**0.51**
C0148-018-1500-M*	**0.148**	**3.76**	**0.018**	**0.46**	**1.500**	**38.10**	**0.780**	**19.80**	**0.504**	**12.81**	**2.09**	**9.29**	**2.90**	**0.51**	**C0148-018-1500-S***	**0.859**	**21.81**	**1.55**	**6.89**	**2.42**	**0.42**
C0148-021-0250-M	0.148	3.76	0.021	0.53	0.250	6.35	0.162	4.11	0.143	3.63	3.15	14.01	35.70	6.25	C0148-021-0250-S	0.182	4.61	2.03	9.05	29.74	5.20
C0148-021-0310-M	0.148	3.76	0.021	0.53	0.310	7.87	0.196	4.98	0.166	4.22	3.15	14.01	27.70	4.85	C0148-021-0310-S	0.222	5.64	2.03	9.05	23.07	4.04
C0148-021-0380-M	0.148	3.76	0.021	0.53	0.380	9.65	0.237	6.02	0.193	4.90	3.15	14.01	22.00	3.85	C0148-021-0380-S	0.269	6.83	2.03	9.05	18.33	3.21
C0148-021-0440-M	0.148	3.76	0.021	0.53	0.440	11.18	0.271	6.88	0.217	5.51	3.15	14.01	18.70	3.27	C0148-021-0440-S	0.309	7.86	2.03	9.05	15.58	2.73
C0148-021-0500-M	0.148	3.76	0.021	0.53	0.500	12.70	0.306	7.77	0.240	6.10	3.15	14.01	16.20	2.84	C0148-021-0500-S	0.349	8.87	2.03	9.05	13.49	2.36
C0148-021-0560-M	0.148	3.76	0.021	0.53	0.560	14.22	0.341	8.66	0.263	6.68	3.15	14.01	14.30	2.50	C0148-021-0560-S	0.389	9.89	2.03	9.05	11.91	2.08
C0148-021-0620-M	0.148	3.76	0.021	0.53	0.620	15.75	0.375	9.53	0.286	7.26	3.15	14.01	12.80	2.24	C0148-021-0620-S	0.429	10.90	2.03	9.05	10.66	1.87
C0148-021-0690-M	0.148	3.76	0.021	0.53	0.690	17.53	0.415	10.54	0.313	7.95	3.15	14.01	11.50	2.01	C0148-021-0690-S	0.478	12.13	2.03	9.05	9.58	1.68
C0148-021-0750-M	0.148	3.76	0.021	0.53	0.750	19.05	0.450	11.43	0.336	8.53	3.15	14.01	10.50	1.84	C0148-021-0750-S	0.517	13.14	2.03	9.05	8.75	1.53
C0148-021-0810-M	0.148	3.76	0.021	0.53	0.810	20.57	0.485	12.32	0.359	9.12	3.15	14.01	9.70	1.70	C0148-021-0810-S	0.558	14.18	2.03	9.05	8.08	1.41
C0148-021-0880-M	0.148	3.76	0.021	0.53	0.880	22.35	0.525	13.34	0.386	9.80	3.15	14.01	8.90	1.56	C0148-021-0880-S	0.606	15.38	2.03	9.05	7.41	1.30
C0148-021-0940-M	0.148	3.76	0.021	0.53	0.940	23.88	0.560	14.22	0.410	10.41	3.15	14.01	8.30	1.45	C0148-021-0940-S	0.646	16.40	2.03	9.05	6.91	1.21
C0148-021-1000-M	0.148	3.76	0.021	0.53	1.000	25.40	0.594	15.09	0.433	11.00	3.15	14.01	7.80	1.37	C0148-021-1000-S	0.687	17.45	2.03	9.05	6.50	1.14
C0148-021-1250-M	0.148	3.76	0.021	0.53	1.250	31.75	0.738	18.75	0.529	13.44	3.15	14.01	6.10	1.07	C0148-021-1250-S	0.850	21.58	2.03	9.05	5.08	0.89
C0148-021-1500-M	0.148	3.76	0.021	0.53	1.500	38.10	0.882	22.40	0.626	15.90	3.15	14.01	5.10	0.89	C0148-021-1500-S	1.021	25.94	2.03	9.05	4.25	0.74
C0148-023-0250-M	0.148	3.76	0.023	0.58	0.250	6.35	0.172	4.37	0.160	4.06	4.04	17.97	52.00	9.10	C0148-023-0250-S	0.190	4.82	2.61	11.62	43.32	7.58
C0148-023-0310-M	0.148	3.76	0.023	0.58	0.310	7.87	0.209	5.31	0.187	4.75	4.04	17.97	40.10	7.02	C0148-023-0310-S	0.232	5.89	2.61	11.62	33.40	5.85
C0148-023-0380-M	0.148	3.76	0.023	0.58	0.380	9.65	0.253	6.43	0.218	5.54	4.04	17.97	31.70	5.55	C0148-023-0380-S	0.281	7.14	2.61	11.62	26.41	4.62
C0148-023-0440-M	0.148	3.76	0.023	0.58	0.440	11.18	0.290	7.37	0.245	6.22	4.04	17.97	26.90	4.71	C0148-023-0440-S	0.323	8.22	2.61	11.62	22.41	3.92
C0148-023-0500-M	0.148	3.76	0.023	0.58	0.500	12.70	0.327	8.31	0.272	6.91	4.04	17.97	23.30	4.08	C0148-023-0500-S	0.365	9.28	2.61	11.62	19.41	3.40
C0148-023-0560-M	0.148	3.76	0.023	0.58	0.560	14.22	0.364	9.25	0.299	7.59	4.04	17.97	20.60	3.61	C0148-023-0560-S	0.408	10.36	2.61	11.62	17.16	3.00
C0148-023-0620-M	0.148	3.76	0.023	0.58	0.620	15.75	0.401	10.19	0.326	8.28	4.04	17.97	18.50	3.24	C0148-023-0620-S	0.451	11.44	2.61	11.62	15.41	2.70
C0148-023-0690-M	0.148	3.76	0.023	0.58	0.690	17.53	0.444	11.28	0.357	9.07	4.04	17.97	16.50	2.89	C0148-023-0690-S	0.500	12.70	2.61	11.62	13.74	2.40
C0148-023-0750-M	0.148	3.76	0.023	0.58	0.750	19.05	0.481	12.22	0.384	9.75	4.04	17.97	15.10	2.64	C0148-023-0750-S	0.542	13.78	2.61	11.62	12.58	2.20
C0148-023-0810-M	0.148	3.76	0.023	0.58	0.810	20.57	0.518	13.16	0.410	10.41	4.04	17.97	13.90	2.43	C0148-023-0810-S	0.584	14.85	2.61	11.62	11.58	2.03
C0148-023-0880-M	0.148	3.76	0.023	0.58	0.880	22.35	0.562	14.27	0.442	11.23	4.04	17.97	12.70	2.22	C0148-023-0880-S	0.633	16.08	2.61	11.62	10.58	1.85
C0148-023-0940-M	0.148	3.76	0.023	0.58	0.940	23.88	0.599	15.21	0.469	11.91	4.04	17.97	11.90	2.08	C0148-023-0940-S	0.677	17.18	2.61	11.62	9.91	1.73
C0148-023-1000-M	0.148	3.76	0.023	0.58	1.000	25.40	0.636	16.15	0.495	12.57	4.04	17.97	11.10	1.94	C0148-023-1000-S	0.718	18.23	2.61	11.62	9.25	1.62
C0148-023-1250-M	0.148	3.76	0.023	0.58	1.250	31.75	0.791	20.09	0.607	15.42	4.04	17.97	8.80	1.54	C0148-023-1250-S	0.894	22.70	2.61	11.62	7.33	1.28
C0148-023-1500-M	0.148	3.76	0.023	0.58	1.500	38.10	0.945	24.00	0.719	18.26	4.04	17.97	7.30	1.28	C0148-023-1500-S	1.071	27.19	2.61	11.62	6.08	1.06
D11350*	0.151	3.83	0.025	0.63	0.217	5.50	0.157	4.00	0.161	4.10	4.72	20.99	80.11	14.02	D21350*	0.157	4.00	3.93	17.48	66.74	11.68
D11360*	0.151	3.83	0.025	0.63	0.307	7.80	0.213	5.40	0.211	5.36	4.72	20.99	50.86	8.90	D21360*	0.213	5.40	3.93	17.48	42.34	7.41
D11370*	0.151	3.83	0.025	0.63	0.433	11.00	0.295	7.50	0.285	7.25	4.72	20.99	32.97	5.77	D21370*	0.295	7.50	3.93	17.48	27.49	4.81
D11380*	0.151	3.83	0.025	0.63	0.610	15.50	0.406	10.30	0.385	9.77	4.72	20.99	22.46	3.93	D21380*	0.406	10.30	3.93	17.48	18.69	3.27
D11390*	0.151	3.83	0.025	0.63	0.886	22.50	0.579	14.70	0.533	13.55	4.72	20.99	15.14	2.65	D21390*	0.579	14.70	3.93	17.48	12.63	2.21
C0156-010-0250-M*	**0.156**	**3.96**	**0.010**	**0.25**	**0.250**	**6.35**	**0.079**	**2.01**	**0.051**	**1.30**	**0.38**	**1.67**	**2.20**	**0.39**	**C0156-010-0250-S***	**0.101**	**2.58**	**0.27**	**1.21**	**1.83**	**0.32**
C0156-010-0313-M*	**0.156**	**3.96**	**0.010**	**0.25**	**0.313**	**7.95**	**0.094**	**2.39**	**0.058**	**1.48**	**0.37**	**1.66**	**1.71**	**0.30**	**C0156-010-0313-S***	**0.122**	**3.09**	**0.27**	**1.21**	**1.42**	**0.25**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0156-010-0375-M*	0.156	3.96	0.010	0.25	0.375	9.53	0.109	2.77	0.065	1.66	0.37	1.66	1.40	0.25
C0156-010-0438-M*	0.156	3.96	0.010	0.25	0.438	11.13	0.124	3.15	0.072	1.83	0.37	1.66	1.19	0.21
C0156-010-0500-M*	0.156	3.96	0.010	0.25	0.500	12.70	0.139	3.52	0.079	2.00	0.37	1.66	1.03	0.18
C0156-010-0563-M*	0.156	3.96	0.010	0.25	0.563	14.30	0.153	3.89	0.085	2.15	0.37	1.66	0.91	0.16
C0156-010-0625-M*	0.156	3.96	0.010	0.25	0.625	15.88	0.168	4.26	0.091	2.32	0.37	1.65	0.81	0.14
C0156-010-0750-M*	0.156	3.96	0.010	0.25	0.750	19.05	0.197	4.99	0.104	2.64	0.37	1.65	0.67	0.12
C0156-010-0875-M*	0.156	3.96	0.010	0.25	0.875	22.23	0.226	5.73	0.117	2.96	0.37	1.65	0.57	0.10
C0156-010-1000-M*	0.156	3.96	0.010	0.25	1.000	25.40	0.254	6.45	0.128	3.26	0.37	1.66	0.50	0.09
C0156-011-0250-M*	0.156	3.96	0.011	0.28	0.250	6.35	0.089	2.25	0.058	1.48	0.50	2.21	3.08	0.54
C0156-011-0313-M*	0.156	3.96	0.011	0.28	0.313	7.95	0.105	2.67	0.067	1.69	0.50	2.21	2.39	0.42
C0156-011-0375-M*	0.156	3.96	0.011	0.28	0.375	9.53	0.120	3.06	0.075	1.90	0.50	2.21	1.95	0.34
C0156-011-0438-M*	0.156	3.96	0.011	0.28	0.438	11.13	0.137	3.48	0.083	2.11	0.50	2.21	1.65	0.29
C0156-011-0500-M*	0.156	3.96	0.011	0.28	0.500	12.70	0.153	3.88	0.090	2.30	0.50	2.21	1.43	0.25
C0156-011-0563-M*	0.156	3.96	0.011	0.28	0.563	14.30	0.169	4.29	0.098	2.49	0.50	2.21	1.26	0.22
C0156-011-0625-M*	0.156	3.96	0.011	0.28	0.625	15.88	0.186	4.71	0.105	2.67	0.50	2.21	1.13	0.20
C0156-011-0750-M*	0.156	3.96	0.011	0.28	0.750	19.05	0.216	5.49	0.120	3.06	0.50	2.21	0.93	0.16
C0156-011-0875-M*	0.156	3.96	0.011	0.28	0.875	22.23	0.246	6.26	0.136	3.44	0.50	2.21	0.79	0.14
C0156-011-1000-M*	0.156	3.96	0.011	0.28	1.000	25.40	0.280	7.12	0.150	3.82	0.50	2.21	0.69	0.12
C0156-012-0250-M*	0.156	3.96	0.012	0.31	0.250	6.35	0.097	2.46	0.066	1.67	0.64	2.83	4.15	0.73
C0156-012-0313-M*	0.156	3.96	0.012	0.31	0.313	7.95	0.115	2.92	0.076	1.92	0.64	2.83	3.21	0.56
C0156-012-0375-M*	0.156	3.96	0.012	0.31	0.375	9.53	0.132	3.36	0.086	2.17	0.64	2.83	2.62	0.46
C0156-012-0438-M*	0.156	3.96	0.012	0.31	0.438	11.13	0.150	3.82	0.095	2.41	0.64	2.83	2.21	0.39
C0156-012-0500-M*	0.156	3.96	0.012	0.31	0.500	12.70	0.169	4.29	0.103	2.62	0.64	2.83	1.92	0.34
C0156-012-0563-M*	0.156	3.96	0.012	0.31	0.563	14.30	0.187	4.75	0.112	2.85	0.64	2.83	1.69	0.30
C0156-012-0625-M*	0.156	3.96	0.012	0.31	0.625	15.88	0.204	5.18	0.121	3.08	0.64	2.83	1.51	0.26
C0156-012-0750-M*	0.156	3.96	0.012	0.31	0.750	19.05	0.237	6.03	0.139	3.54	0.64	2.83	1.24	0.22
C0156-012-0875-M*	0.156	3.96	0.012	0.31	0.875	22.23	0.275	6.99	0.156	3.97	0.64	2.83	1.06	0.19
C0156-012-1000-M*	0.156	3.96	0.012	0.31	1.000	25.40	0.309	7.85	0.175	4.43	0.64	2.83	0.92	0.16
C0156-013-0250-M*	0.156	3.96	0.013	0.33	0.250	6.35	0.105	2.66	0.074	1.87	0.80	3.55	5.49	0.96
C0156-013-0375-M*	0.156	3.96	0.013	0.33	0.375	9.53	0.144	3.66	0.097	2.45	0.80	3.55	3.45	0.60
C0156-013-0500-M*	0.156	3.96	0.013	0.33	0.500	12.70	0.182	4.63	0.117	2.98	0.80	3.55	2.51	0.44
C0156-013-0625-M*	0.156	3.96	0.013	0.33	0.625	15.88	0.222	5.65	0.138	3.50	0.80	3.55	1.98	0.35
C0156-013-0750-M*	0.156	3.96	0.013	0.33	0.750	19.05	0.261	6.63	0.159	4.03	0.80	3.55	1.63	0.29
C0156-013-1000-M*	0.156	3.96	0.013	0.33	1.000	25.40	0.341	8.67	0.199	5.06	0.80	3.55	1.21	0.21
C0156-013-1380-M*	0.156	3.96	0.013	0.33	1.380	35.05	0.484	12.30	0.256	6.51	0.80	3.55	0.89	0.16
C0156-013-1750-M*	0.156	3.96	0.013	0.33	1.750	44.45	0.611	15.52	0.315	7.99	0.80	3.55	0.70	0.12
C0156-016-0250-M*	0.156	3.96	0.016	0.41	0.250	6.35	0.120	3.05	0.102	2.59	1.40	6.25	10.82	1.89
C0156-016-0310-M*	0.156	3.96	0.016	0.41	0.310	7.87	0.144	3.65	0.117	2.98	1.43	6.36	8.60	1.51
C0156-016-0380-M*	0.156	3.96	0.016	0.41	0.380	9.65	0.192	4.87	0.126	3.21	1.43	6.36	7.60	1.33
C0156-016-0440-M*	0.156	3.96	0.016	0.41	0.440	11.18	0.215	5.47	0.185	4.69	0.97	4.30	4.30	0.75
C0156-016-0500-M*	0.156	3.96	0.016	0.41	0.500	12.70	0.239	6.06	0.202	5.14	0.99	4.42	3.80	0.67
C0156-016-0563-M*	0.156	3.96	0.016	0.41	0.563	14.30	0.241	6.12	0.180	4.58	1.43	6.36	4.44	0.78
C0156-016-0625-M*	0.156	3.96	0.016	0.41	0.625	15.88	0.266	6.74	0.195	4.96	1.43	6.36	3.98	0.70
C0156-016-0688-M*	0.156	3.96	0.016	0.41	0.688	17.48	0.291	7.38	0.211	5.35	1.43	6.36	3.60	0.63
C0156-016-0750-M*	0.156	3.96	0.016	0.41	0.750	19.05	0.340	8.64	0.281	7.14	1.02	4.56	2.50	0.44
C0156-016-1000-M*	0.156	3.96	0.016	0.41	1.000	25.40	0.428	10.86	0.281	7.14	1.43	6.36	2.50	0.44
C0156-016-1125-M*	0.156	3.96	0.016	0.41	1.125	28.58	0.463	11.75	0.317	8.06	1.43	6.36	2.16	0.38
C0156-016-1250-M*	0.156	3.96	0.016	0.41	1.250	31.75	0.513	13.02	0.348	8.83	1.43	6.36	1.94	0.34
C0156-016-1380-M*	0.156	3.96	0.016	0.41	1.380	35.05	0.585	14.86	0.371	9.42	1.43	6.36	1.80	0.32
C0156-016-1500-M*	0.156	3.96	0.016	0.41	1.500	38.10	0.611	15.53	0.409	10.38	1.43	6.36	1.61	0.28
C0156-016-1750-M*	0.156	3.96	0.016	0.41	1.750	44.45	0.728	18.49	0.462	11.74	1.43	6.36	1.40	0.25
C0156-020-0380-M*	0.156	3.96	0.020	0.51	0.380	9.65	0.232	5.89	0.170	4.31	2.67	11.86	18.00	3.15
C0156-020-0560-M*	0.156	3.96	0.020	0.51	0.560	14.22	0.318	8.07	0.238	6.03	2.67	11.86	11.00	1.93
C0156-020-0810-M*	0.156	3.96	0.020	0.51	0.810	20.57	0.483	12.28	0.447	11.35	1.63	7.26	5.00	0.88
C0156-020-1250-M*	0.156	3.96	0.020	0.51	1.250	31.75	0.648	16.45	0.568	14.43	2.29	10.18	3.80	0.67
C0156-020-1500-M*	0.156	3.96	0.020	0.51	1.500	38.10	0.833	21.16	0.543	13.79	2.67	11.86	4.00	0.70
C0156-020-1560-M*	0.156	3.96	0.020	0.51	1.560	39.62	0.933	23.69	0.863	21.92	1.51	6.70	2.40	0.42
C0156-022-0380-M	0.156	3.96	0.022	0.56	0.380	9.65	0.222	5.64	0.193	4.91	3.47	15.44	22.00	3.85
C0156-022-0530-M	0.156	3.96	0.022	0.56	0.530	13.46	0.318	8.08	0.295	7.49	2.75	12.25	13.00	2.28
C0156-022-0690-M	0.156	3.96	0.022	0.56	0.690	17.53	0.379	9.62	0.340	8.64	3.42	15.23	11.00	1.93
C0156-023-0250-M	0.156	3.96	0.023	0.58	0.250	6.35	0.168	4.28	0.133	3.38	3.92	17.45	48.13	8.42
C0156-023-0313-M	0.156	3.96	0.023	0.58	0.313	7.95	0.206	5.24	0.161	4.08	3.92	17.45	36.77	6.43
C0156-023-0380-M	0.156	3.96	0.023	0.58	0.380	9.65	0.253	6.44	0.182	4.61	3.92	17.45	31.00	5.43
C0156-023-0438-M	0.156	3.96	0.023	0.58	0.438	11.13	0.281	7.15	0.213	5.41	3.92	17.45	25.05	4.38

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0156-010-0375-S*	0.141	3.59	0.27	1.21	1.17	0.20
C0156-010-0438-S*	0.163	4.15	0.27	1.21	0.99	0.17
C0156-010-0500-S*	0.183	4.64	0.27	1.21	0.86	0.15
C0156-010-0563-S*	0.204	5.17	0.27	1.21	0.76	0.13
C0156-010-0625-S*	0.221	5.62	0.27	1.21	0.67	0.12
C0156-010-0750-S*	0.262	6.66	0.27	1.21	0.56	0.10
C0156-010-0875-S*	0.301	7.66	0.27	1.21	0.47	0.08
C0156-010-1000-S*	0.346	8.79	0.27	1.21	0.42	0.07
C0156-011-0250-S*	0.110	2.80	0.36	1.60	2.57	0.45
C0156-011-0313-S*	0.133	3.37	0.36	1.60	1.99	0.35
C0156-011-0375-S*	0.154	3.91	0.36	1.60	1.62	0.28
C0156-011-0438-S*	0.177	4.49	0.36	1.60	1.37	0.24
C0156-011-0500-S*	0.199	5.04	0.36	1.60	1.19	0.21
C0156-011-0563-S*	0.221	5.61	0.36	1.60	1.05	0.18
C0156-011-0625-S*	0.244	6.19	0.36	1.60	0.94	0.16
C0156-011-0750-S*	0.287	7.28	0.36	1.60	0.77	0.13
C0156-011-0875-S*	0.329	8.37	0.36	1.60	0.66	0.12
C0156-011-1000-S*	0.375	9.53	0.36	1.60	0.57	0.10
C0156-012-0250-S*	0.116	2.96	0.46	2.05	3.46	0.61
C0156-012-0313-S*	0.140	3.56	0.46	2.05	2.67	0.47
C0156-012-0375-S*	0.163	4.15	0.46	2.05	2.18	0.38
C0156-012-0438-S*	0.187	4.75	0.46	2.05	1.84	0.32
C0156-012-0500-S*	0.211	5.37	0.46	2.05	1.60	0.28
C0156-012-0563-S*	0.235	5.97	0.46	2.05	1.41	0.25
C0156-012-0625-S*	0.258	6.55	0.46	2.05	1.26	0.22
C0156-012-0750-S*	0.303	7.69	0.46	2.05	1.03	0.18
C0156-012-0875-S*	0.352	8.94	0.46	2.05	0.88	0.15
C0156-012-1000-S*	0.397	10.09	0.46	2.05	0.77	0.13
C0156-013-0250-S*	0.123	3.12	0.58	2.59	4.57	0.80
C0156-013-0375-S*	0.173	4.38	0.58	2.59	2.87	0.50
C0156-013-0500-S*	0.222	5.63	0.58	2.59	2.09	0.37
C0156-013-0625-S*	0.272	6.92	0.58	2.59	1.65	0.29
C0156-013-0750-S*	0.322	8.17	0.58	2.59	1.36	0.24
C0156-013-1000-S*	0.423	10.74	0.58	2.59	1.01	0.18
C0156-013-1380-S*	0.595	15.12	0.58	2.59	0.74	0.13
C0156-013-1750-S*	0.752	19.11	0.58	2.59	0.58	0.10
C0156-016-0250-S*	0.133	3.38	1.06	4.69	9.01	1.58
C0156-016-0310-S*	0.163	4.13	1.06	4.69	7.16	1.25
C0156-016-0380-S*	0.213	5.42	1.06	4.69	6.33	1.11
C0156-016-0440-S*	0.215	5.47	0.80	3.58	3.58	0.63
C0156-016-0500-S*	0.239	6.06	0.83	3.68	3.17	0.55
C0156-016-0563-S*	0.278	7.05	1.06	4.69	3.70	0.65
C0156-016-0625-S*	0.307	7.79	1.06	4.69	3.32	0.58
C0156-016-0688-S*	0.336	8.54	1.06	4.69	3.00	0.53
C0156-016-0750-S*	0.340	8.64	0.85	3.80	2.08	0.36
C0156-016-1000-S*	0.493	12.53	1.06	4.69	2.08	0.36
C0156-016-1125-S*	0.539	13.68	1.06	4.69	1.80	0.32
C0156-016-1250-S*	0.597	15.17	1.06	4.69	1.62	0.28
C0156-016-1380-S*	0.676	17.18	1.06	4.69	1.50	0.26
C0156-016-1500-S*	0.713	18.12	1.06	4.69	1.34	0.23
C0156-016-1750-S*	0.845	21.47	1.06	4.69	1.17	0.20
C0156-020-0380-S*	0.247	6.29	1.99	8.84	14.99	2.62
C0156-020-0560-S*	0.343	8.71	1.99	8.84	9.16	1.60
C0156-020-0810-S*	0.483	12.28	1.36	6.05	4.17	0.73
C0156-020-1250-S*	0.648	16.45	1.91	8.48	3.17	0.55
C0156-020-1500-S*	0.904	22.95	1.99	8.84	3.33	0.58
C0156-020-1560-S*	0.933	23.69	1.25	5.58	2.00	0.35
C0156-022-0380-S	0.238	6.05	2.60	11.55	18.33	3.21
C0156-022-0530-S	0.318	8.08	2.29	10.20	10.83	1.90
C0156-022-0690-S	0.407	10.33	2.60	11.55	9.16	1.60
C0156-023-0250-S	0.177	4.49	2.94	13.08	40.09	7.02
C0156-023-0313-S	0.217	5.51	2.94	13.08	30.63	5.36
C0156-023-0380-S	0.266	6.76	2.94	13.08	25.82	4.52
C0156-023-0438-S	0.297	7.55	2.94	13.08	20.87	3.65

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

(OD) 0.156 - 0.176

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0156-023-0500-M	**0.156**	**3.96**	**0.023**	**0.58**	**0.500**	**12.70**	**0.319**	**8.09**	**0.239**	**6.08**	**3.92**	**17.45**	**21.63**	**3.79**	**C0156-023-0500-S**	**0.337**	**8.55**	**2.94**	**13.08**	**18.02**	**3.15**
C0156-023-0560-M	**0.156**	**3.96**	**0.023**	**0.58**	**0.560**	**14.22**	**0.353**	**8.98**	**0.266**	**6.75**	**3.92**	**17.45**	**19.00**	**3.33**	**C0156-023-0560-S**	**0.374**	**9.50**	**2.94**	**13.08**	**15.83**	**2.77**
C0156-023-0625-M	**0.156**	**3.96**	**0.023**	**0.58**	**0.625**	**15.88**	**0.394**	**10.00**	**0.292**	**7.41**	**3.92**	**17.45**	**16.96**	**2.97**	**C0156-023-0625-S**	**0.417**	**10.59**	**2.94**	**13.08**	**14.13**	**2.47**
C0156-023-0688-M	**0.156**	**3.96**	**0.023**	**0.58**	**0.688**	**17.48**	**0.431**	**10.96**	**0.318**	**8.09**	**3.92**	**17.45**	**15.29**	**2.68**	**C0156-023-0688-S**	**0.457**	**11.61**	**2.94**	**13.08**	**12.74**	**2.23**
C0156-023-0813-M	**0.156**	**3.96**	**0.023**	**0.58**	**0.813**	**20.65**	**0.506**	**12.86**	**0.371**	**9.42**	**3.92**	**17.45**	**12.80**	**2.24**	**C0156-023-0813-S**	**0.537**	**13.64**	**2.94**	**13.08**	**10.66**	**1.87**
C0156-023-0938-M	**0.156**	**3.96**	**0.023**	**0.58**	**0.938**	**23.83**	**0.582**	**14.77**	**0.423**	**10.75**	**3.92**	**17.45**	**11.01**	**1.93**	**C0156-023-0938-S**	**0.617**	**15.68**	**2.94**	**13.08**	**9.17**	**1.60**
C0156-023-1000-M	**0.156**	**3.96**	**0.023**	**0.58**	**1.000**	**25.40**	**0.619**	**15.71**	**0.450**	**11.42**	**3.92**	**17.45**	**10.29**	**1.80**	**C0156-023-1000-S**	**0.657**	**16.69**	**2.94**	**13.08**	**8.57**	**1.50**
C0156-023-1500-M	**0.156**	**3.96**	**0.023**	**0.58**	**1.500**	**38.10**	**0.919**	**23.33**	**0.660**	**16.77**	**3.92**	**17.45**	**6.75**	**1.18**	**C0156-023-1500-S**	**0.977**	**24.82**	**2.94**	**13.08**	**5.62**	**0.98**
C0156-025-0280-M	**0.156**	**3.96**	**0.025**	**0.64**	**0.280**	**7.11**	**0.200**	**5.09**	**0.158**	**4.02**	**4.93**	**21.94**	**62.00**	**10.85**	**C0156-025-0280-S**	**0.208**	**5.29**	**3.71**	**16.49**	**51.65**	**9.04**
C0156-025-0560-M	**0.156**	**3.96**	**0.025**	**0.64**	**0.560**	**14.22**	**0.363**	**9.21**	**0.315**	**8.00**	**4.93**	**21.94**	**25.00**	**4.38**	**C0156-025-0560-S**	**0.382**	**9.70**	**3.71**	**16.49**	**20.83**	**3.65**
C0156-028-0810-M	**0.156**	**3.96**	**0.028**	**0.71**	**0.810**	**20.57**	**0.555**	**14.09**	**0.535**	**13.59**	**6.64**	**29.52**	**26.00**	**4.55**	**C0156-028-0810-S**	**0.576**	**14.64**	**5.06**	**22.52**	**21.66**	**3.79**
C0156-028-1000-M	**0.156**	**3.96**	**0.028**	**0.71**	**1.000**	**25.40**	**0.708**	**17.99**	**0.597**	**15.17**	**6.71**	**29.84**	**23.00**	**4.03**	**C0156-028-1000-S**	**0.736**	**18.69**	**5.06**	**22.52**	**19.16**	**3.35**
C0156-028-1380-M	**0.156**	**3.96**	**0.028**	**0.71**	**1.380**	**35.05**	**0.961**	**24.40**	**0.833**	**21.16**	**6.71**	**29.84**	**16.00**	**2.80**	**C0156-028-1380-S**	**1.000**	**25.41**	**5.06**	**22.52**	**13.33**	**2.33**
C0156-028-1750-M	**0.156**	**3.96**	**0.028**	**0.71**	**1.750**	**44.45**	**1.234**	**31.34**	**1.012**	**25.70**	**6.71**	**29.84**	**13.00**	**2.28**	**C0156-028-1750-S**	**1.283**	**32.58**	**5.06**	**22.52**	**10.83**	**1.90**
D10800*	0.170	4.32	0.013	0.32	0.343	8.70	0.102	2.60	0.082	2.08	0.69	3.09	2.86	0.50	D20800*	0.102	2.60	0.58	2.57	2.40	0.42
D10810*	0.170	4.32	0.013	0.32	0.516	13.10	0.138	3.50	0.107	2.72	0.69	3.09	1.77	0.31	D20810*	0.138	3.50	0.58	2.57	1.49	0.26
D10820*	0.170	4.32	0.013	0.32	0.780	19.80	0.193	4.90	0.145	3.68	0.69	3.09	1.26	0.22	D20820*	0.193	4.90	0.58	2.57	1.03	0.18
D10830*	0.170	4.32	0.013	0.32	1.126	28.60	0.264	6.70	0.195	4.96	0.69	3.09	0.80	0.14	D20830*	0.264	6.70	0.58	2.57	0.69	0.12
D10840*	0.170	4.32	0.013	0.32	1.650	41.90	0.374	9.50	0.271	6.88	0.69	3.09	0.57	0.10	D20840*	0.374	9.50	0.58	2.57	0.46	0.08
C0172-016-0250-M*	**0.172**	**4.37**	**0.016**	**0.41**	**0.250**	**6.35**	**0.118**	**3.00**	**0.090**	**2.28**	**1.30**	**5.80**	**9.90**	**1.73**	**C0172-016-0250-S***	**0.133**	**3.39**	**0.96**	**4.28**	**8.25**	**1.44**
C0172-016-0310-M*	**0.172**	**4.37**	**0.016**	**0.41**	**0.310**	**7.87**	**0.153**	**3.88**	**0.099**	**2.51**	**1.30**	**5.80**	**8.30**	**1.45**	**C0172-016-0310-S***	**0.171**	**4.34**	**0.96**	**4.28**	**6.91**	**1.21**
C0172-016-0340-M*	**0.172**	**4.37**	**0.016**	**0.41**	**0.340**	**8.64**	**0.146**	**3.71**	**0.118**	**2.99**	**1.20**	**5.34**	**6.20**	**1.09**	**C0172-016-0340-S***	**0.154**	**3.90**	**0.96**	**4.28**	**5.16**	**0.90**
C0172-016-0750-M*	**0.172**	**4.37**	**0.016**	**0.41**	**0.750**	**19.05**	**0.300**	**7.62**	**0.232**	**5.88**	**1.03**	**4.60**	**2.30**	**0.40**	**C0172-016-0750-S***	**0.300**	**7.62**	**0.86**	**3.83**	**1.92**	**0.34**
C0172-016-0780-M*	**0.172**	**4.37**	**0.016**	**0.41**	**0.780**	**19.81**	**0.359**	**9.12**	**0.185**	**4.70**	**1.30**	**5.80**	**3.10**	**0.54**	**C0172-016-0780-S***	**0.407**	**10.35**	**0.96**	**4.28**	**2.58**	**0.45**
C0172-016-0880-M*	**0.172**	**4.37**	**0.016**	**0.41**	**0.880**	**22.35**	**0.360**	**9.15**	**0.282**	**7.16**	**0.94**	**4.16**	**1.80**	**0.32**	**C0172-016-0880-S***	**0.360**	**9.15**	**0.78**	**3.47**	**1.50**	**0.26**
C0172-016-0940-M*	**0.172**	**4.37**	**0.016**	**0.41**	**0.940**	**23.88**	**0.343**	**8.70**	**0.249**	**6.32**	**1.25**	**5.58**	**2.10**	**0.37**	**C0172-016-0940-S***	**0.390**	**9.91**	**0.96**	**4.28**	**1.75**	**0.31**
C0172-016-1250-M*	**0.172**	**4.37**	**0.016**	**0.41**	**1.250**	**31.75**	**0.483**	**12.26**	**0.296**	**7.51**	**1.30**	**5.80**	**1.70**	**0.30**	**C0172-016-1250-S***	**0.571**	**14.50**	**0.96**	**4.28**	**1.42**	**0.25**
C0172-018-0280-M*	**0.172**	**4.37**	**0.018**	**0.46**	**0.280**	**7.11**	**0.140**	**3.55**	**0.121**	**3.06**	**1.68**	**7.49**	**12.00**	**2.10**	**C0172-018-0280-S***	**0.145**	**3.69**	**1.35**	**5.99**	**10.00**	**1.75**
C0172-018-0440-M*	**0.172**	**4.37**	**0.018**	**0.46**	**0.440**	**11.18**	**0.200**	**5.07**	**0.165**	**4.20**	**1.73**	**7.70**	**7.20**	**1.26**	**C0172-018-0440-S***	**0.216**	**5.47**	**1.35**	**5.99**	**6.00**	**1.05**
C0172-018-0500-M*	**0.172**	**4.37**	**0.018**	**0.46**	**0.500**	**12.70**	**0.228**	**5.79**	**0.189**	**4.80**	**1.60**	**7.14**	**5.90**	**1.03**	**C0172-018-0500-S***	**0.228**	**5.79**	**1.34**	**5.95**	**4.91**	**0.86**
C0172-018-0590-M*	**0.172**	**4.37**	**0.018**	**0.46**	**0.590**	**14.99**	**0.256**	**6.50**	**0.207**	**5.25**	**1.74**	**7.73**	**5.20**	**0.91**	**C0172-018-0590-S***	**0.279**	**7.09**	**1.35**	**5.99**	**4.33**	**0.76**
C0172-020-0380-M*	**0.172**	**4.37**	**0.020**	**0.51**	**0.380**	**9.65**	**0.194**	**4.92**	**0.169**	**4.29**	**2.42**	**10.78**	**13.00**	**2.28**	**C0172-020-0380-S***	**0.212**	**5.39**	**1.82**	**8.08**	**10.83**	**1.90**
C0172-020-0440-M*	**0.172**	**4.37**	**0.020**	**0.51**	**0.440**	**11.18**	**0.235**	**5.98**	**0.209**	**5.32**	**1.92**	**8.55**	**9.40**	**1.65**	**C0172-020-0440-S***	**0.235**	**5.98**	**1.60**	**7.12**	**7.83**	**1.37**
C0172-020-0590-M*	**0.172**	**4.37**	**0.020**	**0.51**	**0.590**	**14.99**	**0.293**	**7.44**	**0.231**	**5.86**	**2.44**	**10.84**	**8.20**	**1.44**	**C0172-020-0590-S***	**0.324**	**8.23**	**1.82**	**8.08**	**6.83**	**1.20**
C0172-020-0750-M*	**0.172**	**4.37**	**0.020**	**0.51**	**0.750**	**19.05**	**0.366**	**9.29**	**0.313**	**7.95**	**2.11**	**9.40**	**5.50**	**0.96**	**C0172-020-0750-S***	**0.366**	**9.29**	**1.76**	**7.83**	**4.58**	**0.80**
C0172-020-1130-M*	**0.172**	**4.37**	**0.020**	**0.51**	**1.130**	**28.70**	**0.536**	**13.61**	**0.398**	**10.12**	**2.44**	**10.84**	**4.10**	**0.72**	**C0172-020-1130-S***	**0.598**	**15.20**	**1.82**	**8.08**	**3.42**	**0.60**
C0172-022-0500-M	**0.172**	**4.37**	**0.022**	**0.56**	**0.500**	**12.70**	**0.282**	**7.16**	**0.256**	**6.50**	**2.40**	**10.67**	**11.00**	**1.93**	**C0172-022-0500-S**	**0.282**	**7.16**	**2.00**	**8.88**	**9.16**	**1.60**
C0172-022-0720-M	**0.172**	**4.37**	**0.022**	**0.56**	**0.720**	**18.29**	**0.376**	**9.54**	**0.331**	**8.40**	**2.79**	**12.40**	**8.10**	**1.42**	**C0172-022-0720-S**	**0.376**	**9.54**	**2.32**	**10.33**	**6.75**	**1.18**
C0172-022-0880-M	**0.172**	**4.37**	**0.022**	**0.56**	**0.880**	**22.35**	**0.486**	**12.34**	**0.437**	**11.10**	**2.33**	**10.35**	**5.90**	**1.03**	**C0172-022-0880-S**	**0.486**	**12.34**	**1.94**	**8.62**	**4.91**	**0.86**
C0172-025-0450-M	**0.172**	**4.37**	**0.025**	**0.64**	**0.450**	**11.43**	**0.281**	**7.13**	**0.263**	**6.69**	**3.72**	**16.56**	**22.00**	**3.85**	**C0172-025-0450-S**	**0.281**	**7.13**	**3.10**	**13.80**	**18.33**	**3.21**
C0172-025-0630-M	**0.172**	**4.37**	**0.025**	**0.64**	**0.630**	**16.00**	**0.405**	**10.30**	**0.384**	**9.75**	**3.15**	**13.99**	**14.00**	**2.45**	**C0172-025-0630-S**	**0.405**	**10.30**	**2.62**	**11.66**	**11.66**	**2.04**
C0172-025-0720-M	**0.172**	**4.37**	**0.025**	**0.64**	**0.720**	**18.29**	**0.454**	**11.53**	**0.325**	**8.27**	**4.52**	**20.11**	**17.00**	**2.98**	**C0172-025-0720-S**	**0.480**	**12.19**	**3.40**	**15.12**	**14.16**	**2.48**
C0172-025-1220-M	**0.172**	**4.37**	**0.025**	**0.64**	**1.220**	**30.99**	**0.739**	**18.77**	**0.546**	**13.87**	**4.52**	**20.11**	**9.40**	**1.65**	**C0172-025-1220-S**	**0.786**	**19.97**	**3.40**	**15.12**	**7.83**	**1.37**
C0172-025-1250-M	**0.172**	**4.37**	**0.025**	**0.64**	**1.250**	**31.75**	**0.764**	**19.40**	**0.551**	**14.01**	**4.52**	**20.11**	**9.30**	**1.63**	**C0172-025-1250-S**	**0.811**	**20.61**	**3.40**	**15.12**	**7.75**	**1.36**
C0172-025-1560-M	**0.172**	**4.37**	**0.025**	**0.64**	**1.560**	**39.62**	**0.913**	**23.19**	**0.839**	**21.31**	**3.82**	**16.98**	**5.90**	**1.03**	**C0172-025-1560-S**	**0.913**	**23.19**	**3.18**	**14.14**	**4.91**	**0.86**
C0172-026-0560-M	**0.172**	**4.37**	**0.026**	**0.66**	**0.560**	**14.22**	**0.366**	**9.31**	**0.276**	**7.02**	**5.03**	**22.39**	**26.00**	**4.55**	**C0172-026-0560-S**	**0.385**	**9.78**	**3.79**	**16.86**	**21.66**	**3.79**
C0172-026-0630-M	**0.172**	**4.37**	**0.026**	**0.66**	**0.630**	**16.00**	**0.411**	**10.44**	**0.305**	**7.75**	**5.03**	**22.39**	**23.00**	**4.03**	**C0172-026-0630-S**	**0.432**	**10.98**	**3.79**	**16.86**	**19.16**	**3.35**
C0172-026-1000-M	**0.172**	**4.37**	**0.026**	**0.66**	**1.000**	**25.40**	**0.613**	**15.56**	**0.498**	**12.65**	**5.03**	**22.39**	**13.00**	**2.28**	**C0172-026-1000-S**	**0.650**	**16.51**	**3.79**	**16.86**	**10.83**	**1.90**
C0172-030-0470-M	**0.172**	**4.37**	**0.030**	**0.76**	**0.470**	**11.94**	**0.325**	**8.25**	**0.314**	**7.98**	**7.40**	**32.93**	**51.00**	**8.93**	**C0172-030-0470-S**	**0.338**	**8.58**	**5.62**	**25.00**	**42.48**	**7.43**
C0172-030-0500-M	**0.172**	**4.37**	**0.030**	**0.76**	**0.500**	**12.70**	**0.362**	**9.20**	**0.300**	**7.63**	**7.43**	**33.07**	**54.00**	**9.45**	**C0172-030-0500-S**	**0.375**	**9.53**	**5.62**	**25.00**	**44.98**	**7.87**
D11000*	0.173	4.40	0.016	0.40	0.295	7.50	0.118	3.00	0.102	2.60	1.18	5.25	6.69	1.17	D21000*	0.118	3.00	0.98	4.37	5.54	0.97
D11010*	0.173	4.40	0.016	0.40	0.433	11.00	0.161	4.10	0.134	3.40	1.18	5.25	4.23	0.74	D21010*	0.161	4.10	0.98	4.37	3.54	0.62
D11020*	0.173	4.40	0.016	0.40	0.650	16.50	0.228	5.80	0.181	4.60	1.18	5.25	2.74	0.48	D21020*	0.228	5.80	0.98	4.37	2.29	0.40
D11030*	0.173	4.40	0.016	0.40	0.945	24.00	0.315	8.00	0.244	6.20	1.18	5.25	1.83	0.32	D21030*	0.315	8.00	0.98	4.37	1.54	0.27
D11040*	0.173	4.40	0.016	0.40	1.398	35.50	0.449	11.40	0.339	8.60	1.18	5.25	1.26	0.22	D21040*	0.449	11.40	0.98	4.37	1.03	0.18
C0176-016-0375-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.375**	**9.53**	**0.154**	**3.91**	**0.120**	**3.06**	**1.22**	**5.43**	**5.52**	**0.97**	**C0176-016-0375-S***	**0.179**	**4.54**	**0.94**	**4.19**	**4.80**	**0.84**
C0176-016-0438-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.438**	**11.11**	**0.174**	**4.42**	**0.134**	**3.40**	**1.22**	**5.43**	**4.63**	**0.81**	**C0176-016-0438-S***	**0.204**	**5.18**	**0.94**	**4.19**	**4.03**	**0.71**
C0176-016-0500-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.500**	**12.70**	**0.194**	**4.93**	**0.147**	**3.74**	**1.22**	**5.43**	**3.99**	**0.70**	**C0176-016-0500-S***	**0.229**	**5.81**	**0.94**	**4.19**	**3.47**	**0.61**
C0176-016-0563-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.563**	**14.29**	**0.214**	**5.45**	**0.161**	**4.08**	**1.22**	**5.43**	**3.51**	**0.61**	**C0176-016-0563-S***	**0.254**	**6.45**	**0.94**	**4.19**	**3.05**	**0.53**
C0176-016-0625-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.625**	**15.88**	**0.235**	**5.96**	**0.174**	**4.42**	**1.22**	**5.43**	**3.13**	**0.55**	**C0176-016-0625-S***	**0.279**	**7.08**	**0.94**	**4.19**	**2.72**	**0.48**
C0176-016-0688-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.688**	**17.46**	**0.255**	**6.47**	**0.187**	**4.76**	**1.22**	**5.43**	**2.82**	**0.49**	**C0176-016-0688-S***	**0.304**	**7.72**	**0.94**	**4.19**	**2.45**	**0.43**
C0176-016-0750-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.750**	**19.05**	**0.275**	**6.99**	**0.201**	**5.10**	**1.22**	**5.43**	**2.57**	**0.45**	**C0176-016-0750-S***	**0.329**	**8.35**	**0.94**	**4.19**	**2.23**	**0.39**
C0176-016-0813-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.813**	**20.64**	**0.295**	**7.50**	**0.214**	**5.44**	**1.22**	**5.43**	**2.36**	**0.41**	**C0176-016-0813-S***	**0.354**	**8.99**	**0.94**	**4.19**	**2.05**	**0.36**
C0176-016-0875-M*	**0.176**	**4.47**	**0.016**	**0.41**	**0.875**	**22.23**	**0.315**	**8.01**	**0.228**	**5.78**	**1.22**	**5.43**	**2.18**	**0.38**	**C0176-016-0875-S***	**0.379**	**9.62**	**0.94**	**4.19**	**1.90**	**0.33**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0176-016-0938-M*	0.176	4.47	0.016	0.41	0.938	23.81	0.336	8.53	0.241	6.12	1.22	5.43	2.03	0.35
C0176-016-1000-M*	0.176	4.47	0.016	0.41	1.000	25.40	0.356	9.04	0.254	6.46	1.22	5.43	1.90	0.33
C0176-016-1125-M*	0.176	4.47	0.016	0.41	1.125	28.58	0.396	10.07	0.281	7.14	1.22	5.43	1.68	0.29
C0176-016-1250-M*	0.176	4.47	0.016	0.41	1.250	31.75	0.437	11.09	0.308	7.82	1.22	5.43	1.50	0.26
C0176-016-1375-M*	0.176	4.47	0.016	0.41	1.375	34.93	0.477	12.12	0.335	8.50	1.22	5.43	1.36	0.24
C0176-016-1500-M*	0.176	4.47	0.016	0.41	1.500	38.10	0.518	13.15	0.361	9.18	1.22	5.43	1.24	0.22
C0176-016-1625-M*	0.176	4.47	0.016	0.41	1.625	41.28	0.558	14.17	0.388	9.86	1.22	5.43	1.14	0.20
C0176-016-1750-M*	0.176	4.47	0.016	0.41	1.750	44.45	0.598	15.20	0.415	10.54	1.22	5.43	1.06	0.19
C0176-016-1875-M*	0.176	4.47	0.016	0.41	1.875	47.63	0.639	16.23	0.442	11.22	1.22	5.43	0.99	0.17
C0176-016-2000-M*	0.176	4.47	0.016	0.41	2.000	50.80	0.679	17.25	0.469	11.90	1.22	5.43	0.92	0.16
C0176-016-2125-M*	0.176	4.47	0.016	0.41	2.125	53.98	0.720	18.28	0.495	12.58	1.22	5.43	0.87	0.15
C0176-016-2250-M*	0.176	4.47	0.016	0.41	2.250	57.15	0.760	19.31	0.522	13.26	1.22	5.43	0.82	0.14
C0176-016-2375-M*	0.176	4.47	0.016	0.41	2.375	60.33	0.801	20.34	0.549	13.94	1.22	5.43	0.78	0.14
C0176-016-2500-M*	0.176	4.47	0.016	0.41	2.500	63.50	0.841	21.36	0.576	14.62	1.22	5.43	0.74	0.13
C0176-016-2625-M*	0.176	4.47	0.016	0.41	2.625	66.68	0.881	22.39	0.602	15.30	1.22	5.43	0.70	0.12
C0176-016-2750-M*	0.176	4.47	0.016	0.41	2.750	69.85	0.922	23.42	0.629	15.98	1.22	5.43	0.67	0.12
C0176-016-2875-M*	0.176	4.47	0.016	0.41	2.875	73.03	0.962	24.44	0.656	16.66	1.22	5.43	0.64	0.11
C0176-016-3000-M*	0.176	4.47	0.016	0.41	3.000	76.20	1.003	25.47	0.683	17.34	1.22	5.43	0.61	0.11
C0176-018-0375-M*	0.176	4.47	0.018	0.46	0.375	9.53	0.172	4.37	0.143	3.63	1.70	7.56	8.37	1.46
C0176-018-0438-M*	0.176	4.47	0.018	0.46	0.438	11.11	0.195	4.95	0.160	4.06	1.70	7.56	7.01	1.23
C0176-018-0500-M*	0.176	4.47	0.018	0.46	0.500	12.70	0.218	5.54	0.177	4.49	1.70	7.56	6.03	1.05
C0176-018-0563-M*	0.176	4.47	0.018	0.46	0.563	14.29	0.241	6.12	0.194	4.92	1.70	7.56	5.29	0.92
C0176-018-0625-M*	0.176	4.47	0.018	0.46	0.625	15.88	0.264	6.71	0.210	5.34	1.70	7.56	4.71	0.82
C0176-018-0688-M*	0.176	4.47	0.018	0.46	0.688	17.46	0.287	7.29	0.227	5.77	1.70	7.56	4.24	0.74
C0176-018-0750-M*	0.176	4.47	0.018	0.46	0.750	19.05	0.310	7.87	0.244	6.20	1.70	7.56	3.86	0.68
C0176-018-0813-M*	0.176	4.47	0.018	0.46	0.813	20.64	0.333	8.46	0.261	6.62	1.70	7.56	3.54	0.62
C0176-018-0875-M*	0.176	4.47	0.018	0.46	0.875	22.23	0.356	9.04	0.278	7.05	1.70	7.56	3.27	0.57
C0176-018-0938-M*	0.176	4.47	0.018	0.46	0.938	23.81	0.379	9.63	0.294	7.48	1.70	7.56	3.04	0.53
C0176-018-1000-M*	0.176	4.47	0.018	0.46	1.000	25.40	0.402	10.21	0.311	7.91	1.70	7.56	2.84	0.50
C0176-018-1125-M*	0.176	4.47	0.018	0.46	1.125	28.58	0.448	11.38	0.345	8.76	1.70	7.56	2.51	0.44
C0176-018-1250-M*	0.176	4.47	0.018	0.46	1.250	31.75	0.494	12.55	0.379	9.61	1.70	7.56	2.25	0.39
C0176-018-1375-M*	0.176	4.47	0.018	0.46	1.375	34.93	0.540	13.71	0.412	10.47	1.70	7.56	2.03	0.36
C0176-018-1500-M*	0.176	4.47	0.018	0.46	1.500	38.10	0.586	14.88	0.446	11.32	1.70	7.56	1.86	0.33
C0176-018-1625-M*	0.176	4.47	0.018	0.46	1.625	41.28	0.632	16.05	0.479	12.18	1.70	7.56	1.71	0.30
C0176-018-1750-M*	0.176	4.47	0.018	0.46	1.750	44.45	0.678	17.22	0.513	13.03	1.70	7.56	1.58	0.28
C0176-018-1875-M*	0.176	4.47	0.018	0.46	1.875	47.63	0.724	18.39	0.547	13.89	1.70	7.56	1.48	0.26
C0176-018-2000-M*	0.176	4.47	0.018	0.46	2.000	50.80	0.770	19.55	0.580	14.74	1.70	7.56	1.38	0.24
C0176-018-2125-M*	0.176	4.47	0.018	0.46	2.125	53.98	0.816	20.72	0.614	15.60	1.70	7.56	1.30	0.23
C0176-018-2250-M*	0.176	4.47	0.018	0.46	2.250	57.15	0.862	21.89	0.648	16.45	1.70	7.56	1.22	0.21
C0176-018-2375-M*	0.176	4.47	0.018	0.46	2.375	60.33	0.908	23.06	0.681	17.30	1.70	7.56	1.16	0.20
C0176-018-2500-M*	0.176	4.47	0.018	0.46	2.500	63.50	0.954	24.22	0.715	18.16	1.70	7.56	1.10	0.19
C0176-018-2625-M*	0.176	4.47	0.018	0.46	2.625	66.68	1.000	25.39	0.749	19.01	1.70	7.56	1.05	0.18
C0176-018-2750-M*	0.176	4.47	0.018	0.46	2.750	69.85	1.046	26.56	0.782	19.87	1.70	7.56	1.00	0.17
C0176-018-2875-M*	0.176	4.47	0.018	0.46	2.875	73.03	1.092	27.73	0.816	20.72	1.70	7.56	0.95	0.17
C0176-018-3000-M*	0.176	4.47	0.018	0.46	3.000	76.20	1.138	28.90	0.849	21.58	1.70	7.56	0.91	0.16
C0176-020-0313-M*	0.176	4.47	0.020	0.51	0.313	7.94	0.165	4.18	0.145	3.69	2.28	10.15	15.43	2.70
C0176-020-0375-M*	0.176	4.47	0.020	0.51	0.375	9.53	0.191	4.84	0.166	4.21	2.28	10.14	12.36	2.16
C0176-020-0438-M*	0.176	4.47	0.020	0.51	0.438	11.11	0.216	5.50	0.186	4.73	2.28	10.14	10.32	1.81
C0176-020-0500-M*	0.176	4.47	0.020	0.51	0.500	12.70	0.242	6.16	0.207	5.25	2.28	10.14	8.85	1.55
C0176-020-0563-M*	0.176	4.47	0.020	0.51	0.563	14.29	0.268	6.81	0.227	5.77	2.28	10.14	7.75	1.36
C0176-020-0625-M*	0.176	4.47	0.020	0.51	0.625	15.88	0.294	7.47	0.248	6.29	2.28	10.14	6.89	1.21
C0176-020-0688-M*	0.176	4.47	0.020	0.51	0.688	17.46	0.320	8.13	0.268	6.81	2.28	10.14	6.21	1.09
C0176-020-0750-M*	0.176	4.47	0.020	0.51	0.750	19.05	0.346	8.79	0.288	7.33	2.28	10.14	5.65	0.99
C0176-020-0813-M*	0.176	4.47	0.020	0.51	0.813	20.64	0.372	9.45	0.309	7.84	2.28	10.14	5.18	0.91
C0176-020-0875-M*	0.176	4.47	0.020	0.51	0.875	22.23	0.398	10.10	0.329	8.36	2.28	10.14	4.78	0.84
C0176-020-0938-M*	0.176	4.47	0.020	0.51	0.938	23.81	0.424	10.76	0.350	8.88	2.28	10.14	4.44	0.78
C0176-020-1000-M*	0.176	4.47	0.020	0.51	1.000	25.40	0.450	11.42	0.370	9.40	2.28	10.14	4.14	0.73
C0176-020-1125-M*	0.176	4.47	0.020	0.51	1.125	28.58	0.501	12.74	0.411	10.44	2.28	10.14	3.66	0.64
C0176-020-1250-M*	0.176	4.47	0.020	0.51	1.250	31.75	0.553	14.05	0.452	11.47	2.28	10.14	3.27	0.57
C0176-020-1375-M*	0.176	4.47	0.020	0.51	1.375	34.93	0.605	15.37	0.493	12.51	2.28	10.14	2.96	0.52
C0176-020-1500-M*	0.176	4.47	0.020	0.51	1.500	38.10	0.657	16.68	0.533	13.55	2.28	10.14	2.71	0.47
C0176-020-1625-M*	0.176	4.47	0.020	0.51	1.625	41.28	0.709	18.00	0.574	14.59	2.28	10.14	2.49	0.44
C0176-020-1750-M*	0.176	4.47	0.020	0.51	1.750	44.45	0.760	19.31	0.615	15.62	2.28	10.14	2.31	0.40
C0176-020-1875-M*	0.176	4.47	0.020	0.51	1.875	47.63	0.812	20.63	0.656	16.66	2.28	10.14	2.15	0.38

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0176-016-0938-S*	0.404	10.25	0.94	4.19	1.76	0.31
C0176-016-1000-S*	0.429	10.89	0.94	4.19	1.65	0.29
C0176-016-1125-S*	0.479	12.16	0.94	4.19	1.46	0.26
C0176-016-1250-S*	0.529	13.43	0.94	4.19	1.30	0.23
C0176-016-1375-S*	0.579	14.70	0.94	4.19	1.18	0.21
C0176-016-1500-S*	0.629	15.97	0.94	4.19	1.08	0.19
C0176-016-1625-S*	0.679	17.24	0.94	4.19	0.99	0.17
C0176-016-1750-S*	0.729	18.51	0.94	4.19	0.92	0.16
C0176-016-1875-S*	0.779	19.78	0.94	4.19	0.86	0.15
C0176-016-2000-S*	0.829	21.05	0.94	4.19	0.80	0.14
C0176-016-2125-S*	0.879	22.32	0.94	4.19	0.76	0.13
C0176-016-2250-S*	0.929	23.59	0.94	4.19	0.71	0.12
C0176-016-2375-S*	0.979	24.86	0.94	4.19	0.67	0.12
C0176-016-2500-S*	1.029	26.13	0.94	4.19	0.64	0.11
C0176-016-2625-S*	1.079	27.40	0.94	4.19	0.61	0.11
C0176-016-2750-S*	1.129	28.67	0.94	4.19	0.58	0.10
C0176-016-2875-S*	1.179	29.94	0.94	4.19	0.55	0.10
C0176-016-3000-S*	1.229	31.21	0.94	4.19	0.53	0.09
C0176-018-0375-S*	0.194	4.93	1.32	5.86	7.28	1.27
C0176-018-0438-S*	0.221	5.62	1.32	5.86	6.09	1.07
C0176-018-0500-S*	0.249	6.31	1.32	5.86	5.24	0.92
C0176-018-0563-S*	0.276	7.00	1.32	5.86	4.60	0.81
C0176-018-0625-S*	0.303	7.70	1.32	5.86	4.09	0.72
C0176-018-0688-S*	0.330	8.39	1.32	5.86	3.69	0.65
C0176-018-0750-S*	0.358	9.08	1.32	5.86	3.36	0.59
C0176-018-0813-S*	0.385	9.77	1.32	5.86	3.08	0.54
C0176-018-0875-S*	0.412	10.47	1.32	5.86	2.85	0.50
C0176-018-0938-S*	0.439	11.16	1.32	5.86	2.64	0.46
C0176-018-1000-S*	0.467	11.85	1.32	5.86	2.47	0.43
C0176-018-1125-S*	0.521	13.24	1.32	5.86	2.18	0.38
C0176-018-1250-S*	0.576	14.62	1.32	5.86	1.95	0.34
C0176-018-1375-S*	0.630	16.01	1.32	5.86	1.77	0.31
C0176-018-1500-S*	0.685	17.39	1.32	5.86	1.62	0.28
C0176-018-1625-S*	0.739	18.78	1.32	5.86	1.49	0.26
C0176-018-1750-S*	0.794	20.16	1.32	5.86	1.38	0.24
C0176-018-1875-S*	0.848	21.54	1.32	5.86	1.28	0.22
C0176-018-2000-S*	0.903	22.93	1.32	5.86	1.20	0.21
C0176-018-2125-S*	0.957	24.31	1.32	5.86	1.13	0.20
C0176-018-2250-S*	1.012	25.70	1.32	5.86	1.06	0.19
C0176-018-2375-S*	1.066	27.08	1.32	5.86	1.01	0.18
C0176-018-2500-S*	1.121	28.47	1.32	5.86	0.96	0.17
C0176-018-2625-S*	1.175	29.85	1.32	5.86	0.91	0.16
C0176-018-2750-S*	1.230	31.24	1.32	5.86	0.87	0.15
C0176-018-2875-S*	1.284	32.62	1.32	5.86	0.83	0.15
C0176-018-3000-S*	1.339	34.01	1.32	5.86	0.79	0.14
C0176-020-0313-S*	0.180	4.57	1.78	7.91	13.41	2.35
C0176-020-0375-S*	0.210	5.33	1.78	7.91	10.75	1.88
C0176-020-0438-S*	0.239	6.08	1.78	7.91	8.97	1.57
C0176-020-0500-S*	0.269	6.84	1.78	7.91	7.70	1.35
C0176-020-0563-S*	0.299	7.59	1.78	7.91	6.74	1.18
C0176-020-0625-S*	0.329	8.34	1.78	7.91	5.99	1.05
C0176-020-0688-S*	0.358	9.10	1.78	7.91	5.40	0.95
C0176-020-0750-S*	0.388	9.85	1.78	7.91	4.91	0.86
C0176-020-0813-S*	0.418	10.61	1.78	7.91	4.50	0.79
C0176-020-0875-S*	0.447	11.36	1.78	7.91	4.16	0.73
C0176-020-0938-S*	0.477	12.12	1.78	7.91	3.86	0.68
C0176-020-1000-S*	0.507	12.87	1.78	7.91	3.60	0.63
C0176-020-1125-S*	0.566	14.38	1.78	7.91	3.18	0.56
C0176-020-1250-S*	0.626	15.89	1.78	7.91	2.85	0.50
C0176-020-1375-S*	0.685	17.40	1.78	7.91	2.58	0.45
C0176-020-1500-S*	0.744	18.91	1.78	7.91	2.35	0.41
C0176-020-1625-S*	0.804	20.42	1.78	7.91	2.16	0.38
C0176-020-1750-S*	0.863	21.92	1.78	7.91	2.00	0.35
C0176-020-1875-S*	0.923	23.43	1.78	7.91	1.87	0.33

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL							
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0176-020-2000-M*	0.176	4.47	0.020	0.51	2.000	50.80	0.864	21.95	0.697	17.70	2.28	10.14	2.01	0.35	**C0176-020-2000-S***	0.982	24.94	1.78	7.91	1.75	0.31
C0176-020-2125-M*	0.176	4.47	0.020	0.51	2.125	53.98	0.916	23.26	0.738	18.73	2.28	10.14	1.89	0.33	**C0176-020-2125-S***	1.041	26.45	1.78	7.91	1.64	0.29
C0176-020-2250-M*	0.176	4.47	0.020	0.51	2.250	57.15	0.968	24.58	0.778	19.77	2.28	10.14	1.78	0.31	**C0176-020-2250-S***	1.101	27.96	1.78	7.91	1.55	0.27
C0176-020-2375-M*	0.176	4.47	0.020	0.51	2.375	60.33	1.019	25.89	0.819	20.81	2.28	10.14	1.68	0.29	**C0176-020-2375-S***	1.160	29.47	1.78	7.91	1.46	0.26
C0176-020-2500-M*	0.176	4.47	0.020	0.51	2.500	63.50	1.071	27.21	0.860	21.85	2.28	10.14	1.60	0.28	**C0176-020-2500-S***	1.220	30.98	1.78	7.91	1.39	0.24
C0176-020-2625-M*	0.176	4.47	0.020	0.51	2.625	66.68	1.123	28.53	0.901	22.88	2.28	10.14	1.52	0.27	**C0176-020-2625-S***	1.279	32.49	1.78	7.91	1.32	0.23
C0176-020-2750-M*	0.176	4.47	0.020	0.51	2.750	69.85	1.175	29.84	0.942	23.92	2.28	10.14	1.45	0.25	**C0176-020-2750-S***	1.338	34.00	1.78	7.91	1.26	0.22
C0176-020-2875-M*	0.176	4.47	0.020	0.51	2.875	73.03	1.227	31.16	0.983	24.96	2.28	10.14	1.38	0.24	**C0176-020-2875-S***	1.398	35.50	1.78	7.91	1.20	0.21
C0176-020-3000-M*	0.176	4.47	0.020	0.51	3.000	76.20	1.278	32.47	1.023	25.99	2.28	10.14	1.33	0.23	**C0176-020-3000-S***	1.457	37.01	1.78	7.91	1.15	0.20
C0176-021-0313-M	0.176	4.47	0.021	0.53	0.313	7.94	0.161	4.08	0.140	3.57	2.61	11.62	17.19	3.01	**C0176-021-0313-S**	0.176	4.47	2.04	9.07	14.95	2.62
C0176-021-0375-M	0.176	4.47	0.021	0.53	0.375	9.53	0.188	4.77	0.163	4.13	2.61	11.62	13.97	2.44	**C0176-021-0375-S**	0.207	5.26	2.04	9.07	12.14	2.12
C0176-021-0438-M	0.176	4.47	0.021	0.53	0.438	11.11	0.215	5.47	0.185	4.70	2.61	11.62	11.76	2.06	**C0176-021-0438-S**	0.238	6.04	2.04	9.07	10.22	1.79
C0176-021-0500-M	0.176	4.47	0.021	0.53	0.500	12.70	0.243	6.16	0.207	5.26	2.61	11.62	10.15	1.78	**C0176-021-0500-S**	0.269	6.83	2.04	9.07	8.83	1.55
C0176-021-0563-M	0.176	4.47	0.021	0.53	0.563	14.29	0.270	6.86	0.229	5.83	2.61	11.62	8.93	1.56	**C0176-021-0563-S**	0.300	7.62	2.04	9.07	7.77	1.36
C0176-021-0625-M	0.176	4.47	0.021	0.53	0.625	15.88	0.297	7.56	0.252	6.39	2.61	11.62	7.98	1.40	**C0176-021-0625-S**	0.331	8.40	2.04	9.07	6.94	1.21
C0176-021-0688-M	0.176	4.47	0.021	0.53	0.688	17.46	0.325	8.25	0.274	6.96	2.61	11.62	7.20	1.26	**C0176-021-0688-S**	0.362	9.19	2.04	9.07	6.26	1.10
C0176-021-0750-M	0.176	4.47	0.021	0.53	0.750	19.05	0.352	8.95	0.296	7.52	2.61	11.62	6.57	1.15	**C0176-021-0750-S**	0.393	9.98	2.04	9.07	5.71	1.00
C0176-021-0813-M	0.176	4.47	0.021	0.53	0.813	20.64	0.380	9.64	0.318	8.09	2.61	11.62	6.04	1.06	**C0176-021-0813-S**	0.424	10.76	2.04	9.07	5.25	0.92
C0176-021-0875-M	0.176	4.47	0.021	0.53	0.875	22.23	0.407	10.34	0.341	8.65	2.61	11.62	5.58	0.98	**C0176-021-0875-S**	0.455	11.55	2.04	9.07	4.85	0.85
C0176-021-0938-M	0.176	4.47	0.021	0.53	0.938	23.81	0.434	11.03	0.363	9.22	2.61	11.62	5.19	0.91	**C0176-021-0938-S**	0.486	12.34	2.04	9.07	4.52	0.79
C0176-021-1000-M	0.176	4.47	0.021	0.53	1.000	25.40	0.462	11.73	0.385	9.78	2.61	11.62	4.85	0.85	**C0176-021-1000-S**	0.517	13.12	2.04	9.07	4.22	0.74
C0176-021-1125-M	0.176	4.47	0.021	0.53	1.125	28.58	0.517	13.12	0.430	10.91	2.61	11.62	4.29	0.75	**C0176-021-1125-S**	0.579	14.70	2.04	9.07	3.73	0.65
C0176-021-1250-M	0.176	4.47	0.021	0.53	1.250	31.75	0.571	14.51	0.474	12.04	2.61	11.62	3.85	0.67	**C0176-021-1250-S**	0.641	16.27	2.04	9.07	3.35	0.59
C0176-021-1375-M	0.176	4.47	0.021	0.53	1.375	34.93	0.626	15.90	0.519	13.17	2.61	11.62	3.49	0.61	**C0176-021-1375-S**	0.702	17.84	2.04	9.07	3.03	0.53
C0176-021-1500-M	0.176	4.47	0.021	0.53	1.500	38.10	0.681	17.29	0.563	14.30	2.61	11.62	3.19	0.56	**C0176-021-1500-S**	0.764	19.42	2.04	9.07	2.77	0.48
C0176-021-1625-M	0.176	4.47	0.021	0.53	1.625	41.28	0.736	18.69	0.608	15.43	2.61	11.62	2.94	0.51	**C0176-021-1625-S**	0.826	20.99	2.04	9.07	2.55	0.45
C0176-021-1750-M	0.176	4.47	0.021	0.53	1.750	44.45	0.790	20.08	0.652	16.56	2.61	11.62	2.72	0.48	**C0176-021-1750-S**	0.888	22.56	2.04	9.07	2.37	0.41
C0176-021-1875-M	0.176	4.47	0.021	0.53	1.875	47.63	0.845	21.47	0.697	17.69	2.61	11.62	2.54	0.44	**C0176-021-1875-S**	0.950	24.14	2.04	9.07	2.21	0.39
C0176-021-2000-M	0.176	4.47	0.021	0.53	2.000	50.80	0.900	22.86	0.741	18.82	2.61	11.62	2.38	0.42	**C0176-021-2000-S**	1.012	25.71	2.04	9.07	2.07	0.36
C0176-021-2125-M	0.176	4.47	0.021	0.53	2.125	53.98	0.955	24.25	0.786	19.95	2.61	11.62	2.23	0.39	**C0176-021-2125-S**	1.074	27.28	2.04	9.07	1.94	0.34
C0176-021-2250-M	0.176	4.47	0.021	0.53	2.250	57.15	1.009	25.64	0.830	21.08	2.61	11.62	2.11	0.37	**C0176-021-2250-S**	1.136	28.85	2.04	9.07	1.83	0.32
C0176-021-2375-M	0.176	4.47	0.021	0.53	2.375	60.33	1.064	27.03	0.875	22.21	2.61	11.62	1.99	0.35	**C0176-021-2375-S**	1.198	30.43	2.04	9.07	1.73	0.30
C0176-021-2500-M	0.176	4.47	0.021	0.53	2.500	63.50	1.119	28.42	0.919	23.35	2.61	11.62	1.89	0.33	**C0176-021-2500-S**	1.260	32.00	2.04	9.07	1.65	0.29
C0176-021-2625-M	0.176	4.47	0.021	0.53	2.625	66.68	1.174	29.81	0.964	24.48	2.61	11.62	1.80	0.32	**C0176-021-2625-S**	1.322	33.57	2.04	9.07	1.57	0.27
C0176-021-2750-M	0.176	4.47	0.021	0.53	2.750	69.85	1.229	31.21	1.008	25.61	2.61	11.62	1.72	0.30	**C0176-021-2750-S**	1.384	35.15	2.04	9.07	1.49	0.26
C0176-021-2875-M	0.176	4.47	0.021	0.53	2.875	73.03	1.283	32.60	1.053	26.74	2.61	11.62	1.64	0.29	**C0176-021-2875-S**	1.446	36.72	2.04	9.07	1.43	0.25
C0176-021-3000-M	0.176	4.47	0.021	0.53	3.000	76.20	1.338	33.99	1.097	27.87	2.61	11.62	1.57	0.28	**C0176-021-3000-S**	1.508	38.29	2.04	9.07	1.37	0.24
C0176-022-0313-M	0.176	4.47	0.022	0.56	0.313	7.94	0.168	4.27	0.150	3.80	2.97	13.23	20.58	3.60	**C0176-022-0313-S**	0.183	4.64	2.33	10.35	17.90	3.13
C0176-022-0375-M	0.176	4.47	0.022	0.56	0.375	9.53	0.197	5.00	0.174	4.41	2.97	13.23	16.70	2.92	**C0176-022-0375-S**	0.215	5.46	2.33	10.35	14.52	2.54
C0176-022-0438-M	0.176	4.47	0.022	0.56	0.438	11.11	0.226	5.74	0.198	5.03	2.97	13.23	14.04	2.46	**C0176-022-0438-S**	0.247	6.27	2.33	10.35	12.21	2.14
C0176-022-0500-M	0.176	4.47	0.022	0.56	0.500	12.70	0.255	6.47	0.222	5.64	2.97	13.23	12.12	2.12	**C0176-022-0500-S**	0.279	7.09	2.33	10.35	10.54	1.84
C0176-022-0563-M	0.176	4.47	0.022	0.56	0.563	14.29	0.284	7.20	0.246	6.25	2.97	13.23	10.66	1.87	**C0176-022-0563-S**	0.312	7.91	2.33	10.35	9.27	1.62
C0176-022-0625-M	0.176	4.47	0.022	0.56	0.625	15.88	0.312	7.94	0.270	6.86	2.97	13.23	9.51	1.66	**C0176-022-0625-S**	0.344	8.73	2.33	10.35	8.27	1.45
C0176-022-0688-M	0.176	4.47	0.022	0.56	0.688	17.46	0.341	8.67	0.294	7.47	2.97	13.23	8.59	1.50	**C0176-022-0688-S**	0.376	9.55	2.33	10.35	7.47	1.31
C0176-022-0750-M	0.176	4.47	0.022	0.56	0.750	19.05	0.370	9.40	0.318	8.08	2.97	13.23	7.83	1.37	**C0176-022-0750-S**	0.408	10.37	2.33	10.35	6.81	1.19
C0176-022-0813-M	0.176	4.47	0.022	0.56	0.813	20.64	0.399	10.14	0.342	8.70	2.97	13.23	7.19	1.26	**C0176-022-0813-S**	0.441	11.19	2.33	10.35	6.25	1.09
C0176-022-0875-M	0.176	4.47	0.022	0.56	0.875	22.23	0.428	10.87	0.366	9.31	2.97	13.23	6.65	1.16	**C0176-022-0875-S**	0.473	12.01	2.33	10.35	5.78	1.01
C0176-022-0938-M	0.176	4.47	0.022	0.56	0.938	23.81	0.457	11.60	0.391	9.92	2.97	13.23	6.19	1.08	**C0176-022-0938-S**	0.505	12.83	2.33	10.35	5.38	0.94
C0176-022-1000-M	0.176	4.47	0.022	0.56	1.000	25.40	0.486	12.34	0.415	10.53	2.97	13.23	5.78	1.01	**C0176-022-1000-S**	0.537	13.65	2.33	10.35	5.03	0.88
C0176-022-1125-M	0.176	4.47	0.022	0.56	1.125	28.58	0.543	13.80	0.463	11.76	2.97	13.23	5.11	0.89	**C0176-022-1125-S**	0.602	15.28	2.33	10.35	4.45	0.78
C0176-022-1250-M	0.176	4.47	0.022	0.56	1.250	31.75	0.601	15.27	0.511	12.98	2.97	13.23	4.58	0.80	**C0176-022-1250-S**	0.666	16.92	2.33	10.35	3.98	0.70
C0176-022-1375-M	0.176	4.47	0.022	0.56	1.375	34.93	0.659	16.74	0.559	14.20	2.97	13.23	4.15	0.73	**C0176-022-1375-S**	0.731	18.56	2.33	10.35	3.61	0.63
C0176-022-1500-M	0.176	4.47	0.022	0.56	1.500	38.10	0.717	18.20	0.607	15.43	2.97	13.23	3.80	0.66	**C0176-022-1500-S**	0.795	20.20	2.33	10.35	3.30	0.58
C0176-022-1625-M	0.176	4.47	0.022	0.56	1.625	41.28	0.774	19.67	0.656	16.65	2.97	13.23	3.50	0.61	**C0176-022-1625-S**	0.860	21.84	2.33	10.35	3.04	0.53
C0176-022-1750-M	0.176	4.47	0.022	0.56	1.750	44.45	0.832	21.14	0.704	17.87	2.97	13.23	3.24	0.57	**C0176-022-1750-S**	0.924	23.47	2.33	10.35	2.82	0.49
C0176-022-1875-M	0.176	4.47	0.022	0.56	1.875	47.63	0.890	22.60	0.752	19.10	2.97	13.23	3.02	0.53	**C0176-022-1875-S**	0.989	25.11	2.33	10.35	2.62	0.46
C0176-022-2000-M	0.176	4.47	0.022	0.56	2.000	50.80	0.948	24.07	0.800	20.32	2.97	13.23	2.83	0.49	**C0176-022-2000-S**	1.053	26.75	2.33	10.35	2.46	0.43
C0176-022-2125-M	0.176	4.47	0.022	0.56	2.125	53.98	1.005	25.54	0.848	21.55	2.97	13.23	2.66	0.46	**C0176-022-2125-S**	1.118	28.39	2.33	10.35	2.31	0.40
C0176-022-2250-M	0.176	4.47	0.022	0.56	2.250	57.15	1.063	27.00	0.896	22.77	2.97	13.23	2.51	0.44	**C0176-022-2250-S**	1.182	30.03	2.33	10.35	2.18	0.38
C0176-022-2375-M	0.176	4.47	0.022	0.56	2.375	60.33	1.121	28.47	0.945	23.99	2.97	13.23	2.37	0.41	**C0176-022-2375-S**	1.247	31.67	2.33	10.35	2.06	0.36
C0176-022-2500-M	0.176	4.47	0.022	0.56	2.500	63.50	1.179	29.94	0.993	25.22	2.97	13.23	2.25	0.39	**C0176-022-2500-S**	1.311	33.30	2.33	10.35	1.96	0.34
C0176-022-2625-M	0.176	4.47	0.022	0.56	2.625	66.68	1.236	31.40	1.041	26.44	2.97	13.23	2.14	0.37	**C0176-022-2625-S**	1.376	34.94	2.33	10.35	1.86	0.33
C0176-022-2750-M	0.176	4.47	0.022	0.56	2.750	69.85	1.294	32.87	1.089	27.66	2.97	13.23	2.04	0.36	**C0176-022-2750-S**	1.440	36.58	2.33	10.35	1.78	0.31
C0176-022-2875-M	0.176	4.47	0.022	0.56	2.875	73.03	1.352	34.34	1.137	28.89	2.97	13.23	1.95	0.34	**C0176-022-2875-S**	1.505	38.22	2.33	10.35	1.70	0.30

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0176-022-3000-M	0.176	4.47	0.022	0.56	3.000	76.20	1.410	35.81	1.185	30.11	2.97	13.23	1.87	0.33
C0176-023-0313-M	0.176	4.47	0.023	0.58	0.313	7.94	0.175	4.46	0.159	4.03	3.36	14.96	24.54	4.29
C0176-023-0375-M	0.176	4.47	0.023	0.58	0.375	9.53	0.206	5.23	0.185	4.69	3.36	14.96	19.88	3.48
C0176-023-0438-M	0.176	4.47	0.023	0.58	0.438	11.11	0.236	6.00	0.211	5.35	3.36	14.96	16.70	2.92
C0176-023-0500-M	0.176	4.47	0.023	0.58	0.500	12.70	0.267	6.77	0.237	6.01	3.36	14.96	14.41	2.52
C0176-023-0563-M	0.176	4.47	0.023	0.58	0.563	14.29	0.297	7.54	0.263	6.67	3.36	14.96	12.66	2.22
C0176-023-0625-M	0.176	4.47	0.023	0.58	0.625	15.88	0.327	8.31	0.288	7.33	3.36	14.96	11.30	1.98
C0176-023-0688-M	0.176	4.47	0.023	0.58	0.688	17.46	0.358	9.08	0.314	7.99	3.36	14.96	10.19	1.78
C0176-023-0750-M	0.176	4.47	0.023	0.58	0.750	19.05	0.388	9.85	0.340	8.64	3.36	14.96	9.29	1.63
C0176-023-0813-M	0.176	4.47	0.023	0.58	0.813	20.64	0.418	10.63	0.366	9.30	3.36	14.96	8.53	1.49
C0176-023-0875-M	0.176	4.47	0.023	0.58	0.875	22.23	0.449	11.40	0.392	9.96	3.36	14.96	7.89	1.38
C0176-023-0938-M	0.176	4.47	0.023	0.58	0.938	23.81	0.479	12.17	0.418	10.62	3.36	14.96	7.34	1.28
C0176-023-1000-M	0.176	4.47	0.023	0.58	1.000	25.40	0.509	12.94	0.444	11.28	3.36	14.96	6.86	1.20
C0176-023-1125-M	0.176	4.47	0.023	0.58	1.125	28.58	0.570	14.48	0.496	12.59	3.36	14.96	6.06	1.06
C0176-023-1250-M	0.176	4.47	0.023	0.58	1.250	31.75	0.631	16.02	0.548	13.91	3.36	14.96	5.43	0.95
C0176-023-1375-M	0.176	4.47	0.023	0.58	1.375	34.93	0.692	17.57	0.600	15.23	3.36	14.96	4.92	0.86
C0176-023-1500-M	0.176	4.47	0.023	0.58	1.500	38.10	0.752	19.11	0.651	16.54	3.36	14.96	4.50	0.79
C0176-023-1625-M	0.176	4.47	0.023	0.58	1.625	41.28	0.813	20.65	0.703	17.86	3.36	14.96	4.14	0.72
C0176-023-1750-M	0.176	4.47	0.023	0.58	1.750	44.45	0.874	22.19	0.755	19.18	3.36	14.96	3.84	0.67
C0176-023-1875-M	0.176	4.47	0.023	0.58	1.875	47.63	0.934	23.74	0.807	20.50	3.36	14.96	3.58	0.63
C0176-023-2000-M	0.176	4.47	0.023	0.58	2.000	50.80	0.995	25.28	0.859	21.81	3.36	14.96	3.35	0.59
C0176-023-2125-M	0.176	4.47	0.023	0.58	2.125	53.98	1.056	26.82	0.911	23.13	3.36	14.96	3.15	0.55
C0176-023-2250-M	0.176	4.47	0.023	0.58	2.250	57.15	1.117	28.36	0.962	24.45	3.36	14.96	2.97	0.52
C0176-023-2375-M	0.176	4.47	0.023	0.58	2.375	60.33	1.177	29.90	1.014	25.76	3.36	14.96	2.81	0.49
C0176-023-2500-M	0.176	4.47	0.023	0.58	2.500	63.50	1.238	31.45	1.066	27.08	3.36	14.96	2.67	0.47
C0176-023-2625-M	0.176	4.47	0.023	0.58	2.625	66.68	1.299	32.99	1.118	28.40	3.36	14.96	2.54	0.44
C0176-023-2750-M	0.176	4.47	0.023	0.58	2.750	69.85	1.359	34.53	1.170	29.71	3.36	14.96	2.42	0.42
C0176-023-2875-M	0.176	4.47	0.023	0.58	2.875	73.03	1.420	36.07	1.222	31.03	3.36	14.96	2.31	0.40
C0176-023-3000-M	0.176	4.47	0.023	0.58	3.000	76.20	1.481	37.62	1.274	32.35	3.36	14.96	2.21	0.39
C0176-024-0313-M	0.176	4.47	0.024	0.61	0.313	7.94	0.183	4.64	0.168	4.26	3.78	16.83	29.15	5.10
C0176-024-0375-M	0.176	4.47	0.024	0.61	0.375	9.53	0.215	5.45	0.196	4.97	3.78	16.83	23.58	4.13
C0176-024-0438-M	0.176	4.47	0.024	0.61	0.438	11.11	0.246	6.26	0.223	5.67	3.78	16.83	19.79	3.46
C0176-024-0500-M	0.176	4.47	0.024	0.61	0.500	12.70	0.278	7.07	0.251	6.38	3.78	16.83	17.06	2.98
C0176-024-0563-M	0.176	4.47	0.024	0.61	0.563	14.29	0.310	7.88	0.279	7.08	3.78	16.83	14.99	2.62
C0176-024-0625-M	0.176	4.47	0.024	0.61	0.625	15.88	0.342	8.68	0.307	7.79	3.78	16.83	13.36	2.34
C0176-024-0688-M	0.176	4.47	0.024	0.61	0.688	17.46	0.374	9.49	0.334	8.49	3.78	16.83	12.06	2.11
C0176-024-0750-M	0.176	4.47	0.024	0.61	0.750	19.05	0.406	10.30	0.362	9.20	3.78	16.83	10.98	1.92
C0176-024-0813-M	0.176	4.47	0.024	0.61	0.813	20.64	0.437	11.11	0.390	9.90	3.78	16.83	10.09	1.76
C0176-024-0875-M	0.176	4.47	0.024	0.61	0.875	22.23	0.469	11.92	0.417	10.60	3.78	16.83	9.32	1.63
C0176-024-0938-M	0.176	4.47	0.024	0.61	0.938	23.81	0.501	12.73	0.445	11.31	3.78	16.83	8.67	1.52
C0176-024-1000-M	0.176	4.47	0.024	0.61	1.000	25.40	0.533	13.54	0.473	12.01	3.78	16.83	8.10	1.42
C0176-024-1125-M	0.176	4.47	0.024	0.61	1.125	28.58	0.597	15.15	0.528	13.42	3.78	16.83	7.16	1.25
C0176-024-1250-M	0.176	4.47	0.024	0.61	1.250	31.75	0.660	16.77	0.584	14.83	3.78	16.83	6.41	1.12
C0176-024-1375-M	0.176	4.47	0.024	0.61	1.375	34.93	0.724	18.39	0.639	16.24	3.78	16.83	5.81	1.02
C0176-024-1500-M	0.176	4.47	0.024	0.61	1.500	38.10	0.788	20.00	0.695	17.65	3.78	16.83	5.31	0.93
C0176-024-1625-M	0.176	4.47	0.024	0.61	1.625	41.28	0.851	21.62	0.750	19.06	3.78	16.83	4.89	0.86
C0176-024-1750-M	0.176	4.47	0.024	0.61	1.750	44.45	0.915	23.24	0.806	20.47	3.78	16.83	4.53	0.79
C0176-024-1875-M	0.176	4.47	0.024	0.61	1.875	47.63	0.979	24.86	0.861	21.88	3.78	16.83	4.22	0.74
C0176-024-2000-M	0.176	4.47	0.024	0.61	2.000	50.80	1.042	26.47	0.917	23.29	3.78	16.83	3.95	0.69
C0176-024-2125-M	0.176	4.47	0.024	0.61	2.125	53.98	1.106	28.09	0.972	24.70	3.78	16.83	3.71	0.65
C0176-024-2250-M	0.176	4.47	0.024	0.61	2.250	57.15	1.170	29.71	1.028	26.11	3.78	16.83	3.50	0.61
C0176-024-2375-M	0.176	4.47	0.024	0.61	2.375	60.33	1.233	31.32	1.083	27.52	3.78	16.83	3.31	0.58
C0176-024-2500-M	0.176	4.47	0.024	0.61	2.500	63.50	1.297	32.94	1.139	28.93	3.78	16.83	3.14	0.55
C0176-024-2625-M	0.176	4.47	0.024	0.61	2.625	66.68	1.361	34.56	1.194	30.34	3.78	16.83	2.99	0.52
C0176-024-2750-M	0.176	4.47	0.024	0.61	2.750	69.85	1.424	36.18	1.250	31.74	3.78	16.83	2.85	0.50
C0176-024-2875-M	0.176	4.47	0.024	0.61	2.875	73.03	1.488	37.79	1.305	33.15	3.78	16.83	2.73	0.48
C0176-024-3000-M	0.176	4.47	0.024	0.61	3.000	76.20	1.552	39.41	1.361	34.56	3.78	16.83	2.61	0.46
C0176-026-0313-M	0.176	4.47	0.026	0.66	0.313	7.94	0.197	5.00	0.185	4.70	4.72	20.98	40.72	7.13
C0176-026-0375-M	0.176	4.47	0.026	0.66	0.375	9.53	0.231	5.88	0.216	5.50	4.72	20.98	32.84	5.75
C0176-026-0438-M	0.176	4.47	0.026	0.66	0.438	11.11	0.266	6.76	0.248	6.29	4.72	20.98	27.52	4.82
C0176-026-0500-M	0.176	4.47	0.026	0.66	0.500	12.70	0.301	7.64	0.279	7.09	4.72	20.98	23.68	4.14
C0176-026-0563-M	0.176	4.47	0.026	0.66	0.563	14.29	0.336	8.52	0.310	7.88	4.72	20.98	20.78	3.64
C0176-026-0625-M	0.176	4.47	0.026	0.66	0.625	15.88	0.370	9.41	0.342	8.68	4.72	20.98	18.51	3.24
C0176-026-0688-M	0.176	4.47	0.026	0.66	0.688	17.46	0.405	10.29	0.373	9.47	4.72	20.98	16.69	2.92

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0176-022-3000-S	1.569	39.86	2.33	10.35	1.63	0.29
C0176-023-0313-S	0.189	4.80	2.64	11.72	21.34	3.73
C0176-023-0375-S	0.223	5.65	2.64	11.72	17.28	3.02
C0176-023-0438-S	0.256	6.50	2.64	11.72	14.53	2.54
C0176-023-0500-S	0.290	7.36	2.64	11.72	12.53	2.19
C0176-023-0563-S	0.323	8.21	2.64	11.72	11.01	1.93
C0176-023-0625-S	0.357	9.06	2.64	11.72	9.82	1.72
C0176-023-0688-S	0.390	9.91	2.64	11.72	8.86	1.55
C0176-023-0750-S	0.424	10.76	2.64	11.72	8.08	1.41
C0176-023-0813-S	0.457	11.61	2.64	11.72	7.42	1.30
C0176-023-0875-S	0.491	12.47	2.64	11.72	6.86	1.20
C0176-023-0938-S	0.524	13.32	2.64	11.72	6.38	1.12
C0176-023-1000-S	0.558	14.17	2.64	11.72	5.96	1.04
C0176-023-1125-S	0.625	15.87	2.64	11.72	5.27	0.92
C0176-023-1250-S	0.692	17.58	2.64	11.72	4.72	0.83
C0176-023-1375-S	0.759	19.28	2.64	11.72	4.28	0.75
C0176-023-1500-S	0.826	20.98	2.64	11.72	3.91	0.68
C0176-023-1625-S	0.893	22.69	2.64	11.72	3.60	0.63
C0176-023-1750-S	0.960	24.39	2.64	11.72	3.34	0.58
C0176-023-1875-S	1.027	26.09	2.64	11.72	3.11	0.54
C0176-023-2000-S	1.094	27.80	2.64	11.72	2.91	0.51
C0176-023-2125-S	1.161	29.50	2.64	11.72	2.74	0.48
C0176-023-2250-S	1.228	31.20	2.64	11.72	2.58	0.45
C0176-023-2375-S	1.296	32.91	2.64	11.72	2.44	0.43
C0176-023-2500-S	1.363	34.61	2.64	11.72	2.32	0.41
C0176-023-2625-S	1.430	36.31	2.64	11.72	2.21	0.39
C0176-023-2750-S	1.497	38.02	2.64	11.72	2.10	0.37
C0176-023-2875-S	1.564	39.72	2.64	11.72	2.01	0.35
C0176-023-3000-S	1.631	41.42	2.64	11.72	1.93	0.34
C0176-024-0313-S	0.195	4.96	2.97	13.21	25.35	4.44
C0176-024-0375-S	0.230	5.85	2.97	13.21	20.50	3.59
C0176-024-0438-S	0.265	6.73	2.97	13.21	17.21	3.01
C0176-024-0500-S	0.300	7.61	2.97	13.21	14.83	2.60
C0176-024-0563-S	0.335	8.50	2.97	13.21	13.03	2.28
C0176-024-0625-S	0.369	9.38	2.97	13.21	11.62	2.03
C0176-024-0688-S	0.404	10.27	2.97	13.21	10.48	1.83
C0176-024-0750-S	0.439	11.15	2.97	13.21	9.55	1.67
C0176-024-0813-S	0.474	12.04	2.97	13.21	8.77	1.53
C0176-024-0875-S	0.509	12.92	2.97	13.21	8.11	1.42
C0176-024-0938-S	0.544	13.81	2.97	13.21	7.54	1.32
C0176-024-1000-S	0.578	14.69	2.97	13.21	7.04	1.23
C0176-024-1125-S	0.648	16.46	2.97	13.21	6.22	1.09
C0176-024-1250-S	0.718	18.23	2.97	13.21	5.58	0.98
C0176-024-1375-S	0.787	20.00	2.97	13.21	5.05	0.88
C0176-024-1500-S	0.857	21.76	2.97	13.21	4.62	0.81
C0176-024-1625-S	0.926	23.53	2.97	13.21	4.25	0.74
C0176-024-1750-S	0.996	25.30	2.97	13.21	3.94	0.69
C0176-024-1875-S	1.066	27.07	2.97	13.21	3.67	0.64
C0176-024-2000-S	1.135	28.84	2.97	13.21	3.43	0.60
C0176-024-2125-S	1.205	30.61	2.97	13.21	3.23	0.57
C0176-024-2250-S	1.275	32.38	2.97	13.21	3.04	0.53
C0176-024-2375-S	1.344	34.14	2.97	13.21	2.88	0.50
C0176-024-2500-S	1.414	35.91	2.97	13.21	2.73	0.48
C0176-024-2625-S	1.484	37.68	2.97	13.21	2.60	0.46
C0176-024-2750-S	1.553	39.45	2.97	13.21	2.48	0.43
C0176-024-2875-S	1.623	41.22	2.97	13.21	2.37	0.41
C0176-024-3000-S	1.692	42.99	2.97	13.21	2.27	0.40
C0176-026-0313-S	0.208	5.27	3.71	16.51	35.41	6.20
C0176-026-0375-S	0.245	6.22	3.71	16.51	28.56	5.00
C0176-026-0438-S	0.282	7.17	3.71	16.51	23.93	4.19
C0176-026-0500-S	0.320	8.12	3.71	16.51	20.59	3.60
C0176-026-0563-S	0.357	9.07	3.71	16.51	18.07	3.16
C0176-026-0625-S	0.394	10.02	3.71	16.51	16.10	2.82
C0176-026-0688-S	0.432	10.97	3.71	16.51	14.52	2.54

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

(OD) 0.176 - 0.176

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0176-026-0750-M	**0.176**	**4.47**	**0.026**	**0.66**	**0.750**	**19.05**	**0.440**	**11.17**	**0.404**	**10.27**	**4.72**	**20.98**	**15.20**	**2.66**	**C0176-026-0750-S**	**0.469**	**11.92**	**3.71**	**16.51**	**13.22**	**2.31**
C0176-026-0813-M	**0.176**	**4.47**	**0.026**	**0.66**	**0.813**	**20.64**	**0.474**	**12.05**	**0.436**	**11.06**	**4.72**	**20.98**	**13.95**	**2.44**	**C0176-026-0813-S**	**0.506**	**12.86**	**3.71**	**16.51**	**12.13**	**2.12**
C0176-026-0875-M	**0.176**	**4.47**	**0.026**	**0.66**	**0.875**	**22.23**	**0.509**	**12.93**	**0.467**	**11.86**	**4.72**	**20.98**	**12.89**	**2.26**	**C0176-026-0875-S**	**0.544**	**13.81**	**3.71**	**16.51**	**11.21**	**1.96**
C0176-026-0938-M	**0.176**	**4.47**	**0.026**	**0.66**	**0.938**	**23.81**	**0.544**	**13.81**	**0.498**	**12.65**	**4.72**	**20.98**	**11.98**	**2.10**	**C0176-026-0938-S**	**0.581**	**14.76**	**3.71**	**16.51**	**10.42**	**1.82**
C0176-026-1000-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.000**	**25.40**	**0.579**	**14.70**	**0.529**	**13.45**	**4.72**	**20.98**	**11.19**	**1.96**	**C0176-026-1000-S**	**0.619**	**15.71**	**3.71**	**16.51**	**9.73**	**1.70**
C0176-026-1125-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.125**	**28.58**	**0.648**	**16.46**	**0.592**	**15.04**	**4.72**	**20.98**	**9.89**	**1.73**	**C0176-026-1125-S**	**0.693**	**17.61**	**3.71**	**16.51**	**8.60**	**1.51**
C0176-026-1250-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.250**	**31.75**	**0.717**	**18.22**	**0.655**	**16.63**	**4.72**	**20.98**	**8.86**	**1.55**	**C0176-026-1250-S**	**0.768**	**19.50**	**3.71**	**16.51**	**7.70**	**1.35**
C0176-026-1375-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.375**	**34.93**	**0.787**	**19.99**	**0.717**	**18.22**	**4.72**	**20.98**	**8.02**	**1.40**	**C0176-026-1375-S**	**0.843**	**21.40**	**3.71**	**16.51**	**6.97**	**1.22**
C0176-026-1500-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.500**	**38.10**	**0.856**	**21.75**	**0.780**	**19.81**	**4.72**	**20.98**	**7.33**	**1.28**	**C0176-026-1500-S**	**0.917**	**23.30**	**3.71**	**16.51**	**6.37**	**1.11**
C0176-026-1625-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.625**	**41.28**	**0.926**	**23.51**	**0.842**	**21.40**	**4.72**	**20.98**	**6.74**	**1.18**	**C0176-026-1625-S**	**0.992**	**25.20**	**3.71**	**16.51**	**5.86**	**1.03**
C0176-026-1750-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.750**	**44.45**	**0.995**	**25.28**	**0.905**	**22.99**	**4.72**	**20.98**	**6.25**	**1.09**	**C0176-026-1750-S**	**1.067**	**27.09**	**3.71**	**16.51**	**5.43**	**0.95**
C0176-026-1875-M	**0.176**	**4.47**	**0.026**	**0.66**	**1.875**	**47.63**	**1.065**	**27.04**	**0.968**	**24.58**	**4.72**	**20.98**	**5.82**	**1.02**	**C0176-026-1875-S**	**1.141**	**28.99**	**3.71**	**16.51**	**5.06**	**0.89**
C0176-026-2000-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.000**	**50.80**	**1.134**	**28.81**	**1.030**	**26.17**	**4.72**	**20.98**	**5.45**	**0.95**	**C0176-026-2000-S**	**1.216**	**30.89**	**3.71**	**16.51**	**4.74**	**0.83**
C0176-026-2125-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.125**	**53.98**	**1.204**	**30.57**	**1.093**	**27.76**	**4.72**	**20.98**	**5.12**	**0.90**	**C0176-026-2125-S**	**1.291**	**32.79**	**3.71**	**16.51**	**4.45**	**0.78**
C0176-026-2250-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.250**	**57.15**	**1.273**	**32.33**	**1.156**	**29.35**	**4.72**	**20.98**	**4.83**	**0.84**	**C0176-026-2250-S**	**1.365**	**34.68**	**3.71**	**16.51**	**4.20**	**0.74**
C0176-026-2375-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.375**	**60.33**	**1.342**	**34.10**	**1.218**	**30.94**	**4.72**	**20.98**	**4.57**	**0.80**	**C0176-026-2375-S**	**1.440**	**36.58**	**3.71**	**16.51**	**3.97**	**0.69**
C0176-026-2500-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.500**	**63.50**	**1.412**	**35.86**	**1.281**	**32.53**	**4.72**	**20.98**	**4.33**	**0.76**	**C0176-026-2500-S**	**1.515**	**38.48**	**3.71**	**16.51**	**3.77**	**0.66**
C0176-026-2625-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.625**	**66.68**	**1.481**	**37.62**	**1.343**	**34.12**	**4.72**	**20.98**	**4.12**	**0.72**	**C0176-026-2625-S**	**1.590**	**40.37**	**3.71**	**16.51**	**3.59**	**0.63**
C0176-026-2750-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.750**	**69.85**	**1.551**	**39.39**	**1.406**	**35.71**	**4.72**	**20.98**	**3.93**	**0.69**	**C0176-026-2750-S**	**1.664**	**42.27**	**3.71**	**16.51**	**3.42**	**0.60**
C0176-026-2875-M	**0.176**	**4.47**	**0.026**	**0.66**	**2.875**	**73.03**	**1.620**	**41.15**	**1.469**	**37.30**	**4.72**	**20.98**	**3.76**	**0.66**	**C0176-026-2875-S**	**1.739**	**44.17**	**3.71**	**16.51**	**3.27**	**0.57**
C0176-026-3000-M	**0.176**	**4.47**	**0.026**	**0.66**	**3.000**	**76.20**	**1.690**	**42.91**	**1.531**	**38.89**	**4.72**	**20.98**	**3.60**	**0.63**	**C0176-026-3000-S**	**1.814**	**46.07**	**3.71**	**16.51**	**3.13**	**0.55**
C0176-029-0313-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.313**	**7.94**	**0.216**	**5.49**	**0.209**	**5.31**	**6.36**	**28.27**	**65.85**	**11.52**	**C0176-029-0313-S**	**0.225**	**5.71**	**5.02**	**22.33**	**57.26**	**10.02**
C0176-029-0375-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.375**	**9.53**	**0.255**	**6.47**	**0.245**	**6.23**	**6.36**	**28.27**	**52.87**	**9.25**	**C0176-029-0375-S**	**0.266**	**6.75**	**5.02**	**22.33**	**45.97**	**8.04**
C0176-029-0438-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.438**	**11.11**	**0.294**	**7.46**	**0.282**	**7.15**	**6.36**	**28.27**	**44.16**	**7.73**	**C0176-029-0438-S**	**0.307**	**7.79**	**5.02**	**22.33**	**38.40**	**6.72**
C0176-029-0500-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.500**	**12.70**	**0.332**	**8.44**	**0.318**	**8.08**	**6.36**	**28.27**	**37.92**	**6.64**	**C0176-029-0500-S**	**0.348**	**8.83**	**5.02**	**22.33**	**32.97**	**5.77**
C0176-029-0563-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.563**	**14.29**	**0.371**	**9.43**	**0.354**	**9.00**	**6.36**	**28.27**	**33.22**	**5.81**	**C0176-029-0563-S**	**0.389**	**9.87**	**5.02**	**22.33**	**28.89**	**5.06**
C0176-029-0625-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.625**	**15.88**	**0.410**	**10.41**	**0.391**	**9.92**	**6.36**	**28.27**	**29.56**	**5.17**	**C0176-029-0625-S**	**0.430**	**10.91**	**5.02**	**22.33**	**25.70**	**4.50**
C0176-029-0688-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.688**	**17.46**	**0.449**	**11.40**	**0.427**	**10.84**	**6.36**	**28.27**	**26.62**	**4.66**	**C0176-029-0688-S**	**0.471**	**11.95**	**5.02**	**22.33**	**23.15**	**4.05**
C0176-029-0750-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.750**	**19.05**	**0.488**	**12.38**	**0.463**	**11.77**	**6.36**	**28.27**	**24.22**	**4.24**	**C0176-029-0750-S**	**0.512**	**12.99**	**5.02**	**22.33**	**21.06**	**3.69**
C0176-029-0813-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.813**	**20.64**	**0.526**	**13.37**	**0.500**	**12.69**	**6.36**	**28.27**	**22.21**	**3.89**	**C0176-029-0813-S**	**0.553**	**14.04**	**5.02**	**22.33**	**19.32**	**3.38**
C0176-029-0875-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.875**	**22.23**	**0.565**	**14.35**	**0.536**	**13.61**	**6.36**	**28.27**	**20.51**	**3.59**	**C0176-029-0875-S**	**0.594**	**15.08**	**5.02**	**22.33**	**17.84**	**3.12**
C0176-029-0938-M	**0.176**	**4.47**	**0.029**	**0.74**	**0.938**	**23.81**	**0.604**	**15.34**	**0.572**	**14.54**	**6.36**	**28.27**	**19.06**	**3.33**	**C0176-029-0938-S**	**0.635**	**16.12**	**5.02**	**22.33**	**16.57**	**2.90**
C0176-029-1000-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.000**	**25.40**	**0.643**	**16.33**	**0.609**	**15.46**	**6.36**	**28.27**	**17.79**	**3.11**	**C0176-029-1000-S**	**0.675**	**17.16**	**5.02**	**22.33**	**15.47**	**2.71**
C0176-029-1125-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.125**	**28.58**	**0.720**	**18.30**	**0.681**	**17.31**	**6.36**	**28.27**	**15.71**	**2.75**	**C0176-029-1125-S**	**0.757**	**19.24**	**5.02**	**22.33**	**13.66**	**2.39**
C0176-029-1250-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.250**	**31.75**	**0.798**	**20.27**	**0.754**	**19.15**	**6.36**	**28.27**	**14.06**	**2.46**	**C0176-029-1250-S**	**0.839**	**21.32**	**5.02**	**22.33**	**12.23**	**2.14**
C0176-029-1375-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.375**	**34.93**	**0.876**	**22.24**	**0.827**	**21.00**	**6.36**	**28.27**	**12.73**	**2.23**	**C0176-029-1375-S**	**0.921**	**23.40**	**5.02**	**22.33**	**11.07**	**1.94**
C0176-029-1500-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.500**	**38.10**	**0.953**	**24.21**	**0.899**	**22.85**	**6.36**	**28.27**	**11.62**	**2.03**	**C0176-029-1500-S**	**1.003**	**25.48**	**5.02**	**22.33**	**10.11**	**1.77**
C0176-029-1625-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.625**	**41.28**	**1.031**	**26.18**	**0.972**	**24.69**	**6.36**	**28.27**	**10.70**	**1.87**	**C0176-029-1625-S**	**1.085**	**27.56**	**5.02**	**22.33**	**9.30**	**1.63**
C0176-029-1750-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.750**	**44.45**	**1.108**	**28.15**	**1.045**	**26.54**	**6.36**	**28.27**	**9.91**	**1.73**	**C0176-029-1750-S**	**1.167**	**29.64**	**5.02**	**22.33**	**8.61**	**1.51**
C0176-029-1875-M	**0.176**	**4.47**	**0.029**	**0.74**	**1.875**	**47.63**	**1.186**	**30.12**	**1.118**	**28.38**	**6.36**	**28.27**	**9.22**	**1.61**	**C0176-029-1875-S**	**1.249**	**31.73**	**5.02**	**22.33**	**8.02**	**1.40**
C0176-029-2000-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.000**	**50.80**	**1.264**	**32.09**	**1.190**	**30.23**	**6.36**	**28.27**	**8.63**	**1.51**	**C0176-029-2000-S**	**1.331**	**33.81**	**5.02**	**22.33**	**7.50**	**1.31**
C0176-029-2125-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.125**	**53.98**	**1.341**	**34.06**	**1.263**	**32.08**	**6.36**	**28.27**	**8.11**	**1.42**	**C0176-029-2125-S**	**1.413**	**35.89**	**5.02**	**22.33**	**7.05**	**1.23**
C0176-029-2250-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.250**	**57.15**	**1.419**	**36.03**	**1.336**	**33.92**	**6.36**	**28.27**	**7.65**	**1.34**	**C0176-029-2250-S**	**1.495**	**37.97**	**5.02**	**22.33**	**6.65**	**1.16**
C0176-029-2375-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.375**	**60.33**	**1.496**	**38.01**	**1.408**	**35.77**	**6.36**	**28.27**	**7.23**	**1.27**	**C0176-029-2375-S**	**1.577**	**40.05**	**5.02**	**22.33**	**6.29**	**1.10**
C0176-029-2500-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.500**	**63.50**	**1.574**	**39.98**	**1.481**	**37.62**	**6.36**	**28.27**	**6.86**	**1.20**	**C0176-029-2500-S**	**1.659**	**42.13**	**5.02**	**22.33**	**5.97**	**1.04**
C0176-029-2625-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.625**	**66.68**	**1.651**	**41.95**	**1.554**	**39.46**	**6.36**	**28.27**	**6.53**	**1.14**	**C0176-029-2625-S**	**1.741**	**44.21**	**5.02**	**22.33**	**5.68**	**0.99**
C0176-029-2750-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.750**	**69.85**	**1.729**	**43.92**	**1.626**	**41.31**	**6.36**	**28.27**	**6.23**	**1.09**	**C0176-029-2750-S**	**1.823**	**46.29**	**5.02**	**22.33**	**5.41**	**0.95**
C0176-029-2875-M	**0.176**	**4.47**	**0.029**	**0.74**	**2.875**	**73.03**	**1.807**	**45.89**	**1.699**	**43.16**	**6.36**	**28.27**	**5.95**	**1.04**	**C0176-029-2875-S**	**1.905**	**48.38**	**5.02**	**22.33**	**5.17**	**0.90**
C0176-030-0313-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.313**	**7.94**	**0.222**	**5.64**	**0.216**	**5.49**	**6.97**	**31.00**	**76.92**	**13.46**	**C0176-030-0313-S**	**0.230**	**5.85**	**5.51**	**24.51**	**66.89**	**11.71**
C0176-030-0375-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.375**	**9.53**	**0.262**	**6.65**	**0.254**	**6.45**	**6.97**	**31.00**	**61.66**	**10.79**	**C0176-030-0375-S**	**0.272**	**6.91**	**5.51**	**24.51**	**53.62**	**9.38**
C0176-030-0438-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.438**	**11.11**	**0.302**	**7.67**	**0.292**	**7.42**	**6.97**	**31.00**	**51.45**	**9.00**	**C0176-030-0438-S**	**0.314**	**7.98**	**5.51**	**24.51**	**44.74**	**7.83**
C0176-030-0500-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.500**	**12.70**	**0.342**	**8.69**	**0.330**	**8.38**	**6.97**	**31.00**	**44.14**	**7.73**	**C0176-030-0500-S**	**0.356**	**9.05**	**5.51**	**24.51**	**38.39**	**6.72**
C0176-030-0563-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.563**	**14.29**	**0.382**	**9.71**	**0.368**	**9.34**	**6.97**	**31.00**	**38.65**	**6.76**	**C0176-030-0563-S**	**0.399**	**10.12**	**5.51**	**24.51**	**33.61**	**5.88**
C0176-030-0625-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.625**	**15.88**	**0.422**	**10.73**	**0.406**	**10.31**	**6.97**	**31.00**	**34.38**	**6.02**	**C0176-030-0625-S**	**0.441**	**11.19**	**5.51**	**24.51**	**29.89**	**5.23**
C0176-030-0688-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.688**	**17.46**	**0.462**	**11.74**	**0.444**	**11.27**	**6.97**	**31.00**	**30.95**	**5.42**	**C0176-030-0688-S**	**0.483**	**12.26**	**5.51**	**24.51**	**26.92**	**4.71**
C0176-030-0750-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.750**	**19.05**	**0.502**	**12.76**	**0.482**	**12.23**	**6.97**	**31.00**	**28.15**	**4.93**	**C0176-030-0750-S**	**0.525**	**13.33**	**5.51**	**24.51**	**24.48**	**4.28**
C0176-030-0813-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.813**	**20.64**	**0.542**	**13.78**	**0.520**	**13.20**	**6.97**	**31.00**	**25.81**	**4.52**	**C0176-030-0813-S**	**0.567**	**14.40**	**5.51**	**24.51**	**22.44**	**3.93**
C0176-030-0875-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.875**	**22.23**	**0.583**	**14.80**	**0.558**	**14.16**	**6.97**	**31.00**	**23.83**	**4.17**	**C0176-030-0875-S**	**0.609**	**15.47**	**5.51**	**24.51**	**20.72**	**3.63**
C0176-030-0938-M	**0.176**	**4.47**	**0.030**	**0.76**	**0.938**	**23.81**	**0.623**	**15.82**	**0.595**	**15.12**	**6.97**	**31.00**	**22.14**	**3.87**	**C0176-030-0938-S**	**0.651**	**16.54**	**5.51**	**24.51**	**19.25**	**3.37**
C0176-030-1000-M	**0.176**	**4.47**	**0.030**	**0.76**	**1.000**	**25.40**	**0.663**	**16.83**	**0.633**	**16.09**	**6.97**	**31.00**	**20.66**	**3.62**	**C0176-030-1000-S**	**0.693**	**17.61**	**5.51**	**24.51**	**17.97**	**3.14**
C0176-030-1125-M	**0.176**	**4.47**	**0.030**	**0.76**	**1.125**	**28.58**	**0.743**	**18.87**	**0.709**	**18.01**	**6.97**	**31.00**	**18.24**	**3.19**	**C0176-030-1125-S**	**0.778**	**19.75**	**5.51**	**24.51**	**15.86**	**2.78**
C0176-030-1250-M	**0.176**	**4.47**	**0.030**	**0.76**	**1.250**	**31.75**	**0.823**	**20.90**	**0.785**	**19.94**	**6.97**	**31.00**	**16.32**	**2.86**	**C0176-030-1250-S**	**0.862**	**21.89**	**5.51**	**24.51**	**14.19**	**2.48**
C0176-030-1375-M	**0.176**	**4.47**	**0.030**	**0.76**	**1.375**	**34.93**	**0.903**	**22.94**	**0.861**	**21.87**	**6.97**	**31.00**	**14.77**	**2.58**	**C0176-030-1375-S**	**0.946**	**24.03**	**5.51**	**24.51**	**12.84**	**2.25**
C0176-030-1500-M	**0.176**	**4.47**	**0.030**	**0.76**	**1.500**	**38.10**	**0.983**	**24.98**	**0.937**	**23.79**	**6.97**	**31.00**	**13.49**	**2.36**	**C0176-030-1500-S**	**1.030**	**26.17**	**5.51**	**24.51**	**11.73**	**2.05**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0176-030-1625-M	0.176	4.47	0.030	0.76	1.625	41.28	1.063	27.01	1.013	25.72	6.97	31.00	12.41	2.17
C0176-030-1750-M	0.176	4.47	0.030	0.76	1.750	44.45	1.144	29.05	1.088	27.65	6.97	31.00	11.49	2.01
C0176-030-1875-M	0.176	4.47	0.030	0.76	1.875	47.63	1.224	31.08	1.164	29.57	6.97	31.00	10.70	1.87
C0176-030-2000-M	0.176	4.47	0.030	0.76	2.000	50.80	1.304	33.12	1.240	31.50	6.97	31.00	10.01	1.75
C0176-030-2125-M	0.176	4.47	0.030	0.76	2.125	53.98	1.384	35.16	1.316	33.43	6.97	31.00	9.41	1.65
C0176-030-2250-M	0.176	4.47	0.030	0.76	2.250	57.15	1.464	37.19	1.392	35.35	6.97	31.00	8.87	1.55
C0176-030-2375-M	0.176	4.47	0.030	0.76	2.375	60.33	1.544	39.23	1.468	37.28	6.97	31.00	8.39	1.47
C0176-030-2500-M	0.176	4.47	0.030	0.76	2.500	63.50	1.625	41.26	1.544	39.21	6.97	31.00	7.96	1.39
C0176-030-2625-M	0.176	4.47	0.030	0.76	2.625	66.68	1.705	43.30	1.619	41.13	6.97	31.00	7.57	1.33
C0176-030-2750-M	0.176	4.47	0.030	0.76	2.750	69.85	1.785	45.33	1.695	43.06	6.97	31.00	7.22	1.26
C0176-030-2875-M	0.176	4.47	0.030	0.76	2.875	73.03	1.865	47.37	1.771	44.98	6.97	31.00	6.90	1.21
C0176-032-0313-M	0.176	4.47	0.032	0.81	0.313	7.94	0.233	5.92	0.230	5.84	8.30	36.91	104.29	18.25
C0176-032-0375-M	0.176	4.47	0.032	0.81	0.375	9.53	0.275	7.00	0.271	6.88	8.30	36.91	83.33	14.58
C0176-032-0438-M	0.176	4.47	0.032	0.81	0.438	11.11	0.318	8.08	0.312	7.92	8.30	36.91	69.38	12.14
C0176-032-0500-M	0.176	4.47	0.032	0.81	0.500	12.70	0.360	9.15	0.353	8.96	8.30	36.91	59.44	10.40
C0176-032-0563-M	0.176	4.47	0.032	0.81	0.563	14.29	0.403	10.23	0.393	9.99	8.30	36.91	51.99	9.10
C0176-032-0625-M	0.176	4.47	0.032	0.81	0.625	15.88	0.445	11.31	0.434	11.03	8.30	36.91	46.19	8.08
C0176-032-0688-M	0.176	4.47	0.032	0.81	0.688	17.46	0.488	12.39	0.475	12.07	8.30	36.91	41.56	7.27
C0176-032-0750-M	0.176	4.47	0.032	0.81	0.750	19.05	0.530	13.47	0.516	13.11	8.30	36.91	37.78	6.61
C0176-032-0813-M	0.176	4.47	0.032	0.81	0.813	20.64	0.573	14.55	0.557	14.15	8.30	36.91	34.62	6.06
C0176-032-0875-M	0.176	4.47	0.032	0.81	0.875	22.23	0.615	15.63	0.598	15.19	8.30	36.91	31.95	5.59
C0176-032-0938-M	0.176	4.47	0.032	0.81	0.938	23.81	0.658	16.71	0.639	16.23	8.30	36.91	29.67	5.19
C0176-032-1000-M	0.176	4.47	0.032	0.81	1.000	25.40	0.700	17.79	0.680	17.27	8.30	36.91	27.69	4.85
C0176-032-1125-M	0.176	4.47	0.032	0.81	1.125	28.58	0.785	19.95	0.762	19.35	8.30	36.91	24.43	4.27
C0176-032-1250-M	0.176	4.47	0.032	0.81	1.250	31.75	0.870	22.11	0.843	21.42	8.30	36.91	21.85	3.82
C0176-032-1375-M	0.176	4.47	0.032	0.81	1.375	34.93	0.955	24.26	0.925	23.50	8.30	36.91	19.77	3.46
C0176-032-1500-M	0.176	4.47	0.032	0.81	1.500	38.10	1.040	26.42	1.007	25.58	8.30	36.91	18.05	3.16
C0176-032-1625-M	0.176	4.47	0.032	0.81	1.625	41.28	1.125	28.58	1.089	27.66	8.30	36.91	16.60	2.91
C0176-032-1750-M	0.176	4.47	0.032	0.81	1.750	44.45	1.210	30.74	1.171	29.74	8.30	36.91	15.37	2.69
C0176-032-1875-M	0.176	4.47	0.032	0.81	1.875	47.63	1.295	32.90	1.253	31.81	8.30	36.91	14.31	2.50
C0176-032-2000-M	0.176	4.47	0.032	0.81	2.000	50.80	1.380	35.06	1.334	33.89	8.30	36.91	13.39	2.34
C0176-032-2125-M	0.176	4.47	0.032	0.81	2.125	53.98	1.465	37.21	1.416	35.97	8.30	36.91	12.57	2.20
C0176-032-2250-M	0.176	4.47	0.032	0.81	2.250	57.15	1.550	39.37	1.498	38.05	8.30	36.91	11.86	2.07
C0176-032-2375-M	0.176	4.47	0.032	0.81	2.375	60.33	1.635	41.53	1.580	40.13	8.30	36.91	11.21	1.96
C0176-032-2500-M	0.176	4.47	0.032	0.81	2.500	63.50	1.720	43.69	1.662	42.20	8.30	36.91	10.64	1.86
C0176-032-2625-M	0.176	4.47	0.032	0.81	2.625	66.68	1.805	45.85	1.743	44.28	8.30	36.91	10.12	1.77
C0176-032-2750-M	0.176	4.47	0.032	0.81	2.750	69.85	1.890	48.01	1.825	46.36	8.30	36.91	9.65	1.69
C0176-032-2875-M	0.176	4.47	0.032	0.81	2.875	73.03	1.975	50.17	1.907	48.44	8.30	36.91	9.22	1.61
C0176-035-0313-M	0.176	4.47	0.035	0.89	0.313	7.94	0.258	6.54	0.248	6.29	8.92	39.67	162.23	28.39
C0176-035-0375-M	0.176	4.47	0.035	0.89	0.375	9.53	0.293	7.45	0.293	7.44	10.55	46.91	128.98	22.57
C0176-035-0438-M	0.176	4.47	0.035	0.89	0.438	11.11	0.339	8.61	0.338	8.58	10.55	46.91	107.05	18.73
C0176-035-0500-M	0.176	4.47	0.035	0.89	0.500	12.70	0.385	9.77	0.383	9.72	10.55	46.91	91.49	16.01
C0176-035-0563-M	0.176	4.47	0.035	0.89	0.563	14.29	0.430	10.93	0.428	10.86	10.55	46.91	79.88	13.98
C0176-035-0625-M	0.176	4.47	0.035	0.89	0.625	15.88	0.476	12.10	0.472	12.00	10.55	46.91	70.88	12.40
C0176-035-0688-M	0.176	4.47	0.035	0.89	0.688	17.46	0.522	13.26	0.517	13.14	10.55	46.91	63.71	11.15
C0176-035-0750-M	0.176	4.47	0.035	0.89	0.750	19.05	0.568	14.42	0.562	14.28	10.55	46.91	57.85	10.12
C0176-035-0813-M	0.176	4.47	0.035	0.89	0.813	20.64	0.613	15.58	0.607	15.42	10.55	46.91	52.98	9.27
C0176-035-0875-M	0.176	4.47	0.035	0.89	0.875	22.23	0.659	16.74	0.652	16.57	10.55	46.91	48.87	8.55
C0176-035-0938-M	0.176	4.47	0.035	0.89	0.938	23.81	0.705	17.91	0.697	17.71	10.55	46.91	45.35	7.94
C0176-035-1000-M	0.176	4.47	0.035	0.89	1.000	25.40	0.751	19.07	0.742	18.85	10.55	46.91	42.30	7.40
C0176-035-1125-M	0.176	4.47	0.035	0.89	1.125	28.58	0.842	21.39	0.832	21.13	10.55	46.91	37.29	6.53
C0176-035-1250-M	0.176	4.47	0.035	0.89	1.250	31.75	0.934	23.72	0.922	23.41	10.55	46.91	33.34	5.83
C0176-035-1375-M	0.176	4.47	0.035	0.89	1.375	34.93	1.025	26.04	1.012	25.70	10.55	46.91	30.15	5.28
C0176-035-1500-M	0.176	4.47	0.035	0.89	1.500	38.10	1.117	28.36	1.101	27.98	10.55	46.91	27.51	4.81
C0176-035-1625-M	0.176	4.47	0.035	0.89	1.625	41.28	1.208	30.69	1.191	30.26	10.55	46.91	25.30	4.43
C0176-035-1750-M	0.176	4.47	0.035	0.89	1.750	44.45	1.300	33.01	1.281	32.54	10.55	46.91	23.42	4.10
C0176-035-1875-M	0.176	4.47	0.035	0.89	1.875	47.63	1.391	35.34	1.371	34.82	10.55	46.91	21.80	3.81
C0176-035-2000-M	0.176	4.47	0.035	0.89	2.000	50.80	1.483	37.66	1.461	37.11	10.55	46.91	20.38	3.57
C0176-035-2125-M	0.176	4.47	0.035	0.89	2.125	53.98	1.574	39.98	1.551	39.39	10.55	46.91	19.14	3.35
C0176-035-2250-M	0.176	4.47	0.035	0.89	2.250	57.15	1.666	42.31	1.641	41.67	10.55	46.91	18.05	3.16
C0176-035-2375-M	0.176	4.47	0.035	0.89	2.375	60.33	1.757	44.63	1.730	43.95	10.55	46.91	17.07	2.99
C0176-035-2500-M	0.176	4.47	0.035	0.89	2.500	63.50	1.849	46.95	1.820	46.24	10.55	46.91	16.19	2.83
C0176-035-2625-M	0.176	4.47	0.035	0.89	2.625	66.68	1.940	49.28	1.910	48.52	10.55	46.91	15.40	2.69
C0176-035-2750-M	0.176	4.47	0.035	0.89	2.750	69.85	2.032	51.60	2.000	50.80	10.55	46.91	14.68	2.57

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0176-030-1625-S	1.114	28.31	5.51	24.51	10.79	1.89
C0176-030-1750-S	1.199	30.45	5.51	24.51	9.99	1.75
C0176-030-1875-S	1.283	32.58	5.51	24.51	9.31	1.63
C0176-030-2000-S	1.367	34.72	5.51	24.51	8.71	1.52
C0176-030-2125-S	1.451	36.86	5.51	24.51	8.18	1.43
C0176-030-2250-S	1.536	39.00	5.51	24.51	7.71	1.35
C0176-030-2375-S	1.620	41.14	5.51	24.51	7.30	1.28
C0176-030-2500-S	1.704	43.28	5.51	24.51	6.92	1.21
C0176-030-2625-S	1.788	45.42	5.51	24.51	6.58	1.15
C0176-030-2750-S	1.872	47.56	5.51	24.51	6.28	1.10
C0176-030-2875-S	1.957	49.70	5.51	24.51	6.00	1.05
C0176-032-0313-S	0.240	6.10	6.57	29.23	90.68	15.87
C0176-032-0375-S	0.284	7.22	6.57	29.23	72.46	12.68
C0176-032-0438-S	0.329	8.35	6.57	29.23	60.33	10.56
C0176-032-0500-S	0.373	9.47	6.57	29.23	51.68	9.04
C0176-032-0563-S	0.417	10.60	6.57	29.23	45.20	7.91
C0176-032-0625-S	0.461	11.72	6.57	29.23	40.17	7.03
C0176-032-0688-S	0.506	12.84	6.57	29.23	36.14	6.32
C0176-032-0750-S	0.550	13.97	6.57	29.23	32.85	5.75
C0176-032-0813-S	0.594	15.09	6.57	29.23	30.11	5.27
C0176-032-0875-S	0.639	16.22	6.57	29.23	27.79	4.86
C0176-032-0938-S	0.683	17.34	6.57	29.23	25.80	4.52
C0176-032-1000-S	0.727	18.47	6.57	29.23	24.08	4.21
C0176-032-1125-S	0.816	20.72	6.57	29.23	21.24	3.72
C0176-032-1250-S	0.904	22.97	6.57	29.23	19.00	3.33
C0176-032-1375-S	0.993	25.22	6.57	29.23	17.19	3.01
C0176-032-1500-S	1.081	27.46	6.57	29.23	15.69	2.75
C0176-032-1625-S	1.170	29.71	6.57	29.23	14.44	2.53
C0176-032-1750-S	1.258	31.96	6.57	29.23	13.37	2.34
C0176-032-1875-S	1.347	34.21	6.57	29.23	12.44	2.18
C0176-032-2000-S	1.435	36.46	6.57	29.23	11.64	2.04
C0176-032-2125-S	1.524	38.71	6.57	29.23	10.93	1.91
C0176-032-2250-S	1.613	40.96	6.57	29.23	10.31	1.80
C0176-032-2375-S	1.701	43.21	6.57	29.23	9.75	1.71
C0176-032-2500-S	1.790	45.46	6.57	29.23	9.25	1.62
C0176-032-2625-S	1.878	47.71	6.57	29.23	8.80	1.54
C0176-032-2750-S	1.967	49.96	6.57	29.23	8.39	1.47
C0176-032-2875-S	2.055	52.21	6.57	29.23	8.02	1.40
C0176-035-0313-S	0.253	6.43	8.37	37.22	141.07	24.69
C0176-035-0375-S	0.300	7.63	8.37	37.22	112.16	19.63
C0176-035-0438-S	0.348	8.83	8.37	37.22	93.08	16.29
C0176-035-0500-S	0.395	10.03	8.37	37.22	79.55	13.92
C0176-035-0563-S	0.442	11.23	8.37	37.22	69.46	12.16
C0176-035-0625-S	0.489	12.43	8.37	37.22	61.64	10.79
C0176-035-0688-S	0.536	13.63	8.37	37.22	55.40	9.70
C0176-035-0750-S	0.584	14.83	8.37	37.22	50.31	8.80
C0176-035-0813-S	0.631	16.02	8.37	37.22	46.07	8.06
C0176-035-0875-S	0.678	17.22	8.37	37.22	42.50	7.44
C0176-035-0938-S	0.725	18.42	8.37	37.22	39.43	6.90
C0176-035-1000-S	0.773	19.62	8.37	37.22	36.78	6.44
C0176-035-1125-S	0.867	22.02	8.37	37.22	32.43	5.68
C0176-035-1250-S	0.961	24.42	8.37	37.22	28.99	5.07
C0176-035-1375-S	1.056	26.82	8.37	37.22	26.21	4.59
C0176-035-1500-S	1.150	29.22	8.37	37.22	23.92	4.19
C0176-035-1625-S	1.245	31.61	8.37	37.22	22.00	3.85
C0176-035-1750-S	1.339	34.01	8.37	37.22	20.36	3.56
C0176-035-1875-S	1.433	36.41	8.37	37.22	18.95	3.32
C0176-035-2000-S	1.528	38.81	8.37	37.22	17.72	3.10
C0176-035-2125-S	1.622	41.21	8.37	37.22	16.65	2.91
C0176-035-2250-S	1.717	43.61	8.37	37.22	15.69	2.75
C0176-035-2375-S	1.811	46.00	8.37	37.22	14.84	2.60
C0176-035-2500-S	1.906	48.40	8.37	37.22	14.08	2.46
C0176-035-2625-S	2.000	50.80	8.37	37.22	13.39	2.34
C0176-035-2750-S	2.094	53.20	8.37	37.22	12.76	2.23

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
D11200*	0.177	4.50	0.020	0.50	0.276	7.00	0.146	3.70	0.128	3.25	2.10	9.32	16.17	2.83	D21200*	0.146	3.70	1.74	7.76	13.49	2.36
D11210*	0.177	4.50	0.020	0.50	0.394	10.00	0.201	5.10	0.167	4.25	2.10	9.32	10.34	1.81	D21210*	0.201	5.10	1.74	7.76	8.63	1.51
D11220*	0.177	4.50	0.020	0.50	0.591	15.00	0.280	7.10	0.226	5.75	2.10	9.32	6.69	1.17	D21220*	0.280	7.10	1.74	7.76	5.54	0.97
D11230*	0.177	4.50	0.020	0.50	0.846	21.50	0.386	9.80	0.305	7.75	2.10	9.32	4.51	0.79	D21230*	0.386	9.80	1.74	7.76	3.77	0.66
D11240*	0.177	4.50	0.020	0.50	1.220	31.00	0.551	14.00	0.423	10.75	2.10	9.32	3.09	0.54	D21240*	0.551	14.00	1.74	7.76	2.57	0.45
C0180-010-0250-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.250**	**6.35**	**0.083**	**2.10**	**0.044**	**1.12**	**0.33**	**1.47**	**1.97**	**0.34**	**C0180-010-0250-S***	**0.106**	**2.68**	**0.24**	**1.05**	**1.64**	**0.29**
C0180-010-0313-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.313**	**7.95**	**0.098**	**2.48**	**0.049**	**1.25**	**0.33**	**1.47**	**1.53**	**0.27**	**C0180-010-0313-S***	**0.127**	**3.23**	**0.24**	**1.05**	**1.27**	**0.22**
C0180-010-0375-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.375**	**9.53**	**0.114**	**2.88**	**0.054**	**1.37**	**0.33**	**1.47**	**1.26**	**0.22**	**C0180-010-0375-S***	**0.149**	**3.79**	**0.24**	**1.05**	**1.05**	**0.18**
C0180-010-0438-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.438**	**11.13**	**0.127**	**3.23**	**0.059**	**1.50**	**0.33**	**1.47**	**1.06**	**0.19**	**C0180-010-0438-S***	**0.170**	**4.31**	**0.24**	**1.05**	**0.88**	**0.15**
C0180-010-0500-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.500**	**12.70**	**0.142**	**3.60**	**0.064**	**1.62**	**0.33**	**1.47**	**0.92**	**0.16**	**C0180-010-0500-S***	**0.191**	**4.85**	**0.24**	**1.05**	**0.77**	**0.13**
C0180-010-0563-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.563**	**14.30**	**0.156**	**3.97**	**0.069**	**1.75**	**0.33**	**1.47**	**0.81**	**0.14**	**C0180-010-0563-S***	**0.212**	**5.38**	**0.24**	**1.05**	**0.67**	**0.12**
C0180-010-0625-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.625**	**15.88**	**0.174**	**4.41**	**0.074**	**1.87**	**0.33**	**1.47**	**0.73**	**0.13**	**C0180-010-0625-S***	**0.235**	**5.98**	**0.24**	**1.05**	**0.61**	**0.11**
C0180-010-0750-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.750**	**19.05**	**0.201**	**5.10**	**0.083**	**2.10**	**0.33**	**1.47**	**0.60**	**0.11**	**C0180-010-0750-S***	**0.276**	**7.01**	**0.24**	**1.05**	**0.50**	**0.09**
C0180-010-0875-M*	**0.180**	**4.57**	**0.010**	**0.25**	**0.875**	**22.23**	**0.229**	**5.82**	**0.092**	**2.33**	**0.33**	**1.47**	**0.51**	**0.09**	**C0180-010-0875-S***	**0.317**	**8.06**	**0.24**	**1.05**	**0.42**	**0.07**
C0180-010-1000-M*	**0.180**	**4.57**	**0.010**	**0.25**	**1.000**	**25.40**	**0.268**	**6.80**	**0.100**	**2.53**	**0.33**	**1.47**	**0.45**	**0.08**	**C0180-010-1000-S***	**0.368**	**9.34**	**0.24**	**1.05**	**0.37**	**0.06**
C0180-010-1250-M*	**0.180**	**4.57**	**0.010**	**0.25**	**1.250**	**31.75**	**0.335**	**8.50**	**0.117**	**2.97**	**0.33**	**1.47**	**0.36**	**0.06**	**C0180-010-1250-S***	**0.460**	**11.68**	**0.24**	**1.05**	**0.30**	**0.05**
C0180-010-1500-M*	**0.180**	**4.57**	**0.010**	**0.25**	**1.500**	**38.10**	**0.364**	**9.24**	**0.137**	**3.49**	**0.33**	**1.47**	**0.29**	**0.05**	**C0180-010-1500-S***	**0.519**	**13.18**	**0.24**	**1.05**	**0.24**	**0.04**
C0180-012-0250-M*	0.180	4.57	0.012	0.31	0.250	6.35	0.101	2.57	0.057	1.45	0.54	2.40	3.60	0.63	C0180-012-0250-S*	0.135	3.42	0.35	1.54	3.00	0.53
C0180-012-0310-M*	0.180	4.57	0.012	0.31	0.310	7.87	0.124	3.15	0.062	1.57	0.54	2.40	2.90	0.51	C0180-012-0310-S*	0.167	4.24	0.35	1.54	2.42	0.42
C0180-012-0380-M*	0.180	4.57	0.012	0.31	0.380	9.65	0.145	3.68	0.069	1.75	0.54	2.40	2.30	0.40	C0180-012-0380-S*	0.200	5.07	0.35	1.54	1.92	0.34
C0180-012-0440-M*	0.180	4.57	0.012	0.31	0.440	11.18	0.170	4.32	0.074	1.88	0.54	2.40	2.00	0.35	C0180-012-0440-S*	0.233	5.91	0.35	1.54	1.67	0.29
C0180-012-0500-M*	0.180	4.57	0.012	0.31	0.500	12.70	0.182	4.62	0.080	2.03	0.54	2.40	1.70	0.30	C0180-012-0500-S*	0.256	6.50	0.35	1.54	1.42	0.25
C0180-012-0560-M*	0.180	4.57	0.012	0.31	0.560	14.22	0.200	5.08	0.085	2.16	0.54	2.40	1.50	0.26	C0180-012-0560-S*	0.284	7.20	0.35	1.54	1.25	0.22
C0180-012-0620-M*	0.180	4.57	0.012	0.31	0.620	15.75	0.234	5.94	0.091	2.31	0.54	2.40	1.40	0.25	C0180-012-0620-S*	0.324	8.23	0.35	1.54	1.17	0.20
C0180-012-0690-M*	0.180	4.57	0.012	0.31	0.690	17.53	0.240	6.10	0.097	2.46	0.54	2.40	1.20	0.21	C0180-012-0690-S*	0.344	8.75	0.35	1.54	1.00	0.18
C0180-012-0750-M*	0.180	4.57	0.012	0.31	0.750	19.05	0.259	6.58	0.103	2.62	0.54	2.40	1.10	0.19	C0180-012-0750-S*	0.373	9.48	0.35	1.54	0.92	0.16
C0180-012-0810-M*	0.180	4.57	0.012	0.31	0.810	20.57	0.270	6.86	0.109	2.77	0.54	2.40	1.00	0.18	C0180-012-0810-S*	0.395	10.04	0.35	1.54	0.83	0.15
C0180-012-0880-M*	0.180	4.57	0.012	0.31	0.880	22.35	0.340	8.64	0.115	2.92	0.54	2.40	1.00	0.18	C0180-012-0880-S*	0.465	11.82	0.35	1.54	0.83	0.15
C0180-012-0940-M*	0.180	4.57	0.012	0.31	0.940	23.88	0.336	8.53	0.121	3.07	0.54	2.40	0.90	0.16	C0180-012-0940-S*	0.479	12.17	0.35	1.54	0.75	0.13
C0180-012-1000-M*	0.180	4.57	0.012	0.31	1.000	25.40	0.325	8.26	0.126	3.20	0.54	2.40	0.80	0.14	C0180-012-1000-S*	0.482	12.24	0.35	1.54	0.67	0.12
C0180-012-1250-M*	0.180	4.57	0.012	0.31	1.250	31.75	0.479	12.17	0.149	3.78	0.54	2.40	0.70	0.12	C0180-012-1250-S*	0.658	16.70	0.35	1.54	0.58	0.10
C0180-012-1500-M*	0.180	4.57	0.012	0.31	1.500	38.10	0.600	15.24	0.172	4.37	0.54	2.40	0.60	0.11	C0180-012-1500-S*	0.809	20.55	0.35	1.54	0.50	0.09
C0180-013-0250-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.250**	**6.35**	**0.099**	**2.51**	**0.064**	**1.62**	**0.69**	**3.09**	**4.60**	**0.81**	**C0180-013-0250-S***	**0.118**	**2.99**	**0.51**	**2.26**	**3.83**	**0.67**
C0180-013-0313-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.313**	**7.95**	**0.114**	**2.91**	**0.073**	**1.86**	**0.69**	**3.09**	**3.50**	**0.61**	**C0180-013-0313-S***	**0.139**	**3.53**	**0.51**	**2.26**	**2.92**	**0.51**
C0180-013-0375-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.375**	**9.53**	**0.135**	**3.44**	**0.081**	**2.06**	**0.69**	**3.09**	**2.90**	**0.51**	**C0180-013-0375-S***	**0.165**	**4.19**	**0.51**	**2.26**	**2.42**	**0.42**
C0180-013-0438-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.438**	**11.13**	**0.149**	**3.77**	**0.091**	**2.30**	**0.69**	**3.09**	**2.40**	**0.42**	**C0180-013-0438-S***	**0.184**	**4.68**	**0.51**	**2.26**	**2.00**	**0.35**
C0180-013-0500-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.500**	**12.70**	**0.169**	**4.30**	**0.098**	**2.50**	**0.69**	**3.09**	**2.10**	**0.37**	**C0180-013-0500-S***	**0.210**	**5.34**	**0.51**	**2.26**	**1.75**	**0.31**
C0180-013-0563-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.563**	**14.30**	**0.197**	**5.01**	**0.104**	**2.65**	**0.69**	**3.09**	**1.90**	**0.33**	**C0180-013-0563-S***	**0.243**	**6.16**	**0.51**	**2.26**	**1.58**	**0.28**
C0180-013-0625-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.625**	**15.88**	**0.216**	**5.49**	**0.112**	**2.84**	**0.69**	**3.09**	**1.70**	**0.30**	**C0180-013-0625-S***	**0.267**	**6.78**	**0.51**	**2.26**	**1.42**	**0.25**
C0180-013-0750-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.750**	**19.05**	**0.254**	**6.45**	**0.127**	**3.22**	**0.69**	**3.09**	**1.40**	**0.25**	**C0180-013-0750-S***	**0.315**	**8.01**	**0.51**	**2.26**	**1.17**	**0.20**
C0180-013-0875-M*	**0.180**	**4.57**	**0.013**	**0.33**	**0.875**	**22.23**	**0.296**	**7.52**	**0.141**	**3.59**	**0.69**	**3.09**	**1.20**	**0.21**	**C0180-013-0875-S***	**0.368**	**9.34**	**0.51**	**2.26**	**1.00**	**0.18**
C0180-013-1000-M*	**0.180**	**4.57**	**0.013**	**0.33**	**1.000**	**25.40**	**0.305**	**7.75**	**0.161**	**4.10**	**0.69**	**3.09**	**1.00**	**0.18**	**C0180-013-1000-S***	**0.391**	**9.94**	**0.51**	**2.26**	**0.83**	**0.15**
C0180-013-1250-M*	**0.180**	**4.57**	**0.013**	**0.33**	**1.250**	**31.75**	**0.382**	**9.69**	**0.191**	**4.86**	**0.69**	**3.09**	**0.80**	**0.14**	**C0180-013-1250-S***	**0.489**	**12.43**	**0.51**	**2.26**	**0.67**	**0.12**
C0180-013-1500-M*	**0.180**	**4.57**	**0.013**	**0.33**	**1.500**	**38.10**	**0.507**	**12.89**	**0.213**	**5.41**	**0.69**	**3.09**	**0.70**	**0.12**	**C0180-013-1500-S***	**0.631**	**16.02**	**0.51**	**2.26**	**0.58**	**0.10**
C0180-014-0250-M*	0.180	4.57	0.014	0.36	0.250	6.35	0.115	2.92	0.069	1.75	0.84	3.74	6.20	1.09	C0180-014-0250-S*	0.146	3.70	0.54	2.40	5.17	0.90
C0180-014-0310-M*	0.180	4.57	0.014	0.36	0.310	7.87	0.139	3.53	0.076	1.93	0.84	3.74	4.90	0.86	C0180-014-0310-S*	0.178	4.52	0.54	2.40	4.08	0.71
C0180-014-0380-M*	0.180	4.57	0.014	0.36	0.380	9.65	0.165	4.19	0.085	2.16	0.84	3.74	3.90	0.68	C0180-014-0380-S*	0.214	5.44	0.54	2.40	3.25	0.57
C0180-014-0440-M*	0.180	4.57	0.014	0.36	0.440	11.18	0.193	4.90	0.092	2.34	0.84	3.74	3.40	0.60	C0180-014-0440-S*	0.250	6.35	0.54	2.40	2.83	0.50
C0180-014-0500-M*	0.180	4.57	0.014	0.36	0.500	12.70	0.210	5.33	0.100	2.54	0.84	3.74	2.90	0.51	C0180-014-0500-S*	0.277	7.04	0.54	2.40	2.42	0.42
C0180-014-0560-M*	0.180	4.57	0.014	0.36	0.560	14.22	0.238	6.05	0.107	2.72	0.84	3.74	2.60	0.46	C0180-014-0560-S*	0.311	7.91	0.54	2.40	2.17	0.38
C0180-014-0620-M*	0.180	4.57	0.014	0.36	0.620	15.75	0.255	6.48	0.114	2.90	0.84	3.74	2.30	0.40	C0180-014-0620-S*	0.339	8.61	0.54	2.40	1.92	0.34
C0180-014-0690-M*	0.180	4.57	0.014	0.36	0.690	17.53	0.289	7.34	0.123	3.12	0.84	3.74	2.10	0.37	C0180-014-0690-S*	0.382	9.71	0.54	2.40	1.75	0.31
C0180-014-0750-M*	0.180	4.57	0.014	0.36	0.750	19.05	0.308	7.82	0.130	3.30	0.84	3.74	1.90	0.33	C0180-014-0750-S*	0.410	10.41	0.54	2.40	1.58	0.28
C0180-014-0880-M*	0.180	4.57	0.014	0.36	0.880	22.35	0.355	9.02	0.146	3.71	0.84	3.74	1.60	0.28	C0180-014-0880-S*	0.476	12.09	0.54	2.40	1.33	0.23
C0180-014-1000-M*	0.180	4.57	0.014	0.36	1.000	25.40	0.400	10.16	0.161	4.09	0.84	3.74	1.40	0.25	C0180-014-1000-S*	0.538	13.67	0.54	2.40	1.17	0.20
C0180-014-1250-M*	0.180	4.57	0.014	0.36	1.250	31.75	0.486	12.34	0.191	4.85	0.84	3.74	1.10	0.19	C0180-014-1250-S*	0.662	16.82	0.54	2.40	0.92	0.16
C0180-014-1380-M*	0.180	4.57	0.014	0.36	1.380	35.05	0.540	13.72	0.207	5.26	0.84	3.74	1.00	0.18	C0180-014-1380-S*	0.733	18.63	0.54	2.40	0.83	0.15
C0180-014-1500-M*	0.180	4.57	0.014	0.36	1.500	38.10	0.567	14.40	0.222	5.64	0.84	3.74	0.90	0.16	C0180-014-1500-S*	0.782	19.85	0.54	2.40	0.75	0.13
C0180-016-0250-M*	0.180	4.57	0.016	0.41	0.250	6.35	0.109	2.77	0.080	2.03	1.25	5.56	8.90	1.56	C0180-016-0250-S*	0.144	3.65	0.79	3.51	7.41	1.30
C0180-016-0310-M*	0.180	4.57	0.016	0.41	0.310	7.87	0.143	3.63	0.087	2.21	1.25	5.56	7.50	1.31	C0180-016-0310-S*	0.184	4.67	0.79	3.51	6.25	1.09
C0180-016-0380-M*	0.180	4.57	0.016	0.41	0.380	9.65	0.169	4.29	0.100	2.54	1.25	5.56	5.90	1.03	C0180-016-0380-S*	0.219	5.57	0.79	3.51	4.92	0.86
C0180-016-0440-M*	0.180	4.57	0.016	0.41	0.440	11.18	0.187	4.75	0.112	2.84	1.25	5.56	4.90	0.86	C0180-016-0440-S*	0.247	6.27	0.79	3.51	4.08	0.71
C0180-016-0500-M*	0.180	4.57	0.016	0.41	0.500	12.70	0.205	5.21	0.124	3.15	1.25	5.56	4.20	0.74	C0180-016-0500-S*	0.274	6.97	0.79	3.51	3.50	0.61
C0180-016-0560-M*	0.180	4.57	0.016	0.41	0.560	14.22	0.223	5.66	0.136	3.45	1.25	5.56	3.70	0.65	C0180-016-0560-S*	0.304	7.72	0.79	3.51	3.08	0.54

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0180-016-0620-M*	0.180	4.57	0.016	0.41	0.620	15.75	0.254	6.45	0.144	3.66	1.25	5.56	3.40	0.60
C0180-016-0690-M*	0.180	4.57	0.016	0.41	0.690	17.53	0.283	7.19	0.155	3.94	1.25	5.56	3.10	0.54
C0180-016-0750-M*	0.180	4.57	0.016	0.41	0.750	19.05	0.300	7.62	0.167	4.24	1.25	5.56	2.80	0.49
C0180-016-0880-M*	0.180	4.57	0.016	0.41	0.880	22.35	0.380	9.65	0.185	4.70	1.25	5.56	2.50	0.44
C0180-016-1000-M*	0.180	4.57	0.016	0.41	1.000	25.40	0.432	10.97	0.204	5.18	1.25	5.56	2.20	0.39
C0180-016-1250-M*	0.180	4.57	0.016	0.41	1.250	31.75	0.515	13.08	0.245	6.22	1.25	5.56	1.70	0.30
C0180-016-1380-M*	0.180	4.57	0.016	0.41	1.380	35.05	0.600	15.24	0.266	6.76	1.25	5.56	1.60	0.28
C0180-016-1500-M*	0.180	4.57	0.016	0.41	1.500	38.10	0.607	15.42	0.285	7.24	1.25	5.56	1.40	0.25
C0180-016-1750-M*	0.180	4.57	0.016	0.41	1.750	44.45	0.708	17.98	0.326	8.28	1.25	5.56	1.20	0.21
C0180-018-0250-M*	0.180	4.57	0.018	0.46	0.250	6.35	0.120	3.05	0.094	2.39	1.76	7.83	13.50	2.36
C0180-018-0310-M*	0.180	4.57	0.018	0.46	0.310	7.87	0.156	3.96	0.103	2.62	1.76	7.83	11.40	2.00
C0180-018-0380-M*	0.180	4.57	0.018	0.46	0.380	9.65	0.190	4.83	0.116	2.95	1.76	7.83	9.30	1.63
C0180-018-0440-M*	0.180	4.57	0.018	0.46	0.440	11.18	0.215	5.46	0.130	3.30	1.76	7.83	7.80	1.37
C0180-018-0500-M*	0.180	4.57	0.018	0.46	0.500	12.70	0.239	6.07	0.144	3.66	1.76	7.83	6.70	1.17
C0180-018-0560-M*	0.180	4.57	0.018	0.46	0.560	14.22	0.252	6.40	0.162	4.11	1.76	7.83	5.70	1.00
C0180-018-0620-M*	0.180	4.57	0.018	0.46	0.620	15.75	0.276	7.01	0.175	4.45	1.76	7.83	5.10	0.89
C0180-018-0690-M*	0.180	4.57	0.018	0.46	0.690	17.53	0.310	7.87	0.189	4.80	1.76	7.83	4.60	0.81
C0180-018-0750-M*	0.180	4.57	0.018	0.46	0.750	19.05	0.323	8.20	0.207	5.26	1.76	7.83	4.10	0.72
C0180-018-0880-M*	0.180	4.57	0.018	0.46	0.880	22.35	0.404	10.26	0.227	5.77	1.76	7.83	3.70	0.65
C0180-018-1000-M*	0.180	4.57	0.018	0.46	1.000	25.40	0.450	11.43	0.252	6.40	1.76	7.83	3.20	0.56
C0180-018-1250-M*	0.180	4.57	0.018	0.46	1.250	31.75	0.573	14.55	0.303	7.70	1.76	7.83	2.60	0.46
C0180-018-1380-M*	0.180	4.57	0.018	0.46	1.380	35.05	0.615	15.62	0.330	8.38	1.76	7.83	2.30	0.40
C0180-018-1500-M*	0.180	4.57	0.018	0.46	1.500	38.10	0.662	16.81	0.355	9.02	1.76	7.83	2.10	0.37
C0180-018-1750-M*	0.180	4.57	0.018	0.46	1.750	44.45	0.772	19.61	0.406	10.31	1.76	7.83	1.80	0.32
C0180-020-0250-M*	0.180	4.57	0.020	0.51	0.250	6.35	0.142	3.61	0.113	2.87	2.29	10.19	21.20	3.71
C0180-020-0310-M*	0.180	4.57	0.020	0.51	0.310	7.87	0.171	4.34	0.128	3.25	2.29	10.19	16.50	2.89
C0180-020-0380-M*	0.180	4.57	0.020	0.51	0.380	9.65	0.205	5.21	0.146	3.71	2.29	10.19	13.10	2.29
C0180-020-0440-M*	0.180	4.57	0.020	0.51	0.440	11.18	0.234	5.94	0.161	4.09	2.29	10.19	11.10	1.94
C0180-020-0500-M*	0.180	4.57	0.020	0.51	0.500	12.70	0.263	6.68	0.176	4.47	2.29	10.19	9.70	1.70
C0180-020-0560-M*	0.180	4.57	0.020	0.51	0.560	14.22	0.292	7.42	0.191	4.85	2.29	10.19	8.60	1.51
C0180-020-0620-M*	0.180	4.57	0.020	0.51	0.620	15.75	0.321	8.15	0.207	5.26	2.29	10.19	7.70	1.35
C0180-020-0690-M*	0.180	4.57	0.020	0.51	0.690	17.53	0.355	9.02	0.224	5.69	2.29	10.19	6.80	1.19
C0180-020-0750-M*	0.180	4.57	0.020	0.51	0.750	19.05	0.384	9.75	0.239	6.07	2.29	10.19	6.30	1.10
C0180-020-0880-M*	0.180	4.57	0.020	0.51	0.880	22.35	0.447	11.35	0.272	6.91	2.29	10.19	5.30	0.93
C0180-020-1000-M*	0.180	4.57	0.020	0.51	1.000	25.40	0.505	12.83	0.302	7.67	2.29	10.19	4.60	0.81
C0180-020-1250-M*	0.180	4.57	0.020	0.51	1.250	31.75	0.626	15.90	0.366	9.30	2.29	10.19	3.70	0.65
C0180-020-1380-M*	0.180	4.57	0.020	0.51	1.380	35.05	0.689	17.50	0.398	10.11	2.29	10.19	3.30	0.58
C0180-020-1500-M*	0.180	4.57	0.020	0.51	1.500	38.10	0.737	18.72	0.429	10.90	2.29	10.19	3.00	0.53
C0180-020-1750-M*	0.180	4.57	0.020	0.51	1.750	44.45	0.868	22.05	0.492	12.50	2.29	10.19	2.60	0.46
C0180-022-0250-M	0.180	4.57	0.022	0.56	0.250	6.35	0.144	3.66	0.121	3.07	3.13	13.92	29.60	5.18
C0180-022-0310-M	0.180	4.57	0.022	0.56	0.310	7.87	0.178	4.52	0.137	3.48	3.13	13.92	23.70	4.15
C0180-022-0380-M	0.180	4.57	0.022	0.56	0.380	9.65	0.222	5.64	0.154	3.91	3.13	13.92	19.80	3.47
C0180-022-0440-M	0.180	4.57	0.022	0.56	0.440	11.18	0.255	6.48	0.170	4.32	3.13	13.92	16.90	2.96
C0180-022-0500-M	0.180	4.57	0.022	0.56	0.500	12.70	0.280	7.11	0.192	4.88	3.13	13.92	14.20	2.49
C0180-022-0560-M	0.180	4.57	0.022	0.56	0.560	14.22	0.296	7.52	0.219	5.56	3.13	13.92	11.90	2.08
C0180-022-0620-M	0.180	4.57	0.022	0.56	0.620	15.75	0.322	8.18	0.241	6.12	3.13	13.92	10.50	1.84
C0180-022-0690-M	0.180	4.57	0.022	0.56	0.690	17.53	0.365	9.27	0.259	6.58	3.13	13.92	9.60	1.68
C0180-022-0750-M	0.180	4.57	0.022	0.56	0.750	19.05	0.389	9.88	0.280	7.11	3.13	13.92	8.70	1.52
C0180-022-0810-M	0.180	4.57	0.022	0.56	0.810	20.57	0.405	10.29	0.309	7.85	3.13	13.92	7.70	1.35
C0180-022-0940-M	0.180	4.57	0.022	0.56	0.940	23.88	0.486	12.34	0.337	8.56	3.13	13.92	6.90	1.21
C0180-022-1000-M	0.180	4.57	0.022	0.56	1.000	25.40	0.518	13.16	0.355	9.02	3.13	13.92	6.50	1.14
C0180-022-1120-M	0.180	4.57	0.022	0.56	1.120	28.45	0.580	14.73	0.391	9.93	3.13	13.92	5.80	1.02
C0180-022-1250-M	0.180	4.57	0.022	0.56	1.250	31.75	0.648	16.46	0.430	10.92	3.13	13.92	5.20	0.91
C0180-022-1500-M	0.180	4.57	0.022	0.56	1.500	38.10	0.772	19.61	0.506	12.85	3.13	13.92	4.30	0.75
C0180-022-1750-M	0.180	4.57	0.022	0.56	1.750	44.45	0.929	23.60	0.550	13.97	3.13	13.92	3.80	0.67
C0180-024-0250-M	0.180	4.57	0.024	0.61	0.250	6.35	0.160	4.06	0.143	3.63	3.81	16.95	42.30	7.40
C0180-024-0310-M	0.180	4.57	0.024	0.61	0.310	7.87	0.193	4.90	0.164	4.17	3.81	16.95	32.60	5.71
C0180-024-0380-M	0.180	4.57	0.024	0.61	0.380	9.65	0.232	5.89	0.189	4.80	3.81	16.95	25.70	4.50
C0180-024-0440-M	0.180	4.57	0.024	0.61	0.440	11.18	0.265	6.73	0.210	5.33	3.81	16.95	21.80	3.82
C0180-024-0500-M	0.180	4.57	0.024	0.61	0.500	12.70	0.298	7.57	0.232	5.89	3.81	16.95	18.90	3.31
C0180-024-0560-M	0.180	4.57	0.024	0.61	0.560	14.22	0.331	8.41	0.253	6.43	3.81	16.95	16.70	2.92
C0180-024-0620-M	0.180	4.57	0.024	0.61	0.620	15.75	0.365	9.27	0.274	6.96	3.81	16.95	14.90	2.61
C0180-024-0750-M	0.180	4.57	0.024	0.61	0.750	19.05	0.437	11.10	0.320	8.13	3.81	16.95	12.20	2.14
C0180-024-0880-M	0.180	4.57	0.024	0.61	0.880	22.35	0.509	12.93	0.366	9.30	3.81	16.95	10.30	1.80

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0180-016-0620-S*	0.341	8.67	0.79	3.51	2.83	0.50
C0180-016-0690-S*	0.384	9.76	0.79	3.51	2.58	0.45
C0180-016-0750-S*	0.412	10.46	0.79	3.51	2.33	0.41
C0180-016-0880-S*	0.501	12.73	0.79	3.51	2.08	0.36
C0180-016-1000-S*	0.569	14.46	0.79	3.51	1.83	0.32
C0180-016-1250-S*	0.693	17.60	0.79	3.51	1.42	0.25
C0180-016-1380-S*	0.788	20.01	0.79	3.51	1.33	0.23
C0180-016-1500-S*	0.823	20.91	0.79	3.51	1.17	0.20
C0180-016-1750-S*	0.961	24.40	0.79	3.51	1.00	0.18
C0180-018-0250-S*	0.153	3.88	1.09	4.87	11.25	1.97
C0180-018-0310-S*	0.195	4.95	1.09	4.87	9.50	1.66
C0180-018-0380-S*	0.239	6.06	1.09	4.87	7.75	1.36
C0180-018-0440-S*	0.271	6.90	1.09	4.87	6.50	1.14
C0180-018-0500-S*	0.304	7.72	1.09	4.87	5.58	0.98
C0180-018-0560-S*	0.329	8.37	1.09	4.87	4.75	0.83
C0180-018-0620-S*	0.362	9.20	1.09	4.87	4.25	0.74
C0180-018-0690-S*	0.404	10.27	1.09	4.87	3.83	0.67
C0180-018-0750-S*	0.429	10.91	1.09	4.87	3.42	0.60
C0180-018-0880-S*	0.525	13.33	1.09	4.87	3.08	0.54
C0180-018-1000-S*	0.589	14.97	1.09	4.87	2.67	0.47
C0180-018-1250-S*	0.744	18.91	1.09	4.87	2.17	0.38
C0180-018-1380-S*	0.809	20.54	1.09	4.87	1.92	0.34
C0180-018-1500-S*	0.874	22.20	1.09	4.87	1.75	0.31
C0180-018-1750-S*	1.020	25.90	1.09	4.87	1.50	0.26
C0180-020-0250-S*	0.167	4.23	1.47	6.55	17.66	3.09
C0180-020-0310-S*	0.203	5.15	1.47	6.55	13.75	2.41
C0180-020-0380-S*	0.245	6.22	1.47	6.55	10.91	1.91
C0180-020-0440-S*	0.281	7.13	1.47	6.55	9.25	1.62
C0180-020-0500-S*	0.318	8.07	1.47	6.55	8.08	1.41
C0180-020-0560-S*	0.354	9.00	1.47	6.55	7.16	1.25
C0180-020-0620-S*	0.390	9.92	1.47	6.55	6.41	1.12
C0180-020-0690-S*	0.430	10.92	1.47	6.55	5.66	0.99
C0180-020-0750-S*	0.469	11.92	1.47	6.55	5.25	0.92
C0180-020-0880-S*	0.546	13.88	1.47	6.55	4.42	0.77
C0180-020-1000-S*	0.616	15.64	1.47	6.55	3.83	0.67
C0180-020-1250-S*	0.772	19.61	1.47	6.55	3.08	0.54
C0180-020-1380-S*	0.844	21.45	1.47	6.55	2.75	0.48
C0180-020-1500-S*	0.911	23.13	1.47	6.55	2.50	0.44
C0180-020-1750-S*	1.070	27.18	1.47	6.55	2.17	0.38
C0180-022-0250-S	0.172	4.37	1.92	8.54	24.66	4.31
C0180-022-0310-S	0.213	5.40	1.92	8.54	19.74	3.45
C0180-022-0380-S	0.264	6.69	1.92	8.54	16.49	2.89
C0180-022-0440-S	0.304	7.71	1.92	8.54	14.08	2.46
C0180-022-0500-S	0.338	8.58	1.92	8.54	11.83	2.07
C0180-022-0560-S	0.366	9.30	1.92	8.54	9.91	1.73
C0180-022-0620-S	0.400	10.17	1.92	8.54	8.75	1.53
C0180-022-0690-S	0.450	11.43	1.92	8.54	8.00	1.40
C0180-022-0750-S	0.485	12.32	1.92	8.54	7.25	1.27
C0180-022-0810-S	0.511	12.97	1.92	8.54	6.41	1.12
C0180-022-0940-S	0.606	15.39	1.92	8.54	5.75	1.01
C0180-022-1000-S	0.645	16.39	1.92	8.54	5.42	0.95
C0180-022-1120-S	0.722	18.35	1.92	8.54	4.83	0.85
C0180-022-1250-S	0.807	20.49	1.92	8.54	4.33	0.76
C0180-022-1500-S	0.964	24.48	1.92	8.54	3.58	0.63
C0180-022-1750-S	1.143	29.04	1.92	8.54	3.17	0.55
C0180-024-0250-S	0.180	4.57	2.47	10.98	35.24	6.17
C0180-024-0310-S	0.219	5.57	2.47	10.98	27.16	4.75
C0180-024-0380-S	0.265	6.72	2.47	10.98	21.41	3.75
C0180-024-0440-S	0.304	7.72	2.47	10.98	18.16	3.18
C0180-024-0500-S	0.343	8.72	2.47	10.98	15.74	2.76
C0180-024-0560-S	0.383	9.72	2.47	10.98	13.91	2.43
C0180-024-0620-S	0.421	10.70	2.47	10.98	12.41	2.17
C0180-024-0750-S	0.507	12.88	2.47	10.98	10.16	1.78
C0180-024-0880-S	0.592	15.05	2.47	10.98	8.58	1.50

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0180-024-1000-M	0.180	4.57	0.024	0.61	1.000	25.40	0.575	14.61	0.408	10.36	3.81	16.95	9.00	1.58	C0180-024-1000-S	0.671	17.04	2.47	10.98	7.50	1.31
C0180-024-1120-M	0.180	4.57	0.024	0.61	1.120	28.45	0.641	16.28	0.450	11.43	3.81	16.95	8.00	1.40	C0180-024-1120-S	0.750	19.04	2.47	10.98	6.66	1.17
C0180-024-1250-M	0.180	4.57	0.024	0.61	1.250	31.75	0.713	18.11	0.496	12.60	3.81	16.95	7.10	1.24	C0180-024-1250-S	0.833	21.15	2.47	10.98	5.91	1.03
C0180-024-1500-M	0.180	4.57	0.024	0.61	1.500	38.10	0.852	21.64	0.585	14.86	3.81	16.95	5.90	1.03	C0180-024-1500-S	0.998	25.35	2.47	10.98	4.92	0.86
C0180-024-1750-M	0.180	4.57	0.024	0.61	1.750	44.45	0.990	25.15	0.673	17.09	3.81	16.95	5.00	0.88	C0180-024-1750-S	1.157	29.40	2.47	10.98	4.17	0.73
C0180-024-2000-M	0.180	4.57	0.024	0.61	2.000	50.80	1.129	28.68	0.761	19.33	3.81	16.95	4.40	0.77	C0180-024-2000-S	1.327	33.70	2.47	10.98	3.67	0.64
C0180-026-0250-M	0.180	4.57	0.026	0.66	0.250	6.35	0.163	4.14	0.149	3.78	5.03	22.37	57.80	10.12	C0180-026-0250-S	0.186	4.72	3.09	13.76	48.15	8.43
C0180-026-0310-M	0.180	4.57	0.026	0.66	0.310	7.87	0.203	5.16	0.168	4.27	5.03	22.37	47.00	8.23	C0180-026-0310-S	0.231	5.87	3.09	13.76	39.15	6.85
C0180-026-0380-M	0.180	4.57	0.026	0.66	0.380	9.65	0.246	6.25	0.195	4.95	5.03	22.37	37.50	6.56	C0180-026-0380-S	0.281	7.14	3.09	13.76	31.24	5.47
C0180-026-0440-M	0.180	4.57	0.026	0.66	0.440	11.18	0.279	7.09	0.221	5.61	5.03	22.37	31.20	5.46	C0180-026-0440-S	0.321	8.15	3.09	13.76	25.99	4.55
C0180-026-0500-M	0.180	4.57	0.026	0.66	0.500	12.70	0.312	7.92	0.247	6.27	5.03	22.37	26.80	4.69	C0180-026-0500-S	0.361	9.18	3.09	13.76	22.32	3.91
C0180-026-0560-M	0.180	4.57	0.026	0.66	0.560	14.22	0.346	8.79	0.272	6.91	5.03	22.37	23.50	4.11	C0180-026-0560-S	0.402	10.21	3.09	13.76	19.58	3.43
C0180-026-0620-M	0.180	4.57	0.026	0.66	0.620	15.75	0.379	9.63	0.298	7.57	5.03	22.37	20.90	3.66	C0180-026-0620-S	0.442	11.23	3.09	13.76	17.41	3.05
C0180-026-0690-M	0.180	4.57	0.026	0.66	0.690	17.53	0.422	10.72	0.324	8.23	5.03	22.37	18.80	3.29	C0180-026-0690-S	0.492	12.51	3.09	13.76	15.66	2.74
C0180-026-0750-M	0.180	4.57	0.026	0.66	0.750	19.05	0.455	11.56	0.352	8.94	5.03	22.37	17.00	2.98	C0180-026-0750-S	0.532	13.50	3.09	13.76	14.16	2.48
C0180-026-0810-M	0.180	4.57	0.026	0.66	0.810	20.57	0.488	12.40	0.377	9.58	5.03	22.37	15.60	2.73	C0180-026-0810-S	0.572	14.53	3.09	13.76	13.00	2.27
C0180-026-0880-M	0.180	4.57	0.026	0.66	0.880	22.35	0.532	13.51	0.403	10.24	5.03	22.37	14.40	2.52	C0180-026-0880-S	0.622	15.80	3.09	13.76	12.00	2.10
C0180-026-1000-M	0.180	4.57	0.026	0.66	1.000	25.40	0.588	14.94	0.461	11.71	5.03	22.37	12.20	2.14	C0180-026-1000-S	0.696	17.67	3.09	13.76	10.16	1.78
C0180-026-1120-M	0.180	4.57	0.026	0.66	1.120	28.45	0.654	16.61	0.509	12.93	5.03	22.37	10.80	1.89	C0180-026-1120-S	0.776	19.71	3.09	13.76	9.00	1.57
C0180-026-1250-M	0.180	4.57	0.026	0.66	1.250	31.75	0.731	18.57	0.562	14.27	5.03	22.37	9.70	1.70	C0180-026-1250-S	0.867	22.03	3.09	13.76	8.08	1.41
C0180-026-1500-M	0.180	4.57	0.026	0.66	1.500	38.10	0.871	22.12	0.663	16.84	5.03	22.37	8.00	1.40	C0180-026-1500-S	1.036	26.31	3.09	13.76	6.66	1.17
C0180-026-1750-M	0.180	4.57	0.026	0.66	1.750	44.45	1.010	25.65	0.764	19.41	5.03	22.37	6.80	1.19	C0180-026-1750-S	1.204	30.58	3.09	13.76	5.66	0.99
C0180-026-2000-M	0.180	4.57	0.026	0.66	2.000	50.80	1.147	29.13	0.865	21.97	5.03	22.37	5.90	1.03	C0180-026-2000-S	1.371	34.81	3.09	13.76	4.92	0.86
C0180-029-0250-M	0.180	4.57	0.029	0.74	0.250	6.35	0.181	4.60	0.172	4.37	6.43	28.60	93.10	16.29	C0180-029-0250-S	0.196	4.98	4.18	18.61	77.55	13.57
C0180-029-0310-M	0.180	4.57	0.029	0.74	0.310	7.87	0.219	5.56	0.208	5.28	6.43	28.60	71.00	12.43	C0180-029-0310-S	0.239	6.08	4.18	18.61	59.14	10.35
C0180-029-0380-M	0.180	4.57	0.029	0.74	0.380	9.65	0.264	6.71	0.241	6.12	6.43	28.60	55.50	9.71	C0180-029-0380-S	0.290	7.35	4.18	18.61	46.23	8.09
C0180-029-0440-M	0.180	4.57	0.029	0.74	0.440	11.18	0.303	7.70	0.270	6.86	6.43	28.60	46.80	8.19	C0180-029-0440-S	0.333	8.45	4.18	18.61	38.98	6.82
C0180-029-0500-M	0.180	4.57	0.029	0.74	0.500	12.70	0.341	8.66	0.299	7.59	6.43	28.60	40.50	7.09	C0180-029-0500-S	0.376	9.55	4.18	18.61	33.74	5.90
C0180-029-0560-M	0.180	4.57	0.029	0.74	0.560	14.22	0.380	9.65	0.327	8.31	6.43	28.60	35.60	6.23	C0180-029-0560-S	0.419	10.64	4.18	18.61	29.66	5.19
C0180-029-0620-M	0.180	4.57	0.029	0.74	0.620	15.75	0.418	10.62	0.356	9.04	6.43	28.60	31.80	5.57	C0180-029-0620-S	0.462	11.74	4.18	18.61	26.49	4.64
C0180-029-0690-M	0.180	4.57	0.029	0.74	0.690	17.53	0.463	11.76	0.390	9.91	6.43	28.60	28.30	4.95	C0180-029-0690-S	0.513	13.02	4.18	18.61	23.57	4.13
C0180-029-0750-M	0.180	4.57	0.029	0.74	0.750	19.05	0.501	12.73	0.418	10.62	6.43	28.60	25.80	4.52	C0180-029-0750-S	0.555	14.11	4.18	18.61	21.49	3.76
C0180-029-0810-M	0.180	4.57	0.029	0.74	0.810	20.57	0.540	13.72	0.447	11.35	6.43	28.60	23.80	4.17	C0180-029-0810-S	0.599	15.21	4.18	18.61	19.83	3.47
C0180-029-0880-M	0.180	4.57	0.029	0.74	0.880	22.35	0.584	14.83	0.481	12.22	6.43	28.60	21.80	3.82	C0180-029-0880-S	0.650	16.50	4.18	18.61	18.16	3.18
C0180-029-0940-M	0.180	4.57	0.029	0.74	0.940	23.88	0.623	15.82	0.509	12.93	6.43	28.60	20.30	3.55	C0180-029-0940-S	0.693	17.59	4.18	18.61	16.91	2.96
C0180-029-1000-M	0.180	4.57	0.029	0.74	1.000	25.40	0.661	16.79	0.538	13.67	6.43	28.60	19.00	3.33	C0180-029-1000-S	0.736	18.69	4.18	18.61	15.83	2.77
C0180-029-1120-M	0.180	4.57	0.029	0.74	1.120	28.45	0.738	18.75	0.596	15.14	6.43	28.60	16.80	2.94	C0180-029-1120-S	0.821	20.86	4.18	18.61	13.99	2.45
C0180-029-1250-M	0.180	4.57	0.029	0.74	1.250	31.75	0.821	20.85	0.658	16.71	6.43	28.60	15.00	2.63	C0180-029-1250-S	0.915	23.25	4.18	18.61	12.50	2.19
C0180-029-1380-M	0.180	4.57	0.029	0.74	1.380	35.05	0.905	22.99	0.720	18.29	6.43	28.60	13.50	2.36	C0180-029-1380-S	1.008	25.60	4.18	18.61	11.25	1.97
C0180-029-1500-M	0.180	4.57	0.029	0.74	1.500	38.10	0.982	24.94	0.778	19.76	6.43	28.60	12.40	2.17	C0180-029-1500-S	1.095	27.81	4.18	18.61	10.33	1.81
C0180-029-1750-M	0.180	4.57	0.029	0.74	1.750	44.45	1.142	29.01	0.897	22.78	6.43	28.60	10.60	1.86	C0180-029-1750-S	1.276	32.42	4.18	18.61	8.83	1.55
C0180-029-2000-M	0.180	4.57	0.029	0.74	2.000	50.80	1.302	33.07	1.017	25.83	6.43	28.60	9.20	1.61	C0180-029-2000-S	1.454	36.94	4.18	18.61	7.66	1.34
C0180-032-0310-M	0.180	4.57	0.032	0.81	0.310	7.87	0.238	6.05	0.206	5.23	8.83	39.28	122.70	21.47	C0180-032-0310-S	0.256	6.51	5.49	24.42	102.21	17.89
C0180-032-0380-M	0.180	4.57	0.032	0.81	0.380	9.65	0.289	7.34	0.240	6.10	8.83	39.28	97.00	16.98	C0180-032-0380-S	0.312	7.93	5.49	24.42	80.80	14.14
C0180-032-0440-M	0.180	4.57	0.032	0.81	0.440	11.18	0.326	8.28	0.280	7.11	8.83	39.28	77.50	13.56	C0180-032-0440-S	0.355	9.02	5.49	24.42	64.56	11.30
C0180-032-0500-M	0.180	4.57	0.032	0.81	0.500	12.70	0.364	9.25	0.319	8.10	8.83	39.28	64.90	11.36	C0180-032-0500-S	0.398	10.12	5.49	24.42	54.06	9.46
C0180-032-0560-M	0.180	4.57	0.032	0.81	0.560	14.22	0.410	10.41	0.343	8.71	8.83	39.28	58.90	10.31	C0180-032-0560-S	0.448	11.38	5.49	24.42	49.06	8.59
C0180-032-0620-M	0.180	4.57	0.032	0.81	0.620	15.75	0.448	11.38	0.382	9.70	8.83	39.28	51.30	8.98	C0180-032-0620-S	0.492	12.48	5.49	24.42	42.73	7.48
C0180-032-0690-M	0.180	4.57	0.032	0.81	0.690	17.53	0.504	12.80	0.406	10.31	8.83	39.28	47.50	8.31	C0180-032-0690-S	0.551	14.00	5.49	24.42	39.57	6.92
C0180-032-0750-M	0.180	4.57	0.032	0.81	0.750	19.05	0.536	13.61	0.456	11.58	8.83	39.28	41.30	7.23	C0180-032-0750-S	0.590	15.00	5.49	24.42	34.40	6.02
C0180-032-0810-M	0.180	4.57	0.032	0.81	0.810	20.57	0.573	14.55	0.496	12.60	8.83	39.28	37.30	6.53	C0180-032-0810-S	0.633	16.09	5.49	24.42	31.07	5.44
C0180-032-0880-M	0.180	4.57	0.032	0.81	0.880	22.35	0.616	15.65	0.543	13.79	8.83	39.28	33.50	5.86	C0180-032-0880-S	0.683	17.36	5.49	24.42	27.91	4.88
C0180-032-0940-M	0.180	4.57	0.032	0.81	0.940	23.88	0.658	16.71	0.576	14.63	8.83	39.28	31.30	5.48	C0180-032-0940-S	0.729	18.53	5.49	24.42	26.07	4.56
C0180-032-1000-M	0.180	4.57	0.032	0.81	1.000	25.40	0.700	17.78	0.608	15.44	8.83	39.28	29.40	5.15	C0180-032-1000-S	0.776	19.71	5.49	24.42	24.49	4.29
C0180-032-1120-M	0.180	4.57	0.032	0.81	1.120	28.45	0.775	19.69	0.677	17.20	8.83	39.28	25.60	4.48	C0180-032-1120-S	0.863	21.91	5.49	24.42	21.33	3.73
C0180-032-1250-M	0.180	4.57	0.032	0.81	1.250	31.75	0.863	21.92	0.748	19.00	8.83	39.28	22.80	3.99	C0180-032-1250-S	0.961	24.41	5.49	24.42	18.99	3.32
C0180-032-1380-M	0.180	4.57	0.032	0.81	1.380	35.05	0.951	24.16	0.819	20.80	8.83	39.28	20.60	3.61	C0180-032-1380-S	1.060	26.93	5.49	24.42	17.16	3.00
C0180-032-1500-M	0.180	4.57	0.032	0.81	1.500	38.10	1.030	26.16	0.885	22.48	8.83	39.28	18.80	3.29	C0180-032-1500-S	1.149	29.20	5.49	24.42	15.66	2.74
C0180-032-1750-M	0.180	4.57	0.032	0.81	1.750	44.45	1.202	30.53	1.023	25.98	8.83	39.28	16.10	2.82	C0180-032-1750-S	1.341	34.05	5.49	24.42	13.41	2.35
C0180-032-2000-M	0.180	4.57	0.032	0.81	2.000	50.80	1.369	34.77	1.160	29.46	8.83	39.28	14.00	2.45	C0180-032-2000-S	1.529	38.84	5.49	24.42	11.66	2.04
C0180-035-0380-M	0.180	4.57	0.035	0.89	0.380	9.65	0.302	7.67	0.286	7.26	10.74	47.77	137.00	23.98	C0180-035-0380-S	0.318	8.09	7.03	31.28	114.12	19.97
C0180-035-0440-M	0.180	4.57	0.035	0.89	0.440	11.18	0.346	8.79	0.321	8.15	10.74	47.77	114.70	20.07	C0180-035-0440-S	0.366	9.31	7.03	31.28	95.55	16.72
C0180-035-0500-M	0.180	4.57	0.035	0.89	0.500	12.70	0.391	9.93	0.356	9.04	10.74	47.77	98.70	17.27	C0180-035-0500-S	0.414	10.53	7.03	31.28	82.22	14.39
C0180-035-0560-M	0.180	4.57	0.035	0.89	0.560	14.22	0.436	11.07	0.391	9.93	10.74	47.77	86.60	15.16	C0180-035-0560-S	0.463	11.75	7.03	31.28	72.14	12.62

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0180-035-0620-M	0.180	4.57	0.035	0.89	0.620	15.75	0.481	12.22	0.426	10.82	10.74	47.77	77.20	13.51
C0180-035-0690-M	0.180	4.57	0.035	0.89	0.690	17.53	0.533	13.54	0.467	11.86	10.74	47.77	68.50	11.99
C0180-035-0750-M	0.180	4.57	0.035	0.89	0.750	19.05	0.578	14.68	0.502	12.75	10.74	47.77	62.40	10.92
C0180-035-0810-M	0.180	4.57	0.035	0.89	0.810	20.57	0.623	15.82	0.537	13.64	10.74	47.77	57.40	10.05
C0180-035-0880-M	0.180	4.57	0.035	0.89	0.880	22.35	0.675	17.15	0.578	14.68	10.74	47.77	52.40	9.17
C0180-035-0940-M	0.180	4.57	0.035	0.89	0.940	23.88	0.720	18.29	0.613	15.57	10.74	47.77	48.80	8.54
C0180-035-1000-M	0.180	4.57	0.035	0.89	1.000	25.40	0.765	19.43	0.648	16.46	10.74	47.77	45.70	8.00
C0180-035-1120-M	0.180	4.57	0.035	0.89	1.120	28.45	0.854	21.69	0.718	18.24	10.74	47.77	40.40	7.07
C0180-035-1250-M	0.180	4.57	0.035	0.89	1.250	31.75	0.951	24.16	0.793	20.14	10.74	47.77	36.00	6.30
C0180-035-1500-M	0.180	4.57	0.035	0.89	1.500	38.10	1.138	28.91	0.939	23.85	10.74	47.77	29.70	5.20
C0180-035-1750-M	0.180	4.57	0.035	0.89	1.750	44.45	1.325	33.66	1.085	27.56	10.74	47.77	25.30	4.43
C0180-035-2000-M	0.180	4.57	0.035	0.89	2.000	50.80	1.512	38.40	1.231	31.27	10.74	47.77	22.00	3.85
D11400*	0.182	4.63	0.025	0.63	0.264	6.70	0.169	4.30	0.161	4.10	3.86	17.16	40.91	7.16
D11410*	0.182	4.63	0.025	0.63	0.378	9.60	0.228	5.80	0.211	5.36	3.86	17.16	26.00	4.55
D11420*	0.182	4.63	0.025	0.63	0.551	14.00	0.323	8.20	0.285	7.25	3.86	17.16	16.80	2.94
D11430*	0.182	4.63	0.025	0.63	0.787	20.00	0.445	11.30	0.385	9.77	3.86	17.16	11.43	2.00
D11440*	0.182	4.63	0.025	0.63	1.142	29.00	0.638	16.20	0.533	13.55	3.86	17.16	7.71	1.35
C0188-010-0250-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.250**	**6.35**	**0.081**	**2.07**	**0.043**	**1.08**	**0.32**	**1.40**	**1.87**	**0.33**
C0188-010-0313-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.313**	**7.95**	**0.096**	**2.43**	**0.047**	**1.20**	**0.32**	**1.40**	**1.45**	**0.25**
C0188-010-0375-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.375**	**9.53**	**0.110**	**2.80**	**0.052**	**1.31**	**0.32**	**1.40**	**1.19**	**0.21**
C0188-010-0438-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.438**	**11.13**	**0.124**	**3.16**	**0.056**	**1.43**	**0.32**	**1.40**	**1.01**	**0.18**
C0188-010-0500-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.500**	**12.70**	**0.139**	**3.53**	**0.061**	**1.54**	**0.32**	**1.40**	**0.88**	**0.15**
C0188-010-0563-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.563**	**14.30**	**0.153**	**3.90**	**0.065**	**1.66**	**0.32**	**1.40**	**0.77**	**0.13**
C0188-010-0625-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.625**	**15.88**	**0.167**	**4.25**	**0.070**	**1.78**	**0.32**	**1.40**	**0.69**	**0.12**
C0188-010-0750-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.750**	**19.05**	**0.196**	**4.98**	**0.078**	**1.99**	**0.32**	**1.40**	**0.57**	**0.10**
C0188-010-0875-M*	**0.188**	**4.78**	**0.010**	**0.25**	**0.875**	**22.23**	**0.225**	**5.72**	**0.087**	**2.20**	**0.32**	**1.40**	**0.49**	**0.09**
C0188-010-1000-M*	**0.188**	**4.78**	**0.010**	**0.25**	**1.000**	**25.40**	**0.255**	**6.48**	**0.095**	**2.40**	**0.32**	**1.40**	**0.42**	**0.07**
C0188-010-1250-M*	**0.188**	**4.78**	**0.010**	**0.25**	**1.250**	**31.75**	**0.313**	**7.95**	**0.111**	**2.82**	**0.32**	**1.40**	**0.34**	**0.06**
C0188-010-1500-M*	**0.188**	**4.78**	**0.010**	**0.25**	**1.500**	**38.10**	**0.465**	**11.80**	**0.119**	**3.03**	**0.32**	**1.40**	**0.31**	**0.05**
C0188-010-1750-M*	**0.188**	**4.78**	**0.010**	**0.25**	**1.750**	**44.45**	**0.618**	**15.70**	**0.127**	**3.24**	**0.32**	**1.40**	**0.28**	**0.05**
C0188-012-0250-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.250**	**6.35**	**0.095**	**2.41**	**0.071**	**1.80**	**0.31**	**1.36**	**1.97**	**0.34**
C0188-012-0313-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.313**	**7.95**	**0.112**	**2.83**	**0.080**	**2.03**	**0.32**	**1.44**	**1.61**	**0.28**
C0188-012-0375-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.375**	**9.53**	**0.129**	**3.29**	**0.090**	**2.30**	**0.32**	**1.43**	**1.31**	**0.23**
C0188-012-0438-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.438**	**11.13**	**0.147**	**3.73**	**0.100**	**2.55**	**0.32**	**1.42**	**1.10**	**0.19**
C0188-012-0500-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.500**	**12.70**	**0.164**	**4.16**	**0.110**	**2.78**	**0.32**	**1.44**	**0.96**	**0.17**
C0188-012-0563-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.563**	**14.30**	**0.181**	**4.59**	**0.119**	**3.02**	**0.32**	**1.45**	**0.85**	**0.15**
C0188-012-0625-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.625**	**15.88**	**0.200**	**5.07**	**0.131**	**3.32**	**0.31**	**1.40**	**0.74**	**0.13**
C0188-012-0750-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.750**	**19.05**	**0.233**	**5.92**	**0.149**	**3.78**	**0.32**	**1.43**	**0.62**	**0.11**
C0188-012-0875-M*	**0.188**	**4.78**	**0.012**	**0.31**	**0.875**	**22.23**	**0.267**	**6.78**	**0.168**	**4.26**	**0.32**	**1.43**	**0.53**	**0.09**
C0188-012-1000-M*	**0.188**	**4.78**	**0.012**	**0.31**	**1.000**	**25.40**	**0.302**	**7.67**	**0.188**	**4.76**	**0.32**	**1.43**	**0.46**	**0.08**
C0188-012-1250-M*	**0.188**	**4.78**	**0.012**	**0.31**	**1.250**	**31.75**	**0.369**	**9.37**	**0.224**	**5.69**	**0.33**	**1.45**	**0.37**	**0.06**
C0188-012-1375-M*	**0.188**	**4.78**	**0.012**	**0.31**	**1.375**	**34.93**	**0.406**	**10.31**	**0.247**	**6.26**	**0.32**	**1.42**	**0.33**	**0.06**
C0188-012-1500-M*	**0.188**	**4.78**	**0.012**	**0.31**	**1.500**	**38.10**	**0.441**	**11.21**	**0.267**	**6.79**	**0.32**	**1.41**	**0.30**	**0.05**
C0188-012-1750-M*	**0.188**	**4.78**	**0.012**	**0.31**	**1.750**	**44.45**	**0.508**	**12.89**	**0.303**	**7.69**	**0.32**	**1.44**	**0.26**	**0.05**
C0188-013-0250-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.250**	**6.35**	**0.113**	**2.88**	**0.059**	**1.49**	**0.67**	**2.96**	**4.87**	**0.85**
C0188-013-0313-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.313**	**7.95**	**0.135**	**3.44**	**0.066**	**1.67**	**0.67**	**2.96**	**3.75**	**0.66**
C0188-013-0375-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.375**	**9.53**	**0.157**	**4.00**	**0.073**	**1.85**	**0.67**	**2.96**	**3.06**	**0.54**
C0188-013-0438-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.438**	**11.13**	**0.180**	**4.57**	**0.080**	**2.03**	**0.67**	**2.96**	**2.58**	**0.45**
C0188-013-0500-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.500**	**12.70**	**0.201**	**5.11**	**0.087**	**2.21**	**0.67**	**2.96**	**2.23**	**0.39**
C0188-013-0563-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.563**	**14.30**	**0.223**	**5.67**	**0.094**	**2.39**	**0.67**	**2.96**	**1.96**	**0.34**
C0188-013-0625-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.625**	**15.88**	**0.244**	**6.21**	**0.101**	**2.56**	**0.67**	**2.96**	**1.75**	**0.31**
C0188-013-0750-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.750**	**19.05**	**0.291**	**7.38**	**0.113**	**2.87**	**0.67**	**2.96**	**1.45**	**0.25**
C0188-013-0875-M*	**0.188**	**4.78**	**0.013**	**0.33**	**0.875**	**22.23**	**0.333**	**8.47**	**0.126**	**3.20**	**0.67**	**2.96**	**1.23**	**0.22**
C0188-013-1000-M*	**0.188**	**4.78**	**0.013**	**0.33**	**1.000**	**25.40**	**0.377**	**9.59**	**0.139**	**3.52**	**0.67**	**2.96**	**1.07**	**0.19**
C0188-013-1250-M*	**0.188**	**4.78**	**0.013**	**0.33**	**1.250**	**31.75**	**0.466**	**11.84**	**0.164**	**4.16**	**0.67**	**2.96**	**0.85**	**0.15**
C0188-013-1375-M*	**0.188**	**4.78**	**0.013**	**0.33**	**1.375**	**34.93**	**0.510**	**12.95**	**0.177**	**4.49**	**0.67**	**2.96**	**0.77**	**0.13**
C0188-013-1750-M*	**0.188**	**4.78**	**0.013**	**0.33**	**1.750**	**44.45**	**0.560**	**14.23**	**0.228**	**5.78**	**0.67**	**2.96**	**0.56**	**0.10**
C0188-014-0250-M*	**0.188**	**4.78**	**0.014**	**0.36**	**0.250**	**6.35**	**0.109**	**2.76**	**0.088**	**2.23**	**0.48**	**2.14**	**3.40**	**0.60**
C0188-014-0313-M*	**0.188**	**4.78**	**0.014**	**0.36**	**0.313**	**7.95**	**0.130**	**3.29**	**0.102**	**2.60**	**0.49**	**2.16**	**2.65**	**0.46**
C0188-014-0375-M*	**0.188**	**4.78**	**0.014**	**0.36**	**0.375**	**9.53**	**0.149**	**3.80**	**0.115**	**2.92**	**0.49**	**2.18**	**2.17**	**0.38**
C0188-014-0438-M*	**0.188**	**4.78**	**0.014**	**0.36**	**0.438**	**11.13**	**0.169**	**4.30**	**0.128**	**3.25**	**0.49**	**2.20**	**1.84**	**0.32**
C0188-014-0500-M*	**0.188**	**4.78**	**0.014**	**0.36**	**0.500**	**12.70**	**0.189**	**4.79**	**0.140**	**3.57**	**0.50**	**2.22**	**1.60**	**0.28**
C0188-014-0560-M*	**0.188**	**4.78**	**0.014**	**0.36**	**0.560**	**14.22**	**0.208**	**5.29**	**0.153**	**3.90**	**0.50**	**2.21**	**1.41**	**0.25**
C0188-014-0625-M*	**0.188**	**4.78**	**0.014**	**0.36**	**0.625**	**15.88**	**0.228**	**5.80**	**0.166**	**4.23**	**0.50**	**2.22**	**1.26**	**0.22**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0180-035-0620-S	0.511	12.97	7.03	31.28	64.31	11.25
C0180-035-0690-S	0.567	14.40	7.03	31.28	57.06	9.99
C0180-035-0750-S	0.615	15.61	7.03	31.28	51.98	9.10
C0180-035-0810-S	0.663	16.84	7.03	31.28	47.81	8.37
C0180-035-0880-S	0.719	18.26	7.03	31.28	43.65	7.64
C0180-035-0940-S	0.767	19.48	7.03	31.28	40.65	7.11
C0180-035-1000-S	0.815	20.71	7.03	31.28	38.07	6.66
C0180-035-1120-S	0.911	23.14	7.03	31.28	33.65	5.89
C0180-035-1250-S	1.016	25.79	7.03	31.28	29.99	5.25
C0180-035-1500-S	1.216	30.88	7.03	31.28	24.74	4.33
C0180-035-1750-S	1.416	35.97	7.03	31.28	21.08	3.69
C0180-035-2000-S	1.616	41.05	7.03	31.28	18.33	3.21
D21400*	0.169	4.30	3.21	14.29	34.06	5.96
D21410*	0.228	5.80	3.21	14.29	21.66	3.79
D21420*	0.323	8.20	3.21	14.29	14.00	2.45
D21430*	0.445	11.30	3.21	14.29	9.54	1.67
D21440*	0.638	16.20	3.21	14.29	6.40	1.12
C0188-010-0250-S*	**0.104**	**2.65**	**0.23**	**1.01**	**1.56**	**0.27**
C0188-010-0313-S*	**0.125**	**3.18**	**0.23**	**1.01**	**1.21**	**0.21**
C0188-010-0375-S*	**0.146**	**3.72**	**0.23**	**1.01**	**0.99**	**0.17**
C0188-010-0438-S*	**0.167**	**4.25**	**0.23**	**1.01**	**0.84**	**0.15**
C0188-010-0500-S*	**0.188**	**4.78**	**0.23**	**1.01**	**0.73**	**0.13**
C0188-010-0563-S*	**0.209**	**5.32**	**0.23**	**1.01**	**0.64**	**0.11**
C0188-010-0625-S*	**0.230**	**5.84**	**0.23**	**1.01**	**0.58**	**0.10**
C0188-010-0750-S*	**0.272**	**6.90**	**0.23**	**1.01**	**0.48**	**0.08**
C0188-010-0875-S*	**0.314**	**7.97**	**0.23**	**1.01**	**0.41**	**0.07**
C0188-010-1000-S*	**0.357**	**9.07**	**0.23**	**1.01**	**0.35**	**0.06**
C0188-010-1250-S*	**0.441**	**11.20**	**0.23**	**1.01**	**0.28**	**0.05**
C0188-010-1500-S*	**0.606**	**15.39**	**0.23**	**1.01**	**0.25**	**0.04**
C0188-010-1750-S*	**0.773**	**19.63**	**0.23**	**1.01**	**0.23**	**0.04**
C0188-012-0250-S*	**0.095**	**2.41**	**0.25**	**1.13**	**1.64**	**0.29**
C0188-012-0313-S*	**0.112**	**2.83**	**0.27**	**1.20**	**1.34**	**0.23**
C0188-012-0375-S*	**0.129**	**3.29**	**0.27**	**1.19**	**1.09**	**0.19**
C0188-012-0438-S*	**0.147**	**3.73**	**0.27**	**1.19**	**0.92**	**0.16**
C0188-012-0500-S*	**0.164**	**4.16**	**0.27**	**1.20**	**0.80**	**0.14**
C0188-012-0563-S*	**0.181**	**4.59**	**0.27**	**1.20**	**0.71**	**0.12**
C0188-012-0625-S*	**0.200**	**5.07**	**0.26**	**1.17**	**0.62**	**0.11**
C0188-012-0750-S*	**0.233**	**5.92**	**0.27**	**1.19**	**0.52**	**0.09**
C0188-012-0875-S*	**0.267**	**6.78**	**0.27**	**1.19**	**0.44**	**0.08**
C0188-012-1000-S*	**0.302**	**7.67**	**0.27**	**1.19**	**0.38**	**0.07**
C0188-012-1250-S*	**0.369**	**9.37**	**0.27**	**1.21**	**0.31**	**0.05**
C0188-012-1375-S*	**0.406**	**10.31**	**0.27**	**1.19**	**0.28**	**0.05**
C0188-012-1500-S*	**0.441**	**11.21**	**0.26**	**1.18**	**0.25**	**0.04**
C0188-012-1750-S*	**0.508**	**12.89**	**0.27**	**1.20**	**0.22**	**0.04**
C0188-013-0250-S*	**0.130**	**3.31**	**0.49**	**2.16**	**4.06**	**0.71**
C0188-013-0313-S*	**0.157**	**4.00**	**0.49**	**2.16**	**3.12**	**0.55**
C0188-013-0375-S*	**0.184**	**4.68**	**0.49**	**2.16**	**2.55**	**0.45**
C0188-013-0438-S*	**0.212**	**5.38**	**0.49**	**2.16**	**2.15**	**0.38**
C0188-013-0500-S*	**0.238**	**6.05**	**0.49**	**2.16**	**1.86**	**0.33**
C0188-013-0563-S*	**0.265**	**6.74**	**0.49**	**2.16**	**1.63**	**0.29**
C0188-013-0625-S*	**0.292**	**7.41**	**0.49**	**2.16**	**1.46**	**0.26**
C0188-013-0750-S*	**0.348**	**8.83**	**0.49**	**2.16**	**1.21**	**0.21**
C0188-013-0875-S*	**0.401**	**10.17**	**0.49**	**2.16**	**1.03**	**0.18**
C0188-013-1000-S*	**0.455**	**11.55**	**0.49**	**2.16**	**0.89**	**0.16**
C0188-013-1250-S*	**0.563**	**14.31**	**0.49**	**2.16**	**0.71**	**0.12**
C0188-013-1375-S*	**0.617**	**15.68**	**0.49**	**2.16**	**0.64**	**0.11**
C0188-013-1750-S*	**0.708**	**17.98**	**0.49**	**2.16**	**0.47**	**0.08**
C0188-014-0250-S*	**0.109**	**2.76**	**0.40**	**1.78**	**2.83**	**0.50**
C0188-014-0313-S*	**0.130**	**3.29**	**0.40**	**1.80**	**2.21**	**0.39**
C0188-014-0375-S*	**0.149**	**3.80**	**0.41**	**1.81**	**1.81**	**0.32**
C0188-014-0438-S*	**0.169**	**4.30**	**0.41**	**1.83**	**1.53**	**0.27**
C0188-014-0500-S*	**0.189**	**4.79**	**0.41**	**1.85**	**1.33**	**0.23**
C0188-014-0560-S*	**0.208**	**5.29**	**0.41**	**1.84**	**1.18**	**0.21**
C0188-014-0625-S*	**0.228**	**5.80**	**0.42**	**1.85**	**1.05**	**0.18**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

(OD) 0.188 - 0.188

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0188-014-0750-M*	0.188	4.78	0.014	0.36	0.750	19.05	0.268	6.81	0.192	4.88	0.50	2.23	1.04	0.18
C0188-014-0880-M*	0.188	4.78	0.014	0.36	0.880	22.35	0.308	7.82	0.217	5.52	0.51	2.27	0.89	0.16
C0188-014-1000-M*	0.188	4.78	0.014	0.36	1.000	25.40	0.346	8.78	0.242	6.14	0.51	2.27	0.78	0.14
C0188-014-1250-M*	0.188	4.78	0.014	0.36	1.250	31.75	0.424	10.78	0.293	7.43	0.51	2.28	0.62	0.11
C0188-014-1375-M*	0.188	4.78	0.014	0.36	1.375	34.93	0.465	11.80	0.319	8.11	0.51	2.27	0.56	0.10
C0188-014-1500-M*	0.188	4.78	0.014	0.36	1.500	38.10	0.505	12.83	0.346	8.79	0.51	2.26	0.51	0.09
C0188-014-1750-M*	0.188	4.78	0.014	0.36	1.750	44.45	0.582	14.78	0.394	10.02	0.51	2.29	0.44	0.08
C0188-015-0250-M*	0.188	4.78	0.015	0.38	0.250	6.35	0.111	2.83	0.074	1.89	1.00	4.44	7.20	1.26
C0188-015-0310-M*	0.188	4.78	0.015	0.38	0.310	7.87	0.119	3.02	0.089	2.27	0.96	4.25	5.00	0.88
C0188-015-0500-M*	0.188	4.78	0.015	0.38	0.500	12.70	0.177	4.50	0.126	3.21	0.90	4.02	2.80	0.49
C0188-015-0560-M*	0.188	4.78	0.015	0.38	0.560	14.22	0.197	5.00	0.139	3.54	0.87	3.88	2.40	0.42
C0188-015-0720-M*	0.188	4.78	0.015	0.38	0.720	18.29	0.246	6.24	0.170	4.32	0.85	3.80	1.80	0.32
C0188-015-1380-M*	0.188	4.78	0.015	0.38	1.380	35.05	0.612	15.54	0.218	5.53	1.00	4.44	1.30	0.23
C0188-016-1750-M*	0.188	4.78	0.016	0.41	1.750	44.45	0.661	16.78	0.333	8.46	1.20	5.33	1.10	0.19
C0188-018-0380-M*	0.188	4.78	0.018	0.46	0.380	9.65	0.176	4.48	0.127	3.22	1.67	7.42	8.20	1.44
C0188-018-0440-M*	0.188	4.78	0.018	0.46	0.440	11.18	0.189	4.80	0.152	3.86	1.53	6.81	6.10	1.07
C0188-018-0560-M*	0.188	4.78	0.018	0.46	0.560	14.22	0.286	7.27	0.152	3.86	1.67	7.42	6.10	1.07
C0188-018-0750-M*	0.188	4.78	0.018	0.46	0.750	19.05	0.289	7.34	0.218	5.54	1.66	7.38	3.60	0.63
C0188-018-0880-M*	0.188	4.78	0.018	0.46	0.880	22.35	0.342	8.68	0.244	6.20	1.67	7.42	3.10	0.54
C0188-018-1000-M*	0.188	4.78	0.018	0.46	1.000	25.40	0.444	11.27	0.250	6.36	1.67	7.42	3.00	0.53
C0188-018-1380-M*	0.188	4.78	0.018	0.46	1.380	35.05	0.585	14.86	0.333	8.46	1.67	7.42	2.10	0.37
C0188-018-1750-M*	0.188	4.78	0.018	0.46	1.750	44.45	0.768	19.51	0.398	10.11	1.67	7.42	1.70	0.30
C0188-020-0250-M*	0.188	4.78	0.020	0.51	0.250	6.35	0.140	3.56	0.109	2.77	2.24	9.97	20.42	3.57
C0188-020-0375-M*	0.188	4.78	0.020	0.51	0.375	9.53	0.200	5.08	0.142	3.61	2.24	9.97	12.80	2.24
C0188-020-0438-M*	0.188	4.78	0.020	0.51	0.438	11.13	0.230	5.84	0.158	4.00	2.24	9.97	10.77	1.88
C0188-020-0500-M*	0.188	4.78	0.020	0.51	0.500	12.70	0.227	5.76	0.187	4.76	2.24	9.97	8.20	1.44
C0188-020-0560-M*	0.188	4.78	0.020	0.51	0.560	14.22	0.287	7.28	0.187	4.76	2.24	9.97	8.20	1.44
C0188-020-0625-M*	0.188	4.78	0.020	0.51	0.625	15.88	0.319	8.11	0.202	5.13	2.24	9.97	7.33	1.28
C0188-020-0690-M*	0.188	4.78	0.020	0.51	0.690	17.53	0.323	8.20	0.271	6.88	1.80	8.00	4.90	0.86
C0188-020-0750-M*	0.188	4.78	0.020	0.51	0.750	19.05	0.379	9.62	0.232	5.88	2.24	9.97	6.04	1.06
C0188-020-0875-M*	0.188	4.78	0.020	0.51	0.875	22.23	0.439	11.15	0.261	6.63	2.24	9.97	5.14	0.90
C0188-020-0938-M*	0.188	4.78	0.020	0.51	0.938	23.83	0.469	11.91	0.276	7.01	2.24	9.97	4.78	0.84
C0188-020-1000-M*	0.188	4.78	0.020	0.51	1.000	25.40	0.466	11.84	0.306	7.76	2.24	9.97	4.20	0.74
C0188-020-1125-M*	0.188	4.78	0.020	0.51	1.125	28.58	0.557	14.16	0.321	8.15	2.24	9.97	3.95	0.69
C0188-020-1250-M*	0.188	4.78	0.020	0.51	1.250	31.75	0.617	15.66	0.351	8.91	2.24	9.97	3.54	0.62
C0188-020-1380-M*	0.188	4.78	0.020	0.51	1.380	35.05	0.633	16.07	0.403	10.22	2.24	9.97	3.00	0.53
C0188-020-1500-M*	0.188	4.78	0.020	0.51	1.500	38.10	0.669	16.98	0.548	13.92	1.75	7.77	2.10	0.37
C0188-020-1690-M*	0.188	4.78	0.020	0.51	1.690	42.93	0.793	20.15	0.470	11.95	2.24	9.97	2.50	0.44
C0188-020-1750-M*	0.188	4.78	0.020	0.51	1.750	44.45	0.706	17.94	0.548	13.92	2.19	9.75	2.10	0.37
C0188-022-0410-M	0.188	4.78	0.022	0.56	0.410	10.41	0.224	5.69	0.201	5.10	2.05	9.10	11.00	1.93
C0188-022-0500-M	0.188	4.78	0.022	0.56	0.500	12.70	0.278	7.07	0.251	6.38	1.84	8.19	8.30	1.45
C0188-022-0630-M	0.188	4.78	0.022	0.56	0.630	16.00	0.354	8.99	0.320	8.14	1.71	7.61	6.20	1.09
C0188-022-0750-M	0.188	4.78	0.022	0.56	0.750	19.05	0.360	9.14	0.273	6.93	2.92	13.01	7.50	1.31
C0188-022-1030-M	0.188	4.78	0.022	0.56	1.030	26.16	0.491	12.48	0.416	10.56	2.48	11.03	4.60	0.81
C0188-022-1380-M	0.188	4.78	0.022	0.56	1.380	35.05	0.667	16.93	0.461	11.71	2.92	13.01	4.10	0.72
C0188-023-0250-M	0.188	4.78	0.023	0.58	0.250	6.35	0.140	3.55	0.118	2.99	3.31	14.72	30.00	5.25
C0188-023-0313-M	0.188	4.78	0.023	0.58	0.313	7.95	0.172	4.37	0.140	3.55	3.31	14.72	23.51	4.11
C0188-023-0380-M	0.188	4.78	0.023	0.58	0.380	9.65	0.206	5.23	0.162	4.12	3.31	14.72	19.00	3.33
C0188-023-0438-M	0.188	4.78	0.023	0.58	0.438	11.13	0.231	5.87	0.183	4.66	3.31	14.72	16.01	2.80
C0188-023-0500-M	0.188	4.78	0.023	0.58	0.500	12.70	0.273	6.94	0.245	6.22	2.49	11.09	11.00	1.93
C0188-023-0560-M	0.188	4.78	0.023	0.58	0.560	14.22	0.282	7.17	0.245	6.22	3.06	13.59	11.00	1.93
C0188-023-0690-M	0.188	4.78	0.023	0.58	0.690	17.53	0.359	9.12	0.265	6.72	3.31	14.72	10.00	1.75
C0188-023-0750-M	0.188	4.78	0.023	0.58	0.750	19.05	0.379	9.63	0.291	7.39	3.31	14.72	8.92	1.56
C0188-023-0810-M	0.188	4.78	0.023	0.58	0.810	20.57	0.421	10.68	0.303	7.69	3.31	14.72	8.50	1.49
C0188-023-0875-M	0.188	4.78	0.023	0.58	0.875	22.23	0.438	11.12	0.334	8.48	3.31	14.72	7.57	1.32
C0188-023-0940-M	0.188	4.78	0.023	0.58	0.940	23.88	0.467	11.86	0.403	10.23	2.88	12.83	6.10	1.07
C0188-023-1000-M	0.188	4.78	0.023	0.58	1.000	25.40	0.527	13.39	0.357	9.07	3.31	14.72	7.00	1.23
C0188-023-1220-M	0.188	4.78	0.023	0.58	1.220	30.99	0.571	14.51	0.472	12.00	3.31	14.72	5.10	0.89
C0188-023-1380-M	0.188	4.78	0.023	0.58	1.380	35.05	0.718	18.24	0.481	12.21	3.31	14.72	5.00	0.88
C0188-023-1750-M	0.188	4.78	0.023	0.58	1.750	44.45	0.901	22.90	0.603	15.31	3.31	14.72	3.90	0.68
C0188-023-2000-M	0.188	4.78	0.023	0.58	2.000	50.80	0.959	24.37	0.728	18.50	3.31	14.72	3.18	0.56
C0188-025-0280-M	0.188	4.78	0.025	0.64	0.280	7.11	0.170	4.32	0.140	3.56	4.17	18.55	38.00	6.65
C0188-025-0440-M	0.188	4.78	0.025	0.64	0.440	11.18	0.250	6.36	0.207	5.26	4.17	18.55	22.00	3.85
C0188-025-0500-M	0.188	4.78	0.025	0.64	0.500	12.70	0.292	7.40	0.223	5.66	4.17	18.55	20.00	3.50

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0188-014-0750-S*	0.268	6.81	0.42	1.86	0.87	0.15
C0188-014-0880-S*	0.308	7.82	0.42	1.89	0.74	0.13
C0188-014-1000-S*	0.346	8.78	0.43	1.89	0.65	0.11
C0188-014-1250-S*	0.424	10.78	0.43	1.90	0.52	0.09
C0188-014-1375-S*	0.465	11.80	0.42	1.89	0.47	0.08
C0188-014-1500-S*	0.505	12.83	0.42	1.88	0.43	0.07
C0188-014-1750-S*	0.582	14.78	0.43	1.90	0.37	0.06
C0188-015-0250-S*	0.128	3.24	0.73	3.27	6.00	1.05
C0188-015-0310-S*	0.134	3.40	0.73	3.27	4.17	0.73
C0188-015-0500-S*	0.185	4.70	0.73	3.27	2.33	0.41
C0188-015-0560-S*	0.197	5.00	0.73	3.23	2.00	0.35
C0188-015-0720-S*	0.246	6.24	0.71	3.16	1.50	0.26
C0188-015-1380-S*	0.702	17.83	0.73	3.27	1.08	0.19
C0188-016-1750-S*	0.786	19.95	0.88	3.93	0.92	0.16
C0188-018-0380-S*	0.199	5.05	1.24	5.51	6.83	1.20
C0188-018-0440-S*	0.196	4.99	1.24	5.51	5.08	0.89
C0188-018-0560-S*	0.316	8.04	1.24	5.51	5.08	0.89
C0188-018-0750-S*	0.337	8.57	1.24	5.51	3.00	0.52
C0188-018-0880-S*	0.401	10.18	1.24	5.51	2.58	0.45
C0188-018-1000-S*	0.505	12.82	1.24	5.51	2.50	0.44
C0188-018-1380-S*	0.672	17.08	1.24	5.51	1.75	0.31
C0188-018-1750-S*	0.876	22.25	1.24	5.51	1.42	0.25
C0188-020-0250-S*	0.152	3.86	1.67	7.43	17.01	2.98
C0188-020-0375-S*	0.218	5.55	1.67	7.43	10.66	1.87
C0188-020-0438-S*	0.252	6.40	1.67	7.43	8.97	1.57
C0188-020-0500-S*	0.255	6.49	1.67	7.43	6.83	1.20
C0188-020-0560-S*	0.315	8.01	1.67	7.43	6.83	1.20
C0188-020-0625-S*	0.351	8.92	1.67	7.43	6.11	1.07
C0188-020-0690-S*	0.323	8.20	1.50	6.67	4.08	0.71
C0188-020-0750-S*	0.418	10.62	1.67	7.43	5.03	0.88
C0188-020-0875-S*	0.485	12.31	1.67	7.43	4.28	0.75
C0188-020-0938-S*	0.518	13.17	1.67	7.43	3.98	0.70
C0188-020-1000-S*	0.522	13.27	1.67	7.43	3.50	0.61
C0188-020-1125-S*	0.617	15.68	1.67	7.43	3.29	0.58
C0188-020-1250-S*	0.683	17.36	1.67	7.43	2.95	0.52
C0188-020-1380-S*	0.711	18.07	1.67	7.43	2.50	0.44
C0188-020-1500-S*	0.669	16.98	1.45	6.47	1.75	0.31
C0188-020-1690-S*	0.888	22.55	1.67	7.43	2.08	0.36
C0188-020-1750-S*	0.795	20.19	1.67	7.43	1.75	0.31
C0188-022-0410-S	0.224	5.69	1.70	7.58	9.16	1.60
C0188-022-0500-S	0.278	7.07	1.53	6.82	6.91	1.21
C0188-022-0630-S	0.354	8.99	1.43	6.34	5.17	0.90
C0188-022-0750-S	0.400	10.15	2.19	9.73	6.25	1.09
C0188-022-1030-S	0.491	12.48	2.06	9.18	3.83	0.67
C0188-022-1380-S	0.739	18.78	2.19	9.73	3.42	0.60
C0188-023-0250-S	0.151	3.83	2.48	11.03	24.99	4.37
C0188-023-0313-S	0.186	4.73	2.48	11.03	19.58	3.43
C0188-023-0380-S	0.223	5.67	2.48	11.03	15.83	2.77
C0188-023-0438-S	0.252	6.40	2.48	11.03	13.34	2.33
C0188-023-0500-S	0.273	6.94	2.08	9.24	9.16	1.60
C0188-023-0560-S	0.289	7.35	2.48	11.03	9.16	1.60
C0188-023-0690-S	0.392	9.96	2.48	11.03	8.33	1.46
C0188-023-0750-S	0.416	10.57	2.48	11.03	7.43	1.30
C0188-023-0810-S	0.460	11.68	2.48	11.03	7.08	1.24
C0188-023-0875-S	0.482	12.23	2.48	11.03	6.31	1.10
C0188-023-0940-S	0.467	11.86	2.40	10.69	5.08	0.89
C0188-023-1000-S	0.575	14.60	2.48	11.03	5.83	1.02
C0188-023-1220-S	0.636	16.16	2.48	11.03	4.25	0.74
C0188-023-1380-S	0.784	19.93	2.48	11.03	4.17	0.73
C0188-023-1750-S	0.987	25.06	2.48	11.03	3.25	0.57
C0188-023-2000-S	1.064	27.02	2.48	11.03	2.65	0.46
C0188-025-0280-S	0.181	4.60	3.13	13.94	31.65	5.54
C0188-025-0440-S	0.269	6.83	3.13	13.94	18.33	3.21
C0188-025-0500-S	0.312	7.92	3.13	13.94	16.66	2.92

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0188-025-0590-M	**0.188**	**4.78**	**0.025**	**0.64**	**0.590**	**14.99**	**0.329**	**8.37**	**0.265**	**6.74**	**4.17**	**18.55**	**16.00**	**2.80**
C0188-025-0630-M	**0.188**	**4.78**	**0.025**	**0.64**	**0.630**	**16.00**	**0.367**	**9.31**	**0.336**	**8.54**	**3.16**	**14.06**	**12.00**	**2.10**
C0188-025-0750-M	**0.188**	**4.78**	**0.025**	**0.64**	**0.750**	**19.05**	**0.403**	**10.22**	**0.336**	**8.54**	**4.17**	**18.55**	**12.00**	**2.10**
C0188-025-0840-M	**0.188**	**4.78**	**0.025**	**0.64**	**0.840**	**21.34**	**0.493**	**12.51**	**0.336**	**8.54**	**4.17**	**18.55**	**12.00**	**2.10**
C0188-025-0914-M	**0.188**	**4.78**	**0.025**	**0.64**	**0.914**	**23.22**	**0.512**	**12.99**	**0.463**	**11.75**	**3.34**	**14.86**	**8.30**	**1.45**
C0188-025-1000-M	**0.188**	**4.78**	**0.025**	**0.64**	**1.000**	**25.40**	**0.556**	**14.13**	**0.415**	**10.53**	**4.17**	**18.55**	**9.40**	**1.65**
C0188-025-1940-M	**0.188**	**4.78**	**0.025**	**0.64**	**1.940**	**49.28**	**1.053**	**26.74**	**0.777**	**19.73**	**4.17**	**18.55**	**4.70**	**0.82**
C0188-026-0313-M	**0.188**	**4.78**	**0.026**	**0.66**	**0.313**	**7.95**	**0.236**	**6.00**	**0.234**	**5.94**	**1.80**	**8.01**	**23.51**	**4.11**
C0188-026-0380-M	**0.188**	**4.78**	**0.026**	**0.66**	**0.380**	**9.65**	**0.239**	**6.08**	**0.182**	**4.63**	**4.65**	**20.67**	**33.00**	**5.78**
C0188-026-0630-M	**0.188**	**4.78**	**0.026**	**0.66**	**0.630**	**16.00**	**0.383**	**9.72**	**0.356**	**9.04**	**3.46**	**15.41**	**14.00**	**2.45**
C0188-026-0750-M	**0.188**	**4.78**	**0.026**	**0.66**	**0.750**	**19.05**	**0.440**	**11.18**	**0.336**	**8.53**	**4.65**	**20.67**	**15.00**	**2.63**
C0188-026-0840-M	**0.188**	**4.78**	**0.026**	**0.66**	**0.840**	**21.34**	**0.483**	**12.26**	**0.379**	**9.63**	**4.65**	**20.67**	**13.00**	**2.28**
C0188-026-0880-M	**0.188**	**4.78**	**0.026**	**0.66**	**0.880**	**22.35**	**0.493**	**12.52**	**0.406**	**10.32**	**4.65**	**20.67**	**12.00**	**2.10**
C0188-026-0910-M	**0.188**	**4.78**	**0.026**	**0.66**	**0.910**	**23.11**	**0.523**	**13.28**	**0.406**	**10.32**	**4.65**	**20.67**	**12.00**	**2.10**
C0188-026-1000-M	**0.188**	**4.78**	**0.026**	**0.66**	**1.000**	**25.40**	**0.619**	**15.73**	**0.400**	**10.17**	**4.65**	**20.67**	**12.20**	**2.14**
C0188-026-1750-M	**0.188**	**4.78**	**0.026**	**0.66**	**1.750**	**44.45**	**1.024**	**26.01**	**0.714**	**18.13**	**4.65**	**20.67**	**6.40**	**1.12**
C0188-026-3000-M	**0.188**	**4.78**	**0.026**	**0.66**	**3.000**	**76.20**	**1.759**	**44.68**	**1.617**	**41.07**	**3.35**	**14.91**	**2.70**	**0.47**
C0188-028-0500-M	**0.188**	**4.78**	**0.028**	**0.71**	**0.500**	**12.70**	**0.332**	**8.44**	**0.245**	**6.23**	**5.70**	**25.34**	**34.00**	**5.95**
C0188-028-0530-M	**0.188**	**4.78**	**0.028**	**0.71**	**0.530**	**13.46**	**0.319**	**8.10**	**0.294**	**7.46**	**5.70**	**25.34**	**27.00**	**4.73**
C0188-028-0690-M	**0.188**	**4.78**	**0.028**	**0.71**	**0.690**	**17.53**	**0.442**	**11.24**	**0.335**	**8.50**	**5.70**	**25.34**	**23.00**	**4.03**
C0188-028-1000-M	**0.188**	**4.78**	**0.028**	**0.71**	**1.000**	**25.40**	**0.620**	**15.75**	**0.482**	**12.23**	**5.70**	**25.34**	**15.00**	**2.63**
C0188-028-1380-M	**0.188**	**4.78**	**0.028**	**0.71**	**1.380**	**35.05**	**0.862**	**21.90**	**0.635**	**16.14**	**5.70**	**25.34**	**11.00**	**1.93**
C0188-028-1750-M	**0.188**	**4.78**	**0.028**	**0.71**	**1.750**	**44.45**	**1.064**	**27.02**	**0.823**	**20.90**	**5.70**	**25.34**	**8.30**	**1.45**
C0188-029-0690-M	**0.188**	**4.78**	**0.029**	**0.74**	**0.690**	**17.53**	**0.458**	**11.63**	**0.346**	**8.79**	**6.27**	**27.89**	**27.00**	**4.73**
C0188-029-1880-M	**0.188**	**4.78**	**0.029**	**0.74**	**1.880**	**47.75**	**1.124**	**28.56**	**0.989**	**25.12**	**6.27**	**27.89**	**8.30**	**1.45**
C0188-029-2250-M	**0.188**	**4.78**	**0.029**	**0.74**	**2.250**	**57.15**	**1.426**	**36.22**	**1.345**	**34.15**	**4.94**	**21.99**	**6.00**	**1.05**
C0188-029-2500-M	**0.188**	**4.78**	**0.029**	**0.74**	**2.500**	**63.50**	**1.558**	**39.57**	**1.461**	**37.12**	**5.18**	**23.05**	**5.50**	**0.96**
C0188-030-0440-M	**0.188**	**4.78**	**0.030**	**0.76**	**0.440**	**11.18**	**0.296**	**7.52**	**0.284**	**7.22**	**6.04**	**26.86**	**42.00**	**7.35**
C0188-030-0500-M	**0.188**	**4.78**	**0.030**	**0.76**	**0.500**	**12.70**	**0.377**	**9.57**	**0.373**	**9.47**	**3.69**	**16.42**	**30.00**	**5.25**
C0188-030-0630-M	**0.188**	**4.78**	**0.030**	**0.76**	**0.630**	**16.00**	**0.422**	**10.71**	**0.345**	**8.76**	**6.88**	**30.60**	**33.00**	**5.78**
C0188-030-0750-M	**0.188**	**4.78**	**0.030**	**0.76**	**0.750**	**19.05**	**0.491**	**12.47**	**0.467**	**11.87**	**5.96**	**26.52**	**23.00**	**4.03**
C0188-030-1220-M	**0.188**	**4.78**	**0.030**	**0.76**	**1.220**	**30.99**	**0.790**	**20.07**	**0.644**	**16.36**	**6.88**	**30.60**	**16.00**	**2.80**
C0188-030-1630-M	**0.188**	**4.78**	**0.030**	**0.76**	**1.630**	**41.40**	**1.005**	**25.52**	**0.908**	**23.07**	**6.88**	**30.60**	**11.00**	**1.93**
C0188-030-2750-M	**0.188**	**4.78**	**0.030**	**0.76**	**2.750**	**69.85**	**1.738**	**44.15**	**1.430**	**36.33**	**6.88**	**30.60**	**6.80**	**1.19**
D11600*	0.189	4.80	0.031	0.80	0.272	6.90	0.205	5.20	0.205	5.20	7.16	31.87	105.89	18.53
D11610*	0.189	4.80	0.031	0.80	0.382	9.70	0.276	7.00	0.268	6.80	7.16	31.87	67.83	11.87
D11620*	0.189	4.80	0.031	0.80	0.551	14.00	0.386	9.80	0.362	9.20	7.16	31.87	43.83	7.67
D11630*	0.189	4.80	0.031	0.80	0.768	19.50	0.531	13.50	0.488	12.40	7.16	31.87	29.83	5.22
D11640*	0.189	4.80	0.031	0.80	1.102	28.00	0.752	19.10	0.677	17.20	7.16	31.87	20.11	3.52
C0210-018-0250-M*	0.210	5.33	0.018	0.46	0.250	6.35	0.114	2.90	0.089	2.26	1.50	6.67	11.00	1.93
C0210-018-0310-M*	0.210	5.33	0.018	0.46	0.310	7.87	0.135	3.43	0.099	2.51	1.50	6.67	8.60	1.51
C0210-018-0380-M*	0.210	5.33	0.018	0.46	0.380	9.65	0.161	4.09	0.110	2.79	1.50	6.67	6.80	1.19
C0210-018-0440-M*	0.210	5.33	0.018	0.46	0.440	11.18	0.182	4.62	0.120	3.05	1.50	6.67	5.80	1.02
C0210-018-0500-M*	0.210	5.33	0.018	0.46	0.500	12.70	0.204	5.18	0.130	3.30	1.50	6.67	5.10	0.89
C0210-018-0560-M*	0.210	5.33	0.018	0.46	0.560	14.22	0.226	5.74	0.140	3.56	1.50	6.67	4.50	0.79
C0210-018-0620-M*	0.210	5.33	0.018	0.46	0.620	15.75	0.248	6.30	0.150	3.81	1.50	6.67	4.00	0.70
C0210-018-0690-M*	0.210	5.33	0.018	0.46	0.690	17.53	0.273	6.93	0.161	4.09	1.50	6.67	3.60	0.63
C0210-018-0750-M*	0.210	5.33	0.018	0.46	0.750	19.05	0.295	7.49	0.171	4.34	1.50	6.67	3.30	0.58
C0210-018-0810-M*	0.210	5.33	0.018	0.46	0.810	20.57	0.310	7.87	0.181	4.60	1.50	6.67	3.00	0.53
C0210-018-0880-M*	0.210	5.33	0.018	0.46	0.880	22.35	0.342	8.69	0.192	4.88	1.50	6.67	2.80	0.49
C0210-018-1000-M*	0.210	5.33	0.018	0.46	1.000	25.40	0.375	9.53	0.212	5.38	1.50	6.67	2.40	0.42
C0210-018-1250-M*	0.210	5.33	0.018	0.46	1.250	31.75	0.461	11.71	0.253	6.43	1.50	6.67	1.90	0.33
C0210-018-1500-M*	0.210	5.33	0.018	0.46	1.500	38.10	0.566	14.38	0.294	7.47	1.50	6.67	1.60	0.28
C0210-018-1750-M*	0.210	5.33	0.018	0.46	1.750	44.45	0.679	17.25	0.334	8.48	1.50	6.67	1.40	0.25
C0210-018-2000-M*	0.210	5.33	0.018	0.46	2.000	50.80	0.748	19.00	0.375	9.53	1.50	6.67	1.20	0.21
C0210-022-0250-M	0.210	5.33	0.022	0.56	0.250	6.35	0.140	3.56	0.113	2.87	2.59	11.52	23.60	4.13
C0210-022-0310-M	0.210	5.33	0.022	0.56	0.310	7.87	0.168	4.27	0.127	3.23	2.59	11.52	18.30	3.20
C0210-022-0380-M	0.210	5.33	0.022	0.56	0.380	9.65	0.201	5.11	0.143	3.63	2.59	11.52	14.50	2.54
C0210-022-0440-M	0.210	5.33	0.022	0.56	0.440	11.18	0.229	5.82	0.157	3.99	2.59	11.52	12.30	2.15
C0210-022-0500-M	0.210	5.33	0.022	0.56	0.500	12.70	0.257	6.53	0.170	4.32	2.59	11.52	10.70	1.87
C0210-022-0560-M	0.210	5.33	0.022	0.56	0.560	14.22	0.285	7.24	0.184	4.67	2.59	11.52	9.40	1.65
C0210-022-0620-M	0.210	5.33	0.022	0.56	0.620	15.75	0.314	7.98	0.198	5.03	2.59	11.52	8.50	1.49
C0210-022-0690-M	0.210	5.33	0.022	0.56	0.690	17.53	0.346	8.79	0.214	5.44	2.59	11.52	7.50	1.31
C0210-022-0750-M	0.210	5.33	0.022	0.56	0.750	19.05	0.374	9.50	0.228	5.79	2.59	11.52	6.90	1.21

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0188-025-0590-S	**0.355**	**9.01**	**3.13**	**13.94**	**13.33**	**2.33**
C0188-025-0630-S	**0.367**	**9.31**	**2.63**	**11.71**	**10.00**	**1.75**
C0188-025-0750-S	**0.436**	**11.09**	**3.13**	**13.94**	**10.00**	**1.75**
C0188-025-0840-S	**0.526**	**13.37**	**3.13**	**13.94**	**10.00**	**1.75**
C0188-025-0914-S	**0.512**	**12.99**	**2.78**	**12.38**	**6.91**	**1.21**
C0188-025-1000-S	**0.600**	**15.23**	**3.13**	**13.94**	**7.83**	**1.37**
C0188-025-1940-S	**1.139**	**28.94**	**3.13**	**13.94**	**3.92**	**0.69**
C0188-026-0313-S	**0.236**	**6.00**	**1.50**	**6.67**	**19.58**	**3.43**
C0188-026-0380-S	**0.253**	**6.42**	**3.50**	**15.56**	**27.49**	**4.81**
C0188-026-0630-S	**0.383**	**9.72**	**2.89**	**12.83**	**11.66**	**2.04**
C0188-026-0750-S	**0.470**	**11.94**	**3.50**	**15.56**	**12.50**	**2.19**
C0188-026-0840-S	**0.517**	**13.13**	**3.50**	**15.56**	**10.83**	**1.90**
C0188-026-0880-S	**0.530**	**13.46**	**3.50**	**15.56**	**10.00**	**1.75**
C0188-026-0910-S	**0.560**	**14.23**	**3.50**	**15.56**	**10.00**	**1.75**
C0188-026-1000-S	**0.656**	**16.66**	**3.50**	**15.56**	**10.16**	**1.78**
C0188-026-1750-S	**1.094**	**27.79**	**3.50**	**15.56**	**5.33**	**0.93**
C0188-026-3000-S	**1.759**	**44.68**	**2.79**	**12.42**	**2.25**	**0.39**
C0188-028-0500-S	**0.348**	**8.85**	**4.30**	**19.12**	**28.32**	**4.96**
C0188-028-0530-S	**0.339**	**8.61**	**4.30**	**19.12**	**22.49**	**3.94**
C0188-028-0690-S	**0.466**	**11.83**	**4.30**	**19.12**	**19.16**	**3.35**
C0188-028-1000-S	**0.656**	**16.66**	**4.30**	**19.12**	**12.50**	**2.19**
C0188-028-1380-S	**0.911**	**23.14**	**4.30**	**19.12**	**9.16**	**1.60**
C0188-028-1750-S	**1.128**	**28.66**	**4.30**	**19.12**	**6.91**	**1.21**
C0188-029-0690-S	**0.479**	**12.18**	**4.74**	**21.07**	**22.49**	**3.94**
C0188-029-1880-S	**1.195**	**30.35**	**4.74**	**21.07**	**6.91**	**1.21**
C0188-029-2250-S	**1.426**	**36.22**	**4.12**	**18.32**	**5.00**	**0.87**
C0188-029-2500-S	**1.558**	**39.57**	**4.32**	**19.20**	**4.58**	**0.80**
C0188-030-0440-S	**0.296**	**7.52**	**5.03**	**22.37**	**34.99**	**6.12**
C0188-030-0500-S	**0.377**	**9.57**	**3.08**	**13.68**	**24.99**	**4.37**
C0188-030-0630-S	**0.441**	**11.20**	**5.20**	**23.14**	**27.49**	**4.81**
C0188-030-0750-S	**0.491**	**12.47**	**4.97**	**22.09**	**19.16**	**3.35**
C0188-030-1220-S	**0.830**	**21.08**	**5.20**	**23.14**	**13.33**	**2.33**
C0188-030-1630-S	**1.062**	**26.98**	**5.20**	**23.14**	**9.16**	**1.60**
C0188-030-2750-S	**1.832**	**46.53**	**5.20**	**23.14**	**5.66**	**0.99**
D21600*	0.205	5.20	5.97	26.55	88.23	15.44
D21610*	0.276	7.00	5.97	26.55	56.51	9.89
D21620*	0.386	9.80	5.97	26.55	36.51	6.39
D21630*	0.531	13.50	5.97	26.55	24.86	4.35
D21640*	0.752	19.10	5.97	26.55	16.74	2.93
C0210-018-0250-S*	0.147	3.73	0.95	4.21	9.16	1.60
C0210-018-0310-S*	0.178	4.52	0.95	4.21	7.16	1.25
C0210-018-0380-S*	0.213	5.41	0.95	4.21	5.66	0.99
C0210-018-0440-S*	0.244	6.20	0.95	4.21	4.83	0.85
C0210-018-0500-S*	0.277	7.05	0.95	4.21	4.25	0.74
C0210-018-0560-S*	0.308	7.82	0.95	4.21	3.75	0.66
C0210-018-0620-S*	0.336	8.54	0.95	4.21	3.33	0.58
C0210-018-0690-S*	0.375	9.52	0.95	4.21	3.00	0.52
C0210-018-0750-S*	0.406	10.31	0.95	4.21	2.75	0.48
C0210-018-0810-S*	0.432	10.96	0.95	4.21	2.50	0.44
C0210-018-0880-S*	0.475	12.05	0.95	4.21	2.33	0.41
C0210-018-1000-S*	0.527	13.39	0.95	4.21	2.00	0.35
C0210-018-1250-S*	0.653	16.57	0.95	4.21	1.58	0.28
C0210-018-1500-S*	0.790	20.08	0.95	4.21	1.33	0.23
C0210-018-1750-S*	0.939	23.85	0.95	4.21	1.17	0.20
C0210-018-2000-S*	1.054	26.77	0.95	4.21	1.00	0.18
C0210-022-0250-S	0.165	4.20	1.66	7.40	19.66	3.44
C0210-022-0310-S	0.201	5.10	1.66	7.40	15.24	2.67
C0210-022-0380-S	0.242	6.15	1.66	7.40	12.08	2.11
C0210-022-0440-S	0.278	7.05	1.66	7.40	10.25	1.79
C0210-022-0500-S	0.313	7.96	1.66	7.40	8.91	1.56
C0210-022-0560-S	0.348	8.83	1.66	7.40	7.83	1.37
C0210-022-0620-S	0.385	9.78	1.66	7.40	7.08	1.24
C0210-022-0690-S	0.424	10.76	1.66	7.40	6.25	1.09
C0210-022-0750-S	0.461	11.70	1.66	7.40	5.75	1.01

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0210-022-0810-M	0.210	5.33	0.022	0.56	0.810	20.57	0.402	10.21	0.241	6.12	2.59	11.52	6.40	1.12
C0210-022-0880-M	0.210	5.33	0.022	0.56	0.880	22.35	0.435	11.05	0.257	6.53	2.59	11.52	5.80	1.02
C0210-022-1000-M	0.210	5.33	0.022	0.56	1.000	25.40	0.491	12.47	0.285	7.24	2.59	11.52	5.10	0.89
C0210-022-1250-M	0.210	5.33	0.022	0.56	1.250	31.75	0.608	15.44	0.342	8.69	2.59	11.52	4.00	0.70
C0210-022-1500-M	0.210	5.33	0.022	0.56	1.500	38.10	0.715	18.16	0.399	10.13	2.59	11.52	3.30	0.58
C0210-022-1750-M	0.210	5.33	0.022	0.56	1.750	44.45	0.857	21.77	0.456	11.58	2.59	11.52	2.90	0.51
C0210-022-2000-M	0.210	5.33	0.022	0.56	2.000	50.80	0.959	24.36	0.514	13.06	2.59	11.52	2.50	0.44
C0210-026-0250-M	0.210	5.33	0.026	0.66	0.250	6.35	0.156	3.96	0.140	3.56	4.14	18.42	44.10	7.72
C0210-026-0310-M	0.210	5.33	0.026	0.66	0.310	7.87	0.188	4.78	0.159	4.04	4.14	18.42	33.90	5.93
C0210-026-0380-M	0.210	5.33	0.026	0.66	0.380	9.65	0.225	5.72	0.181	4.60	4.14	18.42	26.60	4.66
C0210-026-0440-M	0.210	5.33	0.026	0.66	0.440	11.18	0.256	6.50	0.200	5.08	4.14	18.42	22.50	3.94
C0210-026-0500-M	0.210	5.33	0.026	0.66	0.500	12.70	0.288	7.32	0.219	5.56	4.14	18.42	19.50	3.41
C0210-026-0560-M	0.210	5.33	0.026	0.66	0.560	14.22	0.320	8.13	0.237	6.02	4.14	18.42	17.20	3.01
C0210-026-0620-M	0.210	5.33	0.026	0.66	0.620	15.75	0.351	8.92	0.256	6.50	4.14	18.42	15.40	2.70
C0210-026-0690-M	0.210	5.33	0.026	0.66	0.690	17.53	0.388	9.86	0.278	7.06	4.14	18.42	13.70	2.40
C0210-026-0750-M	0.210	5.33	0.026	0.66	0.750	19.05	0.420	10.67	0.297	7.54	4.14	18.42	12.50	2.19
C0210-026-0810-M	0.210	5.33	0.026	0.66	0.810	20.57	0.451	11.46	0.316	8.03	4.14	18.42	11.50	2.01
C0210-026-0880-M	0.210	5.33	0.026	0.66	0.880	22.35	0.488	12.40	0.338	8.59	4.14	18.42	10.50	1.84
C0210-026-1000-M	0.210	5.33	0.026	0.66	1.000	25.40	0.551	14.00	0.376	9.55	4.14	18.42	9.20	1.61
C0210-026-1250-M	0.210	5.33	0.026	0.66	1.250	31.75	0.683	17.35	0.454	11.53	4.14	18.42	7.30	1.28
C0210-026-1500-M	0.210	5.33	0.026	0.66	1.500	38.10	0.814	20.68	0.533	13.54	4.14	18.42	6.00	1.05
C0210-026-1750-M	0.210	5.33	0.026	0.66	1.750	44.45	0.946	24.03	0.611	15.52	4.14	18.42	5.10	0.89
C0210-026-2000-M	0.210	5.33	0.026	0.66	2.000	50.80	1.078	27.38	0.689	17.50	4.14	18.42	4.50	0.79
D11050*	0.213	5.40	0.016	0.40	0.413	10.50	0.126	3.20	0.102	2.60	0.98	4.36	3.43	0.60
D11060*	0.213	5.40	0.016	0.40	0.630	16.00	0.177	4.50	0.134	3.40	0.98	4.36	2.17	0.38
D11070*	0.213	5.40	0.016	0.40	0.945	24.00	0.252	6.40	0.181	4.60	0.98	4.36	1.43	0.25
D11080*	0.213	5.40	0.016	0.40	1.378	35.00	0.354	9.00	0.244	6.20	0.98	4.36	0.97	0.17
D11090*	0.213	5.40	0.016	0.40	2.087	53.00	0.504	12.80	0.339	8.60	0.98	4.36	0.63	0.11
D11240*	0.217	5.50	0.020	0.50	0.370	9.40	0.154	3.90	0.128	3.25	1.81	8.04	8.34	1.46
D11260*	0.217	5.50	0.020	0.50	0.551	14.00	0.213	5.40	0.167	4.25	1.81	8.04	5.31	0.93
D11270*	0.217	5.50	0.020	0.50	0.807	20.50	0.299	7.60	0.226	5.75	1.81	8.04	3.49	0.61
D11280*	0.217	5.50	0.020	0.50	1.181	30.00	0.417	10.60	0.305	7.75	1.81	8.04	2.34	0.41
D11290*	0.217	5.50	0.020	0.50	1.752	44.50	0.594	15.10	0.423	10.75	1.81	8.04	1.54	0.27
C0218-010-0250-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.250**	**6.35**	**0.072**	**1.83**	**0.042**	**1.08**	**0.21**	**0.94**	**1.19**	**0.21**
C0218-010-0313-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.313**	**7.95**	**0.085**	**2.16**	**0.047**	**1.20**	**0.21**	**0.93**	**0.92**	**0.16**
C0218-010-0375-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.375**	**9.53**	**0.098**	**2.48**	**0.051**	**1.30**	**0.21**	**0.94**	**0.76**	**0.13**
C0218-010-0438-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.438**	**11.13**	**0.111**	**2.82**	**0.056**	**1.42**	**0.21**	**0.93**	**0.64**	**0.11**
C0218-010-0500-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.500**	**12.70**	**0.124**	**3.15**	**0.060**	**1.53**	**0.21**	**0.93**	**0.56**	**0.10**
C0218-010-0563-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.563**	**14.30**	**0.137**	**3.48**	**0.065**	**1.65**	**0.21**	**0.93**	**0.49**	**0.09**
C0218-010-0625-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.625**	**15.88**	**0.150**	**3.81**	**0.069**	**1.76**	**0.21**	**0.93**	**0.44**	**0.08**
C0218-010-0750-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.750**	**19.05**	**0.175**	**4.46**	**0.078**	**1.97**	**0.21**	**0.93**	**0.36**	**0.06**
C0218-010-0875-M*	**0.218**	**5.54**	**0.010**	**0.25**	**0.875**	**22.23**	**0.201**	**5.10**	**0.086**	**2.18**	**0.21**	**0.93**	**0.31**	**0.05**
C0218-010-1000-M*	**0.218**	**5.54**	**0.010**	**0.25**	**1.000**	**25.40**	**0.226**	**5.74**	**0.094**	**2.38**	**0.21**	**0.93**	**0.27**	**0.05**
C0218-010-1250-M*	**0.218**	**5.54**	**0.010**	**0.25**	**1.250**	**31.75**	**0.276**	**7.02**	**0.110**	**2.79**	**0.21**	**0.93**	**0.21**	**0.04**
C0218-010-1500-M*	**0.218**	**5.54**	**0.010**	**0.25**	**1.500**	**38.10**	**0.327**	**8.30**	**0.126**	**3.19**	**0.21**	**0.93**	**0.18**	**0.03**
C0218-010-1750-M*	**0.218**	**5.54**	**0.010**	**0.25**	**1.750**	**44.45**	**0.377**	**9.58**	**0.142**	**3.60**	**0.21**	**0.93**	**0.15**	**0.03**
C0218-011-0250-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.250**	**6.35**	**0.077**	**1.96**	**0.049**	**1.24**	**0.27**	**1.21**	**1.57**	**0.28**
C0218-011-0313-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.313**	**7.95**	**0.091**	**2.31**	**0.055**	**1.39**	**0.27**	**1.20**	**1.22**	**0.21**
C0218-011-0375-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.375**	**9.53**	**0.105**	**2.66**	**0.060**	**1.52**	**0.27**	**1.21**	**1.00**	**0.18**
C0218-011-0438-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.438**	**11.13**	**0.119**	**3.02**	**0.066**	**1.66**	**0.27**	**1.20**	**0.85**	**0.15**
C0218-011-0500-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.500**	**12.70**	**0.132**	**3.36**	**0.071**	**1.80**	**0.27**	**1.20**	**0.73**	**0.13**
C0218-011-0563-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.563**	**14.30**	**0.146**	**3.72**	**0.076**	**1.94**	**0.27**	**1.20**	**0.65**	**0.11**
C0218-011-0625-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.625**	**15.88**	**0.160**	**4.06**	**0.082**	**2.08**	**0.27**	**1.20**	**0.58**	**0.10**
C0218-011-0750-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.750**	**19.05**	**0.187**	**4.74**	**0.092**	**2.33**	**0.27**	**1.20**	**0.48**	**0.08**
C0218-011-0875-M*	**0.218**	**5.54**	**0.011**	**0.28**	**0.875**	**22.23**	**0.214**	**5.42**	**0.102**	**2.58**	**0.27**	**1.20**	**0.41**	**0.07**
C0218-011-1000-M*	**0.218**	**5.54**	**0.011**	**0.28**	**1.000**	**25.40**	**0.240**	**6.11**	**0.112**	**2.84**	**0.27**	**1.20**	**0.36**	**0.06**
C0218-011-1250-M*	**0.218**	**5.54**	**0.011**	**0.28**	**1.250**	**31.75**	**0.294**	**7.47**	**0.131**	**3.34**	**0.27**	**1.20**	**0.28**	**0.05**
C0218-011-1500-M*	**0.218**	**5.54**	**0.011**	**0.28**	**1.500**	**38.10**	**0.347**	**8.83**	**0.151**	**3.84**	**0.27**	**1.20**	**0.24**	**0.04**
C0218-011-1750-M*	**0.218**	**5.54**	**0.011**	**0.28**	**1.750**	**44.45**	**0.401**	**10.18**	**0.171**	**4.34**	**0.27**	**1.21**	**0.20**	**0.04**
C0218-012-0250-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.250**	**6.35**	**0.086**	**2.20**	**0.049**	**1.25**	**0.46**	**2.04**	**2.81**	**0.49**
C0218-012-0313-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.313**	**7.95**	**0.101**	**2.57**	**0.054**	**1.38**	**0.46**	**2.04**	**2.17**	**0.38**
C0218-012-0375-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.375**	**9.53**	**0.115**	**2.93**	**0.059**	**1.50**	**0.46**	**2.04**	**1.77**	**0.31**
C0218-012-0438-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.438**	**11.13**	**0.132**	**3.34**	**0.064**	**1.63**	**0.46**	**2.04**	**1.50**	**0.26**
C0218-012-0500-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.500**	**12.70**	**0.146**	**3.72**	**0.069**	**1.75**	**0.46**	**2.04**	**1.30**	**0.23**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0210-022-0810-S	0.498	12.65	1.66	7.40	5.33	0.93
C0210-022-0880-S	0.536	13.61	1.66	7.40	4.83	0.85
C0210-022-1000-S	0.608	15.46	1.66	7.40	4.25	0.74
C0210-022-1250-S	0.751	19.07	1.66	7.40	3.33	0.58
C0210-022-1500-S	0.895	22.73	1.66	7.40	2.75	0.48
C0210-022-1750-S	1.061	26.96	1.66	7.40	2.42	0.42
C0210-022-2000-S	1.201	30.51	1.66	7.40	2.08	0.36
C0210-026-0250-S	0.177	4.49	2.69	11.95	36.74	6.43
C0210-026-0310-S	0.215	5.46	2.69	11.95	28.24	4.94
C0210-026-0380-S	0.259	6.57	2.69	11.95	22.16	3.88
C0210-026-0440-S	0.297	7.53	2.69	11.95	18.74	3.28
C0210-026-0500-S	0.335	8.50	2.69	11.95	16.24	2.84
C0210-026-0560-S	0.372	9.46	2.69	11.95	14.33	2.51
C0210-026-0620-S	0.411	10.43	2.69	11.95	12.83	2.24
C0210-026-0690-S	0.455	11.55	2.69	11.95	11.41	2.00
C0210-026-0750-S	0.492	12.50	2.69	11.95	10.41	1.82
C0210-026-0810-S	0.529	13.45	2.69	11.95	9.58	1.68
C0210-026-0880-S	0.573	14.55	2.69	11.95	8.75	1.53
C0210-026-1000-S	0.649	16.49	2.69	11.95	7.66	1.34
C0210-026-1250-S	0.808	20.53	2.69	11.95	6.08	1.06
C0210-026-1500-S	0.962	24.44	2.69	11.95	5.00	0.87
C0210-026-1750-S	1.117	28.38	2.69	11.95	4.25	0.74
C0210-026-2000-S	1.283	32.59	2.69	11.95	3.75	0.66
D21050*	0.126	3.20	0.82	3.63	2.86	0.50
D21060*	0.177	4.50	0.82	3.63	1.83	0.32
D21070*	0.252	6.40	0.82	3.63	1.20	0.21
D21080*	0.354	9.00	0.82	3.63	0.80	0.14
D21090*	0.504	12.80	0.82	3.63	0.51	0.09
D21240*	0.154	3.90	1.51	6.70	6.97	1.22
D21260*	0.213	5.40	1.51	6.70	4.40	0.77
D21270*	0.299	7.60	1.51	6.70	2.91	0.51
D21280*	0.417	10.60	1.51	6.70	1.94	0.34
D21290*	0.594	15.10	1.51	6.70	1.26	0.22
C0218-010-0250-S*	**0.072**	**1.83**	**0.18**	**0.79**	**0.99**	**0.17**
C0218-010-0313-S*	**0.085**	**2.16**	**0.17**	**0.78**	**0.77**	**0.13**
C0218-010-0375-S*	**0.098**	**2.48**	**0.18**	**0.78**	**0.63**	**0.11**
C0218-010-0438-S*	**0.111**	**2.82**	**0.17**	**0.78**	**0.53**	**0.09**
C0218-010-0500-S*	**0.124**	**3.15**	**0.17**	**0.77**	**0.46**	**0.08**
C0218-010-0563-S*	**0.137**	**3.48**	**0.17**	**0.78**	**0.41**	**0.07**
C0218-010-0625-S*	**0.150**	**3.81**	**0.17**	**0.77**	**0.37**	**0.06**
C0218-010-0750-S*	**0.175**	**4.46**	**0.17**	**0.77**	**0.30**	**0.05**
C0218-010-0875-S*	**0.201**	**5.10**	**0.17**	**0.77**	**0.26**	**0.04**
C0218-010-1000-S*	**0.226**	**5.74**	**0.17**	**0.77**	**0.23**	**0.04**
C0218-010-1250-S*	**0.276**	**7.02**	**0.17**	**0.77**	**0.18**	**0.03**
C0218-010-1500-S*	**0.327**	**8.30**	**0.17**	**0.77**	**0.15**	**0.03**
C0218-010-1750-S*	**0.377**	**9.58**	**0.17**	**0.77**	**0.13**	**0.02**
C0218-011-0250-S*	**0.077**	**1.96**	**0.23**	**1.01**	**1.31**	**0.23**
C0218-011-0313-S*	**0.091**	**2.31**	**0.22**	**1.00**	**1.01**	**0.18**
C0218-011-0375-S*	**0.105**	**2.66**	**0.23**	**1.01**	**0.84**	**0.15**
C0218-011-0438-S*	**0.119**	**3.02**	**0.22**	**1.00**	**0.71**	**0.12**
C0218-011-0500-S*	**0.132**	**3.36**	**0.22**	**1.00**	**0.61**	**0.11**
C0218-011-0563-S*	**0.146**	**3.72**	**0.23**	**1.00**	**0.54**	**0.09**
C0218-011-0625-S*	**0.160**	**4.06**	**0.23**	**1.00**	**0.48**	**0.08**
C0218-011-0750-S*	**0.187**	**4.74**	**0.23**	**1.00**	**0.40**	**0.07**
C0218-011-0875-S*	**0.214**	**5.42**	**0.23**	**1.00**	**0.34**	**0.06**
C0218-011-1000-S*	**0.240**	**6.11**	**0.23**	**1.00**	**0.30**	**0.05**
C0218-011-1250-S*	**0.294**	**7.47**	**0.23**	**1.00**	**0.24**	**0.04**
C0218-011-1500-S*	**0.347**	**8.83**	**0.23**	**1.00**	**0.20**	**0.03**
C0218-011-1750-S*	**0.401**	**10.18**	**0.23**	**1.00**	**0.17**	**0.03**
C0218-012-0250-S*	**0.107**	**2.73**	**0.33**	**1.49**	**2.34**	**0.41**
C0218-012-0313-S*	**0.128**	**3.26**	**0.33**	**1.49**	**1.81**	**0.32**
C0218-012-0375-S*	**0.149**	**3.77**	**0.33**	**1.49**	**1.47**	**0.26**
C0218-012-0438-S*	**0.171**	**4.34**	**0.33**	**1.49**	**1.25**	**0.22**
C0218-012-0500-S*	**0.192**	**4.87**	**0.33**	**1.49**	**1.08**	**0.19**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0218-012-0563-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.563**	**14.30**	**0.160**	**4.06**	**0.074**	**1.88**	**0.46**	**2.04**	**1.14**	**0.20**
C0218-012-0625-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.625**	**15.88**	**0.174**	**4.43**	**0.079**	**2.01**	**0.46**	**2.04**	**1.02**	**0.18**
C0218-012-0750-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.750**	**19.05**	**0.203**	**5.15**	**0.089**	**2.26**	**0.46**	**2.04**	**0.84**	**0.15**
C0218-012-0875-M*	**0.218**	**5.54**	**0.012**	**0.31**	**0.875**	**22.23**	**0.237**	**6.01**	**0.097**	**2.48**	**0.46**	**2.04**	**0.72**	**0.13**
C0218-012-1000-M*	**0.218**	**5.54**	**0.012**	**0.31**	**1.000**	**25.40**	**0.259**	**6.57**	**0.107**	**2.72**	**0.46**	**2.04**	**0.62**	**0.11**
C0218-012-1250-M*	**0.218**	**5.54**	**0.012**	**0.31**	**1.250**	**31.75**	**0.331**	**8.40**	**0.124**	**3.14**	**0.46**	**2.04**	**0.50**	**0.09**
C0218-012-1500-M*	**0.218**	**5.54**	**0.012**	**0.31**	**1.500**	**38.10**	**0.379**	**9.63**	**0.143**	**3.62**	**0.46**	**2.04**	**0.41**	**0.07**
C0218-012-1750-M*	**0.218**	**5.54**	**0.012**	**0.31**	**1.750**	**44.45**	**0.437**	**11.10**	**0.161**	**4.08**	**0.46**	**2.04**	**0.35**	**0.06**
C0218-013-0250-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.250**	**6.35**	**0.091**	**2.30**	**0.066**	**1.67**	**0.37**	**1.67**	**2.35**	**0.41**
C0218-013-0313-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.313**	**7.95**	**0.108**	**2.73**	**0.075**	**1.90**	**0.37**	**1.65**	**1.81**	**0.32**
C0218-013-0375-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.375**	**9.53**	**0.124**	**3.15**	**0.084**	**2.13**	**0.37**	**1.65**	**1.48**	**0.26**
C0218-013-0438-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.438**	**11.13**	**0.141**	**3.58**	**0.093**	**2.37**	**0.37**	**1.64**	**1.24**	**0.22**
C0218-013-0500-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.500**	**12.70**	**0.157**	**3.99**	**0.101**	**2.57**	**0.37**	**1.65**	**1.08**	**0.19**
C0218-013-0563-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.563**	**14.30**	**0.173**	**4.40**	**0.109**	**2.78**	**0.37**	**1.65**	**0.95**	**0.17**
C0218-013-0625-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.625**	**15.88**	**0.189**	**4.80**	**0.117**	**2.98**	**0.37**	**1.65**	**0.85**	**0.15**
C0218-013-0750-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.750**	**19.05**	**0.221**	**5.61**	**0.134**	**3.40**	**0.37**	**1.65**	**0.70**	**0.12**
C0218-013-0875-M*	**0.218**	**5.54**	**0.013**	**0.33**	**0.875**	**22.23**	**0.254**	**6.44**	**0.151**	**3.84**	**0.37**	**1.63**	**0.59**	**0.10**
C0218-013-1000-M*	**0.218**	**5.54**	**0.013**	**0.33**	**1.000**	**25.40**	**0.284**	**7.22**	**0.166**	**4.22**	**0.37**	**1.66**	**0.52**	**0.09**
C0218-013-1250-M*	**0.218**	**5.54**	**0.013**	**0.33**	**1.250**	**31.75**	**0.349**	**8.87**	**0.200**	**5.07**	**0.37**	**1.64**	**0.41**	**0.07**
C0218-013-1500-M*	**0.218**	**5.54**	**0.013**	**0.33**	**1.500**	**38.10**	**0.413**	**10.49**	**0.232**	**5.90**	**0.37**	**1.64**	**0.34**	**0.06**
C0218-013-1750-M*	**0.218**	**5.54**	**0.013**	**0.33**	**1.750**	**44.45**	**0.477**	**12.12**	**0.265**	**6.74**	**0.37**	**1.64**	**0.29**	**0.05**
C0219-020-0250-M*	**0.219**	**5.56**	**0.020**	**0.51**	**0.250**	**6.35**	**0.121**	**3.06**	**0.099**	**2.52**	**1.94**	**8.63**	**15.00**	**2.63**
C0219-020-0410-M*	**0.219**	**5.56**	**0.020**	**0.51**	**0.410**	**10.41**	**0.210**	**5.33**	**0.124**	**3.15**	**1.94**	**8.63**	**9.70**	**1.70**
C0219-020-0500-M*	**0.219**	**5.56**	**0.020**	**0.51**	**0.500**	**12.70**	**0.234**	**5.95**	**0.147**	**3.73**	**1.94**	**8.63**	**7.30**	**1.28**
C0219-020-0560-M*	**0.219**	**5.56**	**0.020**	**0.51**	**0.560**	**14.22**	**0.253**	**6.43**	**0.209**	**5.31**	**1.29**	**5.73**	**4.20**	**0.74**
C0219-020-0590-M*	**0.219**	**5.56**	**0.020**	**0.51**	**0.590**	**14.99**	**0.241**	**6.12**	**0.188**	**4.78**	**1.71**	**7.61**	**4.90**	**0.86**
C0219-020-0660-M*	**0.219**	**5.56**	**0.020**	**0.51**	**0.660**	**16.76**	**0.264**	**6.70**	**0.188**	**4.78**	**1.94**	**8.63**	**4.90**	**0.86**
C0219-020-0750-M*	**0.219**	**5.56**	**0.020**	**0.51**	**0.750**	**19.05**	**0.354**	**8.99**	**0.188**	**4.78**	**1.94**	**8.63**	**4.90**	**0.86**
C0219-020-1000-M*	**0.219**	**5.56**	**0.020**	**0.51**	**1.000**	**25.40**	**0.412**	**10.46**	**0.249**	**6.32**	**1.94**	**8.63**	**3.30**	**0.58**
C0219-020-1250-M*	**0.219**	**5.56**	**0.020**	**0.51**	**1.250**	**31.75**	**0.474**	**12.03**	**0.308**	**7.83**	**1.94**	**8.63**	**2.50**	**0.44**
C0219-020-1380-M*	**0.219**	**5.56**	**0.020**	**0.51**	**1.380**	**35.05**	**0.506**	**12.85**	**0.369**	**9.38**	**1.75**	**7.77**	**2.00**	**0.35**
C0219-020-1630-M*	**0.219**	**5.56**	**0.020**	**0.51**	**1.630**	**41.40**	**0.609**	**15.46**	**0.386**	**9.79**	**1.94**	**8.63**	**1.90**	**0.33**
C0219-020-1750-M*	**0.219**	**5.56**	**0.020**	**0.51**	**1.750**	**44.45**	**0.729**	**18.51**	**0.386**	**9.79**	**1.94**	**8.63**	**1.90**	**0.33**
C0219-025-0440-M	**0.219**	**5.56**	**0.025**	**0.64**	**0.440**	**11.18**	**0.279**	**7.08**	**0.263**	**6.67**	**1.55**	**6.89**	**9.60**	**1.68**
C0219-025-0500-M	**0.219**	**5.56**	**0.025**	**0.64**	**0.500**	**12.70**	**0.243**	**6.18**	**0.208**	**5.28**	**3.34**	**14.85**	**13.00**	**2.28**
C0219-025-0590-M	**0.219**	**5.56**	**0.025**	**0.64**	**0.590**	**14.99**	**0.280**	**7.10**	**0.236**	**6.00**	**3.41**	**15.19**	**11.00**	**1.93**
C0219-025-0630-M	**0.219**	**5.56**	**0.025**	**0.64**	**0.630**	**16.00**	**0.349**	**8.87**	**0.315**	**7.99**	**2.16**	**9.62**	**7.70**	**1.35**
C0219-025-0750-M	**0.219**	**5.56**	**0.025**	**0.64**	**0.750**	**19.05**	**0.348**	**8.83**	**0.277**	**7.03**	**3.62**	**16.11**	**9.00**	**1.58**
C0219-025-1000-M	**0.219**	**5.56**	**0.025**	**0.64**	**1.000**	**25.40**	**0.530**	**13.46**	**0.315**	**7.99**	**3.62**	**16.11**	**7.70**	**1.35**
C0219-025-1500-M	**0.219**	**5.56**	**0.025**	**0.64**	**1.500**	**38.10**	**0.746**	**18.94**	**0.473**	**12.02**	**3.62**	**16.11**	**4.80**	**0.84**
D11450*	0.222	5.63	0.025	0.63	0.335	8.50	0.169	4.30	0.161	4.10	3.48	15.49	21.09	3.69
D11460*	0.222	5.63	0.025	0.63	0.492	12.50	0.228	5.80	0.211	5.36	3.48	15.49	13.43	2.35
D11470*	0.222	5.63	0.025	0.63	0.728	18.50	0.323	8.20	0.285	7.25	3.48	15.49	8.86	1.55
D11480*	0.222	5.63	0.025	0.63	1.024	26.00	0.445	11.30	0.385	9.77	3.48	15.49	5.89	1.03
D11490*	0.222	5.63	0.025	0.63	1.516	38.50	0.638	16.20	0.533	13.55	3.48	15.49	4.00	0.70
D11650*	0.228	5.80	0.031	0.80	0.327	8.30	0.220	5.60	0.205	5.20	5.84	25.99	54.46	9.53
D11660*	0.228	5.80	0.031	0.80	0.472	12.00	0.303	7.70	0.268	6.80	5.84	25.99	34.69	6.07
D11670*	0.228	5.80	0.031	0.80	0.689	17.50	0.429	10.90	0.362	9.20	5.84	25.99	22.40	3.92
D11680*	0.228	5.80	0.031	0.80	0.965	24.50	0.594	15.10	0.488	12.40	5.84	25.99	15.26	2.67
D11690*	0.228	5.80	0.031	0.80	1.417	36.00	0.846	21.50	0.677	17.20	5.84	25.99	10.29	1.80
C0234-022-0470-M	**0.234**	**5.94**	**0.022**	**0.56**	**0.470**	**11.94**	**0.217**	**5.51**	**0.132**	**3.36**	**2.38**	**10.59**	**9.40**	**1.65**
C0234-022-0500-M	**0.234**	**5.94**	**0.022**	**0.56**	**0.500**	**12.70**	**0.229**	**5.83**	**0.139**	**3.53**	**2.38**	**10.59**	**8.80**	**1.54**
C0234-022-0590-M	**0.234**	**5.94**	**0.022**	**0.56**	**0.590**	**14.99**	**0.268**	**6.81**	**0.157**	**3.98**	**2.38**	**10.59**	**7.40**	**1.30**
C0234-022-0630-M	**0.234**	**5.94**	**0.022**	**0.56**	**0.630**	**16.00**	**0.242**	**6.15**	**0.182**	**4.63**	**2.33**	**10.35**	**6.00**	**1.05**
C0234-022-0750-M	**0.234**	**5.94**	**0.022**	**0.56**	**0.750**	**19.05**	**0.315**	**8.00**	**0.250**	**6.36**	**1.74**	**7.74**	**4.00**	**0.70**
C0234-022-0810-M	**0.234**	**5.94**	**0.022**	**0.56**	**0.810**	**20.57**	**0.348**	**8.83**	**0.279**	**7.10**	**1.62**	**7.20**	**3.50**	**0.61**
C0234-022-1030-M	**0.234**	**5.94**	**0.022**	**0.56**	**1.030**	**26.16**	**0.428**	**10.87**	**0.338**	**8.58**	**1.69**	**7.50**	**2.80**	**0.49**
C0234-023-0380-M	**0.234**	**5.94**	**0.023**	**0.58**	**0.380**	**9.65**	**0.211**	**5.37**	**0.109**	**2.78**	**2.70**	**11.99**	**16.00**	**2.80**
C0234-023-0410-M	**0.234**	**5.94**	**0.023**	**0.58**	**0.410**	**10.41**	**0.176**	**4.48**	**0.142**	**3.61**	**2.57**	**11.43**	**11.00**	**1.93**
C0234-023-0560-M	**0.234**	**5.94**	**0.023**	**0.58**	**0.560**	**14.22**	**0.241**	**6.12**	**0.194**	**4.93**	**2.26**	**10.07**	**7.10**	**1.24**
C0234-023-0690-M	**0.234**	**5.94**	**0.023**	**0.58**	**0.690**	**17.53**	**0.337**	**8.57**	**0.289**	**7.34**	**1.52**	**6.75**	**4.30**	**0.75**
C0234-023-1000-M	**0.234**	**5.94**	**0.023**	**0.58**	**1.000**	**25.40**	**0.404**	**10.26**	**0.313**	**7.96**	**2.33**	**10.34**	**3.90**	**0.68**
C0234-027-0560-M	**0.234**	**5.94**	**0.027**	**0.69**	**0.560**	**14.22**	**0.326**	**8.27**	**0.192**	**4.89**	**4.22**	**18.76**	**18.00**	**3.15**
C0234-027-0630-M	**0.234**	**5.94**	**0.027**	**0.69**	**0.630**	**16.00**	**0.306**	**7.76**	**0.245**	**6.21**	**4.22**	**18.76**	**13.00**	**2.28**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0218-012-0563-S*	**0.211**	**5.37**	**0.33**	**1.49**	**0.95**	**0.17**
C0218-012-0625-S*	**0.232**	**5.89**	**0.33**	**1.49**	**0.85**	**0.15**
C0218-012-0750-S*	**0.273**	**6.93**	**0.33**	**1.49**	**0.70**	**0.12**
C0218-012-0875-S*	**0.318**	**8.08**	**0.33**	**1.49**	**0.60**	**0.11**
C0218-012-1000-S*	**0.353**	**8.98**	**0.33**	**1.49**	**0.52**	**0.09**
C0218-012-1250-S*	**0.448**	**11.39**	**0.33**	**1.49**	**0.42**	**0.07**
C0218-012-1500-S*	**0.522**	**13.27**	**0.33**	**1.49**	**0.34**	**0.06**
C0218-012-1750-S*	**0.605**	**15.36**	**0.33**	**1.49**	**0.29**	**0.05**
C0218-013-0250-S*	**0.091**	**2.30**	**0.31**	**1.39**	**1.96**	**0.34**
C0218-013-0313-S*	**0.108**	**2.73**	**0.31**	**1.38**	**1.51**	**0.26**
C0218-013-0375-S*	**0.124**	**3.15**	**0.31**	**1.38**	**1.23**	**0.22**
C0218-013-0438-S*	**0.141**	**3.58**	**0.31**	**1.36**	**1.03**	**0.18**
C0218-013-0500-S*	**0.157**	**3.99**	**0.31**	**1.37**	**0.90**	**0.16**
C0218-013-0563-S*	**0.173**	**4.40**	**0.31**	**1.37**	**0.79**	**0.14**
C0218-013-0625-S*	**0.189**	**4.80**	**0.31**	**1.37**	**0.71**	**0.12**
C0218-013-0750-S*	**0.221**	**5.61**	**0.31**	**1.37**	**0.58**	**0.10**
C0218-013-0875-S*	**0.254**	**6.44**	**0.31**	**1.36**	**0.49**	**0.09**
C0218-013-1000-S*	**0.284**	**7.22**	**0.31**	**1.38**	**0.43**	**0.08**
C0218-013-1250-S*	**0.349**	**8.87**	**0.31**	**1.37**	**0.34**	**0.06**
C0218-013-1500-S*	**0.413**	**10.49**	**0.31**	**1.37**	**0.28**	**0.05**
C0218-013-1750-S*	**0.477**	**12.12**	**0.31**	**1.37**	**0.24**	**0.04**
C0219-020-0250-S*	**0.134**	**3.41**	**1.45**	**6.43**	**12.50**	**2.19**
C0219-020-0410-S*	**0.231**	**5.87**	**1.45**	**6.43**	**8.08**	**1.41**
C0219-020-0500-S*	**0.262**	**6.66**	**1.45**	**6.43**	**6.08**	**1.06**
C0219-020-0560-S*	**0.253**	**6.43**	**1.07**	**4.78**	**3.50**	**0.61**
C0219-020-0590-S*	**0.241**	**6.12**	**1.43**	**6.34**	**4.08**	**0.71**
C0219-020-0660-S*	**0.306**	**7.77**	**1.45**	**6.43**	**4.08**	**0.71**
C0219-020-0750-S*	**0.396**	**10.05**	**1.45**	**6.43**	**4.08**	**0.71**
C0219-020-1000-S*	**0.474**	**12.04**	**1.45**	**6.43**	**2.75**	**0.48**
C0219-020-1250-S*	**0.556**	**14.11**	**1.45**	**6.43**	**2.08**	**0.36**
C0219-020-1380-S*	**0.512**	**13.00**	**1.45**	**6.43**	**1.67**	**0.29**
C0219-020-1630-S*	**0.716**	**18.19**	**1.45**	**6.43**	**1.58**	**0.28**
C0219-020-1750-S*	**0.836**	**21.24**	**1.45**	**6.43**	**1.58**	**0.28**
C0219-025-0440-S	**0.279**	**7.08**	**1.29**	**5.74**	**8.00**	**1.40**
C0219-025-0500-S	**0.249**	**6.32**	**2.72**	**12.11**	**10.83**	**1.90**
C0219-025-0590-S	**0.293**	**7.44**	**2.72**	**12.11**	**9.16**	**1.60**
C0219-025-0630-S	**0.349**	**8.87**	**1.80**	**8.01**	**6.41**	**1.12**
C0219-025-0750-S	**0.387**	**9.83**	**2.72**	**12.11**	**7.50**	**1.31**
C0219-025-1000-S	**0.576**	**14.62**	**2.72**	**12.11**	**6.41**	**1.12**
C0219-025-1500-S	**0.819**	**20.81**	**2.72**	**12.11**	**4.00**	**0.70**
D21450*	0.169	4.30	2.90	12.90	17.54	3.07
D21460*	0.228	5.80	2.90	12.90	11.20	1.96
D21470*	0.323	8.20	2.90	12.90	7.37	1.29
D21480*	0.445	11.30	2.90	12.90	4.91	0.86
D21490*	0.638	16.20	2.90	12.90	3.31	0.58
D21650*	0.220	5.60	4.87	21.65	45.37	7.94
D21660*	0.303	7.70	4.87	21.65	28.91	5.06
D21670*	0.429	10.90	4.87	21.65	18.69	3.27
D21680*	0.594	15.10	4.87	21.65	12.69	2.22
D21690*	0.846	21.50	4.87	21.65	8.57	1.50
C0234-022-0470-S	**0.243**	**6.16**	**1.78**	**7.92**	**7.83**	**1.37**
C0234-022-0500-S	**0.257**	**6.53**	**1.78**	**7.92**	**7.33**	**1.28**
C0234-022-0590-S	**0.301**	**7.65**	**1.78**	**7.92**	**6.16**	**1.08**
C0234-022-0630-S	**0.274**	**6.95**	**1.78**	**7.92**	**5.00**	**0.87**
C0234-022-0750-S	**0.315**	**8.00**	**1.45**	**6.45**	**3.33**	**0.58**
C0234-022-0810-S	**0.348**	**8.83**	**1.35**	**6.00**	**2.92**	**0.51**
C0234-022-1030-S	**0.428**	**10.87**	**1.40**	**6.25**	**2.33**	**0.41**
C0234-023-0380-S	**0.228**	**5.80**	**2.02**	**8.99**	**13.33**	**2.33**
C0234-023-0410-S	**0.189**	**4.81**	**2.02**	**8.99**	**9.16**	**1.60**
C0234-023-0560-S	**0.241**	**6.12**	**1.89**	**8.39**	**5.91**	**1.03**
C0234-023-0690-S	**0.337**	**8.57**	**1.26**	**5.62**	**3.58**	**0.63**
C0234-023-1000-S	**0.404**	**10.26**	**1.94**	**8.62**	**3.25**	**0.57**
C0234-027-0560-S	**0.348**	**8.84**	**3.18**	**14.14**	**14.99**	**2.62**
C0234-027-0630-S	**0.337**	**8.55**	**3.18**	**14.14**	**10.83**	**1.90**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0234-027-0690-M	**0.234**	**5.94**	**0.027**	**0.69**	**0.690**	**17.53**	**0.389**	**9.88**	**0.231**	**5.87**	**4.22**	**18.76**	**14.00**	**2.45**
C0234-027-1090-M	**0.234**	**5.94**	**0.027**	**0.69**	**1.090**	**27.69**	**0.556**	**14.13**	**0.485**	**12.32**	**3.04**	**13.53**	**5.70**	**1.00**
C0234-027-1330-M	**0.234**	**5.94**	**0.027**	**0.69**	**1.330**	**33.78**	**0.633**	**16.08**	**0.535**	**13.60**	**3.55**	**15.81**	**5.10**	**0.89**
C0234-028-0310-M	**0.234**	**5.94**	**0.028**	**0.71**	**0.310**	**7.87**	**0.173**	**4.39**	**0.143**	**3.63**	**4.66**	**20.75**	**34.00**	**5.95**
C0234-028-0500-M	**0.234**	**5.94**	**0.028**	**0.71**	**0.500**	**12.70**	**0.255**	**6.46**	**0.215**	**5.47**	**4.66**	**20.75**	**19.00**	**3.33**
C0234-028-0560-M	**0.234**	**5.94**	**0.028**	**0.71**	**0.560**	**14.22**	**0.303**	**7.71**	**0.271**	**6.88**	**3.59**	**15.98**	**14.00**	**2.45**
C0234-028-0810-M	**0.234**	**5.94**	**0.028**	**0.71**	**0.810**	**20.57**	**0.451**	**11.46**	**0.287**	**7.30**	**4.66**	**20.75**	**13.00**	**2.28**
C0234-028-1190-M	**0.234**	**5.94**	**0.028**	**0.71**	**1.190**	**30.23**	**0.585**	**14.86**	**0.502**	**12.76**	**4.05**	**18.03**	**6.70**	**1.17**
C0234-030-0440-M	**0.234**	**5.94**	**0.030**	**0.76**	**0.440**	**11.18**	**0.269**	**6.83**	**0.251**	**6.37**	**3.93**	**17.49**	**23.00**	**4.03**
C0234-030-0630-M	**0.234**	**5.94**	**0.030**	**0.76**	**0.630**	**16.00**	**0.348**	**8.83**	**0.279**	**7.09**	**5.65**	**25.12**	**20.00**	**3.50**
C0234-030-0660-M	**0.234**	**5.94**	**0.030**	**0.76**	**0.660**	**16.76**	**0.378**	**9.59**	**0.279**	**7.09**	**5.65**	**25.12**	**20.00**	**3.50**
C0234-030-0720-M	**0.234**	**5.94**	**0.030**	**0.76**	**0.720**	**18.29**	**0.409**	**10.38**	**0.372**	**9.44**	**4.36**	**19.38**	**14.00**	**2.45**
C0234-030-0810-M	**0.234**	**5.94**	**0.030**	**0.76**	**0.810**	**20.57**	**0.434**	**11.01**	**0.351**	**8.92**	**5.65**	**25.12**	**15.00**	**2.63**
C0234-030-1000-M	**0.234**	**5.94**	**0.030**	**0.76**	**1.000**	**25.40**	**0.608**	**15.43**	**0.565**	**14.36**	**3.37**	**15.01**	**8.60**	**1.51**
C0234-030-1190-M	**0.234**	**5.94**	**0.030**	**0.76**	**1.190**	**30.23**	**0.690**	**17.52**	**0.631**	**16.04**	**3.80**	**16.91**	**7.60**	**1.33**
C0234-030-1220-M	**0.234**	**5.94**	**0.030**	**0.76**	**1.220**	**30.99**	**0.694**	**17.63**	**0.631**	**16.04**	**4.00**	**17.78**	**7.60**	**1.33**
C0234-030-1230-M	**0.234**	**5.94**	**0.030**	**0.76**	**1.230**	**31.24**	**0.620**	**15.74**	**0.538**	**13.66**	**5.55**	**24.70**	**9.10**	**1.59**
C0234-030-2500-M	**0.234**	**5.94**	**0.030**	**0.76**	**2.500**	**63.50**	**1.371**	**34.82**	**0.927**	**23.55**	**5.65**	**25.12**	**5.00**	**0.88**
C0235-021-0500-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.500**	**12.70**	**0.190**	**4.83**	**0.142**	**3.61**	**1.99**	**8.85**	**6.42**	**1.12**
C0235-021-0563-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.563**	**14.29**	**0.210**	**5.34**	**0.155**	**3.95**	**1.99**	**8.85**	**5.65**	**0.99**
C0235-021-0625-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.625**	**15.88**	**0.230**	**5.85**	**0.169**	**4.29**	**1.99**	**8.85**	**5.04**	**0.88**
C0235-021-0688-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.688**	**17.46**	**0.251**	**6.37**	**0.182**	**4.63**	**1.99**	**8.85**	**4.56**	**0.80**
C0235-021-0750-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.750**	**19.05**	**0.271**	**6.88**	**0.196**	**4.97**	**1.99**	**8.85**	**4.15**	**0.73**
C0235-021-0813-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.813**	**20.64**	**0.291**	**7.39**	**0.209**	**5.31**	**1.99**	**8.85**	**3.82**	**0.67**
C0235-021-0875-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.875**	**22.23**	**0.311**	**7.90**	**0.222**	**5.65**	**1.99**	**8.85**	**3.53**	**0.62**
C0235-021-0938-M	**0.235**	**5.97**	**0.021**	**0.53**	**0.938**	**23.81**	**0.331**	**8.42**	**0.236**	**5.99**	**1.99**	**8.85**	**3.28**	**0.57**
C0235-021-1000-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.000**	**25.40**	**0.352**	**8.93**	**0.249**	**6.33**	**1.99**	**8.85**	**3.07**	**0.54**
C0235-021-1125-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.125**	**28.58**	**0.392**	**9.96**	**0.276**	**7.01**	**1.99**	**8.85**	**2.72**	**0.48**
C0235-021-1250-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.250**	**31.75**	**0.432**	**10.98**	**0.303**	**7.68**	**1.99**	**8.85**	**2.43**	**0.43**
C0235-021-1375-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.375**	**34.93**	**0.473**	**12.01**	**0.329**	**8.36**	**1.99**	**8.85**	**2.21**	**0.39**
C0235-021-1500-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.500**	**38.10**	**0.513**	**13.04**	**0.356**	**9.04**	**1.99**	**8.85**	**2.02**	**0.35**
C0235-021-1625-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.625**	**41.28**	**0.554**	**14.06**	**0.383**	**9.72**	**1.99**	**8.85**	**1.86**	**0.32**
C0235-021-1750-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.750**	**44.45**	**0.594**	**15.09**	**0.410**	**10.40**	**1.99**	**8.85**	**1.72**	**0.30**
C0235-021-1875-M	**0.235**	**5.97**	**0.021**	**0.53**	**1.875**	**47.63**	**0.634**	**16.11**	**0.436**	**11.08**	**1.99**	**8.85**	**1.60**	**0.28**
C0235-021-2000-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.000**	**50.80**	**0.675**	**17.14**	**0.463**	**11.76**	**1.99**	**8.85**	**1.50**	**0.26**
C0235-021-2125-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.125**	**53.98**	**0.715**	**18.17**	**0.490**	**12.44**	**1.99**	**8.85**	**1.41**	**0.25**
C0235-021-2250-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.250**	**57.15**	**0.756**	**19.19**	**0.516**	**13.12**	**1.99**	**8.85**	**1.33**	**0.23**
C0235-021-2375-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.375**	**60.33**	**0.796**	**20.22**	**0.543**	**13.80**	**1.99**	**8.85**	**1.26**	**0.22**
C0235-021-2500-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.500**	**63.50**	**0.836**	**21.24**	**0.570**	**14.48**	**1.99**	**8.85**	**1.20**	**0.21**
C0235-021-2625-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.625**	**66.68**	**0.877**	**22.27**	**0.597**	**15.16**	**1.99**	**8.85**	**1.14**	**0.20**
C0235-021-2750-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.750**	**69.85**	**0.917**	**23.30**	**0.623**	**15.84**	**1.99**	**8.85**	**1.09**	**0.19**
C0235-021-2875-M	**0.235**	**5.97**	**0.021**	**0.53**	**2.875**	**73.03**	**0.958**	**24.32**	**0.650**	**16.51**	**1.99**	**8.85**	**1.04**	**0.18**
C0235-021-3000-M	**0.235**	**5.97**	**0.021**	**0.53**	**3.000**	**76.20**	**0.998**	**25.35**	**0.677**	**17.19**	**1.99**	**8.85**	**0.99**	**0.17**
C0235-021-3250-M	**0.235**	**5.97**	**0.021**	**0.53**	**3.250**	**82.55**	**1.079**	**27.40**	**0.730**	**18.55**	**1.99**	**8.85**	**0.92**	**0.16**
C0235-021-3500-M	**0.235**	**5.97**	**0.021**	**0.53**	**3.500**	**88.90**	**1.160**	**29.45**	**0.784**	**19.91**	**1.99**	**8.85**	**0.85**	**0.15**
C0235-021-3750-M	**0.235**	**5.97**	**0.021**	**0.53**	**3.750**	**95.25**	**1.240**	**31.51**	**0.837**	**21.27**	**1.99**	**8.85**	**0.79**	**0.14**
C0235-021-4000-M	**0.235**	**5.97**	**0.021**	**0.53**	**4.000**	**101.60**	**1.321**	**33.56**	**0.891**	**22.63**	**1.99**	**8.85**	**0.74**	**0.13**
C0235-021-4250-M	**0.235**	**5.97**	**0.021**	**0.53**	**4.250**	**107.95**	**1.402**	**35.61**	**0.944**	**23.99**	**1.99**	**8.85**	**0.70**	**0.12**
C0235-022-0500-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.500**	**12.70**	**0.199**	**5.05**	**0.153**	**3.89**	**2.27**	**10.09**	**7.53**	**1.32**
C0235-022-0563-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.563**	**14.29**	**0.220**	**5.59**	**0.168**	**4.26**	**2.27**	**10.09**	**6.62**	**1.16**
C0235-022-0625-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.625**	**15.88**	**0.241**	**6.13**	**0.182**	**4.63**	**2.27**	**10.09**	**5.91**	**1.03**
C0235-022-0688-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.688**	**17.46**	**0.263**	**6.67**	**0.197**	**5.00**	**2.27**	**10.09**	**5.34**	**0.93**
C0235-022-0750-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.750**	**19.05**	**0.284**	**7.21**	**0.212**	**5.38**	**2.27**	**10.09**	**4.86**	**0.85**
C0235-022-0813-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.813**	**20.64**	**0.305**	**7.75**	**0.226**	**5.75**	**2.27**	**10.09**	**4.47**	**0.78**
C0235-022-0875-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.875**	**22.23**	**0.326**	**8.29**	**0.241**	**6.12**	**2.27**	**10.09**	**4.13**	**0.72**
C0235-022-0938-M	**0.235**	**5.97**	**0.022**	**0.56**	**0.938**	**23.81**	**0.348**	**8.83**	**0.256**	**6.49**	**2.27**	**10.09**	**3.84**	**0.67**
C0235-022-1000-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.000**	**25.40**	**0.369**	**9.37**	**0.270**	**6.87**	**2.27**	**10.09**	**3.59**	**0.63**
C0235-022-1125-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.125**	**28.58**	**0.411**	**10.45**	**0.300**	**7.61**	**2.27**	**10.09**	**3.18**	**0.56**
C0235-022-1250-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.250**	**31.75**	**0.454**	**11.53**	**0.329**	**8.35**	**2.27**	**10.09**	**2.85**	**0.50**
C0235-022-1375-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.375**	**34.93**	**0.496**	**12.60**	**0.358**	**9.10**	**2.27**	**10.09**	**2.58**	**0.45**
C0235-022-1500-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.500**	**38.10**	**0.539**	**13.68**	**0.387**	**9.84**	**2.27**	**10.09**	**2.36**	**0.41**
C0235-022-1625-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.625**	**41.28**	**0.581**	**14.76**	**0.417**	**10.59**	**2.27**	**10.09**	**2.17**	**0.38**
C0235-022-1750-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.750**	**44.45**	**0.624**	**15.84**	**0.446**	**11.33**	**2.27**	**10.09**	**2.01**	**0.35**
C0235-022-1875-M	**0.235**	**5.97**	**0.022**	**0.56**	**1.875**	**47.63**	**0.666**	**16.92**	**0.475**	**12.08**	**2.27**	**10.09**	**1.88**	**0.33**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0234-027-0690-S	**0.418**	**10.60**	**3.18**	**14.14**	**11.66**	**2.04**
C0234-027-1090-S	**0.556**	**14.13**	**2.53**	**11.27**	**4.75**	**0.83**
C0234-027-1330-S	**0.633**	**16.08**	**2.96**	**13.17**	**4.25**	**0.74**
C0234-028-0310-S	**0.186**	**4.72**	**3.52**	**15.66**	**28.32**	**4.96**
C0234-028-0500-S	**0.278**	**7.05**	**3.52**	**15.66**	**15.83**	**2.77**
C0234-028-0560-S	**0.303**	**7.71**	**2.99**	**13.31**	**11.66**	**2.04**
C0234-028-0810-S	**0.485**	**12.32**	**3.52**	**15.66**	**10.83**	**1.90**
C0234-028-1190-S	**0.585**	**14.86**	**3.38**	**15.02**	**5.58**	**0.98**
C0234-030-0440-S	**0.269**	**6.83**	**3.28**	**14.57**	**19.16**	**3.35**
C0234-030-0630-S	**0.374**	**9.49**	**4.27**	**18.99**	**16.66**	**2.92**
C0234-030-0660-S	**0.404**	**10.26**	**4.27**	**18.99**	**16.66**	**2.92**
C0234-030-0720-S	**0.409**	**10.38**	**3.63**	**16.14**	**11.66**	**2.04**
C0234-030-0810-S	**0.468**	**11.90**	**4.27**	**18.99**	**12.50**	**2.19**
C0234-030-1000-S	**0.608**	**15.43**	**2.81**	**12.50**	**7.16**	**1.25**
C0234-030-1190-S	**0.690**	**17.52**	**3.17**	**14.09**	**6.33**	**1.11**
C0234-030-1220-S	**0.694**	**17.63**	**3.33**	**14.81**	**6.33**	**1.11**
C0234-030-1230-S	**0.667**	**16.94**	**4.27**	**18.99**	**7.58**	**1.33**
C0234-030-2500-S	**1.475**	**37.47**	**4.27**	**18.99**	**4.17**	**0.73**
C0235-021-0500-S	**0.222**	**5.63**	**1.55**	**6.91**	**5.58**	**0.98**
C0235-021-0563-S	**0.246**	**6.25**	**1.55**	**6.91**	**4.91**	**0.86**
C0235-021-0625-S	**0.271**	**6.87**	**1.55**	**6.91**	**4.39**	**0.77**
C0235-021-0688-S	**0.295**	**7.50**	**1.55**	**6.91**	**3.96**	**0.69**
C0235-021-0750-S	**0.320**	**8.12**	**1.55**	**6.91**	**3.61**	**0.63**
C0235-021-0813-S	**0.344**	**8.74**	**1.55**	**6.91**	**3.32**	**0.58**
C0235-021-0875-S	**0.369**	**9.37**	**1.55**	**6.91**	**3.07**	**0.54**
C0235-021-0938-S	**0.393**	**9.99**	**1.55**	**6.91**	**2.86**	**0.50**
C0235-021-1000-S	**0.418**	**10.61**	**1.55**	**6.91**	**2.67**	**0.47**
C0235-021-1125-S	**0.467**	**11.86**	**1.55**	**6.91**	**2.36**	**0.41**
C0235-021-1250-S	**0.516**	**13.10**	**1.55**	**6.91**	**2.12**	**0.37**
C0235-021-1375-S	**0.565**	**14.35**	**1.55**	**6.91**	**1.92**	**0.34**
C0235-021-1500-S	**0.614**	**15.59**	**1.55**	**6.91**	**1.75**	**0.31**
C0235-021-1625-S	**0.663**	**16.84**	**1.55**	**6.91**	**1.62**	**0.28**
C0235-021-1750-S	**0.712**	**18.08**	**1.55**	**6.91**	**1.50**	**0.26**
C0235-021-1875-S	**0.761**	**19.33**	**1.55**	**6.91**	**1.40**	**0.24**
C0235-021-2000-S	**0.810**	**20.57**	**1.55**	**6.91**	**1.31**	**0.23**
C0235-021-2125-S	**0.859**	**21.82**	**1.55**	**6.91**	**1.23**	**0.21**
C0235-021-2250-S	**0.908**	**23.06**	**1.55**	**6.91**	**1.16**	**0.20**
C0235-021-2375-S	**0.957**	**24.31**	**1.55**	**6.91**	**1.10**	**0.19**
C0235-021-2500-S	**1.006**	**25.55**	**1.55**	**6.91**	**1.04**	**0.18**
C0235-021-2625-S	**1.055**	**26.80**	**1.55**	**6.91**	**0.99**	**0.17**
C0235-021-2750-S	**1.104**	**28.04**	**1.55**	**6.91**	**0.94**	**0.17**
C0235-021-2875-S	**1.153**	**29.29**	**1.55**	**6.91**	**0.90**	**0.16**
C0235-021-3000-S	**1.202**	**30.54**	**1.55**	**6.91**	**0.86**	**0.15**
C0235-021-3250-S	**1.300**	**33.03**	**1.55**	**6.91**	**0.80**	**0.14**
C0235-021-3500-S	**1.398**	**35.52**	**1.55**	**6.91**	**0.74**	**0.13**
C0235-021-3750-S	**1.496**	**38.01**	**1.55**	**6.91**	**0.69**	**0.12**
C0235-021-4000-S	**1.594**	**40.50**	**1.55**	**6.91**	**0.65**	**0.11**
C0235-021-4250-S	**1.692**	**42.99**	**1.55**	**6.91**	**0.61**	**0.11**
C0235-022-0500-S	**0.229**	**5.82**	**1.77**	**7.89**	**6.55**	**1.15**
C0235-022-0563-S	**0.254**	**6.46**	**1.77**	**7.89**	**5.76**	**1.01**
C0235-022-0625-S	**0.280**	**7.11**	**1.77**	**7.89**	**5.14**	**0.90**
C0235-022-0688-S	**0.305**	**7.75**	**1.77**	**7.89**	**4.64**	**0.81**
C0235-022-0750-S	**0.331**	**8.40**	**1.77**	**7.89**	**4.23**	**0.74**
C0235-022-0813-S	**0.356**	**9.04**	**1.77**	**7.89**	**3.89**	**0.68**
C0235-022-0875-S	**0.381**	**9.69**	**1.77**	**7.89**	**3.59**	**0.63**
C0235-022-0938-S	**0.407**	**10.33**	**1.77**	**7.89**	**3.34**	**0.58**
C0235-022-1000-S	**0.432**	**10.98**	**1.77**	**7.89**	**3.12**	**0.55**
C0235-022-1125-S	**0.483**	**12.26**	**1.77**	**7.89**	**2.76**	**0.48**
C0235-022-1250-S	**0.534**	**13.55**	**1.77**	**7.89**	**2.48**	**0.43**
C0235-022-1375-S	**0.584**	**14.84**	**1.77**	**7.89**	**2.24**	**0.39**
C0235-022-1500-S	**0.635**	**16.13**	**1.77**	**7.89**	**2.05**	**0.36**
C0235-022-1625-S	**0.686**	**17.42**	**1.77**	**7.89**	**1.89**	**0.33**
C0235-022-1750-S	**0.737**	**18.71**	**1.77**	**7.89**	**1.75**	**0.31**
C0235-022-1875-S	**0.787**	**20.00**	**1.77**	**7.89**	**1.63**	**0.29**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0235-022-2000-M	0.235	5.97	0.022	0.56	2.000	50.80	0.709	18.00	0.505	12.82	2.27	10.09	1.76	0.31
C0235-022-2125-M	0.235	5.97	0.022	0.56	2.125	53.98	0.751	19.08	0.534	13.56	2.27	10.09	1.65	0.29
C0235-022-2250-M	0.235	5.97	0.022	0.56	2.250	57.15	0.794	20.16	0.563	14.31	2.27	10.09	1.56	0.27
C0235-022-2375-M	0.235	5.97	0.022	0.56	2.375	60.33	0.836	21.23	0.593	15.05	2.27	10.09	1.47	0.26
C0235-022-2500-M	0.235	5.97	0.022	0.56	2.500	63.50	0.878	22.31	0.622	15.80	2.27	10.09	1.40	0.24
C0235-022-2625-M	0.235	5.97	0.022	0.56	2.625	66.68	0.921	23.39	0.651	16.54	2.27	10.09	1.33	0.23
C0235-022-2750-M	0.235	5.97	0.022	0.56	2.750	69.85	0.963	24.47	0.681	17.28	2.27	10.09	1.27	0.22
C0235-022-2875-M	0.235	5.97	0.022	0.56	2.875	73.03	1.006	25.55	0.710	18.03	2.27	10.09	1.21	0.21
C0235-022-3000-M	0.235	5.97	0.022	0.56	3.000	76.20	1.048	26.63	0.739	18.77	2.27	10.09	1.16	0.20
C0235-022-3250-M	0.235	5.97	0.022	0.56	3.250	82.55	1.133	28.78	0.798	20.26	2.27	10.09	1.07	0.19
C0235-022-3500-M	0.235	5.97	0.022	0.56	3.500	88.90	1.218	30.94	0.856	21.75	2.27	10.09	0.99	0.17
C0235-022-3750-M	0.235	5.97	0.022	0.56	3.750	95.25	1.303	33.10	0.915	23.24	2.27	10.09	0.93	0.16
C0235-022-4000-M	0.235	5.97	0.022	0.56	4.000	101.60	1.388	35.26	0.974	24.73	2.27	10.09	0.87	0.15
C0235-022-4250-M	0.235	5.97	0.022	0.56	4.250	107.95	1.473	37.41	1.032	26.22	2.27	10.09	0.82	0.14
C0235-023-0438-M	0.235	5.97	0.023	0.58	0.438	11.11	0.186	4.72	0.148	3.77	2.57	11.42	10.20	1.78
C0235-023-0500-M	0.235	5.97	0.023	0.58	0.500	12.70	0.208	5.28	0.164	4.17	2.57	11.42	8.79	1.54
C0235-023-0563-M	0.235	5.97	0.023	0.58	0.563	14.29	0.230	5.85	0.180	4.58	2.57	11.42	7.73	1.35
C0235-023-0625-M	0.235	5.97	0.023	0.58	0.625	15.88	0.253	6.42	0.196	4.98	2.57	11.42	6.90	1.21
C0235-023-0688-M	0.235	5.97	0.023	0.58	0.688	17.46	0.275	6.98	0.212	5.39	2.57	11.42	6.22	1.09
C0235-023-0750-M	0.235	5.97	0.023	0.58	0.750	19.05	0.297	7.55	0.228	5.79	2.57	11.42	5.67	0.99
C0235-023-0813-M	0.235	5.97	0.023	0.58	0.813	20.64	0.319	8.11	0.244	6.20	2.57	11.42	5.21	0.91
C0235-023-0875-M	0.235	5.97	0.023	0.58	0.875	22.23	0.342	8.68	0.260	6.60	2.57	11.42	4.82	0.84
C0235-023-0938-M	0.235	5.97	0.023	0.58	0.938	23.81	0.364	9.25	0.276	7.01	2.57	11.42	4.48	0.78
C0235-023-1000-M	0.235	5.97	0.023	0.58	1.000	25.40	0.386	9.81	0.292	7.42	2.57	11.42	4.18	0.73
C0235-023-1125-M	0.235	5.97	0.023	0.58	1.125	28.58	0.431	10.95	0.324	8.23	2.57	11.42	3.70	0.65
C0235-023-1250-M	0.235	5.97	0.023	0.58	1.250	31.75	0.476	12.08	0.356	9.04	2.57	11.42	3.32	0.58
C0235-023-1375-M	0.235	5.97	0.023	0.58	1.375	34.93	0.520	13.21	0.388	9.85	2.57	11.42	3.00	0.53
C0235-023-1500-M	0.235	5.97	0.023	0.58	1.500	38.10	0.565	14.34	0.420	10.66	2.57	11.42	2.75	0.48
C0235-023-1625-M	0.235	5.97	0.023	0.58	1.625	41.28	0.609	15.48	0.452	11.47	2.57	11.42	2.53	0.44
C0235-023-1750-M	0.235	5.97	0.023	0.58	1.750	44.45	0.654	16.61	0.484	12.28	2.57	11.42	2.34	0.41
C0235-023-1875-M	0.235	5.97	0.023	0.58	1.875	47.63	0.699	17.74	0.515	13.09	2.57	11.42	2.18	0.38
C0235-023-2000-M	0.235	5.97	0.023	0.58	2.000	50.80	0.743	18.87	0.547	13.90	2.57	11.42	2.04	0.36
C0235-023-2125-M	0.235	5.97	0.023	0.58	2.125	53.98	0.788	20.01	0.579	14.71	2.57	11.42	1.92	0.34
C0235-023-2250-M	0.235	5.97	0.023	0.58	2.250	57.15	0.832	21.14	0.611	15.53	2.57	11.42	1.81	0.32
C0235-023-2375-M	0.235	5.97	0.023	0.58	2.375	60.33	0.877	22.27	0.643	16.34	2.57	11.42	1.71	0.30
C0235-023-2500-M	0.235	5.97	0.023	0.58	2.500	63.50	0.921	23.41	0.675	17.15	2.57	11.42	1.63	0.28
C0235-023-2625-M	0.235	5.97	0.023	0.58	2.625	66.68	0.966	24.54	0.707	17.96	2.57	11.42	1.55	0.27
C0235-023-2750-M	0.235	5.97	0.023	0.58	2.750	69.85	1.011	25.67	0.739	18.77	2.57	11.42	1.48	0.26
C0235-023-2875-M	0.235	5.97	0.023	0.58	2.875	73.03	1.055	26.80	0.771	19.58	2.57	11.42	1.41	0.25
C0235-023-3000-M	0.235	5.97	0.023	0.58	3.000	76.20	1.100	27.94	0.803	20.39	2.57	11.42	1.35	0.24
C0235-023-3250-M	0.235	5.97	0.023	0.58	3.250	82.55	1.189	30.20	0.867	22.01	2.57	11.42	1.25	0.22
C0235-023-3500-M	0.235	5.97	0.023	0.58	3.500	88.90	1.278	32.47	0.930	23.63	2.57	11.42	1.16	0.20
C0235-023-3750-M	0.235	5.97	0.023	0.58	3.750	95.25	1.367	34.73	0.994	25.26	2.57	11.42	1.08	0.19
C0235-023-4000-M	0.235	5.97	0.023	0.58	4.000	101.60	1.457	37.00	1.058	26.88	2.57	11.42	1.01	0.18
C0235-024-0438-M	0.235	5.97	0.024	0.61	0.438	11.11	0.194	4.92	0.158	4.02	2.89	12.87	11.86	2.08
C0235-024-0500-M	0.235	5.97	0.024	0.61	0.500	12.70	0.217	5.51	0.176	4.46	2.89	12.87	10.22	1.79
C0235-024-0563-M	0.235	5.97	0.024	0.61	0.563	14.29	0.240	6.11	0.193	4.90	2.89	12.87	8.98	1.57
C0235-024-0625-M	0.235	5.97	0.024	0.61	0.625	15.88	0.264	6.70	0.210	5.34	2.89	12.87	8.01	1.40
C0235-024-0688-M	0.235	5.97	0.024	0.61	0.688	17.46	0.287	7.30	0.227	5.78	2.89	12.87	7.23	1.26
C0235-024-0750-M	0.235	5.97	0.024	0.61	0.750	19.05	0.311	7.89	0.245	6.22	2.89	12.87	6.58	1.15
C0235-024-0813-M	0.235	5.97	0.024	0.61	0.813	20.64	0.334	8.48	0.262	6.66	2.89	12.87	6.05	1.06
C0235-024-0875-M	0.235	5.97	0.024	0.61	0.875	22.23	0.357	9.08	0.279	7.10	2.89	12.87	5.59	0.98
C0235-024-0938-M	0.235	5.97	0.024	0.61	0.938	23.81	0.381	9.67	0.297	7.54	2.89	12.87	5.20	0.91
C0235-024-1000-M	0.235	5.97	0.024	0.61	1.000	25.40	0.404	10.27	0.314	7.97	2.89	12.87	4.85	0.85
C0235-024-1125-M	0.235	5.97	0.024	0.61	1.125	28.58	0.451	11.45	0.349	8.85	2.89	12.87	4.29	0.75
C0235-024-1250-M	0.235	5.97	0.024	0.61	1.250	31.75	0.498	12.64	0.383	9.73	2.89	12.87	3.85	0.67
C0235-024-1375-M	0.235	5.97	0.024	0.61	1.375	34.93	0.544	13.83	0.418	10.61	2.89	12.87	3.48	0.61
C0235-024-1500-M	0.235	5.97	0.024	0.61	1.500	38.10	0.591	15.02	0.452	11.49	2.89	12.87	3.18	0.56
C0235-024-1625-M	0.235	5.97	0.024	0.61	1.625	41.28	0.638	16.20	0.487	12.37	2.89	12.87	2.93	0.51
C0235-024-1750-M	0.235	5.97	0.024	0.61	1.750	44.45	0.685	17.39	0.522	13.25	2.89	12.87	2.72	0.48
C0235-024-1875-M	0.235	5.97	0.024	0.61	1.875	47.63	0.732	18.58	0.556	14.13	2.89	12.87	2.53	0.44
C0235-024-2000-M	0.235	5.97	0.024	0.61	2.000	50.80	0.778	19.77	0.591	15.01	2.89	12.87	2.37	0.41
C0235-024-2125-M	0.235	5.97	0.024	0.61	2.125	53.98	0.825	20.96	0.625	15.89	2.89	12.87	2.23	0.39
C0235-024-2250-M	0.235	5.97	0.024	0.61	2.250	57.15	0.872	22.14	0.660	16.77	2.89	12.87	2.10	0.37

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0235-022-2000-S	0.838	21.29	1.77	7.89	1.53	0.27
C0235-022-2125-S	0.889	22.58	1.77	7.89	1.44	0.25
C0235-022-2250-S	0.940	23.86	1.77	7.89	1.35	0.24
C0235-022-2375-S	0.990	25.15	1.77	7.89	1.28	0.22
C0235-022-2500-S	1.041	26.44	1.77	7.89	1.22	0.21
C0235-022-2625-S	1.092	27.73	1.77	7.89	1.16	0.20
C0235-022-2750-S	1.143	29.02	1.77	7.89	1.10	0.19
C0235-022-2875-S	1.193	30.31	1.77	7.89	1.06	0.18
C0235-022-3000-S	1.244	31.60	1.77	7.89	1.01	0.18
C0235-022-3250-S	1.346	34.18	1.77	7.89	0.93	0.16
C0235-022-3500-S	1.447	36.75	1.77	7.89	0.86	0.15
C0235-022-3750-S	1.549	39.33	1.77	7.89	0.81	0.14
C0235-022-4000-S	1.650	41.91	1.77	7.89	0.76	0.13
C0235-022-4250-S	1.751	44.49	1.77	7.89	0.71	0.12
C0235-023-0438-S	0.211	5.35	2.01	8.95	8.87	1.55
C0235-023-0500-S	0.237	6.01	2.01	8.95	7.65	1.34
C0235-023-0563-S	0.263	6.68	2.01	8.95	6.72	1.18
C0235-023-0625-S	0.289	7.35	2.01	8.95	6.00	1.05
C0235-023-0688-S	0.316	8.02	2.01	8.95	5.41	0.95
C0235-023-0750-S	0.342	8.68	2.01	8.95	4.93	0.86
C0235-023-0813-S	0.368	9.35	2.01	8.95	4.53	0.79
C0235-023-0875-S	0.394	10.02	2.01	8.95	4.19	0.73
C0235-023-0938-S	0.421	10.68	2.01	8.95	3.89	0.68
C0235-023-1000-S	0.447	11.35	2.01	8.95	3.64	0.64
C0235-023-1125-S	0.499	12.69	2.01	8.95	3.22	0.56
C0235-023-1250-S	0.552	14.02	2.01	8.95	2.88	0.50
C0235-023-1375-S	0.605	15.35	2.01	8.95	2.61	0.46
C0235-023-1500-S	0.657	16.69	2.01	8.95	2.39	0.42
C0235-023-1625-S	0.710	18.02	2.01	8.95	2.20	0.38
C0235-023-1750-S	0.762	19.36	2.01	8.95	2.04	0.36
C0235-023-1875-S	0.815	20.69	2.01	8.95	1.90	0.33
C0235-023-2000-S	0.867	22.03	2.01	8.95	1.78	0.31
C0235-023-2125-S	0.920	23.36	2.01	8.95	1.67	0.29
C0235-023-2250-S	0.972	24.69	2.01	8.95	1.58	0.28
C0235-023-2375-S	1.025	26.03	2.01	8.95	1.49	0.26
C0235-023-2500-S	1.077	27.36	2.01	8.95	1.42	0.25
C0235-023-2625-S	1.130	28.70	2.01	8.95	1.35	0.24
C0235-023-2750-S	1.182	30.03	2.01	8.95	1.28	0.22
C0235-023-2875-S	1.235	31.37	2.01	8.95	1.23	0.21
C0235-023-3000-S	1.287	32.70	2.01	8.95	1.18	0.21
C0235-023-3250-S	1.392	35.37	2.01	8.95	1.08	0.19
C0235-023-3500-S	1.498	38.04	2.01	8.95	1.01	0.18
C0235-023-3750-S	1.603	40.71	2.01	8.95	0.94	0.16
C0235-023-4000-S	1.708	43.38	2.01	8.95	0.88	0.15
C0235-024-0438-S	0.217	5.52	2.27	10.10	10.32	1.81
C0235-024-0500-S	0.245	6.21	2.27	10.10	8.89	1.56
C0235-024-0563-S	0.272	6.90	2.27	10.10	7.81	1.37
C0235-024-0625-S	0.299	7.59	2.27	10.10	6.96	1.22
C0235-024-0688-S	0.326	8.28	2.27	10.10	6.28	1.10
C0235-024-0750-S	0.353	8.98	2.27	10.10	5.72	1.00
C0235-024-0813-S	0.381	9.67	2.27	10.10	5.26	0.92
C0235-024-0875-S	0.408	10.36	2.27	10.10	4.86	0.85
C0235-024-0938-S	0.435	11.05	2.27	10.10	4.52	0.79
C0235-024-1000-S	0.462	11.74	2.27	10.10	4.22	0.74
C0235-024-1125-S	0.516	13.12	2.27	10.10	3.73	0.65
C0235-024-1250-S	0.571	14.50	2.27	10.10	3.34	0.59
C0235-024-1375-S	0.625	15.88	2.27	10.10	3.03	0.53
C0235-024-1500-S	0.680	17.26	2.27	10.10	2.77	0.48
C0235-024-1625-S	0.734	18.64	2.27	10.10	2.55	0.45
C0235-024-1750-S	0.788	20.02	2.27	10.10	2.36	0.41
C0235-024-1875-S	0.843	21.41	2.27	10.10	2.20	0.38
C0235-024-2000-S	0.897	22.79	2.27	10.10	2.06	0.36
C0235-024-2125-S	0.951	24.17	2.27	10.10	1.94	0.34
C0235-024-2250-S	1.006	25.55	2.27	10.10	1.83	0.32

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

(OD) 0.235 - 0.235

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0235-024-2375-M	0.235	5.97	0.024	0.61	2.375	60.33	0.919	23.33	0.695	17.64	2.89	12.87	1.99	0.35	**C0235-024-2375-S**	1.060	26.93	2.27	10.10	1.73	0.30
C0235-024-2500-M	0.235	5.97	0.024	0.61	2.500	63.50	0.965	24.52	0.729	18.52	2.89	12.87	1.89	0.33	**C0235-024-2500-S**	1.115	28.31	2.27	10.10	1.64	0.29
C0235-024-2625-M	0.235	5.97	0.024	0.61	2.625	66.68	1.012	25.71	0.764	19.40	2.89	12.87	1.79	0.31	**C0235-024-2625-S**	1.169	29.69	2.27	10.10	1.56	0.27
C0235-024-2750-M	0.235	5.97	0.024	0.61	2.750	69.85	1.059	26.90	0.798	20.28	2.89	12.87	1.71	0.30	**C0235-024-2750-S**	1.223	31.07	2.27	10.10	1.49	0.26
C0235-024-2875-M	0.235	5.97	0.024	0.61	2.875	73.03	1.106	28.08	0.833	21.16	2.89	12.87	1.64	0.29	**C0235-024-2875-S**	1.278	32.45	2.27	10.10	1.42	0.25
C0235-024-3000-M	0.235	5.97	0.024	0.61	3.000	76.20	1.152	29.27	0.868	22.04	2.89	12.87	1.57	0.27	**C0235-024-3000-S**	1.332	33.84	2.27	10.10	1.36	0.24
C0235-024-3250-M	0.235	5.97	0.024	0.61	3.250	82.55	1.246	31.65	0.937	23.80	2.89	12.87	1.44	0.25	**C0235-024-3250-S**	1.441	36.60	2.27	10.10	1.26	0.22
C0235-024-3500-M	0.235	5.97	0.024	0.61	3.500	88.90	1.339	34.02	1.006	25.56	2.89	12.87	1.34	0.23	**C0235-024-3500-S**	1.550	39.36	2.27	10.10	1.16	0.20
C0235-024-3750-M	0.235	5.97	0.024	0.61	3.750	95.25	1.433	36.40	1.075	27.31	2.89	12.87	1.25	0.22	**C0235-024-3750-S**	1.658	42.12	2.27	10.10	1.09	0.19
C0235-024-4000-M	0.235	5.97	0.024	0.61	4.000	101.60	1.527	38.77	1.145	29.07	2.89	12.87	1.17	0.20	**C0235-024-4000-S**	1.767	44.88	2.27	10.10	1.02	0.18
C0235-026-0438-M	0.235	5.97	0.026	0.66	0.438	11.11	0.210	5.33	0.178	4.53	3.62	16.08	15.89	2.78	**C0235-026-0438-S**	0.231	5.88	2.85	12.66	13.82	2.42
C0235-026-0500-M	0.235	5.97	0.026	0.66	0.500	12.70	0.236	5.98	0.198	5.04	3.62	16.08	13.67	2.39	**C0235-026-0500-S**	0.261	6.62	2.85	12.66	11.89	2.08
C0235-026-0563-M	0.235	5.97	0.026	0.66	0.563	14.29	0.261	6.63	0.218	5.55	3.62	16.08	12.00	2.10	**C0235-026-0563-S**	0.290	7.36	2.85	12.66	10.43	1.83
C0235-026-0625-M	0.235	5.97	0.026	0.66	0.625	15.88	0.287	7.28	0.238	6.05	3.62	16.08	10.69	1.87	**C0235-026-0625-S**	0.319	8.10	2.85	12.66	9.29	1.63
C0235-026-0688-M	0.235	5.97	0.026	0.66	0.688	17.46	0.312	7.93	0.258	6.56	3.62	16.08	9.64	1.69	**C0235-026-0688-S**	0.348	8.84	2.85	12.66	8.38	1.47
C0235-026-0750-M	0.235	5.97	0.026	0.66	0.750	19.05	0.338	8.58	0.278	7.07	3.62	16.08	8.77	1.54	**C0235-026-0750-S**	0.377	9.57	2.85	12.66	7.63	1.34
C0235-026-0813-M	0.235	5.97	0.026	0.66	0.813	20.64	0.364	9.23	0.299	7.58	3.62	16.08	8.05	1.41	**C0235-026-0813-S**	0.406	10.31	2.85	12.66	7.00	1.23
C0235-026-0875-M	0.235	5.97	0.026	0.66	0.875	22.23	0.389	9.88	0.319	8.09	3.62	16.08	7.44	1.30	**C0235-026-0875-S**	0.435	11.05	2.85	12.66	6.47	1.13
C0235-026-0938-M	0.235	5.97	0.026	0.66	0.938	23.81	0.415	10.53	0.339	8.60	3.62	16.08	6.92	1.21	**C0235-026-0938-S**	0.464	11.79	2.85	12.66	6.01	1.05
C0235-026-1000-M	0.235	5.97	0.026	0.66	1.000	25.40	0.440	11.18	0.359	9.11	3.62	16.08	6.46	1.13	**C0235-026-1000-S**	0.493	12.53	2.85	12.66	5.62	0.98
C0235-026-1125-M	0.235	5.97	0.026	0.66	1.125	28.58	0.492	12.49	0.399	10.13	3.62	16.08	5.71	1.00	**C0235-026-1125-S**	0.552	14.01	2.85	12.66	4.96	0.87
C0235-026-1250-M	0.235	5.97	0.026	0.66	1.250	31.75	0.543	13.79	0.439	11.15	3.62	16.08	5.11	0.89	**C0235-026-1250-S**	0.610	15.49	2.85	12.66	4.45	0.78
C0235-026-1375-M	0.235	5.97	0.026	0.66	1.375	34.93	0.594	15.09	0.479	12.17	3.62	16.08	4.63	0.81	**C0235-026-1375-S**	0.668	16.97	2.85	12.66	4.03	0.70
C0235-026-1500-M	0.235	5.97	0.026	0.66	1.500	38.10	0.645	16.39	0.519	13.18	3.62	16.08	4.23	0.74	**C0235-026-1500-S**	0.726	18.44	2.85	12.66	3.68	0.64
C0235-026-1625-M	0.235	5.97	0.026	0.66	1.625	41.28	0.696	17.69	0.559	14.20	3.62	16.08	3.89	0.68	**C0235-026-1625-S**	0.784	19.92	2.85	12.66	3.39	0.59
C0235-026-1750-M	0.235	5.97	0.026	0.66	1.750	44.45	0.748	18.99	0.599	15.22	3.62	16.08	3.61	0.63	**C0235-026-1750-S**	0.843	21.40	2.85	12.66	3.14	0.55
C0235-026-1875-M	0.235	5.97	0.026	0.66	1.875	47.63	0.799	20.29	0.639	16.24	3.62	16.08	3.36	0.59	**C0235-026-1875-S**	0.901	22.88	2.85	12.66	2.92	0.51
C0235-026-2000-M	0.235	5.97	0.026	0.66	2.000	50.80	0.850	21.59	0.679	17.26	3.62	16.08	3.14	0.55	**C0235-026-2000-S**	0.959	24.36	2.85	12.66	2.73	0.48
C0235-026-2125-M	0.235	5.97	0.026	0.66	2.125	53.98	0.901	22.89	0.719	18.28	3.62	16.08	2.95	0.52	**C0235-026-2125-S**	1.017	25.83	2.85	12.66	2.57	0.45
C0235-026-2250-M	0.235	5.97	0.026	0.66	2.250	57.15	0.952	24.19	0.760	19.29	3.62	16.08	2.79	0.49	**C0235-026-2250-S**	1.075	27.31	2.85	12.66	2.42	0.42
C0235-026-2375-M	0.235	5.97	0.026	0.66	2.375	60.33	1.004	25.49	0.800	20.31	3.62	16.08	2.64	0.46	**C0235-026-2375-S**	1.133	28.79	2.85	12.66	2.29	0.40
C0235-026-2500-M	0.235	5.97	0.026	0.66	2.500	63.50	1.055	26.79	0.840	21.33	3.62	16.08	2.50	0.44	**C0235-026-2500-S**	1.192	30.27	2.85	12.66	2.18	0.38
C0235-026-2625-M	0.235	5.97	0.026	0.66	2.625	66.68	1.106	28.09	0.880	22.35	3.62	16.08	2.38	0.42	**C0235-026-2625-S**	1.250	31.75	2.85	12.66	2.07	0.36
C0235-026-2750-M	0.235	5.97	0.026	0.66	2.750	69.85	1.157	29.39	0.920	23.37	3.62	16.08	2.27	0.40	**C0235-026-2750-S**	1.308	33.23	2.85	12.66	1.97	0.35
C0235-026-2875-M	0.235	5.97	0.026	0.66	2.875	73.03	1.208	30.69	0.960	24.39	3.62	16.08	2.17	0.38	**C0235-026-2875-S**	1.366	34.70	2.85	12.66	1.89	0.33
C0235-026-3000-M	0.235	5.97	0.026	0.66	3.000	76.20	1.260	31.99	1.000	25.40	3.62	16.08	2.08	0.36	**C0235-026-3000-S**	1.424	36.18	2.85	12.66	1.81	0.32
C0235-026-3250-M	0.235	5.97	0.026	0.66	3.250	82.55	1.362	34.60	1.080	27.44	3.62	16.08	1.92	0.34	**C0235-026-3250-S**	1.541	39.14	2.85	12.66	1.67	0.29
C0235-026-3500-M	0.235	5.97	0.026	0.66	3.500	88.90	1.464	37.20	1.161	29.48	3.62	16.08	1.78	0.31	**C0235-026-3500-S**	1.657	42.09	2.85	12.66	1.55	0.27
C0235-026-3750-M	0.235	5.97	0.026	0.66	3.750	95.25	1.567	39.80	1.241	31.51	3.62	16.08	1.66	0.29	**C0235-026-3750-S**	1.774	45.05	2.85	12.66	1.44	0.25
C0235-026-4000-M	0.235	5.97	0.026	0.66	4.000	101.60	1.669	42.40	1.321	33.55	3.62	16.08	1.55	0.27	**C0235-026-4000-S**	1.890	48.01	2.85	12.66	1.35	0.24
C0235-029-0375-M	0.235	5.97	0.029	0.74	0.375	9.53	0.205	5.21	0.184	4.67	4.90	21.78	28.81	5.04	**C0235-029-0375-S**	0.221	5.60	3.87	17.20	25.05	4.38
C0235-029-0438-M	0.235	5.97	0.029	0.74	0.438	11.11	0.234	5.94	0.208	5.28	4.90	21.78	24.07	4.21	**C0235-029-0438-S**	0.253	6.42	3.87	17.20	20.93	3.66
C0235-029-0500-M	0.235	5.97	0.029	0.74	0.500	12.70	0.263	6.68	0.232	5.90	4.90	21.78	20.66	3.62	**C0235-029-0500-S**	0.285	7.23	3.87	17.20	17.97	3.14
C0235-029-0563-M	0.235	5.97	0.029	0.74	0.563	14.29	0.292	7.42	0.257	6.52	4.90	21.78	18.10	3.17	**C0235-029-0563-S**	0.317	8.05	3.87	17.20	15.74	2.75
C0235-029-0625-M	0.235	5.97	0.029	0.74	0.625	15.88	0.321	8.15	0.281	7.13	4.90	21.78	16.11	2.82	**C0235-029-0625-S**	0.349	8.86	3.87	17.20	14.01	2.45
C0235-029-0688-M	0.235	5.97	0.029	0.74	0.688	17.46	0.350	8.89	0.305	7.75	4.90	21.78	14.51	2.54	**C0235-029-0688-S**	0.381	9.68	3.87	17.20	12.62	2.21
C0235-029-0750-M	0.235	5.97	0.029	0.74	0.750	19.05	0.379	9.63	0.329	8.36	4.90	21.78	13.20	2.31	**C0235-029-0750-S**	0.413	10.49	3.87	17.20	11.48	2.01
C0235-029-0813-M	0.235	5.97	0.029	0.74	0.813	20.64	0.408	10.36	0.353	8.98	4.90	21.78	12.11	2.12	**C0235-029-0813-S**	0.445	11.30	3.87	17.20	10.53	1.84
C0235-029-0875-M	0.235	5.97	0.029	0.74	0.875	22.23	0.437	11.10	0.378	9.59	4.90	21.78	11.18	1.96	**C0235-029-0875-S**	0.477	12.12	3.87	17.20	9.72	1.70
C0235-029-0938-M	0.235	5.97	0.029	0.74	0.938	23.81	0.466	11.84	0.402	10.21	4.90	21.78	10.39	1.82	**C0235-029-0938-S**	0.509	12.93	3.87	17.20	9.03	1.58
C0235-029-1000-M	0.235	5.97	0.029	0.74	1.000	25.40	0.495	12.57	0.426	10.82	4.90	21.78	9.70	1.70	**C0235-029-1000-S**	0.541	13.75	3.87	17.20	8.43	1.48
C0235-029-1125-M	0.235	5.97	0.029	0.74	1.125	28.58	0.553	14.05	0.475	12.06	4.90	21.78	8.56	1.50	**C0235-029-1125-S**	0.605	15.38	3.87	17.20	7.44	1.30
C0235-029-1250-M	0.235	5.97	0.029	0.74	1.250	31.75	0.611	15.52	0.523	13.29	4.90	21.78	7.66	1.34	**C0235-029-1250-S**	0.670	17.01	3.87	17.20	6.66	1.17
C0235-029-1375-M	0.235	5.97	0.029	0.74	1.375	34.93	0.669	16.99	0.572	14.52	4.90	21.78	6.94	1.21	**C0235-029-1375-S**	0.734	18.63	3.87	17.20	6.03	1.06
C0235-029-1500-M	0.235	5.97	0.029	0.74	1.500	38.10	0.727	18.46	0.620	15.75	4.90	21.78	6.33	1.11	**C0235-029-1500-S**	0.798	20.26	3.87	17.20	5.51	0.96
C0235-029-1625-M	0.235	5.97	0.029	0.74	1.625	41.28	0.785	19.94	0.669	16.98	4.90	21.78	5.83	1.02	**C0235-029-1625-S**	0.862	21.89	3.87	17.20	5.07	0.89
C0235-029-1750-M	0.235	5.97	0.029	0.74	1.750	44.45	0.843	21.41	0.717	18.21	4.90	21.78	5.40	0.94	**C0235-029-1750-S**	0.926	23.52	3.87	17.20	4.69	0.82
C0235-029-1875-M	0.235	5.97	0.029	0.74	1.875	47.63	0.901	22.88	0.765	19.44	4.90	21.78	5.03	0.88	**C0235-029-1875-S**	0.990	25.15	3.87	17.20	4.37	0.76
C0235-029-2000-M	0.235	5.97	0.029	0.74	2.000	50.80	0.959	24.36	0.814	20.67	4.90	21.78	4.70	0.82	**C0235-029-2000-S**	1.054	26.78	3.87	17.20	4.09	0.72
C0235-029-2125-M	0.235	5.97	0.029	0.74	2.125	53.98	1.017	25.83	0.862	21.90	4.90	21.78	4.42	0.77	**C0235-029-2125-S**	1.118	28.41	3.87	17.20	3.84	0.67
C0235-029-2250-M	0.235	5.97	0.029	0.74	2.250	57.15	1.075	27.30	0.911	23.14	4.90	21.78	4.17	0.73	**C0235-029-2250-S**	1.183	30.04	3.87	17.20	3.62	0.63
C0235-029-2375-M	0.235	5.97	0.029	0.74	2.375	60.33	1.133	28.77	0.959	24.37	4.90	21.78	3.94	0.69	**C0235-029-2375-S**	1.247	31.66	3.87	17.20	3.43	0.60
C0235-029-2500-M	0.235	5.97	0.029	0.74	2.500	63.50	1.191	30.25	1.008	25.60	4.90	21.78	3.74	0.65	**C0235-029-2500-S**	1.311	33.29	3.87	17.20	3.25	0.57
C0235-029-2625-M	0.235	5.97	0.029	0.74	2.625	66.68	1.249	31.72	1.056	26.83	4.90	21.78	3.56	0.62	**C0235-029-2625-S**	1.375	34.92	3.87	17.20	3.09	0.54

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0235-029-2750-M	0.235	5.97	0.029	0.74	2.750	69.85	1.307	33.19	1.105	28.06	4.90	21.78	3.39	0.59
C0235-029-2875-M	0.235	5.97	0.029	0.74	2.875	73.03	1.365	34.67	1.153	29.29	4.90	21.78	3.24	0.57
C0235-029-3000-M	0.235	5.97	0.029	0.74	3.000	76.20	1.423	36.14	1.202	30.52	4.90	21.78	3.10	0.54
C0235-029-3250-M	0.235	5.97	0.029	0.74	3.250	82.55	1.539	39.08	1.299	32.98	4.90	21.78	2.86	0.50
C0235-029-3500-M	0.235	5.97	0.029	0.74	3.500	88.90	1.655	42.03	1.396	35.45	4.90	21.78	2.65	0.46
C0235-029-3750-M	0.235	5.97	0.029	0.74	3.750	95.25	1.771	44.98	1.492	37.91	4.90	21.78	2.47	0.43
C0235-029-4000-M	0.235	5.97	0.029	0.74	4.000	101.60	1.887	47.92	1.589	40.37	4.90	21.78	2.32	0.41
C0235-030-0375-M	0.235	5.97	0.030	0.76	0.375	9.53	0.212	5.38	0.192	4.88	5.38	23.92	32.96	5.77
C0235-030-0438-M	0.235	5.97	0.030	0.76	0.438	11.11	0.242	6.15	0.218	5.53	5.38	23.92	27.50	4.81
C0235-030-0500-M	0.235	5.97	0.030	0.76	0.500	12.70	0.272	6.91	0.243	6.18	5.38	23.92	23.60	4.13
C0235-030-0563-M	0.235	5.97	0.030	0.76	0.563	14.29	0.302	7.68	0.269	6.83	5.38	23.92	20.66	3.62
C0235-030-0625-M	0.235	5.97	0.030	0.76	0.625	15.88	0.332	8.44	0.295	7.49	5.38	23.92	18.38	3.22
C0235-030-0688-M	0.235	5.97	0.030	0.76	0.688	17.46	0.362	9.21	0.320	8.14	5.38	23.92	16.54	2.90
C0235-030-0750-M	0.235	5.97	0.030	0.76	0.750	19.05	0.393	9.97	0.346	8.79	5.38	23.92	15.05	2.63
C0235-030-0813-M	0.235	5.97	0.030	0.76	0.813	20.64	0.423	10.74	0.372	9.44	5.38	23.92	13.80	2.41
C0235-030-0875-M	0.235	5.97	0.030	0.76	0.875	22.23	0.453	11.50	0.397	10.09	5.38	23.92	12.74	2.23
C0235-030-0938-M	0.235	5.97	0.030	0.76	0.938	23.81	0.483	12.27	0.423	10.74	5.38	23.92	11.83	2.07
C0235-030-1000-M	0.235	5.97	0.030	0.76	1.000	25.40	0.513	13.03	0.448	11.39	5.38	23.92	11.04	1.93
C0235-030-1125-M	0.235	5.97	0.030	0.76	1.125	28.58	0.573	14.56	0.500	12.69	5.38	23.92	9.75	1.71
C0235-030-1250-M	0.235	5.97	0.030	0.76	1.250	31.75	0.634	16.09	0.551	14.00	5.38	23.92	8.72	1.53
C0235-030-1375-M	0.235	5.97	0.030	0.76	1.375	34.93	0.694	17.62	0.602	15.30	5.38	23.92	7.90	1.38
C0235-030-1500-M	0.235	5.97	0.030	0.76	1.500	38.10	0.754	19.15	0.654	16.60	5.38	23.92	7.21	1.26
C0235-030-1625-M	0.235	5.97	0.030	0.76	1.625	41.28	0.814	20.68	0.705	17.90	5.38	23.92	6.63	1.16
C0235-030-1750-M	0.235	5.97	0.030	0.76	1.750	44.45	0.875	22.21	0.756	19.20	5.38	23.92	6.14	1.08
C0235-030-1875-M	0.235	5.97	0.030	0.76	1.875	47.63	0.935	23.74	0.807	20.51	5.38	23.92	5.72	1.00
C0235-030-2000-M	0.235	5.97	0.030	0.76	2.000	50.80	0.995	25.27	0.859	21.81	5.38	23.92	5.35	0.94
C0235-030-2125-M	0.235	5.97	0.030	0.76	2.125	53.98	1.055	26.80	0.910	23.11	5.38	23.92	5.03	0.88
C0235-030-2250-M	0.235	5.97	0.030	0.76	2.250	57.15	1.116	28.33	0.961	24.41	5.38	23.92	4.74	0.83
C0235-030-2375-M	0.235	5.97	0.030	0.76	2.375	60.33	1.176	29.86	1.012	25.71	5.38	23.92	4.49	0.78
C0235-030-2500-M	0.235	5.97	0.030	0.76	2.500	63.50	1.236	31.39	1.064	27.02	5.38	23.92	4.26	0.74
C0235-030-2625-M	0.235	5.97	0.030	0.76	2.625	66.68	1.296	32.93	1.115	28.32	5.38	23.92	4.05	0.71
C0235-030-2750-M	0.235	5.97	0.030	0.76	2.750	69.85	1.357	34.46	1.166	29.62	5.38	23.92	3.86	0.68
C0235-030-2875-M	0.235	5.97	0.030	0.76	2.875	73.03	1.417	35.99	1.217	30.92	5.38	23.92	3.69	0.65
C0235-030-3000-M	0.235	5.97	0.030	0.76	3.000	76.20	1.477	37.52	1.269	32.22	5.38	23.92	3.53	0.62
C0235-030-3250-M	0.235	5.97	0.030	0.76	3.250	82.55	1.598	40.58	1.371	34.83	5.38	23.92	3.25	0.57
C0235-030-3500-M	0.235	5.97	0.030	0.76	3.500	88.90	1.718	43.64	1.474	37.43	5.38	23.92	3.02	0.53
C0235-030-3750-M	0.235	5.97	0.030	0.76	3.750	95.25	1.838	46.70	1.576	40.04	5.38	23.92	2.81	0.49
C0235-030-4000-M	0.235	5.97	0.030	0.76	4.000	101.60	1.959	49.76	1.679	42.64	5.38	23.92	2.64	0.46
C0235-032-0375-M	0.235	5.97	0.032	0.81	0.375	9.53	0.225	5.72	0.208	5.30	6.43	28.58	42.85	7.50
C0235-032-0438-M	0.235	5.97	0.032	0.81	0.438	11.11	0.257	6.54	0.237	6.02	6.43	28.58	35.68	6.24
C0235-032-0500-M	0.235	5.97	0.032	0.81	0.500	12.70	0.290	7.36	0.265	6.74	6.43	28.58	30.56	5.35
C0235-032-0563-M	0.235	5.97	0.032	0.81	0.563	14.29	0.322	8.18	0.294	7.46	6.43	28.58	26.73	4.68
C0235-032-0625-M	0.235	5.97	0.032	0.81	0.625	15.88	0.354	9.00	0.322	8.18	6.43	28.58	23.75	4.16
C0235-032-0688-M	0.235	5.97	0.032	0.81	0.688	17.46	0.387	9.83	0.350	8.90	6.43	28.58	21.37	3.74
C0235-032-0750-M	0.235	5.97	0.032	0.81	0.750	19.05	0.419	10.65	0.379	9.62	6.43	28.58	19.43	3.40
C0235-032-0813-M	0.235	5.97	0.032	0.81	0.813	20.64	0.452	11.47	0.407	10.34	6.43	28.58	17.80	3.12
C0235-032-0875-M	0.235	5.97	0.032	0.81	0.875	22.23	0.484	12.29	0.436	11.07	6.43	28.58	16.43	2.88
C0235-032-0938-M	0.235	5.97	0.032	0.81	0.938	23.81	0.516	13.11	0.464	11.79	6.43	28.58	15.26	2.67
C0235-032-1000-M	0.235	5.97	0.032	0.81	1.000	25.40	0.549	13.94	0.492	12.51	6.43	28.58	14.24	2.49
C0235-032-1125-M	0.235	5.97	0.032	0.81	1.125	28.58	0.613	15.58	0.549	13.95	6.43	28.58	12.56	2.20
C0235-032-1250-M	0.235	5.97	0.032	0.81	1.250	31.75	0.678	17.22	0.606	15.39	6.43	28.58	11.24	1.97
C0235-032-1375-M	0.235	5.97	0.032	0.81	1.375	34.93	0.743	18.87	0.663	16.84	6.43	28.58	10.17	1.78
C0235-032-1500-M	0.235	5.97	0.032	0.81	1.500	38.10	0.808	20.51	0.720	18.28	6.43	28.58	9.28	1.62
C0235-032-1625-M	0.235	5.97	0.032	0.81	1.625	41.28	0.872	22.16	0.776	19.72	6.43	28.58	8.54	1.49
C0235-032-1750-M	0.235	5.97	0.032	0.81	1.750	44.45	0.937	23.80	0.833	21.16	6.43	28.58	7.90	1.38
C0235-032-1875-M	0.235	5.97	0.032	0.81	1.875	47.63	1.002	25.44	0.890	22.61	6.43	28.58	7.36	1.29
C0235-032-2000-M	0.235	5.97	0.032	0.81	2.000	50.80	1.066	27.09	0.947	24.05	6.43	28.58	6.88	1.20
C0235-032-2125-M	0.235	5.97	0.032	0.81	2.125	53.98	1.131	28.73	1.004	25.49	6.43	28.58	6.47	1.13
C0235-032-2250-M	0.235	5.97	0.032	0.81	2.250	57.15	1.196	30.37	1.060	26.93	6.43	28.58	6.10	1.07
C0235-032-2375-M	0.235	5.97	0.032	0.81	2.375	60.33	1.261	32.02	1.117	28.37	6.43	28.58	5.77	1.01
C0235-032-2500-M	0.235	5.97	0.032	0.81	2.500	63.50	1.325	33.66	1.174	29.82	6.43	28.58	5.47	0.96
C0235-032-2625-M	0.235	5.97	0.032	0.81	2.625	66.68	1.390	35.31	1.231	31.26	6.43	28.58	5.20	0.91
C0235-032-2750-M	0.235	5.97	0.032	0.81	2.750	69.85	1.455	36.95	1.287	32.70	6.43	28.58	4.96	0.87
C0235-032-2875-M	0.235	5.97	0.032	0.81	2.875	73.03	1.519	38.59	1.344	34.14	6.43	28.58	4.74	0.83

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0235-029-2750-S	1.439	36.55	3.87	17.20	2.95	0.52
C0235-029-2875-S	1.503	38.18	3.87	17.20	2.82	0.49
C0235-029-3000-S	1.567	39.81	3.87	17.20	2.70	0.47
C0235-029-3250-S	1.696	43.07	3.87	17.20	2.49	0.44
C0235-029-3500-S	1.824	46.32	3.87	17.20	2.31	0.40
C0235-029-3750-S	1.952	49.58	3.87	17.20	2.15	0.38
C0235-029-4000-S	2.080	52.84	3.87	17.20	2.02	0.35
C0235-030-0375-S	0.227	5.76	4.25	18.91	28.66	5.02
C0235-030-0438-S	0.260	6.60	4.25	18.91	23.91	4.18
C0235-030-0500-S	0.293	7.44	4.25	18.91	20.52	3.59
C0235-030-0563-S	0.326	8.28	4.25	18.91	17.97	3.14
C0235-030-0625-S	0.359	9.12	4.25	18.91	15.98	2.80
C0235-030-0688-S	0.392	9.96	4.25	18.91	14.39	2.52
C0235-030-0750-S	0.425	10.80	4.25	18.91	13.08	2.29
C0235-030-0813-S	0.458	11.63	4.25	18.91	12.00	2.10
C0235-030-0875-S	0.491	12.47	4.25	18.91	11.08	1.94
C0235-030-0938-S	0.524	13.31	4.25	18.91	10.29	1.80
C0235-030-1000-S	0.557	14.15	4.25	18.91	9.60	1.68
C0235-030-1125-S	0.623	15.83	4.25	18.91	8.48	1.48
C0235-030-1250-S	0.689	17.51	4.25	18.91	7.59	1.33
C0235-030-1375-S	0.756	19.19	4.25	18.91	6.87	1.20
C0235-030-1500-S	0.822	20.87	4.25	18.91	6.27	1.10
C0235-030-1625-S	0.888	22.55	4.25	18.91	5.77	1.01
C0235-030-1750-S	0.954	24.23	4.25	18.91	5.34	0.93
C0235-030-1875-S	1.020	25.91	4.25	18.91	4.97	0.87
C0235-030-2000-S	1.086	27.59	4.25	18.91	4.65	0.81
C0235-030-2125-S	1.152	29.27	4.25	18.91	4.37	0.77
C0235-030-2250-S	1.218	30.95	4.25	18.91	4.12	0.72
C0235-030-2375-S	1.285	32.63	4.25	18.91	3.90	0.68
C0235-030-2500-S	1.351	34.31	4.25	18.91	3.70	0.65
C0235-030-2625-S	1.417	35.99	4.25	18.91	3.52	0.62
C0235-030-2750-S	1.483	37.67	4.25	18.91	3.36	0.59
C0235-030-2875-S	1.549	39.35	4.25	18.91	3.21	0.56
C0235-030-3000-S	1.615	41.03	4.25	18.91	3.07	0.54
C0235-030-3250-S	1.747	44.39	4.25	18.91	2.83	0.50
C0235-030-3500-S	1.880	47.74	4.25	18.91	2.62	0.46
C0235-030-3750-S	2.012	51.10	4.25	18.91	2.45	0.43
C0235-030-4000-S	2.144	54.46	4.25	18.91	2.29	0.40
C0235-032-0375-S	0.238	6.06	5.09	22.64	37.26	6.52
C0235-032-0438-S	0.273	6.95	5.09	22.64	31.03	5.43
C0235-032-0500-S	0.309	7.84	5.09	22.64	26.58	4.65
C0235-032-0563-S	0.344	8.73	5.09	22.64	23.25	4.07
C0235-032-0625-S	0.379	9.62	5.09	22.64	20.66	3.61
C0235-032-0688-S	0.414	10.51	5.09	22.64	18.59	3.25
C0235-032-0750-S	0.449	11.40	5.09	22.64	16.89	2.96
C0235-032-0813-S	0.484	12.29	5.09	22.64	15.48	2.71
C0235-032-0875-S	0.519	13.18	5.09	22.64	14.29	2.50
C0235-032-0938-S	0.554	14.07	5.09	22.64	13.27	2.32
C0235-032-1000-S	0.589	14.96	5.09	22.64	12.38	2.17
C0235-032-1125-S	0.659	16.74	5.09	22.64	10.92	1.91
C0235-032-1250-S	0.729	18.52	5.09	22.64	9.77	1.71
C0235-032-1375-S	0.799	20.30	5.09	22.64	8.84	1.55
C0235-032-1500-S	0.869	22.08	5.09	22.64	8.07	1.41
C0235-032-1625-S	0.939	23.86	5.09	22.64	7.42	1.30
C0235-032-1750-S	1.010	25.64	5.09	22.64	6.87	1.20
C0235-032-1875-S	1.080	27.42	5.09	22.64	6.40	1.12
C0235-032-2000-S	1.150	29.20	5.09	22.64	5.99	1.05
C0235-032-2125-S	1.220	30.98	5.09	22.64	5.62	0.98
C0235-032-2250-S	1.290	32.76	5.09	22.64	5.30	0.93
C0235-032-2375-S	1.360	34.55	5.09	22.64	5.01	0.88
C0235-032-2500-S	1.430	36.33	5.09	22.64	4.76	0.83
C0235-032-2625-S	1.500	38.11	5.09	22.64	4.53	0.79
C0235-032-2750-S	1.570	39.89	5.09	22.64	4.31	0.75
C0235-032-2875-S	1.640	41.67	5.09	22.64	4.12	0.72

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0235-032-3000-M	0.235	5.97	0.032	0.81	3.000	76.20	1.584	40.24	1.401	35.59	6.43	28.58	4.54	0.79
C0235-032-3250-M	0.235	5.97	0.032	0.81	3.250	82.55	1.714	43.53	1.515	38.47	6.43	28.58	4.18	0.73
C0235-032-3500-M	0.235	5.97	0.032	0.81	3.500	88.90	1.843	46.81	1.628	41.36	6.43	28.58	3.88	0.68
C0235-032-3750-M	0.235	5.97	0.032	0.81	3.750	95.25	1.973	50.10	1.742	44.24	6.43	28.58	3.62	0.63
C0235-032-4000-M	0.235	5.97	0.032	0.81	4.000	101.60	2.102	53.39	1.855	47.13	6.43	28.58	3.39	0.59
C0235-035-0375-M	0.235	5.97	0.035	0.89	0.375	9.53	0.244	6.19	0.232	5.88	8.22	36.56	62.64	10.96
C0235-035-0438-M	0.235	5.97	0.035	0.89	0.438	11.11	0.279	7.10	0.264	6.71	8.22	36.56	51.99	9.10
C0235-035-0500-M	0.235	5.97	0.035	0.89	0.500	12.70	0.315	8.00	0.297	7.53	8.22	36.56	44.43	7.78
C0235-035-0563-M	0.235	5.97	0.035	0.89	0.563	14.29	0.351	8.91	0.329	8.35	8.22	36.56	38.80	6.79
C0235-035-0625-M	0.235	5.97	0.035	0.89	0.625	15.88	0.386	9.81	0.361	9.18	8.22	36.56	34.43	6.02
C0235-035-0688-M	0.235	5.97	0.035	0.89	0.688	17.46	0.422	10.72	0.394	10.00	8.22	36.56	30.94	5.41
C0235-035-0750-M	0.235	5.97	0.035	0.89	0.750	19.05	0.457	11.62	0.426	10.82	8.22	36.56	28.10	4.92
C0235-035-0813-M	0.235	5.97	0.035	0.89	0.813	20.64	0.493	12.53	0.459	11.65	8.22	36.56	25.73	4.50
C0235-035-0875-M	0.235	5.97	0.035	0.89	0.875	22.23	0.529	13.43	0.491	12.47	8.22	36.56	23.74	4.15
C0235-035-0938-M	0.235	5.97	0.035	0.89	0.938	23.81	0.564	14.33	0.523	13.29	8.22	36.56	22.03	3.85
C0235-035-1000-M	0.235	5.97	0.035	0.89	1.000	25.40	0.600	15.24	0.556	14.12	8.22	36.56	20.55	3.60
C0235-035-1125-M	0.235	5.97	0.035	0.89	1.125	28.58	0.671	17.05	0.621	15.76	8.22	36.56	18.11	3.17
C0235-035-1250-M	0.235	5.97	0.035	0.89	1.250	31.75	0.742	18.86	0.685	17.41	8.22	36.56	16.19	2.83
C0235-035-1375-M	0.235	5.97	0.035	0.89	1.375	34.93	0.814	20.67	0.750	19.06	8.22	36.56	14.64	2.56
C0235-035-1500-M	0.235	5.97	0.035	0.89	1.500	38.10	0.885	22.48	0.815	20.70	8.22	36.56	13.36	2.34
C0235-035-1625-M	0.235	5.97	0.035	0.89	1.625	41.28	0.956	24.29	0.880	22.35	8.22	36.56	12.29	2.15
C0235-035-1750-M	0.235	5.97	0.035	0.89	1.750	44.45	1.027	26.09	0.945	24.00	8.22	36.56	11.37	1.99
C0235-035-1875-M	0.235	5.97	0.035	0.89	1.875	47.63	1.099	27.90	1.010	25.65	8.22	36.56	10.59	1.85
C0235-035-2000-M	0.235	5.97	0.035	0.89	2.000	50.80	1.170	29.71	1.074	27.29	8.22	36.56	9.90	1.73
C0235-035-2125-M	0.235	5.97	0.035	0.89	2.125	53.98	1.241	31.52	1.139	28.94	8.22	36.56	9.30	1.63
C0235-035-2250-M	0.235	5.97	0.035	0.89	2.250	57.15	1.312	33.33	1.204	30.59	8.22	36.56	8.76	1.53
C0235-035-2375-M	0.235	5.97	0.035	0.89	2.375	60.33	1.384	35.14	1.269	32.23	8.22	36.56	8.29	1.45
C0235-035-2500-M	0.235	5.97	0.035	0.89	2.500	63.50	1.455	36.95	1.334	33.88	8.22	36.56	7.86	1.38
C0235-035-2625-M	0.235	5.97	0.035	0.89	2.625	66.68	1.526	38.76	1.399	35.53	8.22	36.56	7.48	1.31
C0235-035-2750-M	0.235	5.97	0.035	0.89	2.750	69.85	1.597	40.57	1.463	37.17	8.22	36.56	7.13	1.25
C0235-035-2875-M	0.235	5.97	0.035	0.89	2.875	73.03	1.668	42.38	1.528	38.82	8.22	36.56	6.81	1.19
C0235-035-3000-M	0.235	5.97	0.035	0.89	3.000	76.20	1.740	44.19	1.593	40.47	8.22	36.56	6.52	1.14
C0235-035-3250-M	0.235	5.97	0.035	0.89	3.250	82.55	1.882	47.81	1.723	43.76	8.22	36.56	6.01	1.05
C0235-035-3500-M	0.235	5.97	0.035	0.89	3.500	88.90	2.025	51.42	1.852	47.05	8.22	36.56	5.57	0.97
C0235-035-3750-M	0.235	5.97	0.035	0.89	3.750	95.25	2.167	55.04	1.982	50.35	8.22	36.56	5.19	0.91
C0235-035-4000-M	0.235	5.97	0.035	0.89	4.000	101.60	2.310	58.66	2.112	53.64	8.22	36.56	4.86	0.85
C0235-038-0375-M	0.235	5.97	0.038	0.97	0.375	9.53	0.261	6.63	0.253	6.43	10.29	45.75	90.30	15.80
C0235-038-0438-M	0.235	5.97	0.038	0.97	0.438	11.11	0.300	7.61	0.289	7.35	10.29	45.75	74.69	13.07
C0235-038-0500-M	0.235	5.97	0.038	0.97	0.500	12.70	0.338	8.60	0.325	8.27	10.29	45.75	63.68	11.14
C0235-038-0563-M	0.235	5.97	0.038	0.97	0.563	14.29	0.377	9.58	0.362	9.19	10.29	45.75	55.50	9.71
C0235-038-0625-M	0.235	5.97	0.038	0.97	0.625	15.88	0.416	10.56	0.398	10.11	10.29	45.75	49.18	8.61
C0235-038-0688-M	0.235	5.97	0.038	0.97	0.688	17.46	0.455	11.55	0.434	11.03	10.29	45.75	44.15	7.73
C0235-038-0750-M	0.235	5.97	0.038	0.97	0.750	19.05	0.493	12.53	0.470	11.95	10.29	45.75	40.06	7.01
C0235-038-0813-M	0.235	5.97	0.038	0.97	0.813	20.64	0.532	13.51	0.507	12.87	10.29	45.75	36.66	6.42
C0235-038-0875-M	0.235	5.97	0.038	0.97	0.875	22.23	0.571	14.49	0.543	13.79	10.29	45.75	33.79	5.91
C0235-038-0938-M	0.235	5.97	0.038	0.97	0.938	23.81	0.609	15.48	0.579	14.71	10.29	45.75	31.34	5.48
C0235-038-1000-M	0.235	5.97	0.038	0.97	1.000	25.40	0.648	16.46	0.615	15.63	10.29	45.75	29.22	5.11
C0235-038-1125-M	0.235	5.97	0.038	0.97	1.125	28.58	0.725	18.42	0.688	17.46	10.29	45.75	25.74	4.50
C0235-038-1250-M	0.235	5.97	0.038	0.97	1.250	31.75	0.803	20.39	0.760	19.30	10.29	45.75	23.00	4.02
C0235-038-1375-M	0.235	5.97	0.038	0.97	1.375	34.93	0.880	22.36	0.832	21.14	10.29	45.75	20.78	3.64
C0235-038-1500-M	0.235	5.97	0.038	0.97	1.500	38.10	0.958	24.32	0.905	22.98	10.29	45.75	18.96	3.32
C0235-038-1625-M	0.235	5.97	0.038	0.97	1.625	41.28	1.035	26.29	0.977	24.82	10.29	45.75	17.43	3.05
C0235-038-1750-M	0.235	5.97	0.038	0.97	1.750	44.45	1.112	28.25	1.050	26.66	10.29	45.75	16.13	2.82
C0235-038-1875-M	0.235	5.97	0.038	0.97	1.875	47.63	1.190	30.22	1.122	28.50	10.29	45.75	15.01	2.63
C0235-038-2000-M	0.235	5.97	0.038	0.97	2.000	50.80	1.267	32.18	1.195	30.34	10.29	45.75	14.03	2.46
C0235-038-2125-M	0.235	5.97	0.038	0.97	2.125	53.98	1.344	34.15	1.267	32.18	10.29	45.75	13.18	2.31
C0235-038-2250-M	0.235	5.97	0.038	0.97	2.250	57.15	1.422	36.11	1.339	34.02	10.29	45.75	12.42	2.17
C0235-038-2375-M	0.235	5.97	0.038	0.97	2.375	60.33	1.499	38.08	1.412	35.86	10.29	45.75	11.74	2.06
C0235-038-2500-M	0.235	5.97	0.038	0.97	2.500	63.50	1.577	40.04	1.484	37.70	10.29	45.75	11.14	1.95
C0235-038-2625-M	0.235	5.97	0.038	0.97	2.625	66.68	1.654	42.01	1.557	39.54	10.29	45.75	10.59	1.85
C0235-038-2750-M	0.235	5.97	0.038	0.97	2.750	69.85	1.731	43.98	1.629	41.38	10.29	45.75	10.10	1.77
C0235-038-2875-M	0.235	5.97	0.038	0.97	2.875	73.03	1.809	45.94	1.702	43.22	10.29	45.75	9.65	1.69
C0235-038-3000-M	0.235	5.97	0.038	0.97	3.000	76.20	1.886	47.91	1.774	45.06	10.29	45.75	9.23	1.62
C0235-038-3250-M	0.235	5.97	0.038	0.97	3.250	82.55	2.041	51.84	1.919	48.74	10.29	45.75	8.51	1.49

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0235-032-3000-S	1.711	43.45	5.09	22.64	3.95	0.69
C0235-032-3250-S	1.851	47.01	5.09	22.64	3.64	0.64
C0235-032-3500-S	1.991	50.57	5.09	22.64	3.37	0.59
C0235-032-3750-S	2.131	54.13	5.09	22.64	3.14	0.55
C0235-032-4000-S	2.271	57.69	5.09	22.64	2.94	0.52
C0235-035-0375-S	0.255	6.48	6.52	29.01	54.47	9.53
C0235-035-0438-S	0.293	7.45	6.52	29.01	45.21	7.91
C0235-035-0500-S	0.331	8.41	6.52	29.01	38.64	6.76
C0235-035-0563-S	0.369	9.38	6.52	29.01	33.74	5.90
C0235-035-0625-S	0.407	10.34	6.52	29.01	29.94	5.24
C0235-035-0688-S	0.445	11.31	6.52	29.01	26.91	4.71
C0235-035-0750-S	0.483	12.27	6.52	29.01	24.43	4.28
C0235-035-0813-S	0.521	13.23	6.52	29.01	22.38	3.92
C0235-035-0875-S	0.559	14.20	6.52	29.01	20.64	3.61
C0235-035-0938-S	0.597	15.16	6.52	29.01	19.15	3.35
C0235-035-1000-S	0.635	16.13	6.52	29.01	17.87	3.13
C0235-035-1125-S	0.711	18.06	6.52	29.01	15.75	2.76
C0235-035-1250-S	0.787	19.99	6.52	29.01	14.08	2.46
C0235-035-1375-S	0.863	21.91	6.52	29.01	12.73	2.23
C0235-035-1500-S	0.939	23.84	6.52	29.01	11.62	2.03
C0235-035-1625-S	1.015	25.77	6.52	29.01	10.68	1.87
C0235-035-1750-S	1.091	27.70	6.52	29.01	9.89	1.73
C0235-035-1875-S	1.167	29.63	6.52	29.01	9.21	1.61
C0235-035-2000-S	1.242	31.56	6.52	29.01	8.61	1.51
C0235-035-2125-S	1.318	33.49	6.52	29.01	8.09	1.41
C0235-035-2250-S	1.394	35.42	6.52	29.01	7.62	1.33
C0235-035-2375-S	1.470	37.34	6.52	29.01	7.21	1.26
C0235-035-2500-S	1.546	39.27	6.52	29.01	6.84	1.20
C0235-035-2625-S	1.622	41.20	6.52	29.01	6.50	1.14
C0235-035-2750-S	1.698	43.13	6.52	29.01	6.20	1.08
C0235-035-2875-S	1.774	45.06	6.52	29.01	5.92	1.04
C0235-035-3000-S	1.850	46.99	6.52	29.01	5.67	0.99
C0235-035-3250-S	2.002	50.85	6.52	29.01	5.23	0.91
C0235-035-3500-S	2.154	54.70	6.52	29.01	4.84	0.85
C0235-035-3750-S	2.306	58.56	6.52	29.01	4.52	0.79
C0235-035-4000-S	2.457	62.42	6.52	29.01	4.23	0.74
C0235-038-0375-S	0.271	6.88	8.17	36.35	78.52	13.74
C0235-038-0438-S	0.312	7.92	8.17	36.35	64.94	11.37
C0235-038-0500-S	0.352	8.95	8.17	36.35	55.37	9.69
C0235-038-0563-S	0.393	9.99	8.17	36.35	48.26	8.44
C0235-038-0625-S	0.434	11.02	8.17	36.35	42.76	7.48
C0235-038-0688-S	0.475	12.06	8.17	36.35	38.39	6.72
C0235-038-0750-S	0.515	13.09	8.17	36.35	34.83	6.10
C0235-038-0813-S	0.556	14.13	8.17	36.35	31.88	5.58
C0235-038-0875-S	0.597	15.16	8.17	36.35	29.38	5.14
C0235-038-0938-S	0.638	16.20	8.17	36.35	27.25	4.77
C0235-038-1000-S	0.678	17.23	8.17	36.35	25.41	4.45
C0235-038-1125-S	0.760	19.30	8.17	36.35	22.38	3.92
C0235-038-1250-S	0.841	21.37	8.17	36.35	20.00	3.50
C0235-038-1375-S	0.923	23.44	8.17	36.35	18.07	3.16
C0235-038-1500-S	1.004	25.51	8.17	36.35	16.49	2.89
C0235-038-1625-S	1.086	27.58	8.17	36.35	15.16	2.65
C0235-038-1750-S	1.167	29.65	8.17	36.35	14.02	2.45
C0235-038-1875-S	1.249	31.72	8.17	36.35	13.05	2.28
C0235-038-2000-S	1.330	33.79	8.17	36.35	12.20	2.14
C0235-038-2125-S	1.412	35.86	8.17	36.35	11.46	2.01
C0235-038-2250-S	1.493	37.93	8.17	36.35	10.80	1.89
C0235-038-2375-S	1.575	40.00	8.17	36.35	10.21	1.79
C0235-038-2500-S	1.656	42.07	8.17	36.35	9.69	1.69
C0235-038-2625-S	1.738	44.14	8.17	36.35	9.21	1.61
C0235-038-2750-S	1.819	46.21	8.17	36.35	8.78	1.54
C0235-038-2875-S	1.901	48.28	8.17	36.35	8.39	1.47
C0235-038-3000-S	1.982	50.35	8.17	36.35	8.03	1.41
C0235-038-3250-S	2.145	54.49	8.17	36.35	7.40	1.29

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0235-038-3500-M	0.235	5.97	0.038	0.97	3.500	88.90	2.196	55.77	2.064	52.42	10.29	45.75	7.89	1.38
C0235-038-3750-M	0.235	5.97	0.038	0.97	3.750	95.25	2.350	59.70	2.209	56.10	10.29	45.75	7.35	1.29
C0235-040-0375-M	0.235	5.97	0.040	1.02	0.375	9.53	0.272	6.90	0.266	6.76	11.82	52.58	114.44	20.03
C0235-040-0438-M	0.235	5.97	0.040	1.02	0.438	11.11	0.312	7.93	0.305	7.74	11.82	52.58	94.43	16.53
C0235-040-0500-M	0.235	5.97	0.040	1.02	0.500	12.70	0.353	8.96	0.343	8.72	11.82	52.58	80.38	14.07
C0235-040-0563-M	0.235	5.97	0.040	1.02	0.563	14.29	0.394	10.00	0.382	9.70	11.82	52.58	69.97	12.24
C0235-040-0625-M	0.235	5.97	0.040	1.02	0.625	15.88	0.434	11.03	0.421	10.68	11.82	52.58	61.94	10.84
C0235-040-0688-M	0.235	5.97	0.040	1.02	0.688	17.46	0.475	12.06	0.459	11.66	11.82	52.58	55.57	9.72
C0235-040-0750-M	0.235	5.97	0.040	1.02	0.750	19.05	0.515	13.09	0.498	12.64	11.82	52.58	50.39	8.82
C0235-040-0813-M	0.235	5.97	0.040	1.02	0.813	20.64	0.556	14.12	0.536	13.62	11.82	52.58	46.09	8.07
C0235-040-0875-M	0.235	5.97	0.040	1.02	0.875	22.23	0.597	15.15	0.575	14.60	11.82	52.58	42.46	7.43
C0235-040-0938-M	0.235	5.97	0.040	1.02	0.938	23.81	0.637	16.19	0.613	15.58	11.82	52.58	39.37	6.89
C0235-040-1000-M	0.235	5.97	0.040	1.02	1.000	25.40	0.678	17.22	0.652	16.56	11.82	52.58	36.69	6.42
C0235-040-1125-M	0.235	5.97	0.040	1.02	1.125	28.58	0.759	19.28	0.729	18.52	11.82	52.58	32.31	5.65
C0235-040-1250-M	0.235	5.97	0.040	1.02	1.250	31.75	0.840	21.34	0.806	20.48	11.82	52.58	28.85	5.05
C0235-040-1375-M	0.235	5.97	0.040	1.02	1.375	34.93	0.922	23.41	0.884	22.44	11.82	52.58	26.07	4.56
C0235-040-1500-M	0.235	5.97	0.040	1.02	1.500	38.10	1.003	25.47	0.961	24.40	11.82	52.58	23.77	4.16
C0235-040-1625-M	0.235	5.97	0.040	1.02	1.625	41.28	1.084	27.53	1.038	26.36	11.82	52.58	21.85	3.82
C0235-040-1750-M	0.235	5.97	0.040	1.02	1.750	44.45	1.165	29.60	1.115	28.33	11.82	52.58	20.22	3.54
C0235-040-1875-M	0.235	5.97	0.040	1.02	1.875	47.63	1.246	31.66	1.192	30.29	11.82	52.58	18.81	3.29
C0235-040-2000-M	0.235	5.97	0.040	1.02	2.000	50.80	1.328	33.72	1.270	32.25	11.82	52.58	17.58	3.08
C0235-040-2125-M	0.235	5.97	0.040	1.02	2.125	53.98	1.409	35.79	1.347	34.21	11.82	52.58	16.51	2.89
C0235-040-2250-M	0.235	5.97	0.040	1.02	2.250	57.15	1.490	37.85	1.424	36.17	11.82	52.58	15.56	2.72
C0235-040-2375-M	0.235	5.97	0.040	1.02	2.375	60.33	1.571	39.91	1.501	38.13	11.82	52.58	14.71	2.57
C0235-040-2500-M	0.235	5.97	0.040	1.02	2.500	63.50	1.653	41.98	1.578	40.09	11.82	52.58	13.95	2.44
C0235-040-2625-M	0.235	5.97	0.040	1.02	2.625	66.68	1.734	44.04	1.655	42.05	11.82	52.58	13.27	2.32
C0235-040-2750-M	0.235	5.97	0.040	1.02	2.750	69.85	1.815	46.10	1.733	44.01	11.82	52.58	12.64	2.21
C0235-040-2875-M	0.235	5.97	0.040	1.02	2.875	73.03	1.896	48.17	1.810	45.97	11.82	52.58	12.08	2.11
C0235-040-3000-M	0.235	5.97	0.040	1.02	3.000	76.20	1.978	50.23	1.887	47.93	11.82	52.58	11.56	2.02
C0235-040-3250-M	0.235	5.97	0.040	1.02	3.250	82.55	2.140	54.36	2.041	51.85	11.82	52.58	10.65	1.86
C0235-040-3500-M	0.235	5.97	0.040	1.02	3.500	88.90	2.302	58.48	2.196	55.77	11.82	52.58	9.87	1.73
C0235-040-3750-M	0.235	5.97	0.040	1.02	3.750	95.25	2.465	62.61	2.350	59.69	11.82	52.58	9.20	1.61
C0235-042-0375-M	0.235	5.97	0.042	1.07	0.375	9.53	0.282	7.15	0.278	7.07	13.48	59.98	144.32	25.26
C0235-042-0438-M	0.235	5.97	0.042	1.07	0.438	11.11	0.324	8.23	0.319	8.11	13.48	59.98	118.80	20.79
C0235-042-0500-M	0.235	5.97	0.042	1.07	0.500	12.70	0.366	9.31	0.360	9.14	13.48	59.98	100.95	17.67
C0235-042-0563-M	0.235	5.97	0.042	1.07	0.563	14.29	0.409	10.39	0.401	10.18	13.48	59.98	87.77	15.36
C0235-042-0625-M	0.235	5.97	0.042	1.07	0.625	15.88	0.451	11.46	0.442	11.22	13.48	59.98	77.63	13.58
C0235-042-0688-M	0.235	5.97	0.042	1.07	0.688	17.46	0.494	12.54	0.483	12.26	13.48	59.98	69.59	12.18
C0235-042-0750-M	0.235	5.97	0.042	1.07	0.750	19.05	0.536	13.62	0.523	13.29	13.48	59.98	63.06	11.03
C0235-042-0813-M	0.235	5.97	0.042	1.07	0.813	20.64	0.579	14.70	0.564	14.33	13.48	59.98	57.65	10.09
C0235-042-0875-M	0.235	5.97	0.042	1.07	0.875	22.23	0.621	15.77	0.605	15.37	13.48	59.98	53.09	9.29
C0235-042-0938-M	0.235	5.97	0.042	1.07	0.938	23.81	0.663	16.85	0.646	16.40	13.48	59.98	49.20	8.61
C0235-042-1000-M	0.235	5.97	0.042	1.07	1.000	25.40	0.706	17.93	0.687	17.44	13.48	59.98	45.85	8.02
C0235-042-1125-M	0.235	5.97	0.042	1.07	1.125	28.58	0.791	20.09	0.768	19.52	13.48	59.98	40.34	7.06
C0235-042-1250-M	0.235	5.97	0.042	1.07	1.250	31.75	0.876	22.24	0.850	21.59	13.48	59.98	36.02	6.30
C0235-042-1375-M	0.235	5.97	0.042	1.07	1.375	34.93	0.960	24.40	0.932	23.67	13.48	59.98	32.53	5.69
C0235-042-1500-M	0.235	5.97	0.042	1.07	1.500	38.10	1.045	26.55	1.013	25.74	13.48	59.98	29.66	5.19
C0235-042-1625-M	0.235	5.97	0.042	1.07	1.625	41.28	1.130	28.71	1.095	27.81	13.48	59.98	27.25	4.77
C0235-042-1750-M	0.235	5.97	0.042	1.07	1.750	44.45	1.215	30.86	1.177	29.89	13.48	59.98	25.21	4.41
C0235-042-1875-M	0.235	5.97	0.042	1.07	1.875	47.63	1.300	33.02	1.258	31.96	13.48	59.98	23.45	4.10
C0235-042-2000-M	0.235	5.97	0.042	1.07	2.000	50.80	1.385	35.17	1.340	34.04	13.48	59.98	21.92	3.84
C0235-042-2125-M	0.235	5.97	0.042	1.07	2.125	53.98	1.470	37.33	1.422	36.11	13.48	59.98	20.58	3.60
C0235-042-2250-M	0.235	5.97	0.042	1.07	2.250	57.15	1.555	39.49	1.503	38.19	13.48	59.98	19.39	3.39
C0235-042-2375-M	0.235	5.97	0.042	1.07	2.375	60.33	1.639	41.64	1.585	40.26	13.48	59.98	18.33	3.21
C0235-042-2500-M	0.235	5.97	0.042	1.07	2.500	63.50	1.724	43.80	1.667	42.34	13.48	59.98	17.38	3.04
C0235-042-2625-M	0.235	5.97	0.042	1.07	2.625	66.68	1.809	45.95	1.748	44.41	13.48	59.98	16.53	2.89
C0235-042-2750-M	0.235	5.97	0.042	1.07	2.750	69.85	1.894	48.11	1.830	46.48	13.48	59.98	15.75	2.76
C0235-042-2875-M	0.235	5.97	0.042	1.07	2.875	73.03	1.979	50.26	1.912	48.56	13.48	59.98	15.05	2.63
C0235-042-3000-M	0.235	5.97	0.042	1.07	3.000	76.20	2.064	52.42	1.993	50.63	13.48	59.98	14.40	2.52
C0235-042-3250-M	0.235	5.97	0.042	1.07	3.250	82.55	2.233	56.73	2.157	54.78	13.48	59.98	13.27	2.32
C0235-042-3500-M	0.235	5.97	0.042	1.07	3.500	88.90	2.403	61.04	2.320	58.93	13.48	59.98	12.29	2.15
C0235-042-3750-M	0.235	5.97	0.042	1.07	3.750	95.25	2.573	65.35	2.483	63.08	13.48	59.98	11.46	2.00
C0235-045-0375-M	0.235	5.97	0.045	1.14	0.375	9.53	0.295	7.49	0.295	7.49	16.22	72.16	202.66	35.47
C0235-045-0438-M	0.235	5.97	0.045	1.14	0.438	11.11	0.340	8.63	0.339	8.61	16.22	72.16	166.21	29.09

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0235-038-3500-S	2.308	58.63	8.17	36.35	6.86	1.20
C0235-038-3750-S	2.471	62.76	8.17	36.35	6.39	1.12
C0235-040-0375-S	0.281	7.13	9.40	41.81	99.51	17.41
C0235-040-0438-S	0.323	8.21	9.40	41.81	82.11	14.37
C0235-040-0500-S	0.366	9.28	9.40	41.81	69.89	12.23
C0235-040-0563-S	0.408	10.36	9.40	41.81	60.84	10.65
C0235-040-0625-S	0.451	11.44	9.40	41.81	53.86	9.43
C0235-040-0688-S	0.493	12.52	9.40	41.81	48.32	8.46
C0235-040-0750-S	0.535	13.60	9.40	41.81	43.81	7.67
C0235-040-0813-S	0.578	14.68	9.40	41.81	40.08	7.01
C0235-040-0875-S	0.620	15.76	9.40	41.81	36.93	6.46
C0235-040-0938-S	0.663	16.84	9.40	41.81	34.23	5.99
C0235-040-1000-S	0.705	17.92	9.40	41.81	31.91	5.58
C0235-040-1125-S	0.790	20.08	9.40	41.81	28.09	4.92
C0235-040-1250-S	0.875	22.24	9.40	41.81	25.09	4.39
C0235-040-1375-S	0.960	24.39	9.40	41.81	22.67	3.97
C0235-040-1500-S	1.045	26.55	9.40	41.81	20.67	3.62
C0235-040-1625-S	1.130	28.71	9.40	41.81	19.00	3.33
C0235-040-1750-S	1.215	30.87	9.40	41.81	17.58	3.08
C0235-040-1875-S	1.300	33.03	9.40	41.81	16.35	2.86
C0235-040-2000-S	1.385	35.19	9.40	41.81	15.29	2.68
C0235-040-2125-S	1.470	37.34	9.40	41.81	14.36	2.51
C0235-040-2250-S	1.555	39.50	9.40	41.81	13.53	2.37
C0235-040-2375-S	1.640	41.66	9.40	41.81	12.79	2.24
C0235-040-2500-S	1.725	43.82	9.40	41.81	12.13	2.12
C0235-040-2625-S	1.810	45.98	9.40	41.81	11.53	2.02
C0235-040-2750-S	1.895	48.14	9.40	41.81	10.99	1.92
C0235-040-2875-S	1.980	50.30	9.40	41.81	10.50	1.84
C0235-040-3000-S	2.065	52.45	9.40	41.81	10.05	1.76
C0235-040-3250-S	2.235	56.77	9.40	41.81	9.26	1.62
C0235-040-3500-S	2.405	61.09	9.40	41.81	8.58	1.50
C0235-040-3750-S	2.575	65.41	9.40	41.81	8.00	1.40
C0235-042-0375-S	0.290	7.35	10.73	47.71	125.49	21.96
C0235-042-0438-S	0.334	8.48	10.73	47.71	103.30	18.08
C0235-042-0500-S	0.378	9.60	10.73	47.71	87.78	15.36
C0235-042-0563-S	0.422	10.72	10.73	47.71	76.32	13.36
C0235-042-0625-S	0.466	11.84	10.73	47.71	67.50	11.81
C0235-042-0688-S	0.510	12.96	10.73	47.71	60.51	10.59
C0235-042-0750-S	0.554	14.08	10.73	47.71	54.83	9.60
C0235-042-0813-S	0.599	15.20	10.73	47.71	50.13	8.77
C0235-042-0875-S	0.643	16.32	10.73	47.71	46.17	8.08
C0235-042-0938-S	0.687	17.45	10.73	47.71	42.79	7.49
C0235-042-1000-S	0.731	18.57	10.73	47.71	39.87	6.98
C0235-042-1125-S	0.819	20.81	10.73	47.71	35.08	6.14
C0235-042-1250-S	0.908	23.05	10.73	47.71	31.32	5.48
C0235-042-1375-S	0.996	25.29	10.73	47.71	28.29	4.95
C0235-042-1500-S	1.084	27.54	10.73	47.71	25.79	4.51
C0235-042-1625-S	1.172	29.78	10.73	47.71	23.70	4.15
C0235-042-1750-S	1.261	32.02	10.73	47.71	21.92	3.84
C0235-042-1875-S	1.349	34.26	10.73	47.71	20.39	3.57
C0235-042-2000-S	1.437	36.51	10.73	47.71	19.06	3.34
C0235-042-2125-S	1.526	38.75	10.73	47.71	17.89	3.13
C0235-042-2250-S	1.614	40.99	10.73	47.71	16.86	2.95
C0235-042-2375-S	1.702	43.23	10.73	47.71	15.94	2.79
C0235-042-2500-S	1.790	45.48	10.73	47.71	15.12	2.65
C0235-042-2625-S	1.879	47.72	10.73	47.71	14.37	2.51
C0235-042-2750-S	1.967	49.96	10.73	47.71	13.70	2.40
C0235-042-2875-S	2.055	52.20	10.73	47.71	13.08	2.29
C0235-042-3000-S	2.144	54.45	10.73	47.71	12.52	2.19
C0235-042-3250-S	2.320	58.93	10.73	47.71	11.53	2.02
C0235-042-3500-S	2.497	63.42	10.73	47.71	10.69	1.87
C0235-042-3750-S	2.673	67.90	10.73	47.71	9.96	1.74
C0235-045-0375-S	0.302	7.66	12.91	57.42	176.22	30.84
C0235-045-0438-S	0.348	8.84	12.91	57.42	144.53	25.29

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0235-045-0500-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.500**	**12.70**	**0.385**	**9.78**	**0.383**	**9.72**	**16.22**	**72.16**	**140.87**	**24.65**	**C0235-045-0500-S**	**0.395**	**10.02**	**12.91**	**57.42**	**122.50**	**21.44**
C0235-045-0563-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.563**	**14.29**	**0.430**	**10.92**	**0.427**	**10.84**	**16.22**	**72.16**	**122.24**	**21.39**	**C0235-045-0563-S**	**0.441**	**11.20**	**12.91**	**57.42**	**106.29**	**18.60**
C0235-045-0625-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.625**	**15.88**	**0.475**	**12.06**	**0.471**	**11.95**	**16.22**	**72.16**	**107.96**	**18.89**	**C0235-045-0625-S**	**0.487**	**12.38**	**12.91**	**57.42**	**93.88**	**16.43**
C0235-045-0688-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.688**	**17.46**	**0.520**	**13.20**	**0.515**	**13.07**	**16.22**	**72.16**	**96.67**	**16.92**	**C0235-045-0688-S**	**0.534**	**13.56**	**12.91**	**57.42**	**84.06**	**14.71**
C0235-045-0750-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.750**	**19.05**	**0.565**	**14.34**	**0.559**	**14.19**	**16.22**	**72.16**	**87.51**	**15.31**	**C0235-045-0750-S**	**0.580**	**14.74**	**12.91**	**57.42**	**76.10**	**13.32**
C0235-045-0813-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.813**	**20.64**	**0.610**	**15.48**	**0.602**	**15.30**	**16.22**	**72.16**	**79.94**	**13.99**	**C0235-045-0813-S**	**0.627**	**15.92**	**12.91**	**57.42**	**69.51**	**12.16**
C0235-045-0875-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.875**	**22.23**	**0.655**	**16.62**	**0.646**	**16.42**	**16.22**	**72.16**	**73.58**	**12.88**	**C0235-045-0875-S**	**0.673**	**17.10**	**12.91**	**57.42**	**63.98**	**11.20**
C0235-045-0938-M	**0.235**	**5.97**	**0.045**	**1.14**	**0.938**	**23.81**	**0.699**	**17.77**	**0.690**	**17.53**	**16.22**	**72.16**	**68.15**	**11.93**	**C0235-045-0938-S**	**0.720**	**18.28**	**12.91**	**57.42**	**59.26**	**10.37**
C0235-045-1000-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.000**	**25.40**	**0.744**	**18.91**	**0.734**	**18.65**	**16.22**	**72.16**	**63.47**	**11.11**	**C0235-045-1000-S**	**0.766**	**19.46**	**12.91**	**57.42**	**55.19**	**9.66**
C0235-045-1125-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.125**	**28.58**	**0.834**	**21.19**	**0.822**	**20.88**	**16.22**	**72.16**	**55.80**	**9.77**	**C0235-045-1125-S**	**0.859**	**21.82**	**12.91**	**57.42**	**48.53**	**8.49**
C0235-045-1250-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.250**	**31.75**	**0.924**	**23.47**	**0.910**	**23.12**	**16.22**	**72.16**	**49.79**	**8.71**	**C0235-045-1250-S**	**0.952**	**24.18**	**12.91**	**57.42**	**43.30**	**7.58**
C0235-045-1375-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.375**	**34.93**	**1.014**	**25.76**	**0.998**	**25.35**	**16.22**	**72.16**	**44.95**	**7.87**	**C0235-045-1375-S**	**1.045**	**26.54**	**12.91**	**57.42**	**39.09**	**6.84**
C0235-045-1500-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.500**	**38.10**	**1.104**	**28.04**	**1.086**	**27.58**	**16.22**	**72.16**	**40.96**	**7.17**	**C0235-045-1500-S**	**1.138**	**28.89**	**12.91**	**57.42**	**35.62**	**6.23**
C0235-045-1625-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.625**	**41.28**	**1.194**	**30.32**	**1.174**	**29.81**	**16.22**	**72.16**	**37.63**	**6.58**	**C0235-045-1625-S**	**1.230**	**31.25**	**12.91**	**57.42**	**32.72**	**5.73**
C0235-045-1750-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.750**	**44.45**	**1.284**	**32.61**	**1.262**	**32.04**	**16.22**	**72.16**	**34.79**	**6.09**	**C0235-045-1750-S**	**1.323**	**33.61**	**12.91**	**57.42**	**30.26**	**5.29**
C0235-045-1875-M	**0.235**	**5.97**	**0.045**	**1.14**	**1.875**	**47.63**	**1.374**	**34.89**	**1.349**	**34.28**	**16.22**	**72.16**	**32.36**	**5.66**	**C0235-045-1875-S**	**1.416**	**35.97**	**12.91**	**57.42**	**28.14**	**4.92**
C0235-045-2000-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.000**	**50.80**	**1.464**	**37.17**	**1.437**	**36.51**	**16.22**	**72.16**	**30.24**	**5.29**	**C0235-045-2000-S**	**1.509**	**38.33**	**12.91**	**57.42**	**26.30**	**4.60**
C0235-045-2125-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.125**	**53.98**	**1.553**	**39.46**	**1.525**	**38.74**	**16.22**	**72.16**	**28.38**	**4.97**	**C0235-045-2125-S**	**1.602**	**40.69**	**12.91**	**57.42**	**24.68**	**4.32**
C0235-045-2250-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.250**	**57.15**	**1.643**	**41.74**	**1.613**	**40.97**	**16.22**	**72.16**	**26.74**	**4.68**	**C0235-045-2250-S**	**1.695**	**43.05**	**12.91**	**57.42**	**23.25**	**4.07**
C0235-045-2375-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.375**	**60.33**	**1.733**	**44.02**	**1.701**	**43.21**	**16.22**	**72.16**	**25.28**	**4.42**	**C0235-045-2375-S**	**1.788**	**45.41**	**12.91**	**57.42**	**21.98**	**3.85**
C0235-045-2500-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.500**	**63.50**	**1.823**	**46.31**	**1.789**	**45.44**	**16.22**	**72.16**	**23.97**	**4.19**	**C0235-045-2500-S**	**1.881**	**47.77**	**12.91**	**57.42**	**20.84**	**3.65**
C0235-045-2625-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.625**	**66.68**	**1.913**	**48.59**	**1.877**	**47.67**	**16.22**	**72.16**	**22.78**	**3.99**	**C0235-045-2625-S**	**1.973**	**50.13**	**12.91**	**57.42**	**19.81**	**3.47**
C0235-045-2750-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.750**	**69.85**	**2.003**	**50.87**	**1.965**	**49.90**	**16.22**	**72.16**	**21.71**	**3.80**	**C0235-045-2750-S**	**2.066**	**52.48**	**12.91**	**57.42**	**18.88**	**3.30**
C0235-045-2875-M	**0.235**	**5.97**	**0.045**	**1.14**	**2.875**	**73.03**	**2.093**	**53.16**	**2.053**	**52.13**	**16.22**	**72.16**	**20.74**	**3.63**	**C0235-045-2875-S**	**2.159**	**54.84**	**12.91**	**57.42**	**18.03**	**3.16**
C0235-045-3000-M	**0.235**	**5.97**	**0.045**	**1.14**	**3.000**	**76.20**	**2.183**	**55.44**	**2.140**	**54.37**	**16.22**	**72.16**	**19.85**	**3.47**	**C0235-045-3000-S**	**2.252**	**57.20**	**12.91**	**57.42**	**17.26**	**3.02**
C0235-045-3250-M	**0.235**	**5.97**	**0.045**	**1.14**	**3.250**	**82.55**	**2.362**	**60.01**	**2.316**	**58.83**	**16.22**	**72.16**	**18.28**	**3.20**	**C0235-045-3250-S**	**2.438**	**61.92**	**12.91**	**57.42**	**15.89**	**2.78**
C0235-045-3500-M	**0.235**	**5.97**	**0.045**	**1.14**	**3.500**	**88.90**	**2.542**	**64.57**	**2.492**	**63.29**	**16.22**	**72.16**	**16.94**	**2.96**	**C0235-045-3500-S**	**2.624**	**66.64**	**12.91**	**57.42**	**14.73**	**2.58**
C0235-045-3750-M	**0.235**	**5.97**	**0.045**	**1.14**	**3.750**	**95.25**	**2.722**	**69.14**	**2.668**	**67.76**	**16.22**	**72.16**	**15.78**	**2.76**	**C0235-045-3750-S**	**2.809**	**71.36**	**12.91**	**57.42**	**13.72**	**2.40**
C0235-047-0375-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.375**	**9.53**	**0.315**	**8.01**	**0.305**	**7.74**	**15.09**	**67.13**	**252.81**	**44.24**	**C0235-047-0375-S**	**0.309**	**7.85**	**14.49**	**64.47**	**219.84**	**38.47**
C0235-047-0438-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.438**	**11.11**	**0.364**	**9.24**	**0.351**	**8.91**	**15.28**	**67.95**	**206.81**	**36.19**	**C0235-047-0438-S**	**0.357**	**9.07**	**14.49**	**64.47**	**179.84**	**31.47**
C0235-047-0500-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.500**	**12.70**	**0.412**	**10.46**	**0.396**	**10.07**	**15.40**	**68.51**	**174.98**	**30.62**	**C0235-047-0500-S**	**0.405**	**10.28**	**14.49**	**64.47**	**152.15**	**26.63**
C0235-047-0563-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.563**	**14.29**	**0.442**	**11.24**	**0.442**	**11.23**	**18.21**	**81.00**	**151.63**	**26.54**	**C0235-047-0563-S**	**0.453**	**11.50**	**14.49**	**64.47**	**131.86**	**23.07**
C0235-047-0625-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.625**	**15.88**	**0.489**	**12.42**	**0.488**	**12.40**	**18.21**	**81.00**	**133.79**	**23.41**	**C0235-047-0625-S**	**0.500**	**12.71**	**14.49**	**64.47**	**116.34**	**20.36**
C0235-047-0688-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.688**	**17.46**	**0.535**	**13.60**	**0.534**	**13.56**	**18.21**	**81.00**	**119.70**	**20.95**	**C0235-047-0688-S**	**0.548**	**13.93**	**14.49**	**64.47**	**104.08**	**18.21**
C0235-047-0750-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.750**	**19.05**	**0.582**	**14.78**	**0.580**	**14.73**	**18.21**	**81.00**	**108.29**	**18.95**	**C0235-047-0750-S**	**0.596**	**15.14**	**14.49**	**64.47**	**94.17**	**16.48**
C0235-047-0813-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.813**	**20.64**	**0.628**	**15.96**	**0.626**	**15.89**	**18.21**	**81.00**	**98.87**	**17.30**	**C0235-047-0813-S**	**0.644**	**16.36**	**14.49**	**64.47**	**85.98**	**15.05**
C0235-047-0875-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.875**	**22.23**	**0.675**	**17.14**	**0.671**	**17.05**	**18.21**	**81.00**	**90.96**	**15.92**	**C0235-047-0875-S**	**0.692**	**17.57**	**14.49**	**64.47**	**79.10**	**13.84**
C0235-047-0938-M	**0.235**	**5.97**	**0.047**	**1.19**	**0.938**	**23.81**	**0.721**	**18.32**	**0.717**	**18.22**	**18.21**	**81.00**	**84.22**	**14.74**	**C0235-047-0938-S**	**0.740**	**18.79**	**14.49**	**64.47**	**73.24**	**12.82**
C0235-047-1000-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.000**	**25.40**	**0.768**	**19.50**	**0.763**	**19.38**	**18.21**	**81.00**	**78.41**	**13.72**	**C0235-047-1000-S**	**0.787**	**20.00**	**14.49**	**64.47**	**68.18**	**11.93**
C0235-047-1125-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.125**	**28.58**	**0.861**	**21.86**	**0.855**	**21.71**	**18.21**	**81.00**	**68.90**	**12.06**	**C0235-047-1125-S**	**0.883**	**22.43**	**14.49**	**64.47**	**59.92**	**10.49**
C0235-047-1250-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.250**	**31.75**	**0.954**	**24.22**	**0.946**	**24.04**	**18.21**	**81.00**	**61.45**	**10.75**	**C0235-047-1250-S**	**0.979**	**24.86**	**14.49**	**64.47**	**53.44**	**9.35**
C0235-047-1375-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.375**	**34.93**	**1.047**	**26.58**	**1.038**	**26.37**	**18.21**	**81.00**	**55.46**	**9.70**	**C0235-047-1375-S**	**1.074**	**27.29**	**14.49**	**64.47**	**48.22**	**8.44**
C0235-047-1500-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.500**	**38.10**	**1.140**	**28.95**	**1.130**	**28.70**	**18.21**	**81.00**	**50.53**	**8.84**	**C0235-047-1500-S**	**1.170**	**29.72**	**14.49**	**64.47**	**43.94**	**7.69**
C0235-047-1625-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.625**	**41.28**	**1.233**	**31.31**	**1.221**	**31.02**	**18.21**	**81.00**	**46.40**	**8.12**	**C0235-047-1625-S**	**1.266**	**32.15**	**14.49**	**64.47**	**40.35**	**7.06**
C0235-047-1750-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.750**	**44.45**	**1.326**	**33.67**	**1.313**	**33.35**	**18.21**	**81.00**	**42.90**	**7.51**	**C0235-047-1750-S**	**1.361**	**34.58**	**14.49**	**64.47**	**37.30**	**6.53**
C0235-047-1875-M	**0.235**	**5.97**	**0.047**	**1.19**	**1.875**	**47.63**	**1.418**	**36.03**	**1.405**	**35.68**	**18.21**	**81.00**	**39.89**	**6.98**	**C0235-047-1875-S**	**1.457**	**37.01**	**14.49**	**64.47**	**34.69**	**6.07**
C0235-047-2000-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.000**	**50.80**	**1.511**	**38.39**	**1.496**	**38.01**	**18.21**	**81.00**	**37.27**	**6.52**	**C0235-047-2000-S**	**1.553**	**39.44**	**14.49**	**64.47**	**32.41**	**5.67**
C0235-047-2125-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.125**	**53.98**	**1.604**	**40.75**	**1.588**	**40.34**	**18.21**	**81.00**	**34.98**	**6.12**	**C0235-047-2125-S**	**1.649**	**41.87**	**14.49**	**64.47**	**30.42**	**5.32**
C0235-047-2250-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.250**	**57.15**	**1.697**	**43.11**	**1.680**	**42.67**	**18.21**	**81.00**	**32.95**	**5.77**	**C0235-047-2250-S**	**1.744**	**44.30**	**14.49**	**64.47**	**28.65**	**5.01**
C0235-047-2375-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.375**	**60.33**	**1.790**	**45.47**	**1.771**	**45.00**	**18.21**	**81.00**	**31.14**	**5.45**	**C0235-047-2375-S**	**1.840**	**46.73**	**14.49**	**64.47**	**27.08**	**4.74**
C0235-047-2500-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.500**	**63.50**	**1.883**	**47.83**	**1.863**	**47.32**	**18.21**	**81.00**	**29.53**	**5.17**	**C0235-047-2500-S**	**1.936**	**49.16**	**14.49**	**64.47**	**25.68**	**4.49**
C0235-047-2625-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.625**	**66.68**	**1.976**	**50.20**	**1.955**	**49.65**	**18.21**	**81.00**	**28.07**	**4.91**	**C0235-047-2625-S**	**2.031**	**51.59**	**14.49**	**64.47**	**24.41**	**4.27**
C0235-047-2750-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.750**	**69.85**	**2.069**	**52.56**	**2.046**	**51.98**	**18.21**	**81.00**	**26.75**	**4.68**	**C0235-047-2750-S**	**2.127**	**54.02**	**14.49**	**64.47**	**23.26**	**4.07**
C0235-047-2875-M	**0.235**	**5.97**	**0.047**	**1.19**	**2.875**	**73.03**	**2.162**	**54.92**	**2.138**	**54.31**	**18.21**	**81.00**	**25.55**	**4.47**	**C0235-047-2875-S**	**2.223**	**56.45**	**14.49**	**64.47**	**22.21**	**3.89**
C0235-047-3000-M	**0.235**	**5.97**	**0.047**	**1.19**	**3.000**	**76.20**	**2.255**	**57.28**	**2.230**	**56.64**	**18.21**	**81.00**	**24.45**	**4.28**	**C0235-047-3000-S**	**2.318**	**58.88**	**14.49**	**64.47**	**21.26**	**3.72**
C0235-047-3250-M	**0.235**	**5.97**	**0.047**	**1.19**	**3.250**	**82.55**	**2.441**	**62.00**	**2.413**	**61.29**	**18.21**	**81.00**	**22.51**	**3.94**	**C0235-047-3250-S**	**2.510**	**63.74**	**14.49**	**64.47**	**19.57**	**3.43**
C0235-047-3500-M	**0.235**	**5.97**	**0.047**	**1.19**	**3.500**	**88.90**	**2.627**	**66.72**	**2.596**	**65.95**	**18.21**	**81.00**	**20.86**	**3.65**	**C0235-047-3500-S**	**2.701**	**68.60**	**14.49**	**64.47**	**18.14**	**3.17**
C0235-047-3750-M	**0.235**	**5.97**	**0.047**	**1.19**	**3.750**	**95.25**	**2.813**	**71.45**	**2.780**	**70.61**	**18.21**	**81.00**	**19.43**	**3.40**	**C0235-047-3750-S**	**2.892**	**73.46**	**14.49**	**64.47**	**16.90**	**2.96**
D11850	0.236	6.00	0.039	1.00	0.335	8.50	0.260	6.60	0.217	5.50	9.83	43.74	132.80	23.24	D21850	0.260	6.60	8.19	36.44	110.63	19.36
D11860	0.236	6.00	0.039	1.00	0.472	12.00	0.354	9.00	0.295	7.50	9.83	43.74	84.63	14.81	D21860	0.354	9.00	8.19	36.44	70.51	12.34
D11870	0.236	6.00	0.039	1.00	0.669	17.00	0.496	12.60	0.413	10.50	9.83	43.74	54.69	9.57	D21870	0.496	12.60	8.19	36.44	45.54	7.97
D11880	0.236	6.00	0.039	1.00	0.945	24.00	0.685	17.40	0.571	14.50	9.83	43.74	37.20	6.51	D21880	0.685	17.40	8.19	36.44	30.97	5.42
D11890	0.236	6.00	0.039	1.00	1.358	34.50	0.969	24.60	0.807	20.50	9.83	43.74	25.14	4.40	D21890	0.969	24.60	8.19	36.44	20.97	3.67
C0240-016-0250-M*	0.240	6.10	0.016	0.41	0.250	6.35	0.102	2.59	0.070	1.78	0.92	4.09	6.20	1.09	C0240-016-0250-S*	0.134	3.41	0.60	2.66	5.17	0.90

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0240-016-0310-M*	0.240	6.10	0.016	0.41	0.310	7.87	0.119	3.02	0.076	1.93	0.92	4.09	4.80	0.84
C0240-016-0380-M*	0.240	6.10	0.016	0.41	0.380	9.65	0.144	3.66	0.083	2.11	0.92	4.09	3.90	0.68
C0240-016-0440-M*	0.240	6.10	0.016	0.41	0.440	11.18	0.160	4.06	0.089	2.26	0.92	4.09	3.30	0.58
C0240-016-0500-M*	0.240	6.10	0.016	0.41	0.500	12.70	0.183	4.65	0.095	2.41	0.92	4.09	2.90	0.51
C0240-016-0560-M*	0.240	6.10	0.016	0.41	0.560	14.22	0.192	4.88	0.101	2.57	0.92	4.09	2.50	0.44
C0240-016-0620-M*	0.240	6.10	0.016	0.41	0.620	15.75	0.217	5.51	0.107	2.72	0.92	4.09	2.30	0.40
C0240-016-0690-M*	0.240	6.10	0.016	0.41	0.690	17.53	0.230	5.84	0.114	2.90	0.92	4.09	2.00	0.35
C0240-016-0750-M*	0.240	6.10	0.016	0.41	0.750	19.05	0.266	6.76	0.120	3.05	0.92	4.09	1.90	0.33
C0240-016-0810-M*	0.240	6.10	0.016	0.41	0.810	20.57	0.269	6.83	0.126	3.20	0.92	4.09	1.70	0.30
C0240-016-0880-M*	0.240	6.10	0.016	0.41	0.880	22.35	0.305	7.75	0.133	3.38	0.92	4.09	1.60	0.28
C0240-016-0938-M*	**0.240**	**6.10**	**0.016**	**0.41**	**0.938**	**23.83**	**0.302**	**7.68**	**0.145**	**3.68**	**0.95**	**4.21**	**1.49**	**0.26**
C0240-016-1000-M*	0.240	6.10	0.016	0.41	1.000	25.40	0.343	8.71	0.145	3.68	0.92	4.09	1.40	0.25
C0240-016-1250-M*	0.240	6.10	0.016	0.41	1.250	31.75	0.415	10.54	0.170	4.32	0.92	4.09	1.10	0.19
C0240-016-1500-M*	0.240	6.10	0.016	0.41	1.500	38.10	0.478	12.14	0.195	4.95	0.92	4.09	0.90	0.16
C0240-016-1750-M*	0.240	6.10	0.016	0.41	1.750	44.45	0.600	15.24	0.220	5.59	0.92	4.09	0.80	0.14
C0240-016-2000-M*	0.240	6.10	0.016	0.41	2.000	50.80	0.686	17.42	0.245	6.22	0.92	4.09	0.70	0.12
C0240-018-0250-M*	0.240	6.10	0.018	0.46	0.250	6.35	0.115	2.92	0.080	2.03	1.28	5.69	9.50	1.66
C0240-018-0310-M*	0.240	6.10	0.018	0.46	0.310	7.87	0.137	3.48	0.088	2.24	1.28	5.69	7.40	1.30
C0240-018-0380-M*	0.240	6.10	0.018	0.46	0.380	9.65	0.162	4.11	0.096	2.44	1.28	5.69	5.90	1.03
C0240-018-0440-M*	0.240	6.10	0.018	0.46	0.440	11.18	0.184	4.67	0.103	2.62	1.28	5.69	5.00	0.88
C0240-018-0500-M*	0.240	6.10	0.018	0.46	0.500	12.70	0.209	5.31	0.111	2.82	1.28	5.69	4.40	0.77
C0240-018-0560-M*	0.240	6.10	0.018	0.46	0.560	14.22	0.232	5.89	0.118	3.00	1.28	5.69	3.90	0.68
C0240-018-0620-M*	0.240	6.10	0.018	0.46	0.620	15.75	0.251	6.38	0.126	3.20	1.28	5.69	3.50	0.61
C0240-018-0690-M*	0.240	6.10	0.018	0.46	0.690	17.53	0.276	7.01	0.134	3.40	1.28	5.69	3.10	0.54
C0240-018-0750-M*	0.240	6.10	0.018	0.46	0.750	19.05	0.293	7.44	0.141	3.58	1.28	5.69	2.80	0.49
C0240-018-0810-M*	0.240	6.10	0.018	0.46	0.810	20.57	0.320	8.13	0.149	3.78	1.28	5.69	2.60	0.46
C0240-018-0880-M*	0.240	6.10	0.018	0.46	0.880	22.35	0.346	8.79	0.157	3.99	1.28	5.69	2.40	0.42
C0240-018-1000-M*	0.240	6.10	0.018	0.46	1.000	25.40	0.390	9.91	0.172	4.37	1.28	5.69	2.10	0.37
C0240-018-1250-M*	0.240	6.10	0.018	0.46	1.250	31.75	0.497	12.62	0.203	5.16	1.28	5.69	1.70	0.30
C0240-018-1500-M*	0.240	6.10	0.018	0.46	1.500	38.10	0.586	14.88	0.233	5.92	1.28	5.69	1.40	0.25
C0240-018-1750-M*	0.240	6.10	0.018	0.46	1.750	44.45	0.683	17.35	0.264	6.71	1.28	5.69	1.20	0.21
C0240-018-2000-M*	0.240	6.10	0.018	0.46	2.000	50.80	0.720	18.29	0.294	7.47	1.28	5.69	1.00	0.18
C0240-020-0250-M*	0.240	6.10	0.020	0.51	0.250	6.35	0.126	3.20	0.091	2.31	1.75	7.78	14.10	2.47
C0240-020-0310-M*	0.240	6.10	0.020	0.51	0.310	7.87	0.151	3.84	0.099	2.51	1.75	7.78	11.00	1.93
C0240-020-0380-M*	0.240	6.10	0.020	0.51	0.380	9.65	0.180	4.57	0.110	2.79	1.75	7.78	8.70	1.52
C0240-020-0440-M*	0.240	6.10	0.020	0.51	0.440	11.18	0.204	5.18	0.118	3.00	1.75	7.78	7.40	1.30
C0240-020-0500-M*	0.240	6.10	0.020	0.51	0.500	12.70	0.229	5.82	0.127	3.23	1.75	7.78	6.40	1.12
C0240-020-0560-M*	0.240	6.10	0.020	0.51	0.560	14.22	0.254	6.45	0.136	3.45	1.75	7.78	5.70	1.00
C0240-020-0620-M*	0.240	6.10	0.020	0.51	0.620	15.75	0.278	7.06	0.145	3.68	1.75	7.78	5.10	0.89
C0240-020-0690-M*	0.240	6.10	0.020	0.51	0.690	17.53	0.307	7.80	0.155	3.94	1.75	7.78	4.60	0.81
C0240-020-0750-M*	0.240	6.10	0.020	0.51	0.750	19.05	0.332	8.43	0.164	4.17	1.75	7.78	4.20	0.74
C0240-020-0810-M*	0.240	6.10	0.020	0.51	0.810	20.57	0.349	8.86	0.172	4.37	1.75	7.78	3.80	0.67
C0240-020-0880-M*	0.240	6.10	0.020	0.51	0.880	22.35	0.380	9.65	0.182	4.62	1.75	7.78	3.50	0.61
C0240-020-1000-M*	0.240	6.10	0.020	0.51	1.000	25.40	0.434	11.02	0.200	5.08	1.75	7.78	3.10	0.54
C0240-020-1250-M*	0.240	6.10	0.020	0.51	1.250	31.75	0.521	13.23	0.236	5.99	1.75	7.78	2.40	0.42
C0240-020-1500-M*	0.240	6.10	0.020	0.51	1.500	38.10	0.625	15.88	0.273	6.93	1.75	7.78	2.00	0.35
C0240-020-1750-M*	0.240	6.10	0.020	0.51	1.750	44.45	0.721	18.31	0.309	7.85	1.75	7.78	1.70	0.30
C0240-020-2000-M*	0.240	6.10	0.020	0.51	2.000	50.80	0.833	21.16	0.346	8.79	1.75	7.78	1.50	0.26
C0240-022-0250-M	0.240	6.10	0.022	0.56	0.250	6.35	0.127	3.23	0.103	2.62	2.39	10.63	19.50	3.41
C0240-022-0310-M	0.240	6.10	0.022	0.56	0.310	7.87	0.152	3.86	0.113	2.87	2.39	10.63	15.10	2.64
C0240-022-0380-M	0.240	6.10	0.022	0.56	0.380	9.65	0.186	4.72	0.115	2.92	2.39	10.63	12.30	2.15
C0240-022-0440-M	0.240	6.10	0.022	0.56	0.440	11.18	0.193	4.90	0.131	3.33	2.39	10.63	9.70	1.70
C0240-022-0500-M	0.240	6.10	0.022	0.56	0.500	12.70	0.218	5.54	0.142	3.61	2.39	10.63	8.50	1.49
C0240-022-0560-M	0.240	6.10	0.022	0.56	0.560	14.22	0.242	6.15	0.154	3.91	2.39	10.63	7.50	1.31
C0240-022-0620-M	0.240	6.10	0.022	0.56	0.620	15.75	0.267	6.78	0.164	4.17	2.39	10.63	6.80	1.19
C0240-022-0690-M	0.240	6.10	0.022	0.56	0.690	17.53	0.302	7.67	0.175	4.45	2.39	10.63	6.20	1.09
C0240-022-0750-M	0.240	6.10	0.022	0.56	0.750	19.05	0.327	8.31	0.188	4.78	2.39	10.63	5.60	0.98
C0240-022-0810-M	0.240	6.10	0.022	0.56	0.810	20.57	0.352	8.94	0.198	5.03	2.39	10.63	5.20	0.91
C0240-022-1000-M	0.240	6.10	0.022	0.56	1.000	25.40	0.431	10.95	0.236	5.99	2.39	10.63	4.20	0.74
C0240-022-1250-M	0.240	6.10	0.022	0.56	1.250	31.75	0.526	13.36	0.280	7.11	2.39	10.63	3.30	0.58
C0240-022-1500-M	0.240	6.10	0.022	0.56	1.500	38.10	0.646	16.41	0.325	8.26	2.39	10.63	2.80	0.49
C0240-022-1750-M	0.240	6.10	0.022	0.56	1.750	44.45	0.754	19.15	0.369	9.37	2.39	10.63	2.40	0.42
C0240-022-2000-M	0.240	6.10	0.022	0.56	2.000	50.80	0.862	21.89	0.413	10.49	2.39	10.63	2.10	0.37
C0240-024-0380-M	0.240	6.10	0.024	0.61	0.380	9.65	0.199	5.05	0.142	3.61	2.92	12.99	16.20	2.84

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0240-016-0310-S*	0.160	4.07	0.60	2.66	4.00	0.70
C0240-016-0380-S*	0.196	4.97	0.60	2.66	3.25	0.57
C0240-016-0440-S*	0.222	5.65	0.60	2.66	2.75	0.48
C0240-016-0500-S*	0.252	6.41	0.60	2.66	2.42	0.42
C0240-016-0560-S*	0.273	6.93	0.60	2.66	2.08	0.36
C0240-016-0620-S*	0.308	7.81	0.60	2.66	1.92	0.34
C0240-016-0690-S*	0.331	8.40	0.60	2.66	1.67	0.29
C0240-016-0750-S*	0.372	9.45	0.60	2.66	1.58	0.28
C0240-016-0810-S*	0.387	9.84	0.60	2.66	1.42	0.25
C0240-016-0880-S*	0.431	10.95	0.60	2.66	1.33	0.23
C0240-016-0938-S*	**0.375**	**9.53**	**0.70**	**3.11**	**1.24**	**0.22**
C0240-016-1000-S*	0.487	12.37	0.60	2.66	1.17	0.20
C0240-016-1250-S*	0.597	15.16	0.60	2.66	0.92	0.16
C0240-016-1500-S*	0.702	17.83	0.60	2.66	0.75	0.13
C0240-016-1750-S*	0.852	21.64	0.60	2.66	0.67	0.12
C0240-016-2000-S*	0.974	24.73	0.60	2.66	0.58	0.10
C0240-018-0250-S*	0.145	3.68	0.83	3.70	7.91	1.38
C0240-018-0310-S*	0.175	4.45	0.83	3.70	6.16	1.08
C0240-018-0380-S*	0.211	5.35	0.83	3.70	4.92	0.86
C0240-018-0440-S*	0.240	6.10	0.83	3.70	4.17	0.73
C0240-018-0500-S*	0.273	6.93	0.83	3.70	3.67	0.64
C0240-018-0560-S*	0.304	7.72	0.83	3.70	3.25	0.57
C0240-018-0620-S*	0.335	8.50	0.83	3.70	2.92	0.51
C0240-018-0690-S*	0.368	9.34	0.83	3.70	2.58	0.45
C0240-018-0750-S*	0.393	9.99	0.83	3.70	2.33	0.41
C0240-018-0810-S*	0.426	10.82	0.83	3.70	2.17	0.38
C0240-018-0880-S*	0.464	11.78	0.83	3.70	2.00	0.35
C0240-018-1000-S*	0.524	13.32	0.83	3.70	1.75	0.31
C0240-018-1250-S*	0.663	16.83	0.83	3.70	1.42	0.25
C0240-018-1500-S*	0.787	19.98	0.83	3.70	1.17	0.20
C0240-018-1750-S*	0.918	23.31	0.83	3.70	1.00	0.18
C0240-018-2000-S*	1.001	25.43	0.83	3.70	0.83	0.15
C0240-020-0250-S*	0.155	3.93	1.12	4.99	11.75	2.06
C0240-020-0310-S*	0.188	4.77	1.12	4.99	9.16	1.60
C0240-020-0380-S*	0.225	5.72	1.12	4.99	7.25	1.27
C0240-020-0440-S*	0.258	6.56	1.12	4.99	6.16	1.08
C0240-020-0500-S*	0.290	7.36	1.12	4.99	5.33	0.93
C0240-020-0560-S*	0.324	8.23	1.12	4.99	4.75	0.83
C0240-020-0620-S*	0.356	9.04	1.12	4.99	4.25	0.74
C0240-020-0690-S*	0.397	10.09	1.12	4.99	3.83	0.67
C0240-020-0750-S*	0.430	10.91	1.12	4.99	3.50	0.61
C0240-020-0810-S*	0.456	11.58	1.12	4.99	3.17	0.55
C0240-020-0880-S*	0.495	12.58	1.12	4.99	2.92	0.51
C0240-020-1000-S*	0.566	14.37	1.12	4.99	2.58	0.45
C0240-020-1250-S*	0.689	17.50	1.12	4.99	2.00	0.35
C0240-020-1500-S*	0.827	21.00	1.12	4.99	1.67	0.29
C0240-020-1750-S*	0.958	24.34	1.12	4.99	1.42	0.25
C0240-020-2000-S*	1.103	28.01	1.12	4.99	1.25	0.22
C0240-022-0250-S	0.160	4.06	1.47	6.52	16.24	2.84
C0240-022-0310-S	0.193	4.91	1.47	6.52	12.58	2.20
C0240-022-0380-S	0.237	6.02	1.47	6.52	10.25	1.79
C0240-022-0440-S	0.259	6.57	1.47	6.52	8.08	1.41
C0240-022-0500-S	0.293	7.44	1.47	6.52	7.08	1.24
C0240-022-0560-S	0.325	8.26	1.47	6.52	6.25	1.09
C0240-022-0620-S	0.361	9.17	1.47	6.52	5.66	0.99
C0240-022-0690-S	0.406	10.32	1.47	6.52	5.17	0.90
C0240-022-0750-S	0.436	11.07	1.47	6.52	4.67	0.82
C0240-022-0810-S	0.472	11.98	1.47	6.52	4.33	0.76
C0240-022-1000-S	0.581	14.76	1.47	6.52	3.50	0.61
C0240-022-1250-S	0.717	18.21	1.47	6.52	2.75	0.48
C0240-022-1500-S	0.872	22.14	1.47	6.52	2.33	0.41
C0240-022-1750-S	1.017	25.83	1.47	6.52	2.00	0.35
C0240-022-2000-S	1.162	29.52	1.47	6.52	1.75	0.31
C0240-024-0380-S	0.240	6.10	1.89	8.40	13.50	2.36

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0240-024-0440-M	0.240	6.10	0.024	0.61	0.440	11.18	0.227	5.77	0.155	3.94	2.92	12.99	13.70	2.40	C0240-024-0440-S	0.275	6.97	1.89	8.40	11.41	2.00
C0240-024-0500-M	0.240	6.10	0.024	0.61	0.500	12.70	0.254	6.45	0.168	4.27	2.92	12.99	11.90	2.08	C0240-024-0500-S	0.310	7.86	1.89	8.40	9.91	1.73
C0240-024-0560-M	0.240	6.10	0.024	0.61	0.560	14.22	0.282	7.16	0.180	4.57	2.92	12.99	10.50	1.84	C0240-024-0560-S	0.344	8.74	1.89	8.40	8.75	1.53
C0240-024-0620-M	0.240	6.10	0.024	0.61	0.620	15.75	0.309	7.85	0.193	4.90	2.92	12.99	9.40	1.65	C0240-024-0620-S	0.379	9.62	1.89	8.40	7.83	1.37
C0240-024-0690-M	0.240	6.10	0.024	0.61	0.690	17.53	0.341	8.66	0.208	5.28	2.92	12.99	8.40	1.47	C0240-024-0690-S	0.420	10.67	1.89	8.40	7.00	1.22
C0240-024-0750-M	0.240	6.10	0.024	0.61	0.750	19.05	0.368	9.35	0.221	5.61	2.92	12.99	7.60	1.33	C0240-024-0750-S	0.452	11.47	1.89	8.40	6.33	1.11
C0240-024-0810-M	0.240	6.10	0.024	0.61	0.810	20.57	0.396	10.06	0.233	5.92	2.92	12.99	7.00	1.23	C0240-024-0810-S	0.486	12.35	1.89	8.40	5.83	1.02
C0240-024-0880-M	0.240	6.10	0.024	0.61	0.880	22.35	0.427	10.85	0.248	6.30	2.92	12.99	6.40	1.12	C0240-024-0880-S	0.526	13.36	1.89	8.40	5.33	0.93
C0240-024-1000-M	0.240	6.10	0.024	0.61	1.000	25.40	0.482	12.24	0.274	6.96	2.92	12.99	5.60	0.98	C0240-024-1000-S	0.595	15.12	1.89	8.40	4.67	0.82
C0240-024-1250-M	0.240	6.10	0.024	0.61	1.250	31.75	0.596	15.14	0.327	8.31	2.92	12.99	4.50	0.79	C0240-024-1250-S	0.746	18.96	1.89	8.40	3.75	0.66
C0240-024-1500-M	0.240	6.10	0.024	0.61	1.500	38.10	0.710	18.03	0.379	9.63	2.92	12.99	3.70	0.65	C0240-024-1500-S	0.887	22.54	1.89	8.40	3.08	0.54
C0240-024-1750-M	0.240	6.10	0.024	0.61	1.750	44.45	0.838	21.29	0.432	10.97	2.92	12.99	3.20	0.56	C0240-024-1750-S	1.042	26.46	1.89	8.40	2.67	0.47
C0240-024-2000-M	0.240	6.10	0.024	0.61	2.000	50.80	0.919	23.34	0.485	12.32	2.92	12.99	2.70	0.47	C0240-024-2000-S	1.161	29.48	1.89	8.40	2.25	0.39
C0240-026-0310-M	0.240	6.10	0.026	0.66	0.310	7.87	0.176	4.47	0.138	3.51	3.85	17.13	28.70	5.02	C0240-026-0310-S	0.211	5.35	2.37	10.56	23.91	4.18
C0240-026-0380-M	0.240	6.10	0.026	0.66	0.380	9.65	0.215	5.46	0.143	3.63	3.85	17.13	23.30	4.08	C0240-026-0380-S	0.258	6.55	2.37	10.56	19.41	3.40
C0240-026-0440-M	0.240	6.10	0.026	0.66	0.440	11.18	0.247	6.27	0.156	3.96	3.85	17.13	19.90	3.48	C0240-026-0440-S	0.297	7.54	2.37	10.56	16.58	2.90
C0240-026-0500-M	0.240	6.10	0.026	0.66	0.500	12.70	0.279	7.09	0.169	4.29	3.85	17.13	17.40	3.05	C0240-026-0500-S	0.336	8.54	2.37	10.56	14.49	2.54
C0240-026-0560-M	0.240	6.10	0.026	0.66	0.560	14.22	0.298	7.57	0.188	4.78	3.85	17.13	14.70	2.57	C0240-026-0560-S	0.366	9.30	2.37	10.56	12.25	2.14
C0240-026-0620-M	0.240	6.10	0.026	0.66	0.620	15.75	0.317	8.05	0.208	5.28	3.85	17.13	12.70	2.22	C0240-026-0620-S	0.396	10.05	2.37	10.56	10.58	1.85
C0240-026-0690-M	0.240	6.10	0.026	0.66	0.690	17.53	0.345	8.76	0.228	5.79	3.85	17.13	11.10	1.94	C0240-026-0690-S	0.433	11.01	2.37	10.56	9.25	1.62
C0240-026-0750-M	0.240	6.10	0.026	0.66	0.750	19.05	0.364	9.25	0.246	6.25	3.85	17.13	10.00	1.75	C0240-026-0750-S	0.465	11.81	2.37	10.56	8.33	1.46
C0240-026-0810-M	0.240	6.10	0.026	0.66	0.810	20.57	0.396	10.06	0.260	6.60	3.85	17.13	9.30	1.63	C0240-026-0810-S	0.504	12.79	2.37	10.56	7.75	1.36
C0240-026-0880-M	0.240	6.10	0.026	0.66	0.880	22.35	0.425	10.80	0.281	7.14	3.85	17.13	8.40	1.47	C0240-026-0880-S	0.541	13.74	2.37	10.56	7.00	1.22
C0240-026-1000-M	0.240	6.10	0.026	0.66	1.000	25.40	0.480	12.19	0.313	7.95	3.85	17.13	7.40	1.30	C0240-026-1000-S	0.615	15.62	2.37	10.56	6.16	1.08
C0240-026-1250-M	0.240	6.10	0.026	0.66	1.250	31.75	0.597	15.16	0.375	9.53	3.85	17.13	5.90	1.03	C0240-026-1250-S	0.767	19.49	2.37	10.56	4.92	0.86
C0240-026-1500-M	0.240	6.10	0.026	0.66	1.500	38.10	0.714	18.14	0.437	11.10	3.85	17.13	4.90	0.86	C0240-026-1500-S	0.919	23.33	2.37	10.56	4.08	0.71
C0240-026-1750-M	0.240	6.10	0.026	0.66	1.750	44.45	0.811	20.60	0.499	12.67	3.85	17.13	4.10	0.72	C0240-026-1750-S	1.055	26.80	2.37	10.56	3.42	0.60
C0240-026-2000-M	0.240	6.10	0.026	0.66	2.000	50.80	0.931	23.65	0.561	14.25	3.85	17.13	3.60	0.63	C0240-026-2000-S	1.209	30.70	2.37	10.56	3.00	0.52
C0240-029-0380-M	0.240	6.10	0.029	0.74	0.380	9.65	0.225	5.72	0.185	4.70	4.95	22.02	32.00	5.60	C0240-029-0380-S	0.259	6.58	3.22	14.34	26.66	4.66
C0240-029-0440-M	0.240	6.10	0.029	0.74	0.440	11.18	0.257	6.53	0.203	5.16	4.95	22.02	27.00	4.73	C0240-029-0440-S	0.297	7.54	3.22	14.34	22.49	3.94
C0240-029-0500-M	0.240	6.10	0.029	0.74	0.500	12.70	0.288	7.32	0.221	5.61	4.95	22.02	23.30	4.08	C0240-029-0500-S	0.334	8.48	3.22	14.34	19.41	3.40
C0240-029-0560-M	0.240	6.10	0.029	0.74	0.560	14.22	0.319	8.10	0.240	6.10	4.95	22.02	20.60	3.61	C0240-029-0560-S	0.372	9.45	3.22	14.34	17.16	3.00
C0240-029-0620-M	0.240	6.10	0.029	0.74	0.620	15.75	0.350	8.89	0.258	6.55	4.95	22.02	18.40	3.22	C0240-029-0620-S	0.410	10.41	3.22	14.34	15.33	2.68
C0240-029-0690-M	0.240	6.10	0.029	0.74	0.690	17.53	0.387	9.83	0.279	7.09	4.95	22.02	16.30	2.85	C0240-029-0690-S	0.453	11.50	3.22	14.34	13.58	2.38
C0240-029-0750-M	0.240	6.10	0.029	0.74	0.750	19.05	0.418	10.62	0.298	7.57	4.95	22.02	14.90	2.61	C0240-029-0750-S	0.490	12.45	3.22	14.34	12.41	2.17
C0240-029-0810-M	0.240	6.10	0.029	0.74	0.810	20.57	0.449	11.40	0.316	8.03	4.95	22.02	13.70	2.40	C0240-029-0810-S	0.528	13.40	3.22	14.34	11.41	2.00
C0240-029-0880-M	0.240	6.10	0.029	0.74	0.880	22.35	0.485	12.32	0.337	8.56	4.95	22.02	12.60	2.21	C0240-029-0880-S	0.573	14.55	3.22	14.34	10.50	1.84
C0240-029-0940-M	0.240	6.10	0.029	0.74	0.940	23.88	0.517	13.13	0.355	9.02	4.95	22.02	11.70	2.05	C0240-029-0940-S	0.609	15.48	3.22	14.34	9.75	1.71
C0240-029-1000-M	0.240	6.10	0.029	0.74	1.000	25.40	0.548	13.92	0.374	9.50	4.95	22.02	11.00	1.93	C0240-029-1000-S	0.648	16.46	3.22	14.34	9.16	1.60
C0240-029-1120-M	0.240	6.10	0.029	0.74	1.120	28.45	0.610	15.49	0.410	10.41	4.95	22.02	9.70	1.70	C0240-029-1120-S	0.721	18.32	3.22	14.34	8.08	1.41
C0240-029-1250-M	0.240	6.10	0.029	0.74	1.250	31.75	0.678	17.22	0.450	11.43	4.95	22.02	8.70	1.52	C0240-029-1250-S	0.805	20.45	3.22	14.34	7.25	1.27
C0240-029-1380-M	0.240	6.10	0.029	0.74	1.380	35.05	0.745	18.92	0.489	12.42	4.95	22.02	7.80	1.37	C0240-029-1380-S	0.884	22.45	3.22	14.34	6.50	1.14
C0240-029-1500-M	0.240	6.10	0.029	0.74	1.500	38.10	0.808	20.52	0.526	13.36	4.95	22.02	7.20	1.26	C0240-029-1500-S	0.963	24.45	3.22	14.34	6.00	1.05
C0240-029-1750-M	0.240	6.10	0.029	0.74	1.750	44.45	0.938	23.83	0.602	15.29	4.95	22.02	6.10	1.07	C0240-029-1750-S	1.116	28.34	3.22	14.34	5.08	0.89
C0240-029-2000-M	0.240	6.10	0.029	0.74	2.000	50.80	1.068	27.13	0.678	17.22	4.95	22.02	5.30	0.93	C0240-029-2000-S	1.270	32.26	3.22	14.34	4.42	0.77
C0240-032-0310-M	0.240	6.10	0.032	0.81	0.310	7.87	0.202	5.13	0.167	4.24	6.89	30.65	63.80	11.17	C0240-032-0310-S	0.230	5.84	4.25	18.91	53.15	9.30
C0240-032-0380-M	0.240	6.10	0.032	0.81	0.380	9.65	0.252	6.40	0.184	4.67	6.89	30.65	53.80	9.42	C0240-032-0380-S	0.285	7.24	4.25	18.91	44.82	7.84
C0240-032-0440-M	0.240	6.10	0.032	0.81	0.440	11.18	0.282	7.16	0.209	5.31	6.89	30.65	43.20	7.56	C0240-032-0440-S	0.322	8.17	4.25	18.91	35.99	6.30
C0240-032-0500-M	0.240	6.10	0.032	0.81	0.500	12.70	0.313	7.95	0.232	5.89	6.89	30.65	36.80	6.44	C0240-032-0500-S	0.361	9.18	4.25	18.91	30.65	5.36
C0240-032-0560-M	0.240	6.10	0.032	0.81	0.560	14.22	0.344	8.74	0.255	6.48	6.89	30.65	31.90	5.58	C0240-032-0560-S	0.400	10.16	4.25	18.91	26.57	4.65
C0240-032-0620-M	0.240	6.10	0.032	0.81	0.620	15.75	0.374	9.50	0.279	7.09	6.89	30.65	28.00	4.90	C0240-032-0620-S	0.438	11.12	4.25	18.91	23.32	4.08
C0240-032-0690-M	0.240	6.10	0.032	0.81	0.690	17.53	0.414	10.52	0.303	7.70	6.89	30.65	25.00	4.38	C0240-032-0690-S	0.486	12.34	4.25	18.91	20.83	3.64
C0240-032-0750-M	0.240	6.10	0.032	0.81	0.750	19.05	0.435	11.05	0.335	8.51	6.89	30.65	21.90	3.83	C0240-032-0750-S	0.517	13.13	4.25	18.91	18.24	3.19
C0240-032-0810-M	0.240	6.10	0.032	0.81	0.810	20.57	0.466	11.84	0.359	9.12	6.89	30.65	20.00	3.50	C0240-032-0810-S	0.555	14.09	4.25	18.91	16.66	2.92
C0240-032-0880-M	0.240	6.10	0.032	0.81	0.880	22.35	0.506	12.85	0.384	9.75	6.89	30.65	18.40	3.22	C0240-032-0880-S	0.603	15.31	4.25	18.91	15.33	2.68
C0240-032-0940-M	0.240	6.10	0.032	0.81	0.940	23.88	0.537	13.64	0.407	10.34	6.89	30.65	17.10	2.99	C0240-032-0940-S	0.642	16.29	4.25	18.91	14.24	2.49
C0240-032-1000-M	0.240	6.10	0.032	0.81	1.000	25.40	0.567	14.40	0.431	10.95	6.89	30.65	15.90	2.78	C0240-032-1000-S	0.679	17.25	4.25	18.91	13.25	2.32
C0240-032-1250-M	0.240	6.10	0.032	0.81	1.250	31.75	0.699	17.75	0.526	13.36	6.89	30.65	12.50	2.19	C0240-032-1250-S	0.842	21.38	4.25	18.91	10.41	1.82
C0240-032-1380-M	0.240	6.10	0.032	0.81	1.380	35.05	0.765	19.43	0.573	14.55	6.89	30.65	11.20	1.96	C0240-032-1380-S	0.924	23.48	4.25	18.91	9.33	1.63
C0240-032-1500-M	0.240	6.10	0.032	0.81	1.500	38.10	0.831	21.11	0.616	15.65	6.89	30.65	10.30	1.80	C0240-032-1500-S	1.004	25.51	4.25	18.91	8.58	1.50
C0240-032-1750-M	0.240	6.10	0.032	0.81	1.750	44.45	0.967	24.56	0.707	17.96	6.89	30.65	8.80	1.54	C0240-032-1750-S	1.170	29.72	4.25	18.91	7.33	1.28
C0240-032-2000-M	0.240	6.10	0.032	0.81	2.000	50.80	1.093	27.76	0.797	20.24	6.89	30.65	7.60	1.33	C0240-032-2000-S	1.328	33.74	4.25	18.91	6.33	1.11
C0240-035-0310-M	0.240	6.10	0.035	0.89	0.310	7.87	0.214	5.44	0.206	5.23	8.34	37.10	86.90	15.21	C0240-035-0310-S	0.234	5.95	5.48	24.37	72.39	12.67
C0240-035-0380-M	0.240	6.10	0.035	0.89	0.380	9.65	0.256	6.50	0.235	5.97	8.34	37.10	67.30	11.78	C0240-035-0380-S	0.282	7.17	5.48	24.37	56.06	9.81

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0240-035-0440-M	0.240	6.10	0.035	0.89	0.440	11.18	0.292	7.42	0.260	6.60	8.34	37.10	56.40	9.87
C0240-035-0500-M	0.240	6.10	0.035	0.89	0.500	12.70	0.328	8.33	0.286	7.26	8.34	37.10	48.50	8.49
C0240-035-0560-M	0.240	6.10	0.035	0.89	0.560	14.22	0.364	9.25	0.311	7.90	8.34	37.10	42.60	7.46
C0240-035-0620-M	0.240	6.10	0.035	0.89	0.620	15.75	0.400	10.16	0.336	8.53	8.34	37.10	37.90	6.63
C0240-035-0690-M	0.240	6.10	0.035	0.89	0.690	17.53	0.442	11.23	0.366	9.30	8.34	37.10	33.60	5.88
C0240-035-0750-M	0.240	6.10	0.035	0.89	0.750	19.05	0.478	12.14	0.391	9.93	8.34	37.10	30.70	5.37
C0240-035-0810-M	0.240	6.10	0.035	0.89	0.810	20.57	0.514	13.06	0.416	10.57	8.34	37.10	28.20	4.94
C0240-035-0880-M	0.240	6.10	0.035	0.89	0.880	22.35	0.556	14.12	0.445	11.30	8.34	37.10	25.70	4.50
C0240-035-0940-M	0.240	6.10	0.035	0.89	0.940	23.88	0.592	15.04	0.471	11.96	8.34	37.10	24.00	4.20
C0240-035-1000-M	0.240	6.10	0.035	0.89	1.000	25.40	0.628	15.95	0.496	12.60	8.34	37.10	22.40	3.92
C0240-035-1250-M	0.240	6.10	0.035	0.89	1.250	31.75	0.778	19.76	0.601	15.27	8.34	37.10	17.70	3.10
C0240-035-1380-M	0.240	6.10	0.035	0.89	1.380	35.05	0.856	21.74	0.656	16.66	8.34	37.10	15.90	2.78
C0240-035-1500-M	0.240	6.10	0.035	0.89	1.500	38.10	0.928	23.57	0.706	17.93	8.34	37.10	14.60	2.56
C0240-035-1750-M	0.240	6.10	0.035	0.89	1.750	44.45	1.078	27.38	0.811	20.60	8.34	37.10	12.40	2.17
C0240-035-2000-M	0.240	6.10	0.035	0.89	2.000	50.80	1.228	31.19	0.916	23.27	8.34	37.10	10.80	1.89
C0240-035-2250-M	0.240	6.10	0.035	0.89	2.250	57.15	1.378	35.00	1.021	25.93	8.34	37.10	9.60	1.68
C0240-035-2500-M	0.240	6.10	0.035	0.89	2.500	63.50	1.528	38.81	1.126	28.60	8.34	37.10	8.60	1.51
C0240-038-0310-M	0.240	6.10	0.038	0.97	0.310	7.87	0.223	5.66	0.208	5.28	11.06	49.20	127.10	22.24
C0240-038-0380-M	0.240	6.10	0.038	0.97	0.380	9.65	0.271	6.88	0.237	6.02	11.06	49.20	101.50	17.76
C0240-038-0440-M	0.240	6.10	0.038	0.97	0.440	11.18	0.309	7.85	0.265	6.73	11.06	49.20	84.40	14.77
C0240-038-0500-M	0.240	6.10	0.038	0.97	0.500	12.70	0.347	8.81	0.294	7.47	11.06	49.20	72.30	12.65
C0240-038-0560-M	0.240	6.10	0.038	0.97	0.560	14.22	0.385	9.78	0.323	8.20	11.06	49.20	63.20	11.06
C0240-038-0620-M	0.240	6.10	0.038	0.97	0.620	15.75	0.424	10.77	0.350	8.89	11.06	49.20	56.40	9.87
C0240-038-0690-M	0.240	6.10	0.038	0.97	0.690	17.53	0.472	11.99	0.379	9.63	11.06	49.20	50.70	8.87
C0240-038-0750-M	0.240	6.10	0.038	0.97	0.750	19.05	0.510	12.95	0.407	10.34	11.06	49.20	46.10	8.07
C0240-038-0810-M	0.240	6.10	0.038	0.97	0.810	20.57	0.548	13.92	0.436	11.07	11.06	49.20	42.20	7.39
C0240-038-0880-M	0.240	6.10	0.038	0.97	0.880	22.35	0.589	14.96	0.474	12.04	11.06	49.20	38.00	6.65
C0240-038-0940-M	0.240	6.10	0.038	0.97	0.940	23.88	0.620	15.75	0.511	12.98	11.06	49.20	34.60	6.06
C0240-038-1000-M	0.240	6.10	0.038	0.97	1.000	25.40	0.658	16.71	0.541	13.74	11.06	49.20	32.30	5.65
C0240-038-1120-M	0.240	6.10	0.038	0.97	1.120	28.45	0.735	18.67	0.597	15.16	11.06	49.20	28.70	5.02
C0240-038-1250-M	0.240	6.10	0.038	0.97	1.250	31.75	0.821	20.85	0.653	16.59	11.06	49.20	25.80	4.52
C0240-038-1380-M	0.240	6.10	0.038	0.97	1.380	35.05	0.907	23.04	0.711	18.06	11.06	49.20	23.40	4.10
C0240-038-1500-M	0.240	6.10	0.038	0.97	1.500	38.10	0.984	24.99	0.768	19.51	11.06	49.20	21.40	3.75
C0240-038-1750-M	0.240	6.10	0.038	0.97	1.750	44.45	1.111	28.22	0.912	23.16	11.06	49.20	17.30	3.03
C0240-038-2000-M	0.240	6.10	0.038	0.97	2.000	50.80	1.268	32.21	1.032	26.21	11.06	49.20	15.10	2.64
C0240-038-2250-M	0.240	6.10	0.038	0.97	2.250	57.15	1.418	36.02	1.151	29.24	11.06	49.20	13.30	2.33
C0240-038-2500-M	0.240	6.10	0.038	0.97	2.500	63.50	1.578	40.08	1.270	32.26	11.06	49.20	12.00	2.10
C0240-040-0310-M	0.240	6.10	0.040	1.02	0.310	7.87	0.233	5.92	0.220	5.59	12.03	53.51	155.80	27.27
C0240-040-0380-M	0.240	6.10	0.040	1.02	0.380	9.65	0.279	7.09	0.274	6.96	12.03	53.51	119.40	20.90
C0240-040-0440-M	0.240	6.10	0.040	1.02	0.440	11.18	0.319	8.10	0.305	7.75	12.03	53.51	99.50	17.41
C0240-040-0500-M	0.240	6.10	0.040	1.02	0.500	12.70	0.359	9.12	0.336	8.53	12.03	53.51	85.30	14.93
C0240-040-0560-M	0.240	6.10	0.040	1.02	0.560	14.22	0.399	10.13	0.366	9.30	12.03	53.51	74.70	13.07
C0240-040-0620-M	0.240	6.10	0.040	1.02	0.620	15.75	0.439	11.15	0.397	10.08	12.03	53.51	66.40	11.62
C0240-040-0690-M	0.240	6.10	0.040	1.02	0.690	17.53	0.485	12.32	0.433	11.00	12.03	53.51	58.70	10.27
C0240-040-0750-M	0.240	6.10	0.040	1.02	0.750	19.05	0.525	13.34	0.464	11.79	12.03	53.51	53.50	9.36
C0240-040-0810-M	0.240	6.10	0.040	1.02	0.810	20.57	0.565	14.35	0.495	12.57	12.03	53.51	49.10	8.59
C0240-040-0880-M	0.240	6.10	0.040	1.02	0.880	22.35	0.611	15.52	0.531	13.49	12.03	53.51	44.80	7.84
C0240-040-0940-M	0.240	6.10	0.040	1.02	0.940	23.88	0.651	16.54	0.562	14.27	12.03	53.51	41.70	7.30
C0240-040-1000-M	0.240	6.10	0.040	1.02	1.000	25.40	0.691	17.55	0.592	15.04	12.03	53.51	39.00	6.83
C0240-040-1120-M	0.240	6.10	0.040	1.02	1.120	28.45	0.771	19.58	0.654	16.61	12.03	53.51	34.50	6.04
C0240-040-1250-M	0.240	6.10	0.040	1.02	1.250	31.75	0.857	21.77	0.721	18.31	12.03	53.51	30.60	5.36
C0240-040-1380-M	0.240	6.10	0.040	1.02	1.380	35.05	0.944	23.98	0.788	20.02	12.03	53.51	27.60	4.83
C0240-040-1500-M	0.240	6.10	0.040	1.02	1.500	38.10	1.023	25.98	0.849	21.56	12.03	53.51	25.20	4.41
C0240-040-1750-M	0.240	6.10	0.040	1.02	1.750	44.45	1.189	30.20	0.977	24.82	12.03	53.51	21.50	3.76
C0240-040-2000-M	0.240	6.10	0.040	1.02	2.000	50.80	1.355	34.42	1.106	28.09	12.03	53.51	18.70	3.27
C0240-040-2250-M	0.240	6.10	0.040	1.02	2.250	57.15	1.522	38.66	1.417	35.99	12.03	53.51	16.50	2.89
C0240-040-2500-M	0.240	6.10	0.040	1.02	2.500	63.50	1.688	42.88	1.363	34.62	12.03	53.51	14.80	2.59
C0240-042-0380-M	0.240	6.10	0.042	1.07	0.380	9.65	0.285	7.24	0.272	6.91	14.39	64.01	151.00	26.43
C0240-042-0440-M	0.240	6.10	0.042	1.07	0.440	11.18	0.323	8.20	0.310	7.87	14.39	64.01	123.00	21.53
C0240-042-0500-M	0.240	6.10	0.042	1.07	0.500	12.70	0.365	9.27	0.343	8.71	14.39	64.01	106.00	18.55
C0240-042-0560-M	0.240	6.10	0.042	1.07	0.560	14.22	0.407	10.34	0.373	9.47	14.39	64.01	94.00	16.45
C0240-042-0620-M	0.240	6.10	0.042	1.07	0.620	15.75	0.451	11.46	0.401	10.19	14.39	64.01	85.00	14.88
C0240-042-0690-M	0.240	6.10	0.042	1.07	0.690	17.53	0.498	12.65	0.441	11.20	14.39	64.01	75.00	13.13
C0240-042-0750-M	0.240	6.10	0.042	1.07	0.750	19.05	0.527	13.39	0.499	12.67	14.39	64.01	64.00	11.20

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0240-035-0440-S	0.323	8.21	5.48	24.37	46.98	8.22
C0240-035-0500-S	0.364	9.26	5.48	24.37	40.40	7.07
C0240-035-0560-S	0.406	10.30	5.48	24.37	35.49	6.21
C0240-035-0620-S	0.446	11.34	5.48	24.37	31.57	5.52
C0240-035-0690-S	0.494	12.55	5.48	24.37	27.99	4.90
C0240-035-0750-S	0.536	13.61	5.48	24.37	25.57	4.48
C0240-035-0810-S	0.577	14.65	5.48	24.37	23.49	4.11
C0240-035-0880-S	0.624	15.85	5.48	24.37	21.41	3.75
C0240-035-0940-S	0.666	16.92	5.48	24.37	19.99	3.50
C0240-035-1000-S	0.706	17.94	5.48	24.37	18.66	3.27
C0240-035-1250-S	0.878	22.31	5.48	24.37	14.74	2.58
C0240-035-1380-S	0.966	24.55	5.48	24.37	13.25	2.32
C0240-035-1500-S	1.050	26.66	5.48	24.37	12.16	2.13
C0240-035-1750-S	1.220	30.98	5.48	24.37	10.33	1.81
C0240-035-2000-S	1.391	35.33	5.48	24.37	9.00	1.57
C0240-035-2250-S	1.565	39.75	5.48	24.37	8.00	1.40
C0240-035-2500-S	1.735	44.08	5.48	24.37	7.16	1.25
C0240-038-0310-S	0.246	6.24	6.82	30.36	105.87	18.53
C0240-038-0380-S	0.299	7.60	6.82	30.36	84.55	14.80
C0240-038-0440-S	0.343	8.71	6.82	30.36	70.31	12.30
C0240-038-0500-S	0.387	9.82	6.82	30.36	60.23	10.54
C0240-038-0560-S	0.430	10.93	6.82	30.36	52.65	9.21
C0240-038-0620-S	0.475	12.06	6.82	30.36	46.98	8.22
C0240-038-0690-S	0.528	13.42	6.82	30.36	42.23	7.39
C0240-038-0750-S	0.572	14.54	6.82	30.36	38.40	6.72
C0240-038-0810-S	0.616	15.64	6.82	30.36	35.15	6.15
C0240-038-0880-S	0.664	16.88	6.82	30.36	31.65	5.54
C0240-038-0940-S	0.703	17.86	6.82	30.36	28.82	5.04
C0240-038-1000-S	0.746	18.96	6.82	30.36	26.91	4.71
C0240-038-1120-S	0.835	21.20	6.82	30.36	23.91	4.18
C0240-038-1250-S	0.932	23.68	6.82	30.36	21.49	3.76
C0240-038-1380-S	1.030	26.16	6.82	30.36	19.49	3.41
C0240-038-1500-S	1.117	28.38	6.82	30.36	17.83	3.12
C0240-038-1750-S	1.276	32.42	6.82	30.36	14.41	2.52
C0240-038-2000-S	1.457	37.02	6.82	30.36	12.58	2.20
C0240-038-2250-S	1.634	41.50	6.82	30.36	11.08	1.94
C0240-038-2500-S	1.817	46.16	6.82	30.36	10.00	1.75
C0240-040-0310-S	0.249	6.33	7.91	35.19	129.78	22.71
C0240-040-0380-S	0.300	7.63	7.91	35.19	99.46	17.41
C0240-040-0440-S	0.345	8.75	7.91	35.19	82.88	14.50
C0240-040-0500-S	0.389	9.87	7.91	35.19	71.06	12.43
C0240-040-0560-S	0.433	10.99	7.91	35.19	62.23	10.89
C0240-040-0620-S	0.477	12.12	7.91	35.19	55.31	9.68
C0240-040-0690-S	0.528	13.42	7.91	35.19	48.90	8.56
C0240-040-0750-S	0.572	14.54	7.91	35.19	44.57	7.80
C0240-040-0810-S	0.617	15.66	7.91	35.19	40.90	7.16
C0240-040-0880-S	0.668	16.97	7.91	35.19	37.32	6.53
C0240-040-0940-S	0.712	18.09	7.91	35.19	34.74	6.08
C0240-040-1000-S	0.756	19.21	7.91	35.19	32.49	5.69
C0240-040-1120-S	0.845	21.46	7.91	35.19	28.74	5.03
C0240-040-1250-S	0.940	23.87	7.91	35.19	25.49	4.46
C0240-040-1380-S	1.036	26.31	7.91	35.19	22.99	4.02
C0240-040-1500-S	1.123	28.53	7.91	35.19	20.99	3.67
C0240-040-1750-S	1.308	33.23	7.91	35.19	17.91	3.13
C0240-040-2000-S	1.492	37.90	7.91	35.19	15.58	2.73
C0240-040-2250-S	1.674	42.53	7.91	35.19	13.75	2.41
C0240-040-2500-S	1.858	47.20	7.91	35.19	12.33	2.16
C0240-042-0380-S	0.308	7.83	9.00	40.03	125.78	22.01
C0240-042-0440-S	0.352	8.95	9.00	40.03	102.46	17.93
C0240-042-0500-S	0.398	10.11	9.00	40.03	88.30	15.45
C0240-042-0560-S	0.445	11.30	9.00	40.03	78.30	13.70
C0240-042-0620-S	0.493	12.52	9.00	40.03	70.81	12.39
C0240-042-0690-S	0.546	13.87	9.00	40.03	62.48	10.93
C0240-042-0750-S	0.581	14.76	9.00	40.03	53.31	9.33

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0240-042-0810-M	0.240	6.10	0.042	1.07	0.810	20.57	0.569	14.45	0.525	13.34	14.39	64.01	60.00	10.50
C0240-042-0880-M	0.240	6.10	0.042	1.07	0.880	22.35	0.621	15.77	0.556	14.12	14.39	64.01	56.00	9.80
C0240-042-0940-M	0.240	6.10	0.042	1.07	0.940	23.88	0.657	16.69	0.600	15.24	14.39	64.01	51.00	8.93
C0240-042-1000-M	0.240	6.10	0.042	1.07	1.000	25.40	0.699	17.75	0.631	16.03	14.39	64.01	48.00	8.40
C0240-042-1120-M	0.240	6.10	0.042	1.07	1.120	28.45	0.783	19.89	0.699	17.75	14.39	64.01	42.50	7.44
C0240-042-1250-M	0.240	6.10	0.042	1.07	1.250	31.75	0.868	22.05	0.778	19.76	14.39	64.01	37.50	6.56
C0240-042-1380-M	0.240	6.10	0.042	1.07	1.380	35.05	0.958	24.33	0.847	21.51	14.39	64.01	34.00	5.95
C0240-042-1500-M	0.240	6.10	0.042	1.07	1.500	38.10	1.028	26.11	0.933	23.70	14.39	64.01	30.50	5.34
C0240-042-1750-M	0.240	6.10	0.042	1.07	1.750	44.45	1.207	30.66	1.040	26.42	14.39	64.01	26.50	4.64
C0240-042-2000-M	0.240	6.10	0.042	1.07	2.000	50.80	1.374	34.90	1.177	29.90	14.39	64.01	23.00	4.03
C0240-042-2250-M	0.240	6.10	0.042	1.07	2.250	57.15	1.545	39.24	1.314	33.38	14.39	64.01	20.40	3.57
C0240-042-2500-M	0.240	6.10	0.042	1.07	2.500	63.50	1.714	43.54	1.452	36.88	14.39	64.01	18.30	3.20
C0240-045-0440-M	0.240	6.10	0.045	1.14	0.440	11.18	0.348	8.84	0.326	8.28	16.17	71.93	174.90	30.61
C0240-045-0500-M	0.240	6.10	0.045	1.14	0.500	12.70	0.392	9.96	0.361	9.17	16.17	71.93	149.30	26.13
C0240-045-0560-M	0.240	6.10	0.045	1.14	0.560	14.22	0.436	11.07	0.396	10.06	16.17	71.93	130.20	22.79
C0240-045-0620-M	0.240	6.10	0.045	1.14	0.620	15.75	0.480	12.19	0.436	11.07	16.17	71.93	115.50	20.21
C0240-045-0690-M	0.240	6.10	0.045	1.14	0.690	17.53	0.532	13.51	0.477	12.12	16.17	71.93	102.00	17.85
C0240-045-0750-M	0.240	6.10	0.045	1.14	0.750	19.05	0.576	14.63	0.516	13.11	16.17	71.93	92.70	16.22
C0240-045-0810-M	0.240	6.10	0.045	1.14	0.810	20.57	0.620	15.75	0.551	14.00	16.17	71.93	85.00	14.88
C0240-045-0880-M	0.240	6.10	0.045	1.14	0.880	22.35	0.671	17.04	0.594	15.09	16.17	71.93	77.50	13.56
C0240-045-1000-M	0.240	6.10	0.045	1.14	1.000	25.40	0.760	19.30	0.667	16.94	16.17	71.93	67.30	11.78
C0240-045-1250-M	0.240	6.10	0.045	1.14	1.250	31.75	0.944	23.98	0.813	20.65	16.17	71.93	52.80	9.24
C0240-045-1500-M	0.240	6.10	0.045	1.14	1.500	38.10	1.128	28.65	0.959	24.36	16.17	71.93	43.40	7.60
C0240-045-1750-M	0.240	6.10	0.045	1.14	1.750	44.45	1.311	33.30	1.105	28.07	16.17	71.93	36.90	6.46
C0240-045-2000-M	0.240	6.10	0.045	1.14	2.000	50.80	1.495	37.97	1.251	31.78	16.17	71.93	32.00	5.60
C0240-045-2250-M	0.240	6.10	0.045	1.14	2.250	57.15	1.679	42.65	1.397	35.48	16.17	71.93	28.30	4.95
C0240-045-2500-M	0.240	6.10	0.045	1.14	2.500	63.50	1.863	47.32	1.543	39.19	16.17	71.93	25.40	4.45
C0250-020-0250-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.250**	**6.35**	**0.110**	**2.80**	**0.090**	**2.28**	**1.70**	**7.57**	**12.18**	**2.13**
C0250-020-0313-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.313**	**7.95**	**0.131**	**3.31**	**0.101**	**2.56**	**1.71**	**7.61**	**9.37**	**1.64**
C0250-020-0375-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.375**	**9.53**	**0.151**	**3.83**	**0.111**	**2.83**	**1.71**	**7.61**	**7.63**	**1.34**
C0250-020-0438-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.438**	**11.13**	**0.172**	**4.37**	**0.122**	**3.11**	**1.71**	**7.61**	**6.43**	**1.13**
C0250-020-0500-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.500**	**12.70**	**0.192**	**4.89**	**0.133**	**3.38**	**1.71**	**7.61**	**5.56**	**0.97**
C0250-020-0563-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.563**	**14.30**	**0.213**	**5.42**	**0.144**	**3.65**	**1.71**	**7.61**	**4.89**	**0.86**
C0250-020-0625-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.625**	**15.88**	**0.234**	**5.94**	**0.154**	**3.91**	**1.71**	**7.61**	**4.37**	**0.76**
C0250-020-0688-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.688**	**17.48**	**0.255**	**6.48**	**0.164**	**4.15**	**1.71**	**7.61**	**3.95**	**0.69**
C0250-020-0750-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.750**	**19.05**	**0.275**	**6.99**	**0.173**	**4.40**	**1.71**	**7.61**	**3.60**	**0.63**
C0250-020-0813-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.813**	**20.65**	**0.297**	**7.54**	**0.183**	**4.64**	**1.71**	**7.61**	**3.31**	**0.58**
C0250-020-0875-M*	**0.250**	**6.35**	**0.020**	**0.51**	**0.875**	**22.23**	**0.316**	**8.03**	**0.193**	**4.90**	**1.71**	**7.61**	**3.06**	**0.54**
C0250-020-1000-M*	**0.250**	**6.35**	**0.020**	**0.51**	**1.000**	**25.40**	**0.357**	**9.07**	**0.212**	**5.39**	**1.71**	**7.61**	**2.66**	**0.47**
C0250-020-1250-M*	**0.250**	**6.35**	**0.020**	**0.51**	**1.250**	**31.75**	**0.440**	**11.17**	**0.251**	**6.38**	**1.71**	**7.61**	**2.11**	**0.37**
C0250-020-1375-M*	**0.250**	**6.35**	**0.020**	**0.51**	**1.375**	**34.93**	**0.470**	**11.94**	**0.273**	**6.94**	**1.71**	**7.61**	**1.89**	**0.33**
C0250-020-1500-M*	**0.250**	**6.35**	**0.020**	**0.51**	**1.500**	**38.10**	**0.517**	**13.14**	**0.291**	**7.40**	**1.71**	**7.61**	**1.74**	**0.30**
C0250-020-1750-M*	**0.250**	**6.35**	**0.020**	**0.51**	**1.750**	**44.45**	**0.595**	**15.10**	**0.331**	**8.41**	**1.71**	**7.61**	**1.48**	**0.26**
C0250-020-1880-M*	**0.250**	**6.35**	**0.020**	**0.51**	**1.880**	**47.75**	**0.625**	**15.88**	**0.424**	**10.77**	**1.38**	**6.14**	**1.10**	**0.19**
C0250-025-0250-M	**0.250**	**6.35**	**0.025**	**0.64**	**0.250**	**6.35**	**0.143**	**3.64**	**0.131**	**3.32**	**1.71**	**7.59**	**16.00**	**2.80**
C0250-025-0410-M	**0.250**	**6.35**	**0.025**	**0.64**	**0.410**	**10.41**	**0.191**	**4.86**	**0.160**	**4.07**	**2.62**	**11.67**	**12.00**	**2.10**
C0250-025-0440-M	**0.250**	**6.35**	**0.025**	**0.64**	**0.440**	**11.18**	**0.212**	**5.37**	**0.144**	**3.65**	**3.20**	**14.22**	**14.00**	**2.45**
C0250-025-0500-M	**0.250**	**6.35**	**0.025**	**0.64**	**0.500**	**12.70**	**0.234**	**5.93**	**0.160**	**4.07**	**3.20**	**14.22**	**12.00**	**2.10**
C0250-025-0590-M	**0.250**	**6.35**	**0.025**	**0.64**	**0.590**	**14.99**	**0.300**	**7.62**	**0.261**	**6.63**	**1.80**	**8.00**	**6.20**	**1.09**
C0250-025-0690-M	**0.250**	**6.35**	**0.025**	**0.64**	**0.690**	**17.53**	**0.300**	**7.62**	**0.210**	**5.34**	**3.20**	**14.22**	**8.20**	**1.44**
C0250-025-1130-M	**0.250**	**6.35**	**0.025**	**0.64**	**1.130**	**28.70**	**0.445**	**11.30**	**0.340**	**8.64**	**3.08**	**13.72**	**4.50**	**0.79**
C0250-025-1780-M	**0.250**	**6.35**	**0.025**	**0.64**	**1.780**	**45.21**	**0.765**	**19.43**	**0.615**	**15.62**	**2.33**	**10.38**	**2.30**	**0.40**
C0250-025-2000-M	**0.250**	**6.35**	**0.025**	**0.64**	**2.000**	**50.80**	**0.894**	**22.70**	**0.734**	**18.63**	**2.10**	**9.35**	**1.90**	**0.33**
C0250-026-0938-M	**0.250**	**6.35**	**0.026**	**0.66**	**0.938**	**23.83**	**0.508**	**12.89**	**0.247**	**6.28**	**3.57**	**15.87**	**8.29**	**1.45**
C0250-026-1000-M	**0.250**	**6.35**	**0.026**	**0.66**	**1.000**	**25.40**	**0.518**	**13.15**	**0.270**	**6.86**	**3.57**	**15.87**	**7.40**	**1.30**
C0250-028-0440-M	**0.250**	**6.35**	**0.028**	**0.71**	**0.440**	**11.18**	**0.221**	**5.61**	**0.178**	**4.51**	**4.39**	**19.51**	**20.00**	**3.50**
C0250-028-0560-M	**0.250**	**6.35**	**0.028**	**0.71**	**0.560**	**14.22**	**0.292**	**7.41**	**0.257**	**6.52**	**3.22**	**14.32**	**12.00**	**2.10**
C0250-028-0630-M	**0.250**	**6.35**	**0.028**	**0.71**	**0.630**	**16.00**	**0.302**	**7.68**	**0.257**	**6.52**	**3.93**	**17.49**	**12.00**	**2.10**
C0250-028-0810-M	**0.250**	**6.35**	**0.028**	**0.71**	**0.810**	**20.57**	**0.406**	**10.32**	**0.352**	**8.94**	**3.27**	**14.54**	**8.10**	**1.42**
C0250-028-1000-M	**0.250**	**6.35**	**0.028**	**0.71**	**1.000**	**25.40**	**0.513**	**13.02**	**0.323**	**8.19**	**4.39**	**19.51**	**9.00**	**1.58**
C0250-028-1380-M	**0.250**	**6.35**	**0.028**	**0.71**	**1.380**	**35.05**	**0.649**	**16.49**	**0.455**	**11.54**	**4.39**	**19.51**	**6.00**	**1.05**
C0250-029-0410-M	**0.250**	**6.35**	**0.029**	**0.74**	**0.410**	**10.41**	**0.221**	**5.62**	**0.197**	**5.02**	**3.96**	**17.62**	**21.00**	**3.68**
C0250-029-0530-M	**0.250**	**6.35**	**0.029**	**0.74**	**0.530**	**13.46**	**0.307**	**7.81**	**0.282**	**7.15**	**2.89**	**12.87**	**13.00**	**2.28**
C0250-029-2250-M	**0.250**	**6.35**	**0.029**	**0.74**	**2.250**	**57.15**	**1.136**	**28.85**	**0.986**	**25.05**	**3.45**	**15.36**	**3.10**	**0.54**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0240-042-0810-S	0.630	16.00	9.00	40.03	49.98	8.75
C0240-042-0880-S	0.687	17.45	9.00	40.03	46.65	8.16
C0240-042-0940-S	0.728	18.50	9.00	40.03	42.48	7.43
C0240-042-1000-S	0.775	19.68	9.00	40.03	39.98	7.00
C0240-042-1120-S	0.866	21.99	9.00	40.03	35.40	6.20
C0240-042-1250-S	0.962	24.43	9.00	40.03	31.24	5.47
C0240-042-1380-S	1.062	26.98	9.00	40.03	28.32	4.96
C0240-042-1500-S	1.146	29.10	9.00	40.03	25.41	4.45
C0240-042-1750-S	1.342	34.10	9.00	40.03	22.08	3.86
C0240-042-2000-S	1.530	38.87	9.00	40.03	19.16	3.35
C0240-042-2250-S	1.720	43.70	9.00	40.03	16.99	2.97
C0240-042-2500-S	1.910	48.51	9.00	40.03	15.24	2.67
C0240-045-0440-S	0.366	9.30	10.75	47.83	145.69	25.50
C0240-045-0500-S	0.414	10.50	10.75	47.83	124.37	21.76
C0240-045-0560-S	0.461	11.71	10.75	47.83	108.46	18.98
C0240-045-0620-S	0.508	12.91	10.75	47.83	96.21	16.84
C0240-045-0690-S	0.563	14.31	10.75	47.83	84.97	14.87
C0240-045-0750-S	0.611	15.51	10.75	47.83	77.22	13.51
C0240-045-0810-S	0.658	16.72	10.75	47.83	70.81	12.39
C0240-045-0880-S	0.713	18.12	10.75	47.83	64.56	11.30
C0240-045-1000-S	0.808	20.53	10.75	47.83	56.06	9.81
C0240-045-1250-S	1.006	25.54	10.75	47.83	43.98	7.70
C0240-045-1500-S	1.203	30.54	10.75	47.83	36.15	6.33
C0240-045-1750-S	1.400	35.56	10.75	47.83	30.74	5.38
C0240-045-2000-S	1.597	40.55	10.75	47.83	26.66	4.66
C0240-045-2250-S	1.794	45.56	10.75	47.83	23.57	4.13
C0240-045-2500-S	1.992	50.59	10.75	47.83	21.16	3.70
C0250-020-0250-S*	**0.124**	**3.16**	**1.27**	**5.67**	**10.15**	**1.78**
C0250-020-0313-S*	**0.150**	**3.80**	**1.27**	**5.67**	**7.81**	**1.37**
C0250-020-0375-S*	**0.175**	**4.43**	**1.27**	**5.67**	**6.36**	**1.11**
C0250-020-0438-S*	**0.200**	**5.08**	**1.27**	**5.67**	**5.36**	**0.94**
C0250-020-0500-S*	**0.225**	**5.71**	**1.27**	**5.67**	**4.63**	**0.81**
C0250-020-0563-S*	**0.250**	**6.35**	**1.27**	**5.67**	**4.07**	**0.71**
C0250-020-0625-S*	**0.275**	**6.98**	**1.27**	**5.67**	**3.64**	**0.64**
C0250-020-0688-S*	**0.301**	**7.64**	**1.27**	**5.67**	**3.29**	**0.58**
C0250-020-0750-S*	**0.325**	**8.26**	**1.27**	**5.67**	**3.00**	**0.52**
C0250-020-0813-S*	**0.351**	**8.93**	**1.27**	**5.67**	**2.76**	**0.48**
C0250-020-0875-S*	**0.375**	**9.53**	**1.27**	**5.67**	**2.55**	**0.45**
C0250-020-1000-S*	**0.425**	**10.79**	**1.27**	**5.67**	**2.22**	**0.39**
C0250-020-1250-S*	**0.525**	**13.34**	**1.27**	**5.67**	**1.76**	**0.31**
C0250-020-1375-S*	**0.566**	**14.37**	**1.27**	**5.67**	**1.57**	**0.28**
C0250-020-1500-S*	**0.621**	**15.77**	**1.27**	**5.67**	**1.45**	**0.25**
C0250-020-1750-S*	**0.716**	**18.20**	**1.27**	**5.67**	**1.23**	**0.22**
C0250-020-1880-S*	**0.625**	**15.88**	**1.15**	**5.11**	**0.92**	**0.16**
C0250-025-0250-S	**0.143**	**3.64**	**1.42**	**6.33**	**13.33**	**2.33**
C0250-025-0410-S	**0.191**	**4.86**	**2.19**	**9.72**	**10.00**	**1.75**
C0250-025-0440-S	**0.234**	**5.94**	**2.40**	**10.69**	**11.66**	**2.04**
C0250-025-0500-S	**0.260**	**6.59**	**2.40**	**10.69**	**10.00**	**1.75**
C0250-025-0590-S	**0.300**	**7.62**	**1.50**	**6.66**	**5.17**	**0.90**
C0250-025-0690-S	**0.338**	**8.59**	**2.40**	**10.69**	**6.83**	**1.20**
C0250-025-1130-S	**0.489**	**12.41**	**2.40**	**10.69**	**3.75**	**0.66**
C0250-025-1780-S	**0.765**	**19.43**	**1.94**	**8.65**	**1.92**	**0.34**
C0250-025-2000-S	**0.894**	**22.70**	**1.75**	**7.79**	**1.58**	**0.28**
C0250-026-0938-S	**0.549**	**13.95**	**2.69**	**11.95**	**6.91**	**1.21**
C0250-026-1000-S	**0.564**	**14.33**	**2.69**	**11.95**	**6.16**	**1.08**
C0250-028-0440-S	**0.241**	**6.13**	**3.31**	**14.72**	**16.66**	**2.92**
C0250-028-0560-S	**0.292**	**7.41**	**2.68**	**11.93**	**10.00**	**1.75**
C0250-028-0630-S	**0.302**	**7.68**	**3.28**	**14.57**	**10.00**	**1.75**
C0250-028-0810-S	**0.406**	**10.32**	**2.72**	**12.11**	**6.75**	**1.18**
C0250-028-1000-S	**0.559**	**14.19**	**3.31**	**14.72**	**7.50**	**1.31**
C0250-028-1380-S	**0.718**	**18.23**	**3.31**	**14.72**	**5.00**	**0.87**
C0250-029-0410-S	**0.221**	**5.62**	**3.30**	**14.68**	**17.49**	**3.06**
C0250-029-0530-S	**0.307**	**7.81**	**2.41**	**10.72**	**10.83**	**1.90**
C0250-029-2250-S	**1.136**	**28.85**	**2.88**	**12.80**	**2.58**	**0.45**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0250-029-2340-M	**0.250**	**6.35**	**0.029**	**0.74**	**2.340**	**59.44**	**1.216**	**30.88**	**0.728**	**18.49**	**4.83**	**21.51**	**4.30**	**0.75**
C0250-030-0310-M	**0.250**	**6.35**	**0.030**	**0.76**	**0.310**	**7.87**	**0.201**	**5.10**	**0.191**	**4.84**	**2.95**	**13.12**	**27.00**	**4.73**
C0250-030-0500-M	**0.250**	**6.35**	**0.030**	**0.76**	**0.500**	**12.70**	**0.259**	**6.57**	**0.220**	**5.58**	**5.31**	**23.63**	**22.00**	**3.85**
C0250-030-0630-M	**0.250**	**6.35**	**0.030**	**0.76**	**0.630**	**16.00**	**0.335**	**8.51**	**0.254**	**6.46**	**5.31**	**23.63**	**18.00**	**3.15**
C0250-030-0690-M	**0.250**	**6.35**	**0.030**	**0.76**	**0.690**	**17.53**	**0.369**	**9.37**	**0.328**	**8.33**	**4.17**	**18.56**	**13.00**	**2.28**
C0250-030-0880-M	**0.250**	**6.35**	**0.030**	**0.76**	**0.880**	**22.35**	**0.437**	**11.11**	**0.350**	**8.89**	**5.31**	**23.63**	**12.00**	**2.10**
C0250-030-0940-M	**0.250**	**6.35**	**0.030**	**0.76**	**0.940**	**23.88**	**0.457**	**11.61**	**0.376**	**9.55**	**5.31**	**23.63**	**11.00**	**1.93**
C0250-030-1250-M	**0.250**	**6.35**	**0.030**	**0.76**	**1.250**	**31.75**	**0.719**	**18.26**	**0.407**	**10.35**	**5.31**	**23.63**	**10.00**	**1.75**
C0250-030-1380-M	**0.250**	**6.35**	**0.030**	**0.76**	**1.380**	**35.05**	**0.816**	**20.72**	**0.752**	**19.10**	**2.82**	**12.55**	**5.00**	**0.88**
C0250-030-1630-M	**0.250**	**6.35**	**0.030**	**0.76**	**1.630**	**41.40**	**0.853**	**21.67**	**0.752**	**19.10**	**3.88**	**17.28**	**5.00**	**0.88**
C0250-030-2500-M	**0.250**	**6.35**	**0.030**	**0.76**	**2.500**	**63.50**	**1.370**	**34.80**	**0.796**	**20.22**	**5.31**	**23.63**	**4.70**	**0.82**
C0250-030-2780-M	**0.250**	**6.35**	**0.030**	**0.76**	**2.780**	**70.61**	**1.540**	**39.13**	**1.388**	**35.25**	**3.22**	**14.34**	**2.60**	**0.46**
C0250-035-0313-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.313**	**7.95**	**0.205**	**5.20**	**0.175**	**4.45**	**8.13**	**36.16**	**75.05**	**13.13**
C0250-035-0375-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.375**	**9.53**	**0.239**	**6.07**	**0.205**	**5.22**	**8.13**	**36.16**	**59.80**	**10.47**
C0250-035-0438-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.438**	**11.13**	**0.274**	**6.96**	**0.234**	**5.96**	**8.13**	**36.16**	**49.56**	**8.67**
C0250-035-0500-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.500**	**12.70**	**0.308**	**7.83**	**0.262**	**6.64**	**8.13**	**36.16**	**42.41**	**7.42**
C0250-035-0563-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.563**	**14.30**	**0.343**	**8.72**	**0.289**	**7.34**	**8.13**	**36.16**	**36.99**	**6.47**
C0250-035-0625-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.625**	**15.88**	**0.378**	**9.59**	**0.316**	**8.03**	**8.13**	**36.16**	**32.86**	**5.75**
C0250-035-0688-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.688**	**17.48**	**0.413**	**10.48**	**0.344**	**8.73**	**8.13**	**36.16**	**29.51**	**5.16**
C0250-035-0750-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.750**	**19.05**	**0.447**	**11.35**	**0.371**	**9.42**	**8.13**	**36.16**	**26.82**	**4.69**
C0250-035-0813-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.813**	**20.65**	**0.482**	**12.24**	**0.398**	**10.12**	**8.13**	**36.16**	**24.55**	**4.30**
C0250-035-0875-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.875**	**22.23**	**0.516**	**13.11**	**0.426**	**10.81**	**8.13**	**36.16**	**22.66**	**3.97**
C0250-035-0938-M	**0.250**	**6.35**	**0.035**	**0.89**	**0.938**	**23.83**	**0.551**	**14.00**	**0.453**	**11.51**	**8.13**	**36.16**	**21.01**	**3.68**
C0250-035-1000-M	**0.250**	**6.35**	**0.035**	**0.89**	**1.000**	**25.40**	**0.586**	**14.87**	**0.480**	**12.20**	**8.13**	**36.16**	**19.61**	**3.43**
C0250-035-1250-M	**0.250**	**6.35**	**0.035**	**0.89**	**1.250**	**31.75**	**0.724**	**18.40**	**0.589**	**14.97**	**8.13**	**36.16**	**15.46**	**2.71**
C0250-035-1375-M	**0.250**	**6.35**	**0.035**	**0.89**	**1.375**	**34.93**	**0.794**	**20.16**	**0.644**	**16.36**	**8.13**	**36.16**	**13.98**	**2.45**
C0250-035-1500-M	**0.250**	**6.35**	**0.035**	**0.89**	**1.500**	**38.10**	**0.862**	**21.91**	**0.699**	**17.76**	**8.13**	**36.16**	**12.75**	**2.23**
C0250-035-1750-M	**0.250**	**6.35**	**0.035**	**0.89**	**1.750**	**44.45**	**1.002**	**25.44**	**0.808**	**20.52**	**8.13**	**36.16**	**10.86**	**1.90**
C0250-035-2000-M	**0.250**	**6.35**	**0.035**	**0.89**	**2.000**	**50.80**	**1.140**	**28.95**	**0.918**	**23.31**	**8.13**	**36.16**	**9.45**	**1.65**
C0250-035-2250-M	**0.250**	**6.35**	**0.035**	**0.89**	**2.250**	**57.15**	**1.279**	**32.48**	**1.027**	**26.07**	**8.13**	**36.16**	**8.37**	**1.46**
C0250-035-2500-M	**0.250**	**6.35**	**0.035**	**0.89**	**2.500**	**63.50**	**1.418**	**36.01**	**1.136**	**28.85**	**8.13**	**36.16**	**7.51**	**1.31**
D11300*	0.268	6.80	0.020	0.50	0.531	13.50	0.169	4.30	0.128	3.25	1.48	6.57	4.17	0.73
D11310*	0.268	6.80	0.020	0.50	0.787	20.00	0.236	6.00	0.167	4.25	1.48	6.57	2.63	0.46
D11320*	0.268	6.80	0.020	0.50	1.181	30.00	0.343	8.70	0.226	5.75	1.48	6.57	1.71	0.30
D11330*	0.268	6.80	0.020	0.50	1.732	44.00	0.480	12.20	0.305	7.75	1.48	6.57	1.20	0.21
D11340*	0.268	6.80	0.020	0.50	2.559	65.00	0.685	17.40	0.423	10.75	1.48	6.57	0.80	0.14
D11500*	0.273	6.93	0.025	0.63	0.453	11.50	0.181	4.60	0.161	4.10	2.80	12.45	10.46	1.83
D11510*	0.273	6.93	0.025	0.63	0.669	17.00	0.244	6.20	0.211	5.36	2.80	12.45	6.69	1.17
D11520*	0.273	6.93	0.025	0.63	1.004	25.50	0.350	8.90	0.285	7.25	2.80	12.45	4.34	0.76
D11530*	0.273	6.93	0.025	0.63	1.437	36.50	0.484	12.30	0.385	9.77	2.80	12.45	2.91	0.51
D11540*	0.273	6.93	0.025	0.63	2.126	54.00	0.697	17.70	0.533	13.55	2.80	12.45	1.94	0.34
D11700*	0.280	7.10	0.031	0.80	0.413	10.50	0.220	5.60	0.205	5.20	5.40	24.03	27.26	4.77
D11710*	0.280	7.10	0.031	0.80	0.610	15.50	0.303	7.70	0.268	6.80	5.40	24.03	17.31	3.03
D11720*	0.280	7.10	0.031	0.80	0.906	23.00	0.429	10.90	0.362	9.20	5.40	24.03	11.20	1.96
D11730*	0.280	7.10	0.031	0.80	1.299	33.00	0.594	15.10	0.488	12.40	5.40	24.03	7.60	1.33
D11740*	0.280	7.10	0.031	0.80	1.890	48.00	0.846	21.50	0.677	17.20	5.40	24.03	5.14	0.90
C0281-028-0250-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.250**	**6.35**	**0.123**	**3.13**	**0.106**	**2.69**	**3.74**	**16.65**	**29.55**	**5.17**
C0281-028-0313-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.313**	**7.95**	**0.149**	**3.78**	**0.126**	**3.19**	**3.67**	**16.31**	**22.31**	**3.90**
C0281-028-0375-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.375**	**9.53**	**0.174**	**4.41**	**0.145**	**3.68**	**3.62**	**16.10**	**17.97**	**3.14**
C0281-028-0438-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.438**	**11.13**	**0.199**	**5.05**	**0.164**	**4.18**	**3.59**	**15.97**	**15.01**	**2.63**
C0281-028-0500-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.500**	**12.70**	**0.223**	**5.67**	**0.183**	**4.65**	**3.57**	**15.90**	**12.91**	**2.26**
C0281-028-0563-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.563**	**14.30**	**0.247**	**6.27**	**0.201**	**5.10**	**3.58**	**15.90**	**11.31**	**1.98**
C0281-028-0625-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.625**	**15.88**	**0.270**	**6.86**	**0.218**	**5.54**	**3.58**	**15.91**	**10.08**	**1.76**
C0281-028-0750-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.750**	**19.05**	**0.317**	**8.06**	**0.253**	**6.43**	**3.57**	**15.90**	**8.26**	**1.45**
C0281-028-0875-M	**0.281**	**7.14**	**0.028**	**0.71**	**0.875**	**22.23**	**0.364**	**9.25**	**0.288**	**7.31**	**3.57**	**15.90**	**7.00**	**1.23**
C0281-028-1000-M	**0.281**	**7.14**	**0.028**	**0.71**	**1.000**	**25.40**	**0.412**	**10.45**	**0.323**	**8.21**	**3.57**	**15.89**	**6.07**	**1.06**
C0281-028-1130-M	**0.281**	**7.14**	**0.028**	**0.71**	**1.130**	**28.70**	**0.488**	**12.39**	**0.393**	**9.98**	**3.08**	**13.72**	**4.80**	**0.84**
C0281-028-1250-M	**0.281**	**7.14**	**0.028**	**0.71**	**1.250**	**31.75**	**0.506**	**12.84**	**0.393**	**9.98**	**3.57**	**15.89**	**4.80**	**0.84**
C0281-028-1375-M	**0.281**	**7.14**	**0.028**	**0.71**	**1.375**	**34.93**	**0.552**	**14.03**	**0.428**	**10.86**	**3.58**	**15.92**	**4.35**	**0.76**
C0281-028-2000-M	**0.281**	**7.14**	**0.028**	**0.71**	**2.000**	**50.80**	**0.847**	**21.51**	**0.676**	**17.16**	**3.00**	**13.33**	**2.60**	**0.46**
C0281-028-2630-M	**0.281**	**7.14**	**0.028**	**0.71**	**2.630**	**66.80**	**1.032**	**26.22**	**0.788**	**20.01**	**3.51**	**15.63**	**2.20**	**0.39**
D11900	0.287	7.30	0.039	1.00	0.394	10.00	0.287	7.30	0.217	5.50	7.67	34.13	66.11	11.57
D11910	0.287	7.30	0.039	1.00	0.571	14.50	0.398	10.10	0.295	7.50	7.67	34.13	42.23	7.39
D11920	0.287	7.30	0.039	1.00	0.846	21.50	0.563	14.30	0.413	10.50	7.67	34.13	27.37	4.79

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0250-029-2340-S	**1.320**	**33.54**	**3.65**	**16.24**	**3.58**	**0.63**
C0250-030-0310-S	**0.201**	**5.10**	**2.46**	**10.93**	**22.49**	**3.94**
C0250-030-0500-S	**0.281**	**7.13**	**4.02**	**17.86**	**18.33**	**3.21**
C0250-030-0630-S	**0.362**	**9.20**	**4.02**	**17.86**	**14.99**	**2.62**
C0250-030-0690-S	**0.369**	**9.37**	**3.48**	**15.46**	**10.83**	**1.90**
C0250-030-0880-S	**0.478**	**12.15**	**4.02**	**17.86**	**10.00**	**1.75**
C0250-030-0940-S	**0.502**	**12.74**	**4.02**	**17.86**	**9.16**	**1.60**
C0250-030-1250-S	**0.768**	**19.50**	**4.02**	**17.86**	**8.33**	**1.46**
C0250-030-1380-S	**0.816**	**20.72**	**2.35**	**10.45**	**4.17**	**0.73**
C0250-030-1630-S	**0.853**	**21.67**	**3.24**	**14.39**	**4.17**	**0.73**
C0250-030-2500-S	**1.474**	**37.45**	**4.02**	**17.86**	**3.92**	**0.69**
C0250-030-2780-S	**1.540**	**39.13**	**2.68**	**11.94**	**2.17**	**0.38**
C0250-035-0313-S	**0.214**	**5.44**	**6.17**	**27.43**	**62.52**	**10.94**
C0250-035-0375-S	**0.251**	**6.38**	**6.17**	**27.43**	**49.81**	**8.72**
C0250-035-0438-S	**0.289**	**7.33**	**6.17**	**27.43**	**41.28**	**7.22**
C0250-035-0500-S	**0.325**	**8.27**	**6.17**	**27.43**	**35.33**	**6.18**
C0250-035-0563-S	**0.363**	**9.22**	**6.17**	**27.43**	**30.81**	**5.39**
C0250-035-0625-S	**0.400**	**10.15**	**6.17**	**27.43**	**27.37**	**4.79**
C0250-035-0688-S	**0.437**	**11.10**	**6.17**	**27.43**	**24.58**	**4.30**
C0250-035-0750-S	**0.474**	**12.04**	**6.17**	**27.43**	**22.34**	**3.91**
C0250-035-0813-S	**0.511**	**12.99**	**6.17**	**27.43**	**20.45**	**3.58**
C0250-035-0875-S	**0.548**	**13.93**	**6.17**	**27.43**	**18.88**	**3.30**
C0250-035-0938-S	**0.586**	**14.87**	**6.17**	**27.43**	**17.50**	**3.06**
C0250-035-1000-S	**0.622**	**15.81**	**6.17**	**27.43**	**16.34**	**2.86**
C0250-035-1250-S	**0.771**	**19.59**	**6.17**	**27.43**	**12.88**	**2.25**
C0250-035-1375-S	**0.845**	**21.47**	**6.17**	**27.43**	**11.65**	**2.04**
C0250-035-1500-S	**0.919**	**23.35**	**6.17**	**27.43**	**10.62**	**1.86**
C0250-035-1750-S	**1.068**	**27.13**	**6.17**	**27.43**	**9.05**	**1.58**
C0250-035-2000-S	**1.217**	**30.90**	**6.17**	**27.43**	**7.87**	**1.38**
C0250-035-2250-S	**1.365**	**34.68**	**6.17**	**27.43**	**6.97**	**1.22**
C0250-035-2500-S	**1.514**	**38.46**	**6.17**	**27.43**	**6.26**	**1.09**
D21300*	0.169	4.30	1.23	5.47	3.49	0.61
D21310*	0.236	6.00	1.23	5.47	2.17	0.38
D21320*	0.343	8.70	1.23	5.47	1.43	0.25
D21330*	0.480	12.20	1.23	5.47	0.97	0.17
D21340*	0.685	17.40	1.23	5.47	0.69	0.12
D21500*	0.181	4.60	2.33	10.37	8.69	1.52
D21510*	0.244	6.20	2.33	10.37	5.54	0.97
D21520*	0.350	8.90	2.33	10.37	3.60	0.63
D21530*	0.484	12.30	2.33	10.37	2.40	0.42
D21540*	0.697	17.70	2.33	10.37	1.60	0.28
D21700*	0.220	5.60	4.50	20.02	22.69	3.97
D21710*	0.303	7.70	4.50	20.02	14.40	2.52
D21720*	0.429	10.90	4.50	20.02	9.31	1.63
D21730*	0.594	15.10	4.50	20.02	6.34	1.11
D21740*	0.846	21.50	4.50	20.02	4.29	0.75
C0281-028-0250-S	**0.130**	**3.29**	**2.96**	**13.19**	**24.62**	**4.31**
C0281-028-0313-S	**0.153**	**3.90**	**2.96**	**13.19**	**18.58**	**3.25**
C0281-028-0375-S	**0.177**	**4.49**	**2.96**	**13.19**	**14.97**	**2.62**
C0281-028-0438-S	**0.201**	**5.10**	**2.96**	**13.19**	**12.50**	**2.19**
C0281-028-0500-S	**0.224**	**5.70**	**2.96**	**13.19**	**10.75**	**1.88**
C0281-028-0563-S	**0.248**	**6.31**	**2.96**	**13.19**	**9.42**	**1.65**
C0281-028-0625-S	**0.272**	**6.91**	**2.96**	**13.19**	**8.40**	**1.47**
C0281-028-0750-S	**0.319**	**8.11**	**2.96**	**13.19**	**6.88**	**1.20**
C0281-028-0875-S	**0.367**	**9.31**	**2.96**	**13.19**	**5.83**	**1.02**
C0281-028-1000-S	**0.414**	**10.51**	**2.96**	**13.19**	**5.06**	**0.88**
C0281-028-1130-S	**0.488**	**12.39**	**2.57**	**11.43**	**4.00**	**0.70**
C0281-028-1250-S	**0.509**	**12.92**	**2.96**	**13.19**	**4.00**	**0.70**
C0281-028-1375-S	**0.557**	**14.14**	**2.96**	**13.19**	**3.62**	**0.63**
C0281-028-2000-S	**0.847**	**21.51**	**2.50**	**11.11**	**2.17**	**0.38**
C0281-028-2630-S	**1.032**	**26.22**	**2.93**	**13.02**	**1.83**	**0.32**
D21900	0.287	7.30	6.39	28.43	55.09	9.64
D21910	0.398	10.10	6.39	28.43	35.20	6.16
D21920	0.563	14.30	6.39	28.43	22.80	3.99

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D11930	0.287	7.30	0.039	1.00	1.201	30.50	0.783	19.90	0.571	14.50	7.67	34.13	18.63	3.26
D11940	0.287	7.30	0.039	1.00	1.713	43.50	1.114	28.30	0.807	20.50	7.67	34.13	12.57	2.20
C0294-029-0563-M	**0.294**	**7.47**	**0.029**	**0.74**	**0.563**	**14.29**	**0.242**	**6.15**	**0.195**	**4.95**	**3.97**	**17.66**	**12.40**	**2.17**
C0294-029-0625-M	**0.294**	**7.47**	**0.029**	**0.74**	**0.625**	**15.88**	**0.265**	**6.73**	**0.212**	**5.38**	**3.97**	**17.66**	**11.03**	**1.93**
C0294-029-0688-M	**0.294**	**7.47**	**0.029**	**0.74**	**0.688**	**17.46**	**0.288**	**7.31**	**0.228**	**5.80**	**3.97**	**17.66**	**9.94**	**1.74**
C0294-029-0750-M	**0.294**	**7.47**	**0.029**	**0.74**	**0.750**	**19.05**	**0.311**	**7.89**	**0.245**	**6.22**	**3.97**	**17.66**	**9.04**	**1.58**
C0294-029-0813-M	**0.294**	**7.47**	**0.029**	**0.74**	**0.813**	**20.64**	**0.334**	**8.47**	**0.262**	**6.64**	**3.97**	**17.66**	**8.29**	**1.45**
C0294-029-0875-M	**0.294**	**7.47**	**0.029**	**0.74**	**0.875**	**22.23**	**0.356**	**9.05**	**0.278**	**7.07**	**3.97**	**17.66**	**7.66**	**1.34**
C0294-029-0938-M	**0.294**	**7.47**	**0.029**	**0.74**	**0.938**	**23.81**	**0.379**	**9.63**	**0.295**	**7.49**	**3.97**	**17.66**	**7.11**	**1.24**
C0294-029-1000-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.000**	**25.40**	**0.402**	**10.21**	**0.311**	**7.91**	**3.97**	**17.66**	**6.64**	**1.16**
C0294-029-1125-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.125**	**28.58**	**0.448**	**11.37**	**0.345**	**8.75**	**3.97**	**17.66**	**5.86**	**1.03**
C0294-029-1250-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.250**	**31.75**	**0.493**	**12.53**	**0.378**	**9.60**	**3.97**	**17.66**	**5.25**	**0.92**
C0294-029-1375-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.375**	**34.93**	**0.539**	**13.69**	**0.411**	**10.44**	**3.97**	**17.66**	**4.75**	**0.83**
C0294-029-1500-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.500**	**38.10**	**0.585**	**14.85**	**0.444**	**11.29**	**3.97**	**17.66**	**4.34**	**0.76**
C0294-029-1625-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.625**	**41.28**	**0.630**	**16.01**	**0.478**	**12.13**	**3.97**	**17.66**	**3.99**	**0.70**
C0294-029-1750-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.750**	**44.45**	**0.676**	**17.17**	**0.511**	**12.98**	**3.97**	**17.66**	**3.70**	**0.65**
C0294-029-1875-M	**0.294**	**7.47**	**0.029**	**0.74**	**1.875**	**47.63**	**0.722**	**18.33**	**0.544**	**13.82**	**3.97**	**17.66**	**3.44**	**0.60**
C0294-029-2000-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.000**	**50.80**	**0.767**	**19.49**	**0.577**	**14.67**	**3.97**	**17.66**	**3.22**	**0.56**
C0294-029-2125-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.125**	**53.98**	**0.813**	**20.65**	**0.611**	**15.51**	**3.97**	**17.66**	**3.03**	**0.53**
C0294-029-2250-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.250**	**57.15**	**0.859**	**21.81**	**0.644**	**16.35**	**3.97**	**17.66**	**2.85**	**0.50**
C0294-029-2375-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.375**	**60.33**	**0.904**	**22.97**	**0.677**	**17.20**	**3.97**	**17.66**	**2.70**	**0.47**
C0294-029-2500-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.500**	**63.50**	**0.950**	**24.13**	**0.710**	**18.04**	**3.97**	**17.66**	**2.56**	**0.45**
C0294-029-2625-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.625**	**66.68**	**0.996**	**25.29**	**0.744**	**18.89**	**3.97**	**17.66**	**2.44**	**0.43**
C0294-029-2750-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.750**	**69.85**	**1.041**	**26.45**	**0.777**	**19.73**	**3.97**	**17.66**	**2.32**	**0.41**
C0294-029-2875-M	**0.294**	**7.47**	**0.029**	**0.74**	**2.875**	**73.03**	**1.087**	**27.61**	**0.810**	**20.58**	**3.97**	**17.66**	**2.22**	**0.39**
C0294-029-3000-M	**0.294**	**7.47**	**0.029**	**0.74**	**3.000**	**76.20**	**1.133**	**28.77**	**0.843**	**21.42**	**3.97**	**17.66**	**2.13**	**0.37**
C0294-029-3250-M	**0.294**	**7.47**	**0.029**	**0.74**	**3.250**	**82.55**	**1.224**	**31.09**	**0.910**	**23.11**	**3.97**	**17.66**	**1.96**	**0.34**
C0294-029-3500-M	**0.294**	**7.47**	**0.029**	**0.74**	**3.500**	**88.90**	**1.315**	**33.41**	**0.976**	**24.80**	**3.97**	**17.66**	**1.82**	**0.32**
C0294-029-3750-M	**0.294**	**7.47**	**0.029**	**0.74**	**3.750**	**95.25**	**1.407**	**35.73**	**1.043**	**26.49**	**3.97**	**17.66**	**1.69**	**0.30**
C0294-029-4000-M	**0.294**	**7.47**	**0.029**	**0.74**	**4.000**	**101.60**	**1.498**	**38.05**	**1.109**	**28.18**	**3.97**	**17.66**	**1.59**	**0.28**
C0294-029-4250-M	**0.294**	**7.47**	**0.029**	**0.74**	**4.250**	**107.95**	**1.589**	**40.37**	**1.176**	**29.86**	**3.97**	**17.66**	**1.49**	**0.26**
C0294-029-4500-M	**0.294**	**7.47**	**0.029**	**0.74**	**4.500**	**114.30**	**1.681**	**42.69**	**1.242**	**31.55**	**3.97**	**17.66**	**1.41**	**0.25**
C0294-029-4750-M	**0.294**	**7.47**	**0.029**	**0.74**	**4.750**	**120.65**	**1.772**	**45.01**	**1.309**	**33.24**	**3.97**	**17.66**	**1.33**	**0.23**
C0294-029-5000-M	**0.294**	**7.47**	**0.029**	**0.74**	**5.000**	**127.00**	**1.863**	**47.33**	**1.375**	**34.93**	**3.97**	**17.66**	**1.27**	**0.22**
C0294-029-5250-M	**0.294**	**7.47**	**0.029**	**0.74**	**5.250**	**133.35**	**1.955**	**49.65**	**1.442**	**36.62**	**3.97**	**17.66**	**1.21**	**0.21**
C0294-030-0563-M	**0.294**	**7.47**	**0.030**	**0.76**	**0.563**	**14.29**	**0.251**	**6.37**	**0.205**	**5.22**	**4.36**	**19.41**	**14.00**	**2.45**
C0294-030-0625-M	**0.294**	**7.47**	**0.030**	**0.76**	**0.625**	**15.88**	**0.274**	**6.97**	**0.223**	**5.67**	**4.36**	**19.41**	**12.45**	**2.18**
C0294-030-0688-M	**0.294**	**7.47**	**0.030**	**0.76**	**0.688**	**17.46**	**0.298**	**7.57**	**0.241**	**6.12**	**4.36**	**19.41**	**11.21**	**1.96**
C0294-030-0750-M	**0.294**	**7.47**	**0.030**	**0.76**	**0.750**	**19.05**	**0.322**	**8.17**	**0.259**	**6.57**	**4.36**	**19.41**	**10.19**	**1.78**
C0294-030-0813-M	**0.294**	**7.47**	**0.030**	**0.76**	**0.813**	**20.64**	**0.346**	**8.78**	**0.276**	**7.02**	**4.36**	**19.41**	**9.35**	**1.64**
C0294-030-0875-M	**0.294**	**7.47**	**0.030**	**0.76**	**0.875**	**22.23**	**0.369**	**9.38**	**0.294**	**7.47**	**4.36**	**19.41**	**8.63**	**1.51**
C0294-030-0938-M	**0.294**	**7.47**	**0.030**	**0.76**	**0.938**	**23.81**	**0.393**	**9.98**	**0.312**	**7.92**	**4.36**	**19.41**	**8.02**	**1.40**
C0294-030-1000-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.000**	**25.40**	**0.417**	**10.58**	**0.329**	**8.37**	**4.36**	**19.41**	**7.48**	**1.31**
C0294-030-1125-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.125**	**28.58**	**0.464**	**11.79**	**0.365**	**9.27**	**4.36**	**19.41**	**6.60**	**1.16**
C0294-030-1250-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.250**	**31.75**	**0.512**	**12.99**	**0.400**	**10.17**	**4.36**	**19.41**	**5.91**	**1.03**
C0294-030-1375-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.375**	**34.93**	**0.559**	**14.20**	**0.436**	**11.07**	**4.36**	**19.41**	**5.35**	**0.94**
C0294-030-1500-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.500**	**38.10**	**0.606**	**15.40**	**0.471**	**11.97**	**4.36**	**19.41**	**4.88**	**0.85**
C0294-030-1625-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.625**	**41.28**	**0.654**	**16.61**	**0.507**	**12.87**	**4.36**	**19.41**	**4.49**	**0.79**
C0294-030-1750-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.750**	**44.45**	**0.701**	**17.81**	**0.542**	**13.77**	**4.36**	**19.41**	**4.16**	**0.73**
C0294-030-1875-M	**0.294**	**7.47**	**0.030**	**0.76**	**1.875**	**47.63**	**0.749**	**19.02**	**0.577**	**14.67**	**4.36**	**19.41**	**3.88**	**0.68**
C0294-030-2000-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.000**	**50.80**	**0.796**	**20.22**	**0.613**	**15.57**	**4.36**	**19.41**	**3.63**	**0.63**
C0294-030-2125-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.125**	**53.98**	**0.844**	**21.43**	**0.648**	**16.47**	**4.36**	**19.41**	**3.41**	**0.60**
C0294-030-2250-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.250**	**57.15**	**0.891**	**22.63**	**0.684**	**17.37**	**4.36**	**19.41**	**3.21**	**0.56**
C0294-030-2375-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.375**	**60.33**	**0.938**	**23.84**	**0.719**	**18.27**	**4.36**	**19.41**	**3.04**	**0.53**
C0294-030-2500-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.500**	**63.50**	**0.986**	**25.04**	**0.755**	**19.17**	**4.36**	**19.41**	**2.88**	**0.50**
C0294-030-2625-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.625**	**66.68**	**1.033**	**26.25**	**0.790**	**20.07**	**4.36**	**19.41**	**2.74**	**0.48**
C0294-030-2750-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.750**	**69.85**	**1.081**	**27.45**	**0.825**	**20.97**	**4.36**	**19.41**	**2.61**	**0.46**
C0294-030-2875-M	**0.294**	**7.47**	**0.030**	**0.76**	**2.875**	**73.03**	**1.128**	**28.66**	**0.861**	**21.87**	**4.36**	**19.41**	**2.50**	**0.44**
C0294-030-3000-M	**0.294**	**7.47**	**0.030**	**0.76**	**3.000**	**76.20**	**1.176**	**29.86**	**0.896**	**22.77**	**4.36**	**19.41**	**2.39**	**0.42**
C0294-030-3250-M	**0.294**	**7.47**	**0.030**	**0.76**	**3.250**	**82.55**	**1.270**	**32.27**	**0.967**	**24.57**	**4.36**	**19.41**	**2.21**	**0.39**
C0294-030-3500-M	**0.294**	**7.47**	**0.030**	**0.76**	**3.500**	**88.90**	**1.365**	**34.68**	**1.038**	**26.37**	**4.36**	**19.41**	**2.04**	**0.36**
C0294-030-3750-M	**0.294**	**7.47**	**0.030**	**0.76**	**3.750**	**95.25**	**1.460**	**37.09**	**1.109**	**28.17**	**4.36**	**19.41**	**1.91**	**0.33**
C0294-030-4000-M	**0.294**	**7.47**	**0.030**	**0.76**	**4.000**	**101.60**	**1.555**	**39.50**	**1.180**	**29.97**	**4.36**	**19.41**	**1.79**	**0.31**
C0294-030-4250-M	**0.294**	**7.47**	**0.030**	**0.76**	**4.250**	**107.95**	**1.650**	**41.91**	**1.251**	**31.77**	**4.36**	**19.41**	**1.68**	**0.29**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D21930	0.783	19.90	6.39	28.43	15.54	2.72
D21940	1.114	28.30	6.39	28.43	10.46	1.83
C0294-029-0563-S	**0.272**	**6.90**	**3.14**	**13.95**	**10.78**	**1.89**
C0294-029-0625-S	**0.298**	**7.57**	**3.14**	**13.95**	**9.59**	**1.68**
C0294-029-0688-S	**0.325**	**8.24**	**3.14**	**13.95**	**8.64**	**1.51**
C0294-029-0750-S	**0.351**	**8.92**	**3.14**	**13.95**	**7.86**	**1.38**
C0294-029-0813-S	**0.377**	**9.59**	**3.14**	**13.95**	**7.21**	**1.26**
C0294-029-0875-S	**0.404**	**10.26**	**3.14**	**13.95**	**6.66**	**1.17**
C0294-029-0938-S	**0.430**	**10.93**	**3.14**	**13.95**	**6.19**	**1.08**
C0294-029-1000-S	**0.457**	**11.60**	**3.14**	**13.95**	**5.77**	**1.01**
C0294-029-1125-S	**0.510**	**12.95**	**3.14**	**13.95**	**5.10**	**0.89**
C0294-029-1250-S	**0.563**	**14.29**	**3.14**	**13.95**	**4.56**	**0.80**
C0294-029-1375-S	**0.616**	**15.64**	**3.14**	**13.95**	**4.13**	**0.72**
C0294-029-1500-S	**0.669**	**16.98**	**3.14**	**13.95**	**3.77**	**0.66**
C0294-029-1625-S	**0.722**	**18.33**	**3.14**	**13.95**	**3.47**	**0.61**
C0294-029-1750-S	**0.774**	**19.67**	**3.14**	**13.95**	**3.22**	**0.56**
C0294-029-1875-S	**0.827**	**21.02**	**3.14**	**13.95**	**2.99**	**0.52**
C0294-029-2000-S	**0.880**	**22.36**	**3.14**	**13.95**	**2.80**	**0.49**
C0294-029-2125-S	**0.933**	**23.70**	**3.14**	**13.95**	**2.63**	**0.46**
C0294-029-2250-S	**0.986**	**25.05**	**3.14**	**13.95**	**2.48**	**0.43**
C0294-029-2375-S	**1.039**	**26.39**	**3.14**	**13.95**	**2.35**	**0.41**
C0294-029-2500-S	**1.092**	**27.74**	**3.14**	**13.95**	**2.23**	**0.39**
C0294-029-2625-S	**1.145**	**29.08**	**3.14**	**13.95**	**2.12**	**0.37**
C0294-029-2750-S	**1.198**	**30.43**	**3.14**	**13.95**	**2.02**	**0.35**
C0294-029-2875-S	**1.251**	**31.77**	**3.14**	**13.95**	**1.93**	**0.34**
C0294-029-3000-S	**1.304**	**33.12**	**3.14**	**13.95**	**1.85**	**0.32**
C0294-029-3250-S	**1.410**	**35.80**	**3.14**	**13.95**	**1.70**	**0.30**
C0294-029-3500-S	**1.515**	**38.49**	**3.14**	**13.95**	**1.58**	**0.28**
C0294-029-3750-S	**1.621**	**41.18**	**3.14**	**13.95**	**1.47**	**0.26**
C0294-029-4000-S	**1.727**	**43.87**	**3.14**	**13.95**	**1.38**	**0.24**
C0294-029-4250-S	**1.833**	**46.56**	**3.14**	**13.95**	**1.30**	**0.23**
C0294-029-4500-S	**1.939**	**49.25**	**3.14**	**13.95**	**1.23**	**0.21**
C0294-029-4750-S	**2.045**	**51.94**	**3.14**	**13.95**	**1.16**	**0.20**
C0294-029-5000-S	**2.151**	**54.63**	**3.14**	**13.95**	**1.10**	**0.19**
C0294-029-5250-S	**2.256**	**57.31**	**3.14**	**13.95**	**1.05**	**0.18**
C0294-030-0563-S	**0.279**	**7.09**	**3.45**	**15.35**	**12.17**	**2.13**
C0294-030-0625-S	**0.306**	**7.78**	**3.45**	**15.35**	**10.82**	**1.89**
C0294-030-0688-S	**0.333**	**8.47**	**3.45**	**15.35**	**9.75**	**1.71**
C0294-030-0750-S	**0.361**	**9.16**	**3.45**	**15.35**	**8.86**	**1.55**
C0294-030-0813-S	**0.388**	**9.85**	**3.45**	**15.35**	**8.13**	**1.42**
C0294-030-0875-S	**0.415**	**10.54**	**3.45**	**15.35**	**7.50**	**1.31**
C0294-030-0938-S	**0.442**	**11.24**	**3.45**	**15.35**	**6.97**	**1.22**
C0294-030-1000-S	**0.470**	**11.93**	**3.45**	**15.35**	**6.51**	**1.14**
C0294-030-1125-S	**0.524**	**13.31**	**3.45**	**15.35**	**5.74**	**1.00**
C0294-030-1250-S	**0.579**	**14.70**	**3.45**	**15.35**	**5.14**	**0.90**
C0294-030-1375-S	**0.633**	**16.08**	**3.45**	**15.35**	**4.65**	**0.81**
C0294-030-1500-S	**0.688**	**17.46**	**3.45**	**15.35**	**4.25**	**0.74**
C0294-030-1625-S	**0.742**	**18.85**	**3.45**	**15.35**	**3.91**	**0.68**
C0294-030-1750-S	**0.796**	**20.23**	**3.45**	**15.35**	**3.62**	**0.63**
C0294-030-1875-S	**0.851**	**21.61**	**3.45**	**15.35**	**3.37**	**0.59**
C0294-030-2000-S	**0.905**	**23.00**	**3.45**	**15.35**	**3.15**	**0.55**
C0294-030-2125-S	**0.960**	**24.38**	**3.45**	**15.35**	**2.96**	**0.52**
C0294-030-2250-S	**1.014**	**25.76**	**3.45**	**15.35**	**2.79**	**0.49**
C0294-030-2375-S	**1.069**	**27.15**	**3.45**	**15.35**	**2.64**	**0.46**
C0294-030-2500-S	**1.123**	**28.53**	**3.45**	**15.35**	**2.51**	**0.44**
C0294-030-2625-S	**1.178**	**29.91**	**3.45**	**15.35**	**2.38**	**0.42**
C0294-030-2750-S	**1.232**	**31.30**	**3.45**	**15.35**	**2.27**	**0.40**
C0294-030-2875-S	**1.287**	**32.68**	**3.45**	**15.35**	**2.17**	**0.38**
C0294-030-3000-S	**1.341**	**34.07**	**3.45**	**15.35**	**2.08**	**0.36**
C0294-030-3250-S	**1.450**	**36.83**	**3.45**	**15.35**	**1.92**	**0.34**
C0294-030-3500-S	**1.559**	**39.60**	**3.45**	**15.35**	**1.78**	**0.31**
C0294-030-3750-S	**1.668**	**42.37**	**3.45**	**15.35**	**1.66**	**0.29**
C0294-030-4000-S	**1.777**	**45.13**	**3.45**	**15.35**	**1.55**	**0.27**
C0294-030-4250-S	**1.886**	**47.90**	**3.45**	**15.35**	**1.46**	**0.26**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0294-030-4500-M	0.294	7.47	0.030	0.76	4.500	114.30	1.745	44.32	1.321	33.57	4.36	19.41	1.58	0.28
C0294-030-4750-M	0.294	7.47	0.030	0.76	4.750	120.65	1.840	46.73	1.392	35.37	4.36	19.41	1.50	0.26
C0294-030-5000-M	0.294	7.47	0.030	0.76	5.000	127.00	1.934	49.14	1.463	37.17	4.36	19.41	1.42	0.25
C0294-030-5250-M	0.294	7.47	0.030	0.76	5.250	133.35	2.029	51.55	1.534	38.97	4.36	19.41	1.36	0.24
C0294-032-0500-M	0.294	7.47	0.032	0.81	0.500	12.70	0.242	6.15	0.206	5.24	5.22	23.23	20.25	3.54
C0294-032-0563-M	0.294	7.47	0.032	0.81	0.563	14.29	0.268	6.80	0.226	5.75	5.22	23.23	17.71	3.10
C0294-032-0625-M	0.294	7.47	0.032	0.81	0.625	15.88	0.293	7.44	0.246	6.25	5.22	23.23	15.73	2.75
C0294-032-0688-M	0.294	7.47	0.032	0.81	0.688	17.46	0.319	8.09	0.266	6.76	5.22	23.23	14.16	2.48
C0294-032-0750-M	0.294	7.47	0.032	0.81	0.750	19.05	0.344	8.74	0.286	7.27	5.22	23.23	12.87	2.25
C0294-032-0813-M	0.294	7.47	0.032	0.81	0.813	20.64	0.370	9.39	0.306	7.77	5.22	23.23	11.79	2.06
C0294-032-0875-M	0.294	7.47	0.032	0.81	0.875	22.23	0.395	10.04	0.326	8.28	5.22	23.23	10.88	1.90
C0294-032-0938-M	0.294	7.47	0.032	0.81	0.938	23.81	0.421	10.68	0.346	8.79	5.22	23.23	10.11	1.77
C0294-032-1000-M	0.294	7.47	0.032	0.81	1.000	25.40	0.446	11.33	0.366	9.29	5.22	23.23	9.43	1.65
C0294-032-1125-M	0.294	7.47	0.032	0.81	1.125	28.58	0.497	12.63	0.406	10.30	5.22	23.23	8.32	1.46
C0294-032-1250-M	0.294	7.47	0.032	0.81	1.250	31.75	0.548	13.92	0.446	11.32	5.22	23.23	7.44	1.30
C0294-032-1375-M	0.294	7.47	0.032	0.81	1.375	34.93	0.599	15.22	0.485	12.33	5.22	23.23	6.73	1.18
C0294-032-1500-M	0.294	7.47	0.032	0.81	1.500	38.10	0.650	16.52	0.525	13.34	5.22	23.23	6.15	1.08
C0294-032-1625-M	0.294	7.47	0.032	0.81	1.625	41.28	0.701	17.81	0.565	14.36	5.22	23.23	5.66	0.99
C0294-032-1750-M	0.294	7.47	0.032	0.81	1.750	44.45	0.752	19.11	0.605	15.37	5.22	23.23	5.24	0.92
C0294-032-1875-M	0.294	7.47	0.032	0.81	1.875	47.63	0.803	20.41	0.645	16.38	5.22	23.23	4.87	0.85
C0294-032-2000-M	0.294	7.47	0.032	0.81	2.000	50.80	0.854	21.70	0.685	17.40	5.22	23.23	4.56	0.80
C0294-032-2125-M	0.294	7.47	0.032	0.81	2.125	53.98	0.905	23.00	0.725	18.41	5.22	23.23	4.28	0.75
C0294-032-2250-M	0.294	7.47	0.032	0.81	2.250	57.15	0.956	24.29	0.765	19.42	5.22	23.23	4.04	0.71
C0294-032-2375-M	0.294	7.47	0.032	0.81	2.375	60.33	1.008	25.59	0.804	20.43	5.22	23.23	3.82	0.67
C0294-032-2500-M	0.294	7.47	0.032	0.81	2.500	63.50	1.059	26.89	0.844	21.45	5.22	23.23	3.62	0.63
C0294-032-2625-M	0.294	7.47	0.032	0.81	2.625	66.68	1.110	28.18	0.884	22.46	5.22	23.23	3.45	0.60
C0294-032-2750-M	0.294	7.47	0.032	0.81	2.750	69.85	1.161	29.48	0.924	23.47	5.22	23.23	3.29	0.58
C0294-032-2875-M	0.294	7.47	0.032	0.81	2.875	73.03	1.212	30.78	0.964	24.49	5.22	23.23	3.14	0.55
C0294-032-3000-M	0.294	7.47	0.032	0.81	3.000	76.20	1.263	32.07	1.004	25.50	5.22	23.23	3.01	0.53
C0294-032-3250-M	0.294	7.47	0.032	0.81	3.250	82.55	1.365	34.66	1.084	27.52	5.22	23.23	2.77	0.48
C0294-032-3500-M	0.294	7.47	0.032	0.81	3.500	88.90	1.467	37.26	1.163	29.55	5.22	23.23	2.57	0.45
C0294-032-3750-M	0.294	7.47	0.032	0.81	3.750	95.25	1.569	39.85	1.243	31.58	5.22	23.23	2.40	0.42
C0294-032-4000-M	0.294	7.47	0.032	0.81	4.000	101.60	1.671	42.44	1.323	33.60	5.22	23.23	2.24	0.39
C0294-032-4250-M	0.294	7.47	0.032	0.81	4.250	107.95	1.773	45.03	1.403	35.63	5.22	23.23	2.11	0.37
C0294-032-4500-M	0.294	7.47	0.032	0.81	4.500	114.30	1.875	47.63	1.482	37.65	5.22	23.23	1.99	0.35
C0294-032-4750-M	0.294	7.47	0.032	0.81	4.750	120.65	1.977	50.22	1.562	39.68	5.22	23.23	1.88	0.33
C0294-032-5000-M	0.294	7.47	0.032	0.81	5.000	127.00	2.079	52.81	1.642	41.71	5.22	23.23	1.79	0.31
C0294-035-0500-M	0.294	7.47	0.035	0.89	0.500	12.70	0.264	6.72	0.234	5.94	6.70	29.79	28.43	4.98
C0294-035-0563-M	0.294	7.47	0.035	0.89	0.563	14.29	0.293	7.43	0.257	6.54	6.70	29.79	24.82	4.34
C0294-035-0625-M	0.294	7.47	0.035	0.89	0.625	15.88	0.321	8.15	0.281	7.13	6.70	29.79	22.03	3.85
C0294-035-0688-M	0.294	7.47	0.035	0.89	0.688	17.46	0.349	8.87	0.304	7.72	6.70	29.79	19.80	3.46
C0294-035-0750-M	0.294	7.47	0.035	0.89	0.750	19.05	0.377	9.59	0.327	8.31	6.70	29.79	17.98	3.15
C0294-035-0813-M	0.294	7.47	0.035	0.89	0.813	20.64	0.406	10.31	0.351	8.91	6.70	29.79	16.47	2.88
C0294-035-0875-M	0.294	7.47	0.035	0.89	0.875	22.23	0.434	11.02	0.374	9.50	6.70	29.79	15.19	2.66
C0294-035-0938-M	0.294	7.47	0.035	0.89	0.938	23.81	0.462	11.74	0.397	10.09	6.70	29.79	14.09	2.47
C0294-035-1000-M	0.294	7.47	0.035	0.89	1.000	25.40	0.490	12.46	0.421	10.68	6.70	29.79	13.15	2.30
C0294-035-1125-M	0.294	7.47	0.035	0.89	1.125	28.58	0.547	13.89	0.467	11.87	6.70	29.79	11.59	2.03
C0294-035-1250-M	0.294	7.47	0.035	0.89	1.250	31.75	0.604	15.33	0.514	13.05	6.70	29.79	10.36	1.81
C0294-035-1375-M	0.294	7.47	0.035	0.89	1.375	34.93	0.660	16.77	0.561	14.24	6.70	29.79	9.37	1.64
C0294-035-1500-M	0.294	7.47	0.035	0.89	1.500	38.10	0.717	18.20	0.607	15.42	6.70	29.79	8.55	1.50
C0294-035-1625-M	0.294	7.47	0.035	0.89	1.625	41.28	0.773	19.64	0.654	16.61	6.70	29.79	7.86	1.38
C0294-035-1750-M	0.294	7.47	0.035	0.89	1.750	44.45	0.830	21.07	0.701	17.79	6.70	29.79	7.28	1.27
C0294-035-1875-M	0.294	7.47	0.035	0.89	1.875	47.63	0.886	22.51	0.747	18.98	6.70	29.79	6.77	1.19
C0294-035-2000-M	0.294	7.47	0.035	0.89	2.000	50.80	0.943	23.94	0.794	20.16	6.70	29.79	6.33	1.11
C0294-035-2125-M	0.294	7.47	0.035	0.89	2.125	53.98	0.999	25.38	0.841	21.35	6.70	29.79	5.95	1.04
C0294-035-2250-M	0.294	7.47	0.035	0.89	2.250	57.15	1.056	26.81	0.887	22.53	6.70	29.79	5.61	0.98
C0294-035-2375-M	0.294	7.47	0.035	0.89	2.375	60.33	1.112	28.25	0.934	23.72	6.70	29.79	5.30	0.93
C0294-035-2500-M	0.294	7.47	0.035	0.89	2.500	63.50	1.169	29.69	0.980	24.90	6.70	29.79	5.03	0.88
C0294-035-2625-M	0.294	7.47	0.035	0.89	2.625	66.68	1.225	31.12	1.027	26.09	6.70	29.79	4.79	0.84
C0294-035-2750-M	0.294	7.47	0.035	0.89	2.750	69.85	1.282	32.56	1.074	27.27	6.70	29.79	4.56	0.80
C0294-035-2875-M	0.294	7.47	0.035	0.89	2.875	73.03	1.338	33.99	1.120	28.46	6.70	29.79	4.36	0.76
C0294-035-3000-M	0.294	7.47	0.035	0.89	3.000	76.20	1.395	35.43	1.167	29.64	6.70	29.79	4.17	0.73
C0294-035-3250-M	0.294	7.47	0.035	0.89	3.250	82.55	1.508	38.30	1.260	32.01	6.70	29.79	3.84	0.67
C0294-035-3500-M	0.294	7.47	0.035	0.89	3.500	88.90	1.621	41.17	1.354	34.38	6.70	29.79	3.56	0.62

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0294-030-4500-S	1.995	50.67	3.45	15.35	1.38	0.24
C0294-030-4750-S	2.104	53.44	3.45	15.35	1.30	0.23
C0294-030-5000-S	2.213	56.20	3.45	15.35	1.24	0.22
C0294-030-5250-S	2.322	58.97	3.45	15.35	1.18	0.21
C0294-032-0500-S	0.265	6.73	4.14	18.40	17.60	3.08
C0294-032-0563-S	0.294	7.46	4.14	18.40	15.40	2.69
C0294-032-0625-S	0.323	8.20	4.14	18.40	13.68	2.39
C0294-032-0688-S	0.351	8.93	4.14	18.40	12.31	2.15
C0294-032-0750-S	0.380	9.66	4.14	18.40	11.19	1.96
C0294-032-0813-S	0.409	10.39	4.14	18.40	10.26	1.79
C0294-032-0875-S	0.438	11.12	4.14	18.40	9.46	1.66
C0294-032-0938-S	0.467	11.86	4.14	18.40	8.79	1.54
C0294-032-1000-S	0.496	12.59	4.14	18.40	8.20	1.44
C0294-032-1125-S	0.553	14.05	4.14	18.40	7.23	1.27
C0294-032-1250-S	0.611	15.52	4.14	18.40	6.47	1.13
C0294-032-1375-S	0.668	16.98	4.14	18.40	5.86	1.02
C0294-032-1500-S	0.726	18.44	4.14	18.40	5.35	0.94
C0294-032-1625-S	0.784	19.91	4.14	18.40	4.92	0.86
C0294-032-1750-S	0.841	21.37	4.14	18.40	4.55	0.80
C0294-032-1875-S	0.899	22.84	4.14	18.40	4.24	0.74
C0294-032-2000-S	0.957	24.30	4.14	18.40	3.97	0.69
C0294-032-2125-S	1.014	25.76	4.14	18.40	3.72	0.65
C0294-032-2250-S	1.072	27.23	4.14	18.40	3.51	0.61
C0294-032-2375-S	1.130	28.69	4.14	18.40	3.32	0.58
C0294-032-2500-S	1.187	30.15	4.14	18.40	3.15	0.55
C0294-032-2625-S	1.245	31.62	4.14	18.40	3.00	0.52
C0294-032-2750-S	1.302	33.08	4.14	18.40	2.86	0.50
C0294-032-2875-S	1.360	34.55	4.14	18.40	2.73	0.48
C0294-032-3000-S	1.418	36.01	4.14	18.40	2.61	0.46
C0294-032-3250-S	1.533	38.94	4.14	18.40	2.41	0.42
C0294-032-3500-S	1.648	41.87	4.14	18.40	2.23	0.39
C0294-032-3750-S	1.764	44.79	4.14	18.40	2.08	0.36
C0294-032-4000-S	1.879	47.72	4.14	18.40	1.95	0.34
C0294-032-4250-S	1.994	50.65	4.14	18.40	1.83	0.32
C0294-032-4500-S	2.109	53.58	4.14	18.40	1.73	0.30
C0294-032-4750-S	2.225	56.51	4.14	18.40	1.64	0.29
C0294-032-5000-S	2.340	59.43	4.14	18.40	1.56	0.27
C0294-035-0500-S	0.285	7.24	5.31	23.64	24.72	4.33
C0294-035-0563-S	0.316	8.03	5.31	23.64	21.59	3.78
C0294-035-0625-S	0.348	8.83	5.31	23.64	19.15	3.35
C0294-035-0688-S	0.379	9.62	5.31	23.64	17.22	3.01
C0294-035-0750-S	0.410	10.42	5.31	23.64	15.63	2.74
C0294-035-0813-S	0.441	11.21	5.31	23.64	14.32	2.51
C0294-035-0875-S	0.473	12.00	5.31	23.64	13.21	2.31
C0294-035-0938-S	0.504	12.80	5.31	23.64	12.25	2.14
C0294-035-1000-S	0.535	13.59	5.31	23.64	11.43	2.00
C0294-035-1125-S	0.598	15.18	5.31	23.64	10.08	1.76
C0294-035-1250-S	0.660	16.77	5.31	23.64	9.01	1.58
C0294-035-1375-S	0.723	18.35	5.31	23.64	8.15	1.43
C0294-035-1500-S	0.785	19.94	5.31	23.64	7.43	1.30
C0294-035-1625-S	0.848	21.53	5.31	23.64	6.84	1.20
C0294-035-1750-S	0.910	23.12	5.31	23.64	6.33	1.11
C0294-035-1875-S	0.973	24.71	5.31	23.64	5.89	1.03
C0294-035-2000-S	1.035	26.29	5.31	23.64	5.51	0.96
C0294-035-2125-S	1.098	27.88	5.31	23.64	5.17	0.91
C0294-035-2250-S	1.160	29.47	5.31	23.64	4.88	0.85
C0294-035-2375-S	1.223	31.06	5.31	23.64	4.61	0.81
C0294-035-2500-S	1.285	32.64	5.31	23.64	4.38	0.77
C0294-035-2625-S	1.348	34.23	5.31	23.64	4.16	0.73
C0294-035-2750-S	1.410	35.82	5.31	23.64	3.97	0.69
C0294-035-2875-S	1.473	37.41	5.31	23.64	3.79	0.66
C0294-035-3000-S	1.535	38.99	5.31	23.64	3.63	0.63
C0294-035-3250-S	1.660	42.17	5.31	23.64	3.34	0.59
C0294-035-3500-S	1.785	45.35	5.31	23.64	3.10	0.54

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0294-035-3750-M	0.294	7.47	0.035	0.89	3.750	95.25	1.734	44.04	1.447	36.75	6.70	29.79	3.32	0.58
C0294-035-4000-M	0.294	7.47	0.035	0.89	4.000	101.60	1.847	46.91	1.540	39.12	6.70	29.79	3.11	0.54
C0294-035-4250-M	0.294	7.47	0.035	0.89	4.250	107.95	1.960	49.78	1.634	41.49	6.70	29.79	2.93	0.51
C0294-035-4500-M	0.294	7.47	0.035	0.89	4.500	114.30	2.073	52.65	1.727	43.86	6.70	29.79	2.76	0.48
C0294-035-4750-M	0.294	7.47	0.035	0.89	4.750	120.65	2.186	55.53	1.820	46.23	6.70	29.79	2.61	0.46
C0294-035-5000-M	0.294	7.47	0.035	0.89	5.000	127.00	2.299	58.40	1.914	48.60	6.70	29.79	2.48	0.43
C0294-038-0500-M	0.294	7.47	0.038	0.97	0.500	12.70	0.286	7.27	0.261	6.63	8.41	37.39	39.34	6.88
C0294-038-0563-M	0.294	7.47	0.038	0.97	0.563	14.29	0.317	8.06	0.288	7.31	8.41	37.39	34.28	6.00
C0294-038-0625-M	0.294	7.47	0.038	0.97	0.625	15.88	0.348	8.85	0.314	7.99	8.41	37.39	30.38	5.32
C0294-038-0688-M	0.294	7.47	0.038	0.97	0.688	17.46	0.379	9.63	0.341	8.67	8.41	37.39	27.28	4.77
C0294-038-0750-M	0.294	7.47	0.038	0.97	0.750	19.05	0.410	10.42	0.368	9.34	8.41	37.39	24.75	4.33
C0294-038-0813-M	0.294	7.47	0.038	0.97	0.813	20.64	0.441	11.21	0.395	10.02	8.41	37.39	22.65	3.96
C0294-038-0875-M	0.294	7.47	0.038	0.97	0.875	22.23	0.472	12.00	0.421	10.70	8.41	37.39	20.88	3.65
C0294-038-0938-M	0.294	7.47	0.038	0.97	0.938	23.81	0.503	12.78	0.448	11.38	8.41	37.39	19.36	3.39
C0294-038-1000-M	0.294	7.47	0.038	0.97	1.000	25.40	0.534	13.57	0.475	12.06	8.41	37.39	18.05	3.16
C0294-038-1125-M	0.294	7.47	0.038	0.97	1.125	28.58	0.596	15.15	0.528	13.41	8.41	37.39	15.90	2.78
C0294-038-1250-M	0.294	7.47	0.038	0.97	1.250	31.75	0.658	16.72	0.582	14.77	8.41	37.39	14.21	2.49
C0294-038-1375-M	0.294	7.47	0.038	0.97	1.375	34.93	0.720	18.30	0.635	16.13	8.41	37.39	12.84	2.25
C0294-038-1500-M	0.294	7.47	0.038	0.97	1.500	38.10	0.782	19.87	0.688	17.49	8.41	37.39	11.71	2.05
C0294-038-1625-M	0.294	7.47	0.038	0.97	1.625	41.28	0.844	21.44	0.742	18.84	8.41	37.39	10.77	1.88
C0294-038-1750-M	0.294	7.47	0.038	0.97	1.750	44.45	0.906	23.02	0.795	20.20	8.41	37.39	9.96	1.74
C0294-038-1875-M	0.294	7.47	0.038	0.97	1.875	47.63	0.968	24.59	0.849	21.56	8.41	37.39	9.27	1.62
C0294-038-2000-M	0.294	7.47	0.038	0.97	2.000	50.80	1.030	26.17	0.902	22.91	8.41	37.39	8.67	1.52
C0294-038-2125-M	0.294	7.47	0.038	0.97	2.125	53.98	1.092	27.74	0.956	24.27	8.41	37.39	8.14	1.42
C0294-038-2250-M	0.294	7.47	0.038	0.97	2.250	57.15	1.154	29.32	1.009	25.63	8.41	37.39	7.67	1.34
C0294-038-2375-M	0.294	7.47	0.038	0.97	2.375	60.33	1.216	30.89	1.062	26.98	8.41	37.39	7.26	1.27
C0294-038-2500-M	0.294	7.47	0.038	0.97	2.500	63.50	1.278	32.47	1.116	28.34	8.41	37.39	6.88	1.20
C0294-038-2625-M	0.294	7.47	0.038	0.97	2.625	66.68	1.340	34.04	1.169	29.70	8.41	37.39	6.54	1.15
C0294-038-2750-M	0.294	7.47	0.038	0.97	2.750	69.85	1.402	35.62	1.223	31.06	8.41	37.39	6.24	1.09
C0294-038-2875-M	0.294	7.47	0.038	0.97	2.875	73.03	1.464	37.19	1.276	32.41	8.41	37.39	5.96	1.04
C0294-038-3000-M	0.294	7.47	0.038	0.97	3.000	76.20	1.526	38.77	1.330	33.77	8.41	37.39	5.70	1.00
C0294-038-3250-M	0.294	7.47	0.038	0.97	3.250	82.55	1.650	41.92	1.436	36.48	8.41	37.39	5.26	0.92
C0294-038-3500-M	0.294	7.47	0.038	0.97	3.500	88.90	1.774	45.07	1.543	39.20	8.41	37.39	4.87	0.85
C0294-038-3750-M	0.294	7.47	0.038	0.97	3.750	95.25	1.898	48.22	1.650	41.91	8.41	37.39	4.54	0.79
C0294-038-4000-M	0.294	7.47	0.038	0.97	4.000	101.60	2.022	51.37	1.757	44.63	8.41	37.39	4.25	0.74
C0294-038-4250-M	0.294	7.47	0.038	0.97	4.250	107.95	2.146	54.51	1.864	47.34	8.41	37.39	4.00	0.70
C0294-038-4500-M	0.294	7.47	0.038	0.97	4.500	114.30	2.270	57.66	1.971	50.05	8.41	37.39	3.77	0.66
C0294-038-4750-M	0.294	7.47	0.038	0.97	4.750	120.65	2.394	60.81	2.077	52.77	8.41	37.39	3.57	0.62
C0294-038-5000-M	0.294	7.47	0.038	0.97	5.000	127.00	2.518	63.96	2.184	55.48	8.41	37.39	3.39	0.59
C0294-040-0500-M	0.294	7.47	0.040	1.02	0.500	12.70	0.300	7.63	0.278	7.07	9.68	43.06	48.51	8.49
C0294-040-0563-M	0.294	7.47	0.040	1.02	0.563	14.29	0.333	8.46	0.307	7.81	9.68	43.06	42.22	7.39
C0294-040-0625-M	0.294	7.47	0.040	1.02	0.625	15.88	0.366	9.30	0.336	8.54	9.68	43.06	37.38	6.54
C0294-040-0688-M	0.294	7.47	0.040	1.02	0.688	17.46	0.399	10.13	0.365	9.28	9.68	43.06	33.54	5.87
C0294-040-0750-M	0.294	7.47	0.040	1.02	0.750	19.05	0.432	10.96	0.394	10.01	9.68	43.06	30.41	5.32
C0294-040-0813-M	0.294	7.47	0.040	1.02	0.813	20.64	0.464	11.80	0.423	10.75	9.68	43.06	27.81	4.87
C0294-040-0875-M	0.294	7.47	0.040	1.02	0.875	22.23	0.497	12.63	0.452	11.48	9.68	43.06	25.63	4.48
C0294-040-0938-M	0.294	7.47	0.040	1.02	0.938	23.81	0.530	13.46	0.481	12.22	9.68	43.06	23.76	4.16
C0294-040-1000-M	0.294	7.47	0.040	1.02	1.000	25.40	0.563	14.30	0.510	12.95	9.68	43.06	22.14	3.88
C0294-040-1125-M	0.294	7.47	0.040	1.02	1.125	28.58	0.628	15.96	0.568	14.42	9.68	43.06	19.50	3.41
C0294-040-1250-M	0.294	7.47	0.040	1.02	1.250	31.75	0.694	17.63	0.626	15.89	9.68	43.06	17.41	3.05
C0294-040-1375-M	0.294	7.47	0.040	1.02	1.375	34.93	0.760	19.29	0.684	17.36	9.68	43.06	15.73	2.75
C0294-040-1500-M	0.294	7.47	0.040	1.02	1.500	38.10	0.825	20.96	0.741	18.83	9.68	43.06	14.35	2.51
C0294-040-1625-M	0.294	7.47	0.040	1.02	1.625	41.28	0.891	22.63	0.799	20.30	9.68	43.06	13.19	2.31
C0294-040-1750-M	0.294	7.47	0.040	1.02	1.750	44.45	0.956	24.29	0.857	21.77	9.68	43.06	12.20	2.13
C0294-040-1875-M	0.294	7.47	0.040	1.02	1.875	47.63	1.022	25.96	0.915	23.24	9.68	43.06	11.35	1.99
C0294-040-2000-M	0.294	7.47	0.040	1.02	2.000	50.80	1.088	27.62	0.973	24.71	9.68	43.06	10.61	1.86
C0294-040-2125-M	0.294	7.47	0.040	1.02	2.125	53.98	1.153	29.29	1.031	26.18	9.68	43.06	9.96	1.74
C0294-040-2250-M	0.294	7.47	0.040	1.02	2.250	57.15	1.219	30.96	1.089	27.65	9.68	43.06	9.39	1.64
C0294-040-2375-M	0.294	7.47	0.040	1.02	2.375	60.33	1.284	32.62	1.147	29.12	9.68	43.06	8.88	1.55
C0294-040-2500-M	0.294	7.47	0.040	1.02	2.500	63.50	1.350	34.29	1.204	30.59	9.68	43.06	8.42	1.47
C0294-040-2625-M	0.294	7.47	0.040	1.02	2.625	66.68	1.416	35.96	1.262	32.06	9.68	43.06	8.01	1.40
C0294-040-2750-M	0.294	7.47	0.040	1.02	2.750	69.85	1.481	37.62	1.320	33.53	9.68	43.06	7.63	1.34
C0294-040-2875-M	0.294	7.47	0.040	1.02	2.875	73.03	1.547	39.29	1.378	35.00	9.68	43.06	7.29	1.28
C0294-040-3000-M	0.294	7.47	0.040	1.02	3.000	76.20	1.612	40.95	1.436	36.47	9.68	43.06	6.98	1.22

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0294-035-3750-S	1.910	48.52	5.31	23.64	2.89	0.51
C0294-035-4000-S	2.035	51.70	5.31	23.64	2.71	0.47
C0294-035-4250-S	2.160	54.87	5.31	23.64	2.54	0.45
C0294-035-4500-S	2.285	58.05	5.31	23.64	2.40	0.42
C0294-035-4750-S	2.410	61.22	5.31	23.64	2.27	0.40
C0294-035-5000-S	2.535	64.40	5.31	23.64	2.16	0.38
C0294-038-0500-S	0.305	7.74	6.68	29.71	34.21	5.99
C0294-038-0563-S	0.338	8.60	6.68	29.71	29.81	5.22
C0294-038-0625-S	0.372	9.45	6.68	29.71	26.42	4.62
C0294-038-0688-S	0.406	10.31	6.68	29.71	23.72	4.15
C0294-038-0750-S	0.440	11.17	6.68	29.71	21.52	3.77
C0294-038-0813-S	0.473	12.02	6.68	29.71	19.69	3.45
C0294-038-0875-S	0.507	12.88	6.68	29.71	18.15	3.18
C0294-038-0938-S	0.541	13.73	6.68	29.71	16.84	2.95
C0294-038-1000-S	0.574	14.59	6.68	29.71	15.70	2.75
C0294-038-1125-S	0.642	16.30	6.68	29.71	13.83	2.42
C0294-038-1250-S	0.709	18.02	6.68	29.71	12.35	2.16
C0294-038-1375-S	0.777	19.73	6.68	29.71	11.17	1.95
C0294-038-1500-S	0.844	21.44	6.68	29.71	10.19	1.78
C0294-038-1625-S	0.912	23.16	6.68	29.71	9.36	1.64
C0294-038-1750-S	0.979	24.87	6.68	29.71	8.66	1.52
C0294-038-1875-S	1.046	26.58	6.68	29.71	8.06	1.41
C0294-038-2000-S	1.114	28.29	6.68	29.71	7.54	1.32
C0294-038-2125-S	1.181	30.01	6.68	29.71	7.08	1.24
C0294-038-2250-S	1.249	31.72	6.68	29.71	6.67	1.17
C0294-038-2375-S	1.316	33.43	6.68	29.71	6.31	1.10
C0294-038-2500-S	1.384	35.14	6.68	29.71	5.98	1.05
C0294-038-2625-S	1.451	36.86	6.68	29.71	5.69	1.00
C0294-038-2750-S	1.519	38.57	6.68	29.71	5.42	0.95
C0294-038-2875-S	1.586	40.28	6.68	29.71	5.18	0.91
C0294-038-3000-S	1.653	42.00	6.68	29.71	4.96	0.87
C0294-038-3250-S	1.788	45.42	6.68	29.71	4.57	0.80
C0294-038-3500-S	1.923	48.85	6.68	29.71	4.24	0.74
C0294-038-3750-S	2.058	52.27	6.68	29.71	3.95	0.69
C0294-038-4000-S	2.193	55.70	6.68	29.71	3.70	0.65
C0294-038-4250-S	2.328	59.12	6.68	29.71	3.48	0.61
C0294-038-4500-S	2.463	62.55	6.68	29.71	3.28	0.57
C0294-038-4750-S	2.597	65.97	6.68	29.71	3.10	0.54
C0294-038-5000-S	2.732	69.40	6.68	29.71	2.95	0.52
C0294-040-0500-S	0.318	8.06	7.70	34.24	42.18	7.38
C0294-040-0563-S	0.353	8.96	7.70	34.24	36.72	6.43
C0294-040-0625-S	0.388	9.86	7.70	34.24	32.51	5.69
C0294-040-0688-S	0.424	10.76	7.70	34.24	29.16	5.10
C0294-040-0750-S	0.459	11.66	7.70	34.24	26.44	4.63
C0294-040-0813-S	0.494	12.55	7.70	34.24	24.18	4.23
C0294-040-0875-S	0.530	13.45	7.70	34.24	22.28	3.90
C0294-040-0938-S	0.565	14.35	7.70	34.24	20.66	3.62
C0294-040-1000-S	0.600	15.25	7.70	34.24	19.26	3.37
C0294-040-1125-S	0.671	17.04	7.70	34.24	16.95	2.97
C0294-040-1250-S	0.742	18.84	7.70	34.24	15.14	2.65
C0294-040-1375-S	0.812	20.63	7.70	34.24	13.68	2.39
C0294-040-1500-S	0.883	22.43	7.70	34.24	12.48	2.18
C0294-040-1625-S	0.954	24.22	7.70	34.24	11.47	2.01
C0294-040-1750-S	1.024	26.02	7.70	34.24	10.61	1.86
C0294-040-1875-S	1.095	27.81	7.70	34.24	9.87	1.73
C0294-040-2000-S	1.166	29.61	7.70	34.24	9.23	1.61
C0294-040-2125-S	1.236	31.41	7.70	34.24	8.66	1.52
C0294-040-2250-S	1.307	33.20	7.70	34.24	8.16	1.43
C0294-040-2375-S	1.378	35.00	7.70	34.24	7.72	1.35
C0294-040-2500-S	1.448	36.79	7.70	34.24	7.32	1.28
C0294-040-2625-S	1.519	38.59	7.70	34.24	6.96	1.22
C0294-040-2750-S	1.590	40.38	7.70	34.24	6.64	1.16
C0294-040-2875-S	1.661	42.18	7.70	34.24	6.34	1.11
C0294-040-3000-S	1.731	43.97	7.70	34.24	6.07	1.06

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0294-040-3250-M	0.294	7.47	0.040	1.02	3.250	82.55	1.744	44.29	1.552	39.41	9.68	43.06	6.43	1.12
C0294-040-3500-M	0.294	7.47	0.040	1.02	3.500	88.90	1.875	47.62	1.667	42.35	9.68	43.06	5.96	1.04
C0294-040-3750-M	0.294	7.47	0.040	1.02	3.750	95.25	2.006	50.95	1.783	45.29	9.68	43.06	5.55	0.97
C0294-040-4000-M	0.294	7.47	0.040	1.02	4.000	101.60	2.137	54.28	1.899	48.23	9.68	43.06	5.20	0.91
C0294-040-4250-M	0.294	7.47	0.040	1.02	4.250	107.95	2.268	57.62	2.015	51.17	9.68	43.06	4.89	0.85
C0294-040-4500-M	0.294	7.47	0.040	1.02	4.500	114.30	2.400	60.95	2.130	54.11	9.68	43.06	4.61	0.81
C0294-040-4750-M	0.294	7.47	0.040	1.02	4.750	120.65	2.531	64.28	2.246	57.05	9.68	43.06	4.36	0.76
C0294-040-5000-M	0.294	7.47	0.040	1.02	5.000	127.00	2.662	67.61	2.362	59.99	9.68	43.06	4.14	0.72
C0294-042-0500-M	0.294	7.47	0.042	1.07	0.500	12.70	0.314	7.98	0.295	7.50	11.07	49.23	59.52	10.42
C0294-042-0563-M	0.294	7.47	0.042	1.07	0.563	14.29	0.349	8.85	0.326	8.29	11.07	49.23	51.75	9.06
C0294-042-0625-M	0.294	7.47	0.042	1.07	0.625	15.88	0.383	9.73	0.358	9.08	11.07	49.23	45.77	8.01
C0294-042-0688-M	0.294	7.47	0.042	1.07	0.688	17.46	0.418	10.61	0.389	9.87	11.07	49.23	41.03	7.18
C0294-042-0750-M	0.294	7.47	0.042	1.07	0.750	19.05	0.452	11.49	0.420	10.66	11.07	49.23	37.18	6.51
C0294-042-0813-M	0.294	7.47	0.042	1.07	0.813	20.64	0.487	12.37	0.451	11.45	11.07	49.23	33.99	5.95
C0294-042-0875-M	0.294	7.47	0.042	1.07	0.875	22.23	0.521	13.24	0.482	12.24	11.07	49.23	31.30	5.48
C0294-042-0938-M	0.294	7.47	0.042	1.07	0.938	23.81	0.556	14.12	0.513	13.03	11.07	49.23	29.01	5.08
C0294-042-1000-M	0.294	7.47	0.042	1.07	1.000	25.40	0.591	15.00	0.544	13.82	11.07	49.23	27.03	4.73
C0294-042-1125-M	0.294	7.47	0.042	1.07	1.125	28.58	0.660	16.76	0.606	15.40	11.07	49.23	23.79	4.16
C0294-042-1250-M	0.294	7.47	0.042	1.07	1.250	31.75	0.729	18.51	0.669	16.98	11.07	49.23	21.24	3.72
C0294-042-1375-M	0.294	7.47	0.042	1.07	1.375	34.93	0.798	20.27	0.731	18.56	11.07	49.23	19.18	3.36
C0294-042-1500-M	0.294	7.47	0.042	1.07	1.500	38.10	0.867	22.02	0.793	20.15	11.07	49.23	17.49	3.06
C0294-042-1625-M	0.294	7.47	0.042	1.07	1.625	41.28	0.936	23.78	0.855	21.73	11.07	49.23	16.07	2.81
C0294-042-1750-M	0.294	7.47	0.042	1.07	1.750	44.45	1.005	25.53	0.918	23.31	11.07	49.23	14.86	2.60
C0294-042-1875-M	0.294	7.47	0.042	1.07	1.875	47.63	1.074	27.29	0.980	24.89	11.07	49.23	13.83	2.42
C0294-042-2000-M	0.294	7.47	0.042	1.07	2.000	50.80	1.144	29.05	1.042	26.47	11.07	49.23	12.92	2.26
C0294-042-2125-M	0.294	7.47	0.042	1.07	2.125	53.98	1.213	30.80	1.104	28.05	11.07	49.23	12.13	2.12
C0294-042-2250-M	0.294	7.47	0.042	1.07	2.250	57.15	1.282	32.56	1.166	29.63	11.07	49.23	11.43	2.00
C0294-042-2375-M	0.294	7.47	0.042	1.07	2.375	60.33	1.351	34.31	1.229	31.21	11.07	49.23	10.81	1.89
C0294-042-2500-M	0.294	7.47	0.042	1.07	2.500	63.50	1.420	36.07	1.291	32.79	11.07	49.23	10.25	1.79
C0294-042-2625-M	0.294	7.47	0.042	1.07	2.625	66.68	1.489	37.82	1.353	34.37	11.07	49.23	9.75	1.71
C0294-042-2750-M	0.294	7.47	0.042	1.07	2.750	69.85	1.558	39.58	1.415	35.95	11.07	49.23	9.29	1.63
C0294-042-2875-M	0.294	7.47	0.042	1.07	2.875	73.03	1.627	41.34	1.478	37.53	11.07	49.23	8.87	1.55
C0294-042-3000-M	0.294	7.47	0.042	1.07	3.000	76.20	1.697	43.09	1.540	39.11	11.07	49.23	8.49	1.49
C0294-042-3250-M	0.294	7.47	0.042	1.07	3.250	82.55	1.835	46.60	1.664	42.27	11.07	49.23	7.82	1.37
C0294-042-3500-M	0.294	7.47	0.042	1.07	3.500	88.90	1.973	50.12	1.789	45.43	11.07	49.23	7.25	1.27
C0294-042-3750-M	0.294	7.47	0.042	1.07	3.750	95.25	2.111	53.63	1.913	48.60	11.07	49.23	6.75	1.18
C0294-042-4000-M	0.294	7.47	0.042	1.07	4.000	101.60	2.250	57.14	2.038	51.76	11.07	49.23	6.32	1.11
C0294-042-4250-M	0.294	7.47	0.042	1.07	4.250	107.95	2.388	60.65	2.162	54.92	11.07	49.23	5.94	1.04
C0294-042-4500-M	0.294	7.47	0.042	1.07	4.500	114.30	2.526	64.16	2.287	58.08	11.07	49.23	5.61	0.98
C0294-042-4750-M	0.294	7.47	0.042	1.07	4.750	120.65	2.664	67.67	2.411	61.24	11.07	49.23	5.31	0.93
C0294-042-5000-M	0.294	7.47	0.042	1.07	5.000	127.00	2.803	71.18	2.535	64.40	11.07	49.23	5.04	0.88
C0294-045-0438-M	0.294	7.47	0.045	1.14	0.438	11.11	0.296	7.53	0.285	7.24	13.37	59.45	94.69	16.57
C0294-045-0500-M	0.294	7.47	0.045	1.14	0.500	12.70	0.333	8.47	0.319	8.11	13.37	59.45	80.26	14.05
C0294-045-0563-M	0.294	7.47	0.045	1.14	0.563	14.29	0.371	9.41	0.354	8.98	13.37	59.45	69.64	12.19
C0294-045-0625-M	0.294	7.47	0.045	1.14	0.625	15.88	0.408	10.36	0.388	9.85	13.37	59.45	61.51	10.76
C0294-045-0688-M	0.294	7.47	0.045	1.14	0.688	17.46	0.445	11.30	0.422	10.72	13.37	59.45	55.07	9.64
C0294-045-0750-M	0.294	7.47	0.045	1.14	0.750	19.05	0.482	12.24	0.456	11.59	13.37	59.45	49.86	8.72
C0294-045-0813-M	0.294	7.47	0.045	1.14	0.813	20.64	0.519	13.18	0.491	12.46	13.37	59.45	45.55	7.97
C0294-045-0875-M	0.294	7.47	0.045	1.14	0.875	22.23	0.556	14.13	0.525	13.33	13.37	59.45	41.92	7.34
C0294-045-0938-M	0.294	7.47	0.045	1.14	0.938	23.81	0.593	15.07	0.559	14.20	13.37	59.45	38.83	6.79
C0294-045-1000-M	0.294	7.47	0.045	1.14	1.000	25.40	0.630	16.01	0.593	15.07	13.37	59.45	36.16	6.33
C0294-045-1125-M	0.294	7.47	0.045	1.14	1.125	28.58	0.705	17.90	0.662	16.81	13.37	59.45	31.79	5.56
C0294-045-1250-M	0.294	7.47	0.045	1.14	1.250	31.75	0.779	19.78	0.730	18.55	13.37	59.45	28.37	4.96
C0294-045-1375-M	0.294	7.47	0.045	1.14	1.375	34.93	0.853	21.67	0.799	20.30	13.37	59.45	25.61	4.48
C0294-045-1500-M	0.294	7.47	0.045	1.14	1.500	38.10	0.927	23.55	0.868	22.04	13.37	59.45	23.34	4.08
C0294-045-1625-M	0.294	7.47	0.045	1.14	1.625	41.28	1.002	25.44	0.936	23.78	13.37	59.45	21.44	3.75
C0294-045-1750-M	0.294	7.47	0.045	1.14	1.750	44.45	1.076	27.32	1.005	25.52	13.37	59.45	19.82	3.47
C0294-045-1875-M	0.294	7.47	0.045	1.14	1.875	47.63	1.150	29.21	1.073	27.26	13.37	59.45	18.44	3.23
C0294-045-2000-M	0.294	7.47	0.045	1.14	2.000	50.80	1.224	31.10	1.142	29.00	13.37	59.45	17.23	3.01
C0294-045-2125-M	0.294	7.47	0.045	1.14	2.125	53.98	1.298	32.98	1.210	30.74	13.37	59.45	16.17	2.83
C0294-045-2250-M	0.294	7.47	0.045	1.14	2.250	57.15	1.373	34.87	1.279	32.48	13.37	59.45	15.23	2.67
C0294-045-2375-M	0.294	7.47	0.045	1.14	2.375	60.33	1.447	36.75	1.347	34.22	13.37	59.45	14.40	2.52
C0294-045-2500-M	0.294	7.47	0.045	1.14	2.500	63.50	1.521	38.64	1.416	35.96	13.37	59.45	13.65	2.39
C0294-045-2625-M	0.294	7.47	0.045	1.14	2.625	66.68	1.595	40.52	1.484	37.70	13.37	59.45	12.98	2.27

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0294-040-3250-S	1.873	47.56	7.70	34.24	5.59	0.98
C0294-040-3500-S	2.014	51.15	7.70	34.24	5.18	0.91
C0294-040-3750-S	2.155	54.75	7.70	34.24	4.83	0.84
C0294-040-4000-S	2.297	58.34	7.70	34.24	4.52	0.79
C0294-040-4250-S	2.438	61.93	7.70	34.24	4.25	0.74
C0294-040-4500-S	2.579	65.52	7.70	34.24	4.01	0.70
C0294-040-4750-S	2.721	69.11	7.70	34.24	3.79	0.66
C0294-040-5000-S	2.862	72.70	7.70	34.24	3.60	0.63
C0294-042-0500-S	0.330	8.38	8.80	39.16	51.76	9.06
C0294-042-0563-S	0.367	9.32	8.80	39.16	45.00	7.87
C0294-042-0625-S	0.404	10.26	8.80	39.16	39.80	6.96
C0294-042-0688-S	0.441	11.19	8.80	39.16	35.68	6.24
C0294-042-0750-S	0.478	12.13	8.80	39.16	32.33	5.66
C0294-042-0813-S	0.515	13.07	8.80	39.16	29.56	5.17
C0294-042-0875-S	0.552	14.01	8.80	39.16	27.22	4.76
C0294-042-0938-S	0.588	14.95	8.80	39.16	25.23	4.41
C0294-042-1000-S	0.625	15.89	8.80	39.16	23.51	4.11
C0294-042-1125-S	0.699	17.76	8.80	39.16	20.68	3.62
C0294-042-1250-S	0.773	19.64	8.80	39.16	18.47	3.23
C0294-042-1375-S	0.847	21.52	8.80	39.16	16.68	2.92
C0294-042-1500-S	0.921	23.39	8.80	39.16	15.21	2.66
C0294-042-1625-S	0.995	25.27	8.80	39.16	13.97	2.45
C0294-042-1750-S	1.069	27.15	8.80	39.16	12.92	2.26
C0294-042-1875-S	1.143	29.02	8.80	39.16	12.02	2.10
C0294-042-2000-S	1.217	30.90	8.80	39.16	11.24	1.97
C0294-042-2125-S	1.290	32.78	8.80	39.16	10.55	1.85
C0294-042-2250-S	1.364	34.65	8.80	39.16	9.94	1.74
C0294-042-2375-S	1.438	36.53	8.80	39.16	9.40	1.64
C0294-042-2500-S	1.512	38.41	8.80	39.16	8.91	1.56
C0294-042-2625-S	1.586	40.28	8.80	39.16	8.47	1.48
C0294-042-2750-S	1.660	42.16	8.80	39.16	8.08	1.41
C0294-042-2875-S	1.734	44.04	8.80	39.16	7.72	1.35
C0294-042-3000-S	1.808	45.91	8.80	39.16	7.38	1.29
C0294-042-3250-S	1.955	49.67	8.80	39.16	6.80	1.19
C0294-042-3500-S	2.103	53.42	8.80	39.16	6.30	1.10
C0294-042-3750-S	2.251	57.17	8.80	39.16	5.87	1.03
C0294-042-4000-S	2.399	60.93	8.80	39.16	5.50	0.96
C0294-042-4250-S	2.546	64.68	8.80	39.16	5.17	0.90
C0294-042-4500-S	2.694	68.43	8.80	39.16	4.88	0.85
C0294-042-4750-S	2.842	72.19	8.80	39.16	4.62	0.81
C0294-042-5000-S	2.990	75.94	8.80	39.16	4.38	0.77
C0294-045-0438-S	0.308	7.83	10.64	47.31	82.34	14.41
C0294-045-0500-S	0.348	8.83	10.64	47.31	69.79	12.21
C0294-045-0563-S	0.387	9.83	10.64	47.31	60.56	10.60
C0294-045-0625-S	0.426	10.82	10.64	47.31	53.48	9.36
C0294-045-0688-S	0.465	11.82	10.64	47.31	47.89	8.38
C0294-045-0750-S	0.505	12.82	10.64	47.31	43.35	7.59
C0294-045-0813-S	0.544	13.82	10.64	47.31	39.60	6.93
C0294-045-0875-S	0.583	14.81	10.64	47.31	36.45	6.38
C0294-045-0938-S	0.622	15.81	10.64	47.31	33.76	5.91
C0294-045-1000-S	0.662	16.81	10.64	47.31	31.44	5.50
C0294-045-1125-S	0.740	18.80	10.64	47.31	27.65	4.84
C0294-045-1250-S	0.819	20.80	10.64	47.31	24.67	4.32
C0294-045-1375-S	0.897	22.79	10.64	47.31	22.27	3.90
C0294-045-1500-S	0.976	24.79	10.64	47.31	20.29	3.55
C0294-045-1625-S	1.054	26.78	10.64	47.31	18.64	3.26
C0294-045-1750-S	1.133	28.78	10.64	47.31	17.24	3.02
C0294-045-1875-S	1.212	30.77	10.64	47.31	16.03	2.81
C0294-045-2000-S	1.290	32.77	10.64	47.31	14.98	2.62
C0294-045-2125-S	1.369	34.76	10.64	47.31	14.06	2.46
C0294-045-2250-S	1.447	36.76	10.64	47.31	13.25	2.32
C0294-045-2375-S	1.526	38.75	10.64	47.31	12.52	2.19
C0294-045-2500-S	1.604	40.75	10.64	47.31	11.87	2.08
C0294-045-2625-S	1.683	42.74	10.64	47.31	11.29	1.98

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0294-045-2750-M	0.294	7.47	0.045	1.14	2.750	69.85	1.670	42.41	1.553	39.44	13.37	59.45	12.37	2.16
C0294-045-2875-M	0.294	7.47	0.045	1.14	2.875	73.03	1.744	44.29	1.621	41.18	13.37	59.45	11.82	2.07
C0294-045-3000-M	0.294	7.47	0.045	1.14	3.000	76.20	1.818	46.18	1.690	42.92	13.37	59.45	11.31	1.98
C0294-045-3250-M	0.294	7.47	0.045	1.14	3.250	82.55	1.967	49.95	1.827	46.41	13.37	59.45	10.41	1.82
C0294-045-3500-M	0.294	7.47	0.045	1.14	3.500	88.90	2.115	53.72	1.964	49.89	13.37	59.45	9.65	1.69
C0294-045-3750-M	0.294	7.47	0.045	1.14	3.750	95.25	2.263	57.49	2.101	53.37	13.37	59.45	8.99	1.57
C0294-045-4000-M	0.294	7.47	0.045	1.14	4.000	101.60	2.412	61.26	2.238	56.85	13.37	59.45	8.42	1.47
C0294-045-4250-M	0.294	7.47	0.045	1.14	4.250	107.95	2.560	65.03	2.375	60.33	13.37	59.45	7.91	1.38
C0294-045-4500-M	0.294	7.47	0.045	1.14	4.500	114.30	2.709	68.80	2.512	63.81	13.37	59.45	7.46	1.31
C0294-045-4750-M	0.294	7.47	0.045	1.14	4.750	120.65	2.857	72.57	2.649	67.29	13.37	59.45	7.06	1.24
C0294-047-0438-M	0.294	7.47	0.047	1.19	0.438	11.11	0.307	7.80	0.298	7.57	15.04	66.92	115.22	20.16
C0294-047-0500-M	0.294	7.47	0.047	1.19	0.500	12.70	0.346	8.78	0.334	8.49	15.04	66.92	97.48	17.06
C0294-047-0563-M	0.294	7.47	0.047	1.19	0.563	14.29	0.384	9.76	0.371	9.41	15.04	66.92	84.48	14.78
C0294-047-0625-M	0.294	7.47	0.047	1.19	0.625	15.88	0.423	10.75	0.407	10.34	15.04	66.92	74.53	13.04
C0294-047-0688-M	0.294	7.47	0.047	1.19	0.688	17.46	0.462	11.73	0.443	11.26	15.04	66.92	66.69	11.67
C0294-047-0750-M	0.294	7.47	0.047	1.19	0.750	19.05	0.501	12.72	0.479	12.18	15.04	66.92	60.33	10.56
C0294-047-0813-M	0.294	7.47	0.047	1.19	0.813	20.64	0.539	13.70	0.516	13.10	15.04	66.92	55.08	9.64
C0294-047-0875-M	0.294	7.47	0.047	1.19	0.875	22.23	0.578	14.68	0.552	14.02	15.04	66.92	50.68	8.87
C0294-047-0938-M	0.294	7.47	0.047	1.19	0.938	23.81	0.617	15.67	0.588	14.94	15.04	66.92	46.92	8.21
C0294-047-1000-M	0.294	7.47	0.047	1.19	1.000	25.40	0.656	16.65	0.625	15.86	15.04	66.92	43.68	7.64
C0294-047-1125-M	0.294	7.47	0.047	1.19	1.125	28.58	0.733	18.62	0.697	17.71	15.04	66.92	38.39	6.72
C0294-047-1250-M	0.294	7.47	0.047	1.19	1.250	31.75	0.811	20.59	0.770	19.55	15.04	66.92	34.24	5.99
C0294-047-1375-M	0.294	7.47	0.047	1.19	1.375	34.93	0.888	22.56	0.842	21.39	15.04	66.92	30.90	5.41
C0294-047-1500-M	0.294	7.47	0.047	1.19	1.500	38.10	0.966	24.52	0.915	23.24	15.04	66.92	28.15	4.93
C0294-047-1625-M	0.294	7.47	0.047	1.19	1.625	41.28	1.043	26.49	0.987	25.08	15.04	66.92	25.85	4.52
C0294-047-1750-M	0.294	7.47	0.047	1.19	1.750	44.45	1.121	28.46	1.060	26.92	15.04	66.92	23.90	4.18
C0294-047-1875-M	0.294	7.47	0.047	1.19	1.875	47.63	1.198	30.43	1.132	28.76	15.04	66.92	22.22	3.89
C0294-047-2000-M	0.294	7.47	0.047	1.19	2.000	50.80	1.275	32.40	1.205	30.61	15.04	66.92	20.77	3.63
C0294-047-2125-M	0.294	7.47	0.047	1.19	2.125	53.98	1.353	34.37	1.278	32.45	15.04	66.92	19.49	3.41
C0294-047-2250-M	0.294	7.47	0.047	1.19	2.250	57.15	1.430	36.33	1.350	34.29	15.04	66.92	18.36	3.21
C0294-047-2375-M	0.294	7.47	0.047	1.19	2.375	60.33	1.508	38.30	1.423	36.14	15.04	66.92	17.35	3.04
C0294-047-2500-M	0.294	7.47	0.047	1.19	2.500	63.50	1.585	40.27	1.495	37.98	15.04	66.92	16.45	2.88
C0294-047-2625-M	0.294	7.47	0.047	1.19	2.625	66.68	1.663	42.24	1.568	39.82	15.04	66.92	15.64	2.74
C0294-047-2750-M	0.294	7.47	0.047	1.19	2.750	69.85	1.740	44.21	1.640	41.66	15.04	66.92	14.90	2.61
C0294-047-2875-M	0.294	7.47	0.047	1.19	2.875	73.03	1.818	46.17	1.713	43.51	15.04	66.92	14.23	2.49
C0294-047-3000-M	0.294	7.47	0.047	1.19	3.000	76.20	1.895	48.14	1.785	45.35	15.04	66.92	13.62	2.38
C0294-047-3250-M	0.294	7.47	0.047	1.19	3.250	82.55	2.050	52.08	1.931	49.04	15.04	66.92	12.54	2.19
C0294-047-3500-M	0.294	7.47	0.047	1.19	3.500	88.90	2.205	56.01	2.076	52.72	15.04	66.92	11.62	2.03
C0294-047-3750-M	0.294	7.47	0.047	1.19	3.750	95.25	2.360	59.95	2.221	56.41	15.04	66.92	10.83	1.89
C0294-047-4000-M	0.294	7.47	0.047	1.19	4.000	101.60	2.515	63.89	2.366	60.09	15.04	66.92	10.13	1.77
C0294-047-4250-M	0.294	7.47	0.047	1.19	4.250	107.95	2.670	67.82	2.511	63.78	15.04	66.92	9.52	1.67
C0294-047-4500-M	0.294	7.47	0.047	1.19	4.500	114.30	2.825	71.76	2.656	67.46	15.04	66.92	8.98	1.57
C0294-047-4750-M	0.294	7.47	0.047	1.19	4.750	120.65	2.980	75.70	2.801	71.15	15.04	66.92	8.50	1.49
C0294-049-0438-M	0.294	7.47	0.049	1.25	0.438	11.11	0.317	8.05	0.310	7.88	16.84	74.93	139.70	24.45
C0294-049-0500-M	0.294	7.47	0.049	1.25	0.500	12.70	0.357	9.07	0.349	8.86	16.84	74.93	117.98	20.65
C0294-049-0563-M	0.294	7.47	0.049	1.25	0.563	14.29	0.398	10.10	0.387	9.83	16.84	74.93	102.11	17.87
C0294-049-0625-M	0.294	7.47	0.049	1.25	0.625	15.88	0.438	11.12	0.425	10.80	16.84	74.93	90.00	15.75
C0294-049-0688-M	0.294	7.47	0.049	1.25	0.688	17.46	0.478	12.14	0.463	11.77	16.84	74.93	80.46	14.08
C0294-049-0750-M	0.294	7.47	0.049	1.25	0.750	19.05	0.518	13.17	0.501	12.74	16.84	74.93	72.74	12.73
C0294-049-0813-M	0.294	7.47	0.049	1.25	0.813	20.64	0.559	14.19	0.540	13.71	16.84	74.93	66.38	11.62
C0294-049-0875-M	0.294	7.47	0.049	1.25	0.875	22.23	0.599	15.22	0.578	14.68	16.84	74.93	61.04	10.68
C0294-049-0938-M	0.294	7.47	0.049	1.25	0.938	23.81	0.639	16.24	0.616	15.65	16.84	74.93	56.50	9.89
C0294-049-1000-M	0.294	7.47	0.049	1.25	1.000	25.40	0.680	17.26	0.654	16.62	16.84	74.93	52.58	9.20
C0294-049-1125-M	0.294	7.47	0.049	1.25	1.125	28.58	0.760	19.31	0.731	18.56	16.84	74.93	46.18	8.08
C0294-049-1250-M	0.294	7.47	0.049	1.25	1.250	31.75	0.841	21.36	0.807	20.50	16.84	74.93	41.17	7.20
C0294-049-1375-M	0.294	7.47	0.049	1.25	1.375	34.93	0.921	23.41	0.884	22.44	16.84	74.93	37.14	6.50
C0294-049-1500-M	0.294	7.47	0.049	1.25	1.500	38.10	1.002	25.45	0.960	24.38	16.84	74.93	33.83	5.92
C0294-049-1625-M	0.294	7.47	0.049	1.25	1.625	41.28	1.083	27.50	1.036	26.32	16.84	74.93	31.06	5.44
C0294-049-1750-M	0.294	7.47	0.049	1.25	1.750	44.45	1.163	29.55	1.113	28.26	16.84	74.93	28.71	5.02
C0294-049-1875-M	0.294	7.47	0.049	1.25	1.875	47.63	1.244	31.59	1.189	30.20	16.84	74.93	26.69	4.67
C0294-049-2000-M	0.294	7.47	0.049	1.25	2.000	50.80	1.325	33.64	1.266	32.15	16.84	74.93	24.94	4.36
C0294-049-2125-M	0.294	7.47	0.049	1.25	2.125	53.98	1.405	35.69	1.342	34.09	16.84	74.93	23.40	4.09
C0294-049-2250-M	0.294	7.47	0.049	1.25	2.250	57.15	1.486	37.74	1.418	36.03	16.84	74.93	22.04	3.86
C0294-049-2375-M	0.294	7.47	0.049	1.25	2.375	60.33	1.566	39.78	1.495	37.97	16.84	74.93	20.83	3.65

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0294-045-2750-S	1.761	44.74	10.64	47.31	10.76	1.88
C0294-045-2875-S	1.840	46.73	10.64	47.31	10.27	1.80
C0294-045-3000-S	1.918	48.73	10.64	47.31	9.83	1.72
C0294-045-3250-S	2.075	52.72	10.64	47.31	9.06	1.58
C0294-045-3500-S	2.232	56.71	10.64	47.31	8.39	1.47
C0294-045-3750-S	2.390	60.69	10.64	47.31	7.82	1.37
C0294-045-4000-S	2.547	64.68	10.64	47.31	7.32	1.28
C0294-045-4250-S	2.704	68.67	10.64	47.31	6.88	1.20
C0294-045-4500-S	2.861	72.66	10.64	47.31	6.49	1.14
C0294-045-4750-S	3.018	76.65	10.64	47.31	6.14	1.07
C0294-047-0438-S	0.318	8.08	11.97	53.26	100.19	17.53
C0294-047-0500-S	0.359	9.11	11.97	53.26	84.77	14.83
C0294-047-0563-S	0.400	10.15	11.97	53.26	73.46	12.86
C0294-047-0625-S	0.440	11.18	11.97	53.26	64.81	11.34
C0294-047-0688-S	0.481	12.22	11.97	53.26	57.99	10.15
C0294-047-0750-S	0.522	13.25	11.97	53.26	52.46	9.18
C0294-047-0813-S	0.563	14.29	11.97	53.26	47.90	8.38
C0294-047-0875-S	0.603	15.32	11.97	53.26	44.07	7.71
C0294-047-0938-S	0.644	16.36	11.97	53.26	40.80	7.14
C0294-047-1000-S	0.685	17.39	11.97	53.26	37.99	6.65
C0294-047-1125-S	0.766	19.46	11.97	53.26	33.38	5.84
C0294-047-1250-S	0.848	21.53	11.97	53.26	29.77	5.21
C0294-047-1375-S	0.929	23.61	11.97	53.26	26.87	4.70
C0294-047-1500-S	1.011	25.68	11.97	53.26	24.48	4.28
C0294-047-1625-S	1.092	27.75	11.97	53.26	22.48	3.93
C0294-047-1750-S	1.174	29.82	11.97	53.26	20.78	3.64
C0294-047-1875-S	1.255	31.89	11.97	53.26	19.32	3.38
C0294-047-2000-S	1.337	33.96	11.97	53.26	18.06	3.16
C0294-047-2125-S	1.418	36.03	11.97	53.26	16.95	2.97
C0294-047-2250-S	1.500	38.10	11.97	53.26	15.96	2.79
C0294-047-2375-S	1.581	40.17	11.97	53.26	15.09	2.64
C0294-047-2500-S	1.663	42.24	11.97	53.26	14.30	2.50
C0294-047-2625-S	1.744	44.31	11.97	53.26	13.60	2.38
C0294-047-2750-S	1.826	46.38	11.97	53.26	12.96	2.27
C0294-047-2875-S	1.907	48.45	11.97	53.26	12.38	2.17
C0294-047-3000-S	1.989	50.52	11.97	53.26	11.84	2.07
C0294-047-3250-S	2.152	54.66	11.97	53.26	10.91	1.91
C0294-047-3500-S	2.315	58.80	11.97	53.26	10.10	1.77
C0294-047-3750-S	2.478	62.94	11.97	53.26	9.41	1.65
C0294-047-4000-S	2.641	67.08	11.97	53.26	8.81	1.54
C0294-047-4250-S	2.804	71.22	11.97	53.26	8.28	1.45
C0294-047-4500-S	2.967	75.37	11.97	53.26	7.81	1.37
C0294-047-4750-S	3.130	79.51	11.97	53.26	7.39	1.29
C0294-049-0438-S	0.327	8.31	13.40	59.63	121.48	21.26
C0294-049-0500-S	0.369	9.38	13.40	59.63	102.59	17.95
C0294-049-0563-S	0.412	10.45	13.40	59.63	88.79	15.54
C0294-049-0625-S	0.454	11.52	13.40	59.63	78.26	13.70
C0294-049-0688-S	0.496	12.60	13.40	59.63	69.96	12.24
C0294-049-0750-S	0.538	13.67	13.40	59.63	63.26	11.07
C0294-049-0813-S	0.580	14.74	13.40	59.63	57.72	10.10
C0294-049-0875-S	0.622	15.81	13.40	59.63	53.08	9.29
C0294-049-0938-S	0.665	16.88	13.40	59.63	49.13	8.60
C0294-049-1000-S	0.707	17.95	13.40	59.63	45.72	8.00
C0294-049-1125-S	0.791	20.10	13.40	59.63	40.16	7.03
C0294-049-1250-S	0.876	22.24	13.40	59.63	35.80	6.27
C0294-049-1375-S	0.960	24.38	13.40	59.63	32.30	5.65
C0294-049-1500-S	1.044	26.53	13.40	59.63	29.42	5.15
C0294-049-1625-S	1.129	28.67	13.40	59.63	27.01	4.73
C0294-049-1750-S	1.213	30.81	13.40	59.63	24.97	4.37
C0294-049-1875-S	1.297	32.95	13.40	59.63	23.21	4.06
C0294-049-2000-S	1.382	35.10	13.40	59.63	21.68	3.79
C0294-049-2125-S	1.466	37.24	13.40	59.63	20.35	3.56
C0294-049-2250-S	1.551	39.38	13.40	59.63	19.16	3.35
C0294-049-2375-S	1.635	41.53	13.40	59.63	18.11	3.17

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0294-049-2500-M	0.294	7.47	0.049	1.25	2.500	63.50	1.647	41.83	1.571	39.91	16.84	74.93	19.75	3.46
C0294-049-2625-M	0.294	7.47	0.049	1.25	2.625	66.68	1.728	43.88	1.648	41.85	16.84	74.93	18.77	3.28
C0294-049-2750-M	0.294	7.47	0.049	1.25	2.750	69.85	1.808	45.93	1.724	43.79	16.84	74.93	17.88	3.13
C0294-049-2875-M	0.294	7.47	0.049	1.25	2.875	73.03	1.889	47.97	1.800	45.73	16.84	74.93	17.08	2.99
C0294-049-3000-M	0.294	7.47	0.049	1.25	3.000	76.20	1.969	50.02	1.877	47.67	16.84	74.93	16.34	2.86
C0294-049-3250-M	0.294	7.47	0.049	1.25	3.250	82.55	2.131	54.12	2.030	51.55	16.84	74.93	15.05	2.63
C0294-049-3500-M	0.294	7.47	0.049	1.25	3.500	88.90	2.292	58.21	2.182	55.44	16.84	74.93	13.94	2.44
C0294-049-3750-M	0.294	7.47	0.049	1.25	3.750	95.25	2.453	62.31	2.335	59.32	16.84	74.93	12.99	2.27
C0294-049-4000-M	0.294	7.47	0.049	1.25	4.000	101.60	2.614	66.40	2.488	63.20	16.84	74.93	12.16	2.13
C0294-049-4250-M	0.294	7.47	0.049	1.25	4.250	107.95	2.775	70.50	2.641	67.08	16.84	74.93	11.42	2.00
C0294-049-4500-M	0.294	7.47	0.049	1.25	4.500	114.30	2.937	74.59	2.794	70.96	16.84	74.93	10.77	1.89
C0294-049-4750-M	0.294	7.47	0.049	1.25	4.750	120.65	3.098	78.68	2.947	74.84	16.84	74.93	10.20	1.78
C0294-051-0438-M	0.294	7.47	0.051	1.30	0.438	11.11	0.326	8.29	0.322	8.18	18.77	83.48	168.83	29.55
C0294-051-0500-M	0.294	7.47	0.051	1.30	0.500	12.70	0.368	9.35	0.362	9.20	18.77	83.48	142.32	24.91
C0294-051-0563-M	0.294	7.47	0.051	1.30	0.563	14.29	0.410	10.41	0.402	10.21	18.77	83.48	123.00	21.53
C0294-051-0625-M	0.294	7.47	0.051	1.30	0.625	15.88	0.452	11.47	0.442	11.23	18.77	83.48	108.31	18.95
C0294-051-0688-M	0.294	7.47	0.051	1.30	0.688	17.46	0.494	12.54	0.482	12.25	18.77	83.48	96.74	16.93
C0294-051-0750-M	0.294	7.47	0.051	1.30	0.750	19.05	0.535	13.60	0.522	13.27	18.77	83.48	87.41	15.30
C0294-051-0813-M	0.294	7.47	0.051	1.30	0.813	20.64	0.577	14.66	0.562	14.28	18.77	83.48	79.72	13.95
C0294-051-0875-M	0.294	7.47	0.051	1.30	0.875	22.23	0.619	15.72	0.602	15.30	18.77	83.48	73.28	12.82
C0294-051-0938-M	0.294	7.47	0.051	1.30	0.938	23.81	0.661	16.78	0.642	16.32	18.77	83.48	67.80	11.86
C0294-051-1000-M	0.294	7.47	0.051	1.30	1.000	25.40	0.702	17.84	0.682	17.34	18.77	83.48	63.08	11.04
C0294-051-1125-M	0.294	7.47	0.051	1.30	1.125	28.58	0.786	19.97	0.763	19.37	18.77	83.48	55.37	9.69
C0294-051-1250-M	0.294	7.47	0.051	1.30	1.250	31.75	0.870	22.09	0.843	21.40	18.77	83.48	49.34	8.63
C0294-051-1375-M	0.294	7.47	0.051	1.30	1.375	34.93	0.953	24.21	0.923	23.44	18.77	83.48	44.50	7.79
C0294-051-1500-M	0.294	7.47	0.051	1.30	1.500	38.10	1.037	26.34	1.003	25.47	18.77	83.48	40.52	7.09
C0294-051-1625-M	0.294	7.47	0.051	1.30	1.625	41.28	1.120	28.46	1.083	27.51	18.77	83.48	37.19	6.51
C0294-051-1750-M	0.294	7.47	0.051	1.30	1.750	44.45	1.204	30.58	1.163	29.54	18.77	83.48	34.37	6.01
C0294-051-1875-M	0.294	7.47	0.051	1.30	1.875	47.63	1.288	32.70	1.243	31.58	18.77	83.48	31.95	5.59
C0294-051-2000-M	0.294	7.47	0.051	1.30	2.000	50.80	1.371	34.83	1.323	33.61	18.77	83.48	29.84	5.22
C0294-051-2125-M	0.294	7.47	0.051	1.30	2.125	53.98	1.455	36.95	1.403	35.64	18.77	83.48	28.00	4.90
C0294-051-2250-M	0.294	7.47	0.051	1.30	2.250	57.15	1.538	39.07	1.483	37.68	18.77	83.48	26.37	4.61
C0294-051-2375-M	0.294	7.47	0.051	1.30	2.375	60.33	1.622	41.20	1.563	39.71	18.77	83.48	24.92	4.36
C0294-051-2500-M	0.294	7.47	0.051	1.30	2.500	63.50	1.706	43.32	1.644	41.75	18.77	83.48	23.62	4.13
C0294-051-2625-M	0.294	7.47	0.051	1.30	2.625	66.68	1.789	45.44	1.724	43.78	18.77	83.48	22.45	3.93
C0294-051-2750-M	0.294	7.47	0.051	1.30	2.750	69.85	1.873	47.57	1.804	45.82	18.77	83.48	21.39	3.74
C0294-051-2875-M	0.294	7.47	0.051	1.30	2.875	73.03	1.956	49.69	1.884	47.85	18.77	83.48	20.43	3.57
C0294-051-3000-M	0.294	7.47	0.051	1.30	3.000	76.20	2.040	51.81	1.964	49.88	18.77	83.48	19.55	3.42
C0294-051-3250-M	0.294	7.47	0.051	1.30	3.250	82.55	2.207	56.06	2.124	53.95	18.77	83.48	17.99	3.15
C0294-051-3500-M	0.294	7.47	0.051	1.30	3.500	88.90	2.374	60.31	2.284	58.02	18.77	83.48	16.67	2.92
C0294-051-3750-M	0.294	7.47	0.051	1.30	3.750	95.25	2.541	64.55	2.445	62.09	18.77	83.48	15.53	2.72
C0294-051-4000-M	0.294	7.47	0.051	1.30	4.000	101.60	2.709	68.80	2.605	66.16	18.77	83.48	14.53	2.54
C0294-051-4250-M	0.294	7.47	0.051	1.30	4.250	107.95	2.876	73.04	2.765	70.23	18.77	83.48	13.66	2.39
C0294-051-4500-M	0.294	7.47	0.051	1.30	4.500	114.30	3.043	77.29	2.925	74.30	18.77	83.48	12.88	2.25
C0294-051-4750-M	0.294	7.47	0.051	1.30	4.750	120.65	3.210	81.54	3.085	78.37	18.77	83.48	12.19	2.13
C0294-055-0500-M	0.294	7.47	0.055	1.40	0.500	12.70	0.388	9.86	0.387	9.82	22.98	102.23	205.21	35.91
C0294-055-0563-M	0.294	7.47	0.055	1.40	0.563	14.29	0.433	10.99	0.430	10.92	22.98	102.23	176.87	30.95
C0294-055-0625-M	0.294	7.47	0.055	1.40	0.625	15.88	0.477	12.12	0.474	12.03	22.98	102.23	155.40	27.20
C0294-055-0688-M	0.294	7.47	0.055	1.40	0.688	17.46	0.522	13.25	0.517	13.13	22.98	102.23	138.58	24.25
C0294-055-0750-M	0.294	7.47	0.055	1.40	0.750	19.05	0.566	14.38	0.560	14.24	22.98	102.23	125.05	21.88
C0294-055-0813-M	0.294	7.47	0.055	1.40	0.813	20.64	0.611	15.51	0.604	15.34	22.98	102.23	113.93	19.94
C0294-055-0875-M	0.294	7.47	0.055	1.40	0.875	22.23	0.655	16.65	0.647	16.44	22.98	102.23	104.62	18.31
C0294-055-0938-M	0.294	7.47	0.055	1.40	0.938	23.81	0.700	17.78	0.691	17.55	22.98	102.23	96.72	16.93
C0294-055-1000-M	0.294	7.47	0.055	1.40	1.000	25.40	0.744	18.91	0.734	18.65	22.98	102.23	89.92	15.74
C0294-055-1125-M	0.294	7.47	0.055	1.40	1.125	28.58	0.834	21.17	0.821	20.86	22.98	102.23	78.85	13.80
C0294-055-1250-M	0.294	7.47	0.055	1.40	1.250	31.75	0.923	23.43	0.908	23.07	22.98	102.23	70.20	12.29
C0294-055-1375-M	0.294	7.47	0.055	1.40	1.375	34.93	1.012	25.70	0.995	25.27	22.98	102.23	63.27	11.07
C0294-055-1500-M	0.294	7.47	0.055	1.40	1.500	38.10	1.101	27.96	1.082	27.48	22.98	102.23	57.58	10.08
C0294-055-1625-M	0.294	7.47	0.055	1.40	1.625	41.28	1.190	30.22	1.169	29.69	22.98	102.23	52.83	9.24
C0294-055-1750-M	0.294	7.47	0.055	1.40	1.750	44.45	1.279	32.49	1.256	31.90	22.98	102.23	48.80	8.54
C0294-055-1875-M	0.294	7.47	0.055	1.40	1.875	47.63	1.368	34.75	1.343	34.10	22.98	102.23	45.34	7.94
C0294-055-2000-M	0.294	7.47	0.055	1.40	2.000	50.80	1.457	37.01	1.430	36.31	22.98	102.23	42.35	7.41
C0294-055-2125-M	0.294	7.47	0.055	1.40	2.125	53.98	1.546	39.28	1.516	38.52	22.98	102.23	39.72	6.95
C0294-055-2250-M	0.294	7.47	0.055	1.40	2.250	57.15	1.635	41.54	1.603	40.73	22.98	102.23	37.40	6.54

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0294-049-2500-S	1.719	43.67	13.40	59.63	17.17	3.00
C0294-049-2625-S	1.804	45.81	13.40	59.63	16.32	2.86
C0294-049-2750-S	1.888	47.96	13.40	59.63	15.55	2.72
C0294-049-2875-S	1.972	50.10	13.40	59.63	14.85	2.60
C0294-049-3000-S	2.057	52.24	13.40	59.63	14.21	2.49
C0294-049-3250-S	2.226	56.53	13.40	59.63	13.08	2.29
C0294-049-3500-S	2.394	60.81	13.40	59.63	12.12	2.12
C0294-049-3750-S	2.563	65.10	13.40	59.63	11.29	1.98
C0294-049-4000-S	2.732	69.39	13.40	59.63	10.57	1.85
C0294-049-4250-S	2.900	73.67	13.40	59.63	9.93	1.74
C0294-049-4500-S	3.069	77.96	13.40	59.63	9.37	1.64
C0294-049-4750-S	3.238	82.24	13.40	59.63	8.87	1.55
C0294-051-0438-S	0.336	8.53	14.93	66.42	146.81	25.69
C0294-051-0500-S	0.379	9.64	14.93	66.42	123.76	21.66
C0294-051-0563-S	0.423	10.74	14.93	66.42	106.96	18.72
C0294-051-0625-S	0.466	11.85	14.93	66.42	94.18	16.48
C0294-051-0688-S	0.510	12.95	14.93	66.42	84.13	14.72
C0294-051-0750-S	0.554	14.06	14.93	66.42	76.01	13.30
C0294-051-0813-S	0.597	15.17	14.93	66.42	69.32	12.13
C0294-051-0875-S	0.641	16.27	14.93	66.42	63.72	11.15
C0294-051-0938-S	0.684	17.38	14.93	66.42	58.95	10.32
C0294-051-1000-S	0.728	18.49	14.93	66.42	54.85	9.60
C0294-051-1125-S	0.815	20.70	14.93	66.42	48.15	8.43
C0294-051-1250-S	0.902	22.91	14.93	66.42	42.91	7.51
C0294-051-1375-S	0.989	25.12	14.93	66.42	38.69	6.77
C0294-051-1500-S	1.076	27.34	14.93	66.42	35.23	6.17
C0294-051-1625-S	1.163	29.55	14.93	66.42	32.34	5.66
C0294-051-1750-S	1.250	31.76	14.93	66.42	29.89	5.23
C0294-051-1875-S	1.338	33.97	14.93	66.42	27.78	4.86
C0294-051-2000-S	1.425	36.18	14.93	66.42	25.95	4.54
C0294-051-2125-S	1.512	38.40	14.93	66.42	24.35	4.26
C0294-051-2250-S	1.599	40.61	14.93	66.42	22.93	4.01
C0294-051-2375-S	1.686	42.82	14.93	66.42	21.67	3.79
C0294-051-2500-S	1.773	45.03	14.93	66.42	20.54	3.59
C0294-051-2625-S	1.860	47.25	14.93	66.42	19.52	3.42
C0294-051-2750-S	1.947	49.46	14.93	66.42	18.60	3.26
C0294-051-2875-S	2.034	51.67	14.93	66.42	17.76	3.11
C0294-051-3000-S	2.121	53.88	14.93	66.42	17.00	2.97
C0294-051-3250-S	2.296	58.31	14.93	66.42	15.65	2.74
C0294-051-3500-S	2.470	62.73	14.93	66.42	14.50	2.54
C0294-051-3750-S	2.644	67.16	14.93	66.42	13.50	2.36
C0294-051-4000-S	2.818	71.58	14.93	66.42	12.64	2.21
C0294-051-4250-S	2.992	76.01	14.93	66.42	11.87	2.08
C0294-051-4500-S	3.167	80.43	14.93	66.42	11.20	1.96
C0294-051-4750-S	3.341	84.86	14.93	66.42	10.60	1.85
C0294-055-0500-S	0.398	10.10	18.28	81.29	178.45	31.23
C0294-055-0563-S	0.444	11.27	18.28	81.29	153.80	26.91
C0294-055-0625-S	0.490	12.44	18.28	81.29	135.13	23.65
C0294-055-0688-S	0.536	13.61	18.28	81.29	120.51	21.09
C0294-055-0750-S	0.582	14.78	18.28	81.29	108.74	19.03
C0294-055-0813-S	0.628	15.95	18.28	81.29	99.07	17.34
C0294-055-0875-S	0.674	17.12	18.28	81.29	90.97	15.92
C0294-055-0938-S	0.720	18.29	18.28	81.29	84.10	14.72
C0294-055-1000-S	0.766	19.46	18.28	81.29	78.20	13.68
C0294-055-1125-S	0.858	21.80	18.28	81.29	68.57	12.00
C0294-055-1250-S	0.951	24.15	18.28	81.29	61.05	10.68
C0294-055-1375-S	1.043	26.49	18.28	81.29	55.02	9.63
C0294-055-1500-S	1.135	28.83	18.28	81.29	50.07	8.76
C0294-055-1625-S	1.227	31.17	18.28	81.29	45.94	8.04
C0294-055-1750-S	1.319	33.51	18.28	81.29	42.44	7.43
C0294-055-1875-S	1.412	35.85	18.28	81.29	39.43	6.90
C0294-055-2000-S	1.504	38.19	18.28	81.29	36.82	6.44
C0294-055-2125-S	1.596	40.53	18.28	81.29	34.54	6.04
C0294-055-2250-S	1.688	42.88	18.28	81.29	32.52	5.69

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0294-055-2375-M	**0.294**	**7.47**	**0.055**	**1.40**	**2.375**	**60.33**	**1.725**	**43.80**	**1.690**	**42.93**	**22.98**	**102.23**	**35.33**	**6.18**
C0294-055-2500-M	**0.294**	**7.47**	**0.055**	**1.40**	**2.500**	**63.50**	**1.814**	**46.07**	**1.777**	**45.14**	**22.98**	**102.23**	**33.49**	**5.86**
C0294-055-2625-M	**0.294**	**7.47**	**0.055**	**1.40**	**2.625**	**66.68**	**1.903**	**48.33**	**1.864**	**47.35**	**22.98**	**102.23**	**31.82**	**5.57**
C0294-055-2750-M	**0.294**	**7.47**	**0.055**	**1.40**	**2.750**	**69.85**	**1.992**	**50.59**	**1.951**	**49.56**	**22.98**	**102.23**	**30.32**	**5.31**
C0294-055-2875-M	**0.294**	**7.47**	**0.055**	**1.40**	**2.875**	**73.03**	**2.081**	**52.86**	**2.038**	**51.76**	**22.98**	**102.23**	**28.95**	**5.07**
C0294-055-3000-M	**0.294**	**7.47**	**0.055**	**1.40**	**3.000**	**76.20**	**2.170**	**55.12**	**2.125**	**53.97**	**22.98**	**102.23**	**27.69**	**4.85**
C0294-055-3250-M	**0.294**	**7.47**	**0.055**	**1.40**	**3.250**	**82.55**	**2.348**	**59.65**	**2.299**	**58.39**	**22.98**	**102.23**	**25.49**	**4.46**
C0294-055-3500-M	**0.294**	**7.47**	**0.055**	**1.40**	**3.500**	**88.90**	**2.527**	**64.17**	**2.472**	**62.80**	**22.98**	**102.23**	**23.61**	**4.13**
C0294-055-3750-M	**0.294**	**7.47**	**0.055**	**1.40**	**3.750**	**95.25**	**2.705**	**68.70**	**2.646**	**67.22**	**22.98**	**102.23**	**21.99**	**3.85**
C0294-055-4000-M	**0.294**	**7.47**	**0.055**	**1.40**	**4.000**	**101.60**	**2.883**	**73.23**	**2.820**	**71.63**	**22.98**	**102.23**	**20.57**	**3.60**
C0294-055-4250-M	**0.294**	**7.47**	**0.055**	**1.40**	**4.250**	**107.95**	**3.061**	**77.75**	**2.994**	**76.05**	**22.98**	**102.23**	**19.33**	**3.38**
C0294-055-4500-M	**0.294**	**7.47**	**0.055**	**1.40**	**4.500**	**114.30**	**3.239**	**82.28**	**3.168**	**80.46**	**22.98**	**102.23**	**18.23**	**3.19**
C0294-055-4750-M	**0.294**	**7.47**	**0.055**	**1.40**	**4.750**	**120.65**	**3.418**	**86.81**	**3.342**	**84.87**	**22.98**	**102.23**	**17.25**	**3.02**
C0296-030-0340-M	**0.296**	**7.52**	**0.030**	**0.76**	**0.340**	**8.64**	**0.170**	**4.33**	**0.147**	**3.74**	**3.73**	**16.60**	**22.00**	**3.85**
C0296-030-0500-M	**0.296**	**7.52**	**0.030**	**0.76**	**0.500**	**12.70**	**0.248**	**6.30**	**0.169**	**4.30**	**4.53**	**20.17**	**18.00**	**3.15**
C0296-030-0660-M	**0.296**	**7.52**	**0.030**	**0.76**	**0.660**	**16.76**	**0.336**	**8.54**	**0.202**	**5.14**	**4.53**	**20.17**	**14.00**	**2.45**
C0296-030-0690-M	**0.296**	**7.52**	**0.030**	**0.76**	**0.690**	**17.53**	**0.295**	**7.50**	**0.237**	**6.02**	**4.42**	**19.66**	**11.20**	**1.96**
C0296-030-1190-M	**0.296**	**7.52**	**0.030**	**0.76**	**1.190**	**30.23**	**0.565**	**14.35**	**0.478**	**12.13**	**2.94**	**13.06**	**4.70**	**0.82**
C0296-030-1380-M	**0.296**	**7.52**	**0.030**	**0.76**	**1.380**	**35.05**	**0.649**	**16.47**	**0.377**	**9.58**	**4.53**	**20.17**	**6.20**	**1.09**
C0296-030-1940-M	**0.296**	**7.52**	**0.030**	**0.76**	**1.940**	**49.28**	**0.909**	**23.10**	**0.506**	**12.85**	**4.53**	**20.17**	**4.40**	**0.77**
C0296-030-3880-M	**0.296**	**7.52**	**0.030**	**0.76**	**3.880**	**98.55**	**1.613**	**40.96**	**1.037**	**26.35**	**4.53**	**20.17**	**2.00**	**0.35**
C0296-032-0530-M	**0.296**	**7.52**	**0.032**	**0.81**	**0.530**	**13.46**	**0.258**	**6.55**	**0.220**	**5.59**	**4.90**	**21.80**	**18.00**	**3.15**
C0296-032-0810-M	**0.296**	**7.52**	**0.032**	**0.81**	**0.810**	**20.57**	**0.415**	**10.55**	**0.363**	**9.22**	**3.67**	**16.32**	**9.30**	**1.63**
C0296-032-0880-M	**0.296**	**7.52**	**0.032**	**0.81**	**0.880**	**22.35**	**0.462**	**11.75**	**0.279**	**7.08**	**5.43**	**24.14**	**13.00**	**2.28**
C0296-032-1000-M	**0.296**	**7.52**	**0.032**	**0.81**	**1.000**	**25.40**	**0.452**	**11.48**	**0.373**	**9.48**	**4.93**	**21.94**	**9.00**	**1.58**
C0296-032-1130-M	**0.296**	**7.52**	**0.032**	**0.81**	**1.130**	**28.70**	**0.538**	**13.66**	**0.455**	**11.55**	**4.21**	**18.71**	**7.10**	**1.24**
C0296-032-1750-M	**0.296**	**7.52**	**0.032**	**0.81**	**1.750**	**44.45**	**0.928**	**23.56**	**0.484**	**12.30**	**5.43**	**24.14**	**6.60**	**1.16**
D12100	0.297	7.55	0.049	1.25	0.472	12.00	0.283	7.20	0.271	6.88	29.98	133.37	165.89	29.03
D12110	0.297	7.55	0.049	1.25	0.669	17.00	0.386	9.80	0.369	9.38	29.98	133.37	103.09	18.04
D12120	0.297	7.55	0.049	1.25	0.984	25.00	0.543	13.80	0.517	13.13	29.98	133.37	67.26	11.77
D12130	0.297	7.55	0.049	1.25	1.398	35.50	0.756	19.20	0.714	18.13	29.98	133.37	46.23	8.09
D12140	0.297	7.55	0.049	1.25	2.028	51.50	1.067	27.10	1.009	25.63	29.98	133.37	30.80	5.39
C0300-022-0380-M	0.300	7.62	0.022	0.56	0.380	9.65	0.165	4.19	0.100	2.54	1.93	8.59	9.00	1.58
C0300-022-0440-M	0.300	7.62	0.022	0.56	0.440	11.18	0.186	4.72	0.106	2.69	1.93	8.59	7.60	1.33
C0300-022-0500-M	0.300	7.62	0.022	0.56	0.500	12.70	0.205	5.21	0.109	2.77	1.93	8.59	6.60	1.16
C0300-022-0560-M	0.300	7.62	0.022	0.56	0.560	14.22	0.235	5.97	0.115	2.92	1.93	8.59	5.90	1.03
C0300-022-0620-M	0.300	7.62	0.022	0.56	0.620	15.75	0.237	6.02	0.126	3.20	1.93	8.59	5.00	0.88
C0300-022-0690-M	0.300	7.62	0.022	0.56	0.690	17.53	0.277	7.04	0.131	3.33	1.93	8.59	4.70	0.82
C0300-022-0750-M	0.300	7.62	0.022	0.56	0.750	19.05	0.278	7.06	0.142	3.61	1.93	8.59	4.10	0.72
C0300-022-0810-M	0.300	7.62	0.022	0.56	0.810	20.57	0.302	7.67	0.149	3.78	1.93	8.59	3.80	0.67
C0300-022-0880-M	0.300	7.62	0.022	0.56	0.880	22.35	0.349	8.86	0.154	3.91	1.93	8.59	3.60	0.63
C0300-022-1000-M	0.300	7.62	0.022	0.56	1.000	25.40	0.397	10.08	0.175	4.45	1.93	8.59	3.20	0.56
C0300-022-1250-M	0.300	7.62	0.022	0.56	1.250	31.75	0.478	12.14	0.204	5.18	1.93	8.59	2.50	0.44
C0300-022-1500-M	0.300	7.62	0.022	0.56	1.500	38.10	0.581	14.76	0.232	5.89	1.93	8.59	2.10	0.37
C0300-022-1750-M	0.300	7.62	0.022	0.56	1.750	44.45	0.678	17.22	0.261	6.63	1.93	8.59	1.80	0.32
C0300-022-2000-M	0.300	7.62	0.022	0.56	2.000	50.80	0.713	18.11	0.289	7.34	1.93	8.59	1.50	0.26
C0300-022-2250-M	0.300	7.62	0.022	0.56	2.250	57.15	0.871	22.12	0.308	7.82	1.93	8.59	1.40	0.25
C0300-022-2500-M	0.300	7.62	0.022	0.56	2.500	63.50	1.015	25.78	0.334	8.48	1.93	8.59	1.30	0.23
C0300-026-0440-M	0.300	7.62	0.026	0.66	0.440	11.18	0.206	5.23	0.130	3.30	3.12	13.88	13.30	2.33
C0300-026-0500-M	0.300	7.62	0.026	0.66	0.500	12.70	0.219	5.56	0.143	3.63	3.12	13.88	11.10	1.94
C0300-026-0560-M	0.300	7.62	0.026	0.66	0.560	14.22	0.256	6.50	0.148	3.76	3.12	13.88	10.30	1.80
C0300-026-0620-M	0.300	7.62	0.026	0.66	0.620	15.75	0.269	6.83	0.162	4.11	3.12	13.88	8.90	1.56
C0300-026-0690-M	0.300	7.62	0.026	0.66	0.690	17.53	0.292	7.42	0.176	4.47	3.12	13.88	7.80	1.37
C0300-026-0750-M	0.300	7.62	0.026	0.66	0.750	19.05	0.328	8.33	0.182	4.62	3.12	13.88	7.40	1.30
C0300-026-0810-M	0.300	7.62	0.026	0.66	0.810	20.57	0.342	8.69	0.194	4.93	3.12	13.88	6.70	1.17
C0300-026-0880-M	0.300	7.62	0.026	0.66	0.880	22.35	0.365	9.27	0.206	5.23	3.12	13.88	6.10	1.07
C0300-026-0940-M	0.300	7.62	0.026	0.66	0.940	23.88	0.378	9.60	0.222	5.64	3.12	13.88	5.50	0.96
C0300-026-1000-M	0.300	7.62	0.026	0.66	1.000	25.40	0.391	9.93	0.234	5.94	3.12	13.88	5.10	0.89
C0300-026-1250-M	0.300	7.62	0.026	0.66	1.250	31.75	0.524	13.31	0.272	6.91	3.12	13.88	4.30	0.75
C0300-026-1500-M	0.300	7.62	0.026	0.66	1.500	38.10	0.609	15.47	0.313	7.95	3.12	13.88	3.50	0.61
C0300-026-1750-M	0.300	7.62	0.026	0.66	1.750	44.45	0.710	18.03	0.354	8.99	3.12	13.88	3.00	0.53
C0300-026-2000-M	0.300	7.62	0.026	0.66	2.000	50.80	0.800	20.32	0.394	10.01	3.12	13.88	2.60	0.46
C0300-026-2250-M	0.300	7.62	0.026	0.66	2.250	57.15	1.002	25.45	0.416	10.57	3.12	13.88	2.50	0.44
C0300-026-2500-M	0.300	7.62	0.026	0.66	2.500	63.50	1.085	27.56	0.455	11.56	3.12	13.88	2.20	0.39

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0294-055-2375-S	**1.780**	**45.22**	**18.28**	**81.29**	**30.73**	**5.38**
C0294-055-2500-S	**1.872**	**47.56**	**18.28**	**81.29**	**29.12**	**5.10**
C0294-055-2625-S	**1.965**	**49.90**	**18.28**	**81.29**	**27.67**	**4.84**
C0294-055-2750-S	**2.057**	**52.24**	**18.28**	**81.29**	**26.36**	**4.61**
C0294-055-2875-S	**2.149**	**54.58**	**18.28**	**81.29**	**25.17**	**4.40**
C0294-055-3000-S	**2.241**	**56.92**	**18.28**	**81.29**	**24.08**	**4.21**
C0294-055-3250-S	**2.425**	**61.61**	**18.28**	**81.29**	**22.16**	**3.88**
C0294-055-3500-S	**2.610**	**66.29**	**18.28**	**81.29**	**20.53**	**3.59**
C0294-055-3750-S	**2.794**	**70.97**	**18.28**	**81.29**	**19.12**	**3.35**
C0294-055-4000-S	**2.978**	**75.65**	**18.28**	**81.29**	**17.89**	**3.13**
C0294-055-4250-S	**3.163**	**80.34**	**18.28**	**81.29**	**16.81**	**2.94**
C0294-055-4500-S	**3.347**	**85.02**	**18.28**	**81.29**	**15.85**	**2.77**
C0294-055-4750-S	**3.532**	**89.70**	**18.28**	**81.29**	**15.00**	**2.62**
C0296-030-0340-S	**0.170**	**4.33**	**3.11**	**13.83**	**18.33**	**3.21**
C0296-030-0500-S	**0.271**	**6.89**	**3.43**	**15.25**	**14.99**	**2.62**
C0296-030-0660-S	**0.366**	**9.30**	**3.43**	**15.25**	**11.66**	**2.04**
C0296-030-0690-S	**0.323**	**8.19**	**3.43**	**15.25**	**9.33**	**1.63**
C0296-030-1190-S	**0.565**	**14.35**	**2.45**	**10.88**	**3.92**	**0.69**
C0296-030-1380-S	**0.716**	**18.19**	**3.43**	**15.25**	**5.17**	**0.90**
C0296-030-1940-S	**1.005**	**25.52**	**3.43**	**15.25**	**3.67**	**0.64**
C0296-030-3880-S	**1.822**	**46.28**	**3.43**	**15.25**	**1.67**	**0.29**
C0296-032-0530-S	**0.258**	**6.55**	**4.08**	**18.16**	**14.99**	**2.62**
C0296-032-0810-S	**0.415**	**10.55**	**3.06**	**13.59**	**7.75**	**1.36**
C0296-032-0880-S	**0.500**	**12.71**	**4.11**	**18.28**	**10.83**	**1.90**
C0296-032-1000-S	**0.452**	**11.48**	**4.11**	**18.28**	**7.50**	**1.31**
C0296-032-1130-S	**0.538**	**13.66**	**3.50**	**15.58**	**5.91**	**1.03**
C0296-032-1750-S	**1.002**	**25.46**	**4.11**	**18.28**	**5.50**	**0.96**
D22100	0.283	7.20	24.98	111.10	138.17	24.18
D22110	0.386	9.80	24.98	111.10	85.89	15.03
D22120	0.543	13.80	24.98	111.10	56.00	9.80
D22130	0.756	19.20	24.98	111.10	38.51	6.74
D22140	1.067	27.10	24.98	111.10	25.66	4.49
C0300-022-0380-S	0.222	5.64	1.18	5.27	7.50	1.31
C0300-022-0440-S	0.253	6.43	1.18	5.27	6.33	1.11
C0300-022-0500-S	0.285	7.23	1.18	5.27	5.50	0.96
C0300-022-0560-S	0.319	8.11	1.18	5.27	4.92	0.86
C0300-022-0620-S	0.336	8.53	1.18	5.27	4.17	0.73
C0300-022-0690-S	0.388	9.85	1.18	5.27	3.92	0.69
C0300-022-0750-S	0.403	10.25	1.18	5.27	3.42	0.60
C0300-022-0810-S	0.436	11.08	1.18	5.27	3.17	0.55
C0300-022-0880-S	0.485	12.33	1.18	5.27	3.00	0.52
C0300-022-1000-S	0.556	14.12	1.18	5.27	2.67	0.47
C0300-022-1250-S	0.682	17.31	1.18	5.27	2.08	0.36
C0300-022-1500-S	0.823	20.91	1.18	5.27	1.75	0.31
C0300-022-1750-S	0.961	24.40	1.18	5.27	1.50	0.26
C0300-022-2000-S	1.053	26.74	1.18	5.27	1.25	0.22
C0300-022-2250-S	1.235	31.37	1.18	5.27	1.17	0.20
C0300-022-2500-S	1.407	35.74	1.18	5.27	1.08	0.19
C0300-026-0440-S	0.267	6.77	1.92	8.54	11.08	1.94
C0300-026-0500-S	0.292	7.42	1.92	8.54	9.25	1.62
C0300-026-0560-S	0.336	8.54	1.92	8.54	8.58	1.50
C0300-026-0620-S	0.361	9.17	1.92	8.54	7.41	1.30
C0300-026-0690-S	0.394	10.02	1.92	8.54	6.50	1.14
C0300-026-0750-S	0.438	11.14	1.92	8.54	6.16	1.08
C0300-026-0810-S	0.466	11.83	1.92	8.54	5.58	0.98
C0300-026-0880-S	0.502	12.75	1.92	8.54	5.08	0.89
C0300-026-0940-S	0.521	13.23	1.92	8.54	4.58	0.80
C0300-026-1000-S	0.548	13.92	1.92	8.54	4.25	0.74
C0300-026-1250-S	0.714	18.13	1.92	8.54	3.58	0.63
C0300-026-1500-S	0.841	21.37	1.92	8.54	2.92	0.51
C0300-026-1750-S	0.981	24.93	1.92	8.54	2.50	0.44
C0300-026-2000-S	1.113	28.27	1.92	8.54	2.17	0.38
C0300-026-2250-S	1.328	33.72	1.92	8.54	2.08	0.36
C0300-026-2500-S	1.452	36.88	1.92	8.54	1.83	0.32

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0300-030-0440-M	0.300	7.62	0.030	0.76	0.440	11.18	0.235	5.97	0.172	4.37	4.42	19.66	21.50	3.76
C0300-030-0500-M	0.300	7.62	0.030	0.76	0.500	12.70	0.262	6.65	0.185	4.70	4.42	19.66	18.60	3.26
C0300-030-0560-M	0.300	7.62	0.030	0.76	0.560	14.22	0.290	7.37	0.198	5.03	4.42	19.66	16.40	2.87
C0300-030-0620-M	0.300	7.62	0.030	0.76	0.620	15.75	0.317	8.05	0.212	5.38	4.42	19.66	14.60	2.56
C0300-030-0690-M	0.300	7.62	0.030	0.76	0.690	17.53	0.350	8.89	0.227	5.77	4.42	19.66	13.00	2.28
C0300-030-0750-M	0.300	7.62	0.030	0.76	0.750	19.05	0.377	9.58	0.240	6.10	4.42	19.66	11.90	2.08
C0300-030-0810-M	0.300	7.62	0.030	0.76	0.810	20.57	0.405	10.29	0.253	6.43	4.42	19.66	10.90	1.91
C0300-030-0880-M	0.300	7.62	0.030	0.76	0.880	22.35	0.437	11.10	0.268	6.81	4.42	19.66	10.00	1.75
C0300-030-0940-M	0.300	7.62	0.030	0.76	0.940	23.88	0.465	11.81	0.281	7.14	4.42	19.66	9.30	1.63
C0300-030-1000-M	0.300	7.62	0.030	0.76	1.000	25.40	0.492	12.50	0.294	7.47	4.42	19.66	8.70	1.52
C0300-030-1250-M	0.300	7.62	0.030	0.76	1.250	31.75	0.607	15.42	0.348	8.84	4.42	19.66	6.90	1.21
C0300-030-1500-M	0.300	7.62	0.030	0.76	1.500	38.10	0.722	18.34	0.402	10.21	4.42	19.66	5.70	1.00
C0300-030-1750-M	0.300	7.62	0.030	0.76	1.750	44.45	0.837	21.26	0.457	11.61	4.42	19.66	4.80	0.84
C0300-030-2000-M	0.300	7.62	0.030	0.76	2.000	50.80	0.952	24.18	0.511	12.98	4.42	19.66	4.20	0.74
C0300-030-2250-M	0.300	7.62	0.030	0.76	2.250	57.15	1.067	27.10	0.565	14.35	4.42	19.66	3.70	0.65
C0300-030-2500-M	0.300	7.62	0.030	0.76	2.500	63.50	1.200	30.48	0.619	15.72	4.42	19.66	3.40	0.60
C0300-032-0440-M	0.300	7.62	0.032	0.81	0.440	11.18	0.235	5.97	0.175	4.45	5.59	24.87	27.30	4.78
C0300-032-0500-M	0.300	7.62	0.032	0.81	0.500	12.70	0.263	6.68	0.190	4.83	5.59	24.87	23.60	4.13
C0300-032-0560-M	0.300	7.62	0.032	0.81	0.560	14.22	0.286	7.26	0.208	5.28	5.59	24.87	20.40	3.57
C0300-032-0620-M	0.300	7.62	0.032	0.81	0.620	15.75	0.312	7.92	0.223	5.66	5.59	24.87	18.20	3.19
C0300-032-0690-M	0.300	7.62	0.032	0.81	0.690	17.53	0.348	8.84	0.240	6.10	5.59	24.87	16.30	2.85
C0300-032-0750-M	0.300	7.62	0.032	0.81	0.750	19.05	0.374	9.50	0.255	6.48	5.59	24.87	14.90	2.61
C0300-032-0810-M	0.300	7.62	0.032	0.81	0.810	20.57	0.400	10.16	0.272	6.91	5.59	24.87	13.60	2.38
C0300-032-0880-M	0.300	7.62	0.032	0.81	0.880	22.35	0.435	11.05	0.287	7.29	5.59	24.87	12.60	2.21
C0300-032-0940-M	0.300	7.62	0.032	0.81	0.940	23.88	0.444	11.28	0.311	7.90	5.59	24.87	11.30	1.98
C0300-032-1000-M	0.300	7.62	0.032	0.81	1.000	25.40	0.470	11.94	0.326	8.28	5.59	24.87	10.60	1.86
C0300-032-1250-M	0.300	7.62	0.032	0.81	1.250	31.75	0.600	15.24	0.388	9.86	5.59	24.87	8.60	1.51
C0300-032-1500-M	0.300	7.62	0.032	0.81	1.500	38.10	0.713	18.11	0.450	11.43	5.59	24.87	7.10	1.24
C0300-032-1750-M	0.300	7.62	0.032	0.81	1.750	44.45	0.818	20.78	0.511	12.98	5.59	24.87	6.00	1.05
C0300-032-2000-M	0.300	7.62	0.032	0.81	2.000	50.80	0.945	24.00	0.573	14.55	5.59	24.87	5.30	0.93
C0300-032-2250-M	0.300	7.62	0.032	0.81	2.250	57.15	1.113	28.27	0.608	15.44	5.59	24.87	4.90	0.86
C0300-032-2500-M	0.300	7.62	0.032	0.81	2.500	63.50	1.233	31.32	0.656	16.66	5.59	24.87	4.40	0.77
C0300-035-0380-M	0.300	7.62	0.035	0.89	0.380	9.65	0.224	5.69	0.193	4.90	7.16	31.85	46.00	8.05
C0300-035-0440-M	0.300	7.62	0.035	0.89	0.440	11.18	0.254	6.45	0.210	5.33	7.16	31.85	38.50	6.74
C0300-035-0500-M	0.300	7.62	0.035	0.89	0.500	12.70	0.284	7.21	0.227	5.77	7.16	31.85	33.20	5.81
C0300-035-0560-M	0.300	7.62	0.035	0.89	0.560	14.22	0.314	7.98	0.244	6.20	7.16	31.85	29.10	5.09
C0300-035-0620-M	0.300	7.62	0.035	0.89	0.620	15.75	0.344	8.74	0.262	6.65	7.16	31.85	25.90	4.53
C0300-035-0690-M	0.300	7.62	0.035	0.89	0.690	17.53	0.379	9.63	0.281	7.14	7.16	31.85	23.00	4.03
C0300-035-0750-M	0.300	7.62	0.035	0.89	0.750	19.05	0.408	10.36	0.298	7.57	7.16	31.85	21.00	3.68
C0300-035-0810-M	0.300	7.62	0.035	0.89	0.810	20.57	0.438	11.13	0.316	8.03	7.16	31.85	19.30	3.38
C0300-035-0880-M	0.300	7.62	0.035	0.89	0.880	22.35	0.473	12.01	0.335	8.51	7.16	31.85	17.60	3.08
C0300-035-0940-M	0.300	7.62	0.035	0.89	0.940	23.88	0.503	12.78	0.353	8.97	7.16	31.85	16.40	2.87
C0300-035-1000-M	0.300	7.62	0.035	0.89	1.000	25.40	0.533	13.54	0.370	9.40	7.16	31.85	15.30	2.68
C0300-035-1120-M	0.300	7.62	0.035	0.89	1.120	28.45	0.593	15.06	0.404	10.26	7.16	31.85	13.60	2.38
C0300-035-1250-M	0.300	7.62	0.035	0.89	1.250	31.75	0.657	16.69	0.441	11.20	7.16	31.85	12.10	2.12
C0300-035-1380-M	0.300	7.62	0.035	0.89	1.380	35.05	0.722	18.34	0.478	12.14	7.16	31.85	10.90	1.91
C0300-035-1500-M	0.300	7.62	0.035	0.89	1.500	38.10	0.782	19.86	0.512	13.00	7.16	31.85	10.00	1.75
C0300-035-1750-M	0.300	7.62	0.035	0.89	1.750	44.45	0.906	23.01	0.583	14.81	7.16	31.85	8.50	1.49
C0300-035-2000-M	0.300	7.62	0.035	0.89	2.000	50.80	1.030	26.16	0.654	16.61	7.16	31.85	7.40	1.30
C0300-035-2250-M	0.300	7.62	0.035	0.89	2.250	57.15	1.155	29.34	0.725	18.42	7.16	31.85	6.50	1.14
C0300-035-2500-M	0.300	7.62	0.035	0.89	2.500	63.50	1.279	32.49	0.796	20.22	7.16	31.85	5.90	1.03
C0300-038-0380-M	0.300	7.62	0.038	0.97	0.380	9.65	0.240	6.10	0.197	5.00	9.04	40.21	64.50	11.29
C0300-038-0440-M	0.300	7.62	0.038	0.97	0.440	11.18	0.271	6.88	0.218	5.54	9.04	40.21	53.50	9.36
C0300-038-0500-M	0.300	7.62	0.038	0.97	0.500	12.70	0.305	7.75	0.237	6.02	9.04	40.21	46.40	8.12
C0300-038-0560-M	0.300	7.62	0.038	0.97	0.560	14.22	0.327	8.31	0.265	6.73	9.04	40.21	38.80	6.79
C0300-038-0620-M	0.300	7.62	0.038	0.97	0.620	15.75	0.361	9.17	0.284	7.21	9.04	40.21	34.90	6.11
C0300-038-0690-M	0.300	7.62	0.038	0.97	0.690	17.53	0.392	9.96	0.313	7.95	9.04	40.21	30.30	5.30
C0300-038-0750-M	0.300	7.62	0.038	0.97	0.750	19.05	0.426	10.82	0.331	8.41	9.04	40.21	27.90	4.88
C0300-038-0810-M	0.300	7.62	0.038	0.97	0.810	20.57	0.460	11.68	0.351	8.92	9.04	40.21	25.80	4.52
C0300-038-0880-M	0.300	7.62	0.038	0.97	0.880	22.35	0.491	12.47	0.379	9.63	9.04	40.21	23.20	4.06
C0300-038-0940-M	0.300	7.62	0.038	0.97	0.940	23.88	0.525	13.34	0.398	10.11	9.04	40.21	21.80	3.82
C0300-038-1000-M	0.300	7.62	0.038	0.97	1.000	25.40	0.559	14.20	0.417	10.59	9.04	40.21	20.50	3.59
C0300-038-1120-M	0.300	7.62	0.038	0.97	1.120	28.45	0.627	15.93	0.456	11.58	9.04	40.21	18.30	3.20
C0300-038-1250-M	0.300	7.62	0.038	0.97	1.250	31.75	0.705	17.91	0.493	12.52	9.04	40.21	16.60	2.91

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0300-030-0440-S	0.279	7.08	2.89	12.85	17.91	3.13
C0300-030-0500-S	0.314	7.96	2.89	12.85	15.49	2.71
C0300-030-0560-S	0.349	8.85	2.89	12.85	13.66	2.39
C0300-030-0620-S	0.382	9.71	2.89	12.85	12.16	2.13
C0300-030-0690-S	0.423	10.75	2.89	12.85	10.83	1.90
C0300-030-0750-S	0.459	11.65	2.89	12.85	9.91	1.73
C0300-030-0810-S	0.492	12.49	2.89	12.85	9.08	1.59
C0300-030-0880-S	0.533	13.54	2.89	12.85	8.33	1.46
C0300-030-0940-S	0.567	14.40	2.89	12.85	7.75	1.36
C0300-030-1000-S	0.601	15.27	2.89	12.85	7.25	1.27
C0300-030-1250-S	0.747	18.98	2.89	12.85	5.75	1.01
C0300-030-1500-S	0.891	22.64	2.89	12.85	4.75	0.83
C0300-030-1750-S	1.027	26.10	2.89	12.85	4.00	0.70
C0300-030-2000-S	1.174	29.82	2.89	12.85	3.50	0.61
C0300-030-2250-S	1.313	33.34	2.89	12.85	3.08	0.54
C0300-030-2500-S	1.480	37.59	2.89	12.85	2.83	0.50
C0300-032-0440-S	0.288	7.32	3.46	15.38	22.74	3.98
C0300-032-0500-S	0.324	8.23	3.46	15.38	19.66	3.44
C0300-032-0560-S	0.357	9.06	3.46	15.38	16.99	2.97
C0300-032-0620-S	0.392	9.96	3.46	15.38	15.16	2.65
C0300-032-0690-S	0.435	11.06	3.46	15.38	13.58	2.38
C0300-032-0750-S	0.471	11.98	3.46	15.38	12.41	2.17
C0300-032-0810-S	0.505	12.82	3.46	15.38	11.33	1.98
C0300-032-0880-S	0.551	13.99	3.46	15.38	10.50	1.84
C0300-032-0940-S	0.573	14.55	3.46	15.38	9.41	1.65
C0300-032-1000-S	0.609	15.46	3.46	15.38	8.83	1.55
C0300-032-1250-S	0.767	19.49	3.46	15.38	7.16	1.25
C0300-032-1500-S	0.916	23.25	3.46	15.38	5.91	1.03
C0300-032-1750-S	1.058	26.88	3.46	15.38	5.00	0.87
C0300-032-2000-S	1.217	30.91	3.46	15.38	4.42	0.77
C0300-032-2250-S	1.403	35.64	3.46	15.38	4.08	0.71
C0300-032-2500-S	1.557	39.54	3.46	15.38	3.67	0.64
C0300-035-0380-S	0.263	6.69	4.46	19.86	38.32	6.71
C0300-035-0440-S	0.301	7.64	4.46	19.86	32.07	5.61
C0300-035-0500-S	0.339	8.60	4.46	19.86	27.66	4.84
C0300-035-0560-S	0.376	9.55	4.46	19.86	24.24	4.24
C0300-035-0620-S	0.413	10.49	4.46	19.86	21.58	3.78
C0300-035-0690-S	0.457	11.61	4.46	19.86	19.16	3.35
C0300-035-0750-S	0.495	12.57	4.46	19.86	17.49	3.06
C0300-035-0810-S	0.532	13.52	4.46	19.86	16.08	2.81
C0300-035-0880-S	0.575	14.62	4.46	19.86	14.66	2.57
C0300-035-0940-S	0.613	15.57	4.46	19.86	13.66	2.39
C0300-035-1000-S	0.650	16.50	4.46	19.86	12.75	2.23
C0300-035-1120-S	0.726	18.44	4.46	19.86	11.33	1.98
C0300-035-1250-S	0.807	20.50	4.46	19.86	10.08	1.76
C0300-035-1380-S	0.888	22.56	4.46	19.86	9.08	1.59
C0300-035-1500-S	0.964	24.49	4.46	19.86	8.33	1.46
C0300-035-1750-S	1.119	28.43	4.46	19.86	7.08	1.24
C0300-035-2000-S	1.276	32.40	4.46	19.86	6.16	1.08
C0300-035-2250-S	1.425	36.21	4.46	19.86	5.42	0.95
C0300-035-2500-S	1.592	40.43	4.46	19.86	4.92	0.86
C0300-038-0380-S	0.276	7.02	5.58	24.81	53.73	9.40
C0300-038-0440-S	0.315	8.00	5.58	24.81	44.57	7.80
C0300-038-0500-S	0.356	9.03	5.58	24.81	38.65	6.76
C0300-038-0560-S	0.387	9.84	5.58	24.81	32.32	5.66
C0300-038-0620-S	0.428	10.87	5.58	24.81	29.07	5.09
C0300-038-0690-S	0.469	11.91	5.58	24.81	25.24	4.42
C0300-038-0750-S	0.510	12.95	5.58	24.81	23.24	4.07
C0300-038-0810-S	0.550	13.98	5.58	24.81	21.49	3.76
C0300-038-0880-S	0.591	15.02	5.58	24.81	19.33	3.38
C0300-038-0940-S	0.633	16.07	5.58	24.81	18.16	3.18
C0300-038-1000-S	0.673	17.10	5.58	24.81	17.08	2.99
C0300-038-1120-S	0.754	19.15	5.58	24.81	15.24	2.67
C0300-038-1250-S	0.847	21.50	5.58	24.81	13.83	2.42

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0300-038-1380-M	0.300	7.62	0.038	0.97	1.380	35.05	0.783	19.89	0.532	13.51	9.04	40.21	15.10	2.64	C0300-038-1380-S	0.937	23.79	5.58	24.81	12.58	2.20
C0300-038-1500-M	0.300	7.62	0.038	0.97	1.500	38.10	0.852	21.64	0.570	14.48	9.04	40.21	13.90	2.43	C0300-038-1500-S	1.018	25.86	5.58	24.81	11.58	2.03
C0300-038-1750-M	0.300	7.62	0.038	0.97	1.750	44.45	0.943	23.95	0.680	17.27	9.04	40.21	11.20	1.96	C0300-038-1750-S	1.152	29.26	5.58	24.81	9.33	1.63
C0300-038-2000-M	0.300	7.62	0.038	0.97	2.000	50.80	1.068	27.13	0.765	19.43	9.04	40.21	9.70	1.70	C0300-038-2000-S	1.310	33.27	5.58	24.81	8.08	1.41
C0300-038-2250-M	0.300	7.62	0.038	0.97	2.250	57.15	1.246	31.65	0.806	20.47	9.04	40.21	9.00	1.58	C0300-038-2250-S	1.506	38.25	5.58	24.81	7.50	1.31
C0300-038-2500-M	0.300	7.62	0.038	0.97	2.500	63.50	1.393	35.38	0.874	22.20	9.04	40.21	8.20	1.44	C0300-038-2500-S	1.683	42.76	5.58	24.81	6.83	1.20
C0300-040-0380-M	0.300	7.62	0.040	1.02	0.380	9.65	0.250	6.35	0.231	5.87	9.85	43.81	75.50	13.21	C0300-040-0380-S	0.277	7.04	6.48	28.82	62.89	11.01
C0300-040-0440-M	0.300	7.62	0.040	1.02	0.440	11.18	0.283	7.19	0.253	6.43	9.85	43.81	62.90	11.01	C0300-040-0440-S	0.316	8.04	6.48	28.82	52.40	9.17
C0300-040-0500-M	0.300	7.62	0.040	1.02	0.500	12.70	0.317	8.05	0.275	6.99	9.85	43.81	53.90	9.43	C0300-040-0500-S	0.356	9.04	6.48	28.82	44.90	7.86
C0300-040-0560-M	0.300	7.62	0.040	1.02	0.560	14.22	0.351	8.92	0.297	7.54	9.85	43.81	47.20	8.26	C0300-040-0560-S	0.395	10.04	6.48	28.82	39.32	6.88
C0300-040-0620-M	0.300	7.62	0.040	1.02	0.620	15.75	0.385	9.78	0.320	8.13	9.85	43.81	41.90	7.33	C0300-040-0620-S	0.434	11.03	6.48	28.82	34.90	6.11
C0300-040-0690-M	0.300	7.62	0.040	1.02	0.690	17.53	0.425	10.80	0.346	8.79	9.85	43.81	37.10	6.49	C0300-040-0690-S	0.480	12.20	6.48	28.82	30.90	5.41
C0300-040-0750-M	0.300	7.62	0.040	1.02	0.750	19.05	0.459	11.66	0.368	9.35	9.85	43.81	33.80	5.92	C0300-040-0750-S	0.520	13.21	6.48	28.82	28.16	4.93
C0300-040-0810-M	0.300	7.62	0.040	1.02	0.810	20.57	0.493	12.52	0.390	9.91	9.85	43.81	31.00	5.43	C0300-040-0810-S	0.559	14.20	6.48	28.82	25.82	4.52
C0300-040-0880-M	0.300	7.62	0.040	1.02	0.880	22.35	0.532	13.51	0.416	10.57	9.85	43.81	28.30	4.95	C0300-040-0880-S	0.605	15.37	6.48	28.82	23.57	4.13
C0300-040-0940-M	0.300	7.62	0.040	1.02	0.940	23.88	0.566	14.38	0.438	11.13	9.85	43.81	26.30	4.60	C0300-040-0940-S	0.644	16.36	6.48	28.82	21.91	3.83
C0300-040-1000-M	0.300	7.62	0.040	1.02	1.000	25.40	0.600	15.24	0.460	11.68	9.85	43.81	24.60	4.31	C0300-040-1000-S	0.684	17.37	6.48	28.82	20.49	3.59
C0300-040-1120-M	0.300	7.62	0.040	1.02	1.120	28.45	0.668	16.97	0.505	12.83	9.85	43.81	21.80	3.82	C0300-040-1120-S	0.763	19.39	6.48	28.82	18.16	3.18
C0300-040-1250-M	0.300	7.62	0.040	1.02	1.250	31.75	0.741	18.82	0.553	14.05	9.85	43.81	19.40	3.40	C0300-040-1250-S	0.849	21.57	6.48	28.82	16.16	2.83
C0300-040-1380-M	0.300	7.62	0.040	1.02	1.380	35.05	0.815	20.70	0.601	15.27	9.85	43.81	17.40	3.05	C0300-040-1380-S	0.933	23.70	6.48	28.82	14.49	2.54
C0300-040-1500-M	0.300	7.62	0.040	1.02	1.500	38.10	0.882	22.40	0.645	16.38	9.85	43.81	16.00	2.80	C0300-040-1500-S	1.014	25.75	6.48	28.82	13.33	2.33
C0300-040-1750-M	0.300	7.62	0.040	1.02	1.750	44.45	1.024	26.01	0.737	18.72	9.85	43.81	13.60	2.38	C0300-040-1750-S	1.178	29.92	6.48	28.82	11.33	1.98
C0300-040-2000-M	0.300	7.62	0.040	1.02	2.000	50.80	1.165	29.59	0.830	21.08	9.85	43.81	11.80	2.07	C0300-040-2000-S	1.341	34.06	6.48	28.82	9.83	1.72
C0300-040-2250-M	0.300	7.62	0.040	1.02	2.250	57.15	1.306	33.17	0.922	23.42	9.85	43.81	10.40	1.82	C0300-040-2250-S	1.502	38.16	6.48	28.82	8.66	1.52
C0300-040-2500-M	0.300	7.62	0.040	1.02	2.500	63.50	1.448	36.78	1.015	25.78	9.85	43.81	9.40	1.65	C0300-040-2500-S	1.673	42.48	6.48	28.82	7.83	1.37
C0300-042-0380-M	0.300	7.62	0.042	1.07	0.380	9.65	0.271	6.88	0.210	5.33	11.81	52.53	108.30	18.95	C0300-042-0380-S	0.298	7.57	7.39	32.85	90.21	15.79
C0300-042-0440-M	0.300	7.62	0.042	1.07	0.440	11.18	0.310	7.87	0.230	5.84	11.81	52.53	90.80	15.89	C0300-042-0440-S	0.342	8.70	7.39	32.85	75.64	13.24
C0300-042-0500-M	0.300	7.62	0.042	1.07	0.500	12.70	0.333	8.46	0.266	6.76	11.81	52.53	70.70	12.37	C0300-042-0500-S	0.375	9.51	7.39	32.85	58.89	10.31
C0300-042-0560-M	0.300	7.62	0.042	1.07	0.560	14.22	0.364	9.25	0.294	7.47	11.81	52.53	60.20	10.54	C0300-042-0560-S	0.413	10.48	7.39	32.85	50.15	8.78
C0300-042-0620-M	0.300	7.62	0.042	1.07	0.620	15.75	0.391	9.93	0.325	8.26	11.81	52.53	51.60	9.03	C0300-042-0620-S	0.448	11.38	7.39	32.85	42.98	7.52
C0300-042-0690-M	0.300	7.62	0.042	1.07	0.690	17.53	0.428	10.87	0.357	9.07	11.81	52.53	45.10	7.89	C0300-042-0690-S	0.493	12.53	7.39	32.85	37.57	6.57
C0300-042-0750-M	0.300	7.62	0.042	1.07	0.750	19.05	0.467	11.86	0.378	9.60	11.81	52.53	41.70	7.30	C0300-042-0750-S	0.537	13.65	7.39	32.85	34.74	6.08
C0300-042-0810-M	0.300	7.62	0.042	1.07	0.810	20.57	0.494	12.55	0.409	10.39	11.81	52.53	37.40	6.55	C0300-042-0810-S	0.573	14.55	7.39	32.85	31.15	5.45
C0300-042-0880-M	0.300	7.62	0.042	1.07	0.880	22.35	0.531	13.49	0.442	11.23	11.81	52.53	33.80	5.92	C0300-042-0880-S	0.618	15.69	7.39	32.85	28.16	4.93
C0300-042-0940-M	0.300	7.62	0.042	1.07	0.940	23.88	0.570	14.48	0.462	11.73	11.81	52.53	31.90	5.58	C0300-042-0940-S	0.662	16.82	7.39	32.85	26.57	4.65
C0300-042-1000-M	0.300	7.62	0.042	1.07	1.000	25.40	0.608	15.44	0.484	12.29	11.81	52.53	30.10	5.27	C0300-042-1000-S	0.705	17.92	7.39	32.85	25.07	4.39
C0300-042-1120-M	0.300	7.62	0.042	1.07	1.120	28.45	0.684	17.37	0.526	13.36	11.81	52.53	27.10	4.74	C0300-042-1120-S	0.793	20.14	7.39	32.85	22.57	3.95
C0300-042-1250-M	0.300	7.62	0.042	1.07	1.250	31.75	0.760	19.30	0.578	14.68	11.81	52.53	24.10	4.22	C0300-042-1250-S	0.882	22.41	7.39	32.85	20.08	3.51
C0300-042-1380-M	0.300	7.62	0.042	1.07	1.380	35.05	0.835	21.21	0.630	16.00	11.81	52.53	21.70	3.80	C0300-042-1380-S	0.971	24.67	7.39	32.85	18.08	3.16
C0300-042-1500-M	0.300	7.62	0.042	1.07	1.500	38.10	0.901	22.89	0.684	17.37	11.81	52.53	19.70	3.45	C0300-042-1500-S	1.050	26.67	7.39	32.85	16.41	2.87
C0300-042-1750-M	0.300	7.62	0.042	1.07	1.750	44.45	1.030	26.16	0.794	20.17	11.81	52.53	16.40	2.87	C0300-042-1750-S	1.209	30.72	7.39	32.85	13.66	2.39
C0300-042-2000-M	0.300	7.62	0.042	1.07	2.000	50.80	1.168	29.67	0.894	22.71	11.81	52.53	14.20	2.49	C0300-042-2000-S	1.376	34.94	7.39	32.85	11.83	2.07
C0300-042-2250-M	0.300	7.62	0.042	1.07	2.250	57.15	1.313	33.35	0.995	25.27	11.81	52.53	12.60	2.21	C0300-042-2250-S	1.546	39.28	7.39	32.85	10.50	1.84
C0300-042-2500-M	0.300	7.62	0.042	1.07	2.500	63.50	1.502	38.15	1.050	26.67	11.81	52.53	11.80	2.07	C0300-042-2500-S	1.749	44.42	7.39	32.85	9.83	1.72
C0300-045-0380-M	0.300	7.62	0.045	1.14	0.380	9.65	0.264	6.71	0.247	6.27	14.26	63.43	123.50	21.61	C0300-045-0380-S	0.294	7.47	8.86	39.39	102.88	18.00
C0300-045-0440-M	0.300	7.62	0.045	1.14	0.440	11.18	0.305	7.75	0.269	6.83	14.26	63.43	106.10	18.57	C0300-045-0440-S	0.340	8.63	8.86	39.39	88.38	15.47
C0300-045-0500-M	0.300	7.62	0.045	1.14	0.500	12.70	0.346	8.79	0.292	7.42	14.26	63.43	92.60	16.21	C0300-045-0500-S	0.385	9.78	8.86	39.39	77.14	13.50
C0300-045-0560-M	0.300	7.62	0.045	1.14	0.560	14.22	0.378	9.60	0.325	8.26	14.26	63.43	78.30	13.70	C0300-045-0560-S	0.424	10.78	8.86	39.39	65.22	11.41
C0300-045-0620-M	0.300	7.62	0.045	1.14	0.620	15.75	0.409	10.39	0.359	9.12	14.26	63.43	67.60	11.83	C0300-045-0620-S	0.463	11.75	8.86	39.39	56.31	9.85
C0300-045-0690-M	0.300	7.62	0.045	1.14	0.690	17.53	0.460	11.68	0.381	9.68	14.26	63.43	62.00	10.85	C0300-045-0690-S	0.519	13.17	8.86	39.39	51.65	9.04
C0300-045-0750-M	0.300	7.62	0.045	1.14	0.750	19.05	0.491	12.47	0.415	10.54	14.26	63.43	55.00	9.63	C0300-045-0750-S	0.557	14.14	8.86	39.39	45.82	8.02
C0300-045-0810-M	0.300	7.62	0.045	1.14	0.810	20.57	0.532	13.51	0.437	11.10	14.26	63.43	51.30	8.98	C0300-045-0810-S	0.603	15.31	8.86	39.39	42.73	7.48
C0300-045-0880-M	0.300	7.62	0.045	1.14	0.880	22.35	0.573	14.55	0.472	11.99	14.26	63.43	46.40	8.12	C0300-045-0880-S	0.651	16.53	8.86	39.39	38.65	6.76
C0300-045-0940-M	0.300	7.62	0.045	1.14	0.940	23.88	0.604	15.34	0.506	12.85	14.26	63.43	42.40	7.42	C0300-045-0940-S	0.689	17.51	8.86	39.39	35.32	6.18
C0300-045-1000-M	0.300	7.62	0.045	1.14	1.000	25.40	0.645	16.38	0.527	13.39	14.26	63.43	40.20	7.04	C0300-045-1000-S	0.736	18.68	8.86	39.39	33.49	5.86
C0300-045-1120-M	0.300	7.62	0.045	1.14	1.120	28.45	0.726	18.44	0.573	14.55	14.26	63.43	36.20	6.34	C0300-045-1120-S	0.826	20.99	8.86	39.39	30.16	5.28
C0300-045-1250-M	0.300	7.62	0.045	1.14	1.250	31.75	0.809	20.55	0.629	15.98	14.26	63.43	32.30	5.65	C0300-045-1250-S	0.921	23.39	8.86	39.39	26.91	4.71
C0300-045-1380-M	0.300	7.62	0.045	1.14	1.380	35.05	0.890	22.61	0.686	17.42	14.26	63.43	29.10	5.09	C0300-045-1380-S	1.015	25.77	8.86	39.39	24.24	4.24
C0300-045-1500-M	0.300	7.62	0.045	1.14	1.500	38.10	0.962	24.43	0.742	18.85	14.26	63.43	26.50	4.64	C0300-045-1500-S	1.099	27.91	8.86	39.39	22.08	3.86
C0300-045-1750-M	0.300	7.62	0.045	1.14	1.750	44.45	1.087	27.61	0.878	22.30	14.26	63.43	21.50	3.76	C0300-045-1750-S	1.256	31.89	8.86	39.39	17.91	3.13
C0300-045-2000-M	0.300	7.62	0.045	1.14	2.000	50.80	1.237	31.42	0.990	25.15	14.26	63.43	18.70	3.27	C0300-045-2000-S	1.431	36.36	8.86	39.39	15.58	2.73
C0300-045-2250-M	0.300	7.62	0.045	1.14	2.250	57.15	1.391	35.33	1.102	27.99	14.26	63.43	16.60	2.91	C0300-045-2250-S	1.610	40.88	8.86	39.39	13.83	2.42
C0300-045-2500-M	0.300	7.62	0.045	1.14	2.500	63.50	1.581	40.16	1.170	29.72	14.26	63.43	15.60	2.73	C0300-045-2500-S	1.818	46.19	8.86	39.39	13.00	2.27
C0300-047-0380-M	0.300	7.62	0.047	1.19	0.380	9.65	0.279	7.09	0.250	6.35	16.10	71.62	159.00	27.83	C0300-047-0380-S	0.304	7.73	10.04	44.67	132.45	23.18

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0300-047-0440-M	0.300	7.62	0.047	1.19	0.440	11.18	0.317	8.05	0.279	7.09	16.10	71.62	131.40	23.00
C0300-047-0500-M	0.300	7.62	0.047	1.19	0.500	12.70	0.356	9.04	0.311	7.90	16.10	71.62	112.00	19.60
C0300-047-0560-M	0.300	7.62	0.047	1.19	0.560	14.22	0.395	10.03	0.343	8.71	16.10	71.62	97.60	17.08
C0300-047-0620-M	0.300	7.62	0.047	1.19	0.620	15.75	0.434	11.02	0.374	9.50	16.10	71.62	86.50	15.14
C0300-047-0690-M	0.300	7.62	0.047	1.19	0.690	17.53	0.479	12.17	0.408	10.36	16.10	71.62	76.30	13.35
C0300-047-0750-M	0.300	7.62	0.047	1.19	0.750	19.05	0.518	13.16	0.435	11.05	16.10	71.62	69.30	12.13
C0300-047-0810-M	0.300	7.62	0.047	1.19	0.810	20.57	0.556	14.12	0.461	11.71	16.10	71.62	63.50	11.11
C0300-047-0880-M	0.300	7.62	0.047	1.19	0.880	22.35	0.602	15.29	0.493	12.52	16.10	71.62	57.90	10.13
C0300-047-0940-M	0.300	7.62	0.047	1.19	0.940	23.88	0.640	16.26	0.520	13.21	16.10	71.62	53.80	9.42
C0300-047-1000-M	0.300	7.62	0.047	1.19	1.000	25.40	0.679	17.25	0.547	13.89	16.10	71.62	50.20	8.79
C0300-047-1120-M	0.300	7.62	0.047	1.19	1.120	28.45	0.757	19.23	0.600	15.24	16.10	71.62	44.30	7.75
C0300-047-1250-M	0.300	7.62	0.047	1.19	1.250	31.75	0.841	21.36	0.658	16.71	16.10	71.62	39.30	6.88
C0300-047-1380-M	0.300	7.62	0.047	1.19	1.380	35.05	0.925	23.50	0.717	18.21	16.10	71.62	35.40	6.20
C0300-047-1500-M	0.300	7.62	0.047	1.19	1.500	38.10	1.002	25.45	0.770	19.56	16.10	71.62	32.30	5.65
C0300-047-1750-M	0.300	7.62	0.047	1.19	1.750	44.45	1.164	29.57	0.882	22.40	16.10	71.62	27.50	4.81
C0300-047-2000-M	0.300	7.62	0.047	1.19	2.000	50.80	1.325	33.66	0.994	25.25	16.10	71.62	23.90	4.18
C0300-047-2250-M	0.300	7.62	0.047	1.19	2.250	57.15	1.487	37.77	1.106	28.09	16.10	71.62	21.10	3.69
C0300-047-2500-M	0.300	7.62	0.047	1.19	2.500	63.50	1.648	41.86	1.218	30.94	16.10	71.62	18.90	3.31
C0300-047-2750-M	0.300	7.62	0.047	1.19	2.750	69.85	1.810	45.97	1.330	33.78	16.10	71.62	17.10	2.99
C0300-047-3000-M	0.300	7.62	0.047	1.19	3.000	76.20	1.971	50.06	1.442	36.63	16.10	71.62	15.70	2.75
C0300-049-0380-M	0.300	7.62	0.049	1.25	0.380	9.65	0.285	7.24	0.263	6.68	17.98	79.98	189.50	33.16
C0300-049-0440-M	0.300	7.62	0.049	1.25	0.440	11.18	0.325	8.26	0.294	7.47	17.98	79.98	156.30	27.35
C0300-049-0500-M	0.300	7.62	0.049	1.25	0.500	12.70	0.365	9.27	0.328	8.33	17.98	79.98	133.00	23.28
C0300-049-0560-M	0.300	7.62	0.049	1.25	0.560	14.22	0.405	10.29	0.362	9.19	17.98	79.98	115.70	20.25
C0300-049-0620-M	0.300	7.62	0.049	1.25	0.620	15.75	0.444	11.28	0.395	10.03	17.98	79.98	102.40	17.92
C0300-049-0690-M	0.300	7.62	0.049	1.25	0.690	17.53	0.491	12.47	0.431	10.95	17.98	79.98	90.30	15.80
C0300-049-0750-M	0.300	7.62	0.049	1.25	0.750	19.05	0.531	13.49	0.460	11.68	17.98	79.98	82.00	14.35
C0300-049-0810-M	0.300	7.62	0.049	1.25	0.810	20.57	0.570	14.48	0.489	12.42	17.98	79.98	75.10	13.14
C0300-049-0880-M	0.300	7.62	0.049	1.25	0.880	22.35	0.617	15.67	0.523	13.28	17.98	79.98	68.40	11.97
C0300-049-0940-M	0.300	7.62	0.049	1.25	0.940	23.88	0.657	16.69	0.551	14.00	17.98	79.98	63.50	11.11
C0300-049-1000-M	0.300	7.62	0.049	1.25	1.000	25.40	0.697	17.70	0.580	14.73	17.98	79.98	59.30	10.38
C0300-049-1120-M	0.300	7.62	0.049	1.25	1.120	28.45	0.776	19.71	0.638	16.21	17.98	79.98	52.30	9.15
C0300-049-1250-M	0.300	7.62	0.049	1.25	1.250	31.75	0.862	21.89	0.700	17.78	17.98	79.98	46.40	8.12
C0300-049-1380-M	0.300	7.62	0.049	1.25	1.380	35.05	0.949	24.10	0.763	19.38	17.98	79.98	41.70	7.30
C0300-049-1500-M	0.300	7.62	0.049	1.25	1.500	38.10	1.028	26.11	0.821	20.85	17.98	79.98	38.10	6.67
C0300-049-1750-M	0.300	7.62	0.049	1.25	1.750	44.45	1.194	30.33	0.941	23.90	17.98	79.98	32.40	5.67
C0300-049-2000-M	0.300	7.62	0.049	1.25	2.000	50.80	1.360	34.54	1.061	26.95	17.98	79.98	28.10	4.92
C0300-049-2250-M	0.300	7.62	0.049	1.25	2.250	57.15	1.526	38.76	1.181	30.00	17.98	79.98	24.80	4.34
C0300-049-2500-M	0.300	7.62	0.049	1.25	2.500	63.50	1.692	42.98	1.301	33.05	17.98	79.98	22.30	3.90
C0300-049-2750-M	0.300	7.62	0.049	1.25	2.750	69.85	1.858	47.19	1.421	36.09	17.98	79.98	20.20	3.54
C0300-049-3000-M	0.300	7.62	0.049	1.25	3.000	76.20	2.024	51.41	1.541	39.14	17.98	79.98	18.40	3.22
C0300-051-0380-M	0.300	7.62	0.051	1.30	0.380	9.65	0.291	7.39	0.274	6.96	20.17	89.72	226.60	39.66
C0300-051-0440-M	0.300	7.62	0.051	1.30	0.440	11.18	0.332	8.43	0.308	7.82	20.17	89.72	186.40	32.62
C0300-051-0500-M	0.300	7.62	0.051	1.30	0.500	12.70	0.373	9.47	0.343	8.71	20.17	89.72	158.30	27.70
C0300-051-0560-M	0.300	7.62	0.051	1.30	0.560	14.22	0.413	10.49	0.379	9.63	20.17	89.72	137.50	24.06
C0300-051-0620-M	0.300	7.62	0.051	1.30	0.620	15.75	0.454	11.53	0.415	10.54	20.17	89.72	121.60	21.28
C0300-051-0690-M	0.300	7.62	0.051	1.30	0.690	17.53	0.502	12.75	0.453	11.51	20.17	89.72	107.10	18.74
C0300-051-0750-M	0.300	7.62	0.051	1.30	0.750	19.05	0.542	13.77	0.483	12.27	20.17	89.72	97.20	17.01
C0300-051-0810-M	0.300	7.62	0.051	1.30	0.810	20.57	0.583	14.81	0.514	13.06	20.17	89.72	89.00	15.58
C0300-051-0880-M	0.300	7.62	0.051	1.30	0.880	22.35	0.631	16.03	0.550	13.97	20.17	89.72	81.00	14.18
C0300-051-0940-M	0.300	7.62	0.051	1.30	0.940	23.88	0.672	17.07	0.580	14.73	20.17	89.72	75.20	13.16
C0300-051-1000-M	0.300	7.62	0.051	1.30	1.000	25.40	0.712	18.08	0.611	15.52	20.17	89.72	70.10	12.27
C0300-051-1120-M	0.300	7.62	0.051	1.30	1.120	28.45	0.794	20.17	0.672	17.07	20.17	89.72	61.90	10.83
C0300-051-1250-M	0.300	7.62	0.051	1.30	1.250	31.75	0.882	22.40	0.738	18.75	20.17	89.72	54.90	9.61
C0300-051-1380-M	0.300	7.62	0.051	1.30	1.380	35.05	0.971	24.66	0.805	20.45	20.17	89.72	49.30	8.63
C0300-051-1500-M	0.300	7.62	0.051	1.30	1.500	38.10	1.052	26.72	0.866	22.00	20.17	89.72	45.10	7.89
C0300-051-1750-M	0.300	7.62	0.051	1.30	1.750	44.45	1.222	31.04	0.993	25.22	20.17	89.72	38.20	6.69
C0300-051-2000-M	0.300	7.62	0.051	1.30	2.000	50.80	1.392	35.36	1.121	28.47	20.17	89.72	33.20	5.81
C0300-051-2250-M	0.300	7.62	0.051	1.30	2.250	57.15	1.562	39.67	1.248	31.70	20.17	89.72	29.30	5.13
C0300-051-2500-M	0.300	7.62	0.051	1.30	2.500	63.50	1.732	43.99	1.376	34.95	20.17	89.72	26.30	4.60
C0300-051-2750-M	0.300	7.62	0.051	1.30	2.750	69.85	1.902	48.31	1.503	38.18	20.17	89.72	23.80	4.17
C0300-051-3000-M	0.300	7.62	0.051	1.30	3.000	76.20	2.072	52.63	1.631	41.43	20.17	89.72	21.70	3.80
C0312-016-0250-M*	**0.312**	**7.93**	**0.016**	**0.41**	**0.250**	**6.35**	**0.092**	**2.33**	**0.067**	**1.70**	**0.45**	**2.00**	**2.84**	**0.50**
C0312-016-0313-M*	**0.312**	**7.93**	**0.016**	**0.41**	**0.313**	**7.95**	**0.107**	**2.71**	**0.074**	**1.87**	**0.46**	**2.03**	**2.21**	**0.39**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0300-047-0440-S	0.348	8.85	10.04	44.67	109.46	19.15
C0300-047-0500-S	0.392	9.97	10.04	44.67	93.30	16.33
C0300-047-0560-S	0.436	11.09	10.04	44.67	81.30	14.23
C0300-047-0620-S	0.481	12.21	10.04	44.67	72.06	12.61
C0300-047-0690-S	0.532	13.51	10.04	44.67	63.56	11.12
C0300-047-0750-S	0.576	14.63	10.04	44.67	57.73	10.10
C0300-047-0810-S	0.620	15.75	10.04	44.67	52.90	9.26
C0300-047-0880-S	0.672	17.06	10.04	44.67	48.23	8.44
C0300-047-0940-S	0.716	18.18	10.04	44.67	44.82	7.84
C0300-047-1000-S	0.760	19.30	10.04	44.67	41.82	7.32
C0300-047-1120-S	0.848	21.54	10.04	44.67	36.90	6.46
C0300-047-1250-S	0.943	23.96	10.04	44.67	32.74	5.73
C0300-047-1380-S	1.039	26.40	10.04	44.67	29.49	5.16
C0300-047-1500-S	1.127	28.62	10.04	44.67	26.91	4.71
C0300-047-1750-S	1.312	33.31	10.04	44.67	22.91	4.01
C0300-047-2000-S	1.496	37.99	10.04	44.67	19.91	3.48
C0300-047-2250-S	1.679	42.64	10.04	44.67	17.58	3.08
C0300-047-2500-S	1.862	47.30	10.04	44.67	15.74	2.76
C0300-047-2750-S	2.045	51.94	10.04	44.67	14.24	2.49
C0300-047-3000-S	2.232	56.70	10.04	44.67	13.08	2.29
C0300-049-0380-S	0.308	7.83	11.32	50.37	157.85	27.62
C0300-049-0440-S	0.353	8.97	11.32	50.37	130.20	22.78
C0300-049-0500-S	0.398	10.10	11.32	50.37	110.79	19.39
C0300-049-0560-S	0.443	11.24	11.32	50.37	96.38	16.87
C0300-049-0620-S	0.487	12.38	11.32	50.37	85.30	14.93
C0300-049-0690-S	0.539	13.70	11.32	50.37	75.22	13.16
C0300-049-0750-S	0.584	14.84	11.32	50.37	68.31	11.95
C0300-049-0810-S	0.629	15.98	11.32	50.37	62.56	10.95
C0300-049-0880-S	0.681	17.30	11.32	50.37	56.98	9.97
C0300-049-0940-S	0.726	18.44	11.32	50.37	52.90	9.26
C0300-049-1000-S	0.771	19.58	11.32	50.37	49.40	8.64
C0300-049-1120-S	0.860	21.85	11.32	50.37	43.57	7.62
C0300-049-1250-S	0.957	24.31	11.32	50.37	38.65	6.76
C0300-049-1380-S	1.054	26.77	11.32	50.37	34.74	6.08
C0300-049-1500-S	1.143	29.04	11.32	50.37	31.74	5.55
C0300-049-1750-S	1.330	33.79	11.32	50.37	26.99	4.72
C0300-049-2000-S	1.516	38.51	11.32	50.37	23.41	4.10
C0300-049-2250-S	1.702	43.23	11.32	50.37	20.66	3.62
C0300-049-2500-S	1.890	48.02	11.32	50.37	18.58	3.25
C0300-049-2750-S	2.077	52.76	11.32	50.37	16.83	2.94
C0300-049-3000-S	2.261	57.43	11.32	50.37	15.33	2.68
C0300-051-0380-S	0.313	7.96	12.61	56.08	188.76	33.03
C0300-051-0440-S	0.359	9.11	12.61	56.08	155.27	27.17
C0300-051-0500-S	0.404	10.27	12.61	56.08	131.86	23.08
C0300-051-0560-S	0.450	11.43	12.61	56.08	114.54	20.04
C0300-051-0620-S	0.496	12.59	12.61	56.08	101.29	17.73
C0300-051-0690-S	0.549	13.94	12.61	56.08	89.21	15.61
C0300-051-0750-S	0.594	15.09	12.61	56.08	80.97	14.17
C0300-051-0810-S	0.640	16.25	12.61	56.08	74.14	12.97
C0300-051-0880-S	0.693	17.61	12.61	56.08	67.47	11.81
C0300-051-0940-S	0.739	18.76	12.61	56.08	62.64	10.96
C0300-051-1000-S	0.784	19.92	12.61	56.08	58.39	10.22
C0300-051-1120-S	0.875	22.24	12.61	56.08	51.56	9.02
C0300-051-1250-S	0.974	24.75	12.61	56.08	45.73	8.00
C0300-051-1380-S	1.073	27.25	12.61	56.08	41.07	7.19
C0300-051-1500-S	1.164	29.58	12.61	56.08	37.57	6.57
C0300-051-1750-S	1.354	34.39	12.61	56.08	31.82	5.57
C0300-051-2000-S	1.544	39.22	12.61	56.08	27.66	4.84
C0300-051-2250-S	1.733	44.03	12.61	56.08	24.41	4.27
C0300-051-2500-S	1.925	48.88	12.61	56.08	21.91	3.83
C0300-051-2750-S	2.114	53.70	12.61	56.08	19.83	3.47
C0300-051-3000-S	2.303	58.48	12.61	56.08	18.08	3.16
C0312-016-0250-S*	**0.092**	**2.33**	**0.37**	**1.67**	**2.37**	**0.41**
C0312-016-0313-S*	**0.107**	**2.71**	**0.38**	**1.69**	**1.84**	**0.32**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

(OD) 0.312 - 0.312

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0312-016-0375-M*	0.312	7.93	0.016	0.41	0.375	9.53	0.122	3.09	0.081	2.05	0.46	2.03	1.80	0.32
C0312-016-0438-M*	0.312	7.93	0.016	0.41	0.438	11.13	0.137	3.47	0.088	2.22	0.46	2.04	1.52	0.27
C0312-016-0500-M*	0.312	7.93	0.016	0.41	0.500	12.70	0.151	3.84	0.094	2.40	0.46	2.05	1.32	0.23
C0312-016-0563-M*	0.312	7.93	0.016	0.41	0.563	14.30	0.166	4.22	0.101	2.56	0.46	2.07	1.17	0.20
C0312-016-0625-M*	0.312	7.93	0.016	0.41	0.625	15.88	0.181	4.60	0.108	2.75	0.46	2.05	1.04	0.18
C0312-016-0688-M*	0.312	7.93	0.016	0.41	0.688	17.48	0.196	4.99	0.115	2.92	0.46	2.06	0.94	0.16
C0312-016-0750-M*	0.312	7.93	0.016	0.41	0.750	19.05	0.211	5.35	0.121	3.08	0.46	2.06	0.86	0.15
C0312-016-0813-M*	0.312	7.93	0.016	0.41	0.813	20.65	0.225	5.72	0.128	3.24	0.46	2.07	0.79	0.14
C0312-016-0875-M*	0.312	7.93	0.016	0.41	0.875	22.23	0.240	6.09	0.134	3.40	0.46	2.06	0.73	0.13
C0312-016-0938-M*	0.312	7.93	0.016	0.41	0.938	23.83	0.254	6.46	0.140	3.56	0.47	2.07	0.68	0.12
C0312-016-1000-M*	0.312	7.93	0.016	0.41	1.000	25.40	0.268	6.81	0.146	3.70	0.47	2.08	0.64	0.11
C0312-016-1250-M*	0.312	7.93	0.016	0.41	1.250	31.75	0.325	8.26	0.170	4.32	0.47	2.10	0.51	0.09
C0312-016-1380-M*	0.312	7.93	0.016	0.41	1.380	35.05	0.360	9.15	0.189	4.80	0.45	2.00	0.44	0.08
C0312-016-1500-M*	0.312	7.93	0.016	0.41	1.500	38.10	0.383	9.74	0.196	4.97	0.47	2.09	0.42	0.07
C0312-016-1750-M*	0.312	7.93	0.016	0.41	1.750	44.45	0.441	11.19	0.220	5.59	0.47	2.10	0.36	0.06
C0312-016-2000-M*	0.312	7.93	0.016	0.41	2.000	50.80	0.500	12.70	0.247	6.28	0.46	2.07	0.31	0.05
C0312-020-0560-M*	0.312	7.93	0.020	0.51	0.560	14.22	0.260	6.60	0.101	2.55	1.38	6.14	4.60	0.81
C0312-020-0660-M*	0.312	7.93	0.020	0.51	0.660	16.76	0.218	5.54	0.147	3.74	1.02	4.52	2.30	0.40
C0312-020-0750-M*	0.312	7.93	0.020	0.51	0.750	19.05	0.268	6.81	0.192	4.89	0.72	3.21	1.50	0.26
C0312-020-0880-M*	0.312	7.93	0.020	0.51	0.880	22.35	0.270	6.86	0.171	4.34	1.10	4.88	1.80	0.32
C0312-020-1000-M*	0.312	7.93	0.020	0.51	1.000	25.40	0.342	8.70	0.155	3.95	1.38	6.14	2.10	0.37
C0312-020-1130-M*	0.312	7.93	0.020	0.51	1.130	28.70	0.325	8.26	0.192	4.89	1.21	5.37	1.50	0.26
C0312-020-1630-M*	0.312	7.93	0.020	0.51	1.630	41.40	0.466	11.84	0.274	6.96	1.07	4.76	0.92	0.16
C0312-020-1750-M*	0.312	7.93	0.020	0.51	1.750	44.45	0.475	12.08	0.263	6.68	1.24	5.50	0.97	0.17
C0312-023-0375-M	0.312	7.93	0.023	0.58	0.375	9.53	0.160	4.07	0.129	3.27	1.05	4.69	4.91	0.86
C0312-023-0438-M	0.312	7.93	0.023	0.58	0.438	11.13	0.184	4.67	0.146	3.71	1.05	4.66	4.12	0.72
C0312-023-0500-M	0.312	7.93	0.023	0.58	0.500	12.70	0.206	5.23	0.162	4.11	1.04	4.64	3.55	0.62
C0312-023-0563-M	0.312	7.93	0.023	0.58	0.563	14.30	0.228	5.79	0.177	4.50	1.05	4.65	3.12	0.55
C0312-023-0625-M	0.312	7.93	0.023	0.58	0.625	15.88	0.250	6.34	0.193	4.89	1.05	4.66	2.79	0.49
C0312-023-0688-M	0.312	7.93	0.023	0.58	0.688	17.48	0.272	6.91	0.209	5.30	1.04	4.64	2.51	0.44
C0312-023-0750-M	0.312	7.93	0.023	0.58	0.750	19.05	0.294	7.46	0.224	5.69	1.04	4.65	2.29	0.40
C0312-023-0813-M	0.312	7.93	0.023	0.58	0.813	20.65	0.316	8.03	0.240	6.09	1.04	4.64	2.10	0.37
C0312-023-0875-M	0.312	7.93	0.023	0.58	0.875	22.23	0.337	8.57	0.255	6.47	1.05	4.66	1.95	0.34
C0312-023-0938-M	0.312	7.93	0.023	0.58	0.938	23.83	0.360	9.14	0.271	6.87	1.05	4.66	1.81	0.32
C0312-023-1000-M	0.312	7.93	0.023	0.58	1.000	25.40	0.382	9.70	0.286	7.28	1.04	4.65	1.69	0.30
C0312-023-1250-M	0.312	7.93	0.023	0.58	1.250	31.75	0.470	11.93	0.349	8.86	1.05	4.65	1.34	0.23
C0312-023-1375-M	0.312	7.93	0.023	0.58	1.375	34.93	0.515	13.07	0.381	9.68	1.04	4.63	1.21	0.21
C0312-023-1500-M	0.312	7.93	0.023	0.58	1.500	38.10	0.558	14.16	0.411	10.44	1.05	4.65	1.11	0.19
C0312-023-1750-M	0.312	7.93	0.023	0.58	1.750	44.45	0.645	16.37	0.472	11.99	1.05	4.67	0.95	0.17
C0312-023-2000-M	0.312	7.93	0.023	0.58	2.000	50.80	0.736	18.71	0.539	13.69	1.04	4.61	0.82	0.14
C0312-023-2250-M	0.312	7.93	0.023	0.58	2.250	57.15	0.823	20.90	0.600	15.23	1.04	4.63	0.73	0.13
C0312-023-2500-M	0.312	7.93	0.023	0.58	2.500	63.50	0.908	23.06	0.658	16.72	1.05	4.67	0.66	0.12
C0312-026-0438-M	0.312	7.93	0.026	0.66	0.438	11.13	0.183	4.64	0.145	3.68	2.13	9.45	8.33	1.46
C0312-026-0500-M	0.312	7.93	0.026	0.66	0.500	12.70	0.205	5.22	0.161	4.09	2.12	9.41	7.18	1.26
C0312-026-0563-M	0.312	7.93	0.026	0.66	0.563	14.30	0.227	5.77	0.176	4.48	2.11	9.39	6.29	1.10
C0312-026-0625-M	0.312	7.93	0.026	0.66	0.625	15.88	0.249	6.31	0.191	4.86	2.11	9.39	5.61	0.98
C0312-026-0688-M	0.312	7.93	0.026	0.66	0.688	17.48	0.270	6.87	0.206	5.24	2.11	9.38	5.05	0.88
C0312-026-0750-M	0.312	7.93	0.026	0.66	0.750	19.05	0.291	7.40	0.221	5.61	2.11	9.41	4.61	0.81
C0312-026-0813-M	0.312	7.93	0.026	0.66	0.813	20.65	0.313	7.96	0.236	6.00	2.11	9.38	4.22	0.74
C0312-026-0875-M	0.312	7.93	0.026	0.66	0.875	22.23	0.334	8.49	0.251	6.37	2.11	9.41	3.91	0.68
C0312-026-0938-M	0.312	7.93	0.026	0.66	0.938	23.83	0.356	9.04	0.266	6.75	2.11	9.40	3.63	0.64
C0312-026-1000-M	0.312	7.93	0.026	0.66	1.000	25.40	0.377	9.58	0.281	7.13	2.11	9.39	3.39	0.59
C0312-026-1250-M	0.312	7.93	0.026	0.66	1.250	31.75	0.463	11.77	0.341	8.65	2.11	9.38	2.68	0.47
C0312-026-1500-M	0.312	7.93	0.026	0.66	1.500	38.10	0.549	13.94	0.400	10.16	2.11	9.39	2.22	0.39
C0312-026-1750-M	0.312	7.93	0.026	0.66	1.750	44.45	0.635	16.13	0.460	11.69	2.11	9.37	1.89	0.33
C0312-026-2000-M	0.312	7.93	0.026	0.66	2.000	50.80	0.720	18.30	0.519	13.19	2.11	9.39	1.65	0.29
C0312-026-2250-M	0.312	7.93	0.026	0.66	2.250	57.15	0.807	20.49	0.580	14.72	2.11	9.37	1.46	0.26
C0312-026-2500-M	0.312	7.93	0.026	0.66	2.500	63.50	0.893	22.68	0.640	16.25	2.11	9.36	1.31	0.23
C0312-028-0380-M	0.312	7.93	0.028	0.71	0.380	9.65	0.172	4.38	0.143	3.62	2.70	12.00	13.00	2.28
C0312-028-0500-M	0.312	7.93	0.028	0.71	0.500	12.70	0.226	5.75	0.143	3.62	3.56	15.83	13.00	2.28
C0312-028-0630-M	0.312	7.93	0.028	0.71	0.630	16.00	0.307	7.79	0.160	4.07	3.56	15.83	11.00	1.93
C0312-028-0690-M	0.312	7.93	0.028	0.71	0.690	17.53	0.270	6.87	0.206	5.23	3.23	14.37	7.70	1.35
C0312-028-1130-M	0.312	7.93	0.028	0.71	1.130	28.70	0.418	10.63	0.286	7.25	3.56	15.83	5.00	0.88
C0312-028-1310-M	0.312	7.93	0.028	0.71	1.310	33.27	0.506	12.86	0.383	9.72	2.81	12.51	3.50	0.61

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0312-016-0375-S*	0.122	3.09	0.38	1.69	1.50	0.26
C0312-016-0438-S*	0.137	3.47	0.38	1.70	1.27	0.22
C0312-016-0500-S*	0.151	3.84	0.38	1.71	1.10	0.19
C0312-016-0563-S*	0.166	4.22	0.39	1.72	0.98	0.17
C0312-016-0625-S*	0.181	4.60	0.38	1.71	0.87	0.15
C0312-016-0688-S*	0.196	4.99	0.38	1.71	0.78	0.14
C0312-016-0750-S*	0.211	5.35	0.39	1.72	0.72	0.13
C0312-016-0813-S*	0.225	5.72	0.39	1.72	0.66	0.12
C0312-016-0875-S*	0.240	6.09	0.39	1.72	0.61	0.11
C0312-016-0938-S*	0.254	6.46	0.39	1.72	0.57	0.10
C0312-016-1000-S*	0.268	6.81	0.39	1.74	0.53	0.09
C0312-016-1250-S*	0.325	8.26	0.39	1.75	0.43	0.07
C0312-016-1380-S*	0.360	9.15	0.37	1.66	0.37	0.06
C0312-016-1500-S*	0.383	9.74	0.39	1.74	0.35	0.06
C0312-016-1750-S*	0.441	11.19	0.39	1.75	0.30	0.05
C0312-016-2000-S*	0.500	12.70	0.39	1.72	0.26	0.05
C0312-020-0560-S*	0.291	7.40	1.03	4.58	3.83	0.67
C0312-020-0660-S*	0.218	5.54	0.85	3.76	1.92	0.34
C0312-020-0750-S*	0.268	6.81	0.60	2.68	1.25	0.22
C0312-020-0880-S*	0.270	6.86	0.91	4.07	1.50	0.26
C0312-020-1000-S*	0.412	10.46	1.03	4.58	1.75	0.31
C0312-020-1130-S*	0.325	8.26	1.01	4.47	1.25	0.22
C0312-020-1630-S*	0.466	11.84	0.89	3.97	0.77	0.13
C0312-020-1750-S*	0.477	12.10	1.03	4.58	0.81	0.14
C0312-023-0375-S	0.160	4.07	0.88	3.90	4.09	0.72
C0312-023-0438-S	0.184	4.67	0.87	3.88	3.43	0.60
C0312-023-0500-S	0.206	5.23	0.87	3.87	2.96	0.52
C0312-023-0563-S	0.228	5.79	0.87	3.87	2.60	0.45
C0312-023-0625-S	0.250	6.34	0.87	3.88	2.32	0.41
C0312-023-0688-S	0.272	6.91	0.87	3.87	2.09	0.37
C0312-023-0750-S	0.294	7.46	0.87	3.87	1.91	0.33
C0312-023-0813-S	0.316	8.03	0.87	3.87	1.75	0.31
C0312-023-0875-S	0.337	8.57	0.87	3.88	1.62	0.28
C0312-023-0938-S	0.360	9.14	0.87	3.88	1.51	0.26
C0312-023-1000-S	0.382	9.70	0.87	3.87	1.41	0.25
C0312-023-1250-S	0.470	11.93	0.87	3.87	1.12	0.20
C0312-023-1375-S	0.515	13.07	0.87	3.86	1.01	0.18
C0312-023-1500-S	0.558	14.16	0.87	3.88	0.93	0.16
C0312-023-1750-S	0.645	16.37	0.87	3.89	0.79	0.14
C0312-023-2000-S	0.736	18.71	0.86	3.84	0.68	0.12
C0312-023-2250-S	0.823	20.90	0.87	3.86	0.61	0.11
C0312-023-2500-S	0.908	23.06	0.88	3.89	0.55	0.10
C0312-026-0438-S	0.183	4.64	1.77	7.88	6.94	1.21
C0312-026-0500-S	0.205	5.22	1.76	7.84	5.98	1.05
C0312-026-0563-S	0.227	5.77	1.76	7.82	5.24	0.92
C0312-026-0625-S	0.249	6.31	1.76	7.82	4.67	0.82
C0312-026-0688-S	0.270	6.87	1.76	7.82	4.21	0.74
C0312-026-0750-S	0.291	7.40	1.76	7.84	3.84	0.67
C0312-026-0813-S	0.313	7.96	1.76	7.82	3.52	0.62
C0312-026-0875-S	0.334	8.49	1.76	7.84	3.26	0.57
C0312-026-0938-S	0.356	9.04	1.76	7.83	3.02	0.53
C0312-026-1000-S	0.377	9.58	1.76	7.82	2.82	0.49
C0312-026-1250-S	0.463	11.77	1.76	7.81	2.23	0.39
C0312-026-1500-S	0.549	13.94	1.76	7.82	1.85	0.32
C0312-026-1750-S	0.635	16.13	1.76	7.81	1.57	0.28
C0312-026-2000-S	0.720	18.30	1.76	7.82	1.37	0.24
C0312-026-2250-S	0.807	20.49	1.76	7.81	1.22	0.21
C0312-026-2500-S	0.893	22.68	1.75	7.80	1.09	0.19
C0312-028-0380-S	0.172	4.38	2.25	10.00	10.83	1.90
C0312-028-0500-S	0.252	6.40	2.68	11.94	10.83	1.90
C0312-028-0630-S	0.337	8.56	2.68	11.94	9.16	1.60
C0312-028-0690-S	0.271	6.90	2.68	11.94	6.41	1.12
C0312-028-1130-S	0.485	12.33	2.68	11.94	4.17	0.73
C0312-028-1310-S	0.506	12.86	2.34	10.42	2.92	0.51

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0312-028-1380-M	**0.312**	**7.93**	**0.028**	**0.71**	**1.380**	**35.05**	**0.503**	**12.77**	**0.365**	**9.28**	**3.25**	**14.44**	**3.70**	**0.65**
C0312-028-2310-M	**0.312**	**7.93**	**0.028**	**0.71**	**2.310**	**58.67**	**0.877**	**22.28**	**0.656**	**16.65**	**2.72**	**12.11**	**1.90**	**0.33**
C0312-030-0560-M	**0.312**	**7.93**	**0.030**	**0.76**	**0.560**	**14.22**	**0.245**	**6.23**	**0.199**	**5.06**	**3.78**	**16.80**	**12.00**	**2.10**
C0312-030-0780-M	**0.312**	**7.93**	**0.030**	**0.76**	**0.780**	**19.81**	**0.320**	**8.13**	**0.251**	**6.38**	**4.00**	**17.79**	**8.70**	**1.52**
C0312-030-0880-M	**0.312**	**7.93**	**0.030**	**0.76**	**0.880**	**22.35**	**0.384**	**9.76**	**0.251**	**6.38**	**4.31**	**19.19**	**8.70**	**1.52**
C0312-030-1060-M	**0.312**	**7.93**	**0.030**	**0.76**	**1.060**	**26.92**	**0.435**	**11.04**	**0.300**	**7.62**	**4.31**	**19.19**	**6.90**	**1.21**
C0312-030-1250-M	**0.312**	**7.93**	**0.030**	**0.76**	**1.250**	**31.75**	**0.546**	**13.88**	**0.443**	**11.26**	**3.03**	**13.46**	**4.30**	**0.75**
C0312-030-1310-M	**0.312**	**7.93**	**0.030**	**0.76**	**1.310**	**33.27**	**0.596**	**15.14**	**0.493**	**12.53**	**2.71**	**12.07**	**3.80**	**0.67**
C0312-030-1380-M	**0.312**	**7.93**	**0.030**	**0.76**	**1.380**	**35.05**	**0.606**	**15.40**	**0.493**	**12.53**	**2.94**	**13.08**	**3.80**	**0.67**
C0312-047-0375-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.375**	**9.53**	**0.262**	**6.66**	**0.255**	**6.47**	**13.08**	**58.20**	**116.19**	**20.33**
C0312-047-0438-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.438**	**11.13**	**0.304**	**7.72**	**0.295**	**7.48**	**12.71**	**56.52**	**94.91**	**16.61**
C0312-047-0500-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.500**	**12.70**	**0.342**	**8.69**	**0.330**	**8.38**	**12.69**	**56.47**	**80.42**	**14.07**
C0312-047-0563-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.563**	**14.30**	**0.380**	**9.66**	**0.365**	**9.28**	**12.75**	**56.72**	**69.76**	**12.21**
C0312-047-0625-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.625**	**15.88**	**0.419**	**10.63**	**0.401**	**10.19**	**12.70**	**56.47**	**61.49**	**10.76**
C0312-047-0688-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.688**	**17.48**	**0.457**	**11.60**	**0.437**	**11.09**	**12.74**	**56.68**	**55.06**	**9.64**
C0312-047-0750-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.750**	**19.05**	**0.495**	**12.57**	**0.472**	**12.00**	**12.69**	**56.46**	**49.77**	**8.71**
C0312-047-0813-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.813**	**20.65**	**0.562**	**14.28**	**0.544**	**13.81**	**10.49**	**46.68**	**41.81**	**7.32**
C0312-047-0875-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.875**	**22.23**	**0.600**	**15.24**	**0.579**	**14.71**	**10.65**	**47.38**	**38.73**	**6.78**
C0312-047-0938-M	**0.312**	**7.93**	**0.047**	**1.19**	**0.938**	**23.83**	**0.638**	**16.22**	**0.615**	**15.62**	**10.80**	**48.03**	**36.04**	**6.31**
C0312-047-1000-M	**0.312**	**7.93**	**0.047**	**1.19**	**1.000**	**25.40**	**0.705**	**17.92**	**0.686**	**17.43**	**9.33**	**41.50**	**31.67**	**5.54**
C0312-047-1250-M	**0.312**	**7.93**	**0.047**	**1.19**	**1.250**	**31.75**	**0.801**	**20.34**	**0.757**	**19.24**	**12.69**	**56.45**	**28.24**	**4.94**
C0312-047-1375-M	**0.312**	**7.93**	**0.047**	**1.19**	**1.375**	**34.93**	**0.877**	**22.27**	**0.828**	**21.04**	**12.70**	**56.48**	**25.49**	**4.46**
C0312-047-1500-M	**0.312**	**7.93**	**0.047**	**1.19**	**1.500**	**38.10**	**0.953**	**24.22**	**0.900**	**22.85**	**12.69**	**56.46**	**23.22**	**4.06**
C0312-047-1750-M	**0.312**	**7.93**	**0.047**	**1.19**	**1.750**	**44.45**	**1.106**	**28.09**	**1.042**	**26.47**	**12.70**	**56.49**	**19.72**	**3.45**
C0312-047-2000-M	**0.312**	**7.93**	**0.047**	**1.19**	**2.000**	**50.80**	**1.259**	**31.98**	**1.185**	**30.09**	**12.69**	**56.47**	**17.13**	**3.00**
C0312-047-2250-M	**0.312**	**7.93**	**0.047**	**1.19**	**2.250**	**57.15**	**1.412**	**35.87**	**1.327**	**33.71**	**12.69**	**56.44**	**15.14**	**2.65**
C0312-047-2500-M	**0.312**	**7.93**	**0.047**	**1.19**	**2.500**	**63.50**	**1.565**	**39.74**	**1.469**	**37.32**	**12.69**	**56.46**	**13.57**	**2.37**
C0312-047-2750-M	**0.312**	**7.93**	**0.047**	**1.19**	**2.750**	**69.85**	**1.718**	**43.63**	**1.612**	**40.95**	**12.69**	**56.44**	**12.29**	**2.15**
C0312-047-3000-M	**0.312**	**7.93**	**0.047**	**1.19**	**3.000**	**76.20**	**1.870**	**47.49**	**1.754**	**44.54**	**12.71**	**56.52**	**11.24**	**1.97**
D11550*	0.340	8.63	0.025	0.63	0.630	16.00	0.201	5.10	0.161	4.10	2.25	10.00	5.09	0.89
D11560*	0.340	8.63	0.025	0.63	0.965	24.50	0.280	7.10	0.211	5.36	2.25	10.00	3.26	0.57
D11570*	0.340	8.63	0.025	0.63	1.457	37.00	0.402	10.20	0.285	7.25	2.25	10.00	2.11	0.37
D11580*	0.340	8.63	0.025	0.63	2.165	55.00	0.563	14.30	0.385	9.77	2.25	10.00	1.43	0.25
D11590*	0.340	8.63	0.025	0.63	3.169	80.50	0.811	20.60	0.533	13.55	2.25	10.00	0.97	0.17
D11750*	0.346	8.80	0.031	0.80	0.571	14.50	0.240	6.10	0.205	5.20	4.39	19.52	13.26	2.32
D11760*	0.346	8.80	0.031	0.80	0.846	21.50	0.331	8.40	0.268	6.80	4.39	19.52	8.46	1.48
D11780*	0.346	8.80	0.031	0.80	1.260	32.00	0.472	12.00	0.362	9.20	4.39	19.52	5.49	0.96
D11780*	0.346	8.80	0.031	0.80	1.850	47.00	0.657	16.70	0.488	12.40	4.39	19.52	3.71	0.65
D11790*	0.346	8.80	0.031	0.80	2.677	68.00	0.937	23.80	0.677	17.20	4.39	19.52	2.51	0.44
C0353-032-0688-M	**0.353**	**8.97**	**0.032**	**0.81**	**0.688**	**17.46**	**0.274**	**6.96**	**0.211**	**5.37**	**4.39**	**19.55**	**10.63**	**1.86**
C0353-032-0750-M	**0.353**	**8.97**	**0.032**	**0.81**	**0.750**	**19.05**	**0.295**	**7.50**	**0.226**	**5.73**	**4.39**	**19.55**	**9.66**	**1.69**
C0353-032-0813-M	**0.353**	**8.97**	**0.032**	**0.81**	**0.813**	**20.64**	**0.316**	**8.03**	**0.240**	**6.10**	**4.39**	**19.55**	**8.86**	**1.55**
C0353-032-0875-M	**0.353**	**8.97**	**0.032**	**0.81**	**0.875**	**22.23**	**0.337**	**8.57**	**0.255**	**6.47**	**4.39**	**19.55**	**8.17**	**1.43**
C0353-032-0938-M	**0.353**	**8.97**	**0.032**	**0.81**	**0.938**	**23.81**	**0.358**	**9.10**	**0.269**	**6.83**	**4.39**	**19.55**	**7.59**	**1.33**
C0353-032-1000-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.000**	**25.40**	**0.379**	**9.64**	**0.283**	**7.20**	**4.39**	**19.55**	**7.08**	**1.24**
C0353-032-1125-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.125**	**28.58**	**0.422**	**10.71**	**0.312**	**7.93**	**4.39**	**19.55**	**6.25**	**1.09**
C0353-032-1250-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.250**	**31.75**	**0.464**	**11.78**	**0.341**	**8.67**	**4.39**	**19.55**	**5.59**	**0.98**
C0353-032-1375-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.375**	**34.93**	**0.506**	**12.85**	**0.370**	**9.40**	**4.39**	**19.55**	**5.06**	**0.88**
C0353-032-1500-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.500**	**38.10**	**0.548**	**13.92**	**0.399**	**10.13**	**4.39**	**19.55**	**4.62**	**0.81**
C0353-032-1625-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.625**	**41.28**	**0.590**	**14.99**	**0.428**	**10.87**	**4.39**	**19.55**	**4.25**	**0.74**
C0353-032-1750-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.750**	**44.45**	**0.632**	**16.06**	**0.457**	**11.60**	**4.39**	**19.55**	**3.93**	**0.69**
C0353-032-1875-M	**0.353**	**8.97**	**0.032**	**0.81**	**1.875**	**47.63**	**0.674**	**17.13**	**0.486**	**12.33**	**4.39**	**19.55**	**3.66**	**0.64**
C0353-032-2000-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.000**	**50.80**	**0.716**	**18.20**	**0.514**	**13.07**	**4.39**	**19.55**	**3.42**	**0.60**
C0353-032-2125-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.125**	**53.98**	**0.759**	**19.27**	**0.543**	**13.80**	**4.39**	**19.55**	**3.22**	**0.56**
C0353-032-2250-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.250**	**57.15**	**0.801**	**20.34**	**0.572**	**14.53**	**4.39**	**19.55**	**3.03**	**0.53**
C0353-032-2375-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.375**	**60.33**	**0.843**	**21.41**	**0.601**	**15.27**	**4.39**	**19.55**	**2.87**	**0.50**
C0353-032-2500-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.500**	**63.50**	**0.885**	**22.48**	**0.630**	**16.00**	**4.39**	**19.55**	**2.72**	**0.48**
C0353-032-2625-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.625**	**66.68**	**0.927**	**23.55**	**0.659**	**16.74**	**4.39**	**19.55**	**2.59**	**0.45**
C0353-032-2750-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.750**	**69.85**	**0.969**	**24.62**	**0.688**	**17.47**	**4.39**	**19.55**	**2.47**	**0.43**
C0353-032-2875-M	**0.353**	**8.97**	**0.032**	**0.81**	**2.875**	**73.03**	**1.011**	**25.69**	**0.717**	**18.20**	**4.39**	**19.55**	**2.36**	**0.41**
C0353-032-3000-M	**0.353**	**8.97**	**0.032**	**0.81**	**3.000**	**76.20**	**1.054**	**26.76**	**0.746**	**18.94**	**4.39**	**19.55**	**2.26**	**0.39**
C0353-032-3250-M	**0.353**	**8.97**	**0.032**	**0.81**	**3.250**	**82.55**	**1.138**	**28.90**	**0.803**	**20.40**	**4.39**	**19.55**	**2.08**	**0.36**
C0353-032-3500-M	**0.353**	**8.97**	**0.032**	**0.81**	**3.500**	**88.90**	**1.222**	**31.04**	**0.861**	**21.87**	**4.39**	**19.55**	**1.93**	**0.34**
C0353-032-3750-M	**0.353**	**8.97**	**0.032**	**0.81**	**3.750**	**95.25**	**1.306**	**33.18**	**0.919**	**23.34**	**4.39**	**19.55**	**1.80**	**0.31**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0312-028-1380-S	**0.509**	**12.93**	**2.68**	**11.94**	**3.08**	**0.54**
C0312-028-2310-S	**0.877**	**22.28**	**2.27**	**10.09**	**1.58**	**0.28**
C0312-030-0560-S	**0.245**	**6.23**	**3.15**	**13.99**	**10.00**	**1.75**
C0312-030-0780-S	**0.330**	**8.38**	**3.26**	**14.51**	**7.25**	**1.27**
C0312-030-0880-S	**0.430**	**10.92**	**3.26**	**14.51**	**7.25**	**1.27**
C0312-030-1060-S	**0.492**	**12.51**	**3.26**	**14.51**	**5.75**	**1.01**
C0312-030-1250-S	**0.546**	**13.88**	**2.52**	**11.21**	**3.58**	**0.63**
C0312-030-1310-S	**0.596**	**15.14**	**2.26**	**10.05**	**3.17**	**0.55**
C0312-030-1380-S	**0.606**	**15.40**	**2.45**	**10.89**	**3.17**	**0.55**
C0312-047-0375-S	**0.262**	**6.66**	**10.90**	**48.48**	**96.79**	**16.94**
C0312-047-0438-S	**0.304**	**7.72**	**10.58**	**47.08**	**79.06**	**13.84**
C0312-047-0500-S	**0.342**	**8.69**	**10.57**	**47.04**	**66.99**	**11.72**
C0312-047-0563-S	**0.380**	**9.66**	**10.62**	**47.25**	**58.11**	**10.17**
C0312-047-0625-S	**0.419**	**10.63**	**10.58**	**47.04**	**51.22**	**8.96**
C0312-047-0688-S	**0.457**	**11.60**	**10.61**	**47.21**	**45.87**	**8.03**
C0312-047-0750-S	**0.495**	**12.57**	**10.57**	**47.03**	**41.46**	**7.26**
C0312-047-0813-S	**0.562**	**14.28**	**8.74**	**38.88**	**34.83**	**6.09**
C0312-047-0875-S	**0.600**	**15.24**	**8.87**	**39.47**	**32.26**	**5.65**
C0312-047-0938-S	**0.638**	**16.22**	**8.99**	**40.01**	**30.02**	**5.25**
C0312-047-1000-S	**0.705**	**17.92**	**7.77**	**34.57**	**26.38**	**4.62**
C0312-047-1250-S	**0.801**	**20.34**	**10.57**	**47.02**	**23.52**	**4.12**
C0312-047-1375-S	**0.877**	**22.27**	**10.58**	**47.04**	**21.23**	**3.72**
C0312-047-1500-S	**0.953**	**24.22**	**10.57**	**47.03**	**19.34**	**3.38**
C0312-047-1750-S	**1.106**	**28.09**	**10.58**	**47.06**	**16.43**	**2.87**
C0312-047-2000-S	**1.259**	**31.98**	**10.57**	**47.04**	**14.27**	**2.50**
C0312-047-2250-S	**1.412**	**35.87**	**10.57**	**47.01**	**12.61**	**2.21**
C0312-047-2500-S	**1.565**	**39.74**	**10.57**	**47.03**	**11.30**	**1.98**
C0312-047-2750-S	**1.718**	**43.63**	**10.57**	**47.01**	**10.24**	**1.79**
C0312-047-3000-S	**1.870**	**47.49**	**10.58**	**47.08**	**9.36**	**1.64**
D21550*	0.201	5.10	1.87	8.33	4.23	0.74
D21560*	0.280	7.10	1.87	8.33	2.69	0.47
D21570*	0.402	10.20	1.87	8.33	1.77	0.31
D21580*	0.563	14.30	1.87	8.33	1.20	0.21
D21590*	0.811	20.60	1.87	8.33	0.80	0.14
D21750*	0.240	6.10	3.66	16.26	11.03	1.93
D21760*	0.331	8.40	3.66	16.26	7.03	1.23
D21780*	0.472	12.00	3.66	16.26	4.57	0.80
D21780*	0.657	16.70	3.66	16.26	3.09	0.54
D21790*	0.937	23.80	3.66	16.26	2.11	0.37
C0353-032-0688-S	**0.311**	**7.90**	**3.48**	**15.48**	**9.24**	**1.62**
C0353-032-0750-S	**0.336**	**8.53**	**3.48**	**15.48**	**8.40**	**1.47**
C0353-032-0813-S	**0.361**	**9.16**	**3.48**	**15.48**	**7.70**	**1.35**
C0353-032-0875-S	**0.385**	**9.79**	**3.48**	**15.48**	**7.11**	**1.24**
C0353-032-0938-S	**0.410**	**10.42**	**3.48**	**15.48**	**6.60**	**1.15**
C0353-032-1000-S	**0.435**	**11.05**	**3.48**	**15.48**	**6.16**	**1.08**
C0353-032-1125-S	**0.484**	**12.30**	**3.48**	**15.48**	**5.43**	**0.95**
C0353-032-1250-S	**0.534**	**13.56**	**3.48**	**15.48**	**4.86**	**0.85**
C0353-032-1375-S	**0.583**	**14.82**	**3.48**	**15.48**	**4.40**	**0.77**
C0353-032-1500-S	**0.633**	**16.08**	**3.48**	**15.48**	**4.01**	**0.70**
C0353-032-1625-S	**0.682**	**17.33**	**3.48**	**15.48**	**3.69**	**0.65**
C0353-032-1750-S	**0.732**	**18.59**	**3.48**	**15.48**	**3.42**	**0.60**
C0353-032-1875-S	**0.782**	**19.85**	**3.48**	**15.48**	**3.18**	**0.56**
C0353-032-2000-S	**0.831**	**21.11**	**3.48**	**15.48**	**2.98**	**0.52**
C0353-032-2125-S	**0.881**	**22.37**	**3.48**	**15.48**	**2.80**	**0.49**
C0353-032-2250-S	**0.930**	**23.62**	**3.48**	**15.48**	**2.64**	**0.46**
C0353-032-2375-S	**0.980**	**24.88**	**3.48**	**15.48**	**2.49**	**0.44**
C0353-032-2500-S	**1.029**	**26.14**	**3.48**	**15.48**	**2.37**	**0.41**
C0353-032-2625-S	**1.079**	**27.40**	**3.48**	**15.48**	**2.25**	**0.39**
C0353-032-2750-S	**1.128**	**28.66**	**3.48**	**15.48**	**2.15**	**0.38**
C0353-032-2875-S	**1.178**	**29.91**	**3.48**	**15.48**	**2.05**	**0.36**
C0353-032-3000-S	**1.227**	**31.17**	**3.48**	**15.48**	**1.96**	**0.34**
C0353-032-3250-S	**1.326**	**33.69**	**3.48**	**15.48**	**1.81**	**0.32**
C0353-032-3500-S	**1.425**	**36.20**	**3.48**	**15.48**	**1.68**	**0.29**
C0353-032-3750-S	**1.524**	**38.72**	**3.48**	**15.48**	**1.56**	**0.27**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0353-032-4000-M	**0.353**	**8.97**	**0.032**	**0.81**	**4.000**	**101.60**	**1.391**	**35.32**	**0.977**	**24.80**	**4.39**	**19.55**	**1.68**	**0.29**
C0353-032-4250-M	**0.353**	**8.97**	**0.032**	**0.81**	**4.250**	**107.95**	**1.475**	**37.46**	**1.034**	**26.27**	**4.39**	**19.55**	**1.58**	**0.28**
C0353-032-4500-M	**0.353**	**8.97**	**0.032**	**0.81**	**4.500**	**114.30**	**1.559**	**39.60**	**1.092**	**27.74**	**4.39**	**19.55**	**1.49**	**0.26**
C0353-032-4750-M	**0.353**	**8.97**	**0.032**	**0.81**	**4.750**	**120.65**	**1.643**	**41.74**	**1.150**	**29.21**	**4.39**	**19.55**	**1.41**	**0.25**
C0353-032-5000-M	**0.353**	**8.97**	**0.032**	**0.81**	**5.000**	**127.00**	**1.728**	**43.88**	**1.208**	**30.67**	**4.39**	**19.55**	**1.34**	**0.24**
C0353-032-5250-M	**0.353**	**8.97**	**0.032**	**0.81**	**5.250**	**133.35**	**1.812**	**46.02**	**1.265**	**32.14**	**4.39**	**19.55**	**1.28**	**0.22**
C0353-032-5500-M	**0.353**	**8.97**	**0.032**	**0.81**	**5.500**	**139.70**	**1.896**	**48.16**	**1.323**	**33.61**	**4.39**	**19.55**	**1.22**	**0.21**
C0353-032-5750-M	**0.353**	**8.97**	**0.032**	**0.81**	**5.750**	**146.05**	**1.980**	**50.30**	**1.381**	**35.07**	**4.39**	**19.55**	**1.17**	**0.20**
C0353-032-6000-M	**0.353**	**8.97**	**0.032**	**0.81**	**6.000**	**152.40**	**2.065**	**52.44**	**1.439**	**36.54**	**4.39**	**19.55**	**1.12**	**0.20**
C0353-032-6250-M	**0.353**	**8.97**	**0.032**	**0.81**	**6.250**	**158.75**	**2.149**	**54.58**	**1.496**	**38.01**	**4.39**	**19.55**	**1.07**	**0.19**
C0353-035-0625-M	**0.353**	**8.97**	**0.035**	**0.89**	**0.625**	**15.88**	**0.277**	**7.02**	**0.226**	**5.73**	**5.64**	**25.10**	**16.19**	**2.83**
C0353-035-0688-M	**0.353**	**8.97**	**0.035**	**0.89**	**0.688**	**17.46**	**0.300**	**7.61**	**0.243**	**6.17**	**5.64**	**25.10**	**14.55**	**2.55**
C0353-035-0750-M	**0.353**	**8.97**	**0.035**	**0.89**	**0.750**	**19.05**	**0.323**	**8.20**	**0.260**	**6.61**	**5.64**	**25.10**	**13.21**	**2.31**
C0353-035-0813-M	**0.353**	**8.97**	**0.035**	**0.89**	**0.813**	**20.64**	**0.346**	**8.80**	**0.277**	**7.04**	**5.64**	**25.10**	**12.10**	**2.12**
C0353-035-0875-M	**0.353**	**8.97**	**0.035**	**0.89**	**0.875**	**22.23**	**0.370**	**9.39**	**0.294**	**7.48**	**5.64**	**25.10**	**11.16**	**1.95**
C0353-035-0938-M	**0.353**	**8.97**	**0.035**	**0.89**	**0.938**	**23.81**	**0.393**	**9.98**	**0.311**	**7.91**	**5.64**	**25.10**	**10.36**	**1.81**
C0353-035-1000-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.000**	**25.40**	**0.416**	**10.57**	**0.329**	**8.35**	**5.64**	**25.10**	**9.66**	**1.69**
C0353-035-1125-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.125**	**28.58**	**0.463**	**11.75**	**0.363**	**9.22**	**5.64**	**25.10**	**8.52**	**1.49**
C0353-035-1250-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.250**	**31.75**	**0.509**	**12.93**	**0.397**	**10.09**	**5.64**	**25.10**	**7.62**	**1.33**
C0353-035-1375-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.375**	**34.93**	**0.556**	**14.11**	**0.432**	**10.96**	**5.64**	**25.10**	**6.89**	**1.21**
C0353-035-1500-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.500**	**38.10**	**0.602**	**15.29**	**0.466**	**11.83**	**5.64**	**25.10**	**6.28**	**1.10**
C0353-035-1625-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.625**	**41.28**	**0.649**	**16.47**	**0.500**	**12.70**	**5.64**	**25.10**	**5.78**	**1.01**
C0353-035-1750-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.750**	**44.45**	**0.695**	**17.66**	**0.534**	**13.57**	**5.64**	**25.10**	**5.35**	**0.94**
C0353-035-1875-M	**0.353**	**8.97**	**0.035**	**0.89**	**1.875**	**47.63**	**0.742**	**18.84**	**0.569**	**14.44**	**5.64**	**25.10**	**4.98**	**0.87**
C0353-035-2000-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.000**	**50.80**	**0.788**	**20.02**	**0.603**	**15.32**	**5.64**	**25.10**	**4.66**	**0.81**
C0353-035-2125-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.125**	**53.98**	**0.835**	**21.20**	**0.637**	**16.19**	**5.64**	**25.10**	**4.37**	**0.77**
C0353-035-2250-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.250**	**57.15**	**0.881**	**22.38**	**0.672**	**17.06**	**5.64**	**25.10**	**4.12**	**0.72**
C0353-035-2375-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.375**	**60.33**	**0.928**	**23.56**	**0.706**	**17.93**	**5.64**	**25.10**	**3.90**	**0.68**
C0353-035-2500-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.500**	**63.50**	**0.974**	**24.74**	**0.740**	**18.80**	**5.64**	**25.10**	**3.70**	**0.65**
C0353-035-2625-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.625**	**66.68**	**1.021**	**25.93**	**0.774**	**19.67**	**5.64**	**25.10**	**3.52**	**0.62**
C0353-035-2750-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.750**	**69.85**	**1.067**	**27.11**	**0.809**	**20.54**	**5.64**	**25.10**	**3.35**	**0.59**
C0353-035-2875-M	**0.353**	**8.97**	**0.035**	**0.89**	**2.875**	**73.03**	**1.114**	**28.29**	**0.843**	**21.41**	**5.64**	**25.10**	**3.20**	**0.56**
C0353-035-3000-M	**0.353**	**8.97**	**0.035**	**0.89**	**3.000**	**76.20**	**1.160**	**29.47**	**0.877**	**22.28**	**5.64**	**25.10**	**3.07**	**0.54**
C0353-035-3250-M	**0.353**	**8.97**	**0.035**	**0.89**	**3.250**	**82.55**	**1.253**	**31.83**	**0.946**	**24.03**	**5.64**	**25.10**	**2.83**	**0.49**
C0353-035-3500-M	**0.353**	**8.97**	**0.035**	**0.89**	**3.500**	**88.90**	**1.346**	**34.20**	**1.015**	**25.77**	**5.64**	**25.10**	**2.62**	**0.46**
C0353-035-3750-M	**0.353**	**8.97**	**0.035**	**0.89**	**3.750**	**95.25**	**1.439**	**36.56**	**1.083**	**27.51**	**5.64**	**25.10**	**2.44**	**0.43**
C0353-035-4000-M	**0.353**	**8.97**	**0.035**	**0.89**	**4.000**	**101.60**	**1.532**	**38.92**	**1.152**	**29.25**	**5.64**	**25.10**	**2.29**	**0.40**
C0353-035-4250-M	**0.353**	**8.97**	**0.035**	**0.89**	**4.250**	**107.95**	**1.625**	**41.28**	**1.220**	**30.99**	**5.64**	**25.10**	**2.15**	**0.38**
C0353-035-4500-M	**0.353**	**8.97**	**0.035**	**0.89**	**4.500**	**114.30**	**1.718**	**43.65**	**1.289**	**32.74**	**5.64**	**25.10**	**2.03**	**0.35**
C0353-035-4750-M	**0.353**	**8.97**	**0.035**	**0.89**	**4.750**	**120.65**	**1.811**	**46.01**	**1.357**	**34.48**	**5.64**	**25.10**	**1.92**	**0.34**
C0353-035-5000-M	**0.353**	**8.97**	**0.035**	**0.89**	**5.000**	**127.00**	**1.904**	**48.37**	**1.426**	**36.22**	**5.64**	**25.10**	**1.82**	**0.32**
C0353-035-5250-M	**0.353**	**8.97**	**0.035**	**0.89**	**5.250**	**133.35**	**1.997**	**50.73**	**1.495**	**37.96**	**5.64**	**25.10**	**1.74**	**0.30**
C0353-035-5500-M	**0.353**	**8.97**	**0.035**	**0.89**	**5.500**	**139.70**	**2.090**	**53.10**	**1.563**	**39.71**	**5.64**	**25.10**	**1.66**	**0.29**
C0353-035-5750-M	**0.353**	**8.97**	**0.035**	**0.89**	**5.750**	**146.05**	**2.183**	**55.46**	**1.632**	**41.45**	**5.64**	**25.10**	**1.58**	**0.28**
C0353-035-6000-M	**0.353**	**8.97**	**0.035**	**0.89**	**6.000**	**152.40**	**2.276**	**57.82**	**1.700**	**43.19**	**5.64**	**25.10**	**1.52**	**0.27**
C0353-035-6250-M	**0.353**	**8.97**	**0.035**	**0.89**	**6.250**	**158.75**	**2.370**	**60.19**	**1.769**	**44.93**	**5.64**	**25.10**	**1.45**	**0.25**
C0353-038-0625-M	**0.353**	**8.97**	**0.038**	**0.97**	**0.625**	**15.88**	**0.300**	**7.63**	**0.255**	**6.48**	**7.09**	**31.55**	**21.84**	**3.82**
C0353-038-0688-M	**0.353**	**8.97**	**0.038**	**0.97**	**0.688**	**17.46**	**0.326**	**8.27**	**0.275**	**6.98**	**7.09**	**31.55**	**19.61**	**3.43**
C0353-038-0750-M	**0.353**	**8.97**	**0.038**	**0.97**	**0.750**	**19.05**	**0.351**	**8.92**	**0.295**	**7.49**	**7.09**	**31.55**	**17.79**	**3.11**
C0353-038-0813-M	**0.353**	**8.97**	**0.038**	**0.97**	**0.813**	**20.64**	**0.377**	**9.57**	**0.315**	**8.00**	**7.09**	**31.55**	**16.28**	**2.85**
C0353-038-0875-M	**0.353**	**8.97**	**0.038**	**0.97**	**0.875**	**22.23**	**0.402**	**10.22**	**0.335**	**8.50**	**7.09**	**31.55**	**15.00**	**2.63**
C0353-038-0938-M	**0.353**	**8.97**	**0.038**	**0.97**	**0.938**	**23.81**	**0.428**	**10.87**	**0.355**	**9.01**	**7.09**	**31.55**	**13.92**	**2.44**
C0353-038-1000-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.000**	**25.40**	**0.453**	**11.51**	**0.375**	**9.52**	**7.09**	**31.55**	**12.97**	**2.27**
C0353-038-1125-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.125**	**28.58**	**0.504**	**12.81**	**0.415**	**10.53**	**7.09**	**31.55**	**11.43**	**2.00**
C0353-038-1250-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.250**	**31.75**	**0.555**	**14.11**	**0.455**	**11.54**	**7.09**	**31.55**	**10.21**	**1.79**
C0353-038-1375-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.375**	**34.93**	**0.606**	**15.40**	**0.494**	**12.56**	**7.09**	**31.55**	**9.23**	**1.62**
C0353-038-1500-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.500**	**38.10**	**0.658**	**16.70**	**0.534**	**13.57**	**7.09**	**31.55**	**8.42**	**1.47**
C0353-038-1625-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.625**	**41.28**	**0.709**	**18.00**	**0.574**	**14.58**	**7.09**	**31.55**	**7.74**	**1.35**
C0353-038-1750-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.750**	**44.45**	**0.760**	**19.29**	**0.614**	**15.60**	**7.09**	**31.55**	**7.16**	**1.25**
C0353-038-1875-M	**0.353**	**8.97**	**0.038**	**0.97**	**1.875**	**47.63**	**0.811**	**20.59**	**0.654**	**16.61**	**7.09**	**31.55**	**6.66**	**1.17**
C0353-038-2000-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.000**	**50.80**	**0.862**	**21.89**	**0.694**	**17.62**	**7.09**	**31.55**	**6.23**	**1.09**
C0353-038-2125-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.125**	**53.98**	**0.913**	**23.18**	**0.734**	**18.64**	**7.09**	**31.55**	**5.85**	**1.02**
C0353-038-2250-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.250**	**57.15**	**0.964**	**24.48**	**0.774**	**19.65**	**7.09**	**31.55**	**5.51**	**0.96**
C0353-038-2375-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.375**	**60.33**	**1.015**	**25.78**	**0.814**	**20.66**	**7.09**	**31.55**	**5.22**	**0.91**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0353-032-4000-S	**1.623**	**41.24**	**3.48**	**15.48**	**1.46**	**0.26**
C0353-032-4250-S	**1.722**	**43.75**	**3.48**	**15.48**	**1.38**	**0.24**
C0353-032-4500-S	**1.822**	**46.27**	**3.48**	**15.48**	**1.30**	**0.23**
C0353-032-4750-S	**1.921**	**48.78**	**3.48**	**15.48**	**1.23**	**0.22**
C0353-032-5000-S	**2.020**	**51.30**	**3.48**	**15.48**	**1.17**	**0.20**
C0353-032-5250-S	**2.119**	**53.81**	**3.48**	**15.48**	**1.11**	**0.19**
C0353-032-5500-S	**2.218**	**56.33**	**3.48**	**15.48**	**1.06**	**0.19**
C0353-032-5750-S	**2.317**	**58.85**	**3.48**	**15.48**	**1.01**	**0.18**
C0353-032-6000-S	**2.416**	**61.36**	**3.48**	**15.48**	**0.97**	**0.17**
C0353-032-6250-S	**2.515**	**63.88**	**3.48**	**15.48**	**0.93**	**0.16**
C0353-035-0625-S	**0.307**	**7.80**	**4.48**	**19.91**	**14.08**	**2.46**
C0353-035-0688-S	**0.334**	**8.48**	**4.48**	**19.91**	**12.65**	**2.21**
C0353-035-0750-S	**0.360**	**9.15**	**4.48**	**19.91**	**11.49**	**2.01**
C0353-035-0813-S	**0.387**	**9.83**	**4.48**	**19.91**	**10.52**	**1.84**
C0353-035-0875-S	**0.414**	**10.51**	**4.48**	**19.91**	**9.71**	**1.70**
C0353-035-0938-S	**0.440**	**11.19**	**4.48**	**19.91**	**9.01**	**1.58**
C0353-035-1000-S	**0.467**	**11.87**	**4.48**	**19.91**	**8.40**	**1.47**
C0353-035-1125-S	**0.521**	**13.22**	**4.48**	**19.91**	**7.41**	**1.30**
C0353-035-1250-S	**0.574**	**14.58**	**4.48**	**19.91**	**6.62**	**1.16**
C0353-035-1375-S	**0.627**	**15.93**	**4.48**	**19.91**	**5.99**	**1.05**
C0353-035-1500-S	**0.681**	**17.29**	**4.48**	**19.91**	**5.46**	**0.96**
C0353-035-1625-S	**0.734**	**18.64**	**4.48**	**19.91**	**5.03**	**0.88**
C0353-035-1750-S	**0.787**	**20.00**	**4.48**	**19.91**	**4.65**	**0.81**
C0353-035-1875-S	**0.841**	**21.36**	**4.48**	**19.91**	**4.33**	**0.76**
C0353-035-2000-S	**0.894**	**22.71**	**4.48**	**19.91**	**4.05**	**0.71**
C0353-035-2125-S	**0.948**	**24.07**	**4.48**	**19.91**	**3.80**	**0.67**
C0353-035-2250-S	**1.001**	**25.42**	**4.48**	**19.91**	**3.58**	**0.63**
C0353-035-2375-S	**1.054**	**26.78**	**4.48**	**19.91**	**3.39**	**0.59**
C0353-035-2500-S	**1.108**	**28.14**	**4.48**	**19.91**	**3.22**	**0.56**
C0353-035-2625-S	**1.161**	**29.49**	**4.48**	**19.91**	**3.06**	**0.54**
C0353-035-2750-S	**1.214**	**30.85**	**4.48**	**19.91**	**2.92**	**0.51**
C0353-035-2875-S	**1.268**	**32.20**	**4.48**	**19.91**	**2.79**	**0.49**
C0353-035-3000-S	**1.321**	**33.56**	**4.48**	**19.91**	**2.67**	**0.47**
C0353-035-3250-S	**1.428**	**36.27**	**4.48**	**19.91**	**2.46**	**0.43**
C0353-035-3500-S	**1.535**	**38.98**	**4.48**	**19.91**	**2.28**	**0.40**
C0353-035-3750-S	**1.641**	**41.69**	**4.48**	**19.91**	**2.12**	**0.37**
C0353-035-4000-S	**1.748**	**44.40**	**4.48**	**19.91**	**1.99**	**0.35**
C0353-035-4250-S	**1.855**	**47.12**	**4.48**	**19.91**	**1.87**	**0.33**
C0353-035-4500-S	**1.962**	**49.83**	**4.48**	**19.91**	**1.76**	**0.31**
C0353-035-4750-S	**2.068**	**52.54**	**4.48**	**19.91**	**1.67**	**0.29**
C0353-035-5000-S	**2.175**	**55.25**	**4.48**	**19.91**	**1.59**	**0.28**
C0353-035-5250-S	**2.282**	**57.96**	**4.48**	**19.91**	**1.51**	**0.26**
C0353-035-5500-S	**2.389**	**60.67**	**4.48**	**19.91**	**1.44**	**0.25**
C0353-035-5750-S	**2.496**	**63.39**	**4.48**	**19.91**	**1.38**	**0.24**
C0353-035-6000-S	**2.602**	**66.10**	**4.48**	**19.91**	**1.32**	**0.23**
C0353-035-6250-S	**2.709**	**68.81**	**4.48**	**19.91**	**1.26**	**0.22**
C0353-038-0625-S	**0.328**	**8.34**	**5.64**	**25.07**	**18.99**	**3.32**
C0353-038-0688-S	**0.357**	**9.07**	**5.64**	**25.07**	**17.05**	**2.98**
C0353-038-0750-S	**0.386**	**9.80**	**5.64**	**25.07**	**15.47**	**2.71**
C0353-038-0813-S	**0.414**	**10.52**	**5.64**	**25.07**	**14.15**	**2.48**
C0353-038-0875-S	**0.443**	**11.25**	**5.64**	**25.07**	**13.05**	**2.28**
C0353-038-0938-S	**0.472**	**11.98**	**5.64**	**25.07**	**12.10**	**2.12**
C0353-038-1000-S	**0.500**	**12.71**	**5.64**	**25.07**	**11.28**	**1.97**
C0353-038-1125-S	**0.558**	**14.17**	**5.64**	**25.07**	**9.94**	**1.74**
C0353-038-1250-S	**0.615**	**15.63**	**5.64**	**25.07**	**8.88**	**1.55**
C0353-038-1375-S	**0.673**	**17.09**	**5.64**	**25.07**	**8.03**	**1.40**
C0353-038-1500-S	**0.730**	**18.55**	**5.64**	**25.07**	**7.32**	**1.28**
C0353-038-1625-S	**0.788**	**20.01**	**5.64**	**25.07**	**6.73**	**1.18**
C0353-038-1750-S	**0.845**	**21.46**	**5.64**	**25.07**	**6.23**	**1.09**
C0353-038-1875-S	**0.902**	**22.92**	**5.64**	**25.07**	**5.80**	**1.01**
C0353-038-2000-S	**0.960**	**24.38**	**5.64**	**25.07**	**5.42**	**0.95**
C0353-038-2125-S	**1.017**	**25.84**	**5.64**	**25.07**	**5.09**	**0.89**
C0353-038-2250-S	**1.075**	**27.30**	**5.64**	**25.07**	**4.80**	**0.84**
C0353-038-2375-S	**1.132**	**28.76**	**5.64**	**25.07**	**4.53**	**0.79**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0353-038-2500-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.500**	**63.50**	**1.066**	**27.07**	**0.853**	**21.68**	**7.09**	**31.55**	**4.95**	**0.87**
C0353-038-2625-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.625**	**66.68**	**1.117**	**28.37**	**0.893**	**22.69**	**7.09**	**31.55**	**4.70**	**0.82**
C0353-038-2750-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.750**	**69.85**	**1.168**	**29.67**	**0.933**	**23.70**	**7.09**	**31.55**	**4.48**	**0.78**
C0353-038-2875-M	**0.353**	**8.97**	**0.038**	**0.97**	**2.875**	**73.03**	**1.219**	**30.96**	**0.973**	**24.72**	**7.09**	**31.55**	**4.28**	**0.75**
C0353-038-3000-M	**0.353**	**8.97**	**0.038**	**0.97**	**3.000**	**76.20**	**1.270**	**32.26**	**1.013**	**25.73**	**7.09**	**31.55**	**4.10**	**0.72**
C0353-038-3250-M	**0.353**	**8.97**	**0.038**	**0.97**	**3.250**	**82.55**	**1.372**	**34.85**	**1.093**	**27.76**	**7.09**	**31.55**	**3.78**	**0.66**
C0353-038-3500-M	**0.353**	**8.97**	**0.038**	**0.97**	**3.500**	**88.90**	**1.474**	**37.45**	**1.173**	**29.79**	**7.09**	**31.55**	**3.50**	**0.61**
C0353-038-3750-M	**0.353**	**8.97**	**0.038**	**0.97**	**3.750**	**95.25**	**1.576**	**40.04**	**1.252**	**31.81**	**7.09**	**31.55**	**3.26**	**0.57**
C0353-038-4000-M	**0.353**	**8.97**	**0.038**	**0.97**	**4.000**	**101.60**	**1.678**	**42.63**	**1.332**	**33.84**	**7.09**	**31.55**	**3.06**	**0.53**
C0353-038-4250-M	**0.353**	**8.97**	**0.038**	**0.97**	**4.250**	**107.95**	**1.781**	**45.23**	**1.412**	**35.87**	**7.09**	**31.55**	**2.87**	**0.50**
C0353-038-4500-M	**0.353**	**8.97**	**0.038**	**0.97**	**4.500**	**114.30**	**1.883**	**47.82**	**1.492**	**37.89**	**7.09**	**31.55**	**2.71**	**0.47**
C0353-038-4750-M	**0.353**	**8.97**	**0.038**	**0.97**	**4.750**	**120.65**	**1.985**	**50.41**	**1.572**	**39.92**	**7.09**	**31.55**	**2.57**	**0.45**
C0353-038-5000-M	**0.353**	**8.97**	**0.038**	**0.97**	**5.000**	**127.00**	**2.087**	**53.01**	**1.651**	**41.95**	**7.09**	**31.55**	**2.44**	**0.43**
C0353-038-5250-M	**0.353**	**8.97**	**0.038**	**0.97**	**5.250**	**133.35**	**2.189**	**55.60**	**1.731**	**43.97**	**7.09**	**31.55**	**2.32**	**0.41**
C0353-038-5500-M	**0.353**	**8.97**	**0.038**	**0.97**	**5.500**	**139.70**	**2.291**	**58.19**	**1.811**	**46.00**	**7.09**	**31.55**	**2.21**	**0.39**
C0353-038-5750-M	**0.353**	**8.97**	**0.038**	**0.97**	**5.750**	**146.05**	**2.393**	**60.79**	**1.891**	**48.03**	**7.09**	**31.55**	**2.11**	**0.37**
C0353-038-6000-M	**0.353**	**8.97**	**0.038**	**0.97**	**6.000**	**152.40**	**2.495**	**63.38**	**1.971**	**50.05**	**7.09**	**31.55**	**2.02**	**0.35**
C0353-038-6250-M	**0.353**	**8.97**	**0.038**	**0.97**	**6.250**	**158.75**	**2.597**	**65.97**	**2.050**	**52.08**	**7.09**	**31.55**	**1.94**	**0.34**
C0353-040-0563-M	**0.353**	**8.97**	**0.040**	**1.02**	**0.563**	**14.29**	**0.289**	**7.34**	**0.253**	**6.42**	**8.18**	**36.37**	**29.89**	**5.23**
C0353-040-0625-M	**0.353**	**8.97**	**0.040**	**1.02**	**0.625**	**15.88**	**0.316**	**8.03**	**0.274**	**6.97**	**8.18**	**36.37**	**26.46**	**4.63**
C0353-040-0688-M	**0.353**	**8.97**	**0.040**	**1.02**	**0.688**	**17.46**	**0.343**	**8.71**	**0.296**	**7.53**	**8.18**	**36.37**	**23.74**	**4.15**
C0353-040-0750-M	**0.353**	**8.97**	**0.040**	**1.02**	**0.750**	**19.05**	**0.370**	**9.40**	**0.318**	**8.08**	**8.18**	**36.37**	**21.52**	**3.77**
C0353-040-0813-M	**0.353**	**8.97**	**0.040**	**1.02**	**0.813**	**20.64**	**0.397**	**10.09**	**0.340**	**8.64**	**8.18**	**36.37**	**19.69**	**3.45**
C0353-040-0875-M	**0.353**	**8.97**	**0.040**	**1.02**	**0.875**	**22.23**	**0.424**	**10.77**	**0.362**	**9.19**	**8.18**	**36.37**	**18.14**	**3.17**
C0353-040-0938-M	**0.353**	**8.97**	**0.040**	**1.02**	**0.938**	**23.81**	**0.451**	**11.46**	**0.384**	**9.75**	**8.18**	**36.37**	**16.82**	**2.94**
C0353-040-1000-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.000**	**25.40**	**0.478**	**12.15**	**0.406**	**10.30**	**8.18**	**36.37**	**15.68**	**2.74**
C0353-040-1125-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.125**	**28.58**	**0.532**	**13.52**	**0.449**	**11.41**	**8.18**	**36.37**	**13.80**	**2.42**
C0353-040-1250-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.250**	**31.75**	**0.587**	**14.90**	**0.493**	**12.52**	**8.18**	**36.37**	**12.33**	**2.16**
C0353-040-1375-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.375**	**34.93**	**0.641**	**16.27**	**0.537**	**13.63**	**8.18**	**36.37**	**11.14**	**1.95**
C0353-040-1500-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.500**	**38.10**	**0.695**	**17.65**	**0.580**	**14.74**	**8.18**	**36.37**	**10.16**	**1.78**
C0353-040-1625-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.625**	**41.28**	**0.749**	**19.02**	**0.624**	**15.85**	**8.18**	**36.37**	**9.33**	**1.63**
C0353-040-1750-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.750**	**44.45**	**0.803**	**20.40**	**0.668**	**16.96**	**8.18**	**36.37**	**8.64**	**1.51**
C0353-040-1875-M	**0.353**	**8.97**	**0.040**	**1.02**	**1.875**	**47.63**	**0.857**	**21.77**	**0.711**	**18.07**	**8.18**	**36.37**	**8.03**	**1.41**
C0353-040-2000-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.000**	**50.80**	**0.911**	**23.15**	**0.755**	**19.18**	**8.18**	**36.37**	**7.51**	**1.31**
C0353-040-2125-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.125**	**53.98**	**0.965**	**24.52**	**0.799**	**20.29**	**8.18**	**36.37**	**7.05**	**1.23**
C0353-040-2250-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.250**	**57.15**	**1.019**	**25.90**	**0.842**	**21.40**	**8.18**	**36.37**	**6.65**	**1.16**
C0353-040-2375-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.375**	**60.33**	**1.074**	**27.27**	**0.886**	**22.51**	**8.18**	**36.37**	**6.28**	**1.10**
C0353-040-2500-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.500**	**63.50**	**1.128**	**28.64**	**0.930**	**23.62**	**8.18**	**36.37**	**5.96**	**1.04**
C0353-040-2625-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.625**	**66.68**	**1.182**	**30.02**	**0.974**	**24.73**	**8.18**	**36.37**	**5.67**	**0.99**
C0353-040-2750-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.750**	**69.85**	**1.236**	**31.39**	**1.017**	**25.84**	**8.18**	**36.37**	**5.40**	**0.95**
C0353-040-2875-M	**0.353**	**8.97**	**0.040**	**1.02**	**2.875**	**73.03**	**1.290**	**32.77**	**1.061**	**26.95**	**8.18**	**36.37**	**5.16**	**0.90**
C0353-040-3000-M	**0.353**	**8.97**	**0.040**	**1.02**	**3.000**	**76.20**	**1.344**	**34.14**	**1.105**	**28.06**	**8.18**	**36.37**	**4.94**	**0.86**
C0353-040-3250-M	**0.353**	**8.97**	**0.040**	**1.02**	**3.250**	**82.55**	**1.452**	**36.89**	**1.192**	**30.28**	**8.18**	**36.37**	**4.55**	**0.80**
C0353-040-3500-M	**0.353**	**8.97**	**0.040**	**1.02**	**3.500**	**88.90**	**1.561**	**39.64**	**1.279**	**32.50**	**8.18**	**36.37**	**4.22**	**0.74**
C0353-040-3750-M	**0.353**	**8.97**	**0.040**	**1.02**	**3.750**	**95.25**	**1.669**	**42.39**	**1.367**	**34.72**	**8.18**	**36.37**	**3.93**	**0.69**
C0353-040-4000-M	**0.353**	**8.97**	**0.040**	**1.02**	**4.000**	**101.60**	**1.777**	**45.14**	**1.454**	**36.94**	**8.18**	**36.37**	**3.68**	**0.64**
C0353-040-4250-M	**0.353**	**8.97**	**0.040**	**1.02**	**4.250**	**107.95**	**1.885**	**47.89**	**1.542**	**39.15**	**8.18**	**36.37**	**3.46**	**0.61**
C0353-040-4500-M	**0.353**	**8.97**	**0.040**	**1.02**	**4.500**	**114.30**	**1.994**	**50.64**	**1.629**	**41.37**	**8.18**	**36.37**	**3.26**	**0.57**
C0353-040-4750-M	**0.353**	**8.97**	**0.040**	**1.02**	**4.750**	**120.65**	**2.102**	**53.39**	**1.716**	**43.59**	**8.18**	**36.37**	**3.09**	**0.54**
C0353-040-5000-M	**0.353**	**8.97**	**0.040**	**1.02**	**5.000**	**127.00**	**2.210**	**56.14**	**1.804**	**45.81**	**8.18**	**36.37**	**2.93**	**0.51**
C0353-040-5250-M	**0.353**	**8.97**	**0.040**	**1.02**	**5.250**	**133.35**	**2.318**	**58.89**	**1.891**	**48.03**	**8.18**	**36.37**	**2.79**	**0.49**
C0353-040-5500-M	**0.353**	**8.97**	**0.040**	**1.02**	**5.500**	**139.70**	**2.427**	**61.64**	**1.978**	**50.25**	**8.18**	**36.37**	**2.66**	**0.47**
C0353-040-5750-M	**0.353**	**8.97**	**0.040**	**1.02**	**5.750**	**146.05**	**2.535**	**64.38**	**2.066**	**52.47**	**8.18**	**36.37**	**2.54**	**0.45**
C0353-040-6000-M	**0.353**	**8.97**	**0.040**	**1.02**	**6.000**	**152.40**	**2.643**	**67.13**	**2.153**	**54.69**	**8.18**	**36.37**	**2.44**	**0.43**
C0353-040-6250-M	**0.353**	**8.97**	**0.040**	**1.02**	**6.250**	**158.75**	**2.751**	**69.88**	**2.241**	**56.91**	**8.18**	**36.37**	**2.34**	**0.41**
C0353-042-0563-M	**0.353**	**8.97**	**0.042**	**1.07**	**0.563**	**14.29**	**0.303**	**7.70**	**0.270**	**6.86**	**9.36**	**41.63**	**36.07**	**6.31**
C0353-042-0625-M	**0.353**	**8.97**	**0.042**	**1.07**	**0.625**	**15.88**	**0.332**	**8.42**	**0.294**	**7.46**	**9.36**	**41.63**	**31.90**	**5.58**
C0353-042-0688-M	**0.353**	**8.97**	**0.042**	**1.07**	**0.688**	**17.46**	**0.360**	**9.15**	**0.318**	**8.07**	**9.36**	**41.63**	**28.60**	**5.00**
C0353-042-0750-M	**0.353**	**8.97**	**0.042**	**1.07**	**0.750**	**19.05**	**0.389**	**9.88**	**0.341**	**8.67**	**9.36**	**41.63**	**25.91**	**4.53**
C0353-042-0813-M	**0.353**	**8.97**	**0.042**	**1.07**	**0.813**	**20.64**	**0.417**	**10.60**	**0.365**	**9.27**	**9.36**	**41.63**	**23.69**	**4.15**
C0353-042-0875-M	**0.353**	**8.97**	**0.042**	**1.07**	**0.875**	**22.23**	**0.446**	**11.33**	**0.389**	**9.88**	**9.36**	**41.63**	**21.82**	**3.82**
C0353-042-0938-M	**0.353**	**8.97**	**0.042**	**1.07**	**0.938**	**23.81**	**0.475**	**12.05**	**0.413**	**10.48**	**9.36**	**41.63**	**20.22**	**3.54**
C0353-042-1000-M	**0.353**	**8.97**	**0.042**	**1.07**	**1.000**	**25.40**	**0.503**	**12.78**	**0.436**	**11.08**	**9.36**	**41.63**	**18.84**	**3.30**
C0353-042-1125-M	**0.353**	**8.97**	**0.042**	**1.07**	**1.125**	**28.58**	**0.560**	**14.23**	**0.484**	**12.29**	**9.36**	**41.63**	**16.58**	**2.90**

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0353-038-2500-S	**1.190**	**30.22**	**5.64**	**25.07**	**4.30**	**0.75**
C0353-038-2625-S	**1.247**	**31.67**	**5.64**	**25.07**	**4.09**	**0.72**
C0353-038-2750-S	**1.304**	**33.13**	**5.64**	**25.07**	**3.90**	**0.68**
C0353-038-2875-S	**1.362**	**34.59**	**5.64**	**25.07**	**3.72**	**0.65**
C0353-038-3000-S	**1.419**	**36.05**	**5.64**	**25.07**	**3.57**	**0.62**
C0353-038-3250-S	**1.534**	**38.97**	**5.64**	**25.07**	**3.28**	**0.57**
C0353-038-3500-S	**1.649**	**41.88**	**5.64**	**25.07**	**3.05**	**0.53**
C0353-038-3750-S	**1.764**	**44.80**	**5.64**	**25.07**	**2.84**	**0.50**
C0353-038-4000-S	**1.879**	**47.72**	**5.64**	**25.07**	**2.66**	**0.46**
C0353-038-4250-S	**1.994**	**50.64**	**5.64**	**25.07**	**2.50**	**0.44**
C0353-038-4500-S	**2.108**	**53.55**	**5.64**	**25.07**	**2.36**	**0.41**
C0353-038-4750-S	**2.223**	**56.47**	**5.64**	**25.07**	**2.23**	**0.39**
C0353-038-5000-S	**2.338**	**59.39**	**5.64**	**25.07**	**2.12**	**0.37**
C0353-038-5250-S	**2.453**	**62.30**	**5.64**	**25.07**	**2.02**	**0.35**
C0353-038-5500-S	**2.568**	**65.22**	**5.64**	**25.07**	**1.92**	**0.34**
C0353-038-5750-S	**2.683**	**68.14**	**5.64**	**25.07**	**1.84**	**0.32**
C0353-038-6000-S	**2.797**	**71.06**	**5.64**	**25.07**	**1.76**	**0.31**
C0353-038-6250-S	**2.912**	**73.97**	**5.64**	**25.07**	**1.69**	**0.30**
C0353-040-0563-S	**0.312**	**7.93**	**6.50**	**28.92**	**25.99**	**4.55**
C0353-040-0625-S	**0.342**	**8.70**	**6.50**	**28.92**	**23.01**	**4.03**
C0353-040-0688-S	**0.373**	**9.46**	**6.50**	**28.92**	**20.64**	**3.61**
C0353-040-0750-S	**0.403**	**10.23**	**6.50**	**28.92**	**18.72**	**3.28**
C0353-040-0813-S	**0.433**	**10.99**	**6.50**	**28.92**	**17.12**	**3.00**
C0353-040-0875-S	**0.463**	**11.76**	**6.50**	**28.92**	**15.77**	**2.76**
C0353-040-0938-S	**0.493**	**12.52**	**6.50**	**28.92**	**14.62**	**2.56**
C0353-040-1000-S	**0.523**	**13.28**	**6.50**	**28.92**	**13.63**	**2.39**
C0353-040-1125-S	**0.583**	**14.81**	**6.50**	**28.92**	**12.00**	**2.10**
C0353-040-1250-S	**0.643**	**16.34**	**6.50**	**28.92**	**10.72**	**1.88**
C0353-040-1375-S	**0.704**	**17.87**	**6.50**	**28.92**	**9.68**	**1.69**
C0353-040-1500-S	**0.764**	**19.40**	**6.50**	**28.92**	**8.83**	**1.55**
C0353-040-1625-S	**0.824**	**20.93**	**6.50**	**28.92**	**8.12**	**1.42**
C0353-040-1750-S	**0.884**	**22.46**	**6.50**	**28.92**	**7.51**	**1.31**
C0353-040-1875-S	**0.944**	**23.99**	**6.50**	**28.92**	**6.99**	**1.22**
C0353-040-2000-S	**1.005**	**25.51**	**6.50**	**28.92**	**6.53**	**1.14**
C0353-040-2125-S	**1.065**	**27.04**	**6.50**	**28.92**	**6.13**	**1.07**
C0353-040-2250-S	**1.125**	**28.57**	**6.50**	**28.92**	**5.78**	**1.01**
C0353-040-2375-S	**1.185**	**30.10**	**6.50**	**28.92**	**5.46**	**0.96**
C0353-040-2500-S	**1.245**	**31.63**	**6.50**	**28.92**	**5.18**	**0.91**
C0353-040-2625-S	**1.305**	**33.16**	**6.50**	**28.92**	**4.93**	**0.86**
C0353-040-2750-S	**1.366**	**34.69**	**6.50**	**28.92**	**4.70**	**0.82**
C0353-040-2875-S	**1.426**	**36.22**	**6.50**	**28.92**	**4.49**	**0.79**
C0353-040-3000-S	**1.486**	**37.74**	**6.50**	**28.92**	**4.29**	**0.75**
C0353-040-3250-S	**1.606**	**40.80**	**6.50**	**28.92**	**3.96**	**0.69**
C0353-040-3500-S	**1.727**	**43.86**	**6.50**	**28.92**	**3.67**	**0.64**
C0353-040-3750-S	**1.847**	**46.92**	**6.50**	**28.92**	**3.42**	**0.60**
C0353-040-4000-S	**1.968**	**49.98**	**6.50**	**28.92**	**3.20**	**0.56**
C0353-040-4250-S	**2.088**	**53.03**	**6.50**	**28.92**	**3.01**	**0.53**
C0353-040-4500-S	**2.208**	**56.09**	**6.50**	**28.92**	**2.84**	**0.50**
C0353-040-4750-S	**2.329**	**59.15**	**6.50**	**28.92**	**2.69**	**0.47**
C0353-040-5000-S	**2.449**	**62.21**	**6.50**	**28.92**	**2.55**	**0.45**
C0353-040-5250-S	**2.569**	**65.26**	**6.50**	**28.92**	**2.43**	**0.42**
C0353-040-5500-S	**2.690**	**68.32**	**6.50**	**28.92**	**2.31**	**0.40**
C0353-040-5750-S	**2.810**	**71.38**	**6.50**	**28.92**	**2.21**	**0.39**
C0353-040-6000-S	**2.931**	**74.44**	**6.50**	**28.92**	**2.12**	**0.37**
C0353-040-6250-S	**3.051**	**77.49**	**6.50**	**28.92**	**2.03**	**0.36**
C0353-042-0563-S	**0.325**	**8.26**	**7.45**	**33.12**	**31.36**	**5.49**
C0353-042-0625-S	**0.357**	**9.06**	**7.45**	**33.12**	**27.74**	**4.85**
C0353-042-0688-S	**0.388**	**9.86**	**7.45**	**33.12**	**24.87**	**4.35**
C0353-042-0750-S	**0.420**	**10.66**	**7.45**	**33.12**	**22.53**	**3.94**
C0353-042-0813-S	**0.451**	**11.46**	**7.45**	**33.12**	**20.60**	**3.60**
C0353-042-0875-S	**0.483**	**12.26**	**7.45**	**33.12**	**18.97**	**3.32**
C0353-042-0938-S	**0.514**	**13.06**	**7.45**	**33.12**	**17.58**	**3.08**
C0353-042-1000-S	**0.546**	**13.86**	**7.45**	**33.12**	**16.38**	**2.87**
C0353-042-1125-S	**0.609**	**15.46**	**7.45**	**33.12**	**14.42**	**2.52**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0353-042-1250-M	0.353	8.97	0.042	1.07	1.250	31.75	0.618	15.69	0.531	13.49	9.36	41.63	14.80	2.59
C0353-042-1375-M	0.353	8.97	0.042	1.07	1.375	34.93	0.675	17.14	0.579	14.70	9.36	41.63	13.37	2.34
C0353-042-1500-M	0.353	8.97	0.042	1.07	1.500	38.10	0.732	18.59	0.626	15.91	9.36	41.63	12.19	2.13
C0353-042-1625-M	0.353	8.97	0.042	1.07	1.625	41.28	0.789	20.05	0.674	17.11	9.36	41.63	11.20	1.96
C0353-042-1750-M	0.353	8.97	0.042	1.07	1.750	44.45	0.846	21.50	0.721	18.32	9.36	41.63	10.36	1.81
C0353-042-1875-M	0.353	8.97	0.042	1.07	1.875	47.63	0.904	22.95	0.769	19.53	9.36	41.63	9.64	1.69
C0353-042-2000-M	0.353	8.97	0.042	1.07	2.000	50.80	0.961	24.40	0.816	20.73	9.36	41.63	9.01	1.58
C0353-042-2125-M	0.353	8.97	0.042	1.07	2.125	53.98	1.018	25.86	0.864	21.94	9.36	41.63	8.46	1.48
C0353-042-2250-M	0.353	8.97	0.042	1.07	2.250	57.15	1.075	27.31	0.911	23.15	9.36	41.63	7.97	1.39
C0353-042-2375-M	0.353	8.97	0.042	1.07	2.375	60.33	1.132	28.76	0.959	24.35	9.36	41.63	7.53	1.32
C0353-042-2500-M	0.353	8.97	0.042	1.07	2.500	63.50	1.190	30.22	1.006	25.56	9.36	41.63	7.14	1.25
C0353-042-2625-M	0.353	8.97	0.042	1.07	2.625	66.68	1.247	31.67	1.054	26.77	9.36	41.63	6.79	1.19
C0353-042-2750-M	0.353	8.97	0.042	1.07	2.750	69.85	1.304	33.12	1.101	27.97	9.36	41.63	6.47	1.13
C0353-042-2875-M	0.353	8.97	0.042	1.07	2.875	73.03	1.361	34.58	1.149	29.18	9.36	41.63	6.18	1.08
C0353-042-3000-M	0.353	8.97	0.042	1.07	3.000	76.20	1.418	36.03	1.196	30.39	9.36	41.63	5.92	1.04
C0353-042-3250-M	0.353	8.97	0.042	1.07	3.250	82.55	1.533	38.93	1.291	32.80	9.36	41.63	5.45	0.95
C0353-042-3500-M	0.353	8.97	0.042	1.07	3.500	88.90	1.647	41.84	1.386	35.21	9.36	41.63	5.05	0.88
C0353-042-3750-M	0.353	8.97	0.042	1.07	3.750	95.25	1.762	44.75	1.481	37.63	9.36	41.63	4.71	0.82
C0353-042-4000-M	0.353	8.97	0.042	1.07	4.000	101.60	1.876	47.65	1.576	40.04	9.36	41.63	4.41	0.77
C0353-042-4250-M	0.353	8.97	0.042	1.07	4.250	107.95	1.990	50.56	1.671	42.45	9.36	41.63	4.14	0.72
C0353-042-4500-M	0.353	8.97	0.042	1.07	4.500	114.30	2.105	53.46	1.766	44.86	9.36	41.63	3.91	0.68
C0353-042-4750-M	0.353	8.97	0.042	1.07	4.750	120.65	2.219	56.37	1.861	47.28	9.36	41.63	3.70	0.65
C0353-042-5000-M	0.353	8.97	0.042	1.07	5.000	127.00	2.334	59.28	1.956	49.69	9.36	41.63	3.51	0.61
C0353-042-5250-M	0.353	8.97	0.042	1.07	5.250	133.35	2.448	62.18	2.051	52.10	9.36	41.63	3.34	0.58
C0353-042-5500-M	0.353	8.97	0.042	1.07	5.500	139.70	2.563	65.09	2.146	54.52	9.36	41.63	3.19	0.56
C0353-042-5750-M	0.353	8.97	0.042	1.07	5.750	146.05	2.677	67.99	2.241	56.93	9.36	41.63	3.05	0.53
C0353-042-6000-M	0.353	8.97	0.042	1.07	6.000	152.40	2.791	70.90	2.336	59.34	9.36	41.63	2.92	0.51
C0353-045-0563-M	0.353	8.97	0.045	1.14	0.563	14.29	0.324	8.22	0.296	7.51	11.32	50.37	47.41	8.30
C0353-045-0625-M	0.353	8.97	0.045	1.14	0.625	15.88	0.355	9.01	0.322	8.18	11.32	50.37	41.87	7.33
C0353-045-0688-M	0.353	8.97	0.045	1.14	0.688	17.46	0.385	9.79	0.349	8.86	11.32	50.37	37.49	6.56
C0353-045-0750-M	0.353	8.97	0.045	1.14	0.750	19.05	0.416	10.58	0.375	9.53	11.32	50.37	33.94	5.94
C0353-045-0813-M	0.353	8.97	0.045	1.14	0.813	20.64	0.447	11.36	0.402	10.21	11.32	50.37	31.00	5.43
C0353-045-0875-M	0.353	8.97	0.045	1.14	0.875	22.23	0.478	12.15	0.429	10.89	11.32	50.37	28.54	4.99
C0353-045-0938-M	0.353	8.97	0.045	1.14	0.938	23.81	0.509	12.93	0.455	11.56	11.32	50.37	26.43	4.63
C0353-045-1000-M	0.353	8.97	0.045	1.14	1.000	25.40	0.540	13.72	0.482	12.24	11.32	50.37	24.62	4.31
C0353-045-1125-M	0.353	8.97	0.045	1.14	1.125	28.58	0.602	15.29	0.535	13.59	11.32	50.37	21.64	3.79
C0353-045-1250-M	0.353	8.97	0.045	1.14	1.250	31.75	0.664	16.86	0.588	14.94	11.32	50.37	19.31	3.38
C0353-045-1375-M	0.353	8.97	0.045	1.14	1.375	34.93	0.725	18.43	0.641	16.29	11.32	50.37	17.43	3.05
C0353-045-1500-M	0.353	8.97	0.045	1.14	1.500	38.10	0.787	20.00	0.695	17.64	11.32	50.37	15.89	2.78
C0353-045-1625-M	0.353	8.97	0.045	1.14	1.625	41.28	0.849	21.57	0.748	18.99	11.32	50.37	14.59	2.55
C0353-045-1750-M	0.353	8.97	0.045	1.14	1.750	44.45	0.911	23.14	0.801	20.34	11.32	50.37	13.49	2.36
C0353-045-1875-M	0.353	8.97	0.045	1.14	1.875	47.63	0.973	24.71	0.854	21.69	11.32	50.37	12.55	2.20
C0353-045-2000-M	0.353	8.97	0.045	1.14	2.000	50.80	1.034	26.28	0.907	23.05	11.32	50.37	11.73	2.05
C0353-045-2125-M	0.353	8.97	0.045	1.14	2.125	53.98	1.096	27.85	0.961	24.40	11.32	50.37	11.01	1.93
C0353-045-2250-M	0.353	8.97	0.045	1.14	2.250	57.15	1.158	29.42	1.014	25.75	11.32	50.37	10.37	1.81
C0353-045-2375-M	0.353	8.97	0.045	1.14	2.375	60.33	1.220	30.99	1.067	27.10	11.32	50.37	9.80	1.72
C0353-045-2500-M	0.353	8.97	0.045	1.14	2.500	63.50	1.282	32.56	1.120	28.45	11.32	50.37	9.30	1.63
C0353-045-2625-M	0.353	8.97	0.045	1.14	2.625	66.68	1.344	34.13	1.173	29.80	11.32	50.37	8.84	1.55
C0353-045-2750-M	0.353	8.97	0.045	1.14	2.750	69.85	1.405	35.70	1.226	31.15	11.32	50.37	8.42	1.47
C0353-045-2875-M	0.353	8.97	0.045	1.14	2.875	73.03	1.467	37.27	1.280	32.50	11.32	50.37	8.04	1.41
C0353-045-3000-M	0.353	8.97	0.045	1.14	3.000	76.20	1.529	38.84	1.333	33.86	11.32	50.37	7.70	1.35
C0353-045-3250-M	0.353	8.97	0.045	1.14	3.250	82.55	1.653	41.98	1.439	36.56	11.32	50.37	7.09	1.24
C0353-045-3500-M	0.353	8.97	0.045	1.14	3.500	88.90	1.776	45.12	1.546	39.26	11.32	50.37	6.57	1.15
C0353-045-3750-M	0.353	8.97	0.045	1.14	3.750	95.25	1.900	48.26	1.652	41.96	11.32	50.37	6.12	1.07
C0353-045-4000-M	0.353	8.97	0.045	1.14	4.000	101.60	2.023	51.40	1.758	44.66	11.32	50.37	5.73	1.00
C0353-045-4250-M	0.353	8.97	0.045	1.14	4.250	107.95	2.147	54.54	1.865	47.37	11.32	50.37	5.39	0.94
C0353-045-4500-M	0.353	8.97	0.045	1.14	4.500	114.30	2.271	57.68	1.971	50.07	11.32	50.37	5.08	0.89
C0353-045-4750-M	0.353	8.97	0.045	1.14	4.750	120.65	2.394	60.82	2.078	52.77	11.32	50.37	4.81	0.84
C0353-045-5000-M	0.353	8.97	0.045	1.14	5.000	127.00	2.518	63.96	2.184	55.47	11.32	50.37	4.56	0.80
C0353-045-5250-M	0.353	8.97	0.045	1.14	5.250	133.35	2.642	67.10	2.290	58.18	11.32	50.37	4.34	0.76
C0353-045-5500-M	0.353	8.97	0.045	1.14	5.500	139.70	2.765	70.24	2.397	60.88	11.32	50.37	4.14	0.72
C0353-045-5750-M	0.353	8.97	0.045	1.14	5.750	146.05	2.889	73.38	2.503	63.58	11.32	50.37	3.96	0.69
C0353-045-6000-M	0.353	8.97	0.045	1.14	6.000	152.40	3.012	76.52	2.610	66.28	11.32	50.37	3.79	0.66
C0353-047-0563-M	0.353	8.97	0.047	1.19	0.563	14.29	0.337	8.56	0.312	7.93	12.76	56.77	56.61	9.91

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0353-042-1250-S	0.671	17.06	7.45	33.12	12.87	2.25
C0353-042-1375-S	0.734	18.66	7.45	33.12	11.62	2.03
C0353-042-1500-S	0.797	20.26	7.45	33.12	10.60	1.85
C0353-042-1625-S	0.860	21.85	7.45	33.12	9.74	1.70
C0353-042-1750-S	0.923	23.45	7.45	33.12	9.01	1.58
C0353-042-1875-S	0.986	25.05	7.45	33.12	8.38	1.47
C0353-042-2000-S	1.049	26.65	7.45	33.12	7.83	1.37
C0353-042-2125-S	1.112	28.25	7.45	33.12	7.35	1.29
C0353-042-2250-S	1.175	29.85	7.45	33.12	6.93	1.21
C0353-042-2375-S	1.238	31.45	7.45	33.12	6.55	1.15
C0353-042-2500-S	1.301	33.05	7.45	33.12	6.21	1.09
C0353-042-2625-S	1.364	34.65	7.45	33.12	5.91	1.03
C0353-042-2750-S	1.427	36.25	7.45	33.12	5.63	0.99
C0353-042-2875-S	1.490	37.85	7.45	33.12	5.38	0.94
C0353-042-3000-S	1.553	39.45	7.45	33.12	5.15	0.90
C0353-042-3250-S	1.679	42.65	7.45	33.12	4.74	0.83
C0353-042-3500-S	1.805	45.85	7.45	33.12	4.39	0.77
C0353-042-3750-S	1.931	49.05	7.45	33.12	4.09	0.72
C0353-042-4000-S	2.057	52.25	7.45	33.12	3.83	0.67
C0353-042-4250-S	2.183	55.45	7.45	33.12	3.60	0.63
C0353-042-4500-S	2.309	58.65	7.45	33.12	3.40	0.59
C0353-042-4750-S	2.435	61.85	7.45	33.12	3.22	0.56
C0353-042-5000-S	2.561	65.05	7.45	33.12	3.05	0.53
C0353-042-5250-S	2.687	68.25	7.45	33.12	2.91	0.51
C0353-042-5500-S	2.813	71.45	7.45	33.12	2.77	0.48
C0353-042-5750-S	2.939	74.65	7.45	33.12	2.65	0.46
C0353-042-6000-S	3.065	77.84	7.45	33.12	2.54	0.44
C0353-045-0563-S	0.344	8.74	9.01	40.08	41.22	7.21
C0353-045-0625-S	0.378	9.59	9.01	40.08	36.41	6.37
C0353-045-0688-S	0.411	10.44	9.01	40.08	32.60	5.71
C0353-045-0750-S	0.445	11.29	9.01	40.08	29.51	5.16
C0353-045-0813-S	0.478	12.15	9.01	40.08	26.96	4.72
C0353-045-0875-S	0.512	13.00	9.01	40.08	24.81	4.34
C0353-045-0938-S	0.545	13.85	9.01	40.08	22.98	4.02
C0353-045-1000-S	0.579	14.71	9.01	40.08	21.41	3.75
C0353-045-1125-S	0.646	16.41	9.01	40.08	18.82	3.29
C0353-045-1250-S	0.713	18.12	9.01	40.08	16.79	2.94
C0353-045-1375-S	0.781	19.83	9.01	40.08	15.16	2.65
C0353-045-1500-S	0.848	21.53	9.01	40.08	13.81	2.42
C0353-045-1625-S	0.915	23.24	9.01	40.08	12.69	2.22
C0353-045-1750-S	0.982	24.94	9.01	40.08	11.73	2.05
C0353-045-1875-S	1.049	26.65	9.01	40.08	10.91	1.91
C0353-045-2000-S	1.116	28.36	9.01	40.08	10.20	1.78
C0353-045-2125-S	1.184	30.06	9.01	40.08	9.57	1.68
C0353-045-2250-S	1.251	31.77	9.01	40.08	9.02	1.58
C0353-045-2375-S	1.318	33.48	9.01	40.08	8.52	1.49
C0353-045-2500-S	1.385	35.18	9.01	40.08	8.08	1.41
C0353-045-2625-S	1.452	36.89	9.01	40.08	7.68	1.34
C0353-045-2750-S	1.519	38.59	9.01	40.08	7.32	1.28
C0353-045-2875-S	1.587	40.30	9.01	40.08	6.99	1.22
C0353-045-3000-S	1.654	42.01	9.01	40.08	6.69	1.17
C0353-045-3250-S	1.788	45.42	9.01	40.08	6.16	1.08
C0353-045-3500-S	1.923	48.83	9.01	40.08	5.71	1.00
C0353-045-3750-S	2.057	52.24	9.01	40.08	5.32	0.93
C0353-045-4000-S	2.191	55.66	9.01	40.08	4.98	0.87
C0353-045-4250-S	2.326	59.07	9.01	40.08	4.68	0.82
C0353-045-4500-S	2.460	62.48	9.01	40.08	4.42	0.77
C0353-045-4750-S	2.594	65.89	9.01	40.08	4.18	0.73
C0353-045-5000-S	2.729	69.31	9.01	40.08	3.97	0.69
C0353-045-5250-S	2.863	72.72	9.01	40.08	3.78	0.66
C0353-045-5500-S	2.997	76.13	9.01	40.08	3.60	0.63
C0353-045-5750-S	3.132	79.54	9.01	40.08	3.44	0.60
C0353-045-6000-S	3.266	82.96	9.01	40.08	3.30	0.58
C0353-047-0563-S	0.356	9.05	10.16	45.18	49.23	8.61

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0353-047-0625-M	0.353	8.97	0.047	1.19	0.625	15.88	0.369	9.38	0.341	8.65	12.76	56.77	49.95	8.74
C0353-047-0688-M	0.353	8.97	0.047	1.19	0.688	17.46	0.402	10.21	0.369	9.37	12.76	56.77	44.69	7.82
C0353-047-0750-M	0.353	8.97	0.047	1.19	0.750	19.05	0.434	11.03	0.398	10.10	12.76	56.77	40.43	7.07
C0353-047-0813-M	0.353	8.97	0.047	1.19	0.813	20.64	0.467	11.86	0.426	10.82	12.76	56.77	36.91	6.46
C0353-047-0875-M	0.353	8.97	0.047	1.19	0.875	22.23	0.499	12.68	0.454	11.54	12.76	56.77	33.96	5.94
C0353-047-0938-M	0.353	8.97	0.047	1.19	0.938	23.81	0.532	13.50	0.483	12.27	12.76	56.77	31.44	5.50
C0353-047-1000-M	0.353	8.97	0.047	1.19	1.000	25.40	0.564	14.33	0.511	12.99	12.76	56.77	29.27	5.12
C0353-047-1125-M	0.353	8.97	0.047	1.19	1.125	28.58	0.629	15.97	0.568	14.44	12.76	56.77	25.72	4.50
C0353-047-1250-M	0.353	8.97	0.047	1.19	1.250	31.75	0.694	17.62	0.625	15.88	12.76	56.77	22.94	4.01
C0353-047-1375-M	0.353	8.97	0.047	1.19	1.375	34.93	0.759	19.27	0.682	17.33	12.76	56.77	20.70	3.62
C0353-047-1500-M	0.353	8.97	0.047	1.19	1.500	38.10	0.823	20.91	0.739	18.78	12.76	56.77	18.86	3.30
C0353-047-1625-M	0.353	8.97	0.047	1.19	1.625	41.28	0.888	22.56	0.796	20.22	12.76	56.77	17.32	3.03
C0353-047-1750-M	0.353	8.97	0.047	1.19	1.750	44.45	0.953	24.21	0.853	21.67	12.76	56.77	16.02	2.80
C0353-047-1875-M	0.353	8.97	0.047	1.19	1.875	47.63	1.018	25.86	0.910	23.11	12.76	56.77	14.89	2.61
C0353-047-2000-M	0.353	8.97	0.047	1.19	2.000	50.80	1.083	27.50	0.967	24.56	12.76	56.77	13.92	2.44
C0353-047-2125-M	0.353	8.97	0.047	1.19	2.125	53.98	1.148	29.15	1.024	26.01	12.76	56.77	13.06	2.29
C0353-047-2250-M	0.353	8.97	0.047	1.19	2.250	57.15	1.212	30.80	1.081	27.45	12.76	56.77	12.30	2.15
C0353-047-2375-M	0.353	8.97	0.047	1.19	2.375	60.33	1.277	32.44	1.138	28.90	12.76	56.77	11.63	2.03
C0353-047-2500-M	0.353	8.97	0.047	1.19	2.500	63.50	1.342	34.09	1.195	30.35	12.76	56.77	11.02	1.93
C0353-047-2625-M	0.353	8.97	0.047	1.19	2.625	66.68	1.407	35.74	1.252	31.79	12.76	56.77	10.48	1.83
C0353-047-2750-M	0.353	8.97	0.047	1.19	2.750	69.85	1.472	37.39	1.309	33.24	12.76	56.77	9.99	1.75
C0353-047-2875-M	0.353	8.97	0.047	1.19	2.875	73.03	1.537	39.03	1.366	34.69	12.76	56.77	9.54	1.67
C0353-047-3000-M	0.353	8.97	0.047	1.19	3.000	76.20	1.602	40.68	1.423	36.13	12.76	56.77	9.13	1.60
C0353-047-3250-M	0.353	8.97	0.047	1.19	3.250	82.55	1.731	43.97	1.536	39.02	12.76	56.77	8.40	1.47
C0353-047-3500-M	0.353	8.97	0.047	1.19	3.500	88.90	1.861	47.27	1.650	41.92	12.76	56.77	7.79	1.36
C0353-047-3750-M	0.353	8.97	0.047	1.19	3.750	95.25	1.991	50.56	1.764	44.81	12.76	56.77	7.25	1.27
C0353-047-4000-M	0.353	8.97	0.047	1.19	4.000	101.60	2.120	53.86	1.878	47.70	12.76	56.77	6.79	1.19
C0353-047-4250-M	0.353	8.97	0.047	1.19	4.250	107.95	2.250	57.15	1.992	50.60	12.76	56.77	6.38	1.12
C0353-047-4500-M	0.353	8.97	0.047	1.19	4.500	114.30	2.380	60.44	2.106	53.49	12.76	56.77	6.02	1.05
C0353-047-4750-M	0.353	8.97	0.047	1.19	4.750	120.65	2.509	63.74	2.220	56.38	12.76	56.77	5.70	1.00
C0353-047-5000-M	0.353	8.97	0.047	1.19	5.000	127.00	2.639	67.03	2.334	59.27	12.76	56.77	5.41	0.95
C0353-047-5250-M	0.353	8.97	0.047	1.19	5.250	133.35	2.769	70.33	2.447	62.17	12.76	56.77	5.14	0.90
C0353-047-5500-M	0.353	8.97	0.047	1.19	5.500	139.70	2.898	73.62	2.561	65.06	12.76	56.77	4.91	0.86
C0353-047-5750-M	0.353	8.97	0.047	1.19	5.750	146.05	3.028	76.92	2.675	67.95	12.76	56.77	4.69	0.82
C0353-047-6000-M	0.353	8.97	0.047	1.19	6.000	152.40	3.158	80.21	2.789	70.84	12.76	56.77	4.49	0.79
C0353-049-0563-M	0.353	8.97	0.049	1.25	0.563	14.29	0.350	8.89	0.328	8.34	14.31	63.65	67.36	11.79
C0353-049-0625-M	0.353	8.97	0.049	1.25	0.625	15.88	0.384	9.75	0.359	9.11	14.31	63.65	59.37	10.39
C0353-049-0688-M	0.353	8.97	0.049	1.25	0.688	17.46	0.418	10.61	0.389	9.88	14.31	63.65	53.08	9.29
C0353-049-0750-M	0.353	8.97	0.049	1.25	0.750	19.05	0.452	11.48	0.419	10.65	14.31	63.65	47.99	8.40
C0353-049-0813-M	0.353	8.97	0.049	1.25	0.813	20.64	0.486	12.34	0.449	11.42	14.31	63.65	43.79	7.66
C0353-049-0875-M	0.353	8.97	0.049	1.25	0.875	22.23	0.520	13.20	0.480	12.19	14.31	63.65	40.27	7.05
C0353-049-0938-M	0.353	8.97	0.049	1.25	0.938	23.81	0.554	14.06	0.510	12.96	14.31	63.65	37.27	6.52
C0353-049-1000-M	0.353	8.97	0.049	1.25	1.000	25.40	0.587	14.92	0.540	13.73	14.31	63.65	34.69	6.07
C0353-049-1125-M	0.353	8.97	0.049	1.25	1.125	28.58	0.655	16.64	0.601	15.27	14.31	63.65	30.47	5.33
C0353-049-1250-M	0.353	8.97	0.049	1.25	1.250	31.75	0.723	18.37	0.662	16.81	14.31	63.65	27.16	4.75
C0353-049-1375-M	0.353	8.97	0.049	1.25	1.375	34.93	0.791	20.09	0.722	18.35	14.31	63.65	24.50	4.29
C0353-049-1500-M	0.353	8.97	0.049	1.25	1.500	38.10	0.859	21.81	0.783	19.89	14.31	63.65	22.32	3.91
C0353-049-1625-M	0.353	8.97	0.049	1.25	1.625	41.28	0.927	23.54	0.844	21.43	14.31	63.65	20.49	3.59
C0353-049-1750-M	0.353	8.97	0.049	1.25	1.750	44.45	0.994	25.26	0.904	22.97	14.31	63.65	18.94	3.31
C0353-049-1875-M	0.353	8.97	0.049	1.25	1.875	47.63	1.062	26.98	0.965	24.51	14.31	63.65	17.61	3.08
C0353-049-2000-M	0.353	8.97	0.049	1.25	2.000	50.80	1.130	28.71	1.025	26.05	14.31	63.65	16.45	2.88
C0353-049-2125-M	0.353	8.97	0.049	1.25	2.125	53.98	1.198	30.43	1.086	27.59	14.31	63.65	15.44	2.70
C0353-049-2250-M	0.353	8.97	0.049	1.25	2.250	57.15	1.266	32.15	1.147	29.13	14.31	63.65	14.54	2.54
C0353-049-2375-M	0.353	8.97	0.049	1.25	2.375	60.33	1.334	33.87	1.207	30.67	14.31	63.65	13.74	2.40
C0353-049-2500-M	0.353	8.97	0.049	1.25	2.500	63.50	1.401	35.60	1.268	32.21	14.31	63.65	13.03	2.28
C0353-049-2625-M	0.353	8.97	0.049	1.25	2.625	66.68	1.469	37.32	1.329	33.75	14.31	63.65	12.38	2.17
C0353-049-2750-M	0.353	8.97	0.049	1.25	2.750	69.85	1.537	39.04	1.389	35.29	14.31	63.65	11.80	2.06
C0353-049-2875-M	0.353	8.97	0.049	1.25	2.875	73.03	1.605	40.77	1.450	36.83	14.31	63.65	11.27	1.97
C0353-049-3000-M	0.353	8.97	0.049	1.25	3.000	76.20	1.673	42.49	1.510	38.37	14.31	63.65	10.78	1.89
C0353-049-3250-M	0.353	8.97	0.049	1.25	3.250	82.55	1.808	45.93	1.632	41.45	14.31	63.65	9.93	1.74
C0353-049-3500-M	0.353	8.97	0.049	1.25	3.500	88.90	1.944	49.38	1.753	44.53	14.31	63.65	9.20	1.61
C0353-049-3750-M	0.353	8.97	0.049	1.25	3.750	95.25	2.080	52.83	1.874	47.61	14.31	63.65	8.57	1.50
C0353-049-4000-M	0.353	8.97	0.049	1.25	4.000	101.60	2.215	56.27	1.996	50.69	14.31	63.65	8.02	1.40
C0353-049-4250-M	0.353	8.97	0.049	1.25	4.250	107.95	2.351	59.72	2.117	53.77	14.31	63.65	7.54	1.32

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0353-047-0625-S	0.391	9.93	10.16	45.18	43.43	7.60
C0353-047-0688-S	0.426	10.82	10.16	45.18	38.86	6.80
C0353-047-0750-S	0.461	11.71	10.16	45.18	35.16	6.15
C0353-047-0813-S	0.496	12.60	10.16	45.18	32.10	5.62
C0353-047-0875-S	0.531	13.49	10.16	45.18	29.53	5.17
C0353-047-0938-S	0.566	14.38	10.16	45.18	27.34	4.78
C0353-047-1000-S	0.601	15.26	10.16	45.18	25.46	4.45
C0353-047-1125-S	0.671	17.04	10.16	45.18	22.37	3.91
C0353-047-1250-S	0.741	18.82	10.16	45.18	19.95	3.49
C0353-047-1375-S	0.811	20.59	10.16	45.18	18.00	3.15
C0353-047-1500-S	0.881	22.37	10.16	45.18	16.40	2.87
C0353-047-1625-S	0.951	24.15	10.16	45.18	15.06	2.64
C0353-047-1750-S	1.021	25.92	10.16	45.18	13.93	2.44
C0353-047-1875-S	1.091	27.70	10.16	45.18	12.95	2.27
C0353-047-2000-S	1.161	29.48	10.16	45.18	12.10	2.12
C0353-047-2125-S	1.230	31.25	10.16	45.18	11.36	1.99
C0353-047-2250-S	1.300	33.03	10.16	45.18	10.70	1.87
C0353-047-2375-S	1.370	34.81	10.16	45.18	10.11	1.77
C0353-047-2500-S	1.440	36.58	10.16	45.18	9.59	1.68
C0353-047-2625-S	1.510	38.36	10.16	45.18	9.11	1.59
C0353-047-2750-S	1.580	40.14	10.16	45.18	8.68	1.52
C0353-047-2875-S	1.650	41.91	10.16	45.18	8.29	1.45
C0353-047-3000-S	1.720	43.69	10.16	45.18	7.94	1.39
C0353-047-3250-S	1.860	47.24	10.16	45.18	7.31	1.28
C0353-047-3500-S	2.000	50.80	10.16	45.18	6.77	1.18
C0353-047-3750-S	2.140	54.35	10.16	45.18	6.31	1.10
C0353-047-4000-S	2.280	57.90	10.16	45.18	5.90	1.03
C0353-047-4250-S	2.420	61.46	10.16	45.18	5.55	0.97
C0353-047-4500-S	2.559	65.01	10.16	45.18	5.23	0.92
C0353-047-4750-S	2.699	68.56	10.16	45.18	4.95	0.87
C0353-047-5000-S	2.839	72.12	10.16	45.18	4.70	0.82
C0353-047-5250-S	2.979	75.67	10.16	45.18	4.47	0.78
C0353-047-5500-S	3.119	79.22	10.16	45.18	4.27	0.75
C0353-047-5750-S	3.259	82.78	10.16	45.18	4.08	0.71
C0353-047-6000-S	3.399	86.33	10.16	45.18	3.91	0.68
C0353-049-0563-S	0.368	9.35	11.39	50.65	58.57	10.25
C0353-049-0625-S	0.404	10.27	11.39	50.65	51.63	9.03
C0353-049-0688-S	0.441	11.20	11.39	50.65	46.15	8.08
C0353-049-0750-S	0.477	12.12	11.39	50.65	41.73	7.30
C0353-049-0813-S	0.513	13.04	11.39	50.65	38.08	6.66
C0353-049-0875-S	0.550	13.96	11.39	50.65	35.02	6.13
C0353-049-0938-S	0.586	14.89	11.39	50.65	32.41	5.67
C0353-049-1000-S	0.622	15.81	11.39	50.65	30.16	5.28
C0353-049-1125-S	0.695	17.66	11.39	50.65	26.49	4.64
C0353-049-1250-S	0.768	19.50	11.39	50.65	23.62	4.13
C0353-049-1375-S	0.841	21.35	11.39	50.65	21.31	3.73
C0353-049-1500-S	0.913	23.19	11.39	50.65	19.41	3.40
C0353-049-1625-S	0.986	25.04	11.39	50.65	17.82	3.12
C0353-049-1750-S	1.059	26.89	11.39	50.65	16.47	2.88
C0353-049-1875-S	1.131	28.73	11.39	50.65	15.31	2.68
C0353-049-2000-S	1.204	30.58	11.39	50.65	14.30	2.50
C0353-049-2125-S	1.277	32.43	11.39	50.65	13.42	2.35
C0353-049-2250-S	1.349	34.27	11.39	50.65	12.64	2.21
C0353-049-2375-S	1.422	36.12	11.39	50.65	11.95	2.09
C0353-049-2500-S	1.495	37.96	11.39	50.65	11.33	1.98
C0353-049-2625-S	1.567	39.81	11.39	50.65	10.77	1.88
C0353-049-2750-S	1.640	41.66	11.39	50.65	10.26	1.80
C0353-049-2875-S	1.713	43.50	11.39	50.65	9.80	1.71
C0353-049-3000-S	1.785	45.35	11.39	50.65	9.38	1.64
C0353-049-3250-S	1.931	49.04	11.39	50.65	8.63	1.51
C0353-049-3500-S	2.076	52.73	11.39	50.65	8.00	1.40
C0353-049-3750-S	2.221	56.42	11.39	50.65	7.45	1.30
C0353-049-4000-S	2.367	60.12	11.39	50.65	6.97	1.22
C0353-049-4250-S	2.512	63.81	11.39	50.65	6.55	1.15

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0353-049-4500-M	**0.353**	**8.97**	**0.049**	**1.25**	**4.500**	**114.30**	**2.487**	**63.16**	**2.238**	**56.85**	**14.31**	**63.65**	**7.11**	**1.24**
C0353-049-4750-M	**0.353**	**8.97**	**0.049**	**1.25**	**4.750**	**120.65**	**2.622**	**66.61**	**2.359**	**59.93**	**14.31**	**63.65**	**6.73**	**1.18**
C0353-049-5000-M	**0.353**	**8.97**	**0.049**	**1.25**	**5.000**	**127.00**	**2.758**	**70.06**	**2.481**	**63.01**	**14.31**	**63.65**	**6.38**	**1.12**
C0353-049-5250-M	**0.353**	**8.97**	**0.049**	**1.25**	**5.250**	**133.35**	**2.894**	**73.50**	**2.602**	**66.09**	**14.31**	**63.65**	**6.07**	**1.06**
C0353-049-5500-M	**0.353**	**8.97**	**0.049**	**1.25**	**5.500**	**139.70**	**3.029**	**76.95**	**2.723**	**69.17**	**14.31**	**63.65**	**5.79**	**1.01**
C0353-049-5750-M	**0.353**	**8.97**	**0.049**	**1.25**	**5.750**	**146.05**	**3.165**	**80.39**	**2.844**	**72.25**	**14.31**	**63.65**	**5.54**	**0.97**
C0353-049-6000-M	**0.353**	**8.97**	**0.049**	**1.25**	**6.000**	**152.40**	**3.301**	**83.84**	**2.966**	**75.33**	**14.31**	**63.65**	**5.30**	**0.93**
C0353-051-0563-M	**0.353**	**8.97**	**0.051**	**1.30**	**0.563**	**14.29**	**0.363**	**9.21**	**0.344**	**8.73**	**15.97**	**71.02**	**79.89**	**13.98**
C0353-051-0625-M	**0.353**	**8.97**	**0.051**	**1.30**	**0.625**	**15.88**	**0.398**	**10.11**	**0.376**	**9.55**	**15.97**	**71.02**	**70.35**	**12.31**
C0353-051-0688-M	**0.353**	**8.97**	**0.051**	**1.30**	**0.688**	**17.46**	**0.433**	**11.01**	**0.408**	**10.36**	**15.97**	**71.02**	**62.84**	**11.00**
C0353-051-0750-M	**0.353**	**8.97**	**0.051**	**1.30**	**0.750**	**19.05**	**0.469**	**11.91**	**0.440**	**11.18**	**15.97**	**71.02**	**56.78**	**9.94**
C0353-051-0813-M	**0.353**	**8.97**	**0.051**	**1.30**	**0.813**	**20.64**	**0.504**	**12.81**	**0.472**	**11.99**	**15.97**	**71.02**	**51.78**	**9.06**
C0353-051-0875-M	**0.353**	**8.97**	**0.051**	**1.30**	**0.875**	**22.23**	**0.540**	**13.70**	**0.504**	**12.81**	**15.97**	**71.02**	**47.59**	**8.33**
C0353-051-0938-M	**0.353**	**8.97**	**0.051**	**1.30**	**0.938**	**23.81**	**0.575**	**14.60**	**0.536**	**13.63**	**15.97**	**71.02**	**44.03**	**7.71**
C0353-051-1000-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.000**	**25.40**	**0.610**	**15.50**	**0.569**	**14.44**	**15.97**	**71.02**	**40.97**	**7.17**
C0353-051-1125-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.125**	**28.58**	**0.681**	**17.30**	**0.633**	**16.07**	**15.97**	**71.02**	**35.96**	**6.29**
C0353-051-1250-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.250**	**31.75**	**0.752**	**19.10**	**0.697**	**17.71**	**15.97**	**71.02**	**32.05**	**5.61**
C0353-051-1375-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.375**	**34.93**	**0.823**	**20.89**	**0.761**	**19.34**	**15.97**	**71.02**	**28.90**	**5.06**
C0353-051-1500-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.500**	**38.10**	**0.893**	**22.69**	**0.826**	**20.97**	**15.97**	**71.02**	**26.32**	**4.61**
C0353-051-1625-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.625**	**41.28**	**0.964**	**24.49**	**0.890**	**22.60**	**15.97**	**71.02**	**24.16**	**4.23**
C0353-051-1750-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.750**	**44.45**	**1.035**	**26.28**	**0.954**	**24.23**	**15.97**	**71.02**	**22.32**	**3.91**
C0353-051-1875-M	**0.353**	**8.97**	**0.051**	**1.30**	**1.875**	**47.63**	**1.106**	**28.08**	**1.018**	**25.86**	**15.97**	**71.02**	**20.75**	**3.63**
C0353-051-2000-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.000**	**50.80**	**1.176**	**29.88**	**1.083**	**27.50**	**15.97**	**71.02**	**19.38**	**3.39**
C0353-051-2125-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.125**	**53.98**	**1.247**	**31.68**	**1.147**	**29.13**	**15.97**	**71.02**	**18.19**	**3.18**
C0353-051-2250-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.250**	**57.15**	**1.318**	**33.47**	**1.211**	**30.76**	**15.97**	**71.02**	**17.13**	**3.00**
C0353-051-2375-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.375**	**60.33**	**1.389**	**35.27**	**1.275**	**32.39**	**15.97**	**71.02**	**16.19**	**2.83**
C0353-051-2500-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.500**	**63.50**	**1.459**	**37.07**	**1.339**	**34.02**	**15.97**	**71.02**	**15.34**	**2.68**
C0353-051-2625-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.625**	**66.68**	**1.530**	**38.86**	**1.404**	**35.65**	**15.97**	**71.02**	**14.58**	**2.55**
C0353-051-2750-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.750**	**69.85**	**1.601**	**40.66**	**1.468**	**37.29**	**15.97**	**71.02**	**13.89**	**2.43**
C0353-051-2875-M	**0.353**	**8.97**	**0.051**	**1.30**	**2.875**	**73.03**	**1.672**	**42.46**	**1.532**	**38.92**	**15.97**	**71.02**	**13.27**	**2.32**
C0353-051-3000-M	**0.353**	**8.97**	**0.051**	**1.30**	**3.000**	**76.20**	**1.742**	**44.26**	**1.596**	**40.55**	**15.97**	**71.02**	**12.70**	**2.22**
C0353-051-3250-M	**0.353**	**8.97**	**0.051**	**1.30**	**3.250**	**82.55**	**1.884**	**47.85**	**1.725**	**43.81**	**15.97**	**71.02**	**11.69**	**2.05**
C0353-051-3500-M	**0.353**	**8.97**	**0.051**	**1.30**	**3.500**	**88.90**	**2.025**	**51.44**	**1.853**	**47.08**	**15.97**	**71.02**	**10.83**	**1.89**
C0353-051-3750-M	**0.353**	**8.97**	**0.051**	**1.30**	**3.750**	**95.25**	**2.167**	**55.04**	**1.982**	**50.34**	**15.97**	**71.02**	**10.09**	**1.76**
C0353-051-4000-M	**0.353**	**8.97**	**0.051**	**1.30**	**4.000**	**101.60**	**2.308**	**58.63**	**2.110**	**53.60**	**15.97**	**71.02**	**9.44**	**1.65**
C0353-051-4250-M	**0.353**	**8.97**	**0.051**	**1.30**	**4.250**	**107.95**	**2.450**	**62.23**	**2.239**	**56.87**	**15.97**	**71.02**	**8.87**	**1.55**
C0353-051-4500-M	**0.353**	**8.97**	**0.051**	**1.30**	**4.500**	**114.30**	**2.591**	**65.82**	**2.367**	**60.13**	**15.97**	**71.02**	**8.37**	**1.46**
C0353-051-4750-M	**0.353**	**8.97**	**0.051**	**1.30**	**4.750**	**120.65**	**2.733**	**69.42**	**2.496**	**63.39**	**15.97**	**71.02**	**7.92**	**1.39**
C0353-051-5000-M	**0.353**	**8.97**	**0.051**	**1.30**	**5.000**	**127.00**	**2.874**	**73.01**	**2.624**	**66.66**	**15.97**	**71.02**	**7.51**	**1.31**
C0353-051-5250-M	**0.353**	**8.97**	**0.051**	**1.30**	**5.250**	**133.35**	**3.016**	**76.60**	**2.753**	**69.92**	**15.97**	**71.02**	**7.15**	**1.25**
C0353-051-5500-M	**0.353**	**8.97**	**0.051**	**1.30**	**5.500**	**139.70**	**3.157**	**80.20**	**2.881**	**73.18**	**15.97**	**71.02**	**6.82**	**1.19**
C0353-051-5750-M	**0.353**	**8.97**	**0.051**	**1.30**	**5.750**	**146.05**	**3.299**	**83.79**	**3.010**	**76.45**	**15.97**	**71.02**	**6.51**	**1.14**
C0353-051-6000-M	**0.353**	**8.97**	**0.051**	**1.30**	**6.000**	**152.40**	**3.440**	**87.39**	**3.138**	**79.71**	**15.97**	**71.02**	**6.24**	**1.09**
C0353-055-0563-M	**0.353**	**8.97**	**0.055**	**1.40**	**0.563**	**14.29**	**0.386**	**9.82**	**0.373**	**9.48**	**19.62**	**87.26**	**111.42**	**19.50**
C0353-055-0625-M	**0.353**	**8.97**	**0.055**	**1.40**	**0.625**	**15.88**	**0.425**	**10.79**	**0.409**	**10.38**	**19.62**	**87.26**	**97.90**	**17.13**
C0353-055-0688-M	**0.353**	**8.97**	**0.055**	**1.40**	**0.688**	**17.46**	**0.463**	**11.76**	**0.444**	**11.29**	**19.62**	**87.26**	**87.30**	**15.28**
C0353-055-0750-M	**0.353**	**8.97**	**0.055**	**1.40**	**0.750**	**19.05**	**0.501**	**12.72**	**0.480**	**12.19**	**19.62**	**87.26**	**78.78**	**13.79**
C0353-055-0813-M	**0.353**	**8.97**	**0.055**	**1.40**	**0.813**	**20.64**	**0.539**	**13.69**	**0.515**	**13.09**	**19.62**	**87.26**	**71.77**	**12.56**
C0353-055-0875-M	**0.353**	**8.97**	**0.055**	**1.40**	**0.875**	**22.23**	**0.577**	**14.66**	**0.551**	**14.00**	**19.62**	**87.26**	**65.90**	**11.53**
C0353-055-0938-M	**0.353**	**8.97**	**0.055**	**1.40**	**0.938**	**23.81**	**0.616**	**15.63**	**0.587**	**14.90**	**19.62**	**87.26**	**60.93**	**10.66**
C0353-055-1000-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.000**	**25.40**	**0.654**	**16.60**	**0.622**	**15.80**	**19.62**	**87.26**	**56.65**	**9.91**
C0353-055-1125-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.125**	**28.58**	**0.730**	**18.54**	**0.693**	**17.61**	**19.62**	**87.26**	**49.67**	**8.69**
C0353-055-1250-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.250**	**31.75**	**0.806**	**20.48**	**0.765**	**19.42**	**19.62**	**87.26**	**44.23**	**7.74**
C0353-055-1375-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.375**	**34.93**	**0.883**	**22.42**	**0.836**	**21.23**	**19.62**	**87.26**	**39.86**	**6.97**
C0353-055-1500-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.500**	**38.10**	**0.959**	**24.36**	**0.907**	**23.04**	**19.62**	**87.26**	**36.27**	**6.35**
C0353-055-1625-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.625**	**41.28**	**1.036**	**26.30**	**0.978**	**24.84**	**19.62**	**87.26**	**33.28**	**5.82**
C0353-055-1750-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.750**	**44.45**	**1.112**	**28.24**	**1.049**	**26.65**	**19.62**	**87.26**	**30.74**	**5.38**
C0353-055-1875-M	**0.353**	**8.97**	**0.055**	**1.40**	**1.875**	**47.63**	**1.188**	**30.18**	**1.120**	**28.46**	**19.62**	**87.26**	**28.57**	**5.00**
C0353-055-2000-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.000**	**50.80**	**1.265**	**32.12**	**1.192**	**30.27**	**19.62**	**87.26**	**26.68**	**4.67**
C0353-055-2125-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.125**	**53.98**	**1.341**	**34.06**	**1.263**	**32.07**	**19.62**	**87.26**	**25.02**	**4.38**
C0353-055-2250-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.250**	**57.15**	**1.417**	**36.00**	**1.334**	**33.88**	**19.62**	**87.26**	**23.56**	**4.12**
C0353-055-2375-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.375**	**60.33**	**1.494**	**37.94**	**1.405**	**35.69**	**19.62**	**87.26**	**22.26**	**3.90**
C0353-055-2500-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.500**	**63.50**	**1.570**	**39.88**	**1.476**	**37.50**	**19.62**	**87.26**	**21.10**	**3.69**
C0353-055-2625-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.625**	**66.68**	**1.646**	**41.82**	**1.547**	**39.30**	**19.62**	**87.26**	**20.05**	**3.51**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0353-049-4500-S	**2.658**	**67.50**	**11.39**	**50.65**	**6.18**	**1.08**
C0353-049-4750-S	**2.803**	**71.19**	**11.39**	**50.65**	**5.85**	**1.02**
C0353-049-5000-S	**2.948**	**74.89**	**11.39**	**50.65**	**5.55**	**0.97**
C0353-049-5250-S	**3.094**	**78.58**	**11.39**	**50.65**	**5.28**	**0.92**
C0353-049-5500-S	**3.239**	**82.27**	**11.39**	**50.65**	**5.04**	**0.88**
C0353-049-5750-S	**3.384**	**85.96**	**11.39**	**50.65**	**4.81**	**0.84**
C0353-049-6000-S	**3.530**	**89.65**	**11.39**	**50.65**	**4.61**	**0.81**
C0353-051-0563-S	**0.380**	**9.64**	**12.70**	**56.51**	**69.47**	**12.16**
C0353-051-0625-S	**0.417**	**10.60**	**12.70**	**56.51**	**61.17**	**10.70**
C0353-051-0688-S	**0.455**	**11.56**	**12.70**	**56.51**	**54.64**	**9.56**
C0353-051-0750-S	**0.493**	**12.51**	**12.70**	**56.51**	**49.37**	**8.64**
C0353-051-0813-S	**0.530**	**13.47**	**12.70**	**56.51**	**45.03**	**7.88**
C0353-051-0875-S	**0.568**	**14.43**	**12.70**	**56.51**	**41.39**	**7.24**
C0353-051-0938-S	**0.606**	**15.39**	**12.70**	**56.51**	**38.29**	**6.70**
C0353-051-1000-S	**0.643**	**16.34**	**12.70**	**56.51**	**35.63**	**6.23**
C0353-051-1125-S	**0.719**	**18.26**	**12.70**	**56.51**	**31.27**	**5.47**
C0353-051-1250-S	**0.794**	**20.17**	**12.70**	**56.51**	**27.87**	**4.88**
C0353-051-1375-S	**0.869**	**22.09**	**12.70**	**56.51**	**25.13**	**4.40**
C0353-051-1500-S	**0.945**	**24.00**	**12.70**	**56.51**	**22.88**	**4.00**
C0353-051-1625-S	**1.020**	**25.91**	**12.70**	**56.51**	**21.01**	**3.68**
C0353-051-1750-S	**1.096**	**27.83**	**12.70**	**56.51**	**19.41**	**3.40**
C0353-051-1875-S	**1.171**	**29.74**	**12.70**	**56.51**	**18.04**	**3.16**
C0353-051-2000-S	**1.246**	**31.66**	**12.70**	**56.51**	**16.86**	**2.95**
C0353-051-2125-S	**1.322**	**33.57**	**12.70**	**56.51**	**15.81**	**2.77**
C0353-051-2250-S	**1.397**	**35.48**	**12.70**	**56.51**	**14.89**	**2.61**
C0353-051-2375-S	**1.472**	**37.40**	**12.70**	**56.51**	**14.08**	**2.46**
C0353-051-2500-S	**1.548**	**39.31**	**12.70**	**56.51**	**13.34**	**2.33**
C0353-051-2625-S	**1.623**	**41.23**	**12.70**	**56.51**	**12.68**	**2.22**
C0353-051-2750-S	**1.698**	**43.14**	**12.70**	**56.51**	**12.08**	**2.11**
C0353-051-2875-S	**1.774**	**45.06**	**12.70**	**56.51**	**11.54**	**2.02**
C0353-051-3000-S	**1.849**	**46.97**	**12.70**	**56.51**	**11.04**	**1.93**
C0353-051-3250-S	**2.000**	**50.80**	**12.70**	**56.51**	**10.16**	**1.78**
C0353-051-3500-S	**2.151**	**54.63**	**12.70**	**56.51**	**9.42**	**1.65**
C0353-051-3750-S	**2.301**	**58.45**	**12.70**	**56.51**	**8.77**	**1.53**
C0353-051-4000-S	**2.452**	**62.28**	**12.70**	**56.51**	**8.21**	**1.44**
C0353-051-4250-S	**2.603**	**66.11**	**12.70**	**56.51**	**7.71**	**1.35**
C0353-051-4500-S	**2.754**	**69.94**	**12.70**	**56.51**	**7.27**	**1.27**
C0353-051-4750-S	**2.904**	**73.77**	**12.70**	**56.51**	**6.88**	**1.20**
C0353-051-5000-S	**3.055**	**77.60**	**12.70**	**56.51**	**6.53**	**1.14**
C0353-051-5250-S	**3.206**	**81.43**	**12.70**	**56.51**	**6.21**	**1.09**
C0353-051-5500-S	**3.356**	**85.25**	**12.70**	**56.51**	**5.93**	**1.04**
C0353-051-5750-S	**3.507**	**89.08**	**12.70**	**56.51**	**5.66**	**0.99**
C0353-051-6000-S	**3.658**	**92.91**	**12.70**	**56.51**	**5.42**	**0.95**
C0353-055-0563-S	**0.401**	**10.20**	**15.60**	**69.39**	**96.89**	**16.95**
C0353-055-0625-S	**0.442**	**11.22**	**15.60**	**69.39**	**85.13**	**14.90**
C0353-055-0688-S	**0.482**	**12.24**	**15.60**	**69.39**	**75.92**	**13.29**
C0353-055-0750-S	**0.522**	**13.27**	**15.60**	**69.39**	**68.50**	**11.99**
C0353-055-0813-S	**0.563**	**14.29**	**15.60**	**69.39**	**62.41**	**10.92**
C0353-055-0875-S	**0.603**	**15.31**	**15.60**	**69.39**	**57.31**	**10.03**
C0353-055-0938-S	**0.643**	**16.33**	**15.60**	**69.39**	**52.98**	**9.27**
C0353-055-1000-S	**0.683**	**17.36**	**15.60**	**69.39**	**49.26**	**8.62**
C0353-055-1125-S	**0.764**	**19.40**	**15.60**	**69.39**	**43.19**	**7.56**
C0353-055-1250-S	**0.844**	**21.45**	**15.60**	**69.39**	**38.46**	**6.73**
C0353-055-1375-S	**0.925**	**23.49**	**15.60**	**69.39**	**34.66**	**6.06**
C0353-055-1500-S	**1.005**	**25.54**	**15.60**	**69.39**	**31.54**	**5.52**
C0353-055-1625-S	**1.086**	**27.58**	**15.60**	**69.39**	**28.94**	**5.06**
C0353-055-1750-S	**1.166**	**29.63**	**15.60**	**69.39**	**26.73**	**4.68**
C0353-055-1875-S	**1.247**	**31.67**	**15.60**	**69.39**	**24.84**	**4.35**
C0353-055-2000-S	**1.328**	**33.72**	**15.60**	**69.39**	**23.20**	**4.06**
C0353-055-2125-S	**1.408**	**35.76**	**15.60**	**69.39**	**21.76**	**3.81**
C0353-055-2250-S	**1.489**	**37.81**	**15.60**	**69.39**	**20.49**	**3.59**
C0353-055-2375-S	**1.569**	**39.86**	**15.60**	**69.39**	**19.36**	**3.39**
C0353-055-2500-S	**1.650**	**41.90**	**15.60**	**69.39**	**18.34**	**3.21**
C0353-055-2625-S	**1.730**	**43.95**	**15.60**	**69.39**	**17.43**	**3.05**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0353-055-2750-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.750**	**69.85**	**1.723**	**43.76**	**1.619**	**41.11**	**19.62**	**87.26**	**19.10**	**3.34**
C0353-055-2875-M	**0.353**	**8.97**	**0.055**	**1.40**	**2.875**	**73.03**	**1.799**	**45.70**	**1.690**	**42.92**	**19.62**	**87.26**	**18.23**	**3.19**
C0353-055-3000-M	**0.353**	**8.97**	**0.055**	**1.40**	**3.000**	**76.20**	**1.876**	**47.64**	**1.761**	**44.73**	**19.62**	**87.26**	**17.45**	**3.05**
C0353-055-3250-M	**0.353**	**8.97**	**0.055**	**1.40**	**3.250**	**82.55**	**2.028**	**51.52**	**1.903**	**48.34**	**19.62**	**87.26**	**16.06**	**2.81**
C0353-055-3500-M	**0.353**	**8.97**	**0.055**	**1.40**	**3.500**	**88.90**	**2.181**	**55.40**	**2.046**	**51.96**	**19.62**	**87.26**	**14.87**	**2.60**
C0353-055-3750-M	**0.353**	**8.97**	**0.055**	**1.40**	**3.750**	**95.25**	**2.334**	**59.28**	**2.188**	**55.57**	**19.62**	**87.26**	**13.85**	**2.42**
C0353-055-4000-M	**0.353**	**8.97**	**0.055**	**1.40**	**4.000**	**101.60**	**2.486**	**63.16**	**2.330**	**59.19**	**19.62**	**87.26**	**12.96**	**2.27**
C0353-055-4250-M	**0.353**	**8.97**	**0.055**	**1.40**	**4.250**	**107.95**	**2.639**	**67.03**	**2.473**	**62.81**	**19.62**	**87.26**	**12.18**	**2.13**
C0353-055-4500-M	**0.353**	**8.97**	**0.055**	**1.40**	**4.500**	**114.30**	**2.792**	**70.91**	**2.615**	**66.42**	**19.62**	**87.26**	**11.48**	**2.01**
C0353-055-4750-M	**0.353**	**8.97**	**0.055**	**1.40**	**4.750**	**120.65**	**2.945**	**74.79**	**2.757**	**70.04**	**19.62**	**87.26**	**10.87**	**1.90**
C0353-055-5000-M	**0.353**	**8.97**	**0.055**	**1.40**	**5.000**	**127.00**	**3.097**	**78.67**	**2.900**	**73.65**	**19.62**	**87.26**	**10.31**	**1.80**
C0353-055-5250-M	**0.353**	**8.97**	**0.055**	**1.40**	**5.250**	**133.35**	**3.250**	**82.55**	**3.042**	**77.27**	**19.62**	**87.26**	**9.81**	**1.72**
C0353-055-5500-M	**0.353**	**8.97**	**0.055**	**1.40**	**5.500**	**139.70**	**3.403**	**86.43**	**3.184**	**80.88**	**19.62**	**87.26**	**9.35**	**1.64**
C0353-055-5750-M	**0.353**	**8.97**	**0.055**	**1.40**	**5.750**	**146.05**	**3.556**	**90.31**	**3.327**	**84.50**	**19.62**	**87.26**	**8.94**	**1.56**
C0353-059-0563-M	**0.353**	**8.97**	**0.059**	**1.50**	**0.563**	**14.29**	**0.408**	**10.37**	**0.400**	**10.16**	**23.73**	**105.55**	**153.79**	**26.91**
C0353-059-0625-M	**0.353**	**8.97**	**0.059**	**1.50**	**0.625**	**15.88**	**0.449**	**11.40**	**0.439**	**11.15**	**23.73**	**105.55**	**134.83**	**23.60**
C0353-059-0688-M	**0.353**	**8.97**	**0.059**	**1.50**	**0.688**	**17.46**	**0.490**	**12.44**	**0.478**	**12.13**	**23.73**	**105.55**	**120.03**	**21.01**
C0353-059-0750-M	**0.353**	**8.97**	**0.059**	**1.50**	**0.750**	**19.05**	**0.531**	**13.48**	**0.516**	**13.12**	**23.73**	**105.55**	**108.16**	**18.93**
C0353-059-0813-M	**0.353**	**8.97**	**0.059**	**1.50**	**0.813**	**20.64**	**0.571**	**14.51**	**0.555**	**14.11**	**23.73**	**105.55**	**98.43**	**17.22**
C0353-059-0875-M	**0.353**	**8.97**	**0.059**	**1.50**	**0.875**	**22.23**	**0.612**	**15.55**	**0.594**	**15.09**	**23.73**	**105.55**	**90.30**	**15.80**
C0353-059-0938-M	**0.353**	**8.97**	**0.059**	**1.50**	**0.938**	**23.81**	**0.653**	**16.59**	**0.633**	**16.08**	**23.73**	**105.55**	**83.42**	**14.60**
C0353-059-1000-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.000**	**25.40**	**0.694**	**17.62**	**0.672**	**17.06**	**23.73**	**105.55**	**77.50**	**13.56**
C0353-059-1125-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.125**	**28.58**	**0.775**	**19.70**	**0.749**	**19.04**	**23.73**	**105.55**	**67.88**	**11.88**
C0353-059-1250-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.250**	**31.75**	**0.857**	**21.77**	**0.827**	**21.01**	**23.73**	**105.55**	**60.39**	**10.57**
C0353-059-1375-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.375**	**34.93**	**0.939**	**23.84**	**0.905**	**22.98**	**23.73**	**105.55**	**54.38**	**9.52**
C0353-059-1500-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.500**	**38.10**	**1.020**	**25.91**	**0.982**	**24.95**	**23.73**	**105.55**	**49.46**	**8.66**
C0353-059-1625-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.625**	**41.28**	**1.102**	**27.99**	**1.060**	**26.92**	**23.73**	**105.55**	**45.36**	**7.94**
C0353-059-1750-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.750**	**44.45**	**1.183**	**30.06**	**1.138**	**28.90**	**23.73**	**105.55**	**41.89**	**7.33**
C0353-059-1875-M	**0.353**	**8.97**	**0.059**	**1.50**	**1.875**	**47.63**	**1.265**	**32.13**	**1.215**	**30.87**	**23.73**	**105.55**	**38.91**	**6.81**
C0353-059-2000-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.000**	**50.80**	**1.347**	**34.21**	**1.293**	**32.84**	**23.73**	**105.55**	**36.32**	**6.36**
C0353-059-2125-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.125**	**53.98**	**1.428**	**36.28**	**1.371**	**34.81**	**23.73**	**105.55**	**34.06**	**5.96**
C0353-059-2250-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.250**	**57.15**	**1.510**	**38.35**	**1.448**	**36.79**	**23.73**	**105.55**	**32.06**	**5.61**
C0353-059-2375-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.375**	**60.33**	**1.592**	**40.42**	**1.526**	**38.76**	**23.73**	**105.55**	**30.29**	**5.30**
C0353-059-2500-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.500**	**63.50**	**1.673**	**42.50**	**1.604**	**40.73**	**23.73**	**105.55**	**28.70**	**5.02**
C0353-059-2625-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.625**	**66.68**	**1.755**	**44.57**	**1.681**	**42.70**	**23.73**	**105.55**	**27.27**	**4.77**
C0353-059-2750-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.750**	**69.85**	**1.836**	**46.64**	**1.759**	**44.68**	**23.73**	**105.55**	**25.97**	**4.55**
C0353-059-2875-M	**0.353**	**8.97**	**0.059**	**1.50**	**2.875**	**73.03**	**1.918**	**48.72**	**1.837**	**46.65**	**23.73**	**105.55**	**24.79**	**4.34**
C0353-059-3000-M	**0.353**	**8.97**	**0.059**	**1.50**	**3.000**	**76.20**	**2.000**	**50.79**	**1.914**	**48.62**	**23.73**	**105.55**	**23.72**	**4.15**
C0353-059-3250-M	**0.353**	**8.97**	**0.059**	**1.50**	**3.250**	**82.55**	**2.163**	**54.93**	**2.069**	**52.56**	**23.73**	**105.55**	**21.83**	**3.82**
C0353-059-3500-M	**0.353**	**8.97**	**0.059**	**1.50**	**3.500**	**88.90**	**2.326**	**59.08**	**2.225**	**56.51**	**23.73**	**105.55**	**20.21**	**3.54**
C0353-059-3750-M	**0.353**	**8.97**	**0.059**	**1.50**	**3.750**	**95.25**	**2.489**	**63.23**	**2.380**	**60.45**	**23.73**	**105.55**	**18.82**	**3.29**
C0353-059-4000-M	**0.353**	**8.97**	**0.059**	**1.50**	**4.000**	**101.60**	**2.652**	**67.37**	**2.535**	**64.40**	**23.73**	**105.55**	**17.61**	**3.08**
C0353-059-4250-M	**0.353**	**8.97**	**0.059**	**1.50**	**4.250**	**107.95**	**2.816**	**71.52**	**2.691**	**68.34**	**23.73**	**105.55**	**16.54**	**2.90**
C0353-059-4500-M	**0.353**	**8.97**	**0.059**	**1.50**	**4.500**	**114.30**	**2.979**	**75.66**	**2.846**	**72.29**	**23.73**	**105.55**	**15.60**	**2.73**
C0353-059-4750-M	**0.353**	**8.97**	**0.059**	**1.50**	**4.750**	**120.65**	**3.142**	**79.81**	**3.001**	**76.23**	**23.73**	**105.55**	**14.76**	**2.58**
C0353-059-5000-M	**0.353**	**8.97**	**0.059**	**1.50**	**5.000**	**127.00**	**3.305**	**83.95**	**3.157**	**80.18**	**23.73**	**105.55**	**14.00**	**2.45**
C0353-059-5250-M	**0.353**	**8.97**	**0.059**	**1.50**	**5.250**	**133.35**	**3.469**	**88.10**	**3.312**	**84.12**	**23.73**	**105.55**	**13.32**	**2.33**
C0353-059-5500-M	**0.353**	**8.97**	**0.059**	**1.50**	**5.500**	**139.70**	**3.632**	**92.25**	**3.467**	**88.07**	**23.73**	**105.55**	**12.70**	**2.22**
C0353-059-5750-M	**0.353**	**8.97**	**0.059**	**1.50**	**5.750**	**146.05**	**3.795**	**96.39**	**3.622**	**92.01**	**23.73**	**105.55**	**12.14**	**2.12**
C0353-063-0563-M	**0.353**	**8.97**	**0.063**	**1.60**	**0.563**	**14.29**	**0.428**	**10.87**	**0.424**	**10.78**	**28.32**	**125.96**	**210.33**	**36.81**
C0353-063-0625-M	**0.353**	**8.97**	**0.063**	**1.60**	**0.625**	**15.88**	**0.471**	**11.97**	**0.466**	**11.84**	**28.32**	**125.96**	**183.98**	**32.20**
C0353-063-0688-M	**0.353**	**8.97**	**0.063**	**1.60**	**0.688**	**17.46**	**0.514**	**13.06**	**0.508**	**12.90**	**28.32**	**125.96**	**163.50**	**28.61**
C0353-063-0750-M	**0.353**	**8.97**	**0.063**	**1.60**	**0.750**	**19.05**	**0.558**	**14.16**	**0.550**	**13.96**	**28.32**	**125.96**	**147.13**	**25.75**
C0353-063-0813-M	**0.353**	**8.97**	**0.063**	**1.60**	**0.813**	**20.64**	**0.601**	**15.26**	**0.592**	**15.03**	**28.32**	**125.96**	**133.73**	**23.40**
C0353-063-0875-M	**0.353**	**8.97**	**0.063**	**1.60**	**0.875**	**22.23**	**0.644**	**16.36**	**0.633**	**16.09**	**28.32**	**125.96**	**122.57**	**21.45**
C0353-063-0938-M	**0.353**	**8.97**	**0.063**	**1.60**	**0.938**	**23.81**	**0.687**	**17.46**	**0.675**	**17.15**	**28.32**	**125.96**	**113.13**	**19.80**
C0353-063-1000-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.000**	**25.40**	**0.730**	**18.55**	**0.717**	**18.21**	**28.32**	**125.96**	**105.04**	**18.38**
C0353-063-1125-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.125**	**28.58**	**0.817**	**20.75**	**0.801**	**20.34**	**28.32**	**125.96**	**91.90**	**16.08**
C0353-063-1250-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.250**	**31.75**	**0.903**	**22.94**	**0.884**	**22.46**	**28.32**	**125.96**	**81.68**	**14.29**
C0353-063-1375-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.375**	**34.93**	**0.990**	**25.14**	**0.968**	**24.58**	**28.32**	**125.96**	**73.51**	**12.86**
C0353-063-1500-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.500**	**38.10**	**1.076**	**27.34**	**1.052**	**26.71**	**28.32**	**125.96**	**66.82**	**11.69**
C0353-063-1625-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.625**	**41.28**	**1.163**	**29.53**	**1.135**	**28.83**	**28.32**	**125.96**	**61.25**	**10.72**
C0353-063-1750-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.750**	**44.45**	**1.249**	**31.73**	**1.219**	**30.96**	**28.32**	**125.96**	**56.53**	**9.89**
C0353-063-1875-M	**0.353**	**8.97**	**0.063**	**1.60**	**1.875**	**47.63**	**1.336**	**33.92**	**1.302**	**33.08**	**28.32**	**125.96**	**52.49**	**9.19**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0353-055-2750-S	**1.811**	**45.99**	**15.60**	**69.39**	**16.61**	**2.91**
C0353-055-2875-S	**1.891**	**48.04**	**15.60**	**69.39**	**15.86**	**2.77**
C0353-055-3000-S	**1.972**	**50.08**	**15.60**	**69.39**	**15.17**	**2.65**
C0353-055-3250-S	**2.133**	**54.17**	**15.60**	**69.39**	**13.96**	**2.44**
C0353-055-3500-S	**2.294**	**58.26**	**15.60**	**69.39**	**12.93**	**2.26**
C0353-055-3750-S	**2.455**	**62.35**	**15.60**	**69.39**	**12.04**	**2.11**
C0353-055-4000-S	**2.616**	**66.44**	**15.60**	**69.39**	**11.27**	**1.97**
C0353-055-4250-S	**2.777**	**70.53**	**15.60**	**69.39**	**10.59**	**1.85**
C0353-055-4500-S	**2.938**	**74.63**	**15.60**	**69.39**	**9.99**	**1.75**
C0353-055-4750-S	**3.099**	**78.72**	**15.60**	**69.39**	**9.45**	**1.65**
C0353-055-5000-S	**3.260**	**82.81**	**15.60**	**69.39**	**8.97**	**1.57**
C0353-055-5250-S	**3.421**	**86.90**	**15.60**	**69.39**	**8.53**	**1.49**
C0353-055-5500-S	**3.582**	**90.99**	**15.60**	**69.39**	**8.13**	**1.42**
C0353-055-5750-S	**3.743**	**95.08**	**15.60**	**69.39**	**7.77**	**1.36**
C0353-059-0563-S	**0.422**	**10.71**	**18.85**	**83.85**	**133.73**	**23.40**
C0353-059-0625-S	**0.464**	**11.79**	**18.85**	**83.85**	**117.24**	**20.52**
C0353-059-0688-S	**0.507**	**12.88**	**18.85**	**83.85**	**104.38**	**18.27**
C0353-059-0750-S	**0.550**	**13.96**	**18.85**	**83.85**	**94.05**	**16.46**
C0353-059-0813-S	**0.592**	**15.04**	**18.85**	**83.85**	**85.59**	**14.98**
C0353-059-0875-S	**0.635**	**16.13**	**18.85**	**83.85**	**78.52**	**13.74**
C0353-059-0938-S	**0.678**	**17.21**	**18.85**	**83.85**	**72.53**	**12.69**
C0353-059-1000-S	**0.720**	**18.30**	**18.85**	**83.85**	**67.40**	**11.79**
C0353-059-1125-S	**0.806**	**20.46**	**18.85**	**83.85**	**59.03**	**10.33**
C0353-059-1250-S	**0.891**	**22.63**	**18.85**	**83.85**	**52.51**	**9.19**
C0353-059-1375-S	**0.976**	**24.80**	**18.85**	**83.85**	**47.29**	**8.28**
C0353-059-1500-S	**1.062**	**26.97**	**18.85**	**83.85**	**43.01**	**7.53**
C0353-059-1625-S	**1.147**	**29.14**	**18.85**	**83.85**	**39.44**	**6.90**
C0353-059-1750-S	**1.232**	**31.30**	**18.85**	**83.85**	**36.42**	**6.37**
C0353-059-1875-S	**1.318**	**33.47**	**18.85**	**83.85**	**33.83**	**5.92**
C0353-059-2000-S	**1.403**	**35.64**	**18.85**	**83.85**	**31.58**	**5.53**
C0353-059-2125-S	**1.489**	**37.81**	**18.85**	**83.85**	**29.62**	**5.18**
C0353-059-2250-S	**1.574**	**39.98**	**18.85**	**83.85**	**27.88**	**4.88**
C0353-059-2375-S	**1.659**	**42.15**	**18.85**	**83.85**	**26.34**	**4.61**
C0353-059-2500-S	**1.745**	**44.31**	**18.85**	**83.85**	**24.96**	**4.37**
C0353-059-2625-S	**1.830**	**46.48**	**18.85**	**83.85**	**23.71**	**4.15**
C0353-059-2750-S	**1.915**	**48.65**	**18.85**	**83.85**	**22.58**	**3.95**
C0353-059-2875-S	**2.001**	**50.82**	**18.85**	**83.85**	**21.56**	**3.77**
C0353-059-3000-S	**2.086**	**52.99**	**18.85**	**83.85**	**20.63**	**3.61**
C0353-059-3250-S	**2.257**	**57.32**	**18.85**	**83.85**	**18.98**	**3.32**
C0353-059-3500-S	**2.427**	**61.66**	**18.85**	**83.85**	**17.58**	**3.08**
C0353-059-3750-S	**2.598**	**65.99**	**18.85**	**83.85**	**16.37**	**2.86**
C0353-059-4000-S	**2.769**	**70.33**	**18.85**	**83.85**	**15.31**	**2.68**
C0353-059-4250-S	**2.940**	**74.67**	**18.85**	**83.85**	**14.39**	**2.52**
C0353-059-4500-S	**3.110**	**79.00**	**18.85**	**83.85**	**13.57**	**2.37**
C0353-059-4750-S	**3.281**	**83.34**	**18.85**	**83.85**	**12.83**	**2.25**
C0353-059-5000-S	**3.452**	**87.68**	**18.85**	**83.85**	**12.18**	**2.13**
C0353-059-5250-S	**3.623**	**92.01**	**18.85**	**83.85**	**11.58**	**2.03**
C0353-059-5500-S	**3.793**	**96.35**	**18.85**	**83.85**	**11.05**	**1.93**
C0353-059-5750-S	**3.964**	**100.68**	**18.85**	**83.85**	**10.55**	**1.85**
C0353-063-0563-S	**0.440**	**11.17**	**22.46**	**99.93**	**182.89**	**32.01**
C0353-063-0625-S	**0.485**	**12.31**	**22.46**	**99.93**	**159.99**	**28.00**
C0353-063-0688-S	**0.529**	**13.45**	**22.46**	**99.93**	**142.18**	**24.88**
C0353-063-0750-S	**0.574**	**14.59**	**22.46**	**99.93**	**127.94**	**22.39**
C0353-063-0813-S	**0.619**	**15.73**	**22.46**	**99.93**	**116.29**	**20.35**
C0353-063-0875-S	**0.664**	**16.87**	**22.46**	**99.93**	**106.59**	**18.65**
C0353-063-0938-S	**0.709**	**18.01**	**22.46**	**99.93**	**98.38**	**17.22**
C0353-063-1000-S	**0.754**	**19.15**	**22.46**	**99.93**	**91.34**	**15.98**
C0353-063-1125-S	**0.844**	**21.43**	**22.46**	**99.93**	**79.91**	**13.98**
C0353-063-1250-S	**0.934**	**23.72**	**22.46**	**99.93**	**71.03**	**12.43**
C0353-063-1375-S	**1.024**	**26.00**	**22.46**	**99.93**	**63.92**	**11.19**
C0353-063-1500-S	**1.113**	**28.28**	**22.46**	**99.93**	**58.10**	**10.17**
C0353-063-1625-S	**1.203**	**30.56**	**22.46**	**99.93**	**53.26**	**9.32**
C0353-063-1750-S	**1.293**	**32.84**	**22.46**	**99.93**	**49.16**	**8.60**
C0353-063-1875-S	**1.383**	**35.12**	**22.46**	**99.93**	**45.65**	**7.99**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0353-063-2000-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.000**	**50.80**	**1.422**	**36.12**	**1.386**	**35.20**	**28.32**	**125.96**	**48.99**	**8.57**	**C0353-063-2000-S**	**1.473**	**37.41**	**22.46**	**99.93**	**42.60**	**7.46**
C0353-063-2125-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.125**	**53.98**	**1.508**	**38.31**	**1.470**	**37.33**	**28.32**	**125.96**	**45.93**	**8.04**	**C0353-063-2125-S**	**1.562**	**39.69**	**22.46**	**99.93**	**39.94**	**6.99**
C0353-063-2250-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.250**	**57.15**	**1.595**	**40.51**	**1.553**	**39.45**	**28.32**	**125.96**	**43.22**	**7.56**	**C0353-063-2250-S**	**1.652**	**41.97**	**22.46**	**99.93**	**37.59**	**6.58**
C0353-063-2375-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.375**	**60.33**	**1.681**	**42.71**	**1.637**	**41.58**	**28.32**	**125.96**	**40.82**	**7.14**	**C0353-063-2375-S**	**1.742**	**44.25**	**22.46**	**99.93**	**35.50**	**6.21**
C0353-063-2500-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.500**	**63.50**	**1.768**	**44.90**	**1.721**	**43.70**	**28.32**	**125.96**	**38.67**	**6.77**	**C0353-063-2500-S**	**1.832**	**46.53**	**22.46**	**99.93**	**33.63**	**5.88**
C0353-063-2625-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.625**	**66.68**	**1.854**	**47.10**	**1.804**	**45.83**	**28.32**	**125.96**	**36.74**	**6.43**	**C0353-063-2625-S**	**1.922**	**48.81**	**22.46**	**99.93**	**31.95**	**5.59**
C0353-063-2750-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.750**	**69.85**	**1.941**	**49.29**	**1.888**	**47.95**	**28.32**	**125.96**	**34.99**	**6.12**	**C0353-063-2750-S**	**2.012**	**51.09**	**22.46**	**99.93**	**30.42**	**5.32**
C0353-063-2875-M	**0.353**	**8.97**	**0.063**	**1.60**	**2.875**	**73.03**	**2.027**	**51.49**	**1.971**	**50.07**	**28.32**	**125.96**	**33.40**	**5.84**	**C0353-063-2875-S**	**2.101**	**53.38**	**22.46**	**99.93**	**29.04**	**5.08**
C0353-063-3000-M	**0.353**	**8.97**	**0.063**	**1.60**	**3.000**	**76.20**	**2.114**	**53.69**	**2.055**	**52.20**	**28.32**	**125.96**	**31.94**	**5.59**	**C0353-063-3000-S**	**2.191**	**55.66**	**22.46**	**99.93**	**27.78**	**4.86**
C0353-063-3250-M	**0.353**	**8.97**	**0.063**	**1.60**	**3.250**	**82.55**	**2.286**	**58.08**	**2.222**	**56.45**	**28.32**	**125.96**	**29.39**	**5.14**	**C0353-063-3250-S**	**2.371**	**60.22**	**22.46**	**99.93**	**25.56**	**4.47**
C0353-063-3500-M	**0.353**	**8.97**	**0.063**	**1.60**	**3.500**	**88.90**	**2.459**	**62.47**	**2.390**	**60.69**	**28.32**	**125.96**	**27.21**	**4.76**	**C0353-063-3500-S**	**2.551**	**64.78**	**22.46**	**99.93**	**23.66**	**4.14**
C0353-063-3750-M	**0.353**	**8.97**	**0.063**	**1.60**	**3.750**	**95.25**	**2.632**	**66.86**	**2.557**	**64.94**	**28.32**	**125.96**	**25.33**	**4.43**	**C0353-063-3750-S**	**2.730**	**69.35**	**22.46**	**99.93**	**22.03**	**3.86**
C0353-063-4000-M	**0.353**	**8.97**	**0.063**	**1.60**	**4.000**	**101.60**	**2.805**	**71.25**	**2.724**	**69.19**	**28.32**	**125.96**	**23.70**	**4.15**	**C0353-063-4000-S**	**2.910**	**73.91**	**22.46**	**99.93**	**20.61**	**3.61**
C0353-063-4250-M	**0.353**	**8.97**	**0.063**	**1.60**	**4.250**	**107.95**	**2.978**	**75.64**	**2.891**	**73.44**	**28.32**	**125.96**	**22.26**	**3.90**	**C0353-063-4250-S**	**3.090**	**78.47**	**22.46**	**99.93**	**19.36**	**3.39**
C0353-063-4500-M	**0.353**	**8.97**	**0.063**	**1.60**	**4.500**	**114.30**	**3.151**	**80.03**	**3.059**	**77.69**	**28.32**	**125.96**	**20.99**	**3.67**	**C0353-063-4500-S**	**3.269**	**83.04**	**22.46**	**99.93**	**18.25**	**3.19**
C0353-063-4750-M	**0.353**	**8.97**	**0.063**	**1.60**	**4.750**	**120.65**	**3.324**	**84.43**	**3.226**	**81.93**	**28.32**	**125.96**	**19.86**	**3.47**	**C0353-063-4750-S**	**3.449**	**87.60**	**22.46**	**99.93**	**17.27**	**3.02**
C0353-063-5000-M	**0.353**	**8.97**	**0.063**	**1.60**	**5.000**	**127.00**	**3.497**	**88.82**	**3.393**	**86.18**	**28.32**	**125.96**	**18.84**	**3.30**	**C0353-063-5000-S**	**3.628**	**92.16**	**22.46**	**99.93**	**16.38**	**2.87**
C0353-063-5250-M	**0.353**	**8.97**	**0.063**	**1.60**	**5.250**	**133.35**	**3.670**	**93.21**	**3.560**	**90.43**	**28.32**	**125.96**	**17.92**	**3.14**	**C0353-063-5250-S**	**3.808**	**96.73**	**22.46**	**99.93**	**15.58**	**2.73**
C0353-063-5500-M	**0.353**	**8.97**	**0.063**	**1.60**	**5.500**	**139.70**	**3.843**	**97.60**	**3.728**	**94.68**	**28.32**	**125.96**	**17.08**	**2.99**	**C0353-063-5500-S**	**3.988**	**101.29**	**22.46**	**99.93**	**14.86**	**2.60**
C0353-063-5750-M	**0.353**	**8.97**	**0.063**	**1.60**	**5.750**	**146.05**	**4.015**	**101.99**	**3.895**	**98.93**	**28.32**	**125.96**	**16.32**	**2.86**	**C0353-063-5750-S**	**4.167**	**105.85**	**22.46**	**99.93**	**14.20**	**2.48**
C0353-068-0563-M	**0.353**	**8.97**	**0.068**	**1.73**	**0.563**	**14.29**	**0.468**	**11.88**	**0.451**	**11.46**	**29.11**	**129.50**	**307.48**	**53.81**	**C0353-068-0563-S**	**0.460**	**11.68**	**27.50**	**122.31**	**267.37**	**46.79**
C0353-068-0625-M	**0.353**	**8.97**	**0.068**	**1.73**	**0.625**	**15.88**	**0.516**	**13.10**	**0.496**	**12.61**	**29.34**	**130.51**	**268.18**	**46.93**	**C0353-068-0625-S**	**0.507**	**12.88**	**27.50**	**122.31**	**233.20**	**40.81**
C0353-068-0688-M	**0.353**	**8.97**	**0.068**	**1.73**	**0.688**	**17.46**	**0.563**	**14.31**	**0.541**	**13.75**	**29.52**	**131.29**	**237.79**	**41.61**	**C0353-068-0688-S**	**0.555**	**14.08**	**27.50**	**122.31**	**206.77**	**36.19**
C0353-068-0750-M	**0.353**	**8.97**	**0.068**	**1.73**	**0.750**	**19.05**	**0.587**	**14.92**	**0.587**	**14.90**	**34.73**	**154.47**	**213.58**	**37.38**	**C0353-068-0750-S**	**0.602**	**15.29**	**27.50**	**122.31**	**185.73**	**32.50**
C0353-068-0813-M	**0.353**	**8.97**	**0.068**	**1.73**	**0.813**	**20.64**	**0.633**	**16.09**	**0.632**	**16.05**	**34.73**	**154.47**	**193.85**	**33.92**	**C0353-068-0813-S**	**0.649**	**16.49**	**27.50**	**122.31**	**168.57**	**29.50**
C0353-068-0875-M	**0.353**	**8.97**	**0.068**	**1.73**	**0.875**	**22.23**	**0.679**	**17.25**	**0.677**	**17.20**	**34.73**	**154.47**	**177.46**	**31.05**	**C0353-068-0875-S**	**0.697**	**17.70**	**27.50**	**122.31**	**154.31**	**27.00**
C0353-068-0938-M	**0.353**	**8.97**	**0.068**	**1.73**	**0.938**	**23.81**	**0.725**	**18.42**	**0.722**	**18.34**	**34.73**	**154.47**	**163.62**	**28.63**	**C0353-068-0938-S**	**0.744**	**18.90**	**27.50**	**122.31**	**142.28**	**24.90**
C0353-068-1000-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.000**	**25.40**	**0.771**	**19.59**	**0.767**	**19.49**	**34.73**	**154.47**	**151.78**	**26.56**	**C0353-068-1000-S**	**0.792**	**20.11**	**27.50**	**122.31**	**131.99**	**23.10**
C0353-068-1125-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.125**	**28.58**	**0.863**	**21.92**	**0.858**	**21.79**	**34.73**	**154.47**	**132.60**	**23.20**	**C0353-068-1125-S**	**0.887**	**22.52**	**27.50**	**122.31**	**115.30**	**20.18**
C0353-068-1250-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.250**	**31.75**	**0.955**	**24.26**	**0.948**	**24.08**	**34.73**	**154.47**	**117.72**	**20.60**	**C0353-068-1250-S**	**0.981**	**24.93**	**27.50**	**122.31**	**102.37**	**17.91**
C0353-068-1375-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.375**	**34.93**	**1.047**	**26.59**	**1.038**	**26.38**	**34.73**	**154.47**	**105.84**	**18.52**	**C0353-068-1375-S**	**1.076**	**27.34**	**27.50**	**122.31**	**92.04**	**16.11**
C0353-068-1500-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.500**	**38.10**	**1.139**	**28.93**	**1.129**	**28.67**	**34.73**	**154.47**	**96.14**	**16.83**	**C0353-068-1500-S**	**1.171**	**29.75**	**27.50**	**122.31**	**83.60**	**14.63**
C0353-068-1625-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.625**	**41.28**	**1.231**	**31.26**	**1.219**	**30.97**	**34.73**	**154.47**	**88.07**	**15.41**	**C0353-068-1625-S**	**1.266**	**32.16**	**27.50**	**122.31**	**76.59**	**13.40**
C0353-068-1750-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.750**	**44.45**	**1.323**	**33.59**	**1.310**	**33.26**	**34.73**	**154.47**	**81.25**	**14.22**	**C0353-068-1750-S**	**1.361**	**34.56**	**27.50**	**122.31**	**70.65**	**12.36**
C0353-068-1875-M	**0.353**	**8.97**	**0.068**	**1.73**	**1.875**	**47.63**	**1.415**	**35.93**	**1.400**	**35.56**	**34.73**	**154.47**	**75.41**	**13.20**	**C0353-068-1875-S**	**1.456**	**36.97**	**27.50**	**122.31**	**65.58**	**11.48**
C0353-068-2000-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.000**	**50.80**	**1.506**	**38.26**	**1.490**	**37.85**	**34.73**	**154.47**	**70.35**	**12.31**	**C0353-068-2000-S**	**1.551**	**39.38**	**27.50**	**122.31**	**61.18**	**10.71**
C0353-068-2125-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.125**	**53.98**	**1.598**	**40.60**	**1.581**	**40.15**	**34.73**	**154.47**	**65.93**	**11.54**	**C0353-068-2125-S**	**1.645**	**41.79**	**27.50**	**122.31**	**57.33**	**10.03**
C0353-068-2250-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.250**	**57.15**	**1.690**	**42.93**	**1.671**	**42.44**	**34.73**	**154.47**	**62.03**	**10.86**	**C0353-068-2250-S**	**1.740**	**44.20**	**27.50**	**122.31**	**53.94**	**9.44**
C0353-068-2375-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.375**	**60.33**	**1.782**	**45.27**	**1.761**	**44.74**	**34.73**	**154.47**	**58.57**	**10.25**	**C0353-068-2375-S**	**1.835**	**46.61**	**27.50**	**122.31**	**50.93**	**8.91**
C0353-068-2500-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.500**	**63.50**	**1.874**	**47.60**	**1.852**	**47.03**	**34.73**	**154.47**	**55.47**	**9.71**	**C0353-068-2500-S**	**1.930**	**49.02**	**27.50**	**122.31**	**48.24**	**8.44**
C0353-068-2625-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.625**	**66.68**	**1.966**	**49.93**	**1.942**	**49.33**	**34.73**	**154.47**	**52.69**	**9.22**	**C0353-068-2625-S**	**2.025**	**51.43**	**27.50**	**122.31**	**45.82**	**8.02**
C0353-068-2750-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.750**	**69.85**	**2.058**	**52.27**	**2.032**	**51.62**	**34.73**	**154.47**	**50.17**	**8.78**	**C0353-068-2750-S**	**2.120**	**53.84**	**27.50**	**122.31**	**43.63**	**7.63**
C0353-068-2875-M	**0.353**	**8.97**	**0.068**	**1.73**	**2.875**	**73.03**	**2.150**	**54.60**	**2.123**	**53.92**	**34.73**	**154.47**	**47.88**	**8.38**	**C0353-068-2875-S**	**2.215**	**56.25**	**27.50**	**122.31**	**41.63**	**7.29**
C0353-068-3000-M	**0.353**	**8.97**	**0.068**	**1.73**	**3.000**	**76.20**	**2.242**	**56.94**	**2.213**	**56.21**	**34.73**	**154.47**	**45.79**	**8.01**	**C0353-068-3000-S**	**2.309**	**58.66**	**27.50**	**122.31**	**39.82**	**6.97**
C0353-068-3250-M	**0.353**	**8.97**	**0.068**	**1.73**	**3.250**	**82.55**	**2.425**	**61.61**	**2.394**	**60.80**	**34.73**	**154.47**	**42.11**	**7.37**	**C0353-068-3250-S**	**2.499**	**63.48**	**27.50**	**122.31**	**36.62**	**6.41**
C0353-068-3500-M	**0.353**	**8.97**	**0.068**	**1.73**	**3.500**	**88.90**	**2.609**	**66.27**	**2.575**	**65.39**	**34.73**	**154.47**	**38.98**	**6.82**	**C0353-068-3500-S**	**2.689**	**68.30**	**27.50**	**122.31**	**33.90**	**5.93**
C0353-068-3750-M	**0.353**	**8.97**	**0.068**	**1.73**	**3.750**	**95.25**	**2.793**	**70.94**	**2.755**	**69.99**	**34.73**	**154.47**	**36.29**	**6.35**	**C0353-068-3750-S**	**2.879**	**73.12**	**27.50**	**122.31**	**31.55**	**5.52**
C0353-068-4000-M	**0.353**	**8.97**	**0.068**	**1.73**	**4.000**	**101.60**	**2.977**	**75.61**	**2.936**	**74.58**	**34.73**	**154.47**	**33.94**	**5.94**	**C0353-068-4000-S**	**3.068**	**77.93**	**27.50**	**122.31**	**29.51**	**5.16**
C0353-068-4250-M	**0.353**	**8.97**	**0.068**	**1.73**	**4.250**	**107.95**	**3.161**	**80.28**	**3.117**	**79.17**	**34.73**	**154.47**	**31.88**	**5.58**	**C0353-068-4250-S**	**3.258**	**82.75**	**27.50**	**122.31**	**27.72**	**4.85**
C0353-068-4500-M	**0.353**	**8.97**	**0.068**	**1.73**	**4.500**	**114.30**	**3.344**	**84.95**	**3.297**	**83.76**	**34.73**	**154.47**	**30.05**	**5.26**	**C0353-068-4500-S**	**3.448**	**87.57**	**27.50**	**122.31**	**26.13**	**4.57**
C0353-068-4750-M	**0.353**	**8.97**	**0.068**	**1.73**	**4.750**	**120.65**	**3.528**	**89.62**	**3.478**	**88.35**	**34.73**	**154.47**	**28.42**	**4.97**	**C0353-068-4750-S**	**3.637**	**92.39**	**27.50**	**122.31**	**24.72**	**4.33**
C0353-068-5000-M	**0.353**	**8.97**	**0.068**	**1.73**	**5.000**	**127.00**	**3.712**	**94.28**	**3.659**	**92.94**	**34.73**	**154.47**	**26.96**	**4.72**	**C0353-068-5000-S**	**3.827**	**97.21**	**27.50**	**122.31**	**23.45**	**4.10**
C0353-068-5250-M	**0.353**	**8.97**	**0.068**	**1.73**	**5.250**	**133.35**	**3.896**	**98.95**	**3.840**	**97.53**	**34.73**	**154.47**	**25.64**	**4.49**	**C0353-068-5250-S**	**4.017**	**102.03**	**27.50**	**122.31**	**22.30**	**3.90**
C0353-068-5500-M	**0.353**	**8.97**	**0.068**	**1.73**	**5.500**	**139.70**	**4.080**	**103.62**	**4.020**	**102.12**	**34.73**	**154.47**	**24.45**	**4.28**	**C0353-068-5500-S**	**4.207**	**106.85**	**27.50**	**122.31**	**21.26**	**3.72**
D11950	0.354	9.00	0.039	1.00	0.512	13.00	0.287	7.30	0.217	5.50	7.45	33.15	32.46	5.68	D21950	0.287	7.30	6.21	27.61	27.03	4.73
D11960	0.354	9.00	0.039	1.00	0.748	19.00	0.398	10.10	0.295	7.50	7.45	33.15	20.63	3.61	D21960	0.398	10.10	6.21	27.61	17.20	3.01
D11970	0.354	9.00	0.039	1.00	1.122	28.50	0.563	14.30	0.413	10.50	7.45	33.15	13.31	2.33	D21970	0.563	14.30	6.21	27.61	11.09	1.94
D11980	0.354	9.00	0.039	1.00	1.594	40.50	0.783	19.90	0.571	14.50	7.45	33.15	9.09	1.59	D21980	0.783	19.90	6.21	27.61	7.54	1.32
D11990	0.354	9.00	0.039	1.00	2.323	59.00	1.114	28.30	0.807	20.50	7.45	33.15	6.17	1.08	D21990	1.114	28.30	6.21	27.61	5.14	0.90
C0360-026-0500-M	0.360	9.14	0.026	0.66	0.500	12.70	0.215	5.46	0.117	2.97	2.62	11.65	9.20	1.61	C0360-026-0500-S	0.290	7.36	1.61	7.17	7.66	1.34
C0360-026-0560-M	0.360	9.14	0.026	0.66	0.560	14.22	0.239	6.07	0.123	3.12	2.62	11.65	8.20	1.44	C0360-026-0560-S	0.324	8.23	1.61	7.17	6.83	1.20
C0360-026-0620-M	0.360	9.14	0.026	0.66	0.620	15.75	0.264	6.71	0.129	3.28	2.62	11.65	7.40	1.30	C0360-026-0620-S	0.358	9.10	1.61	7.17	6.16	1.08
C0360-026-0690-M	0.360	9.14	0.026	0.66	0.690	17.53	0.298	7.57	0.136	3.45	2.62	11.65	6.70	1.17	C0360-026-0690-S	0.401	10.19	1.61	7.17	5.58	0.98
C0360-026-0750-M	0.360	9.14	0.026	0.66	0.750	19.05	0.323	8.20	0.143	3.63	2.62	11.65	6.10	1.07	C0360-026-0750-S	0.433	10.99	1.61	7.17	5.08	0.89

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-026-0810-M	0.360	9.14	0.026	0.66	0.810	20.57	0.347	8.81	0.148	3.76	2.62	11.65	5.70	1.00
C0360-026-0880-M	0.360	9.14	0.026	0.66	0.880	22.35	0.346	8.79	0.162	4.11	2.62	11.65	4.90	0.86
C0360-026-0940-M	0.360	9.14	0.026	0.66	0.940	23.88	0.370	9.40	0.169	4.29	2.62	11.65	4.60	0.81
C0360-026-1000-M	0.360	9.14	0.026	0.66	1.000	25.40	0.359	9.12	0.181	4.60	2.62	11.65	4.10	0.72
C0360-026-1120-M	0.360	9.14	0.026	0.66	1.120	28.45	0.443	11.25	0.187	4.75	2.62	11.65	3.90	0.68
C0360-026-1250-M	0.360	9.14	0.026	0.66	1.250	31.75	0.479	12.17	0.213	5.41	2.62	11.65	3.40	0.60
C0360-026-1500-M	0.360	9.14	0.026	0.66	1.500	38.10	0.564	14.33	0.242	6.15	2.62	11.65	2.80	0.49
C0360-026-1750-M	0.360	9.14	0.026	0.66	1.750	44.45	0.652	16.56	0.270	6.86	2.62	11.65	2.40	0.42
C0360-026-2000-M	0.360	9.14	0.026	0.66	2.000	50.80	0.834	21.18	0.298	7.57	2.62	11.65	2.10	0.37
C0360-029-0500-M	0.360	9.14	0.029	0.74	0.500	12.70	0.238	6.05	0.150	3.81	3.38	15.03	12.90	2.26
C0360-029-0560-M	0.360	9.14	0.029	0.74	0.560	14.22	0.263	6.68	0.159	4.04	3.38	15.03	11.40	2.00
C0360-029-0620-M	0.360	9.14	0.029	0.74	0.620	15.75	0.287	7.29	0.167	4.24	3.38	15.03	10.20	1.79
C0360-029-0690-M	0.360	9.14	0.029	0.74	0.690	17.53	0.316	8.03	0.177	4.50	3.38	15.03	9.00	1.58
C0360-029-0750-M	0.360	9.14	0.029	0.74	0.750	19.05	0.341	8.66	0.186	4.72	3.38	15.03	8.20	1.44
C0360-029-0810-M	0.360	9.14	0.029	0.74	0.810	20.57	0.365	9.27	0.194	4.93	3.38	15.03	7.60	1.33
C0360-029-0880-M	0.360	9.14	0.029	0.74	0.880	22.35	0.394	10.01	0.204	5.18	3.38	15.03	6.90	1.21
C0360-029-0940-M	0.360	9.14	0.029	0.74	0.940	23.88	0.418	10.62	0.213	5.41	3.38	15.03	6.50	1.14
C0360-029-1000-M	0.360	9.14	0.029	0.74	1.000	25.40	0.443	11.25	0.221	5.61	3.38	15.03	6.10	1.07
C0360-029-1120-M	0.360	9.14	0.029	0.74	1.120	28.45	0.492	12.50	0.238	6.05	3.38	15.03	5.40	0.95
C0360-029-1250-M	0.360	9.14	0.029	0.74	1.250	31.75	0.545	13.84	0.257	6.53	3.38	15.03	4.80	0.84
C0360-029-1380-M	0.360	9.14	0.029	0.74	1.380	35.05	0.598	15.19	0.275	6.99	3.38	15.03	4.30	0.75
C0360-029-1500-M	0.360	9.14	0.029	0.74	1.500	38.10	0.647	16.43	0.292	7.42	3.38	15.03	4.00	0.70
C0360-029-1750-M	0.360	9.14	0.029	0.74	1.750	44.45	0.749	19.02	0.328	8.33	3.38	15.03	3.40	0.60
C0360-029-2000-M	0.360	9.14	0.029	0.74	2.000	50.80	0.834	21.18	0.364	9.25	3.38	15.03	2.90	0.51
C0360-032-0380-M	0.360	9.14	0.032	0.81	0.380	9.65	0.190	4.83	0.151	3.84	4.72	21.00	24.80	4.34
C0360-032-0440-M	0.360	9.14	0.032	0.81	0.440	11.18	0.214	5.44	0.162	4.11	4.72	21.00	20.80	3.64
C0360-032-0500-M	0.360	9.14	0.032	0.81	0.500	12.70	0.237	6.02	0.159	4.04	4.72	21.00	17.90	3.13
C0360-032-0560-M	0.360	9.14	0.032	0.81	0.560	14.22	0.270	6.86	0.167	4.24	4.72	21.00	16.30	2.85
C0360-032-0620-M	0.360	9.14	0.032	0.81	0.620	15.75	0.304	7.72	0.175	4.45	4.72	21.00	14.90	2.61
C0360-032-0690-M	0.360	9.14	0.032	0.81	0.690	17.53	0.321	8.15	0.191	4.85	4.72	21.00	12.80	2.24
C0360-032-0750-M	0.360	9.14	0.032	0.81	0.750	19.05	0.355	9.02	0.199	5.05	4.72	21.00	11.90	2.08
C0360-032-0810-M	0.360	9.14	0.032	0.81	0.810	20.57	0.388	9.86	0.207	5.26	4.72	21.00	11.20	1.96
C0360-032-0880-M	0.360	9.14	0.032	0.81	0.880	22.35	0.406	10.31	0.224	5.69	4.72	21.00	9.90	1.73
C0360-032-0940-M	0.360	9.14	0.032	0.81	0.940	23.88	0.439	11.15	0.231	5.87	4.72	21.00	9.40	1.65
C0360-032-1000-M	0.360	9.14	0.032	0.81	1.000	25.40	0.447	11.35	0.247	6.27	4.72	21.00	8.50	1.49
C0360-032-1120-M	0.360	9.14	0.032	0.81	1.120	28.45	0.488	12.40	0.270	6.86	4.72	21.00	7.50	1.31
C0360-032-1250-M	0.360	9.14	0.032	0.81	1.250	31.75	0.535	13.59	0.303	7.70	4.72	21.00	6.60	1.16
C0360-032-1380-M	0.360	9.14	0.032	0.81	1.380	35.05	0.590	14.99	0.317	8.05	4.72	21.00	6.00	1.05
C0360-032-1500-M	0.360	9.14	0.032	0.81	1.500	38.10	0.631	16.03	0.344	8.74	4.72	21.00	5.40	0.95
C0360-032-1750-M	0.360	9.14	0.032	0.81	1.750	44.45	0.724	18.39	0.391	9.93	4.72	21.00	4.60	0.81
C0360-032-2000-M	0.360	9.14	0.032	0.81	2.000	50.80	0.820	20.83	0.434	11.02	4.72	21.00	4.00	0.70
C0360-032-2250-M	0.360	9.14	0.032	0.81	2.250	57.15	1.005	25.53	0.464	11.79	4.72	21.00	3.80	0.67
C0360-032-2500-M	0.360	9.14	0.032	0.81	2.500	63.50	1.113	28.27	0.498	12.65	4.72	21.00	3.40	0.60
C0360-035-0440-M	0.360	9.14	0.035	0.89	0.440	11.18	0.238	6.05	0.182	4.62	5.73	25.49	28.40	4.97
C0360-035-0500-M	0.360	9.14	0.035	0.89	0.500	12.70	0.265	6.73	0.195	4.95	5.73	25.49	24.40	4.27
C0360-035-0560-M	0.360	9.14	0.035	0.89	0.560	14.22	0.293	7.44	0.208	5.28	5.73	25.49	21.40	3.75
C0360-035-0620-M	0.360	9.14	0.035	0.89	0.620	15.75	0.320	8.13	0.220	5.59	5.73	25.49	19.10	3.34
C0360-035-0690-M	0.360	9.14	0.035	0.89	0.690	17.53	0.352	8.94	0.235	5.97	5.73	25.49	16.90	2.96
C0360-035-0750-M	0.360	9.14	0.035	0.89	0.750	19.05	0.379	9.63	0.247	6.27	5.73	25.49	15.40	2.70
C0360-035-0810-M	0.360	9.14	0.035	0.89	0.810	20.57	0.406	10.31	0.260	6.60	5.73	25.49	14.20	2.49
C0360-035-0880-M	0.360	9.14	0.035	0.89	0.880	22.35	0.438	11.13	0.275	6.99	5.73	25.49	13.00	2.28
C0360-035-0940-M	0.360	9.14	0.035	0.89	0.940	23.88	0.465	11.81	0.287	7.29	5.73	25.49	12.10	2.12
C0360-035-1000-M	0.360	9.14	0.035	0.89	1.000	25.40	0.493	12.52	0.300	7.62	5.73	25.49	11.30	1.98
C0360-035-1120-M	0.360	9.14	0.035	0.89	1.120	28.45	0.547	13.89	0.325	8.26	5.73	25.49	10.00	1.75
C0360-035-1250-M	0.360	9.14	0.035	0.89	1.250	31.75	0.606	15.39	0.352	8.94	5.73	25.49	8.90	1.56
C0360-035-1380-M	0.360	9.14	0.035	0.89	1.380	35.05	0.665	16.89	0.379	9.63	5.73	25.49	8.00	1.40
C0360-035-1500-M	0.360	9.14	0.035	0.89	1.500	38.10	0.720	18.29	0.404	10.26	5.73	25.49	7.30	1.28
C0360-035-1750-M	0.360	9.14	0.035	0.89	1.750	44.45	0.834	21.18	0.457	11.61	5.73	25.49	6.30	1.10
C0360-035-2000-M	0.360	9.14	0.035	0.89	2.000	50.80	0.947	24.05	0.509	12.93	5.73	25.49	5.40	0.95
C0360-035-2250-M	0.360	9.14	0.035	0.89	2.250	57.15	1.061	26.95	0.562	14.27	5.73	25.49	4.80	0.84
C0360-035-2500-M	0.360	9.14	0.035	0.89	2.500	63.50	1.174	29.82	0.614	15.60	5.73	25.49	4.30	0.75
C0360-038-0440-M	0.360	9.14	0.038	0.97	0.440	11.18	0.236	5.99	0.190	4.83	7.63	33.94	37.40	6.55
C0360-038-0500-M	0.360	9.14	0.038	0.97	0.500	12.70	0.276	7.01	0.199	5.05	7.63	33.94	34.10	5.97
C0360-038-0560-M	0.360	9.14	0.038	0.97	0.560	14.22	0.295	7.49	0.218	5.54	7.63	33.94	28.80	5.04

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0360-026-0810-S	0.470	11.95	1.61	7.17	4.75	0.83
C0360-026-0880-S	0.485	12.32	1.61	7.17	4.08	0.71
C0360-026-0940-S	0.519	13.19	1.61	7.17	3.83	0.67
C0360-026-1000-S	0.528	13.41	1.61	7.17	3.42	0.60
C0360-026-1120-S	0.624	15.84	1.61	7.17	3.25	0.57
C0360-026-1250-S	0.681	17.29	1.61	7.17	2.83	0.50
C0360-026-1500-S	0.809	20.54	1.61	7.17	2.33	0.41
C0360-026-1750-S	0.943	23.96	1.61	7.17	2.00	0.35
C0360-026-2000-S	1.078	27.39	1.61	7.17	1.75	0.31
C0360-029-0500-S	0.296	7.51	2.20	9.77	10.75	1.88
C0360-029-0560-S	0.329	8.35	2.20	9.77	9.50	1.66
C0360-029-0620-S	0.361	9.18	2.20	9.77	8.50	1.49
C0360-029-0690-S	0.397	10.08	2.20	9.77	7.50	1.31
C0360-029-0750-S	0.428	10.88	2.20	9.77	6.83	1.20
C0360-029-0810-S	0.463	11.76	2.20	9.77	6.33	1.11
C0360-029-0880-S	0.498	12.64	2.20	9.77	5.75	1.01
C0360-029-0940-S	0.534	13.57	2.20	9.77	5.42	0.95
C0360-029-1000-S	0.568	14.42	2.20	9.77	5.08	0.89
C0360-029-1120-S	0.632	16.04	2.20	9.77	4.50	0.79
C0360-029-1250-S	0.700	17.79	2.20	9.77	4.00	0.70
C0360-029-1380-S	0.767	19.47	2.20	9.77	3.58	0.63
C0360-029-1500-S	0.841	21.35	2.20	9.77	3.33	0.58
C0360-029-1750-S	0.974	24.74	2.20	9.77	2.83	0.50
C0360-029-2000-S	1.090	27.70	2.20	9.77	2.42	0.42
C0360-032-0380-S	0.239	6.08	2.91	12.94	20.66	3.62
C0360-032-0440-S	0.272	6.91	2.91	12.94	17.33	3.03
C0360-032-0500-S	0.305	7.75	2.91	12.94	14.91	2.61
C0360-032-0560-S	0.346	8.78	2.91	12.94	13.58	2.38
C0360-032-0620-S	0.386	9.80	2.91	12.94	12.41	2.17
C0360-032-0690-S	0.417	10.60	2.91	12.94	10.66	1.87
C0360-032-0750-S	0.457	11.60	2.91	12.94	9.91	1.73
C0360-032-0810-S	0.498	12.66	2.91	12.94	9.33	1.63
C0360-032-0880-S	0.527	13.39	2.91	12.94	8.25	1.44
C0360-032-0940-S	0.569	14.44	2.91	12.94	7.83	1.37
C0360-032-1000-S	0.589	14.97	2.91	12.94	7.08	1.24
C0360-032-1120-S	0.654	16.62	2.91	12.94	6.25	1.09
C0360-032-1250-S	0.721	18.31	2.91	12.94	5.50	0.96
C0360-032-1380-S	0.798	20.27	2.91	12.94	5.00	0.87
C0360-032-1500-S	0.853	21.68	2.91	12.94	4.50	0.79
C0360-032-1750-S	0.991	25.17	2.91	12.94	3.83	0.67
C0360-032-2000-S	1.127	28.63	2.91	12.94	3.33	0.58
C0360-032-2250-S	1.331	33.81	2.91	12.94	3.17	0.55
C0360-032-2500-S	1.473	37.41	2.91	12.94	2.83	0.50
C0360-035-0440-S	0.281	7.14	3.76	16.73	23.66	4.14
C0360-035-0500-S	0.315	8.00	3.76	16.73	20.33	3.56
C0360-035-0560-S	0.349	8.86	3.76	16.73	17.83	3.12
C0360-035-0620-S	0.384	9.74	3.76	16.73	15.91	2.78
C0360-035-0690-S	0.423	10.74	3.76	16.73	14.08	2.46
C0360-035-0750-S	0.457	11.60	3.76	16.73	12.83	2.24
C0360-035-0810-S	0.492	12.50	3.76	16.73	11.83	2.07
C0360-035-0880-S	0.533	13.53	3.76	16.73	10.83	1.90
C0360-035-0940-S	0.567	14.40	3.76	16.73	10.08	1.76
C0360-035-1000-S	0.600	15.25	3.76	16.73	9.41	1.65
C0360-035-1120-S	0.668	16.98	3.76	16.73	8.33	1.46
C0360-035-1250-S	0.743	18.86	3.76	16.73	7.41	1.30
C0360-035-1380-S	0.815	20.71	3.76	16.73	6.66	1.17
C0360-035-1500-S	0.881	22.39	3.76	16.73	6.08	1.06
C0360-035-1750-S	1.033	26.24	3.76	16.73	5.25	0.92
C0360-035-2000-S	1.164	29.56	3.76	16.73	4.50	0.79
C0360-035-2250-S	1.309	33.25	3.76	16.73	4.00	0.70
C0360-035-2500-S	1.450	36.82	3.76	16.73	3.58	0.63
C0360-038-0440-S	0.289	7.34	4.71	20.94	31.15	5.45
C0360-038-0500-S	0.334	8.49	4.71	20.94	28.41	4.97
C0360-038-0560-S	0.364	9.24	4.71	20.94	23.99	4.20

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-038-0620-M	0.360	9.14	0.038	0.97	0.620	15.75	0.314	7.98	0.237	6.02	7.63	33.94	24.90	4.36
C0360-038-0690-M	0.360	9.14	0.038	0.97	0.690	17.53	0.344	8.74	0.256	6.50	7.63	33.94	22.10	3.87
C0360-038-0750-M	0.360	9.14	0.038	0.97	0.750	19.05	0.383	9.73	0.266	6.76	7.63	33.94	20.80	3.64
C0360-038-0810-M	0.360	9.14	0.038	0.97	0.810	20.57	0.403	10.24	0.285	7.24	7.63	33.94	18.70	3.27
C0360-038-0880-M	0.360	9.14	0.038	0.97	0.880	22.35	0.432	10.97	0.304	7.72	7.63	33.94	17.00	2.98
C0360-038-0940-M	0.360	9.14	0.038	0.97	0.940	23.88	0.451	11.46	0.323	8.20	7.63	33.94	15.60	2.73
C0360-038-1000-M	0.360	9.14	0.038	0.97	1.000	25.40	0.491	12.47	0.332	8.43	7.63	33.94	15.00	2.63
C0360-038-1120-M	0.360	9.14	0.038	0.97	1.120	28.45	0.529	13.44	0.370	9.40	7.63	33.94	12.90	2.26
C0360-038-1250-M	0.360	9.14	0.038	0.97	1.250	31.75	0.598	15.19	0.399	10.13	7.63	33.94	11.70	2.05
C0360-038-1380-M	0.360	9.14	0.038	0.97	1.380	35.05	0.647	16.43	0.437	11.10	7.63	33.94	10.40	1.82
C0360-038-1500-M	0.360	9.14	0.038	0.97	1.500	38.10	0.705	17.91	0.465	11.81	7.63	33.94	9.60	1.68
C0360-038-1750-M	0.360	9.14	0.038	0.97	1.750	44.45	0.831	21.11	0.526	13.36	7.63	33.94	8.30	1.45
C0360-038-2000-M	0.360	9.14	0.038	0.97	2.000	50.80	0.940	23.88	0.587	14.91	7.63	33.94	7.20	1.26
C0360-038-2250-M	0.360	9.14	0.038	0.97	2.250	57.15	1.058	26.87	0.649	16.48	7.63	33.94	6.40	1.12
C0360-038-2500-M	0.360	9.14	0.038	0.97	2.500	63.50	1.161	29.49	0.711	18.06	7.63	33.94	5.70	1.00
C0360-040-0440-M	0.360	9.14	0.040	1.02	0.440	11.18	0.259	6.58	0.218	5.54	8.32	37.01	46.00	8.05
C0360-040-0500-M	0.360	9.14	0.040	1.02	0.500	12.70	0.289	7.34	0.234	5.94	8.32	37.01	39.40	6.90
C0360-040-0560-M	0.360	9.14	0.040	1.02	0.560	14.22	0.319	8.10	0.250	6.35	8.32	37.01	34.50	6.04
C0360-040-0620-M	0.360	9.14	0.040	1.02	0.620	15.75	0.349	8.86	0.267	6.78	8.32	37.01	30.70	5.37
C0360-040-0690-M	0.360	9.14	0.040	1.02	0.690	17.53	0.383	9.73	0.286	7.26	8.32	37.01	27.10	4.74
C0360-040-0750-M	0.360	9.14	0.040	1.02	0.750	19.05	0.413	10.49	0.302	7.67	8.32	37.01	24.70	4.32
C0360-040-0810-M	0.360	9.14	0.040	1.02	0.810	20.57	0.443	11.25	0.318	8.08	8.32	37.01	22.70	3.97
C0360-040-0880-M	0.360	9.14	0.040	1.02	0.880	22.35	0.478	12.14	0.337	8.56	8.32	37.01	20.70	3.62
C0360-040-0940-M	0.360	9.14	0.040	1.02	0.940	23.88	0.508	12.90	0.353	8.97	8.32	37.01	19.20	3.36
C0360-040-1000-M	0.360	9.14	0.040	1.02	1.000	25.40	0.537	13.64	0.370	9.40	8.32	37.01	18.00	3.15
C0360-040-1120-M	0.360	9.14	0.040	1.02	1.120	28.45	0.597	15.16	0.402	10.21	8.32	37.01	15.90	2.78
C0360-040-1250-M	0.360	9.14	0.040	1.02	1.250	31.75	0.662	16.81	0.438	11.13	8.32	37.01	14.10	2.47
C0360-040-1380-M	0.360	9.14	0.040	1.02	1.380	35.05	0.726	18.44	0.473	12.01	8.32	37.01	12.70	2.22
C0360-040-1500-M	0.360	9.14	0.040	1.02	1.500	38.10	0.786	19.96	0.505	12.83	8.32	37.01	11.70	2.05
C0360-040-1750-M	0.360	9.14	0.040	1.02	1.750	44.45	0.910	23.11	0.573	14.55	8.32	37.01	9.90	1.73
C0360-040-2000-M	0.360	9.14	0.040	1.02	2.000	50.80	1.035	26.29	0.641	16.28	8.32	37.01	8.60	1.51
C0360-040-2250-M	0.360	9.14	0.040	1.02	2.250	57.15	1.159	29.44	0.709	18.01	8.32	37.01	7.60	1.33
C0360-040-2500-M	0.360	9.14	0.040	1.02	2.500	63.50	1.283	32.59	0.777	19.74	8.32	37.01	6.80	1.19
C0360-042-0440-M	0.360	9.14	0.042	1.07	0.440	11.18	0.268	6.81	0.209	5.31	10.00	44.48	58.10	10.17
C0360-042-0500-M	0.360	9.14	0.042	1.07	0.500	12.70	0.293	7.44	0.231	5.87	10.00	44.48	48.30	8.45
C0360-042-0560-M	0.360	9.14	0.042	1.07	0.560	14.22	0.318	8.08	0.252	6.40	10.00	44.48	41.30	7.23
C0360-042-0620-M	0.360	9.14	0.042	1.07	0.620	15.75	0.361	9.17	0.262	6.65	10.00	44.48	38.60	6.76
C0360-042-0690-M	0.360	9.14	0.042	1.07	0.690	17.53	0.396	10.06	0.284	7.21	10.00	44.48	34.00	5.95
C0360-042-0750-M	0.360	9.14	0.042	1.07	0.750	19.05	0.426	10.82	0.301	7.65	10.00	44.48	30.90	5.41
C0360-042-0810-M	0.360	9.14	0.042	1.07	0.810	20.57	0.447	11.35	0.326	8.28	10.00	44.48	27.50	4.81
C0360-042-0880-M	0.360	9.14	0.042	1.07	0.880	22.35	0.483	12.27	0.346	8.79	10.00	44.48	25.20	4.41
C0360-042-0940-M	0.360	9.14	0.042	1.07	0.940	23.88	0.508	12.90	0.368	9.35	10.00	44.48	23.10	4.04
C0360-042-1000-M	0.360	9.14	0.042	1.07	1.000	25.40	0.534	13.56	0.388	9.86	10.00	44.48	21.50	3.76
C0360-042-1120-M	0.360	9.14	0.042	1.07	1.120	28.45	0.585	14.86	0.430	10.92	10.00	44.48	18.70	3.27
C0360-042-1250-M	0.360	9.14	0.042	1.07	1.250	31.75	0.663	16.84	0.463	11.76	10.00	44.48	17.00	2.98
C0360-042-1380-M	0.360	9.14	0.042	1.07	1.380	35.05	0.741	18.82	0.495	12.57	10.00	44.48	15.60	2.73
C0360-042-1500-M	0.360	9.14	0.042	1.07	1.500	38.10	0.809	20.55	0.525	13.34	10.00	44.48	14.50	2.54
C0360-042-1750-M	0.360	9.14	0.042	1.07	1.750	44.45	0.903	22.94	0.621	15.77	10.00	44.48	11.80	2.07
C0360-042-2000-M	0.360	9.14	0.042	1.07	2.000	50.80	1.029	26.14	0.695	17.65	10.00	44.48	10.30	1.80
C0360-042-2250-M	0.360	9.14	0.042	1.07	2.250	57.15	1.151	29.24	0.770	19.56	10.00	44.48	9.10	1.59
C0360-042-2500-M	0.360	9.14	0.042	1.07	2.500	63.50	1.265	32.13	0.844	21.44	10.00	44.48	8.10	1.42
C0360-045-0440-M	0.360	9.14	0.045	1.14	0.440	11.18	0.287	7.29	0.224	5.69	12.09	53.78	79.00	13.83
C0360-045-0500-M	0.360	9.14	0.045	1.14	0.500	12.70	0.316	8.03	0.247	6.27	12.09	53.78	65.70	11.50
C0360-045-0560-M	0.360	9.14	0.045	1.14	0.560	14.22	0.345	8.76	0.270	6.86	12.09	53.78	56.20	9.84
C0360-045-0620-M	0.360	9.14	0.045	1.14	0.620	15.75	0.374	9.50	0.292	7.42	12.09	53.78	49.10	8.59
C0360-045-0690-M	0.360	9.14	0.045	1.14	0.690	17.53	0.414	10.52	0.314	7.98	12.09	53.78	43.80	7.67
C0360-045-0750-M	0.360	9.14	0.045	1.14	0.750	19.05	0.443	11.25	0.337	8.56	12.09	53.78	39.40	6.90
C0360-045-0810-M	0.360	9.14	0.045	1.14	0.810	20.57	0.472	11.99	0.359	9.12	12.09	53.78	35.80	6.27
C0360-045-0880-M	0.360	9.14	0.045	1.14	0.880	22.35	0.512	13.00	0.382	9.70	12.09	53.78	32.80	5.74
C0360-045-0940-M	0.360	9.14	0.045	1.14	0.940	23.88	0.541	13.74	0.404	10.26	12.09	53.78	30.30	5.30
C0360-045-1000-M	0.360	9.14	0.045	1.14	1.000	25.40	0.570	14.48	0.427	10.85	12.09	53.78	28.10	4.92
C0360-045-1120-M	0.360	9.14	0.045	1.14	1.120	28.45	0.629	15.98	0.472	11.99	12.09	53.78	24.60	4.31
C0360-045-1250-M	0.360	9.14	0.045	1.14	1.250	31.75	0.698	17.73	0.516	13.11	12.09	53.78	21.90	3.83
C0360-045-1380-M	0.360	9.14	0.045	1.14	1.380	35.05	0.766	19.46	0.562	14.27	12.09	53.78	19.70	3.45

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0360-038-0620-S	0.393	9.98	4.71	20.94	20.74	3.63
C0360-038-0690-S	0.434	11.03	4.71	20.94	18.41	3.22
C0360-038-0750-S	0.478	12.15	4.71	20.94	17.33	3.03
C0360-038-0810-S	0.508	12.90	4.71	20.94	15.58	2.73
C0360-038-0880-S	0.548	13.91	4.71	20.94	14.16	2.48
C0360-038-0940-S	0.578	14.68	4.71	20.94	13.00	2.27
C0360-038-1000-S	0.623	15.83	4.71	20.94	12.50	2.19
C0360-038-1120-S	0.682	17.32	4.71	20.94	10.75	1.88
C0360-038-1250-S	0.767	19.48	4.71	20.94	9.75	1.71
C0360-038-1380-S	0.837	21.25	4.71	20.94	8.66	1.52
C0360-038-1500-S	0.911	23.15	4.71	20.94	8.00	1.40
C0360-038-1750-S	1.069	27.16	4.71	20.94	6.91	1.21
C0360-038-2000-S	1.215	30.87	4.71	20.94	6.00	1.05
C0360-038-2250-S	1.367	34.72	4.71	20.94	5.33	0.93
C0360-038-2500-S	1.509	38.32	4.71	20.94	4.75	0.83
C0360-040-0440-S	0.297	7.55	5.47	24.34	38.32	6.71
C0360-040-0500-S	0.333	8.46	5.47	24.34	32.82	5.74
C0360-040-0560-S	0.370	9.39	5.47	24.34	28.74	5.03
C0360-040-0620-S	0.406	10.31	5.47	24.34	25.57	4.48
C0360-040-0690-S	0.448	11.37	5.47	24.34	22.57	3.95
C0360-040-0750-S	0.484	12.29	5.47	24.34	20.58	3.60
C0360-040-0810-S	0.521	13.22	5.47	24.34	18.91	3.31
C0360-040-0880-S	0.563	14.29	5.47	24.34	17.24	3.02
C0360-040-0940-S	0.598	15.18	5.47	24.34	15.99	2.80
C0360-040-1000-S	0.635	16.13	5.47	24.34	14.99	2.62
C0360-040-1120-S	0.707	17.95	5.47	24.34	13.25	2.32
C0360-040-1250-S	0.784	19.92	5.47	24.34	11.75	2.06
C0360-040-1380-S	0.863	21.91	5.47	24.34	10.58	1.85
C0360-040-1500-S	0.938	23.84	5.47	24.34	9.75	1.71
C0360-040-1750-S	1.086	27.59	5.47	24.34	8.25	1.44
C0360-040-2000-S	1.236	31.40	5.47	24.34	7.16	1.25
C0360-040-2250-S	1.386	35.19	5.47	24.34	6.33	1.11
C0360-040-2500-S	1.534	38.96	5.47	24.34	5.66	0.99
C0360-042-0440-S	0.311	7.90	6.25	27.78	48.40	8.47
C0360-042-0500-S	0.345	8.76	6.25	27.78	40.23	7.04
C0360-042-0560-S	0.378	9.61	6.25	27.78	34.40	6.02
C0360-042-0620-S	0.426	10.81	6.25	27.78	32.15	5.63
C0360-042-0690-S	0.469	11.92	6.25	27.78	28.32	4.96
C0360-042-0750-S	0.507	12.89	6.25	27.78	25.74	4.50
C0360-042-0810-S	0.537	13.65	6.25	27.78	22.91	4.01
C0360-042-0880-S	0.582	14.79	6.25	27.78	20.99	3.67
C0360-042-0940-S	0.615	15.63	6.25	27.78	19.24	3.37
C0360-042-1000-S	0.651	16.54	6.25	27.78	17.91	3.13
C0360-042-1120-S	0.719	18.26	6.25	27.78	15.58	2.73
C0360-042-1250-S	0.809	20.55	6.25	27.78	14.16	2.48
C0360-042-1380-S	0.899	22.84	6.25	27.78	13.00	2.27
C0360-042-1500-S	0.983	24.97	6.25	27.78	12.08	2.11
C0360-042-1750-S	1.115	28.31	6.25	27.78	9.83	1.72
C0360-042-2000-S	1.272	32.31	6.25	27.78	8.58	1.50
C0360-042-2250-S	1.426	36.22	6.25	27.78	7.58	1.33
C0360-042-2500-S	1.574	39.99	6.25	27.78	6.75	1.18
C0360-045-0440-S	0.326	8.28	7.50	33.37	65.81	11.52
C0360-045-0500-S	0.363	9.22	7.50	33.37	54.73	9.58
C0360-045-0560-S	0.400	10.15	7.50	33.37	46.82	8.19
C0360-045-0620-S	0.437	11.09	7.50	33.37	40.90	7.16
C0360-045-0690-S	0.484	12.30	7.50	33.37	36.49	6.38
C0360-045-0750-S	0.521	13.24	7.50	33.37	32.82	5.74
C0360-045-0810-S	0.558	14.18	7.50	33.37	29.82	5.22
C0360-045-0880-S	0.605	15.38	7.50	33.37	27.32	4.78
C0360-045-0940-S	0.643	16.33	7.50	33.37	25.24	4.42
C0360-045-1000-S	0.679	17.26	7.50	33.37	23.41	4.10
C0360-045-1120-S	0.754	19.15	7.50	33.37	20.49	3.59
C0360-045-1250-S	0.839	21.30	7.50	33.37	18.24	3.19
C0360-045-1380-S	0.923	23.44	7.50	33.37	16.41	2.87

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-045-1500-M	0.360	9.14	0.045	1.14	1.500	38.10	0.825	20.96	0.607	15.42	12.09	53.78	17.90	3.13
C0360-045-1750-M	0.360	9.14	0.045	1.14	1.750	44.45	0.955	24.26	0.694	17.63	12.09	53.78	15.20	2.66
C0360-045-2000-M	0.360	9.14	0.045	1.14	2.000	50.80	1.084	27.53	0.778	19.76	12.09	53.78	13.20	2.31
C0360-045-2250-M	0.360	9.14	0.045	1.14	2.250	57.15	1.217	30.91	0.862	21.89	12.09	53.78	11.70	2.05
C0360-045-2500-M	0.360	9.14	0.045	1.14	2.500	63.50	1.349	34.26	0.946	24.03	12.09	53.78	10.50	1.84
C0360-045-2750-M	0.360	9.14	0.045	1.14	2.750	69.85	1.532	38.91	0.990	25.15	12.09	53.78	9.90	1.73
C0360-047-0440-M	0.360	9.14	0.047	1.19	0.440	11.18	0.299	7.59	0.257	6.53	13.01	57.87	92.60	16.21
C0360-047-0500-M	0.360	9.14	0.047	1.19	0.500	12.70	0.335	8.51	0.277	7.04	13.01	57.87	78.90	13.81
C0360-047-0560-M	0.360	9.14	0.047	1.19	0.560	14.22	0.371	9.42	0.297	7.54	13.01	57.87	68.70	12.02
C0360-047-0620-M	0.360	9.14	0.047	1.19	0.620	15.75	0.406	10.31	0.318	8.08	13.01	57.87	60.90	10.66
C0360-047-0690-M	0.360	9.14	0.047	1.19	0.690	17.53	0.448	11.38	0.341	8.66	13.01	57.87	53.70	9.40
C0360-047-0750-M	0.360	9.14	0.047	1.19	0.750	19.05	0.484	12.29	0.361	9.17	13.01	57.87	48.80	8.54
C0360-047-0810-M	0.360	9.14	0.047	1.19	0.810	20.57	0.519	13.18	0.381	9.68	13.01	57.87	44.70	7.82
C0360-047-0880-M	0.360	9.14	0.047	1.19	0.880	22.35	0.561	14.25	0.405	10.29	13.01	57.87	40.70	7.12
C0360-047-0940-M	0.360	9.14	0.047	1.19	0.940	23.88	0.596	15.14	0.425	10.80	13.01	57.87	37.90	6.63
C0360-047-1000-M	0.360	9.14	0.047	1.19	1.000	25.40	0.632	16.05	0.445	11.30	13.01	57.87	35.30	6.18
C0360-047-1120-M	0.360	9.14	0.047	1.19	1.120	28.45	0.703	17.86	0.485	12.32	13.01	57.87	31.20	5.46
C0360-047-1250-M	0.360	9.14	0.047	1.19	1.250	31.75	0.780	19.81	0.529	13.44	13.01	57.87	27.70	4.85
C0360-047-1380-M	0.360	9.14	0.047	1.19	1.380	35.05	0.858	21.79	0.573	14.55	13.01	57.87	24.90	4.36
C0360-047-1500-M	0.360	9.14	0.047	1.19	1.500	38.10	0.929	23.60	0.613	15.57	13.01	57.87	22.80	3.99
C0360-047-1750-M	0.360	9.14	0.047	1.19	1.750	44.45	1.077	27.36	0.697	17.70	13.01	57.87	19.30	3.38
C0360-047-2000-M	0.360	9.14	0.047	1.19	2.000	50.80	1.226	31.14	0.781	19.84	13.01	57.87	16.80	2.94
C0360-047-2250-M	0.360	9.14	0.047	1.19	2.250	57.15	1.374	34.90	0.865	21.97	13.01	57.87	14.90	2.61
C0360-047-2500-M	0.360	9.14	0.047	1.19	2.500	63.50	1.523	38.68	0.949	24.10	13.01	57.87	13.30	2.33
C0360-047-2750-M	0.360	9.14	0.047	1.19	2.750	69.85	1.671	42.44	1.033	26.24	13.01	57.87	12.10	2.12
C0360-047-3000-M	0.360	9.14	0.047	1.19	3.000	76.20	1.819	46.20	1.117	28.37	13.01	57.87	11.00	1.93
C0360-047-3250-M	0.360	9.14	0.047	1.19	3.250	82.55	1.968	49.99	1.201	30.51	13.01	57.87	10.10	1.77
C0360-047-3500-M	0.360	9.14	0.047	1.19	3.500	88.90	2.116	53.75	1.284	32.61	13.01	57.87	9.40	1.65
C0360-049-0440-M	0.360	9.14	0.049	1.25	0.440	11.18	0.306	7.77	0.271	6.88	14.55	64.72	108.70	19.02
C0360-049-0500-M	0.360	9.14	0.049	1.25	0.500	12.70	0.343	8.71	0.293	7.44	14.55	64.72	92.50	16.19
C0360-049-0560-M	0.360	9.14	0.049	1.25	0.560	14.22	0.379	9.63	0.315	8.00	14.55	64.72	80.50	14.09
C0360-049-0620-M	0.360	9.14	0.049	1.25	0.620	15.75	0.416	10.57	0.336	8.53	14.55	64.72	71.20	12.46
C0360-049-0690-M	0.360	9.14	0.049	1.25	0.690	17.53	0.458	11.63	0.362	9.19	14.55	64.72	62.80	10.99
C0360-049-0750-M	0.360	9.14	0.049	1.25	0.750	19.05	0.495	12.57	0.384	9.75	14.55	64.72	57.00	9.98
C0360-049-0810-M	0.360	9.14	0.049	1.25	0.810	20.57	0.532	13.51	0.405	10.29	14.55	64.72	52.20	9.14
C0360-049-0880-M	0.360	9.14	0.049	1.25	0.880	22.35	0.574	14.58	0.431	10.95	14.55	64.72	47.60	8.33
C0360-049-0940-M	0.360	9.14	0.049	1.25	0.940	23.88	0.611	15.52	0.453	11.51	14.55	64.72	44.20	7.74
C0360-049-1000-M	0.360	9.14	0.049	1.25	1.000	25.40	0.647	16.43	0.474	12.04	14.55	64.72	41.20	7.21
C0360-049-1120-M	0.360	9.14	0.049	1.25	1.120	28.45	0.720	18.29	0.518	13.16	14.55	64.72	36.40	6.37
C0360-049-1250-M	0.360	9.14	0.049	1.25	1.250	31.75	0.799	20.29	0.565	14.35	14.55	64.72	32.30	5.65
C0360-049-1380-M	0.360	9.14	0.049	1.25	1.380	35.05	0.879	22.33	0.612	15.54	14.55	64.72	29.00	5.08
C0360-049-1500-M	0.360	9.14	0.049	1.25	1.500	38.10	0.952	24.18	0.656	16.66	14.55	64.72	26.50	4.64
C0360-049-1750-M	0.360	9.14	0.049	1.25	1.750	44.45	1.104	28.04	0.747	18.97	14.55	64.72	22.50	3.94
C0360-049-2000-M	0.360	9.14	0.049	1.25	2.000	50.80	1.256	31.90	0.837	21.26	14.55	64.72	19.60	3.43
C0360-049-2250-M	0.360	9.14	0.049	1.25	2.250	57.15	1.408	35.76	0.928	23.57	14.55	64.72	17.30	3.03
C0360-049-2500-M	0.360	9.14	0.049	1.25	2.500	63.50	1.561	39.65	1.019	25.88	14.55	64.72	15.50	2.71
C0360-049-2750-M	0.360	9.14	0.049	1.25	2.750	69.85	1.713	43.51	1.110	28.19	14.55	64.72	14.00	2.45
C0360-049-3000-M	0.360	9.14	0.049	1.25	3.000	76.20	1.865	47.37	1.200	30.48	14.55	64.72	12.80	2.24
C0360-049-3250-M	0.360	9.14	0.049	1.25	3.250	82.55	2.017	51.23	1.291	32.79	14.55	64.72	11.80	2.07
C0360-049-3500-M	0.360	9.14	0.049	1.25	3.500	88.90	2.169	55.09	1.382	35.10	14.55	64.72	10.90	1.91
C0360-051-0440-M	0.360	9.14	0.051	1.30	0.440	11.18	0.311	7.90	0.286	7.26	16.34	72.68	126.80	22.19
C0360-051-0500-M	0.360	9.14	0.051	1.30	0.500	12.70	0.348	8.84	0.309	7.85	16.34	72.68	107.70	18.85
C0360-051-0560-M	0.360	9.14	0.051	1.30	0.560	14.22	0.385	9.78	0.333	8.46	16.34	72.68	93.60	16.38
C0360-051-0620-M	0.360	9.14	0.051	1.30	0.620	15.75	0.422	10.72	0.356	9.04	16.34	72.68	82.70	14.47
C0360-051-0690-M	0.360	9.14	0.051	1.30	0.690	17.53	0.466	11.84	0.384	9.75	16.34	72.68	72.90	12.76
C0360-051-0750-M	0.360	9.14	0.051	1.30	0.750	19.05	0.503	12.78	0.407	10.34	16.34	72.68	66.10	11.57
C0360-051-0810-M	0.360	9.14	0.051	1.30	0.810	20.57	0.540	13.72	0.431	10.95	16.34	72.68	60.50	10.59
C0360-051-0880-M	0.360	9.14	0.051	1.30	0.880	22.35	0.583	14.81	0.458	11.63	16.34	72.68	55.10	9.64
C0360-051-0940-M	0.360	9.14	0.051	1.30	0.940	23.88	0.620	15.75	0.482	12.24	16.34	72.68	51.10	8.94
C0360-051-1000-M	0.360	9.14	0.051	1.30	1.000	25.40	0.658	16.71	0.505	12.83	16.34	72.68	47.70	8.35
C0360-051-1120-M	0.360	9.14	0.051	1.30	1.120	28.45	0.732	18.59	0.552	14.02	16.34	72.68	42.10	7.37
C0360-051-1250-M	0.360	9.14	0.051	1.30	1.250	31.75	0.812	20.62	0.603	15.32	16.34	72.68	37.30	6.53
C0360-051-1380-M	0.360	9.14	0.051	1.30	1.380	35.05	0.893	22.68	0.654	16.61	16.34	72.68	33.50	5.86
C0360-051-1500-M	0.360	9.14	0.051	1.30	1.500	38.10	0.967	24.56	0.701	17.81	16.34	72.68	30.70	5.37

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0360-045-1500-S	0.997	25.32	7.50	33.37	14.91	2.61
C0360-045-1750-S	1.157	29.40	7.50	33.37	12.66	2.22
C0360-045-2000-S	1.318	33.47	7.50	33.37	11.00	1.92
C0360-045-2250-S	1.480	37.60	7.50	33.37	9.75	1.71
C0360-045-2500-S	1.642	41.71	7.50	33.37	8.75	1.53
C0360-045-2750-S	1.840	46.74	7.50	33.37	8.25	1.44
C0360-047-0440-S	0.330	8.37	8.52	37.89	77.14	13.50
C0360-047-0500-S	0.370	9.41	8.52	37.89	65.72	11.50
C0360-047-0560-S	0.411	10.44	8.52	37.89	57.23	10.01
C0360-047-0620-S	0.452	11.48	8.52	37.89	50.73	8.88
C0360-047-0690-S	0.500	12.69	8.52	37.89	44.73	7.83
C0360-047-0750-S	0.540	13.73	8.52	37.89	40.65	7.11
C0360-047-0810-S	0.581	14.76	8.52	37.89	37.24	6.52
C0360-047-0880-S	0.629	15.97	8.52	37.89	33.90	5.93
C0360-047-0940-S	0.670	17.02	8.52	37.89	31.57	5.52
C0360-047-1000-S	0.710	18.04	8.52	37.89	29.41	5.15
C0360-047-1120-S	0.792	20.12	8.52	37.89	25.99	4.55
C0360-047-1250-S	0.881	22.37	8.52	37.89	23.07	4.04
C0360-047-1380-S	0.969	24.62	8.52	37.89	20.74	3.63
C0360-047-1500-S	1.051	26.71	8.52	37.89	18.99	3.32
C0360-047-1750-S	1.220	30.99	8.52	37.89	16.08	2.81
C0360-047-2000-S	1.391	35.34	8.52	37.89	13.99	2.45
C0360-047-2250-S	1.564	39.72	8.52	37.89	12.41	2.17
C0360-047-2500-S	1.731	43.97	8.52	37.89	11.08	1.94
C0360-047-2750-S	1.905	48.38	8.52	37.89	10.08	1.76
C0360-047-3000-S	2.070	52.59	8.52	37.89	9.16	1.60
C0360-047-3250-S	2.238	56.83	8.52	37.89	8.41	1.47
C0360-047-3500-S	2.412	61.27	8.52	37.89	7.83	1.37
C0360-049-0440-S	0.334	8.48	9.62	42.78	90.55	15.85
C0360-049-0500-S	0.375	9.53	9.62	42.78	77.05	13.48
C0360-049-0560-S	0.417	10.58	9.62	42.78	67.06	11.73
C0360-049-0620-S	0.458	11.63	9.62	42.78	59.31	10.38
C0360-049-0690-S	0.506	12.86	9.62	42.78	52.31	9.15
C0360-049-0750-S	0.547	13.90	9.62	42.78	47.48	8.31
C0360-049-0810-S	0.589	14.96	9.62	42.78	43.48	7.61
C0360-049-0880-S	0.637	16.19	9.62	42.78	39.65	6.94
C0360-049-0940-S	0.679	17.24	9.62	42.78	36.82	6.44
C0360-049-1000-S	0.720	18.28	9.62	42.78	34.32	6.01
C0360-049-1120-S	0.803	20.39	9.62	42.78	30.32	5.31
C0360-049-1250-S	0.893	22.67	9.62	42.78	26.91	4.71
C0360-049-1380-S	0.982	24.94	9.62	42.78	24.16	4.23
C0360-049-1500-S	1.064	27.03	9.62	42.78	22.08	3.86
C0360-049-1750-S	1.237	31.42	9.62	42.78	18.74	3.28
C0360-049-2000-S	1.411	35.84	9.62	42.78	16.33	2.86
C0360-049-2250-S	1.583	40.20	9.62	42.78	14.41	2.52
C0360-049-2500-S	1.755	44.58	9.62	42.78	12.91	2.26
C0360-049-2750-S	1.925	48.90	9.62	42.78	11.66	2.04
C0360-049-3000-S	2.098	53.29	9.62	42.78	10.66	1.87
C0360-049-3250-S	2.271	57.70	9.62	42.78	9.83	1.72
C0360-049-3500-S	2.441	61.99	9.62	42.78	9.08	1.59
C0360-051-0440-S	0.338	8.60	10.72	47.70	105.62	18.48
C0360-051-0500-S	0.380	9.66	10.72	47.70	89.71	15.70
C0360-051-0560-S	0.422	10.73	10.72	47.70	77.97	13.64
C0360-051-0620-S	0.464	11.79	10.72	47.70	68.89	12.06
C0360-051-0690-S	0.513	13.04	10.72	47.70	60.73	10.63
C0360-051-0750-S	0.555	14.10	10.72	47.70	55.06	9.64
C0360-051-0810-S	0.597	15.17	10.72	47.70	50.40	8.82
C0360-051-0880-S	0.646	16.42	10.72	47.70	45.90	8.03
C0360-051-0940-S	0.688	17.48	10.72	47.70	42.57	7.45
C0360-051-1000-S	0.730	18.54	10.72	47.70	39.73	6.95
C0360-051-1120-S	0.814	20.68	10.72	47.70	35.07	6.14
C0360-051-1250-S	0.905	22.98	10.72	47.70	31.07	5.44
C0360-051-1380-S	0.996	25.29	10.72	47.70	27.91	4.88
C0360-051-1500-S	1.081	27.45	10.72	47.70	25.57	4.48

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-051-1750-M	0.360	9.14	0.051	1.30	1.750	44.45	1.122	28.50	0.800	20.32	16.34	72.68	26.00	4.55
C0360-051-2000-M	0.360	9.14	0.051	1.30	2.000	50.80	1.276	32.41	0.898	22.81	16.34	72.68	22.60	3.96
C0360-051-2250-M	0.360	9.14	0.051	1.30	2.250	57.15	1.431	36.35	0.996	25.30	16.34	72.68	19.90	3.48
C0360-051-2500-M	0.360	9.14	0.051	1.30	2.500	63.50	1.586	40.28	1.094	27.79	16.34	72.68	17.90	3.13
C0360-051-2750-M	0.360	9.14	0.051	1.30	2.750	69.85	1.740	44.20	1.192	30.28	16.34	72.68	16.20	2.84
C0360-051-3000-M	0.360	9.14	0.051	1.30	3.000	76.20	1.895	48.13	1.290	32.77	16.34	72.68	14.80	2.59
C0360-051-3250-M	0.360	9.14	0.051	1.30	3.250	82.55	2.050	52.07	1.388	35.26	16.34	72.68	13.60	2.38
C0360-051-3500-M	0.360	9.14	0.051	1.30	3.500	88.90	2.204	55.98	1.486	37.74	16.34	72.68	12.60	2.21
C0360-055-0440-M	0.360	9.14	0.055	1.40	0.440	11.18	0.325	8.26	0.310	7.87	20.14	89.59	175.60	30.73
C0360-055-0500-M	0.360	9.14	0.055	1.40	0.500	12.70	0.364	9.25	0.337	8.56	20.14	89.59	148.60	26.01
C0360-055-0560-M	0.360	9.14	0.055	1.40	0.560	14.22	0.404	10.26	0.363	9.22	20.14	89.59	128.80	22.54
C0360-055-0620-M	0.360	9.14	0.055	1.40	0.620	15.75	0.443	11.25	0.389	9.88	20.14	89.59	113.60	19.88
C0360-055-0690-M	0.360	9.14	0.055	1.40	0.690	17.53	0.488	12.40	0.420	10.67	20.14	89.59	99.90	17.48
C0360-055-0750-M	0.360	9.14	0.055	1.40	0.750	19.05	0.528	13.41	0.447	11.35	20.14	89.59	90.60	15.86
C0360-055-0810-M	0.360	9.14	0.055	1.40	0.810	20.57	0.567	14.40	0.473	12.01	20.14	89.59	82.80	14.49
C0360-055-0880-M	0.360	9.14	0.055	1.40	0.880	22.35	0.612	15.54	0.504	12.80	20.14	89.59	75.30	13.18
C0360-055-0940-M	0.360	9.14	0.055	1.40	0.940	23.88	0.652	16.56	0.530	13.46	20.14	89.59	69.80	12.22
C0360-055-1000-M	0.360	9.14	0.055	1.40	1.000	25.40	0.691	17.55	0.557	14.15	20.14	89.59	65.10	11.39
C0360-055-1120-M	0.360	9.14	0.055	1.40	1.120	28.45	0.769	19.53	0.609	15.47	20.14	89.59	57.40	10.05
C0360-055-1250-M	0.360	9.14	0.055	1.40	1.250	31.75	0.854	21.69	0.667	16.94	20.14	89.59	50.80	8.89
C0360-055-1380-M	0.360	9.14	0.055	1.40	1.380	35.05	0.939	23.85	0.724	18.39	20.14	89.59	45.60	7.98
C0360-055-1500-M	0.360	9.14	0.055	1.40	1.500	38.10	1.017	25.83	0.777	19.74	20.14	89.59	41.70	7.30
C0360-055-1750-M	0.360	9.14	0.055	1.40	1.750	44.45	1.180	29.97	0.887	22.53	20.14	89.59	35.30	6.18
C0360-055-2000-M	0.360	9.14	0.055	1.40	2.000	50.80	1.343	34.11	0.997	25.32	20.14	89.59	30.70	5.37
C0360-055-2250-M	0.360	9.14	0.055	1.40	2.250	57.15	1.506	38.25	1.107	28.12	20.14	89.59	27.10	4.74
C0360-055-2500-M	0.360	9.14	0.055	1.40	2.500	63.50	1.670	42.42	1.217	30.91	20.14	89.59	24.20	4.24
C0360-055-2750-M	0.360	9.14	0.055	1.40	2.750	69.85	1.833	46.56	1.327	33.71	20.14	89.59	22.00	3.85
C0360-055-3000-M	0.360	9.14	0.055	1.40	3.000	76.20	1.996	50.70	1.437	36.50	20.14	89.59	20.10	3.52
C0360-055-3250-M	0.360	9.14	0.055	1.40	3.250	82.55	2.159	54.84	1.547	39.29	20.14	89.59	18.50	3.24
C0360-055-3500-M	0.360	9.14	0.055	1.40	3.500	88.90	2.322	58.98	1.657	42.09	20.14	89.59	17.10	2.99
C0360-059-0440-M	0.360	9.14	0.059	1.50	0.440	11.18	0.338	8.59	0.321	8.15	24.33	108.23	238.00	41.65
C0360-059-0500-M	0.360	9.14	0.059	1.50	0.500	12.70	0.379	9.63	0.356	9.04	24.33	108.23	200.60	35.11
C0360-059-0560-M	0.360	9.14	0.059	1.50	0.560	14.22	0.420	10.67	0.388	9.86	24.33	108.23	173.40	30.35
C0360-059-0620-M	0.360	9.14	0.059	1.50	0.620	15.75	0.461	11.71	0.421	10.69	24.33	108.23	152.70	26.72
C0360-059-0690-M	0.360	9.14	0.059	1.50	0.690	17.53	0.508	12.90	0.458	11.63	24.33	108.23	134.00	23.45
C0360-059-0750-M	0.360	9.14	0.059	1.50	0.750	19.05	0.549	13.94	0.488	12.40	24.33	108.23	121.30	21.23
C0360-059-0810-M	0.360	9.14	0.059	1.50	0.810	20.57	0.590	14.99	0.517	13.13	24.33	108.23	110.80	19.39
C0360-059-0880-M	0.360	9.14	0.059	1.50	0.880	22.35	0.638	16.21	0.552	14.02	24.33	108.23	100.60	17.61
C0360-059-0940-M	0.360	9.14	0.059	1.50	0.940	23.88	0.679	17.25	0.581	14.76	24.33	108.23	93.20	16.31
C0360-059-1000-M	0.360	9.14	0.059	1.50	1.000	25.40	0.720	18.29	0.611	15.52	24.33	108.23	86.90	15.21
C0360-059-1120-M	0.360	9.14	0.059	1.50	1.120	28.45	0.802	20.37	0.670	17.02	24.33	108.23	76.50	13.39
C0360-059-1250-M	0.360	9.14	0.059	1.50	1.250	31.75	0.891	22.63	0.734	18.64	24.33	108.23	67.70	11.85
C0360-059-1380-M	0.360	9.14	0.059	1.50	1.380	35.05	0.979	24.87	0.797	20.24	24.33	108.23	60.70	10.62
C0360-059-1500-M	0.360	9.14	0.059	1.50	1.500	38.10	1.061	26.95	0.856	21.74	24.33	108.23	55.50	9.71
C0360-059-1750-M	0.360	9.14	0.059	1.50	1.750	44.45	1.232	31.29	0.979	24.87	24.33	108.23	47.00	8.23
C0360-059-2000-M	0.360	9.14	0.059	1.50	2.000	50.80	1.403	35.64	1.102	27.99	24.33	108.23	40.70	7.12
C0360-059-2250-M	0.360	9.14	0.059	1.50	2.250	57.15	1.573	39.95	1.225	31.12	24.33	108.23	36.00	6.30
C0360-059-2500-M	0.360	9.14	0.059	1.50	2.500	63.50	1.744	44.30	1.348	34.24	24.33	108.23	32.20	5.64
C0360-059-2750-M	0.360	9.14	0.059	1.50	2.750	69.85	1.915	48.64	1.471	37.36	24.33	108.23	29.10	5.09
C0360-059-3000-M	0.360	9.14	0.059	1.50	3.000	76.20	2.085	52.96	1.594	40.49	24.33	108.23	26.60	4.66
C0360-059-3250-M	0.360	9.14	0.059	1.50	3.250	82.55	2.256	57.30	1.717	43.61	24.33	108.23	24.50	4.29
C0360-059-3500-M	0.360	9.14	0.059	1.50	3.500	88.90	2.427	61.65	1.840	46.74	24.33	108.23	22.70	3.97
D12150	0.364	9.25	0.049	1.25	0.591	15.00	0.291	7.40	0.271	6.88	23.59	104.93	81.83	14.32
D12160	0.364	9.25	0.049	1.25	0.866	22.00	0.413	10.50	0.369	9.38	23.59	104.93	50.97	8.92
D12170	0.364	9.25	0.049	1.25	1.299	33.00	0.587	14.90	0.517	13.13	23.59	104.93	33.31	5.83
D12180	0.364	9.25	0.049	1.25	1.870	47.50	0.827	21.00	0.714	18.13	23.59	104.93	22.63	3.96
D12190	0.364	9.25	0.049	1.25	2.717	69.00	1.181	30.00	1.009	25.63	23.59	104.93	15.37	2.69
C0375-026-0500-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.500**	**12.70**	**0.170**	**4.32**	**0.118**	**2.99**	**2.06**	**9.15**	**6.24**	**1.09**
C0375-026-0563-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.563**	**14.30**	**0.188**	**4.78**	**0.128**	**3.26**	**2.05**	**9.12**	**5.47**	**0.96**
C0375-026-0625-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.625**	**15.88**	**0.206**	**5.23**	**0.139**	**3.52**	**2.05**	**9.10**	**4.88**	**0.85**
C0375-026-0688-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.688**	**17.48**	**0.224**	**5.69**	**0.149**	**3.79**	**2.04**	**9.06**	**4.39**	**0.77**
C0375-026-0750-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.750**	**19.05**	**0.242**	**6.14**	**0.160**	**4.06**	**2.03**	**9.04**	**4.00**	**0.70**
C0375-026-0813-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.813**	**20.65**	**0.259**	**6.58**	**0.170**	**4.31**	**2.03**	**9.04**	**3.67**	**0.64**
C0375-026-0875-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.875**	**22.23**	**0.276**	**7.01**	**0.179**	**4.54**	**2.04**	**9.06**	**3.40**	**0.60**

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0360-051-1750-S	1.255	31.87	10.72	47.70	21.66	3.79
C0360-051-2000-S	1.430	36.33	10.72	47.70	18.83	3.29
C0360-051-2250-S	1.603	40.72	10.72	47.70	16.58	2.90
C0360-051-2500-S	1.781	45.23	10.72	47.70	14.91	2.61
C0360-051-2750-S	1.955	49.67	10.72	47.70	13.50	2.36
C0360-051-3000-S	2.130	54.11	10.72	47.70	12.33	2.16
C0360-051-3250-S	2.303	58.51	10.72	47.70	11.33	1.98
C0360-051-3500-S	2.478	62.95	10.72	47.70	10.50	1.84
C0360-055-0440-S	0.350	8.89	13.15	58.48	146.28	25.60
C0360-055-0500-S	0.394	10.00	13.15	58.48	123.78	21.66
C0360-055-0560-S	0.437	11.11	13.15	58.48	107.29	18.78
C0360-055-0620-S	0.481	12.22	13.15	58.48	94.63	16.56
C0360-055-0690-S	0.532	13.51	13.15	58.48	83.22	14.56
C0360-055-0750-S	0.576	14.63	13.15	58.48	75.47	13.21
C0360-055-0810-S	0.619	15.73	13.15	58.48	68.97	12.07
C0360-055-0880-S	0.670	17.03	13.15	58.48	62.73	10.98
C0360-055-0940-S	0.714	18.13	13.15	58.48	58.14	10.18
C0360-055-1000-S	0.758	19.24	13.15	58.48	54.23	9.49
C0360-055-1120-S	0.845	21.46	13.15	58.48	47.81	8.37
C0360-055-1250-S	0.939	23.86	13.15	58.48	42.32	7.41
C0360-055-1380-S	1.034	26.26	13.15	58.48	37.99	6.65
C0360-055-1500-S	1.122	28.49	13.15	58.48	34.74	6.08
C0360-055-1750-S	1.303	33.09	13.15	58.48	29.41	5.15
C0360-055-2000-S	1.486	37.74	13.15	58.48	25.57	4.48
C0360-055-2250-S	1.668	42.36	13.15	58.48	22.57	3.95
C0360-055-2500-S	1.848	46.94	13.15	58.48	20.16	3.53
C0360-055-2750-S	2.033	51.63	13.15	58.48	18.33	3.21
C0360-055-3000-S	2.215	56.26	13.15	58.48	16.74	2.93
C0360-055-3250-S	2.397	60.88	13.15	58.48	15.41	2.70
C0360-055-3500-S	2.577	65.46	13.15	58.48	14.24	2.49
C0360-059-0440-S	0.360	9.14	15.91	70.78	198.25	34.69
C0360-059-0500-S	0.405	10.28	15.91	70.78	167.10	29.24
C0360-059-0560-S	0.450	11.43	15.91	70.78	144.44	25.28
C0360-059-0620-S	0.495	12.57	15.91	70.78	127.20	22.26
C0360-059-0690-S	0.547	13.91	15.91	70.78	111.62	19.53
C0360-059-0750-S	0.593	15.05	15.91	70.78	101.04	17.68
C0360-059-0810-S	0.638	16.20	15.91	70.78	92.30	16.15
C0360-059-0880-S	0.690	17.53	15.91	70.78	83.80	14.67
C0360-059-0940-S	0.735	18.67	15.91	70.78	77.64	13.59
C0360-059-1000-S	0.780	19.82	15.91	70.78	72.39	12.67
C0360-059-1120-S	0.870	22.11	15.91	70.78	63.73	11.15
C0360-059-1250-S	0.968	24.58	15.91	70.78	56.39	9.87
C0360-059-1380-S	1.065	27.06	15.91	70.78	50.56	8.85
C0360-059-1500-S	1.156	29.36	15.91	70.78	46.23	8.09
C0360-059-1750-S	1.344	34.13	15.91	70.78	39.15	6.85
C0360-059-2000-S	1.531	38.88	15.91	70.78	33.90	5.93
C0360-059-2250-S	1.719	43.67	15.91	70.78	29.99	5.25
C0360-059-2500-S	1.907	48.43	15.91	70.78	26.82	4.69
C0360-059-2750-S	2.094	53.18	15.91	70.78	24.24	4.24
C0360-059-3000-S	2.282	57.96	15.91	70.78	22.16	3.88
C0360-059-3250-S	2.470	62.75	15.91	70.78	20.41	3.57
C0360-059-3500-S	2.659	67.53	15.91	70.78	18.91	3.31
D22150	0.291	7.40	19.65	87.41	68.17	11.93
D22160	0.413	10.50	19.65	87.41	42.46	7.43
D22170	0.587	14.90	19.65	87.41	27.77	4.86
D22180	0.827	21.00	19.65	87.41	18.86	3.30
D22190	1.181	30.00	19.65	87.41	12.80	2.24
C0375-026-0500-S	**0.170**	**4.32**	**1.71**	**7.63**	**5.20**	**0.91**
C0375-026-0563-S	**0.188**	**4.78**	**1.71**	**7.60**	**4.56**	**0.80**
C0375-026-0625-S	**0.206**	**5.23**	**1.70**	**7.58**	**4.07**	**0.71**
C0375-026-0688-S	**0.224**	**5.69**	**1.70**	**7.55**	**3.66**	**0.64**
C0375-026-0750-S	**0.242**	**6.14**	**1.69**	**7.53**	**3.33**	**0.58**
C0375-026-0813-S	**0.259**	**6.58**	**1.69**	**7.53**	**3.06**	**0.53**
C0375-026-0875-S	**0.276**	**7.01**	**1.70**	**7.55**	**2.83**	**0.50**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0375-026-0938-M	**0.375**	**9.53**	**0.026**	**0.66**	**0.938**	**23.83**	**0.293**	**7.45**	**0.189**	**4.79**	**2.03**	**9.03**	**3.15**	**0.55**
C0375-026-1000-M	**0.375**	**9.53**	**0.026**	**0.66**	**1.000**	**25.40**	**0.310**	**7.87**	**0.198**	**5.02**	**2.04**	**9.05**	**2.95**	**0.52**
C0375-026-1125-M	**0.375**	**9.53**	**0.026**	**0.66**	**1.125**	**28.58**	**0.344**	**8.75**	**0.217**	**5.51**	**2.03**	**9.03**	**2.60**	**0.46**
C0375-026-1250-M	**0.375**	**9.53**	**0.026**	**0.66**	**1.250**	**31.75**	**0.378**	**9.61**	**0.236**	**5.99**	**2.03**	**9.03**	**2.33**	**0.41**
C0375-026-1500-M	**0.375**	**9.53**	**0.026**	**0.66**	**1.500**	**38.10**	**0.446**	**11.33**	**0.273**	**6.94**	**2.03**	**9.05**	**1.93**	**0.34**
C0375-026-1750-M	**0.375**	**9.53**	**0.026**	**0.66**	**1.750**	**44.45**	**0.514**	**13.05**	**0.310**	**7.88**	**2.04**	**9.07**	**1.65**	**0.29**
C0375-026-2000-M	**0.375**	**9.53**	**0.026**	**0.66**	**2.000**	**50.80**	**0.583**	**14.81**	**0.350**	**8.88**	**2.03**	**9.01**	**1.43**	**0.25**
C0375-026-2250-M	**0.375**	**9.53**	**0.026**	**0.66**	**2.250**	**57.15**	**0.651**	**16.53**	**0.387**	**9.82**	**2.03**	**9.04**	**1.27**	**0.22**
C0375-030-0630-M	**0.375**	**9.53**	**0.030**	**0.76**	**0.630**	**16.00**	**0.299**	**7.60**	**0.253**	**6.43**	**1.55**	**6.91**	**4.70**	**0.82**
C0375-030-0880-M	**0.375**	**9.53**	**0.030**	**0.76**	**0.880**	**22.35**	**0.359**	**9.13**	**0.281**	**7.13**	**2.13**	**9.50**	**4.10**	**0.72**
C0375-030-0940-M	**0.375**	**9.53**	**0.030**	**0.76**	**0.940**	**23.88**	**0.326**	**8.28**	**0.228**	**5.80**	**3.32**	**14.75**	**5.40**	**0.95**
C0375-030-1000-M	**0.375**	**9.53**	**0.030**	**0.76**	**1.000**	**25.40**	**0.365**	**9.28**	**0.266**	**6.76**	**2.79**	**12.42**	**4.40**	**0.77**
C0375-030-1130-M	**0.375**	**9.53**	**0.030**	**0.76**	**1.130**	**28.70**	**0.427**	**10.85**	**0.318**	**8.08**	**2.46**	**10.94**	**3.50**	**0.61**
C0375-030-1190-M	**0.375**	**9.53**	**0.030**	**0.76**	**1.190**	**30.23**	**0.436**	**11.08**	**0.318**	**8.08**	**2.64**	**11.74**	**3.50**	**0.61**
C0375-030-1380-M	**0.375**	**9.53**	**0.030**	**0.76**	**1.380**	**35.05**	**0.453**	**11.52**	**0.304**	**7.73**	**3.43**	**15.25**	**3.70**	**0.65**
C0375-030-1500-M	**0.375**	**9.53**	**0.030**	**0.76**	**1.500**	**38.10**	**0.554**	**14.07**	**0.407**	**10.33**	**2.46**	**10.94**	**2.60**	**0.46**
C0375-030-2000-M	**0.375**	**9.53**	**0.030**	**0.76**	**2.000**	**50.80**	**0.713**	**18.10**	**0.510**	**12.94**	**2.57**	**11.45**	**2.00**	**0.35**
C0375-030-2190-M	**0.375**	**9.53**	**0.030**	**0.76**	**2.190**	**55.63**	**0.798**	**20.26**	**0.407**	**10.33**	**3.62**	**16.10**	**2.60**	**0.46**
C0375-032-0375-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.375**	**9.53**	**0.167**	**4.24**	**0.137**	**3.48**	**3.43**	**15.24**	**16.48**	**2.88**
C0375-032-0500-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.500**	**12.70**	**0.213**	**5.42**	**0.171**	**4.34**	**3.37**	**14.98**	**11.75**	**2.06**
C0375-032-0563-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.563**	**14.30**	**0.237**	**6.01**	**0.188**	**4.78**	**3.35**	**14.91**	**10.27**	**1.80**
C0375-032-0625-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.625**	**15.88**	**0.259**	**6.59**	**0.205**	**5.20**	**3.34**	**14.85**	**9.13**	**1.60**
C0375-032-0688-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.688**	**17.48**	**0.281**	**7.15**	**0.220**	**5.59**	**3.34**	**14.85**	**8.21**	**1.44**
C0375-032-0750-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.750**	**19.05**	**0.303**	**7.69**	**0.235**	**5.97**	**3.34**	**14.86**	**7.47**	**1.31**
C0375-032-0813-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.813**	**20.65**	**0.325**	**8.25**	**0.251**	**6.37**	**3.34**	**14.85**	**6.84**	**1.20**
C0375-032-0875-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.875**	**22.23**	**0.346**	**8.80**	**0.266**	**6.75**	**3.34**	**14.86**	**6.32**	**1.11**
C0375-032-0938-M	**0.375**	**9.53**	**0.032**	**0.81**	**0.938**	**23.83**	**0.368**	**9.36**	**0.281**	**7.15**	**3.34**	**14.85**	**5.86**	**1.03**
C0375-032-1000-M	**0.375**	**9.53**	**0.032**	**0.81**	**1.000**	**25.40**	**0.390**	**9.91**	**0.297**	**7.53**	**3.34**	**14.84**	**5.47**	**0.96**
C0375-032-1125-M	**0.375**	**9.53**	**0.032**	**0.81**	**1.125**	**28.58**	**0.434**	**11.01**	**0.327**	**8.31**	**3.34**	**14.86**	**4.83**	**0.85**
C0375-032-1250-M	**0.375**	**9.53**	**0.032**	**0.81**	**1.250**	**31.75**	**0.477**	**12.12**	**0.358**	**9.09**	**3.34**	**14.85**	**4.32**	**0.76**
C0375-032-1375-M	**0.375**	**9.53**	**0.032**	**0.81**	**1.375**	**34.93**	**0.520**	**13.22**	**0.388**	**9.86**	**3.34**	**14.86**	**3.91**	**0.68**
C0375-032-1500-M	**0.375**	**9.53**	**0.032**	**0.81**	**1.500**	**38.10**	**0.564**	**14.33**	**0.419**	**10.64**	**3.34**	**14.86**	**3.57**	**0.62**
C0375-032-1750-M	**0.375**	**9.53**	**0.032**	**0.81**	**1.750**	**44.45**	**0.651**	**16.54**	**0.480**	**12.19**	**3.34**	**14.86**	**3.04**	**0.53**
C0375-032-2000-M	**0.375**	**9.53**	**0.032**	**0.81**	**2.000**	**50.80**	**0.738**	**18.74**	**0.541**	**13.74**	**3.34**	**14.88**	**2.65**	**0.46**
C0375-032-2250-M	**0.375**	**9.53**	**0.032**	**0.81**	**2.250**	**57.15**	**0.826**	**20.98**	**0.604**	**15.33**	**3.33**	**14.82**	**2.34**	**0.41**
C0375-032-2500-M	**0.375**	**9.53**	**0.032**	**0.81**	**2.500**	**63.50**	**0.913**	**23.20**	**0.665**	**16.89**	**3.33**	**14.82**	**2.10**	**0.37**
C0375-035-0438-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.438**	**11.13**	**0.213**	**5.42**	**0.182**	**4.63**	**4.02**	**17.89**	**17.90**	**3.13**
C0375-035-0500-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.500**	**12.70**	**0.240**	**6.09**	**0.203**	**5.17**	**3.99**	**17.74**	**15.32**	**2.68**
C0375-035-0563-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.563**	**14.30**	**0.266**	**6.76**	**0.224**	**5.70**	**3.97**	**17.64**	**13.36**	**2.34**
C0375-035-0625-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.625**	**15.88**	**0.291**	**7.39**	**0.243**	**6.18**	**3.97**	**17.65**	**11.87**	**2.08**
C0375-035-0688-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.688**	**17.48**	**0.316**	**8.02**	**0.263**	**6.67**	**3.97**	**17.65**	**10.66**	**1.87**
C0375-035-0750-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.750**	**19.05**	**0.341**	**8.65**	**0.282**	**7.16**	**3.96**	**17.62**	**9.68**	**1.69**
C0375-035-0813-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.813**	**20.65**	**0.366**	**9.29**	**0.301**	**7.65**	**3.96**	**17.63**	**8.86**	**1.55**
C0375-035-0875-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.875**	**22.23**	**0.390**	**9.92**	**0.320**	**8.13**	**3.96**	**17.63**	**8.18**	**1.43**
C0375-035-0938-M	**0.375**	**9.53**	**0.035**	**0.89**	**0.938**	**23.83**	**0.415**	**10.55**	**0.339**	**8.62**	**3.97**	**17.65**	**7.59**	**1.33**
C0375-035-1000-M	**0.375**	**9.53**	**0.035**	**0.89**	**1.000**	**25.40**	**0.440**	**11.18**	**0.358**	**9.10**	**3.96**	**17.63**	**7.08**	**1.24**
C0375-035-1125-M	**0.375**	**9.53**	**0.035**	**0.89**	**1.125**	**28.58**	**0.490**	**12.44**	**0.397**	**10.08**	**3.96**	**17.63**	**6.24**	**1.09**
C0375-035-1250-M	**0.375**	**9.53**	**0.035**	**0.89**	**1.250**	**31.75**	**0.540**	**13.71**	**0.435**	**11.05**	**3.96**	**17.63**	**5.58**	**0.98**
C0375-035-1375-M	**0.375**	**9.53**	**0.035**	**0.89**	**1.375**	**34.93**	**0.589**	**14.96**	**0.473**	**12.01**	**3.97**	**17.65**	**5.05**	**0.88**
C0375-035-1500-M	**0.375**	**9.53**	**0.035**	**0.89**	**1.500**	**38.10**	**0.639**	**16.22**	**0.511**	**12.98**	**3.97**	**17.66**	**4.61**	**0.81**
C0375-035-1750-M	**0.375**	**9.53**	**0.035**	**0.89**	**1.750**	**44.45**	**0.739**	**18.76**	**0.588**	**14.94**	**3.96**	**17.64**	**3.92**	**0.69**
C0375-035-2000-M	**0.375**	**9.53**	**0.035**	**0.89**	**2.000**	**50.80**	**0.838**	**21.29**	**0.665**	**16.89**	**3.96**	**17.62**	**3.41**	**0.60**
C0375-035-2250-M	**0.375**	**9.53**	**0.035**	**0.89**	**2.250**	**57.15**	**0.938**	**23.82**	**0.741**	**18.83**	**3.96**	**17.63**	**3.02**	**0.53**
C0375-035-2500-M	**0.375**	**9.53**	**0.035**	**0.89**	**2.500**	**63.50**	**1.037**	**26.34**	**0.818**	**20.77**	**3.96**	**17.64**	**2.71**	**0.47**
D12350	0.378	9.60	0.063	1.60	0.571	14.50	0.354	9.00	0.346	8.80	47.62	211.82	212.97	37.27
D12360	0.378	9.60	0.063	1.60	0.846	21.50	0.496	12.60	0.472	12.00	47.62	211.82	135.60	23.73
D12370	0.378	9.60	0.063	1.60	1.240	31.50	0.705	17.90	0.661	16.80	47.62	211.82	88.00	15.40
D12380	0.378	9.60	0.063	1.60	1.772	45.00	0.976	24.80	0.913	23.20	47.62	211.82	59.43	10.40
D12390	0.378	9.60	0.063	1.60	2.579	65.50	1.386	35.20	1.291	32.80	47.62	211.82	40.29	7.05
C0390-043-0500-M	0.390	9.91	0.043	1.09	0.500	12.70	0.291	7.39	0.241	6.12	9.45	42.04	45.30	7.93
C0390-043-0560-M	0.390	9.91	0.043	1.09	0.560	14.22	0.321	8.15	0.257	6.53	9.45	42.04	39.60	6.93
C0390-043-0620-M	0.390	9.91	0.043	1.09	0.620	15.75	0.351	8.92	0.273	6.93	9.45	42.04	35.10	6.14
C0390-043-0690-M	0.390	9.91	0.043	1.09	0.690	17.53	0.386	9.80	0.292	7.42	9.45	42.04	31.00	5.43
C0390-043-0750-M	0.390	9.91	0.043	1.09	0.750	19.05	0.415	10.54	0.308	7.82	9.45	42.04	28.20	4.94

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0375-026-0938-S	**0.293**	**7.45**	**1.69**	**7.52**	**2.62**	**0.46**
C0375-026-1000-S	**0.310**	**7.87**	**1.70**	**7.54**	**2.46**	**0.43**
C0375-026-1125-S	**0.344**	**8.75**	**1.69**	**7.52**	**2.17**	**0.38**
C0375-026-1250-S	**0.378**	**9.61**	**1.69**	**7.53**	**1.94**	**0.34**
C0375-026-1500-S	**0.446**	**11.33**	**1.69**	**7.54**	**1.61**	**0.28**
C0375-026-1750-S	**0.514**	**13.05**	**1.70**	**7.56**	**1.37**	**0.24**
C0375-026-2000-S	**0.583**	**14.81**	**1.69**	**7.51**	**1.19**	**0.21**
C0375-026-2250-S	**0.651**	**16.53**	**1.69**	**7.53**	**1.06**	**0.19**
C0375-030-0630-S	**0.299**	**7.60**	**1.29**	**5.76**	**3.92**	**0.69**
C0375-030-0880-S	**0.359**	**9.13**	**1.78**	**7.91**	**3.42**	**0.60**
C0375-030-0940-S	**0.332**	**8.42**	**2.74**	**12.17**	**4.50**	**0.79**
C0375-030-1000-S	**0.365**	**9.28**	**2.33**	**10.35**	**3.67**	**0.64**
C0375-030-1130-S	**0.427**	**10.85**	**2.05**	**9.12**	**2.92**	**0.51**
C0375-030-1190-S	**0.436**	**11.08**	**2.20**	**9.78**	**2.92**	**0.51**
C0375-030-1380-S	**0.492**	**12.50**	**2.74**	**12.17**	**3.08**	**0.54**
C0375-030-1500-S	**0.554**	**14.07**	**2.05**	**9.11**	**2.17**	**0.38**
C0375-030-2000-S	**0.713**	**18.10**	**2.14**	**9.54**	**1.67**	**0.29**
C0375-030-2190-S	**0.926**	**23.53**	**2.74**	**12.17**	**2.17**	**0.38**
C0375-032-0375-S	**0.167**	**4.24**	**2.85**	**12.70**	**13.73**	**2.40**
C0375-032-0500-S	**0.213**	**5.42**	**2.81**	**12.48**	**9.79**	**1.71**
C0375-032-0563-S	**0.237**	**6.01**	**2.79**	**12.42**	**8.56**	**1.50**
C0375-032-0625-S	**0.259**	**6.59**	**2.78**	**12.37**	**7.61**	**1.33**
C0375-032-0688-S	**0.281**	**7.15**	**2.78**	**12.37**	**6.84**	**1.20**
C0375-032-0750-S	**0.303**	**7.69**	**2.78**	**12.38**	**6.22**	**1.09**
C0375-032-0813-S	**0.325**	**8.25**	**2.78**	**12.37**	**5.70**	**1.00**
C0375-032-0875-S	**0.346**	**8.80**	**2.78**	**12.38**	**5.27**	**0.92**
C0375-032-0938-S	**0.368**	**9.36**	**2.78**	**12.37**	**4.88**	**0.85**
C0375-032-1000-S	**0.390**	**9.91**	**2.78**	**12.36**	**4.56**	**0.80**
C0375-032-1125-S	**0.434**	**11.01**	**2.78**	**12.38**	**4.02**	**0.70**
C0375-032-1250-S	**0.477**	**12.12**	**2.78**	**12.37**	**3.60**	**0.63**
C0375-032-1375-S	**0.520**	**13.22**	**2.78**	**12.38**	**3.26**	**0.57**
C0375-032-1500-S	**0.564**	**14.33**	**2.78**	**12.38**	**2.97**	**0.52**
C0375-032-1750-S	**0.651**	**16.54**	**2.78**	**12.38**	**2.53**	**0.44**
C0375-032-2000-S	**0.738**	**18.74**	**2.79**	**12.39**	**2.21**	**0.39**
C0375-032-2250-S	**0.826**	**20.98**	**2.78**	**12.35**	**1.95**	**0.34**
C0375-032-2500-S	**0.913**	**23.20**	**2.78**	**12.35**	**1.75**	**0.31**
C0375-035-0438-S	**0.213**	**5.42**	**3.35**	**14.90**	**14.91**	**2.61**
C0375-035-0500-S	**0.240**	**6.09**	**3.32**	**14.78**	**12.76**	**2.23**
C0375-035-0563-S	**0.266**	**6.76**	**3.30**	**14.69**	**11.13**	**1.95**
C0375-035-0625-S	**0.291**	**7.39**	**3.30**	**14.70**	**9.89**	**1.73**
C0375-035-0688-S	**0.316**	**8.02**	**3.30**	**14.70**	**8.88**	**1.55**
C0375-035-0750-S	**0.341**	**8.65**	**3.30**	**14.68**	**8.06**	**1.41**
C0375-035-0813-S	**0.366**	**9.29**	**3.30**	**14.68**	**7.38**	**1.29**
C0375-035-0875-S	**0.390**	**9.92**	**3.30**	**14.69**	**6.81**	**1.19**
C0375-035-0938-S	**0.415**	**10.55**	**3.30**	**14.70**	**6.32**	**1.11**
C0375-035-1000-S	**0.440**	**11.18**	**3.30**	**14.69**	**5.90**	**1.03**
C0375-035-1125-S	**0.490**	**12.44**	**3.30**	**14.68**	**5.20**	**0.91**
C0375-035-1250-S	**0.540**	**13.71**	**3.30**	**14.69**	**4.65**	**0.81**
C0375-035-1375-S	**0.589**	**14.96**	**3.31**	**14.71**	**4.21**	**0.74**
C0375-035-1500-S	**0.639**	**16.22**	**3.31**	**14.71**	**3.84**	**0.67**
C0375-035-1750-S	**0.739**	**18.76**	**3.30**	**14.69**	**3.27**	**0.57**
C0375-035-2000-S	**0.838**	**21.29**	**3.30**	**14.68**	**2.84**	**0.50**
C0375-035-2250-S	**0.938**	**23.82**	**3.30**	**14.69**	**2.52**	**0.44**
C0375-035-2500-S	**1.037**	**26.34**	**3.30**	**14.69**	**2.26**	**0.39**
D22350	0.354	9.00	39.67	176.45	177.43	31.05
D22360	0.496	12.60	39.67	176.45	112.97	19.77
D22370	0.705	17.90	39.67	176.45	73.31	12.83
D22380	0.976	24.80	39.67	176.45	49.49	8.66
D22390	1.386	35.20	39.67	176.45	33.54	5.87
C0390-043-0500-S	0.335	8.52	6.21	27.62	37.74	6.60
C0390-043-0560-S	0.372	9.44	6.21	27.62	32.99	5.77
C0390-043-0620-S	0.408	10.35	6.21	27.62	29.24	5.12
C0390-043-0690-S	0.450	11.42	6.21	27.62	25.82	4.52
C0390-043-0750-S	0.486	12.34	6.21	27.62	23.49	4.11

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0390-043-0810-M	0.390	9.91	0.043	1.09	0.810	20.57	0.445	11.30	0.324	8.23	9.45	42.04	25.90	4.53
C0390-043-0880-M	0.390	9.91	0.043	1.09	0.880	22.35	0.480	12.19	0.343	8.71	9.45	42.04	23.60	4.13
C0390-043-0940-M	0.390	9.91	0.043	1.09	0.940	23.88	0.513	13.03	0.359	9.12	9.45	42.04	22.10	3.87
C0390-043-1000-M	0.390	9.91	0.043	1.09	1.000	25.40	0.539	13.69	0.376	9.55	9.45	42.04	20.50	3.59
C0390-043-1120-M	0.390	9.91	0.043	1.09	1.120	28.45	0.599	15.21	0.408	10.36	9.45	42.04	18.10	3.17
C0390-043-1250-M	0.390	9.91	0.043	1.09	1.250	31.75	0.664	16.87	0.443	11.25	9.45	42.04	16.10	2.82
C0390-043-1380-M	0.390	9.91	0.043	1.09	1.380	35.05	0.728	18.49	0.478	12.14	9.45	42.04	14.50	2.54
C0390-043-1500-M	0.390	9.91	0.043	1.09	1.500	38.10	0.788	20.02	0.510	12.95	9.45	42.04	13.30	2.33
C0390-043-1750-M	0.390	9.91	0.043	1.09	1.750	44.45	0.912	23.16	0.578	14.68	9.45	42.04	11.30	1.98
C0390-043-2000-M	0.390	9.91	0.043	1.09	2.000	50.80	1.036	26.31	0.645	16.38	9.45	42.04	9.80	1.72
C0390-047-0500-M	0.390	9.91	0.047	1.19	0.500	12.70	0.309	7.85	0.270	6.86	12.10	53.82	63.30	11.08
C0390-047-0560-M	0.390	9.91	0.047	1.19	0.560	14.22	0.341	8.66	0.289	7.34	12.10	53.82	55.20	9.66
C0390-047-0620-M	0.390	9.91	0.047	1.19	0.620	15.75	0.372	9.45	0.308	7.82	12.10	53.82	48.90	8.56
C0390-047-0690-M	0.390	9.91	0.047	1.19	0.690	17.53	0.409	10.39	0.330	8.38	12.10	53.82	43.10	7.54
C0390-047-0750-M	0.390	9.91	0.047	1.19	0.750	19.05	0.441	11.20	0.350	8.89	12.10	53.82	39.20	6.86
C0390-047-0810-M	0.390	9.91	0.047	1.19	0.810	20.57	0.473	12.01	0.369	9.37	12.10	53.82	35.90	6.28
C0390-047-0880-M	0.390	9.91	0.047	1.19	0.880	22.35	0.510	12.95	0.391	9.93	12.10	53.82	32.70	5.72
C0390-047-0940-M	0.390	9.91	0.047	1.19	0.940	23.88	0.542	13.77	0.410	10.41	12.10	53.82	30.40	5.32
C0390-047-1000-M	0.390	9.91	0.047	1.19	1.000	25.40	0.574	14.58	0.429	10.90	12.10	53.82	28.40	4.97
C0390-047-1120-M	0.390	9.91	0.047	1.19	1.120	28.45	0.637	16.18	0.467	11.86	12.10	53.82	25.10	4.39
C0390-047-1250-M	0.390	9.91	0.047	1.19	1.250	31.75	0.706	17.93	0.508	12.90	12.10	53.82	22.20	3.89
C0390-047-1380-M	0.390	9.91	0.047	1.19	1.380	35.05	0.775	19.69	0.550	13.97	12.10	53.82	20.00	3.50
C0390-047-1500-M	0.390	9.91	0.047	1.19	1.500	38.10	0.838	21.29	0.588	14.94	12.10	53.82	18.30	3.20
C0390-047-1750-M	0.390	9.91	0.047	1.19	1.750	44.45	0.971	24.66	0.667	16.94	12.10	53.82	15.50	2.71
C0390-047-2000-M	0.390	9.91	0.047	1.19	2.000	50.80	1.103	28.02	0.747	18.97	12.10	53.82	13.50	2.36
C0411-035-0813-M	**0.411**	**10.44**	**0.035**	**0.89**	**0.813**	**20.64**	**0.306**	**7.79**	**0.228**	**5.79**	**4.88**	**21.72**	**9.65**	**1.69**
C0411-035-0875-M	**0.411**	**10.44**	**0.035**	**0.89**	**0.875**	**22.23**	**0.326**	**8.29**	**0.241**	**6.12**	**4.88**	**21.72**	**8.90**	**1.56**
C0411-035-0938-M	**0.411**	**10.44**	**0.035**	**0.89**	**0.938**	**23.81**	**0.346**	**8.80**	**0.254**	**6.45**	**4.88**	**21.72**	**8.26**	**1.45**
C0411-035-1000-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.000**	**25.40**	**0.366**	**9.30**	**0.267**	**6.78**	**4.88**	**21.72**	**7.70**	**1.35**
C0411-035-1125-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.125**	**28.58**	**0.406**	**10.31**	**0.293**	**7.45**	**4.88**	**21.72**	**6.79**	**1.19**
C0411-035-1250-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.250**	**31.75**	**0.446**	**11.32**	**0.319**	**8.11**	**4.88**	**21.72**	**6.07**	**1.06**
C0411-035-1375-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.375**	**34.93**	**0.486**	**12.34**	**0.345**	**8.77**	**4.88**	**21.72**	**5.49**	**0.96**
C0411-035-1500-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.500**	**38.10**	**0.525**	**13.35**	**0.371**	**9.43**	**4.88**	**21.72**	**5.01**	**0.88**
C0411-035-1625-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.625**	**41.28**	**0.565**	**14.36**	**0.397**	**10.09**	**4.88**	**21.72**	**4.61**	**0.81**
C0411-035-1750-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.750**	**44.45**	**0.605**	**15.37**	**0.423**	**10.75**	**4.88**	**21.72**	**4.26**	**0.75**
C0411-035-1875-M	**0.411**	**10.44**	**0.035**	**0.89**	**1.875**	**47.63**	**0.645**	**16.38**	**0.449**	**11.41**	**4.88**	**21.72**	**3.97**	**0.69**
C0411-035-2000-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.000**	**50.80**	**0.685**	**17.39**	**0.475**	**12.07**	**4.88**	**21.72**	**3.71**	**0.65**
C0411-035-2125-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.125**	**53.98**	**0.725**	**18.40**	**0.501**	**12.73**	**4.88**	**21.72**	**3.49**	**0.61**
C0411-035-2250-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.250**	**57.15**	**0.764**	**19.41**	**0.527**	**13.39**	**4.88**	**21.72**	**3.29**	**0.58**
C0411-035-2375-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.375**	**60.33**	**0.804**	**20.43**	**0.553**	**14.05**	**4.88**	**21.72**	**3.11**	**0.54**
C0411-035-2500-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.500**	**63.50**	**0.844**	**21.44**	**0.579**	**14.72**	**4.88**	**21.72**	**2.95**	**0.52**
C0411-035-2625-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.625**	**66.68**	**0.884**	**22.45**	**0.605**	**15.38**	**4.88**	**21.72**	**2.80**	**0.49**
C0411-035-2750-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.750**	**69.85**	**0.924**	**23.46**	**0.631**	**16.04**	**4.88**	**21.72**	**2.67**	**0.47**
C0411-035-2875-M	**0.411**	**10.44**	**0.035**	**0.89**	**2.875**	**73.03**	**0.963**	**24.47**	**0.657**	**16.70**	**4.88**	**21.72**	**2.55**	**0.45**
C0411-035-3000-M	**0.411**	**10.44**	**0.035**	**0.89**	**3.000**	**76.20**	**1.003**	**25.48**	**0.683**	**17.36**	**4.88**	**21.72**	**2.45**	**0.43**
C0411-035-3250-M	**0.411**	**10.44**	**0.035**	**0.89**	**3.250**	**82.55**	**1.083**	**27.51**	**0.735**	**18.68**	**4.88**	**21.72**	**2.25**	**0.39**
C0411-035-3500-M	**0.411**	**10.44**	**0.035**	**0.89**	**3.500**	**88.90**	**1.163**	**29.53**	**0.788**	**20.00**	**4.88**	**21.72**	**2.09**	**0.37**
C0411-035-3750-M	**0.411**	**10.44**	**0.035**	**0.89**	**3.750**	**95.25**	**1.242**	**31.55**	**0.840**	**21.32**	**4.88**	**21.72**	**1.95**	**0.34**
C0411-035-4000-M	**0.411**	**10.44**	**0.035**	**0.89**	**4.000**	**101.60**	**1.322**	**33.57**	**0.892**	**22.65**	**4.88**	**21.72**	**1.82**	**0.32**
C0411-035-4250-M	**0.411**	**10.44**	**0.035**	**0.89**	**4.250**	**107.95**	**1.401**	**35.60**	**0.944**	**23.97**	**4.88**	**21.72**	**1.71**	**0.30**
C0411-035-4500-M	**0.411**	**10.44**	**0.035**	**0.89**	**4.500**	**114.30**	**1.481**	**37.62**	**0.996**	**25.29**	**4.88**	**21.72**	**1.62**	**0.28**
C0411-035-4750-M	**0.411**	**10.44**	**0.035**	**0.89**	**4.750**	**120.65**	**1.561**	**39.64**	**1.048**	**26.61**	**4.88**	**21.72**	**1.53**	**0.27**
C0411-035-5000-M	**0.411**	**10.44**	**0.035**	**0.89**	**5.000**	**127.00**	**1.640**	**41.66**	**1.100**	**27.93**	**4.88**	**21.72**	**1.45**	**0.25**
C0411-035-5250-M	**0.411**	**10.44**	**0.035**	**0.89**	**5.250**	**133.35**	**1.720**	**43.69**	**1.152**	**29.26**	**4.88**	**21.72**	**1.38**	**0.24**
C0411-035-5500-M	**0.411**	**10.44**	**0.035**	**0.89**	**5.500**	**139.70**	**1.800**	**45.71**	**1.204**	**30.58**	**4.88**	**21.72**	**1.32**	**0.23**
C0411-035-5750-M	**0.411**	**10.44**	**0.035**	**0.89**	**5.750**	**146.05**	**1.879**	**47.73**	**1.256**	**31.90**	**4.88**	**21.72**	**1.26**	**0.22**
C0411-035-6000-M	**0.411**	**10.44**	**0.035**	**0.89**	**6.000**	**152.40**	**1.959**	**49.75**	**1.308**	**33.22**	**4.88**	**21.72**	**1.21**	**0.21**
C0411-035-6250-M	**0.411**	**10.44**	**0.035**	**0.89**	**6.250**	**158.75**	**2.038**	**51.78**	**1.360**	**34.54**	**4.88**	**21.72**	**1.16**	**0.20**
C0411-035-6500-M	**0.411**	**10.44**	**0.035**	**0.89**	**6.500**	**165.10**	**2.118**	**53.80**	**1.412**	**35.87**	**4.88**	**21.72**	**1.11**	**0.19**
C0411-035-6750-M	**0.411**	**10.44**	**0.035**	**0.89**	**6.750**	**171.45**	**2.198**	**55.82**	**1.464**	**37.19**	**4.88**	**21.72**	**1.07**	**0.19**
C0411-035-7000-M	**0.411**	**10.44**	**0.035**	**0.89**	**7.000**	**177.80**	**2.277**	**57.84**	**1.516**	**38.51**	**4.88**	**21.72**	**1.03**	**0.18**
C0411-035-7500-M	**0.411**	**10.44**	**0.035**	**0.89**	**7.500**	**190.50**	**2.437**	**61.89**	**1.620**	**41.15**	**4.88**	**21.72**	**0.96**	**0.17**
C0411-038-0750-M	**0.411**	**10.44**	**0.038**	**0.97**	**0.750**	**19.05**	**0.311**	**7.89**	**0.245**	**6.21**	**6.14**	**27.33**	**13.98**	**2.45**
C0411-038-0813-M	**0.411**	**10.44**	**0.038**	**0.97**	**0.813**	**20.64**	**0.332**	**8.44**	**0.260**	**6.60**	**6.14**	**27.33**	**12.79**	**2.24**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0390-043-0810-S	0.522	13.26	6.21	27.62	21.58	3.78
C0390-043-0880-S	0.564	14.33	6.21	27.62	19.66	3.44
C0390-043-0940-S	0.603	15.31	6.21	27.62	18.41	3.22
C0390-043-1000-S	0.636	16.16	6.21	27.62	17.08	2.99
C0390-043-1120-S	0.708	17.99	6.21	27.62	15.08	2.64
C0390-043-1250-S	0.787	19.99	6.21	27.62	13.41	2.35
C0390-043-1380-S	0.866	21.99	6.21	27.62	12.08	2.11
C0390-043-1500-S	0.939	23.86	6.21	27.62	11.08	1.94
C0390-043-1750-S	1.090	27.69	6.21	27.62	9.41	1.65
C0390-043-2000-S	1.239	31.48	6.21	27.62	8.16	1.43
C0390-047-0500-S	0.350	8.89	7.91	35.20	52.73	9.23
C0390-047-0560-S	0.388	9.85	7.91	35.20	45.98	8.05
C0390-047-0620-S	0.426	10.81	7.91	35.20	40.73	7.13
C0390-047-0690-S	0.470	11.93	7.91	35.20	35.90	6.28
C0390-047-0750-S	0.508	12.90	7.91	35.20	32.65	5.71
C0390-047-0810-S	0.545	13.85	7.91	35.20	29.91	5.23
C0390-047-0880-S	0.590	14.97	7.91	35.20	27.24	4.77
C0390-047-0940-S	0.628	15.94	7.91	35.20	25.32	4.43
C0390-047-1000-S	0.666	16.90	7.91	35.20	23.66	4.14
C0390-047-1120-S	0.742	18.84	7.91	35.20	20.91	3.66
C0390-047-1250-S	0.822	20.88	7.91	35.20	18.49	3.24
C0390-047-1380-S	0.905	22.99	7.91	35.20	16.66	2.92
C0390-047-1500-S	0.981	24.92	7.91	35.20	15.24	2.67
C0390-047-1750-S	1.137	28.88	7.91	35.20	12.91	2.26
C0390-047-2000-S	1.296	32.93	7.91	35.20	11.25	1.97
C0411-035-0813-S	**0.351**	**8.91**	**3.87**	**17.23**	**8.39**	**1.47**
C0411-035-0875-S	**0.374**	**9.51**	**3.87**	**17.23**	**7.74**	**1.35**
C0411-035-0938-S	**0.398**	**10.11**	**3.87**	**17.23**	**7.18**	**1.26**
C0411-035-1000-S	**0.422**	**10.71**	**3.87**	**17.23**	**6.70**	**1.17**
C0411-035-1125-S	**0.469**	**11.91**	**3.87**	**17.23**	**5.91**	**1.03**
C0411-035-1250-S	**0.516**	**13.11**	**3.87**	**17.23**	**5.28**	**0.92**
C0411-035-1375-S	**0.563**	**14.31**	**3.87**	**17.23**	**4.77**	**0.84**
C0411-035-1500-S	**0.611**	**15.51**	**3.87**	**17.23**	**4.36**	**0.76**
C0411-035-1625-S	**0.658**	**16.71**	**3.87**	**17.23**	**4.01**	**0.70**
C0411-035-1750-S	**0.705**	**17.91**	**3.87**	**17.23**	**3.71**	**0.65**
C0411-035-1875-S	**0.753**	**19.11**	**3.87**	**17.23**	**3.45**	**0.60**
C0411-035-2000-S	**0.800**	**20.32**	**3.87**	**17.23**	**3.23**	**0.56**
C0411-035-2125-S	**0.847**	**21.52**	**3.87**	**17.23**	**3.03**	**0.53**
C0411-035-2250-S	**0.894**	**22.72**	**3.87**	**17.23**	**2.86**	**0.50**
C0411-035-2375-S	**0.942**	**23.92**	**3.87**	**17.23**	**2.70**	**0.47**
C0411-035-2500-S	**0.989**	**25.12**	**3.87**	**17.23**	**2.56**	**0.45**
C0411-035-2625-S	**1.036**	**26.32**	**3.87**	**17.23**	**2.44**	**0.43**
C0411-035-2750-S	**1.083**	**27.52**	**3.87**	**17.23**	**2.33**	**0.41**
C0411-035-2875-S	**1.131**	**28.72**	**3.87**	**17.23**	**2.22**	**0.39**
C0411-035-3000-S	**1.178**	**29.92**	**3.87**	**17.23**	**2.13**	**0.37**
C0411-035-3250-S	**1.272**	**32.32**	**3.87**	**17.23**	**1.96**	**0.34**
C0411-035-3500-S	**1.367**	**34.72**	**3.87**	**17.23**	**1.82**	**0.32**
C0411-035-3750-S	**1.462**	**37.12**	**3.87**	**17.23**	**1.69**	**0.30**
C0411-035-4000-S	**1.556**	**39.52**	**3.87**	**17.23**	**1.59**	**0.28**
C0411-035-4250-S	**1.651**	**41.93**	**3.87**	**17.23**	**1.49**	**0.26**
C0411-035-4500-S	**1.745**	**44.33**	**3.87**	**17.23**	**1.41**	**0.25**
C0411-035-4750-S	**1.840**	**46.73**	**3.87**	**17.23**	**1.33**	**0.23**
C0411-035-5000-S	**1.934**	**49.13**	**3.87**	**17.23**	**1.26**	**0.22**
C0411-035-5250-S	**2.029**	**51.53**	**3.87**	**17.23**	**1.20**	**0.21**
C0411-035-5500-S	**2.123**	**53.93**	**3.87**	**17.23**	**1.15**	**0.20**
C0411-035-5750-S	**2.218**	**56.33**	**3.87**	**17.23**	**1.10**	**0.19**
C0411-035-6000-S	**2.312**	**58.73**	**3.87**	**17.23**	**1.05**	**0.18**
C0411-035-6250-S	**2.407**	**61.14**	**3.87**	**17.23**	**1.01**	**0.18**
C0411-035-6500-S	**2.501**	**63.54**	**3.87**	**17.23**	**0.97**	**0.17**
C0411-035-6750-S	**2.596**	**65.94**	**3.87**	**17.23**	**0.93**	**0.16**
C0411-035-7000-S	**2.691**	**68.34**	**3.87**	**17.23**	**0.90**	**0.16**
C0411-035-7500-S	**2.880**	**73.14**	**3.87**	**17.23**	**0.84**	**0.15**
C0411-038-0750-S	**0.348**	**8.85**	**4.88**	**21.71**	**12.16**	**2.13**
C0411-038-0813-S	**0.374**	**9.49**	**4.88**	**21.71**	**11.12**	**1.95**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0411-038-0875-M	**0.411**	**10.44**	**0.038**	**0.97**	**0.875**	**22.23**	**0.354**	**8.99**	**0.275**	**6.99**	**6.14**	**27.33**	**11.79**	**2.06**
C0411-038-0938-M	**0.411**	**10.44**	**0.038**	**0.97**	**0.938**	**23.81**	**0.376**	**9.55**	**0.291**	**7.38**	**6.14**	**27.33**	**10.94**	**1.91**
C0411-038-1000-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.000**	**25.40**	**0.398**	**10.10**	**0.306**	**7.77**	**6.14**	**27.33**	**10.20**	**1.78**
C0411-038-1125-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.125**	**28.58**	**0.441**	**11.20**	**0.336**	**8.54**	**6.14**	**27.33**	**8.98**	**1.57**
C0411-038-1250-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.250**	**31.75**	**0.485**	**12.31**	**0.367**	**9.32**	**6.14**	**27.33**	**8.03**	**1.40**
C0411-038-1375-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.375**	**34.93**	**0.528**	**13.41**	**0.398**	**10.10**	**6.14**	**27.33**	**7.25**	**1.27**
C0411-038-1500-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.500**	**38.10**	**0.572**	**14.52**	**0.428**	**10.87**	**6.14**	**27.33**	**6.62**	**1.16**
C0411-038-1625-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.625**	**41.28**	**0.615**	**15.62**	**0.459**	**11.65**	**6.14**	**27.33**	**6.08**	**1.06**
C0411-038-1750-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.750**	**44.45**	**0.659**	**16.73**	**0.489**	**12.43**	**6.14**	**27.33**	**5.63**	**0.98**
C0411-038-1875-M	**0.411**	**10.44**	**0.038**	**0.97**	**1.875**	**47.63**	**0.702**	**17.83**	**0.520**	**13.20**	**6.14**	**27.33**	**5.24**	**0.92**
C0411-038-2000-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.000**	**50.80**	**0.746**	**18.94**	**0.550**	**13.98**	**6.14**	**27.33**	**4.90**	**0.86**
C0411-038-2125-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.125**	**53.98**	**0.789**	**20.04**	**0.581**	**14.76**	**6.14**	**27.33**	**4.60**	**0.80**
C0411-038-2250-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.250**	**57.15**	**0.833**	**21.15**	**0.612**	**15.53**	**6.14**	**27.33**	**4.33**	**0.76**
C0411-038-2375-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.375**	**60.33**	**0.876**	**22.25**	**0.642**	**16.31**	**6.14**	**27.33**	**4.10**	**0.72**
C0411-038-2500-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.500**	**63.50**	**0.920**	**23.36**	**0.673**	**17.09**	**6.14**	**27.33**	**3.89**	**0.68**
C0411-038-2625-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.625**	**66.68**	**0.963**	**24.46**	**0.703**	**17.86**	**6.14**	**27.33**	**3.70**	**0.65**
C0411-038-2750-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.750**	**69.85**	**1.007**	**25.57**	**0.734**	**18.64**	**6.14**	**27.33**	**3.52**	**0.62**
C0411-038-2875-M	**0.411**	**10.44**	**0.038**	**0.97**	**2.875**	**73.03**	**1.050**	**26.67**	**0.764**	**19.42**	**6.14**	**27.33**	**3.37**	**0.59**
C0411-038-3000-M	**0.411**	**10.44**	**0.038**	**0.97**	**3.000**	**76.20**	**1.094**	**27.78**	**0.795**	**20.19**	**6.14**	**27.33**	**3.22**	**0.56**
C0411-038-3250-M	**0.411**	**10.44**	**0.038**	**0.97**	**3.250**	**82.55**	**1.181**	**29.99**	**0.856**	**21.75**	**6.14**	**27.33**	**2.97**	**0.52**
C0411-038-3500-M	**0.411**	**10.44**	**0.038**	**0.97**	**3.500**	**88.90**	**1.268**	**32.20**	**0.917**	**23.30**	**6.14**	**27.33**	**2.75**	**0.48**
C0411-038-3750-M	**0.411**	**10.44**	**0.038**	**0.97**	**3.750**	**95.25**	**1.355**	**34.41**	**0.978**	**24.85**	**6.14**	**27.33**	**2.56**	**0.45**
C0411-038-4000-M	**0.411**	**10.44**	**0.038**	**0.97**	**4.000**	**101.60**	**1.442**	**36.62**	**1.040**	**26.41**	**6.14**	**27.33**	**2.40**	**0.42**
C0411-038-4250-M	**0.411**	**10.44**	**0.038**	**0.97**	**4.250**	**107.95**	**1.529**	**38.83**	**1.101**	**27.96**	**6.14**	**27.33**	**2.26**	**0.39**
C0411-038-4500-M	**0.411**	**10.44**	**0.038**	**0.97**	**4.500**	**114.30**	**1.616**	**41.04**	**1.162**	**29.51**	**6.14**	**27.33**	**2.13**	**0.37**
C0411-038-4750-M	**0.411**	**10.44**	**0.038**	**0.97**	**4.750**	**120.65**	**1.703**	**43.25**	**1.223**	**31.07**	**6.14**	**27.33**	**2.02**	**0.35**
C0411-038-5000-M	**0.411**	**10.44**	**0.038**	**0.97**	**5.000**	**127.00**	**1.790**	**45.46**	**1.284**	**32.62**	**6.14**	**27.33**	**1.91**	**0.33**
C0411-038-5250-M	**0.411**	**10.44**	**0.038**	**0.97**	**5.250**	**133.35**	**1.877**	**47.67**	**1.345**	**34.17**	**6.14**	**27.33**	**1.82**	**0.32**
C0411-038-5500-M	**0.411**	**10.44**	**0.038**	**0.97**	**5.500**	**139.70**	**1.964**	**49.88**	**1.407**	**35.73**	**6.14**	**27.33**	**1.74**	**0.30**
C0411-038-5750-M	**0.411**	**10.44**	**0.038**	**0.97**	**5.750**	**146.05**	**2.051**	**52.09**	**1.468**	**37.28**	**6.14**	**27.33**	**1.66**	**0.29**
C0411-038-6000-M	**0.411**	**10.44**	**0.038**	**0.97**	**6.000**	**152.40**	**2.138**	**54.30**	**1.529**	**38.83**	**6.14**	**27.33**	**1.59**	**0.28**
C0411-038-6250-M	**0.411**	**10.44**	**0.038**	**0.97**	**6.250**	**158.75**	**2.225**	**56.51**	**1.590**	**40.38**	**6.14**	**27.33**	**1.53**	**0.27**
C0411-038-6500-M	**0.411**	**10.44**	**0.038**	**0.97**	**6.500**	**165.10**	**2.312**	**58.71**	**1.651**	**41.94**	**6.14**	**27.33**	**1.47**	**0.26**
C0411-038-6750-M	**0.411**	**10.44**	**0.038**	**0.97**	**6.750**	**171.45**	**2.399**	**60.92**	**1.712**	**43.49**	**6.14**	**27.33**	**1.41**	**0.25**
C0411-038-7000-M	**0.411**	**10.44**	**0.038**	**0.97**	**7.000**	**177.80**	**2.486**	**63.13**	**1.773**	**45.04**	**6.14**	**27.33**	**1.36**	**0.24**
C0411-040-0750-M	**0.411**	**10.44**	**0.040**	**1.02**	**0.750**	**19.05**	**0.327**	**8.30**	**0.265**	**6.72**	**7.09**	**31.52**	**16.75**	**2.93**
C0411-040-0813-M	**0.411**	**10.44**	**0.040**	**1.02**	**0.813**	**20.64**	**0.350**	**8.89**	**0.282**	**7.15**	**7.09**	**31.52**	**15.32**	**2.68**
C0411-040-0875-M	**0.411**	**10.44**	**0.040**	**1.02**	**0.875**	**22.23**	**0.373**	**9.47**	**0.298**	**7.58**	**7.09**	**31.52**	**14.11**	**2.47**
C0411-040-0938-M	**0.411**	**10.44**	**0.040**	**1.02**	**0.938**	**23.81**	**0.396**	**10.06**	**0.315**	**8.01**	**7.09**	**31.52**	**13.09**	**2.29**
C0411-040-1000-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.000**	**25.40**	**0.419**	**10.64**	**0.332**	**8.44**	**7.09**	**31.52**	**12.20**	**2.13**
C0411-040-1125-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.125**	**28.58**	**0.465**	**11.81**	**0.366**	**9.29**	**7.09**	**31.52**	**10.74**	**1.88**
C0411-040-1250-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.250**	**31.75**	**0.511**	**12.98**	**0.400**	**10.15**	**7.09**	**31.52**	**9.59**	**1.68**
C0411-040-1375-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.375**	**34.93**	**0.557**	**14.15**	**0.433**	**11.01**	**7.09**	**31.52**	**8.66**	**1.52**
C0411-040-1500-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.500**	**38.10**	**0.603**	**15.32**	**0.467**	**11.86**	**7.09**	**31.52**	**7.90**	**1.38**
C0411-040-1625-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.625**	**41.28**	**0.649**	**16.49**	**0.501**	**12.72**	**7.09**	**31.52**	**7.26**	**1.27**
C0411-040-1750-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.750**	**44.45**	**0.695**	**17.66**	**0.534**	**13.58**	**7.09**	**31.52**	**6.72**	**1.18**
C0411-040-1875-M	**0.411**	**10.44**	**0.040**	**1.02**	**1.875**	**47.63**	**0.741**	**18.83**	**0.568**	**14.43**	**7.09**	**31.52**	**6.25**	**1.09**
C0411-040-2000-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.000**	**50.80**	**0.787**	**20.00**	**0.602**	**15.29**	**7.09**	**31.52**	**5.84**	**1.02**
C0411-040-2125-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.125**	**53.98**	**0.833**	**21.17**	**0.636**	**16.15**	**7.09**	**31.52**	**5.49**	**0.96**
C0411-040-2250-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.250**	**57.15**	**0.879**	**22.34**	**0.669**	**17.00**	**7.09**	**31.52**	**5.17**	**0.90**
C0411-040-2375-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.375**	**60.33**	**0.925**	**23.51**	**0.703**	**17.86**	**7.09**	**31.52**	**4.89**	**0.86**
C0411-040-2500-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.500**	**63.50**	**0.971**	**24.68**	**0.737**	**18.72**	**7.09**	**31.52**	**4.64**	**0.81**
C0411-040-2625-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.625**	**66.68**	**1.018**	**25.84**	**0.771**	**19.57**	**7.09**	**31.52**	**4.41**	**0.77**
C0411-040-2750-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.750**	**69.85**	**1.064**	**27.01**	**0.804**	**20.43**	**7.09**	**31.52**	**4.20**	**0.74**
C0411-040-2875-M	**0.411**	**10.44**	**0.040**	**1.02**	**2.875**	**73.03**	**1.110**	**28.18**	**0.838**	**21.28**	**7.09**	**31.52**	**4.01**	**0.70**
C0411-040-3000-M	**0.411**	**10.44**	**0.040**	**1.02**	**3.000**	**76.20**	**1.156**	**29.35**	**0.872**	**22.14**	**7.09**	**31.52**	**3.84**	**0.67**
C0411-040-3250-M	**0.411**	**10.44**	**0.040**	**1.02**	**3.250**	**82.55**	**1.248**	**31.69**	**0.939**	**23.85**	**7.09**	**31.52**	**3.54**	**0.62**
C0411-040-3500-M	**0.411**	**10.44**	**0.040**	**1.02**	**3.500**	**88.90**	**1.340**	**34.03**	**1.007**	**25.57**	**7.09**	**31.52**	**3.28**	**0.57**
C0411-040-3750-M	**0.411**	**10.44**	**0.040**	**1.02**	**3.750**	**95.25**	**1.432**	**36.37**	**1.074**	**27.28**	**7.09**	**31.52**	**3.06**	**0.53**
C0411-040-4000-M	**0.411**	**10.44**	**0.040**	**1.02**	**4.000**	**101.60**	**1.524**	**38.71**	**1.141**	**28.99**	**7.09**	**31.52**	**2.86**	**0.50**
C0411-040-4250-M	**0.411**	**10.44**	**0.040**	**1.02**	**4.250**	**107.95**	**1.616**	**41.05**	**1.209**	**30.71**	**7.09**	**31.52**	**2.69**	**0.47**
C0411-040-4500-M	**0.411**	**10.44**	**0.040**	**1.02**	**4.500**	**114.30**	**1.708**	**43.39**	**1.276**	**32.42**	**7.09**	**31.52**	**2.54**	**0.44**
C0411-040-4750-M	**0.411**	**10.44**	**0.040**	**1.02**	**4.750**	**120.65**	**1.800**	**45.73**	**1.344**	**34.13**	**7.09**	**31.52**	**2.40**	**0.42**
C0411-040-5000-M	**0.411**	**10.44**	**0.040**	**1.02**	**5.000**	**127.00**	**1.892**	**48.07**	**1.411**	**35.84**	**7.09**	**31.52**	**2.28**	**0.40**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0411-038-0875-S	**0.399**	**10.13**	**4.88**	**21.71**	**10.25**	**1.79**
C0411-038-0938-S	**0.424**	**10.78**	**4.88**	**21.71**	**9.51**	**1.66**
C0411-038-1000-S	**0.450**	**11.42**	**4.88**	**21.71**	**8.87**	**1.55**
C0411-038-1125-S	**0.500**	**12.70**	**4.88**	**21.71**	**7.81**	**1.37**
C0411-038-1250-S	**0.551**	**13.98**	**4.88**	**21.71**	**6.98**	**1.22**
C0411-038-1375-S	**0.601**	**15.27**	**4.88**	**21.71**	**6.31**	**1.10**
C0411-038-1500-S	**0.652**	**16.55**	**4.88**	**21.71**	**5.75**	**1.01**
C0411-038-1625-S	**0.702**	**17.83**	**4.88**	**21.71**	**5.29**	**0.93**
C0411-038-1750-S	**0.753**	**19.12**	**4.88**	**21.71**	**4.89**	**0.86**
C0411-038-1875-S	**0.803**	**20.40**	**4.88**	**21.71**	**4.55**	**0.80**
C0411-038-2000-S	**0.854**	**21.69**	**4.88**	**21.71**	**4.26**	**0.75**
C0411-038-2125-S	**0.904**	**22.97**	**4.88**	**21.71**	**4.00**	**0.70**
C0411-038-2250-S	**0.955**	**24.25**	**4.88**	**21.71**	**3.77**	**0.66**
C0411-038-2375-S	**1.005**	**25.54**	**4.88**	**21.71**	**3.56**	**0.62**
C0411-038-2500-S	**1.056**	**26.82**	**4.88**	**21.71**	**3.38**	**0.59**
C0411-038-2625-S	**1.106**	**28.10**	**4.88**	**21.71**	**3.21**	**0.56**
C0411-038-2750-S	**1.157**	**29.39**	**4.88**	**21.71**	**3.06**	**0.54**
C0411-038-2875-S	**1.207**	**30.67**	**4.88**	**21.71**	**2.93**	**0.51**
C0411-038-3000-S	**1.258**	**31.95**	**4.88**	**21.71**	**2.80**	**0.49**
C0411-038-3250-S	**1.359**	**34.52**	**4.88**	**21.71**	**2.58**	**0.45**
C0411-038-3500-S	**1.460**	**37.09**	**4.88**	**21.71**	**2.39**	**0.42**
C0411-038-3750-S	**1.561**	**39.65**	**4.88**	**21.71**	**2.23**	**0.39**
C0411-038-4000-S	**1.662**	**42.22**	**4.88**	**21.71**	**2.09**	**0.37**
C0411-038-4250-S	**1.763**	**44.79**	**4.88**	**21.71**	**1.96**	**0.34**
C0411-038-4500-S	**1.864**	**47.35**	**4.88**	**21.71**	**1.85**	**0.32**
C0411-038-4750-S	**1.965**	**49.92**	**4.88**	**21.71**	**1.75**	**0.31**
C0411-038-5000-S	**2.066**	**52.49**	**4.88**	**21.71**	**1.66**	**0.29**
C0411-038-5250-S	**2.168**	**55.06**	**4.88**	**21.71**	**1.58**	**0.28**
C0411-038-5500-S	**2.269**	**57.62**	**4.88**	**21.71**	**1.51**	**0.26**
C0411-038-5750-S	**2.370**	**60.19**	**4.88**	**21.71**	**1.44**	**0.25**
C0411-038-6000-S	**2.471**	**62.76**	**4.88**	**21.71**	**1.38**	**0.24**
C0411-038-6250-S	**2.572**	**65.32**	**4.88**	**21.71**	**1.33**	**0.23**
C0411-038-6500-S	**2.673**	**67.89**	**4.88**	**21.71**	**1.28**	**0.22**
C0411-038-6750-S	**2.774**	**70.46**	**4.88**	**21.71**	**1.23**	**0.21**
C0411-038-7000-S	**2.875**	**73.02**	**4.88**	**21.71**	**1.18**	**0.21**
C0411-040-0750-S	**0.363**	**9.22**	**5.63**	**25.06**	**14.56**	**2.55**
C0411-040-0813-S	**0.389**	**9.89**	**5.63**	**25.06**	**13.32**	**2.33**
C0411-040-0875-S	**0.416**	**10.56**	**5.63**	**25.06**	**12.27**	**2.15**
C0411-040-0938-S	**0.442**	**11.23**	**5.63**	**25.06**	**11.38**	**1.99**
C0411-040-1000-S	**0.469**	**11.90**	**5.63**	**25.06**	**10.61**	**1.86**
C0411-040-1125-S	**0.521**	**13.25**	**5.63**	**25.06**	**9.34**	**1.63**
C0411-040-1250-S	**0.574**	**14.59**	**5.63**	**25.06**	**8.34**	**1.46**
C0411-040-1375-S	**0.627**	**15.93**	**5.63**	**25.06**	**7.53**	**1.32**
C0411-040-1500-S	**0.680**	**17.27**	**5.63**	**25.06**	**6.87**	**1.20**
C0411-040-1625-S	**0.733**	**18.61**	**5.63**	**25.06**	**6.32**	**1.11**
C0411-040-1750-S	**0.786**	**19.95**	**5.63**	**25.06**	**5.84**	**1.02**
C0411-040-1875-S	**0.838**	**21.29**	**5.63**	**25.06**	**5.44**	**0.95**
C0411-040-2000-S	**0.891**	**22.64**	**5.63**	**25.06**	**5.08**	**0.89**
C0411-040-2125-S	**0.944**	**23.98**	**5.63**	**25.06**	**4.77**	**0.83**
C0411-040-2250-S	**0.997**	**25.32**	**5.63**	**25.06**	**4.50**	**0.79**
C0411-040-2375-S	**1.050**	**26.66**	**5.63**	**25.06**	**4.25**	**0.74**
C0411-040-2500-S	**1.102**	**28.00**	**5.63**	**25.06**	**4.03**	**0.71**
C0411-040-2625-S	**1.155**	**29.34**	**5.63**	**25.06**	**3.83**	**0.67**
C0411-040-2750-S	**1.208**	**30.68**	**5.63**	**25.06**	**3.65**	**0.64**
C0411-040-2875-S	**1.261**	**32.02**	**5.63**	**25.06**	**3.49**	**0.61**
C0411-040-3000-S	**1.314**	**33.37**	**5.63**	**25.06**	**3.34**	**0.58**
C0411-040-3250-S	**1.419**	**36.05**	**5.63**	**25.06**	**3.08**	**0.54**
C0411-040-3500-S	**1.525**	**38.73**	**5.63**	**25.06**	**2.85**	**0.50**
C0411-040-3750-S	**1.630**	**41.41**	**5.63**	**25.06**	**2.66**	**0.47**
C0411-040-4000-S	**1.736**	**44.10**	**5.63**	**25.06**	**2.49**	**0.44**
C0411-040-4250-S	**1.842**	**46.78**	**5.63**	**25.06**	**2.34**	**0.41**
C0411-040-4500-S	**1.947**	**49.46**	**5.63**	**25.06**	**2.21**	**0.39**
C0411-040-4750-S	**2.053**	**52.14**	**5.63**	**25.06**	**2.09**	**0.37**
C0411-040-5000-S	**2.159**	**54.83**	**5.63**	**25.06**	**1.98**	**0.35**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0411-040-5250-M	0.411	10.44	0.040	1.02	5.250	133.35	1.985	50.41	1.479	37.56	7.09	31.52	2.17	0.38
C0411-040-5500-M	0.411	10.44	0.040	1.02	5.500	139.70	2.077	52.75	1.546	39.27	7.09	31.52	2.07	0.36
C0411-040-5750-M	0.411	10.44	0.040	1.02	5.750	146.05	2.169	55.08	1.614	40.98	7.09	31.52	1.98	0.35
C0411-040-6000-M	0.411	10.44	0.040	1.02	6.000	152.40	2.261	57.42	1.681	42.70	7.09	31.52	1.90	0.33
C0411-040-6250-M	0.411	10.44	0.040	1.02	6.250	158.75	2.353	59.76	1.748	44.41	7.09	31.52	1.82	0.32
C0411-040-6500-M	0.411	10.44	0.040	1.02	6.500	165.10	2.445	62.10	1.816	46.12	7.09	31.52	1.75	0.31
C0411-040-6750-M	0.411	10.44	0.040	1.02	6.750	171.45	2.537	64.44	1.883	47.84	7.09	31.52	1.68	0.29
C0411-040-7000-M	0.411	10.44	0.040	1.02	7.000	177.80	2.629	66.78	1.951	49.55	7.09	31.52	1.62	0.28
C0411-042-0688-M	0.411	10.44	0.042	1.07	0.688	17.46	0.319	8.10	0.267	6.77	8.12	36.11	22.02	3.85
C0411-042-0750-M	0.411	10.44	0.042	1.07	0.750	19.05	0.343	8.72	0.285	7.24	8.12	36.11	19.95	3.49
C0411-042-0813-M	0.411	10.44	0.042	1.07	0.813	20.64	0.368	9.33	0.303	7.71	8.12	36.11	18.24	3.19
C0411-042-0875-M	0.411	10.44	0.042	1.07	0.875	22.23	0.392	9.95	0.322	8.18	8.12	36.11	16.80	2.94
C0411-042-0938-M	0.411	10.44	0.042	1.07	0.938	23.81	0.416	10.57	0.340	8.65	8.12	36.11	15.57	2.72
C0411-042-1000-M	0.411	10.44	0.042	1.07	1.000	25.40	0.440	11.19	0.359	9.11	8.12	36.11	14.51	2.54
C0411-042-1125-M	0.411	10.44	0.042	1.07	1.125	28.58	0.489	12.42	0.396	10.05	8.12	36.11	12.77	2.23
C0411-042-1250-M	0.411	10.44	0.042	1.07	1.250	31.75	0.538	13.66	0.433	10.99	8.12	36.11	11.40	1.99
C0411-042-1375-M	0.411	10.44	0.042	1.07	1.375	34.93	0.586	14.89	0.470	11.93	8.12	36.11	10.29	1.80
C0411-042-1500-M	0.411	10.44	0.042	1.07	1.500	38.10	0.635	16.13	0.507	12.87	8.12	36.11	9.39	1.64
C0411-042-1625-M	0.411	10.44	0.042	1.07	1.625	41.28	0.684	17.37	0.543	13.80	8.12	36.11	8.62	1.51
C0411-042-1750-M	0.411	10.44	0.042	1.07	1.750	44.45	0.732	18.60	0.580	14.74	8.12	36.11	7.98	1.40
C0411-042-1875-M	0.411	10.44	0.042	1.07	1.875	47.63	0.781	19.84	0.617	15.68	8.12	36.11	7.42	1.30
C0411-042-2000-M	0.411	10.44	0.042	1.07	2.000	50.80	0.830	21.07	0.654	16.62	8.12	36.11	6.94	1.21
C0411-042-2125-M	0.411	10.44	0.042	1.07	2.125	53.98	0.878	22.31	0.691	17.56	8.12	36.11	6.51	1.14
C0411-042-2250-M	0.411	10.44	0.042	1.07	2.250	57.15	0.927	23.54	0.728	18.49	8.12	36.11	6.14	1.07
C0411-042-2375-M	0.411	10.44	0.042	1.07	2.375	60.33	0.976	24.78	0.765	19.43	8.12	36.11	5.80	1.02
C0411-042-2500-M	0.411	10.44	0.042	1.07	2.500	63.50	1.024	26.02	0.802	20.37	8.12	36.11	5.50	0.96
C0411-042-2625-M	0.411	10.44	0.042	1.07	2.625	66.68	1.073	27.25	0.839	21.31	8.12	36.11	5.23	0.92
C0411-042-2750-M	0.411	10.44	0.042	1.07	2.750	69.85	1.122	28.49	0.876	22.25	8.12	36.11	4.99	0.87
C0411-042-2875-M	0.411	10.44	0.042	1.07	2.875	73.03	1.170	29.72	0.913	23.18	8.12	36.11	4.76	0.83
C0411-042-3000-M	0.411	10.44	0.042	1.07	3.000	76.20	1.219	30.96	0.950	24.12	8.12	36.11	4.56	0.80
C0411-042-3250-M	0.411	10.44	0.042	1.07	3.250	82.55	1.316	33.43	1.024	26.00	8.12	36.11	4.20	0.73
C0411-042-3500-M	0.411	10.44	0.042	1.07	3.500	88.90	1.413	35.90	1.097	27.87	8.12	36.11	3.89	0.68
C0411-042-3750-M	0.411	10.44	0.042	1.07	3.750	95.25	1.511	38.37	1.171	29.75	8.12	36.11	3.63	0.63
C0411-042-4000-M	0.411	10.44	0.042	1.07	4.000	101.60	1.608	40.84	1.245	31.63	8.12	36.11	3.39	0.59
C0411-042-4250-M	0.411	10.44	0.042	1.07	4.250	107.95	1.705	43.31	1.319	33.50	8.12	36.11	3.19	0.56
C0411-042-4500-M	0.411	10.44	0.042	1.07	4.500	114.30	1.803	45.79	1.393	35.38	8.12	36.11	3.01	0.53
C0411-042-4750-M	0.411	10.44	0.042	1.07	4.750	120.65	1.900	48.26	1.467	37.26	8.12	36.11	2.85	0.50
C0411-042-5000-M	0.411	10.44	0.042	1.07	5.000	127.00	1.997	50.73	1.541	39.13	8.12	36.11	2.70	0.47
C0411-042-5250-M	0.411	10.44	0.042	1.07	5.250	133.35	2.094	53.20	1.614	41.01	8.12	36.11	2.57	0.45
C0411-042-5500-M	0.411	10.44	0.042	1.07	5.500	139.70	2.192	55.67	1.688	42.88	8.12	36.11	2.45	0.43
C0411-042-5750-M	0.411	10.44	0.042	1.07	5.750	146.05	2.289	58.14	1.762	44.76	8.12	36.11	2.35	0.41
C0411-042-6000-M	0.411	10.44	0.042	1.07	6.000	152.40	2.386	60.61	1.836	46.64	8.12	36.11	2.25	0.39
C0411-042-6250-M	0.411	10.44	0.042	1.07	6.250	158.75	2.484	63.08	1.910	48.51	8.12	36.11	2.16	0.38
C0411-042-6500-M	0.411	10.44	0.042	1.07	6.500	165.10	2.581	65.55	1.984	50.39	8.12	36.11	2.07	0.36
C0411-042-6750-M	0.411	10.44	0.042	1.07	6.750	171.45	2.678	68.03	2.058	52.26	8.12	36.11	1.99	0.35
C0411-042-7000-M	0.411	10.44	0.042	1.07	7.000	177.80	2.775	70.50	2.131	54.14	8.12	36.11	1.92	0.34
C0411-045-0688-M	0.411	10.44	0.045	1.14	0.688	17.46	0.341	8.67	0.294	7.48	9.83	43.73	28.41	4.97
C0411-045-0750-M	0.411	10.44	0.045	1.14	0.750	19.05	0.368	9.34	0.315	8.01	9.83	43.73	25.72	4.50
C0411-045-0813-M	0.411	10.44	0.045	1.14	0.813	20.64	0.394	10.01	0.336	8.54	9.83	43.73	23.50	4.11
C0411-045-0875-M	0.411	10.44	0.045	1.14	0.875	22.23	0.420	10.68	0.357	9.07	9.83	43.73	21.63	3.78
C0411-045-0938-M	0.411	10.44	0.045	1.14	0.938	23.81	0.447	11.35	0.378	9.60	9.83	43.73	20.03	3.51
C0411-045-1000-M	0.411	10.44	0.045	1.14	1.000	25.40	0.473	12.01	0.399	10.14	9.83	43.73	18.66	3.26
C0411-045-1125-M	0.411	10.44	0.045	1.14	1.125	28.58	0.526	13.35	0.441	11.20	9.83	43.73	16.40	2.87
C0411-045-1250-M	0.411	10.44	0.045	1.14	1.250	31.75	0.578	14.69	0.483	12.26	9.83	43.73	14.64	2.56
C0411-045-1375-M	0.411	10.44	0.045	1.14	1.375	34.93	0.631	16.02	0.525	13.32	9.83	43.73	13.21	2.31
C0411-045-1500-M	0.411	10.44	0.045	1.14	1.500	38.10	0.683	17.36	0.566	14.39	9.83	43.73	12.04	2.11
C0411-045-1625-M	0.411	10.44	0.045	1.14	1.625	41.28	0.736	18.70	0.608	15.45	9.83	43.73	11.06	1.94
C0411-045-1750-M	0.411	10.44	0.045	1.14	1.750	44.45	0.789	20.03	0.650	16.51	9.83	43.73	10.23	1.79
C0411-045-1875-M	0.411	10.44	0.045	1.14	1.875	47.63	0.841	21.37	0.692	17.57	9.83	43.73	9.51	1.66
C0411-045-2000-M	0.411	10.44	0.045	1.14	2.000	50.80	0.894	22.71	0.734	18.64	9.83	43.73	8.89	1.56
C0411-045-2125-M	0.411	10.44	0.045	1.14	2.125	53.98	0.947	24.04	0.775	19.70	9.83	43.73	8.34	1.46
C0411-045-2250-M	0.411	10.44	0.045	1.14	2.250	57.15	0.999	25.38	0.817	20.76	9.83	43.73	7.86	1.38
C0411-045-2375-M	0.411	10.44	0.045	1.14	2.375	60.33	1.052	26.71	0.859	21.82	9.83	43.73	7.43	1.30
C0411-045-2500-M	0.411	10.44	0.045	1.14	2.500	63.50	1.104	28.05	0.901	22.89	9.83	43.73	7.04	1.23

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0411-040-5250-S	2.264	57.51	5.63	25.06	1.89	0.33
C0411-040-5500-S	2.370	60.19	5.63	25.06	1.80	0.32
C0411-040-5750-S	2.475	62.88	5.63	25.06	1.72	0.30
C0411-040-6000-S	2.581	65.56	5.63	25.06	1.65	0.29
C0411-040-6250-S	2.687	68.24	5.63	25.06	1.58	0.28
C0411-040-6500-S	2.792	70.92	5.63	25.06	1.52	0.27
C0411-040-6750-S	2.898	73.61	5.63	25.06	1.46	0.26
C0411-040-7000-S	3.003	76.29	5.63	25.06	1.41	0.25
C0411-042-0688-S	0.350	8.90	6.46	28.72	19.15	3.35
C0411-042-0750-S	0.378	9.60	6.46	28.72	17.35	3.04
C0411-042-0813-S	0.405	10.30	6.46	28.72	15.86	2.78
C0411-042-0875-S	0.433	11.00	6.46	28.72	14.61	2.56
C0411-042-0938-S	0.461	11.70	6.46	28.72	13.54	2.37
C0411-042-1000-S	0.488	12.40	6.46	28.72	12.62	2.21
C0411-042-1125-S	0.543	13.80	6.46	28.72	11.10	1.94
C0411-042-1250-S	0.598	15.20	6.46	28.72	9.91	1.73
C0411-042-1375-S	0.654	16.60	6.46	28.72	8.95	1.57
C0411-042-1500-S	0.709	18.00	6.46	28.72	8.16	1.43
C0411-042-1625-S	0.764	19.40	6.46	28.72	7.50	1.31
C0411-042-1750-S	0.819	20.80	6.46	28.72	6.94	1.21
C0411-042-1875-S	0.874	22.21	6.46	28.72	6.45	1.13
C0411-042-2000-S	0.929	23.61	6.46	28.72	6.03	1.06
C0411-042-2125-S	0.985	25.01	6.46	28.72	5.66	0.99
C0411-042-2250-S	1.040	26.41	6.46	28.72	5.34	0.93
C0411-042-2375-S	1.095	27.81	6.46	28.72	5.04	0.88
C0411-042-2500-S	1.150	29.21	6.46	28.72	4.78	0.84
C0411-042-2625-S	1.205	30.61	6.46	28.72	4.55	0.80
C0411-042-2750-S	1.260	32.01	6.46	28.72	4.33	0.76
C0411-042-2875-S	1.315	33.41	6.46	28.72	4.14	0.72
C0411-042-3000-S	1.371	34.81	6.46	28.72	3.96	0.69
C0411-042-3250-S	1.481	37.61	6.46	28.72	3.65	0.64
C0411-042-3500-S	1.591	40.42	6.46	28.72	3.38	0.59
C0411-042-3750-S	1.702	43.22	6.46	28.72	3.15	0.55
C0411-042-4000-S	1.812	46.02	6.46	28.72	2.95	0.52
C0411-042-4250-S	1.922	48.82	6.46	28.72	2.77	0.49
C0411-042-4500-S	2.032	51.62	6.46	28.72	2.62	0.46
C0411-042-4750-S	2.143	54.43	6.46	28.72	2.48	0.43
C0411-042-5000-S	2.253	57.23	6.46	28.72	2.35	0.41
C0411-042-5250-S	2.363	60.03	6.46	28.72	2.24	0.39
C0411-042-5500-S	2.474	62.83	6.46	28.72	2.13	0.37
C0411-042-5750-S	2.584	65.63	6.46	28.72	2.04	0.36
C0411-042-6000-S	2.694	68.43	6.46	28.72	1.95	0.34
C0411-042-6250-S	2.805	71.24	6.46	28.72	1.87	0.33
C0411-042-6500-S	2.915	74.04	6.46	28.72	1.80	0.32
C0411-042-6750-S	3.025	76.84	6.46	28.72	1.73	0.30
C0411-042-7000-S	3.135	79.64	6.46	28.72	1.67	0.29
C0411-045-0688-S	0.371	9.42	7.82	34.80	24.71	4.32
C0411-045-0750-S	0.400	10.17	7.82	34.80	22.37	3.91
C0411-045-0813-S	0.430	10.91	7.82	34.80	20.43	3.58
C0411-045-0875-S	0.459	11.66	7.82	34.80	18.81	3.29
C0411-045-0938-S	0.488	12.40	7.82	34.80	17.42	3.05
C0411-045-1000-S	0.518	13.15	7.82	34.80	16.22	2.84
C0411-045-1125-S	0.576	14.64	7.82	34.80	14.26	2.50
C0411-045-1250-S	0.635	16.14	7.82	34.80	12.73	2.23
C0411-045-1375-S	0.694	17.63	7.82	34.80	11.49	2.01
C0411-045-1500-S	0.753	19.12	7.82	34.80	10.47	1.83
C0411-045-1625-S	0.812	20.61	7.82	34.80	9.62	1.68
C0411-045-1750-S	0.870	22.10	7.82	34.80	8.89	1.56
C0411-045-1875-S	0.929	23.60	7.82	34.80	8.27	1.45
C0411-045-2000-S	0.988	25.09	7.82	34.80	7.73	1.35
C0411-045-2125-S	1.047	26.58	7.82	34.80	7.25	1.27
C0411-045-2250-S	1.105	28.07	7.82	34.80	6.83	1.20
C0411-045-2375-S	1.164	29.57	7.82	34.80	6.46	1.13
C0411-045-2500-S	1.223	31.06	7.82	34.80	6.13	1.07

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0411-045-2625-M	0.411	10.44	0.045	1.14	2.625	66.68	1.157	29.39	0.943	23.95	9.83	43.73	6.70	1.17
C0411-045-2750-M	0.411	10.44	0.045	1.14	2.750	69.85	1.210	30.72	0.985	25.01	9.83	43.73	6.38	1.12
C0411-045-2875-M	0.411	10.44	0.045	1.14	2.875	73.03	1.262	32.06	1.026	26.07	9.83	43.73	6.10	1.07
C0411-045-3000-M	0.411	10.44	0.045	1.14	3.000	76.20	1.315	33.40	1.068	27.14	9.83	43.73	5.83	1.02
C0411-045-3250-M	0.411	10.44	0.045	1.14	3.250	82.55	1.420	36.07	1.152	29.26	9.83	43.73	5.37	0.94
C0411-045-3500-M	0.411	10.44	0.045	1.14	3.500	88.90	1.525	38.74	1.236	31.38	9.83	43.73	4.98	0.87
C0411-045-3750-M	0.411	10.44	0.045	1.14	3.750	95.25	1.630	41.41	1.319	33.51	9.83	43.73	4.64	0.81
C0411-045-4000-M	0.411	10.44	0.045	1.14	4.000	101.60	1.736	44.09	1.403	35.63	9.83	43.73	4.34	0.76
C0411-045-4250-M	0.411	10.44	0.045	1.14	4.250	107.95	1.841	46.76	1.487	37.76	9.83	43.73	4.08	0.71
C0411-045-4500-M	0.411	10.44	0.045	1.14	4.500	114.30	1.946	49.43	1.570	39.88	9.83	43.73	3.85	0.67
C0411-045-4750-M	0.411	10.44	0.045	1.14	4.750	120.65	2.051	52.11	1.654	42.01	9.83	43.73	3.64	0.64
C0411-045-5000-M	0.411	10.44	0.045	1.14	5.000	127.00	2.157	54.78	1.738	44.13	9.83	43.73	3.46	0.60
C0411-045-5250-M	0.411	10.44	0.045	1.14	5.250	133.35	2.262	57.45	1.821	46.26	9.83	43.73	3.29	0.58
C0411-045-5500-M	0.411	10.44	0.045	1.14	5.500	139.70	2.367	60.12	1.905	48.38	9.83	43.73	3.14	0.55
C0411-045-5750-M	0.411	10.44	0.045	1.14	5.750	146.05	2.472	62.80	1.989	50.51	9.83	43.73	3.00	0.52
C0411-045-6000-M	0.411	10.44	0.045	1.14	6.000	152.40	2.578	65.47	2.072	52.63	9.83	43.73	2.87	0.50
C0411-045-6250-M	0.411	10.44	0.045	1.14	6.250	158.75	2.683	68.14	2.156	54.76	9.83	43.73	2.76	0.48
C0411-045-6500-M	0.411	10.44	0.045	1.14	6.500	165.10	2.788	70.81	2.240	56.88	9.83	43.73	2.65	0.46
C0411-045-6750-M	0.411	10.44	0.045	1.14	6.750	171.45	2.893	73.49	2.323	59.01	9.83	43.73	2.55	0.45
C0411-045-7000-M	0.411	10.44	0.045	1.14	7.000	177.80	2.998	76.16	2.407	61.13	9.83	43.73	2.46	0.43
C0411-047-0688-M	0.411	10.44	0.047	1.19	0.688	17.46	0.356	9.05	0.313	7.95	11.09	49.33	33.50	5.86
C0411-047-0750-M	0.411	10.44	0.047	1.19	0.750	19.05	0.384	9.76	0.336	8.52	11.09	49.33	30.31	5.30
C0411-047-0813-M	0.411	10.44	0.047	1.19	0.813	20.64	0.412	10.46	0.358	9.10	11.09	49.33	27.67	4.84
C0411-047-0875-M	0.411	10.44	0.047	1.19	0.875	22.23	0.439	11.16	0.381	9.67	11.09	49.33	25.46	4.45
C0411-047-0938-M	0.411	10.44	0.047	1.19	0.938	23.81	0.467	11.86	0.403	10.24	11.09	49.33	23.57	4.12
C0411-047-1000-M	0.411	10.44	0.047	1.19	1.000	25.40	0.495	12.56	0.426	10.81	11.09	49.33	21.95	3.84
C0411-047-1125-M	0.411	10.44	0.047	1.19	1.125	28.58	0.550	13.97	0.471	11.96	11.09	49.33	19.28	3.37
C0411-047-1250-M	0.411	10.44	0.047	1.19	1.250	31.75	0.605	15.37	0.516	13.11	11.09	49.33	17.20	3.01
C0411-047-1375-M	0.411	10.44	0.047	1.19	1.375	34.93	0.661	16.78	0.561	14.25	11.09	49.33	15.52	2.72
C0411-047-1500-M	0.411	10.44	0.047	1.19	1.500	38.10	0.716	18.18	0.606	15.40	11.09	49.33	14.14	2.47
C0411-047-1625-M	0.411	10.44	0.047	1.19	1.625	41.28	0.771	19.59	0.651	16.55	11.09	49.33	12.99	2.27
C0411-047-1750-M	0.411	10.44	0.047	1.19	1.750	44.45	0.826	20.99	0.697	17.69	11.09	49.33	12.01	2.10
C0411-047-1875-M	0.411	10.44	0.047	1.19	1.875	47.63	0.882	22.39	0.742	18.84	11.09	49.33	11.16	1.95
C0411-047-2000-M	0.411	10.44	0.047	1.19	2.000	50.80	0.937	23.80	0.787	19.98	11.09	49.33	10.43	1.83
C0411-047-2125-M	0.411	10.44	0.047	1.19	2.125	53.98	0.992	25.20	0.832	21.13	11.09	49.33	9.79	1.71
C0411-047-2250-M	0.411	10.44	0.047	1.19	2.250	57.15	1.047	26.61	0.877	22.28	11.09	49.33	9.22	1.61
C0411-047-2375-M	0.411	10.44	0.047	1.19	2.375	60.33	1.103	28.01	0.922	23.42	11.09	49.33	8.72	1.53
C0411-047-2500-M	0.411	10.44	0.047	1.19	2.500	63.50	1.158	29.41	0.967	24.57	11.09	49.33	8.26	1.45
C0411-047-2625-M	0.411	10.44	0.047	1.19	2.625	66.68	1.213	30.82	1.012	25.72	11.09	49.33	7.86	1.37
C0411-047-2750-M	0.411	10.44	0.047	1.19	2.750	69.85	1.269	32.22	1.058	26.86	11.09	49.33	7.49	1.31
C0411-047-2875-M	0.411	10.44	0.047	1.19	2.875	73.03	1.324	33.63	1.103	28.01	11.09	49.33	7.15	1.25
C0411-047-3000-M	0.411	10.44	0.047	1.19	3.000	76.20	1.379	35.03	1.148	29.15	11.09	49.33	6.84	1.20
C0411-047-3250-M	0.411	10.44	0.047	1.19	3.250	82.55	1.490	37.84	1.238	31.45	11.09	49.33	6.30	1.10
C0411-047-3500-M	0.411	10.44	0.047	1.19	3.500	88.90	1.600	40.65	1.328	33.74	11.09	49.33	5.84	1.02
C0411-047-3750-M	0.411	10.44	0.047	1.19	3.750	95.25	1.711	43.46	1.419	36.03	11.09	49.33	5.44	0.95
C0411-047-4000-M	0.411	10.44	0.047	1.19	4.000	101.60	1.821	46.26	1.509	38.32	11.09	49.33	5.09	0.89
C0411-047-4250-M	0.411	10.44	0.047	1.19	4.250	107.95	1.932	49.07	1.599	40.62	11.09	49.33	4.78	0.84
C0411-047-4500-M	0.411	10.44	0.047	1.19	4.500	114.30	2.043	51.88	1.689	42.91	11.09	49.33	4.51	0.79
C0411-047-4750-M	0.411	10.44	0.047	1.19	4.750	120.65	2.153	54.69	1.780	45.20	11.09	49.33	4.27	0.75
C0411-047-5000-M	0.411	10.44	0.047	1.19	5.000	127.00	2.264	57.50	1.870	47.49	11.09	49.33	4.05	0.71
C0411-047-5250-M	0.411	10.44	0.047	1.19	5.250	133.35	2.374	60.31	1.960	49.79	11.09	49.33	3.86	0.67
C0411-047-5500-M	0.411	10.44	0.047	1.19	5.500	139.70	2.485	63.11	2.050	52.08	11.09	49.33	3.68	0.64
C0411-047-5750-M	0.411	10.44	0.047	1.19	5.750	146.05	2.595	65.92	2.141	54.37	11.09	49.33	3.52	0.62
C0411-047-6000-M	0.411	10.44	0.047	1.19	6.000	152.40	2.706	68.73	2.231	56.66	11.09	49.33	3.37	0.59
C0411-047-6250-M	0.411	10.44	0.047	1.19	6.250	158.75	2.816	71.54	2.321	58.96	11.09	49.33	3.23	0.57
C0411-047-6500-M	0.411	10.44	0.047	1.19	6.500	165.10	2.927	74.35	2.411	61.25	11.09	49.33	3.10	0.54
C0411-047-6750-M	0.411	10.44	0.047	1.19	6.750	171.45	3.038	77.16	2.502	63.54	11.09	49.33	2.99	0.52
C0411-047-7000-M	0.411	10.44	0.047	1.19	7.000	177.80	3.148	79.96	2.592	65.83	11.09	49.33	2.88	0.50
C0411-049-0688-M	0.411	10.44	0.049	1.25	0.688	17.46	0.371	9.43	0.331	8.41	12.44	55.35	39.35	6.89
C0411-049-0750-M	0.411	10.44	0.049	1.25	0.750	19.05	0.400	10.17	0.356	9.03	12.44	55.35	35.58	6.23
C0411-049-0813-M	0.411	10.44	0.049	1.25	0.813	20.64	0.429	10.90	0.380	9.64	12.44	55.35	32.47	5.68
C0411-049-0875-M	0.411	10.44	0.049	1.25	0.875	22.23	0.458	11.64	0.404	10.26	12.44	55.35	29.86	5.22
C0411-049-0938-M	0.411	10.44	0.049	1.25	0.938	23.81	0.487	12.38	0.428	10.87	12.44	55.35	27.63	4.84
C0411-049-1000-M	0.411	10.44	0.049	1.25	1.000	25.40	0.516	13.11	0.452	11.49	12.44	55.35	25.72	4.50

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0411-045-2625-S	1.282	32.55	7.82	34.80	5.82	1.02
C0411-045-2750-S	1.340	34.04	7.82	34.80	5.55	0.97
C0411-045-2875-S	1.399	35.54	7.82	34.80	5.30	0.93
C0411-045-3000-S	1.458	37.03	7.82	34.80	5.07	0.89
C0411-045-3250-S	1.575	40.01	7.82	34.80	4.67	0.82
C0411-045-3500-S	1.693	43.00	7.82	34.80	4.33	0.76
C0411-045-3750-S	1.810	45.98	7.82	34.80	4.03	0.71
C0411-045-4000-S	1.928	48.97	7.82	34.80	3.78	0.66
C0411-045-4250-S	2.045	51.95	7.82	34.80	3.55	0.62
C0411-045-4500-S	2.163	54.94	7.82	34.80	3.35	0.59
C0411-045-4750-S	2.280	57.92	7.82	34.80	3.17	0.55
C0411-045-5000-S	2.398	60.91	7.82	34.80	3.01	0.53
C0411-045-5250-S	2.515	63.89	7.82	34.80	2.86	0.50
C0411-045-5500-S	2.633	66.88	7.82	34.80	2.73	0.48
C0411-045-5750-S	2.750	69.86	7.82	34.80	2.61	0.46
C0411-045-6000-S	2.868	72.85	7.82	34.80	2.50	0.44
C0411-045-6250-S	2.985	75.83	7.82	34.80	2.40	0.42
C0411-045-6500-S	3.103	78.81	7.82	34.80	2.30	0.40
C0411-045-6750-S	3.220	81.80	7.82	34.80	2.22	0.39
C0411-045-7000-S	3.338	84.78	7.82	34.80	2.14	0.37
C0411-047-0688-S	0.385	9.77	8.83	39.26	29.13	5.10
C0411-047-0750-S	0.415	10.54	8.83	39.26	26.35	4.61
C0411-047-0813-S	0.446	11.32	8.83	39.26	24.06	4.21
C0411-047-0875-S	0.476	12.10	8.83	39.26	22.14	3.87
C0411-047-0938-S	0.507	12.88	8.83	39.26	20.50	3.59
C0411-047-1000-S	0.538	13.65	8.83	39.26	19.08	3.34
C0411-047-1125-S	0.599	15.21	8.83	39.26	16.77	2.93
C0411-047-1250-S	0.660	16.76	8.83	39.26	14.96	2.62
C0411-047-1375-S	0.721	18.32	8.83	39.26	13.50	2.36
C0411-047-1500-S	0.782	19.87	8.83	39.26	12.30	2.15
C0411-047-1625-S	0.843	21.42	8.83	39.26	11.29	1.98
C0411-047-1750-S	0.905	22.98	8.83	39.26	10.44	1.83
C0411-047-1875-S	0.966	24.53	8.83	39.26	9.71	1.70
C0411-047-2000-S	1.027	26.09	8.83	39.26	9.07	1.59
C0411-047-2125-S	1.088	27.64	8.83	39.26	8.51	1.49
C0411-047-2250-S	1.149	29.20	8.83	39.26	8.02	1.40
C0411-047-2375-S	1.211	30.75	8.83	39.26	7.58	1.33
C0411-047-2500-S	1.272	32.30	8.83	39.26	7.19	1.26
C0411-047-2625-S	1.333	33.86	8.83	39.26	6.83	1.20
C0411-047-2750-S	1.394	35.41	8.83	39.26	6.51	1.14
C0411-047-2875-S	1.455	36.97	8.83	39.26	6.22	1.09
C0411-047-3000-S	1.517	38.52	8.83	39.26	5.95	1.04
C0411-047-3250-S	1.639	41.63	8.83	39.26	5.48	0.96
C0411-047-3500-S	1.761	44.74	8.83	39.26	5.08	0.89
C0411-047-3750-S	1.884	47.85	8.83	39.26	4.73	0.83
C0411-047-4000-S	2.006	50.96	8.83	39.26	4.43	0.77
C0411-047-4250-S	2.128	54.06	8.83	39.26	4.16	0.73
C0411-047-4500-S	2.251	57.17	8.83	39.26	3.92	0.69
C0411-047-4750-S	2.373	60.28	8.83	39.26	3.71	0.65
C0411-047-5000-S	2.496	63.39	8.83	39.26	3.52	0.62
C0411-047-5250-S	2.618	66.50	8.83	39.26	3.35	0.59
C0411-047-5500-S	2.740	69.61	8.83	39.26	3.20	0.56
C0411-047-5750-S	2.863	72.72	8.83	39.26	3.06	0.53
C0411-047-6000-S	2.985	75.82	8.83	39.26	2.93	0.51
C0411-047-6250-S	3.108	78.93	8.83	39.26	2.81	0.49
C0411-047-6500-S	3.230	82.04	8.83	39.26	2.70	0.47
C0411-047-6750-S	3.352	85.15	8.83	39.26	2.60	0.45
C0411-047-7000-S	3.475	88.26	8.83	39.26	2.50	0.44
C0411-049-0688-S	0.398	10.11	9.90	44.05	34.22	5.99
C0411-049-0750-S	0.430	10.92	9.90	44.05	30.94	5.41
C0411-049-0813-S	0.462	11.73	9.90	44.05	28.23	4.94
C0411-049-0875-S	0.494	12.54	9.90	44.05	25.96	4.54
C0411-049-0938-S	0.525	13.35	9.90	44.05	24.03	4.21
C0411-049-1000-S	0.557	14.15	9.90	44.05	22.36	3.91

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0411-049-1125-M	0.411	10.44	0.049	1.25	1.125	28.58	0.574	14.58	0.501	12.72	12.44	55.35	22.59	3.95
C0411-049-1250-M	0.411	10.44	0.049	1.25	1.250	31.75	0.632	16.06	0.549	13.95	12.44	55.35	20.14	3.52
C0411-049-1375-M	0.411	10.44	0.049	1.25	1.375	34.93	0.690	17.53	0.598	15.18	12.44	55.35	18.17	3.18
C0411-049-1500-M	0.411	10.44	0.049	1.25	1.500	38.10	0.748	19.00	0.646	16.41	12.44	55.35	16.55	2.90
C0411-049-1625-M	0.411	10.44	0.049	1.25	1.625	41.28	0.806	20.47	0.695	17.64	12.44	55.35	15.19	2.66
C0411-049-1750-M	0.411	10.44	0.049	1.25	1.750	44.45	0.864	21.94	0.743	18.87	12.44	55.35	14.04	2.46
C0411-049-1875-M	0.411	10.44	0.049	1.25	1.875	47.63	0.922	23.42	0.791	20.10	12.44	55.35	13.06	2.28
C0411-049-2000-M	0.411	10.44	0.049	1.25	2.000	50.80	0.980	24.89	0.840	21.33	12.44	55.35	12.20	2.13
C0411-049-2125-M	0.411	10.44	0.049	1.25	2.125	53.98	1.038	26.36	0.888	22.56	12.44	55.35	11.45	2.00
C0411-049-2250-M	0.411	10.44	0.049	1.25	2.250	57.15	1.096	27.83	0.937	23.79	12.44	55.35	10.78	1.89
C0411-049-2375-M	0.411	10.44	0.049	1.25	2.375	60.33	1.154	29.30	0.985	25.02	12.44	55.35	10.19	1.78
C0411-049-2500-M	0.411	10.44	0.049	1.25	2.500	63.50	1.212	30.78	1.033	26.25	12.44	55.35	9.66	1.69
C0411-049-2625-M	0.411	10.44	0.049	1.25	2.625	66.68	1.270	32.25	1.082	27.48	12.44	55.35	9.18	1.61
C0411-049-2750-M	0.411	10.44	0.049	1.25	2.750	69.85	1.328	33.72	1.130	28.71	12.44	55.35	8.75	1.53
C0411-049-2875-M	0.411	10.44	0.049	1.25	2.875	73.03	1.386	35.19	1.179	29.94	12.44	55.35	8.35	1.46
C0411-049-3000-M	0.411	10.44	0.049	1.25	3.000	76.20	1.443	36.66	1.227	31.17	12.44	55.35	7.99	1.40
C0411-049-3250-M	0.411	10.44	0.049	1.25	3.250	82.55	1.559	39.61	1.324	33.63	12.44	55.35	7.36	1.29
C0411-049-3500-M	0.411	10.44	0.049	1.25	3.500	88.90	1.675	42.55	1.421	36.09	12.44	55.35	6.82	1.19
C0411-049-3750-M	0.411	10.44	0.049	1.25	3.750	95.25	1.791	45.50	1.518	38.55	12.44	55.35	6.35	1.11
C0411-049-4000-M	0.411	10.44	0.049	1.25	4.000	101.60	1.907	48.44	1.615	41.01	12.44	55.35	5.95	1.04
C0411-049-4250-M	0.411	10.44	0.049	1.25	4.250	107.95	2.023	51.38	1.711	43.47	12.44	55.35	5.59	0.98
C0411-049-4500-M	0.411	10.44	0.049	1.25	4.500	114.30	2.139	54.33	1.808	45.93	12.44	55.35	5.27	0.92
C0411-049-4750-M	0.411	10.44	0.049	1.25	4.750	120.65	2.255	57.27	1.905	48.39	12.44	55.35	4.99	0.87
C0411-049-5000-M	0.411	10.44	0.049	1.25	5.000	127.00	2.371	60.22	2.002	50.85	12.44	55.35	4.73	0.83
C0411-049-5250-M	0.411	10.44	0.049	1.25	5.250	133.35	2.487	63.16	2.099	53.31	12.44	55.35	4.50	0.79
C0411-049-5500-M	0.411	10.44	0.049	1.25	5.500	139.70	2.603	66.10	2.196	55.77	12.44	55.35	4.29	0.75
C0411-049-5750-M	0.411	10.44	0.049	1.25	5.750	146.05	2.718	69.05	2.293	58.23	12.44	55.35	4.11	0.72
C0411-049-6000-M	0.411	10.44	0.049	1.25	6.000	152.40	2.834	71.99	2.389	60.69	12.44	55.35	3.93	0.69
C0411-049-6250-M	0.411	10.44	0.049	1.25	6.250	158.75	2.950	74.94	2.486	63.15	12.44	55.35	3.77	0.66
C0411-049-6500-M	0.411	10.44	0.049	1.25	6.500	165.10	3.066	77.88	2.583	65.61	12.44	55.35	3.62	0.63
C0411-049-6750-M	0.411	10.44	0.049	1.25	6.750	171.45	3.182	80.82	2.680	68.07	12.44	55.35	3.49	0.61
C0411-049-7000-M	0.411	10.44	0.049	1.25	7.000	177.80	3.298	83.77	2.777	70.53	12.44	55.35	3.36	0.59
C0411-051-0625-M	0.411	10.44	0.051	1.30	0.625	15.88	0.356	9.03	0.323	8.22	13.90	61.81	51.58	9.03
C0411-051-0688-M	0.411	10.44	0.051	1.30	0.688	17.46	0.386	9.80	0.349	8.87	13.90	61.81	46.08	8.06
C0411-051-0750-M	0.411	10.44	0.051	1.30	0.750	19.05	0.416	10.57	0.375	9.53	13.90	61.81	41.63	7.29
C0411-051-0813-M	0.411	10.44	0.051	1.30	0.813	20.64	0.447	11.34	0.401	10.19	13.90	61.81	37.97	6.64
C0411-051-0875-M	0.411	10.44	0.051	1.30	0.875	22.23	0.477	12.11	0.427	10.84	13.90	61.81	34.90	6.11
C0411-051-0938-M	0.411	10.44	0.051	1.30	0.938	23.81	0.507	12.88	0.453	11.50	13.90	61.81	32.29	5.65
C0411-051-1000-M	0.411	10.44	0.051	1.30	1.000	25.40	0.537	13.65	0.479	12.16	13.90	61.81	30.04	5.26
C0411-051-1125-M	0.411	10.44	0.051	1.30	1.125	28.58	0.598	15.19	0.530	13.47	13.90	61.81	26.37	4.61
C0411-051-1250-M	0.411	10.44	0.051	1.30	1.250	31.75	0.659	16.73	0.582	14.78	13.90	61.81	23.50	4.11
C0411-051-1375-M	0.411	10.44	0.051	1.30	1.375	34.93	0.719	18.27	0.634	16.10	13.90	61.81	21.19	3.71
C0411-051-1500-M	0.411	10.44	0.051	1.30	1.500	38.10	0.780	19.81	0.686	17.41	13.90	61.81	19.30	3.38
C0411-051-1625-M	0.411	10.44	0.051	1.30	1.625	41.28	0.841	21.35	0.737	18.73	13.90	61.81	17.71	3.10
C0411-051-1750-M	0.411	10.44	0.051	1.30	1.750	44.45	0.901	22.89	0.789	20.04	13.90	61.81	16.37	2.86
C0411-051-1875-M	0.411	10.44	0.051	1.30	1.875	47.63	0.962	24.43	0.841	21.35	13.90	61.81	15.22	2.66
C0411-051-2000-M	0.411	10.44	0.051	1.30	2.000	50.80	1.022	25.97	0.892	22.67	13.90	61.81	14.21	2.49
C0411-051-2125-M	0.411	10.44	0.051	1.30	2.125	53.98	1.083	27.51	0.944	23.98	13.90	61.81	13.34	2.33
C0411-051-2250-M	0.411	10.44	0.051	1.30	2.250	57.15	1.144	29.05	0.996	25.29	13.90	61.81	12.56	2.20
C0411-051-2375-M	0.411	10.44	0.051	1.30	2.375	60.33	1.204	30.59	1.048	26.61	13.90	61.81	11.87	2.08
C0411-051-2500-M	0.411	10.44	0.051	1.30	2.500	63.50	1.265	32.13	1.099	27.92	13.90	61.81	11.25	1.97
C0411-051-2625-M	0.411	10.44	0.051	1.30	2.625	66.68	1.326	33.67	1.151	29.24	13.90	61.81	10.69	1.87
C0411-051-2750-M	0.411	10.44	0.051	1.30	2.750	69.85	1.386	35.21	1.203	30.55	13.90	61.81	10.19	1.78
C0411-051-2875-M	0.411	10.44	0.051	1.30	2.875	73.03	1.447	36.75	1.254	31.86	13.90	61.81	9.73	1.70
C0411-051-3000-M	0.411	10.44	0.051	1.30	3.000	76.20	1.507	38.29	1.306	33.18	13.90	61.81	9.31	1.63
C0411-051-3250-M	0.411	10.44	0.051	1.30	3.250	82.55	1.629	41.37	1.410	35.80	13.90	61.81	8.57	1.50
C0411-051-3500-M	0.411	10.44	0.051	1.30	3.500	88.90	1.750	44.45	1.513	38.43	13.90	61.81	7.94	1.39
C0411-051-3750-M	0.411	10.44	0.051	1.30	3.750	95.25	1.871	47.52	1.616	41.06	13.90	61.81	7.40	1.29
C0411-051-4000-M	0.411	10.44	0.051	1.30	4.000	101.60	1.992	50.60	1.720	43.69	13.90	61.81	6.92	1.21
C0411-051-4250-M	0.411	10.44	0.051	1.30	4.250	107.95	2.114	53.68	1.823	46.31	13.90	61.81	6.50	1.14
C0411-051-4500-M	0.411	10.44	0.051	1.30	4.500	114.30	2.235	56.76	1.927	48.94	13.90	61.81	6.13	1.07
C0411-051-4750-M	0.411	10.44	0.051	1.30	4.750	120.65	2.356	59.84	2.030	51.57	13.90	61.81	5.80	1.02
C0411-051-5000-M	0.411	10.44	0.051	1.30	5.000	127.00	2.477	62.92	2.134	54.19	13.90	61.81	5.51	0.96
C0411-051-5250-M	0.411	10.44	0.051	1.30	5.250	133.35	2.598	66.00	2.237	56.82	13.90	61.81	5.24	0.92

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0411-049-1125-S	0.621	15.77	9.90	44.05	19.64	3.44
C0411-049-1250-S	0.685	17.39	9.90	44.05	17.51	3.06
C0411-049-1375-S	0.748	19.00	9.90	44.05	15.80	2.76
C0411-049-1500-S	0.812	20.62	9.90	44.05	14.39	2.52
C0411-049-1625-S	0.875	22.24	9.90	44.05	13.21	2.31
C0411-049-1750-S	0.939	23.85	9.90	44.05	12.21	2.14
C0411-049-1875-S	1.003	25.47	9.90	44.05	11.35	1.99
C0411-049-2000-S	1.066	27.09	9.90	44.05	10.61	1.86
C0411-049-2125-S	1.130	28.70	9.90	44.05	9.95	1.74
C0411-049-2250-S	1.194	30.32	9.90	44.05	9.37	1.64
C0411-049-2375-S	1.257	31.93	9.90	44.05	8.86	1.55
C0411-049-2500-S	1.321	33.55	9.90	44.05	8.40	1.47
C0411-049-2625-S	1.385	35.17	9.90	44.05	7.98	1.40
C0411-049-2750-S	1.448	36.78	9.90	44.05	7.61	1.33
C0411-049-2875-S	1.512	38.40	9.90	44.05	7.26	1.27
C0411-049-3000-S	1.575	40.02	9.90	44.05	6.95	1.22
C0411-049-3250-S	1.703	43.25	9.90	44.05	6.40	1.12
C0411-049-3500-S	1.830	46.48	9.90	44.05	5.93	1.04
C0411-049-3750-S	1.957	49.72	9.90	44.05	5.52	0.97
C0411-049-4000-S	2.085	52.95	9.90	44.05	5.17	0.90
C0411-049-4250-S	2.212	56.18	9.90	44.05	4.86	0.85
C0411-049-4500-S	2.339	59.41	9.90	44.05	4.58	0.80
C0411-049-4750-S	2.466	62.65	9.90	44.05	4.34	0.76
C0411-049-5000-S	2.594	65.88	9.90	44.05	4.12	0.72
C0411-049-5250-S	2.721	69.11	9.90	44.05	3.92	0.69
C0411-049-5500-S	2.848	72.35	9.90	44.05	3.73	0.65
C0411-049-5750-S	2.976	75.58	9.90	44.05	3.57	0.62
C0411-049-6000-S	3.103	78.81	9.90	44.05	3.42	0.60
C0411-049-6250-S	3.230	82.05	9.90	44.05	3.28	0.57
C0411-049-6500-S	3.357	85.28	9.90	44.05	3.15	0.55
C0411-049-6750-S	3.485	88.51	9.90	44.05	3.03	0.53
C0411-049-7000-S	3.612	91.74	9.90	44.05	2.92	0.51
C0411-051-0625-S	0.379	9.61	11.06	49.18	44.85	7.85
C0411-051-0688-S	0.412	10.45	11.06	49.18	40.07	7.01
C0411-051-0750-S	0.445	11.29	11.06	49.18	36.20	6.34
C0411-051-0813-S	0.478	12.13	11.06	49.18	33.02	5.78
C0411-051-0875-S	0.511	12.97	11.06	49.18	30.35	5.31
C0411-051-0938-S	0.544	13.81	11.06	49.18	28.08	4.91
C0411-051-1000-S	0.577	14.65	11.06	49.18	26.12	4.57
C0411-051-1125-S	0.643	16.33	11.06	49.18	22.93	4.01
C0411-051-1250-S	0.709	18.01	11.06	49.18	20.44	3.58
C0411-051-1375-S	0.775	19.69	11.06	49.18	18.43	3.22
C0411-051-1500-S	0.841	21.36	11.06	49.18	16.78	2.94
C0411-051-1625-S	0.907	23.04	11.06	49.18	15.40	2.70
C0411-051-1750-S	0.973	24.72	11.06	49.18	14.24	2.49
C0411-051-1875-S	1.039	26.40	11.06	49.18	13.23	2.32
C0411-051-2000-S	1.105	28.08	11.06	49.18	12.36	2.16
C0411-051-2125-S	1.172	29.76	11.06	49.18	11.60	2.03
C0411-051-2250-S	1.238	31.44	11.06	49.18	10.92	1.91
C0411-051-2375-S	1.304	33.11	11.06	49.18	10.32	1.81
C0411-051-2500-S	1.370	34.79	11.06	49.18	9.78	1.71
C0411-051-2625-S	1.436	36.47	11.06	49.18	9.30	1.63
C0411-051-2750-S	1.502	38.15	11.06	49.18	8.86	1.55
C0411-051-2875-S	1.568	39.83	11.06	49.18	8.46	1.48
C0411-051-3000-S	1.634	41.51	11.06	49.18	8.10	1.42
C0411-051-3250-S	1.766	44.87	11.06	49.18	7.45	1.30
C0411-051-3500-S	1.899	48.22	11.06	49.18	6.90	1.21
C0411-051-3750-S	2.031	51.58	11.06	49.18	6.43	1.13
C0411-051-4000-S	2.163	54.94	11.06	49.18	6.02	1.05
C0411-051-4250-S	2.295	58.29	11.06	49.18	5.66	0.99
C0411-051-4500-S	2.427	61.65	11.06	49.18	5.33	0.93
C0411-051-4750-S	2.559	65.01	11.06	49.18	5.05	0.88
C0411-051-5000-S	2.692	68.37	11.06	49.18	4.79	0.84
C0411-051-5250-S	2.824	71.72	11.06	49.18	4.56	0.80

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0411-051-5500-M	**0.411**	**10.44**	**0.051**	**1.30**	**5.500**	**139.70**	**2.720**	**69.08**	**2.341**	**59.45**	**13.90**	**61.81**	**5.00**	**0.87**
C0411-051-5750-M	**0.411**	**10.44**	**0.051**	**1.30**	**5.750**	**146.05**	**2.841**	**72.16**	**2.444**	**62.08**	**13.90**	**61.81**	**4.78**	**0.84**
C0411-051-6000-M	**0.411**	**10.44**	**0.051**	**1.30**	**6.000**	**152.40**	**2.962**	**75.24**	**2.547**	**64.70**	**13.90**	**61.81**	**4.57**	**0.80**
C0411-051-6250-M	**0.411**	**10.44**	**0.051**	**1.30**	**6.250**	**158.75**	**3.083**	**78.32**	**2.651**	**67.33**	**13.90**	**61.81**	**4.39**	**0.77**
C0411-051-6500-M	**0.411**	**10.44**	**0.051**	**1.30**	**6.500**	**165.10**	**3.205**	**81.40**	**2.754**	**69.96**	**13.90**	**61.81**	**4.22**	**0.74**
C0411-051-6750-M	**0.411**	**10.44**	**0.051**	**1.30**	**6.750**	**171.45**	**3.326**	**84.48**	**2.858**	**72.59**	**13.90**	**61.81**	**4.06**	**0.71**
C0411-051-7000-M	**0.411**	**10.44**	**0.051**	**1.30**	**7.000**	**177.80**	**3.447**	**87.56**	**2.961**	**75.21**	**13.90**	**61.81**	**3.91**	**0.68**
C0411-055-0625-M	**0.411**	**10.44**	**0.055**	**1.40**	**0.625**	**15.88**	**0.381**	**9.69**	**0.355**	**9.03**	**17.10**	**76.08**	**70.21**	**12.29**
C0411-055-0688-M	**0.411**	**10.44**	**0.055**	**1.40**	**0.688**	**17.46**	**0.414**	**10.52**	**0.384**	**9.76**	**17.10**	**76.08**	**62.61**	**10.96**
C0411-055-0750-M	**0.411**	**10.44**	**0.055**	**1.40**	**0.750**	**19.05**	**0.447**	**11.36**	**0.414**	**10.50**	**17.10**	**76.08**	**56.49**	**9.89**
C0411-055-0813-M	**0.411**	**10.44**	**0.055**	**1.40**	**0.813**	**20.64**	**0.480**	**12.20**	**0.443**	**11.24**	**17.10**	**76.08**	**51.47**	**9.01**
C0411-055-0875-M	**0.411**	**10.44**	**0.055**	**1.40**	**0.875**	**22.23**	**0.513**	**13.03**	**0.472**	**11.98**	**17.10**	**76.08**	**47.26**	**8.27**
C0411-055-0938-M	**0.411**	**10.44**	**0.055**	**1.40**	**0.938**	**23.81**	**0.546**	**13.87**	**0.501**	**12.72**	**17.10**	**76.08**	**43.69**	**7.65**
C0411-055-1000-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.000**	**25.40**	**0.579**	**14.71**	**0.530**	**13.46**	**17.10**	**76.08**	**40.63**	**7.11**
C0411-055-1125-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.125**	**28.58**	**0.645**	**16.38**	**0.588**	**14.94**	**17.10**	**76.08**	**35.62**	**6.23**
C0411-055-1250-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.250**	**31.75**	**0.711**	**18.05**	**0.646**	**16.42**	**17.10**	**76.08**	**31.72**	**5.55**
C0411-055-1375-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.375**	**34.93**	**0.777**	**19.73**	**0.705**	**17.90**	**17.10**	**76.08**	**28.58**	**5.00**
C0411-055-1500-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.500**	**38.10**	**0.842**	**21.40**	**0.763**	**19.37**	**17.10**	**76.08**	**26.01**	**4.55**
C0411-055-1625-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.625**	**41.28**	**0.908**	**23.07**	**0.821**	**20.85**	**17.10**	**76.08**	**23.87**	**4.18**
C0411-055-1750-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.750**	**44.45**	**0.974**	**24.75**	**0.879**	**22.33**	**17.10**	**76.08**	**22.05**	**3.86**
C0411-055-1875-M	**0.411**	**10.44**	**0.055**	**1.40**	**1.875**	**47.63**	**1.040**	**26.42**	**0.937**	**23.81**	**17.10**	**76.08**	**20.49**	**3.58**
C0411-055-2000-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.000**	**50.80**	**1.106**	**28.09**	**0.996**	**25.29**	**17.10**	**76.08**	**19.13**	**3.35**
C0411-055-2125-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.125**	**53.98**	**1.172**	**29.76**	**1.054**	**26.77**	**17.10**	**76.08**	**17.94**	**3.14**
C0411-055-2250-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.250**	**57.15**	**1.238**	**31.44**	**1.112**	**28.25**	**17.10**	**76.08**	**16.90**	**2.96**
C0411-055-2375-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.375**	**60.33**	**1.304**	**33.11**	**1.170**	**29.72**	**17.10**	**76.08**	**15.96**	**2.79**
C0411-055-2500-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.500**	**63.50**	**1.369**	**34.78**	**1.228**	**31.20**	**17.10**	**76.08**	**15.13**	**2.65**
C0411-055-2625-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.625**	**66.68**	**1.435**	**36.46**	**1.287**	**32.68**	**17.10**	**76.08**	**14.38**	**2.52**
C0411-055-2750-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.750**	**69.85**	**1.501**	**38.13**	**1.345**	**34.16**	**17.10**	**76.08**	**13.70**	**2.40**
C0411-055-2875-M	**0.411**	**10.44**	**0.055**	**1.40**	**2.875**	**73.03**	**1.567**	**39.80**	**1.403**	**35.64**	**17.10**	**76.08**	**13.08**	**2.29**
C0411-055-3000-M	**0.411**	**10.44**	**0.055**	**1.40**	**3.000**	**76.20**	**1.633**	**41.48**	**1.461**	**37.12**	**17.10**	**76.08**	**12.51**	**2.19**
C0411-055-3250-M	**0.411**	**10.44**	**0.055**	**1.40**	**3.250**	**82.55**	**1.765**	**44.82**	**1.578**	**40.07**	**17.10**	**76.08**	**11.52**	**2.02**
C0411-055-3500-M	**0.411**	**10.44**	**0.055**	**1.40**	**3.500**	**88.90**	**1.896**	**48.17**	**1.694**	**43.03**	**17.10**	**76.08**	**10.67**	**1.87**
C0411-055-3750-M	**0.411**	**10.44**	**0.055**	**1.40**	**3.750**	**95.25**	**2.028**	**51.52**	**1.811**	**45.99**	**17.10**	**76.08**	**9.93**	**1.74**
C0411-055-4000-M	**0.411**	**10.44**	**0.055**	**1.40**	**4.000**	**101.60**	**2.160**	**54.86**	**1.927**	**48.94**	**17.10**	**76.08**	**9.30**	**1.63**
C0411-055-4250-M	**0.411**	**10.44**	**0.055**	**1.40**	**4.250**	**107.95**	**2.292**	**58.21**	**2.043**	**51.90**	**17.10**	**76.08**	**8.73**	**1.53**
C0411-055-4500-M	**0.411**	**10.44**	**0.055**	**1.40**	**4.500**	**114.30**	**2.423**	**61.55**	**2.160**	**54.86**	**17.10**	**76.08**	**8.24**	**1.44**
C0411-055-4750-M	**0.411**	**10.44**	**0.055**	**1.40**	**4.750**	**120.65**	**2.555**	**64.90**	**2.276**	**57.82**	**17.10**	**76.08**	**7.79**	**1.36**
C0411-055-5000-M	**0.411**	**10.44**	**0.055**	**1.40**	**5.000**	**127.00**	**2.687**	**68.25**	**2.393**	**60.77**	**17.10**	**76.08**	**7.39**	**1.29**
C0411-055-5250-M	**0.411**	**10.44**	**0.055**	**1.40**	**5.250**	**133.35**	**2.819**	**71.59**	**2.509**	**63.73**	**17.10**	**76.08**	**7.03**	**1.23**
C0411-055-5500-M	**0.411**	**10.44**	**0.055**	**1.40**	**5.500**	**139.70**	**2.950**	**74.94**	**2.625**	**66.69**	**17.10**	**76.08**	**6.71**	**1.17**
C0411-055-5750-M	**0.411**	**10.44**	**0.055**	**1.40**	**5.750**	**146.05**	**3.082**	**78.29**	**2.742**	**69.64**	**17.10**	**76.08**	**6.41**	**1.12**
C0411-055-6000-M	**0.411**	**10.44**	**0.055**	**1.40**	**6.000**	**152.40**	**3.214**	**81.63**	**2.858**	**72.60**	**17.10**	**76.08**	**6.14**	**1.07**
C0411-055-6250-M	**0.411**	**10.44**	**0.055**	**1.40**	**6.250**	**158.75**	**3.346**	**84.98**	**2.975**	**75.56**	**17.10**	**76.08**	**5.89**	**1.03**
C0411-055-6500-M	**0.411**	**10.44**	**0.055**	**1.40**	**6.500**	**165.10**	**3.477**	**88.32**	**3.091**	**78.51**	**17.10**	**76.08**	**5.66**	**0.99**
C0411-055-6750-M	**0.411**	**10.44**	**0.055**	**1.40**	**6.750**	**171.45**	**3.609**	**91.67**	**3.208**	**81.47**	**17.10**	**76.08**	**5.45**	**0.95**
C0411-055-7000-M	**0.411**	**10.44**	**0.055**	**1.40**	**7.000**	**177.80**	**3.741**	**95.02**	**3.324**	**84.43**	**17.10**	**76.08**	**5.25**	**0.92**
C0411-059-0625-M	**0.411**	**10.44**	**0.059**	**1.50**	**0.625**	**15.88**	**0.406**	**10.31**	**0.385**	**9.79**	**20.73**	**92.21**	**94.58**	**16.55**
C0411-059-0688-M	**0.411**	**10.44**	**0.059**	**1.50**	**0.688**	**17.46**	**0.441**	**11.21**	**0.418**	**10.61**	**20.73**	**92.21**	**84.20**	**14.73**
C0411-059-0750-M	**0.411**	**10.44**	**0.059**	**1.50**	**0.750**	**19.05**	**0.477**	**12.11**	**0.450**	**11.43**	**20.73**	**92.21**	**75.87**	**13.28**
C0411-059-0813-M	**0.411**	**10.44**	**0.059**	**1.50**	**0.813**	**20.64**	**0.512**	**13.01**	**0.482**	**12.25**	**20.73**	**92.21**	**69.05**	**12.08**
C0411-059-0875-M	**0.411**	**10.44**	**0.059**	**1.50**	**0.875**	**22.23**	**0.548**	**13.91**	**0.514**	**13.07**	**20.73**	**92.21**	**63.34**	**11.09**
C0411-059-0938-M	**0.411**	**10.44**	**0.059**	**1.50**	**0.938**	**23.81**	**0.583**	**14.81**	**0.547**	**13.89**	**20.73**	**92.21**	**58.51**	**10.24**
C0411-059-1000-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.000**	**25.40**	**0.619**	**15.72**	**0.579**	**14.71**	**20.73**	**92.21**	**54.37**	**9.51**
C0411-059-1125-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.125**	**28.58**	**0.690**	**17.52**	**0.643**	**16.34**	**20.73**	**92.21**	**47.62**	**8.33**
C0411-059-1250-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.250**	**31.75**	**0.761**	**19.32**	**0.708**	**17.98**	**20.73**	**92.21**	**42.36**	**7.41**
C0411-059-1375-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.375**	**34.93**	**0.832**	**21.12**	**0.772**	**19.62**	**20.73**	**92.21**	**38.15**	**6.68**
C0411-059-1500-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.500**	**38.10**	**0.903**	**22.92**	**0.837**	**21.26**	**20.73**	**92.21**	**34.70**	**6.07**
C0411-059-1625-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.625**	**41.28**	**0.974**	**24.73**	**0.901**	**22.90**	**20.73**	**92.21**	**31.82**	**5.57**
C0411-059-1750-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.750**	**44.45**	**1.044**	**26.53**	**0.966**	**24.54**	**20.73**	**92.21**	**29.38**	**5.14**
C0411-059-1875-M	**0.411**	**10.44**	**0.059**	**1.50**	**1.875**	**47.63**	**1.115**	**28.33**	**1.030**	**26.17**	**20.73**	**92.21**	**27.29**	**4.78**
C0411-059-2000-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.000**	**50.80**	**1.186**	**30.13**	**1.095**	**27.81**	**20.73**	**92.21**	**25.48**	**4.46**
C0411-059-2125-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.125**	**53.98**	**1.257**	**31.94**	**1.159**	**29.45**	**20.73**	**92.21**	**23.89**	**4.18**
C0411-059-2250-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.250**	**57.15**	**1.328**	**33.74**	**1.224**	**31.09**	**20.73**	**92.21**	**22.49**	**3.94**
C0411-059-2375-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.375**	**60.33**	**1.399**	**35.54**	**1.288**	**32.73**	**20.73**	**92.21**	**21.25**	**3.72**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0411-051-5500-S	**2.956**	**75.08**	**11.06**	**49.18**	**4.35**	**0.76**
C0411-051-5750-S	**3.088**	**78.44**	**11.06**	**49.18**	**4.15**	**0.73**
C0411-051-6000-S	**3.220**	**81.79**	**11.06**	**49.18**	**3.98**	**0.70**
C0411-051-6250-S	**3.352**	**85.15**	**11.06**	**49.18**	**3.82**	**0.67**
C0411-051-6500-S	**3.485**	**88.51**	**11.06**	**49.18**	**3.67**	**0.64**
C0411-051-6750-S	**3.617**	**91.87**	**11.06**	**49.18**	**3.53**	**0.62**
C0411-051-7000-S	**3.749**	**95.22**	**11.06**	**49.18**	**3.40**	**0.60**
C0411-055-0625-S	**0.402**	**10.22**	**13.60**	**60.50**	**61.05**	**10.68**
C0411-055-0688-S	**0.438**	**11.12**	**13.60**	**60.50**	**54.44**	**9.53**
C0411-055-0750-S	**0.473**	**12.02**	**13.60**	**60.50**	**49.13**	**8.60**
C0411-055-0813-S	**0.509**	**12.92**	**13.60**	**60.50**	**44.76**	**7.83**
C0411-055-0875-S	**0.544**	**13.82**	**13.60**	**60.50**	**41.10**	**7.19**
C0411-055-0938-S	**0.580**	**14.72**	**13.60**	**60.50**	**37.99**	**6.65**
C0411-055-1000-S	**0.615**	**15.62**	**13.60**	**60.50**	**35.33**	**6.18**
C0411-055-1125-S	**0.686**	**17.42**	**13.60**	**60.50**	**30.98**	**5.42**
C0411-055-1250-S	**0.757**	**19.22**	**13.60**	**60.50**	**27.58**	**4.83**
C0411-055-1375-S	**0.828**	**21.03**	**13.60**	**60.50**	**24.85**	**4.35**
C0411-055-1500-S	**0.899**	**22.83**	**13.60**	**60.50**	**22.62**	**3.96**
C0411-055-1625-S	**0.970**	**24.63**	**13.60**	**60.50**	**20.75**	**3.63**
C0411-055-1750-S	**1.041**	**26.43**	**13.60**	**60.50**	**19.17**	**3.35**
C0411-055-1875-S	**1.112**	**28.23**	**13.60**	**60.50**	**17.81**	**3.12**
C0411-055-2000-S	**1.182**	**30.03**	**13.60**	**60.50**	**16.64**	**2.91**
C0411-055-2125-S	**1.253**	**31.84**	**13.60**	**60.50**	**15.60**	**2.73**
C0411-055-2250-S	**1.324**	**33.64**	**13.60**	**60.50**	**14.69**	**2.57**
C0411-055-2375-S	**1.395**	**35.44**	**13.60**	**60.50**	**13.88**	**2.43**
C0411-055-2500-S	**1.466**	**37.24**	**13.60**	**60.50**	**13.16**	**2.30**
C0411-055-2625-S	**1.537**	**39.04**	**13.60**	**60.50**	**12.50**	**2.19**
C0411-055-2750-S	**1.608**	**40.84**	**13.60**	**60.50**	**11.91**	**2.08**
C0411-055-2875-S	**1.679**	**42.65**	**13.60**	**60.50**	**11.37**	**1.99**
C0411-055-3000-S	**1.750**	**44.45**	**13.60**	**60.50**	**10.88**	**1.90**
C0411-055-3250-S	**1.892**	**48.05**	**13.60**	**60.50**	**10.01**	**1.75**
C0411-055-3500-S	**2.034**	**51.65**	**13.60**	**60.50**	**9.27**	**1.62**
C0411-055-3750-S	**2.175**	**55.26**	**13.60**	**60.50**	**8.64**	**1.51**
C0411-055-4000-S	**2.317**	**58.86**	**13.60**	**60.50**	**8.08**	**1.41**
C0411-055-4250-S	**2.459**	**62.46**	**13.60**	**60.50**	**7.59**	**1.33**
C0411-055-4500-S	**2.601**	**66.07**	**13.60**	**60.50**	**7.16**	**1.25**
C0411-055-4750-S	**2.743**	**69.67**	**13.60**	**60.50**	**6.78**	**1.19**
C0411-055-5000-S	**2.885**	**73.27**	**13.60**	**60.50**	**6.43**	**1.13**
C0411-055-5250-S	**3.027**	**76.88**	**13.60**	**60.50**	**6.12**	**1.07**
C0411-055-5500-S	**3.168**	**80.48**	**13.60**	**60.50**	**5.83**	**1.02**
C0411-055-5750-S	**3.310**	**84.08**	**13.60**	**60.50**	**5.58**	**0.98**
C0411-055-6000-S	**3.452**	**87.69**	**13.60**	**60.50**	**5.34**	**0.93**
C0411-055-6250-S	**3.594**	**91.29**	**13.60**	**60.50**	**5.12**	**0.90**
C0411-055-6500-S	**3.736**	**94.89**	**13.60**	**60.50**	**4.92**	**0.86**
C0411-055-6750-S	**3.878**	**98.50**	**13.60**	**60.50**	**4.74**	**0.83**
C0411-055-7000-S	**4.020**	**102.10**	**13.60**	**60.50**	**4.56**	**0.80**
C0411-059-0625-S	**0.425**	**10.79**	**16.47**	**73.25**	**82.24**	**14.39**
C0411-059-0688-S	**0.463**	**11.75**	**16.47**	**73.25**	**73.22**	**12.81**
C0411-059-0750-S	**0.500**	**12.71**	**16.47**	**73.25**	**65.98**	**11.55**
C0411-059-0813-S	**0.538**	**13.67**	**16.47**	**73.25**	**60.04**	**10.51**
C0411-059-0875-S	**0.576**	**14.63**	**16.47**	**73.25**	**55.08**	**9.64**
C0411-059-0938-S	**0.614**	**15.59**	**16.47**	**73.25**	**50.88**	**8.90**
C0411-059-1000-S	**0.652**	**16.55**	**16.47**	**73.25**	**47.28**	**8.27**
C0411-059-1125-S	**0.727**	**18.47**	**16.47**	**73.25**	**41.41**	**7.25**
C0411-059-1250-S	**0.803**	**20.39**	**16.47**	**73.25**	**36.84**	**6.45**
C0411-059-1375-S	**0.879**	**22.32**	**16.47**	**73.25**	**33.17**	**5.81**
C0411-059-1500-S	**0.954**	**24.24**	**16.47**	**73.25**	**30.17**	**5.28**
C0411-059-1625-S	**1.030**	**26.16**	**16.47**	**73.25**	**27.67**	**4.84**
C0411-059-1750-S	**1.105**	**28.08**	**16.47**	**73.25**	**25.55**	**4.47**
C0411-059-1875-S	**1.181**	**30.00**	**16.47**	**73.25**	**23.73**	**4.15**
C0411-059-2000-S	**1.257**	**31.92**	**16.47**	**73.25**	**22.16**	**3.88**
C0411-059-2125-S	**1.332**	**33.84**	**16.47**	**73.25**	**20.78**	**3.64**
C0411-059-2250-S	**1.408**	**35.76**	**16.47**	**73.25**	**19.56**	**3.42**
C0411-059-2375-S	**1.484**	**37.68**	**16.47**	**73.25**	**18.48**	**3.23**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0411-059-2500-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.500**	**63.50**	**1.470**	**37.34**	**1.353**	**34.36**	**20.73**	**92.21**	**20.13**	**3.52**	**C0411-059-2500-S**	**1.559**	**39.61**	**16.47**	**73.25**	**17.51**	**3.06**
C0411-059-2625-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.625**	**66.68**	**1.541**	**39.15**	**1.417**	**36.00**	**20.73**	**92.21**	**19.13**	**3.35**	**C0411-059-2625-S**	**1.635**	**41.53**	**16.47**	**73.25**	**16.63**	**2.91**
C0411-059-2750-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.750**	**69.85**	**1.612**	**40.95**	**1.482**	**37.64**	**20.73**	**92.21**	**18.22**	**3.19**	**C0411-059-2750-S**	**1.711**	**43.45**	**16.47**	**73.25**	**15.84**	**2.77**
C0411-059-2875-M	**0.411**	**10.44**	**0.059**	**1.50**	**2.875**	**73.03**	**1.683**	**42.75**	**1.546**	**39.28**	**20.73**	**92.21**	**17.39**	**3.04**	**C0411-059-2875-S**	**1.786**	**45.37**	**16.47**	**73.25**	**15.12**	**2.65**
C0411-059-3000-M	**0.411**	**10.44**	**0.059**	**1.50**	**3.000**	**76.20**	**1.754**	**44.55**	**1.611**	**40.92**	**20.73**	**92.21**	**16.64**	**2.91**	**C0411-059-3000-S**	**1.862**	**47.29**	**16.47**	**73.25**	**14.47**	**2.53**
C0411-059-3250-M	**0.411**	**10.44**	**0.059**	**1.50**	**3.250**	**82.55**	**1.896**	**48.16**	**1.740**	**44.19**	**20.73**	**92.21**	**15.31**	**2.68**	**C0411-059-3250-S**	**2.013**	**51.13**	**16.47**	**73.25**	**13.31**	**2.33**
C0411-059-3500-M	**0.411**	**10.44**	**0.059**	**1.50**	**3.500**	**88.90**	**2.038**	**51.76**	**1.869**	**47.47**	**20.73**	**92.21**	**14.18**	**2.48**	**C0411-059-3500-S**	**2.164**	**54.97**	**16.47**	**73.25**	**12.33**	**2.16**
C0411-059-3750-M	**0.411**	**10.44**	**0.059**	**1.50**	**3.750**	**95.25**	**2.180**	**55.37**	**1.998**	**50.75**	**20.73**	**92.21**	**13.20**	**2.31**	**C0411-059-3750-S**	**2.316**	**58.82**	**16.47**	**73.25**	**11.48**	**2.01**
C0411-059-4000-M	**0.411**	**10.44**	**0.059**	**1.50**	**4.000**	**101.60**	**2.322**	**58.97**	**2.127**	**54.02**	**20.73**	**92.21**	**12.35**	**2.16**	**C0411-059-4000-S**	**2.467**	**62.66**	**16.47**	**73.25**	**10.74**	**1.88**
C0411-059-4250-M	**0.411**	**10.44**	**0.059**	**1.50**	**4.250**	**107.95**	**2.464**	**62.58**	**2.256**	**57.30**	**20.73**	**92.21**	**11.61**	**2.03**	**C0411-059-4250-S**	**2.618**	**66.50**	**16.47**	**73.25**	**10.09**	**1.77**
C0411-059-4500-M	**0.411**	**10.44**	**0.059**	**1.50**	**4.500**	**114.30**	**2.606**	**66.18**	**2.385**	**60.58**	**20.73**	**92.21**	**10.94**	**1.92**	**C0411-059-4500-S**	**2.769**	**70.34**	**16.47**	**73.25**	**9.52**	**1.67**
C0411-059-4750-M	**0.411**	**10.44**	**0.059**	**1.50**	**4.750**	**120.65**	**2.748**	**69.79**	**2.514**	**63.85**	**20.73**	**92.21**	**10.35**	**1.81**	**C0411-059-4750-S**	**2.921**	**74.18**	**16.47**	**73.25**	**9.00**	**1.58**
C0411-059-5000-M	**0.411**	**10.44**	**0.059**	**1.50**	**5.000**	**127.00**	**2.889**	**73.39**	**2.643**	**67.13**	**20.73**	**92.21**	**9.82**	**1.72**	**C0411-059-5000-S**	**3.072**	**78.03**	**16.47**	**73.25**	**8.54**	**1.49**
C0411-059-5250-M	**0.411**	**10.44**	**0.059**	**1.50**	**5.250**	**133.35**	**3.031**	**77.00**	**2.772**	**70.41**	**20.73**	**92.21**	**9.34**	**1.64**	**C0411-059-5250-S**	**3.223**	**81.87**	**16.47**	**73.25**	**8.13**	**1.42**
C0411-059-5500-M	**0.411**	**10.44**	**0.059**	**1.50**	**5.500**	**139.70**	**3.173**	**80.60**	**2.901**	**73.68**	**20.73**	**92.21**	**8.91**	**1.56**	**C0411-059-5500-S**	**3.374**	**85.71**	**16.47**	**73.25**	**7.75**	**1.36**
C0411-059-5750-M	**0.411**	**10.44**	**0.059**	**1.50**	**5.750**	**146.05**	**3.315**	**84.21**	**3.030**	**76.96**	**20.73**	**92.21**	**8.51**	**1.49**	**C0411-059-5750-S**	**3.526**	**89.55**	**16.47**	**73.25**	**7.40**	**1.30**
C0411-059-6000-M	**0.411**	**10.44**	**0.059**	**1.50**	**6.000**	**152.40**	**3.457**	**87.81**	**3.159**	**80.23**	**20.73**	**92.21**	**8.15**	**1.43**	**C0411-059-6000-S**	**3.677**	**93.40**	**16.47**	**73.25**	**7.09**	**1.24**
C0411-059-6250-M	**0.411**	**10.44**	**0.059**	**1.50**	**6.250**	**158.75**	**3.599**	**91.42**	**3.288**	**83.51**	**20.73**	**92.21**	**7.82**	**1.37**	**C0411-059-6250-S**	**3.828**	**97.24**	**16.47**	**73.25**	**6.80**	**1.19**
C0411-059-6500-M	**0.411**	**10.44**	**0.059**	**1.50**	**6.500**	**165.10**	**3.741**	**95.02**	**3.417**	**86.79**	**20.73**	**92.21**	**7.51**	**1.31**	**C0411-059-6500-S**	**3.980**	**101.08**	**16.47**	**73.25**	**6.53**	**1.14**
C0411-059-6750-M	**0.411**	**10.44**	**0.059**	**1.50**	**6.750**	**171.45**	**3.883**	**98.63**	**3.546**	**90.06**	**20.73**	**92.21**	**7.23**	**1.27**	**C0411-059-6750-S**	**4.131**	**104.92**	**16.47**	**73.25**	**6.29**	**1.10**
C0411-059-7000-M	**0.411**	**10.44**	**0.059**	**1.50**	**7.000**	**177.80**	**4.025**	**102.23**	**3.675**	**93.34**	**20.73**	**92.21**	**6.97**	**1.22**	**C0411-059-7000-S**	**4.282**	**108.76**	**16.47**	**73.25**	**6.06**	**1.06**
C0411-063-0625-M	**0.411**	**10.44**	**0.063**	**1.60**	**0.625**	**15.88**	**0.429**	**10.89**	**0.414**	**10.51**	**24.79**	**110.27**	**126.29**	**22.10**	**C0411-063-0625-S**	**0.446**	**11.33**	**19.67**	**87.49**	**109.81**	**19.22**
C0411-063-0688-M	**0.411**	**10.44**	**0.063**	**1.60**	**0.688**	**17.46**	**0.467**	**11.85**	**0.449**	**11.40**	**24.79**	**110.27**	**112.23**	**19.64**	**C0411-063-0688-S**	**0.486**	**12.34**	**19.67**	**87.49**	**97.59**	**17.08**
C0411-063-0750-M	**0.411**	**10.44**	**0.063**	**1.60**	**0.750**	**19.05**	**0.505**	**12.81**	**0.484**	**12.30**	**24.79**	**110.27**	**100.99**	**17.67**	**C0411-063-0750-S**	**0.526**	**13.36**	**19.67**	**87.49**	**87.82**	**15.37**
C0411-063-0813-M	**0.411**	**10.44**	**0.063**	**1.60**	**0.813**	**20.64**	**0.542**	**13.78**	**0.520**	**13.20**	**24.79**	**110.27**	**91.79**	**16.06**	**C0411-063-0813-S**	**0.566**	**14.38**	**19.67**	**87.49**	**79.82**	**13.97**
C0411-063-0875-M	**0.411**	**10.44**	**0.063**	**1.60**	**0.875**	**22.23**	**0.580**	**14.74**	**0.555**	**14.09**	**24.79**	**110.27**	**84.13**	**14.72**	**C0411-063-0875-S**	**0.606**	**15.40**	**19.67**	**87.49**	**73.16**	**12.80**
C0411-063-0938-M	**0.411**	**10.44**	**0.063**	**1.60**	**0.938**	**23.81**	**0.618**	**15.70**	**0.590**	**14.99**	**24.79**	**110.27**	**77.65**	**13.59**	**C0411-063-0938-S**	**0.646**	**16.41**	**19.67**	**87.49**	**67.53**	**11.82**
C0411-063-1000-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.000**	**25.40**	**0.656**	**16.67**	**0.625**	**15.88**	**24.79**	**110.27**	**72.10**	**12.62**	**C0411-063-1000-S**	**0.686**	**17.43**	**19.67**	**87.49**	**62.70**	**10.97**
C0411-063-1125-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.125**	**28.58**	**0.732**	**18.59**	**0.696**	**17.67**	**24.79**	**110.27**	**63.08**	**11.04**	**C0411-063-1125-S**	**0.766**	**19.47**	**19.67**	**87.49**	**54.85**	**9.60**
C0411-063-1250-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.250**	**31.75**	**0.808**	**20.52**	**0.766**	**19.46**	**24.79**	**110.27**	**56.07**	**9.81**	**C0411-063-1250-S**	**0.847**	**21.50**	**19.67**	**87.49**	**48.75**	**8.53**
C0411-063-1375-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.375**	**34.93**	**0.884**	**22.44**	**0.837**	**21.25**	**24.79**	**110.27**	**50.45**	**8.83**	**C0411-063-1375-S**	**0.927**	**23.54**	**19.67**	**87.49**	**43.87**	**7.68**
C0411-063-1500-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.500**	**38.10**	**0.959**	**24.37**	**0.907**	**23.05**	**24.79**	**110.27**	**45.86**	**8.03**	**C0411-063-1500-S**	**1.007**	**25.57**	**19.67**	**87.49**	**39.88**	**6.98**
C0411-063-1625-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.625**	**41.28**	**1.035**	**26.30**	**0.978**	**24.84**	**24.79**	**110.27**	**42.04**	**7.36**	**C0411-063-1625-S**	**1.087**	**27.61**	**19.67**	**87.49**	**36.56**	**6.40**
C0411-063-1750-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.750**	**44.45**	**1.111**	**28.22**	**1.048**	**26.63**	**24.79**	**110.27**	**38.80**	**6.79**	**C0411-063-1750-S**	**1.167**	**29.64**	**19.67**	**87.49**	**33.74**	**5.90**
C0411-063-1875-M	**0.411**	**10.44**	**0.063**	**1.60**	**1.875**	**47.63**	**1.187**	**30.15**	**1.119**	**28.42**	**24.79**	**110.27**	**36.03**	**6.31**	**C0411-063-1875-S**	**1.247**	**31.68**	**19.67**	**87.49**	**31.33**	**5.48**
C0411-063-2000-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.000**	**50.80**	**1.263**	**32.07**	**1.189**	**30.21**	**24.79**	**110.27**	**33.63**	**5.88**	**C0411-063-2000-S**	**1.327**	**33.72**	**19.67**	**87.49**	**29.24**	**5.12**
C0411-063-2125-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.125**	**53.98**	**1.339**	**34.00**	**1.260**	**32.00**	**24.79**	**110.27**	**31.52**	**5.52**	**C0411-063-2125-S**	**1.408**	**35.75**	**19.67**	**87.49**	**27.41**	**4.80**
C0411-063-2250-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.250**	**57.15**	**1.414**	**35.93**	**1.330**	**33.79**	**24.79**	**110.27**	**29.67**	**5.19**	**C0411-063-2250-S**	**1.488**	**37.79**	**19.67**	**87.49**	**25.80**	**4.51**
C0411-063-2375-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.375**	**60.33**	**1.490**	**37.85**	**1.401**	**35.58**	**24.79**	**110.27**	**28.02**	**4.90**	**C0411-063-2375-S**	**1.568**	**39.82**	**19.67**	**87.49**	**24.37**	**4.26**
C0411-063-2500-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.500**	**63.50**	**1.566**	**39.78**	**1.471**	**37.37**	**24.79**	**110.27**	**26.54**	**4.65**	**C0411-063-2500-S**	**1.648**	**41.86**	**19.67**	**87.49**	**23.08**	**4.04**
C0411-063-2625-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.625**	**66.68**	**1.642**	**41.70**	**1.542**	**39.16**	**24.79**	**110.27**	**25.22**	**4.41**	**C0411-063-2625-S**	**1.728**	**43.89**	**19.67**	**87.49**	**21.93**	**3.84**
C0411-063-2750-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.750**	**69.85**	**1.718**	**43.63**	**1.612**	**40.95**	**24.79**	**110.27**	**24.02**	**4.20**	**C0411-063-2750-S**	**1.808**	**45.93**	**19.67**	**87.49**	**20.88**	**3.65**
C0411-063-2875-M	**0.411**	**10.44**	**0.063**	**1.60**	**2.875**	**73.03**	**1.794**	**45.56**	**1.683**	**42.74**	**24.79**	**110.27**	**22.92**	**4.01**	**C0411-063-2875-S**	**1.888**	**47.96**	**19.67**	**87.49**	**19.93**	**3.49**
C0411-063-3000-M	**0.411**	**10.44**	**0.063**	**1.60**	**3.000**	**76.20**	**1.869**	**47.48**	**1.753**	**44.53**	**24.79**	**110.27**	**21.93**	**3.84**	**C0411-063-3000-S**	**1.968**	**50.00**	**19.67**	**87.49**	**19.07**	**3.34**
C0411-063-3250-M	**0.411**	**10.44**	**0.063**	**1.60**	**3.250**	**82.55**	**2.021**	**51.33**	**1.894**	**48.12**	**24.79**	**110.27**	**20.17**	**3.53**	**C0411-063-3250-S**	**2.129**	**54.07**	**19.67**	**87.49**	**17.54**	**3.07**
C0411-063-3500-M	**0.411**	**10.44**	**0.063**	**1.60**	**3.500**	**88.90**	**2.173**	**55.19**	**2.035**	**51.70**	**24.79**	**110.27**	**18.68**	**3.27**	**C0411-063-3500-S**	**2.289**	**58.14**	**19.67**	**87.49**	**16.24**	**2.84**
C0411-063-3750-M	**0.411**	**10.44**	**0.063**	**1.60**	**3.750**	**95.25**	**2.324**	**59.04**	**2.176**	**55.28**	**24.79**	**110.27**	**17.39**	**3.04**	**C0411-063-3750-S**	**2.449**	**62.21**	**19.67**	**87.49**	**15.12**	**2.65**
C0411-063-4000-M	**0.411**	**10.44**	**0.063**	**1.60**	**4.000**	**101.60**	**2.476**	**62.89**	**2.317**	**58.86**	**24.79**	**110.27**	**16.27**	**2.85**	**C0411-063-4000-S**	**2.610**	**66.28**	**19.67**	**87.49**	**14.15**	**2.48**
C0411-063-4250-M	**0.411**	**10.44**	**0.063**	**1.60**	**4.250**	**107.95**	**2.628**	**66.74**	**2.458**	**62.44**	**24.79**	**110.27**	**15.28**	**2.67**	**C0411-063-4250-S**	**2.770**	**70.35**	**19.67**	**87.49**	**13.29**	**2.33**
C0411-063-4500-M	**0.411**	**10.44**	**0.063**	**1.60**	**4.500**	**114.30**	**2.779**	**70.59**	**2.599**	**66.02**	**24.79**	**110.27**	**14.41**	**2.52**	**C0411-063-4500-S**	**2.930**	**74.42**	**19.67**	**87.49**	**12.53**	**2.19**
C0411-063-4750-M	**0.411**	**10.44**	**0.063**	**1.60**	**4.750**	**120.65**	**2.931**	**74.45**	**2.740**	**69.61**	**24.79**	**110.27**	**13.63**	**2.38**	**C0411-063-4750-S**	**3.090**	**78.49**	**19.67**	**87.49**	**11.85**	**2.07**
C0411-063-5000-M	**0.411**	**10.44**	**0.063**	**1.60**	**5.000**	**127.00**	**3.083**	**78.30**	**2.881**	**73.19**	**24.79**	**110.27**	**12.93**	**2.26**	**C0411-063-5000-S**	**3.251**	**82.57**	**19.67**	**87.49**	**11.24**	**1.97**
C0411-063-5250-M	**0.411**	**10.44**	**0.063**	**1.60**	**5.250**	**133.35**	**3.234**	**82.15**	**3.022**	**76.77**	**24.79**	**110.27**	**12.30**	**2.15**	**C0411-063-5250-S**	**3.411**	**86.64**	**19.67**	**87.49**	**10.69**	**1.87**
C0411-063-5500-M	**0.411**	**10.44**	**0.063**	**1.60**	**5.500**	**139.70**	**3.386**	**86.00**	**3.163**	**80.35**	**24.79**	**110.27**	**11.73**	**2.05**	**C0411-063-5500-S**	**3.571**	**90.71**	**19.67**	**87.49**	**10.20**	**1.78**
C0411-063-5750-M	**0.411**	**10.44**	**0.063**	**1.60**	**5.750**	**146.05**	**3.538**	**89.85**	**3.304**	**83.93**	**24.79**	**110.27**	**11.21**	**1.96**	**C0411-063-5750-S**	**3.731**	**94.78**	**19.67**	**87.49**	**9.74**	**1.71**
C0411-063-6000-M	**0.411**	**10.44**	**0.063**	**1.60**	**6.000**	**152.40**	**3.689**	**93.71**	**3.445**	**87.51**	**24.79**	**110.27**	**10.73**	**1.88**	**C0411-063-6000-S**	**3.892**	**98.85**	**19.67**	**87.49**	**9.33**	**1.63**
C0411-063-6250-M	**0.411**	**10.44**	**0.063**	**1.60**	**6.250**	**158.75**	**3.841**	**97.56**	**3.586**	**91.10**	**24.79**	**110.27**	**10.29**	**1.80**	**C0411-063-6250-S**	**4.052**	**102.92**	**19.67**	**87.49**	**8.95**	**1.57**
C0411-063-6500-M	**0.411**	**10.44**	**0.063**	**1.60**	**6.500**	**165.10**	**3.992**	**101.41**	**3.727**	**94.68**	**24.79**	**110.27**	**9.89**	**1.73**	**C0411-063-6500-S**	**4.212**	**106.99**	**19.67**	**87.49**	**8.60**	**1.50**
C0411-063-6750-M	**0.411**	**10.44**	**0.063**	**1.60**	**6.750**	**171.45**	**4.144**	**105.26**	**3.868**	**98.26**	**24.79**	**110.27**	**9.51**	**1.66**	**C0411-063-6750-S**	**4.372**	**111.06**	**19.67**	**87.49**	**8.27**	**1.45**
C0411-068-0625-M	**0.411**	**10.44**	**0.068**	**1.73**	**0.625**	**15.88**	**0.455**	**11.55**	**0.446**	**11.33**	**30.50**	**135.65**	**179.29**	**31.38**	**C0411-068-0625-S**	**0.470**	**11.94**	**24.15**	**107.41**	**155.90**	**27.28**
C0411-068-0688-M	**0.411**	**10.44**	**0.068**	**1.73**	**0.688**	**17.46**	**0.496**	**12.59**	**0.485**	**12.32**	**30.50**	**135.65**	**158.97**	**27.82**	**C0411-068-0688-S**	**0.513**	**13.03**	**24.15**	**107.41**	**138.23**	**24.19**
C0411-068-0750-M	**0.411**	**10.44**	**0.068**	**1.73**	**0.750**	**19.05**	**0.536**	**13.63**	**0.524**	**13.30**	**30.50**	**135.65**	**142.79**	**24.99**	**C0411-068-0750-S**	**0.556**	**14.11**	**24.15**	**107.41**	**124.16**	**21.73**
C0411-068-0813-M	**0.411**	**10.44**	**0.068**	**1.73**	**0.813**	**20.64**	**0.577**	**14.66**	**0.562**	**14.29**	**30.50**	**135.65**	**129.60**	**22.68**	**C0411-068-0813-S**	**0.598**	**15.19**	**24.15**	**107.41**	**112.69**	**19.72**
C0411-068-0875-M	**0.411**	**10.44**	**0.068**	**1.73**	**0.875**	**22.23**	**0.618**	**15.70**	**0.601**	**15.27**	**30.50**	**135.65**	**118.63**	**20.76**	**C0411-068-0875-S**	**0.641**	**16.28**	**24.15**	**107.41**	**103.16**	**18.05**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0411-068-0938-M	0.411	10.44	0.068	1.73	0.938	23.81	0.659	16.73	0.640	16.26	30.50	135.65	109.38	19.14	**C0411-068-0938-S**	0.684	17.36	24.15	107.41	95.12	16.65
C0411-068-1000-M	0.411	10.44	0.068	1.73	1.000	25.40	0.699	17.77	0.679	17.24	30.50	135.65	101.47	17.76	**C0411-068-1000-S**	0.726	18.45	24.15	107.41	88.24	15.44
C0411-068-1125-M	0.411	10.44	0.068	1.73	1.125	28.58	0.781	19.84	0.756	19.21	30.50	135.65	88.65	15.51	**C0411-068-1125-S**	0.812	20.62	24.15	107.41	77.08	13.49
C0411-068-1250-M	0.411	10.44	0.068	1.73	1.250	31.75	0.862	21.91	0.834	21.18	30.50	135.65	78.70	13.77	**C0411-068-1250-S**	0.897	22.79	24.15	107.41	68.43	11.98
C0411-068-1375-M	0.411	10.44	0.068	1.73	1.375	34.93	0.944	23.98	0.911	23.15	30.50	135.65	70.76	12.38	**C0411-068-1375-S**	0.983	24.96	24.15	107.41	61.53	10.77
C0411-068-1500-M	0.411	10.44	0.068	1.73	1.500	38.10	1.026	26.05	0.989	25.12	30.50	135.65	64.28	11.25	**C0411-068-1500-S**	1.068	27.13	24.15	107.41	55.89	9.78
C0411-068-1625-M	0.411	10.44	0.068	1.73	1.625	41.28	1.107	28.12	1.066	27.09	30.50	135.65	58.88	10.30	**C0411-068-1625-S**	1.153	29.30	24.15	107.41	51.20	8.96
C0411-068-1750-M	0.411	10.44	0.068	1.73	1.750	44.45	1.189	30.19	1.144	29.06	30.50	135.65	54.32	9.51	**C0411-068-1750-S**	1.239	31.46	24.15	107.41	47.23	8.27
C0411-068-1875-M	0.411	10.44	0.068	1.73	1.875	47.63	1.270	32.26	1.222	31.03	30.50	135.65	50.41	8.82	**C0411-068-1875-S**	1.324	33.63	24.15	107.41	43.84	7.67
C0411-068-2000-M	0.411	10.44	0.068	1.73	2.000	50.80	1.352	34.33	1.299	33.00	30.50	135.65	47.03	8.23	**C0411-068-2000-S**	1.410	35.80	24.15	107.41	40.90	7.16
C0411-068-2125-M	0.411	10.44	0.068	1.73	2.125	53.98	1.433	36.40	1.377	34.97	30.50	135.65	44.08	7.71	**C0411-068-2125-S**	1.495	37.97	24.15	107.41	38.33	6.71
C0411-068-2250-M	0.411	10.44	0.068	1.73	2.250	57.15	1.515	38.47	1.454	36.93	30.50	135.65	41.47	7.26	**C0411-068-2250-S**	1.580	40.14	24.15	107.41	36.06	6.31
C0411-068-2375-M	0.411	10.44	0.068	1.73	2.375	60.33	1.596	40.54	1.532	38.90	30.50	135.65	39.16	6.85	**C0411-068-2375-S**	1.666	42.31	24.15	107.41	34.05	5.96
C0411-068-2500-M	0.411	10.44	0.068	1.73	2.500	63.50	1.678	42.61	1.609	40.87	30.50	135.65	37.09	6.49	**C0411-068-2500-S**	1.751	44.48	24.15	107.41	32.25	5.64
C0411-068-2625-M	0.411	10.44	0.068	1.73	2.625	66.68	1.759	44.68	1.687	42.84	30.50	135.65	35.22	6.16	**C0411-068-2625-S**	1.837	46.65	24.15	107.41	30.63	5.36
C0411-068-2750-M	0.411	10.44	0.068	1.73	2.750	69.85	1.841	46.75	1.764	44.81	30.50	135.65	33.54	5.87	**C0411-068-2750-S**	1.922	48.82	24.15	107.41	29.16	5.10
C0411-068-2875-M	0.411	10.44	0.068	1.73	2.875	73.03	1.922	48.82	1.842	46.78	30.50	135.65	32.01	5.60	**C0411-068-2875-S**	2.007	50.99	24.15	107.41	27.83	4.87
C0411-068-3000-M	0.411	10.44	0.068	1.73	3.000	76.20	2.004	50.90	1.919	48.75	30.50	135.65	30.61	5.36	**C0411-068-3000-S**	2.093	53.16	24.15	107.41	26.62	4.66
C0411-068-3250-M	0.411	10.44	0.068	1.73	3.250	82.55	2.167	55.04	2.074	52.69	30.50	135.65	28.15	4.93	**C0411-068-3250-S**	2.264	57.50	24.15	107.41	24.48	4.28
C0411-068-3500-M	0.411	10.44	0.068	1.73	3.500	88.90	2.330	59.18	2.230	56.63	30.50	135.65	26.06	4.56	**C0411-068-3500-S**	2.434	61.84	24.15	107.41	22.66	3.97
C0411-068-3750-M	0.411	10.44	0.068	1.73	3.750	95.25	2.493	63.32	2.385	60.57	30.50	135.65	24.26	4.25	**C0411-068-3750-S**	2.605	66.17	24.15	107.41	21.09	3.69
C0411-068-4000-M	0.411	10.44	0.068	1.73	4.000	101.60	2.656	67.46	2.540	64.51	30.50	135.65	22.69	3.97	**C0411-068-4000-S**	2.776	70.51	24.15	107.41	19.73	3.45
C0411-068-4250-M	0.411	10.44	0.068	1.73	4.250	107.95	2.819	71.60	2.695	68.45	30.50	135.65	21.31	3.73	**C0411-068-4250-S**	2.947	74.85	24.15	107.41	18.53	3.24
C0411-068-4500-M	0.411	10.44	0.068	1.73	4.500	114.30	2.982	75.74	2.850	72.39	30.50	135.65	20.09	3.52	**C0411-068-4500-S**	3.118	79.19	24.15	107.41	17.47	3.06
C0411-068-4750-M	0.411	10.44	0.068	1.73	4.750	120.65	3.145	79.88	3.005	76.32	30.50	135.65	19.00	3.33	**C0411-068-4750-S**	3.289	83.53	24.15	107.41	16.52	2.89
C0411-068-5000-M	0.411	10.44	0.068	1.73	5.000	127.00	3.308	84.02	3.160	80.26	30.50	135.65	18.02	3.15	**C0411-068-5000-S**	3.459	87.87	24.15	107.41	15.67	2.74
C0411-068-5250-M	0.411	10.44	0.068	1.73	5.250	133.35	3.471	88.17	3.315	84.20	30.50	135.65	17.14	3.00	**C0411-068-5250-S**	3.630	92.21	24.15	107.41	14.91	2.61
C0411-068-5500-M	0.411	10.44	0.068	1.73	5.500	139.70	3.634	92.31	3.470	88.14	30.50	135.65	16.34	2.86	**C0411-068-5500-S**	3.801	96.55	24.15	107.41	14.21	2.49
C0411-068-5750-M	0.411	10.44	0.068	1.73	5.750	146.05	3.797	96.45	3.625	92.08	30.50	135.65	15.62	2.73	**C0411-068-5750-S**	3.972	100.88	24.15	107.41	13.58	2.38
C0411-068-6000-M	0.411	10.44	0.068	1.73	6.000	152.40	3.960	100.59	3.780	96.02	30.50	135.65	14.95	2.62	**C0411-068-6000-S**	4.143	105.22	24.15	107.41	13.00	2.28
C0411-068-6250-M	0.411	10.44	0.068	1.73	6.250	158.75	4.123	104.73	3.935	99.96	30.50	135.65	14.34	2.51	**C0411-068-6250-S**	4.313	109.56	24.15	107.41	12.47	2.18
C0411-068-6500-M	0.411	10.44	0.068	1.73	6.500	165.10	4.286	108.87	4.090	103.90	30.50	135.65	13.78	2.41	**C0411-068-6500-S**	4.484	113.90	24.15	107.41	11.98	2.10
C0411-068-6750-M	0.411	10.44	0.068	1.73	6.750	171.45	4.449	113.01	4.245	107.84	30.50	135.65	13.26	2.32	**C0411-068-6750-S**	4.655	118.24	24.15	107.41	11.53	2.02
C0411-072-0625-M	0.411	10.44	0.072	1.83	0.625	15.88	0.474	12.04	0.470	11.93	35.58	158.25	235.45	41.20	**C0411-072-0625-S**	0.488	12.39	28.12	125.08	204.74	35.83
C0411-072-0688-M	0.411	10.44	0.072	1.83	0.688	17.46	0.517	13.13	0.511	12.98	35.58	158.25	208.37	36.47	**C0411-072-0688-S**	0.532	13.52	28.12	125.08	181.19	31.71
C0411-072-0750-M	0.411	10.44	0.072	1.83	0.750	19.05	0.560	14.21	0.552	14.03	35.58	158.25	186.88	32.70	**C0411-072-0750-S**	0.577	14.66	28.12	125.08	162.51	28.44
C0411-072-0813-M	0.411	10.44	0.072	1.83	0.813	20.64	0.602	15.30	0.594	15.08	35.58	158.25	169.41	29.65	**C0411-072-0813-S**	0.622	15.79	28.12	125.08	147.31	25.78
C0411-072-0875-M	0.411	10.44	0.072	1.83	0.875	22.23	0.645	16.39	0.635	16.13	35.58	158.25	154.93	27.11	**C0411-072-0875-S**	0.666	16.92	28.12	125.08	134.72	23.58
C0411-072-0938-M	0.411	10.44	0.072	1.83	0.938	23.81	0.688	17.48	0.676	17.18	35.58	158.25	142.72	24.98	**C0411-072-0938-S**	0.711	18.06	28.12	125.08	124.11	21.72
C0411-072-1000-M	0.411	10.44	0.072	1.83	1.000	25.40	0.731	18.57	0.718	18.23	35.58	158.25	132.30	23.15	**C0411-072-1000-S**	0.756	19.19	28.12	125.08	115.05	20.13
C0411-072-1125-M	0.411	10.44	0.072	1.83	1.125	28.58	0.817	20.75	0.801	20.33	35.58	158.25	115.44	20.20	**C0411-072-1125-S**	0.845	21.46	28.12	125.08	100.39	17.57
C0411-072-1250-M	0.411	10.44	0.072	1.83	1.250	31.75	0.903	22.93	0.883	22.44	35.58	158.25	102.40	17.92	**C0411-072-1250-S**	0.934	23.73	28.12	125.08	89.04	15.58
C0411-072-1375-M	0.411	10.44	0.072	1.83	1.375	34.93	0.988	25.10	0.966	24.54	35.58	158.25	92.00	16.10	**C0411-072-1375-S**	1.024	26.00	28.12	125.08	80.00	14.00
C0411-072-1500-M	0.411	10.44	0.072	1.83	1.500	38.10	1.074	27.28	1.049	26.64	35.58	158.25	83.52	14.62	**C0411-072-1500-S**	1.113	28.27	28.12	125.08	72.62	12.71
C0411-072-1625-M	0.411	10.44	0.072	1.83	1.625	41.28	1.160	29.46	1.132	28.74	35.58	158.25	76.47	13.38	**C0411-072-1625-S**	1.202	30.53	28.12	125.08	66.50	11.64
C0411-072-1750-M	0.411	10.44	0.072	1.83	1.750	44.45	1.245	31.64	1.214	30.84	35.58	158.25	70.52	12.34	**C0411-072-1750-S**	1.291	32.80	28.12	125.08	61.32	10.73
C0411-072-1875-M	0.411	10.44	0.072	1.83	1.875	47.63	1.331	33.81	1.297	32.94	35.58	158.25	65.43	11.45	**C0411-072-1875-S**	1.381	35.07	28.12	125.08	56.89	9.96
C0411-072-2000-M	0.411	10.44	0.072	1.83	2.000	50.80	1.417	35.99	1.380	35.05	35.58	158.25	61.02	10.68	**C0411-072-2000-S**	1.470	37.34	28.12	125.08	53.06	9.29
C0411-072-2125-M	0.411	10.44	0.072	1.83	2.125	53.98	1.503	38.17	1.463	37.15	35.58	158.25	57.17	10.00	**C0411-072-2125-S**	1.559	39.61	28.12	125.08	49.71	8.70
C0411-072-2250-M	0.411	10.44	0.072	1.83	2.250	57.15	1.588	40.35	1.545	39.25	35.58	158.25	53.78	9.41	**C0411-072-2250-S**	1.649	41.88	28.12	125.08	46.76	8.18
C0411-072-2375-M	0.411	10.44	0.072	1.83	2.375	60.33	1.674	42.52	1.628	41.35	35.58	158.25	50.76	8.88	**C0411-072-2375-S**	1.738	44.14	28.12	125.08	44.14	7.72
C0411-072-2500-M	0.411	10.44	0.072	1.83	2.500	63.50	1.760	44.70	1.711	43.45	35.58	158.25	48.07	8.41	**C0411-072-2500-S**	1.827	46.41	28.12	125.08	41.80	7.31
C0411-072-2625-M	0.411	10.44	0.072	1.83	2.625	66.68	1.846	46.88	1.793	45.55	35.58	158.25	45.65	7.99	**C0411-072-2625-S**	1.917	48.68	28.12	125.08	39.69	6.95
C0411-072-2750-M	0.411	10.44	0.072	1.83	2.750	69.85	1.931	49.06	1.876	47.66	35.58	158.25	43.46	7.61	**C0411-072-2750-S**	2.006	50.95	28.12	125.08	37.79	6.61
C0411-072-2875-M	0.411	10.44	0.072	1.83	2.875	73.03	2.017	51.23	1.959	49.76	35.58	158.25	41.47	7.26	**C0411-072-2875-S**	2.095	53.22	28.12	125.08	36.06	6.31
C0411-072-3000-M	0.411	10.44	0.072	1.83	3.000	76.20	2.103	53.41	2.042	51.86	35.58	158.25	39.65	6.94	**C0411-072-3000-S**	2.185	55.49	28.12	125.08	34.48	6.03
C0411-072-3250-M	0.411	10.44	0.072	1.83	3.250	82.55	2.274	57.77	2.207	56.06	35.58	158.25	36.46	6.38	**C0411-072-3250-S**	2.363	60.02	28.12	125.08	31.71	5.55
C0411-072-3500-M	0.411	10.44	0.072	1.83	3.500	88.90	2.446	62.12	2.373	60.27	35.58	158.25	33.75	5.91	**C0411-072-3500-S**	2.542	64.56	28.12	125.08	29.34	5.14
C0411-072-3750-M	0.411	10.44	0.072	1.83	3.750	95.25	2.617	66.48	2.538	64.47	35.58	158.25	31.41	5.50	**C0411-072-3750-S**	2.720	69.10	28.12	125.08	27.31	4.78
C0411-072-4000-M	0.411	10.44	0.072	1.83	4.000	101.60	2.789	70.83	2.704	68.67	35.58	158.25	29.37	5.14	**C0411-072-4000-S**	2.899	73.63	28.12	125.08	25.54	4.47
C0411-072-4250-M	0.411	10.44	0.072	1.83	4.250	107.95	2.960	75.19	2.869	72.88	35.58	158.25	27.58	4.83	**C0411-072-4250-S**	3.078	78.17	28.12	125.08	23.98	4.20
C0411-072-4500-M	0.411	10.44	0.072	1.83	4.500	114.30	3.132	79.54	3.035	77.08	35.58	158.25	26.00	4.55	**C0411-072-4500-S**	3.256	82.71	28.12	125.08	22.61	3.96
C0411-072-4750-M	0.411	10.44	0.072	1.83	4.750	120.65	3.303	83.90	3.200	81.28	35.58	158.25	24.59	4.30	**C0411-072-4750-S**	3.435	87.25	28.12	125.08	21.38	3.74
C0411-072-5000-M	0.411	10.44	0.072	1.83	5.000	127.00	3.475	88.25	3.366	85.49	35.58	158.25	23.32	4.08	**C0411-072-5000-S**	3.613	91.78	28.12	125.08	20.28	3.55

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0411-072-5250-M	**0.411**	**10.44**	**0.072**	**1.83**	**5.250**	**133.35**	**3.646**	**92.61**	**3.531**	**89.69**	**35.58**	**158.25**	**22.18**	**3.88**
C0411-072-5500-M	**0.411**	**10.44**	**0.072**	**1.83**	**5.500**	**139.70**	**3.817**	**96.96**	**3.697**	**93.89**	**35.58**	**158.25**	**21.15**	**3.70**
C0411-072-5750-M	**0.411**	**10.44**	**0.072**	**1.83**	**5.750**	**146.05**	**3.989**	**101.32**	**3.862**	**98.10**	**35.58**	**158.25**	**20.20**	**3.54**
C0411-072-6000-M	**0.411**	**10.44**	**0.072**	**1.83**	**6.000**	**152.40**	**4.160**	**105.67**	**4.028**	**102.30**	**35.58**	**158.25**	**19.34**	**3.38**
C0411-072-6250-M	**0.411**	**10.44**	**0.072**	**1.83**	**6.250**	**158.75**	**4.332**	**110.03**	**4.193**	**106.50**	**35.58**	**158.25**	**18.55**	**3.25**
C0411-072-6500-M	**0.411**	**10.44**	**0.072**	**1.83**	**6.500**	**165.10**	**4.503**	**114.38**	**4.359**	**110.71**	**35.58**	**158.25**	**17.82**	**3.12**
C0411-072-6750-M	**0.411**	**10.44**	**0.072**	**1.83**	**6.750**	**171.45**	**4.675**	**118.74**	**4.524**	**114.91**	**35.58**	**158.25**	**17.14**	**3.00**
C0420-035-0500-M	0.420	10.67	0.035	0.89	0.500	12.70	0.250	6.35	0.172	4.37	4.95	22.02	19.70	3.45
C0420-035-0620-M	0.420	10.67	0.035	0.89	0.620	15.75	0.300	7.62	0.191	4.85	4.95	22.02	15.40	2.70
C0420-035-0750-M	0.420	10.67	0.035	0.89	0.750	19.05	0.354	8.99	0.211	5.36	4.95	22.02	12.50	2.19
C0420-035-0880-M	0.420	10.67	0.035	0.89	0.880	22.35	0.408	10.36	0.231	5.87	4.95	22.02	10.50	1.84
C0420-035-1000-M	0.420	10.67	0.035	0.89	1.000	25.40	0.458	11.63	0.250	6.35	4.95	22.02	9.10	1.59
C0420-035-1250-M	0.420	10.67	0.035	0.89	1.250	31.75	0.563	14.30	0.289	7.34	4.95	22.02	7.20	1.26
C0420-035-1500-M	0.420	10.67	0.035	0.89	1.500	38.10	0.667	16.94	0.328	8.33	4.95	22.02	5.90	1.03
C0420-035-1750-M	0.420	10.67	0.035	0.89	1.750	44.45	0.771	19.58	0.367	9.32	4.95	22.02	5.10	0.89
C0420-038-0500-M	0.420	10.67	0.038	0.97	0.500	12.70	0.200	5.08	0.172	4.37	6.60	29.36	22.00	3.85
C0420-038-0560-M	0.420	10.67	0.038	0.97	0.560	14.22	0.230	5.84	0.186	4.72	6.60	29.36	20.00	3.50
C0420-038-0625-M	0.420	10.67	0.038	0.97	0.620	15.75	0.253	6.43	0.194	4.93	6.60	29.36	18.00	3.15
C0420-038-0750-M	0.420	10.67	0.038	0.97	0.750	19.05	0.295	7.49	0.223	5.66	6.60	29.36	14.50	2.54
C0420-038-0880-M	0.420	10.67	0.038	0.97	0.880	22.35	0.352	8.94	0.246	6.25	6.60	29.36	12.50	2.19
C0420-038-1000-M	0.420	10.67	0.038	0.97	1.000	25.40	0.400	10.16	0.269	6.83	6.60	29.36	11.00	1.93
C0420-038-1250-M	0.420	10.67	0.038	0.97	1.250	31.75	0.475	12.07	0.326	8.28	6.60	29.36	8.50	1.49
C0420-038-1500-M	0.420	10.67	0.038	0.97	1.500	38.10	0.580	14.73	0.372	9.45	6.60	29.36	7.20	1.26
C0420-038-1750-M	0.420	10.67	0.038	0.97	1.750	44.45	0.750	19.05	0.423	10.74	6.60	29.36	6.60	1.16
C0420-038-2000-M	0.420	10.67	0.038	0.97	2.000	50.80	0.917	23.29	0.456	11.58	6.60	29.36	6.10	1.07
C0420-038-2250-M	0.420	10.67	0.038	0.97	2.250	57.15	1.027	26.09	0.494	12.55	6.60	29.36	5.40	0.95
C0420-038-2500-M	0.420	10.67	0.038	0.97	2.500	63.50	1.136	28.85	0.532	13.51	6.60	29.36	4.80	0.84
C0420-042-0500-M	0.420	10.67	0.042	1.07	0.500	12.70	0.238	6.05	0.190	4.83	8.90	39.59	34.00	5.95
C0420-042-0560-M	0.420	10.67	0.042	1.07	0.560	14.22	0.272	6.91	0.201	5.11	8.90	39.59	31.00	5.43
C0420-042-0625-M	0.420	10.67	0.042	1.07	0.620	15.75	0.302	7.67	0.213	5.41	8.90	39.59	28.00	4.90
C0420-042-0750-M	0.420	10.67	0.042	1.07	0.750	19.05	0.345	8.76	0.248	6.30	8.90	39.59	22.00	3.85
C0420-042-0880-M	0.420	10.67	0.042	1.07	0.880	22.35	0.395	10.03	0.280	7.11	8.90	39.59	18.50	3.24
C0420-042-1000-M	0.420	10.67	0.042	1.07	1.000	25.40	0.445	11.30	0.310	7.87	8.90	39.59	16.00	2.80
C0420-042-1250-M	0.420	10.67	0.042	1.07	1.250	31.75	0.565	14.35	0.363	9.22	8.90	39.59	13.00	2.28
C0420-042-1500-M	0.420	10.67	0.042	1.07	1.500	38.10	0.650	16.51	0.429	10.90	8.90	39.59	10.50	1.84
C0420-042-1750-M	0.420	10.67	0.042	1.07	1.750	44.45	0.793	20.14	0.501	12.73	8.90	39.59	9.30	1.63
C0420-042-2000-M	0.420	10.67	0.042	1.07	2.000	50.80	0.901	22.89	0.558	14.17	8.90	39.59	8.10	1.42
C0420-042-2250-M	0.420	10.67	0.042	1.07	2.250	57.15	1.092	27.74	0.592	15.04	8.90	39.59	7.70	1.35
C0420-042-2500-M	0.420	10.67	0.042	1.07	2.500	63.50	1.209	30.71	0.630	16.00	8.90	39.59	6.90	1.21
C0420-045-0500-M	0.420	10.67	0.045	1.14	0.500	12.70	0.250	6.35	0.214	5.44	10.50	46.71	42.00	7.35
C0420-045-0625-M	0.420	10.67	0.045	1.14	0.620	15.75	0.311	7.90	0.244	6.20	10.50	46.71	34.00	5.95
C0420-045-0750-M	0.420	10.67	0.045	1.14	0.750	19.05	0.360	9.14	0.284	7.21	10.50	46.71	27.00	4.73
C0420-045-0880-M	0.420	10.67	0.045	1.14	0.880	22.35	0.420	10.67	0.318	8.08	10.50	46.71	23.00	4.03
C0420-045-1000-M	0.420	10.67	0.045	1.14	1.000	25.40	0.475	12.07	0.352	8.94	10.50	46.71	20.00	3.50
C0420-045-1250-M	0.420	10.67	0.045	1.14	1.250	31.75	0.595	15.11	0.418	10.62	10.50	46.71	16.00	2.80
C0420-045-1500-M	0.420	10.67	0.045	1.14	1.500	38.10	0.690	17.53	0.493	12.52	10.50	46.71	13.00	2.28
C0420-045-1750-M	0.420	10.67	0.045	1.14	1.750	44.45	0.860	21.84	0.563	14.30	10.50	46.71	11.80	2.07
C0420-045-2000-M	0.420	10.67	0.045	1.14	2.000	50.80	0.971	24.66	0.627	15.93	10.50	46.71	10.20	1.79
C0420-045-2250-M	0.420	10.67	0.045	1.14	2.250	57.15	1.083	27.51	0.691	17.55	10.50	46.71	9.00	1.58
C0420-045-2500-M	0.420	10.67	0.045	1.14	2.500	63.50	1.204	30.58	0.756	19.20	10.50	46.71	8.10	1.42
C0420-048-0500-M	0.420	10.67	0.048	1.22	0.500	12.70	0.302	7.67	0.261	6.63	11.97	53.25	60.60	10.61
C0420-048-0750-M	0.420	10.67	0.048	1.22	0.750	19.05	0.430	10.92	0.334	8.48	11.97	53.25	37.40	6.55
C0420-048-1000-M	0.420	10.67	0.048	1.22	1.000	25.40	0.558	14.17	0.407	10.34	11.97	53.25	27.10	4.74
C0420-048-1250-M	0.420	10.67	0.048	1.22	1.250	31.75	0.685	17.40	0.480	12.19	11.97	53.25	21.20	3.71
C0420-048-1500-M	0.420	10.67	0.048	1.22	1.500	38.10	0.813	20.65	0.552	14.02	11.97	53.25	17.40	3.05
C0420-048-1750-M	0.420	10.67	0.048	1.22	1.750	44.45	0.941	23.90	0.625	15.88	11.97	53.25	14.80	2.59
C0420-048-2000-M	0.420	10.67	0.048	1.22	2.000	50.80	1.068	27.13	0.698	17.73	11.97	53.25	12.90	2.26
C0420-051-0500-M	0.420	10.67	0.051	1.30	0.500	12.70	0.315	8.00	0.282	7.16	14.17	63.03	76.40	13.37
C0420-051-0620-M	0.420	10.67	0.051	1.30	0.620	15.75	0.379	9.63	0.321	8.15	14.17	63.03	58.70	10.27
C0420-051-0750-M	0.420	10.67	0.051	1.30	0.750	19.05	0.448	11.38	0.363	9.22	14.17	63.03	46.90	8.21
C0420-051-0880-M	0.420	10.67	0.051	1.30	0.880	22.35	0.517	13.13	0.406	10.31	14.17	63.03	39.10	6.84
C0420-051-1000-M	0.420	10.67	0.051	1.30	1.000	25.40	0.582	14.78	0.445	11.30	14.17	63.03	33.90	5.93
C0420-051-1250-M	0.420	10.67	0.051	1.30	1.250	31.75	0.715	18.16	0.526	13.36	14.17	63.03	26.50	4.64
C0420-051-1500-M	0.420	10.67	0.051	1.30	1.500	38.10	0.849	21.56	0.607	15.42	14.17	63.03	21.70	3.80

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0411-072-5250-S	**3.792**	**96.32**	**28.12**	**125.08**	**19.29**	**3.38**
C0411-072-5500-S	**3.971**	**100.86**	**28.12**	**125.08**	**18.39**	**3.22**
C0411-072-5750-S	**4.149**	**105.39**	**28.12**	**125.08**	**17.57**	**3.07**
C0411-072-6000-S	**4.328**	**109.93**	**28.12**	**125.08**	**16.82**	**2.94**
C0411-072-6250-S	**4.507**	**114.47**	**28.12**	**125.08**	**16.13**	**2.82**
C0411-072-6500-S	**4.685**	**119.00**	**28.12**	**125.08**	**15.49**	**2.71**
C0411-072-6750-S	**4.864**	**123.54**	**28.12**	**125.08**	**14.91**	**2.61**
C0420-035-0500-S	0.302	7.67	3.25	14.45	16.41	2.87
C0420-035-0620-S	0.367	9.32	3.25	14.45	12.83	2.24
C0420-035-0750-S	0.438	11.13	3.25	14.45	10.41	1.82
C0420-035-0880-S	0.509	12.92	3.25	14.45	8.75	1.53
C0420-035-1000-S	0.571	14.52	3.25	14.45	7.58	1.33
C0420-035-1250-S	0.708	17.99	3.25	14.45	6.00	1.05
C0420-035-1500-S	0.839	21.31	3.25	14.45	4.92	0.86
C0420-035-1750-S	0.985	25.03	3.25	14.45	4.25	0.74
C0420-038-0500-S	0.278	7.06	4.07	18.09	18.33	3.21
C0420-038-0560-S	0.316	8.02	4.07	18.09	16.66	2.92
C0420-038-0625-S	0.349	8.86	4.07	18.09	14.99	2.62
C0420-038-0750-S	0.413	10.50	4.07	18.09	12.08	2.11
C0420-038-0880-S	0.489	12.43	4.07	18.09	10.41	1.82
C0420-038-1000-S	0.556	14.12	4.07	18.09	9.16	1.60
C0420-038-1250-S	0.675	17.16	4.07	18.09	7.08	1.24
C0420-038-1500-S	0.822	20.87	4.07	18.09	6.00	1.05
C0420-038-1750-S	1.010	25.66	4.07	18.09	5.50	0.96
C0420-038-2000-S	1.199	30.47	4.07	18.09	5.08	0.89
C0420-038-2250-S	1.346	34.18	4.07	18.09	4.50	0.79
C0420-038-2500-S	1.483	37.66	4.07	18.09	4.00	0.70
C0420-042-0500-S	0.309	7.85	5.40	24.04	28.32	4.96
C0420-042-0560-S	0.351	8.91	5.40	24.04	25.82	4.52
C0420-042-0625-S	0.388	9.86	5.40	24.04	23.32	4.08
C0420-042-0750-S	0.455	11.56	5.40	24.04	18.33	3.21
C0420-042-0880-S	0.529	13.44	5.40	24.04	15.41	2.70
C0420-042-1000-S	0.594	15.10	5.40	24.04	13.33	2.33
C0420-042-1250-S	0.751	19.07	5.40	24.04	10.83	1.90
C0420-042-1500-S	0.882	22.40	5.40	24.04	8.75	1.53
C0420-042-1750-S	1.052	26.73	5.40	24.04	7.75	1.36
C0420-042-2000-S	1.199	30.45	5.40	24.04	6.75	1.18
C0420-042-2250-S	1.407	35.75	5.40	24.04	6.41	1.12
C0420-042-2500-S	1.560	39.62	5.40	24.04	5.75	1.01
C0420-045-0500-S	0.314	7.98	6.50	28.91	34.99	6.12
C0420-045-0625-S	0.391	9.92	6.50	28.91	28.32	4.96
C0420-045-0750-S	0.461	11.71	6.50	28.91	22.49	3.94
C0420-045-0880-S	0.541	13.74	6.50	28.91	19.16	3.35
C0420-045-1000-S	0.610	15.49	6.50	28.91	16.66	2.92
C0420-045-1250-S	0.762	19.36	6.50	28.91	13.33	2.33
C0420-045-1500-S	0.900	22.86	6.50	28.91	10.83	1.90
C0420-045-1750-S	1.089	27.66	6.50	28.91	9.83	1.72
C0420-045-2000-S	1.235	31.37	6.50	28.91	8.50	1.49
C0420-045-2250-S	1.383	35.13	6.50	28.91	7.50	1.31
C0420-045-2500-S	1.537	39.03	6.50	28.91	6.75	1.18
C0420-048-0500-S	0.344	8.75	7.86	34.94	50.48	8.83
C0420-048-0750-S	0.498	12.65	7.86	34.94	31.15	5.45
C0420-048-1000-S	0.652	16.56	7.86	34.94	22.57	3.95
C0420-048-1250-S	0.805	20.45	7.86	34.94	17.66	3.09
C0420-048-1500-S	0.958	24.33	7.86	34.94	14.49	2.54
C0420-048-1750-S	1.113	28.27	7.86	34.94	12.33	2.16
C0420-048-2000-S	1.269	32.23	7.86	34.94	10.75	1.88
C0420-051-0500-S	0.354	8.98	9.31	41.42	63.64	11.14
C0420-051-0620-S	0.430	10.91	9.31	41.42	48.90	8.56
C0420-051-0750-S	0.512	13.00	9.31	41.42	39.07	6.84
C0420-051-0880-S	0.594	15.09	9.31	41.42	32.57	5.70
C0420-051-1000-S	0.670	17.02	9.31	41.42	28.24	4.94
C0420-051-1250-S	0.828	21.04	9.31	41.42	22.08	3.86
C0420-051-1500-S	0.985	25.02	9.31	41.42	18.08	3.16

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0420-051-1750-M	0.420	10.67	0.051	1.30	1.750	44.45	0.982	24.94	0.688	17.48	14.17	63.03	18.40	3.22
C0420-051-2000-M	0.420	10.67	0.051	1.30	2.000	50.80	1.116	28.35	0.769	19.53	14.17	63.03	16.00	2.80
C0420-051-2250-M	0.420	10.67	0.051	1.30	2.250	57.15	1.249	31.72	0.850	21.59	14.17	63.03	14.20	2.49
C0420-051-2500-M	0.420	10.67	0.051	1.30	2.500	63.50	1.383	35.13	0.932	23.67	14.17	63.03	12.70	2.22
C0420-055-0500-M	0.420	10.67	0.055	1.40	0.500	12.70	0.310	7.87	0.273	6.93	18.00	80.07	95.00	16.63
C0420-055-0625-M	0.420	10.67	0.055	1.40	0.620	15.75	0.380	9.65	0.316	8.03	18.00	80.07	75.00	13.13
C0420-055-0750-M	0.420	10.67	0.055	1.40	0.750	19.05	0.460	11.68	0.360	9.14	18.00	80.07	62.00	10.85
C0420-055-0880-M	0.420	10.67	0.055	1.40	0.880	22.35	0.534	13.56	0.408	10.36	18.00	80.07	52.00	9.10
C0420-055-1000-M	0.420	10.67	0.055	1.40	1.000	25.40	0.600	15.24	0.454	11.53	18.00	80.07	45.00	7.88
C0420-055-1250-M	0.420	10.67	0.055	1.40	1.250	31.75	0.735	18.67	0.553	14.05	18.00	80.07	35.00	6.13
C0420-055-1500-M	0.420	10.67	0.055	1.40	1.500	38.10	0.880	22.35	0.645	16.38	18.00	80.07	29.00	5.08
C0420-055-1750-M	0.420	10.67	0.055	1.40	1.750	44.45	1.015	25.78	0.772	19.61	18.00	80.07	24.50	4.29
C0420-055-2000-M	0.420	10.67	0.055	1.40	2.000	50.80	1.155	29.34	0.865	21.97	18.00	80.07	21.30	3.73
C0420-055-2250-M	0.420	10.67	0.055	1.40	2.250	57.15	1.290	32.77	0.957	24.31	18.00	80.07	18.80	3.29
C0420-055-2500-M	0.420	10.67	0.055	1.40	2.500	63.50	1.430	36.32	1.050	26.67	18.00	80.07	16.80	2.94
C0420-059-0500-M	0.420	10.67	0.059	1.50	0.500	12.70	0.345	8.76	0.322	8.18	21.20	94.30	136.70	23.92
C0420-059-0625-M	0.420	10.67	0.059	1.50	0.620	15.75	0.414	10.52	0.380	9.65	21.20	94.30	103.00	18.03
C0420-059-0750-M	0.420	10.67	0.059	1.50	0.750	19.05	0.493	12.52	0.439	11.15	21.20	94.30	82.60	14.46
C0420-059-0880-M	0.420	10.67	0.059	1.50	0.880	22.35	0.571	14.50	0.496	12.60	21.20	94.30	68.50	11.99
C0420-059-1000-M	0.420	10.67	0.059	1.50	1.000	25.40	0.642	16.31	0.546	13.87	21.20	94.30	59.20	10.36
C0420-059-1250-M	0.420	10.67	0.059	1.50	1.250	31.75	0.790	20.07	0.651	16.54	21.20	94.30	46.10	8.07
C0420-059-1500-M	0.420	10.67	0.059	1.50	1.500	38.10	0.939	23.85	0.755	19.18	21.20	94.30	37.80	6.62
C0420-059-1750-M	0.420	10.67	0.059	1.50	1.750	44.45	1.087	27.61	0.860	21.84	21.20	94.30	32.00	5.60
C0420-059-2000-M	0.420	10.67	0.059	1.50	2.000	50.80	1.236	31.39	0.965	24.51	21.20	94.30	27.70	4.85
C0420-059-2250-M	0.420	10.67	0.059	1.50	2.250	57.15	1.384	35.15	1.069	27.15	21.20	94.30	24.50	4.29
C0420-059-2500-M	0.420	10.67	0.059	1.50	2.500	63.50	1.532	38.91	1.174	29.82	21.20	94.30	21.90	3.83
C0420-063-0500-M	0.420	10.67	0.063	1.60	0.500	12.70	0.361	9.17	0.345	8.76	25.37	112.85	182.10	31.87
C0420-063-0620-M	0.420	10.67	0.063	1.60	0.620	15.75	0.436	11.07	0.416	10.57	25.37	112.85	137.90	24.13
C0420-063-0750-M	0.420	10.67	0.063	1.60	0.750	19.05	0.518	13.16	0.476	12.09	25.37	112.85	109.20	19.11
C0420-063-0880-M	0.420	10.67	0.063	1.60	0.880	22.35	0.599	15.21	0.536	13.61	25.37	112.85	90.30	15.80
C0420-063-1000-M	0.420	10.67	0.063	1.60	1.000	25.40	0.675	17.15	0.591	15.01	25.37	112.85	77.90	13.63
C0420-063-1250-M	0.420	10.67	0.063	1.60	1.250	31.75	0.831	21.11	0.706	17.93	25.37	112.85	60.60	10.61
C0420-063-1500-M	0.420	10.67	0.063	1.60	1.500	38.10	0.988	25.10	0.821	20.85	25.37	112.85	49.60	8.68
C0420-063-1750-M	0.420	10.67	0.063	1.60	1.750	44.45	1.145	29.08	0.937	23.80	25.37	112.85	41.90	7.33
C0420-063-2000-M	0.420	10.67	0.063	1.60	2.000	50.80	1.302	33.07	1.052	26.72	25.37	112.85	36.30	6.35
C0420-063-2250-M	0.420	10.67	0.063	1.60	2.250	57.15	1.459	37.06	1.167	29.64	25.37	112.85	32.10	5.62
C0420-063-2500-M	0.420	10.67	0.063	1.60	2.500	63.50	1.616	41.05	1.282	32.56	25.37	112.85	28.70	5.02
C0420-067-0750-M	0.420	10.67	0.067	1.70	0.750	19.05	0.542	13.77	0.507	12.88	30.02	133.54	144.30	25.25
C0420-067-1000-M	0.420	10.67	0.067	1.70	1.000	25.40	0.708	17.98	0.631	16.03	30.02	133.54	102.70	17.97
C0420-067-1250-M	0.420	10.67	0.067	1.70	1.250	31.75	0.873	22.17	0.755	19.18	30.02	133.54	79.70	13.95
C0420-067-1500-M	0.420	10.67	0.067	1.70	1.500	38.10	1.039	26.39	0.879	22.33	30.02	133.54	65.10	11.39
C0420-067-1750-M	0.420	10.67	0.067	1.70	1.750	44.45	1.204	30.58	1.003	25.48	30.02	133.54	55.00	9.63
C0420-067-2000-M	0.420	10.67	0.067	1.70	2.000	50.80	1.370	34.80	1.127	28.63	30.02	133.54	47.60	8.33
C0420-067-2250-M	0.420	10.67	0.067	1.70	2.250	57.15	1.536	39.01	1.251	31.78	30.02	133.54	42.00	7.35
C0420-067-2500-M	0.420	10.67	0.067	1.70	2.500	63.50	1.701	43.21	1.375	34.93	30.02	133.54	37.60	6.58
C0420-072-1000-M	0.420	10.67	0.072	1.83	1.000	25.40	0.738	18.75	0.690	17.53	36.53	162.49	139.20	24.36
C0420-072-1250-M	0.420	10.67	0.072	1.83	1.250	31.75	0.911	23.14	0.829	21.06	36.53	162.49	107.70	18.85
C0420-072-1500-M	0.420	10.67	0.072	1.83	1.500	38.10	1.084	27.53	0.967	24.56	36.53	162.49	87.90	15.38
C0420-072-1750-M	0.420	10.67	0.072	1.83	1.750	44.45	1.258	31.95	1.105	28.07	36.53	162.49	74.20	12.99
C0420-072-2000-M	0.420	10.67	0.072	1.83	2.000	50.80	1.431	36.35	1.244	31.60	36.53	162.49	64.20	11.24
C0420-072-2250-M	0.420	10.67	0.072	1.83	2.250	57.15	1.604	40.74	1.382	35.10	36.53	162.49	56.60	9.91
C0420-072-2500-M	0.420	10.67	0.072	1.83	2.500	63.50	1.778	45.16	1.521	38.63	36.53	162.49	50.60	8.86
D11800*	0.425	10.80	0.031	0.80	0.787	20.00	0.272	6.90	0.205	5.20	3.46	15.40	6.86	1.20
D11810*	0.425	10.80	0.031	0.80	1.181	30.00	0.386	9.80	0.268	6.80	3.46	15.40	4.34	0.76
D11820*	0.425	10.80	0.031	0.80	1.791	45.50	0.563	14.30	0.362	9.20	3.46	15.40	2.80	0.49
D11830*	0.425	10.80	0.031	0.80	2.598	66.00	0.783	19.90	0.488	12.40	3.46	15.40	1.89	0.33
D11840*	0.425	10.80	0.031	0.80	3.799	96.50	1.122	28.50	0.677	17.20	3.46	15.40	1.31	0.23
D12000	0.433	11.00	0.039	1.00	0.689	17.50	0.315	8.00	0.217	5.50	6.15	27.36	16.57	2.90
D12010	0.433	11.00	0.039	1.00	1.024	26.00	0.441	11.20	0.295	7.50	6.15	27.36	10.57	1.85
D12020	0.433	11.00	0.039	1.00	1.535	39.00	0.630	16.00	0.413	10.50	6.15	27.36	6.86	1.20
D12030	0.433	11.00	0.039	1.00	2.205	56.00	0.882	22.40	0.571	14.50	6.15	27.36	4.63	0.81
D12040	0.433	11.00	0.039	1.00	3.209	81.50	1.260	32.00	0.807	20.50	6.15	27.36	3.14	0.55
D12850	0.433	11.00	0.087	2.20	0.638	16.20	0.508	12.90	0.476	12.10	75.84	337.35	571.60	100.03
D12860	0.433	11.00	0.087	2.20	0.906	23.00	0.697	17.70	0.650	16.50	75.84	337.35	363.14	63.55

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0420-051-1750-S	1.142	29.02	9.31	41.42	15.33	2.68
C0420-051-2000-S	1.301	33.05	9.31	41.42	13.33	2.33
C0420-051-2250-S	1.463	37.15	9.31	41.42	11.83	2.07
C0420-051-2500-S	1.620	41.14	9.31	41.42	10.58	1.85
C0420-055-0500-S	0.356	9.03	11.43	50.86	79.14	13.85
C0420-055-0625-S	0.437	11.10	11.43	50.86	62.48	10.93
C0420-055-0750-S	0.529	13.43	11.43	50.86	51.65	9.04
C0420-055-0880-S	0.616	15.65	11.43	50.86	43.32	7.58
C0420-055-1000-S	0.695	17.65	11.43	50.86	37.49	6.56
C0420-055-1250-S	0.858	21.79	11.43	50.86	29.16	5.10
C0420-055-1500-S	1.027	26.08	11.43	50.86	24.16	4.23
C0420-055-1750-S	1.190	30.22	11.43	50.86	20.41	3.57
C0420-055-2000-S	1.356	34.43	11.43	50.86	17.74	3.11
C0420-055-2250-S	1.520	38.60	11.43	50.86	15.66	2.74
C0420-055-2500-S	1.683	42.75	11.43	50.86	13.99	2.45
C0420-059-0500-S	0.378	9.61	13.87	61.68	113.87	19.93
C0420-059-0625-S	0.458	11.64	13.87	61.68	85.80	15.01
C0420-059-0750-S	0.548	13.93	13.87	61.68	68.81	12.04
C0420-059-0880-S	0.637	16.18	13.87	61.68	57.06	9.99
C0420-059-1000-S	0.719	18.26	13.87	61.68	49.31	8.63
C0420-059-1250-S	0.889	22.58	13.87	61.68	38.40	6.72
C0420-059-1500-S	1.060	26.91	13.87	61.68	31.49	5.51
C0420-059-1750-S	1.230	31.24	13.87	61.68	26.66	4.66
C0420-059-2000-S	1.399	35.54	13.87	61.68	23.07	4.04
C0420-059-2250-S	1.571	39.89	13.87	61.68	20.41	3.57
C0420-059-2500-S	1.740	44.19	13.87	61.68	18.24	3.19
C0420-063-0500-S	0.392	9.96	16.38	72.87	151.69	26.55
C0420-063-0620-S	0.477	12.13	16.38	72.87	114.87	20.10
C0420-063-0750-S	0.570	14.48	16.38	72.87	90.96	15.92
C0420-063-0880-S	0.662	16.82	16.38	72.87	75.22	13.16
C0420-063-1000-S	0.748	18.99	16.38	72.87	64.89	11.36
C0420-063-1250-S	0.925	23.51	16.38	72.87	50.48	8.83
C0420-063-1500-S	1.103	28.03	16.38	72.87	41.32	7.23
C0420-063-1750-S	1.281	32.53	16.38	72.87	34.90	6.11
C0420-063-2000-S	1.458	37.04	16.38	72.87	30.24	5.29
C0420-063-2250-S	1.637	41.59	16.38	72.87	26.74	4.68
C0420-063-2500-S	1.815	46.09	16.38	72.87	23.91	4.18
C0420-067-0750-S	0.587	14.91	19.57	87.06	120.20	21.04
C0420-067-1000-S	0.771	19.59	19.57	87.06	85.55	14.97
C0420-067-1250-S	0.955	24.26	19.57	87.06	66.39	11.62
C0420-067-1500-S	1.139	28.93	19.57	87.06	54.23	9.49
C0420-067-1750-S	1.323	33.60	19.57	87.06	45.82	8.02
C0420-067-2000-S	1.506	38.26	19.57	87.06	39.65	6.94
C0420-067-2250-S	1.691	42.94	19.57	87.06	34.99	6.12
C0420-067-2500-S	1.875	47.63	19.57	87.06	31.32	5.48
C0420-072-1000-S	0.794	20.17	23.88	106.22	115.95	20.29
C0420-072-1250-S	0.984	24.99	23.88	106.22	89.71	15.70
C0420-072-1500-S	1.174	29.82	23.88	106.22	73.22	12.81
C0420-072-1750-S	1.364	34.64	23.88	106.22	61.81	10.82
C0420-072-2000-S	1.553	39.46	23.88	106.22	53.48	9.36
C0420-072-2250-S	1.744	44.29	23.88	106.22	47.15	8.25
C0420-072-2500-S	1.933	49.11	23.88	106.22	42.15	7.38
D21800*	0.272	6.90	2.88	12.83	5.71	1.00
D21810*	0.386	9.80	2.88	12.83	3.60	0.63
D21820*	0.563	14.30	2.88	12.83	2.34	0.41
D21830*	0.783	19.90	2.88	12.83	1.54	0.27
D21840*	1.122	28.50	2.88	12.83	1.09	0.19
D22000	0.315	8.00	5.12	22.79	13.83	2.42
D22010	0.441	11.20	5.12	22.79	8.80	1.54
D22020	0.630	16.00	5.12	22.79	5.71	1.00
D22030	0.882	22.40	5.12	22.79	3.83	0.67
D22040	1.260	32.00	5.12	22.79	2.63	0.46
D22850	0.508	12.90	63.17	281.01	476.11	83.32
D22860	0.697	17.70	63.17	281.01	302.51	52.94

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D12870	0.433	11.00	0.087	2.20	1.437	36.50	1.079	27.40	0.996	25.30	75.84	337.35	210.69	36.87
D12880	0.433	11.00	0.087	2.20	2.236	56.80	1.650	41.90	1.516	38.50	75.84	337.35	128.91	22.56
C0437-032-0500-M	**0.437**	**11.10**	**0.032**	**0.81**	**0.500**	**12.70**	**0.182**	**4.61**	**0.132**	**3.34**	**3.40**	**15.13**	**10.68**	**1.87**
C0437-032-0625-M	**0.437**	**11.10**	**0.032**	**0.81**	**0.625**	**15.88**	**0.219**	**5.55**	**0.154**	**3.92**	**3.37**	**15.00**	**8.30**	**1.45**
C0437-032-0750-M	**0.437**	**11.10**	**0.032**	**0.81**	**0.750**	**19.05**	**0.256**	**6.50**	**0.177**	**4.50**	**3.36**	**14.93**	**6.79**	**1.19**
C0437-032-0875-M	**0.437**	**11.10**	**0.032**	**0.81**	**0.875**	**22.23**	**0.293**	**7.44**	**0.200**	**5.08**	**3.34**	**14.86**	**5.74**	**1.00**
C0437-032-1000-M	**0.437**	**11.10**	**0.032**	**0.81**	**1.000**	**25.40**	**0.328**	**8.34**	**0.220**	**5.60**	**3.34**	**14.88**	**4.98**	**0.87**
C0437-032-1250-M	**0.437**	**11.10**	**0.032**	**0.81**	**1.250**	**31.75**	**0.399**	**10.13**	**0.261**	**6.63**	**3.34**	**14.88**	**3.93**	**0.69**
C0437-032-1500-M	**0.437**	**11.10**	**0.032**	**0.81**	**1.500**	**38.10**	**0.470**	**11.94**	**0.303**	**7.68**	**3.34**	**14.85**	**3.24**	**0.57**
C0437-032-1750-M	**0.437**	**11.10**	**0.032**	**0.81**	**1.750**	**44.45**	**0.541**	**13.73**	**0.343**	**8.72**	**3.34**	**14.85**	**2.76**	**0.48**
C0437-032-2000-M	**0.437**	**11.10**	**0.032**	**0.81**	**2.000**	**50.80**	**0.610**	**15.51**	**0.384**	**9.74**	**3.35**	**14.90**	**2.41**	**0.42**
C0437-032-2125-M	**0.437**	**11.10**	**0.032**	**0.81**	**2.125**	**53.98**	**0.646**	**16.41**	**0.405**	**10.28**	**3.34**	**14.87**	**2.26**	**0.40**
C0437-041-0500-M	**0.437**	**11.10**	**0.041**	**1.04**	**0.500**	**12.70**	**0.228**	**5.79**	**0.189**	**4.80**	**6.97**	**31.02**	**25.64**	**4.49**
C0437-041-0625-M	**0.437**	**11.10**	**0.041**	**1.04**	**0.625**	**15.88**	**0.276**	**7.02**	**0.225**	**5.73**	**6.88**	**30.62**	**19.74**	**3.45**
C0437-041-0750-M	**0.437**	**11.10**	**0.041**	**1.04**	**0.750**	**19.05**	**0.324**	**8.24**	**0.262**	**6.65**	**6.83**	**30.37**	**16.04**	**2.81**
C0437-041-0875-M	**0.437**	**11.10**	**0.041**	**1.04**	**0.875**	**22.23**	**0.370**	**9.39**	**0.295**	**7.48**	**6.83**	**30.37**	**13.51**	**2.36**
C0437-041-1000-M	**0.437**	**11.10**	**0.041**	**1.04**	**1.000**	**25.40**	**0.415**	**10.54**	**0.327**	**8.32**	**6.83**	**30.37**	**11.67**	**2.04**
C0437-041-1250-M	**0.437**	**11.10**	**0.041**	**1.04**	**1.250**	**31.75**	**0.563**	**14.30**	**0.344**	**8.75**	**7.49**	**33.32**	**10.90**	**1.91**
C0437-041-1500-M	**0.437**	**11.10**	**0.041**	**1.04**	**1.500**	**38.10**	**0.682**	**17.33**	**0.394**	**10.00**	**7.49**	**33.32**	**9.16**	**1.60**
C0437-041-1750-M	**0.437**	**11.10**	**0.041**	**1.04**	**1.750**	**44.45**	**0.757**	**19.22**	**0.460**	**11.67**	**7.49**	**33.32**	**7.54**	**1.32**
C0437-041-2000-M	**0.437**	**11.10**	**0.041**	**1.04**	**2.000**	**50.80**	**0.831**	**21.12**	**0.525**	**13.35**	**7.49**	**33.32**	**6.41**	**1.12**
C0437-041-2125-M	**0.437**	**11.10**	**0.041**	**1.04**	**2.125**	**53.98**	**0.797**	**20.24**	**0.591**	**15.01**	**7.41**	**32.96**	**5.58**	**0.98**
C0437-054-0500-M	**0.437**	**11.10**	**0.054**	**1.37**	**0.500**	**12.70**	**0.294**	**7.48**	**0.271**	**6.88**	**15.42**	**68.61**	**75.00**	**13.13**
C0437-054-0625-M	**0.437**	**11.10**	**0.054**	**1.37**	**0.625**	**15.88**	**0.360**	**9.15**	**0.329**	**8.36**	**15.06**	**66.97**	**56.87**	**9.95**
C0437-054-0750-M	**0.437**	**11.10**	**0.054**	**1.37**	**0.750**	**19.05**	**0.422**	**10.73**	**0.383**	**9.72**	**15.01**	**66.75**	**45.80**	**8.02**
C0437-054-0875-M	**0.437**	**11.10**	**0.054**	**1.37**	**0.875**	**22.23**	**0.484**	**12.28**	**0.435**	**11.05**	**15.00**	**66.74**	**38.33**	**6.71**
C0437-054-1000-M	**0.437**	**11.10**	**0.054**	**1.37**	**1.000**	**25.40**	**0.545**	**13.84**	**0.488**	**12.39**	**15.00**	**66.74**	**32.96**	**5.77**
C0437-054-1250-M	**0.437**	**11.10**	**0.054**	**1.37**	**1.250**	**31.75**	**0.667**	**16.94**	**0.592**	**15.05**	**15.01**	**66.76**	**25.75**	**4.51**
C0437-054-1500-M	**0.437**	**11.10**	**0.054**	**1.37**	**1.500**	**38.10**	**0.790**	**20.06**	**0.697**	**17.72**	**15.00**	**66.74**	**21.12**	**3.70**
C0437-054-1750-M	**0.437**	**11.10**	**0.054**	**1.37**	**1.750**	**44.45**	**0.912**	**23.16**	**0.802**	**20.38**	**15.01**	**66.77**	**17.91**	**3.13**
C0437-054-2000-M	**0.437**	**11.10**	**0.054**	**1.37**	**2.000**	**50.80**	**1.034**	**26.27**	**0.907**	**23.04**	**15.01**	**66.75**	**15.54**	**2.72**
C0437-054-2250-M	**0.437**	**11.10**	**0.054**	**1.37**	**2.250**	**57.15**	**1.157**	**29.38**	**1.012**	**25.70**	**15.01**	**66.78**	**13.73**	**2.40**
C0437-054-2500-M	**0.437**	**11.10**	**0.054**	**1.37**	**2.500**	**63.50**	**1.279**	**32.50**	**1.117**	**28.38**	**15.00**	**66.73**	**12.29**	**2.15**
D12200	0.443	11.25	0.049	1.25	0.787	20.00	0.303	7.70	0.271	6.88	19.20	85.42	40.51	7.09
D12210	0.443	11.25	0.049	1.25	1.161	29.50	0.425	10.80	0.369	9.38	19.20	85.42	25.77	4.51
D12220	0.443	11.25	0.049	1.25	1.752	44.50	0.598	15.20	0.517	13.13	19.20	85.42	16.69	2.92
D12230	0.443	11.25	0.049	1.25	2.520	64.00	0.831	21.10	0.714	18.13	19.20	85.42	11.37	1.99
D12240	0.443	11.25	0.049	1.25	3.681	93.50	1.181	30.00	1.009	25.63	19.20	85.42	7.66	1.34
C0455-039-0500-M	0.455	11.56	0.039	0.99	0.500	12.70	0.257	6.53	0.187	4.75	6.21	27.62	25.60	4.48
C0455-039-0620-M	0.455	11.56	0.039	0.99	0.620	15.75	0.308	7.82	0.207	5.26	6.21	27.62	19.90	3.48
C0455-039-0750-M	0.455	11.56	0.039	0.99	0.750	19.05	0.364	9.25	0.229	5.82	6.21	27.62	16.10	2.82
C0455-039-0880-M	0.455	11.56	0.039	0.99	0.880	22.35	0.419	10.64	0.251	6.38	6.21	27.62	13.50	2.36
C0455-039-1000-M	0.455	11.56	0.039	0.99	1.000	25.40	0.470	11.94	0.271	6.88	6.21	27.62	11.70	2.05
C0455-039-1250-M	0.455	11.56	0.039	0.99	1.250	31.75	0.576	14.63	0.312	7.92	6.21	27.62	9.20	1.61
C0455-039-1500-M	0.455	11.56	0.039	0.99	1.500	38.10	0.682	17.32	0.354	8.99	6.21	27.62	7.60	1.33
C0455-039-1750-M	0.455	11.56	0.039	0.99	1.750	44.45	0.789	20.04	0.396	10.06	6.21	27.62	6.50	1.14
C0455-046-0500-M	0.455	11.56	0.046	1.17	0.500	12.70	0.284	7.21	0.233	5.92	9.86	43.86	45.60	7.98
C0455-046-0620-M	0.455	11.56	0.046	1.17	0.620	15.75	0.340	8.64	0.261	6.63	9.86	43.86	35.30	6.18
C0455-046-0750-M	0.455	11.56	0.046	1.17	0.750	19.05	0.401	10.19	0.291	7.39	9.86	43.86	28.30	4.95
C0455-046-0880-M	0.455	11.56	0.046	1.17	0.880	22.35	0.463	11.76	0.321	8.15	9.86	43.86	23.60	4.13
C0455-046-1000-M	0.455	11.56	0.046	1.17	1.000	25.40	0.519	13.18	0.349	8.86	9.86	43.86	20.50	3.59
C0455-046-1250-M	0.455	11.56	0.046	1.17	1.250	31.75	0.637	16.18	0.407	10.34	9.86	43.86	16.10	2.82
C0455-046-1500-M	0.455	11.56	0.046	1.17	1.500	38.10	0.754	19.15	0.465	11.81	9.86	43.86	13.20	2.31
C0455-046-1750-M	0.455	11.56	0.046	1.17	1.750	44.45	0.872	22.15	0.523	13.28	9.86	43.86	11.20	1.96
D12400	0.457	11.60	0.063	1.60	0.728	18.50	0.370	9.40	0.346	8.80	38.14	169.66	109.26	19.12
D12410	0.457	11.60	0.063	1.60	1.063	27.00	0.520	13.20	0.472	12.00	38.14	169.66	69.49	12.16
D12420	0.457	11.60	0.063	1.60	1.594	40.50	0.744	18.90	0.661	16.80	38.14	169.66	44.97	7.87
D12430	0.457	11.60	0.063	1.60	2.303	58.50	1.043	26.50	0.913	23.20	38.14	169.66	30.46	5.33
D12440	0.457	11.60	0.063	1.60	3.346	85.00	1.492	37.90	1.291	32.80	38.14	169.66	20.63	3.61
C0470-038-0938-M	**0.470**	**11.94**	**0.038**	**0.97**	**0.938**	**23.81**	**0.338**	**8.59**	**0.244**	**6.20**	**5.40**	**24.04**	**9.02**	**1.58**
C0470-038-1000-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.000**	**25.40**	**0.357**	**9.08**	**0.256**	**6.51**	**5.40**	**24.04**	**8.41**	**1.47**
C0470-038-1125-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.125**	**28.58**	**0.395**	**10.04**	**0.280**	**7.11**	**5.40**	**24.04**	**7.41**	**1.30**
C0470-038-1250-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.250**	**31.75**	**0.434**	**11.01**	**0.304**	**7.72**	**5.40**	**24.04**	**6.62**	**1.16**
C0470-038-1375-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.375**	**34.93**	**0.472**	**11.98**	**0.328**	**8.33**	**5.40**	**24.04**	**5.98**	**1.05**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D22870	1.079	27.40	63.17	281.01	175.49	30.71
D22880	1.650	41.90	63.17	281.01	107.37	18.79
C0437-032-0500-S	**0.182**	**4.61**	**2.83**	**12.60**	**8.90**	**1.56**
C0437-032-0625-S	**0.219**	**5.55**	**2.81**	**12.50**	**6.91**	**1.21**
C0437-032-0750-S	**0.256**	**6.50**	**2.80**	**12.43**	**5.66**	**0.99**
C0437-032-0875-S	**0.293**	**7.44**	**2.78**	**12.38**	**4.78**	**0.84**
C0437-032-1000-S	**0.328**	**8.34**	**2.79**	**12.39**	**4.15**	**0.73**
C0437-032-1250-S	**0.399**	**10.13**	**2.79**	**12.39**	**3.27**	**0.57**
C0437-032-1500-S	**0.470**	**11.94**	**2.78**	**12.37**	**2.70**	**0.47**
C0437-032-1750-S	**0.541**	**13.73**	**2.78**	**12.37**	**2.30**	**0.40**
C0437-032-2000-S	**0.610**	**15.51**	**2.79**	**12.41**	**2.01**	**0.35**
C0437-032-2125-S	**0.646**	**16.41**	**2.78**	**12.38**	**1.88**	**0.33**
C0437-041-0500-S	**0.233**	**5.93**	**5.70**	**25.34**	**21.36**	**3.74**
C0437-041-0625-S	**0.279**	**7.08**	**5.70**	**25.34**	**16.44**	**2.88**
C0437-041-0750-S	**0.324**	**8.24**	**5.69**	**25.30**	**13.36**	**2.34**
C0437-041-0875-S	**0.370**	**9.39**	**5.69**	**25.30**	**11.25**	**1.97**
C0437-041-1000-S	**0.415**	**10.54**	**5.69**	**25.29**	**9.72**	**1.70**
C0437-041-1250-S	**0.623**	**15.81**	**5.70**	**25.34**	**9.08**	**1.59**
C0437-041-1500-S	**0.753**	**19.14**	**5.70**	**25.34**	**7.63**	**1.34**
C0437-041-1750-S	**0.843**	**21.41**	**5.70**	**25.34**	**6.28**	**1.10**
C0437-041-2000-S	**0.933**	**23.70**	**5.70**	**25.34**	**5.34**	**0.93**
C0437-041-2125-S	**0.899**	**22.85**	**5.70**	**25.34**	**4.65**	**0.81**
C0437-054-0500-S	**0.304**	**7.73**	**12.22**	**54.38**	**62.48**	**10.93**
C0437-054-0625-S	**0.367**	**9.32**	**12.22**	**54.38**	**47.37**	**8.29**
C0437-054-0750-S	**0.430**	**10.91**	**12.22**	**54.38**	**38.15**	**6.68**
C0437-054-0875-S	**0.492**	**12.50**	**12.22**	**54.38**	**31.93**	**5.59**
C0437-054-1000-S	**0.555**	**14.09**	**12.22**	**54.38**	**27.46**	**4.80**
C0437-054-1250-S	**0.680**	**17.27**	**12.22**	**54.38**	**21.45**	**3.75**
C0437-054-1500-S	**0.805**	**20.45**	**12.22**	**54.38**	**17.59**	**3.08**
C0437-054-1750-S	**0.931**	**23.64**	**12.22**	**54.38**	**14.92**	**2.61**
C0437-054-2000-S	**1.056**	**26.81**	**12.22**	**54.38**	**12.95**	**2.27**
C0437-054-2250-S	**1.181**	**30.00**	**12.22**	**54.38**	**11.44**	**2.00**
C0437-054-2500-S	**1.306**	**33.17**	**12.22**	**54.38**	**10.24**	**1.79**
D22200	0.303	7.70	16.00	71.15	33.77	5.91
D22210	0.425	10.80	16.00	71.15	21.49	3.76
D22220	0.598	15.20	16.00	71.15	13.89	2.43
D22230	0.831	21.10	16.00	71.15	9.49	1.66
D22240	1.181	30.00	16.00	71.15	6.40	1.12
C0455-039-0500-S	0.309	7.85	4.07	18.10	21.33	3.73
C0455-039-0620-S	0.375	9.51	4.07	18.10	16.58	2.90
C0455-039-0750-S	0.447	11.34	4.07	18.10	13.41	2.35
C0455-039-0880-S	0.518	13.16	4.07	18.10	11.25	1.97
C0455-039-1000-S	0.582	14.79	4.07	18.10	9.75	1.71
C0455-039-1250-S	0.719	18.26	4.07	18.10	7.66	1.34
C0455-039-1500-S	0.857	21.77	4.07	18.10	6.33	1.11
C0455-039-1750-S	0.998	25.36	4.07	18.10	5.42	0.95
C0455-046-0500-S	0.331	8.40	6.43	28.60	37.99	6.65
C0455-046-0620-S	0.401	10.19	6.43	28.60	29.41	5.15
C0455-046-0750-S	0.477	12.12	6.43	28.60	23.57	4.13
C0455-046-0880-S	0.553	14.04	6.43	28.60	19.66	3.44
C0455-046-1000-S	0.623	15.84	6.43	28.60	17.08	2.99
C0455-046-1250-S	0.771	19.57	6.43	28.60	13.41	2.35
C0455-046-1500-S	0.915	23.25	6.43	28.60	11.00	1.92
C0455-046-1750-S	1.061	26.94	6.43	28.60	9.33	1.63
D22400	0.370	9.40	31.77	141.33	91.03	15.93
D22410	0.520	13.20	31.77	141.33	57.89	10.13
D22420	0.744	18.90	31.77	141.33	37.49	6.56
D22430	1.043	26.50	31.77	141.33	25.37	4.44
D22440	1.492	37.90	31.77	141.33	17.20	3.01
C0470-038-0938-S	**0.390**	**9.91**	**4.29**	**19.10**	**7.84**	**1.37**
C0470-038-1000-S	**0.413**	**10.49**	**4.29**	**19.10**	**7.31**	**1.28**
C0470-038-1125-S	**0.458**	**11.64**	**4.29**	**19.10**	**6.44**	**1.13**
C0470-038-1250-S	**0.504**	**12.80**	**4.29**	**19.10**	**5.76**	**1.01**
C0470-038-1375-S	**0.550**	**13.96**	**4.29**	**19.10**	**5.20**	**0.91**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-038-1500-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.500**	**38.10**	**0.510**	**12.95**	**0.352**	**8.93**	**5.40**	**24.04**	**5.46**	**0.95**
C0470-038-1625-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.625**	**41.28**	**0.548**	**13.91**	**0.376**	**9.54**	**5.40**	**24.04**	**5.02**	**0.88**
C0470-038-1750-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.750**	**44.45**	**0.586**	**14.88**	**0.399**	**10.14**	**5.40**	**24.04**	**4.64**	**0.81**
C0470-038-1875-M	**0.470**	**11.94**	**0.038**	**0.97**	**1.875**	**47.63**	**0.624**	**15.85**	**0.423**	**10.75**	**5.40**	**24.04**	**4.32**	**0.76**
C0470-038-2000-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.000**	**50.80**	**0.662**	**16.81**	**0.447**	**11.36**	**5.40**	**24.04**	**4.04**	**0.71**
C0470-038-2125-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.125**	**53.98**	**0.700**	**17.78**	**0.471**	**11.96**	**5.40**	**24.04**	**3.79**	**0.66**
C0470-038-2250-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.250**	**57.15**	**0.738**	**18.75**	**0.495**	**12.57**	**5.40**	**24.04**	**3.57**	**0.63**
C0470-038-2375-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.375**	**60.33**	**0.776**	**19.71**	**0.519**	**13.17**	**5.40**	**24.04**	**3.38**	**0.59**
C0470-038-2500-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.500**	**63.50**	**0.814**	**20.68**	**0.543**	**13.78**	**5.40**	**24.04**	**3.21**	**0.56**
C0470-038-2625-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.625**	**66.68**	**0.852**	**21.65**	**0.566**	**14.39**	**5.40**	**24.04**	**3.05**	**0.53**
C0470-038-2750-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.750**	**69.85**	**0.890**	**22.61**	**0.590**	**14.99**	**5.40**	**24.04**	**2.91**	**0.51**
C0470-038-2875-M	**0.470**	**11.94**	**0.038**	**0.97**	**2.875**	**73.03**	**0.928**	**23.58**	**0.614**	**15.60**	**5.40**	**24.04**	**2.78**	**0.49**
C0470-038-3000-M	**0.470**	**11.94**	**0.038**	**0.97**	**3.000**	**76.20**	**0.966**	**24.55**	**0.638**	**16.20**	**5.40**	**24.04**	**2.66**	**0.47**
C0470-038-3250-M	**0.470**	**11.94**	**0.038**	**0.97**	**3.250**	**82.55**	**1.043**	**26.48**	**0.686**	**17.42**	**5.40**	**24.04**	**2.45**	**0.43**
C0470-038-3500-M	**0.470**	**11.94**	**0.038**	**0.97**	**3.500**	**88.90**	**1.119**	**28.42**	**0.733**	**18.63**	**5.40**	**24.04**	**2.27**	**0.40**
C0470-038-3750-M	**0.470**	**11.94**	**0.038**	**0.97**	**3.750**	**95.25**	**1.195**	**30.35**	**0.781**	**19.84**	**5.40**	**24.04**	**2.12**	**0.37**
C0470-038-4000-M	**0.470**	**11.94**	**0.038**	**0.97**	**4.000**	**101.60**	**1.271**	**32.28**	**0.829**	**21.05**	**5.40**	**24.04**	**1.98**	**0.35**
C0470-038-4250-M	**0.470**	**11.94**	**0.038**	**0.97**	**4.250**	**107.95**	**1.347**	**34.22**	**0.877**	**22.27**	**5.40**	**24.04**	**1.86**	**0.33**
C0470-038-4500-M	**0.470**	**11.94**	**0.038**	**0.97**	**4.500**	**114.30**	**1.423**	**36.15**	**0.924**	**23.48**	**5.40**	**24.04**	**1.76**	**0.31**
C0470-038-4750-M	**0.470**	**11.94**	**0.038**	**0.97**	**4.750**	**120.65**	**1.499**	**38.08**	**0.972**	**24.69**	**5.40**	**24.04**	**1.66**	**0.29**
C0470-038-5000-M	**0.470**	**11.94**	**0.038**	**0.97**	**5.000**	**127.00**	**1.576**	**40.02**	**1.020**	**25.90**	**5.40**	**24.04**	**1.58**	**0.28**
C0470-038-5250-M	**0.470**	**11.94**	**0.038**	**0.97**	**5.250**	**133.35**	**1.652**	**41.95**	**1.068**	**27.11**	**5.40**	**24.04**	**1.50**	**0.26**
C0470-038-5500-M	**0.470**	**11.94**	**0.038**	**0.97**	**5.500**	**139.70**	**1.728**	**43.89**	**1.115**	**28.33**	**5.40**	**24.04**	**1.43**	**0.25**
C0470-038-5750-M	**0.470**	**11.94**	**0.038**	**0.97**	**5.750**	**146.05**	**1.804**	**45.82**	**1.163**	**29.54**	**5.40**	**24.04**	**1.37**	**0.24**
C0470-038-6000-M	**0.470**	**11.94**	**0.038**	**0.97**	**6.000**	**152.40**	**1.880**	**47.75**	**1.211**	**30.75**	**5.40**	**24.04**	**1.31**	**0.23**
C0470-038-6250-M	**0.470**	**11.94**	**0.038**	**0.97**	**6.250**	**158.75**	**1.956**	**49.69**	**1.258**	**31.96**	**5.40**	**24.04**	**1.26**	**0.22**
C0470-038-6500-M	**0.470**	**11.94**	**0.038**	**0.97**	**6.500**	**165.10**	**2.032**	**51.62**	**1.306**	**33.18**	**5.40**	**24.04**	**1.21**	**0.21**
C0470-038-6750-M	**0.470**	**11.94**	**0.038**	**0.97**	**6.750**	**171.45**	**2.108**	**53.56**	**1.354**	**34.39**	**5.40**	**24.04**	**1.16**	**0.20**
C0470-038-7000-M	**0.470**	**11.94**	**0.038**	**0.97**	**7.000**	**177.80**	**2.185**	**55.49**	**1.402**	**35.60**	**5.40**	**24.04**	**1.12**	**0.20**
C0470-038-7500-M	**0.470**	**11.94**	**0.038**	**0.97**	**7.500**	**190.50**	**2.337**	**59.36**	**1.497**	**38.02**	**5.40**	**24.04**	**1.05**	**0.18**
C0470-038-8000-M	**0.470**	**11.94**	**0.038**	**0.97**	**8.000**	**203.20**	**2.489**	**63.22**	**1.592**	**40.45**	**5.40**	**24.04**	**0.98**	**0.17**
C0470-038-8500-M	**0.470**	**11.94**	**0.038**	**0.97**	**8.500**	**215.90**	**2.641**	**67.09**	**1.688**	**42.87**	**5.40**	**24.04**	**0.92**	**0.16**
C0470-040-0875-M	**0.470**	**11.94**	**0.040**	**1.02**	**0.875**	**22.23**	**0.335**	**8.52**	**0.252**	**6.41**	**6.24**	**27.75**	**11.56**	**2.02**
C0470-040-0938-M	**0.470**	**11.94**	**0.040**	**1.02**	**0.938**	**23.81**	**0.355**	**9.03**	**0.265**	**6.74**	**6.24**	**27.75**	**10.72**	**1.88**
C0470-040-1000-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.000**	**25.40**	**0.376**	**9.54**	**0.279**	**7.08**	**6.24**	**27.75**	**9.99**	**1.75**
C0470-040-1125-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.125**	**28.58**	**0.416**	**10.56**	**0.305**	**7.75**	**6.24**	**27.75**	**8.79**	**1.54**
C0470-040-1250-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.250**	**31.75**	**0.456**	**11.58**	**0.332**	**8.42**	**6.24**	**27.75**	**7.85**	**1.37**
C0470-040-1375-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.375**	**34.93**	**0.496**	**12.60**	**0.358**	**9.09**	**6.24**	**27.75**	**7.10**	**1.24**
C0470-040-1500-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.500**	**38.10**	**0.536**	**13.62**	**0.384**	**9.76**	**6.24**	**27.75**	**6.47**	**1.13**
C0470-040-1625-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.625**	**41.28**	**0.576**	**14.64**	**0.411**	**10.44**	**6.24**	**27.75**	**5.95**	**1.04**
C0470-040-1750-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.750**	**44.45**	**0.616**	**15.66**	**0.437**	**11.11**	**6.24**	**27.75**	**5.50**	**0.96**
C0470-040-1875-M	**0.470**	**11.94**	**0.040**	**1.02**	**1.875**	**47.63**	**0.657**	**16.68**	**0.464**	**11.78**	**6.24**	**27.75**	**5.12**	**0.90**
C0470-040-2000-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.000**	**50.80**	**0.697**	**17.70**	**0.490**	**12.45**	**6.24**	**27.75**	**4.79**	**0.84**
C0470-040-2125-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.125**	**53.98**	**0.737**	**18.72**	**0.517**	**13.12**	**6.24**	**27.75**	**4.49**	**0.79**
C0470-040-2250-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.250**	**57.15**	**0.777**	**19.74**	**0.543**	**13.79**	**6.24**	**27.75**	**4.24**	**0.74**
C0470-040-2375-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.375**	**60.33**	**0.817**	**20.76**	**0.569**	**14.46**	**6.24**	**27.75**	**4.00**	**0.70**
C0470-040-2500-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.500**	**63.50**	**0.857**	**21.78**	**0.596**	**15.14**	**6.24**	**27.75**	**3.80**	**0.66**
C0470-040-2625-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.625**	**66.68**	**0.898**	**22.80**	**0.622**	**15.81**	**6.24**	**27.75**	**3.61**	**0.63**
C0470-040-2750-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.750**	**69.85**	**0.938**	**23.82**	**0.649**	**16.48**	**6.24**	**27.75**	**3.44**	**0.60**
C0470-040-2875-M	**0.470**	**11.94**	**0.040**	**1.02**	**2.875**	**73.03**	**0.978**	**24.84**	**0.675**	**17.15**	**6.24**	**27.75**	**3.29**	**0.58**
C0470-040-3000-M	**0.470**	**11.94**	**0.040**	**1.02**	**3.000**	**76.20**	**1.018**	**25.86**	**0.702**	**17.82**	**6.24**	**27.75**	**3.15**	**0.55**
C0470-040-3250-M	**0.470**	**11.94**	**0.040**	**1.02**	**3.250**	**82.55**	**1.098**	**27.90**	**0.755**	**19.17**	**6.24**	**27.75**	**2.90**	**0.51**
C0470-040-3500-M	**0.470**	**11.94**	**0.040**	**1.02**	**3.500**	**88.90**	**1.179**	**29.94**	**0.807**	**20.51**	**6.24**	**27.75**	**2.69**	**0.47**
C0470-040-3750-M	**0.470**	**11.94**	**0.040**	**1.02**	**3.750**	**95.25**	**1.259**	**31.98**	**0.860**	**21.85**	**6.24**	**27.75**	**2.50**	**0.44**
C0470-040-4000-M	**0.470**	**11.94**	**0.040**	**1.02**	**4.000**	**101.60**	**1.339**	**34.02**	**0.913**	**23.20**	**6.24**	**27.75**	**2.34**	**0.41**
C0470-040-4250-M	**0.470**	**11.94**	**0.040**	**1.02**	**4.250**	**107.95**	**1.420**	**36.06**	**0.966**	**24.54**	**6.24**	**27.75**	**2.20**	**0.39**
C0470-040-4500-M	**0.470**	**11.94**	**0.040**	**1.02**	**4.500**	**114.30**	**1.500**	**38.10**	**1.019**	**25.88**	**6.24**	**27.75**	**2.08**	**0.36**
C0470-040-4750-M	**0.470**	**11.94**	**0.040**	**1.02**	**4.750**	**120.65**	**1.580**	**40.14**	**1.072**	**27.23**	**6.24**	**27.75**	**1.97**	**0.34**
C0470-040-5000-M	**0.470**	**11.94**	**0.040**	**1.02**	**5.000**	**127.00**	**1.661**	**42.18**	**1.125**	**28.57**	**6.24**	**27.75**	**1.87**	**0.33**
C0470-040-5250-M	**0.470**	**11.94**	**0.040**	**1.02**	**5.250**	**133.35**	**1.741**	**44.22**	**1.178**	**29.91**	**6.24**	**27.75**	**1.78**	**0.31**
C0470-040-5500-M	**0.470**	**11.94**	**0.040**	**1.02**	**5.500**	**139.70**	**1.821**	**46.26**	**1.231**	**31.26**	**6.24**	**27.75**	**1.70**	**0.30**
C0470-040-5750-M	**0.470**	**11.94**	**0.040**	**1.02**	**5.750**	**146.05**	**1.901**	**48.30**	**1.283**	**32.60**	**6.24**	**27.75**	**1.62**	**0.28**
C0470-040-6000-M	**0.470**	**11.94**	**0.040**	**1.02**	**6.000**	**152.40**	**1.982**	**50.34**	**1.336**	**33.94**	**6.24**	**27.75**	**1.55**	**0.27**
C0470-040-6250-M	**0.470**	**11.94**	**0.040**	**1.02**	**6.250**	**158.75**	**2.062**	**52.38**	**1.389**	**35.29**	**6.24**	**27.75**	**1.49**	**0.26**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-038-1500-S	**0.595**	**15.11**	**4.29**	**19.10**	**4.75**	**0.83**
C0470-038-1625-S	**0.641**	**16.27**	**4.29**	**19.10**	**4.36**	**0.76**
C0470-038-1750-S	**0.686**	**17.43**	**4.29**	**19.10**	**4.04**	**0.71**
C0470-038-1875-S	**0.732**	**18.59**	**4.29**	**19.10**	**3.76**	**0.66**
C0470-038-2000-S	**0.777**	**19.74**	**4.29**	**19.10**	**3.51**	**0.61**
C0470-038-2125-S	**0.823**	**20.90**	**4.29**	**19.10**	**3.30**	**0.58**
C0470-038-2250-S	**0.868**	**22.06**	**4.29**	**19.10**	**3.11**	**0.54**
C0470-038-2375-S	**0.914**	**23.22**	**4.29**	**19.10**	**2.94**	**0.51**
C0470-038-2500-S	**0.960**	**24.37**	**4.29**	**19.10**	**2.79**	**0.49**
C0470-038-2625-S	**1.005**	**25.53**	**4.29**	**19.10**	**2.65**	**0.46**
C0470-038-2750-S	**1.051**	**26.69**	**4.29**	**19.10**	**2.53**	**0.44**
C0470-038-2875-S	**1.096**	**27.85**	**4.29**	**19.10**	**2.41**	**0.42**
C0470-038-3000-S	**1.142**	**29.00**	**4.29**	**19.10**	**2.31**	**0.40**
C0470-038-3250-S	**1.233**	**31.32**	**4.29**	**19.10**	**2.13**	**0.37**
C0470-038-3500-S	**1.324**	**33.63**	**4.29**	**19.10**	**1.97**	**0.35**
C0470-038-3750-S	**1.415**	**35.95**	**4.29**	**19.10**	**1.84**	**0.32**
C0470-038-4000-S	**1.506**	**38.26**	**4.29**	**19.10**	**1.72**	**0.30**
C0470-038-4250-S	**1.597**	**40.58**	**4.29**	**19.10**	**1.62**	**0.28**
C0470-038-4500-S	**1.689**	**42.89**	**4.29**	**19.10**	**1.53**	**0.27**
C0470-038-4750-S	**1.780**	**45.21**	**4.29**	**19.10**	**1.45**	**0.25**
C0470-038-5000-S	**1.871**	**47.52**	**4.29**	**19.10**	**1.37**	**0.24**
C0470-038-5250-S	**1.962**	**49.83**	**4.29**	**19.10**	**1.31**	**0.23**
C0470-038-5500-S	**2.053**	**52.15**	**4.29**	**19.10**	**1.25**	**0.22**
C0470-038-5750-S	**2.144**	**54.46**	**4.29**	**19.10**	**1.19**	**0.21**
C0470-038-6000-S	**2.235**	**56.78**	**4.29**	**19.10**	**1.14**	**0.20**
C0470-038-6250-S	**2.327**	**59.09**	**4.29**	**19.10**	**1.09**	**0.19**
C0470-038-6500-S	**2.418**	**61.41**	**4.29**	**19.10**	**1.05**	**0.18**
C0470-038-6750-S	**2.509**	**63.72**	**4.29**	**19.10**	**1.01**	**0.18**
C0470-038-7000-S	**2.600**	**66.04**	**4.29**	**19.10**	**0.98**	**0.17**
C0470-038-7500-S	**2.782**	**70.67**	**4.29**	**19.10**	**0.91**	**0.16**
C0470-038-8000-S	**2.964**	**75.30**	**4.29**	**19.10**	**0.85**	**0.15**
C0470-038-8500-S	**3.147**	**79.93**	**4.29**	**19.10**	**0.80**	**0.14**
C0470-040-0875-S	**0.382**	**9.69**	**4.96**	**22.06**	**10.05**	**1.76**
C0470-040-0938-S	**0.405**	**10.30**	**4.96**	**22.06**	**9.32**	**1.63**
C0470-040-1000-S	**0.429**	**10.90**	**4.96**	**22.06**	**8.69**	**1.52**
C0470-040-1125-S	**0.476**	**12.10**	**4.96**	**22.06**	**7.65**	**1.34**
C0470-040-1250-S	**0.524**	**13.31**	**4.96**	**22.06**	**6.83**	**1.20**
C0470-040-1375-S	**0.571**	**14.51**	**4.96**	**22.06**	**6.17**	**1.08**
C0470-040-1500-S	**0.619**	**15.72**	**4.96**	**22.06**	**5.63**	**0.98**
C0470-040-1625-S	**0.666**	**16.92**	**4.96**	**22.06**	**5.17**	**0.91**
C0470-040-1750-S	**0.714**	**18.12**	**4.96**	**22.06**	**4.79**	**0.84**
C0470-040-1875-S	**0.761**	**19.33**	**4.96**	**22.06**	**4.45**	**0.78**
C0470-040-2000-S	**0.808**	**20.53**	**4.96**	**22.06**	**4.16**	**0.73**
C0470-040-2125-S	**0.856**	**21.74**	**4.96**	**22.06**	**3.91**	**0.68**
C0470-040-2250-S	**0.903**	**22.94**	**4.96**	**22.06**	**3.68**	**0.64**
C0470-040-2375-S	**0.951**	**24.15**	**4.96**	**22.06**	**3.48**	**0.61**
C0470-040-2500-S	**0.998**	**25.35**	**4.96**	**22.06**	**3.30**	**0.58**
C0470-040-2625-S	**1.046**	**26.56**	**4.96**	**22.06**	**3.14**	**0.55**
C0470-040-2750-S	**1.093**	**27.76**	**4.96**	**22.06**	**2.99**	**0.52**
C0470-040-2875-S	**1.140**	**28.97**	**4.96**	**22.06**	**2.86**	**0.50**
C0470-040-3000-S	**1.188**	**30.17**	**4.96**	**22.06**	**2.74**	**0.48**
C0470-040-3250-S	**1.283**	**32.58**	**4.96**	**22.06**	**2.52**	**0.44**
C0470-040-3500-S	**1.377**	**34.99**	**4.96**	**22.06**	**2.34**	**0.41**
C0470-040-3750-S	**1.472**	**37.40**	**4.96**	**22.06**	**2.18**	**0.38**
C0470-040-4000-S	**1.567**	**39.81**	**4.96**	**22.06**	**2.04**	**0.36**
C0470-040-4250-S	**1.662**	**42.21**	**4.96**	**22.06**	**1.92**	**0.34**
C0470-040-4500-S	**1.757**	**44.62**	**4.96**	**22.06**	**1.81**	**0.32**
C0470-040-4750-S	**1.852**	**47.03**	**4.96**	**22.06**	**1.71**	**0.30**
C0470-040-5000-S	**1.947**	**49.44**	**4.96**	**22.06**	**1.62**	**0.28**
C0470-040-5250-S	**2.041**	**51.85**	**4.96**	**22.06**	**1.55**	**0.27**
C0470-040-5500-S	**2.136**	**54.26**	**4.96**	**22.06**	**1.47**	**0.26**
C0470-040-5750-S	**2.231**	**56.67**	**4.96**	**22.06**	**1.41**	**0.25**
C0470-040-6000-S	**2.326**	**59.08**	**4.96**	**22.06**	**1.35**	**0.24**
C0470-040-6250-S	**2.421**	**61.49**	**4.96**	**22.06**	**1.30**	**0.23**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-040-6500-M	0.470	11.94	0.040	1.02	6.500	165.10	2.142	54.42	1.442	36.63	6.24	27.75	1.43	0.25
C0470-040-6750-M	0.470	11.94	0.040	1.02	6.750	171.45	2.223	56.46	1.495	37.97	6.24	27.75	1.38	0.24
C0470-040-7000-M	0.470	11.94	0.040	1.02	7.000	177.80	2.303	58.50	1.548	39.32	6.24	27.75	1.33	0.23
C0470-040-7500-M	0.470	11.94	0.040	1.02	7.500	190.50	2.464	62.58	1.654	42.00	6.24	27.75	1.24	0.22
C0470-040-8000-M	0.470	11.94	0.040	1.02	8.000	203.20	2.624	66.66	1.759	44.69	6.24	27.75	1.16	0.20
C0470-040-8500-M	0.470	11.94	0.040	1.02	8.500	215.90	2.785	70.74	1.865	47.38	6.24	27.75	1.09	0.19
C0470-042-0875-M	0.470	11.94	0.042	1.07	0.875	22.23	0.352	8.93	0.272	6.92	7.15	31.79	13.66	2.39
C0470-042-0938-M	0.470	11.94	0.042	1.07	0.938	23.81	0.373	9.47	0.287	7.29	7.15	31.79	12.66	2.22
C0470-042-1000-M	0.470	11.94	0.042	1.07	1.000	25.40	0.394	10.01	0.301	7.66	7.15	31.79	11.80	2.06
C0470-042-1125-M	0.470	11.94	0.042	1.07	1.125	28.58	0.436	11.08	0.331	8.40	7.15	31.79	10.38	1.82
C0470-042-1250-M	0.470	11.94	0.042	1.07	1.250	31.75	0.479	12.16	0.360	9.14	7.15	31.79	9.27	1.62
C0470-042-1375-M	0.470	11.94	0.042	1.07	1.375	34.93	0.521	13.23	0.389	9.88	7.15	31.79	8.37	1.46
C0470-042-1500-M	0.470	11.94	0.042	1.07	1.500	38.10	0.563	14.31	0.418	10.62	7.15	31.79	7.63	1.34
C0470-042-1625-M	0.470	11.94	0.042	1.07	1.625	41.28	0.606	15.38	0.447	11.35	7.15	31.79	7.01	1.23
C0470-042-1750-M	0.470	11.94	0.042	1.07	1.750	44.45	0.648	16.46	0.476	12.09	7.15	31.79	6.49	1.14
C0470-042-1875-M	0.470	11.94	0.042	1.07	1.875	47.63	0.690	17.53	0.505	12.83	7.15	31.79	6.03	1.06
C0470-042-2000-M	0.470	11.94	0.042	1.07	2.000	50.80	0.733	18.61	0.534	13.57	7.15	31.79	5.64	0.99
C0470-042-2125-M	0.470	11.94	0.042	1.07	2.125	53.98	0.775	19.68	0.563	14.31	7.15	31.79	5.29	0.93
C0470-042-2250-M	0.470	11.94	0.042	1.07	2.250	57.15	0.817	20.76	0.593	15.05	7.15	31.79	4.99	0.87
C0470-042-2375-M	0.470	11.94	0.042	1.07	2.375	60.33	0.859	21.83	0.622	15.79	7.15	31.79	4.72	0.83
C0470-042-2500-M	0.470	11.94	0.042	1.07	2.500	63.50	0.902	22.91	0.651	16.53	7.15	31.79	4.47	0.78
C0470-042-2625-M	0.470	11.94	0.042	1.07	2.625	66.68	0.944	23.98	0.680	17.27	7.15	31.79	4.25	0.74
C0470-042-2750-M	0.470	11.94	0.042	1.07	2.750	69.85	0.986	25.06	0.709	18.01	7.15	31.79	4.05	0.71
C0470-042-2875-M	0.470	11.94	0.042	1.07	2.875	73.03	1.029	26.13	0.738	18.75	7.15	31.79	3.87	0.68
C0470-042-3000-M	0.470	11.94	0.042	1.07	3.000	76.20	1.071	27.20	0.767	19.49	7.15	31.79	3.71	0.65
C0470-042-3250-M	0.470	11.94	0.042	1.07	3.250	82.55	1.156	29.35	0.825	20.97	7.15	31.79	3.41	0.60
C0470-042-3500-M	0.470	11.94	0.042	1.07	3.500	88.90	1.240	31.50	0.884	22.44	7.15	31.79	3.16	0.55
C0470-042-3750-M	0.470	11.94	0.042	1.07	3.750	95.25	1.325	33.65	0.942	23.92	7.15	31.79	2.95	0.52
C0470-042-4000-M	0.470	11.94	0.042	1.07	4.000	101.60	1.410	35.80	1.000	25.40	7.15	31.79	2.76	0.48
C0470-042-4250-M	0.470	11.94	0.042	1.07	4.250	107.95	1.494	37.95	1.058	26.88	7.15	31.79	2.59	0.45
C0470-042-4500-M	0.470	11.94	0.042	1.07	4.500	114.30	1.579	40.10	1.116	28.36	7.15	31.79	2.45	0.43
C0470-042-4750-M	0.470	11.94	0.042	1.07	4.750	120.65	1.663	42.25	1.175	29.84	7.15	31.79	2.32	0.41
C0470-042-5000-M	0.470	11.94	0.042	1.07	5.000	127.00	1.748	44.40	1.233	31.32	7.15	31.79	2.20	0.38
C0470-042-5250-M	0.470	11.94	0.042	1.07	5.250	133.35	1.833	46.55	1.291	32.79	7.15	31.79	2.09	0.37
C0470-042-5500-M	0.470	11.94	0.042	1.07	5.500	139.70	1.917	48.70	1.349	34.27	7.15	31.79	2.00	0.35
C0470-042-5750-M	0.470	11.94	0.042	1.07	5.750	146.05	2.002	50.85	1.408	35.75	7.15	31.79	1.91	0.33
C0470-042-6000-M	0.470	11.94	0.042	1.07	6.000	152.40	2.087	53.00	1.466	37.23	7.15	31.79	1.83	0.32
C0470-042-6250-M	0.470	11.94	0.042	1.07	6.250	158.75	2.171	55.15	1.524	38.71	7.15	31.79	1.75	0.31
C0470-042-6500-M	0.470	11.94	0.042	1.07	6.500	165.10	2.256	57.30	1.582	40.19	7.15	31.79	1.68	0.29
C0470-042-6750-M	0.470	11.94	0.042	1.07	6.750	171.45	2.340	59.45	1.640	41.67	7.15	31.79	1.62	0.28
C0470-042-7000-M	0.470	11.94	0.042	1.07	7.000	177.80	2.425	61.60	1.699	43.14	7.15	31.79	1.56	0.27
C0470-042-7500-M	0.470	11.94	0.042	1.07	7.500	190.50	2.594	65.90	1.815	46.10	7.15	31.79	1.46	0.25
C0470-042-8000-M	0.470	11.94	0.042	1.07	8.000	203.20	2.764	70.19	1.931	49.06	7.15	31.79	1.37	0.24
C0470-042-8500-M	0.470	11.94	0.042	1.07	8.500	215.90	2.933	74.49	2.048	52.02	7.15	31.79	1.28	0.22
C0470-045-0813-M	0.470	11.94	0.045	1.14	0.813	20.64	0.354	8.99	0.287	7.28	8.66	38.53	18.89	3.31
C0470-045-0875-M	0.470	11.94	0.045	1.14	0.875	22.23	0.377	9.57	0.303	7.70	8.66	38.53	17.39	3.04
C0470-045-0938-M	0.470	11.94	0.045	1.14	0.938	23.81	0.400	10.15	0.320	8.12	8.66	38.53	16.10	2.82
C0470-045-1000-M	0.470	11.94	0.045	1.14	1.000	25.40	0.422	10.73	0.336	8.55	8.66	38.53	15.00	2.62
C0470-045-1125-M	0.470	11.94	0.045	1.14	1.125	28.58	0.468	11.89	0.370	9.39	8.66	38.53	13.19	2.31
C0470-045-1250-M	0.470	11.94	0.045	1.14	1.250	31.75	0.514	13.05	0.403	10.23	8.66	38.53	11.77	2.06
C0470-045-1375-M	0.470	11.94	0.045	1.14	1.375	34.93	0.559	14.21	0.436	11.08	8.66	38.53	10.62	1.86
C0470-045-1500-M	0.470	11.94	0.045	1.14	1.500	38.10	0.605	15.37	0.469	11.92	8.66	38.53	9.68	1.69
C0470-045-1625-M	0.470	11.94	0.045	1.14	1.625	41.28	0.651	16.53	0.503	12.77	8.66	38.53	8.89	1.56
C0470-045-1750-M	0.470	11.94	0.045	1.14	1.750	44.45	0.696	17.69	0.536	13.61	8.66	38.53	8.22	1.44
C0470-045-1875-M	0.470	11.94	0.045	1.14	1.875	47.63	0.742	18.84	0.569	14.45	8.66	38.53	7.65	1.34
C0470-045-2000-M	0.470	11.94	0.045	1.14	2.000	50.80	0.788	20.00	0.602	15.30	8.66	38.53	7.15	1.25
C0470-045-2125-M	0.470	11.94	0.045	1.14	2.125	53.98	0.833	21.16	0.636	16.14	8.66	38.53	6.71	1.17
C0470-045-2250-M	0.470	11.94	0.045	1.14	2.250	57.15	0.879	22.32	0.669	16.99	8.66	38.53	6.32	1.11
C0470-045-2375-M	0.470	11.94	0.045	1.14	2.375	60.33	0.925	23.48	0.702	17.83	8.66	38.53	5.97	1.05
C0470-045-2500-M	0.470	11.94	0.045	1.14	2.500	63.50	0.970	24.64	0.735	18.67	8.66	38.53	5.66	0.99
C0470-045-2625-M	0.470	11.94	0.045	1.14	2.625	66.68	1.016	25.80	0.768	19.52	8.66	38.53	5.38	0.94
C0470-045-2750-M	0.470	11.94	0.045	1.14	2.750	69.85	1.061	26.96	0.802	20.36	8.66	38.53	5.13	0.90
C0470-045-2875-M	0.470	11.94	0.045	1.14	2.875	73.03	1.107	28.12	0.835	21.21	8.66	38.53	4.90	0.86
C0470-045-3000-M	0.470	11.94	0.045	1.14	3.000	76.20	1.153	29.28	0.868	22.05	8.66	38.53	4.69	0.82

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-040-6500-S	2.516	63.90	4.96	22.06	1.25	0.22
C0470-040-6750-S	2.610	66.31	4.96	22.06	1.20	0.21
C0470-040-7000-S	2.705	68.71	4.96	22.06	1.16	0.20
C0470-040-7500-S	2.895	73.53	4.96	22.06	1.08	0.19
C0470-040-8000-S	3.085	78.35	4.96	22.06	1.01	0.18
C0470-040-8500-S	3.274	83.17	4.96	22.06	0.95	0.17
C0470-042-0875-S	0.396	10.07	5.69	25.29	11.88	2.08
C0470-042-0938-S	0.421	10.69	5.69	25.29	11.01	1.93
C0470-042-1000-S	0.446	11.32	5.69	25.29	10.26	1.80
C0470-042-1125-S	0.495	12.57	5.69	25.29	9.03	1.58
C0470-042-1250-S	0.544	13.83	5.69	25.29	8.06	1.41
C0470-042-1375-S	0.594	15.08	5.69	25.29	7.28	1.27
C0470-042-1500-S	0.643	16.34	5.69	25.29	6.64	1.16
C0470-042-1625-S	0.692	17.59	5.69	25.29	6.10	1.07
C0470-042-1750-S	0.742	18.84	5.69	25.29	5.64	0.99
C0470-042-1875-S	0.791	20.10	5.69	25.29	5.25	0.92
C0470-042-2000-S	0.841	21.35	5.69	25.29	4.90	0.86
C0470-042-2125-S	0.890	22.60	5.69	25.29	4.60	0.81
C0470-042-2250-S	0.939	23.86	5.69	25.29	4.34	0.76
C0470-042-2375-S	0.989	25.11	5.69	25.29	4.10	0.72
C0470-042-2500-S	1.038	26.37	5.69	25.29	3.89	0.68
C0470-042-2625-S	1.087	27.62	5.69	25.29	3.70	0.65
C0470-042-2750-S	1.137	28.87	5.69	25.29	3.52	0.62
C0470-042-2875-S	1.186	30.13	5.69	25.29	3.37	0.59
C0470-042-3000-S	1.235	31.38	5.69	25.29	3.22	0.56
C0470-042-3250-S	1.334	33.89	5.69	25.29	2.97	0.52
C0470-042-3500-S	1.433	36.39	5.69	25.29	2.75	0.48
C0470-042-3750-S	1.532	38.90	5.69	25.29	2.56	0.45
C0470-042-4000-S	1.630	41.41	5.69	25.29	2.40	0.42
C0470-042-4250-S	1.729	43.92	5.69	25.29	2.26	0.39
C0470-042-4500-S	1.828	46.42	5.69	25.29	2.13	0.37
C0470-042-4750-S	1.926	48.93	5.69	25.29	2.01	0.35
C0470-042-5000-S	2.025	51.44	5.69	25.29	1.91	0.33
C0470-042-5250-S	2.124	53.95	5.69	25.29	1.82	0.32
C0470-042-5500-S	2.223	56.45	5.69	25.29	1.74	0.30
C0470-042-5750-S	2.321	58.96	5.69	25.29	1.66	0.29
C0470-042-6000-S	2.420	61.47	5.69	25.29	1.59	0.28
C0470-042-6250-S	2.519	63.98	5.69	25.29	1.52	0.27
C0470-042-6500-S	2.617	66.48	5.69	25.29	1.46	0.26
C0470-042-6750-S	2.716	68.99	5.69	25.29	1.41	0.25
C0470-042-7000-S	2.815	71.50	5.69	25.29	1.36	0.24
C0470-042-7500-S	3.012	76.51	5.69	25.29	1.27	0.22
C0470-042-8000-S	3.210	81.53	5.69	25.29	1.19	0.21
C0470-042-8500-S	3.407	86.54	5.69	25.29	1.12	0.20
C0470-045-0813-S	0.393	9.98	6.89	30.66	16.43	2.87
C0470-045-0875-S	0.419	10.64	6.89	30.66	15.12	2.65
C0470-045-0938-S	0.445	11.31	6.89	30.66	14.00	2.45
C0470-045-1000-S	0.471	11.97	6.89	30.66	13.04	2.28
C0470-045-1125-S	0.524	13.30	6.89	30.66	11.47	2.01
C0470-045-1250-S	0.576	14.63	6.89	30.66	10.23	1.79
C0470-045-1375-S	0.629	15.96	6.89	30.66	9.24	1.62
C0470-045-1500-S	0.681	17.30	6.89	30.66	8.42	1.47
C0470-045-1625-S	0.733	18.63	6.89	30.66	7.73	1.35
C0470-045-1750-S	0.786	19.96	6.89	30.66	7.15	1.25
C0470-045-1875-S	0.838	21.29	6.89	30.66	6.65	1.16
C0470-045-2000-S	0.890	22.62	6.89	30.66	6.21	1.09
C0470-045-2125-S	0.943	23.95	6.89	30.66	5.83	1.02
C0470-045-2250-S	0.995	25.28	6.89	30.66	5.49	0.96
C0470-045-2375-S	1.048	26.61	6.89	30.66	5.19	0.91
C0470-045-2500-S	1.100	27.94	6.89	30.66	4.92	0.86
C0470-045-2625-S	1.152	29.27	6.89	30.66	4.68	0.82
C0470-045-2750-S	1.205	30.60	6.89	30.66	4.46	0.78
C0470-045-2875-S	1.257	31.93	6.89	30.66	4.26	0.75
C0470-045-3000-S	1.310	33.26	6.89	30.66	4.08	0.71

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-045-3250-M	0.470	11.94	0.045	1.14	3.250	82.55	1.244	31.60	0.935	23.74	8.66	38.53	4.32	0.76
C0470-045-3500-M	0.470	11.94	0.045	1.14	3.500	88.90	1.335	33.92	1.001	25.43	8.66	38.53	4.00	0.70
C0470-045-3750-M	0.470	11.94	0.045	1.14	3.750	95.25	1.427	36.24	1.068	27.12	8.66	38.53	3.73	0.65
C0470-045-4000-M	0.470	11.94	0.045	1.14	4.000	101.60	1.518	38.56	1.134	28.80	8.66	38.53	3.49	0.61
C0470-045-4250-M	0.470	11.94	0.045	1.14	4.250	107.95	1.609	40.88	1.200	30.49	8.66	38.53	3.28	0.57
C0470-045-4500-M	0.470	11.94	0.045	1.14	4.500	114.30	1.701	43.20	1.267	32.18	8.66	38.53	3.10	0.54
C0470-045-4750-M	0.470	11.94	0.045	1.14	4.750	120.65	1.792	45.52	1.333	33.87	8.66	38.53	2.93	0.51
C0470-045-5000-M	0.470	11.94	0.045	1.14	5.000	127.00	1.883	47.83	1.400	35.56	8.66	38.53	2.78	0.49
C0470-045-5250-M	0.470	11.94	0.045	1.14	5.250	133.35	1.975	50.15	1.466	37.25	8.66	38.53	2.65	0.46
C0470-045-5500-M	0.470	11.94	0.045	1.14	5.500	139.70	2.066	52.47	1.533	38.93	8.66	38.53	2.52	0.44
C0470-045-5750-M	0.470	11.94	0.045	1.14	5.750	146.05	2.157	54.79	1.599	40.62	8.66	38.53	2.41	0.42
C0470-045-6000-M	0.470	11.94	0.045	1.14	6.000	152.40	2.248	57.11	1.666	42.31	8.66	38.53	2.31	0.40
C0470-045-6250-M	0.470	11.94	0.045	1.14	6.250	158.75	2.340	59.43	1.732	44.00	8.66	38.53	2.22	0.39
C0470-045-6500-M	0.470	11.94	0.045	1.14	6.500	165.10	2.431	61.75	1.799	45.69	8.66	38.53	2.13	0.37
C0470-045-6750-M	0.470	11.94	0.045	1.14	6.750	171.45	2.522	64.07	1.865	47.37	8.66	38.53	2.05	0.36
C0470-045-7000-M	0.470	11.94	0.045	1.14	7.000	177.80	2.614	66.39	1.932	49.06	8.66	38.53	1.98	0.35
C0470-045-7500-M	0.470	11.94	0.045	1.14	7.500	190.50	2.796	71.03	2.065	52.44	8.66	38.53	1.84	0.32
C0470-045-8000-M	0.470	11.94	0.045	1.14	8.000	203.20	2.979	75.66	2.197	55.82	8.66	38.53	1.73	0.30
C0470-045-8500-M	0.470	11.94	0.045	1.14	8.500	215.90	3.162	80.30	2.330	59.19	8.66	38.53	1.62	0.28
C0470-047-0813-M	0.470	11.94	0.047	1.19	0.813	20.64	0.370	9.39	0.306	7.77	9.78	43.49	22.07	3.86
C0470-047-0875-M	0.470	11.94	0.047	1.19	0.875	22.23	0.393	9.99	0.324	8.23	9.78	43.49	20.30	3.55
C0470-047-0938-M	0.470	11.94	0.047	1.19	0.938	23.81	0.417	10.60	0.342	8.69	9.78	43.49	18.80	3.29
C0470-047-1000-M	0.470	11.94	0.047	1.19	1.000	25.40	0.441	11.21	0.360	9.14	9.78	43.49	17.50	3.06
C0470-047-1125-M	0.470	11.94	0.047	1.19	1.125	28.58	0.489	12.43	0.396	10.06	9.78	43.49	15.38	2.69
C0470-047-1250-M	0.470	11.94	0.047	1.19	1.250	31.75	0.537	13.65	0.432	10.98	9.78	43.49	13.72	2.40
C0470-047-1375-M	0.470	11.94	0.047	1.19	1.375	34.93	0.585	14.87	0.468	11.89	9.78	43.49	12.38	2.17
C0470-047-1500-M	0.470	11.94	0.047	1.19	1.500	38.10	0.633	16.08	0.504	12.81	9.78	43.49	11.28	1.97
C0470-047-1625-M	0.470	11.94	0.047	1.19	1.625	41.28	0.681	17.30	0.540	13.72	9.78	43.49	10.36	1.81
C0470-047-1750-M	0.470	11.94	0.047	1.19	1.750	44.45	0.729	18.52	0.576	14.64	9.78	43.49	9.58	1.68
C0470-047-1875-M	0.470	11.94	0.047	1.19	1.875	47.63	0.777	19.74	0.612	15.55	9.78	43.49	8.90	1.56
C0470-047-2000-M	0.470	11.94	0.047	1.19	2.000	50.80	0.825	20.95	0.648	16.47	9.78	43.49	8.32	1.46
C0470-047-2125-M	0.470	11.94	0.047	1.19	2.125	53.98	0.873	22.17	0.684	17.39	9.78	43.49	7.81	1.37
C0470-047-2250-M	0.470	11.94	0.047	1.19	2.250	57.15	0.921	23.39	0.721	18.30	9.78	43.49	7.36	1.29
C0470-047-2375-M	0.470	11.94	0.047	1.19	2.375	60.33	0.969	24.61	0.757	19.22	9.78	43.49	6.95	1.22
C0470-047-2500-M	0.470	11.94	0.047	1.19	2.500	63.50	1.017	25.82	0.793	20.13	9.78	43.49	6.59	1.15
C0470-047-2625-M	0.470	11.94	0.047	1.19	2.625	66.68	1.065	27.04	0.829	21.05	9.78	43.49	6.27	1.10
C0470-047-2750-M	0.470	11.94	0.047	1.19	2.750	69.85	1.113	28.26	0.865	21.96	9.78	43.49	5.97	1.04
C0470-047-2875-M	0.470	11.94	0.047	1.19	2.875	73.03	1.160	29.48	0.901	22.88	9.78	43.49	5.70	1.00
C0470-047-3000-M	0.470	11.94	0.047	1.19	3.000	76.20	1.208	30.69	0.937	23.80	9.78	43.49	5.46	0.95
C0470-047-3250-M	0.470	11.94	0.047	1.19	3.250	82.55	1.304	33.13	1.009	25.63	9.78	43.49	5.03	0.88
C0470-047-3500-M	0.470	11.94	0.047	1.19	3.500	88.90	1.400	35.56	1.081	27.46	9.78	43.49	4.66	0.81
C0470-047-3750-M	0.470	11.94	0.047	1.19	3.750	95.25	1.496	38.00	1.153	29.29	9.78	43.49	4.34	0.76
C0470-047-4000-M	0.470	11.94	0.047	1.19	4.000	101.60	1.592	40.43	1.225	31.12	9.78	43.49	4.06	0.71
C0470-047-4250-M	0.470	11.94	0.047	1.19	4.250	107.95	1.688	42.87	1.297	32.95	9.78	43.49	3.82	0.67
C0470-047-4500-M	0.470	11.94	0.047	1.19	4.500	114.30	1.784	45.30	1.369	34.78	9.78	43.49	3.60	0.63
C0470-047-4750-M	0.470	11.94	0.047	1.19	4.750	120.65	1.879	47.74	1.442	36.62	9.78	43.49	3.41	0.60
C0470-047-5000-M	0.470	11.94	0.047	1.19	5.000	127.00	1.975	50.17	1.514	38.45	9.78	43.49	3.23	0.57
C0470-047-5250-M	0.470	11.94	0.047	1.19	5.250	133.35	2.071	52.61	1.586	40.28	9.78	43.49	3.08	0.54
C0470-047-5500-M	0.470	11.94	0.047	1.19	5.500	139.70	2.167	55.04	1.658	42.11	9.78	43.49	2.93	0.51
C0470-047-5750-M	0.470	11.94	0.047	1.19	5.750	146.05	2.263	57.48	1.730	43.94	9.78	43.49	2.80	0.49
C0470-047-6000-M	0.470	11.94	0.047	1.19	6.000	152.40	2.359	59.91	1.802	45.77	9.78	43.49	2.69	0.47
C0470-047-6250-M	0.470	11.94	0.047	1.19	6.250	158.75	2.455	62.35	1.874	47.60	9.78	43.49	2.58	0.45
C0470-047-6500-M	0.470	11.94	0.047	1.19	6.500	165.10	2.551	64.78	1.946	49.44	9.78	43.49	2.48	0.43
C0470-047-6750-M	0.470	11.94	0.047	1.19	6.750	171.45	2.646	67.22	2.018	51.27	9.78	43.49	2.38	0.42
C0470-047-7000-M	0.470	11.94	0.047	1.19	7.000	177.80	2.742	69.66	2.091	53.10	9.78	43.49	2.30	0.40
C0470-047-7500-M	0.470	11.94	0.047	1.19	7.500	190.50	2.934	74.53	2.235	56.76	9.78	43.49	2.14	0.37
C0470-047-8000-M	0.470	11.94	0.047	1.19	8.000	203.20	3.126	79.40	2.379	60.43	9.78	43.49	2.01	0.35
C0470-049-0813-M	0.470	11.94	0.049	1.25	0.813	20.64	0.385	9.78	0.325	8.26	10.98	48.82	25.69	4.50
C0470-049-0875-M	0.470	11.94	0.049	1.25	0.875	22.23	0.410	10.42	0.345	8.76	10.98	48.82	23.62	4.13
C0470-049-0938-M	0.470	11.94	0.049	1.25	0.938	23.81	0.435	11.06	0.364	9.25	10.98	48.82	21.86	3.83
C0470-049-1000-M	0.470	11.94	0.049	1.25	1.000	25.40	0.461	11.70	0.384	9.75	10.98	48.82	20.35	3.56
C0470-049-1125-M	0.470	11.94	0.049	1.25	1.125	28.58	0.511	12.98	0.423	10.73	10.98	48.82	17.87	3.13
C0470-049-1250-M	0.470	11.94	0.049	1.25	1.250	31.75	0.561	14.25	0.462	11.72	10.98	48.82	15.93	2.79
C0470-049-1375-M	0.470	11.94	0.049	1.25	1.375	34.93	0.611	15.53	0.500	12.71	10.98	48.82	14.37	2.52

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-045-3250-S	1.414	35.92	6.89	30.66	3.76	0.66
C0470-045-3500-S	1.519	38.58	6.89	30.66	3.48	0.61
C0470-045-3750-S	1.624	41.25	6.89	30.66	3.24	0.57
C0470-045-4000-S	1.729	43.91	6.89	30.66	3.04	0.53
C0470-045-4250-S	1.833	46.57	6.89	30.66	2.85	0.50
C0470-045-4500-S	1.938	49.23	6.89	30.66	2.69	0.47
C0470-045-4750-S	2.043	51.89	6.89	30.66	2.55	0.45
C0470-045-5000-S	2.148	54.55	6.89	30.66	2.42	0.42
C0470-045-5250-S	2.252	57.21	6.89	30.66	2.30	0.40
C0470-045-5500-S	2.357	59.87	6.89	30.66	2.19	0.38
C0470-045-5750-S	2.462	62.53	6.89	30.66	2.10	0.37
C0470-045-6000-S	2.567	65.20	6.89	30.66	2.01	0.35
C0470-045-6250-S	2.672	67.86	6.89	30.66	1.93	0.34
C0470-045-6500-S	2.776	70.52	6.89	30.66	1.85	0.32
C0470-045-6750-S	2.881	73.18	6.89	30.66	1.78	0.31
C0470-045-7000-S	2.986	75.84	6.89	30.66	1.72	0.30
C0470-045-7500-S	3.195	81.16	6.89	30.66	1.60	0.28
C0470-045-8000-S	3.405	86.49	6.89	30.66	1.50	0.26
C0470-045-8500-S	3.614	91.81	6.89	30.66	1.41	0.25
C0470-047-0813-S	0.407	10.34	7.78	34.61	19.19	3.36
C0470-047-0875-S	0.434	11.03	7.78	34.61	17.66	3.09
C0470-047-0938-S	0.462	11.72	7.78	34.61	16.35	2.86
C0470-047-1000-S	0.489	12.42	7.78	34.61	15.22	2.66
C0470-047-1125-S	0.543	13.80	7.78	34.61	13.38	2.34
C0470-047-1250-S	0.598	15.18	7.78	34.61	11.93	2.09
C0470-047-1375-S	0.652	16.57	7.78	34.61	10.77	1.88
C0470-047-1500-S	0.707	17.95	7.78	34.61	9.81	1.72
C0470-047-1625-S	0.761	19.33	7.78	34.61	9.01	1.58
C0470-047-1750-S	0.816	20.72	7.78	34.61	8.33	1.46
C0470-047-1875-S	0.870	22.10	7.78	34.61	7.74	1.35
C0470-047-2000-S	0.925	23.48	7.78	34.61	7.24	1.27
C0470-047-2125-S	0.979	24.87	7.78	34.61	6.79	1.19
C0470-047-2250-S	1.033	26.25	7.78	34.61	6.40	1.12
C0470-047-2375-S	1.088	27.63	7.78	34.61	6.05	1.06
C0470-047-2500-S	1.142	29.02	7.78	34.61	5.73	1.00
C0470-047-2625-S	1.197	30.40	7.78	34.61	5.45	0.95
C0470-047-2750-S	1.251	31.78	7.78	34.61	5.19	0.91
C0470-047-2875-S	1.306	33.17	7.78	34.61	4.96	0.87
C0470-047-3000-S	1.360	34.55	7.78	34.61	4.75	0.83
C0470-047-3250-S	1.469	37.32	7.78	34.61	4.37	0.76
C0470-047-3500-S	1.578	40.09	7.78	34.61	4.05	0.71
C0470-047-3750-S	1.687	42.85	7.78	34.61	3.77	0.66
C0470-047-4000-S	1.796	45.62	7.78	34.61	3.53	0.62
C0470-047-4250-S	1.905	48.39	7.78	34.61	3.32	0.58
C0470-047-4500-S	2.014	51.15	7.78	34.61	3.13	0.55
C0470-047-4750-S	2.123	53.92	7.78	34.61	2.96	0.52
C0470-047-5000-S	2.232	56.69	7.78	34.61	2.81	0.49
C0470-047-5250-S	2.341	59.45	7.78	34.61	2.67	0.47
C0470-047-5500-S	2.450	62.22	7.78	34.61	2.55	0.45
C0470-047-5750-S	2.559	64.99	7.78	34.61	2.44	0.43
C0470-047-6000-S	2.668	67.75	7.78	34.61	2.34	0.41
C0470-047-6250-S	2.776	70.52	7.78	34.61	2.24	0.39
C0470-047-6500-S	2.885	73.29	7.78	34.61	2.15	0.38
C0470-047-6750-S	2.994	76.06	7.78	34.61	2.07	0.36
C0470-047-7000-S	3.103	78.82	7.78	34.61	2.00	0.35
C0470-047-7500-S	3.321	84.36	7.78	34.61	1.86	0.33
C0470-047-8000-S	3.539	89.89	7.78	34.61	1.74	0.31
C0470-049-0813-S	0.421	10.71	8.73	38.85	22.34	3.91
C0470-049-0875-S	0.450	11.42	8.73	38.85	20.54	3.59
C0470-049-0938-S	0.478	12.14	8.73	38.85	19.01	3.33
C0470-049-1000-S	0.506	12.86	8.73	38.85	17.70	3.10
C0470-049-1125-S	0.563	14.30	8.73	38.85	15.54	2.72
C0470-049-1250-S	0.620	15.74	8.73	38.85	13.86	2.42
C0470-049-1375-S	0.676	17.17	8.73	38.85	12.50	2.19

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-049-1500-M	**0.470**	**11.94**	**0.049**	**1.25**	**1.500**	**38.10**	**0.662**	**16.80**	**0.539**	**13.70**	**10.98**	**48.82**	**13.09**	**2.29**
C0470-049-1625-M	**0.470**	**11.94**	**0.049**	**1.25**	**1.625**	**41.28**	**0.712**	**18.08**	**0.578**	**14.69**	**10.98**	**48.82**	**12.02**	**2.10**
C0470-049-1750-M	**0.470**	**11.94**	**0.049**	**1.25**	**1.750**	**44.45**	**0.762**	**19.36**	**0.617**	**15.68**	**10.98**	**48.82**	**11.11**	**1.94**
C0470-049-1875-M	**0.470**	**11.94**	**0.049**	**1.25**	**1.875**	**47.63**	**0.812**	**20.63**	**0.656**	**16.66**	**10.98**	**48.82**	**10.33**	**1.81**
C0470-049-2000-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.000**	**50.80**	**0.863**	**21.91**	**0.695**	**17.65**	**10.98**	**48.82**	**9.65**	**1.69**
C0470-049-2125-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.125**	**53.98**	**0.913**	**23.19**	**0.734**	**18.64**	**10.98**	**48.82**	**9.06**	**1.58**
C0470-049-2250-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.250**	**57.15**	**0.963**	**24.46**	**0.773**	**19.63**	**10.98**	**48.82**	**8.53**	**1.49**
C0470-049-2375-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.375**	**60.33**	**1.013**	**25.74**	**0.812**	**20.62**	**10.98**	**48.82**	**8.06**	**1.41**
C0470-049-2500-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.500**	**63.50**	**1.064**	**27.02**	**0.851**	**21.61**	**10.98**	**48.82**	**7.64**	**1.34**
C0470-049-2625-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.625**	**66.68**	**1.114**	**28.29**	**0.890**	**22.59**	**10.98**	**48.82**	**7.26**	**1.27**
C0470-049-2750-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.750**	**69.85**	**1.164**	**29.57**	**0.928**	**23.58**	**10.98**	**48.82**	**6.92**	**1.21**
C0470-049-2875-M	**0.470**	**11.94**	**0.049**	**1.25**	**2.875**	**73.03**	**1.214**	**30.84**	**0.967**	**24.57**	**10.98**	**48.82**	**6.61**	**1.16**
C0470-049-3000-M	**0.470**	**11.94**	**0.049**	**1.25**	**3.000**	**76.20**	**1.265**	**32.12**	**1.006**	**25.56**	**10.98**	**48.82**	**6.33**	**1.11**
C0470-049-3250-M	**0.470**	**11.94**	**0.049**	**1.25**	**3.250**	**82.55**	**1.365**	**34.67**	**1.084**	**27.54**	**10.98**	**48.82**	**5.82**	**1.02**
C0470-049-3500-M	**0.470**	**11.94**	**0.049**	**1.25**	**3.500**	**88.90**	**1.466**	**37.23**	**1.162**	**29.51**	**10.98**	**48.82**	**5.40**	**0.94**
C0470-049-3750-M	**0.470**	**11.94**	**0.049**	**1.25**	**3.750**	**95.25**	**1.566**	**39.78**	**1.240**	**31.49**	**10.98**	**48.82**	**5.03**	**0.88**
C0470-049-4000-M	**0.470**	**11.94**	**0.049**	**1.25**	**4.000**	**101.60**	**1.667**	**42.33**	**1.318**	**33.47**	**10.98**	**48.82**	**4.70**	**0.82**
C0470-049-4250-M	**0.470**	**11.94**	**0.049**	**1.25**	**4.250**	**107.95**	**1.767**	**44.88**	**1.395**	**35.44**	**10.98**	**48.82**	**4.42**	**0.77**
C0470-049-4500-M	**0.470**	**11.94**	**0.049**	**1.25**	**4.500**	**114.30**	**1.868**	**47.44**	**1.473**	**37.42**	**10.98**	**48.82**	**4.17**	**0.73**
C0470-049-4750-M	**0.470**	**11.94**	**0.049**	**1.25**	**4.750**	**120.65**	**1.968**	**49.99**	**1.551**	**39.40**	**10.98**	**48.82**	**3.95**	**0.69**
C0470-049-5000-M	**0.470**	**11.94**	**0.049**	**1.25**	**5.000**	**127.00**	**2.069**	**52.54**	**1.629**	**41.37**	**10.98**	**48.82**	**3.74**	**0.66**
C0470-049-5250-M	**0.470**	**11.94**	**0.049**	**1.25**	**5.250**	**133.35**	**2.169**	**55.10**	**1.707**	**43.35**	**10.98**	**48.82**	**3.56**	**0.62**
C0470-049-5500-M	**0.470**	**11.94**	**0.049**	**1.25**	**5.500**	**139.70**	**2.270**	**57.65**	**1.785**	**45.33**	**10.98**	**48.82**	**3.40**	**0.59**
C0470-049-5750-M	**0.470**	**11.94**	**0.049**	**1.25**	**5.750**	**146.05**	**2.370**	**60.20**	**1.862**	**47.30**	**10.98**	**48.82**	**3.25**	**0.57**
C0470-049-6000-M	**0.470**	**11.94**	**0.049**	**1.25**	**6.000**	**152.40**	**2.471**	**62.75**	**1.940**	**49.28**	**10.98**	**48.82**	**3.11**	**0.54**
C0470-049-6250-M	**0.470**	**11.94**	**0.049**	**1.25**	**6.250**	**158.75**	**2.571**	**65.31**	**2.018**	**51.26**	**10.98**	**48.82**	**2.98**	**0.52**
C0470-049-6500-M	**0.470**	**11.94**	**0.049**	**1.25**	**6.500**	**165.10**	**2.672**	**67.86**	**2.096**	**53.23**	**10.98**	**48.82**	**2.87**	**0.50**
C0470-049-6750-M	**0.470**	**11.94**	**0.049**	**1.25**	**6.750**	**171.45**	**2.772**	**70.41**	**2.174**	**55.21**	**10.98**	**48.82**	**2.76**	**0.48**
C0470-049-7000-M	**0.470**	**11.94**	**0.049**	**1.25**	**7.000**	**177.80**	**2.873**	**72.97**	**2.251**	**57.19**	**10.98**	**48.82**	**2.66**	**0.47**
C0470-049-7500-M	**0.470**	**11.94**	**0.049**	**1.25**	**7.500**	**190.50**	**3.074**	**78.07**	**2.407**	**61.14**	**10.98**	**48.82**	**2.48**	**0.43**
C0470-049-8000-M	**0.470**	**11.94**	**0.049**	**1.25**	**8.000**	**203.20**	**3.275**	**83.18**	**2.563**	**65.10**	**10.98**	**48.82**	**2.32**	**0.41**
C0470-051-0750-M	**0.470**	**11.94**	**0.051**	**1.30**	**0.750**	**19.05**	**0.375**	**9.52**	**0.324**	**8.22**	**12.26**	**54.55**	**32.67**	**5.72**
C0470-051-0813-M	**0.470**	**11.94**	**0.051**	**1.30**	**0.813**	**20.64**	**0.401**	**10.18**	**0.345**	**8.76**	**12.26**	**54.55**	**29.80**	**5.21**
C0470-051-0875-M	**0.470**	**11.94**	**0.051**	**1.30**	**0.875**	**22.23**	**0.427**	**10.85**	**0.366**	**9.29**	**12.26**	**54.55**	**27.39**	**4.79**
C0470-051-0938-M	**0.470**	**11.94**	**0.051**	**1.30**	**0.938**	**23.81**	**0.454**	**11.52**	**0.386**	**9.82**	**12.26**	**54.55**	**25.34**	**4.43**
C0470-051-1000-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.000**	**25.40**	**0.480**	**12.19**	**0.407**	**10.35**	**12.26**	**54.55**	**23.58**	**4.13**
C0470-051-1125-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.125**	**28.58**	**0.532**	**13.52**	**0.449**	**11.41**	**12.26**	**54.55**	**20.69**	**3.62**
C0470-051-1250-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.250**	**31.75**	**0.585**	**14.86**	**0.491**	**12.47**	**12.26**	**54.55**	**18.44**	**3.23**
C0470-051-1375-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.375**	**34.93**	**0.638**	**16.19**	**0.533**	**13.53**	**12.26**	**54.55**	**16.63**	**2.91**
C0470-051-1500-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.500**	**38.10**	**0.690**	**17.53**	**0.575**	**14.59**	**12.26**	**54.55**	**15.14**	**2.65**
C0470-051-1625-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.625**	**41.28**	**0.743**	**18.87**	**0.616**	**15.66**	**12.26**	**54.55**	**13.90**	**2.43**
C0470-051-1750-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.750**	**44.45**	**0.795**	**20.20**	**0.658**	**16.72**	**12.26**	**54.55**	**12.85**	**2.25**
C0470-051-1875-M	**0.470**	**11.94**	**0.051**	**1.30**	**1.875**	**47.63**	**0.848**	**21.54**	**0.700**	**17.78**	**12.26**	**54.55**	**11.94**	**2.09**
C0470-051-2000-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.000**	**50.80**	**0.901**	**22.87**	**0.742**	**18.84**	**12.26**	**54.55**	**11.15**	**1.95**
C0470-051-2125-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.125**	**53.98**	**0.953**	**24.21**	**0.784**	**19.90**	**12.26**	**54.55**	**10.47**	**1.83**
C0470-051-2250-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.250**	**57.15**	**1.006**	**25.54**	**0.825**	**20.97**	**12.26**	**54.55**	**9.86**	**1.72**
C0470-051-2375-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.375**	**60.33**	**1.058**	**26.88**	**0.867**	**22.03**	**12.26**	**54.55**	**9.31**	**1.63**
C0470-051-2500-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.500**	**63.50**	**1.111**	**28.22**	**0.909**	**23.09**	**12.26**	**54.55**	**8.83**	**1.54**
C0470-051-2625-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.625**	**66.68**	**1.163**	**29.55**	**0.951**	**24.15**	**12.26**	**54.55**	**8.39**	**1.47**
C0470-051-2750-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.750**	**69.85**	**1.216**	**30.89**	**0.993**	**25.21**	**12.26**	**54.55**	**8.00**	**1.40**
C0470-051-2875-M	**0.470**	**11.94**	**0.051**	**1.30**	**2.875**	**73.03**	**1.269**	**32.22**	**1.034**	**26.27**	**12.26**	**54.55**	**7.63**	**1.34**
C0470-051-3000-M	**0.470**	**11.94**	**0.051**	**1.30**	**3.000**	**76.20**	**1.321**	**33.56**	**1.076**	**27.34**	**12.26**	**54.55**	**7.31**	**1.28**
C0470-051-3250-M	**0.470**	**11.94**	**0.051**	**1.30**	**3.250**	**82.55**	**1.426**	**36.23**	**1.160**	**29.46**	**12.26**	**54.55**	**6.73**	**1.18**
C0470-051-3500-M	**0.470**	**11.94**	**0.051**	**1.30**	**3.500**	**88.90**	**1.532**	**38.90**	**1.243**	**31.58**	**12.26**	**54.55**	**6.23**	**1.09**
C0470-051-3750-M	**0.470**	**11.94**	**0.051**	**1.30**	**3.750**	**95.25**	**1.637**	**41.57**	**1.327**	**33.71**	**12.26**	**54.55**	**5.80**	**1.02**
C0470-051-4000-M	**0.470**	**11.94**	**0.051**	**1.30**	**4.000**	**101.60**	**1.742**	**44.25**	**1.411**	**35.83**	**12.26**	**54.55**	**5.43**	**0.95**
C0470-051-4250-M	**0.470**	**11.94**	**0.051**	**1.30**	**4.250**	**107.95**	**1.847**	**46.92**	**1.494**	**37.95**	**12.26**	**54.55**	**5.10**	**0.89**
C0470-051-4500-M	**0.470**	**11.94**	**0.051**	**1.30**	**4.500**	**114.30**	**1.952**	**49.59**	**1.578**	**40.08**	**12.26**	**54.55**	**4.81**	**0.84**
C0470-051-4750-M	**0.470**	**11.94**	**0.051**	**1.30**	**4.750**	**120.65**	**2.057**	**52.26**	**1.661**	**42.20**	**12.26**	**54.55**	**4.56**	**0.80**
C0470-051-5000-M	**0.470**	**11.94**	**0.051**	**1.30**	**5.000**	**127.00**	**2.163**	**54.93**	**1.745**	**44.32**	**12.26**	**54.55**	**4.32**	**0.76**
C0470-051-5250-M	**0.470**	**11.94**	**0.051**	**1.30**	**5.250**	**133.35**	**2.268**	**57.60**	**1.829**	**46.45**	**12.26**	**54.55**	**4.11**	**0.72**
C0470-051-5500-M	**0.470**	**11.94**	**0.051**	**1.30**	**5.500**	**139.70**	**2.373**	**60.27**	**1.912**	**48.57**	**12.26**	**54.55**	**3.92**	**0.69**
C0470-051-5750-M	**0.470**	**11.94**	**0.051**	**1.30**	**5.750**	**146.05**	**2.478**	**62.95**	**1.996**	**50.69**	**12.26**	**54.55**	**3.75**	**0.66**
C0470-051-6000-M	**0.470**	**11.94**	**0.051**	**1.30**	**6.000**	**152.40**	**2.583**	**65.62**	**2.079**	**52.82**	**12.26**	**54.55**	**3.59**	**0.63**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-049-1500-S	**0.733**	**18.61**	**8.73**	**38.85**	**11.38**	**1.99**
C0470-049-1625-S	**0.789**	**20.05**	**8.73**	**38.85**	**10.45**	**1.83**
C0470-049-1750-S	**0.846**	**21.49**	**8.73**	**38.85**	**9.66**	**1.69**
C0470-049-1875-S	**0.902**	**22.92**	**8.73**	**38.85**	**8.98**	**1.57**
C0470-049-2000-S	**0.959**	**24.36**	**8.73**	**38.85**	**8.39**	**1.47**
C0470-049-2125-S	**1.016**	**25.80**	**8.73**	**38.85**	**7.87**	**1.38**
C0470-049-2250-S	**1.072**	**27.24**	**8.73**	**38.85**	**7.42**	**1.30**
C0470-049-2375-S	**1.129**	**28.67**	**8.73**	**38.85**	**7.01**	**1.23**
C0470-049-2500-S	**1.185**	**30.11**	**8.73**	**38.85**	**6.65**	**1.16**
C0470-049-2625-S	**1.242**	**31.55**	**8.73**	**38.85**	**6.32**	**1.11**
C0470-049-2750-S	**1.299**	**32.99**	**8.73**	**38.85**	**6.02**	**1.05**
C0470-049-2875-S	**1.355**	**34.42**	**8.73**	**38.85**	**5.75**	**1.01**
C0470-049-3000-S	**1.412**	**35.86**	**8.73**	**38.85**	**5.50**	**0.96**
C0470-049-3250-S	**1.525**	**38.73**	**8.73**	**38.85**	**5.06**	**0.89**
C0470-049-3500-S	**1.638**	**41.61**	**8.73**	**38.85**	**4.69**	**0.82**
C0470-049-3750-S	**1.751**	**44.48**	**8.73**	**38.85**	**4.37**	**0.76**
C0470-049-4000-S	**1.865**	**47.36**	**8.73**	**38.85**	**4.09**	**0.72**
C0470-049-4250-S	**1.978**	**50.23**	**8.73**	**38.85**	**3.84**	**0.67**
C0470-049-4500-S	**2.091**	**53.11**	**8.73**	**38.85**	**3.63**	**0.63**
C0470-049-4750-S	**2.204**	**55.98**	**8.73**	**38.85**	**3.43**	**0.60**
C0470-049-5000-S	**2.317**	**58.86**	**8.73**	**38.85**	**3.26**	**0.57**
C0470-049-5250-S	**2.430**	**61.73**	**8.73**	**38.85**	**3.10**	**0.54**
C0470-049-5500-S	**2.544**	**64.61**	**8.73**	**38.85**	**2.96**	**0.52**
C0470-049-5750-S	**2.657**	**67.48**	**8.73**	**38.85**	**2.82**	**0.49**
C0470-049-6000-S	**2.770**	**70.36**	**8.73**	**38.85**	**2.70**	**0.47**
C0470-049-6250-S	**2.883**	**73.23**	**8.73**	**38.85**	**2.59**	**0.45**
C0470-049-6500-S	**2.996**	**76.11**	**8.73**	**38.85**	**2.49**	**0.44**
C0470-049-6750-S	**3.110**	**78.98**	**8.73**	**38.85**	**2.40**	**0.42**
C0470-049-7000-S	**3.223**	**81.86**	**8.73**	**38.85**	**2.31**	**0.40**
C0470-049-7500-S	**3.449**	**87.61**	**8.73**	**38.85**	**2.16**	**0.38**
C0470-049-8000-S	**3.675**	**93.36**	**8.73**	**38.85**	**2.02**	**0.35**
C0470-051-0750-S	**0.407**	**10.33**	**9.76**	**43.41**	**28.41**	**4.97**
C0470-051-0813-S	**0.436**	**11.07**	**9.76**	**43.41**	**25.91**	**4.53**
C0470-051-0875-S	**0.465**	**11.82**	**9.76**	**43.41**	**23.82**	**4.17**
C0470-051-0938-S	**0.495**	**12.56**	**9.76**	**43.41**	**22.03**	**3.86**
C0470-051-1000-S	**0.524**	**13.31**	**9.76**	**43.41**	**20.50**	**3.59**
C0470-051-1125-S	**0.583**	**14.80**	**9.76**	**43.41**	**18.00**	**3.15**
C0470-051-1250-S	**0.641**	**16.29**	**9.76**	**43.41**	**16.04**	**2.81**
C0470-051-1375-S	**0.700**	**17.79**	**9.76**	**43.41**	**14.46**	**2.53**
C0470-051-1500-S	**0.759**	**19.28**	**9.76**	**43.41**	**13.17**	**2.30**
C0470-051-1625-S	**0.818**	**20.77**	**9.76**	**43.41**	**12.09**	**2.12**
C0470-051-1750-S	**0.876**	**22.26**	**9.76**	**43.41**	**11.17**	**1.95**
C0470-051-1875-S	**0.935**	**23.75**	**9.76**	**43.41**	**10.38**	**1.82**
C0470-051-2000-S	**0.994**	**25.25**	**9.76**	**43.41**	**9.70**	**1.70**
C0470-051-2125-S	**1.053**	**26.74**	**9.76**	**43.41**	**9.10**	**1.59**
C0470-051-2250-S	**1.111**	**28.23**	**9.76**	**43.41**	**8.57**	**1.50**
C0470-051-2375-S	**1.170**	**29.72**	**9.76**	**43.41**	**8.10**	**1.42**
C0470-051-2500-S	**1.229**	**31.21**	**9.76**	**43.41**	**7.68**	**1.34**
C0470-051-2625-S	**1.288**	**32.71**	**9.76**	**43.41**	**7.30**	**1.28**
C0470-051-2750-S	**1.346**	**34.20**	**9.76**	**43.41**	**6.95**	**1.22**
C0470-051-2875-S	**1.405**	**35.69**	**9.76**	**43.41**	**6.64**	**1.16**
C0470-051-3000-S	**1.464**	**37.18**	**9.76**	**43.41**	**6.35**	**1.11**
C0470-051-3250-S	**1.581**	**40.17**	**9.76**	**43.41**	**5.85**	**1.02**
C0470-051-3500-S	**1.699**	**43.15**	**9.76**	**43.41**	**5.42**	**0.95**
C0470-051-3750-S	**1.816**	**46.13**	**9.76**	**43.41**	**5.05**	**0.88**
C0470-051-4000-S	**1.934**	**49.12**	**9.76**	**43.41**	**4.72**	**0.83**
C0470-051-4250-S	**2.051**	**52.10**	**9.76**	**43.41**	**4.44**	**0.78**
C0470-051-4500-S	**2.169**	**55.09**	**9.76**	**43.41**	**4.19**	**0.73**
C0470-051-4750-S	**2.286**	**58.07**	**9.76**	**43.41**	**3.96**	**0.69**
C0470-051-5000-S	**2.404**	**61.05**	**9.76**	**43.41**	**3.76**	**0.66**
C0470-051-5250-S	**2.521**	**64.04**	**9.76**	**43.41**	**3.58**	**0.63**
C0470-051-5500-S	**2.639**	**67.02**	**9.76**	**43.41**	**3.41**	**0.60**
C0470-051-5750-S	**2.756**	**70.01**	**9.76**	**43.41**	**3.26**	**0.57**
C0470-051-6000-S	**2.874**	**72.99**	**9.76**	**43.41**	**3.12**	**0.55**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-051-6250-M	0.470	11.94	0.051	1.30	6.250	158.75	2.689	68.29	2.163	54.94	12.26	54.55	3.44	0.60
C0470-051-6500-M	0.470	11.94	0.051	1.30	6.500	165.10	2.794	70.96	2.247	57.06	12.26	54.55	3.31	0.58
C0470-051-6750-M	0.470	11.94	0.051	1.30	6.750	171.45	2.899	73.63	2.330	59.19	12.26	54.55	3.18	0.56
C0470-051-7000-M	0.470	11.94	0.051	1.30	7.000	177.80	3.004	76.30	2.414	61.31	12.26	54.55	3.07	0.54
C0470-051-7500-M	0.470	11.94	0.051	1.30	7.500	190.50	3.214	81.65	2.581	65.56	12.26	54.55	2.86	0.50
C0470-051-8000-M	0.470	11.94	0.051	1.30	8.000	203.20	3.425	86.99	2.748	69.81	12.26	54.55	2.68	0.47
C0470-055-0750-M	0.470	11.94	0.055	1.40	0.750	19.05	0.403	10.25	0.359	9.13	15.11	67.22	43.60	7.63
C0470-055-0813-M	0.470	11.94	0.055	1.40	0.813	20.64	0.432	10.97	0.383	9.73	15.11	67.22	39.72	6.95
C0470-055-0875-M	0.470	11.94	0.055	1.40	0.875	22.23	0.461	11.70	0.407	10.34	15.11	67.22	36.47	6.38
C0470-055-0938-M	0.470	11.94	0.055	1.40	0.938	23.81	0.489	12.43	0.431	10.94	15.11	67.22	33.72	5.90
C0470-055-1000-M	0.470	11.94	0.055	1.40	1.000	25.40	0.518	13.16	0.455	11.54	15.11	67.22	31.35	5.49
C0470-055-1125-M	0.470	11.94	0.055	1.40	1.125	28.58	0.575	14.61	0.502	12.75	15.11	67.22	27.49	4.81
C0470-055-1250-M	0.470	11.94	0.055	1.40	1.250	31.75	0.633	16.07	0.550	13.96	15.11	67.22	24.48	4.28
C0470-055-1375-M	0.470	11.94	0.055	1.40	1.375	34.93	0.690	17.52	0.597	15.17	15.11	67.22	22.06	3.86
C0470-055-1500-M	0.470	11.94	0.055	1.40	1.500	38.10	0.747	18.98	0.645	16.38	15.11	67.22	20.07	3.51
C0470-055-1625-M	0.470	11.94	0.055	1.40	1.625	41.28	0.804	20.43	0.693	17.59	15.11	67.22	18.42	3.22
C0470-055-1750-M	0.470	11.94	0.055	1.40	1.750	44.45	0.862	21.89	0.740	18.80	15.11	67.22	17.01	2.98
C0470-055-1875-M	0.470	11.94	0.055	1.40	1.875	47.63	0.919	23.34	0.788	20.01	15.11	67.22	15.81	2.77
C0470-055-2000-M	0.470	11.94	0.055	1.40	2.000	50.80	0.976	24.80	0.835	21.22	15.11	67.22	14.76	2.58
C0470-055-2125-M	0.470	11.94	0.055	1.40	2.125	53.98	1.034	26.25	0.883	22.43	15.11	67.22	13.85	2.42
C0470-055-2250-M	0.470	11.94	0.055	1.40	2.250	57.15	1.091	27.71	0.931	23.64	15.11	67.22	13.04	2.28
C0470-055-2375-M	0.470	11.94	0.055	1.40	2.375	60.33	1.148	29.16	0.978	24.85	15.11	67.22	12.32	2.16
C0470-055-2500-M	0.470	11.94	0.055	1.40	2.500	63.50	1.205	30.62	1.026	26.06	15.11	67.22	11.67	2.04
C0470-055-2625-M	0.470	11.94	0.055	1.40	2.625	66.68	1.263	32.07	1.074	27.27	15.11	67.22	11.09	1.94
C0470-055-2750-M	0.470	11.94	0.055	1.40	2.750	69.85	1.320	33.53	1.121	28.48	15.11	67.22	10.57	1.85
C0470-055-2875-M	0.470	11.94	0.055	1.40	2.875	73.03	1.377	34.99	1.169	29.69	15.11	67.22	10.09	1.77
C0470-055-3000-M	0.470	11.94	0.055	1.40	3.000	76.20	1.435	36.44	1.216	30.90	15.11	67.22	9.66	1.69
C0470-055-3250-M	0.470	11.94	0.055	1.40	3.250	82.55	1.549	39.35	1.312	33.31	15.11	67.22	8.89	1.56
C0470-055-3500-M	0.470	11.94	0.055	1.40	3.500	88.90	1.664	42.26	1.407	35.73	15.11	67.22	8.23	1.44
C0470-055-3750-M	0.470	11.94	0.055	1.40	3.750	95.25	1.778	45.17	1.502	38.15	15.11	67.22	7.67	1.34
C0470-055-4000-M	0.470	11.94	0.055	1.40	4.000	101.60	1.893	48.08	1.597	40.57	15.11	67.22	7.17	1.26
C0470-055-4250-M	0.470	11.94	0.055	1.40	4.250	107.95	2.008	50.99	1.693	42.99	15.11	67.22	6.74	1.18
C0470-055-4500-M	0.470	11.94	0.055	1.40	4.500	114.30	2.122	53.90	1.788	45.41	15.11	67.22	6.36	1.11
C0470-055-4750-M	0.470	11.94	0.055	1.40	4.750	120.65	2.237	56.81	1.883	47.83	15.11	67.22	6.01	1.05
C0470-055-5000-M	0.470	11.94	0.055	1.40	5.000	127.00	2.351	59.73	1.978	50.25	15.11	67.22	5.71	1.00
C0470-055-5250-M	0.470	11.94	0.055	1.40	5.250	133.35	2.466	62.64	2.073	52.66	15.11	67.22	5.43	0.95
C0470-055-5500-M	0.470	11.94	0.055	1.40	5.500	139.70	2.581	65.55	2.169	55.08	15.11	67.22	5.18	0.91
C0470-055-5750-M	0.470	11.94	0.055	1.40	5.750	146.05	2.695	68.46	2.264	57.50	15.11	67.22	4.95	0.87
C0470-055-6000-M	0.470	11.94	0.055	1.40	6.000	152.40	2.810	71.37	2.359	59.92	15.11	67.22	4.74	0.83
C0470-055-6250-M	0.470	11.94	0.055	1.40	6.250	158.75	2.924	74.28	2.454	62.34	15.11	67.22	4.54	0.80
C0470-055-6500-M	0.470	11.94	0.055	1.40	6.500	165.10	3.039	77.19	2.550	64.76	15.11	67.22	4.37	0.76
C0470-055-6750-M	0.470	11.94	0.055	1.40	6.750	171.45	3.154	80.10	2.645	67.18	15.11	67.22	4.20	0.74
C0470-055-7000-M	0.470	11.94	0.055	1.40	7.000	177.80	3.268	83.01	2.740	69.60	15.11	67.22	4.05	0.71
C0470-055-7500-M	0.470	11.94	0.055	1.40	7.500	190.50	3.497	88.83	2.930	74.43	15.11	67.22	3.78	0.66
C0470-055-8000-M	0.470	11.94	0.055	1.40	8.000	203.20	3.726	94.65	3.121	79.27	15.11	67.22	3.54	0.62
C0470-059-0750-M	0.470	11.94	0.059	1.50	0.750	19.05	0.431	10.96	0.394	10.01	18.34	81.58	57.56	10.07
C0470-059-0813-M	0.470	11.94	0.059	1.50	0.813	20.64	0.462	11.74	0.421	10.68	18.34	81.58	52.38	9.17
C0470-059-0875-M	0.470	11.94	0.059	1.50	0.875	22.23	0.493	12.53	0.447	11.36	18.34	81.58	48.06	8.41
C0470-059-0938-M	0.470	11.94	0.059	1.50	0.938	23.81	0.524	13.32	0.474	12.04	18.34	81.58	44.39	7.77
C0470-059-1000-M	0.470	11.94	0.059	1.50	1.000	25.40	0.555	14.11	0.501	12.72	18.34	81.58	41.25	7.22
C0470-059-1125-M	0.470	11.94	0.059	1.50	1.125	28.58	0.617	15.68	0.554	14.07	18.34	81.58	36.13	6.32
C0470-059-1250-M	0.470	11.94	0.059	1.50	1.250	31.75	0.679	17.25	0.608	15.43	18.34	81.58	32.14	5.62
C0470-059-1375-M	0.470	11.94	0.059	1.50	1.375	34.93	0.741	18.83	0.661	16.79	18.34	81.58	28.94	5.06
C0470-059-1500-M	0.470	11.94	0.059	1.50	1.500	38.10	0.803	20.40	0.714	18.14	18.34	81.58	26.32	4.61
C0470-059-1625-M	0.470	11.94	0.059	1.50	1.625	41.28	0.865	21.98	0.768	19.50	18.34	81.58	24.14	4.22
C0470-059-1750-M	0.470	11.94	0.059	1.50	1.750	44.45	0.927	23.55	0.821	20.86	18.34	81.58	22.29	3.90
C0470-059-1875-M	0.470	11.94	0.059	1.50	1.875	47.63	0.989	25.13	0.875	22.21	18.34	81.58	20.71	3.62
C0470-059-2000-M	0.470	11.94	0.059	1.50	2.000	50.80	1.051	26.70	0.928	23.57	18.34	81.58	19.33	3.38
C0470-059-2125-M	0.470	11.94	0.059	1.50	2.125	53.98	1.113	28.27	0.981	24.93	18.34	81.58	18.13	3.17
C0470-059-2250-M	0.470	11.94	0.059	1.50	2.250	57.15	1.175	29.85	1.035	26.28	18.34	81.58	17.06	2.99
C0470-059-2375-M	0.470	11.94	0.059	1.50	2.375	60.33	1.237	31.42	1.088	27.64	18.34	81.58	16.12	2.82
C0470-059-2500-M	0.470	11.94	0.059	1.50	2.500	63.50	1.299	33.00	1.142	29.00	18.34	81.58	15.27	2.67
C0470-059-2625-M	0.470	11.94	0.059	1.50	2.625	66.68	1.361	34.57	1.195	30.35	18.34	81.58	14.51	2.54
C0470-059-2750-M	0.470	11.94	0.059	1.50	2.750	69.85	1.423	36.15	1.248	31.71	18.34	81.58	13.82	2.42

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-051-6250-S	2.991	75.97	9.76	43.41	2.99	0.52
C0470-051-6500-S	3.109	78.96	9.76	43.41	2.88	0.50
C0470-051-6750-S	3.226	81.94	9.76	43.41	2.77	0.48
C0470-051-7000-S	3.344	84.93	9.76	43.41	2.67	0.47
C0470-051-7500-S	3.579	90.89	9.76	43.41	2.49	0.44
C0470-051-8000-S	3.813	96.86	9.76	43.41	2.33	0.41
C0470-055-0750-S	0.433	11.00	12.02	53.46	37.91	6.63
C0470-055-0813-S	0.465	11.80	12.02	53.46	34.54	6.04
C0470-055-0875-S	0.496	12.60	12.02	53.46	31.72	5.55
C0470-055-0938-S	0.528	13.40	12.02	53.46	29.32	5.13
C0470-055-1000-S	0.559	14.20	12.02	53.46	27.26	4.77
C0470-055-1125-S	0.622	15.81	12.02	53.46	23.90	4.18
C0470-055-1250-S	0.685	17.41	12.02	53.46	21.28	3.72
C0470-055-1375-S	0.748	19.01	12.02	53.46	19.18	3.36
C0470-055-1500-S	0.812	20.61	12.02	53.46	17.46	3.05
C0470-055-1625-S	0.875	22.22	12.02	53.46	16.02	2.80
C0470-055-1750-S	0.938	23.82	12.02	53.46	14.79	2.59
C0470-055-1875-S	1.001	25.42	12.02	53.46	13.75	2.41
C0470-055-2000-S	1.064	27.02	12.02	53.46	12.84	2.25
C0470-055-2125-S	1.127	28.62	12.02	53.46	12.04	2.11
C0470-055-2250-S	1.190	30.23	12.02	53.46	11.34	1.98
C0470-055-2375-S	1.253	31.83	12.02	53.46	10.71	1.87
C0470-055-2500-S	1.316	33.43	12.02	53.46	10.15	1.78
C0470-055-2625-S	1.379	35.03	12.02	53.46	9.65	1.69
C0470-055-2750-S	1.442	36.64	12.02	53.46	9.19	1.61
C0470-055-2875-S	1.505	38.24	12.02	53.46	8.78	1.54
C0470-055-3000-S	1.569	39.84	12.02	53.46	8.40	1.47
C0470-055-3250-S	1.695	43.05	12.02	53.46	7.73	1.35
C0470-055-3500-S	1.821	46.25	12.02	53.46	7.16	1.25
C0470-055-3750-S	1.947	49.46	12.02	53.46	6.67	1.17
C0470-055-4000-S	2.073	52.66	12.02	53.46	6.24	1.09
C0470-055-4250-S	2.199	55.87	12.02	53.46	5.86	1.03
C0470-055-4500-S	2.326	59.07	12.02	53.46	5.53	0.97
C0470-055-4750-S	2.452	62.28	12.02	53.46	5.23	0.92
C0470-055-5000-S	2.578	65.48	12.02	53.46	4.96	0.87
C0470-055-5250-S	2.704	68.68	12.02	53.46	4.72	0.83
C0470-055-5500-S	2.830	71.89	12.02	53.46	4.50	0.79
C0470-055-5750-S	2.956	75.09	12.02	53.46	4.30	0.75
C0470-055-6000-S	3.083	78.30	12.02	53.46	4.12	0.72
C0470-055-6250-S	3.209	81.50	12.02	53.46	3.95	0.69
C0470-055-6500-S	3.335	84.71	12.02	53.46	3.80	0.66
C0470-055-6750-S	3.461	87.91	12.02	53.46	3.65	0.64
C0470-055-7000-S	3.587	91.12	12.02	53.46	3.52	0.62
C0470-055-7500-S	3.840	97.53	12.02	53.46	3.28	0.57
C0470-055-8000-S	4.092	103.94	12.02	53.46	3.08	0.54
C0470-059-0750-S	0.459	11.66	14.57	64.81	50.06	8.76
C0470-059-0813-S	0.493	12.51	14.57	64.81	45.55	7.97
C0470-059-0875-S	0.526	13.37	14.57	64.81	41.79	7.31
C0470-059-0938-S	0.560	14.23	14.57	64.81	38.60	6.76
C0470-059-1000-S	0.594	15.08	14.57	64.81	35.87	6.28
C0470-059-1125-S	0.661	16.79	14.57	64.81	31.42	5.50
C0470-059-1250-S	0.729	18.51	14.57	64.81	27.95	4.89
C0470-059-1375-S	0.796	20.22	14.57	64.81	25.17	4.40
C0470-059-1500-S	0.864	21.93	14.57	64.81	22.89	4.01
C0470-059-1625-S	0.931	23.65	14.57	64.81	20.99	3.67
C0470-059-1750-S	0.998	25.36	14.57	64.81	19.38	3.39
C0470-059-1875-S	1.066	27.07	14.57	64.81	18.01	3.15
C0470-059-2000-S	1.133	28.78	14.57	64.81	16.81	2.94
C0470-059-2125-S	1.201	30.50	14.57	64.81	15.76	2.76
C0470-059-2250-S	1.268	32.21	14.57	64.81	14.84	2.60
C0470-059-2375-S	1.336	33.92	14.57	64.81	14.02	2.45
C0470-059-2500-S	1.403	35.63	14.57	64.81	13.28	2.32
C0470-059-2625-S	1.470	37.35	14.57	64.81	12.62	2.21
C0470-059-2750-S	1.538	39.06	14.57	64.81	12.02	2.10

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-059-2875-M	0.470	11.94	0.059	1.50	2.875	73.03	1.485	37.72	1.302	33.07	18.34	81.58	13.20	2.31
C0470-059-3000-M	0.470	11.94	0.059	1.50	3.000	76.20	1.547	39.30	1.355	34.42	18.34	81.58	12.62	2.21
C0470-059-3250-M	0.470	11.94	0.059	1.50	3.250	82.55	1.671	42.44	1.462	37.13	18.34	81.58	11.62	2.03
C0470-059-3500-M	0.470	11.94	0.059	1.50	3.500	88.90	1.795	45.59	1.569	39.85	18.34	81.58	10.76	1.88
C0470-059-3750-M	0.470	11.94	0.059	1.50	3.750	95.25	1.919	48.74	1.676	42.56	18.34	81.58	10.02	1.75
C0470-059-4000-M	0.470	11.94	0.059	1.50	4.000	101.60	2.043	51.89	1.782	45.27	18.34	81.58	9.37	1.64
C0470-059-4250-M	0.470	11.94	0.059	1.50	4.250	107.95	2.167	55.04	1.889	47.99	18.34	81.58	8.80	1.54
C0470-059-4500-M	0.470	11.94	0.059	1.50	4.500	114.30	2.291	58.19	1.996	50.70	18.34	81.58	8.30	1.45
C0470-059-4750-M	0.470	11.94	0.059	1.50	4.750	120.65	2.415	61.34	2.103	53.41	18.34	81.58	7.85	1.37
C0470-059-5000-M	0.470	11.94	0.059	1.50	5.000	127.00	2.539	64.49	2.210	56.13	18.34	81.58	7.45	1.30
C0470-059-5250-M	0.470	11.94	0.059	1.50	5.250	133.35	2.663	67.63	2.316	58.84	18.34	81.58	7.09	1.24
C0470-059-5500-M	0.470	11.94	0.059	1.50	5.500	139.70	2.787	70.78	2.423	61.55	18.34	81.58	6.76	1.18
C0470-059-5750-M	0.470	11.94	0.059	1.50	5.750	146.05	2.911	73.93	2.530	64.26	18.34	81.58	6.46	1.13
C0470-059-6000-M	0.470	11.94	0.059	1.50	6.000	152.40	3.035	77.08	2.637	66.98	18.34	81.58	6.19	1.08
C0470-059-6250-M	0.470	11.94	0.059	1.50	6.250	158.75	3.159	80.23	2.744	69.69	18.34	81.58	5.93	1.04
C0470-059-6500-M	0.470	11.94	0.059	1.50	6.500	165.10	3.283	83.38	2.851	72.40	18.34	81.58	5.70	1.00
C0470-059-6750-M	0.470	11.94	0.059	1.50	6.750	171.45	3.407	86.53	2.957	75.12	18.34	81.58	5.49	0.96
C0470-059-7000-M	0.470	11.94	0.059	1.50	7.000	177.80	3.530	89.67	3.064	77.83	18.34	81.58	5.29	0.93
C0470-059-7500-M	0.470	11.94	0.059	1.50	7.500	190.50	3.778	95.97	3.278	83.26	18.34	81.58	4.93	0.86
C0470-059-8000-M	0.470	11.94	0.059	1.50	8.000	203.20	4.026	102.27	3.491	88.68	18.34	81.58	4.62	0.81
C0470-063-0688-M	0.470	11.94	0.063	1.60	0.688	17.46	0.425	10.80	0.398	10.10	21.96	97.70	83.70	14.65
C0470-063-0750-M	0.470	11.94	0.063	1.60	0.750	19.05	0.458	11.64	0.427	10.85	21.96	97.70	75.32	13.18
C0470-063-0813-M	0.470	11.94	0.063	1.60	0.813	20.64	0.492	12.49	0.457	11.60	21.96	97.70	68.46	11.98
C0470-063-0875-M	0.470	11.94	0.063	1.60	0.875	22.23	0.525	13.33	0.486	12.35	21.96	97.70	62.75	10.98
C0470-063-0938-M	0.470	11.94	0.063	1.60	0.938	23.81	0.558	14.18	0.516	13.10	21.96	97.70	57.92	10.14
C0470-063-1000-M	0.470	11.94	0.063	1.60	1.000	25.40	0.592	15.03	0.545	13.85	21.96	97.70	53.78	9.41
C0470-063-1125-M	0.470	11.94	0.063	1.60	1.125	28.58	0.658	16.72	0.605	15.36	21.96	97.70	47.05	8.23
C0470-063-1250-M	0.470	11.94	0.063	1.60	1.250	31.75	0.725	18.41	0.664	16.86	21.96	97.70	41.82	7.32
C0470-063-1375-M	0.470	11.94	0.063	1.60	1.375	34.93	0.791	20.10	0.723	18.36	21.96	97.70	37.63	6.59
C0470-063-1500-M	0.470	11.94	0.063	1.60	1.500	38.10	0.858	21.79	0.782	19.86	21.96	97.70	34.21	5.99
C0470-063-1625-M	0.470	11.94	0.063	1.60	1.625	41.28	0.925	23.48	0.841	21.36	21.96	97.70	31.35	5.49
C0470-063-1750-M	0.470	11.94	0.063	1.60	1.750	44.45	0.991	25.17	0.900	22.86	21.96	97.70	28.94	5.06
C0470-063-1875-M	0.470	11.94	0.063	1.60	1.875	47.63	1.058	26.87	0.959	24.36	21.96	97.70	26.87	4.70
C0470-063-2000-M	0.470	11.94	0.063	1.60	2.000	50.80	1.124	28.56	1.018	25.86	21.96	97.70	25.08	4.39
C0470-063-2125-M	0.470	11.94	0.063	1.60	2.125	53.98	1.191	30.25	1.077	27.36	21.96	97.70	23.51	4.11
C0470-063-2250-M	0.470	11.94	0.063	1.60	2.250	57.15	1.257	31.94	1.136	28.86	21.96	97.70	22.13	3.87
C0470-063-2375-M	0.470	11.94	0.063	1.60	2.375	60.33	1.324	33.63	1.195	30.37	21.96	97.70	20.90	3.66
C0470-063-2500-M	0.470	11.94	0.063	1.60	2.500	63.50	1.391	35.32	1.255	31.87	21.96	97.70	19.80	3.46
C0470-063-2625-M	0.470	11.94	0.063	1.60	2.625	66.68	1.457	37.01	1.314	33.37	21.96	97.70	18.81	3.29
C0470-063-2750-M	0.470	11.94	0.063	1.60	2.750	69.85	1.524	38.70	1.373	34.87	21.96	97.70	17.91	3.13
C0470-063-2875-M	0.470	11.94	0.063	1.60	2.875	73.03	1.590	40.40	1.432	36.37	21.96	97.70	17.10	2.99
C0470-063-3000-M	0.470	11.94	0.063	1.60	3.000	76.20	1.657	42.09	1.491	37.87	21.96	97.70	16.35	2.86
C0470-063-3250-M	0.470	11.94	0.063	1.60	3.250	82.55	1.790	45.47	1.609	40.87	21.96	97.70	15.05	2.63
C0470-063-3500-M	0.470	11.94	0.063	1.60	3.500	88.90	1.923	48.85	1.727	43.87	21.96	97.70	13.93	2.44
C0470-063-3750-M	0.470	11.94	0.063	1.60	3.750	95.25	2.056	52.23	1.845	46.88	21.96	97.70	12.97	2.27
C0470-063-4000-M	0.470	11.94	0.063	1.60	4.000	101.60	2.190	55.62	1.964	49.88	21.96	97.70	12.13	2.12
C0470-063-4250-M	0.470	11.94	0.063	1.60	4.250	107.95	2.323	59.00	2.082	52.88	21.96	97.70	11.40	1.99
C0470-063-4500-M	0.470	11.94	0.063	1.60	4.500	114.30	2.456	62.38	2.200	55.88	21.96	97.70	10.75	1.88
C0470-063-4750-M	0.470	11.94	0.063	1.60	4.750	120.65	2.589	65.76	2.318	58.88	21.96	97.70	10.16	1.78
C0470-063-5000-M	0.470	11.94	0.063	1.60	5.000	127.00	2.722	69.15	2.436	61.89	21.96	97.70	9.64	1.69
C0470-063-5250-M	0.470	11.94	0.063	1.60	5.250	133.35	2.856	72.53	2.555	64.89	21.96	97.70	9.17	1.61
C0470-063-5500-M	0.470	11.94	0.063	1.60	5.500	139.70	2.989	75.91	2.673	67.89	21.96	97.70	8.75	1.53
C0470-063-5750-M	0.470	11.94	0.063	1.60	5.750	146.05	3.122	79.30	2.791	70.89	21.96	97.70	8.36	1.46
C0470-063-6000-M	0.470	11.94	0.063	1.60	6.000	152.40	3.255	82.68	2.909	73.89	21.96	97.70	8.00	1.40
C0470-063-6250-M	0.470	11.94	0.063	1.60	6.250	158.75	3.388	86.06	3.027	76.89	21.96	97.70	7.68	1.34
C0470-063-6500-M	0.470	11.94	0.063	1.60	6.500	165.10	3.521	89.44	3.146	79.90	21.96	97.70	7.37	1.29
C0470-063-6750-M	0.470	11.94	0.063	1.60	6.750	171.45	3.655	92.83	3.264	82.90	21.96	97.70	7.10	1.24
C0470-063-7000-M	0.470	11.94	0.063	1.60	7.000	177.80	3.788	96.21	3.382	85.90	21.96	97.70	6.84	1.20
C0470-063-7500-M	0.470	11.94	0.063	1.60	7.500	190.50	4.054	102.97	3.618	91.90	21.96	97.70	6.37	1.12
C0470-063-8000-M	0.470	11.94	0.063	1.60	8.000	203.20	4.320	109.74	3.855	97.91	21.96	97.70	5.97	1.04
C0470-068-0688-M	0.470	11.94	0.068	1.73	0.688	17.46	0.454	11.54	0.434	11.02	27.07	120.41	116.08	20.31
C0470-068-0750-M	0.470	11.94	0.068	1.73	0.750	19.05	0.490	12.46	0.467	11.86	27.07	120.41	104.26	18.25
C0470-068-0813-M	0.470	11.94	0.068	1.73	0.813	20.64	0.526	13.37	0.500	12.69	27.07	120.41	94.63	16.56
C0470-068-0875-M	0.470	11.94	0.068	1.73	0.875	22.23	0.563	14.29	0.533	13.53	27.07	120.41	86.63	15.16

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-059-2875-S	1.605	40.77	14.57	64.81	11.47	2.01
C0470-059-3000-S	1.673	42.49	14.57	64.81	10.98	1.92
C0470-059-3250-S	1.808	45.91	14.57	64.81	10.10	1.77
C0470-059-3500-S	1.942	49.34	14.57	64.81	9.35	1.64
C0470-059-3750-S	2.077	52.76	14.57	64.81	8.71	1.52
C0470-059-4000-S	2.212	56.19	14.57	64.81	8.15	1.43
C0470-059-4250-S	2.347	59.61	14.57	64.81	7.66	1.34
C0470-059-4500-S	2.482	63.04	14.57	64.81	7.22	1.26
C0470-059-4750-S	2.617	66.46	14.57	64.81	6.83	1.20
C0470-059-5000-S	2.752	69.89	14.57	64.81	6.48	1.13
C0470-059-5250-S	2.886	73.31	14.57	64.81	6.16	1.08
C0470-059-5500-S	3.021	76.74	14.57	64.81	5.88	1.03
C0470-059-5750-S	3.156	80.17	14.57	64.81	5.62	0.98
C0470-059-6000-S	3.291	83.59	14.57	64.81	5.38	0.94
C0470-059-6250-S	3.426	87.02	14.57	64.81	5.16	0.90
C0470-059-6500-S	3.561	90.44	14.57	64.81	4.96	0.87
C0470-059-6750-S	3.696	93.87	14.57	64.81	4.77	0.83
C0470-059-7000-S	3.830	97.29	14.57	64.81	4.60	0.80
C0470-059-7500-S	4.100	104.14	14.57	64.81	4.29	0.75
C0470-059-8000-S	4.370	110.99	14.57	64.81	4.01	0.70
C0470-063-0688-S	0.448	11.38	17.43	77.51	72.79	12.74
C0470-063-0750-S	0.484	12.29	17.43	77.51	65.50	11.46
C0470-063-0813-S	0.520	13.20	17.43	77.51	59.53	10.42
C0470-063-0875-S	0.556	14.11	17.43	77.51	54.57	9.55
C0470-063-0938-S	0.592	15.02	17.43	77.51	50.36	8.81
C0470-063-1000-S	0.627	15.94	17.43	77.51	46.76	8.18
C0470-063-1125-S	0.699	17.76	17.43	77.51	40.91	7.16
C0470-063-1250-S	0.771	19.58	17.43	77.51	36.36	6.36
C0470-063-1375-S	0.842	21.40	17.43	77.51	32.72	5.73
C0470-063-1500-S	0.914	23.22	17.43	77.51	29.75	5.21
C0470-063-1625-S	0.986	25.04	17.43	77.51	27.27	4.77
C0470-063-1750-S	1.058	26.86	17.43	77.51	25.17	4.40
C0470-063-1875-S	1.129	28.68	17.43	77.51	23.37	4.09
C0470-063-2000-S	1.201	30.51	17.43	77.51	21.81	3.82
C0470-063-2125-S	1.273	32.33	17.43	77.51	20.45	3.58
C0470-063-2250-S	1.344	34.15	17.43	77.51	19.24	3.37
C0470-063-2375-S	1.416	35.97	17.43	77.51	18.17	3.18
C0470-063-2500-S	1.488	37.79	17.43	77.51	17.22	3.01
C0470-063-2625-S	1.560	39.61	17.43	77.51	16.35	2.86
C0470-063-2750-S	1.631	41.43	17.43	77.51	15.58	2.73
C0470-063-2875-S	1.703	43.25	17.43	77.51	14.87	2.60
C0470-063-3000-S	1.775	45.08	17.43	77.51	14.22	2.49
C0470-063-3250-S	1.918	48.72	17.43	77.51	13.08	2.29
C0470-063-3500-S	2.061	52.36	17.43	77.51	12.11	2.12
C0470-063-3750-S	2.205	56.00	17.43	77.51	11.28	1.97
C0470-063-4000-S	2.348	59.65	17.43	77.51	10.55	1.85
C0470-063-4250-S	2.492	63.29	17.43	77.51	9.91	1.73
C0470-063-4500-S	2.635	66.93	17.43	77.51	9.34	1.64
C0470-063-4750-S	2.779	70.57	17.43	77.51	8.84	1.55
C0470-063-5000-S	2.922	74.22	17.43	77.51	8.39	1.47
C0470-063-5250-S	3.065	77.86	17.43	77.51	7.98	1.40
C0470-063-5500-S	3.209	81.50	17.43	77.51	7.61	1.33
C0470-063-5750-S	3.352	85.14	17.43	77.51	7.27	1.27
C0470-063-6000-S	3.496	88.79	17.43	77.51	6.96	1.22
C0470-063-6250-S	3.639	92.43	17.43	77.51	6.67	1.17
C0470-063-6500-S	3.782	96.07	17.43	77.51	6.41	1.12
C0470-063-6750-S	3.926	99.72	17.43	77.51	6.17	1.08
C0470-063-7000-S	4.069	103.36	17.43	77.51	5.95	1.04
C0470-063-7500-S	4.356	110.64	17.43	77.51	5.54	0.97
C0470-063-8000-S	4.643	117.93	17.43	77.51	5.19	0.91
C0470-068-0688-S	0.475	12.07	21.43	95.34	100.94	17.66
C0470-068-0750-S	0.514	13.05	21.43	95.34	90.66	15.87
C0470-068-0813-S	0.552	14.02	21.43	95.34	82.29	14.40
C0470-068-0875-S	0.590	15.00	21.43	95.34	75.33	13.18

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-068-0938-M	0.470	11.94	0.068	1.73	0.938	23.81	0.599	15.20	0.566	14.37	27.07	120.41	79.87	13.98
C0470-068-1000-M	0.470	11.94	0.068	1.73	1.000	25.40	0.635	16.12	0.599	15.21	27.07	120.41	74.10	12.97
C0470-068-1125-M	0.470	11.94	0.068	1.73	1.125	28.58	0.707	17.95	0.665	16.88	27.07	120.41	64.73	11.33
C0470-068-1250-M	0.470	11.94	0.068	1.73	1.250	31.75	0.779	19.79	0.731	18.56	27.07	120.41	57.47	10.06
C0470-068-1375-M	0.470	11.94	0.068	1.73	1.375	34.93	0.851	21.62	0.797	20.23	27.07	120.41	51.67	9.04
C0470-068-1500-M	0.470	11.94	0.068	1.73	1.500	38.10	0.923	23.45	0.863	21.91	27.07	120.41	46.93	8.21
C0470-068-1625-M	0.470	11.94	0.068	1.73	1.625	41.28	0.995	25.28	0.929	23.58	27.07	120.41	42.99	7.52
C0470-068-1750-M	0.470	11.94	0.068	1.73	1.750	44.45	1.068	27.12	0.994	25.26	27.07	120.41	39.66	6.94
C0470-068-1875-M	0.470	11.94	0.068	1.73	1.875	47.63	1.140	28.95	1.060	26.93	27.07	120.41	36.81	6.44
C0470-068-2000-M	0.470	11.94	0.068	1.73	2.000	50.80	1.212	30.78	1.126	28.61	27.07	120.41	34.34	6.01
C0470-068-2125-M	0.470	11.94	0.068	1.73	2.125	53.98	1.284	32.61	1.192	30.29	27.07	120.41	32.19	5.63
C0470-068-2250-M	0.470	11.94	0.068	1.73	2.250	57.15	1.356	34.45	1.258	31.96	27.07	120.41	30.28	5.30
C0470-068-2375-M	0.470	11.94	0.068	1.73	2.375	60.33	1.428	36.28	1.324	33.64	27.07	120.41	28.59	5.00
C0470-068-2500-M	0.470	11.94	0.068	1.73	2.500	63.50	1.500	38.11	1.390	35.31	27.07	120.41	27.08	4.74
C0470-068-2625-M	0.470	11.94	0.068	1.73	2.625	66.68	1.573	39.94	1.456	36.99	27.07	120.41	25.72	4.50
C0470-068-2750-M	0.470	11.94	0.068	1.73	2.750	69.85	1.645	41.78	1.522	38.66	27.07	120.41	24.49	4.29
C0470-068-2875-M	0.470	11.94	0.068	1.73	2.875	73.03	1.717	43.61	1.588	40.34	27.07	120.41	23.37	4.09
C0470-068-3000-M	0.470	11.94	0.068	1.73	3.000	76.20	1.789	45.44	1.654	42.01	27.07	120.41	22.35	3.91
C0470-068-3250-M	0.470	11.94	0.068	1.73	3.250	82.55	1.933	49.11	1.786	45.36	27.07	120.41	20.56	3.60
C0470-068-3500-M	0.470	11.94	0.068	1.73	3.500	88.90	2.078	52.77	1.918	48.71	27.07	120.41	19.03	3.33
C0470-068-3750-M	0.470	11.94	0.068	1.73	3.750	95.25	2.222	56.44	2.050	52.06	27.07	120.41	17.71	3.10
C0470-068-4000-M	0.470	11.94	0.068	1.73	4.000	101.60	2.366	60.10	2.182	55.42	27.07	120.41	16.57	2.90
C0470-068-4250-M	0.470	11.94	0.068	1.73	4.250	107.95	2.510	63.77	2.314	58.77	27.07	120.41	15.56	2.72
C0470-068-4500-M	0.470	11.94	0.068	1.73	4.500	114.30	2.655	67.43	2.446	62.12	27.07	120.41	14.67	2.57
C0470-068-4750-M	0.470	11.94	0.068	1.73	4.750	120.65	2.799	71.10	2.577	65.47	27.07	120.41	13.88	2.43
C0470-068-5000-M	0.470	11.94	0.068	1.73	5.000	127.00	2.943	74.76	2.709	68.82	27.07	120.41	13.16	2.30
C0470-068-5250-M	0.470	11.94	0.068	1.73	5.250	133.35	3.088	78.43	2.841	72.17	27.07	120.41	12.52	2.19
C0470-068-5500-M	0.470	11.94	0.068	1.73	5.500	139.70	3.232	82.09	2.973	75.52	27.07	120.41	11.94	2.09
C0470-068-5750-M	0.470	11.94	0.068	1.73	5.750	146.05	3.376	85.76	3.105	78.87	27.07	120.41	11.40	2.00
C0470-068-6000-M	0.470	11.94	0.068	1.73	6.000	152.40	3.520	89.42	3.237	82.22	27.07	120.41	10.92	1.91
C0470-068-6250-M	0.470	11.94	0.068	1.73	6.250	158.75	3.665	93.09	3.369	85.57	27.07	120.41	10.47	1.83
C0470-068-6500-M	0.470	11.94	0.068	1.73	6.500	165.10	3.809	96.75	3.501	88.92	27.07	120.41	10.06	1.76
C0470-068-6750-M	0.470	11.94	0.068	1.73	6.750	171.45	3.953	100.42	3.633	92.27	27.07	120.41	9.68	1.69
C0470-068-7000-M	0.470	11.94	0.068	1.73	7.000	177.80	4.098	104.08	3.765	95.62	27.07	120.41	9.33	1.63
C0470-068-7500-M	0.470	11.94	0.068	1.73	7.500	190.50	4.386	111.41	4.029	102.33	27.07	120.41	8.69	1.52
C0470-068-8000-M	0.470	11.94	0.068	1.73	8.000	203.20	4.675	118.74	4.292	109.03	27.07	120.41	8.14	1.42
C0470-072-0688-M	0.470	11.94	0.072	1.83	0.688	17.46	0.476	12.09	0.461	11.70	31.63	140.70	149.64	26.19
C0470-072-0750-M	0.470	11.94	0.072	1.83	0.750	19.05	0.514	13.06	0.496	12.61	31.63	140.70	134.21	23.49
C0470-072-0813-M	0.470	11.94	0.072	1.83	0.813	20.64	0.553	14.03	0.532	13.51	31.63	140.70	121.66	21.29
C0470-072-0875-M	0.470	11.94	0.072	1.83	0.875	22.23	0.591	15.00	0.568	14.42	31.63	140.70	111.26	19.47
C0470-072-0938-M	0.470	11.94	0.072	1.83	0.938	23.81	0.629	15.97	0.603	15.32	31.63	140.70	102.50	17.94
C0470-072-1000-M	0.470	11.94	0.072	1.83	1.000	25.40	0.667	16.94	0.639	16.22	31.63	140.70	95.01	16.63
C0470-072-1125-M	0.470	11.94	0.072	1.83	1.125	28.58	0.743	18.88	0.710	18.03	31.63	140.70	82.91	14.51
C0470-072-1250-M	0.470	11.94	0.072	1.83	1.250	31.75	0.820	20.82	0.781	19.84	31.63	140.70	73.54	12.87
C0470-072-1375-M	0.470	11.94	0.072	1.83	1.375	34.93	0.896	22.76	0.852	21.65	31.63	140.70	66.07	11.56
C0470-072-1500-M	0.470	11.94	0.072	1.83	1.500	38.10	0.973	24.70	0.924	23.46	31.63	140.70	59.98	10.50
C0470-072-1625-M	0.470	11.94	0.072	1.83	1.625	41.28	1.049	26.65	0.995	25.27	31.63	140.70	54.92	9.61
C0470-072-1750-M	0.470	11.94	0.072	1.83	1.750	44.45	1.125	28.59	1.066	27.07	31.63	140.70	50.64	8.86
C0470-072-1875-M	0.470	11.94	0.072	1.83	1.875	47.63	1.202	30.53	1.137	28.88	31.63	140.70	46.99	8.22
C0470-072-2000-M	0.470	11.94	0.072	1.83	2.000	50.80	1.278	32.47	1.208	30.69	31.63	140.70	43.82	7.67
C0470-072-2125-M	0.470	11.94	0.072	1.83	2.125	53.98	1.355	34.41	1.280	32.50	31.63	140.70	41.06	7.18
C0470-072-2250-M	0.470	11.94	0.072	1.83	2.250	57.15	1.431	36.35	1.351	34.31	31.63	140.70	38.62	6.76
C0470-072-2375-M	0.470	11.94	0.072	1.83	2.375	60.33	1.507	38.29	1.422	36.12	31.63	140.70	36.46	6.38
C0470-072-2500-M	0.470	11.94	0.072	1.83	2.500	63.50	1.584	40.23	1.493	37.93	31.63	140.70	34.52	6.04
C0470-072-2625-M	0.470	11.94	0.072	1.83	2.625	66.68	1.660	42.17	1.564	39.73	31.63	140.70	32.78	5.74
C0470-072-2750-M	0.470	11.94	0.072	1.83	2.750	69.85	1.736	44.11	1.636	41.54	31.63	140.70	31.21	5.46
C0470-072-2875-M	0.470	11.94	0.072	1.83	2.875	73.03	1.813	46.05	1.707	43.35	31.63	140.70	29.78	5.21
C0470-072-3000-M	0.470	11.94	0.072	1.83	3.000	76.20	1.889	47.99	1.778	45.16	31.63	140.70	28.48	4.98
C0470-072-3250-M	0.470	11.94	0.072	1.83	3.250	82.55	2.042	51.87	1.920	48.78	31.63	140.70	26.19	4.58
C0470-072-3500-M	0.470	11.94	0.072	1.83	3.500	88.90	2.195	55.75	2.063	52.39	31.63	140.70	24.24	4.24
C0470-072-3750-M	0.470	11.94	0.072	1.83	3.750	95.25	2.348	59.63	2.205	56.01	31.63	140.70	22.55	3.95
C0470-072-4000-M	0.470	11.94	0.072	1.83	4.000	101.60	2.500	63.51	2.347	59.63	31.63	140.70	21.09	3.69
C0470-072-4250-M	0.470	11.94	0.072	1.83	4.250	107.95	2.653	67.39	2.490	63.24	31.63	140.70	19.81	3.47
C0470-072-4500-M	0.470	11.94	0.072	1.83	4.500	114.30	2.806	71.27	2.632	66.86	31.63	140.70	18.67	3.27

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-068-0938-S	0.629	15.97	21.43	95.34	69.45	12.15
C0470-068-1000-S	0.667	16.95	21.43	95.34	64.43	11.28
C0470-068-1125-S	0.744	18.90	21.43	95.34	56.29	9.85
C0470-068-1250-S	0.821	20.86	21.43	95.34	49.97	8.74
C0470-068-1375-S	0.898	22.81	21.43	95.34	44.93	7.86
C0470-068-1500-S	0.975	24.76	21.43	95.34	40.81	7.14
C0470-068-1625-S	1.052	26.71	21.43	95.34	37.39	6.54
C0470-068-1750-S	1.129	28.67	21.43	95.34	34.49	6.04
C0470-068-1875-S	1.205	30.62	21.43	95.34	32.01	5.60
C0470-068-2000-S	1.282	32.57	21.43	95.34	29.87	5.23
C0470-068-2125-S	1.359	34.52	21.43	95.34	27.99	4.90
C0470-068-2250-S	1.436	36.48	21.43	95.34	26.33	4.61
C0470-068-2375-S	1.513	38.43	21.43	95.34	24.86	4.35
C0470-068-2500-S	1.590	40.38	21.43	95.34	23.55	4.12
C0470-068-2625-S	1.667	42.33	21.43	95.34	22.37	3.91
C0470-068-2750-S	1.744	44.29	21.43	95.34	21.30	3.73
C0470-068-2875-S	1.820	46.24	21.43	95.34	20.32	3.56
C0470-068-3000-S	1.897	48.19	21.43	95.34	19.44	3.40
C0470-068-3250-S	2.051	52.10	21.43	95.34	17.88	3.13
C0470-068-3500-S	2.205	56.00	21.43	95.34	16.55	2.90
C0470-068-3750-S	2.359	59.91	21.43	95.34	15.40	2.70
C0470-068-4000-S	2.512	63.81	21.43	95.34	14.41	2.52
C0470-068-4250-S	2.666	67.72	21.43	95.34	13.53	2.37
C0470-068-4500-S	2.820	71.62	21.43	95.34	12.76	2.23
C0470-068-4750-S	2.973	75.53	21.43	95.34	12.07	2.11
C0470-068-5000-S	3.127	79.43	21.43	95.34	11.45	2.00
C0470-068-5250-S	3.281	83.34	21.43	95.34	10.89	1.90
C0470-068-5500-S	3.435	87.24	21.43	95.34	10.38	1.82
C0470-068-5750-S	3.588	91.15	21.43	95.34	9.92	1.74
C0470-068-6000-S	3.742	95.05	21.43	95.34	9.49	1.66
C0470-068-6250-S	3.896	98.96	21.43	95.34	9.11	1.59
C0470-068-6500-S	4.050	102.86	21.43	95.34	8.75	1.53
C0470-068-6750-S	4.203	106.77	21.43	95.34	8.42	1.47
C0470-068-7000-S	4.357	110.67	21.43	95.34	8.11	1.42
C0470-068-7500-S	4.665	118.48	21.43	95.34	7.56	1.32
C0470-068-8000-S	4.972	126.29	21.43	95.34	7.08	1.24
C0470-072-0688-S	0.495	12.58	25.00	111.21	130.13	22.77
C0470-072-0750-S	0.536	13.61	25.00	111.21	116.71	20.42
C0470-072-0813-S	0.576	14.64	25.00	111.21	105.79	18.51
C0470-072-0875-S	0.617	15.66	25.00	111.21	96.75	16.93
C0470-072-0938-S	0.657	16.69	25.00	111.21	89.13	15.60
C0470-072-1000-S	0.697	17.71	25.00	111.21	82.62	14.46
C0470-072-1125-S	0.778	19.77	25.00	111.21	72.09	12.62
C0470-072-1250-S	0.859	21.82	25.00	111.21	63.95	11.19
C0470-072-1375-S	0.940	23.87	25.00	111.21	57.45	10.05
C0470-072-1500-S	1.021	25.92	25.00	111.21	52.16	9.13
C0470-072-1625-S	1.101	27.98	25.00	111.21	47.75	8.36
C0470-072-1750-S	1.182	30.03	25.00	111.21	44.04	7.71
C0470-072-1875-S	1.263	32.08	25.00	111.21	40.86	7.15
C0470-072-2000-S	1.344	34.14	25.00	111.21	38.11	6.67
C0470-072-2125-S	1.425	36.19	25.00	111.21	35.70	6.25
C0470-072-2250-S	1.506	38.24	25.00	111.21	33.58	5.88
C0470-072-2375-S	1.586	40.29	25.00	111.21	31.70	5.55
C0470-072-2500-S	1.667	42.35	25.00	111.21	30.02	5.25
C0470-072-2625-S	1.748	44.40	25.00	111.21	28.51	4.99
C0470-072-2750-S	1.829	46.45	25.00	111.21	27.14	4.75
C0470-072-2875-S	1.910	48.50	25.00	111.21	25.90	4.53
C0470-072-3000-S	1.990	50.56	25.00	111.21	24.76	4.33
C0470-072-3250-S	2.152	54.66	25.00	111.21	22.77	3.98
C0470-072-3500-S	2.314	58.77	25.00	111.21	21.07	3.69
C0470-072-3750-S	2.475	62.87	25.00	111.21	19.61	3.43
C0470-072-4000-S	2.637	66.98	25.00	111.21	18.34	3.21
C0470-072-4250-S	2.799	71.08	25.00	111.21	17.22	3.01
C0470-072-4500-S	2.960	75.19	25.00	111.21	16.24	2.84

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0470-072-4750-M	0.470	11.94	0.072	1.83	4.750	120.65	2.959	75.15	2.775	70.48	31.63	140.70	17.66	3.09
C0470-072-5000-M	0.470	11.94	0.072	1.83	5.000	127.00	3.111	79.03	2.917	74.09	31.63	140.70	16.75	2.93
C0470-072-5250-M	0.470	11.94	0.072	1.83	5.250	133.35	3.264	82.91	3.059	77.71	31.63	140.70	15.93	2.79
C0470-072-5500-M	0.470	11.94	0.072	1.83	5.500	139.70	3.417	86.79	3.202	81.33	31.63	140.70	15.19	2.66
C0470-072-5750-M	0.470	11.94	0.072	1.83	5.750	146.05	3.570	90.67	3.344	84.94	31.63	140.70	14.51	2.54
C0470-072-6000-M	0.470	11.94	0.072	1.83	6.000	152.40	3.723	94.55	3.487	88.56	31.63	140.70	13.89	2.43
C0470-072-6250-M	0.470	11.94	0.072	1.83	6.250	158.75	3.875	98.43	3.629	92.18	31.63	140.70	13.32	2.33
C0470-072-6500-M	0.470	11.94	0.072	1.83	6.500	165.10	4.028	102.31	3.771	95.79	31.63	140.70	12.80	2.24
C0470-072-6750-M	0.470	11.94	0.072	1.83	6.750	171.45	4.181	106.19	3.914	99.41	31.63	140.70	12.31	2.15
C0470-072-7000-M	0.470	11.94	0.072	1.83	7.000	177.80	4.334	110.07	4.056	103.03	31.63	140.70	11.86	2.08
C0470-072-7500-M	0.470	11.94	0.072	1.83	7.500	190.50	4.639	117.83	4.341	110.26	31.63	140.70	11.06	1.93
C0470-085-0688-M	0.470	11.94	0.085	2.16	0.688	17.46	0.537	13.63	0.536	13.61	49.51	220.25	328.54	57.49
C0470-085-0750-M	0.470	11.94	0.085	2.16	0.750	19.05	0.581	14.76	0.579	14.70	49.51	220.25	293.14	51.30
C0470-085-0813-M	0.470	11.94	0.085	2.16	0.813	20.64	0.625	15.88	0.622	15.80	49.51	220.25	264.62	46.31
C0470-085-0875-M	0.470	11.94	0.085	2.16	0.875	22.23	0.670	17.01	0.665	16.89	49.51	220.25	241.16	42.20
C0470-085-0938-M	0.470	11.94	0.085	2.16	0.938	23.81	0.714	18.14	0.708	17.99	49.51	220.25	221.53	38.77
C0470-085-1000-M	0.470	11.94	0.085	2.16	1.000	25.40	0.758	19.26	0.751	19.09	49.51	220.25	204.84	35.85
C0470-085-1125-M	0.470	11.94	0.085	2.16	1.125	28.58	0.847	21.51	0.838	21.28	49.51	220.25	178.03	31.16
C0470-085-1250-M	0.470	11.94	0.085	2.16	1.250	31.75	0.935	23.76	0.924	23.47	49.51	220.25	157.43	27.55
C0470-085-1375-M	0.470	11.94	0.085	2.16	1.375	34.93	1.024	26.01	1.010	25.66	49.51	220.25	141.10	24.69
C0470-085-1500-M	0.470	11.94	0.085	2.16	1.500	38.10	1.113	28.26	1.097	27.85	49.51	220.25	127.84	22.37
C0470-085-1625-M	0.470	11.94	0.085	2.16	1.625	41.28	1.201	30.51	1.183	30.04	49.51	220.25	116.85	20.45
C0470-085-1750-M	0.470	11.94	0.085	2.16	1.750	44.45	1.290	32.76	1.269	32.24	49.51	220.25	107.61	18.83
C0470-085-1875-M	0.470	11.94	0.085	2.16	1.875	47.63	1.378	35.01	1.355	34.43	49.51	220.25	99.72	17.45
C0470-085-2000-M	0.470	11.94	0.085	2.16	2.000	50.80	1.467	37.26	1.442	36.62	49.51	220.25	92.91	16.26
C0470-085-2125-M	0.470	11.94	0.085	2.16	2.125	53.98	1.556	39.51	1.528	38.81	49.51	220.25	86.97	15.22
C0470-085-2250-M	0.470	11.94	0.085	2.16	2.250	57.15	1.644	41.76	1.614	41.00	49.51	220.25	81.74	14.30
C0470-085-2375-M	0.470	11.94	0.085	2.16	2.375	60.33	1.733	44.01	1.701	43.19	49.51	220.25	77.11	13.49
C0470-085-2500-M	0.470	11.94	0.085	2.16	2.500	63.50	1.821	46.26	1.787	45.38	49.51	220.25	72.97	12.77
C0470-085-2625-M	0.470	11.94	0.085	2.16	2.625	66.68	1.910	48.52	1.873	47.58	49.51	220.25	69.26	12.12
C0470-085-2750-M	0.470	11.94	0.085	2.16	2.750	69.85	1.999	50.77	1.959	49.77	49.51	220.25	65.90	11.53
C0470-085-2875-M	0.470	11.94	0.085	2.16	2.875	73.03	2.087	53.02	2.046	51.96	49.51	220.25	62.85	11.00
C0470-085-3000-M	0.470	11.94	0.085	2.16	3.000	76.20	2.176	55.27	2.132	54.15	49.51	220.25	60.08	10.51
C0470-085-3250-M	0.470	11.94	0.085	2.16	3.250	82.55	2.353	59.77	2.304	58.53	49.51	220.25	55.20	9.66
C0470-085-3500-M	0.470	11.94	0.085	2.16	3.500	88.90	2.530	64.27	2.477	62.92	49.51	220.25	51.06	8.93
C0470-085-3750-M	0.470	11.94	0.085	2.16	3.750	95.25	2.707	68.77	2.650	67.30	49.51	220.25	47.49	8.31
C0470-085-4000-M	0.470	11.94	0.085	2.16	4.000	101.60	2.885	73.27	2.822	71.68	49.51	220.25	44.39	7.77
C0470-085-4250-M	0.470	11.94	0.085	2.16	4.250	107.95	3.062	77.77	2.995	76.07	49.51	220.25	41.67	7.29
C0470-085-4500-M	0.470	11.94	0.085	2.16	4.500	114.30	3.239	82.27	3.167	80.45	49.51	220.25	39.27	6.87
C0470-085-4750-M	0.470	11.94	0.085	2.16	4.750	120.65	3.416	86.77	3.340	84.83	49.51	220.25	37.12	6.50
C0470-085-5000-M	0.470	11.94	0.085	2.16	5.000	127.00	3.593	91.27	3.512	89.22	49.51	220.25	35.20	6.16
C0470-085-5250-M	0.470	11.94	0.085	2.16	5.250	133.35	3.771	95.77	3.685	93.60	49.51	220.25	33.47	5.86
C0470-085-5500-M	0.470	11.94	0.085	2.16	5.500	139.70	3.948	100.27	3.858	97.98	49.51	220.25	31.90	5.58
C0470-085-5750-M	0.470	11.94	0.085	2.16	5.750	146.05	4.125	104.77	4.030	102.36	49.51	220.25	30.47	5.33
C0470-085-6000-M	0.470	11.94	0.085	2.16	6.000	152.40	4.302	109.28	4.203	106.75	49.51	220.25	29.16	5.10
C0470-085-6250-M	0.470	11.94	0.085	2.16	6.250	158.75	4.479	113.78	4.375	111.13	49.51	220.25	27.96	4.89
C0470-085-6500-M	0.470	11.94	0.085	2.16	6.500	165.10	4.657	118.28	4.548	115.51	49.51	220.25	26.86	4.70
C0470-085-6750-M	0.470	11.94	0.085	2.16	6.750	171.45	4.834	122.78	4.720	119.90	49.51	220.25	25.84	4.52
C0470-085-7000-M	0.470	11.94	0.085	2.16	7.000	177.80	5.011	127.28	4.893	124.28	49.51	220.25	24.89	4.36
C0470-085-7500-M	0.470	11.94	0.085	2.16	7.500	190.50	5.365	136.28	5.238	133.05	49.51	220.25	23.20	4.06
C0470-092-0750-M	0.470	11.94	0.092	2.34	0.750	19.05	0.635	16.13	0.615	15.61	50.27	223.59	437.00	76.48
C0470-092-0813-M	0.470	11.94	0.092	2.34	0.813	20.64	0.684	17.37	0.661	16.80	50.60	225.10	393.55	68.87
C0470-092-0875-M	0.470	11.94	0.092	2.34	0.875	22.23	0.733	18.61	0.708	17.98	50.88	226.34	357.95	62.64
C0470-092-0938-M	0.470	11.94	0.092	2.34	0.938	23.81	0.782	19.86	0.754	19.16	51.12	227.37	328.26	57.45
C0470-092-1000-M	0.470	11.94	0.092	2.34	1.000	25.40	0.831	21.10	0.801	20.34	51.31	228.25	303.12	53.05
C0470-092-1125-M	0.470	11.94	0.092	2.34	1.125	28.58	0.929	23.59	0.894	22.71	51.63	229.65	262.85	46.00
C0470-092-1250-M	0.470	11.94	0.092	2.34	1.250	31.75	1.026	26.07	0.987	25.07	51.87	230.72	232.03	40.61
C0470-092-1375-M	0.470	11.94	0.092	2.34	1.375	34.93	1.081	27.45	1.080	27.43	61.14	271.95	207.68	36.34
C0470-092-1500-M	0.470	11.94	0.092	2.34	1.500	38.10	1.175	29.84	1.173	29.80	61.14	271.95	187.95	32.89
C0470-092-1625-M	0.470	11.94	0.092	2.34	1.625	41.28	1.269	32.23	1.266	32.16	61.14	271.95	171.65	30.04
C0470-092-1750-M	0.470	11.94	0.092	2.34	1.750	44.45	1.363	34.62	1.359	34.53	61.14	271.95	157.95	27.64
C0470-092-1875-M	0.470	11.94	0.092	2.34	1.875	47.63	1.457	37.01	1.452	36.89	61.14	271.95	146.27	25.60
C0470-092-2000-M	0.470	11.94	0.092	2.34	2.000	50.80	1.551	39.40	1.546	39.26	61.14	271.95	136.20	23.84
C0470-092-2125-M	0.470	11.94	0.092	2.34	2.125	53.98	1.645	41.79	1.639	41.62	61.14	271.95	127.43	22.30

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0470-072-4750-S	3.122	79.29	25.00	111.21	15.36	2.69
C0470-072-5000-S	3.283	83.40	25.00	111.21	14.56	2.55
C0470-072-5250-S	3.445	87.50	25.00	111.21	13.85	2.42
C0470-072-5500-S	3.607	91.61	25.00	111.21	13.20	2.31
C0470-072-5750-S	3.768	95.72	25.00	111.21	12.62	2.21
C0470-072-6000-S	3.930	99.82	25.00	111.21	12.08	2.11
C0470-072-6250-S	4.092	103.93	25.00	111.21	11.58	2.03
C0470-072-6500-S	4.253	108.03	25.00	111.21	11.13	1.95
C0470-072-6750-S	4.415	112.14	25.00	111.21	10.71	1.87
C0470-072-7000-S	4.576	116.24	25.00	111.21	10.32	1.81
C0470-072-7500-S	4.900	124.45	25.00	111.21	9.61	1.68
C0470-085-0688-S	0.551	14.01	38.86	172.86	285.69	50.00
C0470-085-0750-S	0.598	15.18	38.86	172.86	254.90	44.61
C0470-085-0813-S	0.644	16.35	38.86	172.86	230.11	40.27
C0470-085-0875-S	0.690	17.52	38.86	172.86	209.71	36.70
C0470-085-0938-S	0.736	18.69	38.86	172.86	192.63	33.71
C0470-085-1000-S	0.782	19.86	38.86	172.86	178.13	31.17
C0470-085-1125-S	0.874	22.20	38.86	172.86	154.81	27.09
C0470-085-1250-S	0.966	24.54	38.86	172.86	136.89	23.96
C0470-085-1375-S	1.058	26.88	38.86	172.86	122.69	21.47
C0470-085-1500-S	1.150	29.22	38.86	172.86	111.16	19.45
C0470-085-1625-S	1.243	31.56	38.86	172.86	101.61	17.78
C0470-085-1750-S	1.335	33.90	38.86	172.86	93.57	16.38
C0470-085-1875-S	1.427	36.24	38.86	172.86	86.71	15.17
C0470-085-2000-S	1.519	38.58	38.86	172.86	80.79	14.14
C0470-085-2125-S	1.611	40.92	38.86	172.86	75.62	13.23
C0470-085-2250-S	1.703	43.26	38.86	172.86	71.08	12.44
C0470-085-2375-S	1.795	45.60	38.86	172.86	67.05	11.73
C0470-085-2500-S	1.888	47.94	38.86	172.86	63.45	11.10
C0470-085-2625-S	1.980	50.28	38.86	172.86	60.22	10.54
C0470-085-2750-S	2.072	52.63	38.86	172.86	57.30	10.03
C0470-085-2875-S	2.164	54.97	38.86	172.86	54.66	9.56
C0470-085-3000-S	2.256	57.31	38.86	172.86	52.24	9.14
C0470-085-3250-S	2.440	61.99	38.86	172.86	48.00	8.40
C0470-085-3500-S	2.625	66.67	38.86	172.86	44.40	7.77
C0470-085-3750-S	2.809	71.35	38.86	172.86	41.30	7.23
C0470-085-4000-S	2.993	76.03	38.86	172.86	38.60	6.76
C0470-085-4250-S	3.178	80.71	38.86	172.86	36.24	6.34
C0470-085-4500-S	3.362	85.39	38.86	172.86	34.14	5.98
C0470-085-4750-S	3.546	90.07	38.86	172.86	32.28	5.65
C0470-085-5000-S	3.730	94.75	38.86	172.86	30.61	5.36
C0470-085-5250-S	3.915	99.43	38.86	172.86	29.10	5.09
C0470-085-5500-S	4.099	104.12	38.86	172.86	27.74	4.85
C0470-085-5750-S	4.283	108.80	38.86	172.86	26.50	4.64
C0470-085-6000-S	4.468	113.48	38.86	172.86	25.36	4.44
C0470-085-6250-S	4.652	118.16	38.86	172.86	24.32	4.26
C0470-085-6500-S	4.836	122.84	38.86	172.86	23.36	4.09
C0470-085-6750-S	5.020	127.52	38.86	172.86	22.47	3.93
C0470-085-7000-S	5.205	132.20	38.86	172.86	21.65	3.79
C0470-085-7500-S	5.573	141.56	38.86	172.86	20.17	3.53
C0470-092-0750-S	0.624	15.86	47.78	212.52	380.00	66.50
C0470-092-0813-S	0.673	17.09	47.78	212.52	342.21	59.89
C0470-092-0875-S	0.722	18.33	47.78	212.52	311.26	54.47
C0470-092-0938-S	0.770	19.56	47.78	212.52	285.44	49.95
C0470-092-1000-S	0.819	20.80	47.78	212.52	263.58	46.13
C0470-092-1125-S	0.916	23.27	47.78	212.52	228.57	40.00
C0470-092-1250-S	1.013	25.74	47.78	212.52	201.77	35.31
C0470-092-1375-S	1.110	28.21	47.78	212.52	180.59	31.60
C0470-092-1500-S	1.208	30.67	47.78	212.52	163.44	28.60
C0470-092-1625-S	1.305	33.14	47.78	212.52	149.26	26.12
C0470-092-1750-S	1.402	35.61	47.78	212.52	137.34	24.04
C0470-092-1875-S	1.499	38.08	47.78	212.52	127.19	22.26
C0470-092-2000-S	1.597	40.55	47.78	212.52	118.44	20.73
C0470-092-2125-S	1.694	43.02	47.78	212.52	110.81	19.39

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL							
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0470-092-2250-M	**0.470**	**11.94**	**0.092**	**2.34**	**2.250**	**57.15**	**1.739**	**44.18**	**1.732**	**43.98**	**61.14**	**271.95**	**119.72**	**20.95**	**C0470-092-2250-S**	**1.791**	**45.49**	**47.78**	**212.52**	**104.11**	**18.22**
C0470-092-2500-M	**0.470**	**11.94**	**0.092**	**2.34**	**2.500**	**63.50**	**1.928**	**48.96**	**1.918**	**48.71**	**61.14**	**271.95**	**106.80**	**18.69**	**C0470-092-2500-S**	**1.986**	**50.43**	**47.78**	**212.52**	**92.87**	**16.25**
C0470-092-2625-M	**0.470**	**11.94**	**0.092**	**2.34**	**2.625**	**66.68**	**2.022**	**51.35**	**2.011**	**51.08**	**61.14**	**271.95**	**101.33**	**17.73**	**C0470-092-2625-S**	**2.083**	**52.90**	**47.78**	**212.52**	**88.11**	**15.42**
C0470-092-2750-M	**0.470**	**11.94**	**0.092**	**2.34**	**2.750**	**69.85**	**2.116**	**53.74**	**2.104**	**53.44**	**61.14**	**271.95**	**96.39**	**16.87**	**C0470-092-2750-S**	**2.180**	**55.37**	**47.78**	**212.52**	**83.82**	**14.67**
C0470-092-2875-M	**0.470**	**11.94**	**0.092**	**2.34**	**2.875**	**73.03**	**2.210**	**56.13**	**2.197**	**55.81**	**61.14**	**271.95**	**91.92**	**16.09**	**C0470-092-2875-S**	**2.277**	**57.84**	**47.78**	**212.52**	**79.93**	**13.99**
C0470-092-3000-M	**0.470**	**11.94**	**0.092**	**2.34**	**3.000**	**76.20**	**2.304**	**58.52**	**2.290**	**58.17**	**61.14**	**271.95**	**87.84**	**15.37**	**C0470-092-3000-S**	**2.374**	**60.31**	**47.78**	**212.52**	**76.38**	**13.37**
C0470-092-3250-M	**0.470**	**11.94**	**0.092**	**2.34**	**3.250**	**82.55**	**2.492**	**63.30**	**2.476**	**62.90**	**61.14**	**271.95**	**80.67**	**14.12**	**C0470-092-3250-S**	**2.569**	**65.25**	**47.78**	**212.52**	**70.15**	**12.28**
C0470-092-3500-M	**0.470**	**11.94**	**0.092**	**2.34**	**3.500**	**88.90**	**2.680**	**68.08**	**2.663**	**67.63**	**61.14**	**271.95**	**74.59**	**13.05**	**C0470-092-3500-S**	**2.763**	**70.19**	**47.78**	**212.52**	**64.86**	**11.35**
C0470-092-3750-M	**0.470**	**11.94**	**0.092**	**2.34**	**3.750**	**95.25**	**2.869**	**72.86**	**2.849**	**72.36**	**61.14**	**271.95**	**69.36**	**12.14**	**C0470-092-3750-S**	**2.958**	**75.13**	**47.78**	**212.52**	**60.31**	**10.55**
C0470-092-4000-M	**0.470**	**11.94**	**0.092**	**2.34**	**4.000**	**101.60**	**3.057**	**77.64**	**3.035**	**77.08**	**61.14**	**271.95**	**64.82**	**11.34**	**C0470-092-4000-S**	**3.152**	**80.07**	**47.78**	**212.52**	**56.36**	**9.86**
C0470-092-4250-M	**0.470**	**11.94**	**0.092**	**2.34**	**4.250**	**107.95**	**3.245**	**82.42**	**3.221**	**81.81**	**61.14**	**271.95**	**60.83**	**10.65**	**C0470-092-4250-S**	**3.347**	**85.01**	**47.78**	**212.52**	**52.90**	**9.26**
C0470-092-4500-M	**0.470**	**11.94**	**0.092**	**2.34**	**4.500**	**114.30**	**3.433**	**87.20**	**3.407**	**86.54**	**61.14**	**271.95**	**57.31**	**10.03**	**C0470-092-4500-S**	**3.541**	**89.95**	**47.78**	**212.52**	**49.83**	**8.72**
C0470-092-4750-M	**0.470**	**11.94**	**0.092**	**2.34**	**4.750**	**120.65**	**3.621**	**91.98**	**3.593**	**91.27**	**61.14**	**271.95**	**54.17**	**9.48**	**C0470-092-4750-S**	**3.736**	**94.89**	**47.78**	**212.52**	**47.11**	**8.24**
C0470-092-5000-M	**0.470**	**11.94**	**0.092**	**2.34**	**5.000**	**127.00**	**3.810**	**96.76**	**3.780**	**96.00**	**61.14**	**271.95**	**51.36**	**8.99**	**C0470-092-5000-S**	**3.930**	**99.83**	**47.78**	**212.52**	**44.66**	**7.82**
C0470-092-5250-M	**0.470**	**11.94**	**0.092**	**2.34**	**5.250**	**133.35**	**3.998**	**101.54**	**3.966**	**100.73**	**61.14**	**271.95**	**48.82**	**8.54**	**C0470-092-5250-S**	**4.125**	**104.77**	**47.78**	**212.52**	**42.46**	**7.43**
C0470-092-5500-M	**0.470**	**11.94**	**0.092**	**2.34**	**5.500**	**139.70**	**4.186**	**106.32**	**4.152**	**105.46**	**61.14**	**271.95**	**46.53**	**8.14**	**C0470-092-5500-S**	**4.319**	**109.71**	**47.78**	**212.52**	**40.46**	**7.08**
C0470-092-5750-M	**0.470**	**11.94**	**0.092**	**2.34**	**5.750**	**146.05**	**4.374**	**111.11**	**4.338**	**110.19**	**61.14**	**271.95**	**44.44**	**7.78**	**C0470-092-5750-S**	**4.514**	**114.65**	**47.78**	**212.52**	**38.64**	**6.76**
C0470-092-6000-M	**0.470**	**11.94**	**0.092**	**2.34**	**6.000**	**152.40**	**4.562**	**115.89**	**4.524**	**114.91**	**61.14**	**271.95**	**42.53**	**7.44**	**C0470-092-6000-S**	**4.708**	**119.59**	**47.78**	**212.52**	**36.98**	**6.47**
C0470-092-6250-M	**0.470**	**11.94**	**0.092**	**2.34**	**6.250**	**158.75**	**4.751**	**120.67**	**4.710**	**119.64**	**61.14**	**271.95**	**40.78**	**7.14**	**C0470-092-6250-S**	**4.903**	**124.52**	**47.78**	**212.52**	**35.46**	**6.20**
C0470-092-6500-M	**0.470**	**11.94**	**0.092**	**2.34**	**6.500**	**165.10**	**4.939**	**125.45**	**4.896**	**124.37**	**61.14**	**271.95**	**39.16**	**6.85**	**C0470-092-6500-S**	**5.097**	**129.46**	**47.78**	**212.52**	**34.05**	**5.96**
C0470-092-6750-M	**0.470**	**11.94**	**0.092**	**2.34**	**6.750**	**171.45**	**5.127**	**130.23**	**5.083**	**129.10**	**61.14**	**271.95**	**37.67**	**6.59**	**C0470-092-6750-S**	**5.291**	**134.40**	**47.78**	**212.52**	**32.76**	**5.73**
C0470-092-7000-M	**0.470**	**11.94**	**0.092**	**2.34**	**7.000**	**177.80**	**5.315**	**135.01**	**5.269**	**133.83**	**61.14**	**271.95**	**36.29**	**6.35**	**C0470-092-7000-S**	**5.486**	**139.34**	**47.78**	**212.52**	**31.56**	**5.52**
C0470-092-7500-M	**0.470**	**11.94**	**0.092**	**2.34**	**7.500**	**190.50**	**5.692**	**144.57**	**5.641**	**143.29**	**61.14**	**271.95**	**33.81**	**5.92**	**C0470-092-7500-S**	**5.875**	**149.22**	**47.78**	**212.52**	**29.40**	**5.14**
D12600	0.472	12.00	0.079	2.00	0.709	18.00	0.441	11.20	0.433	11.00	71.43	317.74	266.17	46.58	D22600	0.441	11.20	59.50	264.68	221.71	38.80
D12610	0.472	12.00	0.079	2.00	1.043	26.50	0.614	15.60	0.591	15.00	71.43	317.74	169.77	29.71	D22610	0.614	15.60	59.50	264.68	141.43	24.75
D12620	0.472	12.00	0.079	2.00	1.516	38.50	0.866	22.00	0.827	21.00	71.43	317.74	109.83	19.22	D22620	0.866	22.00	59.50	264.68	91.49	16.01
D12630	0.472	12.00	0.079	2.00	2.165	55.00	1.205	30.60	1.142	29.00	71.43	317.74	74.51	13.04	D22630	1.205	30.60	59.50	264.68	62.06	10.86
D12640	0.472	12.00	0.079	2.00	3.130	79.50	1.709	43.40	1.614	41.00	71.43	317.74	50.34	8.81	D22640	1.709	43.40	59.50	264.68	41.94	7.34
C0480-035-0500-M	0.480	12.19	0.035	0.89	0.500	12.70	0.200	5.08	0.160	4.06	4.69	20.86	15.70	2.75	C0480-035-0500-S	0.282	7.15	2.86	12.71	13.08	2.29
C0480-035-0620-M	0.480	12.19	0.035	0.89	0.620	15.75	0.237	6.02	0.175	4.45	4.69	20.86	12.20	2.14	C0480-035-0620-S	0.339	8.61	2.86	12.71	10.16	1.78
C0480-035-0750-M	0.480	12.19	0.035	0.89	0.750	19.05	0.276	7.01	0.192	4.88	4.69	20.86	9.90	1.73	C0480-035-0750-S	0.404	10.25	2.86	12.71	8.25	1.44
C0480-035-0880-M	0.480	12.19	0.035	0.89	0.880	22.35	0.315	8.00	0.208	5.28	4.69	20.86	8.30	1.45	C0480-035-0880-S	0.467	11.86	2.86	12.71	6.91	1.21
C0480-035-1000-M	0.480	12.19	0.035	0.89	1.000	25.40	0.352	8.94	0.223	5.66	4.69	20.86	7.20	1.26	C0480-035-1000-S	0.524	13.30	2.86	12.71	6.00	1.05
C0480-035-1250-M	0.480	12.19	0.035	0.89	1.250	31.75	0.427	10.85	0.255	6.48	4.69	20.86	5.70	1.00	C0480-035-1250-S	0.648	16.47	2.86	12.71	4.75	0.83
C0480-035-1500-M	0.480	12.19	0.035	0.89	1.500	38.10	0.503	12.78	0.287	7.29	4.69	20.86	4.70	0.82	C0480-035-1500-S	0.770	19.56	2.86	12.71	3.92	0.69
C0480-035-1750-M	0.480	12.19	0.035	0.89	1.750	44.45	0.579	14.71	0.319	8.10	4.69	20.86	4.00	0.70	C0480-035-1750-S	0.893	22.67	2.86	12.71	3.33	0.58
C0480-035-2000-M	0.480	12.19	0.035	0.89	2.000	50.80	0.655	16.64	0.351	8.92	4.69	20.86	3.50	0.61	C0480-035-2000-S	1.020	25.91	2.86	12.71	2.92	0.51
C0480-035-2500-M	0.480	12.19	0.035	0.89	2.500	63.50	0.825	20.96	0.414	10.52	4.69	20.86	2.80	0.49	C0480-035-2500-S	1.275	32.39	2.86	12.71	2.33	0.41
C0480-035-3000-M	0.480	12.19	0.035	0.89	3.000	76.20	0.958	24.33	0.478	12.14	4.69	20.86	2.30	0.40	C0480-035-3000-S	1.509	38.32	2.86	12.71	1.92	0.34
C0480-038-0500-M	0.480	12.19	0.038	0.97	0.500	12.70	0.200	5.08	0.144	3.66	6.00	26.69	20.00	3.50	C0480-038-0500-S	0.285	7.24	3.58	15.93	16.66	2.92
C0480-038-0625-M	0.480	12.19	0.038	0.97	0.620	15.75	0.220	5.59	0.167	4.24	6.00	26.69	15.00	2.63	C0480-038-0625-S	0.333	8.47	3.58	15.93	12.50	2.19
C0480-038-0750-M	0.480	12.19	0.038	0.97	0.750	19.05	0.270	6.86	0.185	4.70	6.00	26.69	12.50	2.19	C0480-038-0750-S	0.406	10.32	3.58	15.93	10.41	1.82
C0480-038-0880-M	0.480	12.19	0.038	0.97	0.880	22.35	0.305	7.75	0.207	5.26	6.00	26.69	10.50	1.84	C0480-038-0880-S	0.471	11.96	3.58	15.93	8.75	1.53
C0480-038-1000-M	0.480	12.19	0.038	0.97	1.000	25.40	0.370	9.40	0.220	5.59	6.00	26.69	9.50	1.66	C0480-038-1000-S	0.548	13.91	3.58	15.93	7.91	1.38
C0480-038-1250-M	0.480	12.19	0.038	0.97	1.250	31.75	0.450	11.43	0.259	6.58	6.00	26.69	7.50	1.31	C0480-038-1250-S	0.677	17.19	3.58	15.93	6.25	1.09
C0480-038-1500-M	0.480	12.19	0.038	0.97	1.500	38.10	0.500	12.70	0.305	7.75	6.00	26.69	6.00	1.05	C0480-038-1500-S	0.784	19.91	3.58	15.93	5.00	0.87
C0480-038-1750-M	0.480	12.19	0.038	0.97	1.750	44.45	0.660	16.76	0.352	8.94	6.00	26.69	5.50	0.96	C0480-038-1750-S	0.969	24.60	3.58	15.93	4.58	0.80
C0480-038-2000-M	0.480	12.19	0.038	0.97	2.000	50.80	0.756	19.20	0.388	9.86	6.00	26.69	4.80	0.84	C0480-038-2000-S	1.105	28.06	3.58	15.93	4.00	0.70
C0480-038-2250-M	0.480	12.19	0.038	0.97	2.250	57.15	0.963	24.46	0.397	10.08	6.00	26.69	4.70	0.82	C0480-038-2250-S	1.336	33.92	3.58	15.93	3.92	0.69
C0480-038-2500-M	0.480	12.19	0.038	0.97	2.500	63.50	1.065	27.05	0.429	10.90	6.00	26.69	4.20	0.74	C0480-038-2500-S	1.477	37.51	3.58	15.93	3.50	0.61
C0480-038-2750-M	0.480	12.19	0.038	0.97	2.750	69.85	1.168	29.67	0.462	11.73	6.00	26.69	3.80	0.67	C0480-038-2750-S	1.619	41.12	3.58	15.93	3.17	0.55
C0480-038-3000-M	0.480	12.19	0.038	0.97	3.000	76.20	1.270	32.26	0.494	12.55	6.00	26.69	3.50	0.61	C0480-038-3000-S	1.772	45.01	3.58	15.93	2.92	0.51
C0480-042-0500-M	0.480	12.19	0.042	1.07	0.500	12.70	0.220	5.59	0.167	4.24	7.80	34.70	28.00	4.90	C0480-042-0500-S	0.296	7.52	4.76	21.18	23.32	4.08
C0480-042-0625-M	0.480	12.19	0.042	1.07	0.620	15.75	0.249	6.32	0.194	4.93	7.80	34.70	21.00	3.68	C0480-042-0625-S	0.348	8.84	4.76	21.18	17.49	3.06
C0480-042-0750-M	0.480	12.19	0.042	1.07	0.750	19.05	0.315	8.00	0.213	5.41	7.80	34.70	18.00	3.15	C0480-042-0750-S	0.432	10.99	4.76	21.18	14.99	2.62
C0480-042-0880-M	0.480	12.19	0.042	1.07	0.880	22.35	0.355	9.02	0.239	6.07	7.80	34.70	15.00	2.63	C0480-042-0880-S	0.499	12.67	4.76	21.18	12.50	2.19
C0480-042-1000-M	0.480	12.19	0.042	1.07	1.000	25.40	0.400	10.16	0.263	6.68	7.80	34.70	13.00	2.28	C0480-042-1000-S	0.560	14.23	4.76	21.18	10.83	1.90
C0480-042-1250-M	0.480	12.19	0.042	1.07	1.250	31.75	0.470	11.94	0.317	8.05	7.80	34.70	10.00	1.75	C0480-042-1250-S	0.678	17.23	4.76	21.18	8.33	1.46
C0480-042-1500-M	0.480	12.19	0.042	1.07	1.500	38.10	0.580	14.73	0.358	9.09	7.80	34.70	8.50	1.49	C0480-042-1500-S	0.828	21.02	4.76	21.18	7.08	1.24
C0480-042-1750-M	0.480	12.19	0.042	1.07	1.750	44.45	0.737	18.72	0.418	10.62	7.80	34.70	7.70	1.35	C0480-042-1750-S	1.008	25.60	4.76	21.18	6.41	1.12
C0480-042-2000-M	0.480	12.19	0.042	1.07	2.000	50.80	0.836	21.23	0.462	11.73	7.80	34.70	6.70	1.17	C0480-042-2000-S	1.147	29.13	4.76	21.18	5.58	0.98
C0480-042-2250-M	0.480	12.19	0.042	1.07	2.250	57.15	0.928	23.57	0.505	12.83	7.80	34.70	5.90	1.03	C0480-042-2250-S	1.281	32.55	4.76	21.18	4.92	0.86
C0480-042-2500-M	0.480	12.19	0.042	1.07	2.500	63.50	1.125	28.58	0.520	13.21	7.80	34.70	5.70	1.00	C0480-042-2500-S	1.497	38.03	4.76	21.18	4.75	0.83
C0480-042-2750-M	0.480	12.19	0.042	1.07	2.750	69.85	1.233	31.32	0.561	14.25	7.80	34.70	5.10	0.89	C0480-042-2750-S	1.629	41.39	4.76	21.18	4.25	0.74

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0480-042-3000-M	0.480	12.19	0.042	1.07	3.000	76.20	1.340	34.04	0.602	15.29	7.80	34.70	4.70	0.82
C0480-045-0500-M	0.480	12.19	0.045	1.14	0.500	12.70	0.237	6.02	0.185	4.70	9.20	40.92	35.00	6.13
C0480-045-0625-M	0.480	12.19	0.045	1.14	0.620	15.75	0.291	7.39	0.209	5.31	9.20	40.92	28.00	4.90
C0480-045-0750-M	0.480	12.19	0.045	1.14	0.750	19.05	0.330	8.38	0.242	6.15	9.20	40.92	22.00	3.85
C0480-045-0880-M	0.480	12.19	0.045	1.14	0.880	22.35	0.396	10.06	0.266	6.76	9.20	40.92	19.00	3.33
C0480-045-1000-M	0.480	12.19	0.045	1.14	1.000	25.40	0.460	11.68	0.287	7.29	9.20	40.92	17.00	2.98
C0480-045-1250-M	0.480	12.19	0.045	1.14	1.250	31.75	0.545	13.84	0.348	8.84	9.20	40.92	13.00	2.28
C0480-045-1500-M	0.480	12.19	0.045	1.14	1.500	38.10	0.665	16.89	0.395	10.03	9.20	40.92	11.00	1.93
C0480-045-1750-M	0.480	12.19	0.045	1.14	1.750	44.45	0.792	20.12	0.469	11.91	9.20	40.92	9.60	1.68
C0480-045-2000-M	0.480	12.19	0.045	1.14	2.000	50.80	0.905	22.99	0.520	13.21	9.20	40.92	8.40	1.47
C0480-045-2250-M	0.480	12.19	0.045	1.14	2.250	57.15	1.007	25.58	0.570	14.48	9.20	40.92	7.40	1.30
C0480-045-2500-M	0.480	12.19	0.045	1.14	2.500	63.50	1.115	28.32	0.620	15.75	9.20	40.92	6.60	1.16
C0480-045-2750-M	0.480	12.19	0.045	1.14	2.750	69.85	1.222	31.04	0.671	17.04	9.20	40.92	6.00	1.05
C0480-045-3000-M	0.480	12.19	0.045	1.14	3.000	76.20	1.327	33.71	0.721	18.31	9.20	40.92	5.50	0.96
C0480-051-0500-M	0.480	12.19	0.051	1.30	0.500	12.70	0.296	7.52	0.255	6.48	12.51	55.65	61.30	10.73
C0480-051-0620-M	0.480	12.19	0.051	1.30	0.620	15.75	0.355	9.02	0.286	7.26	12.51	55.65	47.10	8.24
C0480-051-0750-M	0.480	12.19	0.051	1.30	0.750	19.05	0.418	10.62	0.320	8.13	12.51	55.65	37.70	6.60
C0480-051-0880-M	0.480	12.19	0.051	1.30	0.880	22.35	0.481	12.22	0.353	8.97	12.51	55.65	31.40	5.50
C0480-051-1000-M	0.480	12.19	0.051	1.30	1.000	25.40	0.540	13.72	0.384	9.75	12.51	55.65	27.20	4.76
C0480-051-1250-M	0.480	12.19	0.051	1.30	1.250	31.75	0.662	16.81	0.448	11.38	12.51	55.65	21.30	3.73
C0480-051-1500-M	0.480	12.19	0.051	1.30	1.500	38.10	0.784	19.91	0.513	13.03	12.51	55.65	17.50	3.06
C0480-051-1750-M	0.480	12.19	0.051	1.30	1.750	44.45	0.906	23.01	0.577	14.66	12.51	55.65	14.80	2.59
C0480-051-2000-M	0.480	12.19	0.051	1.30	2.000	50.80	1.027	26.09	0.641	16.28	12.51	55.65	12.90	2.26
C0480-051-2250-M	0.480	12.19	0.051	1.30	2.250	57.15	1.149	29.18	0.706	17.93	12.51	55.65	11.40	2.00
C0480-051-2500-M	0.480	12.19	0.051	1.30	2.500	63.50	1.271	32.28	0.770	19.56	12.51	55.65	10.20	1.79
C0480-051-2750-M	0.480	12.19	0.051	1.30	2.750	69.85	1.393	35.38	0.834	21.18	12.51	55.65	9.20	1.61
C0480-051-3000-M	0.480	12.19	0.051	1.30	3.000	76.20	1.515	38.48	0.899	22.83	12.51	55.65	8.40	1.47
C0480-055-0500-M	0.480	12.19	0.055	1.40	0.500	12.70	0.275	6.99	0.246	6.25	16.20	72.06	72.00	12.60
C0480-055-0625-M	0.480	12.19	0.055	1.40	0.620	15.75	0.331	8.41	0.285	7.24	16.20	72.06	56.00	9.80
C0480-055-0750-M	0.480	12.19	0.055	1.40	0.750	19.05	0.404	10.26	0.319	8.10	16.20	72.06	47.00	8.23
C0480-055-0880-M	0.480	12.19	0.055	1.40	0.880	22.35	0.450	11.43	0.368	9.35	16.20	72.06	38.00	6.65
C0480-055-1000-M	0.480	12.19	0.055	1.40	1.000	25.40	0.535	13.59	0.391	9.93	16.20	72.06	35.00	6.13
C0480-055-1250-M	0.480	12.19	0.055	1.40	1.250	31.75	0.650	16.51	0.474	12.04	16.20	72.06	27.00	4.73
C0480-055-1500-M	0.480	12.19	0.055	1.40	1.500	38.10	0.765	19.43	0.557	14.15	16.20	72.06	22.00	3.85
C0480-055-1750-M	0.480	12.19	0.055	1.40	1.750	44.45	0.915	23.24	0.651	16.54	16.20	72.06	19.40	3.40
C0480-055-2000-M	0.480	12.19	0.055	1.40	2.000	50.80	1.036	26.31	0.725	18.42	16.20	72.06	16.80	2.94
C0480-055-2250-M	0.480	12.19	0.055	1.40	2.250	57.15	1.163	29.54	0.799	20.29	16.20	72.06	14.90	2.61
C0480-055-2500-M	0.480	12.19	0.055	1.40	2.500	63.50	1.282	32.56	0.874	22.20	16.20	72.06	13.30	2.33
C0480-055-2750-M	0.480	12.19	0.055	1.40	2.750	69.85	1.468	37.29	0.911	23.14	16.20	72.06	12.60	2.21
C0480-055-3000-M	0.480	12.19	0.055	1.40	3.000	76.20	1.597	40.56	0.981	24.92	16.20	72.06	11.50	2.01
C0480-059-0500-M	0.480	12.19	0.059	1.50	0.500	12.70	0.325	8.26	0.305	7.75	18.75	83.40	107.20	18.76
C0480-059-0620-M	0.480	12.19	0.059	1.50	0.620	15.75	0.390	9.91	0.346	8.79	18.75	83.40	81.60	14.28
C0480-059-0750-M	0.480	12.19	0.059	1.50	0.750	19.05	0.461	11.71	0.390	9.91	18.75	83.40	64.80	11.34
C0480-059-1000-M	0.480	12.19	0.059	1.50	1.000	25.40	0.596	15.14	0.474	12.04	18.75	83.40	46.40	8.12
C0480-059-1250-M	0.480	12.19	0.059	1.50	1.250	31.75	0.732	18.59	0.558	14.17	18.75	83.40	36.20	6.34
C0480-059-1500-M	0.480	12.19	0.059	1.50	1.500	38.10	0.867	22.02	0.642	16.31	18.75	83.40	29.60	5.18
C0480-059-1750-M	0.480	12.19	0.059	1.50	1.750	44.45	1.003	25.48	0.726	18.44	18.75	83.40	25.10	4.39
C0480-059-2000-M	0.480	12.19	0.059	1.50	2.000	50.80	1.138	28.91	0.810	20.57	18.75	83.40	21.80	3.82
C0480-059-2250-M	0.480	12.19	0.059	1.50	2.250	57.15	1.274	32.36	0.894	22.71	18.75	83.40	19.20	3.36
C0480-059-2500-M	0.480	12.19	0.059	1.50	2.500	63.50	1.409	35.79	0.978	24.84	18.75	83.40	17.20	3.01
C0480-059-2750-M	0.480	12.19	0.059	1.50	2.750	69.85	1.545	39.24	1.062	26.97	18.75	83.40	15.60	2.73
C0480-059-3000-M	0.480	12.19	0.059	1.50	3.000	76.20	1.680	42.67	1.146	29.11	18.75	83.40	14.20	2.49
C0480-063-0500-M	0.480	12.19	0.063	1.60	0.500	12.70	0.308	7.82	0.296	7.52	23.00	102.31	120.00	21.00
C0480-063-0625-M	0.480	12.19	0.063	1.60	0.620	15.75	0.378	9.60	0.342	8.69	23.00	102.31	95.00	16.63
C0480-063-0750-M	0.480	12.19	0.063	1.60	0.750	19.05	0.455	11.56	0.388	9.86	23.00	102.31	78.00	13.65
C0480-063-0880-M	0.480	12.19	0.063	1.60	0.880	22.35	0.532	13.51	0.436	11.07	23.00	102.31	66.00	11.55
C0480-063-1000-M	0.480	12.19	0.063	1.60	1.000	25.40	0.595	15.11	0.485	12.32	23.00	102.31	57.00	9.98
C0480-063-1250-M	0.480	12.19	0.063	1.60	1.250	31.75	0.740	18.80	0.582	14.78	23.00	102.31	45.00	7.88
C0480-063-1380-M	0.480	12.19	0.063	1.60	1.380	35.05	0.841	21.36	0.655	16.64	23.00	102.31	42.70	7.47
C0480-063-1500-M	0.480	12.19	0.063	1.60	1.500	38.10	0.895	22.73	0.665	16.89	23.00	102.31	38.00	6.65
C0480-063-1750-M	0.480	12.19	0.063	1.60	1.750	44.45	1.036	26.31	0.801	20.35	23.00	102.31	32.20	5.64
C0480-063-2000-M	0.480	12.19	0.063	1.60	2.000	50.80	1.176	29.87	0.895	22.73	23.00	102.31	27.90	4.88
C0480-063-2250-M	0.480	12.19	0.063	1.60	2.250	57.15	1.315	33.40	0.989	25.12	23.00	102.31	24.60	4.31
C0480-063-2500-M	0.480	12.19	0.063	1.60	2.500	63.50	1.455	36.96	1.083	27.51	23.00	102.31	22.00	3.85

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0480-042-3000-S	1.784	45.31	4.76	21.18	3.92	0.69
C0480-045-0500-S	0.303	7.71	5.73	25.48	29.16	5.10
C0480-045-0625-S	0.374	9.51	5.73	25.48	23.32	4.08
C0480-045-0750-S	0.437	11.11	5.73	25.48	18.33	3.21
C0480-045-0880-S	0.518	13.16	5.73	25.48	15.83	2.77
C0480-045-1000-S	0.595	15.12	5.73	25.48	14.16	2.48
C0480-045-1250-S	0.721	18.31	5.73	25.48	10.83	1.90
C0480-045-1500-S	0.875	22.22	5.73	25.48	9.16	1.60
C0480-045-1750-S	1.034	26.25	5.73	25.48	8.00	1.40
C0480-045-2000-S	1.181	30.00	5.73	25.48	7.00	1.22
C0480-045-2250-S	1.321	33.54	5.73	25.48	6.16	1.08
C0480-045-2500-S	1.458	37.03	5.73	25.48	5.50	0.96
C0480-045-2750-S	1.604	40.73	5.73	25.48	5.00	0.87
C0480-045-3000-S	1.750	44.44	5.73	25.48	4.58	0.80
C0480-051-0500-S	0.339	8.61	8.22	36.57	51.06	8.94
C0480-051-0620-S	0.410	10.43	8.22	36.57	39.23	6.87
C0480-051-0750-S	0.488	12.40	8.22	36.57	31.40	5.50
C0480-051-0880-S	0.566	14.37	8.22	36.57	26.16	4.58
C0480-051-1000-S	0.637	16.18	8.22	36.57	22.66	3.97
C0480-051-1250-S	0.787	19.98	8.22	36.57	17.74	3.11
C0480-051-1500-S	0.936	23.78	8.22	36.57	14.58	2.55
C0480-051-1750-S	1.083	27.51	8.22	36.57	12.33	2.16
C0480-051-2000-S	1.235	31.37	8.22	36.57	10.75	1.88
C0480-051-2250-S	1.384	35.16	8.22	36.57	9.50	1.66
C0480-051-2500-S	1.532	38.93	8.22	36.57	8.50	1.49
C0480-051-2750-S	1.677	42.60	8.22	36.57	7.66	1.34
C0480-051-3000-S	1.825	46.36	8.22	36.57	7.00	1.22
C0480-055-0500-S	0.331	8.42	10.11	44.95	59.98	10.50
C0480-055-0625-S	0.403	10.25	10.11	44.95	46.65	8.16
C0480-055-0750-S	0.492	12.49	10.11	44.95	39.15	6.85
C0480-055-0880-S	0.561	14.24	10.11	44.95	31.65	5.54
C0480-055-1000-S	0.653	16.60	10.11	44.95	29.16	5.10
C0480-055-1250-S	0.801	20.34	10.11	44.95	22.49	3.94
C0480-055-1500-S	0.949	24.09	10.11	44.95	18.33	3.21
C0480-055-1750-S	1.125	28.57	10.11	44.95	16.16	2.83
C0480-055-2000-S	1.278	32.46	10.11	44.95	13.99	2.45
C0480-055-2250-S	1.436	36.47	10.11	44.95	12.41	2.17
C0480-055-2500-S	1.588	40.33	10.11	44.95	11.08	1.94
C0480-055-2750-S	1.787	45.39	10.11	44.95	10.50	1.84
C0480-055-3000-S	1.945	49.40	10.11	44.95	9.58	1.68
C0480-059-0500-S	0.363	9.21	12.27	54.58	89.30	15.63
C0480-059-0620-S	0.439	11.16	12.27	54.58	67.97	11.90
C0480-059-0750-S	0.523	13.28	12.27	54.58	53.98	9.45
C0480-059-1000-S	0.683	17.34	12.27	54.58	38.65	6.76
C0480-059-1250-S	0.843	21.41	12.27	54.58	30.16	5.28
C0480-059-1500-S	1.002	25.46	12.27	54.58	24.66	4.31
C0480-059-1750-S	1.163	29.54	12.27	54.58	20.91	3.66
C0480-059-2000-S	1.324	33.64	12.27	54.58	18.16	3.18
C0480-059-2250-S	1.483	37.66	12.27	54.58	15.99	2.80
C0480-059-2500-S	1.644	41.75	12.27	54.58	14.33	2.51
C0480-059-2750-S	1.806	45.87	12.27	54.58	13.00	2.27
C0480-059-3000-S	1.963	49.85	12.27	54.58	11.83	2.07
C0480-063-0500-S	0.355	9.01	14.52	64.57	99.96	17.49
C0480-063-0625-S	0.437	11.09	14.52	64.57	79.14	13.85
C0480-063-0750-S	0.527	13.38	14.52	64.57	64.97	11.37
C0480-063-0880-S	0.616	15.65	14.52	64.57	54.98	9.62
C0480-063-1000-S	0.694	17.63	14.52	64.57	47.48	8.31
C0480-063-1250-S	0.863	21.91	14.52	64.57	37.49	6.56
C0480-063-1380-S	0.972	24.69	14.52	64.57	35.57	6.22
C0480-063-1500-S	1.041	26.45	14.52	64.57	31.65	5.54
C0480-063-1750-S	1.209	30.70	14.52	64.57	26.82	4.69
C0480-063-2000-S	1.375	34.94	14.52	64.57	23.24	4.07
C0480-063-2250-S	1.542	39.16	14.52	64.57	20.49	3.59
C0480-063-2500-S	1.708	43.38	14.52	64.57	18.33	3.21

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0480-063-2750-M	0.480	12.19	0.063	1.60	2.750	69.85	1.597	40.56	1.177	29.90	23.00	102.31	19.90	3.48	C0480-063-2750-S	1.874	47.61	14.52	64.57	16.58	2.90
C0480-063-3000-M	0.480	12.19	0.063	1.60	3.000	76.20	1.737	44.12	1.271	32.28	23.00	102.31	18.20	3.19	C0480-063-3000-S	2.043	51.88	14.52	64.57	15.16	2.65
C0480-067-0500-M	0.480	12.19	0.067	1.70	0.500	12.70	0.353	8.97	0.336	8.53	26.63	118.46	180.70	31.62	C0480-067-0500-S	0.385	9.77	17.37	77.25	150.52	26.34
C0480-067-0620-M	0.480	12.19	0.067	1.70	0.620	15.75	0.424	10.77	0.403	10.24	26.63	118.46	136.10	23.82	C0480-067-0620-S	0.467	11.86	17.37	77.25	113.37	19.84
C0480-067-0750-M	0.480	12.19	0.067	1.70	0.750	19.05	0.502	12.75	0.458	11.63	26.63	118.46	107.40	18.80	C0480-067-0750-S	0.556	14.12	17.37	77.25	89.46	15.66
C0480-067-0880-M	0.480	12.19	0.067	1.70	0.880	22.35	0.580	14.73	0.512	13.00	26.63	118.46	88.70	15.52	C0480-067-0880-S	0.645	16.38	17.37	77.25	73.89	12.93
C0480-067-1000-M	0.480	12.19	0.067	1.70	1.000	25.40	0.651	16.54	0.562	14.27	26.63	118.46	76.40	13.37	C0480-067-1000-S	0.727	18.47	17.37	77.25	63.64	11.14
C0480-067-1250-M	0.480	12.19	0.067	1.70	1.250	31.75	0.801	20.35	0.666	16.92	26.63	118.46	59.30	10.38	C0480-067-1250-S	0.898	22.82	17.37	77.25	49.40	8.64
C0480-067-1500-M	0.480	12.19	0.067	1.70	1.500	38.10	0.950	24.13	0.770	19.56	26.63	118.46	48.40	8.47	C0480-067-1500-S	1.069	27.16	17.37	77.25	40.32	7.06
C0480-067-1750-M	0.480	12.19	0.067	1.70	1.750	44.45	1.099	27.91	0.874	22.20	26.63	118.46	40.90	7.16	C0480-067-1750-S	1.240	31.50	17.37	77.25	34.07	5.96
C0480-067-2000-M	0.480	12.19	0.067	1.70	2.000	50.80	1.249	31.72	0.978	24.84	26.63	118.46	35.40	6.20	C0480-067-2000-S	1.411	35.84	17.37	77.25	29.49	5.16
C0480-067-2250-M	0.480	12.19	0.067	1.70	2.250	57.15	1.398	35.51	1.082	27.48	26.63	118.46	31.30	5.48	C0480-067-2250-S	1.584	40.23	17.37	77.25	26.07	4.56
C0480-067-2500-M	0.480	12.19	0.067	1.70	2.500	63.50	1.547	39.29	1.187	30.15	26.63	118.46	28.00	4.90	C0480-067-2500-S	1.755	44.59	17.37	77.25	23.32	4.08
C0480-067-2750-M	0.480	12.19	0.067	1.70	2.750	69.85	1.697	43.10	1.291	32.79	26.63	118.46	25.30	4.43	C0480-067-2750-S	1.926	48.92	17.37	77.25	21.08	3.69
C0480-067-3000-M	0.480	12.19	0.067	1.70	3.000	76.20	1.846	46.89	1.395	35.43	26.63	118.46	23.10	4.04	C0480-067-3000-S	2.098	53.28	17.37	77.25	19.24	3.37
C0480-072-0500-M	0.480	12.19	0.072	1.83	0.500	12.70	0.373	9.47	0.358	9.09	32.48	144.48	255.60	44.73	C0480-072-0500-S	0.400	10.17	21.23	94.43	212.92	37.26
C0480-072-0620-M	0.480	12.19	0.072	1.83	0.620	15.75	0.450	11.43	0.419	10.64	32.48	144.48	191.20	33.46	C0480-072-0620-S	0.487	12.36	21.23	94.43	159.27	27.87
C0480-072-0750-M	0.480	12.19	0.072	1.83	0.750	19.05	0.534	13.56	0.485	12.32	32.48	144.48	150.20	26.29	C0480-072-0750-S	0.580	14.74	21.23	94.43	125.12	21.90
C0480-072-0880-M	0.480	12.19	0.072	1.83	0.880	22.35	0.617	15.67	0.547	13.89	32.48	144.48	123.70	21.65	C0480-072-0880-S	0.674	17.12	21.23	94.43	103.04	18.03
C0480-072-1000-M	0.480	12.19	0.072	1.83	1.000	25.40	0.695	17.65	0.601	15.27	32.48	144.48	106.30	18.60	C0480-072-1000-S	0.760	19.31	21.23	94.43	88.55	15.50
C0480-072-1250-M	0.480	12.19	0.072	1.83	1.250	31.75	0.855	21.72	0.714	18.14	32.48	144.48	82.30	14.40	C0480-072-1250-S	0.940	23.88	21.23	94.43	68.56	12.00
C0480-072-1500-M	0.480	12.19	0.072	1.83	1.500	38.10	1.016	25.81	0.826	20.98	32.48	144.48	67.10	11.74	C0480-072-1500-S	1.120	28.45	21.23	94.43	55.89	9.78
C0480-072-1750-M	0.480	12.19	0.072	1.83	1.750	44.45	1.177	29.90	0.939	23.85	32.48	144.48	56.70	9.92	C0480-072-1750-S	1.301	33.03	21.23	94.43	47.23	8.27
C0480-072-2000-M	0.480	12.19	0.072	1.83	2.000	50.80	1.338	33.99	1.051	26.70	32.48	144.48	49.00	8.58	C0480-072-2000-S	1.480	37.59	21.23	94.43	40.82	7.14
C0480-072-2250-M	0.480	12.19	0.072	1.83	2.250	57.15	1.498	38.05	1.164	29.57	32.48	144.48	43.20	7.56	C0480-072-2250-S	1.660	42.17	21.23	94.43	35.99	6.30
C0480-072-2500-M	0.480	12.19	0.072	1.83	2.500	63.50	1.659	42.14	1.276	32.41	32.48	144.48	38.60	6.76	C0480-072-2500-S	1.840	46.73	21.23	94.43	32.15	5.63
C0480-072-2750-M	0.480	12.19	0.072	1.83	2.750	69.85	1.820	46.23	1.389	35.28	32.48	144.48	34.90	6.11	C0480-072-2750-S	2.020	51.30	21.23	94.43	29.07	5.09
C0480-072-3000-M	0.480	12.19	0.072	1.83	3.000	76.20	1.981	50.32	1.501	38.13	32.48	144.48	31.90	5.58	C0480-072-3000-S	2.201	55.91	21.23	94.43	26.57	4.65
C0480-072-3250-M	0.480	12.19	0.072	1.83	3.250	82.55	2.142	54.41	1.614	41.00	32.48	144.48	29.30	5.13	C0480-072-3250-S	2.380	60.46	21.23	94.43	24.41	4.27
C0480-072-3500-M	0.480	12.19	0.072	1.83	3.500	88.90	2.302	58.47	1.726	43.84	32.48	144.48	27.10	4.74	C0480-072-3500-S	2.560	65.01	21.23	94.43	22.57	3.95
C0480-074-0500-M	0.480	12.19	0.074	1.88	0.500	12.70	0.380	9.65	0.350	8.89	34.79	154.75	289.10	50.59	C0480-074-0500-S	0.405	10.28	22.98	102.22	240.82	42.14
C0480-074-0620-M	0.480	12.19	0.074	1.88	0.620	15.75	0.459	11.66	0.421	10.69	34.79	154.75	215.60	37.73	C0480-074-0620-S	0.492	12.50	22.98	102.22	179.60	31.43
C0480-074-0750-M	0.480	12.19	0.074	1.88	0.750	19.05	0.544	13.82	0.482	12.24	34.79	154.75	169.10	29.59	C0480-074-0750-S	0.587	14.91	22.98	102.22	140.86	24.65
C0480-074-0880-M	0.480	12.19	0.074	1.88	0.880	22.35	0.630	16.00	0.546	13.87	34.79	154.75	139.00	24.33	C0480-074-0880-S	0.682	17.31	22.98	102.22	115.79	20.26
C0480-074-1000-M	0.480	12.19	0.074	1.88	1.000	25.40	0.709	18.01	0.610	15.49	34.79	154.75	119.40	20.90	C0480-074-1000-S	0.769	19.53	22.98	102.22	99.46	17.41
C0480-074-1250-M	0.480	12.19	0.074	1.88	1.250	31.75	0.873	22.17	0.734	18.64	34.79	154.75	92.30	16.15	C0480-074-1250-S	0.951	24.16	22.98	102.22	76.89	13.46
C0480-074-1500-M	0.480	12.19	0.074	1.88	1.500	38.10	1.038	26.37	0.855	21.72	34.79	154.75	75.30	13.18	C0480-074-1500-S	1.134	28.79	22.98	102.22	62.73	10.98
C0480-074-1750-M	0.480	12.19	0.074	1.88	1.750	44.45	1.202	30.53	0.972	24.69	34.79	154.75	63.50	11.11	C0480-074-1750-S	1.316	33.42	22.98	102.22	52.90	9.26
C0480-074-2000-M	0.480	12.19	0.074	1.88	2.000	50.80	1.367	34.72	1.089	27.66	34.79	154.75	55.00	9.63	C0480-074-2000-S	1.498	38.06	22.98	102.22	45.82	8.02
C0480-074-2250-M	0.480	12.19	0.074	1.88	2.250	57.15	1.531	38.89	1.206	30.63	34.79	154.75	48.40	8.47	C0480-074-2250-S	1.680	42.67	22.98	102.22	40.32	7.06
C0480-074-2500-M	0.480	12.19	0.074	1.88	2.500	63.50	1.696	43.08	1.324	33.63	34.79	154.75	43.30	7.58	C0480-074-2500-S	1.863	47.32	22.98	102.22	36.07	6.31
C0480-074-2750-M	0.480	12.19	0.074	1.88	2.750	69.85	1.861	47.27	1.441	36.60	34.79	154.75	39.10	6.84	C0480-074-2750-S	2.044	51.93	22.98	102.22	32.57	5.70
C0480-074-3000-M	0.480	12.19	0.074	1.88	3.000	76.20	2.025	51.44	1.558	39.57	34.79	154.75	35.70	6.25	C0480-074-3000-S	2.227	56.57	22.98	102.22	29.74	5.20
C0480-074-3250-M	0.480	12.19	0.074	1.88	3.250	82.55	2.190	55.63	1.675	42.55	34.79	154.75	32.80	5.74	C0480-074-3250-S	2.409	61.19	22.98	102.22	27.32	4.78
C0480-074-3500-M	0.480	12.19	0.074	1.88	3.500	88.90	2.354	59.79	1.792	45.52	34.79	154.75	30.40	5.32	C0480-074-3500-S	2.593	65.85	22.98	102.22	25.32	4.43
C0480-081-0500-M	0.480	12.19	0.081	2.06	0.500	12.70	0.401	10.19	0.379	9.63	44.34	197.23	446.70	78.17	C0480-081-0500-S	0.422	10.73	28.86	128.36	372.10	65.12
C0480-081-0620-M	0.480	12.19	0.081	2.06	0.620	15.75	0.486	12.34	0.458	11.63	44.34	197.23	329.70	57.70	C0480-081-0620-S	0.515	13.08	28.86	128.36	274.64	48.06
C0480-081-0750-M	0.480	12.19	0.081	2.06	0.750	19.05	0.577	14.66	0.526	13.36	44.34	197.23	256.80	44.94	C0480-081-0750-S	0.615	15.62	28.86	128.36	213.91	37.43
C0480-081-0880-M	0.480	12.19	0.081	2.06	0.880	22.35	0.669	16.99	0.598	15.19	44.34	197.23	210.30	36.80	C0480-081-0880-S	0.715	18.17	28.86	128.36	175.18	30.66
C0480-081-1000-M	0.480	12.19	0.081	2.06	1.000	25.40	0.754	19.15	0.669	16.99	44.34	197.23	180.20	31.54	C0480-081-1000-S	0.808	20.52	28.86	128.36	150.11	26.27
C0480-081-1250-M	0.480	12.19	0.081	2.06	1.250	31.75	0.931	23.65	0.808	20.52	44.34	197.23	138.80	24.29	C0480-081-1250-S	1.000	25.41	28.86	128.36	115.62	20.23
C0480-081-1500-M	0.480	12.19	0.081	2.06	1.500	38.10	1.107	28.12	0.942	23.93	44.34	197.23	112.90	19.76	C0480-081-1500-S	1.193	30.31	28.86	128.36	94.05	16.46
C0480-081-1750-M	0.480	12.19	0.081	2.06	1.750	44.45	1.284	32.61	1.073	27.25	44.34	197.23	95.10	16.64	C0480-081-1750-S	1.386	35.20	28.86	128.36	79.22	13.86
C0480-081-2000-M	0.480	12.19	0.081	2.06	2.000	50.80	1.460	37.08	1.204	30.58	44.34	197.23	82.20	14.39	C0480-081-2000-S	1.579	40.10	28.86	128.36	68.47	11.98
C0480-081-2250-M	0.480	12.19	0.081	2.06	2.250	57.15	1.637	41.58	1.334	33.88	44.34	197.23	72.30	12.65	C0480-081-2250-S	1.771	44.98	28.86	128.36	60.23	10.54
C0480-081-2500-M	0.480	12.19	0.081	2.06	2.500	63.50	1.813	46.05	1.465	37.21	44.34	197.23	64.60	11.31	C0480-081-2500-S	1.964	49.88	28.86	128.36	53.81	9.42
C0480-081-2750-M	0.480	12.19	0.081	2.06	2.750	69.85	1.990	50.55	1.595	40.51	44.34	197.23	58.30	10.20	C0480-081-2750-S	2.156	54.76	28.86	128.36	48.56	8.50
C0480-081-3000-M	0.480	12.19	0.081	2.06	3.000	76.20	2.167	55.04	1.726	43.84	44.34	197.23	53.20	9.31	C0480-081-3000-S	2.349	59.66	28.86	128.36	44.32	7.76
C0480-081-3250-M	0.480	12.19	0.081	2.06	3.250	82.55	2.343	59.51	1.857	47.17	44.34	197.23	48.90	8.56	C0480-081-3250-S	2.542	64.56	28.86	128.36	40.73	7.13
C0480-081-3500-M	0.480	12.19	0.081	2.06	3.500	88.90	2.520	64.01	1.987	50.47	44.34	197.23	45.20	7.91	C0480-081-3500-S	2.734	69.43	28.86	128.36	37.65	6.59
C0500-041-0500-M	**0.500**	**12.70**	**0.041**	**1.04**	**0.500**	**12.70**	**0.220**	**5.60**	**0.180**	**4.56**	**4.98**	**22.17**	**17.83**	**3.12**	**C0500-041-0500-S**	**0.220**	**5.60**	**4.15**	**18.47**	**14.85**	**2.60**
C0500-041-0625-M	**0.500**	**12.70**	**0.041**	**1.04**	**0.625**	**15.88**	**0.267**	**6.77**	**0.213**	**5.42**	**4.92**	**21.88**	**13.72**	**2.40**	**C0500-041-0625-S**	**0.267**	**6.77**	**4.10**	**18.22**	**11.43**	**2.00**
C0500-041-0750-M	**0.500**	**12.70**	**0.041**	**1.04**	**0.750**	**19.05**	**0.312**	**7.94**	**0.247**	**6.27**	**4.88**	**21.72**	**11.16**	**1.95**	**C0500-041-0750-S**	**0.312**	**7.94**	**4.07**	**18.09**	**9.30**	**1.63**
C0500-041-0875-M	**0.500**	**12.70**	**0.041**	**1.04**	**0.875**	**22.23**	**0.357**	**9.06**	**0.278**	**7.07**	**4.87**	**21.67**	**9.40**	**1.65**	**C0500-041-0875-S**	**0.357**	**9.06**	**4.06**	**18.05**	**7.83**	**1.37**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0500-041-1000-M	0.500	12.70	0.041	1.04	1.000	25.40	0.400	10.16	0.309	7.84	4.87	21.67	8.12	1.42
C0500-041-1250-M	0.500	12.70	0.041	1.04	1.250	31.75	0.487	12.36	0.370	9.39	4.87	21.66	6.38	1.12
C0500-041-1500-M	0.500	12.70	0.041	1.04	1.500	38.10	0.573	14.55	0.430	10.92	4.88	21.69	5.26	0.92
C0500-041-1750-M	0.500	12.70	0.041	1.04	1.750	44.45	0.660	16.76	0.491	12.46	4.87	21.68	4.47	0.78
C0500-041-2000-M	0.500	12.70	0.041	1.04	2.000	50.80	0.746	18.95	0.551	13.99	4.88	21.70	3.89	0.68
C0500-041-2250-M	0.500	12.70	0.041	1.04	2.250	57.15	0.833	21.15	0.612	15.54	4.88	21.69	3.44	0.60
C0500-041-2500-M	0.500	12.70	0.041	1.04	2.500	63.50	0.920	23.37	0.673	17.10	4.87	21.65	3.08	0.54
C0500-041-2750-M	0.500	12.70	0.041	1.04	2.750	69.85	1.007	25.58	0.734	18.65	4.86	21.63	2.79	0.49
C0500-041-3000-M	0.500	12.70	0.041	1.04	3.000	76.20	1.094	27.78	0.795	20.20	4.86	21.62	2.55	0.45
C0500-063-0500-M	0.500	12.70	0.063	1.60	0.500	12.70	0.329	8.35	0.313	7.96	16.23	72.21	94.76	16.58
C0500-063-0625-M	0.500	12.70	0.063	1.60	0.625	15.88	0.404	10.27	0.384	9.74	15.69	69.80	71.07	12.44
C0500-063-0750-M	0.500	12.70	0.063	1.60	0.750	19.05	0.475	12.07	0.448	11.38	15.63	69.52	56.86	9.95
C0500-063-0875-M	0.500	12.70	0.063	1.60	0.875	22.23	0.545	13.84	0.511	12.98	15.63	69.54	47.38	8.29
C0500-063-1000-M	0.500	12.70	0.063	1.60	1.000	25.40	0.615	15.62	0.574	14.59	15.64	69.56	40.61	7.11
C0500-063-1250-M	0.500	12.70	0.063	1.60	1.250	31.75	0.755	19.17	0.701	17.79	15.65	69.62	31.59	5.53
C0500-063-1500-M	0.500	12.70	0.063	1.60	1.500	38.10	0.894	22.72	0.827	21.00	15.65	69.61	25.84	4.52
C0500-063-1750-M	0.500	12.70	0.063	1.60	1.750	44.45	1.039	26.40	0.959	24.37	15.42	68.61	21.70	3.80
C0500-063-2000-M	0.500	12.70	0.063	1.60	2.000	50.80	1.174	29.82	1.080	27.42	15.65	69.64	18.95	3.32
C0500-063-2250-M	0.500	12.70	0.063	1.60	2.250	57.15	1.314	33.37	1.206	30.63	15.66	69.64	16.72	2.93
C0500-063-2500-M	0.500	12.70	0.063	1.60	2.500	63.50	1.453	36.92	1.332	33.84	15.66	69.65	14.96	2.62
C0500-063-2750-M	0.500	12.70	0.063	1.60	2.750	69.85	1.593	40.46	1.458	37.03	15.67	69.70	13.54	2.37
C0500-063-3000-M	0.500	12.70	0.063	1.60	3.000	76.20	1.733	44.01	1.585	40.25	15.66	69.68	12.36	2.16
C0500-072-0500-M	0.500	12.70	0.072	1.83	0.500	12.70	0.344	8.73	0.324	8.23	31.29	139.20	200.36	35.06
C0500-072-0625-M	0.500	12.70	0.072	1.83	0.625	15.88	0.415	10.54	0.397	10.08	31.16	138.59	148.29	25.95
C0500-072-0750-M	0.500	12.70	0.072	1.83	0.750	19.05	0.491	12.47	0.468	11.88	30.47	135.55	117.70	20.60
C0500-072-0875-M	0.500	12.70	0.072	1.83	0.875	22.23	0.563	14.29	0.533	13.54	30.47	135.54	97.57	17.07
C0500-072-1000-M	0.500	12.70	0.072	1.83	1.000	25.40	0.634	16.11	0.598	15.19	30.48	135.56	83.33	14.58
C0500-072-1250-M	0.500	12.70	0.072	1.83	1.250	31.75	0.777	19.75	0.729	18.51	30.47	135.55	64.49	11.29
C0500-072-1500-M	0.500	12.70	0.072	1.83	1.500	38.10	0.921	23.39	0.859	21.83	30.47	135.55	52.60	9.21
C0500-072-1750-M	0.500	12.70	0.072	1.83	1.750	44.45	1.064	27.02	0.990	25.15	30.47	135.53	44.41	7.77
C0500-072-2000-M	0.500	12.70	0.072	1.83	2.000	50.80	1.207	30.66	1.120	28.46	30.47	135.55	38.43	6.73
C0500-072-2250-M	0.500	12.70	0.072	1.83	2.250	57.15	1.350	34.30	1.251	31.78	30.48	135.56	33.87	5.93
C0500-072-2500-M	0.500	12.70	0.072	1.83	2.500	63.50	1.494	37.94	1.382	35.10	30.46	135.51	30.27	5.30
C0500-072-2750-M	0.500	12.70	0.072	1.83	2.750	69.85	1.637	41.57	1.512	38.41	30.47	135.55	27.37	4.79
C0500-072-3000-M	0.500	12.70	0.072	1.83	3.000	76.20	1.780	45.21	1.643	41.73	30.46	135.50	24.97	4.37
C0500-072-3250-M	0.500	12.70	0.072	1.83	3.250	82.55	1.923	48.85	1.774	45.05	30.46	135.50	22.96	4.02
C0500-072-3500-M	0.500	12.70	0.072	1.83	3.500	88.90	2.066	52.49	1.904	48.37	30.46	135.51	21.25	3.72
C0529-045-1000-M	0.529	13.44	0.045	1.14	1.000	25.40	0.385	9.77	0.290	7.36	7.74	34.43	12.58	2.20
C0529-045-1125-M	0.529	13.44	0.045	1.14	1.125	28.58	0.425	10.80	0.317	8.04	7.74	34.43	11.06	1.94
C0529-045-1250-M	0.529	13.44	0.045	1.14	1.250	31.75	0.466	11.82	0.343	8.72	7.74	34.43	9.87	1.73
C0529-045-1375-M	0.529	13.44	0.045	1.14	1.375	34.93	0.506	12.85	0.370	9.41	7.74	34.43	8.91	1.56
C0529-045-1500-M	0.529	13.44	0.045	1.14	1.500	38.10	0.546	13.88	0.397	10.09	7.74	34.43	8.12	1.42
C0529-045-1625-M	0.529	13.44	0.045	1.14	1.625	41.28	0.587	14.91	0.424	10.77	7.74	34.43	7.46	1.30
C0529-045-1750-M	0.529	13.44	0.045	1.14	1.750	44.45	0.627	15.94	0.451	11.45	7.74	34.43	6.90	1.21
C0529-045-1875-M	0.529	13.44	0.045	1.14	1.875	47.63	0.668	16.96	0.478	12.13	7.74	34.43	6.41	1.12
C0529-045-2000-M	0.529	13.44	0.045	1.14	2.000	50.80	0.708	17.99	0.504	12.81	7.74	34.43	5.99	1.05
C0529-045-2125-M	0.529	13.44	0.045	1.14	2.125	53.98	0.749	19.02	0.531	13.49	7.74	34.43	5.62	0.98
C0529-045-2250-M	0.529	13.44	0.045	1.14	2.250	57.15	0.789	20.05	0.558	14.18	7.74	34.43	5.30	0.93
C0529-045-2375-M	0.529	13.44	0.045	1.14	2.375	60.33	0.830	21.08	0.585	14.86	7.74	34.43	5.01	0.88
C0529-045-2500-M	0.529	13.44	0.045	1.14	2.500	63.50	0.870	22.10	0.612	15.54	7.74	34.43	4.75	0.83
C0529-045-2625-M	0.529	13.44	0.045	1.14	2.625	66.68	0.911	23.13	0.639	16.22	7.74	34.43	4.52	0.79
C0529-045-2750-M	0.529	13.44	0.045	1.14	2.750	69.85	0.951	24.16	0.665	16.90	7.74	34.43	4.30	0.75
C0529-045-2875-M	0.529	13.44	0.045	1.14	2.875	73.03	0.992	25.19	0.692	17.58	7.74	34.43	4.11	0.72
C0529-045-3000-M	0.529	13.44	0.045	1.14	3.000	76.20	1.032	26.22	0.719	18.26	7.74	34.43	3.93	0.69
C0529-045-3250-M	0.529	13.44	0.045	1.14	3.250	82.55	1.113	28.27	0.773	19.63	7.74	34.43	3.62	0.63
C0529-045-3500-M	0.529	13.44	0.045	1.14	3.500	88.90	1.194	30.33	0.826	20.99	7.74	34.43	3.36	0.59
C0529-045-3750-M	0.529	13.44	0.045	1.14	3.750	95.25	1.275	32.38	0.880	22.35	7.74	34.43	3.13	0.55
C0529-045-4000-M	0.529	13.44	0.045	1.14	4.000	101.60	1.356	34.44	0.934	23.72	7.74	34.43	2.93	0.51
C0529-045-4250-M	0.529	13.44	0.045	1.14	4.250	107.95	1.437	36.49	0.987	25.08	7.74	34.43	2.75	0.48
C0529-045-4500-M	0.529	13.44	0.045	1.14	4.500	114.30	1.518	38.55	1.041	26.44	7.74	34.43	2.60	0.45
C0529-045-4750-M	0.529	13.44	0.045	1.14	4.750	120.65	1.599	40.61	1.095	27.80	7.74	34.43	2.46	0.43
C0529-045-5000-M	0.529	13.44	0.045	1.14	5.000	127.00	1.680	42.66	1.148	29.17	7.74	34.43	2.33	0.41
C0529-045-5250-M	0.529	13.44	0.045	1.14	5.250	133.35	1.761	44.72	1.202	30.53	7.74	34.43	2.22	0.39
C0529-045-5500-M	0.529	13.44	0.045	1.14	5.500	139.70	1.841	46.77	1.256	31.89	7.74	34.43	2.12	0.37

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0500-041-1000-S	0.400	10.16	4.06	18.05	6.76	1.18
C0500-041-1250-S	0.487	12.36	4.06	18.05	5.32	0.93
C0500-041-1500-S	0.573	14.55	4.06	18.07	4.38	0.77
C0500-041-1750-S	0.660	16.76	4.06	18.06	3.72	0.65
C0500-041-2000-S	0.746	18.95	4.06	18.07	3.24	0.57
C0500-041-2250-S	0.833	21.15	4.06	18.06	2.87	0.50
C0500-041-2500-S	0.920	23.37	4.05	18.03	2.57	0.45
C0500-041-2750-S	1.007	25.58	4.05	18.02	2.32	0.41
C0500-041-3000-S	1.094	27.78	4.05	18.01	2.12	0.37
C0500-063-0500-S	0.329	8.35	13.52	60.15	78.94	13.81
C0500-063-0625-S	0.404	10.27	13.07	58.14	59.20	10.36
C0500-063-0750-S	0.475	12.07	13.02	57.91	47.36	8.29
C0500-063-0875-S	0.545	13.84	13.02	57.93	39.47	6.91
C0500-063-1000-S	0.615	15.62	13.03	57.95	33.83	5.92
C0500-063-1250-S	0.755	19.17	13.04	57.99	26.31	4.60
C0500-063-1500-S	0.894	22.72	13.03	57.98	21.53	3.77
C0500-063-1750-S	1.039	26.40	12.85	57.15	18.08	3.16
C0500-063-2000-S	1.174	29.82	13.04	58.01	15.79	2.76
C0500-063-2250-S	1.314	33.37	13.04	58.01	13.93	2.44
C0500-063-2500-S	1.453	36.92	13.04	58.02	12.46	2.18
C0500-063-2750-S	1.593	40.46	13.05	58.06	11.28	1.97
C0500-063-3000-S	1.733	44.01	13.05	58.04	10.30	1.80
C0500-072-0500-S	0.358	9.10	23.65	105.20	166.90	29.21
C0500-072-0625-S	0.434	11.01	23.65	105.20	123.53	21.62
C0500-072-0750-S	0.509	12.92	23.65	105.20	98.04	17.16
C0500-072-0875-S	0.584	14.83	23.65	105.20	81.28	14.22
C0500-072-1000-S	0.659	16.75	23.65	105.20	69.41	12.15
C0500-072-1250-S	0.810	20.57	23.65	105.20	53.72	9.40
C0500-072-1500-S	0.960	24.39	23.65	105.20	43.82	7.67
C0500-072-1750-S	1.111	28.21	23.65	105.20	36.99	6.47
C0500-072-2000-S	1.261	32.03	23.65	105.20	32.01	5.60
C0500-072-2250-S	1.412	35.86	23.65	105.20	28.21	4.94
C0500-072-2500-S	1.562	39.68	23.65	105.20	25.22	4.41
C0500-072-2750-S	1.713	43.50	23.65	105.20	22.80	3.99
C0500-072-3000-S	1.863	47.32	23.65	105.20	20.80	3.64
C0500-072-3250-S	2.013	51.14	23.65	105.20	19.13	3.35
C0500-072-3500-S	2.164	54.96	23.65	105.20	17.70	3.10
C0529-045-1000-S	0.437	11.10	6.16	27.40	10.94	1.91
C0529-045-1125-S	0.484	12.31	6.16	27.40	9.62	1.68
C0529-045-1250-S	0.532	13.52	6.16	27.40	8.58	1.50
C0529-045-1375-S	0.580	14.73	6.16	27.40	7.75	1.36
C0529-045-1500-S	0.627	15.94	6.16	27.40	7.06	1.24
C0529-045-1625-S	0.675	17.15	6.16	27.40	6.48	1.13
C0529-045-1750-S	0.723	18.36	6.16	27.40	6.00	1.05
C0529-045-1875-S	0.770	19.57	6.16	27.40	5.58	0.98
C0529-045-2000-S	0.818	20.78	6.16	27.40	5.21	0.91
C0529-045-2125-S	0.866	21.99	6.16	27.40	4.89	0.86
C0529-045-2250-S	0.913	23.20	6.16	27.40	4.61	0.81
C0529-045-2375-S	0.961	24.41	6.16	27.40	4.36	0.76
C0529-045-2500-S	1.009	25.62	6.16	27.40	4.13	0.72
C0529-045-2625-S	1.056	26.83	6.16	27.40	3.93	0.69
C0529-045-2750-S	1.104	28.04	6.16	27.40	3.74	0.65
C0529-045-2875-S	1.151	29.25	6.16	27.40	3.57	0.63
C0529-045-3000-S	1.199	30.46	6.16	27.40	3.42	0.60
C0529-045-3250-S	1.294	32.88	6.16	27.40	3.15	0.55
C0529-045-3500-S	1.390	35.30	6.16	27.40	2.92	0.51
C0529-045-3750-S	1.485	37.72	6.16	27.40	2.72	0.48
C0529-045-4000-S	1.580	40.14	6.16	27.40	2.55	0.45
C0529-045-4250-S	1.675	42.56	6.16	27.40	2.39	0.42
C0529-045-4500-S	1.771	44.98	6.16	27.40	2.26	0.39
C0529-045-4750-S	1.866	47.40	6.16	27.40	2.14	0.37
C0529-045-5000-S	1.961	49.82	6.16	27.40	2.03	0.35
C0529-045-5250-S	2.057	52.24	6.16	27.40	1.93	0.34
C0529-045-5500-S	2.152	54.66	6.16	27.40	1.84	0.32

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0529-045-5750-M	**0.529**	**13.44**	**0.045**	**1.14**	**5.750**	**146.05**	**1.922**	**48.83**	**1.309**	**33.26**	**7.74**	**34.43**	**2.02**	**0.35**
C0529-045-6000-M	**0.529**	**13.44**	**0.045**	**1.14**	**6.000**	**152.40**	**2.003**	**50.88**	**1.363**	**34.62**	**7.74**	**34.43**	**1.94**	**0.34**
C0529-045-6250-M	**0.529**	**13.44**	**0.045**	**1.14**	**6.250**	**158.75**	**2.084**	**52.94**	**1.417**	**35.98**	**7.74**	**34.43**	**1.86**	**0.33**
C0529-045-6500-M	**0.529**	**13.44**	**0.045**	**1.14**	**6.500**	**165.10**	**2.165**	**55.00**	**1.470**	**37.34**	**7.74**	**34.43**	**1.79**	**0.31**
C0529-045-6750-M	**0.529**	**13.44**	**0.045**	**1.14**	**6.750**	**171.45**	**2.246**	**57.05**	**1.524**	**38.71**	**7.74**	**34.43**	**1.72**	**0.30**
C0529-045-7000-M	**0.529**	**13.44**	**0.045**	**1.14**	**7.000**	**177.80**	**2.327**	**59.11**	**1.578**	**40.07**	**7.74**	**34.43**	**1.66**	**0.29**
C0529-045-7500-M	**0.529**	**13.44**	**0.045**	**1.14**	**7.500**	**190.50**	**2.489**	**63.22**	**1.685**	**42.80**	**7.74**	**34.43**	**1.55**	**0.27**
C0529-045-8000-M	**0.529**	**13.44**	**0.045**	**1.14**	**8.000**	**203.20**	**2.651**	**67.33**	**1.792**	**45.52**	**7.74**	**34.43**	**1.45**	**0.25**
C0529-045-8500-M	**0.529**	**13.44**	**0.045**	**1.14**	**8.500**	**215.90**	**2.813**	**71.44**	**1.900**	**48.25**	**7.74**	**34.43**	**1.36**	**0.24**
C0529-045-9000-M	**0.529**	**13.44**	**0.045**	**1.14**	**9.000**	**228.60**	**2.975**	**75.55**	**2.007**	**50.97**	**7.74**	**34.43**	**1.29**	**0.22**
C0529-045-9500-M	**0.529**	**13.44**	**0.045**	**1.14**	**9.500**	**241.30**	**3.136**	**79.67**	**2.114**	**53.70**	**7.74**	**34.43**	**1.22**	**0.21**
C0529-047-1000-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.000**	**25.40**	**0.401**	**10.19**	**0.310**	**7.89**	**8.74**	**38.87**	**14.60**	**2.55**
C0529-047-1125-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.125**	**28.58**	**0.444**	**11.27**	**0.340**	**8.63**	**8.74**	**38.87**	**12.83**	**2.24**
C0529-047-1250-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.250**	**31.75**	**0.486**	**12.35**	**0.369**	**9.37**	**8.74**	**38.87**	**11.44**	**2.00**
C0529-047-1375-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.375**	**34.93**	**0.529**	**13.43**	**0.398**	**10.11**	**8.74**	**38.87**	**10.32**	**1.81**
C0529-047-1500-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.500**	**38.10**	**0.571**	**14.50**	**0.427**	**10.85**	**8.74**	**38.87**	**9.41**	**1.65**
C0529-047-1625-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.625**	**41.28**	**0.613**	**15.58**	**0.457**	**11.60**	**8.74**	**38.87**	**8.64**	**1.51**
C0529-047-1750-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.750**	**44.45**	**0.656**	**16.66**	**0.486**	**12.34**	**8.74**	**38.87**	**7.99**	**1.40**
C0529-047-1875-M	**0.529**	**13.44**	**0.047**	**1.19**	**1.875**	**47.63**	**0.698**	**17.73**	**0.515**	**13.08**	**8.74**	**38.87**	**7.43**	**1.30**
C0529-047-2000-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.000**	**50.80**	**0.741**	**18.81**	**0.544**	**13.82**	**8.74**	**38.87**	**6.94**	**1.21**
C0529-047-2125-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.125**	**53.98**	**0.783**	**19.89**	**0.573**	**14.57**	**8.74**	**38.87**	**6.51**	**1.14**
C0529-047-2250-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.250**	**57.15**	**0.825**	**20.96**	**0.603**	**15.31**	**8.74**	**38.87**	**6.13**	**1.07**
C0529-047-2375-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.375**	**60.33**	**0.868**	**22.04**	**0.632**	**16.05**	**8.74**	**38.87**	**5.80**	**1.01**
C0529-047-2500-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.500**	**63.50**	**0.910**	**23.12**	**0.661**	**16.79**	**8.74**	**38.87**	**5.50**	**0.96**
C0529-047-2625-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.625**	**66.68**	**0.953**	**24.20**	**0.690**	**17.53**	**8.74**	**38.87**	**5.23**	**0.91**
C0529-047-2750-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.750**	**69.85**	**0.995**	**25.27**	**0.720**	**18.28**	**8.74**	**38.87**	**4.98**	**0.87**
C0529-047-2875-M	**0.529**	**13.44**	**0.047**	**1.19**	**2.875**	**73.03**	**1.037**	**26.35**	**0.749**	**19.02**	**8.74**	**38.87**	**4.76**	**0.83**
C0529-047-3000-M	**0.529**	**13.44**	**0.047**	**1.19**	**3.000**	**76.20**	**1.080**	**27.43**	**0.778**	**19.76**	**8.74**	**38.87**	**4.55**	**0.80**
C0529-047-3250-M	**0.529**	**13.44**	**0.047**	**1.19**	**3.250**	**82.55**	**1.165**	**29.58**	**0.836**	**21.25**	**8.74**	**38.87**	**4.19**	**0.73**
C0529-047-3500-M	**0.529**	**13.44**	**0.047**	**1.19**	**3.500**	**88.90**	**1.249**	**31.74**	**0.895**	**22.73**	**8.74**	**38.87**	**3.88**	**0.68**
C0529-047-3750-M	**0.529**	**13.44**	**0.047**	**1.19**	**3.750**	**95.25**	**1.334**	**33.89**	**0.953**	**24.21**	**8.74**	**38.87**	**3.62**	**0.63**
C0529-047-4000-M	**0.529**	**13.44**	**0.047**	**1.19**	**4.000**	**101.60**	**1.419**	**36.04**	**1.012**	**25.70**	**8.74**	**38.87**	**3.39**	**0.59**
C0529-047-4250-M	**0.529**	**13.44**	**0.047**	**1.19**	**4.250**	**107.95**	**1.504**	**38.20**	**1.070**	**27.18**	**8.74**	**38.87**	**3.18**	**0.56**
C0529-047-4500-M	**0.529**	**13.44**	**0.047**	**1.19**	**4.500**	**114.30**	**1.589**	**40.35**	**1.129**	**28.67**	**8.74**	**38.87**	**3.00**	**0.53**
C0529-047-4750-M	**0.529**	**13.44**	**0.047**	**1.19**	**4.750**	**120.65**	**1.673**	**42.51**	**1.187**	**30.15**	**8.74**	**38.87**	**2.84**	**0.50**
C0529-047-5000-M	**0.529**	**13.44**	**0.047**	**1.19**	**5.000**	**127.00**	**1.758**	**44.66**	**1.246**	**31.64**	**8.74**	**38.87**	**2.70**	**0.47**
C0529-047-5250-M	**0.529**	**13.44**	**0.047**	**1.19**	**5.250**	**133.35**	**1.843**	**46.81**	**1.304**	**33.12**	**8.74**	**38.87**	**2.57**	**0.45**
C0529-047-5500-M	**0.529**	**13.44**	**0.047**	**1.19**	**5.500**	**139.70**	**1.928**	**48.97**	**1.362**	**34.60**	**8.74**	**38.87**	**2.45**	**0.43**
C0529-047-5750-M	**0.529**	**13.44**	**0.047**	**1.19**	**5.750**	**146.05**	**2.013**	**51.12**	**1.421**	**36.09**	**8.74**	**38.87**	**2.34**	**0.41**
C0529-047-6000-M	**0.529**	**13.44**	**0.047**	**1.19**	**6.000**	**152.40**	**2.098**	**53.28**	**1.479**	**37.57**	**8.74**	**38.87**	**2.24**	**0.39**
C0529-047-6250-M	**0.529**	**13.44**	**0.047**	**1.19**	**6.250**	**158.75**	**2.182**	**55.43**	**1.538**	**39.06**	**8.74**	**38.87**	**2.15**	**0.38**
C0529-047-6500-M	**0.529**	**13.44**	**0.047**	**1.19**	**6.500**	**165.10**	**2.267**	**57.58**	**1.596**	**40.54**	**8.74**	**38.87**	**2.06**	**0.36**
C0529-047-6750-M	**0.529**	**13.44**	**0.047**	**1.19**	**6.750**	**171.45**	**2.352**	**59.74**	**1.655**	**42.03**	**8.74**	**38.87**	**1.99**	**0.35**
C0529-047-7000-M	**0.529**	**13.44**	**0.047**	**1.19**	**7.000**	**177.80**	**2.437**	**61.89**	**1.713**	**43.51**	**8.74**	**38.87**	**1.92**	**0.34**
C0529-047-7500-M	**0.529**	**13.44**	**0.047**	**1.19**	**7.500**	**190.50**	**2.606**	**66.20**	**1.830**	**46.48**	**8.74**	**38.87**	**1.79**	**0.31**
C0529-047-8000-M	**0.529**	**13.44**	**0.047**	**1.19**	**8.000**	**203.20**	**2.776**	**70.51**	**1.947**	**49.45**	**8.74**	**38.87**	**1.67**	**0.29**
C0529-047-8500-M	**0.529**	**13.44**	**0.047**	**1.19**	**8.500**	**215.90**	**2.946**	**74.82**	**2.064**	**52.42**	**8.74**	**38.87**	**1.57**	**0.28**
C0529-047-9000-M	**0.529**	**13.44**	**0.047**	**1.19**	**9.000**	**228.60**	**3.115**	**79.13**	**2.181**	**55.39**	**8.74**	**38.87**	**1.49**	**0.26**
C0529-047-9500-M	**0.529**	**13.44**	**0.047**	**1.19**	**9.500**	**241.30**	**3.285**	**83.43**	**2.297**	**58.35**	**8.74**	**38.87**	**1.41**	**0.25**
C0529-049-0938-M	**0.529**	**13.44**	**0.049**	**1.25**	**0.938**	**23.81**	**0.396**	**10.06**	**0.316**	**8.02**	**9.81**	**43.66**	**18.13**	**3.17**
C0529-049-1000-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.000**	**25.40**	**0.418**	**10.62**	**0.331**	**8.42**	**9.81**	**43.66**	**16.87**	**2.95**
C0529-049-1125-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.125**	**28.58**	**0.463**	**11.75**	**0.363**	**9.22**	**9.81**	**43.66**	**14.82**	**2.59**
C0529-049-1250-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.250**	**31.75**	**0.507**	**12.88**	**0.395**	**10.03**	**9.81**	**43.66**	**13.21**	**2.31**
C0529-049-1375-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.375**	**34.93**	**0.551**	**14.01**	**0.426**	**10.83**	**9.81**	**43.66**	**11.92**	**2.09**
C0529-049-1500-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.500**	**38.10**	**0.596**	**15.13**	**0.458**	**11.64**	**9.81**	**43.66**	**10.85**	**1.90**
C0529-049-1625-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.625**	**41.28**	**0.640**	**16.26**	**0.490**	**12.44**	**9.81**	**43.66**	**9.97**	**1.74**
C0529-049-1750-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.750**	**44.45**	**0.685**	**17.39**	**0.521**	**13.24**	**9.81**	**43.66**	**9.21**	**1.61**
C0529-049-1875-M	**0.529**	**13.44**	**0.049**	**1.25**	**1.875**	**47.63**	**0.729**	**18.52**	**0.553**	**14.05**	**9.81**	**43.66**	**8.56**	**1.50**
C0529-049-2000-M	**0.529**	**13.44**	**0.049**	**1.25**	**2.000**	**50.80**	**0.773**	**19.64**	**0.585**	**14.85**	**9.81**	**43.66**	**8.00**	**1.40**
C0529-049-2125-M	**0.529**	**13.44**	**0.049**	**1.25**	**2.125**	**53.98**	**0.818**	**20.77**	**0.616**	**15.66**	**9.81**	**43.66**	**7.51**	**1.31**
C0529-049-2250-M	**0.529**	**13.44**	**0.049**	**1.25**	**2.250**	**57.15**	**0.862**	**21.90**	**0.648**	**16.46**	**9.81**	**43.66**	**7.07**	**1.24**
C0529-049-2375-M	**0.529**	**13.44**	**0.049**	**1.25**	**2.375**	**60.33**	**0.907**	**23.03**	**0.680**	**17.27**	**9.81**	**43.66**	**6.68**	**1.17**
C0529-049-2500-M	**0.529**	**13.44**	**0.049**	**1.25**	**2.500**	**63.50**	**0.951**	**24.15**	**0.711**	**18.07**	**9.81**	**43.66**	**6.34**	**1.11**
C0529-049-2625-M	**0.529**	**13.44**	**0.049**	**1.25**	**2.625**	**66.68**	**0.995**	**25.28**	**0.743**	**18.87**	**9.81**	**43.66**	**6.02**	**1.05**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0529-045-5750-S	**2.247**	**57.08**	**6.16**	**27.40**	**1.76**	**0.31**
C0529-045-6000-S	**2.342**	**59.50**	**6.16**	**27.40**	**1.68**	**0.29**
C0529-045-6250-S	**2.438**	**61.92**	**6.16**	**27.40**	**1.62**	**0.28**
C0529-045-6500-S	**2.533**	**64.34**	**6.16**	**27.40**	**1.55**	**0.27**
C0529-045-6750-S	**2.628**	**66.76**	**6.16**	**27.40**	**1.49**	**0.26**
C0529-045-7000-S	**2.724**	**69.18**	**6.16**	**27.40**	**1.44**	**0.25**
C0529-045-7500-S	**2.914**	**74.02**	**6.16**	**27.40**	**1.34**	**0.24**
C0529-045-8000-S	**3.105**	**78.86**	**6.16**	**27.40**	**1.26**	**0.22**
C0529-045-8500-S	**3.295**	**83.70**	**6.16**	**27.40**	**1.18**	**0.21**
C0529-045-9000-S	**3.486**	**88.54**	**6.16**	**27.40**	**1.12**	**0.20**
C0529-045-9500-S	**3.676**	**93.38**	**6.16**	**27.40**	**1.06**	**0.19**
C0529-047-1000-S	**0.452**	**11.48**	**6.95**	**30.93**	**12.69**	**2.22**
C0529-047-1125-S	**0.501**	**12.74**	**6.95**	**30.93**	**11.15**	**1.95**
C0529-047-1250-S	**0.551**	**13.99**	**6.95**	**30.93**	**9.95**	**1.74**
C0529-047-1375-S	**0.600**	**15.25**	**6.95**	**30.93**	**8.98**	**1.57**
C0529-047-1500-S	**0.650**	**16.50**	**6.95**	**30.93**	**8.18**	**1.43**
C0529-047-1625-S	**0.699**	**17.76**	**6.95**	**30.93**	**7.51**	**1.31**
C0529-047-1750-S	**0.749**	**19.01**	**6.95**	**30.93**	**6.94**	**1.22**
C0529-047-1875-S	**0.798**	**20.27**	**6.95**	**30.93**	**6.46**	**1.13**
C0529-047-2000-S	**0.847**	**21.52**	**6.95**	**30.93**	**6.03**	**1.06**
C0529-047-2125-S	**0.897**	**22.78**	**6.95**	**30.93**	**5.66**	**0.99**
C0529-047-2250-S	**0.946**	**24.03**	**6.95**	**30.93**	**5.33**	**0.93**
C0529-047-2375-S	**0.996**	**25.29**	**6.95**	**30.93**	**5.04**	**0.88**
C0529-047-2500-S	**1.045**	**26.54**	**6.95**	**30.93**	**4.78**	**0.84**
C0529-047-2625-S	**1.094**	**27.80**	**6.95**	**30.93**	**4.54**	**0.80**
C0529-047-2750-S	**1.144**	**29.05**	**6.95**	**30.93**	**4.33**	**0.76**
C0529-047-2875-S	**1.193**	**30.31**	**6.95**	**30.93**	**4.14**	**0.72**
C0529-047-3000-S	**1.243**	**31.56**	**6.95**	**30.93**	**3.96**	**0.69**
C0529-047-3250-S	**1.341**	**34.07**	**6.95**	**30.93**	**3.64**	**0.64**
C0529-047-3500-S	**1.440**	**36.58**	**6.95**	**30.93**	**3.38**	**0.59**
C0529-047-3750-S	**1.539**	**39.09**	**6.95**	**30.93**	**3.15**	**0.55**
C0529-047-4000-S	**1.638**	**41.60**	**6.95**	**30.93**	**2.94**	**0.52**
C0529-047-4250-S	**1.737**	**44.11**	**6.95**	**30.93**	**2.77**	**0.48**
C0529-047-4500-S	**1.835**	**46.62**	**6.95**	**30.93**	**2.61**	**0.46**
C0529-047-4750-S	**1.934**	**49.13**	**6.95**	**30.93**	**2.47**	**0.43**
C0529-047-5000-S	**2.033**	**51.64**	**6.95**	**30.93**	**2.34**	**0.41**
C0529-047-5250-S	**2.132**	**54.15**	**6.95**	**30.93**	**2.23**	**0.39**
C0529-047-5500-S	**2.231**	**56.66**	**6.95**	**30.93**	**2.13**	**0.37**
C0529-047-5750-S	**2.330**	**59.17**	**6.95**	**30.93**	**2.03**	**0.36**
C0529-047-6000-S	**2.428**	**61.68**	**6.95**	**30.93**	**1.95**	**0.34**
C0529-047-6250-S	**2.527**	**64.19**	**6.95**	**30.93**	**1.87**	**0.33**
C0529-047-6500-S	**2.626**	**66.70**	**6.95**	**30.93**	**1.80**	**0.31**
C0529-047-6750-S	**2.725**	**69.21**	**6.95**	**30.93**	**1.73**	**0.30**
C0529-047-7000-S	**2.824**	**71.72**	**6.95**	**30.93**	**1.67**	**0.29**
C0529-047-7500-S	**3.021**	**76.74**	**6.95**	**30.93**	**1.55**	**0.27**
C0529-047-8000-S	**3.219**	**81.76**	**6.95**	**30.93**	**1.46**	**0.25**
C0529-047-8500-S	**3.416**	**86.78**	**6.95**	**30.93**	**1.37**	**0.24**
C0529-047-9000-S	**3.614**	**91.80**	**6.95**	**30.93**	**1.29**	**0.23**
C0529-047-9500-S	**3.812**	**96.82**	**6.95**	**30.93**	**1.22**	**0.21**
C0529-049-0938-S	**0.442**	**11.23**	**7.81**	**34.74**	**15.76**	**2.76**
C0529-049-1000-S	**0.468**	**11.88**	**7.81**	**34.74**	**14.67**	**2.57**
C0529-049-1125-S	**0.519**	**13.18**	**7.81**	**34.74**	**12.89**	**2.25**
C0529-049-1250-S	**0.570**	**14.48**	**7.81**	**34.74**	**11.49**	**2.01**
C0529-049-1375-S	**0.621**	**15.78**	**7.81**	**34.74**	**10.36**	**1.81**
C0529-049-1500-S	**0.673**	**17.08**	**7.81**	**34.74**	**9.44**	**1.65**
C0529-049-1625-S	**0.724**	**18.38**	**7.81**	**34.74**	**8.67**	**1.52**
C0529-049-1750-S	**0.775**	**19.68**	**7.81**	**34.74**	**8.01**	**1.40**
C0529-049-1875-S	**0.826**	**20.99**	**7.81**	**34.74**	**7.45**	**1.30**
C0529-049-2000-S	**0.877**	**22.29**	**7.81**	**34.74**	**6.96**	**1.22**
C0529-049-2125-S	**0.929**	**23.59**	**7.81**	**34.74**	**6.53**	**1.14**
C0529-049-2250-S	**0.980**	**24.89**	**7.81**	**34.74**	**6.15**	**1.08**
C0529-049-2375-S	**1.031**	**26.19**	**7.81**	**34.74**	**5.81**	**1.02**
C0529-049-2500-S	**1.082**	**27.49**	**7.81**	**34.74**	**5.51**	**0.96**
C0529-049-2625-S	**1.134**	**28.79**	**7.81**	**34.74**	**5.24**	**0.92**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0529-049-2750-M	0.529	13.44	0.049	1.25	2.750	69.85	1.040	26.41	0.775	19.68	9.81	43.66	5.74	1.00
C0529-049-2875-M	0.529	13.44	0.049	1.25	2.875	73.03	1.084	27.54	0.806	20.48	9.81	43.66	5.48	0.96
C0529-049-3000-M	0.529	13.44	0.049	1.25	3.000	76.20	1.128	28.66	0.838	21.29	9.81	43.66	5.24	0.92
C0529-049-3250-M	0.529	13.44	0.049	1.25	3.250	82.55	1.217	30.92	0.901	22.90	9.81	43.66	4.83	0.84
C0529-049-3500-M	0.529	13.44	0.049	1.25	3.500	88.90	1.306	33.17	0.965	24.50	9.81	43.66	4.47	0.78
C0529-049-3750-M	0.529	13.44	0.049	1.25	3.750	95.25	1.395	35.43	1.028	26.11	9.81	43.66	4.17	0.73
C0529-049-4000-M	0.529	13.44	0.049	1.25	4.000	101.60	1.484	37.68	1.091	27.72	9.81	43.66	3.90	0.68
C0529-049-4250-M	0.529	13.44	0.049	1.25	4.250	107.95	1.572	39.94	1.155	29.33	9.81	43.66	3.67	0.64
C0529-049-4500-M	0.529	13.44	0.049	1.25	4.500	114.30	1.661	42.19	1.218	30.94	9.81	43.66	3.46	0.60
C0529-049-4750-M	0.529	13.44	0.049	1.25	4.750	120.65	1.750	44.45	1.281	32.55	9.81	43.66	3.27	0.57
C0529-049-5000-M	0.529	13.44	0.049	1.25	5.000	127.00	1.839	46.70	1.345	34.16	9.81	43.66	3.10	0.54
C0529-049-5250-M	0.529	13.44	0.049	1.25	5.250	133.35	1.927	48.96	1.408	35.77	9.81	43.66	2.95	0.52
C0529-049-5500-M	0.529	13.44	0.049	1.25	5.500	139.70	2.016	51.21	1.471	37.37	9.81	43.66	2.82	0.49
C0529-049-5750-M	0.529	13.44	0.049	1.25	5.750	146.05	2.105	53.47	1.535	38.98	9.81	43.66	2.69	0.47
C0529-049-6000-M	0.529	13.44	0.049	1.25	6.000	152.40	2.194	55.72	1.598	40.59	9.81	43.66	2.58	0.45
C0529-049-6250-M	0.529	13.44	0.049	1.25	6.250	158.75	2.282	57.98	1.661	42.20	9.81	43.66	2.47	0.43
C0529-049-6500-M	0.529	13.44	0.049	1.25	6.500	165.10	2.371	60.23	1.725	43.81	9.81	43.66	2.38	0.42
C0529-049-6750-M	0.529	13.44	0.049	1.25	6.750	171.45	2.460	62.48	1.788	45.42	9.81	43.66	2.29	0.40
C0529-049-7000-M	0.529	13.44	0.049	1.25	7.000	177.80	2.549	64.74	1.851	47.03	9.81	43.66	2.21	0.39
C0529-049-7500-M	0.529	13.44	0.049	1.25	7.500	190.50	2.726	69.25	1.978	50.24	9.81	43.66	2.06	0.36
C0529-049-8000-M	0.529	13.44	0.049	1.25	8.000	203.20	2.904	73.76	2.105	53.46	9.81	43.66	1.93	0.34
C0529-049-8500-M	0.529	13.44	0.049	1.25	8.500	215.90	3.081	78.27	2.231	56.68	9.81	43.66	1.81	0.32
C0529-049-9000-M	0.529	13.44	0.049	1.25	9.000	228.60	3.259	82.78	2.358	59.90	9.81	43.66	1.71	0.30
C0529-049-9500-M	0.529	13.44	0.049	1.25	9.500	241.30	3.437	87.29	2.485	63.11	9.81	43.66	1.62	0.28
C0529-051-0938-M	0.529	13.44	0.051	1.30	0.938	23.81	0.412	10.47	0.335	8.52	10.97	48.80	20.88	3.65
C0529-051-1000-M	0.529	13.44	0.051	1.30	1.000	25.40	0.435	11.06	0.353	8.95	10.97	48.80	19.43	3.40
C0529-051-1125-M	0.529	13.44	0.051	1.30	1.125	28.58	0.482	12.24	0.387	9.82	10.97	48.80	17.06	2.98
C0529-051-1250-M	0.529	13.44	0.051	1.30	1.250	31.75	0.528	13.42	0.421	10.69	10.97	48.80	15.20	2.66
C0529-051-1375-M	0.529	13.44	0.051	1.30	1.375	34.93	0.575	14.59	0.455	11.56	10.97	48.80	13.71	2.40
C0529-051-1500-M	0.529	13.44	0.051	1.30	1.500	38.10	0.621	15.77	0.489	12.43	10.97	48.80	12.48	2.18
C0529-051-1625-M	0.529	13.44	0.051	1.30	1.625	41.28	0.667	16.95	0.523	13.29	10.97	48.80	11.46	2.00
C0529-051-1750-M	0.529	13.44	0.051	1.30	1.750	44.45	0.714	18.13	0.558	14.16	10.97	48.80	10.59	1.85
C0529-051-1875-M	0.529	13.44	0.051	1.30	1.875	47.63	0.760	19.31	0.592	15.03	10.97	48.80	9.84	1.72
C0529-051-2000-M	0.529	13.44	0.051	1.30	2.000	50.80	0.807	20.49	0.626	15.90	10.97	48.80	9.19	1.61
C0529-051-2125-M	0.529	13.44	0.051	1.30	2.125	53.98	0.853	21.67	0.660	16.76	10.97	48.80	8.62	1.51
C0529-051-2250-M	0.529	13.44	0.051	1.30	2.250	57.15	0.899	22.85	0.694	17.63	10.97	48.80	8.12	1.42
C0529-051-2375-M	0.529	13.44	0.051	1.30	2.375	60.33	0.946	24.02	0.728	18.50	10.97	48.80	7.68	1.34
C0529-051-2500-M	0.529	13.44	0.051	1.30	2.500	63.50	0.992	25.20	0.762	19.37	10.97	48.80	7.28	1.27
C0529-051-2625-M	0.529	13.44	0.051	1.30	2.625	66.68	1.039	26.38	0.797	20.23	10.97	48.80	6.92	1.21
C0529-051-2750-M	0.529	13.44	0.051	1.30	2.750	69.85	1.085	27.56	0.831	21.10	10.97	48.80	6.59	1.15
C0529-051-2875-M	0.529	13.44	0.051	1.30	2.875	73.03	1.131	28.74	0.865	21.97	10.97	48.80	6.29	1.10
C0529-051-3000-M	0.529	13.44	0.051	1.30	3.000	76.20	1.178	29.92	0.899	22.84	10.97	48.80	6.02	1.05
C0529-051-3250-M	0.529	13.44	0.051	1.30	3.250	82.55	1.271	32.28	0.967	24.57	10.97	48.80	5.54	0.97
C0529-051-3500-M	0.529	13.44	0.051	1.30	3.500	88.90	1.363	34.63	1.036	26.31	10.97	48.80	5.13	0.90
C0529-051-3750-M	0.529	13.44	0.051	1.30	3.750	95.25	1.456	36.99	1.104	28.04	10.97	48.80	4.78	0.84
C0529-051-4000-M	0.529	13.44	0.051	1.30	4.000	101.60	1.549	39.35	1.172	29.78	10.97	48.80	4.48	0.78
C0529-051-4250-M	0.529	13.44	0.051	1.30	4.250	107.95	1.642	41.71	1.241	31.52	10.97	48.80	4.21	0.74
C0529-051-4500-M	0.529	13.44	0.051	1.30	4.500	114.30	1.735	44.06	1.309	33.25	10.97	48.80	3.97	0.69
C0529-051-4750-M	0.529	13.44	0.051	1.30	4.750	120.65	1.828	46.42	1.377	34.99	10.97	48.80	3.75	0.66
C0529-051-5000-M	0.529	13.44	0.051	1.30	5.000	127.00	1.920	48.78	1.446	36.72	10.97	48.80	3.56	0.62
C0529-051-5250-M	0.529	13.44	0.051	1.30	5.250	133.35	2.013	51.13	1.514	38.46	10.97	48.80	3.39	0.59
C0529-051-5500-M	0.529	13.44	0.051	1.30	5.500	139.70	2.106	53.49	1.582	40.19	10.97	48.80	3.23	0.57
C0529-051-5750-M	0.529	13.44	0.051	1.30	5.750	146.05	2.199	55.85	1.651	41.93	10.97	48.80	3.09	0.54
C0529-051-6000-M	0.529	13.44	0.051	1.30	6.000	152.40	2.292	58.21	1.719	43.66	10.97	48.80	2.96	0.52
C0529-051-6250-M	0.529	13.44	0.051	1.30	6.250	158.75	2.384	60.56	1.787	45.40	10.97	48.80	2.84	0.50
C0529-051-6500-M	0.529	13.44	0.051	1.30	6.500	165.10	2.477	62.92	1.856	47.14	10.97	48.80	2.73	0.48
C0529-051-6750-M	0.529	13.44	0.051	1.30	6.750	171.45	2.570	65.28	1.924	48.87	10.97	48.80	2.62	0.46
C0529-051-7000-M	0.529	13.44	0.051	1.30	7.000	177.80	2.663	67.64	1.992	50.61	10.97	48.80	2.53	0.44
C0529-051-7500-M	0.529	13.44	0.051	1.30	7.500	190.50	2.848	72.35	2.129	54.08	10.97	48.80	2.36	0.41
C0529-051-8000-M	0.529	13.44	0.051	1.30	8.000	203.20	3.034	77.07	2.266	57.55	10.97	48.80	2.21	0.39
C0529-051-8500-M	0.529	13.44	0.051	1.30	8.500	215.90	3.220	81.78	2.402	61.02	10.97	48.80	2.08	0.36
C0529-051-9000-M	0.529	13.44	0.051	1.30	9.000	228.60	3.405	86.50	2.539	64.49	10.97	48.80	1.96	0.34
C0529-051-9500-M	0.529	13.44	0.051	1.30	9.500	241.30	3.591	91.21	2.676	67.96	10.97	48.80	1.86	0.32
C0529-055-0875-M	0.529	13.44	0.055	1.40	0.875	22.23	0.419	10.65	0.356	9.04	13.53	60.18	29.69	5.20

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0529-049-2750-S	1.185	30.09	7.81	34.74	4.99	0.87
C0529-049-2875-S	1.236	31.39	7.81	34.74	4.77	0.83
C0529-049-3000-S	1.287	32.69	7.81	34.74	4.56	0.80
C0529-049-3250-S	1.390	35.30	7.81	34.74	4.20	0.73
C0529-049-3500-S	1.492	37.90	7.81	34.74	3.89	0.68
C0529-049-3750-S	1.595	40.50	7.81	34.74	3.62	0.63
C0529-049-4000-S	1.697	43.10	7.81	34.74	3.39	0.59
C0529-049-4250-S	1.799	45.71	7.81	34.74	3.19	0.56
C0529-049-4500-S	1.902	48.31	7.81	34.74	3.01	0.53
C0529-049-4750-S	2.004	50.91	7.81	34.74	2.85	0.50
C0529-049-5000-S	2.107	53.51	7.81	34.74	2.70	0.47
C0529-049-5250-S	2.209	56.11	7.81	34.74	2.57	0.45
C0529-049-5500-S	2.312	58.72	7.81	34.74	2.45	0.43
C0529-049-5750-S	2.414	61.32	7.81	34.74	2.34	0.41
C0529-049-6000-S	2.517	63.92	7.81	34.74	2.24	0.39
C0529-049-6250-S	2.619	66.52	7.81	34.74	2.15	0.38
C0529-049-6500-S	2.721	69.12	7.81	34.74	2.07	0.36
C0529-049-6750-S	2.824	71.73	7.81	34.74	1.99	0.35
C0529-049-7000-S	2.926	74.33	7.81	34.74	1.92	0.34
C0529-049-7500-S	3.131	79.53	7.81	34.74	1.79	0.31
C0529-049-8000-S	3.336	84.74	7.81	34.74	1.68	0.29
C0529-049-8500-S	3.541	89.94	7.81	34.74	1.58	0.28
C0529-049-9000-S	3.746	95.15	7.81	34.74	1.49	0.26
C0529-049-9500-S	3.951	100.35	7.81	34.74	1.41	0.25
C0529-051-0938-S	0.457	11.60	8.73	38.83	18.16	3.18
C0529-051-1000-S	0.483	12.28	8.73	38.83	16.89	2.96
C0529-051-1125-S	0.536	13.63	8.73	38.83	14.83	2.60
C0529-051-1250-S	0.590	14.97	8.73	38.83	13.22	2.31
C0529-051-1375-S	0.643	16.32	8.73	38.83	11.92	2.09
C0529-051-1500-S	0.696	17.67	8.73	38.83	10.85	1.90
C0529-051-1625-S	0.749	19.02	8.73	38.83	9.96	1.74
C0529-051-1750-S	0.802	20.37	8.73	38.83	9.21	1.61
C0529-051-1875-S	0.855	21.72	8.73	38.83	8.56	1.50
C0529-051-2000-S	0.908	23.06	8.73	38.83	7.99	1.40
C0529-051-2125-S	0.961	24.41	8.73	38.83	7.50	1.31
C0529-051-2250-S	1.014	25.76	8.73	38.83	7.06	1.24
C0529-051-2375-S	1.067	27.11	8.73	38.83	6.67	1.17
C0529-051-2500-S	1.120	28.46	8.73	38.83	6.33	1.11
C0529-051-2625-S	1.173	29.81	8.73	38.83	6.01	1.05
C0529-051-2750-S	1.227	31.15	8.73	38.83	5.73	1.00
C0529-051-2875-S	1.280	32.50	8.73	38.83	5.47	0.96
C0529-051-3000-S	1.333	33.85	8.73	38.83	5.24	0.92
C0529-051-3250-S	1.439	36.55	8.73	38.83	4.82	0.84
C0529-051-3500-S	1.545	39.24	8.73	38.83	4.47	0.78
C0529-051-3750-S	1.651	41.94	8.73	38.83	4.16	0.73
C0529-051-4000-S	1.757	44.64	8.73	38.83	3.89	0.68
C0529-051-4250-S	1.864	47.33	8.73	38.83	3.66	0.64
C0529-051-4500-S	1.970	50.03	8.73	38.83	3.45	0.60
C0529-051-4750-S	2.076	52.73	8.73	38.83	3.26	0.57
C0529-051-5000-S	2.182	55.42	8.73	38.83	3.10	0.54
C0529-051-5250-S	2.288	58.12	8.73	38.83	2.95	0.52
C0529-051-5500-S	2.394	60.82	8.73	38.83	2.81	0.49
C0529-051-5750-S	2.501	63.51	8.73	38.83	2.69	0.47
C0529-051-6000-S	2.607	66.21	8.73	38.83	2.57	0.45
C0529-051-6250-S	2.713	68.91	8.73	38.83	2.47	0.43
C0529-051-6500-S	2.819	71.60	8.73	38.83	2.37	0.41
C0529-051-6750-S	2.925	74.30	8.73	38.83	2.28	0.40
C0529-051-7000-S	3.031	77.00	8.73	38.83	2.20	0.38
C0529-051-7500-S	3.244	82.39	8.73	38.83	2.05	0.36
C0529-051-8000-S	3.456	87.78	8.73	38.83	1.92	0.34
C0529-051-8500-S	3.668	93.18	8.73	38.83	1.81	0.32
C0529-051-9000-S	3.881	98.57	8.73	38.83	1.71	0.30
C0529-051-9500-S	4.093	103.96	8.73	38.83	1.61	0.28
C0529-055-0875-S	0.458	11.64	10.76	47.85	25.81	4.52

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0529-055-0938-M	0.529	13.44	0.055	1.40	0.938	23.81	0.445	11.29	0.375	9.54	13.53	60.18	27.44	4.80
C0529-055-1000-M	0.529	13.44	0.055	1.40	1.000	25.40	0.470	11.93	0.395	10.03	13.53	60.18	25.52	4.47
C0529-055-1125-M	0.529	13.44	0.055	1.40	1.125	28.58	0.520	13.22	0.434	11.03	13.53	60.18	22.37	3.92
C0529-055-1250-M	0.529	13.44	0.055	1.40	1.250	31.75	0.571	14.50	0.474	12.03	13.53	60.18	19.92	3.49
C0529-055-1375-M	0.529	13.44	0.055	1.40	1.375	34.93	0.621	15.78	0.513	13.03	13.53	60.18	17.95	3.14
C0529-055-1500-M	0.529	13.44	0.055	1.40	1.500	38.10	0.672	17.07	0.552	14.02	13.53	60.18	16.34	2.86
C0529-055-1625-M	0.529	13.44	0.055	1.40	1.625	41.28	0.722	18.35	0.591	15.02	13.53	60.18	14.99	2.62
C0529-055-1750-M	0.529	13.44	0.055	1.40	1.750	44.45	0.773	19.63	0.631	16.02	13.53	60.18	13.85	2.42
C0529-055-1875-M	0.529	13.44	0.055	1.40	1.875	47.63	0.824	20.92	0.670	17.01	13.53	60.18	12.87	2.25
C0529-055-2000-M	0.529	13.44	0.055	1.40	2.000	50.80	0.874	22.20	0.709	18.01	13.53	60.18	12.02	2.10
C0529-055-2125-M	0.529	13.44	0.055	1.40	2.125	53.98	0.925	23.48	0.748	19.01	13.53	60.18	11.27	1.97
C0529-055-2250-M	0.529	13.44	0.055	1.40	2.250	57.15	0.975	24.77	0.788	20.01	13.53	60.18	10.61	1.86
C0529-055-2375-M	0.529	13.44	0.055	1.40	2.375	60.33	1.026	26.05	0.827	21.00	13.53	60.18	10.03	1.75
C0529-055-2500-M	0.529	13.44	0.055	1.40	2.500	63.50	1.076	27.34	0.866	22.00	13.53	60.18	9.50	1.66
C0529-055-2625-M	0.529	13.44	0.055	1.40	2.625	66.68	1.127	28.62	0.905	23.00	13.53	60.18	9.03	1.58
C0529-055-2750-M	0.529	13.44	0.055	1.40	2.750	69.85	1.177	29.90	0.945	24.00	13.53	60.18	8.60	1.51
C0529-055-2875-M	0.529	13.44	0.055	1.40	2.875	73.03	1.228	31.19	0.984	24.99	13.53	60.18	8.21	1.44
C0529-055-3000-M	0.529	13.44	0.055	1.40	3.000	76.20	1.278	32.47	1.023	25.99	13.53	60.18	7.86	1.38
C0529-055-3250-M	0.529	13.44	0.055	1.40	3.250	82.55	1.379	35.04	1.102	27.98	13.53	60.18	7.23	1.27
C0529-055-3500-M	0.529	13.44	0.055	1.40	3.500	88.90	1.480	37.60	1.180	29.98	13.53	60.18	6.70	1.17
C0529-055-3750-M	0.529	13.44	0.055	1.40	3.750	95.25	1.582	40.17	1.259	31.97	13.53	60.18	6.24	1.09
C0529-055-4000-M	0.529	13.44	0.055	1.40	4.000	101.60	1.683	42.74	1.337	33.97	13.53	60.18	5.84	1.02
C0529-055-4250-M	0.529	13.44	0.055	1.40	4.250	107.95	1.784	45.31	1.416	35.96	13.53	60.18	5.49	0.96
C0529-055-4500-M	0.529	13.44	0.055	1.40	4.500	114.30	1.885	47.87	1.494	37.96	13.53	60.18	5.17	0.91
C0529-055-4750-M	0.529	13.44	0.055	1.40	4.750	120.65	1.986	50.44	1.573	39.95	13.53	60.18	4.89	0.86
C0529-055-5000-M	0.529	13.44	0.055	1.40	5.000	127.00	2.087	53.01	1.651	41.95	13.53	60.18	4.64	0.81
C0529-055-5250-M	0.529	13.44	0.055	1.40	5.250	133.35	2.188	55.57	1.730	43.94	13.53	60.18	4.42	0.77
C0529-055-5500-M	0.529	13.44	0.055	1.40	5.500	139.70	2.289	58.14	1.808	45.94	13.53	60.18	4.21	0.74
C0529-055-5750-M	0.529	13.44	0.055	1.40	5.750	146.05	2.390	60.71	1.887	47.93	13.53	60.18	4.03	0.70
C0529-055-6000-M	0.529	13.44	0.055	1.40	6.000	152.40	2.491	63.28	1.966	49.92	13.53	60.18	3.86	0.67
C0529-055-6250-M	0.529	13.44	0.055	1.40	6.250	158.75	2.592	65.84	2.044	51.92	13.53	60.18	3.70	0.65
C0529-055-6500-M	0.529	13.44	0.055	1.40	6.500	165.10	2.693	68.41	2.123	53.91	13.53	60.18	3.55	0.62
C0529-055-6750-M	0.529	13.44	0.055	1.40	6.750	171.45	2.794	70.98	2.201	55.91	13.53	60.18	3.42	0.60
C0529-055-7000-M	0.529	13.44	0.055	1.40	7.000	177.80	2.895	73.54	2.280	57.90	13.53	60.18	3.30	0.58
C0529-055-7500-M	0.529	13.44	0.055	1.40	7.500	190.50	3.098	78.68	2.437	61.89	13.53	60.18	3.07	0.54
C0529-055-8000-M	0.529	13.44	0.055	1.40	8.000	203.20	3.300	83.81	2.594	65.88	13.53	60.18	2.88	0.50
C0529-055-8500-M	0.529	13.44	0.055	1.40	8.500	215.90	3.502	88.95	2.751	69.87	13.53	60.18	2.71	0.47
C0529-055-9000-M	0.529	13.44	0.055	1.40	9.000	228.60	3.704	94.08	2.908	73.86	13.53	60.18	2.56	0.45
C0529-059-0875-M	0.529	13.44	0.059	1.50	0.875	22.23	0.449	11.42	0.393	9.98	16.43	73.10	38.61	6.76
C0529-059-0938-M	0.529	13.44	0.059	1.50	0.938	23.81	0.477	12.11	0.415	10.55	16.43	73.10	35.67	6.24
C0529-059-1000-M	0.529	13.44	0.059	1.50	1.000	25.40	0.504	12.81	0.438	11.11	16.43	73.10	33.14	5.80
C0529-059-1125-M	0.529	13.44	0.059	1.50	1.125	28.58	0.559	14.20	0.482	12.24	16.43	73.10	29.03	5.08
C0529-059-1250-M	0.529	13.44	0.059	1.50	1.250	31.75	0.614	15.59	0.526	13.37	16.43	73.10	25.82	4.52
C0529-059-1375-M	0.529	13.44	0.059	1.50	1.375	34.93	0.668	16.98	0.571	14.50	16.43	73.10	23.26	4.07
C0529-059-1500-M	0.529	13.44	0.059	1.50	1.500	38.10	0.723	18.37	0.615	15.63	16.43	73.10	21.15	3.70
C0529-059-1625-M	0.529	13.44	0.059	1.50	1.625	41.28	0.778	19.76	0.660	16.76	16.43	73.10	19.40	3.39
C0529-059-1750-M	0.529	13.44	0.059	1.50	1.750	44.45	0.833	21.15	0.704	17.89	16.43	73.10	17.91	3.13
C0529-059-1875-M	0.529	13.44	0.059	1.50	1.875	47.63	0.887	22.54	0.749	19.02	16.43	73.10	16.64	2.91
C0529-059-2000-M	0.529	13.44	0.059	1.50	2.000	50.80	0.942	23.93	0.793	20.14	16.43	73.10	15.53	2.72
C0529-059-2125-M	0.529	13.44	0.059	1.50	2.125	53.98	0.997	25.32	0.838	21.27	16.43	73.10	14.57	2.55
C0529-059-2250-M	0.529	13.44	0.059	1.50	2.250	57.15	1.051	26.71	0.882	22.40	16.43	73.10	13.71	2.40
C0529-059-2375-M	0.529	13.44	0.059	1.50	2.375	60.33	1.106	28.10	0.926	23.53	16.43	73.10	12.95	2.27
C0529-059-2500-M	0.529	13.44	0.059	1.50	2.500	63.50	1.161	29.49	0.971	24.66	16.43	73.10	12.27	2.15
C0529-059-2625-M	0.529	13.44	0.059	1.50	2.625	66.68	1.216	30.88	1.015	25.79	16.43	73.10	11.66	2.04
C0529-059-2750-M	0.529	13.44	0.059	1.50	2.750	69.85	1.270	32.27	1.060	26.92	16.43	73.10	11.11	1.94
C0529-059-2875-M	0.529	13.44	0.059	1.50	2.875	73.03	1.325	33.66	1.104	28.05	16.43	73.10	10.60	1.86
C0529-059-3000-M	0.529	13.44	0.059	1.50	3.000	76.20	1.380	35.05	1.149	29.18	16.43	73.10	10.14	1.78
C0529-059-3250-M	0.529	13.44	0.059	1.50	3.250	82.55	1.489	37.83	1.238	31.43	16.43	73.10	9.33	1.63
C0529-059-3500-M	0.529	13.44	0.059	1.50	3.500	88.90	1.599	40.61	1.326	33.69	16.43	73.10	8.64	1.51
C0529-059-3750-M	0.529	13.44	0.059	1.50	3.750	95.25	1.708	43.39	1.415	35.95	16.43	73.10	8.05	1.41
C0529-059-4000-M	0.529	13.44	0.059	1.50	4.000	101.60	1.818	46.17	1.504	38.21	16.43	73.10	7.53	1.32
C0529-059-4250-M	0.529	13.44	0.059	1.50	4.250	107.95	1.927	48.95	1.593	40.46	16.43	73.10	7.07	1.24
C0529-059-4500-M	0.529	13.44	0.059	1.50	4.500	114.30	2.037	51.73	1.682	42.72	16.43	73.10	6.67	1.17
C0529-059-4750-M	0.529	13.44	0.059	1.50	4.750	120.65	2.146	54.51	1.771	44.98	16.43	73.10	6.31	1.10

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0529-055-0938-S	0.487	12.36	10.76	47.85	23.86	4.18
C0529-055-1000-S	0.515	13.08	10.76	47.85	22.19	3.88
C0529-055-1125-S	0.572	14.53	10.76	47.85	19.46	3.40
C0529-055-1250-S	0.629	15.98	10.76	47.85	17.32	3.03
C0529-055-1375-S	0.686	17.42	10.76	47.85	15.61	2.73
C0529-055-1500-S	0.743	18.87	10.76	47.85	14.21	2.49
C0529-055-1625-S	0.800	20.31	10.76	47.85	13.04	2.28
C0529-055-1750-S	0.857	21.76	10.76	47.85	12.04	2.11
C0529-055-1875-S	0.913	23.20	10.76	47.85	11.19	1.96
C0529-055-2000-S	0.970	24.65	10.76	47.85	10.45	1.83
C0529-055-2125-S	1.027	26.09	10.76	47.85	9.80	1.72
C0529-055-2250-S	1.084	27.54	10.76	47.85	9.23	1.61
C0529-055-2375-S	1.141	28.98	10.76	47.85	8.72	1.53
C0529-055-2500-S	1.198	30.43	10.76	47.85	8.26	1.45
C0529-055-2625-S	1.255	31.87	10.76	47.85	7.85	1.37
C0529-055-2750-S	1.312	33.32	10.76	47.85	7.48	1.31
C0529-055-2875-S	1.369	34.77	10.76	47.85	7.14	1.25
C0529-055-3000-S	1.426	36.21	10.76	47.85	6.83	1.20
C0529-055-3250-S	1.539	39.10	10.76	47.85	6.29	1.10
C0529-055-3500-S	1.653	41.99	10.76	47.85	5.83	1.02
C0529-055-3750-S	1.767	44.88	10.76	47.85	5.43	0.95
C0529-055-4000-S	1.881	47.77	10.76	47.85	5.08	0.89
C0529-055-4250-S	1.995	50.66	10.76	47.85	4.77	0.83
C0529-055-4500-S	2.108	53.55	10.76	47.85	4.50	0.79
C0529-055-4750-S	2.222	56.45	10.76	47.85	4.26	0.74
C0529-055-5000-S	2.336	59.34	10.76	47.85	4.04	0.71
C0529-055-5250-S	2.450	62.23	10.76	47.85	3.84	0.67
C0529-055-5500-S	2.564	65.12	10.76	47.85	3.66	0.64
C0529-055-5750-S	2.677	68.01	10.76	47.85	3.50	0.61
C0529-055-6000-S	2.791	70.90	10.76	47.85	3.35	0.59
C0529-055-6250-S	2.905	73.79	10.76	47.85	3.22	0.56
C0529-055-6500-S	3.019	76.68	10.76	47.85	3.09	0.54
C0529-055-6750-S	3.133	79.57	10.76	47.85	2.97	0.52
C0529-055-7000-S	3.247	82.46	10.76	47.85	2.87	0.50
C0529-055-7500-S	3.474	88.24	10.76	47.85	2.67	0.47
C0529-055-8000-S	3.702	94.02	10.76	47.85	2.50	0.44
C0529-055-8500-S	3.929	99.81	10.76	47.85	2.35	0.41
C0529-055-9000-S	4.157	105.59	10.76	47.85	2.22	0.39
C0529-059-0875-S	0.486	12.35	13.05	58.07	33.58	5.88
C0529-059-0938-S	0.517	13.12	13.05	58.07	31.02	5.43
C0529-059-1000-S	0.547	13.89	13.05	58.07	28.82	5.04
C0529-059-1125-S	0.608	15.44	13.05	58.07	25.24	4.42
C0529-059-1250-S	0.669	16.98	13.05	58.07	22.45	3.93
C0529-059-1375-S	0.729	18.53	13.05	58.07	20.22	3.54
C0529-059-1500-S	0.790	20.07	13.05	58.07	18.39	3.22
C0529-059-1625-S	0.851	21.62	13.05	58.07	16.87	2.95
C0529-059-1750-S	0.912	23.16	13.05	58.07	15.58	2.73
C0529-059-1875-S	0.973	24.71	13.05	58.07	14.47	2.53
C0529-059-2000-S	1.033	26.25	13.05	58.07	13.51	2.36
C0529-059-2125-S	1.094	27.79	13.05	58.07	12.67	2.22
C0529-059-2250-S	1.155	29.34	13.05	58.07	11.92	2.09
C0529-059-2375-S	1.216	30.88	13.05	58.07	11.26	1.97
C0529-059-2500-S	1.277	32.43	13.05	58.07	10.67	1.87
C0529-059-2625-S	1.337	33.97	13.05	58.07	10.14	1.77
C0529-059-2750-S	1.398	35.52	13.05	58.07	9.66	1.69
C0529-059-2875-S	1.459	37.06	13.05	58.07	9.22	1.61
C0529-059-3000-S	1.520	38.61	13.05	58.07	8.82	1.54
C0529-059-3250-S	1.642	41.69	13.05	58.07	8.12	1.42
C0529-059-3500-S	1.763	44.78	13.05	58.07	7.52	1.32
C0529-059-3750-S	1.885	47.87	13.05	58.07	7.00	1.22
C0529-059-4000-S	2.006	50.96	13.05	58.07	6.55	1.15
C0529-059-4250-S	2.128	54.05	13.05	58.07	6.15	1.08
C0529-059-4500-S	2.250	57.14	13.05	58.07	5.80	1.02
C0529-059-4750-S	2.371	60.23	13.05	58.07	5.49	0.96

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0529-059-5000-M	0.529	13.44	0.059	1.50	5.000	127.00	2.256	57.29	1.860	47.24	16.43	73.10	5.99	1.05
C0529-059-5250-M	0.529	13.44	0.059	1.50	5.250	133.35	2.365	60.07	1.949	49.50	16.43	73.10	5.70	1.00
C0529-059-5500-M	0.529	13.44	0.059	1.50	5.500	139.70	2.474	62.85	2.038	51.75	16.43	73.10	5.43	0.95
C0529-059-5750-M	0.529	13.44	0.059	1.50	5.750	146.05	2.584	65.63	2.126	54.01	16.43	73.10	5.19	0.91
C0529-059-6000-M	0.529	13.44	0.059	1.50	6.000	152.40	2.693	68.41	2.215	56.27	16.43	73.10	4.97	0.87
C0529-059-6250-M	0.529	13.44	0.059	1.50	6.250	158.75	2.803	71.19	2.304	58.53	16.43	73.10	4.77	0.83
C0529-059-6500-M	0.529	13.44	0.059	1.50	6.500	165.10	2.912	73.97	2.393	60.79	16.43	73.10	4.58	0.80
C0529-059-6750-M	0.529	13.44	0.059	1.50	6.750	171.45	3.022	76.75	2.482	63.04	16.43	73.10	4.41	0.77
C0529-059-7000-M	0.529	13.44	0.059	1.50	7.000	177.80	3.131	79.53	2.571	65.30	16.43	73.10	4.25	0.74
C0529-059-7500-M	0.529	13.44	0.059	1.50	7.500	190.50	3.350	85.09	2.749	69.82	16.43	73.10	3.96	0.69
C0529-059-8000-M	0.529	13.44	0.059	1.50	8.000	203.20	3.569	90.65	2.926	74.33	16.43	73.10	3.71	0.65
C0529-059-8500-M	0.529	13.44	0.059	1.50	8.500	215.90	3.788	96.21	3.104	78.85	16.43	73.10	3.49	0.61
C0529-059-9000-M	0.529	13.44	0.059	1.50	9.000	228.60	4.007	101.77	3.282	83.36	16.43	73.10	3.29	0.58
C0529-063-0813-M	0.529	13.44	0.063	1.60	0.813	20.64	0.450	11.42	0.405	10.29	19.70	87.61	54.29	9.50
C0529-063-0875-M	0.529	13.44	0.063	1.60	0.875	22.23	0.479	12.17	0.430	10.92	19.70	87.61	49.76	8.71
C0529-063-0938-M	0.529	13.44	0.063	1.60	0.938	23.81	0.509	12.92	0.455	11.55	19.70	87.61	45.93	8.04
C0529-063-1000-M	0.529	13.44	0.063	1.60	1.000	25.40	0.538	13.67	0.479	12.18	19.70	87.61	42.64	7.46
C0529-063-1125-M	0.529	13.44	0.063	1.60	1.125	28.58	0.597	15.17	0.529	13.44	19.70	87.61	37.31	6.53
C0529-063-1250-M	0.529	13.44	0.063	1.60	1.250	31.75	0.656	16.66	0.579	14.70	19.70	87.61	33.16	5.80
C0529-063-1375-M	0.529	13.44	0.063	1.60	1.375	34.93	0.715	18.16	0.628	15.96	19.70	87.61	29.84	5.22
C0529-063-1500-M	0.529	13.44	0.063	1.60	1.500	38.10	0.774	19.66	0.678	17.22	19.70	87.61	27.13	4.75
C0529-063-1625-M	0.529	13.44	0.063	1.60	1.625	41.28	0.833	21.15	0.728	18.48	19.70	87.61	24.86	4.35
C0529-063-1750-M	0.529	13.44	0.063	1.60	1.750	44.45	0.892	22.65	0.777	19.74	19.70	87.61	22.95	4.02
C0529-063-1875-M	0.529	13.44	0.063	1.60	1.875	47.63	0.951	24.15	0.827	21.00	19.70	87.61	21.31	3.73
C0529-063-2000-M	0.529	13.44	0.063	1.60	2.000	50.80	1.010	25.64	0.877	22.27	19.70	87.61	19.89	3.48
C0529-063-2125-M	0.529	13.44	0.063	1.60	2.125	53.98	1.069	27.14	0.926	23.53	19.70	87.61	18.64	3.26
C0529-063-2250-M	0.529	13.44	0.063	1.60	2.250	57.15	1.128	28.64	0.976	24.79	19.70	87.61	17.55	3.07
C0529-063-2375-M	0.529	13.44	0.063	1.60	2.375	60.33	1.186	30.14	1.026	26.05	19.70	87.61	16.57	2.90
C0529-063-2500-M	0.529	13.44	0.063	1.60	2.500	63.50	1.245	31.63	1.075	27.31	19.70	87.61	15.70	2.75
C0529-063-2625-M	0.529	13.44	0.063	1.60	2.625	66.68	1.304	33.13	1.125	28.57	19.70	87.61	14.91	2.61
C0529-063-2750-M	0.529	13.44	0.063	1.60	2.750	69.85	1.363	34.63	1.174	29.83	19.70	87.61	14.20	2.49
C0529-063-2875-M	0.529	13.44	0.063	1.60	2.875	73.03	1.422	36.12	1.224	31.09	19.70	87.61	13.56	2.37
C0529-063-3000-M	0.529	13.44	0.063	1.60	3.000	76.20	1.481	37.62	1.274	32.35	19.70	87.61	12.97	2.27
C0529-063-3250-M	0.529	13.44	0.063	1.60	3.250	82.55	1.599	40.62	1.373	34.88	19.70	87.61	11.93	2.09
C0529-063-3500-M	0.529	13.44	0.063	1.60	3.500	88.90	1.717	43.61	1.472	37.40	19.70	87.61	11.05	1.93
C0529-063-3750-M	0.529	13.44	0.063	1.60	3.750	95.25	1.835	46.60	1.572	39.92	19.70	87.61	10.28	1.80
C0529-063-4000-M	0.529	13.44	0.063	1.60	4.000	101.60	1.953	49.60	1.671	42.44	19.70	87.61	9.62	1.68
C0529-063-4250-M	0.529	13.44	0.063	1.60	4.250	107.95	2.071	52.59	1.770	44.96	19.70	87.61	9.04	1.58
C0529-063-4500-M	0.529	13.44	0.063	1.60	4.500	114.30	2.188	55.59	1.870	47.49	19.70	87.61	8.52	1.49
C0529-063-4750-M	0.529	13.44	0.063	1.60	4.750	120.65	2.306	58.58	1.969	50.01	19.70	87.61	8.06	1.41
C0529-063-5000-M	0.529	13.44	0.063	1.60	5.000	127.00	2.424	61.57	2.068	52.53	19.70	87.61	7.65	1.34
C0529-063-5250-M	0.529	13.44	0.063	1.60	5.250	133.35	2.542	64.57	2.167	55.05	19.70	87.61	7.27	1.27
C0529-063-5500-M	0.529	13.44	0.063	1.60	5.500	139.70	2.660	67.56	2.267	57.57	19.70	87.61	6.94	1.21
C0529-063-5750-M	0.529	13.44	0.063	1.60	5.750	146.05	2.778	70.56	2.366	60.10	19.70	87.61	6.63	1.16
C0529-063-6000-M	0.529	13.44	0.063	1.60	6.000	152.40	2.896	73.55	2.465	62.62	19.70	87.61	6.35	1.11
C0529-063-6250-M	0.529	13.44	0.063	1.60	6.250	158.75	3.014	76.55	2.565	65.14	19.70	87.61	6.09	1.07
C0529-063-6500-M	0.529	13.44	0.063	1.60	6.500	165.10	3.131	79.54	2.664	67.66	19.70	87.61	5.85	1.02
C0529-063-6750-M	0.529	13.44	0.063	1.60	6.750	171.45	3.249	82.53	2.763	70.18	19.70	87.61	5.63	0.98
C0529-063-7000-M	0.529	13.44	0.063	1.60	7.000	177.80	3.367	85.53	2.862	72.71	19.70	87.61	5.42	0.95
C0529-063-7500-M	0.529	13.44	0.063	1.60	7.500	190.50	3.603	91.52	3.061	77.75	19.70	87.61	5.05	0.88
C0529-063-8000-M	0.529	13.44	0.063	1.60	8.000	203.20	3.839	97.50	3.260	82.79	19.70	87.61	4.73	0.83
C0529-063-8500-M	0.529	13.44	0.063	1.60	8.500	215.90	4.075	103.49	3.458	87.84	19.70	87.61	4.45	0.78
C0529-063-9000-M	0.529	13.44	0.063	1.60	9.000	228.60	4.310	109.48	3.657	92.88	19.70	87.61	4.20	0.74
C0529-068-0813-M	0.529	13.44	0.068	1.73	0.813	20.64	0.483	12.27	0.446	11.34	24.31	108.12	73.80	12.92
C0529-068-0875-M	0.529	13.44	0.068	1.73	0.875	22.23	0.515	13.09	0.474	12.05	24.31	108.12	67.56	11.82
C0529-068-0938-M	0.529	13.44	0.068	1.73	0.938	23.81	0.547	13.90	0.502	12.76	24.31	108.12	62.29	10.90
C0529-068-1000-M	0.529	13.44	0.068	1.73	1.000	25.40	0.579	14.72	0.530	13.47	24.31	108.12	57.79	10.11
C0529-068-1125-M	0.529	13.44	0.068	1.73	1.125	28.58	0.644	16.35	0.587	14.90	24.31	108.12	50.48	8.83
C0529-068-1250-M	0.529	13.44	0.068	1.73	1.250	31.75	0.708	17.98	0.643	16.32	24.31	108.12	44.82	7.84
C0529-068-1375-M	0.529	13.44	0.068	1.73	1.375	34.93	0.772	19.60	0.699	17.75	24.31	108.12	40.30	7.05
C0529-068-1500-M	0.529	13.44	0.068	1.73	1.500	38.10	0.836	21.23	0.755	19.17	24.31	108.12	36.60	6.41
C0529-068-1625-M	0.529	13.44	0.068	1.73	1.625	41.28	0.900	22.86	0.811	20.59	24.31	108.12	33.53	5.87
C0529-068-1750-M	0.529	13.44	0.068	1.73	1.750	44.45	0.964	24.49	0.867	22.02	24.31	108.12	30.93	5.41
C0529-068-1875-M	0.529	13.44	0.068	1.73	1.875	47.63	1.028	26.12	0.923	23.44	24.31	108.12	28.71	5.02

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0529-059-5000-S	2.493	63.32	13.05	58.07	5.21	0.91
C0529-059-5250-S	2.614	66.41	13.05	58.07	4.95	0.87
C0529-059-5500-S	2.736	69.49	13.05	58.07	4.72	0.83
C0529-059-5750-S	2.858	72.58	13.05	58.07	4.51	0.79
C0529-059-6000-S	2.979	75.67	13.05	58.07	4.32	0.76
C0529-059-6250-S	3.101	78.76	13.05	58.07	4.15	0.73
C0529-059-6500-S	3.222	81.85	13.05	58.07	3.98	0.70
C0529-059-6750-S	3.344	84.94	13.05	58.07	3.83	0.67
C0529-059-7000-S	3.466	88.03	13.05	58.07	3.69	0.65
C0529-059-7500-S	3.709	94.21	13.05	58.07	3.44	0.60
C0529-059-8000-S	3.952	100.38	13.05	58.07	3.23	0.56
C0529-059-8500-S	4.195	106.56	13.05	58.07	3.03	0.53
C0529-059-9000-S	4.439	112.74	13.05	58.07	2.86	0.50
C0529-063-0813-S	0.481	12.23	15.63	69.51	47.21	8.26
C0529-063-0875-S	0.514	13.05	15.63	69.51	43.27	7.57
C0529-063-0938-S	0.546	13.87	15.63	69.51	39.94	6.99
C0529-063-1000-S	0.579	14.70	15.63	69.51	37.08	6.49
C0529-063-1125-S	0.643	16.34	15.63	69.51	32.44	5.68
C0529-063-1250-S	0.708	17.98	15.63	69.51	28.83	5.05
C0529-063-1375-S	0.773	19.63	15.63	69.51	25.95	4.54
C0529-063-1500-S	0.837	21.27	15.63	69.51	23.59	4.13
C0529-063-1625-S	0.902	22.92	15.63	69.51	21.62	3.78
C0529-063-1750-S	0.967	24.56	15.63	69.51	19.96	3.49
C0529-063-1875-S	1.032	26.20	15.63	69.51	18.53	3.24
C0529-063-2000-S	1.096	27.85	15.63	69.51	17.29	3.03
C0529-063-2125-S	1.161	29.49	15.63	69.51	16.21	2.84
C0529-063-2250-S	1.226	31.14	15.63	69.51	15.26	2.67
C0529-063-2375-S	1.291	32.78	15.63	69.51	14.41	2.52
C0529-063-2500-S	1.355	34.43	15.63	69.51	13.65	2.39
C0529-063-2625-S	1.420	36.07	15.63	69.51	12.97	2.27
C0529-063-2750-S	1.485	37.71	15.63	69.51	12.35	2.16
C0529-063-2875-S	1.550	39.36	15.63	69.51	11.79	2.06
C0529-063-3000-S	1.614	41.00	15.63	69.51	11.28	1.97
C0529-063-3250-S	1.744	44.29	15.63	69.51	10.37	1.82
C0529-063-3500-S	1.873	47.58	15.63	69.51	9.61	1.68
C0529-063-3750-S	2.003	50.87	15.63	69.51	8.94	1.57
C0529-063-4000-S	2.132	54.15	15.63	69.51	8.37	1.46
C0529-063-4250-S	2.262	57.44	15.63	69.51	7.86	1.38
C0529-063-4500-S	2.391	60.73	15.63	69.51	7.41	1.30
C0529-063-4750-S	2.520	64.02	15.63	69.51	7.01	1.23
C0529-063-5000-S	2.650	67.31	15.63	69.51	6.65	1.16
C0529-063-5250-S	2.779	70.60	15.63	69.51	6.33	1.11
C0529-063-5500-S	2.909	73.88	15.63	69.51	6.03	1.06
C0529-063-5750-S	3.038	77.17	15.63	69.51	5.76	1.01
C0529-063-6000-S	3.168	80.46	15.63	69.51	5.52	0.97
C0529-063-6250-S	3.297	83.75	15.63	69.51	5.29	0.93
C0529-063-6500-S	3.427	87.04	15.63	69.51	5.09	0.89
C0529-063-6750-S	3.556	90.33	15.63	69.51	4.89	0.86
C0529-063-7000-S	3.686	93.61	15.63	69.51	4.72	0.83
C0529-063-7500-S	3.944	100.19	15.63	69.51	4.40	0.77
C0529-063-8000-S	4.203	106.77	15.63	69.51	4.12	0.72
C0529-063-8500-S	4.462	113.34	15.63	69.51	3.87	0.68
C0529-063-9000-S	4.721	119.92	15.63	69.51	3.65	0.64
C0529-068-0813-S	0.513	13.02	19.25	85.61	64.18	11.23
C0529-068-0875-S	0.547	13.90	19.25	85.61	58.75	10.28
C0529-068-0938-S	0.582	14.79	19.25	85.61	54.17	9.48
C0529-068-1000-S	0.617	15.67	19.25	85.61	50.25	8.79
C0529-068-1125-S	0.687	17.44	19.25	85.61	43.90	7.68
C0529-068-1250-S	0.756	19.21	19.25	85.61	38.97	6.82
C0529-068-1375-S	0.826	20.97	19.25	85.61	35.04	6.13
C0529-068-1500-S	0.895	22.74	19.25	85.61	31.83	5.57
C0529-068-1625-S	0.965	24.51	19.25	85.61	29.16	5.10
C0529-068-1750-S	1.035	26.28	19.25	85.61	26.90	4.71
C0529-068-1875-S	1.104	28.04	19.25	85.61	24.97	4.37

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0529-068-2000-M	0.529	13.44	0.068	1.73	2.000	50.80	1.093	27.75	0.979	24.87	24.31	108.12	26.79	4.69
C0529-068-2125-M	0.529	13.44	0.068	1.73	2.125	53.98	1.157	29.38	1.035	26.29	24.31	108.12	25.10	4.39
C0529-068-2250-M	0.529	13.44	0.068	1.73	2.250	57.15	1.221	31.01	1.091	27.72	24.31	108.12	23.62	4.13
C0529-068-2375-M	0.529	13.44	0.068	1.73	2.375	60.33	1.285	32.64	1.147	29.14	24.31	108.12	22.30	3.90
C0529-068-2500-M	0.529	13.44	0.068	1.73	2.500	63.50	1.349	34.27	1.203	30.57	24.31	108.12	21.12	3.70
C0529-068-2625-M	0.529	13.44	0.068	1.73	2.625	66.68	1.413	35.90	1.259	31.99	24.31	108.12	20.06	3.51
C0529-068-2750-M	0.529	13.44	0.068	1.73	2.750	69.85	1.477	37.53	1.316	33.41	24.31	108.12	19.10	3.34
C0529-068-2875-M	0.529	13.44	0.068	1.73	2.875	73.03	1.542	39.16	1.372	34.84	24.31	108.12	18.23	3.19
C0529-068-3000-M	0.529	13.44	0.068	1.73	3.000	76.20	1.606	40.79	1.428	36.26	24.31	108.12	17.43	3.05
C0529-068-3250-M	0.529	13.44	0.068	1.73	3.250	82.55	1.734	44.05	1.540	39.11	24.31	108.12	16.03	2.81
C0529-068-3500-M	0.529	13.44	0.068	1.73	3.500	88.90	1.862	47.30	1.652	41.96	24.31	108.12	14.84	2.60
C0529-068-3750-M	0.529	13.44	0.068	1.73	3.750	95.25	1.991	50.56	1.764	44.81	24.31	108.12	13.82	2.42
C0529-068-4000-M	0.529	13.44	0.068	1.73	4.000	101.60	2.119	53.82	1.876	47.66	24.31	108.12	12.92	2.26
C0529-068-4250-M	0.529	13.44	0.068	1.73	4.250	107.95	2.247	57.08	1.989	50.51	24.31	108.12	12.14	2.12
C0529-068-4500-M	0.529	13.44	0.068	1.73	4.500	114.30	2.376	60.34	2.101	53.36	24.31	108.12	11.44	2.00
C0529-068-4750-M	0.529	13.44	0.068	1.73	4.750	120.65	2.504	63.60	2.213	56.21	24.31	108.12	10.82	1.89
C0529-068-5000-M	0.529	13.44	0.068	1.73	5.000	127.00	2.632	66.86	2.325	59.05	24.31	108.12	10.27	1.80
C0529-068-5250-M	0.529	13.44	0.068	1.73	5.250	133.35	2.760	70.11	2.437	61.90	24.31	108.12	9.76	1.71
C0529-068-5500-M	0.529	13.44	0.068	1.73	5.500	139.70	2.889	73.37	2.549	64.75	24.31	108.12	9.31	1.63
C0529-068-5750-M	0.529	13.44	0.068	1.73	5.750	146.05	3.017	76.63	2.661	67.60	24.31	108.12	8.89	1.56
C0529-068-6000-M	0.529	13.44	0.068	1.73	6.000	152.40	3.145	79.89	2.774	70.45	24.31	108.12	8.51	1.49
C0529-068-6250-M	0.529	13.44	0.068	1.73	6.250	158.75	3.274	83.15	2.886	73.30	24.31	108.12	8.17	1.43
C0529-068-6500-M	0.529	13.44	0.068	1.73	6.500	165.10	3.402	86.41	2.998	76.15	24.31	108.12	7.85	1.37
C0529-068-6750-M	0.529	13.44	0.068	1.73	6.750	171.45	3.530	89.67	3.110	79.00	24.31	108.12	7.55	1.32
C0529-068-7000-M	0.529	13.44	0.068	1.73	7.000	177.80	3.658	92.93	3.222	81.85	24.31	108.12	7.27	1.27
C0529-068-7500-M	0.529	13.44	0.068	1.73	7.500	190.50	3.915	99.44	3.447	87.54	24.31	108.12	6.78	1.19
C0529-068-8000-M	0.529	13.44	0.068	1.73	8.000	203.20	4.172	105.96	3.671	93.24	24.31	108.12	6.35	1.11
C0529-068-8500-M	0.529	13.44	0.068	1.73	8.500	215.90	4.428	112.48	3.895	98.94	24.31	108.12	5.97	1.04
C0529-068-9000-M	0.529	13.44	0.068	1.73	9.000	228.60	4.685	119.00	4.120	104.64	24.31	108.12	5.63	0.99
C0529-072-0813-M	0.529	13.44	0.072	1.83	0.813	20.64	0.509	12.92	0.478	12.14	28.43	126.47	93.63	16.39
C0529-072-0875-M	0.529	13.44	0.072	1.83	0.875	22.23	0.543	13.79	0.509	12.92	28.43	126.47	85.63	14.98
C0529-072-0938-M	0.529	13.44	0.072	1.83	0.938	23.81	0.577	14.66	0.539	13.69	28.43	126.47	78.88	13.80
C0529-072-1000-M	0.529	13.44	0.072	1.83	1.000	25.40	0.611	15.52	0.570	14.47	28.43	126.47	73.12	12.80
C0529-072-1125-M	0.529	13.44	0.072	1.83	1.125	28.58	0.679	17.26	0.631	16.02	28.43	126.47	63.80	11.17
C0529-072-1250-M	0.529	13.44	0.072	1.83	1.250	31.75	0.748	18.99	0.692	17.57	28.43	126.47	56.59	9.90
C0529-072-1375-M	0.529	13.44	0.072	1.83	1.375	34.93	0.816	20.72	0.753	19.13	28.43	126.47	50.85	8.90
C0529-072-1500-M	0.529	13.44	0.072	1.83	1.500	38.10	0.884	22.45	0.814	20.68	28.43	126.47	46.16	8.08
C0529-072-1625-M	0.529	13.44	0.072	1.83	1.625	41.28	0.952	24.19	0.875	22.23	28.43	126.47	42.26	7.40
C0529-072-1750-M	0.529	13.44	0.072	1.83	1.750	44.45	1.020	25.92	0.936	23.78	28.43	126.47	38.97	6.82
C0529-072-1875-M	0.529	13.44	0.072	1.83	1.875	47.63	1.089	27.65	0.997	25.33	28.43	126.47	36.16	6.33
C0529-072-2000-M	0.529	13.44	0.072	1.83	2.000	50.80	1.157	29.39	1.059	26.89	28.43	126.47	33.72	5.90
C0529-072-2125-M	0.529	13.44	0.072	1.83	2.125	53.98	1.225	31.12	1.120	28.44	28.43	126.47	31.60	5.53
C0529-072-2250-M	0.529	13.44	0.072	1.83	2.250	57.15	1.293	32.85	1.181	29.99	28.43	126.47	29.72	5.20
C0529-072-2375-M	0.529	13.44	0.072	1.83	2.375	60.33	1.362	34.58	1.242	31.54	28.43	126.47	28.06	4.91
C0529-072-2500-M	0.529	13.44	0.072	1.83	2.500	63.50	1.430	36.32	1.303	33.10	28.43	126.47	26.57	4.65
C0529-072-2625-M	0.529	13.44	0.072	1.83	2.625	66.68	1.498	38.05	1.364	34.65	28.43	126.47	25.23	4.42
C0529-072-2750-M	0.529	13.44	0.072	1.83	2.750	69.85	1.566	39.78	1.425	36.20	28.43	126.47	24.02	4.20
C0529-072-2875-M	0.529	13.44	0.072	1.83	2.875	73.03	1.634	41.51	1.486	37.75	28.43	126.47	22.92	4.01
C0529-072-3000-M	0.529	13.44	0.072	1.83	3.000	76.20	1.703	43.25	1.547	39.30	28.43	126.47	21.92	3.84
C0529-072-3250-M	0.529	13.44	0.072	1.83	3.250	82.55	1.839	46.71	1.670	42.41	28.43	126.47	20.15	3.53
C0529-072-3500-M	0.529	13.44	0.072	1.83	3.500	88.90	1.976	50.18	1.792	45.51	28.43	126.47	18.65	3.26
C0529-072-3750-M	0.529	13.44	0.072	1.83	3.750	95.25	2.112	53.64	1.914	48.62	28.43	126.47	17.36	3.04
C0529-072-4000-M	0.529	13.44	0.072	1.83	4.000	101.60	2.248	57.11	2.036	51.72	28.43	126.47	16.23	2.84
C0529-072-4250-M	0.529	13.44	0.072	1.83	4.250	107.95	2.385	60.58	2.158	54.83	28.43	126.47	15.24	2.67
C0529-072-4500-M	0.529	13.44	0.072	1.83	4.500	114.30	2.521	64.04	2.281	57.93	28.43	126.47	14.37	2.51
C0529-072-4750-M	0.529	13.44	0.072	1.83	4.750	120.65	2.658	67.51	2.403	61.03	28.43	126.47	13.59	2.38
C0529-072-5000-M	0.529	13.44	0.072	1.83	5.000	127.00	2.794	70.97	2.525	64.14	28.43	126.47	12.89	2.26
C0529-072-5250-M	0.529	13.44	0.072	1.83	5.250	133.35	2.931	74.44	2.647	67.24	28.43	126.47	12.26	2.15
C0529-072-5500-M	0.529	13.44	0.072	1.83	5.500	139.70	3.067	77.90	2.770	70.35	28.43	126.47	11.69	2.05
C0529-072-5750-M	0.529	13.44	0.072	1.83	5.750	146.05	3.203	81.37	2.892	73.45	28.43	126.47	11.17	1.95
C0529-072-6000-M	0.529	13.44	0.072	1.83	6.000	152.40	3.340	84.83	3.014	76.56	28.43	126.47	10.69	1.87
C0529-072-6250-M	0.529	13.44	0.072	1.83	6.250	158.75	3.476	88.30	3.136	79.66	28.43	126.47	10.25	1.79
C0529-072-6500-M	0.529	13.44	0.072	1.83	6.500	165.10	3.613	91.76	3.258	82.76	28.43	126.47	9.85	1.72
C0529-072-6750-M	0.529	13.44	0.072	1.83	6.750	171.45	3.749	95.23	3.381	85.87	28.43	126.47	9.48	1.66

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0529-068-2000-S	1.174	29.81	19.25	85.61	23.29	4.08
C0529-068-2125-S	1.243	31.58	19.25	85.61	21.83	3.82
C0529-068-2250-S	1.313	33.35	19.25	85.61	20.54	3.59
C0529-068-2375-S	1.382	35.12	19.25	85.61	19.39	3.39
C0529-068-2500-S	1.452	36.88	19.25	85.61	18.37	3.21
C0529-068-2625-S	1.522	38.65	19.25	85.61	17.44	3.05
C0529-068-2750-S	1.591	40.42	19.25	85.61	16.61	2.91
C0529-068-2875-S	1.661	42.19	19.25	85.61	15.85	2.77
C0529-068-3000-S	1.730	43.95	19.25	85.61	15.16	2.65
C0529-068-3250-S	1.870	47.49	19.25	85.61	13.94	2.44
C0529-068-3500-S	2.009	51.02	19.25	85.61	12.91	2.26
C0529-068-3750-S	2.148	54.56	19.25	85.61	12.01	2.10
C0529-068-4000-S	2.287	58.09	19.25	85.61	11.24	1.97
C0529-068-4250-S	2.426	61.63	19.25	85.61	10.55	1.85
C0529-068-4500-S	2.566	65.16	19.25	85.61	9.95	1.74
C0529-068-4750-S	2.705	68.70	19.25	85.61	9.41	1.65
C0529-068-5000-S	2.844	72.23	19.25	85.61	8.93	1.56
C0529-068-5250-S	2.983	75.77	19.25	85.61	8.49	1.49
C0529-068-5500-S	3.122	79.30	19.25	85.61	8.09	1.42
C0529-068-5750-S	3.261	82.84	19.25	85.61	7.73	1.35
C0529-068-6000-S	3.401	86.38	19.25	85.61	7.40	1.30
C0529-068-6250-S	3.540	89.91	19.25	85.61	7.10	1.24
C0529-068-6500-S	3.679	93.45	19.25	85.61	6.82	1.19
C0529-068-6750-S	3.818	96.98	19.25	85.61	6.56	1.15
C0529-068-7000-S	3.957	100.52	19.25	85.61	6.33	1.11
C0529-068-7500-S	4.236	107.59	19.25	85.61	5.90	1.03
C0529-068-8000-S	4.514	114.66	19.25	85.61	5.52	0.97
C0529-068-8500-S	4.792	121.73	19.25	85.61	5.19	0.91
C0529-068-9000-S	5.071	128.80	19.25	85.61	4.90	0.86
C0529-072-0813-S	0.536	13.63	22.47	99.96	81.42	14.25
C0529-072-0875-S	0.573	14.56	22.47	99.96	74.46	13.03
C0529-072-0938-S	0.610	15.49	22.47	99.96	68.59	12.00
C0529-072-1000-S	0.647	16.42	22.47	99.96	63.58	11.13
C0529-072-1125-S	0.720	18.29	22.47	99.96	55.48	9.71
C0529-072-1250-S	0.793	20.15	22.47	99.96	49.21	8.61
C0529-072-1375-S	0.867	22.02	22.47	99.96	44.21	7.74
C0529-072-1500-S	0.940	23.88	22.47	99.96	40.14	7.02
C0529-072-1625-S	1.014	25.74	22.47	99.96	36.75	6.43
C0529-072-1750-S	1.087	27.61	22.47	99.96	33.89	5.93
C0529-072-1875-S	1.160	29.47	22.47	99.96	31.44	5.50
C0529-072-2000-S	1.234	31.34	22.47	99.96	29.33	5.13
C0529-072-2125-S	1.307	33.20	22.47	99.96	27.48	4.81
C0529-072-2250-S	1.380	35.06	22.47	99.96	25.84	4.52
C0529-072-2375-S	1.454	36.93	22.47	99.96	24.40	4.27
C0529-072-2500-S	1.527	38.79	22.47	99.96	23.10	4.04
C0529-072-2625-S	1.601	40.66	22.47	99.96	21.94	3.84
C0529-072-2750-S	1.674	42.52	22.47	99.96	20.89	3.66
C0529-072-2875-S	1.747	44.38	22.47	99.96	19.93	3.49
C0529-072-3000-S	1.821	46.25	22.47	99.96	19.06	3.33
C0529-072-3250-S	1.968	49.98	22.47	99.96	17.52	3.07
C0529-072-3500-S	2.114	53.71	22.47	99.96	16.22	2.84
C0529-072-3750-S	2.261	57.43	22.47	99.96	15.09	2.64
C0529-072-4000-S	2.408	61.16	22.47	99.96	14.12	2.47
C0529-072-4250-S	2.555	64.89	22.47	99.96	13.26	2.32
C0529-072-4500-S	2.702	68.62	22.47	99.96	12.50	2.19
C0529-072-4750-S	2.848	72.35	22.47	99.96	11.82	2.07
C0529-072-5000-S	2.995	76.07	22.47	99.96	11.21	1.96
C0529-072-5250-S	3.142	79.80	22.47	99.96	10.66	1.87
C0529-072-5500-S	3.289	83.53	22.47	99.96	10.16	1.78
C0529-072-5750-S	3.435	87.26	22.47	99.96	9.71	1.70
C0529-072-6000-S	3.582	90.99	22.47	99.96	9.29	1.63
C0529-072-6250-S	3.729	94.72	22.47	99.96	8.91	1.56
C0529-072-6500-S	3.876	98.44	22.47	99.96	8.56	1.50
C0529-072-6750-S	4.023	102.17	22.47	99.96	8.24	1.44

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0529-072-7000-M	0.529	13.44	0.072	1.83	7.000	177.80	3.886	98.70	3.503	88.97	28.43	126.47	9.13	1.60	**C0529-072-7000-S**	4.169	105.90	22.47	99.96	7.94	1.39
C0529-072-7500-M	0.529	13.44	0.072	1.83	7.500	190.50	4.159	105.63	3.747	95.18	28.43	126.47	8.51	1.49	**C0529-072-7500-S**	4.463	113.36	22.47	99.96	7.40	1.29
C0529-072-8000-M	0.529	13.44	0.072	1.83	8.000	203.20	4.431	112.56	3.992	101.39	28.43	126.47	7.97	1.39	**C0529-072-8000-S**	4.756	120.81	22.47	99.96	6.93	1.21
C0529-072-8500-M	0.529	13.44	0.072	1.83	8.500	215.90	4.704	119.49	4.236	107.60	28.43	126.47	7.49	1.31	**C0529-072-8500-S**	5.050	128.27	22.47	99.96	6.51	1.14
C0529-072-9000-M	0.529	13.44	0.072	1.83	9.000	228.60	4.977	126.42	4.481	113.81	28.43	126.47	7.07	1.24	**C0529-072-9000-S**	5.344	135.73	22.47	99.96	6.15	1.08
C0529-085-0813-M	0.529	13.44	0.085	2.16	0.813	20.64	0.584	14.82	0.570	14.49	44.69	198.79	195.25	34.17	**C0529-085-0813-S**	0.606	15.39	35.07	156.02	169.78	29.71
C0529-085-0875-M	0.529	13.44	0.085	2.16	0.875	22.23	0.624	15.85	0.609	15.46	44.69	198.79	177.94	31.14	**C0529-085-0875-S**	0.648	16.47	35.07	156.02	154.73	27.08
C0529-085-0938-M	0.529	13.44	0.085	2.16	0.938	23.81	0.664	16.87	0.647	16.42	44.69	198.79	163.45	28.60	**C0529-085-0938-S**	0.691	17.54	35.07	156.02	142.13	24.87
C0529-085-1000-M	0.529	13.44	0.085	2.16	1.000	25.40	0.704	17.89	0.685	17.39	44.69	198.79	151.14	26.45	**C0529-085-1000-S**	0.733	18.62	35.07	156.02	131.43	23.00
C0529-085-1125-M	0.529	13.44	0.085	2.16	1.125	28.58	0.785	19.93	0.761	19.33	44.69	198.79	131.36	22.99	**C0529-085-1125-S**	0.818	20.78	35.07	156.02	114.23	19.99
C0529-085-1250-M	0.529	13.44	0.085	2.16	1.250	31.75	0.865	21.98	0.837	21.27	44.69	198.79	116.16	20.33	**C0529-085-1250-S**	0.903	22.93	35.07	156.02	101.00	17.68
C0529-085-1375-M	0.529	13.44	0.085	2.16	1.375	34.93	0.946	24.02	0.913	23.20	44.69	198.79	104.11	18.22	**C0529-085-1375-S**	0.988	25.08	35.07	156.02	90.53	15.84
C0529-085-1500-M	0.529	13.44	0.085	2.16	1.500	38.10	1.026	26.07	0.990	25.14	44.69	198.79	94.32	16.51	**C0529-085-1500-S**	1.072	27.24	35.07	156.02	82.02	14.35
C0529-085-1625-M	0.529	13.44	0.085	2.16	1.625	41.28	1.107	28.11	1.066	27.08	44.69	198.79	86.22	15.09	**C0529-085-1625-S**	1.157	29.39	35.07	156.02	74.97	13.12
C0529-085-1750-M	0.529	13.44	0.085	2.16	1.750	44.45	1.187	30.15	1.142	29.01	44.69	198.79	79.40	13.89	**C0529-085-1750-S**	1.242	31.55	35.07	156.02	69.04	12.08
C0529-085-1875-M	0.529	13.44	0.085	2.16	1.875	47.63	1.268	32.20	1.218	30.95	44.69	198.79	73.58	12.88	**C0529-085-1875-S**	1.327	33.70	35.07	156.02	63.98	11.20
C0529-085-2000-M	0.529	13.44	0.085	2.16	2.000	50.80	1.348	34.24	1.295	32.88	44.69	198.79	68.55	12.00	**C0529-085-2000-S**	1.412	35.85	35.07	156.02	59.61	10.43
C0529-085-2125-M	0.529	13.44	0.085	2.16	2.125	53.98	1.429	36.28	1.371	34.82	44.69	198.79	64.17	11.23	**C0529-085-2125-S**	1.496	38.01	35.07	156.02	55.80	9.76
C0529-085-2250-M	0.529	13.44	0.085	2.16	2.250	57.15	1.509	38.33	1.447	36.76	44.69	198.79	60.31	10.55	**C0529-085-2250-S**	1.581	40.16	35.07	156.02	52.44	9.18
C0529-085-2375-M	0.529	13.44	0.085	2.16	2.375	60.33	1.589	40.37	1.523	38.69	44.69	198.79	56.89	9.96	**C0529-085-2375-S**	1.666	42.32	35.07	156.02	49.47	8.66
C0529-085-2500-M	0.529	13.44	0.085	2.16	2.500	63.50	1.670	42.42	1.600	40.63	44.69	198.79	53.84	9.42	**C0529-085-2500-S**	1.751	44.47	35.07	156.02	46.82	8.19
C0529-085-2625-M	0.529	13.44	0.085	2.16	2.625	66.68	1.750	44.46	1.676	42.57	44.69	198.79	51.10	8.94	**C0529-085-2625-S**	1.836	46.63	35.07	156.02	44.43	7.78
C0529-085-2750-M	0.529	13.44	0.085	2.16	2.750	69.85	1.831	46.50	1.752	44.50	44.69	198.79	48.62	8.51	**C0529-085-2750-S**	1.920	48.78	35.07	156.02	42.28	7.40
C0529-085-2875-M	0.529	13.44	0.085	2.16	2.875	73.03	1.911	48.55	1.828	46.44	44.69	198.79	46.38	8.12	**C0529-085-2875-S**	2.005	50.93	35.07	156.02	40.33	7.06
C0529-085-3000-M	0.529	13.44	0.085	2.16	3.000	76.20	1.992	50.59	1.905	48.38	44.69	198.79	44.33	7.76	**C0529-085-3000-S**	2.090	53.09	35.07	156.02	38.55	6.75
C0529-085-3250-M	0.529	13.44	0.085	2.16	3.250	82.55	2.153	54.68	2.057	52.25	44.69	198.79	40.73	7.13	**C0529-085-3250-S**	2.260	57.40	35.07	156.02	35.42	6.20
C0529-085-3500-M	0.529	13.44	0.085	2.16	3.500	88.90	2.314	58.77	2.210	56.12	44.69	198.79	37.67	6.59	**C0529-085-3500-S**	2.429	61.70	35.07	156.02	32.76	5.73
C0529-085-3750-M	0.529	13.44	0.085	2.16	3.750	95.25	2.475	62.86	2.362	60.00	44.69	198.79	35.04	6.13	**C0529-085-3750-S**	2.599	66.01	35.07	156.02	30.47	5.33
C0529-085-4000-M	0.529	13.44	0.085	2.16	4.000	101.60	2.636	66.94	2.515	63.87	44.69	198.79	32.75	5.73	**C0529-085-4000-S**	2.769	70.32	35.07	156.02	28.48	4.98
C0529-085-4250-M	0.529	13.44	0.085	2.16	4.250	107.95	2.797	71.03	2.667	67.74	44.69	198.79	30.75	5.38	**C0529-085-4250-S**	2.938	74.63	35.07	156.02	26.74	4.68
C0529-085-4500-M	0.529	13.44	0.085	2.16	4.500	114.30	2.957	75.12	2.820	71.62	44.69	198.79	28.97	5.07	**C0529-085-4500-S**	3.108	78.94	35.07	156.02	25.19	4.41
C0529-085-4750-M	0.529	13.44	0.085	2.16	4.750	120.65	3.118	79.21	2.972	75.49	44.69	198.79	27.39	4.79	**C0529-085-4750-S**	3.277	83.25	35.07	156.02	23.82	4.17
C0529-085-5000-M	0.529	13.44	0.085	2.16	5.000	127.00	3.279	83.30	3.124	79.36	44.69	198.79	25.97	4.55	**C0529-085-5000-S**	3.447	87.55	35.07	156.02	22.59	3.95
C0529-085-5250-M	0.529	13.44	0.085	2.16	5.250	133.35	3.440	87.38	3.277	83.23	44.69	198.79	24.69	4.32	**C0529-085-5250-S**	3.617	91.86	35.07	156.02	21.47	3.76
C0529-085-5500-M	0.529	13.44	0.085	2.16	5.500	139.70	3.601	91.47	3.429	87.11	44.69	198.79	23.54	4.12	**C0529-085-5500-S**	3.786	96.17	35.07	156.02	20.47	3.58
C0529-085-5750-M	0.529	13.44	0.085	2.16	5.750	146.05	3.762	95.56	3.582	90.98	44.69	198.79	22.48	3.93	**C0529-085-5750-S**	3.956	100.48	35.07	156.02	19.55	3.42
C0529-085-6000-M	0.529	13.44	0.085	2.16	6.000	152.40	3.923	99.65	3.734	94.85	44.69	198.79	21.52	3.77	**C0529-085-6000-S**	4.125	104.79	35.07	156.02	18.71	3.27
C0529-085-6250-M	0.529	13.44	0.085	2.16	6.250	158.75	4.084	103.73	3.887	98.73	44.69	198.79	20.63	3.61	**C0529-085-6250-S**	4.295	109.09	35.07	156.02	17.94	3.14
C0529-085-6500-M	0.529	13.44	0.085	2.16	6.500	165.10	4.245	107.82	4.039	102.60	44.69	198.79	19.82	3.47	**C0529-085-6500-S**	4.465	113.40	35.07	156.02	17.23	3.02
C0529-085-6750-M	0.529	13.44	0.085	2.16	6.750	171.45	4.406	111.91	4.192	106.47	44.69	198.79	19.07	3.34	**C0529-085-6750-S**	4.634	117.71	35.07	156.02	16.58	2.90
C0529-085-7000-M	0.529	13.44	0.085	2.16	7.000	177.80	4.567	116.00	4.344	110.35	44.69	198.79	18.37	3.21	**C0529-085-7000-S**	4.804	122.02	35.07	156.02	15.97	2.79
C0529-085-7500-M	0.529	13.44	0.085	2.16	7.500	190.50	4.889	124.17	4.649	118.09	44.69	198.79	17.11	2.99	**C0529-085-7500-S**	5.143	130.64	35.07	156.02	14.88	2.60
C0529-085-8000-M	0.529	13.44	0.085	2.16	8.000	203.20	5.211	132.35	4.954	125.84	44.69	198.79	16.02	2.80	**C0529-085-8000-S**	5.482	139.25	35.07	156.02	13.93	2.44
C0529-085-8500-M	0.529	13.44	0.085	2.16	8.500	215.90	5.532	140.53	5.259	133.58	44.69	198.79	15.06	2.64	**C0529-085-8500-S**	5.822	147.87	35.07	156.02	13.10	2.29
C0529-092-0813-M	0.529	13.44	0.092	2.34	0.813	20.64	0.618	15.69	0.613	15.56	55.33	246.11	284.20	49.74	**C0529-092-0813-S**	0.638	16.19	43.24	192.33	247.13	43.25
C0529-092-0875-M	0.529	13.44	0.092	2.34	0.875	22.23	0.661	16.79	0.654	16.62	55.33	246.11	258.50	45.24	**C0529-092-0875-S**	0.683	17.34	43.24	192.33	224.78	39.34
C0529-092-0938-M	0.529	13.44	0.092	2.34	0.938	23.81	0.704	17.88	0.696	17.68	55.33	246.11	237.05	41.48	**C0529-092-0938-S**	0.728	18.48	43.24	192.33	206.13	36.07
C0529-092-1000-M	0.529	13.44	0.092	2.34	1.000	25.40	0.747	18.98	0.738	18.74	55.33	246.11	218.90	38.31	**C0529-092-1000-S**	0.773	19.63	43.24	192.33	190.35	33.31
C0529-092-1125-M	0.529	13.44	0.092	2.34	1.125	28.58	0.834	21.17	0.821	20.86	55.33	246.11	189.82	33.22	**C0529-092-1125-S**	0.863	21.92	43.24	192.33	165.06	28.89
C0529-092-1250-M	0.529	13.44	0.092	2.34	1.250	31.75	0.920	23.36	0.905	22.98	55.33	246.11	167.56	29.32	**C0529-092-1250-S**	0.953	24.21	43.24	192.33	145.71	25.50
C0529-092-1375-M	0.529	13.44	0.092	2.34	1.375	34.93	1.006	25.55	0.988	25.10	55.33	246.11	149.98	26.25	**C0529-092-1375-S**	1.043	26.50	43.24	192.33	130.41	22.82
C0529-092-1500-M	0.529	13.44	0.092	2.34	1.500	38.10	1.092	27.75	1.071	27.21	55.33	246.11	135.73	23.75	**C0529-092-1500-S**	1.134	28.80	43.24	192.33	118.03	20.65
C0529-092-1625-M	0.529	13.44	0.092	2.34	1.625	41.28	1.179	29.94	1.155	29.33	55.33	246.11	123.96	21.69	**C0529-092-1625-S**	1.224	31.09	43.24	192.33	107.79	18.86
C0529-092-1750-M	0.529	13.44	0.092	2.34	1.750	44.45	1.265	32.13	1.238	31.45	55.33	246.11	114.06	19.96	**C0529-092-1750-S**	1.314	33.38	43.24	192.33	99.18	17.36
C0529-092-1875-M	0.529	13.44	0.092	2.34	1.875	47.63	1.351	34.32	1.322	33.57	55.33	246.11	105.63	18.49	**C0529-092-1875-S**	1.404	35.67	43.24	192.33	91.85	16.07
C0529-092-2000-M	0.529	13.44	0.092	2.34	2.000	50.80	1.437	36.51	1.405	35.69	55.33	246.11	98.36	17.21	**C0529-092-2000-S**	1.494	37.96	43.24	192.33	85.53	14.97
C0529-092-2125-M	0.529	13.44	0.092	2.34	2.125	53.98	1.524	38.70	1.489	37.81	55.33	246.11	92.03	16.10	**C0529-092-2125-S**	1.585	40.25	43.24	192.33	80.02	14.00
C0529-092-2250-M	0.529	13.44	0.092	2.34	2.250	57.15	1.610	40.90	1.572	39.93	55.33	246.11	86.46	15.13	**C0529-092-2250-S**	1.675	42.54	43.24	192.33	75.18	13.16
C0529-092-2375-M	0.529	13.44	0.092	2.34	2.375	60.33	1.696	43.09	1.655	42.05	55.33	246.11	81.52	14.27	**C0529-092-2375-S**	1.765	44.83	43.24	192.33	70.89	12.41
C0529-092-2500-M	0.529	13.44	0.092	2.34	2.500	63.50	1.783	45.28	1.739	44.17	55.33	246.11	77.12	13.50	**C0529-092-2500-S**	1.855	47.12	43.24	192.33	67.07	11.74
C0529-092-2625-M	0.529	13.44	0.092	2.34	2.625	66.68	1.869	47.47	1.822	46.28	55.33	246.11	73.18	12.81	**C0529-092-2625-S**	1.945	49.42	43.24	192.33	63.63	11.14
C0529-092-2750-M	0.529	13.44	0.092	2.34	2.750	69.85	1.955	49.66	1.906	48.40	55.33	246.11	69.61	12.18	**C0529-092-2750-S**	2.036	51.71	43.24	192.33	60.53	10.59
C0529-092-2875-M	0.529	13.44	0.092	2.34	2.875	73.03	2.041	51.85	1.989	50.52	55.33	246.11	66.38	11.62	**C0529-092-2875-S**	2.126	54.00	43.24	192.33	57.72	10.10
C0529-092-3000-M	0.529	13.44	0.092	2.34	3.000	76.20	2.128	54.04	2.072	52.64	55.33	246.11	63.43	11.10	**C0529-092-3000-S**	2.216	56.29	43.24	192.33	55.16	9.65

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0529-092-3250-M	0.529	13.44	0.092	2.34	3.250	82.55	2.300	58.43	2.239	56.88	55.33	246.11	58.26	10.20
C0529-092-3500-M	0.529	13.44	0.092	2.34	3.500	88.90	2.473	62.81	2.406	61.12	55.33	246.11	53.87	9.43
C0529-092-3750-M	0.529	13.44	0.092	2.34	3.750	95.25	2.645	67.19	2.573	65.35	55.33	246.11	50.09	8.77
C0529-092-4000-M	0.529	13.44	0.092	2.34	4.000	101.60	2.818	71.58	2.740	69.59	55.33	246.11	46.81	8.19
C0529-092-4250-M	0.529	13.44	0.092	2.34	4.250	107.95	2.991	75.96	2.907	73.83	55.33	246.11	43.93	7.69
C0529-092-4500-M	0.529	13.44	0.092	2.34	4.500	114.30	3.163	80.34	3.074	78.07	55.33	246.11	41.39	7.24
C0529-092-4750-M	0.529	13.44	0.092	2.34	4.750	120.65	3.336	84.73	3.240	82.31	55.33	246.11	39.12	6.85
C0529-092-5000-M	0.529	13.44	0.092	2.34	5.000	127.00	3.508	89.11	3.407	86.54	55.33	246.11	37.09	6.49
C0529-092-5250-M	0.529	13.44	0.092	2.34	5.250	133.35	3.681	93.49	3.574	90.78	55.33	246.11	35.26	6.17
C0529-092-5500-M	0.529	13.44	0.092	2.34	5.500	139.70	3.853	97.87	3.741	95.02	55.33	246.11	33.60	5.88
C0529-092-5750-M	0.529	13.44	0.092	2.34	5.750	146.05	4.026	102.26	3.908	99.26	55.33	246.11	32.09	5.62
C0529-092-6000-M	0.529	13.44	0.092	2.34	6.000	152.40	4.198	106.64	4.075	103.49	55.33	246.11	30.71	5.37
C0529-092-6250-M	0.529	13.44	0.092	2.34	6.250	158.75	4.371	111.02	4.241	107.73	55.33	246.11	29.45	5.15
C0529-092-6500-M	0.529	13.44	0.092	2.34	6.500	165.10	4.544	115.41	4.408	111.97	55.33	246.11	28.28	4.95
C0529-092-6750-M	0.529	13.44	0.092	2.34	6.750	171.45	4.716	119.79	4.575	116.21	55.33	246.11	27.20	4.76
C0529-092-7000-M	0.529	13.44	0.092	2.34	7.000	177.80	4.889	124.17	4.742	120.45	55.33	246.11	26.21	4.59
C0529-092-7500-M	0.529	13.44	0.092	2.34	7.500	190.50	5.234	132.94	5.076	128.92	55.33	246.11	24.42	4.27
C0529-092-8000-M	0.529	13.44	0.092	2.34	8.000	203.20	5.579	141.71	5.409	137.40	55.33	246.11	22.85	4.00
C0529-092-8500-M	0.529	13.44	0.092	2.34	8.500	215.90	5.924	150.47	5.743	145.87	55.33	246.11	21.48	3.76
C0529-098-0813-M	0.529	13.44	0.098	2.49	0.813	20.64	0.670	17.01	0.645	16.37	55.40	246.43	388.31	67.95
C0529-098-0875-M	0.529	13.44	0.098	2.49	0.875	22.23	0.717	18.21	0.689	17.50	55.70	247.76	352.57	61.70
C0529-098-0938-M	0.529	13.44	0.098	2.49	0.938	23.81	0.735	18.66	0.734	18.63	65.53	291.50	322.85	56.50
C0529-098-1000-M	0.529	13.44	0.098	2.49	1.000	25.40	0.780	19.81	0.778	19.76	65.53	291.50	297.75	52.11
C0529-098-1125-M	0.529	13.44	0.098	2.49	1.125	28.58	0.871	22.12	0.867	22.02	65.53	291.50	257.69	45.10
C0529-098-1250-M	0.529	13.44	0.098	2.49	1.250	31.75	0.961	24.42	0.956	24.28	65.53	291.50	227.13	39.75
C0529-098-1375-M	0.529	13.44	0.098	2.49	1.375	34.93	1.052	26.73	1.045	26.54	65.53	291.50	203.05	35.53
C0529-098-1500-M	0.529	13.44	0.098	2.49	1.500	38.10	1.143	29.03	1.134	28.80	65.53	291.50	183.58	32.13
C0529-098-1625-M	0.529	13.44	0.098	2.49	1.625	41.28	1.234	31.34	1.223	31.06	65.53	291.50	167.53	29.32
C0529-098-1750-M	0.529	13.44	0.098	2.49	1.750	44.45	1.325	33.64	1.312	33.32	65.53	291.50	154.05	26.96
C0529-098-1875-M	0.529	13.44	0.098	2.49	1.875	47.63	1.415	35.95	1.401	35.59	65.53	291.50	142.58	24.95
C0529-098-2000-M	0.529	13.44	0.098	2.49	2.000	50.80	1.506	38.26	1.490	37.85	65.53	291.50	132.70	23.22
C0529-098-2125-M	0.529	13.44	0.098	2.49	2.125	53.98	1.597	40.56	1.579	40.11	65.53	291.50	124.10	21.72
C0529-098-2250-M	0.529	13.44	0.098	2.49	2.250	57.15	1.688	42.87	1.668	42.37	65.53	291.50	116.55	20.40
C0529-098-2375-M	0.529	13.44	0.098	2.49	2.375	60.33	1.779	45.17	1.757	44.63	65.53	291.50	109.86	19.23
C0529-098-2500-M	0.529	13.44	0.098	2.49	2.500	63.50	1.869	47.48	1.846	46.89	65.53	291.50	103.90	18.18
C0529-098-2625-M	0.529	13.44	0.098	2.49	2.625	66.68	1.960	49.79	1.935	49.15	65.53	291.50	98.56	17.25
C0529-098-2750-M	0.529	13.44	0.098	2.49	2.750	69.85	2.051	52.09	2.024	51.41	65.53	291.50	93.73	16.40
C0529-098-2875-M	0.529	13.44	0.098	2.49	2.875	73.03	2.142	54.40	2.113	53.67	65.53	291.50	89.36	15.64
C0529-098-3000-M	0.529	13.44	0.098	2.49	3.000	76.20	2.232	56.70	2.202	55.93	65.53	291.50	85.38	14.94
C0529-098-3250-M	0.529	13.44	0.098	2.49	3.250	82.55	2.414	61.32	2.380	60.45	65.53	291.50	78.39	13.72
C0529-098-3500-M	0.529	13.44	0.098	2.49	3.500	88.90	2.596	65.93	2.558	64.97	65.53	291.50	72.46	12.68
C0529-098-3750-M	0.529	13.44	0.098	2.49	3.750	95.25	2.777	70.54	2.736	69.49	65.53	291.50	67.36	11.79
C0529-098-4000-M	0.529	13.44	0.098	2.49	4.000	101.60	2.959	75.15	2.914	74.01	65.53	291.50	62.93	11.01
C0529-098-4250-M	0.529	13.44	0.098	2.49	4.250	107.95	3.140	79.76	3.092	78.53	65.53	291.50	59.05	10.33
C0529-098-4500-M	0.529	13.44	0.098	2.49	4.500	114.30	3.322	84.37	3.270	83.05	65.53	291.50	55.62	9.73
C0529-098-4750-M	0.529	13.44	0.098	2.49	4.750	120.65	3.503	88.99	3.448	87.57	65.53	291.50	52.57	9.20
C0529-098-5000-M	0.529	13.44	0.098	2.49	5.000	127.00	3.685	93.60	3.626	92.09	65.53	291.50	49.83	8.72
C0529-098-5250-M	0.529	13.44	0.098	2.49	5.250	133.35	3.866	98.21	3.803	96.61	65.53	291.50	47.37	8.29
C0529-098-5500-M	0.529	13.44	0.098	2.49	5.500	139.70	4.048	102.82	3.981	101.13	65.53	291.50	45.13	7.90
C0529-098-5750-M	0.529	13.44	0.098	2.49	5.750	146.05	4.230	107.43	4.159	105.65	65.53	291.50	43.10	7.54
C0529-098-6000-M	0.529	13.44	0.098	2.49	6.000	152.40	4.411	112.04	4.337	110.17	65.53	291.50	41.25	7.22
C0529-098-6250-M	0.529	13.44	0.098	2.49	6.250	158.75	4.593	116.66	4.515	114.69	65.53	291.50	39.54	6.92
C0529-098-6500-M	0.529	13.44	0.098	2.49	6.500	165.10	4.774	121.27	4.693	119.21	65.53	291.50	37.98	6.65
C0529-098-6750-M	0.529	13.44	0.098	2.49	6.750	171.45	4.956	125.88	4.871	123.73	65.53	291.50	36.53	6.39
C0529-098-7000-M	0.529	13.44	0.098	2.49	7.000	177.80	5.137	130.49	5.049	128.25	65.53	291.50	35.18	6.16
C0529-098-7500-M	0.529	13.44	0.098	2.49	7.500	190.50	5.501	139.71	5.405	137.29	65.53	291.50	32.78	5.74
C0529-098-8000-M	0.529	13.44	0.098	2.49	8.000	203.20	5.864	148.94	5.761	146.33	65.53	291.50	30.68	5.37
C0529-098-8500-M	0.529	13.44	0.098	2.49	8.500	215.90	6.227	158.16	6.117	155.37	65.53	291.50	28.83	5.05
C0529-105-0813-M	0.529	13.44	0.105	2.67	0.813	20.64	0.698	17.72	0.677	17.20	63.55	282.70	553.20	96.81
C0529-105-0875-M	0.529	13.44	0.105	2.67	0.875	22.23	0.747	18.98	0.725	18.41	64.02	284.77	501.21	87.71
C0529-105-0938-M	0.529	13.44	0.105	2.67	0.938	23.81	0.797	20.24	0.772	19.61	64.40	286.47	458.15	80.18
C0529-105-1000-M	0.529	13.44	0.105	2.67	1.000	25.40	0.847	21.50	0.820	20.82	64.73	287.91	421.90	73.83
C0529-105-1125-M	0.529	13.44	0.105	2.67	1.125	28.58	0.946	24.03	0.914	23.22	65.24	290.20	364.26	63.75
C0529-105-1250-M	0.529	13.44	0.105	2.67	1.250	31.75	1.045	26.55	1.009	25.63	65.63	291.94	320.48	56.08

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0529-092-3250-S	2.397	60.87	43.24	192.33	50.66	8.87
C0529-092-3500-S	2.577	65.45	43.24	192.33	46.84	8.20
C0529-092-3750-S	2.757	70.04	43.24	192.33	43.56	7.62
C0529-092-4000-S	2.938	74.62	43.24	192.33	40.70	7.12
C0529-092-4250-S	3.118	79.20	43.24	192.33	38.20	6.69
C0529-092-4500-S	3.299	83.78	43.24	192.33	35.99	6.30
C0529-092-4750-S	3.479	88.37	43.24	192.33	34.02	5.95
C0529-092-5000-S	3.659	92.95	43.24	192.33	32.25	5.64
C0529-092-5250-S	3.840	97.53	43.24	192.33	30.66	5.37
C0529-092-5500-S	4.020	102.11	43.24	192.33	29.22	5.11
C0529-092-5750-S	4.201	106.69	43.24	192.33	27.91	4.88
C0529-092-6000-S	4.381	111.28	43.24	192.33	26.71	4.67
C0529-092-6250-S	4.561	115.86	43.24	192.33	25.61	4.48
C0529-092-6500-S	4.742	120.44	43.24	192.33	24.59	4.30
C0529-092-6750-S	4.922	125.02	43.24	192.33	23.66	4.14
C0529-092-7000-S	5.103	129.61	43.24	192.33	22.79	3.99
C0529-092-7500-S	5.463	138.77	43.24	192.33	21.23	3.72
C0529-092-8000-S	5.824	147.94	43.24	192.33	19.87	3.48
C0529-092-8500-S	6.185	157.10	43.24	192.33	18.68	3.27
C0529-098-0813-S	0.661	16.80	51.01	226.91	337.66	59.09
C0529-098-0875-S	0.709	18.00	51.01	226.91	306.58	53.65
C0529-098-0938-S	0.756	19.20	51.01	226.91	280.74	49.13
C0529-098-1000-S	0.803	20.40	51.01	226.91	258.92	45.31
C0529-098-1125-S	0.897	22.79	51.01	226.91	224.08	39.21
C0529-098-1250-S	0.992	25.19	51.01	226.91	197.50	34.56
C0529-098-1375-S	1.086	27.59	51.01	226.91	176.56	30.90
C0529-098-1500-S	1.180	29.98	51.01	226.91	159.64	27.94
C0529-098-1625-S	1.275	32.38	51.01	226.91	145.67	25.49
C0529-098-1750-S	1.369	34.78	51.01	226.91	133.96	23.44
C0529-098-1875-S	1.464	37.17	51.01	226.91	123.98	21.70
C0529-098-2000-S	1.558	39.57	51.01	226.91	115.39	20.19
C0529-098-2125-S	1.652	41.97	51.01	226.91	107.92	18.89
C0529-098-2250-S	1.747	44.37	51.01	226.91	101.35	17.74
C0529-098-2375-S	1.841	46.76	51.01	226.91	95.53	16.72
C0529-098-2500-S	1.935	49.16	51.01	226.91	90.35	15.81
C0529-098-2625-S	2.030	51.56	51.01	226.91	85.70	15.00
C0529-098-2750-S	2.124	53.95	51.01	226.91	81.51	14.26
C0529-098-2875-S	2.219	56.35	51.01	226.91	77.70	13.60
C0529-098-3000-S	2.313	58.75	51.01	226.91	74.24	12.99
C0529-098-3250-S	2.502	63.54	51.01	226.91	68.16	11.93
C0529-098-3500-S	2.690	68.34	51.01	226.91	63.01	11.03
C0529-098-3750-S	2.879	73.13	51.01	226.91	58.57	10.25
C0529-098-4000-S	3.068	77.92	51.01	226.91	54.72	9.58
C0529-098-4250-S	3.257	82.72	51.01	226.91	51.35	8.99
C0529-098-4500-S	3.445	87.51	51.01	226.91	48.37	8.46
C0529-098-4750-S	3.634	92.30	51.01	226.91	45.71	8.00
C0529-098-5000-S	3.823	97.10	51.01	226.91	43.33	7.58
C0529-098-5250-S	4.012	101.89	51.01	226.91	41.19	7.21
C0529-098-5500-S	4.200	106.69	51.01	226.91	39.25	6.87
C0529-098-5750-S	4.389	111.48	51.01	226.91	37.48	6.56
C0529-098-6000-S	4.578	116.27	51.01	226.91	35.87	6.28
C0529-098-6250-S	4.766	121.07	51.01	226.91	34.39	6.02
C0529-098-6500-S	4.955	125.86	51.01	226.91	33.02	5.78
C0529-098-6750-S	5.144	130.66	51.01	226.91	31.76	5.56
C0529-098-7000-S	5.333	135.45	51.01	226.91	30.60	5.35
C0529-098-7500-S	5.710	145.04	51.01	226.91	28.50	4.99
C0529-098-8000-S	6.088	154.63	51.01	226.91	26.67	4.67
C0529-098-8500-S	6.465	164.21	51.01	226.91	25.07	4.39
C0529-105-0813-S	0.686	17.42	60.99	271.28	481.04	84.18
C0529-105-0875-S	0.735	18.67	60.99	271.28	435.83	76.27
C0529-105-0938-S	0.784	19.92	60.99	271.28	398.39	69.72
C0529-105-1000-S	0.834	21.18	60.99	271.28	366.87	64.20
C0529-105-1125-S	0.932	23.68	60.99	271.28	316.75	55.43
C0529-105-1250-S	1.031	26.19	60.99	271.28	278.68	48.77

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0529-105-1375-M	**0.529**	**13.44**	**0.105**	**2.67**	**1.375**	**34.93**	**1.145**	**29.07**	**1.104**	**28.04**	**65.94**	**293.30**	**286.10**	**50.07**
C0529-105-1500-M	**0.529**	**13.44**	**0.105**	**2.67**	**1.500**	**38.10**	**1.244**	**31.59**	**1.199**	**30.45**	**66.19**	**294.41**	**258.37**	**45.22**
C0529-105-1625-M	**0.529**	**13.44**	**0.105**	**2.67**	**1.625**	**41.28**	**1.343**	**34.12**	**1.293**	**32.85**	**66.39**	**295.31**	**235.55**	**41.22**
C0529-105-1750-M	**0.529**	**13.44**	**0.105**	**2.67**	**1.750**	**44.45**	**1.442**	**36.64**	**1.388**	**35.26**	**66.56**	**296.07**	**216.43**	**37.88**
C0529-105-1875-M	**0.529**	**13.44**	**0.105**	**2.67**	**1.875**	**47.63**	**1.542**	**39.16**	**1.483**	**37.67**	**66.70**	**296.72**	**200.18**	**35.03**
C0529-105-2000-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.000**	**50.80**	**1.641**	**41.68**	**1.578**	**40.08**	**66.83**	**297.27**	**186.20**	**32.59**
C0529-105-2125-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.125**	**53.98**	**1.673**	**42.49**	**1.673**	**42.48**	**78.72**	**350.17**	**174.05**	**30.46**
C0529-105-2250-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.250**	**57.15**	**1.768**	**44.91**	**1.767**	**44.89**	**78.72**	**350.17**	**163.38**	**28.59**
C0529-105-2375-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.375**	**60.33**	**1.864**	**47.34**	**1.862**	**47.30**	**78.72**	**350.17**	**153.95**	**26.94**
C0529-105-2500-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.500**	**63.50**	**1.959**	**49.76**	**1.957**	**49.70**	**78.72**	**350.17**	**145.55**	**25.47**
C0529-105-2625-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.625**	**66.68**	**2.055**	**52.19**	**2.052**	**52.11**	**78.72**	**350.17**	**138.01**	**24.15**
C0529-105-2750-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.750**	**69.85**	**2.150**	**54.61**	**2.146**	**54.52**	**78.72**	**350.17**	**131.22**	**22.96**
C0529-105-2875-M	**0.529**	**13.44**	**0.105**	**2.67**	**2.875**	**73.03**	**2.246**	**57.04**	**2.241**	**56.93**	**78.72**	**350.17**	**125.07**	**21.89**
C0529-105-3000-M	**0.529**	**13.44**	**0.105**	**2.67**	**3.000**	**76.20**	**2.341**	**59.46**	**2.336**	**59.33**	**78.72**	**350.17**	**119.46**	**20.91**
C0529-105-3250-M	**0.529**	**13.44**	**0.105**	**2.67**	**3.250**	**82.55**	**2.532**	**64.31**	**2.526**	**64.15**	**78.72**	**350.17**	**109.64**	**19.19**
C0529-105-3500-M	**0.529**	**13.44**	**0.105**	**2.67**	**3.500**	**88.90**	**2.723**	**69.16**	**2.715**	**68.96**	**78.72**	**350.17**	**101.31**	**17.73**
C0529-105-3750-M	**0.529**	**13.44**	**0.105**	**2.67**	**3.750**	**95.25**	**2.914**	**74.01**	**2.905**	**73.78**	**78.72**	**350.17**	**94.15**	**16.48**
C0529-105-4000-M	**0.529**	**13.44**	**0.105**	**2.67**	**4.000**	**101.60**	**3.105**	**78.86**	**3.094**	**78.59**	**78.72**	**350.17**	**87.94**	**15.39**
C0529-105-4250-M	**0.529**	**13.44**	**0.105**	**2.67**	**4.250**	**107.95**	**3.296**	**83.71**	**3.284**	**83.41**	**78.72**	**350.17**	**82.50**	**14.44**
C0529-105-4500-M	**0.529**	**13.44**	**0.105**	**2.67**	**4.500**	**114.30**	**3.487**	**88.56**	**3.473**	**88.22**	**78.72**	**350.17**	**77.69**	**13.60**
C0529-105-4750-M	**0.529**	**13.44**	**0.105**	**2.67**	**4.750**	**120.65**	**3.678**	**93.41**	**3.663**	**93.04**	**78.72**	**350.17**	**73.41**	**12.85**
C0529-105-5000-M	**0.529**	**13.44**	**0.105**	**2.67**	**5.000**	**127.00**	**3.869**	**98.26**	**3.852**	**97.85**	**78.72**	**350.17**	**69.58**	**12.18**
C0529-105-5250-M	**0.529**	**13.44**	**0.105**	**2.67**	**5.250**	**133.35**	**4.060**	**103.11**	**4.042**	**102.67**	**78.72**	**350.17**	**66.13**	**11.57**
C0529-105-5500-M	**0.529**	**13.44**	**0.105**	**2.67**	**5.500**	**139.70**	**4.251**	**107.96**	**4.232**	**107.48**	**78.72**	**350.17**	**63.01**	**11.03**
C0529-105-5750-M	**0.529**	**13.44**	**0.105**	**2.67**	**5.750**	**146.05**	**4.442**	**112.82**	**4.421**	**112.30**	**78.72**	**350.17**	**60.16**	**10.53**
C0529-105-6000-M	**0.529**	**13.44**	**0.105**	**2.67**	**6.000**	**152.40**	**4.632**	**117.67**	**4.611**	**117.11**	**78.72**	**350.17**	**57.57**	**10.07**
C0529-105-6250-M	**0.529**	**13.44**	**0.105**	**2.67**	**6.250**	**158.75**	**4.823**	**122.52**	**4.800**	**121.93**	**78.72**	**350.17**	**55.18**	**9.66**
C0529-105-6500-M	**0.529**	**13.44**	**0.105**	**2.67**	**6.500**	**165.10**	**5.014**	**127.37**	**4.990**	**126.74**	**78.72**	**350.17**	**52.99**	**9.27**
C0529-105-6750-M	**0.529**	**13.44**	**0.105**	**2.67**	**6.750**	**171.45**	**5.205**	**132.22**	**5.179**	**131.56**	**78.72**	**350.17**	**50.96**	**8.92**
C0529-105-7000-M	**0.529**	**13.44**	**0.105**	**2.67**	**7.000**	**177.80**	**5.396**	**137.07**	**5.369**	**136.37**	**78.72**	**350.17**	**49.09**	**8.59**
C0529-105-7500-M	**0.529**	**13.44**	**0.105**	**2.67**	**7.500**	**190.50**	**5.778**	**146.77**	**5.748**	**146.00**	**78.72**	**350.17**	**45.72**	**8.00**
C0529-105-8000-M	**0.529**	**13.44**	**0.105**	**2.67**	**8.000**	**203.20**	**6.160**	**156.47**	**6.127**	**155.63**	**78.72**	**350.17**	**42.79**	**7.49**
D12050	0.531	13.50	0.039	1.00	0.945	24.00	0.370	9.40	0.217	5.50	4.94	21.97	8.51	1.49
D12060	0.531	13.50	0.039	1.00	1.437	36.50	0.528	13.40	0.295	7.50	4.94	21.97	5.43	0.95
D12070	0.531	13.50	0.039	1.00	2.185	55.50	0.764	19.40	0.413	10.50	4.94	21.97	3.49	0.61
D12080	0.531	13.50	0.039	1.00	3.169	80.50	1.079	27.40	0.571	14.50	4.94	21.97	2.34	0.41
D12090	0.531	13.50	0.039	1.00	4.528	115.00	1.551	39.40	0.807	20.50	4.94	21.97	1.60	0.28
C0540-041-0500-M	**0.540**	**13.72**	**0.041**	**1.04**	**0.500**	**12.70**	**0.209**	**5.30**	**0.141**	**3.59**	**6.12**	**27.21**	**21.00**	**3.68**
C0540-041-0625-M	**0.540**	**13.72**	**0.041**	**1.04**	**0.625**	**15.88**	**0.250**	**6.34**	**0.163**	**4.14**	**6.12**	**27.21**	**16.30**	**2.85**
C0540-041-0750-M	**0.540**	**13.72**	**0.041**	**1.04**	**0.750**	**19.05**	**0.290**	**7.37**	**0.185**	**4.69**	**6.12**	**27.21**	**13.30**	**2.33**
C0540-041-0875-M	**0.540**	**13.72**	**0.041**	**1.04**	**0.875**	**22.23**	**0.329**	**8.35**	**0.207**	**5.25**	**6.12**	**27.21**	**11.20**	**1.96**
C0540-041-1000-M	**0.540**	**13.72**	**0.041**	**1.04**	**1.000**	**25.40**	**0.369**	**9.38**	**0.228**	**5.80**	**6.12**	**27.21**	**9.70**	**1.70**
C0540-041-1250-M	**0.540**	**13.72**	**0.041**	**1.04**	**1.250**	**31.75**	**0.445**	**11.30**	**0.271**	**6.89**	**6.12**	**27.21**	**7.60**	**1.33**
C0540-041-1500-M	**0.540**	**13.72**	**0.041**	**1.04**	**1.500**	**38.10**	**0.529**	**13.44**	**0.309**	**7.86**	**6.12**	**27.21**	**6.30**	**1.10**
C0540-041-1750-M	**0.540**	**13.72**	**0.041**	**1.04**	**1.750**	**44.45**	**0.596**	**15.13**	**0.352**	**8.93**	**6.12**	**27.21**	**5.30**	**0.93**
C0540-041-2000-M	**0.540**	**13.72**	**0.041**	**1.04**	**2.000**	**50.80**	**0.670**	**17.02**	**0.392**	**9.96**	**6.12**	**27.21**	**4.60**	**0.81**
C0540-041-2250-M	**0.540**	**13.72**	**0.041**	**1.04**	**2.250**	**57.15**	**0.758**	**19.25**	**0.429**	**10.91**	**6.12**	**27.21**	**4.10**	**0.72**
C0540-041-2500-M	**0.540**	**13.72**	**0.041**	**1.04**	**2.500**	**63.50**	**0.847**	**21.50**	**0.466**	**11.85**	**6.12**	**27.21**	**3.70**	**0.65**
C0540-041-2750-M	**0.540**	**13.72**	**0.041**	**1.04**	**2.750**	**69.85**	**0.896**	**22.76**	**0.513**	**13.02**	**6.12**	**27.21**	**3.30**	**0.58**
C0540-041-3000-M	**0.540**	**13.72**	**0.041**	**1.04**	**3.000**	**76.20**	**0.961**	**24.40**	**0.555**	**14.10**	**6.12**	**27.21**	**3.00**	**0.53**
C0540-046-0500-M	**0.540**	**13.72**	**0.046**	**1.17**	**0.500**	**12.70**	**0.228**	**5.79**	**0.168**	**4.26**	**8.44**	**37.54**	**31.00**	**5.43**
C0540-046-0625-M	**0.540**	**13.72**	**0.046**	**1.17**	**0.625**	**15.88**	**0.273**	**6.94**	**0.195**	**4.94**	**8.44**	**37.54**	**24.00**	**4.20**
C0540-046-0750-M	**0.540**	**13.72**	**0.046**	**1.17**	**0.750**	**19.05**	**0.307**	**7.80**	**0.226**	**5.73**	**8.44**	**37.54**	**19.05**	**3.33**
C0540-046-0875-M	**0.540**	**13.72**	**0.046**	**1.17**	**0.875**	**22.23**	**0.360**	**9.16**	**0.250**	**6.35**	**8.44**	**37.54**	**16.40**	**2.87**
C0540-046-1000-M	**0.540**	**13.72**	**0.046**	**1.17**	**1.000**	**25.40**	**0.402**	**10.20**	**0.278**	**7.07**	**8.44**	**37.54**	**14.10**	**2.47**
C0540-046-1250-M	**0.540**	**13.72**	**0.046**	**1.17**	**1.250**	**31.75**	**0.488**	**12.39**	**0.330**	**8.37**	**8.44**	**37.54**	**11.07**	**1.94**
C0540-046-1500-M	**0.540**	**13.72**	**0.046**	**1.17**	**1.500**	**38.10**	**0.573**	**14.55**	**0.380**	**9.65**	**8.44**	**37.54**	**9.10**	**1.59**
C0540-046-1750-M	**0.540**	**13.72**	**0.046**	**1.17**	**1.750**	**44.45**	**0.658**	**16.72**	**0.430**	**10.93**	**8.44**	**37.54**	**7.73**	**1.35**
C0540-046-2000-M	**0.540**	**13.72**	**0.046**	**1.17**	**2.000**	**50.80**	**0.744**	**18.90**	**0.480**	**12.20**	**8.44**	**37.54**	**6.72**	**1.18**
C0540-046-2250-M	**0.540**	**13.72**	**0.046**	**1.17**	**2.250**	**57.15**	**0.829**	**21.07**	**0.531**	**13.48**	**8.44**	**37.54**	**5.94**	**1.04**
C0540-046-2500-M	**0.540**	**13.72**	**0.046**	**1.17**	**2.500**	**63.50**	**0.914**	**23.21**	**0.581**	**14.77**	**8.44**	**37.54**	**5.32**	**0.93**
C0540-046-2750-M	**0.540**	**13.72**	**0.046**	**1.17**	**2.750**	**69.85**	**0.999**	**25.38**	**0.632**	**16.04**	**8.44**	**37.54**	**4.82**	**0.84**
C0540-046-3000-M	**0.540**	**13.72**	**0.046**	**1.17**	**3.000**	**76.20**	**1.086**	**27.60**	**0.681**	**17.31**	**8.44**	**37.54**	**4.41**	**0.77**
C0540-054-0500-M	**0.540**	**13.72**	**0.054**	**1.37**	**0.500**	**12.70**	**0.270**	**6.85**	**0.205**	**5.21**	**13.19**	**58.66**	**57.30**	**10.03**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0529-105-1375-S	**1.130**	**28.70**	**60.99**	**271.28**	**248.78**	**43.54**
C0529-105-1500-S	**1.229**	**31.21**	**60.99**	**271.28**	**224.67**	**39.32**
C0529-105-1625-S	**1.327**	**33.71**	**60.99**	**271.28**	**204.83**	**35.84**
C0529-105-1750-S	**1.426**	**36.22**	**60.99**	**271.28**	**188.20**	**32.94**
C0529-105-1875-S	**1.525**	**38.73**	**60.99**	**271.28**	**174.07**	**30.46**
C0529-105-2000-S	**1.623**	**41.23**	**60.99**	**271.28**	**161.92**	**28.34**
C0529-105-2125-S	**1.722**	**43.74**	**60.99**	**271.28**	**151.35**	**26.49**
C0529-105-2250-S	**1.821**	**46.25**	**60.99**	**271.28**	**142.07**	**24.86**
C0529-105-2375-S	**1.919**	**48.75**	**60.99**	**271.28**	**133.87**	**23.43**
C0529-105-2500-S	**2.018**	**51.26**	**60.99**	**271.28**	**126.56**	**22.15**
C0529-105-2625-S	**2.117**	**53.77**	**60.99**	**271.28**	**120.01**	**21.00**
C0529-105-2750-S	**2.216**	**56.27**	**60.99**	**271.28**	**114.11**	**19.97**
C0529-105-2875-S	**2.314**	**58.78**	**60.99**	**271.28**	**108.75**	**19.03**
C0529-105-3000-S	**2.413**	**61.29**	**60.99**	**271.28**	**103.88**	**18.18**
C0529-105-3250-S	**2.610**	**66.30**	**60.99**	**271.28**	**95.34**	**16.68**
C0529-105-3500-S	**2.808**	**71.32**	**60.99**	**271.28**	**88.09**	**15.42**
C0529-105-3750-S	**3.005**	**76.33**	**60.99**	**271.28**	**81.87**	**14.33**
C0529-105-4000-S	**3.202**	**81.34**	**60.99**	**271.28**	**76.47**	**13.38**
C0529-105-4250-S	**3.400**	**86.36**	**60.99**	**271.28**	**71.74**	**12.55**
C0529-105-4500-S	**3.597**	**91.37**	**60.99**	**271.28**	**67.56**	**11.82**
C0529-105-4750-S	**3.795**	**96.38**	**60.99**	**271.28**	**63.84**	**11.17**
C0529-105-5000-S	**3.992**	**101.40**	**60.99**	**271.28**	**60.51**	**10.59**
C0529-105-5250-S	**4.189**	**106.41**	**60.99**	**271.28**	**57.51**	**10.06**
C0529-105-5500-S	**4.387**	**111.43**	**60.99**	**271.28**	**54.79**	**9.59**
C0529-105-5750-S	**4.584**	**116.44**	**60.99**	**271.28**	**52.32**	**9.16**
C0529-105-6000-S	**4.782**	**121.45**	**60.99**	**271.28**	**50.06**	**8.76**
C0529-105-6250-S	**4.979**	**126.47**	**60.99**	**271.28**	**47.99**	**8.40**
C0529-105-6500-S	**5.176**	**131.48**	**60.99**	**271.28**	**46.08**	**8.06**
C0529-105-6750-S	**5.374**	**136.50**	**60.99**	**271.28**	**44.32**	**7.76**
C0529-105-7000-S	**5.571**	**141.51**	**60.99**	**271.28**	**42.68**	**7.47**
C0529-105-7500-S	**5.966**	**151.54**	**60.99**	**271.28**	**39.76**	**6.96**
C0529-105-8000-S	**6.361**	**161.56**	**60.99**	**271.28**	**37.21**	**6.51**
D22050	0.370	9.40	4.11	18.30	7.09	1.24
D22060	0.528	13.40	4.11	18.30	4.51	0.79
D22070	0.764	19.40	4.11	18.30	2.91	0.51
D22080	1.079	27.40	4.11	18.30	1.94	0.34
D22090	1.551	39.40	4.11	18.30	1.31	0.23
C0540-041-0500-S	**0.234**	**5.94**	**4.65**	**20.70**	**17.49**	**3.06**
C0540-041-0625-S	**0.282**	**7.17**	**4.65**	**20.70**	**13.58**	**2.38**
C0540-041-0750-S	**0.330**	**8.38**	**4.65**	**20.70**	**11.08**	**1.94**
C0540-041-0875-S	**0.376**	**9.56**	**4.65**	**20.70**	**9.33**	**1.63**
C0540-041-1000-S	**0.424**	**10.77**	**4.65**	**20.70**	**8.08**	**1.41**
C0540-041-1250-S	**0.515**	**13.08**	**4.65**	**20.70**	**6.33**	**1.11**
C0540-041-1500-S	**0.613**	**15.58**	**4.65**	**20.70**	**5.25**	**0.92**
C0540-041-1750-S	**0.696**	**17.68**	**4.65**	**20.70**	**4.42**	**0.77**
C0540-041-2000-S	**0.786**	**19.96**	**4.65**	**20.70**	**3.83**	**0.67**
C0540-041-2250-S	**0.888**	**22.55**	**4.65**	**20.70**	**3.42**	**0.60**
C0540-041-2500-S	**0.990**	**25.16**	**4.65**	**20.70**	**3.08**	**0.54**
C0540-041-2750-S	**1.058**	**26.86**	**4.65**	**20.70**	**2.75**	**0.48**
C0540-041-3000-S	**1.138**	**28.91**	**4.65**	**20.70**	**2.50**	**0.44**
C0540-046-0500-S	**0.251**	**6.38**	**6.42**	**28.57**	**25.82**	**4.52**
C0540-046-0625-S	**0.304**	**7.72**	**6.42**	**28.57**	**19.99**	**3.50**
C0540-046-0750-S	**0.345**	**8.77**	**6.42**	**28.57**	**15.87**	**2.78**
C0540-046-0875-S	**0.405**	**10.28**	**6.42**	**28.57**	**13.66**	**2.39**
C0540-046-1000-S	**0.453**	**11.51**	**6.42**	**28.57**	**11.75**	**2.06**
C0540-046-1250-S	**0.554**	**14.06**	**6.42**	**28.57**	**9.22**	**1.61**
C0540-046-1500-S	**0.653**	**16.58**	**6.42**	**28.57**	**7.58**	**1.33**
C0540-046-1750-S	**0.753**	**19.12**	**6.42**	**28.57**	**6.44**	**1.13**
C0540-046-2000-S	**0.853**	**21.66**	**6.42**	**28.57**	**5.60**	**0.98**
C0540-046-2250-S	**0.952**	**24.18**	**6.42**	**28.57**	**4.95**	**0.87**
C0540-046-2500-S	**1.051**	**26.69**	**6.42**	**28.57**	**4.43**	**0.78**
C0540-046-2750-S	**1.151**	**29.22**	**6.42**	**28.57**	**4.02**	**0.70**
C0540-046-3000-S	**1.252**	**31.80**	**6.42**	**28.57**	**3.67**	**0.64**
C0540-054-0500-S	**0.290**	**7.36**	**10.03**	**44.61**	**47.73**	**8.35**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0540-054-0625-M	**0.540**	**13.72**	**0.054**	**1.37**	**0.625**	**15.88**	**0.321**	**8.16**	**0.243**	**6.17**	**13.19**	**58.66**	**43.40**	**7.60**
C0540-054-0750-M	**0.540**	**13.72**	**0.054**	**1.37**	**0.750**	**19.05**	**0.373**	**9.48**	**0.280**	**7.11**	**13.19**	**58.66**	**35.00**	**6.13**
C0540-054-0875-M	**0.540**	**13.72**	**0.054**	**1.37**	**0.875**	**22.23**	**0.425**	**10.79**	**0.317**	**8.06**	**13.19**	**58.66**	**29.30**	**5.13**
C0540-054-1000-M	**0.540**	**13.72**	**0.054**	**1.37**	**1.000**	**25.40**	**0.477**	**12.11**	**0.353**	**8.97**	**13.19**	**58.66**	**25.20**	**4.41**
C0540-054-1250-M	**0.540**	**13.72**	**0.054**	**1.37**	**1.250**	**31.75**	**0.581**	**14.75**	**0.420**	**10.66**	**13.19**	**58.66**	**19.70**	**3.45**
C0540-054-1500-M	**0.540**	**13.72**	**0.054**	**1.37**	**1.500**	**38.10**	**0.681**	**17.30**	**0.488**	**12.41**	**13.19**	**58.66**	**16.10**	**2.82**
C0540-054-1750-M	**0.540**	**13.72**	**0.054**	**1.37**	**1.750**	**44.45**	**0.787**	**20.00**	**0.554**	**14.07**	**13.19**	**58.66**	**13.70**	**2.40**
C0540-054-2000-M	**0.540**	**13.72**	**0.054**	**1.37**	**2.000**	**50.80**	**0.892**	**22.65**	**0.621**	**15.77**	**13.19**	**58.66**	**11.90**	**2.08**
C0540-054-2250-M	**0.540**	**13.72**	**0.054**	**1.37**	**2.250**	**57.15**	**0.994**	**25.25**	**0.688**	**17.49**	**13.19**	**58.66**	**10.50**	**1.84**
C0540-054-2500-M	**0.540**	**13.72**	**0.054**	**1.37**	**2.500**	**63.50**	**1.097**	**27.87**	**0.756**	**19.19**	**13.19**	**58.66**	**9.40**	**1.65**
C0540-054-2750-M	**0.540**	**13.72**	**0.054**	**1.37**	**2.750**	**69.85**	**1.199**	**30.44**	**0.824**	**20.92**	**13.19**	**58.66**	**8.50**	**1.49**
C0540-054-3000-M	**0.540**	**13.72**	**0.054**	**1.37**	**3.000**	**76.20**	**1.301**	**33.04**	**0.891**	**22.64**	**13.19**	**58.66**	**7.76**	**1.36**
C0540-058-0500-M	**0.540**	**13.72**	**0.058**	**1.47**	**0.500**	**12.70**	**0.288**	**7.31**	**0.224**	**5.70**	**16.08**	**71.52**	**75.80**	**13.27**
C0540-058-0625-M	**0.540**	**13.72**	**0.058**	**1.47**	**0.625**	**15.88**	**0.344**	**8.74**	**0.267**	**6.77**	**16.08**	**71.52**	**57.20**	**10.01**
C0540-058-0750-M	**0.540**	**13.72**	**0.058**	**1.47**	**0.750**	**19.05**	**0.400**	**10.15**	**0.309**	**7.85**	**16.08**	**71.52**	**45.90**	**8.03**
C0540-058-0875-M	**0.540**	**13.72**	**0.058**	**1.47**	**0.875**	**22.23**	**0.456**	**11.59**	**0.351**	**8.91**	**16.08**	**71.52**	**38.40**	**6.72**
C0540-058-1000-M	**0.540**	**13.72**	**0.058**	**1.47**	**1.000**	**25.40**	**0.513**	**13.03**	**0.390**	**9.90**	**16.08**	**71.52**	**33.00**	**5.78**
C0540-058-1250-M	**0.540**	**13.72**	**0.058**	**1.47**	**1.250**	**31.75**	**0.624**	**15.86**	**0.466**	**11.84**	**16.08**	**71.52**	**25.70**	**4.50**
C0540-058-1500-M	**0.540**	**13.72**	**0.058**	**1.47**	**1.500**	**38.10**	**0.734**	**18.65**	**0.543**	**13.79**	**16.08**	**71.52**	**21.00**	**3.68**
C0540-058-1750-M	**0.540**	**13.72**	**0.058**	**1.47**	**1.750**	**44.45**	**0.847**	**21.51**	**0.619**	**15.72**	**16.08**	**71.52**	**17.80**	**3.12**
C0540-058-2000-M	**0.540**	**13.72**	**0.058**	**1.47**	**2.000**	**50.80**	**0.963**	**24.45**	**0.693**	**17.59**	**16.08**	**71.52**	**15.50**	**2.71**
C0540-058-2250-M	**0.540**	**13.72**	**0.058**	**1.47**	**2.250**	**57.15**	**1.076**	**27.34**	**0.768**	**19.50**	**16.08**	**71.52**	**13.70**	**2.40**
C0540-058-2500-M	**0.540**	**13.72**	**0.058**	**1.47**	**2.500**	**63.50**	**1.182**	**30.03**	**0.847**	**21.51**	**16.08**	**71.52**	**12.20**	**2.14**
C0540-058-2750-M	**0.540**	**13.72**	**0.058**	**1.47**	**2.750**	**69.85**	**1.288**	**32.73**	**0.926**	**23.52**	**16.08**	**71.52**	**11.00**	**1.93**
C0540-058-3000-M	**0.540**	**13.72**	**0.058**	**1.47**	**3.000**	**76.20**	**1.408**	**35.77**	**0.998**	**25.34**	**16.08**	**71.52**	**10.10**	**1.77**
C0540-063-0500-M	**0.540**	**13.72**	**0.063**	**1.60**	**0.500**	**12.70**	**0.308**	**7.83**	**0.248**	**6.31**	**20.21**	**89.89**	**105.40**	**18.45**
C0540-063-0625-M	**0.540**	**13.72**	**0.063**	**1.60**	**0.625**	**15.88**	**0.369**	**9.38**	**0.297**	**7.54**	**20.21**	**89.89**	**79.00**	**13.83**
C0540-063-0750-M	**0.540**	**13.72**	**0.063**	**1.60**	**0.750**	**19.05**	**0.430**	**10.93**	**0.346**	**8.78**	**20.21**	**89.89**	**63.20**	**11.06**
C0540-063-0875-M	**0.540**	**13.72**	**0.063**	**1.60**	**0.875**	**22.23**	**0.491**	**12.47**	**0.394**	**10.02**	**20.21**	**89.89**	**52.60**	**9.21**
C0540-063-1000-M	**0.540**	**13.72**	**0.063**	**1.60**	**1.000**	**25.40**	**0.552**	**14.02**	**0.438**	**11.13**	**20.21**	**89.89**	**45.10**	**7.89**
C0540-063-1250-M	**0.540**	**13.72**	**0.063**	**1.60**	**1.250**	**31.75**	**0.674**	**17.13**	**0.526**	**13.35**	**20.21**	**89.89**	**35.10**	**6.14**
C0540-063-1500-M	**0.540**	**13.72**	**0.063**	**1.60**	**1.500**	**38.10**	**0.796**	**20.22**	**0.613**	**15.58**	**20.21**	**89.89**	**28.70**	**5.02**
C0540-063-1750-M	**0.540**	**13.72**	**0.063**	**1.60**	**1.750**	**44.45**	**0.918**	**23.33**	**0.700**	**17.79**	**20.21**	**89.89**	**24.30**	**4.25**
C0540-063-2000-M	**0.540**	**13.72**	**0.063**	**1.60**	**2.000**	**50.80**	**1.038**	**26.36**	**0.790**	**20.05**	**20.21**	**89.89**	**21.00**	**3.68**
C0540-063-2250-M	**0.540**	**13.72**	**0.063**	**1.60**	**2.250**	**57.15**	**1.164**	**29.55**	**0.874**	**22.21**	**20.21**	**89.89**	**18.60**	**3.26**
C0540-063-2500-M	**0.540**	**13.72**	**0.063**	**1.60**	**2.500**	**63.50**	**1.283**	**32.58**	**0.964**	**24.48**	**20.21**	**89.89**	**16.60**	**2.91**
C0540-063-2750-M	**0.540**	**13.72**	**0.063**	**1.60**	**2.750**	**69.85**	**1.403**	**35.63**	**1.052**	**26.73**	**20.21**	**89.89**	**15.00**	**2.63**
C0540-063-3000-M	**0.540**	**13.72**	**0.063**	**1.60**	**3.000**	**76.20**	**1.525**	**38.74**	**1.140**	**28.95**	**20.21**	**89.89**	**13.70**	**2.40**
C0540-067-0500-M	**0.540**	**13.72**	**0.067**	**1.70**	**0.500**	**12.70**	**0.325**	**8.26**	**0.266**	**6.75**	**23.94**	**106.51**	**137.00**	**23.98**
C0540-067-0625-M	**0.540**	**13.72**	**0.067**	**1.70**	**0.625**	**15.88**	**0.390**	**9.91**	**0.319**	**8.11**	**23.94**	**106.51**	**102.00**	**17.85**
C0540-067-0750-M	**0.540**	**13.72**	**0.067**	**1.70**	**0.750**	**19.05**	**0.455**	**11.56**	**0.373**	**9.47**	**23.94**	**106.51**	**81.20**	**14.21**
C0540-067-0875-M	**0.540**	**13.72**	**0.067**	**1.70**	**0.875**	**22.23**	**0.520**	**13.21**	**0.426**	**10.82**	**23.94**	**106.51**	**67.50**	**11.81**
C0540-067-1000-M	**0.540**	**13.72**	**0.067**	**1.70**	**1.000**	**25.40**	**0.584**	**14.82**	**0.476**	**12.08**	**23.94**	**106.51**	**57.50**	**10.06**
C0540-067-1250-M	**0.540**	**13.72**	**0.067**	**1.70**	**1.250**	**31.75**	**0.716**	**18.17**	**0.571**	**14.49**	**23.94**	**106.51**	**44.80**	**7.84**
C0540-067-1500-M	**0.540**	**13.72**	**0.067**	**1.70**	**1.500**	**38.10**	**0.846**	**21.48**	**0.667**	**16.94**	**23.94**	**106.51**	**36.60**	**6.41**
C0540-067-1750-M	**0.540**	**13.72**	**0.067**	**1.70**	**1.750**	**44.45**	**0.978**	**24.83**	**0.762**	**19.35**	**23.94**	**106.51**	**31.00**	**5.43**
C0540-067-2000-M	**0.540**	**13.72**	**0.067**	**1.70**	**2.000**	**50.80**	**1.107**	**28.11**	**0.859**	**21.82**	**23.94**	**106.51**	**26.80**	**4.69**
C0540-067-2250-M	**0.540**	**13.72**	**0.067**	**1.70**	**2.250**	**57.15**	**1.235**	**31.38**	**0.957**	**24.30**	**23.94**	**106.51**	**23.60**	**4.13**
C0540-067-2500-M	**0.540**	**13.72**	**0.067**	**1.70**	**2.500**	**63.50**	**1.365**	**34.68**	**1.053**	**26.76**	**23.94**	**106.51**	**21.10**	**3.69**
C0540-067-2750-M	**0.540**	**13.72**	**0.067**	**1.70**	**2.750**	**69.85**	**1.496**	**38.01**	**1.149**	**29.18**	**23.94**	**106.51**	**19.10**	**3.34**
C0540-067-3000-M	**0.540**	**13.72**	**0.067**	**1.70**	**3.000**	**76.20**	**1.632**	**41.45**	**1.241**	**31.52**	**23.94**	**106.51**	**17.50**	**3.06**
D12250	0.541	13.75	0.049	1.25	1.063	27.00	0.323	8.20	0.271	6.88	15.52	69.04	20.74	3.63
D12260	0.541	13.75	0.049	1.25	1.634	41.50	0.457	11.60	0.369	9.38	15.52	69.04	13.20	2.31
D12270	0.541	13.75	0.049	1.25	2.461	62.50	0.650	16.50	0.517	13.13	15.52	69.04	8.51	1.49
D12280	0.541	13.75	0.049	1.25	3.563	90.50	0.909	23.10	0.714	18.13	15.52	69.04	5.83	1.02
D12290	0.541	13.75	0.049	1.25	5.118	130.00	1.295	32.90	1.009	25.63	15.52	69.04	3.94	0.69
D13190	0.551	14.00	0.110	2.80	0.807	20.50	0.646	16.40	0.606	15.40	116.62	518.77	728.51	127.49
D13200	0.551	14.00	0.110	2.80	1.142	29.00	0.878	22.30	0.827	21.00	116.62	518.77	359.20	62.86
D13210	0.551	14.00	0.110	2.80	1.807	45.90	1.374	34.90	1.268	32.20	116.62	518.77	267.89	46.88
D13220	0.551	14.00	0.110	2.80	2.811	71.40	2.098	53.30	1.929	49.00	116.62	518.77	164.17	28.73
D12450	0.555	14.10	0.063	1.60	0.945	24.00	0.394	10.00	0.346	8.80	30.42	135.33	55.77	9.76
D12460	0.555	14.10	0.063	1.60	1.417	36.00	0.555	14.10	0.472	12.00	30.42	135.33	35.60	6.23
D12470	0.555	14.10	0.063	1.60	2.106	53.50	0.791	20.10	0.661	16.80	30.42	135.33	23.09	4.04
D12480	0.555	14.10	0.063	1.60	3.071	78.00	1.102	28.00	0.913	23.20	30.42	135.33	15.60	2.73

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0540-054-0625-S	**0.348**	**8.83**	**10.03**	**44.61**	**36.15**	**6.33**
C0540-054-0750-S	**0.406**	**10.31**	**10.03**	**44.61**	**29.16**	**5.10**
C0540-054-0875-S	**0.464**	**11.79**	**10.03**	**44.61**	**24.41**	**4.27**
C0540-054-1000-S	**0.522**	**13.26**	**10.03**	**44.61**	**20.99**	**3.67**
C0540-054-1250-S	**0.639**	**16.23**	**10.03**	**44.61**	**16.41**	**2.87**
C0540-054-1500-S	**0.752**	**19.11**	**10.03**	**44.61**	**13.41**	**2.35**
C0540-054-1750-S	**0.871**	**22.13**	**10.03**	**44.61**	**11.41**	**2.00**
C0540-054-2000-S	**0.988**	**25.10**	**10.03**	**44.61**	**9.91**	**1.73**
C0540-054-2250-S	**1.103**	**28.03**	**10.03**	**44.61**	**8.75**	**1.53**
C0540-054-2500-S	**1.219**	**30.97**	**10.03**	**44.61**	**7.83**	**1.37**
C0540-054-2750-S	**1.334**	**33.87**	**10.03**	**44.61**	**7.08**	**1.24**
C0540-054-3000-S	**1.448**	**36.79**	**10.03**	**44.61**	**6.46**	**1.13**
C0540-058-0500-S	**0.307**	**7.79**	**12.22**	**54.34**	**63.14**	**11.05**
C0540-058-0625-S	**0.369**	**9.36**	**12.22**	**54.34**	**47.65**	**8.34**
C0540-058-0750-S	**0.430**	**10.93**	**12.22**	**54.34**	**38.24**	**6.69**
C0540-058-0875-S	**0.493**	**12.52**	**12.22**	**54.34**	**31.99**	**5.60**
C0540-058-1000-S	**0.556**	**14.11**	**12.22**	**54.34**	**27.49**	**4.81**
C0540-058-1250-S	**0.679**	**17.26**	**12.22**	**54.34**	**21.41**	**3.75**
C0540-058-1500-S	**0.802**	**20.36**	**12.22**	**54.34**	**17.49**	**3.06**
C0540-058-1750-S	**0.926**	**23.52**	**12.22**	**54.34**	**14.83**	**2.59**
C0540-058-2000-S	**1.054**	**26.77**	**12.22**	**54.34**	**12.91**	**2.26**
C0540-058-2250-S	**1.180**	**29.96**	**12.22**	**54.34**	**11.41**	**2.00**
C0540-058-2500-S	**1.298**	**32.97**	**12.22**	**54.34**	**10.16**	**1.78**
C0540-058-2750-S	**1.417**	**35.99**	**12.22**	**54.34**	**9.16**	**1.60**
C0540-058-3000-S	**1.548**	**39.32**	**12.22**	**54.34**	**8.41**	**1.47**
C0540-063-0500-S	**0.325**	**8.26**	**15.33**	**68.19**	**87.80**	**15.36**
C0540-063-0625-S	**0.392**	**9.96**	**15.33**	**68.19**	**65.81**	**11.52**
C0540-063-0750-S	**0.459**	**11.65**	**15.33**	**68.19**	**52.65**	**9.21**
C0540-063-0875-S	**0.525**	**13.34**	**15.33**	**68.19**	**43.82**	**7.67**
C0540-063-1000-S	**0.592**	**15.04**	**15.33**	**68.19**	**37.57**	**6.57**
C0540-063-1250-S	**0.726**	**18.43**	**15.33**	**68.19**	**29.24**	**5.12**
C0540-063-1500-S	**0.859**	**21.81**	**15.33**	**68.19**	**23.91**	**4.18**
C0540-063-1750-S	**0.993**	**25.21**	**15.33**	**68.19**	**20.24**	**3.54**
C0540-063-2000-S	**1.124**	**28.54**	**15.33**	**68.19**	**17.49**	**3.06**
C0540-063-2250-S	**1.261**	**32.02**	**15.33**	**68.19**	**15.49**	**2.71**
C0540-063-2500-S	**1.391**	**35.34**	**15.33**	**68.19**	**13.83**	**2.42**
C0540-063-2750-S	**1.523**	**38.69**	**15.33**	**68.19**	**12.50**	**2.19**
C0540-063-3000-S	**1.657**	**42.08**	**15.33**	**68.19**	**11.41**	**2.00**
C0540-067-0500-S	**0.341**	**8.66**	**18.14**	**80.68**	**114.12**	**19.97**
C0540-067-0625-S	**0.412**	**10.45**	**18.14**	**80.68**	**84.97**	**14.87**
C0540-067-0750-S	**0.482**	**12.24**	**18.14**	**80.68**	**67.64**	**11.84**
C0540-067-0875-S	**0.552**	**14.03**	**18.14**	**80.68**	**56.23**	**9.84**
C0540-067-1000-S	**0.621**	**15.78**	**18.14**	**80.68**	**47.90**	**8.38**
C0540-067-1250-S	**0.764**	**19.41**	**18.14**	**80.68**	**37.32**	**6.53**
C0540-067-1500-S	**0.905**	**22.99**	**18.14**	**80.68**	**30.49**	**5.34**
C0540-067-1750-S	**1.048**	**26.61**	**18.14**	**80.68**	**25.82**	**4.52**
C0540-067-2000-S	**1.188**	**30.16**	**18.14**	**80.68**	**22.32**	**3.91**
C0540-067-2250-S	**1.327**	**33.72**	**18.14**	**80.68**	**19.66**	**3.44**
C0540-067-2500-S	**1.468**	**37.29**	**18.14**	**80.68**	**17.58**	**3.08**
C0540-067-2750-S	**1.610**	**40.89**	**18.14**	**80.68**	**15.91**	**2.78**
C0540-067-3000-S	**1.756**	**44.60**	**18.14**	**80.68**	**14.58**	**2.55**
D22250	0.323	8.20	12.93	57.51	17.26	3.02
D22260	0.457	11.60	12.93	57.51	10.97	1.92
D22270	0.650	16.50	12.93	57.51	7.09	1.24
D22280	0.909	23.10	12.93	57.51	4.86	0.85
D22290	1.295	32.90	12.93	57.51	3.26	0.57
D23190	0.646	16.40	97.19	432.31	606.86	106.20
D23200	0.878	22.30	97.19	432.31	299.20	52.36
D23210	1.374	34.90	97.19	432.31	223.14	39.05
D23220	2.098	53.30	97.19	432.31	136.74	23.93
D22450	0.394	10.00	25.34	112.73	46.46	8.13
D22460	0.555	14.10	25.34	112.73	29.66	5.19
D22470	0.791	20.10	25.34	112.73	19.26	3.37
D22480	1.102	28.00	25.34	112.73	12.97	2.27

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
D12490	0.555	14.10	0.063	1.60	4.528	115.00	1.571	39.90	1.291	32.80	30.42	135.33	10.51	1.84	D22490	1.571	39.90	25.34	112.73	8.74	1.53
C0563-054-0625-M	**0.563**	**14.30**	**0.054**	**1.37**	**0.625**	**15.88**	**0.312**	**7.93**	**0.270**	**6.85**	**10.06**	**44.76**	**32.16**	**5.63**	**C0563-054-0625-S**	**0.312**	**7.93**	**8.38**	**37.28**	**26.79**	**4.69**
C0563-054-0750-M	**0.563**	**14.30**	**0.054**	**1.37**	**0.750**	**19.05**	**0.366**	**9.31**	**0.314**	**7.97**	**9.93**	**44.19**	**25.90**	**4.53**	**C0563-054-0750-S**	**0.366**	**9.31**	**8.28**	**36.81**	**21.58**	**3.78**
C0563-054-0875-M	**0.563**	**14.30**	**0.054**	**1.37**	**0.875**	**22.23**	**0.419**	**10.65**	**0.356**	**9.04**	**9.88**	**43.95**	**21.68**	**3.79**	**C0563-054-0875-S**	**0.419**	**10.65**	**8.23**	**36.61**	**18.06**	**3.16**
C0563-054-1000-M	**0.563**	**14.30**	**0.054**	**1.37**	**1.000**	**25.40**	**0.470**	**11.94**	**0.395**	**10.04**	**9.88**	**43.94**	**18.64**	**3.26**	**C0563-054-1000-S**	**0.470**	**11.94**	**8.23**	**36.60**	**15.53**	**2.72**
C0563-054-1250-M	**0.563**	**14.30**	**0.054**	**1.37**	**1.250**	**31.75**	**0.572**	**14.52**	**0.474**	**12.05**	**9.88**	**43.94**	**14.56**	**2.55**	**C0563-054-1250-S**	**0.572**	**14.52**	**8.23**	**36.61**	**12.13**	**2.12**
C0563-054-1500-M	**0.563**	**14.30**	**0.054**	**1.37**	**1.500**	**38.10**	**0.673**	**17.09**	**0.553**	**14.05**	**9.88**	**43.97**	**11.95**	**2.09**	**C0563-054-1500-S**	**0.673**	**17.09**	**8.23**	**36.63**	**9.95**	**1.74**
C0563-054-1750-M	**0.563**	**14.30**	**0.054**	**1.37**	**1.750**	**44.45**	**0.774**	**19.67**	**0.632**	**16.06**	**9.88**	**43.97**	**10.13**	**1.77**	**C0563-054-1750-S**	**0.774**	**19.67**	**8.23**	**36.62**	**8.44**	**1.48**
C0563-054-2000-M	**0.563**	**14.30**	**0.054**	**1.37**	**2.000**	**50.80**	**0.876**	**22.25**	**0.711**	**18.07**	**9.88**	**43.96**	**8.79**	**1.54**	**C0563-054-2000-S**	**0.876**	**22.25**	**8.23**	**36.62**	**7.32**	**1.28**
C0563-054-2250-M	**0.563**	**14.30**	**0.054**	**1.37**	**2.250**	**57.15**	**0.978**	**24.83**	**0.791**	**20.08**	**9.87**	**43.92**	**7.76**	**1.36**	**C0563-054-2250-S**	**0.978**	**24.83**	**8.23**	**36.59**	**6.46**	**1.13**
C0563-054-2500-M	**0.563**	**14.30**	**0.054**	**1.37**	**2.500**	**63.50**	**1.079**	**27.41**	**0.870**	**22.09**	**9.88**	**43.93**	**6.95**	**1.22**	**C0563-054-2500-S**	**1.079**	**27.41**	**8.23**	**36.60**	**5.79**	**1.01**
C0563-054-2750-M	**0.563**	**14.30**	**0.054**	**1.37**	**2.750**	**69.85**	**1.244**	**31.60**	**1.027**	**26.10**	**8.66**	**38.51**	**5.75**	**1.01**	**C0563-054-2750-S**	**1.244**	**31.60**	**7.21**	**32.08**	**4.79**	**0.84**
C0563-054-3000-M	**0.563**	**14.30**	**0.054**	**1.37**	**3.000**	**76.20**	**1.346**	**34.19**	**1.107**	**28.11**	**8.75**	**38.92**	**5.29**	**0.93**	**C0563-054-3000-S**	**1.346**	**34.19**	**7.29**	**32.42**	**4.41**	**0.77**
C0563-054-3250-M	**0.563**	**14.30**	**0.054**	**1.37**	**3.250**	**82.55**	**1.448**	**36.77**	**1.186**	**30.12**	**8.83**	**39.29**	**4.90**	**0.86**	**C0563-054-3250-S**	**1.448**	**36.77**	**7.36**	**32.73**	**4.08**	**0.71**
C0563-054-3500-M	**0.563**	**14.30**	**0.054**	**1.37**	**3.500**	**88.90**	**1.548**	**39.31**	**1.263**	**32.09**	**8.92**	**39.69**	**4.57**	**0.80**	**C0563-054-3500-S**	**1.548**	**39.31**	**7.43**	**33.06**	**3.81**	**0.67**
C0563-054-3750-M	**0.563**	**14.30**	**0.054**	**1.37**	**3.750**	**95.25**	**1.651**	**41.93**	**1.344**	**34.14**	**8.96**	**39.87**	**4.27**	**0.75**	**C0563-054-3750-S**	**1.651**	**41.93**	**7.47**	**33.22**	**3.56**	**0.62**
C0563-092-0750-M	**0.563**	**14.30**	**0.092**	**2.34**	**0.750**	**19.05**	**0.573**	**14.56**	**0.491**	**12.48**	**54.81**	**243.80**	**310.08**	**54.26**	**C0563-092-0750-S**	**0.591**	**15.02**	**40.96**	**182.18**	**258.30**	**45.20**
C0563-092-0875-M	**0.563**	**14.30**	**0.092**	**2.34**	**0.875**	**22.23**	**0.659**	**16.75**	**0.567**	**14.39**	**54.81**	**243.80**	**254.15**	**44.48**	**C0563-092-0875-S**	**0.682**	**17.31**	**40.96**	**182.18**	**211.71**	**37.05**
C0563-092-1000-M	**0.563**	**14.30**	**0.092**	**2.34**	**1.000**	**25.40**	**0.745**	**18.93**	**0.635**	**16.14**	**54.81**	**243.80**	**215.31**	**37.68**	**C0563-092-1000-S**	**0.772**	**19.60**	**40.96**	**182.18**	**179.35**	**31.39**
C0563-092-1250-M	**0.563**	**14.30**	**0.092**	**2.34**	**1.250**	**31.75**	**0.918**	**23.31**	**0.771**	**19.57**	**54.81**	**243.80**	**164.91**	**28.86**	**C0563-092-1250-S**	**0.952**	**24.18**	**40.96**	**182.18**	**137.37**	**24.04**
C0563-092-1500-M	**0.563**	**14.30**	**0.092**	**2.34**	**1.500**	**38.10**	**1.090**	**27.68**	**0.906**	**23.00**	**54.81**	**243.80**	**133.63**	**23.39**	**C0563-092-1500-S**	**1.132**	**28.75**	**40.96**	**182.18**	**111.31**	**19.48**
C0563-092-1750-M	**0.563**	**14.30**	**0.092**	**2.34**	**1.750**	**44.45**	**1.262**	**32.06**	**1.041**	**26.44**	**54.81**	**243.80**	**112.33**	**19.66**	**C0563-092-1750-S**	**1.312**	**33.33**	**40.96**	**182.18**	**93.57**	**16.37**
C0563-092-2000-M	**0.563**	**14.30**	**0.092**	**2.34**	**2.000**	**50.80**	**1.434**	**36.43**	**1.176**	**29.87**	**54.81**	**243.80**	**96.88**	**16.95**	**C0563-092-2000-S**	**1.492**	**37.91**	**40.96**	**182.18**	**80.70**	**14.12**
C0563-092-2250-M	**0.563**	**14.30**	**0.092**	**2.34**	**2.250**	**57.15**	**1.606**	**40.80**	**1.311**	**33.30**	**54.81**	**243.80**	**85.17**	**14.90**	**C0563-092-2250-S**	**1.673**	**42.49**	**40.96**	**182.18**	**70.95**	**12.42**
C0563-092-2500-M	**0.563**	**14.30**	**0.092**	**2.34**	**2.500**	**63.50**	**1.779**	**45.18**	**1.446**	**36.74**	**54.81**	**243.80**	**75.98**	**13.30**	**C0563-092-2500-S**	**1.853**	**47.06**	**40.96**	**182.18**	**63.29**	**11.08**
C0563-092-2750-M	**0.563**	**14.30**	**0.092**	**2.34**	**2.750**	**69.85**	**1.873**	**47.58**	**1.717**	**43.60**	**54.81**	**243.80**	**62.50**	**10.94**	**C0563-092-2750-S**	**1.963**	**49.87**	**40.96**	**182.18**	**52.06**	**9.11**
C0563-092-3000-M	**0.563**	**14.30**	**0.092**	**2.34**	**3.000**	**76.20**	**2.045**	**51.95**	**1.852**	**47.03**	**54.81**	**243.80**	**57.41**	**10.05**	**C0563-092-3000-S**	**2.144**	**54.45**	**40.96**	**182.18**	**47.82**	**8.37**
C0563-092-3250-M	**0.563**	**14.30**	**0.092**	**2.34**	**3.250**	**82.55**	**2.217**	**56.32**	**1.987**	**50.47**	**54.81**	**243.80**	**53.08**	**9.29**	**C0563-092-3250-S**	**2.324**	**59.02**	**40.96**	**182.18**	**44.22**	**7.74**
C0563-092-3500-M	**0.563**	**14.30**	**0.092**	**2.34**	**3.500**	**88.90**	**2.390**	**60.70**	**2.122**	**53.90**	**54.81**	**243.80**	**49.36**	**8.64**	**C0563-092-3500-S**	**2.504**	**63.60**	**40.96**	**182.18**	**41.12**	**7.20**
C0563-092-3750-M	**0.563**	**14.30**	**0.092**	**2.34**	**3.750**	**95.25**	**2.562**	**65.07**	**2.257**	**57.33**	**54.81**	**243.80**	**46.13**	**8.07**	**C0563-092-3750-S**	**2.684**	**68.18**	**40.96**	**182.18**	**38.43**	**6.72**
D12650	0.571	14.50	0.079	2.00	0.886	22.50	0.461	11.70	0.433	11.00	57.10	253.99	136.74	23.93	D22650	0.461	11.70	47.56	211.57	113.89	19.93
D12660	0.571	14.50	0.079	2.00	1.299	33.00	0.646	16.40	0.591	15.00	57.10	253.99	86.86	15.20	D22660	0.646	16.40	47.56	211.57	72.34	12.66
D12670	0.571	14.50	0.079	2.00	1.949	49.50	0.925	23.50	0.827	21.00	57.10	253.99	56.06	9.81	D22670	0.925	23.50	47.56	211.57	46.69	8.17
D12680	0.571	14.50	0.079	2.00	2.795	71.00	1.299	33.00	1.142	29.00	57.10	253.99	38.23	6.69	D22680	1.299	33.00	47.56	211.57	31.83	5.57
D12690	0.571	14.50	0.079	2.00	4.134	105.00	1.858	47.20	1.614	41.00	57.10	253.99	25.83	4.52	D22690	1.858	47.20	47.56	211.57	21.54	3.77
C0588-049-1125-M	**0.588**	**14.94**	**0.049**	**1.25**	**1.125**	**28.58**	**0.426**	**10.81**	**0.317**	**8.06**	**8.87**	**39.47**	**12.69**	**2.22**	**C0588-049-1125-S**	**0.485**	**12.32**	**7.06**	**31.41**	**11.03**	**1.93**
C0588-049-1250-M	**0.588**	**14.94**	**0.049**	**1.25**	**1.250**	**31.75**	**0.466**	**11.83**	**0.344**	**8.73**	**8.87**	**39.47**	**11.31**	**1.98**	**C0588-049-1250-S**	**0.532**	**13.52**	**7.06**	**31.41**	**9.84**	**1.72**
C0588-049-1375-M	**0.588**	**14.94**	**0.049**	**1.25**	**1.375**	**34.93**	**0.506**	**12.84**	**0.370**	**9.39**	**8.87**	**39.47**	**10.21**	**1.79**	**C0588-049-1375-S**	**0.579**	**14.71**	**7.06**	**31.41**	**8.87**	**1.55**
C0588-049-1500-M	**0.588**	**14.94**	**0.049**	**1.25**	**1.500**	**38.10**	**0.545**	**13.85**	**0.396**	**10.05**	**8.87**	**39.47**	**9.30**	**1.63**	**C0588-049-1500-S**	**0.626**	**15.91**	**7.06**	**31.41**	**8.08**	**1.41**
C0588-049-1625-M	**0.588**	**14.94**	**0.049**	**1.25**	**1.625**	**41.28**	**0.585**	**14.87**	**0.422**	**10.72**	**8.87**	**39.47**	**8.53**	**1.49**	**C0588-049-1625-S**	**0.674**	**17.11**	**7.06**	**31.41**	**7.42**	**1.30**
C0588-049-1750-M	**0.588**	**14.94**	**0.049**	**1.25**	**1.750**	**44.45**	**0.625**	**15.88**	**0.448**	**11.38**	**8.87**	**39.47**	**7.89**	**1.38**	**C0588-049-1750-S**	**0.721**	**18.30**	**7.06**	**31.41**	**6.86**	**1.20**
C0588-049-1875-M	**0.588**	**14.94**	**0.049**	**1.25**	**1.875**	**47.63**	**0.665**	**16.89**	**0.474**	**12.04**	**8.87**	**39.47**	**7.33**	**1.28**	**C0588-049-1875-S**	**0.768**	**19.50**	**7.06**	**31.41**	**6.38**	**1.12**
C0588-049-2000-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.000**	**50.80**	**0.705**	**17.91**	**0.500**	**12.71**	**8.87**	**39.47**	**6.85**	**1.20**	**C0588-049-2000-S**	**0.815**	**20.70**	**7.06**	**31.41**	**5.96**	**1.04**
C0588-049-2125-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.125**	**53.98**	**0.745**	**18.92**	**0.526**	**13.37**	**8.87**	**39.47**	**6.43**	**1.13**	**C0588-049-2125-S**	**0.862**	**21.89**	**7.06**	**31.41**	**5.59**	**0.98**
C0588-049-2250-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.250**	**57.15**	**0.785**	**19.93**	**0.553**	**14.03**	**8.87**	**39.47**	**6.06**	**1.06**	**C0588-049-2250-S**	**0.909**	**23.09**	**7.06**	**31.41**	**5.27**	**0.92**
C0588-049-2375-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.375**	**60.33**	**0.825**	**20.95**	**0.579**	**14.70**	**8.87**	**39.47**	**5.72**	**1.00**	**C0588-049-2375-S**	**0.956**	**24.29**	**7.06**	**31.41**	**4.98**	**0.87**
C0588-049-2500-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.500**	**63.50**	**0.865**	**21.96**	**0.605**	**15.36**	**8.87**	**39.47**	**5.43**	**0.95**	**C0588-049-2500-S**	**1.003**	**25.48**	**7.06**	**31.41**	**4.72**	**0.83**
C0588-049-2625-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.625**	**66.68**	**0.904**	**22.97**	**0.631**	**16.02**	**8.87**	**39.47**	**5.16**	**0.90**	**C0588-049-2625-S**	**1.050**	**26.68**	**7.06**	**31.41**	**4.48**	**0.78**
C0588-049-2750-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.750**	**69.85**	**0.944**	**23.99**	**0.657**	**16.69**	**8.87**	**39.47**	**4.91**	**0.86**	**C0588-049-2750-S**	**1.098**	**27.88**	**7.06**	**31.41**	**4.27**	**0.75**
C0588-049-2875-M	**0.588**	**14.94**	**0.049**	**1.25**	**2.875**	**73.03**	**0.984**	**25.00**	**0.683**	**17.35**	**8.87**	**39.47**	**4.69**	**0.82**	**C0588-049-2875-S**	**1.145**	**29.07**	**7.06**	**31.41**	**4.08**	**0.71**
C0588-049-3000-M	**0.588**	**14.94**	**0.049**	**1.25**	**3.000**	**76.20**	**1.024**	**26.01**	**0.709**	**18.02**	**8.87**	**39.47**	**4.49**	**0.79**	**C0588-049-3000-S**	**1.192**	**30.27**	**7.06**	**31.41**	**3.91**	**0.68**
C0588-049-3250-M	**0.588**	**14.94**	**0.049**	**1.25**	**3.250**	**82.55**	**1.104**	**28.04**	**0.761**	**19.34**	**8.87**	**39.47**	**4.13**	**0.72**	**C0588-049-3250-S**	**1.286**	**32.66**	**7.06**	**31.41**	**3.60**	**0.63**
C0588-049-3500-M	**0.588**	**14.94**	**0.049**	**1.25**	**3.500**	**88.90**	**1.184**	**30.07**	**0.814**	**20.67**	**8.87**	**39.47**	**3.83**	**0.67**	**C0588-049-3500-S**	**1.380**	**35.06**	**7.06**	**31.41**	**3.33**	**0.58**
C0588-049-3750-M	**0.588**	**14.94**	**0.049**	**1.25**	**3.750**	**95.25**	**1.264**	**32.09**	**0.866**	**22.00**	**8.87**	**39.47**	**3.57**	**0.62**	**C0588-049-3750-S**	**1.474**	**37.45**	**7.06**	**31.41**	**3.10**	**0.54**
C0588-049-4000-M	**0.588**	**14.94**	**0.049**	**1.25**	**4.000**	**101.60**	**1.343**	**34.12**	**0.918**	**23.32**	**8.87**	**39.47**	**3.34**	**0.58**	**C0588-049-4000-S**	**1.569**	**39.84**	**7.06**	**31.41**	**2.90**	**0.51**
C0588-049-4250-M	**0.588**	**14.94**	**0.049**	**1.25**	**4.250**	**107.95**	**1.423**	**36.15**	**0.970**	**24.65**	**8.87**	**39.47**	**3.14**	**0.55**	**C0588-049-4250-S**	**1.663**	**42.24**	**7.06**	**31.41**	**2.73**	**0.48**
C0588-049-4500-M	**0.588**	**14.94**	**0.049**	**1.25**	**4.500**	**114.30**	**1.503**	**38.17**	**1.023**	**25.98**	**8.87**	**39.47**	**2.96**	**0.52**	**C0588-049-4500-S**	**1.757**	**44.63**	**7.06**	**31.41**	**2.57**	**0.45**
C0588-049-4750-M	**0.588**	**14.94**	**0.049**	**1.25**	**4.750**	**120.65**	**1.583**	**40.20**	**1.075**	**27.30**	**8.87**	**39.47**	**2.80**	**0.49**	**C0588-049-4750-S**	**1.851**	**47.02**	**7.06**	**31.41**	**2.44**	**0.43**
C0588-049-5000-M	**0.588**	**14.94**	**0.049**	**1.25**	**5.000**	**127.00**	**1.662**	**42.23**	**1.127**	**28.63**	**8.87**	**39.47**	**2.66**	**0.47**	**C0588-049-5000-S**	**1.946**	**49.42**	**7.06**	**31.41**	**2.31**	**0.40**
C0588-049-5250-M	**0.588**	**14.94**	**0.049**	**1.25**	**5.250**	**133.35**	**1.742**	**44.25**	**1.179**	**29.96**	**8.87**	**39.47**	**2.53**	**0.44**	**C0588-049-5250-S**	**2.040**	**51.81**	**7.06**	**31.41**	**2.20**	**0.38**
C0588-049-5500-M	**0.588**	**14.94**	**0.049**	**1.25**	**5.500**	**139.70**	**1.822**	**46.28**	**1.232**	**31.28**	**8.87**	**39.47**	**2.41**	**0.42**	**C0588-049-5500-S**	**2.134**	**54.20**	**7.06**	**31.41**	**2.10**	**0.37**
C0588-049-5750-M	**0.588**	**14.94**	**0.049**	**1.25**	**5.750**	**146.05**	**1.902**	**48.31**	**1.284**	**32.61**	**8.87**	**39.47**	**2.31**	**0.40**	**C0588-049-5750-S**	**2.228**	**56.60**	**7.06**	**31.41**	**2.01**	**0.35**
C0588-049-6000-M	**0.588**	**14.94**	**0.049**	**1.25**	**6.000**	**152.40**	**1.982**	**50.33**	**1.336**	**33.94**	**8.87**	**39.47**	**2.21**	**0.39**	**C0588-049-6000-S**	**2.322**	**58.99**	**7.06**	**31.41**	**1.92**	**0.34**
C0588-049-6250-M	**0.588**	**14.94**	**0.049**	**1.25**	**6.250**	**158.75**	**2.061**	**52.36**	**1.388**	**35.26**	**8.87**	**39.47**	**2.12**	**0.37**	**C0588-049-6250-S**	**2.417**	**61.38**	**7.06**	**31.41**	**1.84**	**0.32**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0588-049-6500-M	0.588	14.94	0.049	1.25	6.500	165.10	2.141	54.39	1.441	36.59	8.87	39.47	2.04	0.36
C0588-049-6750-M	0.588	14.94	0.049	1.25	6.750	171.45	2.221	56.41	1.493	37.92	8.87	39.47	1.96	0.34
C0588-049-7000-M	0.588	14.94	0.049	1.25	7.000	177.80	2.301	58.44	1.545	39.24	8.87	39.47	1.89	0.33
C0588-049-7500-M	0.588	14.94	0.049	1.25	7.500	190.50	2.460	62.49	1.649	41.90	8.87	39.47	1.76	0.31
C0588-049-8000-M	0.588	14.94	0.049	1.25	8.000	203.20	2.620	66.54	1.754	44.55	8.87	39.47	1.65	0.29
C0588-049-8500-M	0.588	14.94	0.049	1.25	8.500	215.90	2.779	70.60	1.858	47.20	8.87	39.47	1.55	0.27
C0588-049-9000-M	0.588	14.94	0.049	1.25	9.000	228.60	2.939	74.65	1.963	49.86	8.87	39.47	1.46	0.26
C0588-049-9500-M	0.588	14.94	0.049	1.25	9.500	241.30	3.099	78.70	2.067	52.51	8.87	39.47	1.39	0.24
C0588-051-1125-M	0.588	14.94	0.051	1.30	1.125	28.58	0.443	11.24	0.338	8.60	9.92	44.13	14.54	2.54
C0588-051-1250-M	0.588	14.94	0.051	1.30	1.250	31.75	0.484	12.30	0.367	9.31	9.92	44.13	12.96	2.27
C0588-051-1375-M	0.588	14.94	0.051	1.30	1.375	34.93	0.526	13.36	0.395	10.03	9.92	44.13	11.68	2.04
C0588-051-1500-M	0.588	14.94	0.051	1.30	1.500	38.10	0.568	14.42	0.423	10.75	9.92	44.13	10.64	1.86
C0588-051-1625-M	0.588	14.94	0.051	1.30	1.625	41.28	0.609	15.47	0.451	11.47	9.92	44.13	9.77	1.71
C0588-051-1750-M	0.588	14.94	0.051	1.30	1.750	44.45	0.651	16.53	0.480	12.19	9.92	44.13	9.03	1.58
C0588-051-1875-M	0.588	14.94	0.051	1.30	1.875	47.63	0.692	17.59	0.508	12.90	9.92	44.13	8.39	1.47
C0588-051-2000-M	0.588	14.94	0.051	1.30	2.000	50.80	0.734	18.65	0.536	13.62	9.92	44.13	7.84	1.37
C0588-051-2125-M	0.588	14.94	0.051	1.30	2.125	53.98	0.776	19.70	0.565	14.34	9.92	44.13	7.35	1.29
C0588-051-2250-M	0.588	14.94	0.051	1.30	2.250	57.15	0.817	20.76	0.593	15.06	9.92	44.13	6.92	1.21
C0588-051-2375-M	0.588	14.94	0.051	1.30	2.375	60.33	0.859	21.82	0.621	15.77	9.92	44.13	6.54	1.15
C0588-051-2500-M	0.588	14.94	0.051	1.30	2.500	63.50	0.901	22.88	0.649	16.49	9.92	44.13	6.20	1.09
C0588-051-2625-M	0.588	14.94	0.051	1.30	2.625	66.68	0.942	23.93	0.678	17.21	9.92	44.13	5.90	1.03
C0588-051-2750-M	0.588	14.94	0.051	1.30	2.750	69.85	0.984	24.99	0.706	17.93	9.92	44.13	5.62	0.98
C0588-051-2875-M	0.588	14.94	0.051	1.30	2.875	73.03	1.026	26.05	0.734	18.65	9.92	44.13	5.36	0.94
C0588-051-3000-M	0.588	14.94	0.051	1.30	3.000	76.20	1.067	27.11	0.762	19.36	9.92	44.13	5.13	0.90
C0588-051-3250-M	0.588	14.94	0.051	1.30	3.250	82.55	1.150	29.22	0.819	20.80	9.92	44.13	4.73	0.83
C0588-051-3500-M	0.588	14.94	0.051	1.30	3.500	88.90	1.234	31.34	0.875	22.24	9.92	44.13	4.38	0.77
C0588-051-3750-M	0.588	14.94	0.051	1.30	3.750	95.25	1.317	33.45	0.932	23.67	9.92	44.13	4.08	0.71
C0588-051-4000-M	0.588	14.94	0.051	1.30	4.000	101.60	1.400	35.57	0.988	25.11	9.92	44.13	3.82	0.67
C0588-051-4250-M	0.588	14.94	0.051	1.30	4.250	107.95	1.483	37.68	1.045	26.54	9.92	44.13	3.59	0.63
C0588-051-4500-M	0.588	14.94	0.051	1.30	4.500	114.30	1.567	39.79	1.102	27.98	9.92	44.13	3.38	0.59
C0588-051-4750-M	0.588	14.94	0.051	1.30	4.750	120.65	1.650	41.91	1.158	29.41	9.92	44.13	3.20	0.56
C0588-051-5000-M	0.588	14.94	0.051	1.30	5.000	127.00	1.733	44.02	1.215	30.85	9.92	44.13	3.04	0.53
C0588-051-5250-M	0.588	14.94	0.051	1.30	5.250	133.35	1.817	46.14	1.271	32.29	9.92	44.13	2.89	0.51
C0588-051-5500-M	0.588	14.94	0.051	1.30	5.500	139.70	1.900	48.25	1.328	33.72	9.92	44.13	2.76	0.48
C0588-051-5750-M	0.588	14.94	0.051	1.30	5.750	146.05	1.983	50.37	1.384	35.16	9.92	44.13	2.63	0.46
C0588-051-6000-M	0.588	14.94	0.051	1.30	6.000	152.40	2.066	52.48	1.441	36.59	9.92	44.13	2.52	0.44
C0588-051-6250-M	0.588	14.94	0.051	1.30	6.250	158.75	2.150	54.60	1.497	38.03	9.92	44.13	2.42	0.42
C0588-051-6500-M	0.588	14.94	0.051	1.30	6.500	165.10	2.233	56.71	1.554	39.47	9.92	44.13	2.33	0.41
C0588-051-6750-M	0.588	14.94	0.051	1.30	6.750	171.45	2.316	58.83	1.610	40.90	9.92	44.13	2.24	0.39
C0588-051-7000-M	0.588	14.94	0.051	1.30	7.000	177.80	2.399	60.94	1.667	42.34	9.92	44.13	2.16	0.38
C0588-051-7500-M	0.588	14.94	0.051	1.30	7.500	190.50	2.566	65.17	1.780	45.21	9.92	44.13	2.01	0.35
C0588-051-8000-M	0.588	14.94	0.051	1.30	8.000	203.20	2.732	69.40	1.893	48.08	9.92	44.13	1.88	0.33
C0588-051-8500-M	0.588	14.94	0.051	1.30	8.500	215.90	2.899	73.63	2.006	50.95	9.92	44.13	1.77	0.31
C0588-051-9000-M	0.588	14.94	0.051	1.30	9.000	228.60	3.065	77.86	2.119	53.82	9.92	44.13	1.67	0.29
C0588-051-9500-M	0.588	14.94	0.051	1.30	9.500	241.30	3.232	82.09	2.232	56.70	9.92	44.13	1.58	0.28
C0588-055-1000-M	0.588	14.94	0.055	1.40	1.000	25.40	0.432	10.97	0.348	8.85	12.24	54.45	21.55	3.77
C0588-055-1125-M	0.588	14.94	0.055	1.40	1.125	28.58	0.477	12.12	0.381	9.68	12.24	54.45	18.90	3.31
C0588-055-1250-M	0.588	14.94	0.055	1.40	1.250	31.75	0.522	13.27	0.414	10.51	12.24	54.45	16.82	2.94
C0588-055-1375-M	0.588	14.94	0.055	1.40	1.375	34.93	0.568	14.42	0.446	11.34	12.24	54.45	15.16	2.65
C0588-055-1500-M	0.588	14.94	0.055	1.40	1.500	38.10	0.613	15.57	0.479	12.17	12.24	54.45	13.80	2.41
C0588-055-1625-M	0.588	14.94	0.055	1.40	1.625	41.28	0.658	16.71	0.512	13.00	12.24	54.45	12.66	2.22
C0588-055-1750-M	0.588	14.94	0.055	1.40	1.750	44.45	0.703	17.86	0.544	13.83	12.24	54.45	11.70	2.05
C0588-055-1875-M	0.588	14.94	0.055	1.40	1.875	47.63	0.748	19.01	0.577	14.66	12.24	54.45	10.87	1.90
C0588-055-2000-M	0.588	14.94	0.055	1.40	2.000	50.80	0.794	20.16	0.610	15.49	12.24	54.45	10.15	1.78
C0588-055-2125-M	0.588	14.94	0.055	1.40	2.125	53.98	0.839	21.31	0.643	16.32	12.24	54.45	9.52	1.67
C0588-055-2250-M	0.588	14.94	0.055	1.40	2.250	57.15	0.884	22.46	0.675	17.15	12.24	54.45	8.96	1.57
C0588-055-2375-M	0.588	14.94	0.055	1.40	2.375	60.33	0.929	23.61	0.708	17.98	12.24	54.45	8.47	1.48
C0588-055-2500-M	0.588	14.94	0.055	1.40	2.500	63.50	0.975	24.75	0.741	18.81	12.24	54.45	8.03	1.40
C0588-055-2625-M	0.588	14.94	0.055	1.40	2.625	66.68	1.020	25.90	0.773	19.64	12.24	54.45	7.63	1.33
C0588-055-2750-M	0.588	14.94	0.055	1.40	2.750	69.85	1.065	27.05	0.806	20.47	12.24	54.45	7.27	1.27
C0588-055-2875-M	0.588	14.94	0.055	1.40	2.875	73.03	1.110	28.20	0.839	21.30	12.24	54.45	6.94	1.21
C0588-055-3000-M	0.588	14.94	0.055	1.40	3.000	76.20	1.155	29.35	0.871	22.13	12.24	54.45	6.64	1.16
C0588-055-3250-M	0.588	14.94	0.055	1.40	3.250	82.55	1.246	31.65	0.937	23.80	12.24	54.45	6.11	1.07
C0588-055-3500-M	0.588	14.94	0.055	1.40	3.500	88.90	1.336	33.94	1.002	25.46	12.24	54.45	5.66	0.99

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0588-049-6500-S	2.511	63.78	7.06	31.41	1.77	0.31
C0588-049-6750-S	2.605	66.17	7.06	31.41	1.70	0.30
C0588-049-7000-S	2.699	68.56	7.06	31.41	1.64	0.29
C0588-049-7500-S	2.888	73.35	7.06	31.41	1.53	0.27
C0588-049-8000-S	3.076	78.14	7.06	31.41	1.43	0.25
C0588-049-8500-S	3.265	82.92	7.06	31.41	1.35	0.24
C0588-049-9000-S	3.453	87.71	7.06	31.41	1.27	0.22
C0588-049-9500-S	3.642	92.49	7.06	31.41	1.21	0.21
C0588-051-1125-S	0.501	12.72	7.89	35.11	12.64	2.21
C0588-051-1250-S	0.549	13.95	7.89	35.11	11.27	1.97
C0588-051-1375-S	0.598	15.19	7.89	35.11	10.16	1.78
C0588-051-1500-S	0.647	16.43	7.89	35.11	9.25	1.62
C0588-051-1625-S	0.696	17.67	7.89	35.11	8.49	1.49
C0588-051-1750-S	0.744	18.90	7.89	35.11	7.85	1.37
C0588-051-1875-S	0.793	20.14	7.89	35.11	7.30	1.28
C0588-051-2000-S	0.842	21.38	7.89	35.11	6.81	1.19
C0588-051-2125-S	0.890	22.62	7.89	35.11	6.39	1.12
C0588-051-2250-S	0.939	23.85	7.89	35.11	6.02	1.05
C0588-051-2375-S	0.988	25.09	7.89	35.11	5.69	1.00
C0588-051-2500-S	1.037	26.33	7.89	35.11	5.39	0.94
C0588-051-2625-S	1.085	27.56	7.89	35.11	5.13	0.90
C0588-051-2750-S	1.134	28.80	7.89	35.11	4.88	0.85
C0588-051-2875-S	1.183	30.04	7.89	35.11	4.66	0.82
C0588-051-3000-S	1.231	31.28	7.89	35.11	4.46	0.78
C0588-051-3250-S	1.329	33.75	7.89	35.11	4.11	0.72
C0588-051-3500-S	1.426	36.23	7.89	35.11	3.81	0.67
C0588-051-3750-S	1.524	38.70	7.89	35.11	3.55	0.62
C0588-051-4000-S	1.621	41.18	7.89	35.11	3.32	0.58
C0588-051-4250-S	1.719	43.65	7.89	35.11	3.12	0.55
C0588-051-4500-S	1.816	46.12	7.89	35.11	2.94	0.51
C0588-051-4750-S	1.913	48.60	7.89	35.11	2.78	0.49
C0588-051-5000-S	2.011	51.07	7.89	35.11	2.64	0.46
C0588-051-5250-S	2.108	53.55	7.89	35.11	2.51	0.44
C0588-051-5500-S	2.206	56.02	7.89	35.11	2.40	0.42
C0588-051-5750-S	2.303	58.50	7.89	35.11	2.29	0.40
C0588-051-6000-S	2.400	60.97	7.89	35.11	2.19	0.38
C0588-051-6250-S	2.498	63.45	7.89	35.11	2.10	0.37
C0588-051-6500-S	2.595	65.92	7.89	35.11	2.02	0.35
C0588-051-6750-S	2.693	68.40	7.89	35.11	1.95	0.34
C0588-051-7000-S	2.790	70.87	7.89	35.11	1.88	0.33
C0588-051-7500-S	2.985	75.82	7.89	35.11	1.75	0.31
C0588-051-8000-S	3.180	80.77	7.89	35.11	1.64	0.29
C0588-051-8500-S	3.375	85.72	7.89	35.11	1.54	0.27
C0588-051-9000-S	3.570	90.67	7.89	35.11	1.45	0.25
C0588-051-9500-S	3.764	95.62	7.89	35.11	1.38	0.24
C0588-055-1000-S	0.481	12.21	9.73	43.30	18.74	3.28
C0588-055-1125-S	0.533	13.53	9.73	43.30	16.43	2.88
C0588-055-1250-S	0.585	14.85	9.73	43.30	14.63	2.56
C0588-055-1375-S	0.637	16.17	9.73	43.30	13.18	2.31
C0588-055-1500-S	0.689	17.49	9.73	43.30	12.00	2.10
C0588-055-1625-S	0.741	18.82	9.73	43.30	11.01	1.93
C0588-055-1750-S	0.793	20.14	9.73	43.30	10.17	1.78
C0588-055-1875-S	0.845	21.46	9.73	43.30	9.45	1.65
C0588-055-2000-S	0.897	22.78	9.73	43.30	8.82	1.54
C0588-055-2125-S	0.949	24.10	9.73	43.30	8.28	1.45
C0588-055-2250-S	1.001	25.43	9.73	43.30	7.79	1.36
C0588-055-2375-S	1.053	26.75	9.73	43.30	7.36	1.29
C0588-055-2500-S	1.105	28.07	9.73	43.30	6.98	1.22
C0588-055-2625-S	1.157	29.39	9.73	43.30	6.63	1.16
C0588-055-2750-S	1.209	30.71	9.73	43.30	6.32	1.11
C0588-055-2875-S	1.261	32.03	9.73	43.30	6.03	1.06
C0588-055-3000-S	1.313	33.36	9.73	43.30	5.77	1.01
C0588-055-3250-S	1.417	36.00	9.73	43.30	5.31	0.93
C0588-055-3500-S	1.521	38.64	9.73	43.30	4.92	0.86

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0588-055-3750-M	**0.588**	**14.94**	**0.055**	**1.40**	**3.750**	**95.25**	**1.427**	**36.24**	**1.068**	**27.12**	**12.24**	**54.45**	**5.27**	**0.92**
C0588-055-4000-M	**0.588**	**14.94**	**0.055**	**1.40**	**4.000**	**101.60**	**1.517**	**38.54**	**1.133**	**28.78**	**12.24**	**54.45**	**4.93**	**0.86**
C0588-055-4250-M	**0.588**	**14.94**	**0.055**	**1.40**	**4.250**	**107.95**	**1.608**	**40.83**	**1.198**	**30.44**	**12.24**	**54.45**	**4.63**	**0.81**
C0588-055-4500-M	**0.588**	**14.94**	**0.055**	**1.40**	**4.500**	**114.30**	**1.698**	**43.13**	**1.264**	**32.10**	**12.24**	**54.45**	**4.37**	**0.76**
C0588-055-4750-M	**0.588**	**14.94**	**0.055**	**1.40**	**4.750**	**120.65**	**1.789**	**45.43**	**1.329**	**33.76**	**12.24**	**54.45**	**4.13**	**0.72**
C0588-055-5000-M	**0.588**	**14.94**	**0.055**	**1.40**	**5.000**	**127.00**	**1.879**	**47.73**	**1.395**	**35.42**	**12.24**	**54.45**	**3.92**	**0.69**
C0588-055-5250-M	**0.588**	**14.94**	**0.055**	**1.40**	**5.250**	**133.35**	**1.969**	**50.02**	**1.460**	**37.08**	**12.24**	**54.45**	**3.73**	**0.65**
C0588-055-5500-M	**0.588**	**14.94**	**0.055**	**1.40**	**5.500**	**139.70**	**2.060**	**52.32**	**1.525**	**38.74**	**12.24**	**54.45**	**3.56**	**0.62**
C0588-055-5750-M	**0.588**	**14.94**	**0.055**	**1.40**	**5.750**	**146.05**	**2.150**	**54.62**	**1.591**	**40.41**	**12.24**	**54.45**	**3.40**	**0.60**
C0588-055-6000-M	**0.588**	**14.94**	**0.055**	**1.40**	**6.000**	**152.40**	**2.241**	**56.91**	**1.656**	**42.07**	**12.24**	**54.45**	**3.26**	**0.57**
C0588-055-6250-M	**0.588**	**14.94**	**0.055**	**1.40**	**6.250**	**158.75**	**2.331**	**59.21**	**1.722**	**43.73**	**12.24**	**54.45**	**3.12**	**0.55**
C0588-055-6500-M	**0.588**	**14.94**	**0.055**	**1.40**	**6.500**	**165.10**	**2.422**	**61.51**	**1.787**	**45.39**	**12.24**	**54.45**	**3.00**	**0.53**
C0588-055-6750-M	**0.588**	**14.94**	**0.055**	**1.40**	**6.750**	**171.45**	**2.512**	**63.81**	**1.852**	**47.05**	**12.24**	**54.45**	**2.89**	**0.51**
C0588-055-7000-M	**0.588**	**14.94**	**0.055**	**1.40**	**7.000**	**177.80**	**2.602**	**66.10**	**1.918**	**48.71**	**12.24**	**54.45**	**2.78**	**0.49**
C0588-055-7500-M	**0.588**	**14.94**	**0.055**	**1.40**	**7.500**	**190.50**	**2.783**	**70.70**	**2.049**	**52.03**	**12.24**	**54.45**	**2.60**	**0.45**
C0588-055-8000-M	**0.588**	**14.94**	**0.055**	**1.40**	**8.000**	**203.20**	**2.964**	**75.29**	**2.179**	**55.36**	**12.24**	**54.45**	**2.43**	**0.43**
C0588-055-8500-M	**0.588**	**14.94**	**0.055**	**1.40**	**8.500**	**215.90**	**3.145**	**79.89**	**2.310**	**58.68**	**12.24**	**54.45**	**2.29**	**0.40**
C0588-055-9000-M	**0.588**	**14.94**	**0.055**	**1.40**	**9.000**	**228.60**	**3.326**	**84.48**	**2.441**	**62.00**	**12.24**	**54.45**	**2.16**	**0.38**
C0588-055-9500-M	**0.588**	**14.94**	**0.055**	**1.40**	**9.500**	**241.30**	**3.507**	**89.07**	**2.572**	**65.32**	**12.24**	**54.45**	**2.04**	**0.36**
C0588-059-1000-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.000**	**25.40**	**0.463**	**11.77**	**0.387**	**9.83**	**14.88**	**66.18**	**27.72**	**4.85**
C0588-059-1125-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.125**	**28.58**	**0.512**	**13.01**	**0.424**	**10.77**	**14.88**	**66.18**	**24.28**	**4.25**
C0588-059-1250-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.250**	**31.75**	**0.561**	**14.25**	**0.461**	**11.72**	**14.88**	**66.18**	**21.60**	**3.78**
C0588-059-1375-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.375**	**34.93**	**0.610**	**15.49**	**0.499**	**12.67**	**14.88**	**66.18**	**19.45**	**3.40**
C0588-059-1500-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.500**	**38.10**	**0.659**	**16.74**	**0.536**	**13.61**	**14.88**	**66.18**	**17.69**	**3.10**
C0588-059-1625-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.625**	**41.28**	**0.708**	**17.98**	**0.573**	**14.56**	**14.88**	**66.18**	**16.22**	**2.84**
C0588-059-1750-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.750**	**44.45**	**0.757**	**19.22**	**0.611**	**15.51**	**14.88**	**66.18**	**14.98**	**2.62**
C0588-059-1875-M	**0.588**	**14.94**	**0.059**	**1.50**	**1.875**	**47.63**	**0.806**	**20.46**	**0.648**	**16.45**	**14.88**	**66.18**	**13.91**	**2.43**
C0588-059-2000-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.000**	**50.80**	**0.855**	**21.71**	**0.685**	**17.40**	**14.88**	**66.18**	**12.99**	**2.27**
C0588-059-2125-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.125**	**53.98**	**0.904**	**22.95**	**0.722**	**18.35**	**14.88**	**66.18**	**12.18**	**2.13**
C0588-059-2250-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.250**	**57.15**	**0.952**	**24.19**	**0.760**	**19.29**	**14.88**	**66.18**	**11.47**	**2.01**
C0588-059-2375-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.375**	**60.33**	**1.001**	**25.43**	**0.797**	**20.24**	**14.88**	**66.18**	**10.83**	**1.90**
C0588-059-2500-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.500**	**63.50**	**1.050**	**26.68**	**0.834**	**21.19**	**14.88**	**66.18**	**10.26**	**1.80**
C0588-059-2625-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.625**	**66.68**	**1.099**	**27.92**	**0.871**	**22.14**	**14.88**	**66.18**	**9.75**	**1.71**
C0588-059-2750-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.750**	**69.85**	**1.148**	**29.16**	**0.909**	**23.08**	**14.88**	**66.18**	**9.29**	**1.63**
C0588-059-2875-M	**0.588**	**14.94**	**0.059**	**1.50**	**2.875**	**73.03**	**1.197**	**30.41**	**0.946**	**24.03**	**14.88**	**66.18**	**8.87**	**1.55**
C0588-059-3000-M	**0.588**	**14.94**	**0.059**	**1.50**	**3.000**	**76.20**	**1.246**	**31.65**	**0.983**	**24.98**	**14.88**	**66.18**	**8.48**	**1.48**
C0588-059-3250-M	**0.588**	**14.94**	**0.059**	**1.50**	**3.250**	**82.55**	**1.344**	**34.13**	**1.058**	**26.87**	**14.88**	**66.18**	**7.81**	**1.37**
C0588-059-3500-M	**0.588**	**14.94**	**0.059**	**1.50**	**3.500**	**88.90**	**1.442**	**36.62**	**1.132**	**28.76**	**14.88**	**66.18**	**7.23**	**1.26**
C0588-059-3750-M	**0.588**	**14.94**	**0.059**	**1.50**	**3.750**	**95.25**	**1.540**	**39.10**	**1.207**	**30.66**	**14.88**	**66.18**	**6.73**	**1.18**
C0588-059-4000-M	**0.588**	**14.94**	**0.059**	**1.50**	**4.000**	**101.60**	**1.637**	**41.59**	**1.281**	**32.55**	**14.88**	**66.18**	**6.30**	**1.10**
C0588-059-4250-M	**0.588**	**14.94**	**0.059**	**1.50**	**4.250**	**107.95**	**1.735**	**44.07**	**1.356**	**34.44**	**14.88**	**66.18**	**5.92**	**1.04**
C0588-059-4500-M	**0.588**	**14.94**	**0.059**	**1.50**	**4.500**	**114.30**	**1.833**	**46.56**	**1.431**	**36.34**	**14.88**	**66.18**	**5.58**	**0.98**
C0588-059-4750-M	**0.588**	**14.94**	**0.059**	**1.50**	**4.750**	**120.65**	**1.931**	**49.05**	**1.505**	**38.23**	**14.88**	**66.18**	**5.28**	**0.92**
C0588-059-5000-M	**0.588**	**14.94**	**0.059**	**1.50**	**5.000**	**127.00**	**2.029**	**51.53**	**1.580**	**40.12**	**14.88**	**66.18**	**5.01**	**0.88**
C0588-059-5250-M	**0.588**	**14.94**	**0.059**	**1.50**	**5.250**	**133.35**	**2.127**	**54.02**	**1.654**	**42.02**	**14.88**	**66.18**	**4.76**	**0.83**
C0588-059-5500-M	**0.588**	**14.94**	**0.059**	**1.50**	**5.500**	**139.70**	**2.224**	**56.50**	**1.729**	**43.91**	**14.88**	**66.18**	**4.54**	**0.79**
C0588-059-5750-M	**0.588**	**14.94**	**0.059**	**1.50**	**5.750**	**146.05**	**2.322**	**58.99**	**1.803**	**45.80**	**14.88**	**66.18**	**4.34**	**0.76**
C0588-059-6000-M	**0.588**	**14.94**	**0.059**	**1.50**	**6.000**	**152.40**	**2.420**	**61.47**	**1.878**	**47.70**	**14.88**	**66.18**	**4.16**	**0.73**
C0588-059-6250-M	**0.588**	**14.94**	**0.059**	**1.50**	**6.250**	**158.75**	**2.518**	**63.96**	**1.952**	**49.59**	**14.88**	**66.18**	**3.99**	**0.70**
C0588-059-6500-M	**0.588**	**14.94**	**0.059**	**1.50**	**6.500**	**165.10**	**2.616**	**66.44**	**2.027**	**51.48**	**14.88**	**66.18**	**3.83**	**0.67**
C0588-059-6750-M	**0.588**	**14.94**	**0.059**	**1.50**	**6.750**	**171.45**	**2.714**	**68.93**	**2.101**	**53.38**	**14.88**	**66.18**	**3.69**	**0.65**
C0588-059-7000-M	**0.588**	**14.94**	**0.059**	**1.50**	**7.000**	**177.80**	**2.812**	**71.41**	**2.176**	**55.27**	**14.88**	**66.18**	**3.55**	**0.62**
C0588-059-7500-M	**0.588**	**14.94**	**0.059**	**1.50**	**7.500**	**190.50**	**3.007**	**76.38**	**2.325**	**59.06**	**14.88**	**66.18**	**3.31**	**0.58**
C0588-059-8000-M	**0.588**	**14.94**	**0.059**	**1.50**	**8.000**	**203.20**	**3.203**	**81.35**	**2.474**	**62.85**	**14.88**	**66.18**	**3.10**	**0.54**
C0588-059-8500-M	**0.588**	**14.94**	**0.059**	**1.50**	**8.500**	**215.90**	**3.399**	**86.33**	**2.623**	**66.63**	**14.88**	**66.18**	**2.92**	**0.51**
C0588-059-9000-M	**0.588**	**14.94**	**0.059**	**1.50**	**9.000**	**228.60**	**3.594**	**91.30**	**2.772**	**70.42**	**14.88**	**66.18**	**2.75**	**0.48**
C0588-059-9500-M	**0.588**	**14.94**	**0.059**	**1.50**	**9.500**	**241.30**	**3.790**	**96.27**	**2.922**	**74.21**	**14.88**	**66.18**	**2.61**	**0.46**
C0588-063-0938-M	**0.588**	**14.94**	**0.063**	**1.60**	**0.938**	**23.81**	**0.468**	**11.89**	**0.405**	**10.28**	**17.84**	**79.38**	**38.02**	**6.65**
C0588-063-1000-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.000**	**25.40**	**0.494**	**12.56**	**0.426**	**10.81**	**17.84**	**79.38**	**35.30**	**6.18**
C0588-063-1125-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.125**	**28.58**	**0.547**	**13.90**	**0.467**	**11.87**	**17.84**	**79.38**	**30.88**	**5.40**
C0588-063-1250-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.250**	**31.75**	**0.600**	**15.24**	**0.509**	**12.94**	**17.84**	**79.38**	**27.45**	**4.80**
C0588-063-1375-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.375**	**34.93**	**0.653**	**16.58**	**0.551**	**14.00**	**17.84**	**79.38**	**24.70**	**4.32**
C0588-063-1500-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.500**	**38.10**	**0.705**	**17.91**	**0.593**	**15.07**	**17.84**	**79.38**	**22.46**	**3.93**
C0588-063-1625-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.625**	**41.28**	**0.758**	**19.25**	**0.635**	**16.14**	**17.84**	**79.38**	**20.58**	**3.60**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0588-055-3750-S	**1.626**	**41.29**	**9.73**	**43.30**	**4.58**	**0.80**
C0588-055-4000-S	**1.730**	**43.93**	**9.73**	**43.30**	**4.29**	**0.75**
C0588-055-4250-S	**1.834**	**46.58**	**9.73**	**43.30**	**4.03**	**0.70**
C0588-055-4500-S	**1.938**	**49.22**	**9.73**	**43.30**	**3.80**	**0.66**
C0588-055-4750-S	**2.042**	**51.86**	**9.73**	**43.30**	**3.59**	**0.63**
C0588-055-5000-S	**2.146**	**54.51**	**9.73**	**43.30**	**3.41**	**0.60**
C0588-055-5250-S	**2.250**	**57.15**	**9.73**	**43.30**	**3.25**	**0.57**
C0588-055-5500-S	**2.354**	**59.79**	**9.73**	**43.30**	**3.09**	**0.54**
C0588-055-5750-S	**2.458**	**62.44**	**9.73**	**43.30**	**2.96**	**0.52**
C0588-055-6000-S	**2.562**	**65.08**	**9.73**	**43.30**	**2.83**	**0.50**
C0588-055-6250-S	**2.666**	**67.73**	**9.73**	**43.30**	**2.72**	**0.48**
C0588-055-6500-S	**2.770**	**70.37**	**9.73**	**43.30**	**2.61**	**0.46**
C0588-055-6750-S	**2.875**	**73.01**	**9.73**	**43.30**	**2.51**	**0.44**
C0588-055-7000-S	**2.979**	**75.66**	**9.73**	**43.30**	**2.42**	**0.42**
C0588-055-7500-S	**3.187**	**80.95**	**9.73**	**43.30**	**2.26**	**0.39**
C0588-055-8000-S	**3.395**	**86.23**	**9.73**	**43.30**	**2.11**	**0.37**
C0588-055-8500-S	**3.603**	**91.52**	**9.73**	**43.30**	**1.99**	**0.35**
C0588-055-9000-S	**3.811**	**96.81**	**9.73**	**43.30**	**1.88**	**0.33**
C0588-055-9500-S	**4.020**	**102.10**	**9.73**	**43.30**	**1.78**	**0.31**
C0588-059-1000-S	**0.510**	**12.94**	**11.82**	**52.57**	**24.10**	**4.22**
C0588-059-1125-S	**0.565**	**14.35**	**11.82**	**52.57**	**21.11**	**3.69**
C0588-059-1250-S	**0.621**	**15.76**	**11.82**	**52.57**	**18.78**	**3.29**
C0588-059-1375-S	**0.676**	**17.17**	**11.82**	**52.57**	**16.91**	**2.96**
C0588-059-1500-S	**0.732**	**18.58**	**11.82**	**52.57**	**15.38**	**2.69**
C0588-059-1625-S	**0.787**	**19.99**	**11.82**	**52.57**	**14.11**	**2.47**
C0588-059-1750-S	**0.843**	**21.40**	**11.82**	**52.57**	**13.03**	**2.28**
C0588-059-1875-S	**0.898**	**22.81**	**11.82**	**52.57**	**12.10**	**2.12**
C0588-059-2000-S	**0.954**	**24.22**	**11.82**	**52.57**	**11.30**	**1.98**
C0588-059-2125-S	**1.009**	**25.63**	**11.82**	**52.57**	**10.59**	**1.85**
C0588-059-2250-S	**1.065**	**27.04**	**11.82**	**52.57**	**9.97**	**1.74**
C0588-059-2375-S	**1.120**	**28.45**	**11.82**	**52.57**	**9.42**	**1.65**
C0588-059-2500-S	**1.176**	**29.86**	**11.82**	**52.57**	**8.92**	**1.56**
C0588-059-2625-S	**1.231**	**31.27**	**11.82**	**52.57**	**8.48**	**1.48**
C0588-059-2750-S	**1.287**	**32.68**	**11.82**	**52.57**	**8.08**	**1.41**
C0588-059-2875-S	**1.342**	**34.09**	**11.82**	**52.57**	**7.71**	**1.35**
C0588-059-3000-S	**1.398**	**35.50**	**11.82**	**52.57**	**7.38**	**1.29**
C0588-059-3250-S	**1.509**	**38.32**	**11.82**	**52.57**	**6.79**	**1.19**
C0588-059-3500-S	**1.620**	**41.14**	**11.82**	**52.57**	**6.29**	**1.10**
C0588-059-3750-S	**1.731**	**43.96**	**11.82**	**52.57**	**5.85**	**1.02**
C0588-059-4000-S	**1.842**	**46.78**	**11.82**	**52.57**	**5.48**	**0.96**
C0588-059-4250-S	**1.953**	**49.60**	**11.82**	**52.57**	**5.14**	**0.90**
C0588-059-4500-S	**2.064**	**52.42**	**11.82**	**52.57**	**4.85**	**0.85**
C0588-059-4750-S	**2.175**	**55.24**	**11.82**	**52.57**	**4.59**	**0.80**
C0588-059-5000-S	**2.286**	**58.06**	**11.82**	**52.57**	**4.35**	**0.76**
C0588-059-5250-S	**2.397**	**60.87**	**11.82**	**52.57**	**4.14**	**0.72**
C0588-059-5500-S	**2.508**	**63.69**	**11.82**	**52.57**	**3.95**	**0.69**
C0588-059-5750-S	**2.619**	**66.51**	**11.82**	**52.57**	**3.77**	**0.66**
C0588-059-6000-S	**2.730**	**69.33**	**11.82**	**52.57**	**3.61**	**0.63**
C0588-059-6250-S	**2.841**	**72.15**	**11.82**	**52.57**	**3.47**	**0.61**
C0588-059-6500-S	**2.952**	**74.97**	**11.82**	**52.57**	**3.33**	**0.58**
C0588-059-6750-S	**3.063**	**77.79**	**11.82**	**52.57**	**3.21**	**0.56**
C0588-059-7000-S	**3.174**	**80.61**	**11.82**	**52.57**	**3.09**	**0.54**
C0588-059-7500-S	**3.396**	**86.25**	**11.82**	**52.57**	**2.88**	**0.50**
C0588-059-8000-S	**3.618**	**91.89**	**11.82**	**52.57**	**2.70**	**0.47**
C0588-059-8500-S	**3.840**	**97.53**	**11.82**	**52.57**	**2.54**	**0.44**
C0588-059-9000-S	**4.062**	**103.17**	**11.82**	**52.57**	**2.39**	**0.42**
C0588-059-9500-S	**4.284**	**108.80**	**11.82**	**52.57**	**2.27**	**0.40**
C0588-063-0938-S	**0.509**	**12.94**	**14.16**	**62.97**	**33.06**	**5.79**
C0588-063-1000-S	**0.539**	**13.69**	**14.16**	**62.97**	**30.70**	**5.37**
C0588-063-1125-S	**0.598**	**15.18**	**14.16**	**62.97**	**26.86**	**4.70**
C0588-063-1250-S	**0.657**	**16.68**	**14.16**	**62.97**	**23.87**	**4.18**
C0588-063-1375-S	**0.716**	**18.18**	**14.16**	**62.97**	**21.48**	**3.76**
C0588-063-1500-S	**0.775**	**19.68**	**14.16**	**62.97**	**19.53**	**3.42**
C0588-063-1625-S	**0.834**	**21.18**	**14.16**	**62.97**	**17.90**	**3.13**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0588-063-1750-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.750**	**44.45**	**0.811**	**20.59**	**0.677**	**17.20**	**17.84**	**79.38**	**19.00**	**3.32**
C0588-063-1875-M	**0.588**	**14.94**	**0.063**	**1.60**	**1.875**	**47.63**	**0.863**	**21.93**	**0.719**	**18.27**	**17.84**	**79.38**	**17.64**	**3.09**
C0588-063-2000-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.000**	**50.80**	**0.916**	**23.27**	**0.761**	**19.33**	**17.84**	**79.38**	**16.46**	**2.88**
C0588-063-2125-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.125**	**53.98**	**0.969**	**24.61**	**0.803**	**20.40**	**17.84**	**79.38**	**15.43**	**2.70**
C0588-063-2250-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.250**	**57.15**	**1.022**	**25.95**	**0.845**	**21.46**	**17.84**	**79.38**	**14.53**	**2.54**
C0588-063-2375-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.375**	**60.33**	**1.074**	**27.29**	**0.887**	**22.53**	**17.84**	**79.38**	**13.72**	**2.40**
C0588-063-2500-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.500**	**63.50**	**1.127**	**28.62**	**0.929**	**23.59**	**17.84**	**79.38**	**13.00**	**2.27**
C0588-063-2625-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.625**	**66.68**	**1.180**	**29.96**	**0.971**	**24.66**	**17.84**	**79.38**	**12.35**	**2.16**
C0588-063-2750-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.750**	**69.85**	**1.232**	**31.30**	**1.013**	**25.72**	**17.84**	**79.38**	**11.76**	**2.06**
C0588-063-2875-M	**0.588**	**14.94**	**0.063**	**1.60**	**2.875**	**73.03**	**1.285**	**32.64**	**1.055**	**26.79**	**17.84**	**79.38**	**11.22**	**1.96**
C0588-063-3000-M	**0.588**	**14.94**	**0.063**	**1.60**	**3.000**	**76.20**	**1.338**	**33.98**	**1.097**	**27.85**	**17.84**	**79.38**	**10.74**	**1.88**
C0588-063-3250-M	**0.588**	**14.94**	**0.063**	**1.60**	**3.250**	**82.55**	**1.443**	**36.66**	**1.180**	**29.98**	**17.84**	**79.38**	**9.88**	**1.73**
C0588-063-3500-M	**0.588**	**14.94**	**0.063**	**1.60**	**3.500**	**88.90**	**1.549**	**39.33**	**1.264**	**32.12**	**17.84**	**79.38**	**9.14**	**1.60**
C0588-063-3750-M	**0.588**	**14.94**	**0.063**	**1.60**	**3.750**	**95.25**	**1.654**	**42.01**	**1.348**	**34.25**	**17.84**	**79.38**	**8.51**	**1.49**
C0588-063-4000-M	**0.588**	**14.94**	**0.063**	**1.60**	**4.000**	**101.60**	**1.759**	**44.69**	**1.432**	**36.38**	**17.84**	**79.38**	**7.96**	**1.39**
C0588-063-4250-M	**0.588**	**14.94**	**0.063**	**1.60**	**4.250**	**107.95**	**1.865**	**47.36**	**1.516**	**38.51**	**17.84**	**79.38**	**7.48**	**1.31**
C0588-063-4500-M	**0.588**	**14.94**	**0.063**	**1.60**	**4.500**	**114.30**	**1.970**	**50.04**	**1.600**	**40.64**	**17.84**	**79.38**	**7.05**	**1.23**
C0588-063-4750-M	**0.588**	**14.94**	**0.063**	**1.60**	**4.750**	**120.65**	**2.076**	**52.72**	**1.684**	**42.77**	**17.84**	**79.38**	**6.67**	**1.17**
C0588-063-5000-M	**0.588**	**14.94**	**0.063**	**1.60**	**5.000**	**127.00**	**2.181**	**55.40**	**1.768**	**44.90**	**17.84**	**79.38**	**6.33**	**1.11**
C0588-063-5250-M	**0.588**	**14.94**	**0.063**	**1.60**	**5.250**	**133.35**	**2.286**	**58.07**	**1.852**	**47.03**	**17.84**	**79.38**	**6.02**	**1.05**
C0588-063-5500-M	**0.588**	**14.94**	**0.063**	**1.60**	**5.500**	**139.70**	**2.392**	**60.75**	**1.935**	**49.16**	**17.84**	**79.38**	**5.74**	**1.00**
C0588-063-5750-M	**0.588**	**14.94**	**0.063**	**1.60**	**5.750**	**146.05**	**2.497**	**63.43**	**2.019**	**51.29**	**17.84**	**79.38**	**5.49**	**0.96**
C0588-063-6000-M	**0.588**	**14.94**	**0.063**	**1.60**	**6.000**	**152.40**	**2.603**	**66.11**	**2.103**	**53.42**	**17.84**	**79.38**	**5.25**	**0.92**
C0588-063-6250-M	**0.588**	**14.94**	**0.063**	**1.60**	**6.250**	**158.75**	**2.708**	**68.78**	**2.187**	**55.55**	**17.84**	**79.38**	**5.04**	**0.88**
C0588-063-6500-M	**0.588**	**14.94**	**0.063**	**1.60**	**6.500**	**165.10**	**2.813**	**71.46**	**2.271**	**57.68**	**17.84**	**79.38**	**4.84**	**0.85**
C0588-063-6750-M	**0.588**	**14.94**	**0.063**	**1.60**	**6.750**	**171.45**	**2.919**	**74.14**	**2.355**	**59.81**	**17.84**	**79.38**	**4.66**	**0.82**
C0588-063-7000-M	**0.588**	**14.94**	**0.063**	**1.60**	**7.000**	**177.80**	**3.024**	**76.81**	**2.439**	**61.94**	**17.84**	**79.38**	**4.49**	**0.79**
C0588-063-7500-M	**0.588**	**14.94**	**0.063**	**1.60**	**7.500**	**190.50**	**3.235**	**82.17**	**2.606**	**66.20**	**17.84**	**79.38**	**4.18**	**0.73**
C0588-063-8000-M	**0.588**	**14.94**	**0.063**	**1.60**	**8.000**	**203.20**	**3.446**	**87.52**	**2.774**	**70.47**	**17.84**	**79.38**	**3.92**	**0.69**
C0588-063-8500-M	**0.588**	**14.94**	**0.063**	**1.60**	**8.500**	**215.90**	**3.657**	**92.88**	**2.942**	**74.73**	**17.84**	**79.38**	**3.68**	**0.64**
C0588-063-9000-M	**0.588**	**14.94**	**0.063**	**1.60**	**9.000**	**228.60**	**3.867**	**98.23**	**3.110**	**78.99**	**17.84**	**79.38**	**3.48**	**0.61**
C0588-063-9500-M	**0.588**	**14.94**	**0.063**	**1.60**	**9.500**	**241.30**	**4.078**	**103.59**	**3.278**	**83.25**	**17.84**	**79.38**	**3.29**	**0.58**
C0588-068-0938-M	**0.588**	**14.94**	**0.068**	**1.73**	**0.938**	**23.81**	**0.504**	**12.81**	**0.449**	**11.42**	**22.04**	**98.04**	**50.90**	**8.91**
C0588-068-1000-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.000**	**25.40**	**0.533**	**13.54**	**0.473**	**12.02**	**22.04**	**98.04**	**47.21**	**8.26**
C0588-068-1125-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.125**	**28.58**	**0.591**	**15.00**	**0.521**	**13.24**	**22.04**	**98.04**	**41.25**	**7.22**
C0588-068-1250-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.250**	**31.75**	**0.648**	**16.46**	**0.569**	**14.45**	**22.04**	**98.04**	**36.62**	**6.41**
C0588-068-1375-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.375**	**34.93**	**0.706**	**17.92**	**0.617**	**15.67**	**22.04**	**98.04**	**32.92**	**5.76**
C0588-068-1500-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.500**	**38.10**	**0.763**	**19.38**	**0.665**	**16.88**	**22.04**	**98.04**	**29.91**	**5.23**
C0588-068-1625-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.625**	**41.28**	**0.821**	**20.84**	**0.712**	**18.10**	**22.04**	**98.04**	**27.40**	**4.79**
C0588-068-1750-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.750**	**44.45**	**0.878**	**22.30**	**0.760**	**19.31**	**22.04**	**98.04**	**25.28**	**4.42**
C0588-068-1875-M	**0.588**	**14.94**	**0.068**	**1.73**	**1.875**	**47.63**	**0.935**	**23.76**	**0.808**	**20.53**	**22.04**	**98.04**	**23.46**	**4.11**
C0588-068-2000-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.000**	**50.80**	**0.993**	**25.22**	**0.856**	**21.74**	**22.04**	**98.04**	**21.89**	**3.83**
C0588-068-2125-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.125**	**53.98**	**1.050**	**26.68**	**0.904**	**22.96**	**22.04**	**98.04**	**20.51**	**3.59**
C0588-068-2250-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.250**	**57.15**	**1.108**	**28.14**	**0.952**	**24.17**	**22.04**	**98.04**	**19.30**	**3.38**
C0588-068-2375-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.375**	**60.33**	**1.165**	**29.60**	**0.999**	**25.39**	**22.04**	**98.04**	**18.22**	**3.19**
C0588-068-2500-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.500**	**63.50**	**1.223**	**31.06**	**1.047**	**26.60**	**22.04**	**98.04**	**17.26**	**3.02**
C0588-068-2625-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.625**	**66.68**	**1.280**	**32.52**	**1.095**	**27.82**	**22.04**	**98.04**	**16.39**	**2.87**
C0588-068-2750-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.750**	**69.85**	**1.338**	**33.98**	**1.143**	**29.03**	**22.04**	**98.04**	**15.61**	**2.73**
C0588-068-2875-M	**0.588**	**14.94**	**0.068**	**1.73**	**2.875**	**73.03**	**1.395**	**35.44**	**1.191**	**30.24**	**22.04**	**98.04**	**14.89**	**2.61**
C0588-068-3000-M	**0.588**	**14.94**	**0.068**	**1.73**	**3.000**	**76.20**	**1.453**	**36.90**	**1.239**	**31.46**	**22.04**	**98.04**	**14.24**	**2.49**
C0588-068-3250-M	**0.588**	**14.94**	**0.068**	**1.73**	**3.250**	**82.55**	**1.568**	**39.82**	**1.334**	**33.89**	**22.04**	**98.04**	**13.10**	**2.29**
C0588-068-3500-M	**0.588**	**14.94**	**0.068**	**1.73**	**3.500**	**88.90**	**1.683**	**42.74**	**1.430**	**36.32**	**22.04**	**98.04**	**12.13**	**2.12**
C0588-068-3750-M	**0.588**	**14.94**	**0.068**	**1.73**	**3.750**	**95.25**	**1.797**	**45.65**	**1.526**	**38.75**	**22.04**	**98.04**	**11.29**	**1.98**
C0588-068-4000-M	**0.588**	**14.94**	**0.068**	**1.73**	**4.000**	**101.60**	**1.912**	**48.57**	**1.621**	**41.18**	**22.04**	**98.04**	**10.56**	**1.85**
C0588-068-4250-M	**0.588**	**14.94**	**0.068**	**1.73**	**4.250**	**107.95**	**2.027**	**51.49**	**1.717**	**43.61**	**22.04**	**98.04**	**9.92**	**1.74**
C0588-068-4500-M	**0.588**	**14.94**	**0.068**	**1.73**	**4.500**	**114.30**	**2.142**	**54.41**	**1.812**	**46.04**	**22.04**	**98.04**	**9.35**	**1.64**
C0588-068-4750-M	**0.588**	**14.94**	**0.068**	**1.73**	**4.750**	**120.65**	**2.257**	**57.33**	**1.908**	**48.47**	**22.04**	**98.04**	**8.84**	**1.55**
C0588-068-5000-M	**0.588**	**14.94**	**0.068**	**1.73**	**5.000**	**127.00**	**2.372**	**60.25**	**2.004**	**50.90**	**22.04**	**98.04**	**8.39**	**1.47**
C0588-068-5250-M	**0.588**	**14.94**	**0.068**	**1.73**	**5.250**	**133.35**	**2.487**	**63.17**	**2.099**	**53.33**	**22.04**	**98.04**	**7.98**	**1.40**
C0588-068-5500-M	**0.588**	**14.94**	**0.068**	**1.73**	**5.500**	**139.70**	**2.602**	**66.09**	**2.195**	**55.75**	**22.04**	**98.04**	**7.61**	**1.33**
C0588-068-5750-M	**0.588**	**14.94**	**0.068**	**1.73**	**5.750**	**146.05**	**2.717**	**69.01**	**2.291**	**58.18**	**22.04**	**98.04**	**7.27**	**1.27**
C0588-068-6000-M	**0.588**	**14.94**	**0.068**	**1.73**	**6.000**	**152.40**	**2.832**	**71.93**	**2.386**	**60.61**	**22.04**	**98.04**	**6.96**	**1.22**
C0588-068-6250-M	**0.588**	**14.94**	**0.068**	**1.73**	**6.250**	**158.75**	**2.947**	**74.85**	**2.482**	**63.04**	**22.04**	**98.04**	**6.67**	**1.17**
C0588-068-6500-M	**0.588**	**14.94**	**0.068**	**1.73**	**6.500**	**165.10**	**3.062**	**77.77**	**2.578**	**65.47**	**22.04**	**98.04**	**6.41**	**1.12**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0588-063-1750-S	**0.893**	**22.68**	**14.16**	**62.97**	**16.52**	**2.89**
C0588-063-1875-S	**0.952**	**24.18**	**14.16**	**62.97**	**15.34**	**2.68**
C0588-063-2000-S	**1.011**	**25.68**	**14.16**	**62.97**	**14.32**	**2.51**
C0588-063-2125-S	**1.070**	**27.18**	**14.16**	**62.97**	**13.42**	**2.35**
C0588-063-2250-S	**1.129**	**28.68**	**14.16**	**62.97**	**12.63**	**2.21**
C0588-063-2375-S	**1.188**	**30.18**	**14.16**	**62.97**	**11.93**	**2.09**
C0588-063-2500-S	**1.247**	**31.68**	**14.16**	**62.97**	**11.30**	**1.98**
C0588-063-2625-S	**1.306**	**33.18**	**14.16**	**62.97**	**10.74**	**1.88**
C0588-063-2750-S	**1.365**	**34.68**	**14.16**	**62.97**	**10.22**	**1.79**
C0588-063-2875-S	**1.424**	**36.18**	**14.16**	**62.97**	**9.76**	**1.71**
C0588-063-3000-S	**1.483**	**37.68**	**14.16**	**62.97**	**9.34**	**1.63**
C0588-063-3250-S	**1.601**	**40.68**	**14.16**	**62.97**	**8.59**	**1.50**
C0588-063-3500-S	**1.720**	**43.68**	**14.16**	**62.97**	**7.95**	**1.39**
C0588-063-3750-S	**1.838**	**46.68**	**14.16**	**62.97**	**7.40**	**1.30**
C0588-063-4000-S	**1.956**	**49.67**	**14.16**	**62.97**	**6.93**	**1.21**
C0588-063-4250-S	**2.074**	**52.67**	**14.16**	**62.97**	**6.51**	**1.14**
C0588-063-4500-S	**2.192**	**55.67**	**14.16**	**62.97**	**6.13**	**1.07**
C0588-063-4750-S	**2.310**	**58.67**	**14.16**	**62.97**	**5.80**	**1.02**
C0588-063-5000-S	**2.428**	**61.67**	**14.16**	**62.97**	**5.50**	**0.96**
C0588-063-5250-S	**2.546**	**64.67**	**14.16**	**62.97**	**5.24**	**0.92**
C0588-063-5500-S	**2.664**	**67.67**	**14.16**	**62.97**	**4.99**	**0.87**
C0588-063-5750-S	**2.782**	**70.67**	**14.16**	**62.97**	**4.77**	**0.83**
C0588-063-6000-S	**2.900**	**73.67**	**14.16**	**62.97**	**4.57**	**0.80**
C0588-063-6250-S	**3.018**	**76.67**	**14.16**	**62.97**	**4.38**	**0.77**
C0588-063-6500-S	**3.136**	**79.67**	**14.16**	**62.97**	**4.21**	**0.74**
C0588-063-6750-S	**3.255**	**82.67**	**14.16**	**62.97**	**4.05**	**0.71**
C0588-063-7000-S	**3.373**	**85.66**	**14.16**	**62.97**	**3.90**	**0.68**
C0588-063-7500-S	**3.609**	**91.66**	**14.16**	**62.97**	**3.64**	**0.64**
C0588-063-8000-S	**3.845**	**97.66**	**14.16**	**62.97**	**3.41**	**0.60**
C0588-063-8500-S	**4.081**	**103.66**	**14.16**	**62.97**	**3.20**	**0.56**
C0588-063-9000-S	**4.317**	**109.66**	**14.16**	**62.97**	**3.02**	**0.53**
C0588-063-9500-S	**4.553**	**115.66**	**14.16**	**62.97**	**2.86**	**0.50**
C0588-068-0938-S	**0.543**	**13.80**	**17.45**	**77.63**	**44.26**	**7.74**
C0588-068-1000-S	**0.575**	**14.60**	**17.45**	**77.63**	**41.06**	**7.18**
C0588-068-1125-S	**0.638**	**16.22**	**17.45**	**77.63**	**35.87**	**6.28**
C0588-068-1250-S	**0.702**	**17.83**	**17.45**	**77.63**	**31.84**	**5.57**
C0588-068-1375-S	**0.765**	**19.44**	**17.45**	**77.63**	**28.63**	**5.01**
C0588-068-1500-S	**0.829**	**21.06**	**17.45**	**77.63**	**26.01**	**4.55**
C0588-068-1625-S	**0.892**	**22.67**	**17.45**	**77.63**	**23.82**	**4.17**
C0588-068-1750-S	**0.956**	**24.28**	**17.45**	**77.63**	**21.98**	**3.85**
C0588-068-1875-S	**1.019**	**25.89**	**17.45**	**77.63**	**20.40**	**3.57**
C0588-068-2000-S	**1.083**	**27.51**	**17.45**	**77.63**	**19.03**	**3.33**
C0588-068-2125-S	**1.146**	**29.12**	**17.45**	**77.63**	**17.83**	**3.12**
C0588-068-2250-S	**1.210**	**30.73**	**17.45**	**77.63**	**16.78**	**2.94**
C0588-068-2375-S	**1.273**	**32.35**	**17.45**	**77.63**	**15.84**	**2.77**
C0588-068-2500-S	**1.337**	**33.96**	**17.45**	**77.63**	**15.01**	**2.63**
C0588-068-2625-S	**1.401**	**35.57**	**17.45**	**77.63**	**14.25**	**2.49**
C0588-068-2750-S	**1.464**	**37.19**	**17.45**	**77.63**	**13.57**	**2.37**
C0588-068-2875-S	**1.528**	**38.80**	**17.45**	**77.63**	**12.95**	**2.27**
C0588-068-3000-S	**1.591**	**40.41**	**17.45**	**77.63**	**12.39**	**2.17**
C0588-068-3250-S	**1.718**	**43.64**	**17.45**	**77.63**	**11.39**	**1.99**
C0588-068-3500-S	**1.845**	**46.86**	**17.45**	**77.63**	**10.55**	**1.85**
C0588-068-3750-S	**1.972**	**50.09**	**17.45**	**77.63**	**9.82**	**1.72**
C0588-068-4000-S	**2.099**	**53.32**	**17.45**	**77.63**	**9.18**	**1.61**
C0588-068-4250-S	**2.226**	**56.54**	**17.45**	**77.63**	**8.62**	**1.51**
C0588-068-4500-S	**2.353**	**59.77**	**17.45**	**77.63**	**8.13**	**1.42**
C0588-068-4750-S	**2.480**	**62.99**	**17.45**	**77.63**	**7.69**	**1.35**
C0588-068-5000-S	**2.607**	**66.22**	**17.45**	**77.63**	**7.29**	**1.28**
C0588-068-5250-S	**2.734**	**69.45**	**17.45**	**77.63**	**6.94**	**1.21**
C0588-068-5500-S	**2.861**	**72.67**	**17.45**	**77.63**	**6.61**	**1.16**
C0588-068-5750-S	**2.988**	**75.90**	**17.45**	**77.63**	**6.32**	**1.11**
C0588-068-6000-S	**3.115**	**79.12**	**17.45**	**77.63**	**6.05**	**1.06**
C0588-068-6250-S	**3.242**	**82.35**	**17.45**	**77.63**	**5.80**	**1.02**
C0588-068-6500-S	**3.369**	**85.58**	**17.45**	**77.63**	**5.57**	**0.98**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0588-068-6750-M	0.588	14.94	0.068	1.73	6.750	171.45	3.177	80.69	2.673	67.90	22.04	98.04	6.17	1.08
C0588-068-7000-M	0.588	14.94	0.068	1.73	7.000	177.80	3.292	83.61	2.769	70.33	22.04	98.04	5.94	1.04
C0588-068-7500-M	0.588	14.94	0.068	1.73	7.500	190.50	3.521	89.44	2.960	75.19	22.04	98.04	5.54	0.97
C0588-068-8000-M	0.588	14.94	0.068	1.73	8.000	203.20	3.751	95.28	3.152	80.05	22.04	98.04	5.19	0.91
C0588-068-8500-M	0.588	14.94	0.068	1.73	8.500	215.90	3.981	101.12	3.343	84.91	22.04	98.04	4.88	0.85
C0588-068-9000-M	0.588	14.94	0.068	1.73	9.000	228.60	4.211	106.96	3.534	89.77	22.04	98.04	4.60	0.81
C0588-068-9500-M	0.588	14.94	0.068	1.73	9.500	241.30	4.441	112.80	3.725	94.63	22.04	98.04	4.36	0.76
C0588-072-0875-M	0.588	14.94	0.072	1.83	0.875	22.23	0.502	12.76	0.458	11.64	25.80	114.77	69.22	12.11
C0588-072-0938-M	0.588	14.94	0.072	1.83	0.938	23.81	0.533	13.54	0.485	12.31	25.80	114.77	63.77	11.16
C0588-072-1000-M	0.588	14.94	0.072	1.83	1.000	25.40	0.564	14.31	0.511	12.97	25.80	114.77	59.11	10.34
C0588-072-1125-M	0.588	14.94	0.072	1.83	1.125	28.58	0.625	15.87	0.563	14.31	25.80	114.77	51.58	9.03
C0588-072-1250-M	0.588	14.94	0.072	1.83	1.250	31.75	0.686	17.43	0.616	15.64	25.80	114.77	45.75	8.01
C0588-072-1375-M	0.588	14.94	0.072	1.83	1.375	34.93	0.747	18.98	0.668	16.98	25.80	114.77	41.10	7.19
C0588-072-1500-M	0.588	14.94	0.072	1.83	1.500	38.10	0.809	20.54	0.721	18.31	25.80	114.77	37.32	6.53
C0588-072-1625-M	0.588	14.94	0.072	1.83	1.625	41.28	0.870	22.09	0.773	19.64	25.80	114.77	34.17	5.98
C0588-072-1750-M	0.588	14.94	0.072	1.83	1.750	44.45	0.931	23.65	0.826	20.98	25.80	114.77	31.51	5.51
C0588-072-1875-M	0.588	14.94	0.072	1.83	1.875	47.63	0.992	25.21	0.878	22.31	25.80	114.77	29.23	5.12
C0588-072-2000-M	0.588	14.94	0.072	1.83	2.000	50.80	1.054	26.76	0.931	23.65	25.80	114.77	27.26	4.77
C0588-072-2125-M	0.588	14.94	0.072	1.83	2.125	53.98	1.115	28.32	0.983	24.98	25.80	114.77	25.54	4.47
C0588-072-2250-M	0.588	14.94	0.072	1.83	2.250	57.15	1.176	29.87	1.036	26.31	25.80	114.77	24.03	4.20
C0588-072-2375-M	0.588	14.94	0.072	1.83	2.375	60.33	1.237	31.43	1.088	27.65	25.80	114.77	22.68	3.97
C0588-072-2500-M	0.588	14.94	0.072	1.83	2.500	63.50	1.299	32.99	1.141	28.98	25.80	114.77	21.48	3.76
C0588-072-2625-M	0.588	14.94	0.072	1.83	2.625	66.68	1.360	34.54	1.193	30.31	25.80	114.77	20.40	3.57
C0588-072-2750-M	0.588	14.94	0.072	1.83	2.750	69.85	1.421	36.10	1.246	31.65	25.80	114.77	19.42	3.40
C0588-072-2875-M	0.588	14.94	0.072	1.83	2.875	73.03	1.482	37.65	1.299	32.98	25.80	114.77	18.53	3.24
C0588-072-3000-M	0.588	14.94	0.072	1.83	3.000	76.20	1.544	39.21	1.351	34.32	25.80	114.77	17.72	3.10
C0588-072-3250-M	0.588	14.94	0.072	1.83	3.250	82.55	1.666	42.32	1.456	36.98	25.80	114.77	16.29	2.85
C0588-072-3500-M	0.588	14.94	0.072	1.83	3.500	88.90	1.789	45.43	1.561	39.65	25.80	114.77	15.08	2.64
C0588-072-3750-M	0.588	14.94	0.072	1.83	3.750	95.25	1.911	48.55	1.666	42.32	25.80	114.77	14.03	2.46
C0588-072-4000-M	0.588	14.94	0.072	1.83	4.000	101.60	2.034	51.66	1.771	44.99	25.80	114.77	13.12	2.30
C0588-072-4250-M	0.588	14.94	0.072	1.83	4.250	107.95	2.156	54.77	1.876	47.65	25.80	114.77	12.32	2.16
C0588-072-4500-M	0.588	14.94	0.072	1.83	4.500	114.30	2.279	57.88	1.981	50.32	25.80	114.77	11.62	2.03
C0588-072-4750-M	0.588	14.94	0.072	1.83	4.750	120.65	2.401	60.99	2.086	52.99	25.80	114.77	10.99	1.92
C0588-072-5000-M	0.588	14.94	0.072	1.83	5.000	127.00	2.524	64.11	2.191	55.66	25.80	114.77	10.42	1.82
C0588-072-5250-M	0.588	14.94	0.072	1.83	5.250	133.35	2.646	67.22	2.296	58.33	25.80	114.77	9.91	1.73
C0588-072-5500-M	0.588	14.94	0.072	1.83	5.500	139.70	2.769	70.33	2.401	60.99	25.80	114.77	9.45	1.65
C0588-072-5750-M	0.588	14.94	0.072	1.83	5.750	146.05	2.891	73.44	2.506	63.66	25.80	114.77	9.03	1.58
C0588-072-6000-M	0.588	14.94	0.072	1.83	6.000	152.40	3.014	76.55	2.611	66.33	25.80	114.77	8.64	1.51
C0588-072-6250-M	0.588	14.94	0.072	1.83	6.250	158.75	3.136	79.67	2.716	69.00	25.80	114.77	8.29	1.45
C0588-072-6500-M	0.588	14.94	0.072	1.83	6.500	165.10	3.259	82.78	2.821	71.66	25.80	114.77	7.96	1.39
C0588-072-6750-M	0.588	14.94	0.072	1.83	6.750	171.45	3.382	85.89	2.926	74.33	25.80	114.77	7.66	1.34
C0588-072-7000-M	0.588	14.94	0.072	1.83	7.000	177.80	3.504	89.00	3.031	77.00	25.80	114.77	7.38	1.29
C0588-072-7500-M	0.588	14.94	0.072	1.83	7.500	190.50	3.749	95.23	3.242	82.34	25.80	114.77	6.88	1.20
C0588-072-8000-M	0.588	14.94	0.072	1.83	8.000	203.20	3.994	101.45	3.452	87.67	25.80	114.77	6.44	1.13
C0588-072-8500-M	0.588	14.94	0.072	1.83	8.500	215.90	4.239	107.68	3.662	93.01	25.80	114.77	6.06	1.06
C0588-072-9000-M	0.588	14.94	0.072	1.83	9.000	228.60	4.484	113.90	3.872	98.34	25.80	114.77	5.71	1.00
C0588-072-9500-M	0.588	14.94	0.072	1.83	9.500	241.30	4.729	120.12	4.082	103.68	25.80	114.77	5.41	0.95
C0588-085-0875-M	0.588	14.94	0.085	2.16	0.875	22.23	0.582	14.79	0.557	14.15	40.67	180.90	138.96	24.32
C0588-085-0938-M	0.588	14.94	0.085	2.16	0.938	23.81	0.619	15.72	0.591	15.01	40.67	180.90	127.64	22.34
C0588-085-1000-M	0.588	14.94	0.085	2.16	1.000	25.40	0.655	16.65	0.624	15.86	40.67	180.90	118.03	20.66
C0588-085-1125-M	0.588	14.94	0.085	2.16	1.125	28.58	0.729	18.51	0.692	17.56	40.67	180.90	102.58	17.95
C0588-085-1250-M	0.588	14.94	0.085	2.16	1.250	31.75	0.802	20.36	0.759	19.27	40.67	180.90	90.71	15.87
C0588-085-1375-M	0.588	14.94	0.085	2.16	1.375	34.93	0.875	22.22	0.826	20.98	40.67	180.90	81.30	14.23
C0588-085-1500-M	0.588	14.94	0.085	2.16	1.500	38.10	0.948	24.08	0.893	22.68	40.67	180.90	73.66	12.89
C0588-085-1625-M	0.588	14.94	0.085	2.16	1.625	41.28	1.021	25.93	0.960	24.39	40.67	180.90	67.33	11.78
C0588-085-1750-M	0.588	14.94	0.085	2.16	1.750	44.45	1.094	27.79	1.027	26.09	40.67	180.90	62.00	10.85
C0588-085-1875-M	0.588	14.94	0.085	2.16	1.875	47.63	1.167	29.65	1.094	27.80	40.67	180.90	57.46	10.05
C0588-085-2000-M	0.588	14.94	0.085	2.16	2.000	50.80	1.240	31.50	1.162	29.50	40.67	180.90	53.53	9.37
C0588-085-2125-M	0.588	14.94	0.085	2.16	2.125	53.98	1.313	33.36	1.229	31.21	40.67	180.90	50.11	8.77
C0588-085-2250-M	0.588	14.94	0.085	2.16	2.250	57.15	1.387	35.22	1.296	32.91	40.67	180.90	47.10	8.24
C0588-085-2375-M	0.588	14.94	0.085	2.16	2.375	60.33	1.460	37.07	1.363	34.62	40.67	180.90	44.43	7.77
C0588-085-2500-M	0.588	14.94	0.085	2.16	2.500	63.50	1.533	38.93	1.430	36.33	40.67	180.90	42.05	7.36
C0588-085-2625-M	0.588	14.94	0.085	2.16	2.625	66.68	1.606	40.79	1.497	38.03	40.67	180.90	39.90	6.98
C0588-085-2750-M	0.588	14.94	0.085	2.16	2.750	69.85	1.679	42.65	1.564	39.74	40.67	180.90	37.97	6.64

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0588-068-6750-S	3.496	88.80	17.45	77.63	5.36	0.94
C0588-068-7000-S	3.623	92.03	17.45	77.63	5.17	0.90
C0588-068-7500-S	3.877	98.48	17.45	77.63	4.82	0.84
C0588-068-8000-S	4.131	104.93	17.45	77.63	4.51	0.79
C0588-068-8500-S	4.385	111.38	17.45	77.63	4.24	0.74
C0588-068-9000-S	4.639	117.84	17.45	77.63	4.00	0.70
C0588-068-9500-S	4.893	124.29	17.45	77.63	3.79	0.66
C0588-072-0875-S	0.536	13.62	20.39	90.71	60.19	10.53
C0588-072-0938-S	0.570	14.47	20.39	90.71	55.45	9.70
C0588-072-1000-S	0.603	15.32	20.39	90.71	51.40	9.00
C0588-072-1125-S	0.670	17.03	20.39	90.71	44.85	7.85
C0588-072-1250-S	0.737	18.73	20.39	90.71	39.78	6.96
C0588-072-1375-S	0.804	20.43	20.39	90.71	35.74	6.26
C0588-072-1500-S	0.872	22.14	20.39	90.71	32.45	5.68
C0588-072-1625-S	0.939	23.84	20.39	90.71	29.71	5.20
C0588-072-1750-S	1.006	25.54	20.39	90.71	27.40	4.79
C0588-072-1875-S	1.073	27.25	20.39	90.71	25.42	4.45
C0588-072-2000-S	1.140	28.95	20.39	90.71	23.71	4.15
C0588-072-2125-S	1.207	30.65	20.39	90.71	22.21	3.89
C0588-072-2250-S	1.274	32.36	20.39	90.71	20.89	3.66
C0588-072-2375-S	1.341	34.06	20.39	90.71	19.72	3.45
C0588-072-2500-S	1.408	35.77	20.39	90.71	18.68	3.27
C0588-072-2625-S	1.475	37.47	20.39	90.71	17.74	3.10
C0588-072-2750-S	1.542	39.17	20.39	90.71	16.88	2.95
C0588-072-2875-S	1.609	40.88	20.39	90.71	16.11	2.82
C0588-072-3000-S	1.676	42.58	20.39	90.71	15.41	2.70
C0588-072-3250-S	1.810	45.99	20.39	90.71	14.17	2.48
C0588-072-3500-S	1.945	49.39	20.39	90.71	13.11	2.29
C0588-072-3750-S	2.079	52.80	20.39	90.71	12.20	2.14
C0588-072-4000-S	2.213	56.21	20.39	90.71	11.41	2.00
C0588-072-4250-S	2.347	59.61	20.39	90.71	10.72	1.88
C0588-072-4500-S	2.481	63.02	20.39	90.71	10.10	1.77
C0588-072-4750-S	2.615	66.43	20.39	90.71	9.55	1.67
C0588-072-5000-S	2.749	69.83	20.39	90.71	9.06	1.59
C0588-072-5250-S	2.884	73.24	20.39	90.71	8.62	1.51
C0588-072-5500-S	3.018	76.65	20.39	90.71	8.22	1.44
C0588-072-5750-S	3.152	80.06	20.39	90.71	7.85	1.37
C0588-072-6000-S	3.286	83.46	20.39	90.71	7.51	1.31
C0588-072-6250-S	3.420	86.87	20.39	90.71	7.21	1.26
C0588-072-6500-S	3.554	90.28	20.39	90.71	6.92	1.21
C0588-072-6750-S	3.688	93.68	20.39	90.71	6.66	1.17
C0588-072-7000-S	3.822	97.09	20.39	90.71	6.42	1.12
C0588-072-7500-S	4.091	103.90	20.39	90.71	5.98	1.05
C0588-072-8000-S	4.359	110.72	20.39	90.71	5.60	0.98
C0588-072-8500-S	4.627	117.53	20.39	90.71	5.27	0.92
C0588-072-9000-S	4.896	124.35	20.39	90.71	4.97	0.87
C0588-072-9500-S	5.164	131.16	20.39	90.71	4.70	0.82
C0588-085-0875-S	0.611	15.52	31.92	141.98	120.83	21.15
C0588-085-0938-S	0.650	16.51	31.92	141.98	110.99	19.42
C0588-085-1000-S	0.689	17.50	31.92	141.98	102.63	17.96
C0588-085-1125-S	0.767	19.49	31.92	141.98	89.20	15.61
C0588-085-1250-S	0.845	21.47	31.92	141.98	78.88	13.80
C0588-085-1375-S	0.924	23.46	31.92	141.98	70.69	12.37
C0588-085-1500-S	1.002	25.44	31.92	141.98	64.05	11.21
C0588-085-1625-S	1.080	27.43	31.92	141.98	58.55	10.25
C0588-085-1750-S	1.158	29.41	31.92	141.98	53.92	9.44
C0588-085-1875-S	1.236	31.40	31.92	141.98	49.96	8.74
C0588-085-2000-S	1.314	33.38	31.92	141.98	46.55	8.15
C0588-085-2125-S	1.392	35.37	31.92	141.98	43.57	7.63
C0588-085-2250-S	1.471	37.35	31.92	141.98	40.96	7.17
C0588-085-2375-S	1.549	39.34	31.92	141.98	38.63	6.76
C0588-085-2500-S	1.627	41.33	31.92	141.98	36.56	6.40
C0588-085-2625-S	1.705	43.31	31.92	141.98	34.70	6.07
C0588-085-2750-S	1.783	45.30	31.92	141.98	33.02	5.78

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0588-085-2875-M	0.588	14.94	0.085	2.16	2.875	73.03	1.752	44.50	1.632	41.44	40.67	180.90	36.22	6.34
C0588-085-3000-M	0.588	14.94	0.085	2.16	3.000	76.20	1.825	46.36	1.699	43.15	40.67	180.90	34.62	6.06
C0588-085-3250-M	0.588	14.94	0.085	2.16	3.250	82.55	1.971	50.07	1.833	46.56	40.67	180.90	31.81	5.57
C0588-085-3500-M	0.588	14.94	0.085	2.16	3.500	88.90	2.118	53.79	1.967	49.97	40.67	180.90	29.42	5.15
C0588-085-3750-M	0.588	14.94	0.085	2.16	3.750	95.25	2.264	57.50	2.102	53.38	40.67	180.90	27.36	4.79
C0588-085-4000-M	0.588	14.94	0.085	2.16	4.000	101.60	2.410	61.21	2.236	56.79	40.67	180.90	25.58	4.48
C0588-085-4250-M	0.588	14.94	0.085	2.16	4.250	107.95	2.556	64.93	2.370	60.20	40.67	180.90	24.01	4.20
C0588-085-4500-M	0.588	14.94	0.085	2.16	4.500	114.30	2.702	68.64	2.505	63.61	40.67	180.90	22.62	3.96
C0588-085-4750-M	0.588	14.94	0.085	2.16	4.750	120.65	2.849	72.36	2.639	67.03	40.67	180.90	21.39	3.74
C0588-085-5000-M	0.588	14.94	0.085	2.16	5.000	127.00	2.995	76.07	2.773	70.44	40.67	180.90	20.28	3.55
C0588-085-5250-M	0.588	14.94	0.085	2.16	5.250	133.35	3.141	79.78	2.907	73.85	40.67	180.90	19.28	3.37
C0588-085-5500-M	0.588	14.94	0.085	2.16	5.500	139.70	3.287	83.50	3.042	77.26	40.67	180.90	18.38	3.22
C0588-085-5750-M	0.588	14.94	0.085	2.16	5.750	146.05	3.434	87.21	3.176	80.67	40.67	180.90	17.56	3.07
C0588-085-6000-M	0.588	14.94	0.085	2.16	6.000	152.40	3.580	90.93	3.310	84.08	40.67	180.90	16.80	2.94
C0588-085-6250-M	0.588	14.94	0.085	2.16	6.250	158.75	3.726	94.64	3.445	87.49	40.67	180.90	16.11	2.82
C0588-085-6500-M	0.588	14.94	0.085	2.16	6.500	165.10	3.872	98.35	3.579	90.90	40.67	180.90	15.48	2.71
C0588-085-6750-M	0.588	14.94	0.085	2.16	6.750	171.45	4.018	102.07	3.713	94.31	40.67	180.90	14.89	2.61
C0588-085-7000-M	0.588	14.94	0.085	2.16	7.000	177.80	4.165	105.78	3.847	97.73	40.67	180.90	14.34	2.51
C0588-085-7500-M	0.588	14.94	0.085	2.16	7.500	190.50	4.457	113.21	4.116	104.55	40.67	180.90	13.37	2.34
C0588-085-8000-M	0.588	14.94	0.085	2.16	8.000	203.20	4.749	120.64	4.385	111.37	40.67	180.90	12.51	2.19
C0588-085-8500-M	0.588	14.94	0.085	2.16	8.500	215.90	5.042	128.06	4.653	118.19	40.67	180.90	11.76	2.06
C0588-085-9000-M	0.588	14.94	0.085	2.16	9.000	228.60	5.334	135.49	4.922	125.01	40.67	180.90	11.09	1.94
C0588-085-9500-M	0.588	14.94	0.085	2.16	9.500	241.30	5.627	142.92	5.190	131.84	40.67	180.90	10.50	1.84
C0588-092-0875-M	0.588	14.94	0.092	2.34	0.875	22.23	0.621	15.76	0.604	15.35	50.44	224.37	198.24	34.69
C0588-092-0938-M	0.588	14.94	0.092	2.34	0.938	23.81	0.660	16.77	0.642	16.30	50.44	224.37	181.80	31.81
C0588-092-1000-M	0.588	14.94	0.092	2.34	1.000	25.40	0.700	17.77	0.679	17.24	50.44	224.37	167.87	29.38
C0588-092-1125-M	0.588	14.94	0.092	2.34	1.125	28.58	0.779	19.77	0.753	19.13	50.44	224.37	145.57	25.48
C0588-092-1250-M	0.588	14.94	0.092	2.34	1.250	31.75	0.857	21.78	0.828	21.02	50.44	224.37	128.50	22.49
C0588-092-1375-M	0.588	14.94	0.092	2.34	1.375	34.93	0.936	23.79	0.902	22.91	50.44	224.37	115.02	20.13
C0588-092-1500-M	0.588	14.94	0.092	2.34	1.500	38.10	1.015	25.79	0.976	24.80	50.44	224.37	104.09	18.22
C0588-092-1625-M	0.588	14.94	0.092	2.34	1.625	41.28	1.094	27.80	1.051	26.69	50.44	224.37	95.06	16.64
C0588-092-1750-M	0.588	14.94	0.092	2.34	1.750	44.45	1.173	29.80	1.125	28.58	50.44	224.37	87.47	15.31
C0588-092-1875-M	0.588	14.94	0.092	2.34	1.875	47.63	1.252	31.81	1.200	30.47	50.44	224.37	81.01	14.18
C0588-092-2000-M	0.588	14.94	0.092	2.34	2.000	50.80	1.331	33.82	1.274	32.36	50.44	224.37	75.43	13.20
C0588-092-2125-M	0.588	14.94	0.092	2.34	2.125	53.98	1.410	35.82	1.348	34.25	50.44	224.37	70.57	12.35
C0588-092-2250-M	0.588	14.94	0.092	2.34	2.250	57.15	1.489	37.83	1.423	36.14	50.44	224.37	66.30	11.60
C0588-092-2375-M	0.588	14.94	0.092	2.34	2.375	60.33	1.568	39.83	1.497	38.03	50.44	224.37	62.52	10.94
C0588-092-2500-M	0.588	14.94	0.092	2.34	2.500	63.50	1.647	41.84	1.572	39.92	50.44	224.37	59.15	10.35
C0588-092-2625-M	0.588	14.94	0.092	2.34	2.625	66.68	1.726	43.85	1.646	41.81	50.44	224.37	56.12	9.82
C0588-092-2750-M	0.588	14.94	0.092	2.34	2.750	69.85	1.805	45.85	1.720	43.70	50.44	224.37	53.38	9.34
C0588-092-2875-M	0.588	14.94	0.092	2.34	2.875	73.03	1.884	47.86	1.795	45.59	50.44	224.37	50.90	8.91
C0588-092-3000-M	0.588	14.94	0.092	2.34	3.000	76.20	1.963	49.86	1.869	47.48	50.44	224.37	48.65	8.51
C0588-092-3250-M	0.588	14.94	0.092	2.34	3.250	82.55	2.121	53.87	2.018	51.26	50.44	224.37	44.68	7.82
C0588-092-3500-M	0.588	14.94	0.092	2.34	3.500	88.90	2.279	57.89	2.167	55.03	50.44	224.37	41.31	7.23
C0588-092-3750-M	0.588	14.94	0.092	2.34	3.750	95.25	2.437	61.90	2.315	58.81	50.44	224.37	38.41	6.72
C0588-092-4000-M	0.588	14.94	0.092	2.34	4.000	101.60	2.595	65.91	2.464	62.59	50.44	224.37	35.90	6.28
C0588-092-4250-M	0.588	14.94	0.092	2.34	4.250	107.95	2.753	69.92	2.613	66.37	50.44	224.37	33.69	5.90
C0588-092-4500-M	0.588	14.94	0.092	2.34	4.500	114.30	2.911	73.93	2.762	70.15	50.44	224.37	31.74	5.55
C0588-092-4750-M	0.588	14.94	0.092	2.34	4.750	120.65	3.069	77.95	2.911	73.93	50.44	224.37	30.00	5.25
C0588-092-5000-M	0.588	14.94	0.092	2.34	5.000	127.00	3.227	81.96	3.059	77.71	50.44	224.37	28.44	4.98
C0588-092-5250-M	0.588	14.94	0.092	2.34	5.250	133.35	3.385	85.97	3.208	81.49	50.44	224.37	27.04	4.73
C0588-092-5500-M	0.588	14.94	0.092	2.34	5.500	139.70	3.543	89.98	3.357	85.27	50.44	224.37	25.77	4.51
C0588-092-5750-M	0.588	14.94	0.092	2.34	5.750	146.05	3.701	93.99	3.506	89.05	50.44	224.37	24.61	4.31
C0588-092-6000-M	0.588	14.94	0.092	2.34	6.000	152.40	3.858	98.00	3.655	92.83	50.44	224.37	23.55	4.12
C0588-092-6250-M	0.588	14.94	0.092	2.34	6.250	158.75	4.016	102.02	3.803	96.61	50.44	224.37	22.58	3.95
C0588-092-6500-M	0.588	14.94	0.092	2.34	6.500	165.10	4.174	106.03	3.952	100.38	50.44	224.37	21.69	3.80
C0588-092-6750-M	0.588	14.94	0.092	2.34	6.750	171.45	4.332	110.04	4.101	104.16	50.44	224.37	20.86	3.65
C0588-092-7000-M	0.588	14.94	0.092	2.34	7.000	177.80	4.490	114.05	4.250	107.94	50.44	224.37	20.10	3.52
C0588-092-7500-M	0.588	14.94	0.092	2.34	7.500	190.50	4.806	122.08	4.547	115.50	50.44	224.37	18.72	3.28
C0588-092-8000-M	0.588	14.94	0.092	2.34	8.000	203.20	5.122	130.10	4.845	123.06	50.44	224.37	17.53	3.07
C0588-092-8500-M	0.588	14.94	0.092	2.34	8.500	215.90	5.438	138.12	5.142	130.62	50.44	224.37	16.47	2.88
C0588-092-9000-M	0.588	14.94	0.092	2.34	9.000	228.60	5.754	146.15	5.440	138.18	50.44	224.37	15.54	2.72
C0588-092-9500-M	0.588	14.94	0.092	2.34	9.500	241.30	6.070	154.17	5.738	145.73	50.44	224.37	14.70	2.57
C0588-098-0875-M	0.588	14.94	0.098	2.49	0.875	22.23	0.650	16.52	0.641	16.29	59.84	266.20	266.35	46.61

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0588-085-2875-S	1.861	47.28	31.92	141.98	31.49	5.51
C0588-085-3000-S	1.940	49.27	31.92	141.98	30.10	5.27
C0588-085-3250-S	2.096	53.24	31.92	141.98	27.66	4.84
C0588-085-3500-S	2.252	57.21	31.92	141.98	25.58	4.48
C0588-085-3750-S	2.409	61.18	31.92	141.98	23.80	4.16
C0588-085-4000-S	2.565	65.15	31.92	141.98	22.24	3.89
C0588-085-4250-S	2.721	69.12	31.92	141.98	20.88	3.65
C0588-085-4500-S	2.878	73.09	31.92	141.98	19.67	3.44
C0588-085-4750-S	3.034	77.06	31.92	141.98	18.60	3.26
C0588-085-5000-S	3.190	81.03	31.92	141.98	17.64	3.09
C0588-085-5250-S	3.347	85.00	31.92	141.98	16.77	2.93
C0588-085-5500-S	3.503	88.97	31.92	141.98	15.98	2.80
C0588-085-5750-S	3.659	92.94	31.92	141.98	15.27	2.67
C0588-085-6000-S	3.816	96.92	31.92	141.98	14.61	2.56
C0588-085-6250-S	3.972	100.89	31.92	141.98	14.01	2.45
C0588-085-6500-S	4.128	104.86	31.92	141.98	13.46	2.35
C0588-085-6750-S	4.285	108.83	31.92	141.98	12.95	2.27
C0588-085-7000-S	4.441	112.80	31.92	141.98	12.47	2.18
C0588-085-7500-S	4.754	120.74	31.92	141.98	11.62	2.03
C0588-085-8000-S	5.066	128.68	31.92	141.98	10.88	1.90
C0588-085-8500-S	5.379	136.62	31.92	141.98	10.23	1.79
C0588-085-9000-S	5.692	144.56	31.92	141.98	9.65	1.69
C0588-085-9500-S	6.004	152.51	31.92	141.98	9.13	1.60
C0588-092-0875-S	0.646	16.42	39.42	175.33	172.38	30.17
C0588-092-0938-S	0.688	17.48	39.42	175.33	158.08	27.66
C0588-092-1000-S	0.730	18.54	39.42	175.33	145.98	25.55
C0588-092-1125-S	0.814	20.67	39.42	175.33	126.58	22.15
C0588-092-1250-S	0.897	22.79	39.42	175.33	111.74	19.55
C0588-092-1375-S	0.981	24.91	39.42	175.33	100.01	17.50
C0588-092-1500-S	1.065	27.04	39.42	175.33	90.51	15.84
C0588-092-1625-S	1.148	29.16	39.42	175.33	82.66	14.47
C0588-092-1750-S	1.232	31.29	39.42	175.33	76.06	13.31
C0588-092-1875-S	1.315	33.41	39.42	175.33	70.44	12.33
C0588-092-2000-S	1.399	35.54	39.42	175.33	65.59	11.48
C0588-092-2125-S	1.483	37.66	39.42	175.33	61.37	10.74
C0588-092-2250-S	1.566	39.79	39.42	175.33	57.66	10.09
C0588-092-2375-S	1.650	41.91	39.42	175.33	54.37	9.51
C0588-092-2500-S	1.734	44.03	39.42	175.33	51.43	9.00
C0588-092-2625-S	1.817	46.16	39.42	175.33	48.80	8.54
C0588-092-2750-S	1.901	48.28	39.42	175.33	46.42	8.12
C0588-092-2875-S	1.985	50.41	39.42	175.33	44.27	7.75
C0588-092-3000-S	2.068	52.53	39.42	175.33	42.30	7.40
C0588-092-3250-S	2.235	56.78	39.42	175.33	38.85	6.80
C0588-092-3500-S	2.403	61.03	39.42	175.33	35.92	6.29
C0588-092-3750-S	2.570	65.28	39.42	175.33	33.40	5.85
C0588-092-4000-S	2.737	69.53	39.42	175.33	31.22	5.46
C0588-092-4250-S	2.905	73.77	39.42	175.33	29.30	5.13
C0588-092-4500-S	3.072	78.02	39.42	175.33	27.60	4.83
C0588-092-4750-S	3.239	82.27	39.42	175.33	26.09	4.57
C0588-092-5000-S	3.406	86.52	39.42	175.33	24.73	4.33
C0588-092-5250-S	3.574	90.77	39.42	175.33	23.51	4.11
C0588-092-5500-S	3.741	95.02	39.42	175.33	22.41	3.92
C0588-092-5750-S	3.908	99.27	39.42	175.33	21.40	3.75
C0588-092-6000-S	4.075	103.52	39.42	175.33	20.48	3.58
C0588-092-6250-S	4.243	107.76	39.42	175.33	19.64	3.44
C0588-092-6500-S	4.410	112.01	39.42	175.33	18.86	3.30
C0588-092-6750-S	4.577	116.26	39.42	175.33	18.14	3.17
C0588-092-7000-S	4.745	120.51	39.42	175.33	17.48	3.06
C0588-092-7500-S	5.079	129.01	39.42	175.33	16.28	2.85
C0588-092-8000-S	5.414	137.51	39.42	175.33	15.24	2.67
C0588-092-8500-S	5.748	146.00	39.42	175.33	14.32	2.51
C0588-092-9000-S	6.083	154.50	39.42	175.33	13.51	2.36
C0588-092-9500-S	6.417	163.00	39.42	175.33	12.79	2.24
C0588-098-0875-S	0.674	17.12	46.58	207.21	231.61	40.53

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0588-098-0938-M	**0.588**	**14.94**	**0.098**	**2.49**	**0.938**	**23.81**	**0.692**	**17.58**	**0.681**	**17.30**	**59.84**	**266.20**	**243.90**	**42.68**	**C0588-098-0938-S**	**0.718**	**18.23**	**46.58**	**207.21**	**212.09**	**37.11**
C0588-098-1000-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.000**	**25.40**	**0.734**	**18.64**	**0.721**	**18.32**	**59.84**	**266.20**	**224.94**	**39.36**	**C0588-098-1000-S**	**0.762**	**19.35**	**46.58**	**207.21**	**195.60**	**34.23**
C0588-098-1125-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.125**	**28.58**	**0.818**	**20.77**	**0.802**	**20.36**	**59.84**	**266.20**	**194.67**	**34.07**	**C0588-098-1125-S**	**0.850**	**21.59**	**46.58**	**207.21**	**169.28**	**29.62**
C0588-098-1250-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.250**	**31.75**	**0.901**	**22.89**	**0.882**	**22.39**	**59.84**	**266.20**	**171.59**	**30.03**	**C0588-098-1250-S**	**0.938**	**23.82**	**46.58**	**207.21**	**149.20**	**26.11**
C0588-098-1375-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.375**	**34.93**	**0.985**	**25.02**	**0.962**	**24.43**	**59.84**	**266.20**	**153.39**	**26.84**	**C0588-098-1375-S**	**1.026**	**26.05**	**46.58**	**207.21**	**133.39**	**23.34**
C0588-098-1500-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.500**	**38.10**	**1.069**	**27.14**	**1.042**	**26.47**	**59.84**	**266.20**	**138.69**	**24.27**	**C0588-098-1500-S**	**1.114**	**28.29**	**46.58**	**207.21**	**120.60**	**21.10**
C0588-098-1625-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.625**	**41.28**	**1.152**	**29.26**	**1.122**	**28.50**	**59.84**	**266.20**	**126.56**	**22.15**	**C0588-098-1625-S**	**1.202**	**30.52**	**46.58**	**207.21**	**110.05**	**19.26**
C0588-098-1750-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.750**	**44.45**	**1.236**	**31.39**	**1.202**	**30.54**	**59.84**	**266.20**	**116.38**	**20.37**	**C0588-098-1750-S**	**1.290**	**32.76**	**46.58**	**207.21**	**101.20**	**17.71**
C0588-098-1875-M	**0.588**	**14.94**	**0.098**	**2.49**	**1.875**	**47.63**	**1.319**	**33.51**	**1.282**	**32.57**	**59.84**	**266.20**	**107.71**	**18.85**	**C0588-098-1875-S**	**1.378**	**34.99**	**46.58**	**207.21**	**93.66**	**16.39**
C0588-098-2000-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.000**	**50.80**	**1.403**	**35.64**	**1.363**	**34.61**	**59.84**	**266.20**	**100.25**	**17.54**	**C0588-098-2000-S**	**1.466**	**37.23**	**46.58**	**207.21**	**87.17**	**15.26**
C0588-098-2125-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.125**	**53.98**	**1.487**	**37.76**	**1.443**	**36.65**	**59.84**	**266.20**	**93.75**	**16.41**	**C0588-098-2125-S**	**1.554**	**39.46**	**46.58**	**207.21**	**81.53**	**14.27**
C0588-098-2250-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.250**	**57.15**	**1.570**	**39.89**	**1.523**	**38.68**	**59.84**	**266.20**	**88.05**	**15.41**	**C0588-098-2250-S**	**1.642**	**41.70**	**46.58**	**207.21**	**76.56**	**13.40**
C0588-098-2375-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.375**	**60.33**	**1.654**	**42.01**	**1.603**	**40.72**	**59.84**	**266.20**	**83.00**	**14.52**	**C0588-098-2375-S**	**1.730**	**43.93**	**46.58**	**207.21**	**72.17**	**12.63**
C0588-098-2500-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.500**	**63.50**	**1.738**	**44.14**	**1.683**	**42.75**	**59.84**	**266.20**	**78.49**	**13.74**	**C0588-098-2500-S**	**1.818**	**46.17**	**46.58**	**207.21**	**68.26**	**11.94**
C0588-098-2625-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.625**	**66.68**	**1.821**	**46.26**	**1.763**	**44.79**	**59.84**	**266.20**	**74.46**	**13.03**	**C0588-098-2625-S**	**1.905**	**48.40**	**46.58**	**207.21**	**64.74**	**11.33**
C0588-098-2750-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.750**	**69.85**	**1.905**	**48.38**	**1.844**	**46.83**	**59.84**	**266.20**	**70.81**	**12.39**	**C0588-098-2750-S**	**1.993**	**50.63**	**46.58**	**207.21**	**61.57**	**10.78**
C0588-098-2875-M	**0.588**	**14.94**	**0.098**	**2.49**	**2.875**	**73.03**	**1.989**	**50.51**	**1.924**	**48.86**	**59.84**	**266.20**	**67.51**	**11.81**	**C0588-098-2875-S**	**2.081**	**52.87**	**46.58**	**207.21**	**58.70**	**10.27**
C0588-098-3000-M	**0.588**	**14.94**	**0.098**	**2.49**	**3.000**	**76.20**	**2.072**	**52.63**	**2.004**	**50.90**	**59.84**	**266.20**	**64.50**	**11.29**	**C0588-098-3000-S**	**2.169**	**55.10**	**46.58**	**207.21**	**56.09**	**9.81**
C0588-098-3250-M	**0.588**	**14.94**	**0.098**	**2.49**	**3.250**	**82.55**	**2.239**	**56.88**	**2.164**	**54.97**	**59.84**	**266.20**	**59.22**	**10.36**	**C0588-098-3250-S**	**2.345**	**59.57**	**46.58**	**207.21**	**51.49**	**9.01**
C0588-098-3500-M	**0.588**	**14.94**	**0.098**	**2.49**	**3.500**	**88.90**	**2.407**	**61.13**	**2.324**	**59.04**	**59.84**	**266.20**	**54.74**	**9.58**	**C0588-098-3500-S**	**2.521**	**64.04**	**46.58**	**207.21**	**47.60**	**8.33**
C0588-098-3750-M	**0.588**	**14.94**	**0.098**	**2.49**	**3.750**	**95.25**	**2.574**	**65.38**	**2.485**	**63.11**	**59.84**	**266.20**	**50.89**	**8.91**	**C0588-098-3750-S**	**2.697**	**68.51**	**46.58**	**207.21**	**44.25**	**7.74**
C0588-098-4000-M	**0.588**	**14.94**	**0.098**	**2.49**	**4.000**	**101.60**	**2.741**	**69.63**	**2.645**	**67.18**	**59.84**	**266.20**	**47.54**	**8.32**	**C0588-098-4000-S**	**2.873**	**72.98**	**46.58**	**207.21**	**41.34**	**7.23**
C0588-098-4250-M	**0.588**	**14.94**	**0.098**	**2.49**	**4.250**	**107.95**	**2.909**	**73.88**	**2.805**	**71.26**	**59.84**	**266.20**	**44.61**	**7.81**	**C0588-098-4250-S**	**3.049**	**77.45**	**46.58**	**207.21**	**38.79**	**6.79**
C0588-098-4500-M	**0.588**	**14.94**	**0.098**	**2.49**	**4.500**	**114.30**	**3.076**	**78.13**	**2.966**	**75.33**	**59.84**	**266.20**	**42.02**	**7.35**	**C0588-098-4500-S**	**3.225**	**81.92**	**46.58**	**207.21**	**36.54**	**6.39**
C0588-098-4750-M	**0.588**	**14.94**	**0.098**	**2.49**	**4.750**	**120.65**	**3.243**	**82.37**	**3.126**	**79.40**	**59.84**	**266.20**	**39.71**	**6.95**	**C0588-098-4750-S**	**3.401**	**86.39**	**46.58**	**207.21**	**34.53**	**6.04**
C0588-098-5000-M	**0.588**	**14.94**	**0.098**	**2.49**	**5.000**	**127.00**	**3.410**	**86.62**	**3.286**	**83.47**	**59.84**	**266.20**	**37.65**	**6.59**	**C0588-098-5000-S**	**3.577**	**90.86**	**46.58**	**207.21**	**32.74**	**5.73**
C0588-098-5250-M	**0.588**	**14.94**	**0.098**	**2.49**	**5.250**	**133.35**	**3.578**	**90.87**	**3.447**	**87.54**	**59.84**	**266.20**	**35.78**	**6.26**	**C0588-098-5250-S**	**3.753**	**95.32**	**46.58**	**207.21**	**31.12**	**5.45**
C0588-098-5500-M	**0.588**	**14.94**	**0.098**	**2.49**	**5.500**	**139.70**	**3.745**	**95.12**	**3.607**	**91.62**	**59.84**	**266.20**	**34.10**	**5.97**	**C0588-098-5500-S**	**3.929**	**99.79**	**46.58**	**207.21**	**29.65**	**5.19**
C0588-098-5750-M	**0.588**	**14.94**	**0.098**	**2.49**	**5.750**	**146.05**	**3.912**	**99.37**	**3.767**	**95.69**	**59.84**	**266.20**	**32.56**	**5.70**	**C0588-098-5750-S**	**4.105**	**104.26**	**46.58**	**207.21**	**28.32**	**4.96**
C0588-098-6000-M	**0.588**	**14.94**	**0.098**	**2.49**	**6.000**	**152.40**	**4.079**	**103.62**	**3.928**	**99.76**	**59.84**	**266.20**	**31.16**	**5.45**	**C0588-098-6000-S**	**4.281**	**108.73**	**46.58**	**207.21**	**27.10**	**4.74**
C0588-098-6250-M	**0.588**	**14.94**	**0.098**	**2.49**	**6.250**	**158.75**	**4.247**	**107.87**	**4.088**	**103.83**	**59.84**	**266.20**	**29.87**	**5.23**	**C0588-098-6250-S**	**4.457**	**113.20**	**46.58**	**207.21**	**25.98**	**4.55**
C0588-098-6500-M	**0.588**	**14.94**	**0.098**	**2.49**	**6.500**	**165.10**	**4.414**	**112.12**	**4.248**	**107.90**	**59.84**	**266.20**	**28.69**	**5.02**	**C0588-098-6500-S**	**4.633**	**117.67**	**46.58**	**207.21**	**24.95**	**4.37**
C0588-098-6750-M	**0.588**	**14.94**	**0.098**	**2.49**	**6.750**	**171.45**	**4.581**	**116.36**	**4.408**	**111.98**	**59.84**	**266.20**	**27.59**	**4.83**	**C0588-098-6750-S**	**4.809**	**122.14**	**46.58**	**207.21**	**24.00**	**4.20**
C0588-098-7000-M	**0.588**	**14.94**	**0.098**	**2.49**	**7.000**	**177.80**	**4.749**	**120.61**	**4.569**	**116.05**	**59.84**	**266.20**	**26.58**	**4.65**	**C0588-098-7000-S**	**4.985**	**126.61**	**46.58**	**207.21**	**23.11**	**4.04**
C0588-098-7500-M	**0.588**	**14.94**	**0.098**	**2.49**	**7.500**	**190.50**	**5.083**	**129.11**	**4.889**	**124.19**	**59.84**	**266.20**	**24.76**	**4.33**	**C0588-098-7500-S**	**5.336**	**135.55**	**46.58**	**207.21**	**21.53**	**3.77**
C0588-098-8000-M	**0.588**	**14.94**	**0.098**	**2.49**	**8.000**	**203.20**	**5.418**	**137.61**	**5.210**	**132.33**	**59.84**	**266.20**	**23.17**	**4.06**	**C0588-098-8000-S**	**5.688**	**144.48**	**46.58**	**207.21**	**20.15**	**3.53**
C0588-098-8500-M	**0.588**	**14.94**	**0.098**	**2.49**	**8.500**	**215.90**	**5.752**	**146.11**	**5.531**	**140.48**	**59.84**	**266.20**	**21.78**	**3.81**	**C0588-098-8500-S**	**6.040**	**153.42**	**46.58**	**207.21**	**18.94**	**3.31**
C0588-098-9000-M	**0.588**	**14.94**	**0.098**	**2.49**	**9.000**	**228.60**	**6.087**	**154.60**	**5.851**	**148.62**	**59.84**	**266.20**	**20.54**	**3.59**	**C0588-098-9000-S**	**6.392**	**162.36**	**46.58**	**207.21**	**17.86**	**3.13**
C0588-098-9500-M	**0.588**	**14.94**	**0.098**	**2.49**	**9.500**	**241.30**	**6.421**	**163.10**	**6.172**	**156.77**	**59.84**	**266.20**	**19.44**	**3.40**	**C0588-098-9500-S**	**6.744**	**171.30**	**46.58**	**207.21**	**16.90**	**2.96**
C0588-105-0875-M	**0.588**	**14.94**	**0.105**	**2.67**	**0.875**	**22.23**	**0.681**	**17.31**	**0.680**	**17.26**	**72.05**	**320.48**	**372.30**	**65.15**	**C0588-105-0875-S**	**0.703**	**17.85**	**55.82**	**248.28**	**323.74**	**56.66**
C0588-105-0938-M	**0.588**	**14.94**	**0.105**	**2.67**	**0.938**	**23.81**	**0.726**	**18.44**	**0.723**	**18.36**	**72.05**	**320.48**	**340.32**	**59.56**	**C0588-105-0938-S**	**0.749**	**19.02**	**55.82**	**248.28**	**295.93**	**51.79**
C0588-105-1000-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.000**	**25.40**	**0.770**	**19.56**	**0.766**	**19.46**	**72.05**	**320.48**	**313.40**	**54.84**	**C0588-105-1000-S**	**0.795**	**20.20**	**55.82**	**248.28**	**272.52**	**47.69**
C0588-105-1125-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.125**	**28.58**	**0.859**	**21.81**	**0.852**	**21.65**	**72.05**	**320.48**	**270.58**	**47.35**	**C0588-105-1125-S**	**0.888**	**22.55**	**55.82**	**248.28**	**235.29**	**41.18**
C0588-105-1250-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.250**	**31.75**	**0.947**	**24.06**	**0.939**	**23.84**	**72.05**	**320.48**	**238.06**	**41.66**	**C0588-105-1250-S**	**0.980**	**24.90**	**55.82**	**248.28**	**207.01**	**36.23**
C0588-105-1375-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.375**	**34.93**	**1.036**	**26.31**	**1.025**	**26.03**	**72.05**	**320.48**	**212.52**	**37.19**	**C0588-105-1375-S**	**1.073**	**27.25**	**55.82**	**248.28**	**184.80**	**32.34**
C0588-105-1500-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.500**	**38.10**	**1.125**	**28.57**	**1.111**	**28.23**	**72.05**	**320.48**	**191.92**	**33.59**	**C0588-105-1500-S**	**1.166**	**29.61**	**55.82**	**248.28**	**166.89**	**29.21**
C0588-105-1625-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.625**	**41.28**	**1.213**	**30.82**	**1.198**	**30.42**	**72.05**	**320.48**	**174.97**	**30.62**	**C0588-105-1625-S**	**1.258**	**31.96**	**55.82**	**248.28**	**152.15**	**26.63**
C0588-105-1750-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.750**	**44.45**	**1.302**	**33.07**	**1.284**	**32.61**	**72.05**	**320.48**	**160.77**	**28.13**	**C0588-105-1750-S**	**1.351**	**34.31**	**55.82**	**248.28**	**139.80**	**24.46**
C0588-105-1875-M	**0.588**	**14.94**	**0.105**	**2.67**	**1.875**	**47.63**	**1.390**	**35.32**	**1.370**	**34.80**	**72.05**	**320.48**	**148.70**	**26.02**	**C0588-105-1875-S**	**1.443**	**36.66**	**55.82**	**248.28**	**129.30**	**22.63**
C0588-105-2000-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.000**	**50.80**	**1.479**	**37.57**	**1.457**	**37.00**	**72.05**	**320.48**	**138.31**	**24.20**	**C0588-105-2000-S**	**1.536**	**39.01**	**55.82**	**248.28**	**120.27**	**21.05**
C0588-105-2125-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.125**	**53.98**	**1.568**	**39.82**	**1.543**	**39.19**	**72.05**	**320.48**	**129.29**	**22.63**	**C0588-105-2125-S**	**1.629**	**41.36**	**55.82**	**248.28**	**112.42**	**19.67**
C0588-105-2250-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.250**	**57.15**	**1.656**	**42.07**	**1.629**	**41.38**	**72.05**	**320.48**	**121.36**	**21.24**	**C0588-105-2250-S**	**1.721**	**43.72**	**55.82**	**248.28**	**105.53**	**18.47**
C0588-105-2375-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.375**	**60.33**	**1.745**	**44.32**	**1.715**	**43.57**	**72.05**	**320.48**	**114.36**	**20.01**	**C0588-105-2375-S**	**1.814**	**46.07**	**55.82**	**248.28**	**99.44**	**17.40**
C0588-105-2500-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.500**	**63.50**	**1.834**	**46.57**	**1.802**	**45.77**	**72.05**	**320.48**	**108.12**	**18.92**	**C0588-105-2500-S**	**1.906**	**48.42**	**55.82**	**248.28**	**94.01**	**16.45**
C0588-105-2625-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.625**	**66.68**	**1.922**	**48.82**	**1.888**	**47.96**	**72.05**	**320.48**	**102.52**	**17.94**	**C0588-105-2625-S**	**1.999**	**50.77**	**55.82**	**248.28**	**89.15**	**15.60**
C0588-105-2750-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.750**	**69.85**	**2.011**	**51.08**	**1.974**	**50.15**	**72.05**	**320.48**	**97.47**	**17.06**	**C0588-105-2750-S**	**2.091**	**53.12**	**55.82**	**248.28**	**84.76**	**14.83**
C0588-105-2875-M	**0.588**	**14.94**	**0.105**	**2.67**	**2.875**	**73.03**	**2.099**	**53.33**	**2.061**	**52.34**	**72.05**	**320.48**	**92.90**	**16.26**	**C0588-105-2875-S**	**2.184**	**55.48**	**55.82**	**248.28**	**80.78**	**14.14**
C0588-105-3000-M	**0.588**	**14.94**	**0.105**	**2.67**	**3.000**	**76.20**	**2.188**	**55.58**	**2.147**	**54.54**	**72.05**	**320.48**	**88.74**	**15.53**	**C0588-105-3000-S**	**2.277**	**57.83**	**55.82**	**248.28**	**77.17**	**13.50**
C0588-105-3250-M	**0.588**	**14.94**	**0.105**	**2.67**	**3.250**	**82.55**	**2.365**	**60.08**	**2.320**	**58.92**	**72.05**	**320.48**	**81.44**	**14.25**	**C0588-105-3250-S**	**2.462**	**62.53**	**55.82**	**248.28**	**70.82**	**12.39**
C0588-105-3500-M	**0.588**	**14.94**	**0.105**	**2.67**	**3.500**	**88.90**	**2.543**	**64.58**	**2.492**	**63.31**	**72.05**	**320.48**	**75.25**	**13.17**	**C0588-105-3500-S**	**2.647**	**67.23**	**55.82**	**248.28**	**65.44**	**11.45**
C0588-105-3750-M	**0.588**	**14.94**	**0.105**	**2.67**	**3.750**	**95.25**	**2.720**	**69.08**	**2.665**	**67.69**	**72.05**	**320.48**	**69.94**	**12.24**	**C0588-105-3750-S**	**2.832**	**71.94**	**55.82**	**248.28**	**60.82**	**10.64**
C0588-105-4000-M	**0.588**	**14.94**	**0.105**	**2.67**	**4.000**	**101.60**	**2.897**	**73.59**	**2.838**	**72.08**	**72.05**	**320.48**	**65.33**	**11.43**	**C0588-105-4000-S**	**3.017**	**76.64**	**55.82**	**248.28**	**56.81**	**9.94**
C0588-105-4250-M	**0.588**	**14.94**	**0.105**	**2.67**	**4.250**	**107.95**	**3.074**	**78.09**	**3.010**	**76.46**	**72.05**	**320.48**	**61.28**	**10.72**	**C0588-105-4250-S**	**3.203**	**81.35**	**55.82**	**248.28**	**53.29**	**9.33**
C0588-105-4500-M	**0.588**	**14.94**	**0.105**	**2.67**	**4.500**	**114.30**	**3.252**	**82.59**	**3.183**	**80.84**	**72.05**	**320.48**	**57.71**	**10.10**	**C0588-105-4500-S**	**3.388**	**86.05**	**55.82**	**248.28**	**50.18**	**8.78**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0588-105-4750-M	**0.588**	**14.94**	**0.105**	**2.67**	**4.750**	**120.65**	**3.429**	**87.09**	**3.356**	**85.23**	**72.05**	**320.48**	**54.53**	**9.54**
C0588-105-5000-M	**0.588**	**14.94**	**0.105**	**2.67**	**5.000**	**127.00**	**3.606**	**91.60**	**3.528**	**89.61**	**72.05**	**320.48**	**51.69**	**9.05**
C0588-105-5250-M	**0.588**	**14.94**	**0.105**	**2.67**	**5.250**	**133.35**	**3.783**	**96.10**	**3.701**	**94.00**	**72.05**	**320.48**	**49.12**	**8.60**
C0588-105-5500-M	**0.588**	**14.94**	**0.105**	**2.67**	**5.500**	**139.70**	**3.961**	**100.60**	**3.873**	**98.38**	**72.05**	**320.48**	**46.80**	**8.19**
C0588-105-5750-M	**0.588**	**14.94**	**0.105**	**2.67**	**5.750**	**146.05**	**4.138**	**105.10**	**4.046**	**102.77**	**72.05**	**320.48**	**44.69**	**7.82**
C0588-105-6000-M	**0.588**	**14.94**	**0.105**	**2.67**	**6.000**	**152.40**	**4.315**	**109.60**	**4.219**	**107.15**	**72.05**	**320.48**	**42.76**	**7.48**
C0588-105-6250-M	**0.588**	**14.94**	**0.105**	**2.67**	**6.250**	**158.75**	**4.492**	**114.11**	**4.391**	**111.54**	**72.05**	**320.48**	**40.99**	**7.17**
C0588-105-6500-M	**0.588**	**14.94**	**0.105**	**2.67**	**6.500**	**165.10**	**4.670**	**118.61**	**4.564**	**115.92**	**72.05**	**320.48**	**39.36**	**6.89**
C0588-105-6750-M	**0.588**	**14.94**	**0.105**	**2.67**	**6.750**	**171.45**	**4.847**	**123.11**	**4.737**	**120.31**	**72.05**	**320.48**	**37.86**	**6.62**
C0588-105-7000-M	**0.588**	**14.94**	**0.105**	**2.67**	**7.000**	**177.80**	**5.024**	**127.61**	**4.909**	**124.69**	**72.05**	**320.48**	**36.46**	**6.38**
C0588-105-7500-M	**0.588**	**14.94**	**0.105**	**2.67**	**7.500**	**190.50**	**5.379**	**136.62**	**5.254**	**133.46**	**72.05**	**320.48**	**33.96**	**5.94**
C0588-105-8000-M	**0.588**	**14.94**	**0.105**	**2.67**	**8.000**	**203.20**	**5.733**	**145.62**	**5.600**	**142.23**	**72.05**	**320.48**	**31.78**	**5.56**
C0588-105-8500-M	**0.588**	**14.94**	**0.105**	**2.67**	**8.500**	**215.90**	**6.088**	**154.63**	**5.945**	**151.00**	**72.05**	**320.48**	**29.87**	**5.23**
C0588-105-9000-M	**0.588**	**14.94**	**0.105**	**2.67**	**9.000**	**228.60**	**6.442**	**163.63**	**6.290**	**159.77**	**72.05**	**320.48**	**28.17**	**4.93**
C0588-105-9500-M	**0.588**	**14.94**	**0.105**	**2.67**	**9.500**	**241.30**	**6.797**	**172.63**	**6.636**	**168.54**	**72.05**	**320.48**	**26.65**	**4.66**
C0588-112-0875-M	**0.588**	**14.94**	**0.112**	**2.85**	**0.875**	**22.23**	**0.738**	**18.74**	**0.714**	**18.13**	**70.71**	**314.52**	**515.51**	**90.21**
C0588-112-0938-M	**0.588**	**14.94**	**0.112**	**2.85**	**0.938**	**23.81**	**0.786**	**19.97**	**0.760**	**19.29**	**71.14**	**316.43**	**470.36**	**82.31**
C0588-112-1000-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.000**	**25.40**	**0.835**	**21.20**	**0.806**	**20.46**	**71.50**	**318.04**	**432.47**	**75.68**
C0588-112-1125-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.125**	**28.58**	**0.932**	**23.66**	**0.897**	**22.79**	**72.07**	**320.58**	**372.48**	**65.18**
C0588-112-1250-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.250**	**31.75**	**1.028**	**26.12**	**0.989**	**25.13**	**72.50**	**322.50**	**327.10**	**57.24**
C0588-112-1375-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.375**	**34.93**	**1.081**	**27.47**	**1.081**	**27.46**	**85.60**	**380.76**	**291.57**	**51.03**
C0588-112-1500-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.500**	**38.10**	**1.175**	**29.83**	**1.173**	**29.79**	**85.60**	**380.76**	**263.01**	**46.03**
C0588-112-1625-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.625**	**41.28**	**1.268**	**32.20**	**1.265**	**32.13**	**85.60**	**380.76**	**239.54**	**41.92**
C0588-112-1750-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.750**	**44.45**	**1.361**	**34.56**	**1.357**	**34.46**	**85.60**	**380.76**	**219.92**	**38.49**
C0588-112-1875-M	**0.588**	**14.94**	**0.112**	**2.85**	**1.875**	**47.63**	**1.454**	**36.93**	**1.449**	**36.79**	**85.60**	**380.76**	**203.27**	**35.57**
C0588-112-2000-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.000**	**50.80**	**1.547**	**39.29**	**1.540**	**39.13**	**85.60**	**380.76**	**188.96**	**33.07**
C0588-112-2125-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.125**	**53.98**	**1.640**	**41.66**	**1.632**	**41.46**	**85.60**	**380.76**	**176.54**	**30.89**
C0588-112-2250-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.250**	**57.15**	**1.733**	**44.02**	**1.724**	**43.79**	**85.60**	**380.76**	**165.65**	**28.99**
C0588-112-2375-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.375**	**60.33**	**1.826**	**46.39**	**1.816**	**46.13**	**85.60**	**380.76**	**156.02**	**27.30**
C0588-112-2500-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.500**	**63.50**	**1.919**	**48.75**	**1.908**	**48.46**	**85.60**	**380.76**	**147.45**	**25.80**
C0588-112-2625-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.625**	**66.68**	**2.013**	**51.12**	**2.000**	**50.79**	**85.60**	**380.76**	**139.78**	**24.46**
C0588-112-2750-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.750**	**69.85**	**2.106**	**53.49**	**2.092**	**53.13**	**85.60**	**380.76**	**132.86**	**23.25**
C0588-112-2875-M	**0.588**	**14.94**	**0.112**	**2.85**	**2.875**	**73.03**	**2.199**	**55.85**	**2.183**	**55.46**	**85.60**	**380.76**	**126.59**	**22.15**
C0588-112-3000-M	**0.588**	**14.94**	**0.112**	**2.85**	**3.000**	**76.20**	**2.292**	**58.22**	**2.275**	**57.79**	**85.60**	**380.76**	**120.89**	**21.16**
C0588-112-3250-M	**0.588**	**14.94**	**0.112**	**2.85**	**3.250**	**82.55**	**2.478**	**62.95**	**2.459**	**62.46**	**85.60**	**380.76**	**110.91**	**19.41**
C0588-112-3500-M	**0.588**	**14.94**	**0.112**	**2.85**	**3.500**	**88.90**	**2.664**	**67.68**	**2.643**	**67.13**	**85.60**	**380.76**	**102.44**	**17.93**
C0588-112-3750-M	**0.588**	**14.94**	**0.112**	**2.85**	**3.750**	**95.25**	**2.851**	**72.41**	**2.827**	**71.79**	**85.60**	**380.76**	**95.18**	**16.66**
C0588-112-4000-M	**0.588**	**14.94**	**0.112**	**2.85**	**4.000**	**101.60**	**3.037**	**77.14**	**3.010**	**76.46**	**85.60**	**380.76**	**88.88**	**15.55**
C0588-112-4250-M	**0.588**	**14.94**	**0.112**	**2.85**	**4.250**	**107.95**	**3.223**	**81.87**	**3.194**	**81.13**	**85.60**	**380.76**	**83.36**	**14.59**
C0588-112-4500-M	**0.588**	**14.94**	**0.112**	**2.85**	**4.500**	**114.30**	**3.409**	**86.60**	**3.378**	**85.79**	**85.60**	**380.76**	**78.49**	**13.73**
C0588-112-4750-M	**0.588**	**14.94**	**0.112**	**2.85**	**4.750**	**120.65**	**3.596**	**91.33**	**3.561**	**90.46**	**85.60**	**380.76**	**74.15**	**12.98**
C0588-112-5000-M	**0.588**	**14.94**	**0.112**	**2.85**	**5.000**	**127.00**	**3.782**	**96.06**	**3.745**	**95.13**	**85.60**	**380.76**	**70.27**	**12.30**
C0588-112-5250-M	**0.588**	**14.94**	**0.112**	**2.85**	**5.250**	**133.35**	**3.968**	**100.79**	**3.929**	**99.80**	**85.60**	**380.76**	**66.77**	**11.69**
C0588-112-5500-M	**0.588**	**14.94**	**0.112**	**2.85**	**5.500**	**139.70**	**4.154**	**105.52**	**4.113**	**104.46**	**85.60**	**380.76**	**63.61**	**11.13**
C0588-112-5750-M	**0.588**	**14.94**	**0.112**	**2.85**	**5.750**	**146.05**	**4.341**	**110.25**	**4.296**	**109.13**	**85.60**	**380.76**	**60.73**	**10.63**
C0588-112-6000-M	**0.588**	**14.94**	**0.112**	**2.85**	**6.000**	**152.40**	**4.527**	**114.98**	**4.480**	**113.80**	**85.60**	**380.76**	**58.10**	**10.17**
C0588-112-6250-M	**0.588**	**14.94**	**0.112**	**2.85**	**6.250**	**158.75**	**4.713**	**119.71**	**4.664**	**118.46**	**85.60**	**380.76**	**55.69**	**9.75**
C0588-112-6500-M	**0.588**	**14.94**	**0.112**	**2.85**	**6.500**	**165.10**	**4.899**	**124.44**	**4.848**	**123.13**	**85.60**	**380.76**	**53.47**	**9.36**
C0588-112-6750-M	**0.588**	**14.94**	**0.112**	**2.85**	**6.750**	**171.45**	**5.085**	**129.17**	**5.031**	**127.80**	**85.60**	**380.76**	**51.43**	**9.00**
C0588-112-7000-M	**0.588**	**14.94**	**0.112**	**2.85**	**7.000**	**177.80**	**5.272**	**133.90**	**5.215**	**132.46**	**85.60**	**380.76**	**49.53**	**8.67**
C0588-112-7500-M	**0.588**	**14.94**	**0.112**	**2.85**	**7.500**	**190.50**	**5.644**	**143.36**	**5.583**	**141.80**	**85.60**	**380.76**	**46.12**	**8.07**
C0588-112-8000-M	**0.588**	**14.94**	**0.112**	**2.85**	**8.000**	**203.20**	**6.017**	**152.82**	**5.950**	**151.13**	**85.60**	**380.76**	**43.16**	**7.55**
C0588-112-8500-M	**0.588**	**14.94**	**0.112**	**2.85**	**8.500**	**215.90**	**6.389**	**162.28**	**6.317**	**160.46**	**85.60**	**380.76**	**40.55**	**7.10**
C0588-112-9000-M	**0.588**	**14.94**	**0.112**	**2.85**	**9.000**	**228.60**	**6.762**	**171.74**	**6.685**	**169.80**	**85.60**	**380.76**	**38.24**	**6.69**
C0588-112-9500-M	**0.588**	**14.94**	**0.112**	**2.85**	**9.500**	**241.30**	**7.134**	**181.21**	**7.052**	**179.13**	**85.60**	**380.76**	**36.18**	**6.33**
D12890	0.591	15.00	0.087	2.20	0.787	20.00	0.508	12.90	0.476	12.10	57.76	256.93	185.49	32.46
D12900	0.591	15.00	0.087	2.20	1.189	30.20	0.697	17.70	0.650	16.50	57.76	256.93	118.23	20.69
D12910	0.591	15.00	0.087	2.20	1.925	48.90	1.079	27.40	0.996	25.30	57.76	256.93	68.34	11.96
D12940	0.591	15.00	0.098	2.50	0.866	22.00	0.551	14.00	0.541	13.75	105.16	467.78	333.43	58.35
D12950	0.591	15.00	0.098	2.50	1.260	32.00	0.768	19.50	0.738	18.75	105.16	467.78	212.40	37.17
D12960	0.591	15.00	0.098	2.50	1.870	47.50	1.094	27.80	1.033	26.25	105.16	467.78	137.31	24.03
D12970	0.591	15.00	0.098	2.50	2.657	67.50	1.524	38.70	1.427	36.25	105.16	467.78	93.03	16.28
D12980	0.591	15.00	0.098	2.50	3.858	98.00	2.169	55.10	2.018	51.25	105.16	467.78	62.74	10.98
C0600-045-0500-M	0.600	15.24	0.045	1.14	0.500	12.70	0.257	6.53	0.153	3.89	6.00	26.69	24.70	4.32

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0588-105-4750-S	**3.573**	**90.75**	**55.82**	**248.28**	**47.42**	**8.30**
C0588-105-5000-S	**3.758**	**95.46**	**55.82**	**248.28**	**44.95**	**7.87**
C0588-105-5250-S	**3.943**	**100.16**	**55.82**	**248.28**	**42.72**	**7.48**
C0588-105-5500-S	**4.129**	**104.86**	**55.82**	**248.28**	**40.70**	**7.12**
C0588-105-5750-S	**4.314**	**109.57**	**55.82**	**248.28**	**38.86**	**6.80**
C0588-105-6000-S	**4.499**	**114.27**	**55.82**	**248.28**	**37.18**	**6.51**
C0588-105-6250-S	**4.684**	**118.98**	**55.82**	**248.28**	**35.64**	**6.24**
C0588-105-6500-S	**4.869**	**123.68**	**55.82**	**248.28**	**34.23**	**5.99**
C0588-105-6750-S	**5.054**	**128.38**	**55.82**	**248.28**	**32.92**	**5.76**
C0588-105-7000-S	**5.240**	**133.09**	**55.82**	**248.28**	**31.71**	**5.55**
C0588-105-7500-S	**5.610**	**142.49**	**55.82**	**248.28**	**29.53**	**5.17**
C0588-105-8000-S	**5.980**	**151.90**	**55.82**	**248.28**	**27.64**	**4.84**
C0588-105-8500-S	**6.351**	**161.31**	**55.82**	**248.28**	**25.97**	**4.54**
C0588-105-9000-S	**6.721**	**170.72**	**55.82**	**248.28**	**24.49**	**4.29**
C0588-105-9500-S	**7.091**	**180.12**	**55.82**	**248.28**	**23.17**	**4.06**
C0588-112-0875-S	**0.728**	**18.49**	**65.99**	**293.53**	**448.27**	**78.45**
C0588-112-0938-S	**0.776**	**19.71**	**65.99**	**293.53**	**409.01**	**71.58**
C0588-112-1000-S	**0.825**	**20.94**	**65.99**	**293.53**	**376.06**	**65.81**
C0588-112-1125-S	**0.921**	**23.40**	**65.99**	**293.53**	**323.89**	**56.68**
C0588-112-1250-S	**1.018**	**25.86**	**65.99**	**293.53**	**284.43**	**49.78**
C0588-112-1375-S	**1.115**	**28.31**	**65.99**	**293.53**	**253.54**	**44.37**
C0588-112-1500-S	**1.211**	**30.77**	**65.99**	**293.53**	**228.70**	**40.02**
C0588-112-1625-S	**1.308**	**33.23**	**65.99**	**293.53**	**208.30**	**36.45**
C0588-112-1750-S	**1.405**	**35.69**	**65.99**	**293.53**	**191.24**	**33.47**
C0588-112-1875-S	**1.502**	**38.14**	**65.99**	**293.53**	**176.76**	**30.93**
C0588-112-2000-S	**1.598**	**40.60**	**65.99**	**293.53**	**164.32**	**28.76**
C0588-112-2125-S	**1.695**	**43.06**	**65.99**	**293.53**	**153.51**	**26.86**
C0588-112-2250-S	**1.792**	**45.51**	**65.99**	**293.53**	**144.04**	**25.21**
C0588-112-2375-S	**1.889**	**47.97**	**65.99**	**293.53**	**135.67**	**23.74**
C0588-112-2500-S	**1.985**	**50.43**	**65.99**	**293.53**	**128.22**	**22.44**
C0588-112-2625-S	**2.082**	**52.88**	**65.99**	**293.53**	**121.54**	**21.27**
C0588-112-2750-S	**2.179**	**55.34**	**65.99**	**293.53**	**115.53**	**20.22**
C0588-112-2875-S	**2.276**	**57.80**	**65.99**	**293.53**	**110.08**	**19.26**
C0588-112-3000-S	**2.372**	**60.26**	**65.99**	**293.53**	**105.13**	**18.40**
C0588-112-3250-S	**2.566**	**65.17**	**65.99**	**293.53**	**96.44**	**16.88**
C0588-112-3500-S	**2.759**	**70.08**	**65.99**	**293.53**	**89.08**	**15.59**
C0588-112-3750-S	**2.953**	**75.00**	**65.99**	**293.53**	**82.76**	**14.48**
C0588-112-4000-S	**3.146**	**79.91**	**65.99**	**293.53**	**77.28**	**13.52**
C0588-112-4250-S	**3.340**	**84.83**	**65.99**	**293.53**	**72.49**	**12.68**
C0588-112-4500-S	**3.533**	**89.74**	**65.99**	**293.53**	**68.25**	**11.94**
C0588-112-4750-S	**3.727**	**94.66**	**65.99**	**293.53**	**64.48**	**11.28**
C0588-112-5000-S	**3.920**	**99.57**	**65.99**	**293.53**	**61.10**	**10.69**
C0588-112-5250-S	**4.114**	**104.48**	**65.99**	**293.53**	**58.06**	**10.16**
C0588-112-5500-S	**4.307**	**109.40**	**65.99**	**293.53**	**55.31**	**9.68**
C0588-112-5750-S	**4.500**	**114.31**	**65.99**	**293.53**	**52.81**	**9.24**
C0588-112-6000-S	**4.694**	**119.23**	**65.99**	**293.53**	**50.52**	**8.84**
C0588-112-6250-S	**4.887**	**124.14**	**65.99**	**293.53**	**48.43**	**8.47**
C0588-112-6500-S	**5.081**	**129.05**	**65.99**	**293.53**	**46.50**	**8.14**
C0588-112-6750-S	**5.274**	**133.97**	**65.99**	**293.53**	**44.72**	**7.83**
C0588-112-7000-S	**5.468**	**138.88**	**65.99**	**293.53**	**43.07**	**7.54**
C0588-112-7500-S	**5.855**	**148.71**	**65.99**	**293.53**	**40.11**	**7.02**
C0588-112-8000-S	**6.242**	**158.54**	**65.99**	**293.53**	**37.53**	**6.57**
C0588-112-8500-S	**6.629**	**168.37**	**65.99**	**293.53**	**35.26**	**6.17**
C0588-112-9000-S	**7.016**	**178.20**	**65.99**	**293.53**	**33.25**	**5.82**
C0588-112-9500-S	**7.402**	**188.02**	**65.99**	**293.53**	**31.46**	**5.51**
D22890	0.508	12.90	48.11	214.02	154.51	27.04
D22900	0.697	17.70	48.11	214.02	98.46	17.23
D22910	1.079	27.40	48.11	214.02	56.91	9.96
D22940	0.551	14.00	87.60	389.66	277.77	48.61
D22950	0.768	19.50	87.60	389.66	176.91	30.96
D22960	1.094	27.80	87.60	389.66	114.40	20.02
D22970	1.524	38.70	87.60	389.66	77.49	13.56
D22980	2.169	55.10	87.60	389.66	52.29	9.15
C0600-045-0500-S	0.257	6.53	5.00	22.23	20.58	3.60

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0600-045-0625-M	0.600	15.24	0.045	1.14	0.620	15.75	0.287	7.29	0.179	4.55	6.00	26.69	18.00	3.15
C0600-045-0750-M	0.600	15.24	0.045	1.14	0.750	19.05	0.321	8.15	0.205	5.21	6.00	26.69	14.00	2.45
C0600-045-0880-M	0.600	15.24	0.045	1.14	0.880	22.35	0.380	9.65	0.224	5.69	6.00	26.69	12.00	2.10
C0600-045-1000-M	0.600	15.24	0.045	1.14	1.000	25.40	0.400	10.16	0.251	6.38	6.00	26.69	10.00	1.75
C0600-045-1250-M	0.600	15.24	0.045	1.14	1.250	31.75	0.500	12.70	0.292	7.42	6.00	26.69	8.00	1.40
C0600-045-1380-M	0.600	15.24	0.045	1.14	1.380	35.05	0.540	13.72	0.306	7.77	6.00	26.69	7.10	1.24
C0600-045-1500-M	0.600	15.24	0.045	1.14	1.500	38.10	0.575	14.61	0.338	8.59	6.00	26.69	6.50	1.14
C0600-045-1750-M	0.600	15.24	0.045	1.14	1.750	44.45	0.854	21.69	0.366	9.30	6.00	26.69	6.70	1.17
C0600-045-2000-M	0.600	15.24	0.045	1.14	2.000	50.80	0.966	24.54	0.401	10.19	6.00	26.69	5.80	1.02
C0600-045-2250-M	0.600	15.24	0.045	1.14	2.250	57.15	1.096	27.84	0.436	11.07	6.00	26.69	5.20	0.91
C0600-045-2500-M	0.600	15.24	0.045	1.14	2.500	63.50	1.196	30.38	0.471	11.96	6.00	26.69	4.60	0.81
C0600-045-2750-M	0.600	15.24	0.045	1.14	2.750	69.85	1.170	29.72	0.540	13.72	6.00	26.69	3.80	0.67
C0600-045-3000-M	0.600	15.24	0.045	1.14	3.000	76.20	1.272	32.31	0.585	14.86	6.00	26.69	3.50	0.61
C0600-045-3500-M	0.600	15.24	0.045	1.14	3.500	88.90	1.500	38.10	0.659	16.74	6.00	26.69	3.00	0.53
C0600-049-0620-M	0.600	15.24	0.049	1.25	0.620	15.75	0.320	8.13	0.234	5.94	8.40	37.37	28.00	4.90
C0600-049-0750-M	0.600	15.24	0.049	1.25	0.750	19.05	0.375	9.53	0.255	6.48	8.40	37.37	22.40	3.92
C0600-049-1000-M	0.600	15.24	0.049	1.25	1.000	25.40	0.481	12.22	0.297	7.54	8.40	37.37	16.20	2.84
C0600-049-1250-M	0.600	15.24	0.049	1.25	1.250	31.75	0.587	14.91	0.338	8.59	8.40	37.37	12.70	2.22
C0600-049-1500-M	0.600	15.24	0.049	1.25	1.500	38.10	0.693	17.60	0.380	9.65	8.40	37.37	10.40	1.82
C0600-049-1750-M	0.600	15.24	0.049	1.25	1.750	44.45	0.800	20.32	0.422	10.72	8.40	37.37	8.80	1.54
C0600-049-2000-M	0.600	15.24	0.049	1.25	2.000	50.80	0.906	23.01	0.463	11.76	8.40	37.37	7.70	1.35
C0600-049-2250-M	0.600	15.24	0.049	1.25	2.250	57.15	1.012	25.70	0.505	12.83	8.40	37.37	6.80	1.19
C0600-049-2500-M	0.600	15.24	0.049	1.25	2.500	63.50	1.118	28.40	0.546	13.87	8.40	37.37	6.10	1.07
C0600-049-2750-M	0.600	15.24	0.049	1.25	2.750	69.85	1.224	31.09	0.588	14.94	8.40	37.37	5.50	0.96
C0600-049-3000-M	0.600	15.24	0.049	1.25	3.000	76.20	1.330	33.78	0.629	15.98	8.40	37.37	5.00	0.88
C0600-055-0625-M	0.600	15.24	0.055	1.40	0.620	15.75	0.320	8.13	0.226	5.74	12.00	53.38	40.00	7.00
C0600-055-0750-M	0.600	15.24	0.055	1.40	0.750	19.05	0.385	9.78	0.251	6.38	12.00	53.38	33.00	5.78
C0600-055-0880-M	0.600	15.24	0.055	1.40	0.880	22.35	0.450	11.43	0.276	7.01	12.00	53.38	28.00	4.90
C0600-055-1000-M	0.600	15.24	0.055	1.40	1.000	25.40	0.500	12.70	0.304	7.72	12.00	53.38	24.00	4.20
C0600-055-1250-M	0.600	15.24	0.055	1.40	1.250	31.75	0.580	14.73	0.369	9.37	12.00	53.38	18.00	3.15
C0600-055-1500-M	0.600	15.24	0.055	1.40	1.500	38.10	0.700	17.78	0.420	10.67	12.00	53.38	15.00	2.63
C0600-055-1750-M	0.600	15.24	0.055	1.40	1.750	44.45	0.827	21.01	0.509	12.93	12.00	53.38	13.00	2.28
C0600-055-2000-M	0.600	15.24	0.055	1.40	2.000	50.80	0.938	23.83	0.562	14.27	12.00	53.38	11.30	1.98
C0600-055-2250-M	0.600	15.24	0.055	1.40	2.250	57.15	1.050	26.67	0.614	15.60	12.00	53.38	10.00	1.75
C0600-055-2500-M	0.600	15.24	0.055	1.40	2.500	63.50	1.152	29.26	0.667	16.94	12.00	53.38	8.90	1.56
C0600-055-2750-M	0.600	15.24	0.055	1.40	2.750	69.85	1.311	33.30	0.701	17.81	12.00	53.38	8.30	1.45
C0600-055-3000-M	0.600	15.24	0.055	1.40	3.000	76.20	1.424	36.17	0.752	19.10	12.00	53.38	7.60	1.33
C0600-059-0620-M	0.600	15.24	0.059	1.50	0.620	15.75	0.357	9.07	0.298	7.57	14.13	62.85	53.70	9.40
C0600-059-0750-M	0.600	15.24	0.059	1.50	0.750	19.05	0.419	10.64	0.329	8.36	14.13	62.85	42.70	7.47
C0600-059-0880-M	0.600	15.24	0.059	1.50	0.880	22.35	0.481	12.22	0.360	9.14	14.13	62.85	35.40	6.20
C0600-059-1000-M	0.600	15.24	0.059	1.50	1.000	25.40	0.538	13.67	0.389	9.88	14.13	62.85	30.60	5.36
C0600-059-1250-M	0.600	15.24	0.059	1.50	1.250	31.75	0.657	16.69	0.449	11.40	14.13	62.85	23.80	4.17
C0600-059-1500-M	0.600	15.24	0.059	1.50	1.500	38.10	0.776	19.71	0.510	12.95	14.13	62.85	19.50	3.41
C0600-059-1750-M	0.600	15.24	0.059	1.50	1.750	44.45	0.895	22.73	0.570	14.48	14.13	62.85	16.50	2.89
C0600-059-2000-M	0.600	15.24	0.059	1.50	2.000	50.80	1.014	25.76	0.630	16.00	14.13	62.85	14.30	2.50
C0600-059-2250-M	0.600	15.24	0.059	1.50	2.250	57.15	1.133	28.78	0.690	17.53	14.13	62.85	12.60	2.21
C0600-059-2500-M	0.600	15.24	0.059	1.50	2.500	63.50	1.252	31.80	0.750	19.05	14.13	62.85	11.30	1.98
C0600-059-2750-M	0.600	15.24	0.059	1.50	2.750	69.85	1.371	34.82	0.811	20.60	14.13	62.85	10.20	1.79
C0600-059-3000-M	0.600	15.24	0.059	1.50	3.000	76.20	1.490	37.85	0.871	22.12	14.13	62.85	9.40	1.65
C0600-063-0625-M	0.600	15.24	0.063	1.60	0.620	15.75	0.330	8.38	0.280	7.11	18.00	80.07	62.00	10.85
C0600-063-0750-M	0.600	15.24	0.063	1.60	0.750	19.05	0.400	10.16	0.314	7.98	18.00	80.07	51.00	8.93
C0600-063-0880-M	0.600	15.24	0.063	1.60	0.880	22.35	0.471	11.96	0.343	8.71	18.00	80.07	44.00	7.70
C0600-063-1000-M	0.600	15.24	0.063	1.60	1.000	25.40	0.525	13.34	0.378	9.60	18.00	80.07	38.00	6.65
C0600-063-1250-M	0.600	15.24	0.063	1.60	1.250	31.75	0.670	17.02	0.435	11.05	18.00	80.07	31.00	5.43
C0600-063-1500-M	0.600	15.24	0.063	1.60	1.500	38.10	0.750	19.05	0.526	13.36	18.00	80.07	24.00	4.20
C0600-063-1750-M	0.600	15.24	0.063	1.60	1.750	44.45	0.885	22.48	0.632	16.05	18.00	80.07	20.80	3.64
C0600-063-2000-M	0.600	15.24	0.063	1.60	2.000	50.80	1.000	25.40	0.700	17.78	18.00	80.07	18.00	3.15
C0600-063-2250-M	0.600	15.24	0.063	1.60	2.250	57.15	1.118	28.40	0.768	19.51	18.00	80.07	15.90	2.78
C0600-063-2500-M	0.600	15.24	0.063	1.60	2.500	63.50	1.232	31.29	0.836	21.23	18.00	80.07	14.20	2.49
C0600-063-2750-M	0.600	15.24	0.063	1.60	2.750	69.85	1.433	36.40	0.863	21.92	18.00	80.07	13.70	2.40
C0600-063-3000-M	0.600	15.24	0.063	1.60	3.000	76.20	1.558	39.57	0.927	23.55	18.00	80.07	12.50	2.19
C0600-063-3500-M	0.600	15.24	0.063	1.60	3.500	88.90	1.807	45.90	1.055	26.80	18.00	80.07	10.60	1.86
C0600-067-0625-M	0.600	15.24	0.067	1.70	0.620	15.75	0.360	9.14	0.300	7.62	21.00	93.41	80.00	14.00
C0600-067-0750-M	0.600	15.24	0.067	1.70	0.750	19.05	0.430	10.92	0.336	8.53	21.00	93.41	66.00	11.55

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0600-045-0625-S	0.287	7.29	5.00	22.23	14.99	2.62
C0600-045-0750-S	0.321	8.15	5.00	22.23	11.66	2.04
C0600-045-0880-S	0.380	9.65	5.00	22.23	10.00	1.75
C0600-045-1000-S	0.400	10.16	5.00	22.23	8.33	1.46
C0600-045-1250-S	0.500	12.70	5.00	22.23	6.66	1.17
C0600-045-1380-S	0.540	13.72	5.00	22.23	5.91	1.03
C0600-045-1500-S	0.575	14.61	5.00	22.23	5.42	0.95
C0600-045-1750-S	0.854	21.69	5.00	22.23	5.58	0.98
C0600-045-2000-S	0.966	24.54	5.00	22.23	4.83	0.85
C0600-045-2250-S	1.096	27.84	5.00	22.23	4.33	0.76
C0600-045-2500-S	1.196	30.38	5.00	22.23	3.83	0.67
C0600-045-2750-S	1.170	29.72	5.00	22.23	3.17	0.55
C0600-045-3000-S	1.272	32.31	5.00	22.23	2.92	0.51
C0600-045-3500-S	1.500	38.10	5.00	22.23	2.50	0.44
C0600-049-0620-S	0.365	9.26	5.95	26.49	23.32	4.08
C0600-049-0750-S	0.431	10.94	5.95	26.49	18.66	3.27
C0600-049-1000-S	0.559	14.19	5.95	26.49	13.50	2.36
C0600-049-1250-S	0.687	17.45	5.95	26.49	10.58	1.85
C0600-049-1500-S	0.813	20.64	5.95	26.49	8.66	1.52
C0600-049-1750-S	0.938	23.82	5.95	26.49	7.33	1.28
C0600-049-2000-S	1.072	27.22	5.95	26.49	6.41	1.12
C0600-049-2250-S	1.199	30.45	5.95	26.49	5.66	0.99
C0600-049-2500-S	1.328	33.73	5.95	26.49	5.08	0.89
C0600-049-2750-S	1.450	36.84	5.95	26.49	4.58	0.80
C0600-049-3000-S	1.570	39.89	5.95	26.49	4.17	0.73
C0600-055-0625-S	0.374	9.51	8.19	36.43	33.32	5.83
C0600-055-0750-S	0.452	11.48	8.19	36.43	27.49	4.81
C0600-055-0880-S	0.529	13.43	8.19	36.43	23.32	4.08
C0600-055-1000-S	0.590	15.00	8.19	36.43	19.99	3.50
C0600-055-1250-S	0.704	17.88	8.19	36.43	14.99	2.62
C0600-055-1500-S	0.845	21.45	8.19	36.43	12.50	2.19
C0600-055-1750-S	0.994	25.24	8.19	36.43	10.83	1.90
C0600-055-2000-S	1.130	28.70	8.19	36.43	9.41	1.65
C0600-055-2250-S	1.267	32.18	8.19	36.43	8.33	1.46
C0600-055-2500-S	1.395	35.44	8.19	36.43	7.41	1.30
C0600-055-2750-S	1.566	39.77	8.19	36.43	6.91	1.21
C0600-055-3000-S	1.706	43.34	8.19	36.43	6.33	1.11
C0600-059-0620-S	0.397	10.09	9.96	44.29	44.73	7.83
C0600-059-0750-S	0.470	11.94	9.96	44.29	35.57	6.22
C0600-059-0880-S	0.542	13.78	9.96	44.29	29.49	5.16
C0600-059-1000-S	0.609	15.48	9.96	44.29	25.49	4.46
C0600-059-1250-S	0.748	18.99	9.96	44.29	19.83	3.47
C0600-059-1500-S	0.887	22.53	9.96	44.29	16.24	2.84
C0600-059-1750-S	1.026	26.05	9.96	44.29	13.75	2.41
C0600-059-2000-S	1.164	29.57	9.96	44.29	11.91	2.08
C0600-059-2250-S	1.301	33.05	9.96	44.29	10.50	1.84
C0600-059-2500-S	1.442	36.63	9.96	44.29	9.41	1.65
C0600-059-2750-S	1.578	40.08	9.96	44.29	8.50	1.49
C0600-059-3000-S	1.728	43.90	9.96	44.29	7.83	1.37
C0600-063-0625-S	0.392	9.95	11.80	52.47	51.65	9.04
C0600-063-0750-S	0.472	12.00	11.80	52.47	42.48	7.43
C0600-063-0880-S	0.558	14.18	11.80	52.47	36.65	6.41
C0600-063-1000-S	0.627	15.93	11.80	52.47	31.65	5.54
C0600-063-1250-S	0.793	20.15	11.80	52.47	25.82	4.52
C0600-063-1500-S	0.910	23.11	11.80	52.47	19.99	3.50
C0600-063-1750-S	1.069	27.16	11.80	52.47	17.33	3.03
C0600-063-2000-S	1.213	30.82	11.80	52.47	14.99	2.62
C0600-063-2250-S	1.359	34.53	11.80	52.47	13.25	2.32
C0600-063-2500-S	1.503	38.17	11.80	52.47	11.83	2.07
C0600-063-2750-S	1.716	43.59	11.80	52.47	11.41	2.00
C0600-063-3000-S	1.867	47.42	11.80	52.47	10.41	1.82
C0600-063-3500-S	2.164	54.97	11.80	52.47	8.83	1.55
C0600-067-0625-S	0.408	10.36	14.14	62.88	66.64	11.66
C0600-067-0750-S	0.493	12.52	14.14	62.88	54.98	9.62

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0600-067-0880-M	0.600	15.24	0.067	1.70	0.880	22.35	0.460	11.68	0.401	10.19	21.00	93.41	50.00	8.75
C0600-067-1000-M	0.600	15.24	0.067	1.70	1.000	25.40	0.530	13.46	0.430	10.92	21.00	93.41	45.00	7.88
C0600-067-1250-M	0.600	15.24	0.067	1.70	1.250	31.75	0.665	16.89	0.505	12.83	21.00	93.41	36.00	6.30
C0600-067-1500-M	0.600	15.24	0.067	1.70	1.500	38.10	0.780	19.81	0.594	15.09	21.00	93.41	29.00	5.08
C0600-067-1750-M	0.600	15.24	0.067	1.70	1.750	44.45	0.830	21.08	0.715	18.16	21.00	93.41	23.00	4.03
C0600-067-2000-M	0.600	15.24	0.067	1.70	2.000	50.80	1.067	27.10	0.771	19.58	21.00	93.41	22.50	3.94
C0600-067-2250-M	0.600	15.24	0.067	1.70	2.250	57.15	1.189	30.20	0.847	21.51	21.00	93.41	19.80	3.47
C0600-067-2500-M	0.600	15.24	0.067	1.70	2.500	63.50	1.314	33.38	0.923	23.44	21.00	93.41	17.70	3.10
C0600-067-2750-M	0.600	15.24	0.067	1.70	2.750	69.85	1.496	38.00	0.966	24.54	21.00	93.41	16.70	2.92
C0600-067-3000-M	0.600	15.24	0.067	1.70	3.000	76.20	1.626	41.30	1.040	26.42	21.00	93.41	15.30	2.68
C0600-072-0620-M	0.600	15.24	0.072	1.83	0.620	15.75	0.410	10.41	0.381	9.68	24.00	106.76	114.50	20.04
C0600-072-0750-M	0.600	15.24	0.072	1.83	0.750	19.05	0.445	11.30	0.396	10.06	24.00	106.76	78.00	13.65
C0600-072-0880-M	0.600	15.24	0.072	1.83	0.880	22.35	0.527	13.39	0.433	11.00	24.00	106.76	68.00	11.90
C0600-072-1000-M	0.600	15.24	0.072	1.83	1.000	25.40	0.565	14.35	0.502	12.75	24.00	106.76	55.00	9.63
C0600-072-1250-M	0.600	15.24	0.072	1.83	1.250	31.75	0.717	18.21	0.581	14.76	24.00	106.76	45.00	7.88
C0600-072-1500-M	0.600	15.24	0.072	1.83	1.500	38.10	0.830	21.08	0.691	17.55	24.00	106.76	36.00	6.30
C0600-072-1750-M	0.600	15.24	0.072	1.83	1.750	44.45	0.950	24.13	0.801	20.35	24.00	106.76	30.00	5.25
C0600-072-2000-M	0.600	15.24	0.072	1.83	2.000	50.80	1.140	28.96	0.848	21.54	24.00	106.76	28.00	4.90
C0600-072-2250-M	0.600	15.24	0.072	1.83	2.250	57.15	1.323	33.60	0.946	24.03	24.00	106.76	25.90	4.53
C0600-072-2500-M	0.600	15.24	0.072	1.83	2.500	63.50	1.461	37.11	1.033	26.24	24.00	106.76	23.10	4.04
C0600-072-2750-M	0.600	15.24	0.072	1.83	2.750	69.85	1.601	40.67	1.119	28.42	24.00	106.76	20.90	3.66
C0600-072-3000-M	0.600	15.24	0.072	1.83	3.000	76.20	1.742	44.25	1.206	30.63	24.00	106.76	19.10	3.34
C0600-081-0620-M	0.600	15.24	0.081	2.06	0.620	15.75	0.466	11.84	0.412	10.46	32.69	145.41	212.60	37.21
C0600-081-0750-M	0.600	15.24	0.081	2.06	0.750	19.05	0.553	14.05	0.459	11.66	32.69	145.41	165.60	28.98
C0600-081-0880-M	0.600	15.24	0.081	2.06	0.880	22.35	0.639	16.23	0.507	12.88	32.69	145.41	135.60	23.73
C0600-081-1000-M	0.600	15.24	0.081	2.06	1.000	25.40	0.719	18.26	0.552	14.02	32.69	145.41	116.20	20.34
C0600-081-1250-M	0.600	15.24	0.081	2.06	1.250	31.75	0.885	22.48	0.644	16.36	32.69	145.41	89.50	15.66
C0600-081-1500-M	0.600	15.24	0.081	2.06	1.500	38.10	1.051	26.70	0.736	18.69	32.69	145.41	72.80	12.74
C0600-081-1750-M	0.600	15.24	0.081	2.06	1.750	44.45	1.217	30.91	0.828	21.03	32.69	145.41	61.30	10.73
C0600-081-2000-M	0.600	15.24	0.081	2.06	2.000	50.80	1.383	35.13	0.920	23.37	32.69	145.41	53.00	9.28
C0600-081-2250-M	0.600	15.24	0.081	2.06	2.250	57.15	1.549	39.34	1.012	25.70	32.69	145.41	46.60	8.16
C0600-081-2500-M	0.600	15.24	0.081	2.06	2.500	63.50	1.715	43.56	1.104	28.04	32.69	145.41	41.70	7.30
C0600-081-2750-M	0.600	15.24	0.081	2.06	2.750	69.85	1.881	47.78	1.196	30.38	32.69	145.41	37.60	6.58
C0600-081-3000-M	0.600	15.24	0.081	2.06	3.000	76.20	2.047	51.99	1.288	32.72	32.69	145.41	34.30	6.00
C0600-081-3250-M	0.600	15.24	0.081	2.06	3.250	82.55	2.213	56.21	1.380	35.05	32.69	145.41	31.50	5.51
C0600-081-3500-M	0.600	15.24	0.081	2.06	3.500	88.90	2.379	60.43	1.472	37.39	32.69	145.41	29.20	5.11
C0600-081-3750-M	0.600	15.24	0.081	2.06	3.750	95.25	2.545	64.64	1.564	39.73	32.69	145.41	27.10	4.74
C0600-081-4000-M	0.600	15.24	0.081	2.06	4.000	101.60	2.711	68.86	1.656	42.06	32.69	145.41	25.40	4.45
C0600-085-0620-M	0.600	15.24	0.085	2.16	0.620	15.75	0.477	12.12	0.433	11.00	37.62	167.34	262.50	45.94
C0600-085-0750-M	0.600	15.24	0.085	2.16	0.750	19.05	0.565	14.35	0.484	12.29	37.62	167.34	203.60	35.63
C0600-085-0880-M	0.600	15.24	0.085	2.16	0.880	22.35	0.654	16.61	0.536	13.61	37.62	167.34	166.40	29.12
C0600-085-1000-M	0.600	15.24	0.085	2.16	1.000	25.40	0.736	18.69	0.583	14.81	37.62	167.34	142.30	24.90
C0600-085-1250-M	0.600	15.24	0.085	2.16	1.250	31.75	0.906	23.01	0.682	17.32	37.62	167.34	109.40	19.15
C0600-085-1500-M	0.600	15.24	0.085	2.16	1.500	38.10	1.076	27.33	0.781	19.84	37.62	167.34	88.80	15.54
C0600-085-1750-M	0.600	15.24	0.085	2.16	1.750	44.45	1.247	31.67	0.880	22.35	37.62	167.34	74.80	13.09
C0600-085-2000-M	0.600	15.24	0.085	2.16	2.000	50.80	1.417	35.99	0.978	24.84	37.62	167.34	64.50	11.29
C0600-085-2250-M	0.600	15.24	0.085	2.16	2.250	57.15	1.588	40.34	1.077	27.36	37.62	167.34	56.80	9.94
C0600-085-2500-M	0.600	15.24	0.085	2.16	2.500	63.50	1.758	44.65	1.176	29.87	37.62	167.34	50.70	8.87
C0600-085-2750-M	0.600	15.24	0.085	2.16	2.750	69.85	1.928	48.97	1.275	32.39	37.62	167.34	45.80	8.02
C0600-085-3000-M	0.600	15.24	0.085	2.16	3.000	76.20	2.099	53.31	1.374	34.90	37.62	167.34	41.70	7.30
C0600-085-3250-M	0.600	15.24	0.085	2.16	3.250	82.55	2.269	57.63	1.473	37.41	37.62	167.34	38.30	6.70
C0600-085-3500-M	0.600	15.24	0.085	2.16	3.500	88.90	2.439	61.95	1.572	39.93	37.62	167.34	35.50	6.21
C0600-085-3750-M	0.600	15.24	0.085	2.16	3.750	95.25	2.610	66.29	1.670	42.42	37.62	167.34	33.00	5.78
C0600-085-4000-M	0.600	15.24	0.085	2.16	4.000	101.60	2.780	70.61	1.769	44.93	37.62	167.34	30.80	5.39
C0600-092-0750-M	0.600	15.24	0.092	2.34	0.750	19.05	0.591	15.01	0.524	13.31	46.46	206.66	291.50	51.01
C0600-092-0880-M	0.600	15.24	0.092	2.34	0.880	22.35	0.684	17.37	0.581	14.76	46.46	206.66	237.00	41.48
C0600-092-1000-M	0.600	15.24	0.092	2.34	1.000	25.40	0.770	19.56	0.633	16.08	46.46	206.66	202.20	35.39
C0600-092-1250-M	0.600	15.24	0.092	2.34	1.250	31.75	0.950	24.13	0.743	18.87	46.46	206.66	154.70	27.07
C0600-092-1500-M	0.600	15.24	0.092	2.34	1.500	38.10	1.129	28.68	0.853	21.67	46.46	206.66	125.40	21.95
C0600-092-1750-M	0.600	15.24	0.092	2.34	1.750	44.45	1.309	33.25	0.962	24.43	46.46	206.66	105.30	18.43
C0600-092-2000-M	0.600	15.24	0.092	2.34	2.000	50.80	1.488	37.80	1.072	27.23	46.46	206.66	90.80	15.89
C0600-092-2250-M	0.600	15.24	0.092	2.34	2.250	57.15	1.668	42.37	1.181	30.00	46.46	206.66	79.80	13.97
C0600-092-2500-M	0.600	15.24	0.092	2.34	2.500	63.50	1.848	46.94	1.291	32.79	46.46	206.66	71.20	12.46
C0600-092-2750-M	0.600	15.24	0.092	2.34	2.750	69.85	2.027	51.49	1.400	35.56	46.46	206.66	64.30	11.25

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0600-067-0880-S	0.541	13.73	14.14	62.88	41.65	7.29
C0600-067-1000-S	0.623	15.82	14.14	62.88	37.49	6.56
C0600-067-1250-S	0.779	19.78	14.14	62.88	29.99	5.25
C0600-067-1500-S	0.915	23.24	14.14	62.88	24.16	4.23
C0600-067-1750-S	1.012	25.71	14.14	62.88	19.16	3.35
C0600-067-2000-S	1.246	31.64	14.14	62.88	18.74	3.28
C0600-067-2250-S	1.393	35.38	14.14	62.88	16.49	2.89
C0600-067-2500-S	1.541	39.15	14.14	62.88	14.74	2.58
C0600-067-2750-S	1.734	44.04	14.14	62.88	13.91	2.43
C0600-067-3000-S	1.891	48.03	14.14	62.88	12.75	2.23
C0600-072-0620-S	0.410	10.41	19.99	88.93	95.38	16.69
C0600-072-0750-S	0.445	11.30	19.99	88.93	64.97	11.37
C0600-072-0880-S	0.527	13.39	19.99	88.93	56.64	9.91
C0600-072-1000-S	0.565	14.35	19.99	88.93	45.82	8.02
C0600-072-1250-S	0.717	18.21	19.99	88.93	37.49	6.56
C0600-072-1500-S	0.830	21.08	19.99	88.93	29.99	5.25
C0600-072-1750-S	0.950	24.13	19.99	88.93	24.99	4.37
C0600-072-2000-S	1.140	28.96	19.99	88.93	23.32	4.08
C0600-072-2250-S	1.323	33.60	19.99	88.93	21.58	3.78
C0600-072-2500-S	1.461	37.11	19.99	88.93	19.24	3.37
C0600-072-2750-S	1.601	40.67	19.99	88.93	17.41	3.05
C0600-072-3000-S	1.742	44.25	19.99	88.93	15.91	2.78
C0600-081-0620-S	0.466	11.84	27.23	121.13	177.10	30.99
C0600-081-0750-S	0.553	14.05	27.23	121.13	137.95	24.14
C0600-081-0880-S	0.639	16.23	27.23	121.13	112.96	19.77
C0600-081-1000-S	0.719	18.26	27.23	121.13	96.80	16.94
C0600-081-1250-S	0.885	22.48	27.23	121.13	74.55	13.05
C0600-081-1500-S	1.051	26.70	27.23	121.13	60.64	10.61
C0600-081-1750-S	1.217	30.91	27.23	121.13	51.06	8.94
C0600-081-2000-S	1.383	35.13	27.23	121.13	44.15	7.73
C0600-081-2250-S	1.549	39.34	27.23	121.13	38.82	6.79
C0600-081-2500-S	1.715	43.56	27.23	121.13	34.74	6.08
C0600-081-2750-S	1.881	47.78	27.23	121.13	31.32	5.48
C0600-081-3000-S	2.047	51.99	27.23	121.13	28.57	5.00
C0600-081-3250-S	2.213	56.21	27.23	121.13	26.24	4.59
C0600-081-3500-S	2.379	60.43	27.23	121.13	24.32	4.26
C0600-081-3750-S	2.545	64.64	27.23	121.13	22.57	3.95
C0600-081-4000-S	2.711	68.86	27.23	121.13	21.16	3.70
C0600-085-0620-S	0.477	12.12	31.34	139.40	218.66	38.27
C0600-085-0750-S	0.565	14.35	31.34	139.40	169.60	29.68
C0600-085-0880-S	0.654	16.61	31.34	139.40	138.61	24.26
C0600-085-1000-S	0.736	18.69	31.34	139.40	118.54	20.74
C0600-085-1250-S	0.906	23.01	31.34	139.40	91.13	15.95
C0600-085-1500-S	1.076	27.33	31.34	139.40	73.97	12.94
C0600-085-1750-S	1.247	31.67	31.34	139.40	62.31	10.90
C0600-085-2000-S	1.417	35.99	31.34	139.40	53.73	9.40
C0600-085-2250-S	1.588	40.34	31.34	139.40	47.31	8.28
C0600-085-2500-S	1.758	44.65	31.34	139.40	42.23	7.39
C0600-085-2750-S	1.928	48.97	31.34	139.40	38.15	6.68
C0600-085-3000-S	2.099	53.31	31.34	139.40	34.74	6.08
C0600-085-3250-S	2.269	57.63	31.34	139.40	31.90	5.58
C0600-085-3500-S	2.439	61.95	31.34	139.40	29.57	5.18
C0600-085-3750-S	2.610	66.29	31.34	139.40	27.49	4.81
C0600-085-4000-S	2.780	70.61	31.34	139.40	25.66	4.49
C0600-092-0750-S	0.591	15.01	38.70	172.15	242.82	42.49
C0600-092-0880-S	0.684	17.37	38.70	172.15	197.42	34.55
C0600-092-1000-S	0.770	19.56	38.70	172.15	168.43	29.48
C0600-092-1250-S	0.950	24.13	38.70	172.15	128.87	22.55
C0600-092-1500-S	1.129	28.68	38.70	172.15	104.46	18.28
C0600-092-1750-S	1.309	33.25	38.70	172.15	87.72	15.35
C0600-092-2000-S	1.488	37.80	38.70	172.15	75.64	13.24
C0600-092-2250-S	1.668	42.37	38.70	172.15	66.47	11.63
C0600-092-2500-S	1.848	46.94	38.70	172.15	59.31	10.38
C0600-092-2750-S	2.027	51.49	38.70	172.15	53.56	9.37

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0600-092-3000-M	0.600	15.24	0.092	2.34	3.000	76.20	2.207	56.06	1.510	38.35	46.46	206.66	58.60	10.26
C0600-092-3250-M	0.600	15.24	0.092	2.34	3.250	82.55	2.386	60.60	1.619	41.12	46.46	206.66	53.80	9.42
C0600-092-3500-M	0.600	15.24	0.092	2.34	3.500	88.90	2.566	65.18	1.729	43.92	46.46	206.66	49.70	8.70
C0600-092-3750-M	0.600	15.24	0.092	2.34	3.750	95.25	2.746	69.75	1.838	46.69	46.46	206.66	46.30	8.10
C0600-092-4000-M	0.600	15.24	0.092	2.34	4.000	101.60	2.925	74.30	1.948	49.48	46.46	206.66	43.20	7.56
C0600-098-0750-M	0.600	15.24	0.098	2.49	0.750	19.05	0.608	15.44	0.559	14.20	55.14	245.27	387.80	67.87
C0600-098-0880-M	0.600	15.24	0.098	2.49	0.880	22.35	0.704	17.88	0.621	15.77	55.14	245.27	314.10	54.97
C0600-098-1000-M	0.600	15.24	0.098	2.49	1.000	25.40	0.794	20.17	0.678	17.22	55.14	245.27	267.20	46.76
C0600-098-1250-M	0.600	15.24	0.098	2.49	1.250	31.75	0.980	24.89	0.798	20.27	55.14	245.27	203.90	35.68
C0600-098-1500-M	0.600	15.24	0.098	2.49	1.500	38.10	1.165	29.59	0.917	23.29	55.14	245.27	164.80	28.84
C0600-098-1750-M	0.600	15.24	0.098	2.49	1.750	44.45	1.351	34.32	1.037	26.34	55.14	245.27	138.30	24.20
C0600-098-2000-M	0.600	15.24	0.098	2.49	2.000	50.80	1.537	39.04	1.156	29.36	55.14	245.27	119.10	20.84
C0600-098-2250-M	0.600	15.24	0.098	2.49	2.250	57.15	1.723	43.76	1.276	32.41	55.14	245.27	104.60	18.31
C0600-098-2500-M	0.600	15.24	0.098	2.49	2.500	63.50	1.909	48.49	1.395	35.43	55.14	245.27	93.30	16.33
C0600-098-2750-M	0.600	15.24	0.098	2.49	2.750	69.85	2.095	53.21	1.515	38.48	55.14	245.27	84.10	14.72
C0600-098-3000-M	0.600	15.24	0.098	2.49	3.000	76.20	2.280	57.91	1.634	41.50	55.14	245.27	76.60	13.41
C0600-098-3250-M	0.600	15.24	0.098	2.49	3.250	82.55	2.466	62.64	1.754	44.55	55.14	245.27	70.40	12.32
C0600-098-3500-M	0.600	15.24	0.098	2.49	3.500	88.90	2.652	67.36	1.873	47.57	55.14	245.27	65.00	11.38
C0600-098-3750-M	0.600	15.24	0.098	2.49	3.750	95.25	2.838	72.09	1.993	50.62	55.14	245.27	60.50	10.59
C0600-098-4000-M	0.600	15.24	0.098	2.49	4.000	101.60	3.024	76.81	2.112	53.64	55.14	245.27	56.50	9.89
C0625-120-0875-M	**0.625**	**15.88**	**0.120**	**3.05**	**0.875**	**22.23**	**0.719**	**18.25**	**0.692**	**17.57**	**102.21**	**454.63**	**653.47**	**114.36**
C0625-120-1000-M	**0.625**	**15.88**	**0.120**	**3.05**	**1.000**	**25.40**	**0.813**	**20.65**	**0.786**	**19.97**	**102.21**	**454.63**	**545.99**	**95.55**
C0625-120-1250-M	**0.625**	**15.88**	**0.120**	**3.05**	**1.250**	**31.75**	**1.001**	**25.43**	**0.962**	**24.43**	**102.21**	**454.63**	**410.85**	**71.90**
C0625-120-1500-M	**0.625**	**15.88**	**0.120**	**3.05**	**1.500**	**38.10**	**1.190**	**30.22**	**1.138**	**28.89**	**102.21**	**454.63**	**329.33**	**57.63**
C0625-120-1750-M	**0.625**	**15.88**	**0.120**	**3.05**	**1.750**	**44.45**	**1.378**	**35.00**	**1.313**	**33.36**	**102.21**	**454.63**	**274.80**	**48.09**
C0625-120-2000-M	**0.625**	**15.88**	**0.120**	**3.05**	**2.000**	**50.80**	**1.567**	**39.79**	**1.489**	**37.82**	**102.21**	**454.63**	**235.77**	**41.26**
C0625-120-2250-M	**0.625**	**15.88**	**0.120**	**3.05**	**2.250**	**57.15**	**1.755**	**44.57**	**1.665**	**42.28**	**102.21**	**454.63**	**206.44**	**36.13**
C0625-120-2500-M	**0.625**	**15.88**	**0.120**	**3.05**	**2.500**	**63.50**	**1.943**	**49.36**	**1.840**	**46.74**	**102.21**	**454.63**	**183.61**	**32.13**
C0625-120-2750-M	**0.625**	**15.88**	**0.120**	**3.05**	**2.750**	**69.85**	**2.132**	**54.15**	**2.016**	**51.21**	**102.21**	**454.63**	**165.32**	**28.93**
C0625-120-3000-M	**0.625**	**15.88**	**0.120**	**3.05**	**3.000**	**76.20**	**2.320**	**58.93**	**2.192**	**55.67**	**102.21**	**454.63**	**150.35**	**26.31**
C0625-120-3250-M	**0.625**	**15.88**	**0.120**	**3.05**	**3.250**	**82.55**	**2.509**	**63.72**	**2.367**	**60.13**	**102.21**	**454.63**	**137.86**	**24.13**
C0625-120-3500-M	**0.625**	**15.88**	**0.120**	**3.05**	**3.500**	**88.90**	**2.697**	**68.51**	**2.543**	**64.59**	**102.21**	**454.63**	**127.29**	**22.28**
C0625-120-4000-M	**0.625**	**15.88**	**0.120**	**3.05**	**4.000**	**101.60**	**3.074**	**78.08**	**2.895**	**73.52**	**102.21**	**454.63**	**110.36**	**19.31**
C0646-051-1250-M	**0.646**	**16.41**	**0.051**	**1.30**	**1.250**	**31.75**	**0.451**	**11.45**	**0.325**	**8.26**	**9.07**	**40.32**	**11.34**	**1.98**
C0646-051-1375-M	**0.646**	**16.41**	**0.051**	**1.30**	**1.375**	**34.93**	**0.489**	**12.41**	**0.349**	**8.86**	**9.07**	**40.32**	**10.23**	**1.79**
C0646-051-1500-M	**0.646**	**16.41**	**0.051**	**1.30**	**1.500**	**38.10**	**0.527**	**13.38**	**0.373**	**9.46**	**9.07**	**40.32**	**9.31**	**1.63**
C0646-051-1625-M	**0.646**	**16.41**	**0.051**	**1.30**	**1.625**	**41.28**	**0.565**	**14.34**	**0.396**	**10.07**	**9.07**	**40.32**	**8.55**	**1.50**
C0646-051-1750-M	**0.646**	**16.41**	**0.051**	**1.30**	**1.750**	**44.45**	**0.603**	**15.30**	**0.420**	**10.67**	**9.07**	**40.32**	**7.90**	**1.38**
C0646-051-1875-M	**0.646**	**16.41**	**0.051**	**1.30**	**1.875**	**47.63**	**0.641**	**16.27**	**0.444**	**11.27**	**9.07**	**40.32**	**7.34**	**1.29**
C0646-051-2000-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.000**	**50.80**	**0.678**	**17.23**	**0.468**	**11.87**	**9.07**	**40.32**	**6.86**	**1.20**
C0646-051-2125-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.125**	**53.98**	**0.716**	**18.20**	**0.491**	**12.48**	**9.07**	**40.32**	**6.44**	**1.13**
C0646-051-2250-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.250**	**57.15**	**0.754**	**19.16**	**0.515**	**13.08**	**9.07**	**40.32**	**6.06**	**1.06**
C0646-051-2375-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.375**	**60.33**	**0.792**	**20.13**	**0.539**	**13.68**	**9.07**	**40.32**	**5.73**	**1.00**
C0646-051-2500-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.500**	**63.50**	**0.830**	**21.09**	**0.562**	**14.29**	**9.07**	**40.32**	**5.43**	**0.95**
C0646-051-2625-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.625**	**66.68**	**0.868**	**22.05**	**0.586**	**14.89**	**9.07**	**40.32**	**5.16**	**0.90**
C0646-051-2750-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.750**	**69.85**	**0.906**	**23.02**	**0.610**	**15.49**	**9.07**	**40.32**	**4.92**	**0.86**
C0646-051-2875-M	**0.646**	**16.41**	**0.051**	**1.30**	**2.875**	**73.03**	**0.944**	**23.98**	**0.634**	**16.10**	**9.07**	**40.32**	**4.70**	**0.82**
C0646-051-3000-M	**0.646**	**16.41**	**0.051**	**1.30**	**3.000**	**76.20**	**0.982**	**24.95**	**0.657**	**16.70**	**9.07**	**40.32**	**4.49**	**0.79**
C0646-051-3250-M	**0.646**	**16.41**	**0.051**	**1.30**	**3.250**	**82.55**	**1.058**	**26.88**	**0.705**	**17.90**	**9.07**	**40.32**	**4.14**	**0.72**
C0646-051-3500-M	**0.646**	**16.41**	**0.051**	**1.30**	**3.500**	**88.90**	**1.134**	**28.80**	**0.752**	**19.11**	**9.07**	**40.32**	**3.83**	**0.67**
C0646-051-3750-M	**0.646**	**16.41**	**0.051**	**1.30**	**3.750**	**95.25**	**1.210**	**30.73**	**0.800**	**20.32**	**9.07**	**40.32**	**3.57**	**0.62**
C0646-051-4000-M	**0.646**	**16.41**	**0.051**	**1.30**	**4.000**	**101.60**	**1.286**	**32.66**	**0.847**	**21.52**	**9.07**	**40.32**	**3.34**	**0.58**
C0646-051-4250-M	**0.646**	**16.41**	**0.051**	**1.30**	**4.250**	**107.95**	**1.362**	**34.59**	**0.895**	**22.73**	**9.07**	**40.32**	**3.14**	**0.55**
C0646-051-4500-M	**0.646**	**16.41**	**0.051**	**1.30**	**4.500**	**114.30**	**1.438**	**36.52**	**0.942**	**23.93**	**9.07**	**40.32**	**2.96**	**0.52**
C0646-051-4750-M	**0.646**	**16.41**	**0.051**	**1.30**	**4.750**	**120.65**	**1.514**	**38.45**	**0.990**	**25.14**	**9.07**	**40.32**	**2.80**	**0.49**
C0646-051-5000-M	**0.646**	**16.41**	**0.051**	**1.30**	**5.000**	**127.00**	**1.590**	**40.38**	**1.037**	**26.34**	**9.07**	**40.32**	**2.66**	**0.47**
C0646-051-5250-M	**0.646**	**16.41**	**0.051**	**1.30**	**5.250**	**133.35**	**1.666**	**42.31**	**1.085**	**27.55**	**9.07**	**40.32**	**2.53**	**0.44**
C0646-051-5500-M	**0.646**	**16.41**	**0.051**	**1.30**	**5.500**	**139.70**	**1.741**	**44.23**	**1.132**	**28.76**	**9.07**	**40.32**	**2.41**	**0.42**
C0646-051-5750-M	**0.646**	**16.41**	**0.051**	**1.30**	**5.750**	**146.05**	**1.817**	**46.16**	**1.180**	**29.96**	**9.07**	**40.32**	**2.31**	**0.40**
C0646-051-6000-M	**0.646**	**16.41**	**0.051**	**1.30**	**6.000**	**152.40**	**1.893**	**48.09**	**1.227**	**31.17**	**9.07**	**40.32**	**2.21**	**0.39**
C0646-051-6250-M	**0.646**	**16.41**	**0.051**	**1.30**	**6.250**	**158.75**	**1.969**	**50.02**	**1.275**	**32.37**	**9.07**	**40.32**	**2.12**	**0.37**
C0646-051-6500-M	**0.646**	**16.41**	**0.051**	**1.30**	**6.500**	**165.10**	**2.045**	**51.95**	**1.322**	**33.58**	**9.07**	**40.32**	**2.04**	**0.36**
C0646-051-6750-M	**0.646**	**16.41**	**0.051**	**1.30**	**6.750**	**171.45**	**2.121**	**53.88**	**1.370**	**34.79**	**9.07**	**40.32**	**1.96**	**0.34**
C0646-051-7000-M	**0.646**	**16.41**	**0.051**	**1.30**	**7.000**	**177.80**	**2.197**	**55.81**	**1.417**	**35.99**	**9.07**	**40.32**	**1.89**	**0.33**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0600-092-3000-S	2.207	56.06	38.70	172.15	48.81	8.54
C0600-092-3250-S	2.386	60.60	38.70	172.15	44.82	7.84
C0600-092-3500-S	2.566	65.18	38.70	172.15	41.40	7.25
C0600-092-3750-S	2.746	69.75	38.70	172.15	38.57	6.75
C0600-092-4000-S	2.925	74.30	38.70	172.15	35.99	6.30
C0600-098-0750-S	0.628	15.96	39.36	175.07	323.04	56.53
C0600-098-0880-S	0.730	18.53	39.36	175.07	261.65	45.79
C0600-098-1000-S	0.823	20.91	39.36	175.07	222.58	38.95
C0600-098-1250-S	1.018	25.86	39.36	175.07	169.85	29.72
C0600-098-1500-S	1.213	30.82	39.36	175.07	137.28	24.02
C0600-098-1750-S	1.408	35.77	39.36	175.07	115.20	20.16
C0600-098-2000-S	1.603	40.72	39.36	175.07	99.21	17.36
C0600-098-2250-S	1.798	45.68	39.36	175.07	87.13	15.25
C0600-098-2500-S	1.994	50.64	39.36	175.07	77.72	13.60
C0600-098-2750-S	2.188	55.58	39.36	175.07	70.06	12.26
C0600-098-3000-S	2.383	60.53	39.36	175.07	63.81	11.17
C0600-098-3250-S	2.579	65.50	39.36	175.07	58.64	10.26
C0600-098-3500-S	2.773	70.44	39.36	175.07	54.15	9.48
C0600-098-3750-S	2.969	75.41	39.36	175.07	50.40	8.82
C0600-098-4000-S	3.164	80.36	39.36	175.07	47.07	8.24
C0625-120-0875-S	**0.737**	**18.73**	**74.91**	**333.21**	**544.34**	**95.26**
C0625-120-1000-S	**0.835**	**21.22**	**74.91**	**333.21**	**454.81**	**79.59**
C0625-120-1250-S	**1.031**	**26.19**	**74.91**	**333.21**	**342.24**	**59.89**
C0625-120-1500-S	**1.227**	**31.16**	**74.91**	**333.21**	**274.33**	**48.01**
C0625-120-1750-S	**1.423**	**36.14**	**74.91**	**333.21**	**228.91**	**40.06**
C0625-120-2000-S	**1.619**	**41.11**	**74.91**	**333.21**	**196.40**	**34.37**
C0625-120-2250-S	**1.814**	**46.09**	**74.91**	**333.21**	**171.97**	**30.09**
C0625-120-2500-S	**2.010**	**51.06**	**74.91**	**333.21**	**152.95**	**26.77**
C0625-120-2750-S	**2.206**	**56.03**	**74.91**	**333.21**	**137.71**	**24.10**
C0625-120-3000-S	**2.402**	**61.01**	**74.91**	**333.21**	**125.24**	**21.92**
C0625-120-3250-S	**2.598**	**65.98**	**74.91**	**333.21**	**114.84**	**20.10**
C0625-120-3500-S	**2.794**	**70.96**	**74.91**	**333.21**	**106.03**	**18.56**
C0625-120-4000-S	**3.185**	**80.90**	**74.91**	**333.21**	**91.93**	**16.09**
C0646-051-1250-S	**0.519**	**13.17**	**7.21**	**32.08**	**9.86**	**1.73**
C0646-051-1375-S	**0.564**	**14.32**	**7.21**	**32.08**	**8.89**	**1.56**
C0646-051-1500-S	**0.609**	**15.48**	**7.21**	**32.08**	**8.10**	**1.42**
C0646-051-1625-S	**0.655**	**16.63**	**7.21**	**32.08**	**7.43**	**1.30**
C0646-051-1750-S	**0.700**	**17.78**	**7.21**	**32.08**	**6.87**	**1.20**
C0646-051-1875-S	**0.745**	**18.93**	**7.21**	**32.08**	**6.39**	**1.12**
C0646-051-2000-S	**0.791**	**20.08**	**7.21**	**32.08**	**5.97**	**1.04**
C0646-051-2125-S	**0.836**	**21.24**	**7.21**	**32.08**	**5.60**	**0.98**
C0646-051-2250-S	**0.881**	**22.39**	**7.21**	**32.08**	**5.27**	**0.92**
C0646-051-2375-S	**0.927**	**23.54**	**7.21**	**32.08**	**4.98**	**0.87**
C0646-051-2500-S	**0.972**	**24.69**	**7.21**	**32.08**	**4.72**	**0.83**
C0646-051-2625-S	**1.018**	**25.85**	**7.21**	**32.08**	**4.49**	**0.79**
C0646-051-2750-S	**1.063**	**27.00**	**7.21**	**32.08**	**4.28**	**0.75**
C0646-051-2875-S	**1.108**	**28.15**	**7.21**	**32.08**	**4.08**	**0.71**
C0646-051-3000-S	**1.154**	**29.30**	**7.21**	**32.08**	**3.91**	**0.68**
C0646-051-3250-S	**1.244**	**31.61**	**7.21**	**32.08**	**3.60**	**0.63**
C0646-051-3500-S	**1.335**	**33.91**	**7.21**	**32.08**	**3.33**	**0.58**
C0646-051-3750-S	**1.426**	**36.21**	**7.21**	**32.08**	**3.10**	**0.54**
C0646-051-4000-S	**1.517**	**38.52**	**7.21**	**32.08**	**2.90**	**0.51**
C0646-051-4250-S	**1.607**	**40.82**	**7.21**	**32.08**	**2.73**	**0.48**
C0646-051-4500-S	**1.698**	**43.13**	**7.21**	**32.08**	**2.57**	**0.45**
C0646-051-4750-S	**1.789**	**45.43**	**7.21**	**32.08**	**2.44**	**0.43**
C0646-051-5000-S	**1.879**	**47.74**	**7.21**	**32.08**	**2.31**	**0.40**
C0646-051-5250-S	**1.970**	**50.04**	**7.21**	**32.08**	**2.20**	**0.38**
C0646-051-5500-S	**2.061**	**52.34**	**7.21**	**32.08**	**2.10**	**0.37**
C0646-051-5750-S	**2.152**	**54.65**	**7.21**	**32.08**	**2.00**	**0.35**
C0646-051-6000-S	**2.242**	**56.95**	**7.21**	**32.08**	**1.92**	**0.34**
C0646-051-6250-S	**2.333**	**59.26**	**7.21**	**32.08**	**1.84**	**0.32**
C0646-051-6500-S	**2.424**	**61.56**	**7.21**	**32.08**	**1.77**	**0.31**
C0646-051-6750-S	**2.514**	**63.87**	**7.21**	**32.08**	**1.70**	**0.30**
C0646-051-7000-S	**2.605**	**66.17**	**7.21**	**32.08**	**1.64**	**0.29**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0646-051-7500-M	0.646	16.41	0.051	1.30	7.500	190.50	2.349	59.66	1.512	38.40	9.07	40.32	1.76	0.31
C0646-051-8000-M	0.646	16.41	0.051	1.30	8.000	203.20	2.501	63.52	1.607	40.81	9.07	40.32	1.65	0.29
C0646-051-8500-M	0.646	16.41	0.051	1.30	8.500	215.90	2.653	67.38	1.702	43.23	9.07	40.32	1.55	0.27
C0646-051-9000-M	0.646	16.41	0.051	1.30	9.000	228.60	2.805	71.23	1.797	45.64	9.07	40.32	1.46	0.26
C0646-051-9500-M	0.646	16.41	0.051	1.30	9.500	241.30	2.956	75.09	1.892	48.05	9.07	40.32	1.39	0.24
C0646-055-1250-M	0.646	16.41	0.055	1.40	1.250	31.75	0.485	12.31	0.367	9.33	11.19	49.78	14.62	2.56
C0646-055-1375-M	0.646	16.41	0.055	1.40	1.375	34.93	0.526	13.36	0.395	10.03	11.19	49.78	13.18	2.31
C0646-055-1500-M	0.646	16.41	0.055	1.40	1.500	38.10	0.567	14.40	0.422	10.73	11.19	49.78	11.99	2.10
C0646-055-1625-M	0.646	16.41	0.055	1.40	1.625	41.28	0.608	15.44	0.450	11.43	11.19	49.78	11.00	1.93
C0646-055-1750-M	0.646	16.41	0.055	1.40	1.750	44.45	0.649	16.49	0.478	12.13	11.19	49.78	10.17	1.78
C0646-055-1875-M	0.646	16.41	0.055	1.40	1.875	47.63	0.690	17.53	0.505	12.83	11.19	49.78	9.45	1.65
C0646-055-2000-M	0.646	16.41	0.055	1.40	2.000	50.80	0.731	18.57	0.533	13.53	11.19	49.78	8.82	1.54
C0646-055-2125-M	0.646	16.41	0.055	1.40	2.125	53.98	0.772	19.62	0.560	14.23	11.19	49.78	8.27	1.45
C0646-055-2250-M	0.646	16.41	0.055	1.40	2.250	57.15	0.813	20.66	0.588	14.93	11.19	49.78	7.79	1.36
C0646-055-2375-M	0.646	16.41	0.055	1.40	2.375	60.33	0.854	21.70	0.615	15.63	11.19	49.78	7.36	1.29
C0646-055-2500-M	0.646	16.41	0.055	1.40	2.500	63.50	0.896	22.75	0.643	16.33	11.19	49.78	6.98	1.22
C0646-055-2625-M	0.646	16.41	0.055	1.40	2.625	66.68	0.937	23.79	0.671	17.03	11.19	49.78	6.63	1.16
C0646-055-2750-M	0.646	16.41	0.055	1.40	2.750	69.85	0.978	24.84	0.698	17.74	11.19	49.78	6.32	1.11
C0646-055-2875-M	0.646	16.41	0.055	1.40	2.875	73.03	1.019	25.88	0.726	18.44	11.19	49.78	6.03	1.06
C0646-055-3000-M	0.646	16.41	0.055	1.40	3.000	76.20	1.060	26.92	0.753	19.14	11.19	49.78	5.77	1.01
C0646-055-3250-M	0.646	16.41	0.055	1.40	3.250	82.55	1.142	29.01	0.809	20.54	11.19	49.78	5.31	0.93
C0646-055-3500-M	0.646	16.41	0.055	1.40	3.500	88.90	1.224	31.10	0.864	21.94	11.19	49.78	4.92	0.86
C0646-055-3750-M	0.646	16.41	0.055	1.40	3.750	95.25	1.306	33.18	0.919	23.34	11.19	49.78	4.58	0.80
C0646-055-4000-M	0.646	16.41	0.055	1.40	4.000	101.60	1.389	35.27	0.974	24.74	11.19	49.78	4.29	0.75
C0646-055-4250-M	0.646	16.41	0.055	1.40	4.250	107.95	1.471	37.36	1.029	26.15	11.19	49.78	4.03	0.70
C0646-055-4500-M	0.646	16.41	0.055	1.40	4.500	114.30	1.553	39.45	1.085	27.55	11.19	49.78	3.80	0.66
C0646-055-4750-M	0.646	16.41	0.055	1.40	4.750	120.65	1.635	41.53	1.140	28.95	11.19	49.78	3.59	0.63
C0646-055-5000-M	0.646	16.41	0.055	1.40	5.000	127.00	1.717	43.62	1.195	30.35	11.19	49.78	3.41	0.60
C0646-055-5250-M	0.646	16.41	0.055	1.40	5.250	133.35	1.799	45.71	1.250	31.75	11.19	49.78	3.24	0.57
C0646-055-5500-M	0.646	16.41	0.055	1.40	5.500	139.70	1.882	47.79	1.305	33.15	11.19	49.78	3.09	0.54
C0646-055-5750-M	0.646	16.41	0.055	1.40	5.750	146.05	1.964	49.88	1.360	34.56	11.19	49.78	2.96	0.52
C0646-055-6000-M	0.646	16.41	0.055	1.40	6.000	152.40	2.046	51.97	1.416	35.96	11.19	49.78	2.83	0.50
C0646-055-6250-M	0.646	16.41	0.055	1.40	6.250	158.75	2.128	54.06	1.471	37.36	11.19	49.78	2.72	0.48
C0646-055-6500-M	0.646	16.41	0.055	1.40	6.500	165.10	2.210	56.14	1.526	38.76	11.19	49.78	2.61	0.46
C0646-055-6750-M	0.646	16.41	0.055	1.40	6.750	171.45	2.293	58.23	1.581	40.16	11.19	49.78	2.51	0.44
C0646-055-7000-M	0.646	16.41	0.055	1.40	7.000	177.80	2.375	60.32	1.636	41.56	11.19	49.78	2.42	0.42
C0646-055-7500-M	0.646	16.41	0.055	1.40	7.500	190.50	2.539	64.49	1.747	44.37	11.19	49.78	2.26	0.39
C0646-055-8000-M	0.646	16.41	0.055	1.40	8.000	203.20	2.703	68.67	1.857	47.17	11.19	49.78	2.11	0.37
C0646-055-8500-M	0.646	16.41	0.055	1.40	8.500	215.90	2.868	72.84	1.968	49.98	11.19	49.78	1.99	0.35
C0646-055-9000-M	0.646	16.41	0.055	1.40	9.000	228.60	3.032	77.02	2.078	52.78	11.19	49.78	1.88	0.33
C0646-055-9500-M	0.646	16.41	0.055	1.40	9.500	241.30	3.196	81.19	2.188	55.58	11.19	49.78	1.78	0.31
C0646-059-1125-M	0.646	16.41	0.059	1.50	1.125	28.58	0.475	12.07	0.379	9.62	13.61	60.53	20.94	3.67
C0646-059-1250-M	0.646	16.41	0.059	1.50	1.250	31.75	0.520	13.20	0.410	10.42	13.61	60.53	18.63	3.26
C0646-059-1375-M	0.646	16.41	0.059	1.50	1.375	34.93	0.564	14.32	0.442	11.22	13.61	60.53	16.78	2.94
C0646-059-1500-M	0.646	16.41	0.059	1.50	1.500	38.10	0.608	15.45	0.473	12.03	13.61	60.53	15.26	2.67
C0646-059-1625-M	0.646	16.41	0.059	1.50	1.625	41.28	0.653	16.58	0.505	12.83	13.61	60.53	14.00	2.45
C0646-059-1750-M	0.646	16.41	0.059	1.50	1.750	44.45	0.697	17.70	0.537	13.63	13.61	60.53	12.92	2.26
C0646-059-1875-M	0.646	16.41	0.059	1.50	1.875	47.63	0.741	18.83	0.568	14.44	13.61	60.53	12.00	2.10
C0646-059-2000-M	0.646	16.41	0.059	1.50	2.000	50.80	0.786	19.96	0.600	15.24	13.61	60.53	11.21	1.96
C0646-059-2125-M	0.646	16.41	0.059	1.50	2.125	53.98	0.830	21.08	0.632	16.04	13.61	60.53	10.51	1.84
C0646-059-2250-M	0.646	16.41	0.059	1.50	2.250	57.15	0.874	22.21	0.663	16.85	13.61	60.53	9.89	1.73
C0646-059-2375-M	0.646	16.41	0.059	1.50	2.375	60.33	0.919	23.34	0.695	17.65	13.61	60.53	9.34	1.64
C0646-059-2500-M	0.646	16.41	0.059	1.50	2.500	63.50	0.963	24.46	0.726	18.45	13.61	60.53	8.85	1.55
C0646-059-2625-M	0.646	16.41	0.059	1.50	2.625	66.68	1.007	25.59	0.758	19.26	13.61	60.53	8.41	1.47
C0646-059-2750-M	0.646	16.41	0.059	1.50	2.750	69.85	1.052	26.72	0.790	20.06	13.61	60.53	8.01	1.40
C0646-059-2875-M	0.646	16.41	0.059	1.50	2.875	73.03	1.096	27.84	0.821	20.86	13.61	60.53	7.65	1.34
C0646-059-3000-M	0.646	16.41	0.059	1.50	3.000	76.20	1.140	28.97	0.853	21.66	13.61	60.53	7.32	1.28
C0646-059-3250-M	0.646	16.41	0.059	1.50	3.250	82.55	1.229	31.22	0.916	23.27	13.61	60.53	6.73	1.18
C0646-059-3500-M	0.646	16.41	0.059	1.50	3.500	88.90	1.318	33.47	0.979	24.88	13.61	60.53	6.24	1.09
C0646-059-3750-M	0.646	16.41	0.059	1.50	3.750	95.25	1.407	35.73	1.043	26.48	13.61	60.53	5.81	1.02
C0646-059-4000-M	0.646	16.41	0.059	1.50	4.000	101.60	1.495	37.98	1.106	28.09	13.61	60.53	5.43	0.95
C0646-059-4250-M	0.646	16.41	0.059	1.50	4.250	107.95	1.584	40.23	1.169	29.70	13.61	60.53	5.10	0.89
C0646-059-4500-M	0.646	16.41	0.059	1.50	4.500	114.30	1.673	42.49	1.232	31.30	13.61	60.53	4.81	0.84
C0646-059-4750-M	0.646	16.41	0.059	1.50	4.750	120.65	1.761	44.74	1.296	32.91	13.61	60.53	4.55	0.80

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0646-051-7500-S	2.787	70.78	7.21	32.08	1.53	0.27
C0646-051-8000-S	2.968	75.39	7.21	32.08	1.43	0.25
C0646-051-8500-S	3.149	80.00	7.21	32.08	1.35	0.24
C0646-051-9000-S	3.331	84.60	7.21	32.08	1.27	0.22
C0646-051-9500-S	3.512	89.21	7.21	32.08	1.21	0.21
C0646-055-1250-S	0.550	13.97	8.90	39.59	12.72	2.23
C0646-055-1375-S	0.598	15.20	8.90	39.59	11.46	2.01
C0646-055-1500-S	0.647	16.43	8.90	39.59	10.43	1.83
C0646-055-1625-S	0.695	17.65	8.90	39.59	9.57	1.67
C0646-055-1750-S	0.743	18.88	8.90	39.59	8.84	1.55
C0646-055-1875-S	0.792	20.10	8.90	39.59	8.21	1.44
C0646-055-2000-S	0.840	21.33	8.90	39.59	7.67	1.34
C0646-055-2125-S	0.888	22.56	8.90	39.59	7.19	1.26
C0646-055-2250-S	0.936	23.78	8.90	39.59	6.77	1.19
C0646-055-2375-S	0.985	25.01	8.90	39.59	6.40	1.12
C0646-055-2500-S	1.033	26.23	8.90	39.59	6.07	1.06
C0646-055-2625-S	1.081	27.46	8.90	39.59	5.76	1.01
C0646-055-2750-S	1.129	28.69	8.90	39.59	5.49	0.96
C0646-055-2875-S	1.178	29.91	8.90	39.59	5.24	0.92
C0646-055-3000-S	1.226	31.14	8.90	39.59	5.02	0.88
C0646-055-3250-S	1.322	33.59	8.90	39.59	4.62	0.81
C0646-055-3500-S	1.419	36.04	8.90	39.59	4.28	0.75
C0646-055-3750-S	1.515	38.49	8.90	39.59	3.98	0.70
C0646-055-4000-S	1.612	40.95	8.90	39.59	3.73	0.65
C0646-055-4250-S	1.709	43.40	8.90	39.59	3.50	0.61
C0646-055-4500-S	1.805	45.85	8.90	39.59	3.30	0.58
C0646-055-4750-S	1.902	48.30	8.90	39.59	3.12	0.55
C0646-055-5000-S	1.998	50.75	8.90	39.59	2.97	0.52
C0646-055-5250-S	2.095	53.20	8.90	39.59	2.82	0.49
C0646-055-5500-S	2.191	55.66	8.90	39.59	2.69	0.47
C0646-055-5750-S	2.288	58.11	8.90	39.59	2.57	0.45
C0646-055-6000-S	2.384	60.56	8.90	39.59	2.46	0.43
C0646-055-6250-S	2.481	63.01	8.90	39.59	2.36	0.41
C0646-055-6500-S	2.577	65.46	8.90	39.59	2.27	0.40
C0646-055-6750-S	2.674	67.92	8.90	39.59	2.18	0.38
C0646-055-7000-S	2.770	70.37	8.90	39.59	2.10	0.37
C0646-055-7500-S	2.963	75.27	8.90	39.59	1.96	0.34
C0646-055-8000-S	3.156	80.18	8.90	39.59	1.84	0.32
C0646-055-8500-S	3.350	85.08	8.90	39.59	1.73	0.30
C0646-055-9000-S	3.543	89.98	8.90	39.59	1.63	0.29
C0646-055-9500-S	3.736	94.89	8.90	39.59	1.54	0.27
C0646-059-1125-S	0.531	13.50	10.81	48.09	18.21	3.19
C0646-059-1250-S	0.583	14.80	10.81	48.09	16.20	2.84
C0646-059-1375-S	0.634	16.11	10.81	48.09	14.59	2.55
C0646-059-1500-S	0.685	17.41	10.81	48.09	13.27	2.32
C0646-059-1625-S	0.737	18.71	10.81	48.09	12.17	2.13
C0646-059-1750-S	0.788	20.02	10.81	48.09	11.24	1.97
C0646-059-1875-S	0.839	21.32	10.81	48.09	10.44	1.83
C0646-059-2000-S	0.891	22.62	10.81	48.09	9.75	1.71
C0646-059-2125-S	0.942	23.93	10.81	48.09	9.14	1.60
C0646-059-2250-S	0.993	25.23	10.81	48.09	8.60	1.51
C0646-059-2375-S	1.045	26.53	10.81	48.09	8.13	1.42
C0646-059-2500-S	1.096	27.84	10.81	48.09	7.70	1.35
C0646-059-2625-S	1.147	29.14	10.81	48.09	7.32	1.28
C0646-059-2750-S	1.199	30.44	10.81	48.09	6.97	1.22
C0646-059-2875-S	1.250	31.75	10.81	48.09	6.65	1.16
C0646-059-3000-S	1.301	33.05	10.81	48.09	6.36	1.11
C0646-059-3250-S	1.404	35.66	10.81	48.09	5.86	1.02
C0646-059-3500-S	1.507	38.27	10.81	48.09	5.42	0.95
C0646-059-3750-S	1.609	40.87	10.81	48.09	5.05	0.88
C0646-059-4000-S	1.712	43.48	10.81	48.09	4.72	0.83
C0646-059-4250-S	1.814	46.09	10.81	48.09	4.44	0.78
C0646-059-4500-S	1.917	48.69	10.81	48.09	4.19	0.73
C0646-059-4750-S	2.020	51.30	10.81	48.09	3.96	0.69

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0646-059-5000-M	0.646	16.41	0.059	1.50	5.000	127.00	1.850	46.99	1.359	34.52	13.61	60.53	4.32	0.76
C0646-059-5250-M	0.646	16.41	0.059	1.50	5.250	133.35	1.939	49.24	1.422	36.12	13.61	60.53	4.11	0.72
C0646-059-5500-M	0.646	16.41	0.059	1.50	5.500	139.70	2.027	51.50	1.485	37.73	13.61	60.53	3.92	0.69
C0646-059-5750-M	0.646	16.41	0.059	1.50	5.750	146.05	2.116	53.75	1.549	39.33	13.61	60.53	3.75	0.66
C0646-059-6000-M	0.646	16.41	0.059	1.50	6.000	152.40	2.205	56.00	1.612	40.94	13.61	60.53	3.59	0.63
C0646-059-6250-M	0.646	16.41	0.059	1.50	6.250	158.75	2.294	58.26	1.675	42.55	13.61	60.53	3.44	0.60
C0646-059-6500-M	0.646	16.41	0.059	1.50	6.500	165.10	2.382	60.51	1.738	44.15	13.61	60.53	3.31	0.58
C0646-059-6750-M	0.646	16.41	0.059	1.50	6.750	171.45	2.471	62.76	1.802	45.76	13.61	60.53	3.18	0.56
C0646-059-7000-M	0.646	16.41	0.059	1.50	7.000	177.80	2.560	65.01	1.865	47.37	13.61	60.53	3.07	0.54
C0646-059-7500-M	0.646	16.41	0.059	1.50	7.500	190.50	2.737	69.52	1.991	50.58	13.61	60.53	2.86	0.50
C0646-059-8000-M	0.646	16.41	0.059	1.50	8.000	203.20	2.914	74.03	2.118	53.79	13.61	60.53	2.68	0.47
C0646-059-8500-M	0.646	16.41	0.059	1.50	8.500	215.90	3.092	78.53	2.244	57.00	13.61	60.53	2.52	0.44
C0646-059-9000-M	0.646	16.41	0.059	1.50	9.000	228.60	3.269	83.04	2.371	60.22	13.61	60.53	2.38	0.42
C0646-059-9500-M	0.646	16.41	0.059	1.50	9.500	241.30	3.447	87.54	2.497	63.43	13.61	60.53	2.25	0.39
C0646-063-1125-M	0.646	16.41	0.063	1.60	1.125	28.58	0.507	12.89	0.418	10.62	16.33	72.64	26.44	4.63
C0646-063-1250-M	0.646	16.41	0.063	1.60	1.250	31.75	0.555	14.10	0.454	11.53	16.33	72.64	23.50	4.11
C0646-063-1375-M	0.646	16.41	0.063	1.60	1.375	34.93	0.603	15.31	0.490	12.44	16.33	72.64	21.15	3.70
C0646-063-1500-M	0.646	16.41	0.063	1.60	1.500	38.10	0.650	16.52	0.526	13.35	16.33	72.64	19.22	3.36
C0646-063-1625-M	0.646	16.41	0.063	1.60	1.625	41.28	0.698	17.73	0.561	14.26	16.33	72.64	17.62	3.08
C0646-063-1750-M	0.646	16.41	0.063	1.60	1.750	44.45	0.746	18.95	0.597	15.17	16.33	72.64	16.26	2.85
C0646-063-1875-M	0.646	16.41	0.063	1.60	1.875	47.63	0.794	20.16	0.633	16.08	16.33	72.64	15.10	2.64
C0646-063-2000-M	0.646	16.41	0.063	1.60	2.000	50.80	0.841	21.37	0.669	16.98	16.33	72.64	14.09	2.47
C0646-063-2125-M	0.646	16.41	0.063	1.60	2.125	53.98	0.889	22.58	0.704	17.89	16.33	72.64	13.21	2.31
C0646-063-2250-M	0.646	16.41	0.063	1.60	2.250	57.15	0.937	23.79	0.740	18.80	16.33	72.64	12.44	2.18
C0646-063-2375-M	0.646	16.41	0.063	1.60	2.375	60.33	0.984	25.01	0.776	19.71	16.33	72.64	11.74	2.06
C0646-063-2500-M	0.646	16.41	0.063	1.60	2.500	63.50	1.032	26.22	0.812	20.62	16.33	72.64	11.13	1.95
C0646-063-2625-M	0.646	16.41	0.063	1.60	2.625	66.68	1.080	27.43	0.848	21.53	16.33	72.64	10.57	1.85
C0646-063-2750-M	0.646	16.41	0.063	1.60	2.750	69.85	1.128	28.64	0.883	22.44	16.33	72.64	10.07	1.76
C0646-063-2875-M	0.646	16.41	0.063	1.60	2.875	73.03	1.175	29.85	0.919	23.35	16.33	72.64	9.61	1.68
C0646-063-3000-M	0.646	16.41	0.063	1.60	3.000	76.20	1.223	31.06	0.955	24.25	16.33	72.64	9.19	1.61
C0646-063-3250-M	0.646	16.41	0.063	1.60	3.250	82.55	1.318	33.49	1.026	26.07	16.33	72.64	8.45	1.48
C0646-063-3500-M	0.646	16.41	0.063	1.60	3.500	88.90	1.414	35.91	1.098	27.89	16.33	72.64	7.83	1.37
C0646-063-3750-M	0.646	16.41	0.063	1.60	3.750	95.25	1.509	38.34	1.170	29.71	16.33	72.64	7.29	1.28
C0646-063-4000-M	0.646	16.41	0.063	1.60	4.000	101.60	1.605	40.76	1.241	31.53	16.33	72.64	6.82	1.19
C0646-063-4250-M	0.646	16.41	0.063	1.60	4.250	107.95	1.700	43.18	1.313	33.34	16.33	72.64	6.40	1.12
C0646-063-4500-M	0.646	16.41	0.063	1.60	4.500	114.30	1.796	45.61	1.384	35.16	16.33	72.64	6.04	1.06
C0646-063-4750-M	0.646	16.41	0.063	1.60	4.750	120.65	1.891	48.03	1.456	36.98	16.33	72.64	5.71	1.00
C0646-063-5000-M	0.646	16.41	0.063	1.60	5.000	127.00	1.986	50.46	1.527	38.80	16.33	72.64	5.42	0.95
C0646-063-5250-M	0.646	16.41	0.063	1.60	5.250	133.35	2.082	52.88	1.599	40.61	16.33	72.64	5.15	0.90
C0646-063-5500-M	0.646	16.41	0.063	1.60	5.500	139.70	2.177	55.30	1.670	42.43	16.33	72.64	4.92	0.86
C0646-063-5750-M	0.646	16.41	0.063	1.60	5.750	146.05	2.273	57.73	1.742	44.25	16.33	72.64	4.70	0.82
C0646-063-6000-M	0.646	16.41	0.063	1.60	6.000	152.40	2.368	60.15	1.814	46.07	16.33	72.64	4.50	0.79
C0646-063-6250-M	0.646	16.41	0.063	1.60	6.250	158.75	2.464	62.57	1.885	47.88	16.33	72.64	4.31	0.75
C0646-063-6500-M	0.646	16.41	0.063	1.60	6.500	165.10	2.559	65.00	1.957	49.70	16.33	72.64	4.14	0.73
C0646-063-6750-M	0.646	16.41	0.063	1.60	6.750	171.45	2.654	67.42	2.028	51.52	16.33	72.64	3.99	0.70
C0646-063-7000-M	0.646	16.41	0.063	1.60	7.000	177.80	2.750	69.85	2.100	53.34	16.33	72.64	3.84	0.67
C0646-063-7500-M	0.646	16.41	0.063	1.60	7.500	190.50	2.941	74.69	2.243	56.97	16.33	72.64	3.58	0.63
C0646-063-8000-M	0.646	16.41	0.063	1.60	8.000	203.20	3.132	79.54	2.386	60.61	16.33	72.64	3.35	0.59
C0646-063-8500-M	0.646	16.41	0.063	1.60	8.500	215.90	3.322	84.39	2.529	64.24	16.33	72.64	3.15	0.55
C0646-063-9000-M	0.646	16.41	0.063	1.60	9.000	228.60	3.513	89.24	2.672	67.88	16.33	72.64	2.98	0.52
C0646-063-9500-M	0.646	16.41	0.063	1.60	9.500	241.30	3.704	94.08	2.815	71.51	16.33	72.64	2.82	0.49
C0646-068-1125-M	0.646	16.41	0.068	1.73	1.125	28.58	0.548	13.91	0.468	11.89	20.18	89.77	34.95	6.12
C0646-068-1250-M	0.646	16.41	0.068	1.73	1.250	31.75	0.600	15.23	0.509	12.93	20.18	89.77	31.03	5.43
C0646-068-1375-M	0.646	16.41	0.068	1.73	1.375	34.93	0.652	16.55	0.550	13.97	20.18	89.77	27.90	4.88
C0646-068-1500-M	0.646	16.41	0.068	1.73	1.500	38.10	0.704	17.87	0.591	15.02	20.18	89.77	25.34	4.43
C0646-068-1625-M	0.646	16.41	0.068	1.73	1.625	41.28	0.756	19.19	0.632	16.06	20.18	89.77	23.22	4.06
C0646-068-1750-M	0.646	16.41	0.068	1.73	1.750	44.45	0.808	20.51	0.673	17.11	20.18	89.77	21.42	3.75
C0646-068-1875-M	0.646	16.41	0.068	1.73	1.875	47.63	0.860	21.84	0.715	18.15	20.18	89.77	19.88	3.48
C0646-068-2000-M	0.646	16.41	0.068	1.73	2.000	50.80	0.912	23.16	0.756	19.19	20.18	89.77	18.54	3.25
C0646-068-2125-M	0.646	16.41	0.068	1.73	2.125	53.98	0.964	24.48	0.797	20.24	20.18	89.77	17.38	3.04
C0646-068-2250-M	0.646	16.41	0.068	1.73	2.250	57.15	1.016	25.80	0.838	21.28	20.18	89.77	16.35	2.86
C0646-068-2375-M	0.646	16.41	0.068	1.73	2.375	60.33	1.068	27.12	0.879	22.32	20.18	89.77	15.44	2.70
C0646-068-2500-M	0.646	16.41	0.068	1.73	2.500	63.50	1.120	28.44	0.920	23.37	20.18	89.77	14.62	2.56
C0646-068-2625-M	0.646	16.41	0.068	1.73	2.625	66.68	1.172	29.76	0.961	24.41	20.18	89.77	13.89	2.43

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0646-059-5000-S	2.122	53.91	10.81	48.09	3.76	0.66
C0646-059-5250-S	2.225	56.51	10.81	48.09	3.57	0.63
C0646-059-5500-S	2.328	59.12	10.81	48.09	3.41	0.60
C0646-059-5750-S	2.430	61.73	10.81	48.09	3.26	0.57
C0646-059-6000-S	2.533	64.34	10.81	48.09	3.12	0.55
C0646-059-6250-S	2.636	66.94	10.81	48.09	2.99	0.52
C0646-059-6500-S	2.738	69.55	10.81	48.09	2.87	0.50
C0646-059-6750-S	2.841	72.16	10.81	48.09	2.77	0.48
C0646-059-7000-S	2.943	74.76	10.81	48.09	2.67	0.47
C0646-059-7500-S	3.149	79.98	10.81	48.09	2.48	0.43
C0646-059-8000-S	3.354	85.19	10.81	48.09	2.33	0.41
C0646-059-8500-S	3.559	90.41	10.81	48.09	2.19	0.38
C0646-059-9000-S	3.765	95.62	10.81	48.09	2.07	0.36
C0646-059-9500-S	3.970	100.83	10.81	48.09	1.96	0.34
C0646-063-1125-S	0.561	14.26	12.96	57.63	22.99	4.02
C0646-063-1250-S	0.616	15.64	12.96	57.63	20.43	3.58
C0646-063-1375-S	0.670	17.03	12.96	57.63	18.39	3.22
C0646-063-1500-S	0.725	18.41	12.96	57.63	16.72	2.93
C0646-063-1625-S	0.779	19.80	12.96	57.63	15.32	2.68
C0646-063-1750-S	0.834	21.18	12.96	57.63	14.14	2.47
C0646-063-1875-S	0.888	22.56	12.96	57.63	13.13	2.30
C0646-063-2000-S	0.943	23.95	12.96	57.63	12.26	2.14
C0646-063-2125-S	0.997	25.33	12.96	57.63	11.49	2.01
C0646-063-2250-S	1.052	26.72	12.96	57.63	10.81	1.89
C0646-063-2375-S	1.106	28.10	12.96	57.63	10.21	1.79
C0646-063-2500-S	1.161	29.48	12.96	57.63	9.67	1.69
C0646-063-2625-S	1.215	30.87	12.96	57.63	9.19	1.61
C0646-063-2750-S	1.270	32.25	12.96	57.63	8.75	1.53
C0646-063-2875-S	1.324	33.64	12.96	57.63	8.35	1.46
C0646-063-3000-S	1.379	35.02	12.96	57.63	7.99	1.40
C0646-063-3250-S	1.488	37.79	12.96	57.63	7.35	1.29
C0646-063-3500-S	1.597	40.56	12.96	57.63	6.81	1.19
C0646-063-3750-S	1.706	43.32	12.96	57.63	6.34	1.11
C0646-063-4000-S	1.815	46.09	12.96	57.63	5.93	1.04
C0646-063-4250-S	1.924	48.86	12.96	57.63	5.57	0.97
C0646-063-4500-S	2.033	51.63	12.96	57.63	5.25	0.92
C0646-063-4750-S	2.142	54.40	12.96	57.63	4.97	0.87
C0646-063-5000-S	2.251	57.16	12.96	57.63	4.71	0.82
C0646-063-5250-S	2.359	59.93	12.96	57.63	4.48	0.78
C0646-063-5500-S	2.468	62.70	12.96	57.63	4.27	0.75
C0646-063-5750-S	2.577	65.47	12.96	57.63	4.08	0.71
C0646-063-6000-S	2.686	68.23	12.96	57.63	3.91	0.68
C0646-063-6250-S	2.795	71.00	12.96	57.63	3.75	0.66
C0646-063-6500-S	2.904	73.77	12.96	57.63	3.60	0.63
C0646-063-6750-S	3.013	76.54	12.96	57.63	3.47	0.61
C0646-063-7000-S	3.122	79.31	12.96	57.63	3.34	0.58
C0646-063-7500-S	3.340	84.84	12.96	57.63	3.11	0.54
C0646-063-8000-S	3.558	90.38	12.96	57.63	2.92	0.51
C0646-063-8500-S	3.776	95.91	12.96	57.63	2.74	0.48
C0646-063-9000-S	3.994	101.45	12.96	57.63	2.59	0.45
C0646-063-9500-S	4.212	106.99	12.96	57.63	2.45	0.43
C0646-068-1125-S	0.599	15.22	15.98	71.08	30.39	5.32
C0646-068-1250-S	0.658	16.71	15.98	71.08	26.98	4.72
C0646-068-1375-S	0.716	18.19	15.98	71.08	24.26	4.25
C0646-068-1500-S	0.775	19.68	15.98	71.08	22.04	3.86
C0646-068-1625-S	0.833	21.17	15.98	71.08	20.19	3.53
C0646-068-1750-S	0.892	22.66	15.98	71.08	18.62	3.26
C0646-068-1875-S	0.950	24.14	15.98	71.08	17.29	3.02
C0646-068-2000-S	1.009	25.63	15.98	71.08	16.13	2.82
C0646-068-2125-S	1.068	27.12	15.98	71.08	15.11	2.64
C0646-068-2250-S	1.126	28.60	15.98	71.08	14.22	2.49
C0646-068-2375-S	1.185	30.09	15.98	71.08	13.43	2.35
C0646-068-2500-S	1.243	31.58	15.98	71.08	12.72	2.23
C0646-068-2625-S	1.302	33.06	15.98	71.08	12.08	2.11

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0646-068-2750-M	**0.646**	**16.41**	**0.068**	**1.73**	**2.750**	**69.85**	**1.224**	**31.09**	**1.002**	**25.46**	**20.18**	**89.77**	**13.22**	**2.31**	**C0646-068-2750-S**	**1.360**	**34.55**	**15.98**	**71.08**	**11.50**	**2.01**
C0646-068-2875-M	**0.646**	**16.41**	**0.068**	**1.73**	**2.875**	**73.03**	**1.276**	**32.41**	**1.043**	**26.50**	**20.18**	**89.77**	**12.62**	**2.21**	**C0646-068-2875-S**	**1.419**	**36.04**	**15.98**	**71.08**	**10.97**	**1.92**
C0646-068-3000-M	**0.646**	**16.41**	**0.068**	**1.73**	**3.000**	**76.20**	**1.328**	**33.73**	**1.084**	**27.54**	**20.18**	**89.77**	**12.07**	**2.11**	**C0646-068-3000-S**	**1.477**	**37.53**	**15.98**	**71.08**	**10.50**	**1.84**
C0646-068-3250-M	**0.646**	**16.41**	**0.068**	**1.73**	**3.250**	**82.55**	**1.432**	**36.37**	**1.167**	**29.63**	**20.18**	**89.77**	**11.10**	**1.94**	**C0646-068-3250-S**	**1.594**	**40.50**	**15.98**	**71.08**	**9.65**	**1.69**
C0646-068-3500-M	**0.646**	**16.41**	**0.068**	**1.73**	**3.500**	**88.90**	**1.536**	**39.01**	**1.249**	**31.72**	**20.18**	**89.77**	**10.28**	**1.80**	**C0646-068-3500-S**	**1.712**	**43.47**	**15.98**	**71.08**	**8.94**	**1.56**
C0646-068-3750-M	**0.646**	**16.41**	**0.068**	**1.73**	**3.750**	**95.25**	**1.640**	**41.66**	**1.331**	**33.81**	**20.18**	**89.77**	**9.57**	**1.67**	**C0646-068-3750-S**	**1.829**	**46.45**	**15.98**	**71.08**	**8.32**	**1.46**
C0646-068-4000-M	**0.646**	**16.41**	**0.068**	**1.73**	**4.000**	**101.60**	**1.744**	**44.30**	**1.413**	**35.90**	**20.18**	**89.77**	**8.95**	**1.57**	**C0646-068-4000-S**	**1.946**	**49.42**	**15.98**	**71.08**	**7.78**	**1.36**
C0646-068-4250-M	**0.646**	**16.41**	**0.068**	**1.73**	**4.250**	**107.95**	**1.848**	**46.94**	**1.495**	**37.98**	**20.18**	**89.77**	**8.40**	**1.47**	**C0646-068-4250-S**	**2.063**	**52.40**	**15.98**	**71.08**	**7.31**	**1.28**
C0646-068-4500-M	**0.646**	**16.41**	**0.068**	**1.73**	**4.500**	**114.30**	**1.952**	**49.58**	**1.578**	**40.07**	**20.18**	**89.77**	**7.92**	**1.39**	**C0646-068-4500-S**	**2.180**	**55.37**	**15.98**	**71.08**	**6.89**	**1.21**
C0646-068-4750-M	**0.646**	**16.41**	**0.068**	**1.73**	**4.750**	**120.65**	**2.056**	**52.23**	**1.660**	**42.16**	**20.18**	**89.77**	**7.49**	**1.31**	**C0646-068-4750-S**	**2.297**	**58.34**	**15.98**	**71.08**	**6.51**	**1.14**
C0646-068-5000-M	**0.646**	**16.41**	**0.068**	**1.73**	**5.000**	**127.00**	**2.160**	**54.87**	**1.742**	**44.25**	**20.18**	**89.77**	**7.11**	**1.24**	**C0646-068-5000-S**	**2.414**	**61.32**	**15.98**	**71.08**	**6.18**	**1.08**
C0646-068-5250-M	**0.646**	**16.41**	**0.068**	**1.73**	**5.250**	**133.35**	**2.264**	**57.51**	**1.824**	**46.33**	**20.18**	**89.77**	**6.76**	**1.18**	**C0646-068-5250-S**	**2.531**	**64.29**	**15.98**	**71.08**	**5.88**	**1.03**
C0646-068-5500-M	**0.646**	**16.41**	**0.068**	**1.73**	**5.500**	**139.70**	**2.368**	**60.15**	**1.906**	**48.42**	**20.18**	**89.77**	**6.44**	**1.13**	**C0646-068-5500-S**	**2.648**	**67.27**	**15.98**	**71.08**	**5.60**	**0.98**
C0646-068-5750-M	**0.646**	**16.41**	**0.068**	**1.73**	**5.750**	**146.05**	**2.472**	**62.80**	**1.989**	**50.51**	**20.18**	**89.77**	**6.16**	**1.08**	**C0646-068-5750-S**	**2.765**	**70.24**	**15.98**	**71.08**	**5.35**	**0.94**
C0646-068-6000-M	**0.646**	**16.41**	**0.068**	**1.73**	**6.000**	**152.40**	**2.576**	**65.44**	**2.071**	**52.60**	**20.18**	**89.77**	**5.90**	**1.03**	**C0646-068-6000-S**	**2.882**	**73.22**	**15.98**	**71.08**	**5.13**	**0.90**
C0646-068-6250-M	**0.646**	**16.41**	**0.068**	**1.73**	**6.250**	**158.75**	**2.680**	**68.08**	**2.153**	**54.68**	**20.18**	**89.77**	**5.65**	**0.99**	**C0646-068-6250-S**	**3.000**	**76.19**	**15.98**	**71.08**	**4.92**	**0.86**
C0646-068-6500-M	**0.646**	**16.41**	**0.068**	**1.73**	**6.500**	**165.10**	**2.784**	**70.72**	**2.235**	**56.77**	**20.18**	**89.77**	**5.43**	**0.95**	**C0646-068-6500-S**	**3.117**	**79.16**	**15.98**	**71.08**	**4.72**	**0.83**
C0646-068-6750-M	**0.646**	**16.41**	**0.068**	**1.73**	**6.750**	**171.45**	**2.888**	**73.37**	**2.317**	**58.86**	**20.18**	**89.77**	**5.23**	**0.91**	**C0646-068-6750-S**	**3.234**	**82.14**	**15.98**	**71.08**	**4.55**	**0.80**
C0646-068-7000-M	**0.646**	**16.41**	**0.068**	**1.73**	**7.000**	**177.80**	**2.992**	**76.01**	**2.400**	**60.95**	**20.18**	**89.77**	**5.04**	**0.88**	**C0646-068-7000-S**	**3.351**	**85.11**	**15.98**	**71.08**	**4.38**	**0.77**
C0646-068-7500-M	**0.646**	**16.41**	**0.068**	**1.73**	**7.500**	**190.50**	**3.201**	**81.29**	**2.564**	**65.12**	**20.18**	**89.77**	**4.69**	**0.82**	**C0646-068-7500-S**	**3.585**	**91.06**	**15.98**	**71.08**	**4.08**	**0.71**
C0646-068-8000-M	**0.646**	**16.41**	**0.068**	**1.73**	**8.000**	**203.20**	**3.409**	**86.58**	**2.728**	**69.30**	**20.18**	**89.77**	**4.40**	**0.77**	**C0646-068-8000-S**	**3.819**	**97.01**	**15.98**	**71.08**	**3.82**	**0.67**
C0646-068-8500-M	**0.646**	**16.41**	**0.068**	**1.73**	**8.500**	**215.90**	**3.617**	**91.86**	**2.893**	**73.47**	**20.18**	**89.77**	**4.13**	**0.72**	**C0646-068-8500-S**	**4.053**	**102.96**	**15.98**	**71.08**	**3.59**	**0.63**
C0646-068-9000-M	**0.646**	**16.41**	**0.068**	**1.73**	**9.000**	**228.60**	**3.825**	**97.15**	**3.057**	**77.65**	**20.18**	**89.77**	**3.90**	**0.68**	**C0646-068-9000-S**	**4.288**	**108.90**	**15.98**	**71.08**	**3.39**	**0.59**
C0646-068-9500-M	**0.646**	**16.41**	**0.068**	**1.73**	**9.500**	**241.30**	**4.033**	**102.43**	**3.221**	**81.83**	**20.18**	**89.77**	**3.69**	**0.65**	**C0646-068-9500-S**	**4.522**	**114.85**	**15.98**	**71.08**	**3.21**	**0.56**
C0646-072-1000-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.000**	**25.40**	**0.524**	**13.31**	**0.462**	**11.74**	**23.64**	**105.15**	**49.67**	**8.69**	**C0646-072-1000-S**	**0.567**	**14.41**	**18.68**	**83.11**	**43.19**	**7.56**
C0646-072-1125-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.125**	**28.58**	**0.580**	**14.72**	**0.508**	**12.89**	**23.64**	**105.15**	**43.34**	**7.58**	**C0646-072-1125-S**	**0.629**	**15.98**	**18.68**	**83.11**	**37.69**	**6.60**
C0646-072-1250-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.250**	**31.75**	**0.635**	**16.13**	**0.553**	**14.04**	**23.64**	**105.15**	**38.44**	**6.73**	**C0646-072-1250-S**	**0.691**	**17.55**	**18.68**	**83.11**	**33.43**	**5.85**
C0646-072-1375-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.375**	**34.93**	**0.691**	**17.54**	**0.598**	**15.20**	**23.64**	**105.15**	**34.54**	**6.04**	**C0646-072-1375-S**	**0.753**	**19.12**	**18.68**	**83.11**	**30.03**	**5.26**
C0646-072-1500-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.500**	**38.10**	**0.746**	**18.95**	**0.644**	**16.35**	**23.64**	**105.15**	**31.36**	**5.49**	**C0646-072-1500-S**	**0.815**	**20.69**	**18.68**	**83.11**	**27.27**	**4.77**
C0646-072-1625-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.625**	**41.28**	**0.802**	**20.36**	**0.689**	**17.50**	**23.64**	**105.15**	**28.71**	**5.02**	**C0646-072-1625-S**	**0.877**	**22.27**	**18.68**	**83.11**	**24.96**	**4.37**
C0646-072-1750-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.750**	**44.45**	**0.857**	**21.77**	**0.735**	**18.66**	**23.64**	**105.15**	**26.47**	**4.63**	**C0646-072-1750-S**	**0.938**	**23.84**	**18.68**	**83.11**	**23.02**	**4.03**
C0646-072-1875-M	**0.646**	**16.41**	**0.072**	**1.83**	**1.875**	**47.63**	**0.913**	**23.18**	**0.780**	**19.81**	**23.64**	**105.15**	**24.56**	**4.30**	**C0646-072-1875-S**	**1.000**	**25.41**	**18.68**	**83.11**	**21.36**	**3.74**
C0646-072-2000-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.000**	**50.80**	**0.968**	**24.59**	**0.825**	**20.96**	**23.64**	**105.15**	**22.91**	**4.01**	**C0646-072-2000-S**	**1.062**	**26.98**	**18.68**	**83.11**	**19.92**	**3.49**
C0646-072-2125-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.125**	**53.98**	**1.024**	**26.00**	**0.871**	**22.12**	**23.64**	**105.15**	**21.46**	**3.76**	**C0646-072-2125-S**	**1.124**	**28.55**	**18.68**	**83.11**	**18.66**	**3.27**
C0646-072-2250-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.250**	**57.15**	**1.079**	**27.41**	**0.916**	**23.27**	**23.64**	**105.15**	**20.19**	**3.53**	**C0646-072-2250-S**	**1.186**	**30.12**	**18.68**	**83.11**	**17.56**	**3.07**
C0646-072-2375-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.375**	**60.33**	**1.135**	**28.82**	**0.962**	**24.42**	**23.64**	**105.15**	**19.06**	**3.34**	**C0646-072-2375-S**	**1.248**	**31.69**	**18.68**	**83.11**	**16.57**	**2.90**
C0646-072-2500-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.500**	**63.50**	**1.190**	**30.23**	**1.007**	**25.58**	**23.64**	**105.15**	**18.05**	**3.16**	**C0646-072-2500-S**	**1.309**	**33.26**	**18.68**	**83.11**	**15.69**	**2.75**
C0646-072-2625-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.625**	**66.68**	**1.246**	**31.64**	**1.052**	**26.73**	**23.64**	**105.15**	**17.14**	**3.00**	**C0646-072-2625-S**	**1.371**	**34.83**	**18.68**	**83.11**	**14.90**	**2.61**
C0646-072-2750-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.750**	**69.85**	**1.301**	**33.05**	**1.098**	**27.88**	**23.64**	**105.15**	**16.32**	**2.86**	**C0646-072-2750-S**	**1.433**	**36.40**	**18.68**	**83.11**	**14.19**	**2.48**
C0646-072-2875-M	**0.646**	**16.41**	**0.072**	**1.83**	**2.875**	**73.03**	**1.357**	**34.46**	**1.143**	**29.04**	**23.64**	**105.15**	**15.57**	**2.72**	**C0646-072-2875-S**	**1.495**	**37.97**	**18.68**	**83.11**	**13.54**	**2.37**
C0646-072-3000-M	**0.646**	**16.41**	**0.072**	**1.83**	**3.000**	**76.20**	**1.412**	**35.87**	**1.189**	**30.19**	**23.64**	**105.15**	**14.89**	**2.61**	**C0646-072-3000-S**	**1.557**	**39.54**	**18.68**	**83.11**	**12.95**	**2.27**
C0646-072-3250-M	**0.646**	**16.41**	**0.072**	**1.83**	**3.250**	**82.55**	**1.523**	**38.69**	**1.279**	**32.49**	**23.64**	**105.15**	**13.69**	**2.40**	**C0646-072-3250-S**	**1.680**	**42.68**	**18.68**	**83.11**	**11.90**	**2.08**
C0646-072-3500-M	**0.646**	**16.41**	**0.072**	**1.83**	**3.500**	**88.90**	**1.634**	**41.51**	**1.370**	**34.80**	**23.64**	**105.15**	**12.67**	**2.22**	**C0646-072-3500-S**	**1.804**	**45.82**	**18.68**	**83.11**	**11.02**	**1.93**
C0646-072-3750-M	**0.646**	**16.41**	**0.072**	**1.83**	**3.750**	**95.25**	**1.745**	**44.33**	**1.461**	**37.11**	**23.64**	**105.15**	**11.79**	**2.06**	**C0646-072-3750-S**	**1.928**	**48.96**	**18.68**	**83.11**	**10.25**	**1.79**
C0646-072-4000-M	**0.646**	**16.41**	**0.072**	**1.83**	**4.000**	**101.60**	**1.856**	**47.15**	**1.552**	**39.41**	**23.64**	**105.15**	**11.03**	**1.93**	**C0646-072-4000-S**	**2.051**	**52.11**	**18.68**	**83.11**	**9.59**	**1.68**
C0646-072-4250-M	**0.646**	**16.41**	**0.072**	**1.83**	**4.250**	**107.95**	**1.967**	**49.97**	**1.643**	**41.72**	**23.64**	**105.15**	**10.36**	**1.81**	**C0646-072-4250-S**	**2.175**	**55.25**	**18.68**	**83.11**	**9.00**	**1.58**
C0646-072-4500-M	**0.646**	**16.41**	**0.072**	**1.83**	**4.500**	**114.30**	**2.078**	**52.79**	**1.733**	**44.03**	**23.64**	**105.15**	**9.76**	**1.71**	**C0646-072-4500-S**	**2.299**	**58.39**	**18.68**	**83.11**	**8.49**	**1.49**
C0646-072-4750-M	**0.646**	**16.41**	**0.072**	**1.83**	**4.750**	**120.65**	**2.189**	**55.61**	**1.824**	**46.33**	**23.64**	**105.15**	**9.23**	**1.62**	**C0646-072-4750-S**	**2.422**	**61.53**	**18.68**	**83.11**	**8.03**	**1.40**
C0646-072-5000-M	**0.646**	**16.41**	**0.072**	**1.83**	**5.000**	**127.00**	**2.300**	**58.42**	**1.915**	**48.64**	**23.64**	**105.15**	**8.76**	**1.53**	**C0646-072-5000-S**	**2.546**	**64.67**	**18.68**	**83.11**	**7.61**	**1.33**
C0646-072-5250-M	**0.646**	**16.41**	**0.072**	**1.83**	**5.250**	**133.35**	**2.411**	**61.24**	**2.006**	**50.95**	**23.64**	**105.15**	**8.33**	**1.46**	**C0646-072-5250-S**	**2.670**	**67.81**	**18.68**	**83.11**	**7.24**	**1.27**
C0646-072-5500-M	**0.646**	**16.41**	**0.072**	**1.83**	**5.500**	**139.70**	**2.522**	**64.06**	**2.097**	**53.25**	**23.64**	**105.15**	**7.94**	**1.39**	**C0646-072-5500-S**	**2.793**	**70.95**	**18.68**	**83.11**	**6.90**	**1.21**
C0646-072-5750-M	**0.646**	**16.41**	**0.072**	**1.83**	**5.750**	**146.05**	**2.633**	**66.88**	**2.187**	**55.56**	**23.64**	**105.15**	**7.58**	**1.33**	**C0646-072-5750-S**	**2.917**	**74.09**	**18.68**	**83.11**	**6.60**	**1.15**
C0646-072-6000-M	**0.646**	**16.41**	**0.072**	**1.83**	**6.000**	**152.40**	**2.744**	**69.70**	**2.278**	**57.86**	**23.64**	**105.15**	**7.26**	**1.27**	**C0646-072-6000-S**	**3.041**	**77.23**	**18.68**	**83.11**	**6.31**	**1.10**
C0646-072-6250-M	**0.646**	**16.41**	**0.072**	**1.83**	**6.250**	**158.75**	**2.855**	**72.52**	**2.369**	**60.17**	**23.64**	**105.15**	**6.96**	**1.22**	**C0646-072-6250-S**	**3.164**	**80.38**	**18.68**	**83.11**	**6.06**	**1.06**
C0646-072-6500-M	**0.646**	**16.41**	**0.072**	**1.83**	**6.500**	**165.10**	**2.966**	**75.34**	**2.460**	**62.48**	**23.64**	**105.15**	**6.69**	**1.17**	**C0646-072-6500-S**	**3.288**	**83.52**	**18.68**	**83.11**	**5.82**	**1.02**
C0646-072-6750-M	**0.646**	**16.41**	**0.072**	**1.83**	**6.750**	**171.45**	**3.077**	**78.16**	**2.551**	**64.78**	**23.64**	**105.15**	**6.44**	**1.13**	**C0646-072-6750-S**	**3.412**	**86.66**	**18.68**	**83.11**	**5.60**	**0.98**
C0646-072-7000-M	**0.646**	**16.41**	**0.072**	**1.83**	**7.000**	**177.80**	**3.188**	**80.98**	**2.641**	**67.09**	**23.64**	**105.15**	**6.20**	**1.09**	**C0646-072-7000-S**	**3.535**	**89.80**	**18.68**	**83.11**	**5.39**	**0.94**
C0646-072-7500-M	**0.646**	**16.41**	**0.072**	**1.83**	**7.500**	**190.50**	**3.410**	**86.62**	**2.823**	**71.70**	**23.64**	**105.15**	**5.78**	**1.01**	**C0646-072-7500-S**	**3.783**	**96.08**	**18.68**	**83.11**	**5.03**	**0.88**
C0646-072-8000-M	**0.646**	**16.41**	**0.072**	**1.83**	**8.000**	**203.20**	**3.632**	**92.26**	**3.005**	**76.32**	**23.64**	**105.15**	**5.41**	**0.95**	**C0646-072-8000-S**	**4.030**	**102.36**	**18.68**	**83.11**	**4.71**	**0.82**
C0646-072-8500-M	**0.646**	**16.41**	**0.072**	**1.83**	**8.500**	**215.90**	**3.854**	**97.90**	**3.186**	**80.93**	**23.64**	**105.15**	**5.09**	**0.89**	**C0646-072-8500-S**	**4.277**	**108.65**	**18.68**	**83.11**	**4.43**	**0.77**
C0646-072-9000-M	**0.646**	**16.41**	**0.072**	**1.83**	**9.000**	**228.60**	**4.076**	**103.54**	**3.368**	**85.54**	**23.64**	**105.15**	**4.80**	**0.84**	**C0646-072-9000-S**	**4.525**	**114.93**	**18.68**	**83.11**	**4.18**	**0.73**
C0646-072-9500-M	**0.646**	**16.41**	**0.072**	**1.83**	**9.500**	**241.30**	**4.298**	**109.18**	**3.549**	**90.15**	**23.64**	**105.15**	**4.54**	**0.80**	**C0646-072-9500-S**	**4.772**	**121.21**	**18.68**	**83.11**	**3.95**	**0.69**
C0646-085-0938-M	**0.646**	**16.41**	**0.085**	**2.16**	**0.938**	**23.81**	**0.580**	**14.72**	**0.542**	**13.77**	**37.34**	**166.08**	**104.30**	**18.25**	**C0646-085-0938-S**	**0.614**	**15.61**	**29.30**	**130.34**	**90.70**	**15.87**
C0646-085-1000-M	**0.646**	**16.41**	**0.085**	**2.16**	**1.000**	**25.40**	**0.613**	**15.57**	**0.572**	**14.52**	**37.34**	**166.08**	**96.45**	**16.88**	**C0646-085-1000-S**	**0.651**	**16.53**	**29.30**	**130.34**	**83.87**	**14.68**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0646-085-1125-M	0.646	16.41	0.085	2.16	1.125	28.58	0.680	17.26	0.631	16.03	37.34	166.08	83.82	14.67	**C0646-085-1125-S**	0.723	18.36	29.30	130.34	72.89	12.76
C0646-085-1250-M	0.646	16.41	0.085	2.16	1.250	31.75	0.746	18.96	0.690	17.53	37.34	166.08	74.12	12.97	**C0646-085-1250-S**	0.795	20.20	29.30	130.34	64.45	11.28
C0646-085-1375-M	0.646	16.41	0.085	2.16	1.375	34.93	0.813	20.65	0.749	19.04	37.34	166.08	66.43	11.63	**C0646-085-1375-S**	0.868	22.04	29.30	130.34	57.77	10.11
C0646-085-1500-M	0.646	16.41	0.085	2.16	1.500	38.10	0.880	22.34	0.809	20.54	37.34	166.08	60.19	10.53	**C0646-085-1500-S**	0.940	23.88	29.30	130.34	52.34	9.16
C0646-085-1625-M	0.646	16.41	0.085	2.16	1.625	41.28	0.946	24.04	0.868	22.05	37.34	166.08	55.02	9.63	**C0646-085-1625-S**	1.013	25.72	29.30	130.34	47.84	8.37
C0646-085-1750-M	0.646	16.41	0.085	2.16	1.750	44.45	1.013	25.73	0.927	23.55	37.34	166.08	50.66	8.87	**C0646-085-1750-S**	1.085	27.56	29.30	130.34	44.06	7.71
C0646-085-1875-M	0.646	16.41	0.085	2.16	1.875	47.63	1.080	27.43	0.986	25.06	37.34	166.08	46.95	8.22	**C0646-085-1875-S**	1.157	29.39	29.30	130.34	40.83	7.14
C0646-085-2000-M	0.646	16.41	0.085	2.16	2.000	50.80	1.146	29.12	1.046	26.56	37.34	166.08	43.74	7.66	**C0646-085-2000-S**	1.230	31.23	29.30	130.34	38.04	6.66
C0646-085-2125-M	0.646	16.41	0.085	2.16	2.125	53.98	1.213	30.81	1.105	28.06	37.34	166.08	40.95	7.17	**C0646-085-2125-S**	1.302	33.07	29.30	130.34	35.61	6.23
C0646-085-2250-M	0.646	16.41	0.085	2.16	2.250	57.15	1.280	32.51	1.164	29.57	37.34	166.08	38.49	6.73	**C0646-085-2250-S**	1.374	34.91	29.30	130.34	33.47	5.86
C0646-085-2375-M	0.646	16.41	0.085	2.16	2.375	60.33	1.347	34.20	1.223	31.07	37.34	166.08	36.30	6.35	**C0646-085-2375-S**	1.447	36.75	29.30	130.34	31.57	5.52
C0646-085-2500-M	0.646	16.41	0.085	2.16	2.500	63.50	1.413	35.90	1.283	32.58	37.34	166.08	34.36	6.01	**C0646-085-2500-S**	1.519	38.59	29.30	130.34	29.88	5.23
C0646-085-2625-M	0.646	16.41	0.085	2.16	2.625	66.68	1.480	37.59	1.342	34.08	37.34	166.08	32.61	5.71	**C0646-085-2625-S**	1.592	40.43	29.30	130.34	28.35	4.96
C0646-085-2750-M	0.646	16.41	0.085	2.16	2.750	69.85	1.547	39.29	1.401	35.59	37.34	166.08	31.03	5.43	**C0646-085-2750-S**	1.664	42.26	29.30	130.34	26.98	4.72
C0646-085-2875-M	0.646	16.41	0.085	2.16	2.875	73.03	1.613	40.98	1.460	37.09	37.34	166.08	29.59	5.18	**C0646-085-2875-S**	1.736	44.10	29.30	130.34	25.73	4.50
C0646-085-3000-M	0.646	16.41	0.085	2.16	3.000	76.20	1.680	42.67	1.520	38.60	37.34	166.08	28.29	4.95	**C0646-085-3000-S**	1.809	45.94	29.30	130.34	24.60	4.30
C0646-085-3250-M	0.646	16.41	0.085	2.16	3.250	82.55	1.813	46.06	1.638	41.60	37.34	166.08	25.99	4.55	**C0646-085-3250-S**	1.953	49.62	29.30	130.34	22.60	3.96
C0646-085-3500-M	0.646	16.41	0.085	2.16	3.500	88.90	1.947	49.45	1.756	44.61	37.34	166.08	24.04	4.21	**C0646-085-3500-S**	2.098	53.29	29.30	130.34	20.90	3.66
C0646-085-3750-M	0.646	16.41	0.085	2.16	3.750	95.25	2.080	52.84	1.875	47.62	37.34	166.08	22.36	3.91	**C0646-085-3750-S**	2.243	56.97	29.30	130.34	19.44	3.40
C0646-085-4000-M	0.646	16.41	0.085	2.16	4.000	101.60	2.214	56.23	1.993	50.63	37.34	166.08	20.90	3.66	**C0646-085-4000-S**	2.388	60.65	29.30	130.34	18.17	3.18
C0646-085-4250-M	0.646	16.41	0.085	2.16	4.250	107.95	2.347	59.62	2.112	53.64	37.34	166.08	19.62	3.43	**C0646-085-4250-S**	2.532	64.33	29.30	130.34	17.06	2.99
C0646-085-4500-M	0.646	16.41	0.085	2.16	4.500	114.30	2.480	63.00	2.230	56.65	37.34	166.08	18.49	3.24	**C0646-085-4500-S**	2.677	68.00	29.30	130.34	16.08	2.81
C0646-085-4750-M	0.646	16.41	0.085	2.16	4.750	120.65	2.614	66.39	2.349	59.66	37.34	166.08	17.48	3.06	**C0646-085-4750-S**	2.822	71.68	29.30	130.34	15.20	2.66
C0646-085-5000-M	0.646	16.41	0.085	2.16	5.000	127.00	2.747	69.78	2.467	62.67	37.34	166.08	16.57	2.90	**C0646-085-5000-S**	2.967	75.36	29.30	130.34	14.41	2.52
C0646-085-5250-M	0.646	16.41	0.085	2.16	5.250	133.35	2.881	73.17	2.586	65.68	37.34	166.08	15.76	2.76	**C0646-085-5250-S**	3.112	79.03	29.30	130.34	13.70	2.40
C0646-085-5500-M	0.646	16.41	0.085	2.16	5.500	139.70	3.014	76.56	2.704	68.69	37.34	166.08	15.02	2.63	**C0646-085-5500-S**	3.256	82.71	29.30	130.34	13.06	2.29
C0646-085-5750-M	0.646	16.41	0.085	2.16	5.750	146.05	3.147	79.95	2.823	71.69	37.34	166.08	14.35	2.51	**C0646-085-5750-S**	3.401	86.39	29.30	130.34	12.48	2.18
C0646-085-6000-M	0.646	16.41	0.085	2.16	6.000	152.40	3.281	83.33	2.941	74.70	37.34	166.08	13.73	2.40	**C0646-085-6000-S**	3.546	90.06	29.30	130.34	11.94	2.09
C0646-085-6250-M	0.646	16.41	0.085	2.16	6.250	158.75	3.414	86.72	3.060	77.71	37.34	166.08	13.17	2.30	**C0646-085-6250-S**	3.691	93.74	29.30	130.34	11.45	2.00
C0646-085-6500-M	0.646	16.41	0.085	2.16	6.500	165.10	3.548	90.11	3.178	80.72	37.34	166.08	12.65	2.21	**C0646-085-6500-S**	3.835	97.42	29.30	130.34	11.00	1.92
C0646-085-6750-M	0.646	16.41	0.085	2.16	6.750	171.45	3.681	93.50	3.296	83.73	37.34	166.08	12.17	2.13	**C0646-085-6750-S**	3.980	101.09	29.30	130.34	10.58	1.85
C0646-085-7000-M	0.646	16.41	0.085	2.16	7.000	177.80	3.814	96.89	3.415	86.74	37.34	166.08	11.72	2.05	**C0646-085-7000-S**	4.125	104.77	29.30	130.34	10.19	1.78
C0646-085-7500-M	0.646	16.41	0.085	2.16	7.500	190.50	4.081	103.66	3.652	92.76	37.34	166.08	10.92	1.91	**C0646-085-7500-S**	4.414	112.13	29.30	130.34	9.50	1.66
C0646-085-8000-M	0.646	16.41	0.085	2.16	8.000	203.20	4.348	110.44	3.889	98.77	37.34	166.08	10.22	1.79	**C0646-085-8000-S**	4.704	119.48	29.30	130.34	8.89	1.56
C0646-085-8500-M	0.646	16.41	0.085	2.16	8.500	215.90	4.615	117.22	4.126	104.79	37.34	166.08	9.61	1.68	**C0646-085-8500-S**	4.993	126.83	29.30	130.34	8.36	1.46
C0646-085-9000-M	0.646	16.41	0.085	2.16	9.000	228.60	4.882	123.99	4.363	110.81	37.34	166.08	9.07	1.59	**C0646-085-9000-S**	5.283	134.19	29.30	130.34	7.88	1.38
C0646-085-9500-M	0.646	16.41	0.085	2.16	9.500	241.30	5.148	130.77	4.600	116.83	37.34	166.08	8.58	1.50	**C0646-085-9500-S**	5.572	141.54	29.30	130.34	7.46	1.31
C0646-092-0938-M	0.646	16.41	0.092	2.34	0.938	23.81	0.621	15.77	0.593	15.06	46.36	206.23	146.34	25.61	**C0646-092-0938-S**	0.653	16.58	36.23	161.16	127.25	22.27
C0646-092-1000-M	0.646	16.41	0.092	2.34	1.000	25.40	0.657	16.69	0.626	15.90	46.36	206.23	135.13	23.65	**C0646-092-1000-S**	0.692	17.57	36.23	161.16	117.50	20.56
C0646-092-1125-M	0.646	16.41	0.092	2.34	1.125	28.58	0.729	18.53	0.692	17.59	46.36	206.23	117.18	20.51	**C0646-092-1125-S**	0.769	19.54	36.23	161.16	101.90	17.83
C0646-092-1250-M	0.646	16.41	0.092	2.34	1.250	31.75	0.802	20.37	0.759	19.27	46.36	206.23	103.44	18.10	**C0646-092-1250-S**	0.847	21.52	36.23	161.16	89.95	15.74
C0646-092-1375-M	0.646	16.41	0.092	2.34	1.375	34.93	0.874	22.21	0.825	20.96	46.36	206.23	92.58	16.20	**C0646-092-1375-S**	0.925	23.49	36.23	161.16	80.51	14.09
C0646-092-1500-M	0.646	16.41	0.092	2.34	1.500	38.10	0.947	24.05	0.891	22.64	46.36	206.23	83.79	14.66	**C0646-092-1500-S**	1.003	25.47	36.23	161.16	72.86	12.75
C0646-092-1625-M	0.646	16.41	0.092	2.34	1.625	41.28	1.019	25.89	0.958	24.33	46.36	206.23	76.52	13.39	**C0646-092-1625-S**	1.080	27.44	36.23	161.16	66.54	11.64
C0646-092-1750-M	0.646	16.41	0.092	2.34	1.750	44.45	1.092	27.73	1.024	26.01	46.36	206.23	70.41	12.32	**C0646-092-1750-S**	1.158	29.42	36.23	161.16	61.23	10.71
C0646-092-1875-M	0.646	16.41	0.092	2.34	1.875	47.63	1.164	29.57	1.090	27.70	46.36	206.23	65.21	11.41	**C0646-092-1875-S**	1.236	31.40	36.23	161.16	56.70	9.92
C0646-092-2000-M	0.646	16.41	0.092	2.34	2.000	50.80	1.236	31.41	1.157	29.38	46.36	206.23	60.72	10.63	**C0646-092-2000-S**	1.314	33.37	36.23	161.16	52.80	9.24
C0646-092-2125-M	0.646	16.41	0.092	2.34	2.125	53.98	1.309	33.25	1.223	31.07	46.36	206.23	56.81	9.94	**C0646-092-2125-S**	1.392	35.35	36.23	161.16	49.40	8.64
C0646-092-2250-M	0.646	16.41	0.092	2.34	2.250	57.15	1.381	35.09	1.289	32.75	46.36	206.23	53.37	9.34	**C0646-092-2250-S**	1.469	37.32	36.23	161.16	46.41	8.12
C0646-092-2375-M	0.646	16.41	0.092	2.34	2.375	60.33	1.454	36.93	1.356	34.44	46.36	206.23	50.33	8.81	**C0646-092-2375-S**	1.547	39.30	36.23	161.16	43.76	7.66
C0646-092-2500-M	0.646	16.41	0.092	2.34	2.500	63.50	1.526	38.77	1.422	36.12	46.36	206.23	47.61	8.33	**C0646-092-2500-S**	1.625	41.27	36.23	161.16	41.40	7.25
C0646-092-2625-M	0.646	16.41	0.092	2.34	2.625	66.68	1.599	40.61	1.488	37.81	46.36	206.23	45.17	7.91	**C0646-092-2625-S**	1.703	43.25	36.23	161.16	39.28	6.87
C0646-092-2750-M	0.646	16.41	0.092	2.34	2.750	69.85	1.671	42.45	1.555	39.49	46.36	206.23	42.97	7.52	**C0646-092-2750-S**	1.780	45.22	36.23	161.16	37.37	6.54
C0646-092-2875-M	0.646	16.41	0.092	2.34	2.875	73.03	1.744	44.29	1.621	41.17	46.36	206.23	40.98	7.17	**C0646-092-2875-S**	1.858	47.20	36.23	161.16	35.63	6.24
C0646-092-3000-M	0.646	16.41	0.092	2.34	3.000	76.20	1.816	46.13	1.687	42.86	46.36	206.23	39.16	6.85	**C0646-092-3000-S**	1.936	49.17	36.23	161.16	34.05	5.96
C0646-092-3250-M	0.646	16.41	0.092	2.34	3.250	82.55	1.961	49.81	1.820	46.23	46.36	206.23	35.96	6.29	**C0646-092-3250-S**	2.091	53.12	36.23	161.16	31.27	5.47
C0646-092-3500-M	0.646	16.41	0.092	2.34	3.500	88.90	2.106	53.49	1.953	49.60	46.36	206.23	33.25	5.82	**C0646-092-3500-S**	2.247	57.07	36.23	161.16	28.92	5.06
C0646-092-3750-M	0.646	16.41	0.092	2.34	3.750	95.25	2.251	57.17	2.085	52.97	46.36	206.23	30.92	5.41	**C0646-092-3750-S**	2.403	61.02	36.23	161.16	26.89	4.71
C0646-092-4000-M	0.646	16.41	0.092	2.34	4.000	101.60	2.395	60.85	2.218	56.34	46.36	206.23	28.90	5.06	**C0646-092-4000-S**	2.558	64.97	36.23	161.16	25.13	4.40
C0646-092-4250-M	0.646	16.41	0.092	2.34	4.250	107.95	2.540	64.53	2.351	59.71	46.36	206.23	27.12	4.75	**C0646-092-4250-S**	2.714	68.93	36.23	161.16	23.58	4.13
C0646-092-4500-M	0.646	16.41	0.092	2.34	4.500	114.30	2.685	68.21	2.483	63.07	46.36	206.23	25.55	4.47	**C0646-092-4500-S**	2.869	72.88	36.23	161.16	22.22	3.89
C0646-092-4750-M	0.646	16.41	0.092	2.34	4.750	120.65	2.830	71.89	2.616	66.44	46.36	206.23	24.15	4.23	**C0646-092-4750-S**	3.025	76.83	36.23	161.16	21.00	3.67
C0646-092-5000-M	0.646	16.41	0.092	2.34	5.000	127.00	2.975	75.57	2.749	69.81	46.36	206.23	22.90	4.01	**C0646-092-5000-S**	3.180	80.78	36.23	161.16	19.91	3.48
C0646-092-5250-M	0.646	16.41	0.092	2.34	5.250	133.35	3.120	79.25	2.881	73.18	46.36	206.23	21.77	3.81	**C0646-092-5250-S**	3.336	84.73	36.23	161.16	18.93	3.31

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0646-092-5500-M	0.646	16.41	0.092	2.34	5.500	139.70	3.265	82.93	3.014	76.55	46.36	206.23	20.74	3.63
C0646-092-5750-M	0.646	16.41	0.092	2.34	5.750	146.05	3.410	86.61	3.147	79.92	46.36	206.23	19.81	3.47
C0646-092-6000-M	0.646	16.41	0.092	2.34	6.000	152.40	3.555	90.29	3.279	83.29	46.36	206.23	18.96	3.32
C0646-092-6250-M	0.646	16.41	0.092	2.34	6.250	158.75	3.699	93.97	3.412	86.66	46.36	206.23	18.18	3.18
C0646-092-6500-M	0.646	16.41	0.092	2.34	6.500	165.10	3.844	97.65	3.544	90.03	46.36	206.23	17.46	3.06
C0646-092-6750-M	0.646	16.41	0.092	2.34	6.750	171.45	3.989	101.33	3.677	93.40	46.36	206.23	16.79	2.94
C0646-092-7000-M	0.646	16.41	0.092	2.34	7.000	177.80	4.134	105.01	3.810	96.77	46.36	206.23	16.18	2.83
C0646-092-7500-M	0.646	16.41	0.092	2.34	7.500	190.50	4.424	112.37	4.075	103.51	46.36	206.23	15.07	2.64
C0646-092-8000-M	0.646	16.41	0.092	2.34	8.000	203.20	4.714	119.73	4.340	110.24	46.36	206.23	14.11	2.47
C0646-092-8500-M	0.646	16.41	0.092	2.34	8.500	215.90	5.003	127.09	4.606	116.98	46.36	206.23	13.26	2.32
C0646-092-9000-M	0.646	16.41	0.092	2.34	9.000	228.60	5.293	134.45	4.871	123.72	46.36	206.23	12.51	2.19
C0646-092-9500-M	0.646	16.41	0.092	2.34	9.500	241.30	5.583	141.81	5.136	130.46	46.36	206.23	11.84	2.07
C0646-098-0938-M	0.646	16.41	0.098	2.49	0.938	23.81	0.653	16.60	0.633	16.09	55.07	244.97	193.86	33.93
C0646-098-1000-M	0.646	16.41	0.098	2.49	1.000	25.40	0.692	17.58	0.669	17.01	55.07	244.97	178.79	31.29
C0646-098-1125-M	0.646	16.41	0.098	2.49	1.125	28.58	0.769	19.53	0.742	18.84	55.07	244.97	154.74	27.08
C0646-098-1250-M	0.646	16.41	0.098	2.49	1.250	31.75	0.846	21.49	0.814	20.67	55.07	244.97	136.38	23.87
C0646-098-1375-M	0.646	16.41	0.098	2.49	1.375	34.93	0.923	23.45	0.886	22.50	55.07	244.97	121.93	21.34
C0646-098-1500-M	0.646	16.41	0.098	2.49	1.500	38.10	1.000	25.41	0.958	24.33	55.07	244.97	110.24	19.29
C0646-098-1625-M	0.646	16.41	0.098	2.49	1.625	41.28	1.078	27.37	1.030	26.16	55.07	244.97	100.59	17.60
C0646-098-1750-M	0.646	16.41	0.098	2.49	1.750	44.45	1.155	29.33	1.102	27.99	55.07	244.97	92.50	16.19
C0646-098-1875-M	0.646	16.41	0.098	2.49	1.875	47.63	1.232	31.29	1.174	29.82	55.07	244.97	85.62	14.98
C0646-098-2000-M	0.646	16.41	0.098	2.49	2.000	50.80	1.309	33.25	1.246	31.65	55.07	244.97	79.68	13.94
C0646-098-2125-M	0.646	16.41	0.098	2.49	2.125	53.98	1.386	35.20	1.318	33.49	55.07	244.97	74.52	13.04
C0646-098-2250-M	0.646	16.41	0.098	2.49	2.250	57.15	1.463	37.16	1.390	35.32	55.07	244.97	69.99	12.25
C0646-098-2375-M	0.646	16.41	0.098	2.49	2.375	60.33	1.540	39.12	1.463	37.15	55.07	244.97	65.97	11.54
C0646-098-2500-M	0.646	16.41	0.098	2.49	2.500	63.50	1.617	41.08	1.535	38.98	55.07	244.97	62.39	10.92
C0646-098-2625-M	0.646	16.41	0.098	2.49	2.625	66.68	1.694	43.04	1.607	40.81	55.07	244.97	59.18	10.36
C0646-098-2750-M	0.646	16.41	0.098	2.49	2.750	69.85	1.772	45.00	1.679	42.64	55.07	244.97	56.28	9.85
C0646-098-2875-M	0.646	16.41	0.098	2.49	2.875	73.03	1.849	46.96	1.751	44.47	55.07	244.97	53.66	9.39
C0646-098-3000-M	0.646	16.41	0.098	2.49	3.000	76.20	1.926	48.91	1.823	46.30	55.07	244.97	51.27	8.97
C0646-098-3250-M	0.646	16.41	0.098	2.49	3.250	82.55	2.080	52.83	1.967	49.97	55.07	244.97	47.07	8.24
C0646-098-3500-M	0.646	16.41	0.098	2.49	3.500	88.90	2.234	56.75	2.111	53.63	55.07	244.97	43.51	7.61
C0646-098-3750-M	0.646	16.41	0.098	2.49	3.750	95.25	2.388	60.67	2.256	57.29	55.07	244.97	40.45	7.08
C0646-098-4000-M	0.646	16.41	0.098	2.49	4.000	101.60	2.543	64.58	2.400	60.95	55.07	244.97	37.79	6.61
C0646-098-4250-M	0.646	16.41	0.098	2.49	4.250	107.95	2.697	68.50	2.544	64.62	55.07	244.97	35.46	6.21
C0646-098-4500-M	0.646	16.41	0.098	2.49	4.500	114.30	2.851	72.42	2.688	68.28	55.07	244.97	33.40	5.84
C0646-098-4750-M	0.646	16.41	0.098	2.49	4.750	120.65	3.005	76.33	2.832	71.94	55.07	244.97	31.57	5.52
C0646-098-5000-M	0.646	16.41	0.098	2.49	5.000	127.00	3.160	80.25	2.976	75.60	55.07	244.97	29.92	5.24
C0646-098-5250-M	0.646	16.41	0.098	2.49	5.250	133.35	3.314	84.17	3.121	79.26	55.07	244.97	28.44	4.98
C0646-098-5500-M	0.646	16.41	0.098	2.49	5.500	139.70	3.468	88.09	3.265	82.93	55.07	244.97	27.10	4.74
C0646-098-5750-M	0.646	16.41	0.098	2.49	5.750	146.05	3.622	92.00	3.409	86.59	55.07	244.97	25.88	4.53
C0646-098-6000-M	0.646	16.41	0.098	2.49	6.000	152.40	3.776	95.92	3.553	90.25	55.07	244.97	24.77	4.33
C0646-098-6250-M	0.646	16.41	0.098	2.49	6.250	158.75	3.931	99.84	3.697	93.91	55.07	244.97	23.75	4.16
C0646-098-6500-M	0.646	16.41	0.098	2.49	6.500	165.10	4.085	103.76	3.842	97.58	55.07	244.97	22.80	3.99
C0646-098-6750-M	0.646	16.41	0.098	2.49	6.750	171.45	4.239	107.67	3.986	101.24	55.07	244.97	21.93	3.84
C0646-098-7000-M	0.646	16.41	0.098	2.49	7.000	177.80	4.393	111.59	4.130	104.90	55.07	244.97	21.13	3.70
C0646-098-7500-M	0.646	16.41	0.098	2.49	7.500	190.50	4.702	119.42	4.418	112.23	55.07	244.97	19.68	3.44
C0646-098-8000-M	0.646	16.41	0.098	2.49	8.000	203.20	5.010	127.26	4.707	119.55	55.07	244.97	18.42	3.22
C0646-098-8500-M	0.646	16.41	0.098	2.49	8.500	215.90	5.319	135.09	4.995	126.87	55.07	244.97	17.31	3.03
C0646-098-9000-M	0.646	16.41	0.098	2.49	9.000	228.60	5.627	142.93	5.283	134.20	55.07	244.97	16.33	2.86
C0646-098-9500-M	0.646	16.41	0.098	2.49	9.500	241.30	5.935	150.76	5.572	141.52	55.07	244.97	15.45	2.70
C0646-105-0938-M	0.646	16.41	0.105	2.67	0.938	23.81	0.688	17.49	0.677	17.19	66.40	295.37	266.65	46.66
C0646-105-1000-M	0.646	16.41	0.105	2.67	1.000	25.40	0.730	18.53	0.716	18.19	66.40	295.37	245.56	42.97
C0646-105-1125-M	0.646	16.41	0.105	2.67	1.125	28.58	0.812	20.62	0.794	20.18	66.40	295.37	212.01	37.10
C0646-105-1250-M	0.646	16.41	0.105	2.67	1.250	31.75	0.894	22.71	0.873	22.17	66.40	295.37	186.53	32.64
C0646-105-1375-M	0.646	16.41	0.105	2.67	1.375	34.93	0.976	24.80	0.951	24.16	66.40	295.37	166.51	29.14
C0646-105-1500-M	0.646	16.41	0.105	2.67	1.500	38.10	1.058	26.88	1.030	26.15	66.40	295.37	150.38	26.32
C0646-105-1625-M	0.646	16.41	0.105	2.67	1.625	41.28	1.141	28.97	1.108	28.14	66.40	295.37	137.10	23.99
C0646-105-1750-M	0.646	16.41	0.105	2.67	1.750	44.45	1.223	31.06	1.186	30.13	66.40	295.37	125.97	22.04
C0646-105-1875-M	0.646	16.41	0.105	2.67	1.875	47.63	1.305	33.15	1.265	32.12	66.40	295.37	116.51	20.39
C0646-105-2000-M	0.646	16.41	0.105	2.67	2.000	50.80	1.387	35.24	1.343	34.11	66.40	295.37	108.37	18.97
C0646-105-2125-M	0.646	16.41	0.105	2.67	2.125	53.98	1.469	37.33	1.422	36.11	66.40	295.37	101.30	17.73
C0646-105-2250-M	0.646	16.41	0.105	2.67	2.250	57.15	1.552	39.41	1.500	38.10	66.40	295.37	95.09	16.64
C0646-105-2375-M	0.646	16.41	0.105	2.67	2.375	60.33	1.634	41.50	1.578	40.09	66.40	295.37	89.60	15.68

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0646-092-5500-S	3.491	88.68	36.23	161.16	18.04	3.16
C0646-092-5750-S	3.647	92.63	36.23	161.16	17.23	3.01
C0646-092-6000-S	3.802	96.58	36.23	161.16	16.49	2.89
C0646-092-6250-S	3.958	100.53	36.23	161.16	15.81	2.77
C0646-092-6500-S	4.113	104.48	36.23	161.16	15.18	2.66
C0646-092-6750-S	4.269	108.43	36.23	161.16	14.60	2.56
C0646-092-7000-S	4.424	112.38	36.23	161.16	14.07	2.46
C0646-092-7500-S	4.736	120.28	36.23	161.16	13.11	2.29
C0646-092-8000-S	5.047	128.18	36.23	161.16	12.27	2.15
C0646-092-8500-S	5.358	136.08	36.23	161.16	11.53	2.02
C0646-092-9000-S	5.669	143.99	36.23	161.16	10.88	1.90
C0646-092-9500-S	5.980	151.89	36.23	161.16	10.29	1.80
C0646-098-0938-S	0.683	17.35	42.87	190.69	168.58	29.50
C0646-098-1000-S	0.724	18.40	42.87	190.69	155.47	27.21
C0646-098-1125-S	0.806	20.48	42.87	190.69	134.55	23.55
C0646-098-1250-S	0.889	22.57	42.87	190.69	118.60	20.75
C0646-098-1375-S	0.971	24.65	42.87	190.69	106.02	18.55
C0646-098-1500-S	1.053	26.74	42.87	190.69	95.86	16.78
C0646-098-1625-S	1.135	28.83	42.87	190.69	87.47	15.31
C0646-098-1750-S	1.217	30.91	42.87	190.69	80.44	14.08
C0646-098-1875-S	1.299	33.00	42.87	190.69	74.45	13.03
C0646-098-2000-S	1.381	35.09	42.87	190.69	69.29	12.13
C0646-098-2125-S	1.463	37.17	42.87	190.69	64.80	11.34
C0646-098-2250-S	1.546	39.26	42.87	190.69	60.86	10.65
C0646-098-2375-S	1.628	41.34	42.87	190.69	57.37	10.04
C0646-098-2500-S	1.710	43.43	42.87	190.69	54.25	9.49
C0646-098-2625-S	1.792	45.52	42.87	190.69	51.46	9.01
C0646-098-2750-S	1.874	47.60	42.87	190.69	48.94	8.57
C0646-098-2875-S	1.956	49.69	42.87	190.69	46.66	8.17
C0646-098-3000-S	2.038	51.77	42.87	190.69	44.58	7.80
C0646-098-3250-S	2.203	55.95	42.87	190.69	40.93	7.16
C0646-098-3500-S	2.367	60.12	42.87	190.69	37.83	6.62
C0646-098-3750-S	2.531	64.29	42.87	190.69	35.17	6.15
C0646-098-4000-S	2.695	68.46	42.87	190.69	32.86	5.75
C0646-098-4250-S	2.860	72.64	42.87	190.69	30.83	5.40
C0646-098-4500-S	3.024	76.81	42.87	190.69	29.04	5.08
C0646-098-4750-S	3.188	80.98	42.87	190.69	27.45	4.80
C0646-098-5000-S	3.352	85.15	42.87	190.69	26.02	4.55
C0646-098-5250-S	3.517	89.32	42.87	190.69	24.73	4.33
C0646-098-5500-S	3.681	93.50	42.87	190.69	23.57	4.12
C0646-098-5750-S	3.845	97.67	42.87	190.69	22.51	3.94
C0646-098-6000-S	4.009	101.84	42.87	190.69	21.54	3.77
C0646-098-6250-S	4.174	106.01	42.87	190.69	20.65	3.61
C0646-098-6500-S	4.338	110.19	42.87	190.69	19.83	3.47
C0646-098-6750-S	4.502	114.36	42.87	190.69	19.07	3.34
C0646-098-7000-S	4.667	118.53	42.87	190.69	18.37	3.21
C0646-098-7500-S	4.995	126.87	42.87	190.69	17.11	2.99
C0646-098-8000-S	5.324	135.22	42.87	190.69	16.02	2.80
C0646-098-8500-S	5.652	143.56	42.87	190.69	15.05	2.63
C0646-098-9000-S	5.981	151.91	42.87	190.69	14.20	2.48
C0646-098-9500-S	6.309	160.25	42.87	190.69	13.44	2.35
C0646-105-0938-S	0.716	18.18	51.44	228.83	231.87	40.58
C0646-105-1000-S	0.759	19.28	51.44	228.83	213.53	37.37
C0646-105-1125-S	0.846	21.49	51.44	228.83	184.36	32.26
C0646-105-1250-S	0.933	23.69	51.44	228.83	162.20	28.38
C0646-105-1375-S	1.020	25.90	51.44	228.83	144.80	25.34
C0646-105-1500-S	1.107	28.11	51.44	228.83	130.76	22.88
C0646-105-1625-S	1.193	30.31	51.44	228.83	119.21	20.86
C0646-105-1750-S	1.280	32.52	51.44	228.83	109.54	19.17
C0646-105-1875-S	1.367	34.73	51.44	228.83	101.31	17.73
C0646-105-2000-S	1.454	36.93	51.44	228.83	94.24	16.49
C0646-105-2125-S	1.541	39.14	51.44	228.83	88.09	15.42
C0646-105-2250-S	1.628	41.35	51.44	228.83	82.69	14.47
C0646-105-2375-S	1.715	43.55	51.44	228.83	77.92	13.64

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0646-105-2500-M	0.646	16.41	0.105	2.67	2.500	63.50	1.716	43.59	1.657	42.08	66.40	295.37	84.71	14.82
C0646-105-2625-M	0.646	16.41	0.105	2.67	2.625	66.68	1.798	45.68	1.735	44.07	66.40	295.37	80.33	14.06
C0646-105-2750-M	0.646	16.41	0.105	2.67	2.750	69.85	1.881	47.77	1.813	46.06	66.40	295.37	76.37	13.37
C0646-105-2875-M	0.646	16.41	0.105	2.67	2.875	73.03	1.963	49.85	1.892	48.05	66.40	295.37	72.79	12.74
C0646-105-3000-M	0.646	16.41	0.105	2.67	3.000	76.20	2.045	51.94	1.970	50.04	66.40	295.37	69.53	12.17
C0646-105-3250-M	0.646	16.41	0.105	2.67	3.250	82.55	2.209	56.12	2.127	54.03	66.40	295.37	63.81	11.17
C0646-105-3500-M	0.646	16.41	0.105	2.67	3.500	88.90	2.374	60.30	2.284	58.01	66.40	295.37	58.96	10.32
C0646-105-3750-M	0.646	16.41	0.105	2.67	3.750	95.25	2.538	64.47	2.441	61.99	66.40	295.37	54.80	9.59
C0646-105-4000-M	0.646	16.41	0.105	2.67	4.000	101.60	2.703	68.65	2.597	65.97	66.40	295.37	51.18	8.96
C0646-105-4250-M	0.646	16.41	0.105	2.67	4.250	107.95	2.867	72.82	2.754	69.96	66.40	295.37	48.02	8.40
C0646-105-4500-M	0.646	16.41	0.105	2.67	4.500	114.30	3.032	77.00	2.911	73.94	66.40	295.37	45.22	7.91
C0646-105-4750-M	0.646	16.41	0.105	2.67	4.750	120.65	3.196	81.18	3.068	77.92	66.40	295.37	42.73	7.48
C0646-105-5000-M	0.646	16.41	0.105	2.67	5.000	127.00	3.360	85.35	3.225	81.90	66.40	295.37	40.50	7.09
C0646-105-5250-M	0.646	16.41	0.105	2.67	5.250	133.35	3.525	89.53	3.381	85.89	66.40	295.37	38.49	6.74
C0646-105-5500-M	0.646	16.41	0.105	2.67	5.500	139.70	3.689	93.71	3.538	89.87	66.40	295.37	36.67	6.42
C0646-105-5750-M	0.646	16.41	0.105	2.67	5.750	146.05	3.854	97.88	3.695	93.85	66.40	295.37	35.02	6.13
C0646-105-6000-M	0.646	16.41	0.105	2.67	6.000	152.40	4.018	102.06	3.852	97.83	66.40	295.37	33.50	5.86
C0646-105-6250-M	0.646	16.41	0.105	2.67	6.250	158.75	4.182	106.24	4.009	101.82	66.40	295.37	32.12	5.62
C0646-105-6500-M	0.646	16.41	0.105	2.67	6.500	165.10	4.347	110.41	4.165	105.80	66.40	295.37	30.84	5.40
C0646-105-6750-M	0.646	16.41	0.105	2.67	6.750	171.45	4.511	114.59	4.322	109.78	66.40	295.37	29.66	5.19
C0646-105-7000-M	0.646	16.41	0.105	2.67	7.000	177.80	4.676	118.76	4.479	113.76	66.40	295.37	28.57	5.00
C0646-105-7500-M	0.646	16.41	0.105	2.67	7.500	190.50	5.005	127.12	4.792	121.73	66.40	295.37	26.61	4.66
C0646-105-8000-M	0.646	16.41	0.105	2.67	8.000	203.20	5.333	135.47	5.106	129.69	66.40	295.37	24.90	4.36
C0646-105-8500-M	0.646	16.41	0.105	2.67	8.500	215.90	5.662	143.82	5.420	137.66	66.40	295.37	23.40	4.10
C0646-105-9000-M	0.646	16.41	0.105	2.67	9.000	228.60	5.991	152.18	5.733	145.62	66.40	295.37	22.07	3.86
C0646-105-9500-M	0.646	16.41	0.105	2.67	9.500	241.30	6.320	160.53	6.047	153.59	66.40	295.37	20.88	3.65
C0646-112-0938-M	0.646	16.41	0.112	2.85	0.938	23.81	0.720	18.29	0.716	18.18	79.03	351.52	363.48	63.61
C0646-112-1000-M	0.646	16.41	0.112	2.85	1.000	25.40	0.764	19.39	0.758	19.25	79.03	351.52	334.20	58.49
C0646-112-1125-M	0.646	16.41	0.112	2.85	1.125	28.58	0.850	21.60	0.842	21.39	79.03	351.52	287.84	50.37
C0646-112-1250-M	0.646	16.41	0.112	2.85	1.250	31.75	0.937	23.81	0.926	23.53	79.03	351.52	252.77	44.23
C0646-112-1375-M	0.646	16.41	0.112	2.85	1.375	34.93	1.024	26.02	1.010	25.67	79.03	351.52	225.32	39.43
C0646-112-1500-M	0.646	16.41	0.112	2.85	1.500	38.10	1.111	28.22	1.095	27.81	79.03	351.52	203.25	35.57
C0646-112-1625-M	0.646	16.41	0.112	2.85	1.625	41.28	1.198	30.43	1.179	29.94	79.03	351.52	185.11	32.39
C0646-112-1750-M	0.646	16.41	0.112	2.85	1.750	44.45	1.285	32.64	1.263	32.08	79.03	351.52	169.95	29.74
C0646-112-1875-M	0.646	16.41	0.112	2.85	1.875	47.63	1.372	34.85	1.347	34.22	79.03	351.52	157.08	27.49
C0646-112-2000-M	0.646	16.41	0.112	2.85	2.000	50.80	1.459	37.05	1.431	36.36	79.03	351.52	146.03	25.55
C0646-112-2125-M	0.646	16.41	0.112	2.85	2.125	53.98	1.546	39.26	1.516	38.50	79.03	351.52	136.42	23.87
C0646-112-2250-M	0.646	16.41	0.112	2.85	2.250	57.15	1.633	41.47	1.600	40.64	79.03	351.52	128.01	22.40
C0646-112-2375-M	0.646	16.41	0.112	2.85	2.375	60.33	1.720	43.68	1.684	42.78	79.03	351.52	120.57	21.10
C0646-112-2500-M	0.646	16.41	0.112	2.85	2.500	63.50	1.806	45.88	1.768	44.91	79.03	351.52	113.95	19.94
C0646-112-2625-M	0.646	16.41	0.112	2.85	2.625	66.68	1.893	48.09	1.852	47.05	79.03	351.52	108.01	18.90
C0646-112-2750-M	0.646	16.41	0.112	2.85	2.750	69.85	1.980	50.30	1.937	49.19	79.03	351.52	102.67	17.97
C0646-112-2875-M	0.646	16.41	0.112	2.85	2.875	73.03	2.067	52.51	2.021	51.33	79.03	351.52	97.83	17.12
C0646-112-3000-M	0.646	16.41	0.112	2.85	3.000	76.20	2.154	54.71	2.105	53.47	79.03	351.52	93.42	16.35
C0646-112-3250-M	0.646	16.41	0.112	2.85	3.250	82.55	2.328	59.13	2.273	57.75	79.03	351.52	85.70	15.00
C0646-112-3500-M	0.646	16.41	0.112	2.85	3.500	88.90	2.502	63.54	2.442	62.02	79.03	351.52	79.16	13.85
C0646-112-3750-M	0.646	16.41	0.112	2.85	3.750	95.25	2.676	67.96	2.610	66.30	79.03	351.52	73.55	12.87
C0646-112-4000-M	0.646	16.41	0.112	2.85	4.000	101.60	2.849	72.37	2.779	70.58	79.03	351.52	68.68	12.02
C0646-112-4250-M	0.646	16.41	0.112	2.85	4.250	107.95	3.023	76.79	2.947	74.86	79.03	351.52	64.42	11.27
C0646-112-4500-M	0.646	16.41	0.112	2.85	4.500	114.30	3.197	81.20	3.115	79.13	79.03	351.52	60.65	10.61
C0646-112-4750-M	0.646	16.41	0.112	2.85	4.750	120.65	3.371	85.62	3.284	83.41	79.03	351.52	57.30	10.03
C0646-112-5000-M	0.646	16.41	0.112	2.85	5.000	127.00	3.545	90.03	3.452	87.69	79.03	351.52	54.30	9.50
C0646-112-5250-M	0.646	16.41	0.112	2.85	5.250	133.35	3.718	94.45	3.621	91.96	79.03	351.52	51.60	9.03
C0646-112-5500-M	0.646	16.41	0.112	2.85	5.500	139.70	3.892	98.86	3.789	96.24	79.03	351.52	49.16	8.60
C0646-112-5750-M	0.646	16.41	0.112	2.85	5.750	146.05	4.066	103.28	3.957	100.52	79.03	351.52	46.93	8.21
C0646-112-6000-M	0.646	16.41	0.112	2.85	6.000	152.40	4.240	107.69	4.126	104.80	79.03	351.52	44.90	7.86
C0646-112-6250-M	0.646	16.41	0.112	2.85	6.250	158.75	4.414	112.11	4.294	109.07	79.03	351.52	43.04	7.53
C0646-112-6500-M	0.646	16.41	0.112	2.85	6.500	165.10	4.588	116.52	4.463	113.35	79.03	351.52	41.32	7.23
C0646-112-6750-M	0.646	16.41	0.112	2.85	6.750	171.45	4.761	120.94	4.631	117.63	79.03	351.52	39.74	6.95
C0646-112-7000-M	0.646	16.41	0.112	2.85	7.000	177.80	4.935	125.36	4.799	121.91	79.03	351.52	38.27	6.70
C0646-112-7500-M	0.646	16.41	0.112	2.85	7.500	190.50	5.283	134.19	5.136	130.46	79.03	351.52	35.64	6.24
C0646-112-8000-M	0.646	16.41	0.112	2.85	8.000	203.20	5.631	143.02	5.473	139.01	79.03	351.52	33.35	5.84
C0646-112-8500-M	0.646	16.41	0.112	2.85	8.500	215.90	5.978	151.85	5.810	147.57	79.03	351.52	31.34	5.48
C0646-112-9000-M	0.646	16.41	0.112	2.85	9.000	228.60	6.326	160.68	6.147	156.12	79.03	351.52	29.55	5.17

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0646-105-2500-S	1.802	45.76	51.44	228.83	73.66	12.89
C0646-105-2625-S	1.889	47.97	51.44	228.83	69.85	12.22
C0646-105-2750-S	1.975	50.17	51.44	228.83	66.41	11.62
C0646-105-2875-S	2.062	52.38	51.44	228.83	63.30	11.08
C0646-105-3000-S	2.149	54.59	51.44	228.83	60.46	10.58
C0646-105-3250-S	2.323	59.00	51.44	228.83	55.49	9.71
C0646-105-3500-S	2.497	63.42	51.44	228.83	51.27	8.97
C0646-105-3750-S	2.670	67.83	51.44	228.83	47.65	8.34
C0646-105-4000-S	2.844	72.24	51.44	228.83	44.51	7.79
C0646-105-4250-S	3.018	76.66	51.44	228.83	41.75	7.31
C0646-105-4500-S	3.192	81.07	51.44	228.83	39.32	6.88
C0646-105-4750-S	3.365	85.48	51.44	228.83	37.16	6.50
C0646-105-5000-S	3.539	89.90	51.44	228.83	35.22	6.16
C0646-105-5250-S	3.713	94.31	51.44	228.83	33.47	5.86
C0646-105-5500-S	3.887	98.72	51.44	228.83	31.89	5.58
C0646-105-5750-S	4.060	103.14	51.44	228.83	30.45	5.33
C0646-105-6000-S	4.234	107.55	51.44	228.83	29.13	5.10
C0646-105-6250-S	4.408	111.96	51.44	228.83	27.93	4.89
C0646-105-6500-S	4.582	116.38	51.44	228.83	26.82	4.69
C0646-105-6750-S	4.756	120.79	51.44	228.83	25.79	4.51
C0646-105-7000-S	4.929	125.20	51.44	228.83	24.84	4.35
C0646-105-7500-S	5.277	134.03	51.44	228.83	23.14	4.05
C0646-105-8000-S	5.624	142.86	51.44	228.83	21.65	3.79
C0646-105-8500-S	5.972	151.68	51.44	228.83	20.35	3.56
C0646-105-9000-S	6.319	160.51	51.44	228.83	19.19	3.36
C0646-105-9500-S	6.667	169.34	51.44	228.83	18.16	3.18
C0646-112-0938-S	0.745	18.92	60.92	270.99	316.07	55.31
C0646-112-1000-S	0.790	20.08	60.92	270.99	290.61	50.86
C0646-112-1125-S	0.882	22.39	60.92	270.99	250.29	43.80
C0646-112-1250-S	0.973	24.71	60.92	270.99	219.80	38.46
C0646-112-1375-S	1.064	27.03	60.92	270.99	195.93	34.29
C0646-112-1500-S	1.155	29.34	60.92	270.99	176.74	30.93
C0646-112-1625-S	1.247	31.66	60.92	270.99	160.97	28.17
C0646-112-1750-S	1.338	33.98	60.92	270.99	147.78	25.86
C0646-112-1875-S	1.429	36.30	60.92	270.99	136.59	23.90
C0646-112-2000-S	1.520	38.61	60.92	270.99	126.98	22.22
C0646-112-2125-S	1.611	40.93	60.92	270.99	118.63	20.76
C0646-112-2250-S	1.703	43.25	60.92	270.99	111.31	19.48
C0646-112-2375-S	1.794	45.57	60.92	270.99	104.84	18.35
C0646-112-2500-S	1.885	47.88	60.92	270.99	99.08	17.34
C0646-112-2625-S	1.976	50.20	60.92	270.99	93.93	16.44
C0646-112-2750-S	2.068	52.52	60.92	270.99	89.28	15.62
C0646-112-2875-S	2.159	54.83	60.92	270.99	85.07	14.89
C0646-112-3000-S	2.250	57.15	60.92	270.99	81.24	14.22
C0646-112-3250-S	2.433	61.79	60.92	270.99	74.53	13.04
C0646-112-3500-S	2.615	66.42	60.92	270.99	68.84	12.05
C0646-112-3750-S	2.797	71.06	60.92	270.99	63.96	11.19
C0646-112-4000-S	2.980	75.69	60.92	270.99	59.72	10.45
C0646-112-4250-S	3.162	80.32	60.92	270.99	56.01	9.80
C0646-112-4500-S	3.345	84.96	60.92	270.99	52.74	9.23
C0646-112-4750-S	3.527	89.59	60.92	270.99	49.83	8.72
C0646-112-5000-S	3.710	94.23	60.92	270.99	47.22	8.26
C0646-112-5250-S	3.892	98.86	60.92	270.99	44.87	7.85
C0646-112-5500-S	4.075	103.50	60.92	270.99	42.74	7.48
C0646-112-5750-S	4.257	108.13	60.92	270.99	40.81	7.14
C0646-112-6000-S	4.440	112.77	60.92	270.99	39.04	6.83
C0646-112-6250-S	4.622	117.40	60.92	270.99	37.42	6.55
C0646-112-6500-S	4.805	122.04	60.92	270.99	35.93	6.29
C0646-112-6750-S	4.987	126.67	60.92	270.99	34.56	6.05
C0646-112-7000-S	5.169	131.31	60.92	270.99	33.28	5.82
C0646-112-7500-S	5.534	140.57	60.92	270.99	30.99	5.42
C0646-112-8000-S	5.899	149.84	60.92	270.99	29.00	5.08
C0646-112-8500-S	6.264	159.11	60.92	270.99	27.25	4.77
C0646-112-9000-S	6.629	168.38	60.92	270.99	25.70	4.50

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0646-112-9500-M	**0.646**	**16.41**	**0.112**	**2.85**	**9.500**	**241.30**	**6.673**	**169.51**	**6.483**	**164.68**	**79.03**	**351.52**	**27.96**	**4.89**
C0646-125-1000-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.000**	**25.40**	**0.851**	**21.61**	**0.824**	**20.94**	**86.63**	**385.36**	**579.84**	**101.47**
C0646-125-1125-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.125**	**28.58**	**0.949**	**24.10**	**0.918**	**23.31**	**87.51**	**389.28**	**497.01**	**86.98**
C0646-125-1250-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.250**	**31.75**	**1.047**	**26.60**	**1.011**	**25.69**	**88.17**	**392.21**	**434.88**	**76.10**
C0646-125-1375-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.375**	**34.93**	**1.146**	**29.10**	**1.105**	**28.07**	**88.69**	**394.50**	**386.56**	**67.65**
C0646-125-1500-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.500**	**38.10**	**1.244**	**31.60**	**1.199**	**30.45**	**89.10**	**396.32**	**347.91**	**60.88**
C0646-125-1625-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.625**	**41.28**	**1.342**	**34.09**	**1.292**	**32.83**	**89.43**	**397.82**	**316.28**	**55.35**
C0646-125-1750-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.750**	**44.45**	**1.441**	**36.59**	**1.386**	**35.20**	**89.71**	**399.06**	**289.92**	**50.74**
C0646-125-1875-M	**0.646**	**16.41**	**0.125**	**3.18**	**1.875**	**47.63**	**1.539**	**39.09**	**1.480**	**37.58**	**89.95**	**400.12**	**267.62**	**46.83**
C0646-125-2000-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.000**	**50.80**	**1.574**	**39.97**	**1.573**	**39.96**	**105.98**	**471.41**	**248.50**	**43.49**
C0646-125-2125-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.125**	**53.98**	**1.668**	**42.37**	**1.667**	**42.34**	**105.98**	**471.41**	**231.94**	**40.59**
C0646-125-2250-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.250**	**57.15**	**1.763**	**44.77**	**1.760**	**44.72**	**105.98**	**471.41**	**217.44**	**38.05**
C0646-125-2375-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.375**	**60.33**	**1.857**	**47.17**	**1.854**	**47.09**	**105.98**	**471.41**	**204.65**	**35.81**
C0646-125-2500-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.500**	**63.50**	**1.952**	**49.57**	**1.948**	**49.47**	**105.98**	**471.41**	**193.28**	**33.82**
C0646-125-2625-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.625**	**66.68**	**2.046**	**51.97**	**2.041**	**51.85**	**105.98**	**471.41**	**183.11**	**32.04**
C0646-125-2750-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.750**	**69.85**	**2.141**	**54.38**	**2.135**	**54.23**	**105.98**	**471.41**	**173.95**	**30.44**
C0646-125-2875-M	**0.646**	**16.41**	**0.125**	**3.18**	**2.875**	**73.03**	**2.235**	**56.78**	**2.229**	**56.60**	**105.98**	**471.41**	**165.67**	**28.99**
C0646-125-3000-M	**0.646**	**16.41**	**0.125**	**3.18**	**3.000**	**76.20**	**2.330**	**59.18**	**2.322**	**58.98**	**105.98**	**471.41**	**158.14**	**27.67**
C0646-125-3250-M	**0.646**	**16.41**	**0.125**	**3.18**	**3.250**	**82.55**	**2.519**	**63.98**	**2.509**	**63.74**	**105.98**	**471.41**	**144.96**	**25.37**
C0646-125-3500-M	**0.646**	**16.41**	**0.125**	**3.18**	**3.500**	**88.90**	**2.708**	**68.78**	**2.697**	**68.49**	**105.98**	**471.41**	**133.81**	**23.42**
C0646-125-3750-M	**0.646**	**16.41**	**0.125**	**3.18**	**3.750**	**95.25**	**2.897**	**73.59**	**2.884**	**73.25**	**105.98**	**471.41**	**124.25**	**21.74**
C0646-125-4000-M	**0.646**	**16.41**	**0.125**	**3.18**	**4.000**	**101.60**	**3.086**	**78.39**	**3.071**	**78.01**	**105.98**	**471.41**	**115.97**	**20.29**
C0646-125-4250-M	**0.646**	**16.41**	**0.125**	**3.18**	**4.250**	**107.95**	**3.275**	**83.19**	**3.258**	**82.76**	**105.98**	**471.41**	**108.72**	**19.03**
C0646-125-4500-M	**0.646**	**16.41**	**0.125**	**3.18**	**4.500**	**114.30**	**3.464**	**87.99**	**3.446**	**87.52**	**105.98**	**471.41**	**102.33**	**17.91**
C0646-125-4750-M	**0.646**	**16.41**	**0.125**	**3.18**	**4.750**	**120.65**	**3.653**	**92.80**	**3.633**	**92.27**	**105.98**	**471.41**	**96.64**	**16.91**
C0646-125-5000-M	**0.646**	**16.41**	**0.125**	**3.18**	**5.000**	**127.00**	**3.842**	**97.60**	**3.820**	**97.03**	**105.98**	**471.41**	**91.55**	**16.02**
C0646-125-5250-M	**0.646**	**16.41**	**0.125**	**3.18**	**5.250**	**133.35**	**4.032**	**102.40**	**4.007**	**101.79**	**105.98**	**471.41**	**86.98**	**15.22**
C0646-125-5500-M	**0.646**	**16.41**	**0.125**	**3.18**	**5.500**	**139.70**	**4.221**	**107.20**	**4.195**	**106.54**	**105.98**	**471.41**	**82.83**	**14.50**
C0646-125-5750-M	**0.646**	**16.41**	**0.125**	**3.18**	**5.750**	**146.05**	**4.410**	**112.01**	**4.382**	**111.30**	**105.98**	**471.41**	**79.07**	**13.84**
C0646-125-6000-M	**0.646**	**16.41**	**0.125**	**3.18**	**6.000**	**152.40**	**4.599**	**116.81**	**4.569**	**116.05**	**105.98**	**471.41**	**75.63**	**13.24**
C0646-125-6250-M	**0.646**	**16.41**	**0.125**	**3.18**	**6.250**	**158.75**	**4.788**	**121.61**	**4.756**	**120.81**	**105.98**	**471.41**	**72.48**	**12.68**
C0646-125-6500-M	**0.646**	**16.41**	**0.125**	**3.18**	**6.500**	**165.10**	**4.977**	**126.41**	**4.944**	**125.57**	**105.98**	**471.41**	**69.58**	**12.18**
C0646-125-6750-M	**0.646**	**16.41**	**0.125**	**3.18**	**6.750**	**171.45**	**5.166**	**131.22**	**5.131**	**130.32**	**105.98**	**471.41**	**66.91**	**11.71**
C0646-125-7000-M	**0.646**	**16.41**	**0.125**	**3.18**	**7.000**	**177.80**	**5.355**	**136.02**	**5.318**	**135.08**	**105.98**	**471.41**	**64.43**	**11.27**
C0646-125-7500-M	**0.646**	**16.41**	**0.125**	**3.18**	**7.500**	**190.50**	**5.733**	**145.62**	**5.693**	**144.59**	**105.98**	**471.41**	**59.98**	**10.50**
C0646-125-8000-M	**0.646**	**16.41**	**0.125**	**3.18**	**8.000**	**203.20**	**6.111**	**155.23**	**6.067**	**154.10**	**105.98**	**471.41**	**56.11**	**9.82**
C0646-125-8500-M	**0.646**	**16.41**	**0.125**	**3.18**	**8.500**	**215.90**	**6.490**	**164.83**	**6.441**	**163.61**	**105.98**	**471.41**	**52.71**	**9.22**
C0646-125-9000-M	**0.646**	**16.41**	**0.125**	**3.18**	**9.000**	**228.60**	**6.868**	**174.44**	**6.816**	**173.13**	**105.98**	**471.41**	**49.70**	**8.70**
C0646-125-9500-M	**0.646**	**16.41**	**0.125**	**3.18**	**9.500**	**241.30**	**7.246**	**184.04**	**7.190**	**182.64**	**105.98**	**471.41**	**47.01**	**8.23**
C0660-049-0625-M	**0.660**	**16.76**	**0.049**	**1.25**	**0.625**	**15.88**	**0.269**	**6.82**	**0.169**	**4.30**	**8.30**	**36.94**	**23.30**	**4.08**
C0660-049-0750-M	**0.660**	**16.76**	**0.049**	**1.25**	**0.750**	**19.05**	**0.294**	**7.46**	**0.194**	**4.93**	**8.30**	**36.94**	**18.20**	**3.19**
C0660-049-0875-M	**0.660**	**16.76**	**0.049**	**1.25**	**0.875**	**22.23**	**0.329**	**8.35**	**0.217**	**5.50**	**8.30**	**36.94**	**15.20**	**2.66**
C0660-049-1000-M	**0.660**	**16.76**	**0.049**	**1.25**	**1.000**	**25.40**	**0.371**	**9.42**	**0.237**	**6.03**	**8.30**	**36.94**	**13.20**	**2.31**
C0660-049-1250-M	**0.660**	**16.76**	**0.049**	**1.25**	**1.250**	**31.75**	**0.444**	**11.27**	**0.282**	**7.15**	**8.30**	**36.94**	**10.30**	**1.80**
C0660-049-1500-M	**0.660**	**16.76**	**0.049**	**1.25**	**1.500**	**38.10**	**0.523**	**13.29**	**0.323**	**8.20**	**8.30**	**36.94**	**8.50**	**1.49**
C0660-049-1750-M	**0.660**	**16.76**	**0.049**	**1.25**	**1.750**	**44.45**	**0.597**	**15.16**	**0.363**	**9.21**	**8.30**	**36.94**	**7.20**	**1.26**
C0660-049-2000-M	**0.660**	**16.76**	**0.049**	**1.25**	**2.000**	**50.80**	**0.682**	**17.32**	**0.400**	**10.15**	**8.30**	**36.94**	**6.30**	**1.10**
C0660-049-2250-M	**0.660**	**16.76**	**0.049**	**1.25**	**2.250**	**57.15**	**0.740**	**18.80**	**0.443**	**11.25**	**8.30**	**36.94**	**5.50**	**0.96**
C0660-049-2500-M	**0.660**	**16.76**	**0.049**	**1.25**	**2.500**	**63.50**	**0.839**	**21.32**	**0.477**	**12.11**	**8.30**	**36.94**	**5.00**	**0.88**
C0660-049-2750-M	**0.660**	**16.76**	**0.049**	**1.25**	**2.750**	**69.85**	**0.905**	**22.98**	**0.518**	**13.16**	**8.30**	**36.94**	**4.50**	**0.79**
C0660-049-3000-M	**0.660**	**16.76**	**0.049**	**1.25**	**3.000**	**76.20**	**0.975**	**24.76**	**0.559**	**14.19**	**8.30**	**36.94**	**4.10**	**0.72**
C0660-055-0625-M	**0.660**	**16.76**	**0.055**	**1.40**	**0.625**	**15.88**	**0.307**	**7.79**	**0.196**	**4.97**	**11.47**	**51.00**	**36.00**	**6.30**
C0660-055-0750-M	**0.660**	**16.76**	**0.055**	**1.40**	**0.750**	**19.05**	**0.353**	**8.97**	**0.222**	**5.63**	**11.47**	**51.00**	**28.90**	**5.06**
C0660-055-0875-M	**0.660**	**16.76**	**0.055**	**1.40**	**0.875**	**22.23**	**0.399**	**10.14**	**0.248**	**6.30**	**11.47**	**51.00**	**24.10**	**4.22**
C0660-055-1000-M	**0.660**	**16.76**	**0.055**	**1.40**	**1.000**	**25.40**	**0.449**	**11.40**	**0.273**	**6.94**	**11.47**	**51.00**	**20.80**	**3.64**
C0660-055-1250-M	**0.660**	**16.76**	**0.055**	**1.40**	**1.250**	**31.75**	**0.542**	**13.77**	**0.325**	**8.26**	**11.47**	**51.00**	**16.20**	**2.84**
C0660-055-1500-M	**0.660**	**16.76**	**0.055**	**1.40**	**1.500**	**38.10**	**0.638**	**16.20**	**0.373**	**9.48**	**11.47**	**51.00**	**13.30**	**2.33**
C0660-055-1750-M	**0.660**	**16.76**	**0.055**	**1.40**	**1.750**	**44.45**	**0.735**	**18.68**	**0.419**	**10.64**	**11.47**	**51.00**	**11.30**	**1.98**
C0660-055-2000-M	**0.660**	**16.76**	**0.055**	**1.40**	**2.000**	**50.80**	**0.830**	**21.08**	**0.466**	**11.82**	**11.47**	**51.00**	**9.80**	**1.72**
C0660-055-2250-M	**0.660**	**16.76**	**0.055**	**1.40**	**2.250**	**57.15**	**0.917**	**23.29**	**0.514**	**13.07**	**11.47**	**51.00**	**8.60**	**1.51**
C0660-055-2500-M	**0.660**	**16.76**	**0.055**	**1.40**	**2.500**	**63.50**	**1.030**	**26.16**	**0.555**	**14.10**	**11.47**	**51.00**	**7.80**	**1.37**
C0660-055-2750-M	**0.660**	**16.76**	**0.055**	**1.40**	**2.750**	**69.85**	**1.112**	**28.25**	**0.606**	**15.38**	**11.47**	**51.00**	**7.00**	**1.23**
C0660-055-3000-M	**0.660**	**16.76**	**0.055**	**1.40**	**3.000**	**76.20**	**1.208**	**30.70**	**0.651**	**16.55**	**11.47**	**51.00**	**6.40**	**1.12**
C0660-063-0625-M	**0.660**	**16.76**	**0.063**	**1.60**	**0.625**	**15.88**	**0.324**	**8.23**	**0.244**	**6.19**	**16.73**	**74.43**	**55.60**	**9.73**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0646-112-9500-S	**6.994**	**177.65**	**60.92**	**270.99**	**24.31**	**4.25**
C0646-125-1000-S	**0.839**	**21.32**	**80.93**	**359.99**	**504.21**	**88.24**
C0646-125-1125-S	**0.938**	**23.82**	**80.93**	**359.99**	**432.18**	**75.63**
C0646-125-1250-S	**1.036**	**26.31**	**80.93**	**359.99**	**378.16**	**66.18**
C0646-125-1375-S	**1.134**	**28.81**	**80.93**	**359.99**	**336.14**	**58.82**
C0646-125-1500-S	**1.232**	**31.31**	**80.93**	**359.99**	**302.53**	**52.94**
C0646-125-1625-S	**1.331**	**33.80**	**80.93**	**359.99**	**275.02**	**48.13**
C0646-125-1750-S	**1.429**	**36.30**	**80.93**	**359.99**	**252.11**	**44.12**
C0646-125-1875-S	**1.527**	**38.79**	**80.93**	**359.99**	**232.71**	**40.72**
C0646-125-2000-S	**1.625**	**41.29**	**80.93**	**359.99**	**216.09**	**37.82**
C0646-125-2125-S	**1.724**	**43.78**	**80.93**	**359.99**	**201.68**	**35.29**
C0646-125-2250-S	**1.822**	**46.28**	**80.93**	**359.99**	**189.08**	**33.09**
C0646-125-2375-S	**1.920**	**48.77**	**80.93**	**359.99**	**177.96**	**31.14**
C0646-125-2500-S	**2.018**	**51.27**	**80.93**	**359.99**	**168.07**	**29.41**
C0646-125-2625-S	**2.117**	**53.77**	**80.93**	**359.99**	**159.22**	**27.86**
C0646-125-2750-S	**2.215**	**56.26**	**80.93**	**359.99**	**151.26**	**26.47**
C0646-125-2875-S	**2.313**	**58.76**	**80.93**	**359.99**	**144.06**	**25.21**
C0646-125-3000-S	**2.411**	**61.25**	**80.93**	**359.99**	**137.51**	**24.06**
C0646-125-3250-S	**2.608**	**66.24**	**80.93**	**359.99**	**126.05**	**22.06**
C0646-125-3500-S	**2.804**	**71.23**	**80.93**	**359.99**	**116.36**	**20.36**
C0646-125-3750-S	**3.001**	**76.22**	**80.93**	**359.99**	**108.05**	**18.91**
C0646-125-4000-S	**3.197**	**81.22**	**80.93**	**359.99**	**100.84**	**17.65**
C0646-125-4250-S	**3.394**	**86.21**	**80.93**	**359.99**	**94.54**	**16.54**
C0646-125-4500-S	**3.590**	**91.20**	**80.93**	**359.99**	**88.98**	**15.57**
C0646-125-4750-S	**3.787**	**96.19**	**80.93**	**359.99**	**84.04**	**14.71**
C0646-125-5000-S	**3.983**	**101.18**	**80.93**	**359.99**	**79.61**	**13.93**
C0646-125-5250-S	**4.180**	**106.17**	**80.93**	**359.99**	**75.63**	**13.24**
C0646-125-5500-S	**4.376**	**111.16**	**80.93**	**359.99**	**72.03**	**12.61**
C0646-125-5750-S	**4.573**	**116.15**	**80.93**	**359.99**	**68.76**	**12.03**
C0646-125-6000-S	**4.769**	**121.14**	**80.93**	**359.99**	**65.77**	**11.51**
C0646-125-6250-S	**4.966**	**126.14**	**80.93**	**359.99**	**63.03**	**11.03**
C0646-125-6500-S	**5.162**	**131.13**	**80.93**	**359.99**	**60.51**	**10.59**
C0646-125-6750-S	**5.359**	**136.12**	**80.93**	**359.99**	**58.18**	**10.18**
C0646-125-7000-S	**5.555**	**141.11**	**80.93**	**359.99**	**56.02**	**9.80**
C0646-125-7500-S	**5.948**	**151.09**	**80.93**	**359.99**	**52.16**	**9.13**
C0646-125-8000-S	**6.341**	**161.07**	**80.93**	**359.99**	**48.80**	**8.54**
C0646-125-8500-S	**6.734**	**171.05**	**80.93**	**359.99**	**45.84**	**8.02**
C0646-125-9000-S	**7.127**	**181.04**	**80.93**	**359.99**	**43.22**	**7.56**
C0646-125-9500-S	**7.520**	**191.02**	**80.93**	**359.99**	**40.88**	**7.15**
C0660-049-0625-S	**0.299**	**7.61**	**6.32**	**28.11**	**19.41**	**3.40**
C0660-049-0750-S	**0.333**	**8.46**	**6.32**	**28.11**	**15.16**	**2.65**
C0660-049-0875-S	**0.376**	**9.55**	**6.32**	**28.11**	**12.66**	**2.22**
C0660-049-1000-S	**0.425**	**10.80**	**6.32**	**28.11**	**11.00**	**1.92**
C0660-049-1250-S	**0.513**	**13.04**	**6.32**	**28.11**	**8.58**	**1.50**
C0660-049-1500-S	**0.608**	**15.43**	**6.32**	**28.11**	**7.08**	**1.24**
C0660-049-1750-S	**0.696**	**17.69**	**6.32**	**28.11**	**6.00**	**1.05**
C0660-049-2000-S	**0.796**	**20.21**	**6.32**	**28.11**	**5.25**	**0.92**
C0660-049-2250-S	**0.871**	**22.12**	**6.32**	**28.11**	**4.58**	**0.80**
C0660-049-2500-S	**0.983**	**24.96**	**6.32**	**28.11**	**4.17**	**0.73**
C0660-049-2750-S	**1.064**	**27.03**	**6.32**	**28.11**	**3.75**	**0.66**
C0660-049-3000-S	**1.150**	**29.20**	**6.32**	**28.11**	**3.42**	**0.60**
C0660-055-0625-S	**0.334**	**8.49**	**8.72**	**38.78**	**29.99**	**5.25**
C0660-055-0750-S	**0.388**	**9.85**	**8.72**	**38.78**	**24.07**	**4.21**
C0660-055-0875-S	**0.441**	**11.19**	**8.72**	**38.78**	**20.08**	**3.51**
C0660-055-1000-S	**0.497**	**12.62**	**8.72**	**38.78**	**17.33**	**3.03**
C0660-055-1250-S	**0.604**	**15.34**	**8.72**	**38.78**	**13.50**	**2.36**
C0660-055-1500-S	**0.713**	**18.11**	**8.72**	**38.78**	**11.08**	**1.94**
C0660-055-1750-S	**0.824**	**20.92**	**8.72**	**38.78**	**9.41**	**1.65**
C0660-055-2000-S	**0.932**	**23.67**	**8.72**	**38.78**	**8.16**	**1.43**
C0660-055-2250-S	**1.033**	**26.24**	**8.72**	**38.78**	**7.16**	**1.25**
C0660-055-2500-S	**1.158**	**29.42**	**8.72**	**38.78**	**6.50**	**1.14**
C0660-055-2750-S	**1.255**	**31.87**	**8.72**	**38.78**	**5.83**	**1.02**
C0660-055-3000-S	**1.365**	**34.66**	**8.72**	**38.78**	**5.33**	**0.93**
C0660-063-0625-S	**0.351**	**8.91**	**12.69**	**56.47**	**46.32**	**8.11**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0660-063-0750-M	**0.660**	**16.76**	**0.063**	**1.60**	**0.750**	**19.05**	**0.374**	**9.50**	**0.279**	**7.08**	**16.73**	**74.43**	**44.50**	**7.79**
C0660-063-0875-M	**0.660**	**16.76**	**0.063**	**1.60**	**0.875**	**22.23**	**0.424**	**10.77**	**0.314**	**7.97**	**16.73**	**74.43**	**37.10**	**6.49**
C0660-063-1000-M	**0.660**	**16.76**	**0.063**	**1.60**	**1.000**	**25.40**	**0.474**	**12.03**	**0.349**	**8.86**	**16.73**	**74.43**	**31.80**	**5.57**
C0660-063-1250-M	**0.660**	**16.76**	**0.063**	**1.60**	**1.250**	**31.75**	**0.573**	**14.54**	**0.417**	**10.60**	**16.73**	**74.43**	**24.70**	**4.32**
C0660-063-1500-M	**0.660**	**16.76**	**0.063**	**1.60**	**1.500**	**38.10**	**0.672**	**17.06**	**0.481**	**12.21**	**16.73**	**74.43**	**20.20**	**3.54**
C0660-063-1750-M	**0.660**	**16.76**	**0.063**	**1.60**	**1.750**	**44.45**	**0.771**	**19.59**	**0.544**	**13.82**	**16.73**	**74.43**	**17.10**	**2.99**
C0660-063-2000-M	**0.660**	**16.76**	**0.063**	**1.60**	**2.000**	**50.80**	**0.869**	**22.08**	**0.608**	**15.44**	**16.73**	**74.43**	**14.80**	**2.59**
C0660-063-2250-M	**0.660**	**16.76**	**0.063**	**1.60**	**2.250**	**57.15**	**0.973**	**24.71**	**0.670**	**17.01**	**16.73**	**74.43**	**13.10**	**2.29**
C0660-063-2500-M	**0.660**	**16.76**	**0.063**	**1.60**	**2.500**	**63.50**	**1.070**	**27.17**	**0.734**	**18.64**	**16.73**	**74.43**	**11.70**	**2.05**
C0660-063-2750-M	**0.660**	**16.76**	**0.063**	**1.60**	**2.750**	**69.85**	**1.171**	**29.75**	**0.796**	**20.23**	**16.73**	**74.43**	**10.60**	**1.86**
C0660-063-3000-M	**0.660**	**16.76**	**0.063**	**1.60**	**3.000**	**76.20**	**1.275**	**32.38**	**0.858**	**21.80**	**16.73**	**74.43**	**9.70**	**1.70**
C0660-067-0625-M	**0.660**	**16.76**	**0.067**	**1.70**	**0.625**	**15.88**	**0.344**	**8.74**	**0.263**	**6.68**	**19.85**	**88.30**	**70.70**	**12.37**
C0660-067-0750-M	**0.660**	**16.76**	**0.067**	**1.70**	**0.750**	**19.05**	**0.398**	**10.11**	**0.302**	**7.67**	**19.85**	**88.30**	**56.40**	**9.87**
C0660-067-0875-M	**0.660**	**16.76**	**0.067**	**1.70**	**0.875**	**22.23**	**0.452**	**11.47**	**0.341**	**8.66**	**19.85**	**88.30**	**46.90**	**8.21**
C0660-067-1000-M	**0.660**	**16.76**	**0.067**	**1.70**	**1.000**	**25.40**	**0.505**	**12.83**	**0.380**	**9.66**	**19.85**	**88.30**	**40.10**	**7.02**
C0660-067-1250-M	**0.660**	**16.76**	**0.067**	**1.70**	**1.250**	**31.75**	**0.612**	**15.54**	**0.455**	**11.56**	**19.85**	**88.30**	**31.10**	**5.44**
C0660-067-1500-M	**0.660**	**16.76**	**0.067**	**1.70**	**1.500**	**38.10**	**0.722**	**18.33**	**0.524**	**13.31**	**19.85**	**88.30**	**25.50**	**4.46**
C0660-067-1750-M	**0.660**	**16.76**	**0.067**	**1.70**	**1.750**	**44.45**	**0.827**	**21.00**	**0.595**	**15.12**	**19.85**	**88.30**	**21.50**	**3.76**
C0660-067-2000-M	**0.660**	**16.76**	**0.067**	**1.70**	**2.000**	**50.80**	**0.933**	**23.69**	**0.666**	**16.92**	**19.85**	**88.30**	**18.60**	**3.26**
C0660-067-2250-M	**0.660**	**16.76**	**0.067**	**1.70**	**2.250**	**57.15**	**1.047**	**26.59**	**0.733**	**18.62**	**19.85**	**88.30**	**16.50**	**2.89**
C0660-067-2500-M	**0.660**	**16.76**	**0.067**	**1.70**	**2.500**	**63.50**	**1.150**	**29.20**	**0.805**	**20.46**	**19.85**	**88.30**	**14.70**	**2.57**
C0660-067-2750-M	**0.660**	**16.76**	**0.067**	**1.70**	**2.750**	**69.85**	**1.257**	**31.94**	**0.875**	**22.24**	**19.85**	**88.30**	**13.30**	**2.33**
C0660-067-3000-M	**0.660**	**16.76**	**0.067**	**1.70**	**3.000**	**76.20**	**1.359**	**34.53**	**0.948**	**24.09**	**19.85**	**88.30**	**12.10**	**2.12**
C0660-072-0625-M	**0.660**	**16.76**	**0.072**	**1.83**	**0.625**	**15.88**	**0.368**	**9.33**	**0.287**	**7.30**	**24.23**	**107.78**	**94.10**	**16.47**
C0660-072-0750-M	**0.660**	**16.76**	**0.072**	**1.83**	**0.750**	**19.05**	**0.426**	**10.81**	**0.331**	**8.41**	**24.23**	**107.78**	**74.70**	**13.07**
C0660-072-0875-M	**0.660**	**16.76**	**0.072**	**1.83**	**0.875**	**22.23**	**0.484**	**12.30**	**0.375**	**9.53**	**24.23**	**107.78**	**62.00**	**10.85**
C0660-072-1000-M	**0.660**	**16.76**	**0.072**	**1.83**	**1.000**	**25.40**	**0.543**	**13.79**	**0.419**	**10.64**	**24.23**	**107.78**	**53.00**	**9.28**
C0660-072-1250-M	**0.660**	**16.76**	**0.072**	**1.83**	**1.250**	**31.75**	**0.659**	**16.74**	**0.502**	**12.74**	**24.23**	**107.78**	**41.00**	**7.18**
C0660-072-1500-M	**0.660**	**16.76**	**0.072**	**1.83**	**1.500**	**38.10**	**0.777**	**19.73**	**0.580**	**14.73**	**24.23**	**107.78**	**33.50**	**5.86**
C0660-072-1750-M	**0.660**	**16.76**	**0.072**	**1.83**	**1.750**	**44.45**	**0.891**	**22.63**	**0.661**	**16.78**	**24.23**	**107.78**	**28.20**	**4.94**
C0660-072-2000-M	**0.660**	**16.76**	**0.072**	**1.83**	**2.000**	**50.80**	**1.011**	**25.68**	**0.738**	**18.73**	**24.23**	**107.78**	**24.50**	**4.29**
C0660-072-2250-M	**0.660**	**16.76**	**0.072**	**1.83**	**2.250**	**57.15**	**1.123**	**28.53**	**0.819**	**20.81**	**24.23**	**107.78**	**21.50**	**3.76**
C0660-072-2500-M	**0.660**	**16.76**	**0.072**	**1.83**	**2.500**	**63.50**	**1.238**	**31.45**	**0.899**	**22.85**	**24.23**	**107.78**	**19.20**	**3.36**
C0660-072-2750-M	**0.660**	**16.76**	**0.072**	**1.83**	**2.750**	**69.85**	**1.365**	**34.68**	**0.972**	**24.69**	**24.23**	**107.78**	**17.50**	**3.06**
C0660-072-3000-M	**0.660**	**16.76**	**0.072**	**1.83**	**3.000**	**76.20**	**1.476**	**37.49**	**1.055**	**26.79**	**24.23**	**107.78**	**15.90**	**2.78**
D12300	0.679	17.25	0.049	1.25	1.594	40.50	0.358	9.10	0.271	6.88	12.19	54.23	9.89	1.73
D12310	0.679	17.25	0.049	1.25	2.441	62.00	0.508	12.90	0.369	9.38	12.19	54.23	6.29	1.10
D12320	0.679	17.25	0.049	1.25	3.701	94.00	0.728	18.50	0.517	13.13	12.19	54.23	4.11	0.72
D12330	0.679	17.25	0.049	1.25	5.512	140.00	1.024	26.00	0.714	18.13	12.19	54.23	2.74	0.48
D12340	0.679	17.25	0.049	1.25	8.071	205.00	1.469	37.30	1.009	25.63	12.19	54.23	1.83	0.32
C0688-105-0875-M	**0.688**	**17.48**	**0.105**	**2.67**	**0.875**	**22.23**	**0.640**	**16.25**	**0.558**	**14.18**	**65.67**	**292.13**	**279.21**	**48.86**
C0688-105-1000-M	**0.688**	**17.48**	**0.105**	**2.67**	**1.000**	**25.40**	**0.721**	**18.30**	**0.631**	**16.03**	**65.67**	**292.13**	**235.03**	**41.13**
C0688-105-1250-M	**0.688**	**17.48**	**0.105**	**2.67**	**1.250**	**31.75**	**0.882**	**22.41**	**0.765**	**19.43**	**65.67**	**292.13**	**178.53**	**31.24**
C0688-105-1500-M	**0.688**	**17.48**	**0.105**	**2.67**	**1.500**	**38.10**	**1.044**	**26.51**	**0.896**	**22.76**	**65.67**	**292.13**	**143.93**	**25.19**
C0688-105-1750-M	**0.688**	**17.48**	**0.105**	**2.67**	**1.750**	**44.45**	**1.205**	**30.61**	**1.027**	**26.08**	**65.67**	**292.13**	**120.57**	**21.10**
C0688-105-2000-M	**0.688**	**17.48**	**0.105**	**2.67**	**2.000**	**50.80**	**1.367**	**34.72**	**1.158**	**29.41**	**65.67**	**292.13**	**103.73**	**18.15**
C0688-105-2250-M	**0.688**	**17.48**	**0.105**	**2.67**	**2.250**	**57.15**	**1.528**	**38.82**	**1.289**	**32.73**	**65.67**	**292.13**	**91.02**	**15.93**
C0688-105-2500-M	**0.688**	**17.48**	**0.105**	**2.67**	**2.500**	**63.50**	**1.690**	**42.93**	**1.420**	**36.06**	**65.67**	**292.13**	**81.08**	**14.19**
C0688-105-2750-M	**0.688**	**17.48**	**0.105**	**2.67**	**2.750**	**69.85**	**1.852**	**47.03**	**1.550**	**39.38**	**65.67**	**292.13**	**73.10**	**12.79**
C0688-105-3000-M	**0.688**	**17.48**	**0.105**	**2.67**	**3.000**	**76.20**	**2.013**	**51.13**	**1.681**	**42.70**	**65.67**	**292.13**	**66.55**	**11.65**
C0688-105-3250-M	**0.688**	**17.48**	**0.105**	**2.67**	**3.250**	**82.55**	**2.175**	**55.24**	**1.812**	**46.03**	**65.67**	**292.13**	**61.08**	**10.69**
C0688-105-3500-M	**0.688**	**17.48**	**0.105**	**2.67**	**3.500**	**88.90**	**2.336**	**59.34**	**1.943**	**49.35**	**65.67**	**292.13**	**56.44**	**9.88**
C0688-105-4000-M	**0.688**	**17.48**	**0.105**	**2.67**	**4.000**	**101.60**	**2.659**	**67.55**	**2.205**	**56.00**	**65.67**	**292.13**	**48.99**	**8.57**
D12500	0.693	17.60	0.063	1.60	1.339	34.00	0.433	11.00	0.346	8.80	23.81	105.91	26.57	4.65
D12510	0.693	17.60	0.063	1.60	2.028	51.50	0.610	15.50	0.472	12.00	23.81	105.91	16.91	2.96
D12520	0.693	17.60	0.063	1.60	3.051	77.50	0.874	22.20	0.661	16.80	23.81	105.91	10.97	1.92
D12530	0.693	17.60	0.063	1.60	4.331	110.00	1.228	31.20	0.913	23.20	23.81	105.91	7.43	1.30
D12540	0.693	17.60	0.063	1.60	6.496	165.00	1.756	44.60	1.291	32.80	23.81	105.91	5.03	0.88
C0705-055-1375-M	**0.705**	**17.91**	**0.055**	**1.40**	**1.375**	**34.93**	**0.492**	**12.49**	**0.353**	**8.96**	**10.29**	**45.78**	**11.65**	**2.04**
C0705-055-1500-M	**0.705**	**17.91**	**0.055**	**1.40**	**1.500**	**38.10**	**0.530**	**13.45**	**0.376**	**9.56**	**10.29**	**45.78**	**10.61**	**1.86**
C0705-055-1625-M	**0.705**	**17.91**	**0.055**	**1.40**	**1.625**	**41.28**	**0.567**	**14.41**	**0.400**	**10.15**	**10.29**	**45.78**	**9.73**	**1.70**
C0705-055-1750-M	**0.705**	**17.91**	**0.055**	**1.40**	**1.750**	**44.45**	**0.605**	**15.37**	**0.423**	**10.75**	**10.29**	**45.78**	**8.99**	**1.57**
C0705-055-1875-M	**0.705**	**17.91**	**0.055**	**1.40**	**1.875**	**47.63**	**0.643**	**16.33**	**0.447**	**11.35**	**10.29**	**45.78**	**8.35**	**1.46**
C0705-055-2000-M	**0.705**	**17.91**	**0.055**	**1.40**	**2.000**	**50.80**	**0.681**	**17.29**	**0.470**	**11.94**	**10.29**	**45.78**	**7.80**	**1.37**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0660-063-0750-S	**0.408**	**10.35**	**12.69**	**56.47**	**37.07**	**6.49**
C0660-063-0875-S	**0.464**	**11.79**	**12.69**	**56.47**	**30.90**	**5.41**
C0660-063-1000-S	**0.521**	**13.23**	**12.69**	**56.47**	**26.49**	**4.64**
C0660-063-1250-S	**0.633**	**16.08**	**12.69**	**56.47**	**20.58**	**3.60**
C0660-063-1500-S	**0.746**	**18.94**	**12.69**	**56.47**	**16.83**	**2.94**
C0660-063-1750-S	**0.859**	**21.81**	**12.69**	**56.47**	**14.24**	**2.49**
C0660-063-2000-S	**0.970**	**24.65**	**12.69**	**56.47**	**12.33**	**2.16**
C0660-063-2250-S	**1.087**	**27.60**	**12.69**	**56.47**	**10.91**	**1.91**
C0660-063-2500-S	**1.197**	**30.42**	**12.69**	**56.47**	**9.75**	**1.71**
C0660-063-2750-S	**1.312**	**33.33**	**12.69**	**56.47**	**8.83**	**1.55**
C0660-063-3000-S	**1.429**	**36.29**	**12.69**	**56.47**	**8.08**	**1.41**
C0660-067-0625-S	**0.370**	**9.39**	**15.04**	**66.89**	**58.89**	**10.31**
C0660-067-0750-S	**0.430**	**10.92**	**15.04**	**66.89**	**46.98**	**8.22**
C0660-067-0875-S	**0.490**	**12.45**	**15.04**	**66.89**	**39.07**	**6.84**
C0660-067-1000-S	**0.550**	**13.97**	**15.04**	**66.89**	**33.40**	**5.85**
C0660-067-1250-S	**0.670**	**17.01**	**15.04**	**66.89**	**25.91**	**4.53**
C0660-067-1500-S	**0.792**	**20.12**	**15.04**	**66.89**	**21.24**	**3.72**
C0660-067-1750-S	**0.910**	**23.12**	**15.04**	**66.89**	**17.91**	**3.13**
C0660-067-2000-S	**1.030**	**26.15**	**15.04**	**66.89**	**15.49**	**2.71**
C0660-067-2250-S	**1.156**	**29.36**	**15.04**	**66.89**	**13.75**	**2.41**
C0660-067-2500-S	**1.272**	**32.31**	**15.04**	**66.89**	**12.25**	**2.14**
C0660-067-2750-S	**1.393**	**35.38**	**15.04**	**66.89**	**11.08**	**1.94**
C0660-067-3000-S	**1.508**	**38.31**	**15.04**	**66.89**	**10.08**	**1.76**
C0660-072-0625-S	**0.391**	**9.94**	**18.31**	**81.46**	**78.39**	**13.72**
C0660-072-0750-S	**0.456**	**11.58**	**18.31**	**81.46**	**62.23**	**10.89**
C0660-072-0875-S	**0.520**	**13.22**	**18.31**	**81.46**	**51.65**	**9.04**
C0660-072-1000-S	**0.585**	**14.86**	**18.31**	**81.46**	**44.15**	**7.73**
C0660-072-1250-S	**0.714**	**18.13**	**18.31**	**81.46**	**34.15**	**5.98**
C0660-072-1500-S	**0.844**	**21.43**	**18.31**	**81.46**	**27.91**	**4.88**
C0660-072-1750-S	**0.970**	**24.65**	**18.31**	**81.46**	**23.49**	**4.11**
C0660-072-2000-S	**1.103**	**28.01**	**18.31**	**81.46**	**20.41**	**3.57**
C0660-072-2250-S	**1.228**	**31.18**	**18.31**	**81.46**	**17.91**	**3.13**
C0660-072-2500-S	**1.355**	**34.42**	**18.31**	**81.46**	**15.99**	**2.80**
C0660-072-2750-S	**1.494**	**37.94**	**18.31**	**81.46**	**14.58**	**2.55**
C0660-072-3000-S	**1.617**	**41.08**	**18.31**	**81.46**	**13.25**	**2.32**
D22300	0.358	9.10	10.15	45.17	8.23	1.44
D22310	0.508	12.90	10.15	45.17	5.26	0.92
D22320	0.728	18.50	10.15	45.17	3.43	0.60
D22330	1.024	26.00	10.15	45.17	2.29	0.40
D22340	1.469	37.30	10.15	45.17	1.54	0.27
C0688-105-0875-S	**0.666**	**16.91**	**48.65**	**216.42**	**232.58**	**40.70**
C0688-105-1000-S	**0.751**	**19.09**	**48.65**	**216.42**	**195.78**	**34.26**
C0688-105-1250-S	**0.923**	**23.44**	**48.65**	**216.42**	**148.72**	**26.03**
C0688-105-1500-S	**1.094**	**27.79**	**48.65**	**216.42**	**119.89**	**20.98**
C0688-105-1750-S	**1.266**	**32.15**	**48.65**	**216.42**	**100.44**	**17.58**
C0688-105-2000-S	**1.437**	**36.50**	**48.65**	**216.42**	**86.41**	**15.12**
C0688-105-2250-S	**1.608**	**40.85**	**48.65**	**216.42**	**75.82**	**13.27**
C0688-105-2500-S	**1.780**	**45.20**	**48.65**	**216.42**	**67.54**	**11.82**
C0688-105-2750-S	**1.951**	**49.56**	**48.65**	**216.42**	**60.89**	**10.66**
C0688-105-3000-S	**2.122**	**53.91**	**48.65**	**216.42**	**55.44**	**9.70**
C0688-105-3250-S	**2.294**	**58.26**	**48.65**	**216.42**	**50.88**	**8.90**
C0688-105-3500-S	**2.465**	**62.61**	**48.65**	**216.42**	**47.02**	**8.23**
C0688-105-4000-S	**2.808**	**71.32**	**48.65**	**216.42**	**40.81**	**7.14**
D22500	0.433	11.00	19.83	88.22	22.11	3.87
D22510	0.610	15.50	19.83	88.22	14.11	2.47
D22520	0.874	22.20	19.83	88.22	9.14	1.60
D22530	1.228	31.20	19.83	88.22	6.17	1.08
D22540	1.756	44.60	19.83	88.22	4.17	0.73
C0705-055-1375-S	**0.567**	**14.41**	**8.18**	**36.40**	**10.13**	**1.77**
C0705-055-1500-S	**0.613**	**15.56**	**8.18**	**36.40**	**9.22**	**1.61**
C0705-055-1625-S	**0.658**	**16.71**	**8.18**	**36.40**	**8.46**	**1.48**
C0705-055-1750-S	**0.703**	**17.86**	**8.18**	**36.40**	**7.82**	**1.37**
C0705-055-1875-S	**0.748**	**19.01**	**8.18**	**36.40**	**7.26**	**1.27**
C0705-055-2000-S	**0.793**	**20.15**	**8.18**	**36.40**	**6.78**	**1.19**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0705-055-2125-M	0.705	17.91	0.055	1.40	2.125	53.98	0.718	18.25	0.494	12.54	10.29	45.78	7.32	1.28
C0705-055-2250-M	0.705	17.91	0.055	1.40	2.250	57.15	0.756	19.20	0.517	13.13	10.29	45.78	6.89	1.21
C0705-055-2375-M	0.705	17.91	0.055	1.40	2.375	60.33	0.794	20.16	0.540	13.73	10.29	45.78	6.51	1.14
C0705-055-2500-M	0.705	17.91	0.055	1.40	2.500	63.50	0.832	21.12	0.564	14.32	10.29	45.78	6.17	1.08
C0705-055-2625-M	0.705	17.91	0.055	1.40	2.625	66.68	0.869	22.08	0.587	14.92	10.29	45.78	5.86	1.03
C0705-055-2750-M	0.705	17.91	0.055	1.40	2.750	69.85	0.907	23.04	0.611	15.52	10.29	45.78	5.58	0.98
C0705-055-2875-M	0.705	17.91	0.055	1.40	2.875	73.03	0.945	24.00	0.634	16.11	10.29	45.78	5.33	0.93
C0705-055-3000-M	0.705	17.91	0.055	1.40	3.000	76.20	0.982	24.95	0.658	16.71	10.29	45.78	5.10	0.89
C0705-055-3250-M	0.705	17.91	0.055	1.40	3.250	82.55	1.058	26.87	0.705	17.90	10.29	45.78	4.70	0.82
C0705-055-3500-M	0.705	17.91	0.055	1.40	3.500	88.90	1.133	28.79	0.752	19.09	10.29	45.78	4.35	0.76
C0705-055-3750-M	0.705	17.91	0.055	1.40	3.750	95.25	1.209	30.71	0.798	20.28	10.29	45.78	4.05	0.71
C0705-055-4000-M	0.705	17.91	0.055	1.40	4.000	101.60	1.284	32.62	0.845	21.47	10.29	45.78	3.79	0.66
C0705-055-4250-M	0.705	17.91	0.055	1.40	4.250	107.95	1.360	34.54	0.892	22.66	10.29	45.78	3.56	0.62
C0705-055-4500-M	0.705	17.91	0.055	1.40	4.500	114.30	1.435	36.46	0.939	23.86	10.29	45.78	3.36	0.59
C0705-055-4750-M	0.705	17.91	0.055	1.40	4.750	120.65	1.511	38.37	0.986	25.05	10.29	45.78	3.18	0.56
C0705-055-5000-M	0.705	17.91	0.055	1.40	5.000	127.00	1.586	40.29	1.033	26.24	10.29	45.78	3.02	0.53
C0705-055-5250-M	0.705	17.91	0.055	1.40	5.250	133.35	1.662	42.21	1.080	27.43	10.29	45.78	2.87	0.50
C0705-055-5500-M	0.705	17.91	0.055	1.40	5.500	139.70	1.737	44.12	1.127	28.62	10.29	45.78	2.74	0.48
C0705-055-5750-M	0.705	17.91	0.055	1.40	5.750	146.05	1.813	46.04	1.174	29.81	10.29	45.78	2.61	0.46
C0705-055-6000-M	0.705	17.91	0.055	1.40	6.000	152.40	1.888	47.96	1.221	31.00	10.29	45.78	2.50	0.44
C0705-055-6250-M	0.705	17.91	0.055	1.40	6.250	158.75	1.964	49.88	1.268	32.20	10.29	45.78	2.40	0.42
C0705-055-6500-M	0.705	17.91	0.055	1.40	6.500	165.10	2.039	51.79	1.314	33.39	10.29	45.78	2.31	0.40
C0705-055-6750-M	0.705	17.91	0.055	1.40	6.750	171.45	2.115	53.71	1.361	34.58	10.29	45.78	2.22	0.39
C0705-055-7000-M	0.705	17.91	0.055	1.40	7.000	177.80	2.190	55.63	1.408	35.77	10.29	45.78	2.14	0.37
C0705-055-7500-M	0.705	17.91	0.055	1.40	7.500	190.50	2.341	59.46	1.502	38.15	10.29	45.78	2.00	0.35
C0705-055-8000-M	0.705	17.91	0.055	1.40	8.000	203.20	2.492	63.29	1.596	40.54	10.29	45.78	1.87	0.33
C0705-055-8500-M	0.705	17.91	0.055	1.40	8.500	215.90	2.643	67.13	1.690	42.92	10.29	45.78	1.76	0.31
C0705-055-9000-M	0.705	17.91	0.055	1.40	9.000	228.60	2.794	70.96	1.784	45.30	10.29	45.78	1.66	0.29
C0705-055-9500-M	0.705	17.91	0.055	1.40	9.500	241.30	2.945	74.80	1.877	47.68	10.29	45.78	1.57	0.27
C0705-059-1375-M	0.705	17.91	0.059	1.50	1.375	34.93	0.526	13.37	0.395	10.04	12.52	55.69	14.75	2.58
C0705-059-1500-M	0.705	17.91	0.059	1.50	1.500	38.10	0.567	14.40	0.422	10.73	12.52	55.69	13.42	2.35
C0705-059-1625-M	0.705	17.91	0.059	1.50	1.625	41.28	0.607	15.43	0.449	11.41	12.52	55.69	12.30	2.15
C0705-059-1750-M	0.705	17.91	0.059	1.50	1.750	44.45	0.648	16.46	0.476	12.10	12.52	55.69	11.36	1.99
C0705-059-1875-M	0.705	17.91	0.059	1.50	1.875	47.63	0.689	17.49	0.503	12.78	12.52	55.69	10.55	1.85
C0705-059-2000-M	0.705	17.91	0.059	1.50	2.000	50.80	0.729	18.52	0.530	13.47	12.52	55.69	9.85	1.72
C0705-059-2125-M	0.705	17.91	0.059	1.50	2.125	53.98	0.770	19.55	0.557	14.15	12.52	55.69	9.24	1.62
C0705-059-2250-M	0.705	17.91	0.059	1.50	2.250	57.15	0.810	20.58	0.584	14.84	12.52	55.69	8.70	1.52
C0705-059-2375-M	0.705	17.91	0.059	1.50	2.375	60.33	0.851	21.62	0.611	15.52	12.52	55.69	8.22	1.44
C0705-059-2500-M	0.705	17.91	0.059	1.50	2.500	63.50	0.892	22.65	0.638	16.21	12.52	55.69	7.78	1.36
C0705-059-2625-M	0.705	17.91	0.059	1.50	2.625	66.68	0.932	23.68	0.665	16.89	12.52	55.69	7.40	1.29
C0705-059-2750-M	0.705	17.91	0.059	1.50	2.750	69.85	0.973	24.71	0.692	17.58	12.52	55.69	7.04	1.23
C0705-059-2875-M	0.705	17.91	0.059	1.50	2.875	73.03	1.013	25.74	0.719	18.27	12.52	55.69	6.73	1.18
C0705-059-3000-M	0.705	17.91	0.059	1.50	3.000	76.20	1.054	26.77	0.746	18.95	12.52	55.69	6.43	1.13
C0705-059-3250-M	0.705	17.91	0.059	1.50	3.250	82.55	1.135	28.83	0.800	20.32	12.52	55.69	5.92	1.04
C0705-059-3500-M	0.705	17.91	0.059	1.50	3.500	88.90	1.216	30.90	0.854	21.69	12.52	55.69	5.48	0.96
C0705-059-3750-M	0.705	17.91	0.059	1.50	3.750	95.25	1.298	32.96	0.908	23.06	12.52	55.69	5.11	0.89
C0705-059-4000-M	0.705	17.91	0.059	1.50	4.000	101.60	1.379	35.02	0.962	24.43	12.52	55.69	4.78	0.84
C0705-059-4250-M	0.705	17.91	0.059	1.50	4.250	107.95	1.460	37.08	1.016	25.81	12.52	55.69	4.49	0.79
C0705-059-4500-M	0.705	17.91	0.059	1.50	4.500	114.30	1.541	39.15	1.070	27.18	12.52	55.69	4.23	0.74
C0705-059-4750-M	0.705	17.91	0.059	1.50	4.750	120.65	1.622	41.21	1.124	28.55	12.52	55.69	4.00	0.70
C0705-059-5000-M	0.705	17.91	0.059	1.50	5.000	127.00	1.704	43.27	1.178	29.92	12.52	55.69	3.80	0.66
C0705-059-5250-M	0.705	17.91	0.059	1.50	5.250	133.35	1.785	45.33	1.232	31.29	12.52	55.69	3.61	0.63
C0705-059-5500-M	0.705	17.91	0.059	1.50	5.500	139.70	1.866	47.39	1.286	32.66	12.52	55.69	3.45	0.60
C0705-059-5750-M	0.705	17.91	0.059	1.50	5.750	146.05	1.947	49.46	1.340	34.03	12.52	55.69	3.29	0.58
C0705-059-6000-M	0.705	17.91	0.059	1.50	6.000	152.40	2.028	51.52	1.394	35.40	12.52	55.69	3.15	0.55
C0705-059-6250-M	0.705	17.91	0.059	1.50	6.250	158.75	2.110	53.58	1.448	36.77	12.52	55.69	3.02	0.53
C0705-059-6500-M	0.705	17.91	0.059	1.50	6.500	165.10	2.191	55.64	1.502	38.14	12.52	55.69	2.91	0.51
C0705-059-6750-M	0.705	17.91	0.059	1.50	6.750	171.45	2.272	57.71	1.556	39.52	12.52	55.69	2.80	0.49
C0705-059-7000-M	0.705	17.91	0.059	1.50	7.000	177.80	2.353	59.77	1.610	40.89	12.52	55.69	2.69	0.47
C0705-059-7500-M	0.705	17.91	0.059	1.50	7.500	190.50	2.515	63.89	1.718	43.63	12.52	55.69	2.51	0.44
C0705-059-8000-M	0.705	17.91	0.059	1.50	8.000	203.20	2.678	68.02	1.826	46.37	12.52	55.69	2.35	0.41
C0705-059-8500-M	0.705	17.91	0.059	1.50	8.500	215.90	2.840	72.14	1.934	49.11	12.52	55.69	2.21	0.39
C0705-059-9000-M	0.705	17.91	0.059	1.50	9.000	228.60	3.003	76.27	2.041	51.85	12.52	55.69	2.09	0.37
C0705-059-9500-M	0.705	17.91	0.059	1.50	9.500	241.30	3.165	80.39	2.149	54.60	12.52	55.69	1.98	0.35

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0705-055-2125-S	0.839	21.30	8.18	36.40	6.36	1.11
C0705-055-2250-S	0.884	22.45	8.18	36.40	5.99	1.05
C0705-055-2375-S	0.929	23.60	8.18	36.40	5.66	0.99
C0705-055-2500-S	0.974	24.75	8.18	36.40	5.36	0.94
C0705-055-2625-S	1.019	25.89	8.18	36.40	5.10	0.89
C0705-055-2750-S	1.065	27.04	8.18	36.40	4.86	0.85
C0705-055-2875-S	1.110	28.19	8.18	36.40	4.64	0.81
C0705-055-3000-S	1.155	29.34	8.18	36.40	4.44	0.78
C0705-055-3250-S	1.245	31.63	8.18	36.40	4.08	0.71
C0705-055-3500-S	1.336	33.93	8.18	36.40	3.78	0.66
C0705-055-3750-S	1.426	36.23	8.18	36.40	3.52	0.62
C0705-055-4000-S	1.517	38.52	8.18	36.40	3.30	0.58
C0705-055-4250-S	1.607	40.82	8.18	36.40	3.10	0.54
C0705-055-4500-S	1.697	43.12	8.18	36.40	2.92	0.51
C0705-055-4750-S	1.788	45.41	8.18	36.40	2.76	0.48
C0705-055-5000-S	1.878	47.71	8.18	36.40	2.62	0.46
C0705-055-5250-S	1.969	50.00	8.18	36.40	2.49	0.44
C0705-055-5500-S	2.059	52.30	8.18	36.40	2.38	0.42
C0705-055-5750-S	2.149	54.60	8.18	36.40	2.27	0.40
C0705-055-6000-S	2.240	56.89	8.18	36.40	2.18	0.38
C0705-055-6250-S	2.330	59.19	8.18	36.40	2.09	0.37
C0705-055-6500-S	2.421	61.49	8.18	36.40	2.01	0.35
C0705-055-6750-S	2.511	63.78	8.18	36.40	1.93	0.34
C0705-055-7000-S	2.601	66.08	8.18	36.40	1.86	0.33
C0705-055-7500-S	2.782	70.67	8.18	36.40	1.74	0.30
C0705-055-8000-S	2.963	75.26	8.18	36.40	1.63	0.28
C0705-055-8500-S	3.144	79.85	8.18	36.40	1.53	0.27
C0705-055-9000-S	3.325	84.45	8.18	36.40	1.44	0.25
C0705-055-9500-S	3.505	89.04	8.18	36.40	1.37	0.24
C0705-059-1375-S	0.600	15.23	9.94	44.24	12.83	2.24
C0705-059-1500-S	0.648	16.45	9.94	44.24	11.67	2.04
C0705-059-1625-S	0.695	17.66	9.94	44.24	10.70	1.87
C0705-059-1750-S	0.743	18.88	9.94	44.24	9.88	1.73
C0705-059-1875-S	0.791	20.10	9.94	44.24	9.18	1.61
C0705-059-2000-S	0.839	21.31	9.94	44.24	8.57	1.50
C0705-059-2125-S	0.887	22.53	9.94	44.24	8.03	1.41
C0705-059-2250-S	0.935	23.75	9.94	44.24	7.56	1.32
C0705-059-2375-S	0.983	24.96	9.94	44.24	7.14	1.25
C0705-059-2500-S	1.031	26.18	9.94	44.24	6.77	1.18
C0705-059-2625-S	1.079	27.40	9.94	44.24	6.43	1.13
C0705-059-2750-S	1.126	28.61	9.94	44.24	6.13	1.07
C0705-059-2875-S	1.174	29.83	9.94	44.24	5.85	1.02
C0705-059-3000-S	1.222	31.04	9.94	44.24	5.59	0.98
C0705-059-3250-S	1.318	33.48	9.94	44.24	5.15	0.90
C0705-059-3500-S	1.414	35.91	9.94	44.24	4.77	0.83
C0705-059-3750-S	1.510	38.34	9.94	44.24	4.44	0.78
C0705-059-4000-S	1.605	40.78	9.94	44.24	4.15	0.73
C0705-059-4250-S	1.701	43.21	9.94	44.24	3.90	0.68
C0705-059-4500-S	1.797	45.64	9.94	44.24	3.68	0.64
C0705-059-4750-S	1.893	48.08	9.94	44.24	3.48	0.61
C0705-059-5000-S	1.989	50.51	9.94	44.24	3.30	0.58
C0705-059-5250-S	2.084	52.94	9.94	44.24	3.14	0.55
C0705-059-5500-S	2.180	55.37	9.94	44.24	3.00	0.52
C0705-059-5750-S	2.276	57.81	9.94	44.24	2.86	0.50
C0705-059-6000-S	2.372	60.24	9.94	44.24	2.74	0.48
C0705-059-6250-S	2.467	62.67	9.94	44.24	2.63	0.46
C0705-059-6500-S	2.563	65.11	9.94	44.24	2.53	0.44
C0705-059-6750-S	2.659	67.54	9.94	44.24	2.43	0.43
C0705-059-7000-S	2.755	69.97	9.94	44.24	2.34	0.41
C0705-059-7500-S	2.946	74.84	9.94	44.24	2.18	0.38
C0705-059-8000-S	3.138	79.70	9.94	44.24	2.05	0.36
C0705-059-8500-S	3.330	84.57	9.94	44.24	1.92	0.34
C0705-059-9000-S	3.521	89.44	9.94	44.24	1.82	0.32
C0705-059-9500-S	3.713	94.30	9.94	44.24	1.72	0.30

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0705-063-1250-M	0.705	17.91	0.063	1.60	1.250	31.75	0.518	13.15	0.408	10.37	15.03	66.85	20.53	3.59
C0705-063-1375-M	0.705	17.91	0.063	1.60	1.375	34.93	0.561	14.26	0.439	11.14	15.03	66.85	18.47	3.23
C0705-063-1500-M	0.705	17.91	0.063	1.60	1.500	38.10	0.605	15.37	0.469	11.92	15.03	66.85	16.79	2.94
C0705-063-1625-M	0.705	17.91	0.063	1.60	1.625	41.28	0.649	16.47	0.500	12.70	15.03	66.85	15.39	2.69
C0705-063-1750-M	0.705	17.91	0.063	1.60	1.750	44.45	0.692	17.58	0.531	13.48	15.03	66.85	14.21	2.49
C0705-063-1875-M	0.705	17.91	0.063	1.60	1.875	47.63	0.736	18.69	0.561	14.26	15.03	66.85	13.19	2.31
C0705-063-2000-M	0.705	17.91	0.063	1.60	2.000	50.80	0.779	19.79	0.592	15.04	15.03	66.85	12.31	2.15
C0705-063-2125-M	0.705	17.91	0.063	1.60	2.125	53.98	0.823	20.90	0.623	15.82	15.03	66.85	11.54	2.02
C0705-063-2250-M	0.705	17.91	0.063	1.60	2.250	57.15	0.866	22.01	0.653	16.60	15.03	66.85	10.86	1.90
C0705-063-2375-M	0.705	17.91	0.063	1.60	2.375	60.33	0.910	23.12	0.684	17.38	15.03	66.85	10.26	1.80
C0705-063-2500-M	0.705	17.91	0.063	1.60	2.500	63.50	0.954	24.22	0.715	18.16	15.03	66.85	9.72	1.70
C0705-063-2625-M	0.705	17.91	0.063	1.60	2.625	66.68	0.997	25.33	0.745	18.93	15.03	66.85	9.23	1.62
C0705-063-2750-M	0.705	17.91	0.063	1.60	2.750	69.85	1.041	26.44	0.776	19.71	15.03	66.85	8.79	1.54
C0705-063-2875-M	0.705	17.91	0.063	1.60	2.875	73.03	1.084	27.54	0.807	20.49	15.03	66.85	8.39	1.47
C0705-063-3000-M	0.705	17.91	0.063	1.60	3.000	76.20	1.128	28.65	0.837	21.27	15.03	66.85	8.03	1.40
C0705-063-3250-M	0.705	17.91	0.063	1.60	3.250	82.55	1.215	30.86	0.899	22.83	15.03	66.85	7.39	1.29
C0705-063-3500-M	0.705	17.91	0.063	1.60	3.500	88.90	1.302	33.08	0.960	24.39	15.03	66.85	6.84	1.20
C0705-063-3750-M	0.705	17.91	0.063	1.60	3.750	95.25	1.389	35.29	1.021	25.95	15.03	66.85	6.37	1.11
C0705-063-4000-M	0.705	17.91	0.063	1.60	4.000	101.60	1.477	37.51	1.083	27.50	15.03	66.85	5.96	1.04
C0705-063-4250-M	0.705	17.91	0.063	1.60	4.250	107.95	1.564	39.72	1.144	29.06	15.03	66.85	5.60	0.98
C0705-063-4500-M	0.705	17.91	0.063	1.60	4.500	114.30	1.651	41.93	1.206	30.62	15.03	66.85	5.28	0.92
C0705-063-4750-M	0.705	17.91	0.063	1.60	4.750	120.65	1.738	44.15	1.267	32.18	15.03	66.85	4.99	0.87
C0705-063-5000-M	0.705	17.91	0.063	1.60	5.000	127.00	1.825	46.36	1.328	33.74	15.03	66.85	4.73	0.83
C0705-063-5250-M	0.705	17.91	0.063	1.60	5.250	133.35	1.912	48.57	1.390	35.29	15.03	66.85	4.50	0.79
C0705-063-5500-M	0.705	17.91	0.063	1.60	5.500	139.70	2.000	50.79	1.451	36.85	15.03	66.85	4.29	0.75
C0705-063-5750-M	0.705	17.91	0.063	1.60	5.750	146.05	2.087	53.00	1.512	38.41	15.03	66.85	4.10	0.72
C0705-063-6000-M	0.705	17.91	0.063	1.60	6.000	152.40	2.174	55.22	1.574	39.97	15.03	66.85	3.93	0.69
C0705-063-6250-M	0.705	17.91	0.063	1.60	6.250	158.75	2.261	57.43	1.635	41.53	15.03	66.85	3.77	0.66
C0705-063-6500-M	0.705	17.91	0.063	1.60	6.500	165.10	2.348	59.64	1.696	43.08	15.03	66.85	3.62	0.63
C0705-063-6750-M	0.705	17.91	0.063	1.60	6.750	171.45	2.435	61.86	1.758	44.64	15.03	66.85	3.48	0.61
C0705-063-7000-M	0.705	17.91	0.063	1.60	7.000	177.80	2.522	64.07	1.819	46.20	15.03	66.85	3.36	0.59
C0705-063-7500-M	0.705	17.91	0.063	1.60	7.500	190.50	2.697	68.50	1.942	49.32	15.03	66.85	3.13	0.55
C0705-063-8000-M	0.705	17.91	0.063	1.60	8.000	203.20	2.871	72.93	2.064	52.43	15.03	66.85	2.93	0.51
C0705-063-8500-M	0.705	17.91	0.063	1.60	8.500	215.90	3.045	77.35	2.187	55.55	15.03	66.85	2.76	0.48
C0705-063-9000-M	0.705	17.91	0.063	1.60	9.000	228.60	3.220	81.78	2.310	58.67	15.03	66.85	2.60	0.46
C0705-063-9500-M	0.705	17.91	0.063	1.60	9.500	241.30	3.394	86.21	2.432	61.78	15.03	66.85	2.46	0.43
C0705-068-1250-M	0.705	17.91	0.068	1.73	1.250	31.75	0.559	14.19	0.459	11.65	18.58	82.66	26.88	4.70
C0705-068-1375-M	0.705	17.91	0.068	1.73	1.375	34.93	0.606	15.40	0.494	12.55	18.58	82.66	24.17	4.23
C0705-068-1500-M	0.705	17.91	0.068	1.73	1.500	38.10	0.654	16.60	0.529	13.45	18.58	82.66	21.96	3.84
C0705-068-1625-M	0.705	17.91	0.068	1.73	1.625	41.28	0.701	17.81	0.565	14.35	18.58	82.66	20.11	3.52
C0705-068-1750-M	0.705	17.91	0.068	1.73	1.750	44.45	0.749	19.01	0.600	15.25	18.58	82.66	18.56	3.25
C0705-068-1875-M	0.705	17.91	0.068	1.73	1.875	47.63	0.796	20.22	0.636	16.15	18.58	82.66	17.22	3.01
C0705-068-2000-M	0.705	17.91	0.068	1.73	2.000	50.80	0.843	21.42	0.671	17.05	18.58	82.66	16.07	2.81
C0705-068-2125-M	0.705	17.91	0.068	1.73	2.125	53.98	0.891	22.63	0.707	17.95	18.58	82.66	15.06	2.63
C0705-068-2250-M	0.705	17.91	0.068	1.73	2.250	57.15	0.938	23.83	0.742	18.85	18.58	82.66	14.17	2.48
C0705-068-2375-M	0.705	17.91	0.068	1.73	2.375	60.33	0.986	25.04	0.778	19.75	18.58	82.66	13.38	2.34
C0705-068-2500-M	0.705	17.91	0.068	1.73	2.500	63.50	1.033	26.24	0.813	20.65	18.58	82.66	12.67	2.22
C0705-068-2625-M	0.705	17.91	0.068	1.73	2.625	66.68	1.081	27.45	0.848	21.55	18.58	82.66	12.03	2.11
C0705-068-2750-M	0.705	17.91	0.068	1.73	2.750	69.85	1.128	28.65	0.884	22.45	18.58	82.66	11.46	2.00
C0705-068-2875-M	0.705	17.91	0.068	1.73	2.875	73.03	1.175	29.86	0.919	23.35	18.58	82.66	10.93	1.91
C0705-068-3000-M	0.705	17.91	0.068	1.73	3.000	76.20	1.223	31.06	0.955	24.25	18.58	82.66	10.46	1.83
C0705-068-3250-M	0.705	17.91	0.068	1.73	3.250	82.55	1.318	33.47	1.026	26.05	18.58	82.66	9.62	1.68
C0705-068-3500-M	0.705	17.91	0.068	1.73	3.500	88.90	1.413	35.88	1.096	27.85	18.58	82.66	8.90	1.56
C0705-068-3750-M	0.705	17.91	0.068	1.73	3.750	95.25	1.508	38.29	1.167	29.65	18.58	82.66	8.29	1.45
C0705-068-4000-M	0.705	17.91	0.068	1.73	4.000	101.60	1.602	40.70	1.238	31.45	18.58	82.66	7.75	1.36
C0705-068-4250-M	0.705	17.91	0.068	1.73	4.250	107.95	1.697	43.11	1.309	33.25	18.58	82.66	7.28	1.27
C0705-068-4500-M	0.705	17.91	0.068	1.73	4.500	114.30	1.792	45.52	1.380	35.05	18.58	82.66	6.86	1.20
C0705-068-4750-M	0.705	17.91	0.068	1.73	4.750	120.65	1.887	47.93	1.451	36.85	18.58	82.66	6.49	1.14
C0705-068-5000-M	0.705	17.91	0.068	1.73	5.000	127.00	1.982	50.34	1.522	38.65	18.58	82.66	6.16	1.08
C0705-068-5250-M	0.705	17.91	0.068	1.73	5.250	133.35	2.077	52.75	1.593	40.45	18.58	82.66	5.86	1.02
C0705-068-5500-M	0.705	17.91	0.068	1.73	5.500	139.70	2.172	55.16	1.663	42.25	18.58	82.66	5.58	0.98
C0705-068-5750-M	0.705	17.91	0.068	1.73	5.750	146.05	2.267	57.57	1.734	44.05	18.58	82.66	5.34	0.93
C0705-068-6000-M	0.705	17.91	0.068	1.73	6.000	152.40	2.361	59.98	1.805	45.85	18.58	82.66	5.11	0.89
C0705-068-6250-M	0.705	17.91	0.068	1.73	6.250	158.75	2.456	62.39	1.876	47.65	18.58	82.66	4.90	0.86

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0705-063-1250-S	0.582	14.78	11.92	53.04	17.85	3.12
C0705-063-1375-S	0.633	16.07	11.92	53.04	16.06	2.81
C0705-063-1500-S	0.683	17.36	11.92	53.04	14.60	2.56
C0705-063-1625-S	0.734	18.65	11.92	53.04	13.38	2.34
C0705-063-1750-S	0.785	19.94	11.92	53.04	12.35	2.16
C0705-063-1875-S	0.836	21.22	11.92	53.04	11.47	2.01
C0705-063-2000-S	0.886	22.51	11.92	53.04	10.71	1.87
C0705-063-2125-S	0.937	23.80	11.92	53.04	10.04	1.76
C0705-063-2250-S	0.988	25.09	11.92	53.04	9.45	1.65
C0705-063-2375-S	1.038	26.38	11.92	53.04	8.92	1.56
C0705-063-2500-S	1.089	27.66	11.92	53.04	8.45	1.48
C0705-063-2625-S	1.140	28.95	11.92	53.04	8.03	1.40
C0705-063-2750-S	1.191	30.24	11.92	53.04	7.65	1.34
C0705-063-2875-S	1.241	31.53	11.92	53.04	7.30	1.28
C0705-063-3000-S	1.292	32.82	11.92	53.04	6.98	1.22
C0705-063-3250-S	1.393	35.39	11.92	53.04	6.42	1.12
C0705-063-3500-S	1.495	37.97	11.92	53.04	5.95	1.04
C0705-063-3750-S	1.596	40.55	11.92	53.04	5.54	0.97
C0705-063-4000-S	1.698	43.12	11.92	53.04	5.18	0.91
C0705-063-4250-S	1.799	45.70	11.92	53.04	4.87	0.85
C0705-063-4500-S	1.901	48.27	11.92	53.04	4.59	0.80
C0705-063-4750-S	2.002	50.85	11.92	53.04	4.34	0.76
C0705-063-5000-S	2.103	53.43	11.92	53.04	4.12	0.72
C0705-063-5250-S	2.205	56.00	11.92	53.04	3.92	0.69
C0705-063-5500-S	2.306	58.58	11.92	53.04	3.73	0.65
C0705-063-5750-S	2.408	61.16	11.92	53.04	3.57	0.62
C0705-063-6000-S	2.509	63.73	11.92	53.04	3.42	0.60
C0705-063-6250-S	2.611	66.31	11.92	53.04	3.28	0.57
C0705-063-6500-S	2.712	68.88	11.92	53.04	3.15	0.55
C0705-063-6750-S	2.813	71.46	11.92	53.04	3.03	0.53
C0705-063-7000-S	2.915	74.04	11.92	53.04	2.92	0.51
C0705-063-7500-S	3.118	79.19	11.92	53.04	2.72	0.48
C0705-063-8000-S	3.321	84.34	11.92	53.04	2.55	0.45
C0705-063-8500-S	3.523	89.49	11.92	53.04	2.40	0.42
C0705-063-9000-S	3.726	94.65	11.92	53.04	2.26	0.40
C0705-063-9500-S	3.929	99.80	11.92	53.04	2.14	0.37
C0705-068-1250-S	0.621	15.76	14.71	65.45	23.38	4.09
C0705-068-1375-S	0.675	17.14	14.71	65.45	21.02	3.68
C0705-068-1500-S	0.729	18.52	14.71	65.45	19.09	3.34
C0705-068-1625-S	0.784	19.91	14.71	65.45	17.49	3.06
C0705-068-1750-S	0.838	21.29	14.71	65.45	16.14	2.82
C0705-068-1875-S	0.892	22.67	14.71	65.45	14.98	2.62
C0705-068-2000-S	0.947	24.05	14.71	65.45	13.97	2.44
C0705-068-2125-S	1.001	25.43	14.71	65.45	13.09	2.29
C0705-068-2250-S	1.056	26.81	14.71	65.45	12.32	2.16
C0705-068-2375-S	1.110	28.19	14.71	65.45	11.63	2.04
C0705-068-2500-S	1.164	29.57	14.71	65.45	11.02	1.93
C0705-068-2625-S	1.219	30.95	14.71	65.45	10.46	1.83
C0705-068-2750-S	1.273	32.34	14.71	65.45	9.96	1.74
C0705-068-2875-S	1.327	33.72	14.71	65.45	9.51	1.66
C0705-068-3000-S	1.382	35.10	14.71	65.45	9.09	1.59
C0705-068-3250-S	1.491	37.86	14.71	65.45	8.36	1.46
C0705-068-3500-S	1.599	40.62	14.71	65.45	7.74	1.35
C0705-068-3750-S	1.708	43.38	14.71	65.45	7.21	1.26
C0705-068-4000-S	1.817	46.15	14.71	65.45	6.74	1.18
C0705-068-4250-S	1.926	48.91	14.71	65.45	6.33	1.11
C0705-068-4500-S	2.034	51.67	14.71	65.45	5.97	1.04
C0705-068-4750-S	2.143	54.43	14.71	65.45	5.64	0.99
C0705-068-5000-S	2.252	57.20	14.71	65.45	5.35	0.94
C0705-068-5250-S	2.361	59.96	14.71	65.45	5.09	0.89
C0705-068-5500-S	2.469	62.72	14.71	65.45	4.86	0.85
C0705-068-5750-S	2.578	65.48	14.71	65.45	4.64	0.81
C0705-068-6000-S	2.687	68.24	14.71	65.45	4.44	0.78
C0705-068-6250-S	2.796	71.01	14.71	65.45	4.26	0.75

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0705-068-6500-M	0.705	17.91	0.068	1.73	6.500	165.10	2.551	64.80	1.947	49.45	18.58	82.66	4.71	0.82
C0705-068-6750-M	0.705	17.91	0.068	1.73	6.750	171.45	2.646	67.21	2.018	51.25	18.58	82.66	4.53	0.79
C0705-068-7000-M	0.705	17.91	0.068	1.73	7.000	177.80	2.741	69.62	2.089	53.05	18.58	82.66	4.36	0.76
C0705-068-7500-M	0.705	17.91	0.068	1.73	7.500	190.50	2.931	74.44	2.230	56.65	18.58	82.66	4.07	0.71
C0705-068-8000-M	0.705	17.91	0.068	1.73	8.000	203.20	3.120	79.26	2.372	60.25	18.58	82.66	3.81	0.67
C0705-068-8500-M	0.705	17.91	0.068	1.73	8.500	215.90	3.310	84.08	2.514	63.86	18.58	82.66	3.58	0.63
C0705-068-9000-M	0.705	17.91	0.068	1.73	9.000	228.60	3.500	88.90	2.656	67.46	18.58	82.66	3.38	0.59
C0705-068-9500-M	0.705	17.91	0.068	1.73	9.500	241.30	3.690	93.72	2.797	71.06	18.58	82.66	3.20	0.56
C0705-072-1125-M	0.705	17.91	0.072	1.83	1.125	28.58	0.541	13.74	0.460	11.68	21.78	96.86	37.29	6.53
C0705-072-1250-M	0.705	17.91	0.072	1.83	1.250	31.75	0.592	15.03	0.499	12.68	21.78	96.86	33.08	5.79
C0705-072-1375-M	0.705	17.91	0.072	1.83	1.375	34.93	0.642	16.31	0.539	13.68	21.78	96.86	29.72	5.20
C0705-072-1500-M	0.705	17.91	0.072	1.83	1.500	38.10	0.693	17.60	0.578	14.68	21.78	96.86	26.98	4.72
C0705-072-1625-M	0.705	17.91	0.072	1.83	1.625	41.28	0.743	18.88	0.617	15.68	21.78	96.86	24.70	4.32
C0705-072-1750-M	0.705	17.91	0.072	1.83	1.750	44.45	0.794	20.17	0.657	16.68	21.78	96.86	22.78	3.99
C0705-072-1875-M	0.705	17.91	0.072	1.83	1.875	47.63	0.845	21.46	0.696	17.68	21.78	96.86	21.14	3.70
C0705-072-2000-M	0.705	17.91	0.072	1.83	2.000	50.80	0.895	22.74	0.735	18.68	21.78	96.86	19.71	3.45
C0705-072-2125-M	0.705	17.91	0.072	1.83	2.125	53.98	0.946	24.03	0.775	19.68	21.78	96.86	18.47	3.23
C0705-072-2250-M	0.705	17.91	0.072	1.83	2.250	57.15	0.996	25.31	0.814	20.68	21.78	96.86	17.37	3.04
C0705-072-2375-M	0.705	17.91	0.072	1.83	2.375	60.33	1.047	26.60	0.853	21.68	21.78	96.86	16.40	2.87
C0705-072-2500-M	0.705	17.91	0.072	1.83	2.500	63.50	1.098	27.88	0.893	22.68	21.78	96.86	15.53	2.72
C0705-072-2625-M	0.705	17.91	0.072	1.83	2.625	66.68	1.148	29.17	0.932	23.67	21.78	96.86	14.75	2.58
C0705-072-2750-M	0.705	17.91	0.072	1.83	2.750	69.85	1.199	30.45	0.971	24.67	21.78	96.86	14.04	2.46
C0705-072-2875-M	0.705	17.91	0.072	1.83	2.875	73.03	1.249	31.74	1.011	25.67	21.78	96.86	13.40	2.34
C0705-072-3000-M	0.705	17.91	0.072	1.83	3.000	76.20	1.300	33.02	1.050	26.67	21.78	96.86	12.81	2.24
C0705-072-3250-M	0.705	17.91	0.072	1.83	3.250	82.55	1.401	35.59	1.129	28.67	21.78	96.86	11.78	2.06
C0705-072-3500-M	0.705	17.91	0.072	1.83	3.500	88.90	1.502	38.16	1.207	30.67	21.78	96.86	10.90	1.91
C0705-072-3750-M	0.705	17.91	0.072	1.83	3.750	95.25	1.604	40.73	1.286	32.67	21.78	96.86	10.15	1.78
C0705-072-4000-M	0.705	17.91	0.072	1.83	4.000	101.60	1.705	43.30	1.365	34.67	21.78	96.86	9.49	1.66
C0705-072-4250-M	0.705	17.91	0.072	1.83	4.250	107.95	1.806	45.87	1.444	36.67	21.78	96.86	8.91	1.56
C0705-072-4500-M	0.705	17.91	0.072	1.83	4.500	114.30	1.907	48.44	1.522	38.66	21.78	96.86	8.40	1.47
C0705-072-4750-M	0.705	17.91	0.072	1.83	4.750	120.65	2.008	51.01	1.601	40.66	21.78	96.86	7.94	1.39
C0705-072-5000-M	0.705	17.91	0.072	1.83	5.000	127.00	2.110	53.59	1.680	42.66	21.78	96.86	7.53	1.32
C0705-072-5250-M	0.705	17.91	0.072	1.83	5.250	133.35	2.211	56.16	1.758	44.66	21.78	96.86	7.17	1.25
C0705-072-5500-M	0.705	17.91	0.072	1.83	5.500	139.70	2.312	58.73	1.837	46.66	21.78	96.86	6.83	1.20
C0705-072-5750-M	0.705	17.91	0.072	1.83	5.750	146.05	2.413	61.30	1.916	48.66	21.78	96.86	6.53	1.14
C0705-072-6000-M	0.705	17.91	0.072	1.83	6.000	152.40	2.514	63.87	1.994	50.66	21.78	96.86	6.25	1.09
C0705-072-6250-M	0.705	17.91	0.072	1.83	6.250	158.75	2.616	66.44	2.073	52.65	21.78	96.86	5.99	1.05
C0705-072-6500-M	0.705	17.91	0.072	1.83	6.500	165.10	2.717	69.01	2.152	54.65	21.78	96.86	5.76	1.01
C0705-072-6750-M	0.705	17.91	0.072	1.83	6.750	171.45	2.818	71.58	2.230	56.65	21.78	96.86	5.54	0.97
C0705-072-7000-M	0.705	17.91	0.072	1.83	7.000	177.80	2.919	74.15	2.309	58.65	21.78	96.86	5.34	0.93
C0705-072-7500-M	0.705	17.91	0.072	1.83	7.500	190.50	3.122	79.29	2.466	62.65	21.78	96.86	4.97	0.87
C0705-072-8000-M	0.705	17.91	0.072	1.83	8.000	203.20	3.324	84.43	2.624	66.64	21.78	96.86	4.66	0.81
C0705-072-8500-M	0.705	17.91	0.072	1.83	8.500	215.90	3.526	89.57	2.781	70.64	21.78	96.86	4.38	0.77
C0705-072-9000-M	0.705	17.91	0.072	1.83	9.000	228.60	3.729	94.71	2.939	74.64	21.78	96.86	4.13	0.72
C0705-072-9500-M	0.705	17.91	0.072	1.83	9.500	241.30	3.931	99.85	3.096	78.64	21.78	96.86	3.91	0.68
C0705-085-1125-M	0.705	17.91	0.085	2.16	1.125	28.58	0.636	16.16	0.577	14.66	34.45	153.22	70.46	12.33
C0705-085-1250-M	0.705	17.91	0.085	2.16	1.250	31.75	0.697	17.71	0.630	15.99	34.45	153.22	62.30	10.90
C0705-085-1375-M	0.705	17.91	0.085	2.16	1.375	34.93	0.758	19.26	0.682	17.32	34.45	153.22	55.84	9.77
C0705-085-1500-M	0.705	17.91	0.085	2.16	1.500	38.10	0.819	20.81	0.734	18.64	34.45	153.22	50.59	8.85
C0705-085-1625-M	0.705	17.91	0.085	2.16	1.625	41.28	0.880	22.36	0.786	19.97	34.45	153.22	46.25	8.09
C0705-085-1750-M	0.705	17.91	0.085	2.16	1.750	44.45	0.941	23.91	0.838	21.29	34.45	153.22	42.59	7.45
C0705-085-1875-M	0.705	17.91	0.085	2.16	1.875	47.63	1.002	25.46	0.891	22.62	34.45	153.22	39.47	6.91
C0705-085-2000-M	0.705	17.91	0.085	2.16	2.000	50.80	1.063	27.00	0.943	23.95	34.45	153.22	36.77	6.43
C0705-085-2125-M	0.705	17.91	0.085	2.16	2.125	53.98	1.124	28.55	0.995	25.27	34.45	153.22	34.42	6.02
C0705-085-2250-M	0.705	17.91	0.085	2.16	2.250	57.15	1.185	30.10	1.047	26.60	34.45	153.22	32.35	5.66
C0705-085-2375-M	0.705	17.91	0.085	2.16	2.375	60.33	1.246	31.65	1.099	27.92	34.45	153.22	30.52	5.34
C0705-085-2500-M	0.705	17.91	0.085	2.16	2.500	63.50	1.307	33.20	1.152	29.25	34.45	153.22	28.88	5.05
C0705-085-2625-M	0.705	17.91	0.085	2.16	2.625	66.68	1.368	34.75	1.204	30.58	34.45	153.22	27.41	4.80
C0705-085-2750-M	0.705	17.91	0.085	2.16	2.750	69.85	1.429	36.30	1.256	31.90	34.45	153.22	26.08	4.56
C0705-085-2875-M	0.705	17.91	0.085	2.16	2.875	73.03	1.490	37.85	1.308	33.23	34.45	153.22	24.88	4.35
C0705-085-3000-M	0.705	17.91	0.085	2.16	3.000	76.20	1.551	39.40	1.360	34.55	34.45	153.22	23.78	4.16
C0705-085-3250-M	0.705	17.91	0.085	2.16	3.250	82.55	1.673	42.50	1.465	37.21	34.45	153.22	21.85	3.82
C0705-085-3500-M	0.705	17.91	0.085	2.16	3.500	88.90	1.795	45.60	1.569	39.86	34.45	153.22	20.21	3.54
C0705-085-3750-M	0.705	17.91	0.085	2.16	3.750	95.25	1.917	48.70	1.674	42.51	34.45	153.22	18.80	3.29

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0705-068-6500-S	2.904	73.77	14.71	65.45	4.09	0.72
C0705-068-6750-S	3.013	76.53	14.71	65.45	3.94	0.69
C0705-068-7000-S	3.122	79.29	14.71	65.45	3.79	0.66
C0705-068-7500-S	3.339	84.82	14.71	65.45	3.54	0.62
C0705-068-8000-S	3.557	90.34	14.71	65.45	3.31	0.58
C0705-068-8500-S	3.774	95.87	14.71	65.45	3.11	0.54
C0705-068-9000-S	3.992	101.39	14.71	65.45	2.94	0.51
C0705-068-9500-S	4.209	106.91	14.71	65.45	2.78	0.49
C0705-072-1125-S	0.594	15.09	17.21	76.56	32.43	5.68
C0705-072-1250-S	0.652	16.55	17.21	76.56	28.76	5.03
C0705-072-1375-S	0.709	18.01	17.21	76.56	25.84	4.52
C0705-072-1500-S	0.766	19.47	17.21	76.56	23.46	4.11
C0705-072-1625-S	0.824	20.92	17.21	76.56	21.48	3.76
C0705-072-1750-S	0.881	22.38	17.21	76.56	19.81	3.47
C0705-072-1875-S	0.939	23.84	17.21	76.56	18.38	3.22
C0705-072-2000-S	0.996	25.30	17.21	76.56	17.14	3.00
C0705-072-2125-S	1.053	26.75	17.21	76.56	16.06	2.81
C0705-072-2250-S	1.111	28.21	17.21	76.56	15.11	2.64
C0705-072-2375-S	1.168	29.67	17.21	76.56	14.26	2.50
C0705-072-2500-S	1.225	31.13	17.21	76.56	13.50	2.36
C0705-072-2625-S	1.283	32.58	17.21	76.56	12.82	2.24
C0705-072-2750-S	1.340	34.04	17.21	76.56	12.21	2.14
C0705-072-2875-S	1.398	35.50	17.21	76.56	11.65	2.04
C0705-072-3000-S	1.455	36.95	17.21	76.56	11.14	1.95
C0705-072-3250-S	1.570	39.87	17.21	76.56	10.24	1.79
C0705-072-3500-S	1.684	42.78	17.21	76.56	9.48	1.66
C0705-072-3750-S	1.799	45.70	17.21	76.56	8.82	1.54
C0705-072-4000-S	1.914	48.61	17.21	76.56	8.25	1.44
C0705-072-4250-S	2.029	51.53	17.21	76.56	7.75	1.36
C0705-072-4500-S	2.143	54.44	17.21	76.56	7.30	1.28
C0705-072-4750-S	2.258	57.36	17.21	76.56	6.91	1.21
C0705-072-5000-S	2.373	60.27	17.21	76.56	6.55	1.15
C0705-072-5250-S	2.488	63.19	17.21	76.56	6.23	1.09
C0705-072-5500-S	2.602	66.10	17.21	76.56	5.94	1.04
C0705-072-5750-S	2.717	69.02	17.21	76.56	5.68	0.99
C0705-072-6000-S	2.832	71.93	17.21	76.56	5.43	0.95
C0705-072-6250-S	2.947	74.84	17.21	76.56	5.21	0.91
C0705-072-6500-S	3.061	77.76	17.21	76.56	5.01	0.88
C0705-072-6750-S	3.176	80.67	17.21	76.56	4.82	0.84
C0705-072-7000-S	3.291	83.59	17.21	76.56	4.64	0.81
C0705-072-7500-S	3.520	89.42	17.21	76.56	4.33	0.76
C0705-072-8000-S	3.750	95.25	17.21	76.56	4.05	0.71
C0705-072-8500-S	3.979	101.08	17.21	76.56	3.81	0.67
C0705-072-9000-S	4.209	106.91	17.21	76.56	3.59	0.63
C0705-072-9500-S	4.438	112.74	17.21	76.56	3.40	0.60
C0705-085-1125-S	0.684	17.37	27.03	120.26	61.27	10.72
C0705-085-1250-S	0.751	19.08	27.03	120.26	54.18	9.48
C0705-085-1375-S	0.818	20.78	27.03	120.26	48.56	8.50
C0705-085-1500-S	0.885	22.49	27.03	120.26	43.99	7.70
C0705-085-1625-S	0.953	24.20	27.03	120.26	40.21	7.04
C0705-085-1750-S	1.020	25.91	27.03	120.26	37.03	6.48
C0705-085-1875-S	1.087	27.62	27.03	120.26	34.32	6.01
C0705-085-2000-S	1.154	29.32	27.03	120.26	31.97	5.60
C0705-085-2125-S	1.222	31.03	27.03	120.26	29.93	5.24
C0705-085-2250-S	1.289	32.74	27.03	120.26	28.13	4.92
C0705-085-2375-S	1.356	34.45	27.03	120.26	26.54	4.64
C0705-085-2500-S	1.423	36.16	27.03	120.26	25.11	4.39
C0705-085-2625-S	1.491	37.86	27.03	120.26	23.83	4.17
C0705-085-2750-S	1.558	39.57	27.03	120.26	22.68	3.97
C0705-085-2875-S	1.625	41.28	27.03	120.26	21.63	3.79
C0705-085-3000-S	1.692	42.99	27.03	120.26	20.68	3.62
C0705-085-3250-S	1.827	46.40	27.03	120.26	19.00	3.32
C0705-085-3500-S	1.961	49.82	27.03	120.26	17.57	3.07
C0705-085-3750-S	2.096	53.24	27.03	120.26	16.34	2.86

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

(OD) 0.705 - 0.705

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0705-085-4000-M	0.705	17.91	0.085	2.16	4.000	101.60	2.039	51.80	1.778	45.16	34.45	153.22	17.57	3.07	**C0705-085-4000-S**	2.230	56.65	27.03	120.26	15.28	2.67
C0705-085-4250-M	0.705	17.91	0.085	2.16	4.250	107.95	2.161	54.90	1.882	47.81	34.45	153.22	16.49	2.89	**C0705-085-4250-S**	2.365	60.07	27.03	120.26	14.34	2.51
C0705-085-4500-M	0.705	17.91	0.085	2.16	4.500	114.30	2.283	58.00	1.987	50.46	34.45	153.22	15.54	2.72	**C0705-085-4500-S**	2.499	63.48	27.03	120.26	13.51	2.36
C0705-085-4750-M	0.705	17.91	0.085	2.16	4.750	120.65	2.405	61.10	2.091	53.12	34.45	153.22	14.69	2.57	**C0705-085-4750-S**	2.634	66.90	27.03	120.26	12.78	2.24
C0705-085-5000-M	0.705	17.91	0.085	2.16	5.000	127.00	2.527	64.20	2.196	55.77	34.45	153.22	13.93	2.44	**C0705-085-5000-S**	2.768	70.32	27.03	120.26	12.11	2.12
C0705-085-5250-M	0.705	17.91	0.085	2.16	5.250	133.35	2.649	67.30	2.300	58.42	34.45	153.22	13.25	2.32	**C0705-085-5250-S**	2.903	73.73	27.03	120.26	11.52	2.02
C0705-085-5500-M	0.705	17.91	0.085	2.16	5.500	139.70	2.771	70.39	2.404	61.07	34.45	153.22	12.62	2.21	**C0705-085-5500-S**	3.037	77.15	27.03	120.26	10.98	1.92
C0705-085-5750-M	0.705	17.91	0.085	2.16	5.750	146.05	2.893	73.49	2.509	63.72	34.45	153.22	12.06	2.11	**C0705-085-5750-S**	3.172	80.56	27.03	120.26	10.49	1.84
C0705-085-6000-M	0.705	17.91	0.085	2.16	6.000	152.40	3.015	76.59	2.613	66.38	34.45	153.22	11.54	2.02	**C0705-085-6000-S**	3.306	83.98	27.03	120.26	10.04	1.76
C0705-085-6250-M	0.705	17.91	0.085	2.16	6.250	158.75	3.137	79.69	2.718	69.03	34.45	153.22	11.07	1.94	**C0705-085-6250-S**	3.441	87.40	27.03	120.26	9.62	1.68
C0705-085-6500-M	0.705	17.91	0.085	2.16	6.500	165.10	3.260	82.79	2.822	71.68	34.45	153.22	10.63	1.86	**C0705-085-6500-S**	3.575	90.81	27.03	120.26	9.24	1.62
C0705-085-6750-M	0.705	17.91	0.085	2.16	6.750	171.45	3.382	85.89	2.926	74.33	34.45	153.22	10.23	1.79	**C0705-085-6750-S**	3.710	94.23	27.03	120.26	8.89	1.56
C0705-085-7000-M	0.705	17.91	0.085	2.16	7.000	177.80	3.504	88.99	3.031	76.98	34.45	153.22	9.85	1.72	**C0705-085-7000-S**	3.844	97.64	27.03	120.26	8.57	1.50
C0705-085-7500-M	0.705	17.91	0.085	2.16	7.500	190.50	3.748	95.19	3.240	82.29	34.45	153.22	9.18	1.61	**C0705-085-7500-S**	4.113	104.48	27.03	120.26	7.98	1.40
C0705-085-8000-M	0.705	17.91	0.085	2.16	8.000	203.20	3.992	101.39	3.448	87.59	34.45	153.22	8.59	1.50	**C0705-085-8000-S**	4.382	111.31	27.03	120.26	7.47	1.31
C0705-085-8500-M	0.705	17.91	0.085	2.16	8.500	215.90	4.236	107.59	3.657	92.90	34.45	153.22	8.08	1.41	**C0705-085-8500-S**	4.651	118.14	27.03	120.26	7.02	1.23
C0705-085-9000-M	0.705	17.91	0.085	2.16	9.000	228.60	4.480	113.78	3.866	98.20	34.45	153.22	7.62	1.33	**C0705-085-9000-S**	4.920	124.97	27.03	120.26	6.63	1.16
C0705-085-9500-M	0.705	17.91	0.085	2.16	9.500	241.30	4.724	119.98	4.075	103.50	34.45	153.22	7.21	1.26	**C0705-085-9500-S**	5.189	131.80	27.03	120.26	6.27	1.10
C0705-092-1125-M	0.705	17.91	0.092	2.34	1.125	28.58	0.685	17.39	0.637	16.19	42.82	190.45	97.24	17.02	**C0705-092-1125-S**	0.729	18.52	33.46	148.83	84.56	14.80
C0705-092-1250-M	0.705	17.91	0.092	2.34	1.250	31.75	0.751	19.08	0.696	17.69	42.82	190.45	85.84	15.02	**C0705-092-1250-S**	0.802	20.36	33.46	148.83	74.64	13.06
C0705-092-1375-M	0.705	17.91	0.092	2.34	1.375	34.93	0.818	20.77	0.755	19.19	42.82	190.45	76.83	13.44	**C0705-092-1375-S**	0.874	22.20	33.46	148.83	66.81	11.69
C0705-092-1500-M	0.705	17.91	0.092	2.34	1.500	38.10	0.884	22.46	0.814	20.68	42.82	190.45	69.53	12.17	**C0705-092-1500-S**	0.947	24.04	33.46	148.83	60.46	10.58
C0705-092-1625-M	0.705	17.91	0.092	2.34	1.625	41.28	0.951	24.15	0.873	22.18	42.82	190.45	63.50	11.11	**C0705-092-1625-S**	1.019	25.88	33.46	148.83	55.22	9.66
C0705-092-1750-M	0.705	17.91	0.092	2.34	1.750	44.45	1.017	25.84	0.932	23.68	42.82	190.45	58.43	10.23	**C0705-092-1750-S**	1.091	27.72	33.46	148.83	50.81	8.89
C0705-092-1875-M	0.705	17.91	0.092	2.34	1.875	47.63	1.084	27.53	0.991	25.18	42.82	190.45	54.11	9.47	**C0705-092-1875-S**	1.164	29.56	33.46	148.83	47.05	8.23
C0705-092-2000-M	0.705	17.91	0.092	2.34	2.000	50.80	1.150	29.22	1.050	26.68	42.82	190.45	50.39	8.82	**C0705-092-2000-S**	1.236	31.40	33.46	148.83	43.82	7.67
C0705-092-2125-M	0.705	17.91	0.092	2.34	2.125	53.98	1.217	30.91	1.109	28.18	42.82	190.45	47.14	8.25	**C0705-092-2125-S**	1.309	33.24	33.46	148.83	40.99	7.17
C0705-092-2250-M	0.705	17.91	0.092	2.34	2.250	57.15	1.283	32.60	1.168	29.68	42.82	190.45	44.29	7.75	**C0705-092-2250-S**	1.381	35.08	33.46	148.83	38.51	6.74
C0705-092-2375-M	0.705	17.91	0.092	2.34	2.375	60.33	1.350	34.28	1.227	31.17	42.82	190.45	41.76	7.31	**C0705-092-2375-S**	1.454	36.92	33.46	148.83	36.32	6.36
C0705-092-2500-M	0.705	17.91	0.092	2.34	2.500	63.50	1.416	35.97	1.286	32.67	42.82	190.45	39.51	6.91	**C0705-092-2500-S**	1.526	38.76	33.46	148.83	34.36	6.01
C0705-092-2625-M	0.705	17.91	0.092	2.34	2.625	66.68	1.483	37.66	1.345	34.17	42.82	190.45	37.49	6.56	**C0705-092-2625-S**	1.599	40.60	33.46	148.83	32.60	5.70
C0705-092-2750-M	0.705	17.91	0.092	2.34	2.750	69.85	1.549	39.35	1.404	35.67	42.82	190.45	35.66	6.24	**C0705-092-2750-S**	1.671	42.44	33.46	148.83	31.01	5.43
C0705-092-2875-M	0.705	17.91	0.092	2.34	2.875	73.03	1.616	41.04	1.463	37.17	42.82	190.45	34.00	5.95	**C0705-092-2875-S**	1.743	44.28	33.46	148.83	29.57	5.17
C0705-092-3000-M	0.705	17.91	0.092	2.34	3.000	76.20	1.682	42.73	1.522	38.67	42.82	190.45	32.49	5.69	**C0705-092-3000-S**	1.816	46.12	33.46	148.83	28.26	4.94
C0705-092-3250-M	0.705	17.91	0.092	2.34	3.250	82.55	1.815	46.11	1.640	41.66	42.82	190.45	29.84	5.22	**C0705-092-3250-S**	1.961	49.80	33.46	148.83	25.95	4.54
C0705-092-3500-M	0.705	17.91	0.092	2.34	3.500	88.90	1.948	49.49	1.758	44.66	42.82	190.45	27.59	4.83	**C0705-092-3500-S**	2.106	53.48	33.46	148.83	24.00	4.20
C0705-092-3750-M	0.705	17.91	0.092	2.34	3.750	95.25	2.081	52.87	1.876	47.66	42.82	190.45	25.66	4.49	**C0705-092-3750-S**	2.250	57.16	33.46	148.83	22.31	3.90
C0705-092-4000-M	0.705	17.91	0.092	2.34	4.000	101.60	2.214	56.25	1.994	50.65	42.82	190.45	23.98	4.20	**C0705-092-4000-S**	2.395	60.84	33.46	148.83	20.85	3.65
C0705-092-4250-M	0.705	17.91	0.092	2.34	4.250	107.95	2.347	59.62	2.112	53.65	42.82	190.45	22.50	3.94	**C0705-092-4250-S**	2.540	64.52	33.46	148.83	19.57	3.42
C0705-092-4500-M	0.705	17.91	0.092	2.34	4.500	114.30	2.480	63.00	2.230	56.65	42.82	190.45	21.20	3.71	**C0705-092-4500-S**	2.685	68.20	33.46	148.83	18.44	3.23
C0705-092-4750-M	0.705	17.91	0.092	2.34	4.750	120.65	2.613	66.38	2.348	59.65	42.82	190.45	20.04	3.51	**C0705-092-4750-S**	2.830	71.88	33.46	148.83	17.43	3.05
C0705-092-5000-M	0.705	17.91	0.092	2.34	5.000	127.00	2.746	69.76	2.466	62.64	42.82	190.45	19.00	3.33	**C0705-092-5000-S**	2.975	75.56	33.46	148.83	16.52	2.89
C0705-092-5250-M	0.705	17.91	0.092	2.34	5.250	133.35	2.880	73.14	2.584	65.64	42.82	190.45	18.06	3.16	**C0705-092-5250-S**	3.120	79.24	33.46	148.83	15.71	2.75
C0705-092-5500-M	0.705	17.91	0.092	2.34	5.500	139.70	3.013	76.52	2.702	68.64	42.82	190.45	17.21	3.01	**C0705-092-5500-S**	3.265	82.92	33.46	148.83	14.97	2.62
C0705-092-5750-M	0.705	17.91	0.092	2.34	5.750	146.05	3.146	79.90	2.820	71.63	42.82	190.45	16.44	2.88	**C0705-092-5750-S**	3.409	86.60	33.46	148.83	14.30	2.50
C0705-092-6000-M	0.705	17.91	0.092	2.34	6.000	152.40	3.279	83.28	2.938	74.63	42.82	190.45	15.73	2.75	**C0705-092-6000-S**	3.554	90.28	33.46	148.83	13.68	2.39
C0705-092-6250-M	0.705	17.91	0.092	2.34	6.250	158.75	3.412	86.65	3.056	77.63	42.82	190.45	15.08	2.64	**C0705-092-6250-S**	3.699	93.96	33.46	148.83	13.12	2.30
C0705-092-6500-M	0.705	17.91	0.092	2.34	6.500	165.10	3.545	90.03	3.174	80.63	42.82	190.45	14.49	2.54	**C0705-092-6500-S**	3.844	97.64	33.46	148.83	12.60	2.20
C0705-092-6750-M	0.705	17.91	0.092	2.34	6.750	171.45	3.678	93.41	3.292	83.62	42.82	190.45	13.94	2.44	**C0705-092-6750-S**	3.989	101.32	33.46	148.83	12.12	2.12
C0705-092-7000-M	0.705	17.91	0.092	2.34	7.000	177.80	3.811	96.79	3.410	86.62	42.82	190.45	13.43	2.35	**C0705-092-7000-S**	4.134	105.00	33.46	148.83	11.67	2.04
C0705-092-7500-M	0.705	17.91	0.092	2.34	7.500	190.50	4.077	103.55	3.646	92.61	42.82	190.45	12.51	2.19	**C0705-092-7500-S**	4.424	112.36	33.46	148.83	10.88	1.90
C0705-092-8000-M	0.705	17.91	0.092	2.34	8.000	203.20	4.343	110.31	3.882	98.61	42.82	190.45	11.71	2.05	**C0705-092-8000-S**	4.713	119.72	33.46	148.83	10.18	1.78
C0705-092-8500-M	0.705	17.91	0.092	2.34	8.500	215.90	4.609	117.06	4.118	104.60	42.82	190.45	11.00	1.93	**C0705-092-8500-S**	5.003	127.08	33.46	148.83	9.57	1.67
C0705-092-9000-M	0.705	17.91	0.092	2.34	9.000	228.60	4.875	123.82	4.354	110.60	42.82	190.45	10.38	1.82	**C0705-092-9000-S**	5.293	134.44	33.46	148.83	9.03	1.58
C0705-092-9500-M	0.705	17.91	0.092	2.34	9.500	241.30	5.141	130.58	4.590	116.59	42.82	190.45	9.82	1.72	**C0705-092-9500-S**	5.583	141.80	33.46	148.83	8.54	1.49
C0705-098-1000-M	0.705	17.91	0.098	2.49	1.000	25.40	0.653	16.59	0.622	15.79	50.90	226.43	146.75	25.68	**C0705-098-1000-S**	0.689	17.51	39.62	176.26	127.61	22.33
C0705-098-1125-M	0.705	17.91	0.098	2.49	1.125	28.58	0.724	18.39	0.686	17.43	50.90	226.43	127.00	22.23	**C0705-098-1125-S**	0.766	19.46	39.62	176.26	110.44	19.33
C0705-098-1250-M	0.705	17.91	0.098	2.49	1.250	31.75	0.795	20.20	0.751	19.07	50.90	226.43	111.94	19.59	**C0705-098-1250-S**	0.843	21.41	39.62	176.26	97.34	17.03
C0705-098-1375-M	0.705	17.91	0.098	2.49	1.375	34.93	0.866	22.00	0.815	20.71	50.90	226.43	100.07	17.51	**C0705-098-1375-S**	0.920	23.36	39.62	176.26	87.02	15.23
C0705-098-1500-M	0.705	17.91	0.098	2.49	1.500	38.10	0.937	23.81	0.880	22.35	50.90	226.43	90.48	15.83	**C0705-098-1500-S**	0.996	25.31	39.62	176.26	78.68	13.77
C0705-098-1625-M	0.705	17.91	0.098	2.49	1.625	41.28	1.008	25.62	0.945	23.99	50.90	226.43	82.57	14.45	**C0705-098-1625-S**	1.073	27.26	39.62	176.26	71.80	12.56
C0705-098-1750-M	0.705	17.91	0.098	2.49	1.750	44.45	1.080	27.42	1.009	25.64	50.90	226.43	75.92	13.29	**C0705-098-1750-S**	1.150	29.21	39.62	176.26	66.02	11.55
C0705-098-1875-M	0.705	17.91	0.098	2.49	1.875	47.63	1.151	29.23	1.074	27.28	50.90	226.43	70.27	12.30	**C0705-098-1875-S**	1.227	31.15	39.62	176.26	61.11	10.69
C0705-098-2000-M	0.705	17.91	0.098	2.49	2.000	50.80	1.222	31.03	1.139	28.92	50.90	226.43	65.40	11.45	**C0705-098-2000-S**	1.303	33.10	39.62	176.26	56.87	9.95

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0705-098-2125-M	**0.705**	**17.91**	**0.098**	**2.49**	**2.125**	**53.98**	**1.293**	**32.84**	**1.203**	**30.56**	**50.90**	**226.43**	**61.16**	**10.70**	**C0705-098-2125-S**	**1.380**	**35.05**	**39.62**	**176.26**	**53.19**	**9.31**
C0705-098-2250-M	**0.705**	**17.91**	**0.098**	**2.49**	**2.250**	**57.15**	**1.364**	**34.64**	**1.268**	**32.20**	**50.90**	**226.43**	**57.44**	**10.05**	**C0705-098-2250-S**	**1.457**	**37.00**	**39.62**	**176.26**	**49.95**	**8.74**
C0705-098-2375-M	**0.705**	**17.91**	**0.098**	**2.49**	**2.375**	**60.33**	**1.435**	**36.45**	**1.332**	**33.84**	**50.90**	**226.43**	**54.15**	**9.48**	**C0705-098-2375-S**	**1.533**	**38.95**	**39.62**	**176.26**	**47.08**	**8.24**
C0705-098-2500-M	**0.705**	**17.91**	**0.098**	**2.49**	**2.500**	**63.50**	**1.506**	**38.25**	**1.397**	**35.49**	**50.90**	**226.43**	**51.21**	**8.96**	**C0705-098-2500-S**	**1.610**	**40.90**	**39.62**	**176.26**	**44.53**	**7.79**
C0705-098-2625-M	**0.705**	**17.91**	**0.098**	**2.49**	**2.625**	**66.68**	**1.577**	**40.06**	**1.462**	**37.13**	**50.90**	**226.43**	**48.57**	**8.50**	**C0705-098-2625-S**	**1.687**	**42.85**	**39.62**	**176.26**	**42.24**	**7.39**
C0705-098-2750-M	**0.705**	**17.91**	**0.098**	**2.49**	**2.750**	**69.85**	**1.648**	**41.86**	**1.526**	**38.77**	**50.90**	**226.43**	**46.20**	**8.08**	**C0705-098-2750-S**	**1.764**	**44.80**	**39.62**	**176.26**	**40.17**	**7.03**
C0705-098-2875-M	**0.705**	**17.91**	**0.098**	**2.49**	**2.875**	**73.03**	**1.719**	**43.67**	**1.591**	**40.41**	**50.90**	**226.43**	**44.04**	**7.71**	**C0705-098-2875-S**	**1.840**	**46.74**	**39.62**	**176.26**	**38.30**	**6.70**
C0705-098-3000-M	**0.705**	**17.91**	**0.098**	**2.49**	**3.000**	**76.20**	**1.790**	**45.47**	**1.656**	**42.05**	**50.90**	**226.43**	**42.08**	**7.36**	**C0705-098-3000-S**	**1.917**	**48.69**	**39.62**	**176.26**	**36.59**	**6.40**
C0705-098-3250-M	**0.705**	**17.91**	**0.098**	**2.49**	**3.250**	**82.55**	**1.932**	**49.08**	**1.785**	**45.34**	**50.90**	**226.43**	**38.63**	**6.76**	**C0705-098-3250-S**	**2.071**	**52.59**	**39.62**	**176.26**	**33.59**	**5.88**
C0705-098-3500-M	**0.705**	**17.91**	**0.098**	**2.49**	**3.500**	**88.90**	**2.075**	**52.69**	**1.914**	**48.62**	**50.90**	**226.43**	**35.71**	**6.25**	**C0705-098-3500-S**	**2.224**	**56.49**	**39.62**	**176.26**	**31.05**	**5.43**
C0705-098-3750-M	**0.705**	**17.91**	**0.098**	**2.49**	**3.750**	**95.25**	**2.217**	**56.30**	**2.043**	**51.90**	**50.90**	**226.43**	**33.20**	**5.81**	**C0705-098-3750-S**	**2.377**	**60.39**	**39.62**	**176.26**	**28.87**	**5.05**
C0705-098-4000-M	**0.705**	**17.91**	**0.098**	**2.49**	**4.000**	**101.60**	**2.359**	**59.91**	**2.173**	**55.19**	**50.90**	**226.43**	**31.02**	**5.43**	**C0705-098-4000-S**	**2.531**	**64.28**	**39.62**	**176.26**	**26.97**	**4.72**
C0705-098-4250-M	**0.705**	**17.91**	**0.098**	**2.49**	**4.250**	**107.95**	**2.501**	**63.52**	**2.302**	**58.47**	**50.90**	**226.43**	**29.10**	**5.09**	**C0705-098-4250-S**	**2.684**	**68.18**	**39.62**	**176.26**	**25.31**	**4.43**
C0705-098-4500-M	**0.705**	**17.91**	**0.098**	**2.49**	**4.500**	**114.30**	**2.643**	**67.13**	**2.431**	**61.75**	**50.90**	**226.43**	**27.41**	**4.80**	**C0705-098-4500-S**	**2.838**	**72.08**	**39.62**	**176.26**	**23.84**	**4.17**
C0705-098-4750-M	**0.705**	**17.91**	**0.098**	**2.49**	**4.750**	**120.65**	**2.785**	**70.74**	**2.560**	**65.04**	**50.90**	**226.43**	**25.91**	**4.53**	**C0705-098-4750-S**	**2.991**	**75.98**	**39.62**	**176.26**	**22.53**	**3.94**
C0705-098-5000-M	**0.705**	**17.91**	**0.098**	**2.49**	**5.000**	**127.00**	**2.927**	**74.36**	**2.690**	**68.32**	**50.90**	**226.43**	**24.56**	**4.30**	**C0705-098-5000-S**	**3.145**	**79.87**	**39.62**	**176.26**	**21.36**	**3.74**
C0705-098-5250-M	**0.705**	**17.91**	**0.098**	**2.49**	**5.250**	**133.35**	**3.070**	**77.97**	**2.819**	**71.60**	**50.90**	**226.43**	**23.35**	**4.09**	**C0705-098-5250-S**	**3.298**	**83.77**	**39.62**	**176.26**	**20.30**	**3.55**
C0705-098-5500-M	**0.705**	**17.91**	**0.098**	**2.49**	**5.500**	**139.70**	**3.212**	**81.58**	**2.948**	**74.88**	**50.90**	**226.43**	**22.25**	**3.89**	**C0705-098-5500-S**	**3.452**	**87.67**	**39.62**	**176.26**	**19.34**	**3.39**
C0705-098-5750-M	**0.705**	**17.91**	**0.098**	**2.49**	**5.750**	**146.05**	**3.354**	**85.19**	**3.077**	**78.17**	**50.90**	**226.43**	**21.24**	**3.72**	**C0705-098-5750-S**	**3.605**	**91.57**	**39.62**	**176.26**	**18.47**	**3.23**
C0705-098-6000-M	**0.705**	**17.91**	**0.098**	**2.49**	**6.000**	**152.40**	**3.496**	**88.80**	**3.207**	**81.45**	**50.90**	**226.43**	**20.33**	**3.56**	**C0705-098-6000-S**	**3.758**	**95.46**	**39.62**	**176.26**	**17.68**	**3.09**
C0705-098-6250-M	**0.705**	**17.91**	**0.098**	**2.49**	**6.250**	**158.75**	**3.638**	**92.41**	**3.336**	**84.73**	**50.90**	**226.43**	**19.49**	**3.41**	**C0705-098-6250-S**	**3.912**	**99.36**	**39.62**	**176.26**	**16.95**	**2.97**
C0705-098-6500-M	**0.705**	**17.91**	**0.098**	**2.49**	**6.500**	**165.10**	**3.780**	**96.02**	**3.465**	**88.02**	**50.90**	**226.43**	**18.72**	**3.28**	**C0705-098-6500-S**	**4.065**	**103.26**	**39.62**	**176.26**	**16.28**	**2.85**
C0705-098-6750-M	**0.705**	**17.91**	**0.098**	**2.49**	**6.750**	**171.45**	**3.922**	**99.63**	**3.595**	**91.30**	**50.90**	**226.43**	**18.00**	**3.15**	**C0705-098-6750-S**	**4.219**	**107.16**	**39.62**	**176.26**	**15.65**	**2.74**
C0705-098-7000-M	**0.705**	**17.91**	**0.098**	**2.49**	**7.000**	**177.80**	**4.064**	**103.24**	**3.724**	**94.58**	**50.90**	**226.43**	**17.34**	**3.03**	**C0705-098-7000-S**	**4.372**	**111.05**	**39.62**	**176.26**	**15.08**	**2.64**
C0705-098-7500-M	**0.705**	**17.91**	**0.098**	**2.49**	**7.500**	**190.50**	**4.349**	**110.46**	**3.982**	**101.15**	**50.90**	**226.43**	**16.15**	**2.83**	**C0705-098-7500-S**	**4.679**	**118.85**	**39.62**	**176.26**	**14.05**	**2.46**
C0705-098-8000-M	**0.705**	**17.91**	**0.098**	**2.49**	**8.000**	**203.20**	**4.633**	**117.68**	**4.241**	**107.72**	**50.90**	**226.43**	**15.12**	**2.65**	**C0705-098-8000-S**	**4.986**	**126.64**	**39.62**	**176.26**	**13.15**	**2.30**
C0705-098-8500-M	**0.705**	**17.91**	**0.098**	**2.49**	**8.500**	**215.90**	**4.917**	**124.90**	**4.499**	**114.28**	**50.90**	**226.43**	**14.21**	**2.49**	**C0705-098-8500-S**	**5.293**	**134.44**	**39.62**	**176.26**	**12.36**	**2.16**
C0705-098-9000-M	**0.705**	**17.91**	**0.098**	**2.49**	**9.000**	**228.60**	**5.202**	**132.12**	**4.758**	**120.85**	**50.90**	**226.43**	**13.40**	**2.35**	**C0705-098-9000-S**	**5.600**	**142.23**	**39.62**	**176.26**	**11.65**	**2.04**
C0705-098-9500-M	**0.705**	**17.91**	**0.098**	**2.49**	**9.500**	**241.30**	**5.486**	**139.34**	**5.016**	**127.42**	**50.90**	**226.43**	**12.68**	**2.22**	**C0705-098-9500-S**	**5.907**	**150.03**	**39.62**	**176.26**	**11.03**	**1.93**
C0705-105-1000-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.000**	**25.40**	**0.691**	**17.56**	**0.669**	**16.98**	**61.45**	**273.32**	**199.02**	**34.83**	**C0705-105-1000-S**	**0.725**	**18.41**	**47.60**	**211.75**	**173.06**	**30.29**
C0705-105-1125-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.125**	**28.58**	**0.767**	**19.49**	**0.740**	**18.78**	**61.45**	**273.32**	**171.83**	**30.07**	**C0705-105-1125-S**	**0.806**	**20.48**	**47.60**	**211.75**	**149.42**	**26.15**
C0705-105-1250-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.250**	**31.75**	**0.844**	**21.43**	**0.810**	**20.58**	**61.45**	**273.32**	**151.18**	**26.46**	**C0705-105-1250-S**	**0.888**	**22.55**	**47.60**	**211.75**	**131.46**	**23.01**
C0705-105-1375-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.375**	**34.93**	**0.920**	**23.36**	**0.881**	**22.39**	**61.45**	**273.32**	**134.96**	**23.62**	**C0705-105-1375-S**	**0.969**	**24.62**	**47.60**	**211.75**	**117.36**	**20.54**
C0705-105-1500-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.500**	**38.10**	**0.996**	**25.29**	**0.952**	**24.19**	**61.45**	**273.32**	**121.88**	**21.33**	**C0705-105-1500-S**	**1.051**	**26.69**	**47.60**	**211.75**	**105.98**	**18.55**
C0705-105-1625-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.625**	**41.28**	**1.072**	**27.23**	**1.023**	**25.99**	**61.45**	**273.32**	**111.11**	**19.44**	**C0705-105-1625-S**	**1.132**	**28.76**	**47.60**	**211.75**	**96.62**	**16.91**
C0705-105-1750-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.750**	**44.45**	**1.148**	**29.16**	**1.094**	**27.79**	**61.45**	**273.32**	**102.10**	**17.87**	**C0705-105-1750-S**	**1.214**	**30.83**	**47.60**	**211.75**	**88.78**	**15.54**
C0705-105-1875-M	**0.705**	**17.91**	**0.105**	**2.67**	**1.875**	**47.63**	**1.224**	**31.10**	**1.165**	**29.59**	**61.45**	**273.32**	**94.43**	**16.53**	**C0705-105-1875-S**	**1.295**	**32.90**	**47.60**	**211.75**	**82.11**	**14.37**
C0705-105-2000-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.000**	**50.80**	**1.300**	**33.03**	**1.236**	**31.39**	**61.45**	**273.32**	**87.84**	**15.37**	**C0705-105-2000-S**	**1.377**	**34.97**	**47.60**	**211.75**	**76.38**	**13.37**
C0705-105-2125-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.125**	**53.98**	**1.377**	**34.97**	**1.307**	**33.19**	**61.45**	**273.32**	**82.10**	**14.37**	**C0705-105-2125-S**	**1.458**	**37.04**	**47.60**	**211.75**	**71.39**	**12.49**
C0705-105-2250-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.250**	**57.15**	**1.453**	**36.90**	**1.378**	**34.99**	**61.45**	**273.32**	**77.07**	**13.49**	**C0705-105-2250-S**	**1.540**	**39.11**	**47.60**	**211.75**	**67.02**	**11.73**
C0705-105-2375-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.375**	**60.33**	**1.529**	**38.83**	**1.449**	**36.79**	**61.45**	**273.32**	**72.62**	**12.71**	**C0705-105-2375-S**	**1.621**	**41.18**	**47.60**	**211.75**	**63.15**	**11.05**
C0705-105-2500-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.500**	**63.50**	**1.605**	**40.77**	**1.519**	**38.59**	**61.45**	**273.32**	**68.66**	**12.02**	**C0705-105-2500-S**	**1.703**	**43.25**	**47.60**	**211.75**	**59.70**	**10.45**
C0705-105-2625-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.625**	**66.68**	**1.681**	**42.70**	**1.590**	**40.40**	**61.45**	**273.32**	**65.10**	**11.39**	**C0705-105-2625-S**	**1.784**	**45.32**	**47.60**	**211.75**	**56.61**	**9.91**
C0705-105-2750-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.750**	**69.85**	**1.757**	**44.64**	**1.661**	**42.20**	**61.45**	**273.32**	**61.90**	**10.83**	**C0705-105-2750-S**	**1.866**	**47.39**	**47.60**	**211.75**	**53.83**	**9.42**
C0705-105-2875-M	**0.705**	**17.91**	**0.105**	**2.67**	**2.875**	**73.03**	**1.833**	**46.57**	**1.732**	**44.00**	**61.45**	**273.32**	**59.00**	**10.32**	**C0705-105-2875-S**	**1.947**	**49.46**	**47.60**	**211.75**	**51.30**	**8.98**
C0705-105-3000-M	**0.705**	**17.91**	**0.105**	**2.67**	**3.000**	**76.20**	**1.910**	**48.50**	**1.803**	**45.80**	**61.45**	**273.32**	**56.35**	**9.86**	**C0705-105-3000-S**	**2.029**	**51.53**	**47.60**	**211.75**	**49.00**	**8.58**
C0705-105-3250-M	**0.705**	**17.91**	**0.105**	**2.67**	**3.250**	**82.55**	**2.062**	**52.37**	**1.945**	**49.40**	**61.45**	**273.32**	**51.72**	**9.05**	**C0705-105-3250-S**	**2.192**	**55.66**	**47.60**	**211.75**	**44.97**	**7.87**
C0705-105-3500-M	**0.705**	**17.91**	**0.105**	**2.67**	**3.500**	**88.90**	**2.214**	**56.24**	**2.087**	**53.00**	**61.45**	**273.32**	**47.79**	**8.36**	**C0705-105-3500-S**	**2.354**	**59.80**	**47.60**	**211.75**	**41.56**	**7.27**
C0705-105-3750-M	**0.705**	**17.91**	**0.105**	**2.67**	**3.750**	**95.25**	**2.367**	**60.11**	**2.229**	**56.60**	**61.45**	**273.32**	**44.41**	**7.77**	**C0705-105-3750-S**	**2.517**	**63.94**	**47.60**	**211.75**	**38.62**	**6.76**
C0705-105-4000-M	**0.705**	**17.91**	**0.105**	**2.67**	**4.000**	**101.60**	**2.519**	**63.98**	**2.370**	**60.21**	**61.45**	**273.32**	**41.49**	**7.26**	**C0705-105-4000-S**	**2.680**	**68.08**	**47.60**	**211.75**	**36.07**	**6.31**
C0705-105-4250-M	**0.705**	**17.91**	**0.105**	**2.67**	**4.250**	**107.95**	**2.671**	**67.85**	**2.512**	**63.81**	**61.45**	**273.32**	**38.92**	**6.81**	**C0705-105-4250-S**	**2.843**	**72.22**	**47.60**	**211.75**	**33.84**	**5.92**
C0705-105-4500-M	**0.705**	**17.91**	**0.105**	**2.67**	**4.500**	**114.30**	**2.823**	**71.72**	**2.654**	**67.41**	**61.45**	**273.32**	**36.65**	**6.41**	**C0705-105-4500-S**	**3.006**	**76.36**	**47.60**	**211.75**	**31.87**	**5.58**
C0705-105-4750-M	**0.705**	**17.91**	**0.105**	**2.67**	**4.750**	**120.65**	**2.976**	**75.58**	**2.796**	**71.01**	**61.45**	**273.32**	**34.63**	**6.06**	**C0705-105-4750-S**	**3.169**	**80.50**	**47.60**	**211.75**	**30.11**	**5.27**
C0705-105-5000-M	**0.705**	**17.91**	**0.105**	**2.67**	**5.000**	**127.00**	**3.128**	**79.45**	**2.938**	**74.61**	**61.45**	**273.32**	**32.82**	**5.74**	**C0705-105-5000-S**	**3.332**	**84.64**	**47.60**	**211.75**	**28.54**	**5.00**
C0705-105-5250-M	**0.705**	**17.91**	**0.105**	**2.67**	**5.250**	**133.35**	**3.280**	**83.32**	**3.079**	**78.22**	**61.45**	**273.32**	**31.20**	**5.46**	**C0705-105-5250-S**	**3.495**	**88.78**	**47.60**	**211.75**	**27.13**	**4.75**
C0705-105-5500-M	**0.705**	**17.91**	**0.105**	**2.67**	**5.500**	**139.70**	**3.433**	**87.19**	**3.221**	**81.82**	**61.45**	**273.32**	**29.72**	**5.20**	**C0705-105-5500-S**	**3.658**	**92.92**	**47.60**	**211.75**	**25.85**	**4.52**
C0705-105-5750-M	**0.705**	**17.91**	**0.105**	**2.67**	**5.750**	**146.05**	**3.585**	**91.06**	**3.363**	**85.42**	**61.45**	**273.32**	**28.38**	**4.97**	**C0705-105-5750-S**	**3.821**	**97.06**	**47.60**	**211.75**	**24.68**	**4.32**
C0705-105-6000-M	**0.705**	**17.91**	**0.105**	**2.67**	**6.000**	**152.40**	**3.737**	**94.93**	**3.505**	**89.02**	**61.45**	**273.32**	**27.16**	**4.75**	**C0705-105-6000-S**	**3.984**	**101.19**	**47.60**	**211.75**	**23.61**	**4.13**
C0705-105-6250-M	**0.705**	**17.91**	**0.105**	**2.67**	**6.250**	**158.75**	**3.890**	**98.79**	**3.647**	**92.62**	**61.45**	**273.32**	**26.03**	**4.56**	**C0705-105-6250-S**	**4.147**	**105.33**	**47.60**	**211.75**	**22.64**	**3.96**
C0705-105-6500-M	**0.705**	**17.91**	**0.105**	**2.67**	**6.500**	**165.10**	**4.042**	**102.66**	**3.788**	**96.23**	**61.45**	**273.32**	**25.00**	**4.37**	**C0705-105-6500-S**	**4.310**	**109.47**	**47.60**	**211.75**	**21.74**	**3.80**
C0705-105-6750-M	**0.705**	**17.91**	**0.105**	**2.67**	**6.750**	**171.45**	**4.194**	**106.53**	**3.930**	**99.83**	**61.45**	**273.32**	**24.04**	**4.21**	**C0705-105-6750-S**	**4.473**	**113.61**	**47.60**	**211.75**	**20.91**	**3.66**
C0705-105-7000-M	**0.705**	**17.91**	**0.105**	**2.67**	**7.000**	**177.80**	**4.346**	**110.40**	**4.072**	**103.43**	**61.45**	**273.32**	**23.16**	**4.05**	**C0705-105-7000-S**	**4.636**	**117.75**	**47.60**	**211.75**	**20.14**	**3.52**
C0705-105-7500-M	**0.705**	**17.91**	**0.105**	**2.67**	**7.500**	**190.50**	**4.651**	**118.14**	**4.356**	**110.63**	**61.45**	**273.32**	**21.57**	**3.77**	**C0705-105-7500-S**	**4.962**	**126.03**	**47.60**	**211.75**	**18.75**	**3.28**
C0705-105-8000-M	**0.705**	**17.91**	**0.105**	**2.67**	**8.000**	**203.20**	**4.956**	**125.87**	**4.639**	**117.84**	**61.45**	**273.32**	**20.18**	**3.53**	**C0705-105-8000-S**	**5.288**	**134.31**	**47.60**	**211.75**	**17.55**	**3.07**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0705-105-8500-M	0.705	17.91	0.105	2.67	8.500	215.90	5.260	133.61	4.923	125.04	61.45	273.32	18.97	3.32	**C0705-105-8500-S**	5.614	142.58	47.60	211.75	16.49	2.89
C0705-105-9000-M	0.705	17.91	0.105	2.67	9.000	228.60	5.565	141.35	5.207	132.25	61.45	273.32	17.89	3.13	**C0705-105-9000-S**	5.939	150.86	47.60	211.75	15.55	2.72
C0705-105-9500-M	0.705	17.91	0.105	2.67	9.500	241.30	5.869	149.08	5.490	139.45	61.45	273.32	16.92	2.96	**C0705-105-9500-S**	6.265	159.14	47.60	211.75	14.72	2.58
C0705-112-1000-M	0.705	17.91	0.112	2.85	1.000	25.40	0.726	18.45	0.712	18.08	73.22	325.68	267.56	46.82	**C0705-112-1000-S**	0.757	19.24	56.44	251.07	232.66	40.72
C0705-112-1125-M	0.705	17.91	0.112	2.85	1.125	28.58	0.807	20.50	0.789	20.03	73.22	325.68	230.44	40.33	**C0705-112-1125-S**	0.843	21.42	56.44	251.07	200.38	35.07
C0705-112-1250-M	0.705	17.91	0.112	2.85	1.250	31.75	0.888	22.56	0.866	21.99	73.22	325.68	202.36	35.41	**C0705-112-1250-S**	0.929	23.60	56.44	251.07	175.97	30.79
C0705-112-1375-M	0.705	17.91	0.112	2.85	1.375	34.93	0.969	24.62	0.942	23.94	73.22	325.68	180.39	31.57	**C0705-112-1375-S**	1.015	25.79	56.44	251.07	156.86	27.45
C0705-112-1500-M	0.705	17.91	0.112	2.85	1.500	38.10	1.050	26.67	1.019	25.89	73.22	325.68	162.72	28.48	**C0705-112-1500-S**	1.101	27.97	56.44	251.07	141.49	24.76
C0705-112-1625-M	0.705	17.91	0.112	2.85	1.625	41.28	1.131	28.73	1.096	27.84	73.22	325.68	148.20	25.93	**C0705-112-1625-S**	1.187	30.15	56.44	251.07	128.87	22.55
C0705-112-1750-M	0.705	17.91	0.112	2.85	1.750	44.45	1.212	30.78	1.173	29.79	73.22	325.68	136.06	23.81	**C0705-112-1750-S**	1.273	32.33	56.44	251.07	118.31	20.70
C0705-112-1875-M	0.705	17.91	0.112	2.85	1.875	47.63	1.293	32.84	1.250	31.74	73.22	325.68	125.76	22.01	**C0705-112-1875-S**	1.359	34.51	56.44	251.07	109.35	19.14
C0705-112-2000-M	0.705	17.91	0.112	2.85	2.000	50.80	1.374	34.89	1.326	33.69	73.22	325.68	116.91	20.46	**C0705-112-2000-S**	1.445	36.70	56.44	251.07	101.66	17.79
C0705-112-2125-M	0.705	17.91	0.112	2.85	2.125	53.98	1.455	36.95	1.403	35.64	73.22	325.68	109.22	19.11	**C0705-112-2125-S**	1.531	38.88	56.44	251.07	94.97	16.62
C0705-112-2250-M	0.705	17.91	0.112	2.85	2.250	57.15	1.536	39.00	1.480	37.59	73.22	325.68	102.48	17.93	**C0705-112-2250-S**	1.617	41.06	56.44	251.07	89.11	15.59
C0705-112-2375-M	0.705	17.91	0.112	2.85	2.375	60.33	1.616	41.06	1.557	39.54	73.22	325.68	96.53	16.89	**C0705-112-2375-S**	1.703	43.24	56.44	251.07	83.94	14.69
C0705-112-2500-M	0.705	17.91	0.112	2.85	2.500	63.50	1.697	43.11	1.634	41.49	73.22	325.68	91.22	15.96	**C0705-112-2500-S**	1.788	45.43	56.44	251.07	79.33	13.88
C0705-112-2625-M	0.705	17.91	0.112	2.85	2.625	66.68	1.778	45.17	1.710	43.44	73.22	325.68	86.48	15.13	**C0705-112-2625-S**	1.874	47.61	56.44	251.07	75.20	13.16
C0705-112-2750-M	0.705	17.91	0.112	2.85	2.750	69.85	1.859	47.22	1.787	45.39	73.22	325.68	82.20	14.38	**C0705-112-2750-S**	1.960	49.79	56.44	251.07	71.47	12.51
C0705-112-2875-M	0.705	17.91	0.112	2.85	2.875	73.03	1.940	49.28	1.864	47.34	73.22	325.68	78.32	13.71	**C0705-112-2875-S**	2.046	51.97	56.44	251.07	68.10	11.92
C0705-112-3000-M	0.705	17.91	0.112	2.85	3.000	76.20	2.021	51.34	1.941	49.29	73.22	325.68	74.79	13.09	**C0705-112-3000-S**	2.132	54.16	56.44	251.07	65.04	11.38
C0705-112-3250-M	0.705	17.91	0.112	2.85	3.250	82.55	2.183	55.45	2.094	53.20	73.22	325.68	68.61	12.01	**C0705-112-3250-S**	2.304	58.52	56.44	251.07	59.66	10.44
C0705-112-3500-M	0.705	17.91	0.112	2.85	3.500	88.90	2.345	59.56	2.248	57.10	73.22	325.68	63.38	11.09	**C0705-112-3500-S**	2.476	62.89	56.44	251.07	55.11	9.64
C0705-112-3750-M	0.705	17.91	0.112	2.85	3.750	95.25	2.507	63.67	2.402	61.00	73.22	325.68	58.88	10.30	**C0705-112-3750-S**	2.648	67.25	56.44	251.07	51.20	8.96
C0705-112-4000-M	0.705	17.91	0.112	2.85	4.000	101.60	2.668	67.78	2.555	64.90	73.22	325.68	54.99	9.62	**C0705-112-4000-S**	2.820	71.62	56.44	251.07	47.81	8.37
C0705-112-4250-M	0.705	17.91	0.112	2.85	4.250	107.95	2.830	71.89	2.709	68.80	73.22	325.68	51.57	9.02	**C0705-112-4250-S**	2.991	75.98	56.44	251.07	44.84	7.85
C0705-112-4500-M	0.705	17.91	0.112	2.85	4.500	114.30	2.992	76.00	2.862	72.70	73.22	325.68	48.56	8.50	**C0705-112-4500-S**	3.163	80.35	56.44	251.07	42.22	7.39
C0705-112-4750-M	0.705	17.91	0.112	2.85	4.750	120.65	3.154	80.11	3.016	76.60	73.22	325.68	45.87	8.03	**C0705-112-4750-S**	3.335	84.71	56.44	251.07	39.89	6.98
C0705-112-5000-M	0.705	17.91	0.112	2.85	5.000	127.00	3.316	84.22	3.170	80.51	73.22	325.68	43.47	7.61	**C0705-112-5000-S**	3.507	89.07	56.44	251.07	37.80	6.62
C0705-112-5250-M	0.705	17.91	0.112	2.85	5.250	133.35	3.478	88.33	3.323	84.41	73.22	325.68	41.31	7.23	**C0705-112-5250-S**	3.679	93.44	56.44	251.07	35.92	6.29
C0705-112-5500-M	0.705	17.91	0.112	2.85	5.500	139.70	3.639	92.44	3.477	88.31	73.22	325.68	39.35	6.89	**C0705-112-5500-S**	3.851	97.80	56.44	251.07	34.22	5.99
C0705-112-5750-M	0.705	17.91	0.112	2.85	5.750	146.05	3.801	96.55	3.630	92.21	73.22	325.68	37.57	6.58	**C0705-112-5750-S**	4.022	102.17	56.44	251.07	32.67	5.72
C0705-112-6000-M	0.705	17.91	0.112	2.85	6.000	152.40	3.963	100.66	3.784	96.11	73.22	325.68	35.95	6.29	**C0705-112-6000-S**	4.194	106.53	56.44	251.07	31.26	5.47
C0705-112-6250-M	0.705	17.91	0.112	2.85	6.250	158.75	4.125	104.78	3.938	100.01	73.22	325.68	34.46	6.03	**C0705-112-6250-S**	4.366	110.90	56.44	251.07	29.96	5.24
C0705-112-6500-M	0.705	17.91	0.112	2.85	6.500	165.10	4.287	108.89	4.091	103.91	73.22	325.68	33.08	5.79	**C0705-112-6500-S**	4.538	115.26	56.44	251.07	28.77	5.03
C0705-112-6750-M	0.705	17.91	0.112	2.85	6.750	171.45	4.449	113.00	4.245	107.82	73.22	325.68	31.82	5.57	**C0705-112-6750-S**	4.710	119.63	56.44	251.07	27.67	4.84
C0705-112-7000-M	0.705	17.91	0.112	2.85	7.000	177.80	4.611	117.11	4.398	111.72	73.22	325.68	30.64	5.36	**C0705-112-7000-S**	4.882	123.99	56.44	251.07	26.65	4.66
C0705-112-7500-M	0.705	17.91	0.112	2.85	7.500	190.50	4.934	125.33	4.705	119.52	73.22	325.68	28.54	4.99	**C0705-112-7500-S**	5.225	132.72	56.44	251.07	24.81	4.34
C0705-112-8000-M	0.705	17.91	0.112	2.85	8.000	203.20	5.258	133.55	5.013	127.32	73.22	325.68	26.70	4.67	**C0705-112-8000-S**	5.569	141.45	56.44	251.07	23.22	4.06
C0705-112-8500-M	0.705	17.91	0.112	2.85	8.500	215.90	5.582	141.77	5.320	135.12	73.22	325.68	25.09	4.39	**C0705-112-8500-S**	5.913	150.18	56.44	251.07	21.82	3.82
C0705-112-9000-M	0.705	17.91	0.112	2.85	9.000	228.60	5.905	149.99	5.627	142.93	73.22	325.68	23.66	4.14	**C0705-112-9000-S**	6.256	158.91	56.44	251.07	20.57	3.60
C0705-112-9500-M	0.705	17.91	0.112	2.85	9.500	241.30	6.229	158.21	5.934	150.73	73.22	325.68	22.38	3.92	**C0705-112-9500-S**	6.600	167.64	56.44	251.07	19.46	3.41
C0705-125-1125-M	0.705	17.91	0.125	3.18	1.125	28.58	0.872	22.15	0.869	22.07	98.45	437.92	389.33	68.13	**C0705-125-1125-S**	0.903	22.93	75.18	334.41	338.55	59.25
C0705-125-1250-M	0.705	17.91	0.125	3.18	1.250	31.75	0.961	24.41	0.956	24.27	98.45	437.92	340.66	59.62	**C0705-125-1250-S**	0.996	25.30	75.18	334.41	296.23	51.84
C0705-125-1375-M	0.705	17.91	0.125	3.18	1.375	34.93	1.050	26.67	1.042	26.47	98.45	437.92	302.81	52.99	**C0705-125-1375-S**	1.089	27.67	75.18	334.41	263.31	46.08
C0705-125-1500-M	0.705	17.91	0.125	3.18	1.500	38.10	1.139	28.92	1.129	28.67	98.45	437.92	272.53	47.69	**C0705-125-1500-S**	1.183	30.04	75.18	334.41	236.98	41.47
C0705-125-1625-M	0.705	17.91	0.125	3.18	1.625	41.28	1.228	31.18	1.215	30.87	98.45	437.92	247.75	43.36	**C0705-125-1625-S**	1.276	32.41	75.18	334.41	215.44	37.70
C0705-125-1750-M	0.705	17.91	0.125	3.18	1.750	44.45	1.317	33.44	1.302	33.07	98.45	437.92	227.11	39.74	**C0705-125-1750-S**	1.369	34.78	75.18	334.41	197.48	34.56
C0705-125-1875-M	0.705	17.91	0.125	3.18	1.875	47.63	1.405	35.70	1.389	35.27	98.45	437.92	209.64	36.69	**C0705-125-1875-S**	1.463	37.15	75.18	334.41	182.29	31.90
C0705-125-2000-M	0.705	17.91	0.125	3.18	2.000	50.80	1.494	37.95	1.475	37.47	98.45	437.92	194.66	34.07	**C0705-125-2000-S**	1.556	39.52	75.18	334.41	169.27	29.62
C0705-125-2125-M	0.705	17.91	0.125	3.18	2.125	53.98	1.583	40.21	1.562	39.67	98.45	437.92	181.69	31.80	**C0705-125-2125-S**	1.649	41.89	75.18	334.41	157.99	27.65
C0705-125-2250-M	0.705	17.91	0.125	3.18	2.250	57.15	1.672	42.47	1.649	41.87	98.45	437.92	170.33	29.81	**C0705-125-2250-S**	1.742	44.26	75.18	334.41	148.11	25.92
C0705-125-2375-M	0.705	17.91	0.125	3.18	2.375	60.33	1.761	44.73	1.735	44.07	98.45	437.92	160.31	28.05	**C0705-125-2375-S**	1.836	46.63	75.18	334.41	139.40	24.40
C0705-125-2500-M	0.705	17.91	0.125	3.18	2.500	63.50	1.850	46.98	1.822	46.27	98.45	437.92	151.41	26.50	**C0705-125-2500-S**	1.929	49.00	75.18	334.41	131.66	23.04
C0705-125-2625-M	0.705	17.91	0.125	3.18	2.625	66.68	1.939	49.24	1.908	48.47	98.45	437.92	143.44	25.10	**C0705-125-2625-S**	2.022	51.37	75.18	334.41	124.73	21.83
C0705-125-2750-M	0.705	17.91	0.125	3.18	2.750	69.85	2.028	51.50	1.995	50.67	98.45	437.92	136.26	23.85	**C0705-125-2750-S**	2.116	53.73	75.18	334.41	118.49	20.74
C0705-125-2875-M	0.705	17.91	0.125	3.18	2.875	73.03	2.116	53.76	2.082	52.87	98.45	437.92	129.78	22.71	**C0705-125-2875-S**	2.209	56.10	75.18	334.41	112.85	19.75
C0705-125-3000-M	0.705	17.91	0.125	3.18	3.000	76.20	2.205	56.01	2.168	55.07	98.45	437.92	123.88	21.68	**C0705-125-3000-S**	2.302	58.47	75.18	334.41	107.72	18.85
C0705-125-3250-M	0.705	17.91	0.125	3.18	3.250	82.55	2.383	60.53	2.342	59.48	98.45	437.92	113.55	19.87	**C0705-125-3250-S**	2.489	63.21	75.18	334.41	98.74	17.28
C0705-125-3500-M	0.705	17.91	0.125	3.18	3.500	88.90	2.561	65.04	2.515	63.88	98.45	437.92	104.82	18.34	**C0705-125-3500-S**	2.675	67.95	75.18	334.41	91.15	15.95
C0705-125-3750-M	0.705	17.91	0.125	3.18	3.750	95.25	2.739	69.56	2.688	68.28	98.45	437.92	97.33	17.03	**C0705-125-3750-S**	2.862	72.69	75.18	334.41	84.64	14.81
C0705-125-4000-M	0.705	17.91	0.125	3.18	4.000	101.60	2.916	74.07	2.861	72.68	98.45	437.92	90.84	15.90	**C0705-125-4000-S**	3.048	77.43	75.18	334.41	78.99	13.82
C0705-125-4250-M	0.705	17.91	0.125	3.18	4.250	107.95	3.094	78.59	3.035	77.08	98.45	437.92	85.17	14.90	**C0705-125-4250-S**	3.235	82.17	75.18	334.41	74.06	12.96
C0705-125-4500-M	0.705	17.91	0.125	3.18	4.500	114.30	3.272	83.10	3.208	81.48	98.45	437.92	80.16	14.03	**C0705-125-4500-S**	3.421	86.90	75.18	334.41	69.70	12.20
C0705-125-4750-M	0.705	17.91	0.125	3.18	4.750	120.65	3.450	87.62	3.381	85.88	98.45	437.92	75.70	13.25	**C0705-125-4750-S**	3.608	91.64	75.18	334.41	65.83	11.52

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0705-125-5000-M	**0.705**	**17.91**	**0.125**	**3.18**	**5.000**	**127.00**	**3.627**	**92.13**	**3.554**	**90.28**	**98.45**	**437.92**	**71.72**	**12.55**
C0705-125-5250-M	**0.705**	**17.91**	**0.125**	**3.18**	**5.250**	**133.35**	**3.805**	**96.65**	**3.728**	**94.68**	**98.45**	**437.92**	**68.13**	**11.92**
C0705-125-5500-M	**0.705**	**17.91**	**0.125**	**3.18**	**5.500**	**139.70**	**3.983**	**101.16**	**3.901**	**99.08**	**98.45**	**437.92**	**64.89**	**11.36**
C0705-125-5750-M	**0.705**	**17.91**	**0.125**	**3.18**	**5.750**	**146.05**	**4.161**	**105.68**	**4.074**	**103.48**	**98.45**	**437.92**	**61.94**	**10.84**
C0705-125-6000-M	**0.705**	**17.91**	**0.125**	**3.18**	**6.000**	**152.40**	**4.338**	**110.19**	**4.247**	**107.88**	**98.45**	**437.92**	**59.25**	**10.37**
C0705-125-6250-M	**0.705**	**17.91**	**0.125**	**3.18**	**6.250**	**158.75**	**4.516**	**114.71**	**4.421**	**112.28**	**98.45**	**437.92**	**56.78**	**9.94**
C0705-125-6500-M	**0.705**	**17.91**	**0.125**	**3.18**	**6.500**	**165.10**	**4.694**	**119.22**	**4.594**	**116.68**	**98.45**	**437.92**	**54.51**	**9.54**
C0705-125-6750-M	**0.705**	**17.91**	**0.125**	**3.18**	**6.750**	**171.45**	**4.872**	**123.74**	**4.767**	**121.08**	**98.45**	**437.92**	**52.41**	**9.17**
C0705-125-7000-M	**0.705**	**17.91**	**0.125**	**3.18**	**7.000**	**177.80**	**5.049**	**128.25**	**4.940**	**125.48**	**98.45**	**437.92**	**50.47**	**8.83**
C0705-125-7500-M	**0.705**	**17.91**	**0.125**	**3.18**	**7.500**	**190.50**	**5.405**	**137.28**	**5.287**	**134.29**	**98.45**	**437.92**	**46.99**	**8.22**
C0705-125-8000-M	**0.705**	**17.91**	**0.125**	**3.18**	**8.000**	**203.20**	**5.760**	**146.31**	**5.633**	**143.09**	**98.45**	**437.92**	**43.96**	**7.69**
C0705-125-8500-M	**0.705**	**17.91**	**0.125**	**3.18**	**8.500**	**215.90**	**6.116**	**155.34**	**5.980**	**151.89**	**98.45**	**437.92**	**41.29**	**7.23**
C0705-125-9000-M	**0.705**	**17.91**	**0.125**	**3.18**	**9.000**	**228.60**	**6.471**	**164.37**	**6.326**	**160.69**	**98.45**	**437.92**	**38.93**	**6.81**
C0705-125-9500-M	**0.705**	**17.91**	**0.125**	**3.18**	**9.500**	**241.30**	**6.827**	**173.40**	**6.673**	**169.49**	**98.45**	**437.92**	**36.83**	**6.44**
C0705-135-1125-M	**0.705**	**17.91**	**0.135**	**3.43**	**1.125**	**28.58**	**0.951**	**24.17**	**0.921**	**23.39**	**99.54**	**442.77**	**573.46**	**100.36**
C0705-135-1250-M	**0.705**	**17.91**	**0.135**	**3.43**	**1.250**	**31.75**	**1.049**	**26.65**	**1.014**	**25.75**	**100.38**	**446.50**	**500.31**	**87.55**
C0705-135-1375-M	**0.705**	**17.91**	**0.135**	**3.43**	**1.375**	**34.93**	**1.147**	**29.14**	**1.107**	**28.12**	**101.03**	**449.39**	**443.72**	**77.65**
C0705-135-1750-M	**0.705**	**17.91**	**0.135**	**3.43**	**1.750**	**44.45**	**1.441**	**36.61**	**1.387**	**35.22**	**102.32**	**455.13**	**331.29**	**57.98**
C0705-135-1875-M	**0.705**	**17.91**	**0.135**	**3.43**	**1.875**	**47.63**	**1.539**	**39.09**	**1.480**	**37.59**	**102.61**	**456.45**	**305.49**	**53.46**
C0705-135-2000-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.000**	**50.80**	**1.573**	**39.96**	**1.573**	**39.95**	**120.91**	**537.84**	**283.42**	**49.60**
C0705-135-2125-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.125**	**53.98**	**1.668**	**42.36**	**1.666**	**42.32**	**120.91**	**537.84**	**264.32**	**46.26**
C0705-135-2250-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.250**	**57.15**	**1.762**	**44.75**	**1.759**	**44.69**	**120.91**	**537.84**	**247.63**	**43.34**
C0705-135-2375-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.375**	**60.33**	**1.856**	**47.14**	**1.853**	**47.05**	**120.91**	**537.84**	**232.93**	**40.76**
C0705-135-2500-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.500**	**63.50**	**1.950**	**49.53**	**1.946**	**49.42**	**120.91**	**537.84**	**219.87**	**38.48**
C0705-135-2625-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.625**	**66.68**	**2.044**	**51.92**	**2.039**	**51.79**	**120.91**	**537.84**	**208.20**	**36.43**
C0705-135-2750-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.750**	**69.85**	**2.138**	**54.32**	**2.132**	**54.15**	**120.91**	**537.84**	**197.71**	**34.60**
C0705-135-2875-M	**0.705**	**17.91**	**0.135**	**3.43**	**2.875**	**73.03**	**2.233**	**56.71**	**2.225**	**56.52**	**120.91**	**537.84**	**188.22**	**32.94**
C0705-135-3000-M	**0.705**	**17.91**	**0.135**	**3.43**	**3.000**	**76.20**	**2.327**	**59.10**	**2.318**	**58.89**	**120.91**	**537.84**	**179.60**	**31.43**
C0705-135-3250-M	**0.705**	**17.91**	**0.135**	**3.43**	**3.250**	**82.55**	**2.515**	**63.88**	**2.505**	**63.62**	**120.91**	**537.84**	**164.53**	**28.79**
C0705-135-3500-M	**0.705**	**17.91**	**0.135**	**3.43**	**3.500**	**88.90**	**2.703**	**68.67**	**2.691**	**68.35**	**120.91**	**537.84**	**151.80**	**26.56**
C0705-135-3750-M	**0.705**	**17.91**	**0.135**	**3.43**	**3.750**	**95.25**	**2.892**	**73.45**	**2.877**	**73.09**	**120.91**	**537.84**	**140.89**	**24.66**
C0705-135-4000-M	**0.705**	**17.91**	**0.135**	**3.43**	**4.000**	**101.60**	**3.080**	**78.24**	**3.064**	**77.82**	**120.91**	**537.84**	**131.45**	**23.00**
C0705-135-4250-M	**0.705**	**17.91**	**0.135**	**3.43**	**4.250**	**107.95**	**3.269**	**83.02**	**3.250**	**82.55**	**120.91**	**537.84**	**123.19**	**21.56**
C0705-135-4500-M	**0.705**	**17.91**	**0.135**	**3.43**	**4.500**	**114.30**	**3.457**	**87.80**	**3.436**	**87.29**	**120.91**	**537.84**	**115.91**	**20.28**
C0705-135-4750-M	**0.705**	**17.91**	**0.135**	**3.43**	**4.750**	**120.65**	**3.645**	**92.59**	**3.623**	**92.02**	**120.91**	**537.84**	**109.44**	**19.15**
C0705-135-5000-M	**0.705**	**17.91**	**0.135**	**3.43**	**5.000**	**127.00**	**3.834**	**97.37**	**3.809**	**96.75**	**120.91**	**537.84**	**103.66**	**18.14**
C0705-135-5250-M	**0.705**	**17.91**	**0.135**	**3.43**	**5.250**	**133.35**	**4.022**	**102.16**	**3.995**	**101.48**	**120.91**	**537.84**	**98.46**	**17.23**
C0705-135-5500-M	**0.705**	**17.91**	**0.135**	**3.43**	**5.500**	**139.70**	**4.210**	**106.94**	**4.182**	**106.22**	**120.91**	**537.84**	**93.75**	**16.41**
C0705-135-5750-M	**0.705**	**17.91**	**0.135**	**3.43**	**5.750**	**146.05**	**4.399**	**111.72**	**4.368**	**110.95**	**120.91**	**537.84**	**89.47**	**15.66**
C0705-135-6000-M	**0.705**	**17.91**	**0.135**	**3.43**	**6.000**	**152.40**	**4.587**	**116.51**	**4.554**	**115.68**	**120.91**	**537.84**	**85.57**	**14.97**
C0705-135-6250-M	**0.705**	**17.91**	**0.135**	**3.43**	**6.250**	**158.75**	**4.775**	**121.29**	**4.741**	**120.42**	**120.91**	**537.84**	**81.99**	**14.35**
C0705-135-6500-M	**0.705**	**17.91**	**0.135**	**3.43**	**6.500**	**165.10**	**4.964**	**126.08**	**4.927**	**125.15**	**120.91**	**537.84**	**78.70**	**13.77**
C0705-135-6750-M	**0.705**	**17.91**	**0.135**	**3.43**	**6.750**	**171.45**	**5.152**	**130.86**	**5.114**	**129.88**	**120.91**	**537.84**	**75.67**	**13.24**
C0705-135-7000-M	**0.705**	**17.91**	**0.135**	**3.43**	**7.000**	**177.80**	**5.340**	**135.65**	**5.300**	**134.62**	**120.91**	**537.84**	**72.85**	**12.75**
C0705-135-7500-M	**0.705**	**17.91**	**0.135**	**3.43**	**7.500**	**190.50**	**5.717**	**145.21**	**5.673**	**144.08**	**120.91**	**537.84**	**67.82**	**11.87**
C0705-135-8000-M	**0.705**	**17.91**	**0.135**	**3.43**	**8.000**	**203.20**	**6.094**	**154.78**	**6.045**	**153.55**	**120.91**	**537.84**	**63.43**	**11.10**
C0705-135-8500-M	**0.705**	**17.91**	**0.135**	**3.43**	**8.500**	**215.90**	**6.470**	**164.35**	**6.418**	**163.01**	**120.91**	**537.84**	**59.58**	**10.43**
C0705-135-9000-M	**0.705**	**17.91**	**0.135**	**3.43**	**9.000**	**228.60**	**6.847**	**173.92**	**6.791**	**172.48**	**120.91**	**537.84**	**56.16**	**9.83**
C0705-135-9500-M	**0.705**	**17.91**	**0.135**	**3.43**	**9.500**	**241.30**	**7.224**	**183.49**	**7.163**	**181.95**	**120.91**	**537.84**	**53.12**	**9.30**
D12700	0.709	18.00	0.079	2.00	1.181	30.00	0.492	12.50	0.433	11.00	44.53	198.09	65.03	11.38
D12710	0.709	18.00	0.079	2.00	1.772	45.00	0.697	17.70	0.591	15.00	44.53	198.09	41.37	7.24
D12720	0.709	18.00	0.079	2.00	2.677	68.00	1.004	25.50	0.827	21.00	44.53	198.09	26.80	4.69
D12730	0.709	18.00	0.079	2.00	3.858	98.00	1.413	35.90	1.142	29.00	44.53	198.09	18.23	3.19
D12740	0.709	18.00	0.079	2.00	5.709	145.00	2.024	51.40	1.614	41.00	44.53	198.09	12.34	2.16
C0720-055-0620-M	0.720	18.29	0.055	1.40	0.620	15.75	0.320	8.13	0.241	6.12	9.75	43.37	32.50	5.69
C0720-055-0750-M	0.720	18.29	0.055	1.40	0.750	19.05	0.326	8.28	0.221	5.61	9.75	43.37	23.00	4.03
C0720-055-0880-M	0.720	18.29	0.055	1.40	0.880	22.35	0.393	9.98	0.238	6.05	9.75	43.37	20.00	3.50
C0720-055-1000-M	0.720	18.29	0.055	1.40	1.000	25.40	0.473	12.01	0.248	6.30	9.75	43.37	18.50	3.24
C0720-055-1250-M	0.720	18.29	0.055	1.40	1.250	31.75	0.600	15.24	0.281	7.14	9.75	43.37	15.00	2.63
C0720-055-1500-M	0.720	18.29	0.055	1.40	1.500	38.10	0.652	16.56	0.333	8.46	9.75	43.37	11.50	2.01
C0720-055-1750-M	0.720	18.29	0.055	1.40	1.750	44.45	0.690	17.53	0.388	9.86	9.75	43.37	9.20	1.61
C0720-055-2000-M	0.720	18.29	0.055	1.40	2.000	50.80	0.853	21.67	0.411	10.44	9.75	43.37	8.50	1.49
C0720-055-2250-M	0.720	18.29	0.055	1.40	2.250	57.15	0.992	25.20	0.482	12.24	9.75	43.37	7.80	1.37
C0720-055-2500-M	0.720	18.29	0.055	1.40	2.500	63.50	1.095	27.81	0.519	13.18	9.75	43.37	6.90	1.21

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0705-125-5000-S	**3.795**	**96.38**	**75.18**	**334.41**	**62.36**	**10.91**
C0705-125-5250-S	**3.981**	**101.12**	**75.18**	**334.41**	**59.25**	**10.37**
C0705-125-5500-S	**4.168**	**105.86**	**75.18**	**334.41**	**56.42**	**9.87**
C0705-125-5750-S	**4.354**	**110.60**	**75.18**	**334.41**	**53.86**	**9.43**
C0705-125-6000-S	**4.541**	**115.33**	**75.18**	**334.41**	**51.52**	**9.02**
C0705-125-6250-S	**4.727**	**120.07**	**75.18**	**334.41**	**49.37**	**8.64**
C0705-125-6500-S	**4.914**	**124.81**	**75.18**	**334.41**	**47.40**	**8.29**
C0705-125-6750-S	**5.100**	**129.55**	**75.18**	**334.41**	**45.57**	**7.98**
C0705-125-7000-S	**5.287**	**134.29**	**75.18**	**334.41**	**43.89**	**7.68**
C0705-125-7500-S	**5.660**	**143.77**	**75.18**	**334.41**	**40.86**	**7.15**
C0705-125-8000-S	**6.033**	**153.24**	**75.18**	**334.41**	**38.22**	**6.69**
C0705-125-8500-S	**6.406**	**162.72**	**75.18**	**334.41**	**35.91**	**6.28**
C0705-125-9000-S	**6.779**	**172.20**	**75.18**	**334.41**	**33.85**	**5.92**
C0705-125-9500-S	**7.152**	**181.67**	**75.18**	**334.41**	**32.02**	**5.60**
C0705-135-1125-S	**0.941**	**23.91**	**91.64**	**407.65**	**498.66**	**87.27**
C0705-135-1250-S	**1.039**	**26.40**	**91.64**	**407.65**	**435.06**	**76.13**
C0705-135-1375-S	**1.137**	**28.89**	**91.64**	**407.65**	**385.84**	**67.52**
C0705-135-1750-S	**1.432**	**36.37**	**91.64**	**407.65**	**288.08**	**50.41**
C0705-135-1875-S	**1.530**	**38.86**	**91.64**	**407.65**	**265.64**	**46.49**
C0705-135-2000-S	**1.628**	**41.35**	**91.64**	**407.65**	**246.45**	**43.13**
C0705-135-2125-S	**1.726**	**43.85**	**91.64**	**407.65**	**229.84**	**40.22**
C0705-135-2250-S	**1.824**	**46.34**	**91.64**	**407.65**	**215.33**	**37.68**
C0705-135-2375-S	**1.923**	**48.83**	**91.64**	**407.65**	**202.54**	**35.45**
C0705-135-2500-S	**2.021**	**51.32**	**91.64**	**407.65**	**191.19**	**33.46**
C0705-135-2625-S	**2.119**	**53.82**	**91.64**	**407.65**	**181.04**	**31.68**
C0705-135-2750-S	**2.217**	**56.31**	**91.64**	**407.65**	**171.92**	**30.09**
C0705-135-2875-S	**2.315**	**58.80**	**91.64**	**407.65**	**163.67**	**28.64**
C0705-135-3000-S	**2.413**	**61.30**	**91.64**	**407.65**	**156.17**	**27.33**
C0705-135-3250-S	**2.609**	**66.28**	**91.64**	**407.65**	**143.07**	**25.04**
C0705-135-3500-S	**2.806**	**71.27**	**91.64**	**407.65**	**132.00**	**23.10**
C0705-135-3750-S	**3.002**	**76.25**	**91.64**	**407.65**	**122.52**	**21.44**
C0705-135-4000-S	**3.198**	**81.24**	**91.64**	**407.65**	**114.30**	**20.00**
C0705-135-4250-S	**3.395**	**86.22**	**91.64**	**407.65**	**107.12**	**18.75**
C0705-135-4500-S	**3.591**	**91.21**	**91.64**	**407.65**	**100.79**	**17.64**
C0705-135-4750-S	**3.787**	**96.19**	**91.64**	**407.65**	**95.17**	**16.65**
C0705-135-5000-S	**3.983**	**101.18**	**91.64**	**407.65**	**90.14**	**15.77**
C0705-135-5250-S	**4.180**	**106.16**	**91.64**	**407.65**	**85.61**	**14.98**
C0705-135-5500-S	**4.376**	**111.15**	**91.64**	**407.65**	**81.52**	**14.27**
C0705-135-5750-S	**4.572**	**116.13**	**91.64**	**407.65**	**77.80**	**13.62**
C0705-135-6000-S	**4.768**	**121.12**	**91.64**	**407.65**	**74.41**	**13.02**
C0705-135-6250-S	**4.965**	**126.10**	**91.64**	**407.65**	**71.30**	**12.48**
C0705-135-6500-S	**5.161**	**131.09**	**91.64**	**407.65**	**68.44**	**11.98**
C0705-135-6750-S	**5.357**	**136.07**	**91.64**	**407.65**	**65.80**	**11.51**
C0705-135-7000-S	**5.553**	**141.06**	**91.64**	**407.65**	**63.35**	**11.09**
C0705-135-7500-S	**5.946**	**151.03**	**91.64**	**407.65**	**58.97**	**10.32**
C0705-135-8000-S	**6.338**	**161.00**	**91.64**	**407.65**	**55.16**	**9.65**
C0705-135-8500-S	**6.731**	**170.97**	**91.64**	**407.65**	**51.81**	**9.07**
C0705-135-9000-S	**7.123**	**180.94**	**91.64**	**407.65**	**48.84**	**8.55**
C0705-135-9500-S	**7.516**	**190.91**	**91.64**	**407.65**	**46.19**	**8.08**
D22700	0.492	12.50	37.10	165.01	54.17	9.48
D22710	0.697	17.70	37.10	165.01	34.46	6.03
D22720	1.004	25.50	37.10	165.01	22.34	3.91
D22730	1.413	35.90	37.10	165.01	15.20	2.66
D22740	2.024	51.40	37.10	165.01	10.29	1.80
C0720-055-0620-S	0.366	9.29	6.88	30.59	27.07	4.74
C0720-055-0750-S	0.391	9.93	6.88	30.59	19.16	3.35
C0720-055-0880-S	0.467	11.87	6.88	30.59	16.66	2.92
C0720-055-1000-S	0.554	14.06	6.88	30.59	15.41	2.70
C0720-055-1250-S	0.700	17.77	6.88	30.59	12.50	2.19
C0720-055-1500-S	0.782	19.86	6.88	30.59	9.58	1.68
C0720-055-1750-S	0.853	21.65	6.88	30.59	7.66	1.34
C0720-055-2000-S	1.029	26.13	6.88	30.59	7.08	1.24
C0720-055-2250-S	1.191	30.26	6.88	30.59	6.50	1.14
C0720-055-2500-S	1.303	33.11	6.88	30.59	5.75	1.01

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0720-055-2750-M	0.720	18.29	0.055	1.40	2.750	69.85	1.198	30.43	0.556	14.12	9.75	43.37	6.30	1.10
C0720-055-3000-M	0.720	18.29	0.055	1.40	3.000	76.20	1.302	33.07	0.593	15.06	9.75	43.37	5.70	1.00
C0720-059-0750-M	0.720	18.29	0.059	1.50	0.750	19.05	0.389	9.88	0.285	7.24	11.88	52.84	32.90	5.76
C0720-059-0880-M	0.720	18.29	0.059	1.50	0.880	22.35	0.444	11.28	0.308	7.82	11.88	52.84	27.30	4.78
C0720-059-1000-M	0.720	18.29	0.059	1.50	1.000	25.40	0.496	12.60	0.328	8.33	11.88	52.84	23.50	4.11
C0720-059-1250-M	0.720	18.29	0.059	1.50	1.250	31.75	0.603	15.32	0.371	9.42	11.88	52.84	18.30	3.20
C0720-059-1500-M	0.720	18.29	0.059	1.50	1.500	38.10	0.710	18.03	0.414	10.52	11.88	52.84	15.00	2.63
C0720-059-1750-M	0.720	18.29	0.059	1.50	1.750	44.45	0.817	20.75	0.457	11.61	11.88	52.84	12.70	2.22
C0720-059-2000-M	0.720	18.29	0.059	1.50	2.000	50.80	0.924	23.47	0.499	12.67	11.88	52.84	11.00	1.93
C0720-059-2250-M	0.720	18.29	0.059	1.50	2.250	57.15	1.031	26.19	0.542	13.77	11.88	52.84	9.70	1.70
C0720-059-2500-M	0.720	18.29	0.059	1.50	2.500	63.50	1.138	28.91	0.585	14.86	11.88	52.84	8.70	1.52
C0720-063-0620-M	0.720	18.29	0.063	1.60	0.620	15.75	0.351	8.92	0.286	7.26	14.00	62.28	52.00	9.10
C0720-063-0750-M	0.720	18.29	0.063	1.60	0.750	19.05	0.325	8.26	0.284	7.21	14.00	62.28	33.00	5.78
C0720-063-0880-M	0.720	18.29	0.063	1.60	0.880	22.35	0.380	9.65	0.313	7.95	14.00	62.28	28.00	4.90
C0720-063-1000-M	0.720	18.29	0.063	1.60	1.000	25.40	0.420	10.67	0.344	8.74	14.00	62.28	24.00	4.20
C0720-063-1250-M	0.720	18.29	0.063	1.60	1.250	31.75	0.490	12.45	0.409	10.39	14.00	62.28	18.50	3.24
C0720-063-1500-M	0.720	18.29	0.063	1.60	1.500	38.10	0.570	14.48	0.475	12.07	14.00	62.28	15.00	2.63
C0720-063-1750-M	0.720	18.29	0.063	1.60	1.750	44.45	0.680	17.27	0.529	13.44	14.00	62.28	13.00	2.28
C0720-063-2000-M	0.720	18.29	0.063	1.60	2.000	50.80	0.730	18.54	0.602	15.29	14.00	62.28	11.00	1.93
C0720-063-2250-M	0.720	18.29	0.063	1.60	2.250	57.15	1.093	27.76	0.605	15.37	14.00	62.28	12.10	2.12
C0720-063-2500-M	0.720	18.29	0.063	1.60	2.500	63.50	1.204	30.58	0.654	16.61	14.00	62.28	10.80	1.89
C0720-063-2750-M	0.720	18.29	0.063	1.60	2.750	69.85	1.321	33.55	0.702	17.83	14.00	62.28	9.80	1.72
C0720-063-3000-M	0.720	18.29	0.063	1.60	3.000	76.20	1.427	36.25	0.751	19.08	14.00	62.28	8.90	1.56
C0720-065-0750-M	0.720	18.29	0.065	1.65	0.750	19.05	0.411	10.44	0.324	8.23	15.57	69.26	46.00	8.05
C0720-065-0880-M	0.720	18.29	0.065	1.65	0.880	22.35	0.470	11.94	0.351	8.92	15.57	69.26	38.00	6.65
C0720-065-1000-M	0.720	18.29	0.065	1.65	1.000	25.40	0.525	13.34	0.376	9.55	15.57	69.26	32.80	5.74
C0720-065-1250-M	0.720	18.29	0.065	1.65	1.250	31.75	0.638	16.21	0.428	10.87	15.57	69.26	25.40	4.45
C0720-065-1500-M	0.720	18.29	0.065	1.65	1.500	38.10	0.752	19.10	0.480	12.19	15.57	69.26	20.80	3.64
C0720-065-1750-M	0.720	18.29	0.065	1.65	1.750	44.45	0.865	21.97	0.532	13.51	15.57	69.26	17.60	3.08
C0720-065-2000-M	0.720	18.29	0.065	1.65	2.000	50.80	0.978	24.84	0.584	14.83	15.57	69.26	15.20	2.66
C0720-065-2250-M	0.720	18.29	0.065	1.65	2.250	57.15	1.092	27.74	0.636	16.15	15.57	69.26	13.40	2.35
C0720-065-2500-M	0.720	18.29	0.065	1.65	2.500	63.50	1.205	30.61	0.689	17.50	15.57	69.26	12.00	2.10
C0720-065-2750-M	0.720	18.29	0.065	1.65	2.750	69.85	1.319	33.50	0.714	18.14	15.57	69.26	10.90	1.91
C0720-065-3000-M	0.720	18.29	0.065	1.65	3.000	76.20	1.432	36.37	0.793	20.14	15.57	69.26	9.90	1.73
C0720-067-0750-M	0.720	18.29	0.067	1.70	0.750	19.05	0.390	9.91	0.279	7.09	18.00	80.07	50.00	8.75
C0720-067-0880-M	0.720	18.29	0.067	1.70	0.880	22.35	0.430	10.92	0.315	8.00	18.00	80.07	40.00	7.00
C0720-067-1000-M	0.720	18.29	0.067	1.70	1.000	25.40	0.450	11.43	0.354	8.99	18.00	80.07	33.00	5.78
C0720-067-1250-M	0.720	18.29	0.067	1.70	1.250	31.75	0.580	14.73	0.403	10.24	18.00	80.07	27.00	4.73
C0720-067-1500-M	0.720	18.29	0.067	1.70	1.500	38.10	0.680	17.27	0.464	11.79	18.00	80.07	22.00	3.85
C0720-067-1750-M	0.720	18.29	0.067	1.70	1.750	44.45	0.750	19.05	0.538	13.67	18.00	80.07	18.00	3.15
C0720-067-2000-M	0.720	18.29	0.067	1.70	2.000	50.80	0.850	21.59	0.603	15.32	18.00	80.07	15.50	2.71
C0720-067-2250-M	0.720	18.29	0.067	1.70	2.250	57.15	1.042	26.47	0.669	16.99	18.00	80.07	14.90	2.61
C0720-067-2500-M	0.720	18.29	0.067	1.70	2.500	63.50	1.147	29.13	0.724	18.39	18.00	80.07	13.30	2.33
C0720-067-3000-M	0.720	18.29	0.067	1.70	3.000	76.20	1.364	34.65	0.835	21.21	18.00	80.07	11.00	1.93
C0720-067-3250-M	0.720	18.29	0.067	1.70	3.250	82.55	1.575	40.01	0.850	21.59	18.00	80.07	10.70	1.87
C0720-067-3500-M	0.720	18.29	0.067	1.70	3.500	88.90	1.691	42.95	0.902	22.91	18.00	80.07	10.00	1.75
C0720-072-0750-M	0.720	18.29	0.072	1.83	0.750	19.05	0.438	11.13	0.368	9.35	21.00	93.41	67.30	11.78
C0720-072-0880-M	0.720	18.29	0.072	1.83	0.880	22.35	0.443	11.25	0.365	9.27	21.00	93.41	48.00	8.40
C0720-072-1000-M	0.720	18.29	0.072	1.83	1.000	25.40	0.500	12.70	0.397	10.08	21.00	93.41	42.00	7.35
C0720-072-1250-M	0.720	18.29	0.072	1.83	1.250	31.75	0.650	16.51	0.448	11.38	21.00	93.41	35.00	6.13
C0720-072-1500-M	0.720	18.29	0.072	1.83	1.500	38.10	0.700	17.78	0.554	14.07	21.00	93.41	26.00	4.55
C0720-072-1750-M	0.720	18.29	0.072	1.83	1.750	44.45	0.795	20.19	0.628	15.95	21.00	93.41	22.00	3.85
C0720-072-2000-M	0.720	18.29	0.072	1.83	2.000	50.80	0.950	24.13	0.677	17.20	21.00	93.41	20.00	3.50
C0720-072-2250-M	0.720	18.29	0.072	1.83	2.250	57.15	1.151	29.24	0.751	19.08	21.00	93.41	19.10	3.34
C0720-072-2500-M	0.720	18.29	0.072	1.83	2.500	63.50	1.275	32.39	0.815	20.70	21.00	93.41	17.10	2.99
C0720-072-2750-M	0.720	18.29	0.072	1.83	2.750	69.85	1.386	35.20	0.878	22.30	21.00	93.41	15.40	2.70
C0720-072-3000-M	0.720	18.29	0.072	1.83	3.000	76.20	1.511	38.38	0.942	23.93	21.00	93.41	14.10	2.47
C0720-072-3250-M	0.720	18.29	0.072	1.83	3.250	82.55	1.629	41.38	1.005	25.53	21.00	93.41	13.00	2.28
C0720-072-3500-M	0.720	18.29	0.072	1.83	3.500	88.90	1.749	44.42	1.069	27.15	21.00	93.41	12.00	2.10
C0720-072-4000-M	0.720	18.29	0.072	1.83	4.000	101.60	2.015	51.18	1.182	30.02	21.00	93.41	10.60	1.86
C0720-081-0750-M	0.720	18.29	0.081	2.06	0.750	19.05	0.472	11.99	0.429	10.90	28.72	127.75	103.50	18.11
C0720-081-0880-M	0.720	18.29	0.081	2.06	0.880	22.35	0.541	13.74	0.470	11.94	28.72	127.75	84.70	14.82
C0720-081-1000-M	0.720	18.29	0.081	2.06	1.000	25.40	0.604	15.34	0.508	12.90	28.72	127.75	72.60	12.71
C0720-081-1250-M	0.720	18.29	0.081	2.06	1.250	31.75	0.736	18.69	0.587	14.91	28.72	127.75	55.90	9.78

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0720-055-2750-S	1.439	36.56	6.88	30.59	5.25	0.92
C0720-055-3000-S	1.551	39.41	6.88	30.59	4.75	0.83
C0720-059-0750-S	0.445	11.29	8.37	37.23	27.41	4.80
C0720-059-0880-S	0.512	13.00	8.37	37.23	22.74	3.98
C0720-059-1000-S	0.572	14.54	8.37	37.23	19.58	3.43
C0720-059-1250-S	0.701	17.80	8.37	37.23	15.24	2.67
C0720-059-1500-S	0.830	21.09	8.37	37.23	12.50	2.19
C0720-059-1750-S	0.959	24.36	8.37	37.23	10.58	1.85
C0720-059-2000-S	1.087	27.60	8.37	37.23	9.16	1.60
C0720-059-2250-S	1.214	30.84	8.37	37.23	8.08	1.41
C0720-059-2500-S	1.345	34.17	8.37	37.23	7.25	1.27
C0720-063-0620-S	0.391	9.93	9.92	44.15	43.32	7.58
C0720-063-0750-S	0.389	9.88	9.92	44.15	27.49	4.81
C0720-063-0880-S	0.455	11.54	9.92	44.15	23.32	4.08
C0720-063-1000-S	0.504	12.79	9.92	44.15	19.99	3.50
C0720-063-1250-S	0.606	15.39	9.92	44.15	15.41	2.70
C0720-063-1500-S	0.706	17.93	9.92	44.15	12.50	2.19
C0720-063-1750-S	0.834	21.17	9.92	44.15	10.83	1.90
C0720-063-2000-S	0.917	23.29	9.92	44.15	9.16	1.60
C0720-063-2250-S	1.265	32.14	9.92	44.15	10.08	1.76
C0720-063-2500-S	1.397	35.48	9.92	44.15	9.00	1.57
C0720-063-2750-S	1.534	38.97	9.92	44.15	8.16	1.43
C0720-063-3000-S	1.661	42.20	9.92	44.15	7.41	1.30
C0720-065-0750-S	0.466	11.84	10.88	48.41	38.32	6.71
C0720-065-0880-S	0.536	13.62	10.88	48.41	31.65	5.54
C0720-065-1000-S	0.602	15.28	10.88	48.41	27.32	4.78
C0720-065-1250-S	0.736	18.68	10.88	48.41	21.16	3.70
C0720-065-1500-S	0.872	22.14	10.88	48.41	17.33	3.03
C0720-065-1750-S	1.008	25.59	10.88	48.41	14.66	2.57
C0720-065-2000-S	1.140	28.97	10.88	48.41	12.66	2.22
C0720-065-2250-S	1.275	32.38	10.88	48.41	11.16	1.95
C0720-065-2500-S	1.411	35.84	10.88	48.41	10.00	1.75
C0720-065-2750-S	1.551	39.40	10.88	48.41	9.08	1.59
C0720-065-3000-S	1.680	42.68	10.88	48.41	8.25	1.44
C0720-067-0750-S	0.464	11.79	11.90	52.94	41.65	7.29
C0720-067-0880-S	0.523	13.28	11.90	52.94	33.32	5.83
C0720-067-1000-S	0.567	14.40	11.90	52.94	27.49	4.81
C0720-067-1250-S	0.721	18.31	11.90	52.94	22.49	3.94
C0720-067-1500-S	0.851	21.60	11.90	52.94	18.33	3.21
C0720-067-1750-S	0.956	24.29	11.90	52.94	14.99	2.62
C0720-067-2000-S	1.078	27.39	11.90	52.94	12.91	2.26
C0720-067-2250-S	1.291	32.79	11.90	52.94	12.41	2.17
C0720-067-2500-S	1.426	36.21	11.90	52.94	11.08	1.94
C0720-067-3000-S	1.701	43.21	11.90	52.94	9.16	1.60
C0720-067-3250-S	1.915	48.63	11.90	52.94	8.91	1.56
C0720-067-3500-S	2.071	52.61	11.90	52.94	8.33	1.46
C0720-072-0750-S	0.490	12.44	14.60	64.94	56.06	9.81
C0720-072-0880-S	0.515	13.08	14.60	64.94	39.98	7.00
C0720-072-1000-S	0.583	14.80	14.60	64.94	34.99	6.12
C0720-072-1250-S	0.749	19.03	14.60	64.94	29.16	5.10
C0720-072-1500-S	0.826	20.98	14.60	64.94	21.66	3.79
C0720-072-1750-S	0.953	24.22	14.60	64.94	18.33	3.21
C0720-072-2000-S	1.124	28.54	14.60	64.94	16.66	2.92
C0720-072-2250-S	1.332	33.84	14.60	64.94	15.91	2.78
C0720-072-2500-S	1.475	37.47	14.60	64.94	14.24	2.49
C0720-072-2750-S	1.612	40.94	14.60	64.94	12.83	2.24
C0720-072-3000-S	1.757	44.63	14.60	64.94	11.75	2.06
C0720-072-3250-S	1.902	48.31	14.60	64.94	10.83	1.90
C0720-072-3500-S	2.040	51.81	14.60	64.94	10.00	1.75
C0720-072-4000-S	2.347	59.61	14.60	64.94	8.83	1.55
C0720-081-0750-S	0.518	13.16	19.98	88.87	86.22	15.09
C0720-081-0880-S	0.597	15.16	19.98	88.87	70.56	12.35
C0720-081-1000-S	0.670	17.01	19.98	88.87	60.48	10.58
C0720-081-1250-S	0.821	20.85	19.98	88.87	46.57	8.15

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0720-081-1500-M	0.720	18.29	0.081	2.06	1.500	38.10	0.868	22.05	0.665	16.89	28.72	127.75	45.50	7.96	C0720-081-1500-S	0.973	24.71	19.98	88.87	37.90	6.63
C0720-081-1750-M	0.720	18.29	0.081	2.06	1.750	44.45	1.000	25.40	0.744	18.90	28.72	127.75	38.30	6.70	C0720-081-1750-S	1.124	28.54	19.98	88.87	31.90	5.58
C0720-081-2000-M	0.720	18.29	0.081	2.06	2.000	50.80	1.132	28.75	0.823	20.90	28.72	127.75	33.10	5.79	C0720-081-2000-S	1.275	32.40	19.98	88.87	27.57	4.83
C0720-081-2250-M	0.720	18.29	0.081	2.06	2.250	57.15	1.264	32.11	0.902	22.91	28.72	127.75	29.10	5.09	C0720-081-2250-S	1.426	36.22	19.98	88.87	24.24	4.24
C0720-081-2500-M	0.720	18.29	0.081	2.06	2.500	63.50	1.396	35.46	0.981	24.92	28.72	127.75	26.00	4.55	C0720-081-2500-S	1.578	40.07	19.98	88.87	21.66	3.79
C0720-081-2750-M	0.720	18.29	0.081	2.06	2.750	69.85	1.528	38.81	1.060	26.92	28.72	127.75	23.50	4.11	C0720-081-2750-S	1.729	43.93	19.98	88.87	19.58	3.43
C0720-081-3000-M	0.720	18.29	0.081	2.06	3.000	76.20	1.660	42.16	1.139	28.93	28.72	127.75	21.40	3.75	C0720-081-3000-S	1.879	47.73	19.98	88.87	17.83	3.12
C0720-081-3500-M	0.720	18.29	0.081	2.06	3.500	88.90	1.924	48.87	1.297	32.94	28.72	127.75	18.20	3.19	C0720-081-3500-S	2.182	55.43	19.98	88.87	15.16	2.65
C0720-081-4000-M	0.720	18.29	0.081	2.06	4.000	101.60	2.186	55.52	1.455	36.96	28.72	127.75	15.90	2.78	C0720-081-4000-S	2.492	63.29	19.98	88.87	13.25	2.32
C0720-085-0750-M	0.720	18.29	0.085	2.16	0.750	19.05	0.508	12.90	0.434	11.02	33.59	149.42	139.00	24.33	C0720-085-0750-S	0.551	14.00	23.01	102.36	115.79	20.26
C0720-085-0880-M	0.720	18.29	0.085	2.16	0.880	22.35	0.584	14.83	0.474	12.04	33.59	149.42	113.50	19.86	C0720-085-0880-S	0.637	16.17	23.01	102.36	94.55	16.55
C0720-085-1000-M	0.720	18.29	0.085	2.16	1.000	25.40	0.654	16.61	0.512	13.00	33.59	149.42	97.10	16.99	C0720-085-1000-S	0.716	18.17	23.01	102.36	80.88	14.15
C0720-085-1250-M	0.720	18.29	0.085	2.16	1.250	31.75	0.800	20.32	0.589	14.96	33.59	149.42	74.60	13.06	C0720-085-1250-S	0.880	22.34	23.01	102.36	62.14	10.87
C0720-085-1500-M	0.720	18.29	0.085	2.16	1.500	38.10	0.946	24.03	0.666	16.92	33.59	149.42	60.60	10.61	C0720-085-1500-S	1.044	26.52	23.01	102.36	50.48	8.83
C0720-085-1750-M	0.720	18.29	0.085	2.16	1.750	44.45	1.092	27.74	0.743	18.87	33.59	149.42	51.00	8.93	C0720-085-1750-S	1.208	30.69	23.01	102.36	42.48	7.43
C0720-085-2000-M	0.720	18.29	0.085	2.16	2.000	50.80	1.237	31.42	0.821	20.85	33.59	149.42	44.00	7.70	C0720-085-2000-S	1.372	34.85	23.01	102.36	36.65	6.41
C0720-085-2250-M	0.720	18.29	0.085	2.16	2.250	57.15	1.383	35.13	0.898	22.81	33.59	149.42	38.70	6.77	C0720-085-2250-S	1.536	39.02	23.01	102.36	32.24	5.64
C0720-085-2500-M	0.720	18.29	0.085	2.16	2.500	63.50	1.529	38.84	0.975	24.77	33.59	149.42	34.60	6.06	C0720-085-2500-S	1.702	43.22	23.01	102.36	28.82	5.04
C0720-085-2750-M	0.720	18.29	0.085	2.16	2.750	69.85	1.675	42.55	1.052	26.72	33.59	149.42	31.20	5.46	C0720-085-2750-S	1.865	47.36	23.01	102.36	25.99	4.55
C0720-085-3000-M	0.720	18.29	0.085	2.16	3.000	76.20	1.821	46.25	1.130	28.70	33.59	149.42	28.50	4.99	C0720-085-3000-S	2.031	51.58	23.01	102.36	23.74	4.15
C0720-085-3500-M	0.720	18.29	0.085	2.16	3.500	88.90	2.112	53.64	1.284	32.61	33.59	149.42	24.20	4.24	C0720-085-3500-S	2.358	59.91	23.01	102.36	20.16	3.53
C0720-085-4000-M	0.720	18.29	0.085	2.16	4.000	101.60	2.404	61.06	1.439	36.55	33.59	149.42	21.00	3.68	C0720-085-4000-S	2.685	68.19	23.01	102.36	17.49	3.06
C0720-096-0750-M	0.720	18.29	0.096	2.44	0.750	19.05	0.560	14.22	0.490	12.45	45.33	201.64	238.60	41.76	C0720-096-0750-S	0.592	15.03	31.48	140.03	198.75	34.78
C0720-096-0880-M	0.720	18.29	0.096	2.44	0.880	22.35	0.646	16.41	0.537	13.64	45.33	201.64	193.60	33.88	C0720-096-0880-S	0.685	17.39	31.48	140.03	161.27	28.22
C0720-096-1000-M	0.720	18.29	0.096	2.44	1.000	25.40	0.725	18.42	0.581	14.76	45.33	201.64	164.80	28.84	C0720-096-1000-S	0.771	19.58	31.48	140.03	137.28	24.02
C0720-096-1250-M	0.720	18.29	0.096	2.44	1.250	31.75	0.890	22.61	0.671	17.04	45.33	201.64	125.90	22.03	C0720-096-1250-S	0.950	24.13	31.48	140.03	104.88	18.35
C0720-096-1500-M	0.720	18.29	0.096	2.44	1.500	38.10	1.055	26.80	0.762	19.35	45.33	201.64	101.80	17.82	C0720-096-1500-S	1.129	28.67	31.48	140.03	84.80	14.84
C0720-096-1750-M	0.720	18.29	0.096	2.44	1.750	44.45	1.220	30.99	0.852	21.64	45.33	201.64	85.50	14.96	C0720-096-1750-S	1.308	33.22	31.48	140.03	71.22	12.46
C0720-096-2000-M	0.720	18.29	0.096	2.44	2.000	50.80	1.385	35.18	0.943	23.95	45.33	201.64	73.70	12.90	C0720-096-2000-S	1.487	37.78	31.48	140.03	61.39	10.74
C0720-096-2250-M	0.720	18.29	0.096	2.44	2.250	57.15	1.549	39.34	1.034	26.26	45.33	201.64	64.70	11.32	C0720-096-2250-S	1.666	42.31	31.48	140.03	53.90	9.43
C0720-096-2500-M	0.720	18.29	0.096	2.44	2.500	63.50	1.714	43.54	1.124	28.55	45.33	201.64	57.70	10.10	C0720-096-2500-S	1.845	46.86	31.48	140.03	48.06	8.41
C0720-096-2750-M	0.720	18.29	0.096	2.44	2.750	69.85	1.879	47.73	1.215	30.86	45.33	201.64	52.10	9.12	C0720-096-2750-S	2.025	51.43	31.48	140.03	43.40	7.59
C0720-096-3000-M	0.720	18.29	0.096	2.44	3.000	76.20	2.044	51.92	1.305	33.15	45.33	201.64	47.40	8.30	C0720-096-3000-S	2.203	55.95	31.48	140.03	39.48	6.91
C0720-096-3500-M	0.720	18.29	0.096	2.44	3.500	88.90	2.374	60.30	1.486	37.74	45.33	201.64	40.30	7.05	C0720-096-3500-S	2.562	65.08	31.48	140.03	33.57	5.87
C0720-096-4000-M	0.720	18.29	0.096	2.44	4.000	101.60	2.704	68.68	1.668	42.37	45.33	201.64	35.00	6.13	C0720-096-4000-S	2.920	74.17	31.48	140.03	29.16	5.10
C0720-105-0750-M	0.720	18.29	0.105	2.67	0.750	19.05	0.585	14.86	0.537	13.64	58.60	260.67	354.70	62.07	C0720-105-0750-S	0.615	15.61	39.97	177.79	295.47	51.71
C0720-105-0880-M	0.720	18.29	0.105	2.67	0.880	22.35	0.675	17.15	0.591	15.01	58.60	260.67	285.90	50.03	C0720-105-0880-S	0.712	18.09	39.97	177.79	238.16	41.68
C0720-105-1000-M	0.720	18.29	0.105	2.67	1.000	25.40	0.758	19.25	0.640	16.26	58.60	260.67	242.50	42.44	C0720-105-1000-S	0.802	20.37	39.97	177.79	202.00	35.35
C0720-105-1250-M	0.720	18.29	0.105	2.67	1.250	31.75	0.932	23.67	0.743	18.87	58.60	260.67	184.20	32.24	C0720-105-1250-S	0.990	25.13	39.97	177.79	153.44	26.85
C0720-105-1500-M	0.720	18.29	0.105	2.67	1.500	38.10	1.105	28.07	0.846	21.49	58.60	260.67	148.50	25.99	C0720-105-1500-S	1.177	29.89	39.97	177.79	123.70	21.65
C0720-105-1750-M	0.720	18.29	0.105	2.67	1.750	44.45	1.279	32.49	0.949	24.10	58.60	260.67	124.40	21.77	C0720-105-1750-S	1.364	34.65	39.97	177.79	103.63	18.13
C0720-105-2000-M	0.720	18.29	0.105	2.67	2.000	50.80	1.452	36.88	1.052	26.72	58.60	260.67	107.00	18.73	C0720-105-2000-S	1.552	39.41	39.97	177.79	89.13	15.60
C0720-105-2250-M	0.720	18.29	0.105	2.67	2.250	57.15	1.626	41.30	1.155	29.34	58.60	260.67	93.90	16.43	C0720-105-2250-S	1.739	44.17	39.97	177.79	78.22	13.69
C0720-105-2500-M	0.720	18.29	0.105	2.67	2.500	63.50	1.799	45.69	1.258	31.95	58.60	260.67	83.60	14.63	C0720-105-2500-S	1.926	48.92	39.97	177.79	69.64	12.19
C0720-105-2750-M	0.720	18.29	0.105	2.67	2.750	69.85	1.973	50.11	1.361	34.57	58.60	260.67	75.40	13.20	C0720-105-2750-S	2.114	53.69	39.97	177.79	62.81	10.99
C0720-105-3000-M	0.720	18.29	0.105	2.67	3.000	76.20	2.146	54.51	1.464	37.19	58.60	260.67	68.70	12.02	C0720-105-3000-S	2.302	58.46	39.97	177.79	57.23	10.01
C0720-105-3500-M	0.720	18.29	0.105	2.67	3.500	88.90	2.493	63.32	1.670	42.42	58.60	260.67	58.20	10.19	C0720-105-3500-S	2.676	67.96	39.97	177.79	48.48	8.48
C0720-105-4000-M	0.720	18.29	0.105	2.67	4.000	101.60	2.840	72.14	1.876	47.65	58.60	260.67	50.50	8.84	C0720-105-4000-S	3.050	77.47	39.97	177.79	42.07	7.36
C0720-112-0750-M	0.720	18.29	0.112	2.85	0.750	19.05	0.602	15.29	0.576	14.63	69.59	309.55	468.80	82.04	C0720-112-0750-S	0.627	15.92	48.18	214.31	390.51	68.34
C0720-112-0880-M	0.720	18.29	0.112	2.85	0.880	22.35	0.695	17.65	0.636	16.15	69.59	309.55	375.90	65.78	C0720-112-0880-S	0.726	18.44	48.18	214.31	313.13	54.80
C0720-112-1000-M	0.720	18.29	0.112	2.85	1.000	25.40	0.781	19.84	0.691	17.55	69.59	309.55	317.70	55.60	C0720-112-1000-S	0.818	20.78	48.18	214.31	264.64	46.31
C0720-112-1250-M	0.720	18.29	0.112	2.85	1.250	31.75	0.960	24.38	0.805	20.45	69.59	309.55	240.30	42.05	C0720-112-1250-S	1.009	25.64	48.18	214.31	200.17	35.03
C0720-112-1500-M	0.720	18.29	0.112	2.85	1.500	38.10	1.140	28.96	0.919	23.34	69.59	309.55	193.20	33.81	C0720-112-1500-S	1.201	30.50	48.18	214.31	160.94	28.16
C0720-112-1750-M	0.720	18.29	0.112	2.85	1.750	44.45	1.319	33.50	1.034	26.26	69.59	309.55	161.60	28.28	C0720-112-1750-S	1.392	35.36	48.18	214.31	134.61	23.56
C0720-112-2000-M	0.720	18.29	0.112	2.85	2.000	50.80	1.499	38.07	1.148	29.16	69.59	309.55	138.80	24.29	C0720-112-2000-S	1.583	40.22	48.18	214.31	115.62	20.23
C0720-112-2250-M	0.720	18.29	0.112	2.85	2.250	57.15	1.678	42.62	1.262	32.05	69.59	309.55	121.70	21.30	C0720-112-2250-S	1.775	45.08	48.18	214.31	101.38	17.74
C0720-112-2500-M	0.720	18.29	0.112	2.85	2.500	63.50	1.858	47.19	1.376	34.95	69.59	309.55	108.30	18.95	C0720-112-2500-S	1.966	49.94	48.18	214.31	90.21	15.79
C0720-112-2750-M	0.720	18.29	0.112	2.85	2.750	69.85	2.037	51.74	1.491	37.87	69.59	309.55	97.60	17.08	C0720-112-2750-S	2.157	54.80	48.18	214.31	81.30	14.23
C0720-112-3000-M	0.720	18.29	0.112	2.85	3.000	76.20	2.216	56.29	1.605	40.77	69.59	309.55	88.80	15.54	C0720-112-3000-S	2.349	59.66	48.18	214.31	73.97	12.94
C0720-112-3500-M	0.720	18.29	0.112	2.85	3.500	88.90	2.575	65.41	1.834	46.58	69.59	309.55	75.30	13.18	C0720-112-3500-S	2.732	69.39	48.18	214.31	62.73	10.98
C0720-112-4000-M	0.720	18.29	0.112	2.85	4.000	101.60	2.934	74.52	2.062	52.37	69.59	309.55	65.30	11.43	C0720-112-4000-S	3.114	79.10	48.18	214.31	54.40	9.52
D12990	0.728	18.50	0.098	2.50	1.083	27.50	0.575	14.60	0.541	13.75	82.01	364.81	158.57	27.75	D22990	0.575	14.60	68.32	303.89	132.11	23.12
D13000	0.728	18.50	0.098	2.50	1.614	41.00	0.807	20.50	0.738	18.75	82.01	364.81	100.86	17.65	D23000	0.807	20.50	68.32	303.89	84.00	14.70
D13010	0.728	18.50	0.098	2.50	2.402	61.00	1.154	29.30	1.033	26.25	82.01	364.81	65.54	11.47	D23010	1.154	29.30	68.32	303.89	54.57	9.55

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D13020	0.728	18.50	0.098	2.50	3.465	88.00	1.618	41.10	1.427	36.25	82.01	364.81	44.46	7.78
D13030	0.728	18.50	0.098	2.50	5.118	130.00	2.319	58.90	2.018	51.25	82.01	364.81	30.00	5.25
D13280	0.756	19.20	0.126	3.20	1.083	27.50	0.701	17.80	0.693	17.60	162.04	720.79	424.74	74.33
D13290	0.756	19.20	0.126	3.20	1.575	40.00	0.980	24.90	0.945	24.00	162.04	720.79	270.69	47.37
D13300	0.756	19.20	0.126	3.20	2.323	59.00	1.394	35.40	1.323	33.60	162.04	720.79	175.37	30.69
D13310	0.756	19.20	0.126	3.20	3.287	83.50	1.929	49.00	1.827	46.40	162.04	720.79	118.80	20.79
D13320	0.756	19.20	0.126	3.20	4.724	120.00	2.732	69.40	2.583	65.60	162.04	720.79	80.69	14.12
C0764-059-1500-M	**0.764**	**19.41**	**0.059**	**1.50**	**1.500**	**38.10**	**0.533**	**13.54**	**0.381**	**9.67**	**11.59**	**51.55**	**11.99**	**2.10**
C0764-059-1625-M	**0.764**	**19.41**	**0.059**	**1.50**	**1.625**	**41.28**	**0.571**	**14.50**	**0.404**	**10.26**	**11.59**	**51.55**	**10.99**	**1.92**
C0764-059-1750-M	**0.764**	**19.41**	**0.059**	**1.50**	**1.750**	**44.45**	**0.608**	**15.45**	**0.427**	**10.85**	**11.59**	**51.55**	**10.15**	**1.78**
C0764-059-1875-M	**0.764**	**19.41**	**0.059**	**1.50**	**1.875**	**47.63**	**0.646**	**16.41**	**0.450**	**11.44**	**11.59**	**51.55**	**9.43**	**1.65**
C0764-059-2000-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.000**	**50.80**	**0.683**	**17.36**	**0.474**	**12.03**	**11.59**	**51.55**	**8.80**	**1.54**
C0764-059-2125-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.125**	**53.98**	**0.721**	**18.31**	**0.497**	**12.62**	**11.59**	**51.55**	**8.26**	**1.44**
C0764-059-2250-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.250**	**57.15**	**0.759**	**19.27**	**0.520**	**13.21**	**11.59**	**51.55**	**7.77**	**1.36**
C0764-059-2375-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.375**	**60.33**	**0.796**	**20.22**	**0.543**	**13.80**	**11.59**	**51.55**	**7.34**	**1.28**
C0764-059-2500-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.500**	**63.50**	**0.834**	**21.18**	**0.567**	**14.39**	**11.59**	**51.55**	**6.96**	**1.22**
C0764-059-2625-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.625**	**66.68**	**0.871**	**22.13**	**0.590**	**14.98**	**11.59**	**51.55**	**6.61**	**1.16**
C0764-059-2750-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.750**	**69.85**	**0.909**	**23.08**	**0.613**	**15.57**	**11.59**	**51.55**	**6.30**	**1.10**
C0764-059-2875-M	**0.764**	**19.41**	**0.059**	**1.50**	**2.875**	**73.03**	**0.946**	**24.04**	**0.636**	**16.16**	**11.59**	**51.55**	**6.01**	**1.05**
C0764-059-3000-M	**0.764**	**19.41**	**0.059**	**1.50**	**3.000**	**76.20**	**0.984**	**24.99**	**0.660**	**16.75**	**11.59**	**51.55**	**5.75**	**1.01**
C0764-059-3250-M	**0.764**	**19.41**	**0.059**	**1.50**	**3.250**	**82.55**	**1.059**	**26.90**	**0.706**	**17.93**	**11.59**	**51.55**	**5.29**	**0.93**
C0764-059-3500-M	**0.764**	**19.41**	**0.059**	**1.50**	**3.500**	**88.90**	**1.134**	**28.81**	**0.753**	**19.11**	**11.59**	**51.55**	**4.90**	**0.86**
C0764-059-3750-M	**0.764**	**19.41**	**0.059**	**1.50**	**3.750**	**95.25**	**1.209**	**30.72**	**0.799**	**20.29**	**11.59**	**51.55**	**4.56**	**0.80**
C0764-059-4000-M	**0.764**	**19.41**	**0.059**	**1.50**	**4.000**	**101.60**	**1.284**	**32.62**	**0.845**	**21.47**	**11.59**	**51.55**	**4.27**	**0.75**
C0764-059-4250-M	**0.764**	**19.41**	**0.059**	**1.50**	**4.250**	**107.95**	**1.360**	**34.53**	**0.892**	**22.66**	**11.59**	**51.55**	**4.01**	**0.70**
C0764-059-4500-M	**0.764**	**19.41**	**0.059**	**1.50**	**4.500**	**114.30**	**1.435**	**36.44**	**0.938**	**23.84**	**11.59**	**51.55**	**3.78**	**0.66**
C0764-059-4750-M	**0.764**	**19.41**	**0.059**	**1.50**	**4.750**	**120.65**	**1.510**	**38.35**	**0.985**	**25.02**	**11.59**	**51.55**	**3.58**	**0.63**
C0764-059-5000-M	**0.764**	**19.41**	**0.059**	**1.50**	**5.000**	**127.00**	**1.585**	**40.26**	**1.031**	**26.20**	**11.59**	**51.55**	**3.39**	**0.59**
C0764-059-5250-M	**0.764**	**19.41**	**0.059**	**1.50**	**5.250**	**133.35**	**1.660**	**42.16**	**1.078**	**27.38**	**11.59**	**51.55**	**3.23**	**0.56**
C0764-059-5500-M	**0.764**	**19.41**	**0.059**	**1.50**	**5.500**	**139.70**	**1.735**	**44.07**	**1.124**	**28.56**	**11.59**	**51.55**	**3.08**	**0.54**
C0764-059-5750-M	**0.764**	**19.41**	**0.059**	**1.50**	**5.750**	**146.05**	**1.810**	**45.98**	**1.171**	**29.74**	**11.59**	**51.55**	**2.94**	**0.51**
C0764-059-6000-M	**0.764**	**19.41**	**0.059**	**1.50**	**6.000**	**152.40**	**1.885**	**47.89**	**1.217**	**30.92**	**11.59**	**51.55**	**2.82**	**0.49**
C0764-059-6250-M	**0.764**	**19.41**	**0.059**	**1.50**	**6.250**	**158.75**	**1.960**	**49.80**	**1.264**	**32.10**	**11.59**	**51.55**	**2.70**	**0.47**
C0764-059-6500-M	**0.764**	**19.41**	**0.059**	**1.50**	**6.500**	**165.10**	**2.036**	**51.70**	**1.310**	**33.28**	**11.59**	**51.55**	**2.60**	**0.45**
C0764-059-6750-M	**0.764**	**19.41**	**0.059**	**1.50**	**6.750**	**171.45**	**2.111**	**53.61**	**1.357**	**34.46**	**11.59**	**51.55**	**2.50**	**0.44**
C0764-059-7000-M	**0.764**	**19.41**	**0.059**	**1.50**	**7.000**	**177.80**	**2.186**	**55.52**	**1.403**	**35.64**	**11.59**	**51.55**	**2.41**	**0.42**
C0764-059-7500-M	**0.764**	**19.41**	**0.059**	**1.50**	**7.500**	**190.50**	**2.336**	**59.34**	**1.496**	**38.00**	**11.59**	**51.55**	**2.24**	**0.39**
C0764-059-8000-M	**0.764**	**19.41**	**0.059**	**1.50**	**8.000**	**203.20**	**2.486**	**63.15**	**1.589**	**40.36**	**11.59**	**51.55**	**2.10**	**0.37**
C0764-059-8500-M	**0.764**	**19.41**	**0.059**	**1.50**	**8.500**	**215.90**	**2.637**	**66.97**	**1.682**	**42.72**	**11.59**	**51.55**	**1.98**	**0.35**
C0764-059-9000-M	**0.764**	**19.41**	**0.059**	**1.50**	**9.000**	**228.60**	**2.787**	**70.78**	**1.775**	**45.08**	**11.59**	**51.55**	**1.87**	**0.33**
C0764-059-9500-M	**0.764**	**19.41**	**0.059**	**1.50**	**9.500**	**241.30**	**2.937**	**74.60**	**1.868**	**47.44**	**11.59**	**51.55**	**1.77**	**0.31**
C0764-063-1375-M	**0.764**	**19.41**	**0.063**	**1.60**	**1.375**	**34.93**	**0.528**	**13.40**	**0.397**	**10.09**	**13.92**	**61.91**	**16.43**	**2.87**
C0764-063-1500-M	**0.764**	**19.41**	**0.063**	**1.60**	**1.500**	**38.10**	**0.568**	**14.42**	**0.424**	**10.76**	**13.92**	**61.91**	**14.93**	**2.61**
C0764-063-1625-M	**0.764**	**19.41**	**0.063**	**1.60**	**1.625**	**41.28**	**0.608**	**15.44**	**0.450**	**11.43**	**13.92**	**61.91**	**13.69**	**2.40**
C0764-063-1750-M	**0.764**	**19.41**	**0.063**	**1.60**	**1.750**	**44.45**	**0.648**	**16.47**	**0.477**	**12.10**	**13.92**	**61.91**	**12.63**	**2.21**
C0764-063-1875-M	**0.764**	**19.41**	**0.063**	**1.60**	**1.875**	**47.63**	**0.688**	**17.49**	**0.503**	**12.78**	**13.92**	**61.91**	**11.73**	**2.05**
C0764-063-2000-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.000**	**50.80**	**0.729**	**18.51**	**0.530**	**13.45**	**13.92**	**61.91**	**10.95**	**1.92**
C0764-063-2125-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.125**	**53.98**	**0.769**	**19.53**	**0.556**	**14.12**	**13.92**	**61.91**	**10.26**	**1.80**
C0764-063-2250-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.250**	**57.15**	**0.809**	**20.55**	**0.583**	**14.80**	**13.92**	**61.91**	**9.66**	**1.69**
C0764-063-2375-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.375**	**60.33**	**0.849**	**21.57**	**0.609**	**15.47**	**13.92**	**61.91**	**9.12**	**1.60**
C0764-063-2500-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.500**	**63.50**	**0.889**	**22.59**	**0.636**	**16.14**	**13.92**	**61.91**	**8.64**	**1.51**
C0764-063-2625-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.625**	**66.68**	**0.930**	**23.61**	**0.662**	**16.82**	**13.92**	**61.91**	**8.21**	**1.44**
C0764-063-2750-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.750**	**69.85**	**0.970**	**24.63**	**0.689**	**17.49**	**13.92**	**61.91**	**7.82**	**1.37**
C0764-063-2875-M	**0.764**	**19.41**	**0.063**	**1.60**	**2.875**	**73.03**	**1.010**	**25.66**	**0.715**	**18.16**	**13.92**	**61.91**	**7.46**	**1.31**
C0764-063-3000-M	**0.764**	**19.41**	**0.063**	**1.60**	**3.000**	**76.20**	**1.050**	**26.68**	**0.742**	**18.83**	**13.92**	**61.91**	**7.14**	**1.25**
C0764-063-3250-M	**0.764**	**19.41**	**0.063**	**1.60**	**3.250**	**82.55**	**1.131**	**28.72**	**0.794**	**20.18**	**13.92**	**61.91**	**6.57**	**1.15**
C0764-063-3500-M	**0.764**	**19.41**	**0.063**	**1.60**	**3.500**	**88.90**	**1.211**	**30.76**	**0.847**	**21.53**	**13.92**	**61.91**	**6.08**	**1.06**
C0764-063-3750-M	**0.764**	**19.41**	**0.063**	**1.60**	**3.750**	**95.25**	**1.291**	**32.80**	**0.900**	**22.87**	**13.92**	**61.91**	**5.66**	**0.99**
C0764-063-4000-M	**0.764**	**19.41**	**0.063**	**1.60**	**4.000**	**101.60**	**1.372**	**34.85**	**0.953**	**24.22**	**13.92**	**61.91**	**5.30**	**0.93**
C0764-063-4250-M	**0.764**	**19.41**	**0.063**	**1.60**	**4.250**	**107.95**	**1.452**	**36.89**	**1.006**	**25.56**	**13.92**	**61.91**	**4.98**	**0.87**
C0764-063-4500-M	**0.764**	**19.41**	**0.063**	**1.60**	**4.500**	**114.30**	**1.533**	**38.93**	**1.059**	**26.91**	**13.92**	**61.91**	**4.69**	**0.82**
C0764-063-4750-M	**0.764**	**19.41**	**0.063**	**1.60**	**4.750**	**120.65**	**1.613**	**40.97**	**1.112**	**28.26**	**13.92**	**61.91**	**4.44**	**0.78**
C0764-063-5000-M	**0.764**	**19.41**	**0.063**	**1.60**	**5.000**	**127.00**	**1.693**	**43.01**	**1.165**	**29.60**	**13.92**	**61.91**	**4.21**	**0.74**
C0764-063-5250-M	**0.764**	**19.41**	**0.063**	**1.60**	**5.250**	**133.35**	**1.774**	**45.06**	**1.218**	**30.95**	**13.92**	**61.91**	**4.00**	**0.70**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D23020	1.618	41.10	68.32	303.89	37.03	6.48
D23030	2.319	58.90	68.32	303.89	24.97	4.37
D23280	0.701	17.80	135.03	600.66	353.83	61.92
D23290	0.980	24.90	135.03	600.66	225.49	39.46
D23300	1.394	35.40	135.03	600.66	146.06	25.56
D23310	1.929	49.00	135.03	600.66	98.97	17.32
D23320	2.732	69.40	135.03	600.66	67.20	11.76
C0764-059-1500-S	**0.617**	**15.67**	**9.21**	**40.95**	**10.43**	**1.82**
C0764-059-1625-S	**0.662**	**16.81**	**9.21**	**40.95**	**9.56**	**1.67**
C0764-059-1750-S	**0.707**	**17.96**	**9.21**	**40.95**	**8.83**	**1.54**
C0764-059-1875-S	**0.752**	**19.11**	**9.21**	**40.95**	**8.20**	**1.44**
C0764-059-2000-S	**0.797**	**20.25**	**9.21**	**40.95**	**7.66**	**1.34**
C0764-059-2125-S	**0.842**	**21.40**	**9.21**	**40.95**	**7.18**	**1.26**
C0764-059-2250-S	**0.888**	**22.54**	**9.21**	**40.95**	**6.76**	**1.18**
C0764-059-2375-S	**0.933**	**23.69**	**9.21**	**40.95**	**6.38**	**1.12**
C0764-059-2500-S	**0.978**	**24.84**	**9.21**	**40.95**	**6.05**	**1.06**
C0764-059-2625-S	**1.023**	**25.98**	**9.21**	**40.95**	**5.75**	**1.01**
C0764-059-2750-S	**1.068**	**27.13**	**9.21**	**40.95**	**5.47**	**0.96**
C0764-059-2875-S	**1.113**	**28.27**	**9.21**	**40.95**	**5.23**	**0.91**
C0764-059-3000-S	**1.158**	**29.42**	**9.21**	**40.95**	**5.00**	**0.87**
C0764-059-3250-S	**1.248**	**31.71**	**9.21**	**40.95**	**4.60**	**0.81**
C0764-059-3500-S	**1.339**	**34.00**	**9.21**	**40.95**	**4.26**	**0.75**
C0764-059-3750-S	**1.429**	**36.30**	**9.21**	**40.95**	**3.97**	**0.69**
C0764-059-4000-S	**1.519**	**38.59**	**9.21**	**40.95**	**3.71**	**0.65**
C0764-059-4250-S	**1.609**	**40.88**	**9.21**	**40.95**	**3.49**	**0.61**
C0764-059-4500-S	**1.700**	**43.17**	**9.21**	**40.95**	**3.29**	**0.58**
C0764-059-4750-S	**1.790**	**45.46**	**9.21**	**40.95**	**3.11**	**0.54**
C0764-059-5000-S	**1.880**	**47.76**	**9.21**	**40.95**	**2.95**	**0.52**
C0764-059-5250-S	**1.970**	**50.05**	**9.21**	**40.95**	**2.81**	**0.49**
C0764-059-5500-S	**2.061**	**52.34**	**9.21**	**40.95**	**2.68**	**0.47**
C0764-059-5750-S	**2.151**	**54.63**	**9.21**	**40.95**	**2.56**	**0.45**
C0764-059-6000-S	**2.241**	**56.92**	**9.21**	**40.95**	**2.45**	**0.43**
C0764-059-6250-S	**2.331**	**59.22**	**9.21**	**40.95**	**2.35**	**0.41**
C0764-059-6500-S	**2.422**	**61.51**	**9.21**	**40.95**	**2.26**	**0.39**
C0764-059-6750-S	**2.512**	**63.80**	**9.21**	**40.95**	**2.17**	**0.38**
C0764-059-7000-S	**2.602**	**66.09**	**9.21**	**40.95**	**2.09**	**0.37**
C0764-059-7500-S	**2.782**	**70.67**	**9.21**	**40.95**	**1.95**	**0.34**
C0764-059-8000-S	**2.963**	**75.26**	**9.21**	**40.95**	**1.83**	**0.32**
C0764-059-8500-S	**3.143**	**79.84**	**9.21**	**40.95**	**1.72**	**0.30**
C0764-059-9000-S	**3.324**	**84.43**	**9.21**	**40.95**	**1.62**	**0.28**
C0764-059-9500-S	**3.504**	**89.01**	**9.21**	**40.95**	**1.54**	**0.27**
C0764-063-1375-S	**0.602**	**15.29**	**11.04**	**49.12**	**14.28**	**2.50**
C0764-063-1500-S	**0.650**	**16.50**	**11.04**	**49.12**	**12.98**	**2.27**
C0764-063-1625-S	**0.697**	**17.71**	**11.04**	**49.12**	**11.90**	**2.08**
C0764-063-1750-S	**0.745**	**18.92**	**11.04**	**49.12**	**10.99**	**1.92**
C0764-063-1875-S	**0.792**	**20.13**	**11.04**	**49.12**	**10.20**	**1.79**
C0764-063-2000-S	**0.840**	**21.34**	**11.04**	**49.12**	**9.52**	**1.67**
C0764-063-2125-S	**0.888**	**22.55**	**11.04**	**49.12**	**8.92**	**1.56**
C0764-063-2250-S	**0.935**	**23.76**	**11.04**	**49.12**	**8.40**	**1.47**
C0764-063-2375-S	**0.983**	**24.97**	**11.04**	**49.12**	**7.93**	**1.39**
C0764-063-2500-S	**1.031**	**26.18**	**11.04**	**49.12**	**7.51**	**1.31**
C0764-063-2625-S	**1.078**	**27.39**	**11.04**	**49.12**	**7.14**	**1.25**
C0764-063-2750-S	**1.126**	**28.60**	**11.04**	**49.12**	**6.80**	**1.19**
C0764-063-2875-S	**1.173**	**29.81**	**11.04**	**49.12**	**6.49**	**1.14**
C0764-063-3000-S	**1.221**	**31.02**	**11.04**	**49.12**	**6.21**	**1.09**
C0764-063-3250-S	**1.316**	**33.44**	**11.04**	**49.12**	**5.71**	**1.00**
C0764-063-3500-S	**1.412**	**35.86**	**11.04**	**49.12**	**5.29**	**0.93**
C0764-063-3750-S	**1.507**	**38.28**	**11.04**	**49.12**	**4.92**	**0.86**
C0764-063-4000-S	**1.602**	**40.69**	**11.04**	**49.12**	**4.61**	**0.81**
C0764-063-4250-S	**1.697**	**43.11**	**11.04**	**49.12**	**4.33**	**0.76**
C0764-063-4500-S	**1.793**	**45.53**	**11.04**	**49.12**	**4.08**	**0.71**
C0764-063-4750-S	**1.888**	**47.95**	**11.04**	**49.12**	**3.86**	**0.68**
C0764-063-5000-S	**1.983**	**50.37**	**11.04**	**49.12**	**3.66**	**0.64**
C0764-063-5250-S	**2.078**	**52.79**	**11.04**	**49.12**	**3.48**	**0.61**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0764-063-5500-M	0.764	19.41	0.063	1.60	5.500	139.70	1.854	47.10	1.271	32.29	13.92	61.91	3.82	0.67
C0764-063-5750-M	0.764	19.41	0.063	1.60	5.750	146.05	1.935	49.14	1.324	33.64	13.92	61.91	3.65	0.64
C0764-063-6000-M	0.764	19.41	0.063	1.60	6.000	152.40	2.015	51.18	1.377	34.99	13.92	61.91	3.49	0.61
C0764-063-6250-M	0.764	19.41	0.063	1.60	6.250	158.75	2.095	53.22	1.430	36.33	13.92	61.91	3.35	0.59
C0764-063-6500-M	0.764	19.41	0.063	1.60	6.500	165.10	2.176	55.27	1.483	37.68	13.92	61.91	3.22	0.56
C0764-063-6750-M	0.764	19.41	0.063	1.60	6.750	171.45	2.256	57.31	1.536	39.02	13.92	61.91	3.10	0.54
C0764-063-7000-M	0.764	19.41	0.063	1.60	7.000	177.80	2.337	59.35	1.589	40.37	13.92	61.91	2.98	0.52
C0764-063-7500-M	0.764	19.41	0.063	1.60	7.500	190.50	2.497	63.43	1.695	43.06	13.92	61.91	2.78	0.49
C0764-063-8000-M	0.764	19.41	0.063	1.60	8.000	203.20	2.658	67.52	1.801	45.75	13.92	61.91	2.61	0.46
C0764-063-8500-M	0.764	19.41	0.063	1.60	8.500	215.90	2.819	71.60	1.907	48.45	13.92	61.91	2.45	0.43
C0764-063-9000-M	0.764	19.41	0.063	1.60	9.000	228.60	2.980	75.69	2.013	51.14	13.92	61.91	2.31	0.40
C0764-063-9500-M	0.764	19.41	0.063	1.60	9.500	241.30	3.141	79.77	2.119	53.83	13.92	61.91	2.19	0.38
C0764-068-1375-M	0.764	19.41	0.068	1.73	1.375	34.93	0.569	14.44	0.448	11.37	17.22	76.58	21.35	3.74
C0764-068-1500-M	0.764	19.41	0.068	1.73	1.500	38.10	0.612	15.55	0.478	12.15	17.22	76.58	19.39	3.39
C0764-068-1625-M	0.764	19.41	0.068	1.73	1.625	41.28	0.656	16.66	0.509	12.93	17.22	76.58	17.77	3.11
C0764-068-1750-M	0.764	19.41	0.068	1.73	1.750	44.45	0.700	17.77	0.540	13.71	17.22	76.58	16.39	2.87
C0764-068-1875-M	0.764	19.41	0.068	1.73	1.875	47.63	0.743	18.88	0.571	14.50	17.22	76.58	15.21	2.66
C0764-068-2000-M	0.764	19.41	0.068	1.73	2.000	50.80	0.787	19.99	0.601	15.28	17.22	76.58	14.19	2.48
C0764-068-2125-M	0.764	19.41	0.068	1.73	2.125	53.98	0.831	21.10	0.632	16.06	17.22	76.58	13.30	2.33
C0764-068-2250-M	0.764	19.41	0.068	1.73	2.250	57.15	0.874	22.20	0.663	16.84	17.22	76.58	12.51	2.19
C0764-068-2375-M	0.764	19.41	0.068	1.73	2.375	60.33	0.918	23.31	0.694	17.62	17.22	76.58	11.82	2.07
C0764-068-2500-M	0.764	19.41	0.068	1.73	2.500	63.50	0.961	24.42	0.724	18.40	17.22	76.58	11.19	1.96
C0764-068-2625-M	0.764	19.41	0.068	1.73	2.625	66.68	1.005	25.53	0.755	19.18	17.22	76.58	10.63	1.86
C0764-068-2750-M	0.764	19.41	0.068	1.73	2.750	69.85	1.049	26.64	0.786	19.96	17.22	76.58	10.12	1.77
C0764-068-2875-M	0.764	19.41	0.068	1.73	2.875	73.03	1.092	27.75	0.817	20.75	17.22	76.58	9.66	1.69
C0764-068-3000-M	0.764	19.41	0.068	1.73	3.000	76.20	1.136	28.86	0.848	21.53	17.22	76.58	9.24	1.62
C0764-068-3250-M	0.764	19.41	0.068	1.73	3.250	82.55	1.223	31.07	0.909	23.09	17.22	76.58	8.50	1.49
C0764-068-3500-M	0.764	19.41	0.068	1.73	3.500	88.90	1.311	33.29	0.971	24.65	17.22	76.58	7.86	1.38
C0764-068-3750-M	0.764	19.41	0.068	1.73	3.750	95.25	1.398	35.51	1.032	26.21	17.22	76.58	7.32	1.28
C0764-068-4000-M	0.764	19.41	0.068	1.73	4.000	101.60	1.485	37.73	1.094	27.78	17.22	76.58	6.85	1.20
C0764-068-4250-M	0.764	19.41	0.068	1.73	4.250	107.95	1.573	39.94	1.155	29.34	17.22	76.58	6.43	1.13
C0764-068-4500-M	0.764	19.41	0.068	1.73	4.500	114.30	1.660	42.16	1.217	30.90	17.22	76.58	6.06	1.06
C0764-068-4750-M	0.764	19.41	0.068	1.73	4.750	120.65	1.747	44.38	1.278	32.46	17.22	76.58	5.73	1.00
C0764-068-5000-M	0.764	19.41	0.068	1.73	5.000	127.00	1.834	46.60	1.340	34.03	17.22	76.58	5.44	0.95
C0764-068-5250-M	0.764	19.41	0.068	1.73	5.250	133.35	1.922	48.81	1.401	35.59	17.22	76.58	5.17	0.91
C0764-068-5500-M	0.764	19.41	0.068	1.73	5.500	139.70	2.009	51.03	1.463	37.15	17.22	76.58	4.93	0.86
C0764-068-5750-M	0.764	19.41	0.068	1.73	5.750	146.05	2.096	53.25	1.524	38.71	17.22	76.58	4.71	0.82
C0764-068-6000-M	0.764	19.41	0.068	1.73	6.000	152.40	2.184	55.46	1.586	40.28	17.22	76.58	4.51	0.79
C0764-068-6250-M	0.764	19.41	0.068	1.73	6.250	158.75	2.271	57.68	1.647	41.84	17.22	76.58	4.33	0.76
C0764-068-6500-M	0.764	19.41	0.068	1.73	6.500	165.10	2.358	59.90	1.709	43.40	17.22	76.58	4.16	0.73
C0764-068-6750-M	0.764	19.41	0.068	1.73	6.750	171.45	2.446	62.12	1.770	44.96	17.22	76.58	4.00	0.70
C0764-068-7000-M	0.764	19.41	0.068	1.73	7.000	177.80	2.533	64.33	1.832	46.53	17.22	76.58	3.85	0.67
C0764-068-7500-M	0.764	19.41	0.068	1.73	7.500	190.50	2.707	68.77	1.955	49.65	17.22	76.58	3.59	0.63
C0764-068-8000-M	0.764	19.41	0.068	1.73	8.000	203.20	2.882	73.20	2.078	52.78	17.22	76.58	3.36	0.59
C0764-068-8500-M	0.764	19.41	0.068	1.73	8.500	215.90	3.057	77.64	2.201	55.90	17.22	76.58	3.16	0.55
C0764-068-9000-M	0.764	19.41	0.068	1.73	9.000	228.60	3.231	82.07	2.324	59.03	17.22	76.58	2.98	0.52
C0764-068-9500-M	0.764	19.41	0.068	1.73	9.500	241.30	3.406	86.51	2.447	62.15	17.22	76.58	2.83	0.49
C0764-072-1250-M	0.764	19.41	0.072	1.83	1.250	31.75	0.555	14.11	0.455	11.54	20.18	89.77	29.06	5.08
C0764-072-1375-M	0.764	19.41	0.072	1.83	1.375	34.93	0.602	15.29	0.489	12.42	20.18	89.77	26.11	4.57
C0764-072-1500-M	0.764	19.41	0.072	1.83	1.500	38.10	0.648	16.47	0.523	13.29	20.18	89.77	23.70	4.15
C0764-072-1625-M	0.764	19.41	0.072	1.83	1.625	41.28	0.695	17.65	0.557	14.16	20.18	89.77	21.70	3.80
C0764-072-1750-M	0.764	19.41	0.072	1.83	1.750	44.45	0.741	18.83	0.592	15.03	20.18	89.77	20.01	3.50
C0764-072-1875-M	0.764	19.41	0.072	1.83	1.875	47.63	0.788	20.01	0.626	15.90	20.18	89.77	18.57	3.25
C0764-072-2000-M	0.764	19.41	0.072	1.83	2.000	50.80	0.834	21.20	0.660	16.77	20.18	89.77	17.32	3.03
C0764-072-2125-M	0.764	19.41	0.072	1.83	2.125	53.98	0.881	22.38	0.694	17.64	20.18	89.77	16.22	2.84
C0764-072-2250-M	0.764	19.41	0.072	1.83	2.250	57.15	0.927	23.56	0.729	18.51	20.18	89.77	15.26	2.67
C0764-072-2375-M	0.764	19.41	0.072	1.83	2.375	60.33	0.974	24.74	0.763	19.38	20.18	89.77	14.40	2.52
C0764-072-2500-M	0.764	19.41	0.072	1.83	2.500	63.50	1.020	25.92	0.797	20.25	20.18	89.77	13.64	2.39
C0764-072-2625-M	0.764	19.41	0.072	1.83	2.625	66.68	1.067	27.10	0.832	21.12	20.18	89.77	12.95	2.27
C0764-072-2750-M	0.764	19.41	0.072	1.83	2.750	69.85	1.113	28.28	0.866	21.99	20.18	89.77	12.33	2.16
C0764-072-2875-M	0.764	19.41	0.072	1.83	2.875	73.03	1.160	29.46	0.900	22.86	20.18	89.77	11.77	2.06
C0764-072-3000-M	0.764	19.41	0.072	1.83	3.000	76.20	1.206	30.64	0.934	23.74	20.18	89.77	11.25	1.97
C0764-072-3250-M	0.764	19.41	0.072	1.83	3.250	82.55	1.299	33.01	1.003	25.48	20.18	89.77	10.35	1.81
C0764-072-3500-M	0.764	19.41	0.072	1.83	3.500	88.90	1.392	35.37	1.072	27.22	20.18	89.77	9.58	1.68

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0764-063-5500-S	2.174	55.21	11.04	49.12	3.32	0.58
C0764-063-5750-S	2.269	57.63	11.04	49.12	3.17	0.56
C0764-063-6000-S	2.364	60.05	11.04	49.12	3.04	0.53
C0764-063-6250-S	2.460	62.47	11.04	49.12	2.91	0.51
C0764-063-6500-S	2.555	64.89	11.04	49.12	2.80	0.49
C0764-063-6750-S	2.650	67.31	11.04	49.12	2.69	0.47
C0764-063-7000-S	2.745	69.73	11.04	49.12	2.60	0.45
C0764-063-7500-S	2.936	74.57	11.04	49.12	2.42	0.42
C0764-063-8000-S	3.126	79.41	11.04	49.12	2.27	0.40
C0764-063-8500-S	3.317	84.25	11.04	49.12	2.13	0.37
C0764-063-9000-S	3.507	89.09	11.04	49.12	2.01	0.35
C0764-063-9500-S	3.698	93.93	11.04	49.12	1.90	0.33
C0764-068-1375-S	0.641	16.28	13.63	60.64	18.57	3.25
C0764-068-1500-S	0.692	17.57	13.63	60.64	16.86	2.95
C0764-068-1625-S	0.743	18.86	13.63	60.64	15.45	2.70
C0764-068-1750-S	0.794	20.16	13.63	60.64	14.25	2.49
C0764-068-1875-S	0.844	21.45	13.63	60.64	13.23	2.31
C0764-068-2000-S	0.895	22.74	13.63	60.64	12.34	2.16
C0764-068-2125-S	0.946	24.04	13.63	60.64	11.57	2.02
C0764-068-2250-S	0.997	25.33	13.63	60.64	10.88	1.90
C0764-068-2375-S	1.048	26.62	13.63	60.64	10.27	1.80
C0764-068-2500-S	1.099	27.92	13.63	60.64	9.73	1.70
C0764-068-2625-S	1.150	29.21	13.63	60.64	9.24	1.62
C0764-068-2750-S	1.201	30.50	13.63	60.64	8.80	1.54
C0764-068-2875-S	1.252	31.80	13.63	60.64	8.40	1.47
C0764-068-3000-S	1.303	33.09	13.63	60.64	8.03	1.41
C0764-068-3250-S	1.405	35.68	13.63	60.64	7.39	1.29
C0764-068-3500-S	1.506	38.26	13.63	60.64	6.84	1.20
C0764-068-3750-S	1.608	40.85	13.63	60.64	6.37	1.11
C0764-068-4000-S	1.710	43.44	13.63	60.64	5.95	1.04
C0764-068-4250-S	1.812	46.02	13.63	60.64	5.59	0.98
C0764-068-4500-S	1.914	48.61	13.63	60.64	5.27	0.92
C0764-068-4750-S	2.016	51.20	13.63	60.64	4.99	0.87
C0764-068-5000-S	2.118	53.79	13.63	60.64	4.73	0.83
C0764-068-5250-S	2.219	56.37	13.63	60.64	4.50	0.79
C0764-068-5500-S	2.321	58.96	13.63	60.64	4.29	0.75
C0764-068-5750-S	2.423	61.55	13.63	60.64	4.10	0.72
C0764-068-6000-S	2.525	64.13	13.63	60.64	3.92	0.69
C0764-068-6250-S	2.627	66.72	13.63	60.64	3.76	0.66
C0764-068-6500-S	2.729	69.31	13.63	60.64	3.62	0.63
C0764-068-6750-S	2.830	71.89	13.63	60.64	3.48	0.61
C0764-068-7000-S	2.932	74.48	13.63	60.64	3.35	0.59
C0764-068-7500-S	3.136	79.65	13.63	60.64	3.12	0.55
C0764-068-8000-S	3.340	84.83	13.63	60.64	2.93	0.51
C0764-068-8500-S	3.543	90.00	13.63	60.64	2.75	0.48
C0764-068-9000-S	3.747	95.18	13.63	60.64	2.60	0.45
C0764-068-9500-S	3.951	100.35	13.63	60.64	2.46	0.43
C0764-072-1250-S	0.619	15.72	15.95	70.95	25.27	4.42
C0764-072-1375-S	0.672	17.08	15.95	70.95	22.70	3.97
C0764-072-1500-S	0.726	18.44	15.95	70.95	20.61	3.61
C0764-072-1625-S	0.780	19.80	15.95	70.95	18.87	3.30
C0764-072-1750-S	0.833	21.17	15.95	70.95	17.40	3.05
C0764-072-1875-S	0.887	22.53	15.95	70.95	16.14	2.83
C0764-072-2000-S	0.941	23.89	15.95	70.95	15.06	2.63
C0764-072-2125-S	0.994	25.25	15.95	70.95	14.11	2.47
C0764-072-2250-S	1.048	26.62	15.95	70.95	13.27	2.32
C0764-072-2375-S	1.102	27.98	15.95	70.95	12.53	2.19
C0764-072-2500-S	1.155	29.34	15.95	70.95	11.86	2.08
C0764-072-2625-S	1.209	30.71	15.95	70.95	11.26	1.97
C0764-072-2750-S	1.263	32.07	15.95	70.95	10.72	1.88
C0764-072-2875-S	1.316	33.43	15.95	70.95	10.23	1.79
C0764-072-3000-S	1.370	34.79	15.95	70.95	9.78	1.71
C0764-072-3250-S	1.477	37.52	15.95	70.95	9.00	1.57
C0764-072-3500-S	1.584	40.24	15.95	70.95	8.33	1.46

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0764-072-3750-M	0.764	19.41	0.072	1.83	3.750	95.25	1.485	37.73	1.140	28.96	20.18	89.77	8.91	1.56
C0764-072-4000-M	0.764	19.41	0.072	1.83	4.000	101.60	1.578	40.09	1.209	30.70	20.18	89.77	8.33	1.46
C0764-072-4250-M	0.764	19.41	0.072	1.83	4.250	107.95	1.671	42.46	1.277	32.44	20.18	89.77	7.83	1.37
C0764-072-4500-M	0.764	19.41	0.072	1.83	4.500	114.30	1.764	44.82	1.346	34.18	20.18	89.77	7.38	1.29
C0764-072-4750-M	0.764	19.41	0.072	1.83	4.750	120.65	1.857	47.18	1.414	35.93	20.18	89.77	6.98	1.22
C0764-072-5000-M	0.764	19.41	0.072	1.83	5.000	127.00	1.951	49.54	1.483	37.67	20.18	89.77	6.62	1.16
C0764-072-5250-M	0.764	19.41	0.072	1.83	5.250	133.35	2.044	51.91	1.552	39.41	20.18	89.77	6.29	1.10
C0764-072-5500-M	0.764	19.41	0.072	1.83	5.500	139.70	2.137	54.27	1.620	41.15	20.18	89.77	6.00	1.05
C0764-072-5750-M	0.764	19.41	0.072	1.83	5.750	146.05	2.230	56.63	1.689	42.89	20.18	89.77	5.73	1.00
C0764-072-6000-M	0.764	19.41	0.072	1.83	6.000	152.40	2.323	58.99	1.757	44.63	20.18	89.77	5.49	0.96
C0764-072-6250-M	0.764	19.41	0.072	1.83	6.250	158.75	2.416	61.35	1.826	46.38	20.18	89.77	5.26	0.92
C0764-072-6500-M	0.764	19.41	0.072	1.83	6.500	165.10	2.509	63.72	1.894	48.12	20.18	89.77	5.06	0.88
C0764-072-6750-M	0.764	19.41	0.072	1.83	6.750	171.45	2.602	66.08	1.963	49.86	20.18	89.77	4.87	0.85
C0764-072-7000-M	0.764	19.41	0.072	1.83	7.000	177.80	2.695	68.44	2.031	51.60	20.18	89.77	4.69	0.82
C0764-072-7500-M	0.764	19.41	0.072	1.83	7.500	190.50	2.881	73.17	2.169	55.08	20.18	89.77	4.37	0.76
C0764-072-8000-M	0.764	19.41	0.072	1.83	8.000	203.20	3.067	77.89	2.306	58.57	20.18	89.77	4.09	0.72
C0764-072-8500-M	0.764	19.41	0.072	1.83	8.500	215.90	3.253	82.61	2.443	62.05	20.18	89.77	3.85	0.67
C0764-072-9000-M	0.764	19.41	0.072	1.83	9.000	228.60	3.439	87.34	2.580	65.53	20.18	89.77	3.63	0.64
C0764-072-9500-M	0.764	19.41	0.072	1.83	9.500	241.30	3.625	92.06	2.717	69.01	20.18	89.77	3.44	0.60
C0764-085-1250-M	0.764	19.41	0.085	2.16	1.250	31.75	0.655	16.63	0.577	14.66	31.96	142.17	53.68	9.39
C0764-085-1375-M	0.764	19.41	0.085	2.16	1.375	34.93	0.711	18.05	0.623	15.83	31.96	142.17	48.11	8.42
C0764-085-1500-M	0.764	19.41	0.085	2.16	1.500	38.10	0.767	19.48	0.669	17.00	31.96	142.17	43.59	7.63
C0764-085-1625-M	0.764	19.41	0.085	2.16	1.625	41.28	0.823	20.90	0.715	18.17	31.96	142.17	39.85	6.97
C0764-085-1750-M	0.764	19.41	0.085	2.16	1.750	44.45	0.879	22.33	0.762	19.34	31.96	142.17	36.69	6.42
C0764-085-1875-M	0.764	19.41	0.085	2.16	1.875	47.63	0.935	23.75	0.808	20.51	31.96	142.17	34.00	5.95
C0764-085-2000-M	0.764	19.41	0.085	2.16	2.000	50.80	0.991	25.18	0.854	21.69	31.96	142.17	31.68	5.54
C0764-085-2125-M	0.764	19.41	0.085	2.16	2.125	53.98	1.047	26.60	0.900	22.86	31.96	142.17	29.66	5.19
C0764-085-2250-M	0.764	19.41	0.085	2.16	2.250	57.15	1.103	28.02	0.946	24.03	31.96	142.17	27.87	4.88
C0764-085-2375-M	0.764	19.41	0.085	2.16	2.375	60.33	1.159	29.45	0.992	25.20	31.96	142.17	26.29	4.60
C0764-085-2500-M	0.764	19.41	0.085	2.16	2.500	63.50	1.216	30.87	1.038	26.37	31.96	142.17	24.88	4.35
C0764-085-2625-M	0.764	19.41	0.085	2.16	2.625	66.68	1.272	32.30	1.084	27.54	31.96	142.17	23.62	4.13
C0764-085-2750-M	0.764	19.41	0.085	2.16	2.750	69.85	1.328	33.72	1.131	28.72	31.96	142.17	22.47	3.93
C0764-085-2875-M	0.764	19.41	0.085	2.16	2.875	73.03	1.384	35.15	1.177	29.89	31.96	142.17	21.43	3.75
C0764-085-3000-M	0.764	19.41	0.085	2.16	3.000	76.20	1.440	36.57	1.223	31.06	31.96	142.17	20.49	3.59
C0764-085-3250-M	0.764	19.41	0.085	2.16	3.250	82.55	1.552	39.42	1.315	33.40	31.96	142.17	18.82	3.29
C0764-085-3500-M	0.764	19.41	0.085	2.16	3.500	88.90	1.664	42.27	1.407	35.74	31.96	142.17	17.41	3.05
C0764-085-3750-M	0.764	19.41	0.085	2.16	3.750	95.25	1.776	45.12	1.500	38.09	31.96	142.17	16.20	2.83
C0764-085-4000-M	0.764	19.41	0.085	2.16	4.000	101.60	1.889	47.97	1.592	40.43	31.96	142.17	15.14	2.65
C0764-085-4250-M	0.764	19.41	0.085	2.16	4.250	107.95	2.001	50.82	1.684	42.77	31.96	142.17	14.21	2.49
C0764-085-4500-M	0.764	19.41	0.085	2.16	4.500	114.30	2.113	53.67	1.776	45.12	31.96	142.17	13.39	2.34
C0764-085-4750-M	0.764	19.41	0.085	2.16	4.750	120.65	2.225	56.52	1.869	47.46	31.96	142.17	12.66	2.22
C0764-085-5000-M	0.764	19.41	0.085	2.16	5.000	127.00	2.337	59.37	1.961	49.80	31.96	142.17	12.00	2.10
C0764-085-5250-M	0.764	19.41	0.085	2.16	5.250	133.35	2.449	62.22	2.053	52.15	31.96	142.17	11.41	2.00
C0764-085-5500-M	0.764	19.41	0.085	2.16	5.500	139.70	2.562	65.07	2.145	54.49	31.96	142.17	10.88	1.90
C0764-085-5750-M	0.764	19.41	0.085	2.16	5.750	146.05	2.674	67.92	2.238	56.83	31.96	142.17	10.39	1.82
C0764-085-6000-M	0.764	19.41	0.085	2.16	6.000	152.40	2.786	70.76	2.330	59.18	31.96	142.17	9.95	1.74
C0764-085-6250-M	0.764	19.41	0.085	2.16	6.250	158.75	2.898	73.61	2.422	61.52	31.96	142.17	9.54	1.67
C0764-085-6500-M	0.764	19.41	0.085	2.16	6.500	165.10	3.010	76.46	2.514	63.86	31.96	142.17	9.16	1.60
C0764-085-6750-M	0.764	19.41	0.085	2.16	6.750	171.45	3.123	79.31	2.607	66.21	31.96	142.17	8.81	1.54
C0764-085-7000-M	0.764	19.41	0.085	2.16	7.000	177.80	3.235	82.16	2.699	68.55	31.96	142.17	8.49	1.49
C0764-085-7500-M	0.764	19.41	0.085	2.16	7.500	190.50	3.459	87.86	2.883	73.24	31.96	142.17	7.91	1.38
C0764-085-8000-M	0.764	19.41	0.085	2.16	8.000	203.20	3.683	93.56	3.068	77.92	31.96	142.17	7.40	1.30
C0764-085-8500-M	0.764	19.41	0.085	2.16	8.500	215.90	3.908	99.26	3.252	82.61	31.96	142.17	6.96	1.22
C0764-085-9000-M	0.764	19.41	0.085	2.16	9.000	228.60	4.132	104.96	3.437	87.29	31.96	142.17	6.57	1.15
C0764-085-9500-M	0.764	19.41	0.085	2.16	9.500	241.30	4.357	110.66	3.621	91.98	31.96	142.17	6.21	1.09
C0764-092-1125-M	0.764	19.41	0.092	2.34	1.125	28.58	0.645	16.39	0.589	14.95	39.76	176.85	82.88	14.50
C0764-092-1250-M	0.764	19.41	0.092	2.34	1.250	31.75	0.707	17.95	0.641	16.29	39.76	176.85	73.17	12.80
C0764-092-1375-M	0.764	19.41	0.092	2.34	1.375	34.93	0.768	19.50	0.694	17.62	39.76	176.85	65.49	11.46
C0764-092-1500-M	0.764	19.41	0.092	2.34	1.500	38.10	0.829	21.06	0.746	18.96	39.76	176.85	59.27	10.37
C0764-092-1625-M	0.764	19.41	0.092	2.34	1.625	41.28	0.890	22.62	0.799	20.29	39.76	176.85	54.13	9.47
C0764-092-1750-M	0.764	19.41	0.092	2.34	1.750	44.45	0.952	24.17	0.851	21.63	39.76	176.85	49.80	8.72
C0764-092-1875-M	0.764	19.41	0.092	2.34	1.875	47.63	1.013	25.73	0.904	22.96	39.76	176.85	46.12	8.07
C0764-092-2000-M	0.764	19.41	0.092	2.34	2.000	50.80	1.074	27.29	0.956	24.29	39.76	176.85	42.95	7.52
C0764-092-2125-M	0.764	19.41	0.092	2.34	2.125	53.98	1.136	28.84	1.009	25.63	39.76	176.85	40.18	7.03

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0764-072-3750-S	1.692	42.97	15.95	70.95	7.75	1.36
C0764-072-4000-S	1.799	45.70	15.95	70.95	7.25	1.27
C0764-072-4250-S	1.906	48.42	15.95	70.95	6.81	1.19
C0764-072-4500-S	2.014	51.15	15.95	70.95	6.42	1.12
C0764-072-4750-S	2.121	53.87	15.95	70.95	6.07	1.06
C0764-072-5000-S	2.228	56.60	15.95	70.95	5.76	1.01
C0764-072-5250-S	2.336	59.32	15.95	70.95	5.47	0.96
C0764-072-5500-S	2.443	62.05	15.95	70.95	5.22	0.91
C0764-072-5750-S	2.550	64.77	15.95	70.95	4.99	0.87
C0764-072-6000-S	2.657	67.50	15.95	70.95	4.77	0.84
C0764-072-6250-S	2.765	70.22	15.95	70.95	4.58	0.80
C0764-072-6500-S	2.872	72.95	15.95	70.95	4.40	0.77
C0764-072-6750-S	2.979	75.68	15.95	70.95	4.23	0.74
C0764-072-7000-S	3.087	78.40	15.95	70.95	4.08	0.71
C0764-072-7500-S	3.301	83.85	15.95	70.95	3.80	0.66
C0764-072-8000-S	3.516	89.30	15.95	70.95	3.56	0.62
C0764-072-8500-S	3.730	94.75	15.95	70.95	3.34	0.59
C0764-072-9000-S	3.945	100.21	15.95	70.95	3.16	0.55
C0764-072-9500-S	4.160	105.66	15.95	70.95	2.99	0.52
C0764-085-1250-S	0.713	18.10	25.08	111.58	46.68	8.17
C0764-085-1375-S	0.775	19.70	25.08	111.58	41.84	7.32
C0764-085-1500-S	0.838	21.29	25.08	111.58	37.91	6.63
C0764-085-1625-S	0.901	22.89	25.08	111.58	34.65	6.06
C0764-085-1750-S	0.964	24.48	25.08	111.58	31.91	5.58
C0764-085-1875-S	1.027	26.08	25.08	111.58	29.57	5.17
C0764-085-2000-S	1.089	27.67	25.08	111.58	27.55	4.82
C0764-085-2125-S	1.152	29.27	25.08	111.58	25.79	4.51
C0764-085-2250-S	1.215	30.86	25.08	111.58	24.24	4.24
C0764-085-2375-S	1.278	32.46	25.08	111.58	22.86	4.00
C0764-085-2500-S	1.341	34.05	25.08	111.58	21.64	3.79
C0764-085-2625-S	1.403	35.65	25.08	111.58	20.54	3.59
C0764-085-2750-S	1.466	37.24	25.08	111.58	19.54	3.42
C0764-085-2875-S	1.529	38.84	25.08	111.58	18.64	3.26
C0764-085-3000-S	1.592	40.43	25.08	111.58	17.81	3.12
C0764-085-3250-S	1.717	43.62	25.08	111.58	16.37	2.86
C0764-085-3500-S	1.843	46.81	25.08	111.58	15.14	2.65
C0764-085-3750-S	1.969	50.01	25.08	111.58	14.08	2.46
C0764-085-4000-S	2.094	53.20	25.08	111.58	13.16	2.30
C0764-085-4250-S	2.220	56.39	25.08	111.58	12.36	2.16
C0764-085-4500-S	2.346	59.58	25.08	111.58	11.64	2.04
C0764-085-4750-S	2.471	62.77	25.08	111.58	11.01	1.93
C0764-085-5000-S	2.597	65.96	25.08	111.58	10.44	1.83
C0764-085-5250-S	2.722	69.15	25.08	111.58	9.92	1.74
C0764-085-5500-S	2.848	72.34	25.08	111.58	9.46	1.66
C0764-085-5750-S	2.974	75.53	25.08	111.58	9.04	1.58
C0764-085-6000-S	3.099	78.72	25.08	111.58	8.65	1.51
C0764-085-6250-S	3.225	81.91	25.08	111.58	8.29	1.45
C0764-085-6500-S	3.350	85.10	25.08	111.58	7.96	1.39
C0764-085-6750-S	3.476	88.29	25.08	111.58	7.66	1.34
C0764-085-7000-S	3.602	91.48	25.08	111.58	7.38	1.29
C0764-085-7500-S	3.853	97.86	25.08	111.58	6.88	1.20
C0764-085-8000-S	4.104	104.24	25.08	111.58	6.44	1.13
C0764-085-8500-S	4.355	110.62	25.08	111.58	6.05	1.06
C0764-085-9000-S	4.606	117.00	25.08	111.58	5.71	1.00
C0764-085-9500-S	4.858	123.38	25.08	111.58	5.40	0.95
C0764-092-1125-S	0.694	17.63	31.07	138.20	72.07	12.61
C0764-092-1250-S	0.762	19.35	31.07	138.20	63.62	11.13
C0764-092-1375-S	0.829	21.07	31.07	138.20	56.94	9.97
C0764-092-1500-S	0.897	22.79	31.07	138.20	51.54	9.02
C0764-092-1625-S	0.965	24.51	31.07	138.20	47.07	8.24
C0764-092-1750-S	1.033	26.23	31.07	138.20	43.31	7.58
C0764-092-1875-S	1.100	27.95	31.07	138.20	40.11	7.02
C0764-092-2000-S	1.168	29.67	31.07	138.20	37.35	6.54
C0764-092-2125-S	1.236	31.39	31.07	138.20	34.94	6.11

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0764-092-2250-M	**0.764**	**19.41**	**0.092**	**2.34**	**2.250**	**57.15**	**1.197**	**30.40**	**1.062**	**26.96**	**39.76**	**176.85**	**37.75**	**6.61**	**C0764-092-2250-S**	**1.304**	**33.11**	**31.07**	**138.20**	**32.83**	**5.74**
C0764-092-2375-M	**0.764**	**19.41**	**0.092**	**2.34**	**2.375**	**60.33**	**1.258**	**31.96**	**1.114**	**28.30**	**39.76**	**176.85**	**35.60**	**6.23**	**C0764-092-2375-S**	**1.371**	**34.83**	**31.07**	**138.20**	**30.95**	**5.42**
C0764-092-2500-M	**0.764**	**19.41**	**0.092**	**2.34**	**2.500**	**63.50**	**1.319**	**33.51**	**1.167**	**29.63**	**39.76**	**176.85**	**33.68**	**5.89**	**C0764-092-2500-S**	**1.439**	**36.55**	**31.07**	**138.20**	**29.28**	**5.12**
C0764-092-2625-M	**0.764**	**19.41**	**0.092**	**2.34**	**2.625**	**66.68**	**1.381**	**35.07**	**1.219**	**30.97**	**39.76**	**176.85**	**31.95**	**5.59**	**C0764-092-2625-S**	**1.507**	**38.27**	**31.07**	**138.20**	**27.78**	**4.86**
C0764-092-2750-M	**0.764**	**19.41**	**0.092**	**2.34**	**2.750**	**69.85**	**1.442**	**36.63**	**1.272**	**32.30**	**39.76**	**176.85**	**30.40**	**5.32**	**C0764-092-2750-S**	**1.575**	**39.99**	**31.07**	**138.20**	**26.43**	**4.63**
C0764-092-2875-M	**0.764**	**19.41**	**0.092**	**2.34**	**2.875**	**73.03**	**1.503**	**38.18**	**1.324**	**33.64**	**39.76**	**176.85**	**28.98**	**5.07**	**C0764-092-2875-S**	**1.642**	**41.71**	**31.07**	**138.20**	**25.20**	**4.41**
C0764-092-3000-M	**0.764**	**19.41**	**0.092**	**2.34**	**3.000**	**76.20**	**1.565**	**39.74**	**1.377**	**34.97**	**39.76**	**176.85**	**27.70**	**4.85**	**C0764-092-3000-S**	**1.710**	**43.43**	**31.07**	**138.20**	**24.08**	**4.21**
C0764-092-3250-M	**0.764**	**19.41**	**0.092**	**2.34**	**3.250**	**82.55**	**1.687**	**42.85**	**1.482**	**37.64**	**39.76**	**176.85**	**25.44**	**4.45**	**C0764-092-3250-S**	**1.845**	**46.87**	**31.07**	**138.20**	**22.12**	**3.87**
C0764-092-3500-M	**0.764**	**19.41**	**0.092**	**2.34**	**3.500**	**88.90**	**1.810**	**45.97**	**1.587**	**40.31**	**39.76**	**176.85**	**23.52**	**4.12**	**C0764-092-3500-S**	**1.981**	**50.32**	**31.07**	**138.20**	**20.45**	**3.58**
C0764-092-3750-M	**0.764**	**19.41**	**0.092**	**2.34**	**3.750**	**95.25**	**1.932**	**49.08**	**1.692**	**42.98**	**39.76**	**176.85**	**21.87**	**3.83**	**C0764-092-3750-S**	**2.116**	**53.76**	**31.07**	**138.20**	**19.02**	**3.33**
C0764-092-4000-M	**0.764**	**19.41**	**0.092**	**2.34**	**4.000**	**101.60**	**2.055**	**52.19**	**1.797**	**45.65**	**39.76**	**176.85**	**20.44**	**3.58**	**C0764-092-4000-S**	**2.252**	**57.20**	**31.07**	**138.20**	**17.77**	**3.11**
C0764-092-4250-M	**0.764**	**19.41**	**0.092**	**2.34**	**4.250**	**107.95**	**2.177**	**55.30**	**1.902**	**48.32**	**39.76**	**176.85**	**19.18**	**3.36**	**C0764-092-4250-S**	**2.387**	**60.64**	**31.07**	**138.20**	**16.68**	**2.92**
C0764-092-4500-M	**0.764**	**19.41**	**0.092**	**2.34**	**4.500**	**114.30**	**2.300**	**58.42**	**2.007**	**50.98**	**39.76**	**176.85**	**18.07**	**3.16**	**C0764-092-4500-S**	**2.523**	**64.08**	**31.07**	**138.20**	**15.71**	**2.75**
C0764-092-4750-M	**0.764**	**19.41**	**0.092**	**2.34**	**4.750**	**120.65**	**2.422**	**61.53**	**2.112**	**53.65**	**39.76**	**176.85**	**17.08**	**2.99**	**C0764-092-4750-S**	**2.658**	**67.52**	**31.07**	**138.20**	**14.85**	**2.60**
C0764-092-5000-M	**0.764**	**19.41**	**0.092**	**2.34**	**5.000**	**127.00**	**2.545**	**64.64**	**2.217**	**56.32**	**39.76**	**176.85**	**16.20**	**2.83**	**C0764-092-5000-S**	**2.794**	**70.96**	**31.07**	**138.20**	**14.08**	**2.46**
C0764-092-5250-M	**0.764**	**19.41**	**0.092**	**2.34**	**5.250**	**133.35**	**2.668**	**67.76**	**2.322**	**58.99**	**39.76**	**176.85**	**15.40**	**2.69**	**C0764-092-5250-S**	**2.929**	**74.40**	**31.07**	**138.20**	**13.39**	**2.34**
C0764-092-5500-M	**0.764**	**19.41**	**0.092**	**2.34**	**5.500**	**139.70**	**2.790**	**70.87**	**2.428**	**61.66**	**39.76**	**176.85**	**14.67**	**2.57**	**C0764-092-5500-S**	**3.065**	**77.84**	**31.07**	**138.20**	**12.76**	**2.23**
C0764-092-5750-M	**0.764**	**19.41**	**0.092**	**2.34**	**5.750**	**146.05**	**2.913**	**73.98**	**2.533**	**64.33**	**39.76**	**176.85**	**14.01**	**2.45**	**C0764-092-5750-S**	**3.200**	**81.29**	**31.07**	**138.20**	**12.19**	**2.13**
C0764-092-6000-M	**0.764**	**19.41**	**0.092**	**2.34**	**6.000**	**152.40**	**3.035**	**77.10**	**2.638**	**67.00**	**39.76**	**176.85**	**13.41**	**2.35**	**C0764-092-6000-S**	**3.336**	**84.73**	**31.07**	**138.20**	**11.66**	**2.04**
C0764-092-6250-M	**0.764**	**19.41**	**0.092**	**2.34**	**6.250**	**158.75**	**3.158**	**80.21**	**2.743**	**69.67**	**39.76**	**176.85**	**12.86**	**2.25**	**C0764-092-6250-S**	**3.471**	**88.17**	**31.07**	**138.20**	**11.18**	**1.96**
C0764-092-6500-M	**0.764**	**19.41**	**0.092**	**2.34**	**6.500**	**165.10**	**3.280**	**83.32**	**2.848**	**72.34**	**39.76**	**176.85**	**12.35**	**2.16**	**C0764-092-6500-S**	**3.607**	**91.61**	**31.07**	**138.20**	**10.74**	**1.88**
C0764-092-6750-M	**0.764**	**19.41**	**0.092**	**2.34**	**6.750**	**171.45**	**3.403**	**86.44**	**2.953**	**75.01**	**39.76**	**176.85**	**11.88**	**2.08**	**C0764-092-6750-S**	**3.742**	**95.05**	**31.07**	**138.20**	**10.33**	**1.81**
C0764-092-7000-M	**0.764**	**19.41**	**0.092**	**2.34**	**7.000**	**177.80**	**3.526**	**89.55**	**3.058**	**77.67**	**39.76**	**176.85**	**11.44**	**2.00**	**C0764-092-7000-S**	**3.878**	**98.49**	**31.07**	**138.20**	**9.95**	**1.74**
C0764-092-7500-M	**0.764**	**19.41**	**0.092**	**2.34**	**7.500**	**190.50**	**3.771**	**95.78**	**3.268**	**83.01**	**39.76**	**176.85**	**10.66**	**1.87**	**C0764-092-7500-S**	**4.149**	**105.37**	**31.07**	**138.20**	**9.27**	**1.62**
C0764-092-8000-M	**0.764**	**19.41**	**0.092**	**2.34**	**8.000**	**203.20**	**4.016**	**102.00**	**3.478**	**88.35**	**39.76**	**176.85**	**9.98**	**1.75**	**C0764-092-8000-S**	**4.419**	**112.25**	**31.07**	**138.20**	**8.68**	**1.52**
C0764-092-8500-M	**0.764**	**19.41**	**0.092**	**2.34**	**8.500**	**215.90**	**4.261**	**108.23**	**3.688**	**93.69**	**39.76**	**176.85**	**9.38**	**1.64**	**C0764-092-8500-S**	**4.690**	**119.14**	**31.07**	**138.20**	**8.16**	**1.43**
C0764-092-9000-M	**0.764**	**19.41**	**0.092**	**2.34**	**9.000**	**228.60**	**4.506**	**114.45**	**3.899**	**99.03**	**39.76**	**176.85**	**8.85**	**1.55**	**C0764-092-9000-S**	**4.961**	**126.02**	**31.07**	**138.20**	**7.69**	**1.35**
C0764-092-9500-M	**0.764**	**19.41**	**0.092**	**2.34**	**9.500**	**241.30**	**4.751**	**120.68**	**4.109**	**104.36**	**39.76**	**176.85**	**8.37**	**1.47**	**C0764-092-9500-S**	**5.232**	**132.90**	**31.07**	**138.20**	**7.28**	**1.27**
C0764-098-1125-M	**0.764**	**19.41**	**0.098**	**2.49**	**1.125**	**28.58**	**0.684**	**17.37**	**0.636**	**16.17**	**47.30**	**210.40**	**107.25**	**18.77**	**C0764-098-1125-S**	**0.730**	**18.55**	**36.82**	**163.78**	**93.26**	**16.32**
C0764-098-1250-M	**0.764**	**19.41**	**0.098**	**2.49**	**1.250**	**31.75**	**0.750**	**19.04**	**0.694**	**17.64**	**47.30**	**210.40**	**94.53**	**16.54**	**C0764-098-1250-S**	**0.802**	**20.37**	**36.82**	**163.78**	**82.20**	**14.38**
C0764-098-1375-M	**0.764**	**19.41**	**0.098**	**2.49**	**1.375**	**34.93**	**0.815**	**20.71**	**0.752**	**19.11**	**47.30**	**210.40**	**84.51**	**14.79**	**C0764-098-1375-S**	**0.874**	**22.20**	**36.82**	**163.78**	**73.48**	**12.86**
C0764-098-1500-M	**0.764**	**19.41**	**0.098**	**2.49**	**1.500**	**38.10**	**0.881**	**22.38**	**0.810**	**20.58**	**47.30**	**210.40**	**76.41**	**13.37**	**C0764-098-1500-S**	**0.946**	**24.02**	**36.82**	**163.78**	**66.44**	**11.63**
C0764-098-1625-M	**0.764**	**19.41**	**0.098**	**2.49**	**1.625**	**41.28**	**0.947**	**24.04**	**0.868**	**22.05**	**47.30**	**210.40**	**69.72**	**12.20**	**C0764-098-1625-S**	**1.018**	**25.85**	**36.82**	**163.78**	**60.63**	**10.61**
C0764-098-1750-M	**0.764**	**19.41**	**0.098**	**2.49**	**1.750**	**44.45**	**1.012**	**25.71**	**0.926**	**23.52**	**47.30**	**210.40**	**64.11**	**11.22**	**C0764-098-1750-S**	**1.090**	**27.68**	**36.82**	**163.78**	**55.75**	**9.76**
C0764-098-1875-M	**0.764**	**19.41**	**0.098**	**2.49**	**1.875**	**47.63**	**1.078**	**27.38**	**0.984**	**25.00**	**47.30**	**210.40**	**59.34**	**10.38**	**C0764-098-1875-S**	**1.161**	**29.50**	**36.82**	**163.78**	**51.60**	**9.03**
C0764-098-2000-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.000**	**50.80**	**1.144**	**29.05**	**1.042**	**26.47**	**47.30**	**210.40**	**55.23**	**9.67**	**C0764-098-2000-S**	**1.233**	**31.33**	**36.82**	**163.78**	**48.03**	**8.40**
C0764-098-2125-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.125**	**53.98**	**1.209**	**30.71**	**1.100**	**27.94**	**47.30**	**210.40**	**51.65**	**9.04**	**C0764-098-2125-S**	**1.305**	**33.15**	**36.82**	**163.78**	**44.91**	**7.86**
C0764-098-2250-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.250**	**57.15**	**1.275**	**32.38**	**1.158**	**29.41**	**47.30**	**210.40**	**48.51**	**8.49**	**C0764-098-2250-S**	**1.377**	**34.98**	**36.82**	**163.78**	**42.18**	**7.38**
C0764-098-2375-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.375**	**60.33**	**1.341**	**34.05**	**1.216**	**30.88**	**47.30**	**210.40**	**45.72**	**8.00**	**C0764-098-2375-S**	**1.449**	**36.80**	**36.82**	**163.78**	**39.76**	**6.96**
C0764-098-2500-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.500**	**63.50**	**1.406**	**35.72**	**1.274**	**32.36**	**47.30**	**210.40**	**43.24**	**7.57**	**C0764-098-2500-S**	**1.521**	**38.63**	**36.82**	**163.78**	**37.60**	**6.58**
C0764-098-2625-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.625**	**66.68**	**1.472**	**37.39**	**1.332**	**33.83**	**47.30**	**210.40**	**41.02**	**7.18**	**C0764-098-2625-S**	**1.593**	**40.46**	**36.82**	**163.78**	**35.67**	**6.24**
C0764-098-2750-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.750**	**69.85**	**1.538**	**39.05**	**1.390**	**35.30**	**47.30**	**210.40**	**39.01**	**6.83**	**C0764-098-2750-S**	**1.665**	**42.28**	**36.82**	**163.78**	**33.92**	**5.94**
C0764-098-2875-M	**0.764**	**19.41**	**0.098**	**2.49**	**2.875**	**73.03**	**1.603**	**40.72**	**1.448**	**36.77**	**47.30**	**210.40**	**37.19**	**6.51**	**C0764-098-2875-S**	**1.736**	**44.11**	**36.82**	**163.78**	**32.34**	**5.66**
C0764-098-3000-M	**0.764**	**19.41**	**0.098**	**2.49**	**3.000**	**76.20**	**1.669**	**42.39**	**1.506**	**38.24**	**47.30**	**210.40**	**35.53**	**6.22**	**C0764-098-3000-S**	**1.808**	**45.93**	**36.82**	**163.78**	**30.90**	**5.41**
C0764-098-3250-M	**0.764**	**19.41**	**0.098**	**2.49**	**3.250**	**82.55**	**1.800**	**45.72**	**1.622**	**41.19**	**47.30**	**210.40**	**32.62**	**5.71**	**C0764-098-3250-S**	**1.952**	**49.58**	**36.82**	**163.78**	**28.37**	**4.96**
C0764-098-3500-M	**0.764**	**19.41**	**0.098**	**2.49**	**3.500**	**88.90**	**1.931**	**49.06**	**1.737**	**44.13**	**47.30**	**210.40**	**30.16**	**5.28**	**C0764-098-3500-S**	**2.096**	**53.24**	**36.82**	**163.78**	**26.22**	**4.59**
C0764-098-3750-M	**0.764**	**19.41**	**0.098**	**2.49**	**3.750**	**95.25**	**2.063**	**52.39**	**1.853**	**47.07**	**47.30**	**210.40**	**28.03**	**4.91**	**C0764-098-3750-S**	**2.240**	**56.89**	**36.82**	**163.78**	**24.38**	**4.27**
C0764-098-4000-M	**0.764**	**19.41**	**0.098**	**2.49**	**4.000**	**101.60**	**2.194**	**55.73**	**1.969**	**50.02**	**47.30**	**210.40**	**26.19**	**4.58**	**C0764-098-4000-S**	**2.383**	**60.54**	**36.82**	**163.78**	**22.78**	**3.99**
C0764-098-4250-M	**0.764**	**19.41**	**0.098**	**2.49**	**4.250**	**107.95**	**2.325**	**59.07**	**2.085**	**52.96**	**47.30**	**210.40**	**24.58**	**4.30**	**C0764-098-4250-S**	**2.527**	**64.19**	**36.82**	**163.78**	**21.37**	**3.74**
C0764-098-4500-M	**0.764**	**19.41**	**0.098**	**2.49**	**4.500**	**114.30**	**2.457**	**62.40**	**2.201**	**55.90**	**47.30**	**210.40**	**23.15**	**4.05**	**C0764-098-4500-S**	**2.671**	**67.84**	**36.82**	**163.78**	**20.13**	**3.52**
C0764-098-4750-M	**0.764**	**19.41**	**0.098**	**2.49**	**4.750**	**120.65**	**2.588**	**65.74**	**2.317**	**58.85**	**47.30**	**210.40**	**21.88**	**3.83**	**C0764-098-4750-S**	**2.815**	**71.49**	**36.82**	**163.78**	**19.02**	**3.33**
C0764-098-5000-M	**0.764**	**19.41**	**0.098**	**2.49**	**5.000**	**127.00**	**2.719**	**69.07**	**2.433**	**61.79**	**47.30**	**210.40**	**20.74**	**3.63**	**C0764-098-5000-S**	**2.958**	**75.14**	**36.82**	**163.78**	**18.03**	**3.16**
C0764-098-5250-M	**0.764**	**19.41**	**0.098**	**2.49**	**5.250**	**133.35**	**2.851**	**72.41**	**2.549**	**64.74**	**47.30**	**210.40**	**19.71**	**3.45**	**C0764-098-5250-S**	**3.102**	**78.80**	**36.82**	**163.78**	**17.14**	**3.00**
C0764-098-5500-M	**0.764**	**19.41**	**0.098**	**2.49**	**5.500**	**139.70**	**2.982**	**75.74**	**2.665**	**67.68**	**47.30**	**210.40**	**18.78**	**3.29**	**C0764-098-5500-S**	**3.246**	**82.45**	**36.82**	**163.78**	**16.33**	**2.86**
C0764-098-5750-M	**0.764**	**19.41**	**0.098**	**2.49**	**5.750**	**146.05**	**3.113**	**79.08**	**2.780**	**70.62**	**47.30**	**210.40**	**17.94**	**3.14**	**C0764-098-5750-S**	**3.390**	**86.10**	**36.82**	**163.78**	**15.60**	**2.73**
C0764-098-6000-M	**0.764**	**19.41**	**0.098**	**2.49**	**6.000**	**152.40**	**3.245**	**82.41**	**2.896**	**73.57**	**47.30**	**210.40**	**17.17**	**3.00**	**C0764-098-6000-S**	**3.533**	**89.75**	**36.82**	**163.78**	**14.93**	**2.61**
C0764-098-6250-M	**0.764**	**19.41**	**0.098**	**2.49**	**6.250**	**158.75**	**3.376**	**85.75**	**3.012**	**76.51**	**47.30**	**210.40**	**16.46**	**2.88**	**C0764-098-6250-S**	**3.677**	**93.40**	**36.82**	**163.78**	**14.31**	**2.50**
C0764-098-6500-M	**0.764**	**19.41**	**0.098**	**2.49**	**6.500**	**165.10**	**3.507**	**89.08**	**3.128**	**79.45**	**47.30**	**210.40**	**15.81**	**2.77**	**C0764-098-6500-S**	**3.821**	**97.05**	**36.82**	**163.78**	**13.74**	**2.41**
C0764-098-6750-M	**0.764**	**19.41**	**0.098**	**2.49**	**6.750**	**171.45**	**3.639**	**92.42**	**3.244**	**82.40**	**47.30**	**210.40**	**15.20**	**2.66**	**C0764-098-6750-S**	**3.965**	**100.70**	**36.82**	**163.78**	**13.22**	**2.31**
C0764-098-7000-M	**0.764**	**19.41**	**0.098**	**2.49**	**7.000**	**177.80**	**3.770**	**95.76**	**3.360**	**85.34**	**47.30**	**210.40**	**14.64**	**2.56**	**C0764-098-7000-S**	**4.108**	**104.36**	**36.82**	**163.78**	**12.73**	**2.23**
C0764-098-7500-M	**0.764**	**19.41**	**0.098**	**2.49**	**7.500**	**190.50**	**4.033**	**102.43**	**3.592**	**91.23**	**47.30**	**210.40**	**13.64**	**2.39**	**C0764-098-7500-S**	**4.396**	**111.66**	**36.82**	**163.78**	**11.86**	**2.08**
C0764-098-8000-M	**0.764**	**19.41**	**0.098**	**2.49**	**8.000**	**203.20**	**4.295**	**109.10**	**3.823**	**97.11**	**47.30**	**210.40**	**12.77**	**2.23**	**C0764-098-8000-S**	**4.684**	**118.96**	**36.82**	**163.78**	**11.10**	**1.94**
C0764-098-8500-M	**0.764**	**19.41**	**0.098**	**2.49**	**8.500**	**215.90**	**4.558**	**115.77**	**4.055**	**103.00**	**47.30**	**210.40**	**12.00**	**2.10**	**C0764-098-8500-S**	**4.971**	**126.26**	**36.82**	**163.78**	**10.43**	**1.83**
C0764-098-9000-M	**0.764**	**19.41**	**0.098**	**2.49**	**9.000**	**228.60**	**4.820**	**122.44**	**4.287**	**108.89**	**47.30**	**210.40**	**11.32**	**1.98**	**C0764-098-9000-S**	**5.259**	**133.57**	**36.82**	**163.78**	**9.84**	**1.72**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0764-098-9500-M	**0.764**	**19.41**	**0.098**	**2.49**	**9.500**	**241.30**	**5.083**	**129.11**	**4.519**	**114.78**	**47.30**	**210.40**	**10.71**	**1.87**	**C0764-098-9500-S**	**5.546**	**140.87**	**36.82**	**163.78**	**9.31**	**1.63**
C0764-105-1125-M	**0.764**	**19.41**	**0.105**	**2.67**	**1.125**	**28.58**	**0.727**	**18.46**	**0.689**	**17.51**	**57.14**	**254.19**	**143.53**	**25.12**	**C0764-105-1125-S**	**0.770**	**19.57**	**44.27**	**196.92**	**124.81**	**21.84**
C0764-105-1250-M	**0.764**	**19.41**	**0.105**	**2.67**	**1.250**	**31.75**	**0.797**	**20.26**	**0.754**	**19.14**	**57.14**	**254.19**	**126.28**	**22.10**	**C0764-105-1250-S**	**0.847**	**21.51**	**44.27**	**196.92**	**109.81**	**19.22**
C0764-105-1375-M	**0.764**	**19.41**	**0.105**	**2.67**	**1.375**	**34.93**	**0.868**	**22.05**	**0.818**	**20.77**	**57.14**	**254.19**	**112.73**	**19.73**	**C0764-105-1375-S**	**0.923**	**23.45**	**44.27**	**196.92**	**98.03**	**17.15**
C0764-105-1500-M	**0.764**	**19.41**	**0.105**	**2.67**	**1.500**	**38.10**	**0.939**	**23.84**	**0.882**	**22.39**	**57.14**	**254.19**	**101.81**	**17.82**	**C0764-105-1500-S**	**1.000**	**25.40**	**44.27**	**196.92**	**88.53**	**15.49**
C0764-105-1625-M	**0.764**	**19.41**	**0.105**	**2.67**	**1.625**	**41.28**	**1.009**	**25.64**	**0.946**	**24.02**	**57.14**	**254.19**	**92.82**	**16.24**	**C0764-105-1625-S**	**1.076**	**27.34**	**44.27**	**196.92**	**80.71**	**14.12**
C0764-105-1750-M	**0.764**	**19.41**	**0.105**	**2.67**	**1.750**	**44.45**	**1.080**	**27.43**	**1.010**	**25.65**	**57.14**	**254.19**	**85.28**	**14.92**	**C0764-105-1750-S**	**1.153**	**29.29**	**44.27**	**196.92**	**74.16**	**12.98**
C0764-105-1875-M	**0.764**	**19.41**	**0.105**	**2.67**	**1.875**	**47.63**	**1.151**	**29.22**	**1.074**	**27.28**	**57.14**	**254.19**	**78.88**	**13.80**	**C0764-105-1875-S**	**1.230**	**31.23**	**44.27**	**196.92**	**68.59**	**12.00**
C0764-105-2000-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.000**	**50.80**	**1.221**	**31.02**	**1.138**	**28.90**	**57.14**	**254.19**	**73.37**	**12.84**	**C0764-105-2000-S**	**1.306**	**33.18**	**44.27**	**196.92**	**63.80**	**11.17**
C0764-105-2125-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.125**	**53.98**	**1.292**	**32.81**	**1.202**	**30.53**	**57.14**	**254.19**	**68.58**	**12.00**	**C0764-105-2125-S**	**1.383**	**35.12**	**44.27**	**196.92**	**59.64**	**10.44**
C0764-105-2250-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.250**	**57.15**	**1.362**	**34.60**	**1.266**	**32.16**	**57.14**	**254.19**	**64.38**	**11.27**	**C0764-105-2250-S**	**1.459**	**37.06**	**44.27**	**196.92**	**55.98**	**9.80**
C0764-105-2375-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.375**	**60.33**	**1.433**	**36.40**	**1.330**	**33.78**	**57.14**	**254.19**	**60.66**	**10.62**	**C0764-105-2375-S**	**1.536**	**39.01**	**44.27**	**196.92**	**52.75**	**9.23**
C0764-105-2500-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.500**	**63.50**	**1.504**	**38.19**	**1.394**	**35.41**	**57.14**	**254.19**	**57.35**	**10.04**	**C0764-105-2500-S**	**1.612**	**40.95**	**44.27**	**196.92**	**49.87**	**8.73**
C0764-105-2625-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.625**	**66.68**	**1.574**	**39.99**	**1.458**	**37.04**	**57.14**	**254.19**	**54.38**	**9.52**	**C0764-105-2625-S**	**1.689**	**42.90**	**44.27**	**196.92**	**47.29**	**8.28**
C0764-105-2750-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.750**	**69.85**	**1.645**	**41.78**	**1.522**	**38.67**	**57.14**	**254.19**	**51.71**	**9.05**	**C0764-105-2750-S**	**1.765**	**44.84**	**44.27**	**196.92**	**44.96**	**7.87**
C0764-105-2875-M	**0.764**	**19.41**	**0.105**	**2.67**	**2.875**	**73.03**	**1.715**	**43.57**	**1.586**	**40.29**	**57.14**	**254.19**	**49.28**	**8.62**	**C0764-105-2875-S**	**1.842**	**46.79**	**44.27**	**196.92**	**42.85**	**7.50**
C0764-105-3000-M	**0.764**	**19.41**	**0.105**	**2.67**	**3.000**	**76.20**	**1.786**	**45.37**	**1.650**	**41.92**	**57.14**	**254.19**	**47.07**	**8.24**	**C0764-105-3000-S**	**1.918**	**48.73**	**44.27**	**196.92**	**40.93**	**7.16**
C0764-105-3250-M	**0.764**	**19.41**	**0.105**	**2.67**	**3.250**	**82.55**	**1.927**	**48.95**	**1.779**	**45.18**	**57.14**	**254.19**	**43.20**	**7.56**	**C0764-105-3250-S**	**2.072**	**52.62**	**44.27**	**196.92**	**37.57**	**6.57**
C0764-105-3500-M	**0.764**	**19.41**	**0.105**	**2.67**	**3.500**	**88.90**	**2.069**	**52.54**	**1.907**	**48.43**	**57.14**	**254.19**	**39.92**	**6.99**	**C0764-105-3500-S**	**2.225**	**56.51**	**44.27**	**196.92**	**34.71**	**6.07**
C0764-105-3750-M	**0.764**	**19.41**	**0.105**	**2.67**	**3.750**	**95.25**	**2.210**	**56.13**	**2.035**	**51.68**	**57.14**	**254.19**	**37.10**	**6.49**	**C0764-105-3750-S**	**2.378**	**60.39**	**44.27**	**196.92**	**32.26**	**5.65**
C0764-105-4000-M	**0.764**	**19.41**	**0.105**	**2.67**	**4.000**	**101.60**	**2.351**	**59.71**	**2.163**	**54.94**	**57.14**	**254.19**	**34.65**	**6.06**	**C0764-105-4000-S**	**2.531**	**64.28**	**44.27**	**196.92**	**30.13**	**5.27**
C0764-105-4250-M	**0.764**	**19.41**	**0.105**	**2.67**	**4.250**	**107.95**	**2.492**	**63.30**	**2.291**	**58.19**	**57.14**	**254.19**	**32.51**	**5.69**	**C0764-105-4250-S**	**2.684**	**68.17**	**44.27**	**196.92**	**28.27**	**4.95**
C0764-105-4500-M	**0.764**	**19.41**	**0.105**	**2.67**	**4.500**	**114.30**	**2.633**	**66.89**	**2.419**	**61.45**	**57.14**	**254.19**	**30.61**	**5.36**	**C0764-105-4500-S**	**2.837**	**72.06**	**44.27**	**196.92**	**26.62**	**4.66**
C0764-105-4750-M	**0.764**	**19.41**	**0.105**	**2.67**	**4.750**	**120.65**	**2.775**	**70.48**	**2.547**	**64.70**	**57.14**	**254.19**	**28.93**	**5.06**	**C0764-105-4750-S**	**2.990**	**75.95**	**44.27**	**196.92**	**25.16**	**4.40**
C0764-105-5000-M	**0.764**	**19.41**	**0.105**	**2.67**	**5.000**	**127.00**	**2.916**	**74.06**	**2.675**	**67.96**	**57.14**	**254.19**	**27.42**	**4.80**	**C0764-105-5000-S**	**3.143**	**79.84**	**44.27**	**196.92**	**23.84**	**4.17**
C0764-105-5250-M	**0.764**	**19.41**	**0.105**	**2.67**	**5.250**	**133.35**	**3.057**	**77.65**	**2.804**	**71.21**	**57.14**	**254.19**	**26.06**	**4.56**	**C0764-105-5250-S**	**3.296**	**83.73**	**44.27**	**196.92**	**22.66**	**3.97**
C0764-105-5500-M	**0.764**	**19.41**	**0.105**	**2.67**	**5.500**	**139.70**	**3.198**	**81.24**	**2.932**	**74.47**	**57.14**	**254.19**	**24.83**	**4.34**	**C0764-105-5500-S**	**3.449**	**87.61**	**44.27**	**196.92**	**21.59**	**3.78**
C0764-105-5750-M	**0.764**	**19.41**	**0.105**	**2.67**	**5.750**	**146.05**	**3.340**	**84.82**	**3.060**	**77.72**	**57.14**	**254.19**	**23.71**	**4.15**	**C0764-105-5750-S**	**3.602**	**91.50**	**44.27**	**196.92**	**20.61**	**3.61**
C0764-105-6000-M	**0.764**	**19.41**	**0.105**	**2.67**	**6.000**	**152.40**	**3.481**	**88.41**	**3.188**	**80.98**	**57.14**	**254.19**	**22.68**	**3.97**	**C0764-105-6000-S**	**3.756**	**95.39**	**44.27**	**196.92**	**19.72**	**3.45**
C0764-105-6250-M	**0.764**	**19.41**	**0.105**	**2.67**	**6.250**	**158.75**	**3.622**	**92.00**	**3.316**	**84.23**	**57.14**	**254.19**	**21.74**	**3.81**	**C0764-105-6250-S**	**3.909**	**99.28**	**44.27**	**196.92**	**18.91**	**3.31**
C0764-105-6500-M	**0.764**	**19.41**	**0.105**	**2.67**	**6.500**	**165.10**	**3.763**	**95.59**	**3.444**	**87.48**	**57.14**	**254.19**	**20.88**	**3.65**	**C0764-105-6500-S**	**4.062**	**103.17**	**44.27**	**196.92**	**18.16**	**3.18**
C0764-105-6750-M	**0.764**	**19.41**	**0.105**	**2.67**	**6.750**	**171.45**	**3.904**	**99.17**	**3.572**	**90.74**	**57.14**	**254.19**	**20.08**	**3.51**	**C0764-105-6750-S**	**4.215**	**107.06**	**44.27**	**196.92**	**17.46**	**3.06**
C0764-105-7000-M	**0.764**	**19.41**	**0.105**	**2.67**	**7.000**	**177.80**	**4.046**	**102.76**	**3.701**	**93.99**	**57.14**	**254.19**	**19.34**	**3.38**	**C0764-105-7000-S**	**4.368**	**110.94**	**44.27**	**196.92**	**16.82**	**2.94**
C0764-105-7500-M	**0.764**	**19.41**	**0.105**	**2.67**	**7.500**	**190.50**	**4.328**	**109.93**	**3.957**	**100.50**	**57.14**	**254.19**	**18.02**	**3.15**	**C0764-105-7500-S**	**4.674**	**118.72**	**44.27**	**196.92**	**15.67**	**2.74**
C0764-105-8000-M	**0.764**	**19.41**	**0.105**	**2.67**	**8.000**	**203.20**	**4.611**	**117.11**	**4.213**	**107.01**	**57.14**	**254.19**	**16.86**	**2.95**	**C0764-105-8000-S**	**4.980**	**126.50**	**44.27**	**196.92**	**14.66**	**2.57**
C0764-105-8500-M	**0.764**	**19.41**	**0.105**	**2.67**	**8.500**	**215.90**	**4.893**	**124.28**	**4.469**	**113.52**	**57.14**	**254.19**	**15.84**	**2.77**	**C0764-105-8500-S**	**5.286**	**134.28**	**44.27**	**196.92**	**13.78**	**2.41**
C0764-105-9000-M	**0.764**	**19.41**	**0.105**	**2.67**	**9.000**	**228.60**	**5.175**	**131.46**	**4.726**	**120.03**	**57.14**	**254.19**	**14.94**	**2.61**	**C0764-105-9000-S**	**5.593**	**142.05**	**44.27**	**196.92**	**12.99**	**2.27**
C0764-105-9500-M	**0.764**	**19.41**	**0.105**	**2.67**	**9.500**	**241.30**	**5.458**	**138.63**	**4.982**	**126.54**	**57.14**	**254.19**	**14.14**	**2.47**	**C0764-105-9500-S**	**5.899**	**149.83**	**44.27**	**196.92**	**12.29**	**2.15**
C0764-112-1125-M	**0.764**	**19.41**	**0.112**	**2.85**	**1.125**	**28.58**	**0.767**	**19.48**	**0.739**	**18.77**	**68.15**	**303.16**	**190.44**	**33.33**	**C0764-112-1125-S**	**0.808**	**20.52**	**52.54**	**233.71**	**165.60**	**28.98**
C0764-112-1250-M	**0.764**	**19.41**	**0.112**	**2.85**	**1.250**	**31.75**	**0.842**	**21.40**	**0.809**	**20.55**	**68.15**	**303.16**	**167.24**	**29.27**	**C0764-112-1250-S**	**0.889**	**22.57**	**52.54**	**233.71**	**145.42**	**25.45**
C0764-112-1375-M	**0.764**	**19.41**	**0.112**	**2.85**	**1.375**	**34.93**	**0.918**	**23.31**	**0.879**	**22.33**	**68.15**	**303.16**	**149.07**	**26.09**	**C0764-112-1375-S**	**0.970**	**24.63**	**52.54**	**233.71**	**129.63**	**22.68**
C0764-112-1500-M	**0.764**	**19.41**	**0.112**	**2.85**	**1.500**	**38.10**	**0.993**	**25.23**	**0.949**	**24.10**	**68.15**	**303.16**	**134.47**	**23.53**	**C0764-112-1500-S**	**1.051**	**26.69**	**52.54**	**233.71**	**116.93**	**20.46**
C0764-112-1625-M	**0.764**	**19.41**	**0.112**	**2.85**	**1.625**	**41.28**	**1.069**	**27.14**	**1.019**	**25.88**	**68.15**	**303.16**	**122.47**	**21.43**	**C0764-112-1625-S**	**1.132**	**28.74**	**52.54**	**233.71**	**106.50**	**18.64**
C0764-112-1750-M	**0.764**	**19.41**	**0.112**	**2.85**	**1.750**	**44.45**	**1.144**	**29.05**	**1.089**	**27.65**	**68.15**	**303.16**	**112.44**	**19.68**	**C0764-112-1750-S**	**1.213**	**30.80**	**52.54**	**233.71**	**97.77**	**17.11**
C0764-112-1875-M	**0.764**	**19.41**	**0.112**	**2.85**	**1.875**	**47.63**	**1.219**	**30.97**	**1.159**	**29.43**	**68.15**	**303.16**	**103.93**	**18.19**	**C0764-112-1875-S**	**1.294**	**32.86**	**52.54**	**233.71**	**90.37**	**15.81**
C0764-112-2000-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.000**	**50.80**	**1.295**	**32.88**	**1.229**	**31.21**	**68.15**	**303.16**	**96.61**	**16.91**	**C0764-112-2000-S**	**1.375**	**34.91**	**52.54**	**233.71**	**84.01**	**14.70**
C0764-112-2125-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.125**	**53.98**	**1.370**	**34.80**	**1.298**	**32.98**	**68.15**	**303.16**	**90.26**	**15.80**	**C0764-112-2125-S**	**1.456**	**36.97**	**52.54**	**233.71**	**78.49**	**13.74**
C0764-112-2250-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.250**	**57.15**	**1.445**	**36.71**	**1.368**	**34.76**	**68.15**	**303.16**	**84.69**	**14.82**	**C0764-112-2250-S**	**1.537**	**39.03**	**52.54**	**233.71**	**73.64**	**12.89**
C0764-112-2375-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.375**	**60.33**	**1.521**	**38.62**	**1.438**	**36.53**	**68.15**	**303.16**	**79.77**	**13.96**	**C0764-112-2375-S**	**1.618**	**41.09**	**52.54**	**233.71**	**69.36**	**12.14**
C0764-112-2500-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.500**	**63.50**	**1.596**	**40.54**	**1.508**	**38.31**	**68.15**	**303.16**	**75.39**	**13.19**	**C0764-112-2500-S**	**1.699**	**43.14**	**52.54**	**233.71**	**65.56**	**11.47**
C0764-112-2625-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.625**	**66.68**	**1.671**	**42.45**	**1.578**	**40.09**	**68.15**	**303.16**	**71.46**	**12.51**	**C0764-112-2625-S**	**1.780**	**45.20**	**52.54**	**233.71**	**62.14**	**10.87**
C0764-112-2750-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.750**	**69.85**	**1.747**	**44.37**	**1.648**	**41.86**	**68.15**	**303.16**	**67.93**	**11.89**	**C0764-112-2750-S**	**1.860**	**47.26**	**52.54**	**233.71**	**59.07**	**10.34**
C0764-112-2875-M	**0.764**	**19.41**	**0.112**	**2.85**	**2.875**	**73.03**	**1.822**	**46.28**	**1.718**	**43.64**	**68.15**	**303.16**	**64.72**	**11.33**	**C0764-112-2875-S**	**1.941**	**49.31**	**52.54**	**233.71**	**56.28**	**9.85**
C0764-112-3000-M	**0.764**	**19.41**	**0.112**	**2.85**	**3.000**	**76.20**	**1.897**	**48.19**	**1.788**	**45.41**	**68.15**	**303.16**	**61.81**	**10.82**	**C0764-112-3000-S**	**2.022**	**51.37**	**52.54**	**233.71**	**53.75**	**9.41**
C0764-112-3250-M	**0.764**	**19.41**	**0.112**	**2.85**	**3.250**	**82.55**	**2.048**	**52.02**	**1.928**	**48.96**	**68.15**	**303.16**	**56.70**	**9.92**	**C0764-112-3250-S**	**2.184**	**55.48**	**52.54**	**233.71**	**49.31**	**8.63**
C0764-112-3500-M	**0.764**	**19.41**	**0.112**	**2.85**	**3.500**	**88.90**	**2.199**	**55.85**	**2.068**	**52.52**	**68.15**	**303.16**	**52.38**	**9.17**	**C0764-112-3500-S**	**2.346**	**59.60**	**52.54**	**233.71**	**45.54**	**7.97**
C0764-112-3750-M	**0.764**	**19.41**	**0.112**	**2.85**	**3.750**	**95.25**	**2.349**	**59.68**	**2.207**	**56.07**	**68.15**	**303.16**	**48.66**	**8.52**	**C0764-112-3750-S**	**2.508**	**63.71**	**52.54**	**233.71**	**42.32**	**7.41**
C0764-112-4000-M	**0.764**	**19.41**	**0.112**	**2.85**	**4.000**	**101.60**	**2.500**	**63.50**	**2.347**	**59.62**	**68.15**	**303.16**	**45.44**	**7.95**	**C0764-112-4000-S**	**2.670**	**67.83**	**52.54**	**233.71**	**39.51**	**6.91**
C0764-112-4250-M	**0.764**	**19.41**	**0.112**	**2.85**	**4.250**	**107.95**	**2.651**	**67.33**	**2.487**	**63.17**	**68.15**	**303.16**	**42.62**	**7.46**	**C0764-112-4250-S**	**2.832**	**71.94**	**52.54**	**233.71**	**37.06**	**6.49**
C0764-112-4500-M	**0.764**	**19.41**	**0.112**	**2.85**	**4.500**	**114.30**	**2.802**	**71.16**	**2.627**	**66.72**	**68.15**	**303.16**	**40.13**	**7.02**	**C0764-112-4500-S**	**2.994**	**76.05**	**52.54**	**233.71**	**34.89**	**6.11**
C0764-112-4750-M	**0.764**	**19.41**	**0.112**	**2.85**	**4.750**	**120.65**	**2.952**	**74.99**	**2.767**	**70.28**	**68.15**	**303.16**	**37.91**	**6.63**	**C0764-112-4750-S**	**3.156**	**80.17**	**52.54**	**233.71**	**32.97**	**5.77**
C0764-112-5000-M	**0.764**	**19.41**	**0.112**	**2.85**	**5.000**	**127.00**	**3.103**	**78.81**	**2.907**	**73.83**	**68.15**	**303.16**	**35.93**	**6.29**	**C0764-112-5000-S**	**3.318**	**84.28**	**52.54**	**233.71**	**31.24**	**5.47**
C0764-112-5250-M	**0.764**	**19.41**	**0.112**	**2.85**	**5.250**	**133.35**	**3.254**	**82.64**	**3.046**	**77.38**	**68.15**	**303.16**	**34.14**	**5.97**	**C0764-112-5250-S**	**3.480**	**88.40**	**52.54**	**233.71**	**29.69**	**5.20**
C0764-112-5500-M	**0.764**	**19.41**	**0.112**	**2.85**	**5.500**	**139.70**	**3.404**	**86.47**	**3.186**	**80.93**	**68.15**	**303.16**	**32.52**	**5.69**	**C0764-112-5500-S**	**3.642**	**92.51**	**52.54**	**233.71**	**28.28**	**4.95**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0764-112-5750-M	**0.764**	**19.41**	**0.112**	**2.85**	**5.750**	**146.05**	**3.555**	**90.30**	**3.326**	**84.48**	**68.15**	**303.16**	**31.05**	**5.43**	**C0764-112-5750-S**	**3.804**	**96.62**	**52.54**	**233.71**	**27.00**	**4.73**
C0764-112-6000-M	**0.764**	**19.41**	**0.112**	**2.85**	**6.000**	**152.40**	**3.706**	**94.13**	**3.466**	**88.03**	**68.15**	**303.16**	**29.71**	**5.20**	**C0764-112-6000-S**	**3.966**	**100.74**	**52.54**	**233.71**	**25.83**	**4.52**
C0764-112-6250-M	**0.764**	**19.41**	**0.112**	**2.85**	**6.250**	**158.75**	**3.856**	**97.95**	**3.606**	**91.59**	**68.15**	**303.16**	**28.47**	**4.98**	**C0764-112-6250-S**	**4.128**	**104.85**	**52.54**	**233.71**	**24.76**	**4.33**
C0764-112-6500-M	**0.764**	**19.41**	**0.112**	**2.85**	**6.500**	**165.10**	**4.007**	**101.78**	**3.746**	**95.14**	**68.15**	**303.16**	**27.34**	**4.78**	**C0764-112-6500-S**	**4.290**	**108.96**	**52.54**	**233.71**	**23.77**	**4.16**
C0764-112-6750-M	**0.764**	**19.41**	**0.112**	**2.85**	**6.750**	**171.45**	**4.158**	**105.61**	**3.885**	**98.69**	**68.15**	**303.16**	**26.29**	**4.60**	**C0764-112-6750-S**	**4.452**	**113.08**	**52.54**	**233.71**	**22.86**	**4.00**
C0764-112-7000-M	**0.764**	**19.41**	**0.112**	**2.85**	**7.000**	**177.80**	**4.309**	**109.44**	**4.025**	**102.24**	**68.15**	**303.16**	**25.32**	**4.43**	**C0764-112-7000-S**	**4.614**	**117.19**	**52.54**	**233.71**	**22.02**	**3.85**
C0764-112-7500-M	**0.764**	**19.41**	**0.112**	**2.85**	**7.500**	**190.50**	**4.610**	**117.09**	**4.305**	**109.34**	**68.15**	**303.16**	**23.58**	**4.13**	**C0764-112-7500-S**	**4.938**	**125.42**	**52.54**	**233.71**	**20.51**	**3.59**
C0764-112-8000-M	**0.764**	**19.41**	**0.112**	**2.85**	**8.000**	**203.20**	**4.911**	**124.75**	**4.585**	**116.45**	**68.15**	**303.16**	**22.07**	**3.86**	**C0764-112-8000-S**	**5.262**	**133.65**	**52.54**	**233.71**	**19.19**	**3.36**
C0764-112-8500-M	**0.764**	**19.41**	**0.112**	**2.85**	**8.500**	**215.90**	**5.213**	**132.40**	**4.864**	**123.55**	**68.15**	**303.16**	**20.73**	**3.63**	**C0764-112-8500-S**	**5.586**	**141.88**	**52.54**	**233.71**	**18.03**	**3.15**
C0764-112-9000-M	**0.764**	**19.41**	**0.112**	**2.85**	**9.000**	**228.60**	**5.514**	**140.06**	**5.144**	**130.66**	**68.15**	**303.16**	**19.55**	**3.42**	**C0764-112-9000-S**	**5.910**	**150.10**	**52.54**	**233.71**	**17.00**	**2.98**
C0764-112-9500-M	**0.764**	**19.41**	**0.112**	**2.85**	**9.500**	**241.30**	**5.816**	**147.71**	**5.424**	**137.76**	**68.15**	**303.16**	**18.50**	**3.24**	**C0764-112-9500-S**	**6.234**	**158.33**	**52.54**	**233.71**	**16.09**	**2.81**
C0764-125-1125-M	**0.764**	**19.41**	**0.125**	**3.18**	**1.125**	**28.58**	**0.834**	**21.19**	**0.822**	**20.88**	**91.82**	**408.43**	**315.61**	**55.23**	**C0764-125-1125-S**	**0.870**	**22.09**	**70.12**	**311.90**	**274.44**	**48.03**
C0764-125-1250-M	**0.764**	**19.41**	**0.125**	**3.18**	**1.250**	**31.75**	**0.918**	**23.30**	**0.902**	**22.91**	**91.82**	**408.43**	**276.16**	**48.33**	**C0764-125-1250-S**	**0.958**	**24.33**	**70.12**	**311.90**	**240.14**	**42.02**
C0764-125-1375-M	**0.764**	**19.41**	**0.125**	**3.18**	**1.375**	**34.93**	**1.001**	**25.42**	**0.982**	**24.93**	**91.82**	**408.43**	**245.47**	**42.96**	**C0764-125-1375-S**	**1.047**	**26.58**	**70.12**	**311.90**	**213.45**	**37.35**
C0764-125-1500-M	**0.764**	**19.41**	**0.125**	**3.18**	**1.500**	**38.10**	**1.084**	**27.54**	**1.062**	**26.96**	**91.82**	**408.43**	**220.93**	**38.66**	**C0764-125-1500-S**	**1.135**	**28.83**	**70.12**	**311.90**	**192.11**	**33.62**
C0764-125-1625-M	**0.764**	**19.41**	**0.125**	**3.18**	**1.625**	**41.28**	**1.168**	**29.66**	**1.142**	**28.99**	**91.82**	**408.43**	**200.84**	**35.15**	**C0764-125-1625-S**	**1.224**	**31.08**	**70.12**	**311.90**	**174.64**	**30.56**
C0764-125-1750-M	**0.764**	**19.41**	**0.125**	**3.18**	**1.750**	**44.45**	**1.251**	**31.78**	**1.221**	**31.02**	**91.82**	**408.43**	**184.10**	**32.22**	**C0764-125-1750-S**	**1.312**	**33.33**	**70.12**	**311.90**	**160.09**	**28.02**
C0764-125-1875-M	**0.764**	**19.41**	**0.125**	**3.18**	**1.875**	**47.63**	**1.335**	**33.90**	**1.301**	**33.05**	**91.82**	**408.43**	**169.94**	**29.74**	**C0764-125-1875-S**	**1.401**	**35.57**	**70.12**	**311.90**	**147.78**	**25.86**
C0764-125-2000-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.000**	**50.80**	**1.418**	**36.02**	**1.381**	**35.08**	**91.82**	**408.43**	**157.80**	**27.62**	**C0764-125-2000-S**	**1.489**	**37.82**	**70.12**	**311.90**	**137.22**	**24.01**
C0764-125-2125-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.125**	**53.98**	**1.502**	**38.14**	**1.461**	**37.11**	**91.82**	**408.43**	**147.28**	**25.77**	**C0764-125-2125-S**	**1.578**	**40.07**	**70.12**	**311.90**	**128.07**	**22.41**
C0764-125-2250-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.250**	**57.15**	**1.585**	**40.26**	**1.541**	**39.14**	**91.82**	**408.43**	**138.08**	**24.16**	**C0764-125-2250-S**	**1.666**	**42.32**	**70.12**	**311.90**	**120.07**	**21.01**
C0764-125-2375-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.375**	**60.33**	**1.668**	**42.38**	**1.621**	**41.17**	**91.82**	**408.43**	**129.96**	**22.74**	**C0764-125-2375-S**	**1.755**	**44.56**	**70.12**	**311.90**	**113.01**	**19.78**
C0764-125-2500-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.500**	**63.50**	**1.752**	**44.50**	**1.701**	**43.20**	**91.82**	**408.43**	**122.74**	**21.48**	**C0764-125-2500-S**	**1.843**	**46.81**	**70.12**	**311.90**	**106.73**	**18.68**
C0764-125-2625-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.625**	**66.68**	**1.835**	**46.62**	**1.781**	**45.23**	**91.82**	**408.43**	**116.28**	**20.35**	**C0764-125-2625-S**	**1.932**	**49.06**	**70.12**	**311.90**	**101.11**	**17.69**
C0764-125-2750-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.750**	**69.85**	**1.919**	**48.74**	**1.861**	**47.26**	**91.82**	**408.43**	**110.46**	**19.33**	**C0764-125-2750-S**	**2.020**	**51.31**	**70.12**	**311.90**	**96.05**	**16.81**
C0764-125-2875-M	**0.764**	**19.41**	**0.125**	**3.18**	**2.875**	**73.03**	**2.002**	**50.86**	**1.941**	**49.29**	**91.82**	**408.43**	**105.20**	**18.41**	**C0764-125-2875-S**	**2.109**	**53.56**	**70.12**	**311.90**	**91.48**	**16.01**
C0764-125-3000-M	**0.764**	**19.41**	**0.125**	**3.18**	**3.000**	**76.20**	**2.086**	**52.98**	**2.021**	**51.32**	**91.82**	**408.43**	**100.42**	**17.57**	**C0764-125-3000-S**	**2.197**	**55.80**	**70.12**	**311.90**	**87.32**	**15.28**
C0764-125-3250-M	**0.764**	**19.41**	**0.125**	**3.18**	**3.250**	**82.55**	**2.253**	**57.21**	**2.180**	**55.38**	**91.82**	**408.43**	**92.05**	**16.11**	**C0764-125-3250-S**	**2.374**	**60.30**	**70.12**	**311.90**	**80.05**	**14.01**
C0764-125-3500-M	**0.764**	**19.41**	**0.125**	**3.18**	**3.500**	**88.90**	**2.419**	**61.45**	**2.340**	**59.44**	**91.82**	**408.43**	**84.97**	**14.87**	**C0764-125-3500-S**	**2.551**	**64.80**	**70.12**	**311.90**	**73.89**	**12.93**
C0764-125-3750-M	**0.764**	**19.41**	**0.125**	**3.18**	**3.750**	**95.25**	**2.586**	**65.69**	**2.500**	**63.50**	**91.82**	**408.43**	**78.90**	**13.81**	**C0764-125-3750-S**	**2.728**	**69.29**	**70.12**	**311.90**	**68.61**	**12.01**
C0764-125-4000-M	**0.764**	**19.41**	**0.125**	**3.18**	**4.000**	**101.60**	**2.753**	**69.93**	**2.660**	**67.56**	**91.82**	**408.43**	**73.64**	**12.89**	**C0764-125-4000-S**	**2.905**	**73.79**	**70.12**	**311.90**	**64.04**	**11.21**
C0764-125-4250-M	**0.764**	**19.41**	**0.125**	**3.18**	**4.250**	**107.95**	**2.920**	**74.17**	**2.820**	**71.62**	**91.82**	**408.43**	**69.04**	**12.08**	**C0764-125-4250-S**	**3.082**	**78.28**	**70.12**	**311.90**	**60.03**	**10.51**
C0764-125-4500-M	**0.764**	**19.41**	**0.125**	**3.18**	**4.500**	**114.30**	**3.087**	**78.41**	**2.979**	**75.68**	**91.82**	**408.43**	**64.98**	**11.37**	**C0764-125-4500-S**	**3.259**	**82.78**	**70.12**	**311.90**	**56.50**	**9.89**
C0764-125-4750-M	**0.764**	**19.41**	**0.125**	**3.18**	**4.750**	**120.65**	**3.254**	**82.65**	**3.139**	**79.74**	**91.82**	**408.43**	**61.37**	**10.74**	**C0764-125-4750-S**	**3.436**	**87.28**	**70.12**	**311.90**	**53.36**	**9.34**
C0764-125-5000-M	**0.764**	**19.41**	**0.125**	**3.18**	**5.000**	**127.00**	**3.421**	**86.89**	**3.299**	**83.80**	**91.82**	**408.43**	**58.14**	**10.17**	**C0764-125-5000-S**	**3.613**	**91.77**	**70.12**	**311.90**	**50.56**	**8.85**
C0764-125-5250-M	**0.764**	**19.41**	**0.125**	**3.18**	**5.250**	**133.35**	**3.588**	**91.12**	**3.459**	**87.86**	**91.82**	**408.43**	**55.23**	**9.67**	**C0764-125-5250-S**	**3.790**	**96.27**	**70.12**	**311.90**	**48.03**	**8.40**
C0764-125-5500-M	**0.764**	**19.41**	**0.125**	**3.18**	**5.500**	**139.70**	**3.754**	**95.36**	**3.619**	**91.92**	**91.82**	**408.43**	**52.60**	**9.21**	**C0764-125-5500-S**	**3.967**	**100.76**	**70.12**	**311.90**	**45.74**	**8.00**
C0764-125-5750-M	**0.764**	**19.41**	**0.125**	**3.18**	**5.750**	**146.05**	**3.921**	**99.60**	**3.779**	**95.97**	**91.82**	**408.43**	**50.21**	**8.79**	**C0764-125-5750-S**	**4.144**	**105.26**	**70.12**	**311.90**	**43.66**	**7.64**
C0764-125-6000-M	**0.764**	**19.41**	**0.125**	**3.18**	**6.000**	**152.40**	**4.088**	**103.84**	**3.938**	**100.03**	**91.82**	**408.43**	**48.03**	**8.40**	**C0764-125-6000-S**	**4.321**	**109.76**	**70.12**	**311.90**	**41.76**	**7.31**
C0764-125-6250-M	**0.764**	**19.41**	**0.125**	**3.18**	**6.250**	**158.75**	**4.255**	**108.08**	**4.098**	**104.09**	**91.82**	**408.43**	**46.03**	**8.05**	**C0764-125-6250-S**	**4.498**	**114.25**	**70.12**	**311.90**	**40.02**	**7.00**
C0764-125-6500-M	**0.764**	**19.41**	**0.125**	**3.18**	**6.500**	**165.10**	**4.422**	**112.32**	**4.258**	**108.15**	**91.82**	**408.43**	**44.19**	**7.73**	**C0764-125-6500-S**	**4.675**	**118.75**	**70.12**	**311.90**	**38.42**	**6.72**
C0764-125-6750-M	**0.764**	**19.41**	**0.125**	**3.18**	**6.750**	**171.45**	**4.589**	**116.56**	**4.418**	**112.21**	**91.82**	**408.43**	**42.49**	**7.44**	**C0764-125-6750-S**	**4.852**	**123.24**	**70.12**	**311.90**	**36.94**	**6.47**
C0764-125-7000-M	**0.764**	**19.41**	**0.125**	**3.18**	**7.000**	**177.80**	**4.756**	**120.79**	**4.578**	**116.27**	**91.82**	**408.43**	**40.91**	**7.16**	**C0764-125-7000-S**	**5.029**	**127.74**	**70.12**	**311.90**	**35.58**	**6.23**
C0764-125-7500-M	**0.764**	**19.41**	**0.125**	**3.18**	**7.500**	**190.50**	**5.089**	**129.27**	**4.897**	**124.39**	**91.82**	**408.43**	**38.09**	**6.67**	**C0764-125-7500-S**	**5.383**	**136.73**	**70.12**	**311.90**	**33.12**	**5.80**
C0764-125-8000-M	**0.764**	**19.41**	**0.125**	**3.18**	**8.000**	**203.20**	**5.423**	**137.75**	**5.217**	**132.51**	**91.82**	**408.43**	**35.63**	**6.24**	**C0764-125-8000-S**	**5.737**	**145.72**	**70.12**	**311.90**	**30.99**	**5.42**
C0764-125-8500-M	**0.764**	**19.41**	**0.125**	**3.18**	**8.500**	**215.90**	**5.757**	**146.23**	**5.537**	**140.63**	**91.82**	**408.43**	**33.47**	**5.86**	**C0764-125-8500-S**	**6.091**	**154.71**	**70.12**	**311.90**	**29.11**	**5.09**
C0764-125-9000-M	**0.764**	**19.41**	**0.125**	**3.18**	**9.000**	**228.60**	**6.091**	**154.70**	**5.856**	**148.75**	**91.82**	**408.43**	**31.56**	**5.52**	**C0764-125-9000-S**	**6.445**	**163.71**	**70.12**	**311.90**	**27.44**	**4.80**
C0764-125-9500-M	**0.764**	**19.41**	**0.125**	**3.18**	**9.500**	**241.30**	**6.424**	**163.18**	**6.176**	**156.87**	**91.82**	**408.43**	**29.86**	**5.22**	**C0764-125-9500-S**	**6.799**	**172.70**	**70.12**	**311.90**	**25.96**	**4.54**
C0764-135-1125-M	**0.764**	**19.41**	**0.135**	**3.43**	**1.125**	**28.58**	**0.879**	**22.32**	**0.877**	**22.27**	**112.97**	**502.51**	**458.38**	**80.22**	**C0764-135-1125-S**	**0.910**	**23.12**	**85.62**	**380.87**	**398.60**	**69.75**
C0764-135-1250-M	**0.764**	**19.41**	**0.135**	**3.43**	**1.250**	**31.75**	**0.968**	**24.58**	**0.964**	**24.47**	**112.97**	**502.51**	**399.92**	**69.99**	**C0764-135-1250-S**	**1.004**	**25.50**	**85.62**	**380.87**	**347.75**	**60.86**
C0764-135-1375-M	**0.764**	**19.41**	**0.135**	**3.43**	**1.375**	**34.93**	**1.056**	**26.83**	**1.050**	**26.68**	**112.97**	**502.51**	**354.68**	**62.07**	**C0764-135-1375-S**	**1.097**	**27.87**	**85.62**	**380.87**	**308.42**	**53.97**
C0764-135-1500-M	**0.764**	**19.41**	**0.135**	**3.43**	**1.500**	**38.10**	**1.145**	**29.09**	**1.137**	**28.88**	**112.97**	**502.51**	**318.63**	**55.76**	**C0764-135-1500-S**	**1.191**	**30.25**	**85.62**	**380.87**	**277.07**	**48.49**
C0764-135-1625-M	**0.764**	**19.41**	**0.135**	**3.43**	**1.625**	**41.28**	**1.234**	**31.35**	**1.224**	**31.08**	**112.97**	**502.51**	**289.24**	**50.62**	**C0764-135-1625-S**	**1.285**	**32.63**	**85.62**	**380.87**	**251.51**	**44.01**
C0764-135-1750-M	**0.764**	**19.41**	**0.135**	**3.43**	**1.750**	**44.45**	**1.323**	**33.61**	**1.311**	**33.29**	**112.97**	**502.51**	**264.81**	**46.34**	**C0764-135-1750-S**	**1.378**	**35.01**	**85.62**	**380.87**	**230.27**	**40.30**
C0764-135-1875-M	**0.764**	**19.41**	**0.135**	**3.43**	**1.875**	**47.63**	**1.412**	**35.87**	**1.397**	**35.49**	**112.97**	**502.51**	**244.19**	**42.73**	**C0764-135-1875-S**	**1.472**	**37.38**	**85.62**	**380.87**	**212.34**	**37.16**
C0764-135-2000-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.000**	**50.80**	**1.501**	**38.13**	**1.484**	**37.69**	**112.97**	**502.51**	**226.54**	**39.65**	**C0764-135-2000-S**	**1.565**	**39.76**	**85.62**	**380.87**	**196.99**	**34.47**
C0764-135-2125-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.125**	**53.98**	**1.590**	**40.39**	**1.571**	**39.90**	**112.97**	**502.51**	**211.28**	**36.97**	**C0764-135-2125-S**	**1.659**	**42.14**	**85.62**	**380.87**	**183.72**	**32.15**
C0764-135-2250-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.250**	**57.15**	**1.679**	**42.65**	**1.657**	**42.10**	**112.97**	**502.51**	**197.94**	**34.64**	**C0764-135-2250-S**	**1.753**	**44.51**	**85.62**	**380.87**	**172.12**	**30.12**
C0764-135-2375-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.375**	**60.33**	**1.768**	**44.91**	**1.744**	**44.30**	**112.97**	**502.51**	**186.19**	**32.58**	**C0764-135-2375-S**	**1.846**	**46.89**	**85.62**	**380.87**	**161.90**	**28.33**
C0764-135-2500-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.500**	**63.50**	**1.857**	**47.17**	**1.831**	**46.51**	**112.97**	**502.51**	**175.75**	**30.76**	**C0764-135-2500-S**	**1.940**	**49.27**	**85.62**	**380.87**	**152.83**	**26.74**
C0764-135-2625-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.625**	**66.68**	**1.946**	**49.43**	**1.918**	**48.71**	**112.97**	**502.51**	**166.42**	**29.12**	**C0764-135-2625-S**	**2.033**	**51.65**	**85.62**	**380.87**	**144.71**	**25.32**
C0764-135-2750-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.750**	**69.85**	**2.035**	**51.69**	**2.004**	**50.91**	**112.97**	**502.51**	**158.03**	**27.66**	**C0764-135-2750-S**	**2.127**	**54.02**	**85.62**	**380.87**	**137.42**	**24.05**
C0764-135-2875-M	**0.764**	**19.41**	**0.135**	**3.43**	**2.875**	**73.03**	**2.124**	**53.95**	**2.091**	**53.12**	**112.97**	**502.51**	**150.45**	**26.33**	**C0764-135-2875-S**	**2.221**	**56.40**	**85.62**	**380.87**	**130.83**	**22.89**
C0764-135-3000-M	**0.764**	**19.41**	**0.135**	**3.43**	**3.000**	**76.20**	**2.213**	**56.21**	**2.178**	**55.32**	**112.97**	**502.51**	**143.56**	**25.12**	**C0764-135-3000-S**	**2.314**	**58.78**	**85.62**	**380.87**	**124.84**	**21.85**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL							
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0764-135-3250-M	**0.764**	**19.41**	**0.135**	**3.43**	**3.250**	**82.55**	**2.391**	**60.73**	**2.351**	**59.73**	**112.97**	**502.51**	**131.52**	**23.02**	**C0764-135-3250-S**	**2.501**	**63.53**	**85.62**	**380.87**	**114.36**	**20.01**
C0764-135-3500-M	**0.764**	**19.41**	**0.135**	**3.43**	**3.500**	**88.90**	**2.569**	**65.25**	**2.525**	**64.13**	**112.97**	**502.51**	**121.34**	**21.23**	**C0764-135-3500-S**	**2.688**	**68.29**	**85.62**	**380.87**	**105.51**	**18.46**
C0764-135-3750-M	**0.764**	**19.41**	**0.135**	**3.43**	**3.750**	**95.25**	**2.747**	**69.77**	**2.698**	**68.54**	**112.97**	**502.51**	**112.62**	**19.71**	**C0764-135-3750-S**	**2.876**	**73.04**	**85.62**	**380.87**	**97.93**	**17.14**
C0764-135-4000-M	**0.764**	**19.41**	**0.135**	**3.43**	**4.000**	**101.60**	**2.925**	**74.29**	**2.872**	**72.95**	**112.97**	**502.51**	**105.07**	**18.39**	**C0764-135-4000-S**	**3.063**	**77.80**	**85.62**	**380.87**	**91.37**	**15.99**
C0764-135-4250-M	**0.764**	**19.41**	**0.135**	**3.43**	**4.250**	**107.95**	**3.103**	**78.81**	**3.045**	**77.35**	**112.97**	**502.51**	**98.47**	**17.23**	**C0764-135-4250-S**	**3.250**	**82.55**	**85.62**	**380.87**	**85.63**	**14.98**
C0764-135-4500-M	**0.764**	**19.41**	**0.135**	**3.43**	**4.500**	**114.30**	**3.281**	**83.33**	**3.219**	**81.76**	**112.97**	**502.51**	**92.65**	**16.21**	**C0764-135-4500-S**	**3.437**	**87.31**	**85.62**	**380.87**	**80.57**	**14.10**
C0764-135-4750-M	**0.764**	**19.41**	**0.135**	**3.43**	**4.750**	**120.65**	**3.459**	**87.85**	**3.392**	**86.17**	**112.97**	**502.51**	**87.48**	**15.31**	**C0764-135-4750-S**	**3.624**	**92.06**	**85.62**	**380.87**	**76.07**	**13.31**
C0764-135-5000-M	**0.764**	**19.41**	**0.135**	**3.43**	**5.000**	**127.00**	**3.637**	**92.37**	**3.566**	**90.57**	**112.97**	**502.51**	**82.86**	**14.50**	**C0764-135-5000-S**	**3.812**	**96.82**	**85.62**	**380.87**	**72.05**	**12.61**
C0764-135-5250-M	**0.764**	**19.41**	**0.135**	**3.43**	**5.250**	**133.35**	**3.815**	**96.89**	**3.739**	**94.98**	**112.97**	**502.51**	**78.70**	**13.77**	**C0764-135-5250-S**	**3.999**	**101.57**	**85.62**	**380.87**	**68.43**	**11.98**
C0764-135-5500-M	**0.764**	**19.41**	**0.135**	**3.43**	**5.500**	**139.70**	**3.992**	**101.41**	**3.913**	**99.38**	**112.97**	**502.51**	**74.94**	**13.11**	**C0764-135-5500-S**	**4.186**	**106.32**	**85.62**	**380.87**	**65.16**	**11.40**
C0764-135-5750-M	**0.764**	**19.41**	**0.135**	**3.43**	**5.750**	**146.05**	**4.170**	**105.93**	**4.086**	**103.79**	**112.97**	**502.51**	**71.52**	**12.52**	**C0764-135-5750-S**	**4.373**	**111.08**	**85.62**	**380.87**	**62.19**	**10.88**
C0764-135-6000-M	**0.764**	**19.41**	**0.135**	**3.43**	**6.000**	**152.40**	**4.348**	**110.45**	**4.260**	**108.20**	**112.97**	**502.51**	**68.40**	**11.97**	**C0764-135-6000-S**	**4.560**	**115.83**	**85.62**	**380.87**	**59.48**	**10.41**
C0764-135-6250-M	**0.764**	**19.41**	**0.135**	**3.43**	**6.250**	**158.75**	**4.526**	**114.97**	**4.433**	**112.60**	**112.97**	**502.51**	**65.54**	**11.47**	**C0764-135-6250-S**	**4.748**	**120.59**	**85.62**	**380.87**	**56.99**	**9.97**
C0764-135-6500-M	**0.764**	**19.41**	**0.135**	**3.43**	**6.500**	**165.10**	**4.704**	**119.49**	**4.607**	**117.01**	**112.97**	**502.51**	**62.91**	**11.01**	**C0764-135-6500-S**	**4.935**	**125.34**	**85.62**	**380.87**	**54.70**	**9.57**
C0764-135-6750-M	**0.764**	**19.41**	**0.135**	**3.43**	**6.750**	**171.45**	**4.882**	**124.01**	**4.780**	**121.42**	**112.97**	**502.51**	**60.48**	**10.58**	**C0764-135-6750-S**	**5.122**	**130.10**	**85.62**	**380.87**	**52.59**	**9.20**
C0764-135-7000-M	**0.764**	**19.41**	**0.135**	**3.43**	**7.000**	**177.80**	**5.060**	**128.53**	**4.954**	**125.82**	**112.97**	**502.51**	**58.24**	**10.19**	**C0764-135-7000-S**	**5.309**	**134.85**	**85.62**	**380.87**	**50.64**	**8.86**
C0764-135-7500-M	**0.764**	**19.41**	**0.135**	**3.43**	**7.500**	**190.50**	**5.416**	**137.57**	**5.301**	**134.64**	**112.97**	**502.51**	**54.21**	**9.49**	**C0764-135-7500-S**	**5.684**	**144.36**	**85.62**	**380.87**	**47.14**	**8.25**
C0764-135-8000-M	**0.764**	**19.41**	**0.135**	**3.43**	**8.000**	**203.20**	**5.772**	**146.61**	**5.648**	**143.45**	**112.97**	**502.51**	**50.70**	**8.87**	**C0764-135-8000-S**	**6.058**	**153.87**	**85.62**	**380.87**	**44.09**	**7.72**
C0764-135-8500-M	**0.764**	**19.41**	**0.135**	**3.43**	**8.500**	**215.90**	**6.128**	**155.64**	**5.995**	**152.26**	**112.97**	**502.51**	**47.62**	**8.33**	**C0764-135-8500-S**	**6.432**	**163.38**	**85.62**	**380.87**	**41.41**	**7.25**
C0764-135-9000-M	**0.764**	**19.41**	**0.135**	**3.43**	**9.000**	**228.60**	**6.484**	**164.68**	**6.342**	**161.08**	**112.97**	**502.51**	**44.89**	**7.86**	**C0764-135-9000-S**	**6.807**	**172.89**	**85.62**	**380.87**	**39.04**	**6.83**
C0764-135-9500-M	**0.764**	**19.41**	**0.135**	**3.43**	**9.500**	**241.30**	**6.840**	**173.72**	**6.689**	**169.89**	**112.97**	**502.51**	**42.46**	**7.43**	**C0764-135-9500-S**	**7.181**	**182.40**	**85.62**	**380.87**	**36.92**	**6.46**
C0764-148-1125-M	**0.764**	**19.41**	**0.148**	**3.76**	**1.125**	**28.58**	**0.966**	**24.53**	**0.937**	**23.81**	**116.63**	**518.79**	**731.68**	**128.04**	**C0764-148-1125-S**	**0.955**	**24.25**	**108.37**	**482.03**	**636.25**	**111.34**
C0764-148-1250-M	**0.764**	**19.41**	**0.148**	**3.76**	**1.250**	**31.75**	**1.065**	**27.04**	**1.032**	**26.21**	**117.84**	**524.16**	**635.81**	**111.27**	**C0764-148-1250-S**	**1.054**	**26.77**	**108.37**	**482.03**	**552.88**	**96.75**
C0764-148-1375-M	**0.764**	**19.41**	**0.148**	**3.76**	**1.375**	**34.93**	**1.164**	**29.56**	**1.126**	**28.61**	**118.76**	**528.28**	**562.16**	**98.38**	**C0764-148-1375-S**	**1.153**	**29.29**	**108.37**	**482.03**	**488.83**	**85.55**
C0764-148-1500-M	**0.764**	**19.41**	**0.148**	**3.76**	**1.500**	**38.10**	**1.263**	**32.08**	**1.221**	**31.01**	**119.50**	**531.54**	**503.79**	**88.16**	**C0764-148-1500-S**	**1.253**	**31.82**	**108.37**	**482.03**	**438.08**	**76.66**
C0764-148-1625-M	**0.764**	**19.41**	**0.148**	**3.76**	**1.625**	**41.28**	**1.362**	**34.59**	**1.315**	**33.41**	**120.09**	**534.20**	**456.41**	**79.87**	**C0764-148-1625-S**	**1.352**	**34.34**	**108.37**	**482.03**	**396.88**	**69.45**
C0764-148-1750-M	**0.764**	**19.41**	**0.148**	**3.76**	**1.750**	**44.45**	**1.461**	**37.11**	**1.410**	**35.81**	**120.59**	**536.39**	**417.17**	**73.00**	**C0764-148-1750-S**	**1.451**	**36.86**	**108.37**	**482.03**	**362.76**	**63.48**
C0764-148-1875-M	**0.764**	**19.41**	**0.148**	**3.76**	**1.875**	**47.63**	**1.560**	**39.62**	**1.504**	**38.21**	**121.00**	**538.24**	**384.15**	**67.23**	**C0764-148-1875-S**	**1.551**	**39.39**	**108.37**	**482.03**	**334.04**	**58.46**
C0764-148-2000-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.000**	**50.80**	**1.659**	**42.14**	**1.599**	**40.61**	**121.36**	**539.82**	**355.97**	**62.29**	**C0764-148-2000-S**	**1.650**	**41.91**	**108.37**	**482.03**	**309.54**	**54.17**
C0764-148-2125-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.125**	**53.98**	**1.758**	**44.66**	**1.693**	**43.01**	**121.66**	**541.18**	**331.64**	**58.04**	**C0764-148-2125-S**	**1.749**	**44.43**	**108.37**	**482.03**	**288.38**	**50.47**
C0764-148-2250-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.250**	**57.15**	**1.857**	**47.17**	**1.788**	**45.41**	**121.93**	**542.36**	**310.42**	**54.32**	**C0764-148-2250-S**	**1.849**	**46.95**	**108.37**	**482.03**	**269.93**	**47.24**
C0764-148-2375-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.375**	**60.33**	**1.956**	**49.69**	**1.882**	**47.81**	**122.16**	**543.41**	**291.76**	**51.06**	**C0764-148-2375-S**	**1.948**	**49.48**	**108.37**	**482.03**	**253.70**	**44.40**
C0764-148-2500-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.500**	**63.50**	**2.055**	**52.21**	**1.977**	**50.21**	**122.37**	**544.34**	**275.21**	**48.16**	**C0764-148-2500-S**	**2.047**	**52.00**	**108.37**	**482.03**	**239.31**	**41.88**
C0764-148-2625-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.625**	**66.68**	**2.154**	**54.72**	**2.071**	**52.61**	**122.56**	**545.16**	**260.44**	**45.58**	**C0764-148-2625-S**	**2.147**	**54.52**	**108.37**	**482.03**	**226.47**	**39.63**
C0764-148-2750-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.750**	**69.85**	**2.253**	**57.24**	**2.166**	**55.01**	**122.72**	**545.90**	**247.17**	**43.26**	**C0764-148-2750-S**	**2.246**	**57.04**	**108.37**	**482.03**	**214.93**	**37.61**
C0764-148-2875-M	**0.764**	**19.41**	**0.148**	**3.76**	**2.875**	**73.03**	**2.261**	**57.43**	**2.260**	**57.41**	**144.39**	**642.29**	**235.19**	**41.16**	**C0764-148-2875-S**	**2.345**	**59.57**	**108.37**	**482.03**	**204.52**	**35.79**
C0764-148-3000-M	**0.764**	**19.41**	**0.148**	**3.76**	**3.000**	**76.20**	**2.356**	**59.85**	**2.355**	**59.81**	**144.39**	**642.29**	**224.32**	**39.26**	**C0764-148-3000-S**	**2.444**	**62.09**	**108.37**	**482.03**	**195.06**	**34.14**
C0764-148-3250-M	**0.764**	**19.41**	**0.148**	**3.76**	**3.250**	**82.55**	**2.547**	**64.69**	**2.544**	**64.61**	**144.39**	**642.29**	**205.34**	**35.93**	**C0764-148-3250-S**	**2.643**	**67.13**	**108.37**	**482.03**	**178.55**	**31.25**
C0764-148-3500-M	**0.764**	**19.41**	**0.148**	**3.76**	**3.500**	**88.90**	**2.737**	**69.53**	**2.733**	**69.41**	**144.39**	**642.29**	**189.32**	**33.13**	**C0764-148-3500-S**	**2.842**	**72.18**	**108.37**	**482.03**	**164.62**	**28.81**
C0764-148-3750-M	**0.764**	**19.41**	**0.148**	**3.76**	**3.750**	**95.25**	**2.928**	**74.37**	**2.922**	**74.21**	**144.39**	**642.29**	**175.61**	**30.73**	**C0764-148-3750-S**	**3.040**	**77.23**	**108.37**	**482.03**	**152.71**	**26.72**
C0764-148-4000-M	**0.764**	**19.41**	**0.148**	**3.76**	**4.000**	**101.60**	**3.118**	**79.20**	**3.111**	**79.01**	**144.39**	**642.29**	**163.76**	**28.66**	**C0764-148-4000-S**	**3.239**	**82.27**	**108.37**	**482.03**	**142.40**	**24.92**
C0764-148-4250-M	**0.764**	**19.41**	**0.148**	**3.76**	**4.250**	**107.95**	**3.309**	**84.04**	**3.300**	**83.81**	**144.39**	**642.29**	**153.41**	**26.85**	**C0764-148-4250-S**	**3.438**	**87.32**	**108.37**	**482.03**	**133.40**	**23.34**
C0764-148-4500-M	**0.764**	**19.41**	**0.148**	**3.76**	**4.500**	**114.30**	**3.499**	**88.88**	**3.489**	**88.61**	**144.39**	**642.29**	**144.28**	**25.25**	**C0764-148-4500-S**	**3.636**	**92.36**	**108.37**	**482.03**	**125.46**	**21.96**
C0764-148-4750-M	**0.764**	**19.41**	**0.148**	**3.76**	**4.750**	**120.65**	**3.690**	**93.72**	**3.678**	**93.41**	**144.39**	**642.29**	**136.18**	**23.83**	**C0764-148-4750-S**	**3.835**	**97.41**	**108.37**	**482.03**	**118.42**	**20.72**
C0764-148-5000-M	**0.764**	**19.41**	**0.148**	**3.76**	**5.000**	**127.00**	**3.880**	**98.56**	**3.867**	**98.21**	**144.39**	**642.29**	**128.95**	**22.57**	**C0764-148-5000-S**	**4.034**	**102.45**	**108.37**	**482.03**	**112.13**	**19.62**
C0764-148-5250-M	**0.764**	**19.41**	**0.148**	**3.76**	**5.250**	**133.35**	**4.071**	**103.40**	**4.056**	**103.02**	**144.39**	**642.29**	**122.44**	**21.43**	**C0764-148-5250-S**	**4.232**	**107.50**	**108.37**	**482.03**	**106.47**	**18.63**
C0764-148-5500-M	**0.764**	**19.41**	**0.148**	**3.76**	**5.500**	**139.70**	**4.261**	**108.23**	**4.245**	**107.82**	**144.39**	**642.29**	**116.56**	**20.40**	**C0764-148-5500-S**	**4.431**	**112.54**	**108.37**	**482.03**	**101.35**	**17.74**
C0764-148-5750-M	**0.764**	**19.41**	**0.148**	**3.76**	**5.750**	**146.05**	**4.452**	**113.07**	**4.434**	**112.62**	**144.39**	**642.29**	**111.22**	**19.46**	**C0764-148-5750-S**	**4.629**	**117.59**	**108.37**	**482.03**	**96.71**	**16.92**
C0764-148-6000-M	**0.764**	**19.41**	**0.148**	**3.76**	**6.000**	**152.40**	**4.642**	**117.91**	**4.623**	**117.42**	**144.39**	**642.29**	**106.34**	**18.61**	**C0764-148-6000-S**	**4.828**	**122.63**	**108.37**	**482.03**	**92.47**	**16.18**
C0764-148-6250-M	**0.764**	**19.41**	**0.148**	**3.76**	**6.250**	**158.75**	**4.833**	**122.75**	**4.812**	**122.22**	**144.39**	**642.29**	**101.88**	**17.83**	**C0764-148-6250-S**	**5.027**	**127.68**	**108.37**	**482.03**	**88.59**	**15.50**
C0764-148-6500-M	**0.764**	**19.41**	**0.148**	**3.76**	**6.500**	**165.10**	**5.023**	**127.59**	**5.001**	**127.02**	**144.39**	**642.29**	**97.77**	**17.11**	**C0764-148-6500-S**	**5.225**	**132.72**	**108.37**	**482.03**	**85.02**	**14.88**
C0764-148-6750-M	**0.764**	**19.41**	**0.148**	**3.76**	**6.750**	**171.45**	**5.214**	**132.43**	**5.190**	**131.82**	**144.39**	**642.29**	**93.98**	**16.45**	**C0764-148-6750-S**	**5.424**	**137.77**	**108.37**	**482.03**	**81.72**	**14.30**
C0764-148-7000-M	**0.764**	**19.41**	**0.148**	**3.76**	**7.000**	**177.80**	**5.404**	**137.26**	**5.379**	**136.62**	**144.39**	**642.29**	**90.48**	**15.83**	**C0764-148-7000-S**	**5.623**	**142.82**	**108.37**	**482.03**	**78.68**	**13.77**
C0764-148-7500-M	**0.764**	**19.41**	**0.148**	**3.76**	**7.500**	**190.50**	**5.785**	**146.94**	**5.757**	**146.22**	**144.39**	**642.29**	**84.20**	**14.73**	**C0764-148-7500-S**	**6.020**	**152.91**	**108.37**	**482.03**	**73.22**	**12.81**
C0764-148-8000-M	**0.764**	**19.41**	**0.148**	**3.76**	**8.000**	**203.20**	**6.166**	**156.62**	**6.135**	**155.82**	**144.39**	**642.29**	**78.73**	**13.78**	**C0764-148-8000-S**	**6.417**	**163.00**	**108.37**	**482.03**	**68.46**	**11.98**
C0764-148-8500-M	**0.764**	**19.41**	**0.148**	**3.76**	**8.500**	**215.90**	**6.547**	**166.29**	**6.513**	**165.42**	**144.39**	**642.29**	**73.94**	**12.94**	**C0764-148-8500-S**	**6.814**	**173.09**	**108.37**	**482.03**	**64.29**	**11.25**
C0764-148-9000-M	**0.764**	**19.41**	**0.148**	**3.76**	**9.000**	**228.60**	**6.928**	**175.97**	**6.890**	**175.02**	**144.39**	**642.29**	**69.69**	**12.20**	**C0764-148-9000-S**	**7.212**	**183.18**	**108.37**	**482.03**	**60.60**	**10.60**
C0764-148-9500-M	**0.764**	**19.41**	**0.148**	**3.76**	**9.500**	**241.30**	**7.309**	**185.65**	**7.268**	**184.62**	**144.39**	**642.29**	**65.90**	**11.53**	**C0764-148-9500-S**	**7.609**	**193.27**	**108.37**	**482.03**	**57.31**	**10.03**
D13230	0.787	20.00	0.110	2.80	1.071	27.20	0.646	16.40	0.606	15.40	85.32	379.52	200.63	35.11	D23230	0.646	16.40	71.10	316.27	167.14	29.25
D13240	0.787	20.00	0.110	2.80	1.555	39.50	0.886	22.50	0.827	21.00	85.32	379.52	127.77	22.36	D23240	0.886	22.50	71.10	316.27	106.46	18.63
D13250	0.787	20.00	0.110	2.80	2.528	64.20	1.374	34.90	1.268	32.20	85.32	379.52	73.94	12.94	D23250	1.374	34.90	71.10	316.27	61.60	10.78
C0813-135-1500-M	**0.813**	**20.65**	**0.135**	**3.43**	**1.500**	**38.10**	**1.146**	**29.11**	**0.970**	**24.63**	**111.95**	**497.96**	**316.43**	**55.38**	**C0813-135-1500-S**	**1.192**	**30.28**	**81.14**	**360.91**	**263.59**	**46.13**
C0813-135-1750-M	**0.813**	**20.65**	**0.135**	**3.43**	**1.750**	**44.45**	**1.324**	**33.64**	**1.109**	**28.18**	**111.95**	**497.96**	**262.98**	**46.02**	**C0813-135-1750-S**	**1.380**	**35.04**	**81.14**	**360.91**	**219.06**	**38.34**
C0813-135-2000-M	**0.813**	**20.65**	**0.135**	**3.43**	**2.000**	**50.80**	**1.502**	**38.16**	**1.249**	**31.72**	**111.95**	**497.96**	**224.97**	**39.37**	**C0813-135-2000-S**	**1.567**	**39.80**	**81.14**	**360.91**	**187.40**	**32.80**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0813-135-2250-M	**0.813**	**20.65**	**0.135**	**3.43**	**2.250**	**57.15**	**1.681**	**42.68**	**1.388**	**35.26**	**111.95**	**497.96**	**196.57**	**34.40**	**C0813-135-2250-S**	**1.754**	**44.56**	**81.14**	**360.91**	**163.74**	**28.66**
C0813-135-2500-M	**0.813**	**20.65**	**0.135**	**3.43**	**2.500**	**63.50**	**1.859**	**47.21**	**1.528**	**38.80**	**111.95**	**497.96**	**174.53**	**30.54**	**C0813-135-2500-S**	**1.942**	**49.32**	**81.14**	**360.91**	**145.38**	**25.44**
C0813-135-3000-M	**0.813**	**20.65**	**0.135**	**3.43**	**3.000**	**76.20**	**2.215**	**56.26**	**1.807**	**45.89**	**111.95**	**497.96**	**142.57**	**24.95**	**C0813-135-3000-S**	**2.317**	**58.85**	**81.14**	**360.91**	**118.76**	**20.78**
C0813-135-3500-M	**0.813**	**20.65**	**0.135**	**3.43**	**3.500**	**88.90**	**2.571**	**65.30**	**2.086**	**52.98**	**111.95**	**497.96**	**120.50**	**21.09**	**C0813-135-3500-S**	**2.692**	**68.37**	**81.14**	**360.91**	**100.38**	**17.57**
C0813-135-3750-M	**0.813**	**20.65**	**0.135**	**3.43**	**3.750**	**95.25**	**2.749**	**69.83**	**2.225**	**56.52**	**111.95**	**497.96**	**111.84**	**19.57**	**C0813-135-3750-S**	**2.879**	**73.13**	**81.14**	**360.91**	**93.16**	**16.30**
C0813-135-4000-M	**0.813**	**20.65**	**0.135**	**3.43**	**4.000**	**101.60**	**2.927**	**74.35**	**2.365**	**60.06**	**111.95**	**497.96**	**104.34**	**18.26**	**C0813-135-4000-S**	**3.066**	**77.89**	**81.14**	**360.91**	**86.92**	**15.21**
C0823-068-1500-M	**0.823**	**20.90**	**0.068**	**1.73**	**1.500**	**38.10**	**0.578**	**14.68**	**0.436**	**11.07**	**16.03**	**71.33**	**17.39**	**3.04**	**C0823-068-1500-S**	**0.660**	**16.77**	**12.70**	**56.48**	**15.12**	**2.65**
C0823-068-1625-M	**0.823**	**20.90**	**0.068**	**1.73**	**1.625**	**41.28**	**0.618**	**15.71**	**0.463**	**11.76**	**16.03**	**71.33**	**15.93**	**2.79**	**C0823-068-1625-S**	**0.708**	**18.00**	**12.70**	**56.48**	**13.85**	**2.42**
C0823-068-1750-M	**0.823**	**20.90**	**0.068**	**1.73**	**1.750**	**44.45**	**0.659**	**16.74**	**0.490**	**12.44**	**16.03**	**71.33**	**14.70**	**2.57**	**C0823-068-1750-S**	**0.757**	**19.22**	**12.70**	**56.48**	**12.78**	**2.24**
C0823-068-1875-M	**0.823**	**20.90**	**0.068**	**1.73**	**1.875**	**47.63**	**0.699**	**17.77**	**0.517**	**13.12**	**16.03**	**71.33**	**13.64**	**2.39**	**C0823-068-1875-S**	**0.805**	**20.44**	**12.70**	**56.48**	**11.86**	**2.08**
C0823-068-2000-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.000**	**50.80**	**0.740**	**18.80**	**0.544**	**13.80**	**16.03**	**71.33**	**12.73**	**2.23**	**C0823-068-2000-S**	**0.853**	**21.66**	**12.70**	**56.48**	**11.07**	**1.94**
C0823-068-2125-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.125**	**53.98**	**0.780**	**19.82**	**0.570**	**14.49**	**16.03**	**71.33**	**11.93**	**2.09**	**C0823-068-2125-S**	**0.901**	**22.88**	**12.70**	**56.48**	**10.37**	**1.81**
C0823-068-2250-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.250**	**57.15**	**0.821**	**20.85**	**0.597**	**15.17**	**16.03**	**71.33**	**11.22**	**1.96**	**C0823-068-2250-S**	**0.949**	**24.10**	**12.70**	**56.48**	**9.76**	**1.71**
C0823-068-2375-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.375**	**60.33**	**0.861**	**21.88**	**0.624**	**15.85**	**16.03**	**71.33**	**10.59**	**1.85**	**C0823-068-2375-S**	**0.997**	**25.32**	**12.70**	**56.48**	**9.21**	**1.61**
C0823-068-2500-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.500**	**63.50**	**0.902**	**22.91**	**0.651**	**16.54**	**16.03**	**71.33**	**10.03**	**1.76**	**C0823-068-2500-S**	**1.045**	**26.54**	**12.70**	**56.48**	**8.73**	**1.53**
C0823-068-2625-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.625**	**66.68**	**0.942**	**23.94**	**0.678**	**17.22**	**16.03**	**71.33**	**9.53**	**1.67**	**C0823-068-2625-S**	**1.093**	**27.76**	**12.70**	**56.48**	**8.29**	**1.45**
C0823-068-2750-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.750**	**69.85**	**0.983**	**24.97**	**0.705**	**17.90**	**16.03**	**71.33**	**9.07**	**1.59**	**C0823-068-2750-S**	**1.141**	**28.98**	**12.70**	**56.48**	**7.89**	**1.38**
C0823-068-2875-M	**0.823**	**20.90**	**0.068**	**1.73**	**2.875**	**73.03**	**1.023**	**26.00**	**0.732**	**18.58**	**16.03**	**71.33**	**8.66**	**1.52**	**C0823-068-2875-S**	**1.189**	**30.20**	**12.70**	**56.48**	**7.53**	**1.32**
C0823-068-3000-M	**0.823**	**20.90**	**0.068**	**1.73**	**3.000**	**76.20**	**1.064**	**27.03**	**0.758**	**19.27**	**16.03**	**71.33**	**8.28**	**1.45**	**C0823-068-3000-S**	**1.237**	**31.42**	**12.70**	**56.48**	**7.20**	**1.26**
C0823-068-3250-M	**0.823**	**20.90**	**0.068**	**1.73**	**3.250**	**82.55**	**1.145**	**29.08**	**0.812**	**20.63**	**16.03**	**71.33**	**7.62**	**1.33**	**C0823-068-3250-S**	**1.333**	**33.86**	**12.70**	**56.48**	**6.62**	**1.16**
C0823-068-3500-M	**0.823**	**20.90**	**0.068**	**1.73**	**3.500**	**88.90**	**1.226**	**31.14**	**0.866**	**22.00**	**16.03**	**71.33**	**7.05**	**1.23**	**C0823-068-3500-S**	**1.429**	**36.31**	**12.70**	**56.48**	**6.13**	**1.07**
C0823-068-3750-M	**0.823**	**20.90**	**0.068**	**1.73**	**3.750**	**95.25**	**1.307**	**33.20**	**0.920**	**23.36**	**16.03**	**71.33**	**6.56**	**1.15**	**C0823-068-3750-S**	**1.525**	**38.75**	**12.70**	**56.48**	**5.71**	**1.00**
C0823-068-4000-M	**0.823**	**20.90**	**0.068**	**1.73**	**4.000**	**101.60**	**1.388**	**35.26**	**0.973**	**24.73**	**16.03**	**71.33**	**6.14**	**1.07**	**C0823-068-4000-S**	**1.622**	**41.19**	**12.70**	**56.48**	**5.34**	**0.93**
C0823-068-4250-M	**0.823**	**20.90**	**0.068**	**1.73**	**4.250**	**107.95**	**1.469**	**37.31**	**1.027**	**26.09**	**16.03**	**71.33**	**5.77**	**1.01**	**C0823-068-4250-S**	**1.718**	**43.63**	**12.70**	**56.48**	**5.01**	**0.88**
C0823-068-4500-M	**0.823**	**20.90**	**0.068**	**1.73**	**4.500**	**114.30**	**1.550**	**39.37**	**1.081**	**27.46**	**16.03**	**71.33**	**5.44**	**0.95**	**C0823-068-4500-S**	**1.814**	**46.07**	**12.70**	**56.48**	**4.73**	**0.83**
C0823-068-4750-M	**0.823**	**20.90**	**0.068**	**1.73**	**4.750**	**120.65**	**1.631**	**41.43**	**1.135**	**28.82**	**16.03**	**71.33**	**5.14**	**0.90**	**C0823-068-4750-S**	**1.910**	**48.51**	**12.70**	**56.48**	**4.47**	**0.78**
C0823-068-5000-M	**0.823**	**20.90**	**0.068**	**1.73**	**5.000**	**127.00**	**1.712**	**43.49**	**1.188**	**30.19**	**16.03**	**71.33**	**4.88**	**0.85**	**C0823-068-5000-S**	**2.006**	**50.95**	**12.70**	**56.48**	**4.24**	**0.74**
C0823-068-5250-M	**0.823**	**20.90**	**0.068**	**1.73**	**5.250**	**133.35**	**1.793**	**45.54**	**1.242**	**31.55**	**16.03**	**71.33**	**4.64**	**0.81**	**C0823-068-5250-S**	**2.102**	**53.40**	**12.70**	**56.48**	**4.03**	**0.71**
C0823-068-5500-M	**0.823**	**20.90**	**0.068**	**1.73**	**5.500**	**139.70**	**1.874**	**47.60**	**1.296**	**32.92**	**16.03**	**71.33**	**4.42**	**0.77**	**C0823-068-5500-S**	**2.198**	**55.84**	**12.70**	**56.48**	**3.85**	**0.67**
C0823-068-5750-M	**0.823**	**20.90**	**0.068**	**1.73**	**5.750**	**146.05**	**1.955**	**49.66**	**1.350**	**34.28**	**16.03**	**71.33**	**4.23**	**0.74**	**C0823-068-5750-S**	**2.294**	**58.28**	**12.70**	**56.48**	**3.67**	**0.64**
C0823-068-6000-M	**0.823**	**20.90**	**0.068**	**1.73**	**6.000**	**152.40**	**2.036**	**51.72**	**1.403**	**35.65**	**16.03**	**71.33**	**4.05**	**0.71**	**C0823-068-6000-S**	**2.391**	**60.72**	**12.70**	**56.48**	**3.52**	**0.62**
C0823-068-6250-M	**0.823**	**20.90**	**0.068**	**1.73**	**6.250**	**158.75**	**2.117**	**53.77**	**1.457**	**37.01**	**16.03**	**71.33**	**3.88**	**0.68**	**C0823-068-6250-S**	**2.487**	**63.16**	**12.70**	**56.48**	**3.37**	**0.59**
C0823-068-6500-M	**0.823**	**20.90**	**0.068**	**1.73**	**6.500**	**165.10**	**2.198**	**55.83**	**1.511**	**38.38**	**16.03**	**71.33**	**3.73**	**0.65**	**C0823-068-6500-S**	**2.583**	**65.60**	**12.70**	**56.48**	**3.24**	**0.57**
C0823-068-6750-M	**0.823**	**20.90**	**0.068**	**1.73**	**6.750**	**171.45**	**2.279**	**57.89**	**1.565**	**39.74**	**16.03**	**71.33**	**3.59**	**0.63**	**C0823-068-6750-S**	**2.679**	**68.04**	**12.70**	**56.48**	**3.12**	**0.55**
C0823-068-7000-M	**0.823**	**20.90**	**0.068**	**1.73**	**7.000**	**177.80**	**2.360**	**59.95**	**1.618**	**41.11**	**16.03**	**71.33**	**3.46**	**0.60**	**C0823-068-7000-S**	**2.775**	**70.49**	**12.70**	**56.48**	**3.01**	**0.53**
C0823-068-7500-M	**0.823**	**20.90**	**0.068**	**1.73**	**7.500**	**190.50**	**2.522**	**64.06**	**1.726**	**43.84**	**16.03**	**71.33**	**3.22**	**0.56**	**C0823-068-7500-S**	**2.967**	**75.37**	**12.70**	**56.48**	**2.80**	**0.49**
C0823-068-8000-M	**0.823**	**20.90**	**0.068**	**1.73**	**8.000**	**203.20**	**2.684**	**68.18**	**1.833**	**46.57**	**16.03**	**71.33**	**3.02**	**0.53**	**C0823-068-8000-S**	**3.159**	**80.25**	**12.70**	**56.48**	**2.62**	**0.46**
C0823-068-8500-M	**0.823**	**20.90**	**0.068**	**1.73**	**8.500**	**215.90**	**2.846**	**72.29**	**1.941**	**49.30**	**16.03**	**71.33**	**2.84**	**0.50**	**C0823-068-8500-S**	**3.352**	**85.13**	**12.70**	**56.48**	**2.47**	**0.43**
C0823-068-9000-M	**0.823**	**20.90**	**0.068**	**1.73**	**9.000**	**228.60**	**3.008**	**76.41**	**2.048**	**52.03**	**16.03**	**71.33**	**2.68**	**0.47**	**C0823-068-9000-S**	**3.544**	**90.02**	**12.70**	**56.48**	**2.33**	**0.41**
C0823-068-9500-M	**0.823**	**20.90**	**0.068**	**1.73**	**9.500**	**241.30**	**3.170**	**80.52**	**2.156**	**54.76**	**16.03**	**71.33**	**2.53**	**0.44**	**C0823-068-9500-S**	**3.736**	**94.90**	**12.70**	**56.48**	**2.20**	**0.39**
C0823-072-1500-M	**0.823**	**20.90**	**0.072**	**1.83**	**1.500**	**38.10**	**0.611**	**15.53**	**0.477**	**12.12**	**18.80**	**83.63**	**21.16**	**3.70**	**C0823-072-1500-S**	**0.692**	**17.58**	**14.86**	**66.10**	**18.40**	**3.22**
C0823-072-1625-M	**0.823**	**20.90**	**0.072**	**1.83**	**1.625**	**41.28**	**0.654**	**16.62**	**0.507**	**12.88**	**18.80**	**83.63**	**19.37**	**3.39**	**C0823-072-1625-S**	**0.743**	**18.87**	**14.86**	**66.10**	**16.84**	**2.95**
C0823-072-1750-M	**0.823**	**20.90**	**0.072**	**1.83**	**1.750**	**44.45**	**0.697**	**17.71**	**0.537**	**13.65**	**18.80**	**83.63**	**17.86**	**3.13**	**C0823-072-1750-S**	**0.793**	**20.15**	**14.86**	**66.10**	**15.53**	**2.72**
C0823-072-1875-M	**0.823**	**20.90**	**0.072**	**1.83**	**1.875**	**47.63**	**0.740**	**18.81**	**0.567**	**14.41**	**18.80**	**83.63**	**16.57**	**2.90**	**C0823-072-1875-S**	**0.844**	**21.43**	**14.86**	**66.10**	**14.41**	**2.52**
C0823-072-2000-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.000**	**50.80**	**0.784**	**19.90**	**0.597**	**15.17**	**18.80**	**83.63**	**15.46**	**2.70**	**C0823-072-2000-S**	**0.894**	**22.72**	**14.86**	**66.10**	**13.44**	**2.35**
C0823-072-2125-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.125**	**53.98**	**0.827**	**21.00**	**0.627**	**15.94**	**18.80**	**83.63**	**14.48**	**2.53**	**C0823-072-2125-S**	**0.945**	**24.00**	**14.86**	**66.10**	**12.59**	**2.20**
C0823-072-2250-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.250**	**57.15**	**0.870**	**22.09**	**0.657**	**16.70**	**18.80**	**83.63**	**13.62**	**2.38**	**C0823-072-2250-S**	**0.995**	**25.28**	**14.86**	**66.10**	**11.84**	**2.07**
C0823-072-2375-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.375**	**60.33**	**0.913**	**23.18**	**0.687**	**17.46**	**18.80**	**83.63**	**12.86**	**2.25**	**C0823-072-2375-S**	**1.046**	**26.57**	**14.86**	**66.10**	**11.18**	**1.96**
C0823-072-2500-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.500**	**63.50**	**0.956**	**24.28**	**0.718**	**18.22**	**18.80**	**83.63**	**12.18**	**2.13**	**C0823-072-2500-S**	**1.096**	**27.85**	**14.86**	**66.10**	**10.59**	**1.85**
C0823-072-2625-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.625**	**66.68**	**0.999**	**25.37**	**0.748**	**18.99**	**18.80**	**83.63**	**11.56**	**2.02**	**C0823-072-2625-S**	**1.147**	**29.13**	**14.86**	**66.10**	**10.05**	**1.76**
C0823-072-2750-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.750**	**69.85**	**1.042**	**26.47**	**0.778**	**19.75**	**18.80**	**83.63**	**11.01**	**1.93**	**C0823-072-2750-S**	**1.198**	**30.42**	**14.86**	**66.10**	**9.57**	**1.68**
C0823-072-2875-M	**0.823**	**20.90**	**0.072**	**1.83**	**2.875**	**73.03**	**1.085**	**27.56**	**0.808**	**20.51**	**18.80**	**83.63**	**10.50**	**1.84**	**C0823-072-2875-S**	**1.248**	**31.70**	**14.86**	**66.10**	**9.13**	**1.60**
C0823-072-3000-M	**0.823**	**20.90**	**0.072**	**1.83**	**3.000**	**76.20**	**1.128**	**28.65**	**0.838**	**21.28**	**18.80**	**83.63**	**10.04**	**1.76**	**C0823-072-3000-S**	**1.299**	**32.98**	**14.86**	**66.10**	**8.73**	**1.53**
C0823-072-3250-M	**0.823**	**20.90**	**0.072**	**1.83**	**3.250**	**82.55**	**1.214**	**30.84**	**0.898**	**22.80**	**18.80**	**83.63**	**9.24**	**1.62**	**C0823-072-3250-S**	**1.400**	**35.55**	**14.86**	**66.10**	**8.03**	**1.41**
C0823-072-3500-M	**0.823**	**20.90**	**0.072**	**1.83**	**3.500**	**88.90**	**1.300**	**33.03**	**0.958**	**24.33**	**18.80**	**83.63**	**8.55**	**1.50**	**C0823-072-3500-S**	**1.501**	**38.12**	**14.86**	**66.10**	**7.43**	**1.30**
C0823-072-3750-M	**0.823**	**20.90**	**0.072**	**1.83**	**3.750**	**95.25**	**1.387**	**35.22**	**1.018**	**25.86**	**18.80**	**83.63**	**7.96**	**1.39**	**C0823-072-3750-S**	**1.602**	**40.69**	**14.86**	**66.10**	**6.92**	**1.21**
C0823-072-4000-M	**0.823**	**20.90**	**0.072**	**1.83**	**4.000**	**101.60**	**1.473**	**37.41**	**1.078**	**27.38**	**18.80**	**83.63**	**7.44**	**1.30**	**C0823-072-4000-S**	**1.703**	**43.25**	**14.86**	**66.10**	**6.47**	**1.13**
C0823-072-4250-M	**0.823**	**20.90**	**0.072**	**1.83**	**4.250**	**107.95**	**1.559**	**39.59**	**1.138**	**28.91**	**18.80**	**83.63**	**6.99**	**1.22**	**C0823-072-4250-S**	**1.804**	**45.82**	**14.86**	**66.10**	**6.08**	**1.06**
C0823-072-4500-M	**0.823**	**20.90**	**0.072**	**1.83**	**4.500**	**114.30**	**1.645**	**41.78**	**1.198**	**30.44**	**18.80**	**83.63**	**6.59**	**1.15**	**C0823-072-4500-S**	**1.905**	**48.39**	**14.86**	**66.10**	**5.73**	**1.00**
C0823-072-4750-M	**0.823**	**20.90**	**0.072**	**1.83**	**4.750**	**120.65**	**1.731**	**43.97**	**1.258**	**31.96**	**18.80**	**83.63**	**6.23**	**1.09**	**C0823-072-4750-S**	**2.006**	**50.96**	**14.86**	**66.10**	**5.42**	**0.95**
C0823-072-5000-M	**0.823**	**20.90**	**0.072**	**1.83**	**5.000**	**127.00**	**1.817**	**46.16**	**1.318**	**33.49**	**18.80**	**83.63**	**5.91**	**1.03**	**C0823-072-5000-S**	**2.107**	**53.52**	**14.86**	**66.10**	**5.14**	**0.90**
C0823-072-5250-M	**0.823**	**20.90**	**0.072**	**1.83**	**5.250**	**133.35**	**1.903**	**48.35**	**1.379**	**35.01**	**18.80**	**83.63**	**5.62**	**0.98**	**C0823-072-5250-S**	**2.208**	**56.09**	**14.86**	**66.10**	**4.89**	**0.85**
C0823-072-5500-M	**0.823**	**20.90**	**0.072**	**1.83**	**5.500**	**139.70**	**1.990**	**50.54**	**1.439**	**36.54**	**18.80**	**83.63**	**5.36**	**0.94**	**C0823-072-5500-S**	**2.309**	**58.66**	**14.86**	**66.10**	**4.66**	**0.81**
C0823-072-5750-M	**0.823**	**20.90**	**0.072**	**1.83**	**5.750**	**146.05**	**2.076**	**52.72**	**1.499**	**38.07**	**18.80**	**83.63**	**5.12**	**0.90**	**C0823-072-5750-S**	**2.410**	**61.22**	**14.86**	**66.10**	**4.45**	**0.78**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0823-072-6000-M	0.823	20.90	0.072	1.83	6.000	152.40	2.162	54.91	1.559	39.59	18.80	83.63	4.90	0.86
C0823-072-6250-M	0.823	20.90	0.072	1.83	6.250	158.75	2.248	57.10	1.619	41.12	18.80	83.63	4.70	0.82
C0823-072-6500-M	0.823	20.90	0.072	1.83	6.500	165.10	2.334	59.29	1.679	42.65	18.80	83.63	4.51	0.79
C0823-072-6750-M	0.823	20.90	0.072	1.83	6.750	171.45	2.420	61.48	1.739	44.17	18.80	83.63	4.34	0.76
C0823-072-7000-M	0.823	20.90	0.072	1.83	7.000	177.80	2.506	63.66	1.799	45.70	18.80	83.63	4.18	0.73
C0823-072-7500-M	0.823	20.90	0.072	1.83	7.500	190.50	2.679	68.04	1.919	48.75	18.80	83.63	3.90	0.68
C0823-072-8000-M	0.823	20.90	0.072	1.83	8.000	203.20	2.851	72.42	2.040	51.80	18.80	83.63	3.65	0.64
C0823-072-8500-M	0.823	20.90	0.072	1.83	8.500	215.90	3.023	76.79	2.160	54.86	18.80	83.63	3.43	0.60
C0823-072-9000-M	0.823	20.90	0.072	1.83	9.000	228.60	3.196	81.17	2.280	57.91	18.80	83.63	3.24	0.57
C0823-072-9500-M	0.823	20.90	0.072	1.83	9.500	241.30	3.368	85.55	2.400	60.96	18.80	83.63	3.07	0.54
C0823-085-1375-M	0.823	20.90	0.085	2.16	1.375	34.93	0.670	17.01	0.573	14.55	29.81	132.58	42.27	7.40
C0823-085-1500-M	0.823	20.90	0.085	2.16	1.500	38.10	0.722	18.33	0.614	15.58	29.81	132.58	38.30	6.70
C0823-085-1625-M	0.823	20.90	0.085	2.16	1.625	41.28	0.774	19.65	0.654	16.62	29.81	132.58	35.01	6.13
C0823-085-1750-M	0.823	20.90	0.085	2.16	1.750	44.45	0.825	20.97	0.695	17.66	29.81	132.58	32.24	5.64
C0823-085-1875-M	0.823	20.90	0.085	2.16	1.875	47.63	0.877	22.28	0.736	18.70	29.81	132.58	29.87	5.23
C0823-085-2000-M	0.823	20.90	0.085	2.16	2.000	50.80	0.929	23.60	0.777	19.74	29.81	132.58	27.83	4.87
C0823-085-2125-M	0.823	20.90	0.085	2.16	2.125	53.98	0.981	24.92	0.818	20.78	29.81	132.58	26.05	4.56
C0823-085-2250-M	0.823	20.90	0.085	2.16	2.250	57.15	1.033	26.23	0.859	21.82	29.81	132.58	24.49	4.29
C0823-085-2375-M	0.823	20.90	0.085	2.16	2.375	60.33	1.085	27.55	0.900	22.86	29.81	132.58	23.10	4.04
C0823-085-2500-M	0.823	20.90	0.085	2.16	2.500	63.50	1.137	28.87	0.941	23.89	29.81	132.58	21.86	3.83
C0823-085-2625-M	0.823	20.90	0.085	2.16	2.625	66.68	1.188	30.18	0.982	24.93	29.81	132.58	20.75	3.63
C0823-085-2750-M	0.823	20.90	0.085	2.16	2.750	69.85	1.240	31.50	1.022	25.97	29.81	132.58	19.74	3.45
C0823-085-2875-M	0.823	20.90	0.085	2.16	2.875	73.03	1.292	32.82	1.063	27.01	29.81	132.58	18.83	3.30
C0823-085-3000-M	0.823	20.90	0.085	2.16	3.000	76.20	1.344	34.14	1.104	28.05	29.81	132.58	18.00	3.15
C0823-085-3250-M	0.823	20.90	0.085	2.16	3.250	82.55	1.448	36.77	1.186	30.13	29.81	132.58	16.54	2.89
C0823-085-3500-M	0.823	20.90	0.085	2.16	3.500	88.90	1.551	39.40	1.268	32.20	29.81	132.58	15.30	2.68
C0823-085-3750-M	0.823	20.90	0.085	2.16	3.750	95.25	1.655	42.04	1.350	34.28	29.81	132.58	14.23	2.49
C0823-085-4000-M	0.823	20.90	0.085	2.16	4.000	101.60	1.759	44.67	1.431	36.36	29.81	132.58	13.30	2.33
C0823-085-4250-M	0.823	20.90	0.085	2.16	4.250	107.95	1.862	47.31	1.513	38.43	29.81	132.58	12.48	2.18
C0823-085-4500-M	0.823	20.90	0.085	2.16	4.500	114.30	1.966	49.94	1.595	40.51	29.81	132.58	11.76	2.06
C0823-085-4750-M	0.823	20.90	0.085	2.16	4.750	120.65	2.070	52.57	1.677	42.59	29.81	132.58	11.12	1.95
C0823-085-5000-M	0.823	20.90	0.085	2.16	5.000	127.00	2.174	55.21	1.759	44.67	29.81	132.58	10.55	1.85
C0823-085-5250-M	0.823	20.90	0.085	2.16	5.250	133.35	2.277	57.84	1.840	46.74	29.81	132.58	10.03	1.75
C0823-085-5500-M	0.823	20.90	0.085	2.16	5.500	139.70	2.381	60.48	1.922	48.82	29.81	132.58	9.56	1.67
C0823-085-5750-M	0.823	20.90	0.085	2.16	5.750	146.05	2.485	63.11	2.004	50.90	29.81	132.58	9.13	1.60
C0823-085-6000-M	0.823	20.90	0.085	2.16	6.000	152.40	2.588	65.75	2.086	52.98	29.81	132.58	8.74	1.53
C0823-085-6250-M	0.823	20.90	0.085	2.16	6.250	158.75	2.692	68.38	2.167	55.05	29.81	132.58	8.38	1.47
C0823-085-6500-M	0.823	20.90	0.085	2.16	6.500	165.10	2.796	71.01	2.249	57.13	29.81	132.58	8.05	1.41
C0823-085-6750-M	0.823	20.90	0.085	2.16	6.750	171.45	2.899	73.65	2.331	59.21	29.81	132.58	7.74	1.35
C0823-085-7000-M	0.823	20.90	0.085	2.16	7.000	177.80	3.003	76.28	2.413	61.28	29.81	132.58	7.46	1.30
C0823-085-7500-M	0.823	20.90	0.085	2.16	7.500	190.50	3.211	81.55	2.576	65.44	29.81	132.58	6.95	1.22
C0823-085-8000-M	0.823	20.90	0.085	2.16	8.000	203.20	3.418	86.82	2.740	69.59	29.81	132.58	6.51	1.14
C0823-085-8500-M	0.823	20.90	0.085	2.16	8.500	215.90	3.625	92.09	2.903	73.75	29.81	132.58	6.11	1.07
C0823-085-9000-M	0.823	20.90	0.085	2.16	9.000	228.60	3.833	97.35	3.067	77.90	29.81	132.58	5.77	1.01
C0823-085-9500-M*	0.823	20.90	0.085	2.16	9.500	241.30	4.090	103.89	3.292	83.62	29.81	132.58	5.51	0.96
C0823-092-1250-M	0.823	20.90	0.092	2.34	1.250	31.75	0.668	16.96	0.593	15.06	37.10	165.01	63.69	11.15
C0823-092-1375-M	0.823	20.90	0.092	2.34	1.375	34.93	0.724	18.40	0.640	16.25	37.10	165.01	57.01	9.98
C0823-092-1500-M	0.823	20.90	0.092	2.34	1.500	38.10	0.781	19.84	0.687	17.45	37.10	165.01	51.59	9.03
C0823-092-1625-M	0.823	20.90	0.092	2.34	1.625	41.28	0.838	21.28	0.734	18.64	37.10	165.01	47.12	8.25
C0823-092-1750-M	0.823	20.90	0.092	2.34	1.750	44.45	0.894	22.72	0.781	19.83	37.10	165.01	43.36	7.59
C0823-092-1875-M	0.823	20.90	0.092	2.34	1.875	47.63	0.951	24.16	0.827	21.02	37.10	165.01	40.15	7.03
C0823-092-2000-M	0.823	20.90	0.092	2.34	2.000	50.80	1.008	25.60	0.874	22.21	37.10	165.01	37.39	6.54
C0823-092-2125-M	0.823	20.90	0.092	2.34	2.125	53.98	1.065	27.04	0.921	23.40	37.10	165.01	34.98	6.12
C0823-092-2250-M	0.823	20.90	0.092	2.34	2.250	57.15	1.121	28.48	0.968	24.59	37.10	165.01	32.86	5.75
C0823-092-2375-M	0.823	20.90	0.092	2.34	2.375	60.33	1.178	29.92	1.015	25.78	37.10	165.01	30.99	5.42
C0823-092-2500-M	0.823	20.90	0.092	2.34	2.500	63.50	1.235	31.36	1.062	26.97	37.10	165.01	29.32	5.13
C0823-092-2625-M	0.823	20.90	0.092	2.34	2.625	66.68	1.291	32.80	1.109	28.16	37.10	165.01	27.82	4.87
C0823-092-2750-M	0.823	20.90	0.092	2.34	2.750	69.85	1.348	34.24	1.156	29.35	37.10	165.01	26.46	4.63
C0823-092-2875-M	0.823	20.90	0.092	2.34	2.875	73.03	1.405	35.68	1.203	30.54	37.10	165.01	25.23	4.42
C0823-092-3000-M	0.823	20.90	0.092	2.34	3.000	76.20	1.461	37.12	1.249	31.74	37.10	165.01	24.11	4.22
C0823-092-3250-M	0.823	20.90	0.092	2.34	3.250	82.55	1.575	40.00	1.343	34.12	37.10	165.01	22.15	3.88
C0823-092-3500-M	0.823	20.90	0.092	2.34	3.500	88.90	1.688	42.88	1.437	36.50	37.10	165.01	20.48	3.58
C0823-092-3750-M	0.823	20.90	0.092	2.34	3.750	95.25	1.802	45.76	1.531	38.88	37.10	165.01	19.04	3.33
C0823-092-4000-M	0.823	20.90	0.092	2.34	4.000	101.60	1.915	48.64	1.625	41.26	37.10	165.01	17.79	3.11

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0823-072-6000-S	2.511	63.79	14.86	66.10	4.26	0.75
C0823-072-6250-S	2.613	66.36	14.86	66.10	4.09	0.71
C0823-072-6500-S	2.714	68.93	14.86	66.10	3.92	0.69
C0823-072-6750-S	2.815	71.49	14.86	66.10	3.78	0.66
C0823-072-7000-S	2.916	74.06	14.86	66.10	3.64	0.64
C0823-072-7500-S	3.118	79.19	14.86	66.10	3.39	0.59
C0823-072-8000-S	3.320	84.33	14.86	66.10	3.18	0.56
C0823-072-8500-S	3.522	89.46	14.86	66.10	2.99	0.52
C0823-072-9000-S	3.724	94.60	14.86	66.10	2.82	0.49
C0823-072-9500-S	3.926	99.73	14.86	66.10	2.67	0.47
C0823-085-1375-S	0.739	18.76	23.39	104.05	36.76	6.43
C0823-085-1500-S	0.798	20.26	23.39	104.05	33.30	5.83
C0823-085-1625-S	0.857	21.76	23.39	104.05	30.44	5.33
C0823-085-1750-S	0.916	23.25	23.39	104.05	28.03	4.91
C0823-085-1875-S	0.974	24.75	23.39	104.05	25.98	4.55
C0823-085-2000-S	1.033	26.25	23.39	104.05	24.20	4.24
C0823-085-2125-S	1.092	27.75	23.39	104.05	22.66	3.96
C0823-085-2250-S	1.151	29.25	23.39	104.05	21.29	3.73
C0823-085-2375-S	1.210	30.74	23.39	104.05	20.09	3.52
C0823-085-2500-S	1.269	32.24	23.39	104.05	19.01	3.33
C0823-085-2625-S	1.328	33.74	23.39	104.05	18.04	3.16
C0823-085-2750-S	1.387	35.24	23.39	104.05	17.17	3.00
C0823-085-2875-S	1.446	36.74	23.39	104.05	16.37	2.87
C0823-085-3000-S	1.505	38.23	23.39	104.05	15.65	2.74
C0823-085-3250-S	1.623	41.23	23.39	104.05	14.38	2.52
C0823-085-3500-S	1.741	44.23	23.39	104.05	13.30	2.33
C0823-085-3750-S	1.859	47.22	23.39	104.05	12.37	2.17
C0823-085-4000-S	1.977	50.22	23.39	104.05	11.56	2.02
C0823-085-4250-S	2.095	53.22	23.39	104.05	10.86	1.90
C0823-085-4500-S	2.213	56.21	23.39	104.05	10.23	1.79
C0823-085-4750-S	2.331	59.21	23.39	104.05	9.67	1.69
C0823-085-5000-S	2.449	62.20	23.39	104.05	9.17	1.60
C0823-085-5250-S	2.567	65.20	23.39	104.05	8.72	1.53
C0823-085-5500-S	2.685	68.20	23.39	104.05	8.31	1.45
C0823-085-5750-S	2.803	71.19	23.39	104.05	7.94	1.39
C0823-085-6000-S	2.921	74.19	23.39	104.05	7.60	1.33
C0823-085-6250-S	3.039	77.18	23.39	104.05	7.29	1.27
C0823-085-6500-S	3.157	80.18	23.39	104.05	7.00	1.22
C0823-085-6750-S	3.275	83.18	23.39	104.05	6.73	1.18
C0823-085-7000-S	3.393	86.17	23.39	104.05	6.49	1.13
C0823-085-7500-S	3.629	92.17	23.39	104.05	6.04	1.06
C0823-085-8000-S	3.864	98.16	23.39	104.05	5.66	0.99
C0823-085-8500-S	4.100	104.15	23.39	104.05	5.32	0.93
C0823-085-9000-S	4.336	110.14	23.39	104.05	5.02	0.88
C0823-085-9500-S*	4.617	117.27	23.39	104.05	4.79	0.84
C0823-092-1250-S	0.727	18.46	28.99	128.95	55.39	9.69
C0823-092-1375-S	0.790	20.07	28.99	128.95	49.57	8.68
C0823-092-1500-S	0.854	21.69	28.99	128.95	44.86	7.85
C0823-092-1625-S	0.917	23.30	28.99	128.95	40.97	7.17
C0823-092-1750-S	0.981	24.92	28.99	128.95	37.70	6.60
C0823-092-1875-S	1.045	26.54	28.99	128.95	34.92	6.11
C0823-092-2000-S	1.108	28.15	28.99	128.95	32.51	5.69
C0823-092-2125-S	1.172	29.77	28.99	128.95	30.42	5.32
C0823-092-2250-S	1.236	31.38	28.99	128.95	28.58	5.00
C0823-092-2375-S	1.299	33.00	28.99	128.95	26.95	4.72
C0823-092-2500-S	1.363	34.62	28.99	128.95	25.49	4.46
C0823-092-2625-S	1.426	36.23	28.99	128.95	24.19	4.23
C0823-092-2750-S	1.490	37.85	28.99	128.95	23.01	4.03
C0823-092-2875-S	1.554	39.46	28.99	128.95	21.94	3.84
C0823-092-3000-S	1.617	41.08	28.99	128.95	20.97	3.67
C0823-092-3250-S	1.745	44.31	28.99	128.95	19.26	3.37
C0823-092-3500-S	1.872	47.54	28.99	128.95	17.81	3.12
C0823-092-3750-S	1.999	50.78	28.99	128.95	16.56	2.90
C0823-092-4000-S	2.126	54.01	28.99	128.95	15.47	2.71

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0823-092-4250-M	0.823	20.90	0.092	2.34	4.250	107.95	2.029	51.52	1.718	43.64	37.10	165.01	16.70	2.92
C0823-092-4500-M	0.823	20.90	0.092	2.34	4.500	114.30	2.142	54.40	1.812	46.03	37.10	165.01	15.73	2.75
C0823-092-4750-M	0.823	20.90	0.092	2.34	4.750	120.65	2.255	57.29	1.906	48.41	37.10	165.01	14.87	2.60
C0823-092-5000-M	0.823	20.90	0.092	2.34	5.000	127.00	2.369	60.17	2.000	50.79	37.10	165.01	14.10	2.47
C0823-092-5250-M	0.823	20.90	0.092	2.34	5.250	133.35	2.482	63.05	2.093	53.17	37.10	165.01	13.40	2.35
C0823-092-5500-M	0.823	20.90	0.092	2.34	5.500	139.70	2.596	65.93	2.187	55.55	37.10	165.01	12.77	2.24
C0823-092-5750-M	0.823	20.90	0.092	2.34	5.750	146.05	2.709	68.81	2.281	57.94	37.10	165.01	12.20	2.13
C0823-092-6000-M	0.823	20.90	0.092	2.34	6.000	152.40	2.822	71.69	2.375	60.32	37.10	165.01	11.67	2.04
C0823-092-6250-M	0.823	20.90	0.092	2.34	6.250	158.75	2.936	74.57	2.468	62.70	37.10	165.01	11.19	1.96
C0823-092-6500-M	0.823	20.90	0.092	2.34	6.500	165.10	3.049	77.45	2.562	65.08	37.10	165.01	10.75	1.88
C0823-092-6750-M	0.823	20.90	0.092	2.34	6.750	171.45	3.163	80.33	2.656	67.46	37.10	165.01	10.34	1.81
C0823-092-7000-M	0.823	20.90	0.092	2.34	7.000	177.80	3.276	83.21	2.750	69.84	37.10	165.01	9.96	1.74
C0823-092-7500-M	0.823	20.90	0.092	2.34	7.500	190.50	3.503	88.97	2.937	74.61	37.10	165.01	9.28	1.62
C0823-092-8000-M	0.823	20.90	0.092	2.34	8.000	203.20	3.730	94.73	3.125	79.37	37.10	165.01	8.69	1.52
C0823-092-8500-M	0.823	20.90	0.092	2.34	8.500	215.90	3.956	100.49	3.312	84.14	37.10	165.01	8.17	1.43
C0823-092-9000-M	0.823	20.90	0.092	2.34	9.000	228.60	4.183	106.26	3.500	88.90	37.10	165.01	7.70	1.35
C0823-092-9500-M	0.823	20.90	0.092	2.34	9.500	241.30	4.410	112.02	3.687	93.66	37.10	165.01	7.29	1.28
C0823-098-1250-M	0.823	20.90	0.098	2.49	1.250	31.75	0.709	18.01	0.644	16.37	44.16	196.42	81.64	14.29
C0823-098-1375-M	0.823	20.90	0.098	2.49	1.375	34.93	0.770	19.56	0.696	17.69	44.16	196.42	72.98	12.77
C0823-098-1500-M	0.823	20.90	0.098	2.49	1.500	38.10	0.831	21.10	0.748	19.01	44.16	196.42	65.99	11.55
C0823-098-1625-M	0.823	20.90	0.098	2.49	1.625	41.28	0.892	22.65	0.800	20.33	44.16	196.42	60.22	10.54
C0823-098-1750-M	0.823	20.90	0.098	2.49	1.750	44.45	0.953	24.19	0.852	21.65	44.16	196.42	55.37	9.69
C0823-098-1875-M	0.823	20.90	0.098	2.49	1.875	47.63	1.013	25.74	0.904	22.97	44.16	196.42	51.25	8.97
C0823-098-2000-M	0.823	20.90	0.098	2.49	2.000	50.80	1.074	27.29	0.956	24.29	44.16	196.42	47.70	8.35
C0823-098-2125-M	0.823	20.90	0.098	2.49	2.125	53.98	1.135	28.83	1.008	25.61	44.16	196.42	44.61	7.81
C0823-098-2250-M	0.823	20.90	0.098	2.49	2.250	57.15	1.196	30.38	1.060	26.93	44.16	196.42	41.89	7.33
C0823-098-2375-M	0.823	20.90	0.098	2.49	2.375	60.33	1.257	31.92	1.112	28.26	44.16	196.42	39.49	6.91
C0823-098-2500-M	0.823	20.90	0.098	2.49	2.500	63.50	1.318	33.47	1.164	29.58	44.16	196.42	37.35	6.54
C0823-098-2625-M	0.823	20.90	0.098	2.49	2.625	66.68	1.378	35.01	1.216	30.90	44.16	196.42	35.43	6.20
C0823-098-2750-M	0.823	20.90	0.098	2.49	2.750	69.85	1.439	36.56	1.268	32.22	44.16	196.42	33.69	5.90
C0823-098-2875-M	0.823	20.90	0.098	2.49	2.875	73.03	1.500	38.11	1.320	33.54	44.16	196.42	32.12	5.62
C0823-098-3000-M	0.823	20.90	0.098	2.49	3.000	76.20	1.561	39.65	1.372	34.86	44.16	196.42	30.69	5.37
C0823-098-3250-M	0.823	20.90	0.098	2.49	3.250	82.55	1.683	42.74	1.477	37.50	44.16	196.42	28.18	4.93
C0823-098-3500-M	0.823	20.90	0.098	2.49	3.500	88.90	1.804	45.83	1.581	40.15	44.16	196.42	26.04	4.56
C0823-098-3750-M	0.823	20.90	0.098	2.49	3.750	95.25	1.926	48.92	1.685	42.79	44.16	196.42	24.21	4.24
C0823-098-4000-M	0.823	20.90	0.098	2.49	4.000	101.60	2.048	52.02	1.789	45.43	44.16	196.42	22.62	3.96
C0823-098-4250-M	0.823	20.90	0.098	2.49	4.250	107.95	2.170	55.11	1.893	48.07	44.16	196.42	21.23	3.71
C0823-098-4500-M	0.823	20.90	0.098	2.49	4.500	114.30	2.291	58.20	1.997	50.71	44.16	196.42	19.99	3.50
C0823-098-4750-M	0.823	20.90	0.098	2.49	4.750	120.65	2.413	61.29	2.101	53.36	44.16	196.42	18.90	3.31
C0823-098-5000-M	0.823	20.90	0.098	2.49	5.000	127.00	2.535	64.38	2.205	56.00	44.16	196.42	17.91	3.13
C0823-098-5250-M	0.823	20.90	0.098	2.49	5.250	133.35	2.656	67.47	2.309	58.64	44.16	196.42	17.03	2.98
C0823-098-5500-M	0.823	20.90	0.098	2.49	5.500	139.70	2.778	70.56	2.413	61.28	44.16	196.42	16.22	2.84
C0823-098-5750-M	0.823	20.90	0.098	2.49	5.750	146.05	2.900	73.66	2.517	63.92	44.16	196.42	15.49	2.71
C0823-098-6000-M	0.823	20.90	0.098	2.49	6.000	152.40	3.022	76.75	2.621	66.57	44.16	196.42	14.83	2.59
C0823-098-6250-M	0.823	20.90	0.098	2.49	6.250	158.75	3.143	79.84	2.725	69.21	44.16	196.42	14.21	2.49
C0823-098-6500-M	0.823	20.90	0.098	2.49	6.500	165.10	3.265	82.93	2.829	71.85	44.16	196.42	13.65	2.39
C0823-098-6750-M	0.823	20.90	0.098	2.49	6.750	171.45	3.387	86.02	2.933	74.49	44.16	196.42	13.13	2.30
C0823-098-7000-M	0.823	20.90	0.098	2.49	7.000	177.80	3.508	89.11	3.037	77.13	44.16	196.42	12.65	2.21
C0823-098-7500-M	0.823	20.90	0.098	2.49	7.500	190.50	3.752	95.30	3.245	82.42	44.16	196.42	11.78	2.06
C0823-098-8000-M	0.823	20.90	0.098	2.49	8.000	203.20	3.995	101.48	3.453	87.70	44.16	196.42	11.03	1.93
C0823-098-8500-M	0.823	20.90	0.098	2.49	8.500	215.90	4.239	107.66	3.661	92.99	44.16	196.42	10.36	1.81
C0823-098-9000-M	0.823	20.90	0.098	2.49	9.000	228.60	4.482	113.84	3.869	98.27	44.16	196.42	9.77	1.71
C0823-098-9500-M	0.823	20.90	0.098	2.49	9.500	241.30	4.725	120.03	4.077	103.56	44.16	196.42	9.25	1.62
C0823-105-1250-M	0.823	20.90	0.105	2.67	1.250	31.75	0.756	19.20	0.702	17.84	53.38	237.46	108.05	18.91
C0823-105-1375-M	0.823	20.90	0.105	2.67	1.375	34.93	0.822	20.87	0.760	19.31	53.38	237.46	96.46	16.88
C0823-105-1500-M	0.823	20.90	0.105	2.67	1.500	38.10	0.887	22.53	0.818	20.78	53.38	237.46	87.11	15.24
C0823-105-1625-M	0.823	20.90	0.105	2.67	1.625	41.28	0.953	24.20	0.876	22.25	53.38	237.46	79.41	13.90
C0823-105-1750-M	0.823	20.90	0.105	2.67	1.750	44.45	1.018	25.87	0.934	23.72	53.38	237.46	72.97	12.77
C0823-105-1875-M	0.823	20.90	0.105	2.67	1.875	47.63	1.084	27.53	0.992	25.19	53.38	237.46	67.49	11.81
C0823-105-2000-M	0.823	20.90	0.105	2.67	2.000	50.80	1.150	29.20	1.050	26.66	53.38	237.46	62.78	10.99
C0823-105-2125-M	0.823	20.90	0.105	2.67	2.125	53.98	1.215	30.87	1.107	28.13	53.38	237.46	58.68	10.27
C0823-105-2250-M	0.823	20.90	0.105	2.67	2.250	57.15	1.281	32.53	1.165	29.60	53.38	237.46	55.08	9.64
C0823-105-2375-M	0.823	20.90	0.105	2.67	2.375	60.33	1.346	34.20	1.223	31.07	53.38	237.46	51.90	9.08
C0823-105-2500-M	0.823	20.90	0.105	2.67	2.500	63.50	1.412	35.87	1.281	32.54	53.38	237.46	49.07	8.59

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0823-092-4250-S	2.254	57.24	28.99	128.95	14.52	2.54
C0823-092-4500-S	2.381	60.47	28.99	128.95	13.68	2.39
C0823-092-4750-S	2.508	63.71	28.99	128.95	12.93	2.26
C0823-092-5000-S	2.635	66.94	28.99	128.95	12.26	2.15
C0823-092-5250-S	2.763	70.17	28.99	128.95	11.65	2.04
C0823-092-5500-S	2.890	73.40	28.99	128.95	11.11	1.94
C0823-092-5750-S	3.017	76.63	28.99	128.95	10.61	1.86
C0823-092-6000-S	3.144	79.87	28.99	128.95	10.15	1.78
C0823-092-6250-S	3.272	83.10	28.99	128.95	9.73	1.70
C0823-092-6500-S	3.399	86.33	28.99	128.95	9.35	1.64
C0823-092-6750-S	3.526	89.56	28.99	128.95	8.99	1.57
C0823-092-7000-S	3.653	92.79	28.99	128.95	8.66	1.52
C0823-092-7500-S	3.908	99.26	28.99	128.95	8.07	1.41
C0823-092-8000-S	4.162	105.72	28.99	128.95	7.55	1.32
C0823-092-8500-S	4.417	112.19	28.99	128.95	7.10	1.24
C0823-092-9000-S	4.671	118.65	28.99	128.95	6.70	1.17
C0823-092-9500-S	4.926	125.12	28.99	128.95	6.34	1.11
C0823-098-1250-S	0.766	19.45	34.37	152.90	70.99	12.42
C0823-098-1375-S	0.833	21.17	34.37	152.90	63.46	11.11
C0823-098-1500-S	0.901	22.88	34.37	152.90	57.38	10.04
C0823-098-1625-S	0.969	24.60	34.37	152.90	52.36	9.16
C0823-098-1750-S	1.036	26.32	34.37	152.90	48.15	8.43
C0823-098-1875-S	1.104	28.03	34.37	152.90	44.57	7.80
C0823-098-2000-S	1.171	29.75	34.37	152.90	41.48	7.26
C0823-098-2125-S	1.239	31.47	34.37	152.90	38.79	6.79
C0823-098-2250-S	1.306	33.18	34.37	152.90	36.43	6.37
C0823-098-2375-S	1.374	34.90	34.37	152.90	34.34	6.01
C0823-098-2500-S	1.442	36.62	34.37	152.90	32.48	5.68
C0823-098-2625-S	1.509	38.33	34.37	152.90	30.80	5.39
C0823-098-2750-S	1.577	40.05	34.37	152.90	29.30	5.13
C0823-098-2875-S	1.644	41.77	34.37	152.90	27.93	4.89
C0823-098-3000-S	1.712	43.48	34.37	152.90	26.69	4.67
C0823-098-3250-S	1.847	46.92	34.37	152.90	24.50	4.29
C0823-098-3500-S	1.982	50.35	34.37	152.90	22.65	3.96
C0823-098-3750-S	2.117	53.78	34.37	152.90	21.05	3.68
C0823-098-4000-S	2.253	57.21	34.37	152.90	19.67	3.44
C0823-098-4250-S	2.388	60.65	34.37	152.90	18.46	3.23
C0823-098-4500-S	2.523	64.08	34.37	152.90	17.39	3.04
C0823-098-4750-S	2.658	67.51	34.37	152.90	16.43	2.88
C0823-098-5000-S	2.793	70.95	34.37	152.90	15.58	2.73
C0823-098-5250-S	2.928	74.38	34.37	152.90	14.81	2.59
C0823-098-5500-S	3.063	77.81	34.37	152.90	14.11	2.47
C0823-098-5750-S	3.199	81.24	34.37	152.90	13.47	2.36
C0823-098-6000-S	3.334	84.68	34.37	152.90	12.89	2.26
C0823-098-6250-S	3.469	88.11	34.37	152.90	12.36	2.16
C0823-098-6500-S	3.604	91.54	34.37	152.90	11.87	2.08
C0823-098-6750-S	3.739	94.98	34.37	152.90	11.42	2.00
C0823-098-7000-S	3.874	98.41	34.37	152.90	11.00	1.92
C0823-098-7500-S	4.145	105.27	34.37	152.90	10.24	1.79
C0823-098-8000-S	4.415	112.14	34.37	152.90	9.59	1.68
C0823-098-8500-S	4.685	119.01	34.37	152.90	9.01	1.58
C0823-098-9000-S	4.956	125.87	34.37	152.90	8.50	1.49
C0823-098-9500-S	5.226	132.74	34.37	152.90	8.04	1.41
C0823-105-1250-S	0.810	20.57	41.36	183.97	93.96	16.44
C0823-105-1375-S	0.882	22.40	41.36	183.97	83.87	14.68
C0823-105-1500-S	0.954	24.23	41.36	183.97	75.75	13.26
C0823-105-1625-S	1.026	26.06	41.36	183.97	69.06	12.08
C0823-105-1750-S	1.098	27.89	41.36	183.97	63.45	11.10
C0823-105-1875-S	1.170	29.73	41.36	183.97	58.69	10.27
C0823-105-2000-S	1.242	31.56	41.36	183.97	54.59	9.55
C0823-105-2125-S	1.314	33.39	41.36	183.97	51.03	8.93
C0823-105-2250-S	1.387	35.22	41.36	183.97	47.90	8.38
C0823-105-2375-S	1.459	37.05	41.36	183.97	45.13	7.90
C0823-105-2500-S	1.531	38.88	41.36	183.97	42.67	7.47

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0823-105-2625-M	0.823	20.90	0.105	2.67	2.625	66.68	1.478	37.53	1.339	34.01	53.38	237.46	46.53	8.14	**C0823-105-2625-S**	1.603	40.71	41.36	183.97	40.46	7.08
C0823-105-2750-M	0.823	20.90	0.105	2.67	2.750	69.85	1.543	39.20	1.397	35.48	53.38	237.46	44.24	7.74	**C0823-105-2750-S**	1.675	42.54	41.36	183.97	38.47	6.73
C0823-105-2875-M	0.823	20.90	0.105	2.67	2.875	73.03	1.609	40.87	1.455	36.95	53.38	237.46	42.17	7.38	**C0823-105-2875-S**	1.747	44.37	41.36	183.97	36.67	6.42
C0823-105-3000-M	0.823	20.90	0.105	2.67	3.000	76.20	1.675	42.53	1.513	38.42	53.38	237.46	40.28	7.05	**C0823-105-3000-S**	1.819	46.21	41.36	183.97	35.02	6.13
C0823-105-3250-M	0.823	20.90	0.105	2.67	3.250	82.55	1.806	45.87	1.628	41.36	53.38	237.46	36.96	6.47	**C0823-105-3250-S**	1.963	49.87	41.36	183.97	32.14	5.62
C0823-105-3500-M	0.823	20.90	0.105	2.67	3.500	88.90	1.937	49.20	1.744	44.30	53.38	237.46	34.16	5.98	**C0823-105-3500-S**	2.108	53.53	41.36	183.97	29.70	5.20
C0823-105-3750-M	0.823	20.90	0.105	2.67	3.750	95.25	2.068	52.53	1.860	47.25	53.38	237.46	31.74	5.56	**C0823-105-3750-S**	2.252	57.19	41.36	183.97	27.60	4.83
C0823-105-4000-M	0.823	20.90	0.105	2.67	4.000	101.60	2.199	55.87	1.976	50.19	53.38	237.46	29.65	5.19	**C0823-105-4000-S**	2.396	60.86	41.36	183.97	25.78	4.51
C0823-105-4250-M	0.823	20.90	0.105	2.67	4.250	107.95	2.331	59.20	2.092	53.13	53.38	237.46	27.81	4.87	**C0823-105-4250-S**	2.540	64.52	41.36	183.97	24.19	4.23
C0823-105-4500-M	0.823	20.90	0.105	2.67	4.500	114.30	2.462	62.53	2.207	56.07	53.38	237.46	26.19	4.58	**C0823-105-4500-S**	2.684	68.18	41.36	183.97	22.78	3.99
C0823-105-4750-M	0.823	20.90	0.105	2.67	4.750	120.65	2.593	65.87	2.323	59.01	53.38	237.46	24.75	4.33	**C0823-105-4750-S**	2.828	71.84	41.36	183.97	21.52	3.77
C0823-105-5000-M	0.823	20.90	0.105	2.67	5.000	127.00	2.724	69.20	2.439	61.95	53.38	237.46	23.46	4.11	**C0823-105-5000-S**	2.973	75.50	41.36	183.97	20.40	3.57
C0823-105-5250-M	0.823	20.90	0.105	2.67	5.250	133.35	2.856	72.53	2.555	64.89	53.38	237.46	22.30	3.90	**C0823-105-5250-S**	3.117	79.17	41.36	183.97	19.39	3.39
C0823-105-5500-M	0.823	20.90	0.105	2.67	5.500	139.70	2.987	75.87	2.671	67.83	53.38	237.46	21.24	3.72	**C0823-105-5500-S**	3.261	82.83	41.36	183.97	18.47	3.23
C0823-105-5750-M	0.823	20.90	0.105	2.67	5.750	146.05	3.118	79.20	2.786	70.77	53.38	237.46	20.28	3.55	**C0823-105-5750-S**	3.405	86.49	41.36	183.97	17.64	3.09
C0823-105-6000-M	0.823	20.90	0.105	2.67	6.000	152.40	3.249	82.53	2.902	73.71	53.38	237.46	19.41	3.40	**C0823-105-6000-S**	3.549	90.15	41.36	183.97	16.88	2.95
C0823-105-6250-M	0.823	20.90	0.105	2.67	6.250	158.75	3.381	85.87	3.018	76.66	53.38	237.46	18.60	3.26	**C0823-105-6250-S**	3.694	93.82	41.36	183.97	16.18	2.83
C0823-105-6500-M	0.823	20.90	0.105	2.67	6.500	165.10	3.512	89.20	3.134	79.60	53.38	237.46	17.87	3.13	**C0823-105-6500-S**	3.838	97.48	41.36	183.97	15.54	2.72
C0823-105-6750-M	0.823	20.90	0.105	2.67	6.750	171.45	3.643	92.53	3.249	82.54	53.38	237.46	17.18	3.01	**C0823-105-6750-S**	3.982	101.14	41.36	183.97	14.94	2.61
C0823-105-7000-M	0.823	20.90	0.105	2.67	7.000	177.80	3.774	95.87	3.365	85.48	53.38	237.46	16.55	2.90	**C0823-105-7000-S**	4.126	104.80	41.36	183.97	14.39	2.52
C0823-105-7500-M	0.823	20.90	0.105	2.67	7.500	190.50	4.037	102.53	3.597	91.36	53.38	237.46	15.41	2.70	**C0823-105-7500-S**	4.414	112.13	41.36	183.97	13.40	2.35
C0823-105-8000-M	0.823	20.90	0.105	2.67	8.000	203.20	4.299	109.20	3.828	97.24	53.38	237.46	14.43	2.52	**C0823-105-8000-S**	4.703	119.45	41.36	183.97	12.54	2.20
C0823-105-8500-M	0.823	20.90	0.105	2.67	8.500	215.90	4.562	115.87	4.060	103.12	53.38	237.46	13.56	2.37	**C0823-105-8500-S**	4.991	126.78	41.36	183.97	11.79	2.06
C0823-105-9000-M	0.823	20.90	0.105	2.67	9.000	228.60	4.824	122.53	4.292	109.01	53.38	237.46	12.78	2.24	**C0823-105-9000-S**	5.280	134.10	41.36	183.97	11.12	1.95
C0823-105-9500-M	0.823	20.90	0.105	2.67	9.500	241.30	5.087	129.20	4.523	114.89	53.38	237.46	12.10	2.12	**C0823-105-9500-S**	5.568	141.43	41.36	183.97	10.52	1.84
C0823-112-1250-M	0.823	20.90	0.112	2.85	1.250	31.75	0.801	20.33	0.757	19.23	63.72	283.42	141.76	24.81	**C0823-112-1250-S**	0.852	21.63	49.12	218.49	123.27	21.57
C0823-112-1375-M	0.823	20.90	0.112	2.85	1.375	34.93	0.871	22.12	0.821	20.85	63.72	283.42	126.36	22.11	**C0823-112-1375-S**	0.928	23.57	49.12	218.49	109.88	19.23
C0823-112-1500-M	0.823	20.90	0.112	2.85	1.500	38.10	0.941	23.90	0.884	22.47	63.72	283.42	113.98	19.95	**C0823-112-1500-S**	1.004	25.51	49.12	218.49	99.12	17.35
C0823-112-1625-M	0.823	20.90	0.112	2.85	1.625	41.28	1.011	25.69	0.948	24.08	63.72	283.42	103.81	18.17	**C0823-112-1625-S**	1.081	27.45	49.12	218.49	90.27	15.80
C0823-112-1750-M	0.823	20.90	0.112	2.85	1.750	44.45	1.081	27.47	1.012	25.70	63.72	283.42	95.31	16.68	**C0823-112-1750-S**	1.157	29.40	49.12	218.49	82.88	14.50
C0823-112-1875-M	0.823	20.90	0.112	2.85	1.875	47.63	1.152	29.25	1.075	27.31	63.72	283.42	88.09	15.42	**C0823-112-1875-S**	1.234	31.34	49.12	218.49	76.60	13.41
C0823-112-2000-M	0.823	20.90	0.112	2.85	2.000	50.80	1.222	31.04	1.139	28.93	63.72	283.42	81.89	14.33	**C0823-112-2000-S**	1.310	33.28	49.12	218.49	71.21	12.46
C0823-112-2125-M	0.823	20.90	0.112	2.85	2.125	53.98	1.292	32.82	1.203	30.54	63.72	283.42	76.51	13.39	**C0823-112-2125-S**	1.387	35.22	49.12	218.49	66.53	11.64
C0823-112-2250-M	0.823	20.90	0.112	2.85	2.250	57.15	1.362	34.61	1.266	32.16	63.72	283.42	71.79	12.56	**C0823-112-2250-S**	1.463	37.16	49.12	218.49	62.42	10.92
C0823-112-2375-M	0.823	20.90	0.112	2.85	2.375	60.33	1.433	36.39	1.330	33.78	63.72	283.42	67.62	11.83	**C0823-112-2375-S**	1.540	39.11	49.12	218.49	58.80	10.29
C0823-112-2500-M	0.823	20.90	0.112	2.85	2.500	63.50	1.503	38.17	1.393	35.39	63.72	283.42	63.90	11.18	**C0823-112-2500-S**	1.616	41.05	49.12	218.49	55.57	9.72
C0823-112-2625-M	0.823	20.90	0.112	2.85	2.625	66.68	1.573	39.96	1.457	37.01	63.72	283.42	60.58	10.60	**C0823-112-2625-S**	1.693	42.99	49.12	218.49	52.68	9.22
C0823-112-2750-M	0.823	20.90	0.112	2.85	2.750	69.85	1.643	41.74	1.521	38.62	63.72	283.42	57.58	10.08	**C0823-112-2750-S**	1.769	44.93	49.12	218.49	50.07	8.76
C0823-112-2875-M	0.823	20.90	0.112	2.85	2.875	73.03	1.714	43.53	1.584	40.24	63.72	283.42	54.86	9.60	**C0823-112-2875-S**	1.845	46.87	49.12	218.49	47.71	8.35
C0823-112-3000-M	0.823	20.90	0.112	2.85	3.000	76.20	1.784	45.31	1.648	41.85	63.72	283.42	52.39	9.17	**C0823-112-3000-S**	1.922	48.82	49.12	218.49	45.56	7.97
C0823-112-3250-M	0.823	20.90	0.112	2.85	3.250	82.55	1.924	48.88	1.775	45.08	63.72	283.42	48.06	8.41	**C0823-112-3250-S**	2.075	52.70	49.12	218.49	41.80	7.31
C0823-112-3500-M	0.823	20.90	0.112	2.85	3.500	88.90	2.065	52.45	1.902	48.32	63.72	283.42	44.40	7.77	**C0823-112-3500-S**	2.228	56.58	49.12	218.49	38.61	6.76
C0823-112-3750-M	0.823	20.90	0.112	2.85	3.750	95.25	2.205	56.02	2.029	51.55	63.72	283.42	41.25	7.22	**C0823-112-3750-S**	2.381	60.47	49.12	218.49	35.87	6.28
C0823-112-4000-M	0.823	20.90	0.112	2.85	4.000	101.60	2.346	59.58	2.157	54.78	63.72	283.42	38.52	6.74	**C0823-112-4000-S**	2.533	64.35	49.12	218.49	33.49	5.86
C0823-112-4250-M	0.823	20.90	0.112	2.85	4.250	107.95	2.486	63.15	2.284	58.01	63.72	283.42	36.13	6.32	**C0823-112-4250-S**	2.686	68.23	49.12	218.49	31.41	5.50
C0823-112-4500-M	0.823	20.90	0.112	2.85	4.500	114.30	2.627	66.72	2.411	61.24	63.72	283.42	34.01	5.95	**C0823-112-4500-S**	2.839	72.12	49.12	218.49	29.58	5.18
C0823-112-4750-M	0.823	20.90	0.112	2.85	4.750	120.65	2.767	70.29	2.538	64.47	63.72	283.42	32.14	5.62	**C0823-112-4750-S**	2.992	76.00	49.12	218.49	27.94	4.89
C0823-112-5000-M	0.823	20.90	0.112	2.85	5.000	127.00	2.908	73.86	2.665	67.70	63.72	283.42	30.45	5.33	**C0823-112-5000-S**	3.145	79.89	49.12	218.49	26.48	4.63
C0823-112-5250-M	0.823	20.90	0.112	2.85	5.250	133.35	3.048	77.42	2.793	70.93	63.72	283.42	28.94	5.06	**C0823-112-5250-S**	3.298	83.77	49.12	218.49	25.16	4.40
C0823-112-5500-M	0.823	20.90	0.112	2.85	5.500	139.70	3.189	80.99	2.920	74.16	63.72	283.42	27.57	4.82	**C0823-112-5500-S**	3.451	87.65	49.12	218.49	23.97	4.19
C0823-112-5750-M	0.823	20.90	0.112	2.85	5.750	146.05	3.329	84.56	3.047	77.40	63.72	283.42	26.32	4.61	**C0823-112-5750-S**	3.604	91.54	49.12	218.49	22.89	4.01
C0823-112-6000-M	0.823	20.90	0.112	2.85	6.000	152.40	3.470	88.13	3.174	80.63	63.72	283.42	25.18	4.41	**C0823-112-6000-S**	3.757	95.42	49.12	218.49	21.90	3.83
C0823-112-6250-M	0.823	20.90	0.112	2.85	6.250	158.75	3.610	91.70	3.302	83.86	63.72	283.42	24.14	4.22	**C0823-112-6250-S**	3.910	99.31	49.12	218.49	20.99	3.67
C0823-112-6500-M	0.823	20.90	0.112	2.85	6.500	165.10	3.751	95.27	3.429	87.09	63.72	283.42	23.17	4.06	**C0823-112-6500-S**	4.063	103.19	49.12	218.49	20.15	3.53
C0823-112-6750-M	0.823	20.90	0.112	2.85	6.750	171.45	3.891	98.83	3.556	90.32	63.72	283.42	22.29	3.90	**C0823-112-6750-S**	4.215	107.07	49.12	218.49	19.38	3.39
C0823-112-7000-M	0.823	20.90	0.112	2.85	7.000	177.80	4.032	102.40	3.683	93.55	63.72	283.42	21.46	3.76	**C0823-112-7000-S**	4.368	110.96	49.12	218.49	18.67	3.27
C0823-112-7500-M	0.823	20.90	0.112	2.85	7.500	190.50	4.313	109.54	3.938	100.01	63.72	283.42	19.99	3.50	**C0823-112-7500-S**	4.674	118.72	49.12	218.49	17.38	3.04
C0823-112-8000-M	0.823	20.90	0.112	2.85	8.000	203.20	4.594	116.68	4.192	106.48	63.72	283.42	18.70	3.27	**C0823-112-8000-S**	4.980	126.49	49.12	218.49	16.26	2.85
C0823-112-8500-M	0.823	20.90	0.112	2.85	8.500	215.90	4.874	123.81	4.446	112.94	63.72	283.42	17.57	3.08	**C0823-112-8500-S**	5.286	134.26	49.12	218.49	15.28	2.67
C0823-112-9000-M	0.823	20.90	0.112	2.85	9.000	228.60	5.155	130.95	4.701	119.40	63.72	283.42	16.57	2.90	**C0823-112-9000-S**	5.592	142.03	49.12	218.49	14.41	2.52
C0823-112-9500-M	0.823	20.90	0.112	2.85	9.500	241.30	5.436	138.08	4.955	125.86	63.72	283.42	15.68	2.74	**C0823-112-9500-S**	5.897	149.79	49.12	218.49	13.63	2.39
C0823-125-1250-M	0.823	20.90	0.125	3.18	1.250	31.75	0.876	22.26	0.851	21.62	85.97	382.41	230.14	40.27	**C0823-125-1250-S**	0.922	23.42	65.65	292.02	200.12	35.02
C0823-125-1375-M	0.823	20.90	0.125	3.18	1.375	34.93	0.955	24.25	0.925	23.49	85.97	382.41	204.57	35.80	**C0823-125-1375-S**	1.006	25.55	65.65	292.02	177.89	31.13
C0823-125-1500-M	0.823	20.90	0.125	3.18	1.500	38.10	1.033	26.24	0.998	25.35	85.97	382.41	184.11	32.22	**C0823-125-1500-S**	1.090	27.68	65.65	292.02	160.10	28.02

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0823-125-1625-M	**0.823**	**20.90**	**0.125**	**3.18**	**1.625**	**41.28**	**1.111**	**28.23**	**1.072**	**27.22**	**85.97**	**382.41**	**167.38**	**29.29**
C0823-125-1750-M	**0.823**	**20.90**	**0.125**	**3.18**	**1.750**	**44.45**	**1.190**	**30.22**	**1.145**	**29.09**	**85.97**	**382.41**	**153.43**	**26.85**
C0823-125-1875-M	**0.823**	**20.90**	**0.125**	**3.18**	**1.875**	**47.63**	**1.268**	**32.21**	**1.219**	**30.96**	**85.97**	**382.41**	**141.63**	**24.78**
C0823-125-2000-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.000**	**50.80**	**1.346**	**34.20**	**1.292**	**32.83**	**85.97**	**382.41**	**131.51**	**23.01**
C0823-125-2125-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.125**	**53.98**	**1.425**	**36.18**	**1.366**	**34.70**	**85.97**	**382.41**	**122.74**	**21.48**
C0823-125-2250-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.250**	**57.15**	**1.503**	**38.17**	**1.440**	**36.57**	**85.97**	**382.41**	**115.07**	**20.14**
C0823-125-2375-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.375**	**60.33**	**1.581**	**40.16**	**1.513**	**38.43**	**85.97**	**382.41**	**108.30**	**18.95**
C0823-125-2500-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.500**	**63.50**	**1.660**	**42.15**	**1.587**	**40.30**	**85.97**	**382.41**	**102.28**	**17.90**
C0823-125-2625-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.625**	**66.68**	**1.738**	**44.14**	**1.660**	**42.17**	**85.97**	**382.41**	**96.90**	**16.96**
C0823-125-2750-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.750**	**69.85**	**1.816**	**46.13**	**1.734**	**44.04**	**85.97**	**382.41**	**92.06**	**16.11**
C0823-125-2875-M	**0.823**	**20.90**	**0.125**	**3.18**	**2.875**	**73.03**	**1.894**	**48.12**	**1.807**	**45.91**	**85.97**	**382.41**	**87.67**	**15.34**
C0823-125-3000-M	**0.823**	**20.90**	**0.125**	**3.18**	**3.000**	**76.20**	**1.973**	**50.11**	**1.881**	**47.78**	**85.97**	**382.41**	**83.69**	**14.65**
C0823-125-3250-M	**0.823**	**20.90**	**0.125**	**3.18**	**3.250**	**82.55**	**2.129**	**54.09**	**2.028**	**51.52**	**85.97**	**382.41**	**76.71**	**13.42**
C0823-125-3500-M	**0.823**	**20.90**	**0.125**	**3.18**	**3.500**	**88.90**	**2.286**	**58.06**	**2.175**	**55.25**	**85.97**	**382.41**	**70.81**	**12.39**
C0823-125-3750-M	**0.823**	**20.90**	**0.125**	**3.18**	**3.750**	**95.25**	**2.443**	**62.04**	**2.322**	**58.99**	**85.97**	**382.41**	**65.75**	**11.51**
C0823-125-4000-M	**0.823**	**20.90**	**0.125**	**3.18**	**4.000**	**101.60**	**2.599**	**66.02**	**2.470**	**62.73**	**85.97**	**382.41**	**61.37**	**10.74**
C0823-125-4250-M	**0.823**	**20.90**	**0.125**	**3.18**	**4.250**	**107.95**	**2.756**	**70.00**	**2.617**	**66.46**	**85.97**	**382.41**	**57.54**	**10.07**
C0823-125-4500-M	**0.823**	**20.90**	**0.125**	**3.18**	**4.500**	**114.30**	**2.912**	**73.98**	**2.764**	**70.20**	**85.97**	**382.41**	**54.15**	**9.48**
C0823-125-4750-M	**0.823**	**20.90**	**0.125**	**3.18**	**4.750**	**120.65**	**3.069**	**77.95**	**2.911**	**73.94**	**85.97**	**382.41**	**51.14**	**8.95**
C0823-125-5000-M	**0.823**	**20.90**	**0.125**	**3.18**	**5.000**	**127.00**	**3.226**	**81.93**	**3.058**	**77.68**	**85.97**	**382.41**	**48.45**	**8.48**
C0823-125-5250-M	**0.823**	**20.90**	**0.125**	**3.18**	**5.250**	**133.35**	**3.382**	**85.91**	**3.205**	**81.41**	**85.97**	**382.41**	**46.03**	**8.05**
C0823-125-5500-M	**0.823**	**20.90**	**0.125**	**3.18**	**5.500**	**139.70**	**3.539**	**89.89**	**3.352**	**85.15**	**85.97**	**382.41**	**43.84**	**7.67**
C0823-125-5750-M	**0.823**	**20.90**	**0.125**	**3.18**	**5.750**	**146.05**	**3.695**	**93.87**	**3.500**	**88.89**	**85.97**	**382.41**	**41.84**	**7.32**
C0823-125-6000-M	**0.823**	**20.90**	**0.125**	**3.18**	**6.000**	**152.40**	**3.852**	**97.84**	**3.647**	**92.63**	**85.97**	**382.41**	**40.02**	**7.00**
C0823-125-6250-M	**0.823**	**20.90**	**0.125**	**3.18**	**6.250**	**158.75**	**4.009**	**101.82**	**3.794**	**96.36**	**85.97**	**382.41**	**38.36**	**6.71**
C0823-125-6500-M	**0.823**	**20.90**	**0.125**	**3.18**	**6.500**	**165.10**	**4.165**	**105.80**	**3.941**	**100.10**	**85.97**	**382.41**	**36.82**	**6.44**
C0823-125-6750-M	**0.823**	**20.90**	**0.125**	**3.18**	**6.750**	**171.45**	**4.322**	**109.78**	**4.088**	**103.84**	**85.97**	**382.41**	**35.41**	**6.20**
C0823-125-7000-M	**0.823**	**20.90**	**0.125**	**3.18**	**7.000**	**177.80**	**4.479**	**113.76**	**4.235**	**107.58**	**85.97**	**382.41**	**34.10**	**5.97**
C0823-125-7500-M	**0.823**	**20.90**	**0.125**	**3.18**	**7.500**	**190.50**	**4.792**	**121.71**	**4.530**	**115.05**	**85.97**	**382.41**	**31.74**	**5.56**
C0823-125-8000-M	**0.823**	**20.90**	**0.125**	**3.18**	**8.000**	**203.20**	**5.105**	**129.67**	**4.824**	**122.53**	**85.97**	**382.41**	**29.70**	**5.20**
C0823-125-8500-M	**0.823**	**20.90**	**0.125**	**3.18**	**8.500**	**215.90**	**5.418**	**137.62**	**5.118**	**130.00**	**85.97**	**382.41**	**27.90**	**4.88**
C0823-125-9000-M	**0.823**	**20.90**	**0.125**	**3.18**	**9.000**	**228.60**	**5.731**	**145.58**	**5.412**	**137.47**	**85.97**	**382.41**	**26.30**	**4.60**
C0823-125-9500-M	**0.823**	**20.90**	**0.125**	**3.18**	**9.500**	**241.30**	**6.045**	**153.53**	**5.707**	**144.95**	**85.97**	**382.41**	**24.88**	**4.35**
C0823-135-1250-M	**0.823**	**20.90**	**0.135**	**3.43**	**1.250**	**31.75**	**0.928**	**23.58**	**0.915**	**23.24**	**105.91**	**471.11**	**329.11**	**57.59**
C0823-135-1375-M	**0.823**	**20.90**	**0.135**	**3.43**	**1.375**	**34.93**	**1.012**	**25.71**	**0.996**	**25.29**	**105.91**	**471.11**	**291.88**	**51.08**
C0823-135-1500-M	**0.823**	**20.90**	**0.135**	**3.43**	**1.500**	**38.10**	**1.096**	**27.84**	**1.076**	**27.33**	**105.91**	**471.11**	**262.22**	**45.89**
C0823-135-1625-M	**0.823**	**20.90**	**0.135**	**3.43**	**1.625**	**41.28**	**1.180**	**29.97**	**1.157**	**29.38**	**105.91**	**471.11**	**238.03**	**41.66**
C0823-135-1750-M	**0.823**	**20.90**	**0.135**	**3.43**	**1.750**	**44.45**	**1.264**	**32.11**	**1.237**	**31.42**	**105.91**	**471.11**	**217.93**	**38.14**
C0823-135-1875-M	**0.823**	**20.90**	**0.135**	**3.43**	**1.875**	**47.63**	**1.348**	**34.24**	**1.318**	**33.47**	**105.91**	**471.11**	**200.95**	**35.17**
C0823-135-2000-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.000**	**50.80**	**1.432**	**36.37**	**1.398**	**35.52**	**105.91**	**471.11**	**186.43**	**32.63**
C0823-135-2125-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.125**	**53.98**	**1.516**	**38.50**	**1.479**	**37.56**	**105.91**	**471.11**	**173.87**	**30.43**
C0823-135-2250-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.250**	**57.15**	**1.600**	**40.64**	**1.559**	**39.61**	**105.91**	**471.11**	**162.89**	**28.51**
C0823-135-2375-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.375**	**60.33**	**1.684**	**42.77**	**1.640**	**41.65**	**105.91**	**471.11**	**153.22**	**26.81**
C0823-135-2500-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.500**	**63.50**	**1.768**	**44.90**	**1.720**	**43.70**	**105.91**	**471.11**	**144.63**	**25.31**
C0823-135-2625-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.625**	**66.68**	**1.852**	**47.03**	**1.801**	**45.74**	**105.91**	**471.11**	**136.96**	**23.97**
C0823-135-2750-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.750**	**69.85**	**1.936**	**49.17**	**1.882**	**47.79**	**105.91**	**471.11**	**130.05**	**22.76**
C0823-135-2875-M	**0.823**	**20.90**	**0.135**	**3.43**	**2.875**	**73.03**	**2.020**	**51.30**	**1.962**	**49.84**	**105.91**	**471.11**	**123.81**	**21.67**
C0823-135-3000-M	**0.823**	**20.90**	**0.135**	**3.43**	**3.000**	**76.20**	**2.104**	**53.43**	**2.043**	**51.88**	**105.91**	**471.11**	**118.14**	**20.68**
C0823-135-3250-M	**0.823**	**20.90**	**0.135**	**3.43**	**3.250**	**82.55**	**2.271**	**57.69**	**2.204**	**55.97**	**105.91**	**471.11**	**108.23**	**18.94**
C0823-135-3500-M	**0.823**	**20.90**	**0.135**	**3.43**	**3.500**	**88.90**	**2.439**	**61.96**	**2.365**	**60.07**	**105.91**	**471.11**	**99.85**	**17.47**
C0823-135-3750-M	**0.823**	**20.90**	**0.135**	**3.43**	**3.750**	**95.25**	**2.607**	**66.22**	**2.526**	**64.16**	**105.91**	**471.11**	**92.68**	**16.22**
C0823-135-4000-M	**0.823**	**20.90**	**0.135**	**3.43**	**4.000**	**101.60**	**2.775**	**70.49**	**2.687**	**68.25**	**105.91**	**471.11**	**86.47**	**15.13**
C0823-135-4250-M	**0.823**	**20.90**	**0.135**	**3.43**	**4.250**	**107.95**	**2.943**	**74.75**	**2.848**	**72.34**	**105.91**	**471.11**	**81.04**	**14.18**
C0823-135-4500-M	**0.823**	**20.90**	**0.135**	**3.43**	**4.500**	**114.30**	**3.111**	**79.02**	**3.009**	**76.43**	**105.91**	**471.11**	**76.25**	**13.34**
C0823-135-4750-M	**0.823**	**20.90**	**0.135**	**3.43**	**4.750**	**120.65**	**3.279**	**83.28**	**3.170**	**80.52**	**105.91**	**471.11**	**71.99**	**12.60**
C0823-135-5000-M	**0.823**	**20.90**	**0.135**	**3.43**	**5.000**	**127.00**	**3.447**	**87.55**	**3.331**	**84.62**	**105.91**	**471.11**	**68.19**	**11.93**
C0823-135-5250-M	**0.823**	**20.90**	**0.135**	**3.43**	**5.250**	**133.35**	**3.615**	**91.81**	**3.492**	**88.71**	**105.91**	**471.11**	**64.77**	**11.33**
C0823-135-5500-M	**0.823**	**20.90**	**0.135**	**3.43**	**5.500**	**139.70**	**3.783**	**96.08**	**3.654**	**92.80**	**105.91**	**471.11**	**61.67**	**10.79**
C0823-135-5750-M	**0.823**	**20.90**	**0.135**	**3.43**	**5.750**	**146.05**	**3.951**	**100.34**	**3.815**	**96.89**	**105.91**	**471.11**	**58.86**	**10.30**
C0823-135-6000-M	**0.823**	**20.90**	**0.135**	**3.43**	**6.000**	**152.40**	**4.118**	**104.61**	**3.976**	**100.98**	**105.91**	**471.11**	**56.29**	**9.85**
C0823-135-6250-M	**0.823**	**20.90**	**0.135**	**3.43**	**6.250**	**158.75**	**4.286**	**108.87**	**4.137**	**105.07**	**105.91**	**471.11**	**53.94**	**9.44**
C0823-135-6500-M	**0.823**	**20.90**	**0.135**	**3.43**	**6.500**	**165.10**	**4.454**	**113.14**	**4.298**	**109.17**	**105.91**	**471.11**	**51.77**	**9.06**
C0823-135-6750-M	**0.823**	**20.90**	**0.135**	**3.43**	**6.750**	**171.45**	**4.622**	**117.40**	**4.459**	**113.26**	**105.91**	**471.11**	**49.77**	**8.71**
C0823-135-7000-M	**0.823**	**20.90**	**0.135**	**3.43**	**7.000**	**177.80**	**4.790**	**121.67**	**4.620**	**117.35**	**105.91**	**471.11**	**47.92**	**8.39**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0823-125-1625-S	**1.174**	**29.82**	**65.65**	**292.02**	**145.54**	**25.47**
C0823-125-1750-S	**1.258**	**31.95**	**65.65**	**292.02**	**133.41**	**23.35**
C0823-125-1875-S	**1.342**	**34.08**	**65.65**	**292.02**	**123.15**	**21.55**
C0823-125-2000-S	**1.426**	**36.22**	**65.65**	**292.02**	**114.36**	**20.01**
C0823-125-2125-S	**1.510**	**38.35**	**65.65**	**292.02**	**106.73**	**18.68**
C0823-125-2250-S	**1.594**	**40.49**	**65.65**	**292.02**	**100.06**	**17.51**
C0823-125-2375-S	**1.678**	**42.62**	**65.65**	**292.02**	**94.18**	**16.48**
C0823-125-2500-S	**1.762**	**44.75**	**65.65**	**292.02**	**88.94**	**15.57**
C0823-125-2625-S	**1.846**	**46.89**	**65.65**	**292.02**	**84.26**	**14.75**
C0823-125-2750-S	**1.930**	**49.02**	**65.65**	**292.02**	**80.05**	**14.01**
C0823-125-2875-S	**2.014**	**51.15**	**65.65**	**292.02**	**76.24**	**13.34**
C0823-125-3000-S	**2.098**	**53.29**	**65.65**	**292.02**	**72.77**	**12.74**
C0823-125-3250-S	**2.266**	**57.55**	**65.65**	**292.02**	**66.71**	**11.67**
C0823-125-3500-S	**2.434**	**61.82**	**65.65**	**292.02**	**61.58**	**10.78**
C0823-125-3750-S	**2.602**	**66.09**	**65.65**	**292.02**	**57.18**	**10.01**
C0823-125-4000-S	**2.770**	**70.35**	**65.65**	**292.02**	**53.37**	**9.34**
C0823-125-4250-S	**2.938**	**74.62**	**65.65**	**292.02**	**50.03**	**8.76**
C0823-125-4500-S	**3.106**	**78.89**	**65.65**	**292.02**	**47.09**	**8.24**
C0823-125-4750-S	**3.274**	**83.15**	**65.65**	**292.02**	**44.47**	**7.78**
C0823-125-5000-S	**3.442**	**87.42**	**65.65**	**292.02**	**42.13**	**7.37**
C0823-125-5250-S	**3.610**	**91.69**	**65.65**	**292.02**	**40.02**	**7.00**
C0823-125-5500-S	**3.778**	**95.96**	**65.65**	**292.02**	**38.12**	**6.67**
C0823-125-5750-S	**3.946**	**100.22**	**65.65**	**292.02**	**36.39**	**6.37**
C0823-125-6000-S	**4.114**	**104.49**	**65.65**	**292.02**	**34.80**	**6.09**
C0823-125-6250-S	**4.282**	**108.76**	**65.65**	**292.02**	**33.35**	**5.84**
C0823-125-6500-S	**4.450**	**113.02**	**65.65**	**292.02**	**32.02**	**5.60**
C0823-125-6750-S	**4.618**	**117.29**	**65.65**	**292.02**	**30.79**	**5.39**
C0823-125-7000-S	**4.786**	**121.56**	**65.65**	**292.02**	**29.65**	**5.19**
C0823-125-7500-S	**5.122**	**130.09**	**65.65**	**292.02**	**27.60**	**4.83**
C0823-125-8000-S	**5.458**	**138.62**	**65.65**	**292.02**	**25.82**	**4.52**
C0823-125-8500-S	**5.794**	**147.16**	**65.65**	**292.02**	**24.26**	**4.24**
C0823-125-9000-S	**6.130**	**155.69**	**65.65**	**292.02**	**22.87**	**4.00**
C0823-125-9500-S	**6.466**	**164.23**	**65.65**	**292.02**	**21.64**	**3.79**
C0823-135-1250-S	**0.970**	**24.63**	**80.27**	**357.07**	**286.18**	**50.08**
C0823-135-1375-S	**1.059**	**26.89**	**80.27**	**357.07**	**253.81**	**44.42**
C0823-135-1500-S	**1.148**	**29.16**	**80.27**	**357.07**	**228.02**	**39.90**
C0823-135-1625-S	**1.237**	**31.42**	**80.27**	**357.07**	**206.98**	**36.22**
C0823-135-1750-S	**1.326**	**33.69**	**80.27**	**357.07**	**189.50**	**33.16**
C0823-135-1875-S	**1.416**	**35.96**	**80.27**	**357.07**	**174.74**	**30.58**
C0823-135-2000-S	**1.505**	**38.22**	**80.27**	**357.07**	**162.12**	**28.37**
C0823-135-2125-S	**1.594**	**40.49**	**80.27**	**357.07**	**151.19**	**26.46**
C0823-135-2250-S	**1.683**	**42.76**	**80.27**	**357.07**	**141.65**	**24.79**
C0823-135-2375-S	**1.773**	**45.02**	**80.27**	**357.07**	**133.24**	**23.32**
C0823-135-2500-S	**1.862**	**47.29**	**80.27**	**357.07**	**125.77**	**22.01**
C0823-135-2625-S	**1.951**	**49.55**	**80.27**	**357.07**	**119.09**	**20.84**
C0823-135-2750-S	**2.040**	**51.82**	**80.27**	**357.07**	**113.09**	**19.79**
C0823-135-2875-S	**2.129**	**54.09**	**80.27**	**357.07**	**107.66**	**18.84**
C0823-135-3000-S	**2.219**	**56.35**	**80.27**	**357.07**	**102.73**	**17.98**
C0823-135-3250-S	**2.397**	**60.89**	**80.27**	**357.07**	**94.11**	**16.47**
C0823-135-3500-S	**2.576**	**65.42**	**80.27**	**357.07**	**86.83**	**15.20**
C0823-135-3750-S	**2.754**	**69.95**	**80.27**	**357.07**	**80.59**	**14.10**
C0823-135-4000-S	**2.932**	**74.48**	**80.27**	**357.07**	**75.19**	**13.16**
C0823-135-4250-S	**3.111**	**79.02**	**80.27**	**357.07**	**70.47**	**12.33**
C0823-135-4500-S	**3.289**	**83.55**	**80.27**	**357.07**	**66.30**	**11.60**
C0823-135-4750-S	**3.468**	**88.08**	**80.27**	**357.07**	**62.60**	**10.96**
C0823-135-5000-S	**3.646**	**92.61**	**80.27**	**357.07**	**59.29**	**10.38**
C0823-135-5250-S	**3.825**	**97.15**	**80.27**	**357.07**	**56.32**	**9.86**
C0823-135-5500-S	**4.003**	**101.68**	**80.27**	**357.07**	**53.63**	**9.38**
C0823-135-5750-S	**4.182**	**106.21**	**80.27**	**357.07**	**51.18**	**8.96**
C0823-135-6000-S	**4.360**	**110.74**	**80.27**	**357.07**	**48.95**	**8.57**
C0823-135-6250-S	**4.538**	**115.28**	**80.27**	**357.07**	**46.90**	**8.21**
C0823-135-6500-S	**4.717**	**119.81**	**80.27**	**357.07**	**45.02**	**7.88**
C0823-135-6750-S	**4.895**	**124.34**	**80.27**	**357.07**	**43.28**	**7.57**
C0823-135-7000-S	**5.074**	**128.87**	**80.27**	**357.07**	**41.67**	**7.29**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0823-135-7500-M	0.823	20.90	0.135	3.43	7.500	190.50	5.126	130.20	4.942	125.53	105.91	471.11	44.61	7.81
C0823-135-8000-M	0.823	20.90	0.135	3.43	8.000	203.20	5.462	138.73	5.264	133.72	105.91	471.11	41.72	7.30
C0823-135-8500-M	0.823	20.90	0.135	3.43	8.500	215.90	5.798	147.26	5.587	141.90	105.91	471.11	39.19	6.86
C0823-135-9000-M	0.823	20.90	0.135	3.43	9.000	228.60	6.133	155.79	5.909	150.08	105.91	471.11	36.95	6.47
C0823-135-9500-M	0.823	20.90	0.135	3.43	9.500	241.30	6.469	164.32	6.231	158.27	105.91	471.11	34.94	6.12
C0823-148-1250-M	0.823	20.90	0.148	3.76	1.250	31.75	1.027	26.08	0.987	25.08	115.05	511.77	515.17	90.15
C0823-148-1375-M	0.823	20.90	0.148	3.76	1.375	34.93	1.077	27.36	1.076	27.33	135.64	603.35	455.49	79.71
C0823-148-1500-M	0.823	20.90	0.148	3.76	1.500	38.10	1.168	29.66	1.165	29.58	135.64	603.35	408.20	71.43
C0823-148-1625-M	0.823	20.90	0.148	3.76	1.625	41.28	1.258	31.96	1.253	31.83	135.64	603.35	369.81	64.72
C0823-148-1750-M	0.823	20.90	0.148	3.76	1.750	44.45	1.349	34.26	1.342	34.08	135.64	603.35	338.01	59.15
C0823-148-1875-M	0.823	20.90	0.148	3.76	1.875	47.63	1.439	36.56	1.430	36.33	135.64	603.35	311.26	54.47
C0823-148-2000-M	0.823	20.90	0.148	3.76	2.000	50.80	1.530	38.86	1.519	38.58	135.64	603.35	288.42	50.47
C0823-148-2125-M	0.823	20.90	0.148	3.76	2.125	53.98	1.620	41.15	1.608	40.84	135.64	603.35	268.71	47.02
C0823-148-2250-M	0.823	20.90	0.148	3.76	2.250	57.15	1.711	43.45	1.696	43.09	135.64	603.35	251.52	44.02
C0823-148-2375-M	0.823	20.90	0.148	3.76	2.375	60.33	1.801	45.75	1.785	45.34	135.64	603.35	236.40	41.37
C0823-148-2500-M	0.823	20.90	0.148	3.76	2.500	63.50	1.892	48.05	1.874	47.59	135.64	603.35	222.99	39.02
C0823-148-2625-M	0.823	20.90	0.148	3.76	2.625	66.68	1.982	50.35	1.962	49.84	135.64	603.35	211.02	36.93
C0823-148-2750-M	0.823	20.90	0.148	3.76	2.750	69.85	2.073	52.65	2.051	52.09	135.64	603.35	200.27	35.05
C0823-148-2875-M	0.823	20.90	0.148	3.76	2.875	73.03	2.163	54.95	2.140	54.34	135.64	603.35	190.57	33.35
C0823-148-3000-M	0.823	20.90	0.148	3.76	3.000	76.20	2.254	57.25	2.228	56.60	135.64	603.35	181.76	31.81
C0823-148-3250-M	0.823	20.90	0.148	3.76	3.250	82.55	2.435	61.84	2.405	61.10	135.64	603.35	166.38	29.12
C0823-148-3500-M	0.823	20.90	0.148	3.76	3.500	88.90	2.616	66.44	2.583	65.60	135.64	603.35	153.39	26.84
C0823-148-3750-M	0.823	20.90	0.148	3.76	3.750	95.25	2.797	71.04	2.760	70.10	135.64	603.35	142.29	24.90
C0823-148-4000-M	0.823	20.90	0.148	3.76	4.000	101.60	2.978	75.64	2.937	74.61	135.64	603.35	132.69	23.22
C0823-148-4250-M	0.823	20.90	0.148	3.76	4.250	107.95	3.159	80.23	3.115	79.11	135.64	603.35	124.30	21.75
C0823-148-4500-M	0.823	20.90	0.148	3.76	4.500	114.30	3.340	84.83	3.292	83.61	135.64	603.35	116.91	20.46
C0823-148-4750-M	0.823	20.90	0.148	3.76	4.750	120.65	3.521	89.43	3.469	88.11	135.64	603.35	110.34	19.31
C0823-148-5000-M	0.823	20.90	0.148	3.76	5.000	127.00	3.702	94.03	3.646	92.62	135.64	603.35	104.48	18.28
C0823-148-5250-M	0.823	20.90	0.148	3.76	5.250	133.35	3.883	98.62	3.824	97.12	135.64	603.35	99.21	17.36
C0823-148-5500-M	0.823	20.90	0.148	3.76	5.500	139.70	4.064	103.22	4.001	101.62	135.64	603.35	94.44	16.53
C0823-148-5750-M	0.823	20.90	0.148	3.76	5.750	146.05	4.245	107.82	4.178	106.12	135.64	603.35	90.11	15.77
C0823-148-6000-M	0.823	20.90	0.148	3.76	6.000	152.40	4.426	112.42	4.355	110.63	135.64	603.35	86.16	15.08
C0823-148-6250-M	0.823	20.90	0.148	3.76	6.250	158.75	4.607	117.01	4.533	115.13	135.64	603.35	82.55	14.45
C0823-148-6500-M	0.823	20.90	0.148	3.76	6.500	165.10	4.788	121.61	4.710	119.63	135.64	603.35	79.22	13.86
C0823-148-6750-M	0.823	20.90	0.148	3.76	6.750	171.45	4.969	126.21	4.887	124.14	135.64	603.35	76.15	13.33
C0823-148-7000-M	0.823	20.90	0.148	3.76	7.000	177.80	5.150	130.81	5.064	128.64	135.64	603.35	73.31	12.83
C0823-148-7500-M	0.823	20.90	0.148	3.76	7.500	190.50	5.512	140.00	5.419	137.64	135.64	603.35	68.22	11.94
C0823-148-8000-M	0.823	20.90	0.148	3.76	8.000	203.20	5.874	149.20	5.774	146.65	135.64	603.35	63.79	11.16
C0823-148-8500-M	0.823	20.90	0.148	3.76	8.500	215.90	6.236	158.39	6.128	155.65	135.64	603.35	59.91	10.48
C0823-148-9000-M	0.823	20.90	0.148	3.76	9.000	228.60	6.598	167.59	6.483	164.66	135.64	603.35	56.47	9.88
C0823-148-9500-M	0.823	20.90	0.148	3.76	9.500	241.30	6.960	176.78	6.837	173.66	135.64	603.35	53.40	9.34
C0823-162-1250-M	0.823	20.90	0.162	4.12	1.250	31.75	1.082	27.48	1.052	26.73	137.69	612.48	819.00	143.32
C0823-162-1375-M	0.823	20.90	0.162	4.12	1.375	34.93	1.182	30.03	1.148	29.17	139.03	618.45	721.59	126.28
C0823-162-1500-M	0.823	20.90	0.162	4.12	1.500	38.10	1.283	32.58	1.244	31.61	140.09	623.15	644.89	112.86
C0823-162-1625-M	0.823	20.90	0.162	4.12	1.625	41.28	1.383	35.13	1.341	34.05	140.94	626.94	582.93	102.01
C0823-162-1750-M	0.823	20.90	0.162	4.12	1.750	44.45	1.484	37.69	1.437	36.49	141.65	630.07	531.83	93.07
C0823-162-1875-M	0.823	20.90	0.162	4.12	1.875	47.63	1.584	40.24	1.533	38.93	142.24	632.70	488.97	85.57
C0823-162-2000-M	0.823	20.90	0.162	4.12	2.000	50.80	1.685	42.79	1.629	41.37	142.74	634.93	452.50	79.19
C0823-162-2125-M	0.823	20.90	0.162	4.12	2.125	53.98	1.785	45.34	1.725	43.82	143.17	636.86	421.10	73.69
C0823-162-2250-M	0.823	20.90	0.162	4.12	2.250	57.15	1.885	47.89	1.821	46.26	143.55	638.53	393.77	68.91
C0823-162-2375-M	0.823	20.90	0.162	4.12	2.375	60.33	1.986	50.44	1.917	48.70	143.88	640.00	369.77	64.71
C0823-162-2500-M	0.823	20.90	0.162	4.12	2.500	63.50	2.086	52.99	2.013	51.14	144.17	641.30	348.53	60.99
C0823-162-2625-M	0.823	20.90	0.162	4.12	2.625	66.68	2.187	55.54	2.109	53.58	144.43	642.46	329.59	57.68
C0823-162-2750-M	0.823	20.90	0.162	4.12	2.750	69.85	2.287	58.10	2.206	56.02	144.67	643.50	312.61	54.71
C0823-162-2875-M	0.823	20.90	0.162	4.12	2.875	73.03	2.388	60.65	2.302	58.46	144.88	644.44	297.29	52.03
C0823-162-3000-M	0.823	20.90	0.162	4.12	3.000	76.20	2.488	63.20	2.398	60.90	145.07	645.29	283.41	49.60
C0823-162-3250-M	0.823	20.90	0.162	4.12	3.250	82.55	2.689	68.30	2.590	65.79	145.40	646.77	259.19	45.36
C0823-162-3500-M	0.823	20.90	0.162	4.12	3.500	88.90	2.890	73.40	2.782	70.67	145.68	648.02	238.79	41.79
C0823-162-3750-M	0.823	20.90	0.162	4.12	3.750	95.25	3.091	78.51	2.974	75.55	145.92	649.09	221.36	38.74
C0823-162-4000-M	0.823	20.90	0.162	4.12	4.000	101.60	3.292	83.61	3.167	80.43	146.13	650.01	206.31	36.10
C0823-162-4250-M	0.823	20.90	0.162	4.12	4.250	107.95	3.493	88.71	3.359	85.32	146.31	650.82	193.17	33.81
C0823-162-4500-M	0.823	20.90	0.162	4.12	4.500	114.30	3.693	93.81	3.551	90.20	146.47	651.53	181.61	31.78
C0823-162-4750-M	0.823	20.90	0.162	4.12	4.750	120.65	3.894	98.92	3.743	95.08	146.61	652.15	171.35	29.99
C0823-162-5000-M	0.823	20.90	0.162	4.12	5.000	127.00	3.936	99.97	3.936	99.96	172.57	767.64	162.19	28.38

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0823-135-7500-S	5.431	137.94	80.27	357.07	38.79	6.79
C0823-135-8000-S	5.788	147.00	80.27	357.07	36.28	6.35
C0823-135-8500-S	6.144	156.07	80.27	357.07	34.08	5.96
C0823-135-9000-S	6.501	165.13	80.27	357.07	32.13	5.62
C0823-135-9500-S	6.858	174.20	80.27	357.07	30.39	5.32
C0823-148-1250-S	1.023	25.98	101.79	452.80	447.97	78.40
C0823-148-1375-S	1.118	28.40	101.79	452.80	396.08	69.31
C0823-148-1500-S	1.213	30.82	101.79	452.80	354.96	62.12
C0823-148-1625-S	1.308	33.23	101.79	452.80	321.57	56.27
C0823-148-1750-S	1.404	35.65	101.79	452.80	293.93	51.44
C0823-148-1875-S	1.499	38.07	101.79	452.80	270.66	47.36
C0823-148-2000-S	1.594	40.49	101.79	452.80	250.80	43.89
C0823-148-2125-S	1.689	42.91	101.79	452.80	233.66	40.89
C0823-148-2250-S	1.785	45.33	101.79	452.80	218.71	38.27
C0823-148-2375-S	1.880	47.75	101.79	452.80	205.56	35.97
C0823-148-2500-S	1.975	50.17	101.79	452.80	193.91	33.93
C0823-148-2625-S	2.070	52.58	101.79	452.80	183.50	32.11
C0823-148-2750-S	2.165	55.00	101.79	452.80	174.15	30.48
C0823-148-2875-S	2.261	57.42	101.79	452.80	165.71	29.00
C0823-148-3000-S	2.356	59.84	101.79	452.80	158.05	27.66
C0823-148-3250-S	2.546	64.68	101.79	452.80	144.67	25.32
C0823-148-3500-S	2.737	69.52	101.79	452.80	133.39	23.34
C0823-148-3750-S	2.927	74.35	101.79	452.80	123.73	21.65
C0823-148-4000-S	3.118	79.19	101.79	452.80	115.38	20.19
C0823-148-4250-S	3.308	84.03	101.79	452.80	108.09	18.91
C0823-148-4500-S	3.499	88.87	101.79	452.80	101.66	17.79
C0823-148-4750-S	3.689	93.70	101.79	452.80	95.95	16.79
C0823-148-5000-S	3.880	98.54	101.79	452.80	90.85	15.90
C0823-148-5250-S	4.070	103.38	101.79	452.80	86.27	15.10
C0823-148-5500-S	4.260	108.22	101.79	452.80	82.12	14.37
C0823-148-5750-S	4.451	113.05	101.79	452.80	78.36	13.71
C0823-148-6000-S	4.641	117.89	101.79	452.80	74.92	13.11
C0823-148-6250-S	4.832	122.73	101.79	452.80	71.78	12.56
C0823-148-6500-S	5.022	127.57	101.79	452.80	68.89	12.06
C0823-148-6750-S	5.213	132.40	101.79	452.80	66.22	11.59
C0823-148-7000-S	5.403	137.24	101.79	452.80	63.75	11.16
C0823-148-7500-S	5.784	146.92	101.79	452.80	59.32	10.38
C0823-148-8000-S	6.165	156.59	101.79	452.80	55.47	9.71
C0823-148-8500-S	6.546	166.27	101.79	452.80	52.09	9.12
C0823-148-9000-S	6.927	175.94	101.79	452.80	49.10	8.59
C0823-148-9500-S	7.308	185.62	101.79	452.80	46.43	8.13
C0823-162-1250-S	1.070	27.18	128.13	569.95	712.17	124.63
C0823-162-1375-S	1.171	29.74	128.13	569.95	627.47	109.81
C0823-162-1500-S	1.272	32.30	128.13	569.95	560.78	98.14
C0823-162-1625-S	1.372	34.85	128.13	569.95	506.90	88.71
C0823-162-1750-S	1.473	37.41	128.13	569.95	462.46	80.93
C0823-162-1875-S	1.574	39.97	128.13	569.95	425.19	74.41
C0823-162-2000-S	1.674	42.53	128.13	569.95	393.48	68.86
C0823-162-2125-S	1.775	45.09	128.13	569.95	366.17	64.08
C0823-162-2250-S	1.876	47.65	128.13	569.95	342.41	59.92
C0823-162-2375-S	1.977	50.20	128.13	569.95	321.54	56.27
C0823-162-2500-S	2.077	52.76	128.13	569.95	303.07	53.04
C0823-162-2625-S	2.178	55.32	128.13	569.95	286.60	50.16
C0823-162-2750-S	2.279	57.88	128.13	569.95	271.84	47.57
C0823-162-2875-S	2.379	60.44	128.13	569.95	258.52	45.24
C0823-162-3000-S	2.480	62.99	128.13	569.95	246.44	43.13
C0823-162-3250-S	2.682	68.11	128.13	569.95	225.38	39.44
C0823-162-3500-S	2.883	73.23	128.13	569.95	207.64	36.34
C0823-162-3750-S	3.084	78.34	128.13	569.95	192.49	33.69
C0823-162-4000-S	3.286	83.46	128.13	569.95	179.40	31.39
C0823-162-4250-S	3.487	88.58	128.13	569.95	167.98	29.40
C0823-162-4500-S	3.689	93.69	128.13	569.95	157.92	27.64
C0823-162-4750-S	3.890	98.81	128.13	569.95	149.00	26.07
C0823-162-5000-S	4.091	103.92	128.13	569.95	141.03	24.68

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL							
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0823-162-5250-M	0.823	20.90	0.162	4.12	5.250	133.35	4.129	104.88	4.128	104.85	172.57	767.64	153.96	26.94	**C0823-162-5250-S**	4.293	109.04	128.13	569.95	133.88	23.43
C0823-162-5500-M	0.823	20.90	0.162	4.12	5.500	139.70	4.322	109.78	4.320	109.73	172.57	767.64	146.52	25.64	**C0823-162-5500-S**	4.494	114.16	128.13	569.95	127.41	22.30
C0823-162-5750-M	0.823	20.90	0.162	4.12	5.750	146.05	4.515	114.69	4.512	114.61	172.57	767.64	139.77	24.46	**C0823-162-5750-S**	4.696	119.27	128.13	569.95	121.54	21.27
C0823-162-6000-M	0.823	20.90	0.162	4.12	6.000	152.40	4.708	119.59	4.705	119.49	172.57	767.64	133.61	23.38	**C0823-162-6000-S**	4.897	124.39	128.13	569.95	116.19	20.33
C0823-162-6250-M	0.823	20.90	0.162	4.12	6.250	158.75	4.902	124.50	4.897	124.38	172.57	767.64	127.98	22.40	**C0823-162-6250-S**	5.099	129.51	128.13	569.95	111.28	19.47
C0823-162-6500-M	0.823	20.90	0.162	4.12	6.500	165.10	5.095	129.40	5.089	129.26	172.57	767.64	122.80	21.49	**C0823-162-6500-S**	5.300	134.62	128.13	569.95	106.78	18.69
C0823-162-6750-M	0.823	20.90	0.162	4.12	6.750	171.45	5.288	134.31	5.281	134.14	172.57	767.64	118.02	20.65	**C0823-162-6750-S**	5.501	139.74	128.13	569.95	102.63	17.96
C0823-162-7000-M	0.823	20.90	0.162	4.12	7.000	177.80	5.481	139.21	5.473	139.03	172.57	767.64	113.60	19.88	**C0823-162-7000-S**	5.703	144.85	128.13	569.95	98.78	17.29
C0823-162-7500-M	0.823	20.90	0.162	4.12	7.500	190.50	5.867	149.02	5.858	148.79	172.57	767.64	105.68	18.49	**C0823-162-7500-S**	6.106	155.09	128.13	569.95	91.90	16.08
C0823-162-8000-M	0.823	20.90	0.162	4.12	8.000	203.20	6.253	158.83	6.242	158.56	172.57	767.64	98.80	17.29	**C0823-162-8000-S**	6.509	165.32	128.13	569.95	85.91	15.03
C0823-162-8500-M	0.823	20.90	0.162	4.12	8.500	215.90	6.640	168.64	6.627	168.32	172.57	767.64	92.76	16.23	**C0823-162-8500-S**	6.911	175.55	128.13	569.95	80.66	14.12
C0823-162-9000-M	0.823	20.90	0.162	4.12	9.000	228.60	7.026	178.45	7.011	178.09	172.57	767.64	87.41	15.30	**C0823-162-9000-S**	7.314	185.78	128.13	569.95	76.01	13.30
C0823-162-9500-M	0.823	20.90	0.162	4.12	9.500	241.30	7.412	188.26	7.396	187.85	172.57	767.64	82.65	14.46	**C0823-162-9500-S**	7.717	196.02	128.13	569.95	71.87	12.58
C0845-050-0750-M	0.845	21.46	0.050	1.27	0.750	19.05	0.244	6.19	0.162	4.11	6.58	29.29	13.00	2.28	**C0845-050-0750-S**	0.264	6.70	5.26	23.41	10.83	1.90
C0845-050-0875-M	0.845	21.46	0.050	1.27	0.875	22.23	0.275	6.98	0.177	4.50	6.54	29.10	10.90	1.91	**C0845-050-0875-S**	0.295	7.50	5.26	23.41	9.08	1.59
C0845-050-1000-M	0.845	21.46	0.050	1.27	1.000	25.40	0.306	7.77	0.193	4.89	6.52	29.02	9.40	1.65	**C0845-050-1000-S**	0.328	8.33	5.26	23.41	7.83	1.37
C0845-050-1250-M	0.845	21.46	0.050	1.27	1.250	31.75	0.369	9.38	0.225	5.70	6.43	28.60	7.30	1.28	**C0845-050-1250-S**	0.384	9.76	5.26	23.41	6.08	1.06
C0845-050-1500-M	0.845	21.46	0.050	1.27	1.500	38.10	0.432	10.97	0.256	6.49	6.41	28.51	6.00	1.05	**C0845-050-1500-S**	0.447	11.35	5.26	23.41	5.00	0.87
C0845-050-2000-M	0.845	21.46	0.050	1.27	2.000	50.80	0.558	14.17	0.318	8.09	6.35	28.23	4.40	0.77	**C0845-050-2000-S**	0.564	14.32	5.26	23.41	3.67	0.64
C0845-050-2500-M	0.845	21.46	0.050	1.27	2.500	63.50	0.677	17.20	0.373	9.48	6.38	28.38	3.50	0.61	**C0845-050-2500-S**	0.695	17.64	5.26	23.41	2.92	0.51
C0845-050-3000-M	0.845	21.46	0.050	1.27	3.000	76.20	0.797	20.24	0.429	10.89	6.39	28.42	2.90	0.51	**C0845-050-3000-S**	0.821	20.85	5.26	23.41	2.42	0.42
C0845-050-3500-M	0.845	21.46	0.050	1.27	3.500	88.90	0.914	23.21	0.480	12.20	6.47	28.76	2.50	0.44	**C0845-050-3500-S**	0.972	24.70	5.26	23.41	2.08	0.36
C0845-050-4000-M	0.845	21.46	0.050	1.27	4.000	101.60	1.030	26.17	0.532	13.51	6.53	29.06	2.20	0.39	**C0845-050-4000-S**	1.128	28.64	5.26	23.41	1.83	0.32
C0845-055-0750-M	0.845	21.46	0.055	1.40	0.750	19.05	0.262	6.65	0.185	4.69	8.81	39.18	18.05	3.16	**C0845-055-0750-S**	0.293	7.44	6.87	30.56	15.04	2.63
C0845-055-0875-M	0.845	21.46	0.055	1.40	0.875	22.23	0.296	7.51	0.203	5.16	8.75	38.91	15.10	2.64	**C0845-055-0875-S**	0.329	8.35	6.87	30.56	12.58	2.20
C0845-055-1000-M	0.845	21.46	0.055	1.40	1.000	25.40	0.329	8.37	0.222	5.63	8.70	38.71	12.98	2.27	**C0845-055-1000-S**	0.365	9.26	6.87	30.56	10.81	1.89
C0845-055-1250-M	0.845	21.46	0.055	1.40	1.250	31.75	0.397	10.08	0.259	6.57	8.64	38.44	10.13	1.77	**C0845-055-1250-S**	0.436	11.07	6.87	30.56	8.44	1.48
C0845-055-1500-M	0.845	21.46	0.055	1.40	1.500	38.10	0.464	11.80	0.296	7.51	8.61	38.28	8.31	1.45	**C0845-055-1500-S**	0.507	12.89	6.87	30.56	6.92	1.21
C0845-055-2000-M	0.845	21.46	0.055	1.40	2.000	50.80	0.598	15.18	0.368	9.34	8.57	38.11	6.11	1.07	**C0845-055-2000-S**	0.650	16.51	6.87	30.56	5.09	0.89
C0845-055-2500-M	0.845	21.46	0.055	1.40	2.500	63.50	0.727	18.46	0.434	11.04	8.56	38.10	4.83	0.85	**C0845-055-2500-S**	0.792	20.12	6.87	30.56	4.02	0.70
C0845-055-3000-M	0.845	21.46	0.055	1.40	3.000	76.20	0.855	21.73	0.501	12.72	8.58	38.16	4.00	0.70	**C0845-055-3000-S**	0.938	23.82	6.87	30.56	3.33	0.58
C0845-055-3500-M	0.845	21.46	0.055	1.40	3.500	88.90	0.984	25.00	0.567	14.41	8.58	38.16	3.41	0.60	**C0845-055-3500-S**	1.081	27.46	6.87	30.56	2.84	0.50
C0845-055-4000-M	0.845	21.46	0.055	1.40	4.000	101.60	1.113	28.28	0.634	16.11	8.57	38.13	2.97	0.52	**C0845-055-4000-S**	1.223	31.06	6.87	30.56	2.47	0.43
C0845-067-0750-M	0.845	21.46	0.067	1.70	0.750	19.05	0.315	8.00	0.250	6.36	14.85	66.07	34.15	5.98	**C0845-067-0750-S**	0.332	8.44	11.88	52.86	28.45	4.98
C0845-067-0875-M	0.845	21.46	0.067	1.70	0.875	22.23	0.357	9.06	0.279	7.08	14.72	65.48	28.41	4.97	**C0845-067-0875-S**	0.373	9.47	11.88	52.86	23.67	4.14
C0845-067-1000-M	0.845	21.46	0.067	1.70	1.000	25.40	0.399	10.13	0.307	7.80	14.63	65.06	24.32	4.26	**C0845-067-1000-S**	0.413	10.50	11.88	52.86	20.26	3.55
C0845-067-1250-M	0.845	21.46	0.067	1.70	1.250	31.75	0.482	12.25	0.364	9.25	14.50	64.48	18.88	3.30	**C0845-067-1250-S**	0.494	12.56	11.88	52.86	15.73	2.75
C0845-067-1500-M	0.845	21.46	0.067	1.70	1.500	38.10	0.566	14.39	0.422	10.71	14.38	63.96	15.40	2.70	**C0845-067-1500-S**	0.574	14.57	11.88	52.86	12.83	2.24
C0845-067-2000-M	0.845	21.46	0.067	1.70	2.000	50.80	0.725	18.42	0.525	13.34	14.36	63.86	11.26	1.97	**C0845-067-2000-S**	0.733	18.62	11.88	52.86	9.38	1.64
C0845-067-2500-M	0.845	21.46	0.067	1.70	2.500	63.50	0.883	22.43	0.627	15.94	14.38	63.95	8.89	1.56	**C0845-067-2500-S**	0.895	22.74	11.88	52.86	7.41	1.30
C0845-067-3000-M	0.845	21.46	0.067	1.70	3.000	76.20	1.041	26.45	0.730	18.55	14.38	63.96	7.34	1.28	**C0845-067-3000-S**	1.056	26.83	11.88	52.86	6.11	1.07
C0845-067-3500-M	0.845	21.46	0.067	1.70	3.500	88.90	1.199	30.46	0.833	21.16	14.38	63.96	6.25	1.09	**C0845-067-3500-S**	1.218	30.92	11.88	52.86	5.21	0.91
C0845-067-4000-M	0.845	21.46	0.067	1.70	4.000	101.60	1.357	34.46	0.935	23.74	14.41	64.08	5.45	0.95	**C0845-067-4000-S**	1.382	35.11	11.88	52.86	4.54	0.79
C0845-072-0750-M	0.845	21.46	0.072	1.83	0.750	19.05	0.348	8.83	0.291	7.38	16.33	72.64	40.60	7.11	**C0845-072-0750-S**	0.348	8.83	13.60	60.51	33.82	5.92
C0845-072-0875-M	0.845	21.46	0.072	1.83	0.875	22.23	0.389	9.89	0.319	8.10	16.95	75.41	34.91	6.11	**C0845-072-0875-S**	0.389	9.89	14.12	62.82	29.08	5.09
C0845-072-1000-M	0.845	21.46	0.072	1.83	1.000	25.40	0.457	11.61	0.379	9.63	14.58	64.85	26.85	4.70	**C0845-072-1000-S**	0.457	11.61	12.14	54.02	22.37	3.91
C0845-072-1250-M	0.845	21.46	0.072	1.83	1.250	31.75	0.543	13.80	0.440	11.17	15.42	68.59	21.82	3.82	**C0845-072-1250-S**	0.543	13.80	12.84	57.13	18.18	3.18
C0845-072-1500-M	0.845	21.46	0.072	1.83	1.500	38.10	0.626	15.90	0.495	12.58	16.05	71.41	18.37	3.21	**C0845-072-1500-S**	0.626	15.90	13.37	59.49	15.30	2.68
C0845-072-2000-M	0.845	21.46	0.072	1.83	2.000	50.80	0.803	20.40	0.546	13.87	19.17	85.28	16.02	2.80	**C0845-072-2000-S**	0.914	23.22	14.49	64.45	13.35	2.34
C0845-072-2500-M	0.845	21.46	0.072	1.83	2.500	63.50	0.964	24.48	0.658	16.71	19.17	85.28	12.48	2.18	**C0845-072-2500-S**	1.106	28.10	14.49	64.45	10.40	1.82
C0845-072-3000-M	0.845	21.46	0.072	1.83	3.000	76.20	1.155	29.33	0.760	19.30	19.17	85.28	10.39	1.82	**C0845-072-3000-S**	1.326	33.68	14.49	64.45	8.66	1.51
C0845-072-3500-M	0.845	21.46	0.072	1.83	3.500	88.90	1.331	33.81	0.866	22.01	19.17	85.28	8.84	1.55	**C0845-072-3500-S**	1.532	38.92	14.49	64.45	7.36	1.29
C0845-075-0880-M	0.845	21.46	0.075	1.91	0.880	22.35	0.407	10.34	0.340	8.63	18.96	84.34	40.10	7.02	**C0845-075-0880-S**	0.407	10.34	15.79	70.26	33.40	5.85
C0845-075-1000-M	0.845	21.46	0.075	1.91	1.000	25.40	0.454	11.53	0.376	9.54	18.80	83.63	34.44	6.03	**C0845-075-1000-S**	0.454	11.53	15.66	69.67	28.69	5.02
C0845-075-1250-M	0.845	21.46	0.075	1.91	1.250	31.75	0.552	14.02	0.450	11.43	18.58	82.64	26.61	4.66	**C0845-075-1250-S**	0.552	14.02	15.47	68.84	22.17	3.88
C0845-075-1500-M	0.845	21.46	0.075	1.91	1.500	38.10	0.645	16.39	0.519	13.19	18.53	82.41	21.68	3.79	**C0845-075-1500-S**	0.645	16.39	15.43	68.65	18.06	3.16
C0845-075-1750-M	0.845	21.46	0.075	1.91	1.750	44.45	0.737	18.72	0.586	14.89	18.54	82.46	18.30	3.20	**C0845-075-1750-S**	0.737	18.72	15.44	68.69	15.24	2.67
C0845-075-2000-M	0.845	21.46	0.075	1.91	2.000	50.80	0.829	21.06	0.653	16.60	18.53	82.41	15.82	2.77	**C0845-075-2000-S**	0.829	21.06	15.43	68.64	13.18	2.31
C0845-075-2250-M	0.845	21.46	0.075	1.91	2.250	57.15	0.921	23.38	0.720	18.30	18.53	82.43	13.94	2.44	**C0845-075-2250-S**	0.921	23.38	15.44	68.67	11.61	2.03
C0845-075-2500-M	0.845	21.46	0.075	1.91	2.500	63.50	1.012	25.71	0.787	19.99	18.54	82.46	12.46	2.18	**C0845-075-2500-S**	1.012	25.71	15.44	68.69	10.38	1.82
C0845-075-2750-M	0.845	21.46	0.075	1.91	2.750	69.85	1.104	28.04	0.854	21.70	18.53	82.44	11.26	1.97	**C0845-075-2750-S**	1.104	28.04	15.44	68.67	9.38	1.64
C0845-075-3000-M	0.845	21.46	0.075	1.91	3.000	76.20	1.196	30.38	0.921	23.40	18.53	82.42	10.27	1.80	**C0845-075-3000-S**	1.196	30.38	15.43	68.65	8.56	1.50
C0845-075-3500-M	0.845	21.46	0.075	1.91	3.500	88.90	1.379	35.03	1.055	26.80	18.54	82.45	8.74	1.53	**C0845-075-3500-S**	1.379	35.03	15.44	68.68	7.28	1.27
C0845-080-0750-M	0.845	21.46	0.080	2.03	0.750	19.05	0.370	9.41	0.312	7.92	25.70	114.31	67.70	11.85	**C0845-080-0750-S**	0.407	10.34	19.34	86.03	56.39	9.87

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0845-080-0875-M	**0.845**	**21.46**	**0.080**	**2.03**	**0.875**	**22.23**	**0.426**	**10.81**	**0.345**	**8.77**	**25.70**	**114.31**	**57.20**	**10.01**
C0845-080-1000-M	**0.845**	**21.46**	**0.080**	**2.03**	**1.000**	**25.40**	**0.470**	**11.94**	**0.384**	**9.75**	**25.70**	**114.31**	**48.50**	**8.49**
C0845-080-1250-M	**0.845**	**21.46**	**0.080**	**2.03**	**1.250**	**31.75**	**0.574**	**14.57**	**0.454**	**11.52**	**25.70**	**114.31**	**38.00**	**6.65**
C0845-080-1375-M	**0.845**	**21.46**	**0.080**	**2.03**	**1.375**	**34.93**	**0.619**	**15.73**	**0.492**	**12.49**	**25.70**	**114.31**	**34.00**	**5.95**
C0845-080-1500-M	**0.845**	**21.46**	**0.080**	**2.03**	**1.500**	**38.10**	**0.671**	**17.04**	**0.524**	**13.32**	**25.70**	**114.31**	**31.00**	**5.43**
C0845-080-1750-M	**0.845**	**21.46**	**0.080**	**2.03**	**1.750**	**44.45**	**0.762**	**19.35**	**0.593**	**15.06**	**25.70**	**114.31**	**26.00**	**4.55**
C0845-080-2000-M	**0.845**	**21.46**	**0.080**	**2.03**	**2.000**	**50.80**	**0.843**	**21.40**	**0.670**	**17.02**	**25.46**	**113.27**	**22.00**	**3.85**
C0845-080-2250-M	**0.845**	**21.46**	**0.080**	**2.03**	**2.250**	**57.15**	**0.932**	**23.68**	**0.735**	**18.66**	**25.70**	**114.31**	**19.50**	**3.41**
C0845-080-2500-M	**0.845**	**21.46**	**0.080**	**2.03**	**2.500**	**63.50**	**1.032**	**26.20**	**0.799**	**20.30**	**25.70**	**114.31**	**17.50**	**3.06**
C0845-080-2750-M	**0.845**	**21.46**	**0.080**	**2.03**	**2.750**	**69.85**	**1.125**	**28.59**	**0.881**	**22.37**	**25.18**	**112.01**	**15.50**	**2.71**
C0845-080-3000-M	**0.845**	**21.46**	**0.080**	**2.03**	**3.000**	**76.20**	**1.228**	**31.19**	**0.930**	**23.62**	**25.70**	**114.31**	**14.50**	**2.54**
C0845-080-3500-M	**0.845**	**21.46**	**0.080**	**2.03**	**3.500**	**88.90**	**1.406**	**35.72**	**1.089**	**27.65**	**25.12**	**111.76**	**12.00**	**2.10**
C0850-068-0750-M	0.850	21.59	0.068	1.73	0.750	19.05	0.445	11.30	0.292	7.42	10.94	48.66	35.90	6.28
C0850-068-0875-M	0.850	21.59	0.068	1.73	0.880	22.35	0.513	13.03	0.317	8.05	10.94	48.66	29.80	5.22
C0850-068-1000-M	0.850	21.59	0.068	1.73	1.000	25.40	0.571	14.50	0.342	8.69	10.94	48.66	25.50	4.46
C0850-068-1250-M	0.850	21.59	0.068	1.73	1.250	31.75	0.696	17.68	0.391	9.93	10.94	48.66	19.80	3.47
C0850-068-1500-M	0.850	21.59	0.068	1.73	1.500	38.10	0.822	20.88	0.441	11.20	10.94	48.66	16.10	2.82
C0850-068-1750-M	0.850	21.59	0.068	1.73	1.750	44.45	0.948	24.08	0.490	12.45	10.94	48.66	13.60	2.38
C0850-068-2000-M	0.850	21.59	0.068	1.73	2.000	50.80	1.074	27.28	0.540	13.72	10.94	48.66	11.80	2.07
C0850-068-2250-M	0.850	21.59	0.068	1.73	2.250	57.15	1.200	30.48	0.590	14.99	10.94	48.66	10.40	1.82
C0850-068-2500-M	0.850	21.59	0.068	1.73	2.500	63.50	1.325	33.66	0.639	16.23	10.94	48.66	9.30	1.63
C0850-068-3000-M	0.850	21.59	0.068	1.73	3.000	76.20	1.577	40.06	0.739	18.77	10.94	48.66	7.70	1.35
C0850-068-3500-M	0.850	21.59	0.068	1.73	3.500	88.90	1.828	46.43	0.838	21.29	10.94	48.66	6.50	1.14
C0850-068-4000-M	0.850	21.59	0.068	1.73	4.000	101.60	2.080	52.83	0.937	23.80	10.94	48.66	5.70	1.00
C0850-074-0875-M	0.850	21.59	0.074	1.88	0.880	22.35	0.534	13.56	0.355	9.02	13.86	61.65	40.10	7.02
C0850-074-1000-M	0.850	21.59	0.074	1.88	1.000	25.40	0.595	15.11	0.384	9.75	13.86	61.65	34.20	5.99
C0850-074-1250-M	0.850	21.59	0.074	1.88	1.250	31.75	0.727	18.47	0.443	11.25	13.86	61.65	26.50	4.64
C0850-074-1500-M	0.850	21.59	0.074	1.88	1.500	38.10	0.858	21.79	0.501	12.73	13.86	61.65	21.60	3.78
C0850-074-2000-M	0.850	21.59	0.074	1.88	2.000	50.80	1.120	28.45	0.618	15.70	13.86	61.65	15.80	2.77
C0850-074-2500-M	0.850	21.59	0.074	1.88	2.500	63.50	1.383	35.13	0.735	18.67	13.86	61.65	12.40	2.17
C0850-074-3000-M	0.850	21.59	0.074	1.88	3.000	76.20	1.645	41.78	0.852	21.64	13.86	61.65	10.20	1.79
C0850-074-3500-M	0.850	21.59	0.074	1.88	3.500	88.90	1.908	48.46	0.969	24.61	13.86	61.65	8.70	1.52
C0850-081-0750-M	0.850	21.59	0.081	2.06	0.750	19.05	0.486	12.34	0.365	9.27	17.83	79.31	67.70	11.85
C0850-081-0875-M	0.850	21.59	0.081	2.06	0.880	22.35	0.560	14.22	0.400	10.16	17.83	79.31	55.80	9.77
C0850-081-1000-M	0.850	21.59	0.081	2.06	1.000	25.40	0.624	15.85	0.435	11.05	17.83	79.31	47.50	8.31
C0850-081-1250-M	0.850	21.59	0.081	2.06	1.250	31.75	0.762	19.35	0.504	12.80	17.83	79.31	36.60	6.41
C0850-081-1500-M	0.850	21.59	0.081	2.06	1.500	38.10	0.900	22.86	0.573	14.55	17.83	79.31	29.70	5.20
C0850-081-1750-M	0.850	21.59	0.081	2.06	1.750	44.45	1.038	26.37	0.642	16.31	17.83	79.31	25.10	4.39
C0850-081-2000-M	0.850	21.59	0.081	2.06	2.000	50.80	1.176	29.87	0.712	18.08	17.83	79.31	21.60	3.78
C0850-081-2250-M	0.850	21.59	0.081	2.06	2.250	57.15	1.314	33.38	0.781	19.84	17.83	79.31	19.10	3.34
C0850-081-2500-M	0.850	21.59	0.081	2.06	2.500	63.50	1.452	36.88	0.850	21.59	17.83	79.31	17.00	2.98
C0850-081-2750-M	0.850	21.59	0.081	2.06	2.750	69.85	1.590	40.39	0.920	23.37	17.83	79.31	15.40	2.70
C0850-081-3000-M	0.850	21.59	0.081	2.06	3.000	76.20	1.728	43.89	0.989	25.12	17.83	79.31	14.00	2.45
C0850-081-3500-M	0.850	21.59	0.081	2.06	3.500	88.90	2.004	50.90	1.127	28.63	17.83	79.31	11.90	2.08
C0850-085-0750-M	0.850	21.59	0.085	2.16	0.750	19.05	0.499	12.67	0.388	9.86	20.39	90.70	81.30	14.23
C0850-085-0875-M	0.850	21.59	0.085	2.16	0.880	22.35	0.575	14.61	0.426	10.82	20.39	90.70	66.90	11.71
C0850-085-1000-M	0.850	21.59	0.085	2.16	1.000	25.40	0.641	16.28	0.463	11.76	20.39	90.70	56.80	9.94
C0850-085-1250-M	0.850	21.59	0.085	2.16	1.250	31.75	0.783	19.89	0.539	13.69	20.39	90.70	43.60	7.63
C0850-085-1500-M	0.850	21.59	0.085	2.16	1.500	38.10	0.925	23.50	0.615	15.62	20.39	90.70	35.40	6.20
C0850-085-1750-M	0.850	21.59	0.085	2.16	1.750	44.45	1.067	27.10	0.690	17.53	20.39	90.70	29.80	5.22
C0850-085-2000-M	0.850	21.59	0.085	2.16	2.000	50.80	1.208	30.68	0.766	19.46	20.39	90.70	25.80	4.52
C0850-085-2250-M	0.850	21.59	0.085	2.16	2.250	57.15	1.350	34.29	0.841	21.36	20.39	90.70	22.70	3.97
C0850-085-2500-M	0.850	21.59	0.085	2.16	2.500	63.50	1.492	37.90	0.917	23.29	20.39	90.70	20.20	3.54
C0850-085-2750-M	0.850	21.59	0.085	2.16	2.750	69.85	1.634	41.50	0.992	25.20	20.39	90.70	18.30	3.20
C0850-085-3000-M	0.850	21.59	0.085	2.16	3.000	76.20	1.776	45.11	1.068	27.13	20.39	90.70	16.70	2.92
C0850-085-3250-M	0.850	21.59	0.085	2.16	3.250	82.55	1.918	48.72	1.144	29.06	20.39	90.70	15.30	2.68
C0850-085-3500-M	0.850	21.59	0.085	2.16	3.500	88.90	2.059	52.30	1.219	30.96	20.39	90.70	14.20	2.49
C0850-085-4000-M	0.850	21.59	0.085	2.16	4.000	101.60	2.343	59.51	1.370	34.80	20.39	90.70	12.30	2.15
C0850-092-0880-M	0.850	21.59	0.092	2.34	0.880	22.35	0.598	15.19	0.471	11.96	25.39	112.94	90.10	15.77
C0850-092-1000-M	0.850	21.59	0.092	2.34	1.000	25.40	0.670	17.02	0.513	13.03	25.39	112.94	76.90	13.46
C0850-092-1250-M	0.850	21.59	0.092	2.34	1.250	31.75	0.818	20.78	0.600	15.24	25.39	112.94	58.80	10.29
C0850-092-1500-M	0.850	21.59	0.092	2.34	1.500	38.10	0.967	24.56	0.686	17.42	25.39	112.94	47.70	8.35
C0850-092-1750-M	0.850	21.59	0.092	2.34	1.750	44.45	1.116	28.35	0.773	19.63	25.39	112.94	40.00	7.00
C0850-092-2000-M	0.850	21.59	0.092	2.34	2.000	50.80	1.265	32.13	0.860	21.84	25.39	112.94	34.50	6.04

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0845-080-0875-S	**0.469**	**11.91**	**19.34**	**86.03**	**47.65**	**8.34**
C0845-080-1000-S	**0.521**	**13.24**	**19.34**	**86.03**	**40.40**	**7.07**
C0845-080-1250-S	**0.639**	**16.23**	**19.34**	**86.03**	**31.65**	**5.54**
C0845-080-1375-S	**0.692**	**17.58**	**19.34**	**86.03**	**28.32**	**4.96**
C0845-080-1500-S	**0.751**	**19.08**	**19.34**	**86.03**	**25.82**	**4.52**
C0845-080-1750-S	**0.857**	**21.77**	**19.34**	**86.03**	**21.66**	**3.79**
C0845-080-2000-S	**0.945**	**23.99**	**19.34**	**86.03**	**18.33**	**3.21**
C0845-080-2250-S	**1.059**	**26.91**	**19.34**	**86.03**	**16.24**	**2.84**
C0845-080-2500-S	**1.173**	**29.80**	**19.34**	**86.03**	**14.58**	**2.55**
C0845-080-2750-S	**1.252**	**31.80**	**19.34**	**86.03**	**12.91**	**2.26**
C0845-080-3000-S	**1.399**	**35.53**	**19.34**	**86.03**	**12.08**	**2.11**
C0845-080-3500-S	**1.565**	**39.75**	**19.34**	**86.03**	**10.00**	**1.75**
C0850-068-0750-S	0.445	11.30	9.11	40.54	29.91	5.23
C0850-068-0875-S	0.513	13.03	9.11	40.54	24.82	4.34
C0850-068-1000-S	0.571	14.50	9.11	40.54	21.24	3.72
C0850-068-1250-S	0.696	17.68	9.11	40.54	16.49	2.89
C0850-068-1500-S	0.822	20.88	9.11	40.54	13.41	2.35
C0850-068-1750-S	0.948	24.08	9.11	40.54	11.33	1.98
C0850-068-2000-S	1.074	27.28	9.11	40.54	9.83	1.72
C0850-068-2250-S	1.200	30.48	9.11	40.54	8.66	1.52
C0850-068-2500-S	1.325	33.66	9.11	40.54	7.75	1.36
C0850-068-3000-S	1.577	40.06	9.11	40.54	6.41	1.12
C0850-068-3500-S	1.828	46.43	9.11	40.54	5.42	0.95
C0850-068-4000-S	2.080	52.83	9.11	40.54	4.75	0.83
C0850-074-0875-S	0.534	13.56	11.55	51.36	33.40	5.85
C0850-074-1000-S	0.595	15.11	11.55	51.36	28.49	4.99
C0850-074-1250-S	0.727	18.47	11.55	51.36	22.08	3.86
C0850-074-1500-S	0.858	21.79	11.55	51.36	17.99	3.15
C0850-074-2000-S	1.120	28.45	11.55	51.36	13.16	2.30
C0850-074-2500-S	1.383	35.13	11.55	51.36	10.33	1.81
C0850-074-3000-S	1.645	41.78	11.55	51.36	8.50	1.49
C0850-074-3500-S	1.908	48.46	11.55	51.36	7.25	1.27
C0850-081-0750-S	0.486	12.34	14.85	66.07	56.39	9.87
C0850-081-0875-S	0.560	14.22	14.85	66.07	46.48	8.13
C0850-081-1000-S	0.624	15.85	14.85	66.07	39.57	6.92
C0850-081-1250-S	0.762	19.35	14.85	66.07	30.49	5.34
C0850-081-1500-S	0.900	22.86	14.85	66.07	24.74	4.33
C0850-081-1750-S	1.038	26.37	14.85	66.07	20.91	3.66
C0850-081-2000-S	1.176	29.87	14.85	66.07	17.99	3.15
C0850-081-2250-S	1.314	33.38	14.85	66.07	15.91	2.78
C0850-081-2500-S	1.452	36.88	14.85	66.07	14.16	2.48
C0850-081-2750-S	1.590	40.39	14.85	66.07	12.83	2.24
C0850-081-3000-S	1.728	43.89	14.85	66.07	11.66	2.04
C0850-081-3500-S	2.004	50.90	14.85	66.07	9.91	1.73
C0850-085-0750-S	0.499	12.67	16.98	75.55	67.72	11.85
C0850-085-0875-S	0.575	14.61	16.98	75.55	55.73	9.75
C0850-085-1000-S	0.641	16.28	16.98	75.55	47.31	8.28
C0850-085-1250-S	0.783	19.89	16.98	75.55	36.32	6.36
C0850-085-1500-S	0.925	23.50	16.98	75.55	29.49	5.16
C0850-085-1750-S	1.067	27.10	16.98	75.55	24.82	4.34
C0850-085-2000-S	1.208	30.68	16.98	75.55	21.49	3.76
C0850-085-2250-S	1.350	34.29	16.98	75.55	18.91	3.31
C0850-085-2500-S	1.492	37.90	16.98	75.55	16.83	2.94
C0850-085-2750-S	1.634	41.50	16.98	75.55	15.24	2.67
C0850-085-3000-S	1.776	45.11	16.98	75.55	13.91	2.43
C0850-085-3250-S	1.918	48.72	16.98	75.55	12.75	2.23
C0850-085-3500-S	2.059	52.30	16.98	75.55	11.83	2.07
C0850-085-4000-S	2.343	59.51	16.98	75.55	10.25	1.79
C0850-092-0880-S	0.598	15.19	21.15	94.08	75.05	13.13
C0850-092-1000-S	0.670	17.02	21.15	94.08	64.06	11.21
C0850-092-1250-S	0.818	20.78	21.15	94.08	48.98	8.57
C0850-092-1500-S	0.967	24.56	21.15	94.08	39.73	6.95
C0850-092-1750-S	1.116	28.35	21.15	94.08	33.32	5.83
C0850-092-2000-S	1.265	32.13	21.15	94.08	28.74	5.03

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0850-092-2250-M	0.850	21.59	0.092	2.34	2.250	57.15	1.413	35.89	0.947	24.05	25.39	112.94	30.40	5.32
C0850-092-2500-M	0.850	21.59	0.092	2.34	2.500	63.50	1.562	39.67	1.033	26.24	25.39	112.94	27.10	4.74
C0850-092-2750-M	0.850	21.59	0.092	2.34	2.750	69.85	1.711	43.46	1.120	28.45	25.39	112.94	24.40	4.27
C0850-092-3000-M	0.850	21.59	0.092	2.34	3.000	76.20	1.860	47.24	1.207	30.66	25.39	112.94	22.30	3.90
C0850-092-3500-M	0.850	21.59	0.092	2.34	3.500	88.90	2.157	54.79	1.380	35.05	25.39	112.94	18.90	3.31
C0850-098-1000-M	0.850	21.59	0.098	2.49	1.000	25.40	0.694	17.63	0.555	14.10	30.24	134.51	98.70	17.27
C0850-098-1250-M	0.850	21.59	0.098	2.49	1.250	31.75	0.848	21.54	0.651	16.54	30.24	134.51	75.30	13.18
C0850-098-1500-M	0.850	21.59	0.098	2.49	1.500	38.10	1.003	25.48	0.747	18.97	30.24	134.51	60.80	10.64
C0850-098-1750-M	0.850	21.59	0.098	2.49	1.750	44.45	1.158	29.41	0.843	21.41	30.24	134.51	51.10	8.94
C0850-098-2000-M	0.850	21.59	0.098	2.49	2.000	50.80	1.312	33.32	0.940	23.88	30.24	134.51	44.00	7.70
C0850-098-2250-M	0.850	21.59	0.098	2.49	2.250	57.15	1.467	37.26	1.036	26.31	30.24	134.51	38.60	6.76
C0850-098-2500-M	0.850	21.59	0.098	2.49	2.500	63.50	1.622	41.20	1.132	28.75	30.24	134.51	34.40	6.02
C0850-098-2750-M	0.850	21.59	0.098	2.49	2.750	69.85	1.776	45.11	1.229	31.22	30.24	134.51	31.10	5.44
C0850-098-3000-M	0.850	21.59	0.098	2.49	3.000	76.20	1.931	49.05	1.325	33.66	30.24	134.51	28.30	4.95
C0850-098-3500-M	0.850	21.59	0.098	2.49	3.500	88.90	2.240	56.90	1.517	38.53	30.24	134.51	24.00	4.20
D12550	0.850	21.60	0.063	1.60	1.890	48.00	0.488	12.40	0.346	8.80	19.07	84.83	13.60	2.38
D12560	0.850	21.60	0.063	1.60	2.894	73.50	0.693	17.60	0.472	12.00	19.07	84.83	8.69	1.52
D12570	0.850	21.60	0.063	1.60	4.331	110.00	1.004	25.50	0.661	16.80	19.07	84.83	5.66	0.99
D12580	0.850	21.60	0.063	1.60	6.496	165.00	1.417	36.00	0.913	23.20	19.07	84.83	3.83	0.67
D12590	0.850	21.60	0.063	1.60	9.449	240.00	2.039	51.80	1.291	32.80	19.07	84.83	2.57	0.45
D12750	0.866	22.00	0.079	2.00	1.614	41.00	0.535	13.60	0.433	11.00	35.72	158.87	33.31	5.83
D12760	0.866	22.00	0.079	2.00	2.441	62.00	0.756	19.20	0.591	15.00	35.72	158.87	21.20	3.71
D12770	0.866	22.00	0.079	2.00	3.701	94.00	1.087	27.60	0.827	21.00	35.72	158.87	13.66	2.39
D12780	0.866	22.00	0.079	2.00	5.315	135.00	1.528	38.80	1.142	29.00	35.72	158.87	9.31	1.63
D12790	0.866	22.00	0.079	2.00	7.874	200.00	2.189	55.60	1.614	41.00	35.72	158.87	6.29	1.10
C0875-092-0875-M	**0.875**	**22.23**	**0.092**	**2.34**	**0.875**	**22.23**	**0.471**	**11.97**	**0.420**	**10.66**	**34.49**	**153.44**	**85.41**	**14.95**
C0875-092-1000-M	**0.875**	**22.23**	**0.092**	**2.34**	**1.000**	**25.40**	**0.529**	**13.45**	**0.469**	**11.90**	**34.04**	**151.43**	**72.33**	**12.66**
C0875-092-1500-M	**0.875**	**22.23**	**0.092**	**2.34**	**1.500**	**38.10**	**0.755**	**19.19**	**0.655**	**16.64**	**33.39**	**148.54**	**44.85**	**7.85**
C0875-092-1750-M	**0.875**	**22.23**	**0.092**	**2.34**	**1.750**	**44.45**	**0.864**	**21.95**	**0.743**	**18.87**	**33.39**	**148.54**	**37.69**	**6.60**
C0875-092-2000-M	**0.875**	**22.23**	**0.092**	**2.34**	**2.000**	**50.80**	**0.973**	**24.70**	**0.831**	**21.10**	**33.39**	**148.53**	**32.50**	**5.69**
C0875-092-2500-M	**0.875**	**22.23**	**0.092**	**2.34**	**2.500**	**63.50**	**1.190**	**30.22**	**1.007**	**25.57**	**33.38**	**148.50**	**25.48**	**4.46**
C0875-092-2750-M	**0.875**	**22.23**	**0.092**	**2.34**	**2.750**	**69.85**	**1.298**	**32.98**	**1.094**	**27.79**	**33.39**	**148.52**	**23.00**	**4.03**
C0875-092-3063-M	**0.875**	**22.23**	**0.092**	**2.34**	**3.063**	**77.80**	**1.434**	**36.43**	**1.204**	**30.58**	**33.39**	**148.53**	**20.50**	**3.59**
C0875-092-3500-M	**0.875**	**22.23**	**0.092**	**2.34**	**3.500**	**88.90**	**1.624**	**41.25**	**1.357**	**34.48**	**33.40**	**148.55**	**17.80**	**3.12**
C0875-092-4000-M	**0.875**	**22.23**	**0.092**	**2.34**	**4.000**	**101.60**	**1.841**	**46.76**	**1.533**	**38.93**	**33.40**	**148.58**	**15.47**	**2.71**
C0875-120-1500-M	**0.875**	**22.23**	**0.120**	**3.05**	**1.500**	**38.10**	**0.995**	**25.27**	**0.831**	**21.12**	**76.11**	**338.54**	**150.62**	**26.36**
C0875-120-2000-M	**0.875**	**22.23**	**0.120**	**3.05**	**2.000**	**50.80**	**1.294**	**32.87**	**1.061**	**26.96**	**76.11**	**338.54**	**107.83**	**18.87**
C0875-120-2250-M	**0.875**	**22.23**	**0.120**	**3.05**	**2.250**	**57.15**	**1.444**	**36.68**	**1.176**	**29.88**	**76.11**	**338.54**	**94.42**	**16.52**
C0875-120-2500-M	**0.875**	**22.23**	**0.120**	**3.05**	**2.500**	**63.50**	**1.594**	**40.48**	**1.291**	**32.80**	**76.11**	**338.54**	**83.97**	**14.69**
C0875-120-3000-M	**0.875**	**22.23**	**0.120**	**3.05**	**3.000**	**76.20**	**1.893**	**48.09**	**1.521**	**38.64**	**76.11**	**338.54**	**68.76**	**12.03**
C0875-120-3500-M	**0.875**	**22.23**	**0.120**	**3.05**	**3.500**	**88.90**	**2.193**	**55.69**	**1.751**	**44.48**	**76.11**	**338.54**	**58.21**	**10.19**
C0875-120-4000-M	**0.875**	**22.23**	**0.120**	**3.05**	**4.000**	**101.60**	**2.492**	**63.30**	**1.981**	**50.32**	**76.11**	**338.54**	**50.47**	**8.83**
C0875-120-4500-M	**0.875**	**22.23**	**0.120**	**3.05**	**4.500**	**114.30**	**2.792**	**70.91**	**2.211**	**56.16**	**76.11**	**338.54**	**44.55**	**7.80**
C0875-120-5000-M	**0.875**	**22.23**	**0.120**	**3.05**	**5.000**	**127.00**	**3.091**	**78.51**	**2.441**	**62.00**	**76.11**	**338.54**	**39.87**	**6.98**
C0875-120-5500-M	**0.875**	**22.23**	**0.120**	**3.05**	**5.500**	**139.70**	**3.391**	**86.12**	**2.671**	**67.84**	**76.11**	**338.54**	**36.08**	**6.31**
C0875-148-2500-M	**0.875**	**22.23**	**0.148**	**3.76**	**2.500**	**63.50**	**1.825**	**46.36**	**1.709**	**43.42**	**134.55**	**598.52**	**199.44**	**34.90**
C0881-068-1750-M	**0.881**	**22.38**	**0.068**	**1.73**	**1.750**	**44.45**	**0.626**	**15.89**	**0.449**	**11.39**	**15.02**	**66.81**	**13.36**	**2.34**
C0881-068-1875-M	**0.881**	**22.38**	**0.068**	**1.73**	**1.875**	**47.63**	**0.664**	**16.85**	**0.472**	**11.99**	**15.02**	**66.81**	**12.40**	**2.17**
C0881-068-2000-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.000**	**50.80**	**0.701**	**17.82**	**0.496**	**12.60**	**15.02**	**66.81**	**11.57**	**2.02**
C0881-068-2125-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.125**	**53.98**	**0.739**	**18.78**	**0.520**	**13.20**	**15.02**	**66.81**	**10.84**	**1.90**
C0881-068-2250-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.250**	**57.15**	**0.777**	**19.74**	**0.543**	**13.80**	**15.02**	**66.81**	**10.20**	**1.78**
C0881-068-2375-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.375**	**60.33**	**0.815**	**20.71**	**0.567**	**14.40**	**15.02**	**66.81**	**9.63**	**1.69**
C0881-068-2500-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.500**	**63.50**	**0.853**	**21.67**	**0.591**	**15.00**	**15.02**	**66.81**	**9.12**	**1.60**
C0881-068-2625-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.625**	**66.68**	**0.891**	**22.63**	**0.614**	**15.60**	**15.02**	**66.81**	**8.66**	**1.52**
C0881-068-2750-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.750**	**69.85**	**0.929**	**23.59**	**0.638**	**16.20**	**15.02**	**66.81**	**8.25**	**1.44**
C0881-068-2875-M	**0.881**	**22.38**	**0.068**	**1.73**	**2.875**	**73.03**	**0.967**	**24.56**	**0.662**	**16.81**	**15.02**	**66.81**	**7.87**	**1.38**
C0881-068-3000-M	**0.881**	**22.38**	**0.068**	**1.73**	**3.000**	**76.20**	**1.005**	**25.52**	**0.685**	**17.41**	**15.02**	**66.81**	**7.53**	**1.32**
C0881-068-3250-M	**0.881**	**22.38**	**0.068**	**1.73**	**3.250**	**82.55**	**1.081**	**27.45**	**0.733**	**18.61**	**15.02**	**66.81**	**6.92**	**1.21**
C0881-068-3500-M	**0.881**	**22.38**	**0.068**	**1.73**	**3.500**	**88.90**	**1.156**	**29.37**	**0.780**	**19.81**	**15.02**	**66.81**	**6.41**	**1.12**
C0881-068-3750-M	**0.881**	**22.38**	**0.068**	**1.73**	**3.750**	**95.25**	**1.232**	**31.30**	**0.827**	**21.01**	**15.02**	**66.81**	**5.97**	**1.04**
C0881-068-4000-M	**0.881**	**22.38**	**0.068**	**1.73**	**4.000**	**101.60**	**1.308**	**33.23**	**0.875**	**22.22**	**15.02**	**66.81**	**5.58**	**0.98**
C0881-068-4250-M	**0.881**	**22.38**	**0.068**	**1.73**	**4.250**	**107.95**	**1.384**	**35.15**	**0.922**	**23.42**	**15.02**	**66.81**	**5.24**	**0.92**
C0881-068-4500-M	**0.881**	**22.38**	**0.068**	**1.73**	**4.500**	**114.30**	**1.460**	**37.08**	**0.969**	**24.62**	**15.02**	**66.81**	**4.94**	**0.86**
C0881-068-4750-M	**0.881**	**22.38**	**0.068**	**1.73**	**4.750**	**120.65**	**1.536**	**39.00**	**1.017**	**25.83**	**15.02**	**66.81**	**4.67**	**0.82**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0850-092-2250-S	1.413	35.89	21.15	94.08	25.32	4.43
C0850-092-2500-S	1.562	39.67	21.15	94.08	22.57	3.95
C0850-092-2750-S	1.711	43.46	21.15	94.08	20.33	3.56
C0850-092-3000-S	1.860	47.24	21.15	94.08	18.58	3.25
C0850-092-3500-S	2.157	54.79	21.15	94.08	15.74	2.76
C0850-098-1000-S	0.694	17.63	25.19	112.05	82.22	14.39
C0850-098-1250-S	0.848	21.54	25.19	112.05	62.73	10.98
C0850-098-1500-S	1.003	25.48	25.19	112.05	50.65	8.86
C0850-098-1750-S	1.158	29.41	25.19	112.05	42.57	7.45
C0850-098-2000-S	1.312	33.32	25.19	112.05	36.65	6.41
C0850-098-2250-S	1.467	37.26	25.19	112.05	32.15	5.63
C0850-098-2500-S	1.622	41.20	25.19	112.05	28.66	5.01
C0850-098-2750-S	1.776	45.11	25.19	112.05	25.91	4.53
C0850-098-3000-S	1.931	49.05	25.19	112.05	23.57	4.13
C0850-098-3500-S	2.240	56.90	25.19	112.05	19.99	3.50
D22550	0.488	12.40	15.89	70.66	11.31	1.98
D22560	0.693	17.60	15.89	70.66	7.26	1.27
D22570	1.004	25.50	15.89	70.66	4.69	0.82
D22580	1.417	36.00	15.89	70.66	3.20	0.56
D22590	2.039	51.80	15.89	70.66	2.11	0.37
D22750	0.535	13.60	29.75	132.34	27.77	4.86
D22760	0.756	19.20	29.75	132.34	17.66	3.09
D22770	1.087	27.60	29.75	132.34	11.37	1.99
D22780	1.528	38.80	29.75	132.34	7.77	1.36
D22790	2.189	55.60	29.75	132.34	5.26	0.92
C0875-092-0875-S	**0.490**	**12.45**	**27.37**	**121.75**	**71.15**	**12.45**
C0875-092-1000-S	**0.546**	**13.86**	**27.37**	**121.75**	**60.25**	**10.54**
C0875-092-1500-S	**0.767**	**19.49**	**27.37**	**121.75**	**37.36**	**6.54**
C0875-092-1750-S	**0.878**	**22.31**	**27.37**	**121.75**	**31.40**	**5.49**
C0875-092-2000-S	**0.989**	**25.12**	**27.37**	**121.75**	**27.07**	**4.74**
C0875-092-2500-S	**1.210**	**30.75**	**27.37**	**121.75**	**21.23**	**3.71**
C0875-092-2750-S	**1.321**	**33.56**	**27.37**	**121.75**	**19.16**	**3.35**
C0875-092-3063-S	**1.460**	**37.09**	**27.37**	**121.75**	**17.08**	**2.99**
C0875-092-3500-S	**1.654**	**42.01**	**27.37**	**121.75**	**14.83**	**2.59**
C0875-092-4000-S	**1.876**	**47.65**	**27.37**	**121.75**	**12.89**	**2.26**
C0875-120-1500-S	**1.055**	**26.81**	**55.78**	**248.13**	**125.47**	**21.96**
C0875-120-2000-S	**1.379**	**35.03**	**55.78**	**248.13**	**89.82**	**15.72**
C0875-120-2250-S	**1.541**	**39.14**	**55.78**	**248.13**	**78.65**	**13.76**
C0875-120-2500-S	**1.703**	**43.24**	**55.78**	**248.13**	**69.95**	**12.24**
C0875-120-3000-S	**2.026**	**51.46**	**55.78**	**248.13**	**57.28**	**10.02**
C0875-120-3500-S	**2.350**	**59.68**	**55.78**	**248.13**	**48.49**	**8.49**
C0875-120-4000-S	**2.673**	**67.90**	**55.78**	**248.13**	**42.04**	**7.36**
C0875-120-4500-S	**2.997**	**76.12**	**55.78**	**248.13**	**37.11**	**6.49**
C0875-120-5000-S	**3.320**	**84.34**	**55.78**	**248.13**	**33.21**	**5.81**
C0875-120-5500-S	**3.644**	**92.56**	**55.78**	**248.13**	**30.06**	**5.26**
C0875-148-2500-S	**1.919**	**48.74**	**96.56**	**429.53**	**166.13**	**29.07**
C0881-068-1750-S	**0.726**	**18.44**	**11.89**	**52.90**	**11.62**	**2.03**
C0881-068-1875-S	**0.772**	**19.60**	**11.89**	**52.90**	**10.78**	**1.89**
C0881-068-2000-S	**0.818**	**20.77**	**11.89**	**52.90**	**10.06**	**1.76**
C0881-068-2125-S	**0.863**	**21.93**	**11.89**	**52.90**	**9.43**	**1.65**
C0881-068-2250-S	**0.909**	**23.09**	**11.89**	**52.90**	**8.87**	**1.55**
C0881-068-2375-S	**0.955**	**24.25**	**11.89**	**52.90**	**8.37**	**1.47**
C0881-068-2500-S	**1.000**	**25.41**	**11.89**	**52.90**	**7.93**	**1.39**
C0881-068-2625-S	**1.046**	**26.57**	**11.89**	**52.90**	**7.53**	**1.32**
C0881-068-2750-S	**1.092**	**27.73**	**11.89**	**52.90**	**7.17**	**1.26**
C0881-068-2875-S	**1.137**	**28.89**	**11.89**	**52.90**	**6.85**	**1.20**
C0881-068-3000-S	**1.183**	**30.05**	**11.89**	**52.90**	**6.55**	**1.15**
C0881-068-3250-S	**1.275**	**32.37**	**11.89**	**52.90**	**6.02**	**1.05**
C0881-068-3500-S	**1.366**	**34.70**	**11.89**	**52.90**	**5.57**	**0.98**
C0881-068-3750-S	**1.457**	**37.02**	**11.89**	**52.90**	**5.19**	**0.91**
C0881-068-4000-S	**1.549**	**39.34**	**11.89**	**52.90**	**4.85**	**0.85**
C0881-068-4250-S	**1.640**	**41.66**	**11.89**	**52.90**	**4.56**	**0.80**
C0881-068-4500-S	**1.732**	**43.98**	**11.89**	**52.90**	**4.30**	**0.75**
C0881-068-4750-S	**1.823**	**46.31**	**11.89**	**52.90**	**4.06**	**0.71**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0881-068-5000-M	**0.881**	**22.38**	**0.068**	**1.73**	**5.000**	**127.00**	**1.611**	**40.93**	**1.064**	**27.03**	**15.02**	**66.81**	**4.43**	**0.78**
C0881-068-5250-M	**0.881**	**22.38**	**0.068**	**1.73**	**5.250**	**133.35**	**1.687**	**42.86**	**1.111**	**28.23**	**15.02**	**66.81**	**4.22**	**0.74**
C0881-068-5500-M	**0.881**	**22.38**	**0.068**	**1.73**	**5.500**	**139.70**	**1.763**	**44.78**	**1.159**	**29.43**	**15.02**	**66.81**	**4.02**	**0.70**
C0881-068-5750-M	**0.881**	**22.38**	**0.068**	**1.73**	**5.750**	**146.05**	**1.839**	**46.71**	**1.206**	**30.64**	**15.02**	**66.81**	**3.84**	**0.67**
C0881-068-6000-M	**0.881**	**22.38**	**0.068**	**1.73**	**6.000**	**152.40**	**1.915**	**48.64**	**1.254**	**31.84**	**15.02**	**66.81**	**3.68**	**0.64**
C0881-068-6250-M	**0.881**	**22.38**	**0.068**	**1.73**	**6.250**	**158.75**	**1.991**	**50.56**	**1.301**	**33.04**	**15.02**	**66.81**	**3.53**	**0.62**
C0881-068-6500-M	**0.881**	**22.38**	**0.068**	**1.73**	**6.500**	**165.10**	**2.066**	**52.49**	**1.348**	**34.25**	**15.02**	**66.81**	**3.39**	**0.59**
C0881-068-6750-M	**0.881**	**22.38**	**0.068**	**1.73**	**6.750**	**171.45**	**2.142**	**54.41**	**1.396**	**35.45**	**15.02**	**66.81**	**3.26**	**0.57**
C0881-068-7000-M	**0.881**	**22.38**	**0.068**	**1.73**	**7.000**	**177.80**	**2.218**	**56.34**	**1.443**	**36.65**	**15.02**	**66.81**	**3.14**	**0.55**
C0881-068-7500-M	**0.881**	**22.38**	**0.068**	**1.73**	**7.500**	**190.50**	**2.370**	**60.19**	**1.538**	**39.06**	**15.02**	**66.81**	**2.93**	**0.51**
C0881-068-8000-M	**0.881**	**22.38**	**0.068**	**1.73**	**8.000**	**203.20**	**2.521**	**64.04**	**1.632**	**41.46**	**15.02**	**66.81**	**2.74**	**0.48**
C0881-068-8500-M	**0.881**	**22.38**	**0.068**	**1.73**	**8.500**	**215.90**	**2.673**	**67.90**	**1.727**	**43.87**	**15.02**	**66.81**	**2.58**	**0.45**
C0881-068-9000-M	**0.881**	**22.38**	**0.068**	**1.73**	**9.000**	**228.60**	**2.825**	**71.75**	**1.822**	**46.27**	**15.02**	**66.81**	**2.43**	**0.43**
C0881-068-9500-M	**0.881**	**22.38**	**0.068**	**1.73**	**9.500**	**241.30**	**2.976**	**75.60**	**1.917**	**48.68**	**15.02**	**66.81**	**2.30**	**0.40**
C0881-072-1625-M	**0.881**	**22.38**	**0.072**	**1.83**	**1.625**	**41.28**	**0.621**	**15.77**	**0.466**	**11.83**	**17.62**	**78.36**	**17.54**	**3.07**
C0881-072-1750-M	**0.881**	**22.38**	**0.072**	**1.83**	**1.750**	**44.45**	**0.661**	**16.79**	**0.492**	**12.50**	**17.62**	**78.36**	**16.18**	**2.83**
C0881-072-1875-M	**0.881**	**22.38**	**0.072**	**1.83**	**1.875**	**47.63**	**0.701**	**17.81**	**0.519**	**13.18**	**17.62**	**78.36**	**15.01**	**2.63**
C0881-072-2000-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.000**	**50.80**	**0.741**	**18.83**	**0.545**	**13.85**	**17.62**	**78.36**	**14.00**	**2.45**
C0881-072-2125-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.125**	**53.98**	**0.782**	**19.85**	**0.572**	**14.52**	**17.62**	**78.36**	**13.11**	**2.29**
C0881-072-2250-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.250**	**57.15**	**0.822**	**20.88**	**0.598**	**15.20**	**17.62**	**78.36**	**12.34**	**2.16**
C0881-072-2375-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.375**	**60.33**	**0.862**	**21.90**	**0.625**	**15.87**	**17.62**	**78.36**	**11.64**	**2.04**
C0881-072-2500-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.500**	**63.50**	**0.902**	**22.92**	**0.651**	**16.55**	**17.62**	**78.36**	**11.03**	**1.93**
C0881-072-2625-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.625**	**66.68**	**0.943**	**23.94**	**0.678**	**17.22**	**17.62**	**78.36**	**10.47**	**1.83**
C0881-072-2750-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.750**	**69.85**	**0.983**	**24.96**	**0.705**	**17.90**	**17.62**	**78.36**	**9.97**	**1.74**
C0881-072-2875-M	**0.881**	**22.38**	**0.072**	**1.83**	**2.875**	**73.03**	**1.023**	**25.99**	**0.731**	**18.57**	**17.62**	**78.36**	**9.51**	**1.66**
C0881-072-3000-M	**0.881**	**22.38**	**0.072**	**1.83**	**3.000**	**76.20**	**1.063**	**27.01**	**0.758**	**19.24**	**17.62**	**78.36**	**9.10**	**1.59**
C0881-072-3250-M	**0.881**	**22.38**	**0.072**	**1.83**	**3.250**	**82.55**	**1.144**	**29.05**	**0.811**	**20.59**	**17.62**	**78.36**	**8.36**	**1.46**
C0881-072-3500-M	**0.881**	**22.38**	**0.072**	**1.83**	**3.500**	**88.90**	**1.224**	**31.10**	**0.864**	**21.94**	**17.62**	**78.36**	**7.74**	**1.35**
C0881-072-3750-M	**0.881**	**22.38**	**0.072**	**1.83**	**3.750**	**95.25**	**1.305**	**33.14**	**0.917**	**23.29**	**17.62**	**78.36**	**7.20**	**1.26**
C0881-072-4000-M	**0.881**	**22.38**	**0.072**	**1.83**	**4.000**	**101.60**	**1.385**	**35.18**	**0.970**	**24.64**	**17.62**	**78.36**	**6.74**	**1.18**
C0881-072-4250-M	**0.881**	**22.38**	**0.072**	**1.83**	**4.250**	**107.95**	**1.466**	**37.23**	**1.023**	**25.99**	**17.62**	**78.36**	**6.33**	**1.11**
C0881-072-4500-M	**0.881**	**22.38**	**0.072**	**1.83**	**4.500**	**114.30**	**1.546**	**39.27**	**1.076**	**27.33**	**17.62**	**78.36**	**5.96**	**1.04**
C0881-072-4750-M	**0.881**	**22.38**	**0.072**	**1.83**	**4.750**	**120.65**	**1.627**	**41.32**	**1.129**	**28.68**	**17.62**	**78.36**	**5.64**	**0.99**
C0881-072-5000-M	**0.881**	**22.38**	**0.072**	**1.83**	**5.000**	**127.00**	**1.707**	**43.36**	**1.182**	**30.03**	**17.62**	**78.36**	**5.35**	**0.94**
C0881-072-5250-M	**0.881**	**22.38**	**0.072**	**1.83**	**5.250**	**133.35**	**1.788**	**45.40**	**1.235**	**31.38**	**17.62**	**78.36**	**5.09**	**0.89**
C0881-072-5500-M	**0.881**	**22.38**	**0.072**	**1.83**	**5.500**	**139.70**	**1.868**	**47.45**	**1.288**	**32.73**	**17.62**	**78.36**	**4.85**	**0.85**
C0881-072-5750-M	**0.881**	**22.38**	**0.072**	**1.83**	**5.750**	**146.05**	**1.949**	**49.49**	**1.342**	**34.08**	**17.62**	**78.36**	**4.63**	**0.81**
C0881-072-6000-M	**0.881**	**22.38**	**0.072**	**1.83**	**6.000**	**152.40**	**2.029**	**51.54**	**1.395**	**35.42**	**17.62**	**78.36**	**4.44**	**0.78**
C0881-072-6250-M	**0.881**	**22.38**	**0.072**	**1.83**	**6.250**	**158.75**	**2.109**	**53.58**	**1.448**	**36.77**	**17.62**	**78.36**	**4.25**	**0.74**
C0881-072-6500-M	**0.881**	**22.38**	**0.072**	**1.83**	**6.500**	**165.10**	**2.190**	**55.62**	**1.501**	**38.12**	**17.62**	**78.36**	**4.09**	**0.72**
C0881-072-6750-M	**0.881**	**22.38**	**0.072**	**1.83**	**6.750**	**171.45**	**2.270**	**57.67**	**1.554**	**39.47**	**17.62**	**78.36**	**3.93**	**0.69**
C0881-072-7000-M	**0.881**	**22.38**	**0.072**	**1.83**	**7.000**	**177.80**	**2.351**	**59.71**	**1.607**	**40.82**	**17.62**	**78.36**	**3.79**	**0.66**
C0881-072-7500-M	**0.881**	**22.38**	**0.072**	**1.83**	**7.500**	**190.50**	**2.512**	**63.80**	**1.713**	**43.51**	**17.62**	**78.36**	**3.53**	**0.62**
C0881-072-8000-M	**0.881**	**22.38**	**0.072**	**1.83**	**8.000**	**203.20**	**2.673**	**67.89**	**1.819**	**46.21**	**17.62**	**78.36**	**3.31**	**0.58**
C0881-072-8500-M	**0.881**	**22.38**	**0.072**	**1.83**	**8.500**	**215.90**	**2.834**	**71.98**	**1.925**	**48.91**	**17.62**	**78.36**	**3.11**	**0.54**
C0881-072-9000-M	**0.881**	**22.38**	**0.072**	**1.83**	**9.000**	**228.60**	**2.995**	**76.06**	**2.032**	**51.60**	**17.62**	**78.36**	**2.93**	**0.51**
C0881-072-9500-M	**0.881**	**22.38**	**0.072**	**1.83**	**9.500**	**241.30**	**3.156**	**80.15**	**2.138**	**54.30**	**17.62**	**78.36**	**2.78**	**0.49**
C0881-085-1500-M	**0.881**	**22.38**	**0.085**	**2.16**	**1.500**	**38.10**	**0.684**	**17.36**	**0.566**	**14.39**	**27.95**	**124.32**	**34.23**	**5.99**
C0881-085-1625-M	**0.881**	**22.38**	**0.085**	**2.16**	**1.625**	**41.28**	**0.732**	**18.59**	**0.603**	**15.31**	**27.95**	**124.32**	**31.29**	**5.48**
C0881-085-1750-M	**0.881**	**22.38**	**0.085**	**2.16**	**1.750**	**44.45**	**0.780**	**19.81**	**0.639**	**16.24**	**27.95**	**124.32**	**28.81**	**5.04**
C0881-085-1875-M	**0.881**	**22.38**	**0.085**	**2.16**	**1.875**	**47.63**	**0.828**	**21.04**	**0.676**	**17.17**	**27.95**	**124.32**	**26.70**	**4.67**
C0881-085-2000-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.000**	**50.80**	**0.877**	**22.27**	**0.712**	**18.09**	**27.95**	**124.32**	**24.88**	**4.35**
C0881-085-2125-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.125**	**53.98**	**0.925**	**23.49**	**0.749**	**19.02**	**27.95**	**124.32**	**23.29**	**4.08**
C0881-085-2250-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.250**	**57.15**	**0.973**	**24.72**	**0.785**	**19.94**	**27.95**	**124.32**	**21.89**	**3.83**
C0881-085-2375-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.375**	**60.33**	**1.021**	**25.94**	**0.822**	**20.87**	**27.95**	**124.32**	**20.65**	**3.61**
C0881-085-2500-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.500**	**63.50**	**1.070**	**27.17**	**0.858**	**21.80**	**27.95**	**124.32**	**19.54**	**3.42**
C0881-085-2625-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.625**	**66.68**	**1.118**	**28.39**	**0.895**	**22.72**	**27.95**	**124.32**	**18.54**	**3.25**
C0881-085-2750-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.750**	**69.85**	**1.166**	**29.62**	**0.931**	**23.65**	**27.95**	**124.32**	**17.65**	**3.09**
C0881-085-2875-M	**0.881**	**22.38**	**0.085**	**2.16**	**2.875**	**73.03**	**1.214**	**30.85**	**0.967**	**24.57**	**27.95**	**124.32**	**16.83**	**2.95**
C0881-085-3000-M	**0.881**	**22.38**	**0.085**	**2.16**	**3.000**	**76.20**	**1.263**	**32.07**	**1.004**	**25.50**	**27.95**	**124.32**	**16.09**	**2.82**
C0881-085-3250-M	**0.881**	**22.38**	**0.085**	**2.16**	**3.250**	**82.55**	**1.359**	**34.52**	**1.077**	**27.35**	**27.95**	**124.32**	**14.78**	**2.59**
C0881-085-3500-M	**0.881**	**22.38**	**0.085**	**2.16**	**3.500**	**88.90**	**1.456**	**36.98**	**1.150**	**29.20**	**27.95**	**124.32**	**13.67**	**2.39**
C0881-085-3750-M	**0.881**	**22.38**	**0.085**	**2.16**	**3.750**	**95.25**	**1.552**	**39.43**	**1.223**	**31.06**	**27.95**	**124.32**	**12.72**	**2.23**
C0881-085-4000-M	**0.881**	**22.38**	**0.085**	**2.16**	**4.000**	**101.60**	**1.649**	**41.88**	**1.296**	**32.91**	**27.95**	**124.32**	**11.89**	**2.08**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0881-068-5000-S	**1.914**	**48.63**	**11.89**	**52.90**	**3.85**	**0.67**
C0881-068-5250-S	**2.006**	**50.95**	**11.89**	**52.90**	**3.67**	**0.64**
C0881-068-5500-S	**2.097**	**53.27**	**11.89**	**52.90**	**3.50**	**0.61**
C0881-068-5750-S	**2.189**	**55.59**	**11.89**	**52.90**	**3.34**	**0.58**
C0881-068-6000-S	**2.280**	**57.91**	**11.89**	**52.90**	**3.20**	**0.56**
C0881-068-6250-S	**2.372**	**60.24**	**11.89**	**52.90**	**3.07**	**0.54**
C0881-068-6500-S	**2.463**	**62.56**	**11.89**	**52.90**	**2.95**	**0.52**
C0881-068-6750-S	**2.554**	**64.88**	**11.89**	**52.90**	**2.84**	**0.50**
C0881-068-7000-S	**2.646**	**67.20**	**11.89**	**52.90**	**2.73**	**0.48**
C0881-068-7500-S	**2.829**	**71.85**	**11.89**	**52.90**	**2.55**	**0.45**
C0881-068-8000-S	**3.011**	**76.49**	**11.89**	**52.90**	**2.38**	**0.42**
C0881-068-8500-S	**3.194**	**81.13**	**11.89**	**52.90**	**2.24**	**0.39**
C0881-068-9000-S	**3.377**	**85.78**	**11.89**	**52.90**	**2.12**	**0.37**
C0881-068-9500-S	**3.560**	**90.42**	**11.89**	**52.90**	**2.00**	**0.35**
C0881-072-1625-S	**0.712**	**18.09**	**13.92**	**61.93**	**15.25**	**2.67**
C0881-072-1750-S	**0.760**	**19.31**	**13.92**	**61.93**	**14.07**	**2.46**
C0881-072-1875-S	**0.808**	**20.53**	**13.92**	**61.93**	**13.05**	**2.28**
C0881-072-2000-S	**0.856**	**21.74**	**13.92**	**61.93**	**12.17**	**2.13**
C0881-072-2125-S	**0.904**	**22.96**	**13.92**	**61.93**	**11.40**	**2.00**
C0881-072-2250-S	**0.952**	**24.18**	**13.92**	**61.93**	**10.73**	**1.88**
C0881-072-2375-S	**1.000**	**25.40**	**13.92**	**61.93**	**10.13**	**1.77**
C0881-072-2500-S	**1.048**	**26.62**	**13.92**	**61.93**	**9.59**	**1.68**
C0881-072-2625-S	**1.096**	**27.83**	**13.92**	**61.93**	**9.11**	**1.59**
C0881-072-2750-S	**1.144**	**29.05**	**13.92**	**61.93**	**8.67**	**1.52**
C0881-072-2875-S	**1.192**	**30.27**	**13.92**	**61.93**	**8.27**	**1.45**
C0881-072-3000-S	**1.240**	**31.49**	**13.92**	**61.93**	**7.91**	**1.38**
C0881-072-3250-S	**1.336**	**33.92**	**13.92**	**61.93**	**7.27**	**1.27**
C0881-072-3500-S	**1.432**	**36.36**	**13.92**	**61.93**	**6.73**	**1.18**
C0881-072-3750-S	**1.527**	**38.80**	**13.92**	**61.93**	**6.26**	**1.10**
C0881-072-4000-S	**1.623**	**41.23**	**13.92**	**61.93**	**5.86**	**1.03**
C0881-072-4250-S	**1.719**	**43.67**	**13.92**	**61.93**	**5.50**	**0.96**
C0881-072-4500-S	**1.815**	**46.11**	**13.92**	**61.93**	**5.19**	**0.91**
C0881-072-4750-S	**1.911**	**48.54**	**13.92**	**61.93**	**4.90**	**0.86**
C0881-072-5000-S	**2.007**	**50.98**	**13.92**	**61.93**	**4.65**	**0.81**
C0881-072-5250-S	**2.103**	**53.41**	**13.92**	**61.93**	**4.42**	**0.77**
C0881-072-5500-S	**2.199**	**55.85**	**13.92**	**61.93**	**4.22**	**0.74**
C0881-072-5750-S	**2.295**	**58.29**	**13.92**	**61.93**	**4.03**	**0.71**
C0881-072-6000-S	**2.391**	**60.72**	**13.92**	**61.93**	**3.86**	**0.67**
C0881-072-6250-S	**2.487**	**63.16**	**13.92**	**61.93**	**3.70**	**0.65**
C0881-072-6500-S	**2.582**	**65.60**	**13.92**	**61.93**	**3.55**	**0.62**
C0881-072-6750-S	**2.678**	**68.03**	**13.92**	**61.93**	**3.42**	**0.60**
C0881-072-7000-S	**2.774**	**70.47**	**13.92**	**61.93**	**3.30**	**0.58**
C0881-072-7500-S	**2.966**	**75.34**	**13.92**	**61.93**	**3.07**	**0.54**
C0881-072-8000-S	**3.158**	**80.21**	**13.92**	**61.93**	**2.88**	**0.50**
C0881-072-8500-S	**3.350**	**85.08**	**13.92**	**61.93**	**2.70**	**0.47**
C0881-072-9000-S	**3.542**	**89.96**	**13.92**	**61.93**	**2.55**	**0.45**
C0881-072-9500-S	**3.733**	**94.83**	**13.92**	**61.93**	**2.41**	**0.42**
C0881-085-1500-S	**0.763**	**19.38**	**21.93**	**97.57**	**29.77**	**5.21**
C0881-085-1625-S	**0.819**	**20.80**	**21.93**	**97.57**	**27.21**	**4.76**
C0881-085-1750-S	**0.875**	**22.21**	**21.93**	**97.57**	**25.06**	**4.38**
C0881-085-1875-S	**0.930**	**23.63**	**21.93**	**97.57**	**23.22**	**4.06**
C0881-085-2000-S	**0.986**	**25.05**	**21.93**	**97.57**	**21.63**	**3.79**
C0881-085-2125-S	**1.042**	**26.46**	**21.93**	**97.57**	**20.25**	**3.54**
C0881-085-2250-S	**1.098**	**27.88**	**21.93**	**97.57**	**19.03**	**3.33**
C0881-085-2375-S	**1.153**	**29.29**	**21.93**	**97.57**	**17.95**	**3.14**
C0881-085-2500-S	**1.209**	**30.71**	**21.93**	**97.57**	**16.99**	**2.97**
C0881-085-2625-S	**1.265**	**32.12**	**21.93**	**97.57**	**16.13**	**2.82**
C0881-085-2750-S	**1.320**	**33.54**	**21.93**	**97.57**	**15.34**	**2.69**
C0881-085-2875-S	**1.376**	**34.96**	**21.93**	**97.57**	**14.64**	**2.56**
C0881-085-3000-S	**1.432**	**36.37**	**21.93**	**97.57**	**13.99**	**2.45**
C0881-085-3250-S	**1.543**	**39.20**	**21.93**	**97.57**	**12.85**	**2.25**
C0881-085-3500-S	**1.655**	**42.04**	**21.93**	**97.57**	**11.89**	**2.08**
C0881-085-3750-S	**1.766**	**44.87**	**21.93**	**97.57**	**11.06**	**1.94**
C0881-085-4000-S	**1.878**	**47.70**	**21.93**	**97.57**	**10.34**	**1.81**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0881-085-4250-M	**0.881**	**22.38**	**0.085**	**2.16**	**4.250**	**107.95**	**1.745**	**44.33**	**1.369**	**34.76**	**27.95**	**124.32**	**11.16**	**1.95**
C0881-085-4500-M	**0.881**	**22.38**	**0.085**	**2.16**	**4.500**	**114.30**	**1.842**	**46.78**	**1.441**	**36.61**	**27.95**	**124.32**	**10.51**	**1.84**
C0881-085-4750-M	**0.881**	**22.38**	**0.085**	**2.16**	**4.750**	**120.65**	**1.938**	**49.24**	**1.514**	**38.46**	**27.95**	**124.32**	**9.94**	**1.74**
C0881-085-5000-M	**0.881**	**22.38**	**0.085**	**2.16**	**5.000**	**127.00**	**2.035**	**51.69**	**1.587**	**40.32**	**27.95**	**124.32**	**9.43**	**1.65**
C0881-085-5250-M	**0.881**	**22.38**	**0.085**	**2.16**	**5.250**	**133.35**	**2.131**	**54.14**	**1.660**	**42.17**	**27.95**	**124.32**	**8.96**	**1.57**
C0881-085-5500-M	**0.881**	**22.38**	**0.085**	**2.16**	**5.500**	**139.70**	**2.228**	**56.59**	**1.733**	**44.02**	**27.95**	**124.32**	**8.54**	**1.49**
C0881-085-5750-M	**0.881**	**22.38**	**0.085**	**2.16**	**5.750**	**146.05**	**2.325**	**59.04**	**1.806**	**45.87**	**27.95**	**124.32**	**8.16**	**1.43**
C0881-085-6000-M	**0.881**	**22.38**	**0.085**	**2.16**	**6.000**	**152.40**	**2.421**	**61.49**	**1.879**	**47.73**	**27.95**	**124.32**	**7.81**	**1.37**
C0881-085-6250-M	**0.881**	**22.38**	**0.085**	**2.16**	**6.250**	**158.75**	**2.518**	**63.95**	**1.952**	**49.58**	**27.95**	**124.32**	**7.49**	**1.31**
C0881-085-6500-M	**0.881**	**22.38**	**0.085**	**2.16**	**6.500**	**165.10**	**2.614**	**66.40**	**2.025**	**51.43**	**27.95**	**124.32**	**7.19**	**1.26**
C0881-085-6750-M	**0.881**	**22.38**	**0.085**	**2.16**	**6.750**	**171.45**	**2.711**	**68.85**	**2.098**	**53.28**	**27.95**	**124.32**	**6.92**	**1.21**
C0881-085-7000-M	**0.881**	**22.38**	**0.085**	**2.16**	**7.000**	**177.80**	**2.807**	**71.30**	**2.171**	**55.13**	**27.95**	**124.32**	**6.67**	**1.17**
C0881-085-7500-M	**0.881**	**22.38**	**0.085**	**2.16**	**7.500**	**190.50**	**3.000**	**76.21**	**2.316**	**58.84**	**27.95**	**124.32**	**6.21**	**1.09**
C0881-085-8000-M	**0.881**	**22.38**	**0.085**	**2.16**	**8.000**	**203.20**	**3.193**	**81.11**	**2.462**	**62.54**	**27.95**	**124.32**	**5.81**	**1.02**
C0881-085-8500-M*	**0.881**	**22.38**	**0.085**	**2.16**	**8.500**	**215.90**	**3.439**	**87.34**	**2.673**	**67.88**	**27.95**	**124.32**	**5.52**	**0.97**
C0881-085-9000-M*	**0.881**	**22.38**	**0.085**	**2.16**	**9.000**	**228.60**	**3.632**	**92.24**	**2.818**	**71.59**	**27.95**	**124.32**	**5.21**	**0.91**
C0881-085-9500-M*	**0.881**	**22.38**	**0.085**	**2.16**	**9.500**	**241.30**	**3.825**	**97.15**	**2.964**	**75.29**	**27.95**	**124.32**	**4.92**	**0.86**
C0881-092-1375-M	**0.881**	**22.38**	**0.092**	**2.34**	**1.375**	**34.93**	**0.687**	**17.45**	**0.594**	**15.08**	**34.80**	**154.80**	**50.57**	**8.85**
C0881-092-1500-M	**0.881**	**22.38**	**0.092**	**2.34**	**1.500**	**38.10**	**0.740**	**18.79**	**0.636**	**16.15**	**34.80**	**154.80**	**45.77**	**8.01**
C0881-092-1625-M	**0.881**	**22.38**	**0.092**	**2.34**	**1.625**	**41.28**	**0.792**	**20.13**	**0.678**	**17.22**	**34.80**	**154.80**	**41.80**	**7.31**
C0881-092-1750-M	**0.881**	**22.38**	**0.092**	**2.34**	**1.750**	**44.45**	**0.845**	**21.47**	**0.720**	**18.28**	**34.80**	**154.80**	**38.46**	**6.73**
C0881-092-1875-M	**0.881**	**22.38**	**0.092**	**2.34**	**1.875**	**47.63**	**0.898**	**22.81**	**0.762**	**19.35**	**34.80**	**154.80**	**35.62**	**6.23**
C0881-092-2000-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.000**	**50.80**	**0.951**	**24.15**	**0.804**	**20.42**	**34.80**	**154.80**	**33.17**	**5.80**
C0881-092-2125-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.125**	**53.98**	**1.004**	**25.49**	**0.846**	**21.49**	**34.80**	**154.80**	**31.03**	**5.43**
C0881-092-2250-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.250**	**57.15**	**1.056**	**26.83**	**0.888**	**22.55**	**34.80**	**154.80**	**29.15**	**5.10**
C0881-092-2375-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.375**	**60.33**	**1.109**	**28.17**	**0.930**	**23.62**	**34.80**	**154.80**	**27.49**	**4.81**
C0881-092-2500-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.500**	**63.50**	**1.162**	**29.51**	**0.972**	**24.69**	**34.80**	**154.80**	**26.01**	**4.55**
C0881-092-2625-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.625**	**66.68**	**1.215**	**30.85**	**1.014**	**25.76**	**34.80**	**154.80**	**24.68**	**4.32**
C0881-092-2750-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.750**	**69.85**	**1.267**	**32.19**	**1.056**	**26.82**	**34.80**	**154.80**	**23.47**	**4.11**
C0881-092-2875-M	**0.881**	**22.38**	**0.092**	**2.34**	**2.875**	**73.03**	**1.320**	**33.53**	**1.098**	**27.89**	**34.80**	**154.80**	**22.38**	**3.92**
C0881-092-3000-M	**0.881**	**22.38**	**0.092**	**2.34**	**3.000**	**76.20**	**1.373**	**34.87**	**1.140**	**28.96**	**34.80**	**154.80**	**21.39**	**3.74**
C0881-092-3250-M	**0.881**	**22.38**	**0.092**	**2.34**	**3.250**	**82.55**	**1.479**	**37.55**	**1.224**	**31.09**	**34.80**	**154.80**	**19.65**	**3.44**
C0881-092-3500-M	**0.881**	**22.38**	**0.092**	**2.34**	**3.500**	**88.90**	**1.584**	**40.24**	**1.308**	**33.23**	**34.80**	**154.80**	**18.16**	**3.18**
C0881-092-3750-M	**0.881**	**22.38**	**0.092**	**2.34**	**3.750**	**95.25**	**1.690**	**42.92**	**1.392**	**35.37**	**34.80**	**154.80**	**16.89**	**2.96**
C0881-092-4000-M	**0.881**	**22.38**	**0.092**	**2.34**	**4.000**	**101.60**	**1.795**	**45.60**	**1.476**	**37.50**	**34.80**	**154.80**	**15.78**	**2.76**
C0881-092-4250-M	**0.881**	**22.38**	**0.092**	**2.34**	**4.250**	**107.95**	**1.901**	**48.28**	**1.560**	**39.64**	**34.80**	**154.80**	**14.81**	**2.59**
C0881-092-4500-M	**0.881**	**22.38**	**0.092**	**2.34**	**4.500**	**114.30**	**2.006**	**50.96**	**1.645**	**41.77**	**34.80**	**154.80**	**13.96**	**2.44**
C0881-092-4750-M	**0.881**	**22.38**	**0.092**	**2.34**	**4.750**	**120.65**	**2.112**	**53.64**	**1.729**	**43.91**	**34.80**	**154.80**	**13.19**	**2.31**
C0881-092-5000-M	**0.881**	**22.38**	**0.092**	**2.34**	**5.000**	**127.00**	**2.217**	**56.32**	**1.813**	**46.04**	**34.80**	**154.80**	**12.51**	**2.19**
C0881-092-5250-M	**0.881**	**22.38**	**0.092**	**2.34**	**5.250**	**133.35**	**2.323**	**59.00**	**1.897**	**48.18**	**34.80**	**154.80**	**11.89**	**2.08**
C0881-092-5500-M	**0.881**	**22.38**	**0.092**	**2.34**	**5.500**	**139.70**	**2.429**	**61.68**	**1.981**	**50.31**	**34.80**	**154.80**	**11.33**	**1.98**
C0881-092-5750-M	**0.881**	**22.38**	**0.092**	**2.34**	**5.750**	**146.05**	**2.534**	**64.37**	**2.065**	**52.45**	**34.80**	**154.80**	**10.82**	**1.89**
C0881-092-6000-M	**0.881**	**22.38**	**0.092**	**2.34**	**6.000**	**152.40**	**2.640**	**67.05**	**2.149**	**54.58**	**34.80**	**154.80**	**10.36**	**1.81**
C0881-092-6250-M	**0.881**	**22.38**	**0.092**	**2.34**	**6.250**	**158.75**	**2.745**	**69.73**	**2.233**	**56.72**	**34.80**	**154.80**	**9.93**	**1.74**
C0881-092-6500-M	**0.881**	**22.38**	**0.092**	**2.34**	**6.500**	**165.10**	**2.851**	**72.41**	**2.317**	**58.85**	**34.80**	**154.80**	**9.54**	**1.67**
C0881-092-6750-M	**0.881**	**22.38**	**0.092**	**2.34**	**6.750**	**171.45**	**2.956**	**75.09**	**2.401**	**60.99**	**34.80**	**154.80**	**9.17**	**1.61**
C0881-092-7000-M	**0.881**	**22.38**	**0.092**	**2.34**	**7.000**	**177.80**	**3.062**	**77.77**	**2.485**	**63.12**	**34.80**	**154.80**	**8.84**	**1.55**
C0881-092-7500-M	**0.881**	**22.38**	**0.092**	**2.34**	**7.500**	**190.50**	**3.273**	**83.13**	**2.653**	**67.39**	**34.80**	**154.80**	**8.23**	**1.44**
C0881-092-8000-M	**0.881**	**22.38**	**0.092**	**2.34**	**8.000**	**203.20**	**3.484**	**88.49**	**2.821**	**71.67**	**34.80**	**154.80**	**7.71**	**1.35**
C0881-092-8500-M	**0.881**	**22.38**	**0.092**	**2.34**	**8.500**	**215.90**	**3.695**	**93.86**	**2.990**	**75.94**	**34.80**	**154.80**	**7.24**	**1.27**
C0881-092-9000-M*	**0.881**	**22.38**	**0.092**	**2.34**	**9.000**	**228.60**	**3.959**	**100.57**	**3.223**	**81.87**	**34.80**	**154.80**	**6.90**	**1.21**
C0881-092-9500-M*	**0.881**	**22.38**	**0.092**	**2.34**	**9.500**	**241.30**	**4.171**	**105.93**	**3.392**	**86.15**	**34.80**	**154.80**	**6.53**	**1.14**
C0881-098-1375-M	**0.881**	**22.38**	**0.098**	**2.49**	**1.375**	**34.93**	**0.731**	**18.56**	**0.648**	**16.45**	**41.44**	**184.34**	**64.31**	**11.25**
C0881-098-1500-M	**0.881**	**22.38**	**0.098**	**2.49**	**1.500**	**38.10**	**0.787**	**20.00**	**0.695**	**17.64**	**41.44**	**184.34**	**58.15**	**10.18**
C0881-098-1625-M	**0.881**	**22.38**	**0.098**	**2.49**	**1.625**	**41.28**	**0.844**	**21.44**	**0.741**	**18.83**	**41.44**	**184.34**	**53.06**	**9.29**
C0881-098-1750-M	**0.881**	**22.38**	**0.098**	**2.49**	**1.750**	**44.45**	**0.901**	**22.88**	**0.788**	**20.02**	**41.44**	**184.34**	**48.79**	**8.54**
C0881-098-1875-M	**0.881**	**22.38**	**0.098**	**2.49**	**1.875**	**47.63**	**0.957**	**24.32**	**0.835**	**21.21**	**41.44**	**184.34**	**45.16**	**7.90**
C0881-098-2000-M	**0.881**	**22.38**	**0.098**	**2.49**	**2.000**	**50.80**	**1.014**	**25.76**	**0.882**	**22.40**	**41.44**	**184.34**	**42.03**	**7.36**
C0881-098-2125-M	**0.881**	**22.38**	**0.098**	**2.49**	**2.125**	**53.98**	**1.071**	**27.20**	**0.929**	**23.59**	**41.44**	**184.34**	**39.31**	**6.88**
C0881-098-2250-M	**0.881**	**22.38**	**0.098**	**2.49**	**2.250**	**57.15**	**1.127**	**28.64**	**0.976**	**24.78**	**41.44**	**184.34**	**36.92**	**6.46**
C0881-098-2375-M	**0.881**	**22.38**	**0.098**	**2.49**	**2.375**	**60.33**	**1.184**	**30.07**	**1.023**	**25.97**	**41.44**	**184.34**	**34.80**	**6.09**
C0881-098-2500-M	**0.881**	**22.38**	**0.098**	**2.49**	**2.500**	**63.50**	**1.241**	**31.51**	**1.069**	**27.16**	**41.44**	**184.34**	**32.91**	**5.76**
C0881-098-2625-M	**0.881**	**22.38**	**0.098**	**2.49**	**2.625**	**66.68**	**1.297**	**32.95**	**1.116**	**28.35**	**41.44**	**184.34**	**31.22**	**5.46**
C0881-098-2750-M	**0.881**	**22.38**	**0.098**	**2.49**	**2.750**	**69.85**	**1.354**	**34.39**	**1.163**	**29.54**	**41.44**	**184.34**	**29.69**	**5.20**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0881-085-4250-S	**1.989**	**50.53**	**21.93**	**97.57**	**9.70**	**1.70**
C0881-085-4500-S	**2.101**	**53.36**	**21.93**	**97.57**	**9.14**	**1.60**
C0881-085-4750-S	**2.212**	**56.19**	**21.93**	**97.57**	**8.64**	**1.51**
C0881-085-5000-S	**2.324**	**59.03**	**21.93**	**97.57**	**8.20**	**1.43**
C0881-085-5250-S	**2.435**	**61.86**	**21.93**	**97.57**	**7.79**	**1.36**
C0881-085-5500-S	**2.547**	**64.69**	**21.93**	**97.57**	**7.43**	**1.30**
C0881-085-5750-S	**2.658**	**67.52**	**21.93**	**97.57**	**7.10**	**1.24**
C0881-085-6000-S	**2.770**	**70.35**	**21.93**	**97.57**	**6.79**	**1.19**
C0881-085-6250-S	**2.881**	**73.18**	**21.93**	**97.57**	**6.51**	**1.14**
C0881-085-6500-S	**2.993**	**76.02**	**21.93**	**97.57**	**6.25**	**1.09**
C0881-085-6750-S	**3.104**	**78.85**	**21.93**	**97.57**	**6.02**	**1.05**
C0881-085-7000-S	**3.216**	**81.68**	**21.93**	**97.57**	**5.80**	**1.01**
C0881-085-7500-S	**3.439**	**87.34**	**21.93**	**97.57**	**5.40**	**0.95**
C0881-085-8000-S	**3.662**	**93.01**	**21.93**	**97.57**	**5.06**	**0.88**
C0881-085-8500-S*	**3.932**	**99.86**	**21.93**	**97.57**	**4.80**	**0.84**
C0881-085-9000-S*	**4.155**	**105.53**	**21.93**	**97.57**	**4.53**	**0.79**
C0881-085-9500-S*	**4.378**	**111.19**	**21.93**	**97.57**	**4.28**	**0.75**
C0881-092-1375-S	**0.757**	**19.22**	**27.20**	**120.97**	**43.98**	**7.70**
C0881-092-1500-S	**0.817**	**20.74**	**27.20**	**120.97**	**39.80**	**6.96**
C0881-092-1625-S	**0.877**	**22.27**	**27.20**	**120.97**	**36.35**	**6.36**
C0881-092-1750-S	**0.937**	**23.80**	**27.20**	**120.97**	**33.45**	**5.85**
C0881-092-1875-S	**0.997**	**25.32**	**27.20**	**120.97**	**30.97**	**5.42**
C0881-092-2000-S	**1.057**	**26.85**	**27.20**	**120.97**	**28.84**	**5.05**
C0881-092-2125-S	**1.117**	**28.38**	**27.20**	**120.97**	**26.98**	**4.72**
C0881-092-2250-S	**1.177**	**29.90**	**27.20**	**120.97**	**25.35**	**4.44**
C0881-092-2375-S	**1.237**	**31.43**	**27.20**	**120.97**	**23.90**	**4.18**
C0881-092-2500-S	**1.297**	**32.95**	**27.20**	**120.97**	**22.61**	**3.96**
C0881-092-2625-S	**1.358**	**34.48**	**27.20**	**120.97**	**21.46**	**3.75**
C0881-092-2750-S	**1.418**	**36.01**	**27.20**	**120.97**	**20.41**	**3.57**
C0881-092-2875-S	**1.478**	**37.53**	**27.20**	**120.97**	**19.46**	**3.41**
C0881-092-3000-S	**1.538**	**39.06**	**27.20**	**120.97**	**18.60**	**3.25**
C0881-092-3250-S	**1.658**	**42.11**	**27.20**	**120.97**	**17.08**	**2.99**
C0881-092-3500-S	**1.778**	**45.17**	**27.20**	**120.97**	**15.80**	**2.76**
C0881-092-3750-S	**1.898**	**48.22**	**27.20**	**120.97**	**14.69**	**2.57**
C0881-092-4000-S	**2.019**	**51.27**	**27.20**	**120.97**	**13.73**	**2.40**
C0881-092-4250-S	**2.139**	**54.32**	**27.20**	**120.97**	**12.88**	**2.25**
C0881-092-4500-S	**2.259**	**57.38**	**27.20**	**120.97**	**12.14**	**2.12**
C0881-092-4750-S	**2.379**	**60.43**	**27.20**	**120.97**	**11.47**	**2.01**
C0881-092-5000-S	**2.499**	**63.48**	**27.20**	**120.97**	**10.88**	**1.90**
C0881-092-5250-S	**2.620**	**66.54**	**27.20**	**120.97**	**10.34**	**1.81**
C0881-092-5500-S	**2.740**	**69.59**	**27.20**	**120.97**	**9.85**	**1.72**
C0881-092-5750-S	**2.860**	**72.64**	**27.20**	**120.97**	**9.41**	**1.65**
C0881-092-6000-S	**2.980**	**75.69**	**27.20**	**120.97**	**9.01**	**1.58**
C0881-092-6250-S	**3.100**	**78.75**	**27.20**	**120.97**	**8.63**	**1.51**
C0881-092-6500-S	**3.220**	**81.80**	**27.20**	**120.97**	**8.29**	**1.45**
C0881-092-6750-S	**3.341**	**84.85**	**27.20**	**120.97**	**7.98**	**1.40**
C0881-092-7000-S	**3.461**	**87.91**	**27.20**	**120.97**	**7.68**	**1.34**
C0881-092-7500-S	**3.701**	**94.01**	**27.20**	**120.97**	**7.16**	**1.25**
C0881-092-8000-S	**3.942**	**100.12**	**27.20**	**120.97**	**6.70**	**1.17**
C0881-092-8500-S	**4.182**	**106.22**	**27.20**	**120.97**	**6.30**	**1.10**
C0881-092-9000-S*	**4.470**	**113.54**	**27.20**	**120.97**	**6.00**	**1.05**
C0881-092-9500-S*	**4.711**	**119.65**	**27.20**	**120.97**	**5.68**	**0.99**
C0881-098-1375-S	**0.798**	**20.27**	**32.26**	**143.49**	**55.92**	**9.79**
C0881-098-1500-S	**0.862**	**21.89**	**32.26**	**143.49**	**50.56**	**8.85**
C0881-098-1625-S	**0.926**	**23.52**	**32.26**	**143.49**	**46.14**	**8.07**
C0881-098-1750-S	**0.990**	**25.14**	**32.26**	**143.49**	**42.43**	**7.42**
C0881-098-1875-S	**1.054**	**26.76**	**32.26**	**143.49**	**39.27**	**6.87**
C0881-098-2000-S	**1.117**	**28.38**	**32.26**	**143.49**	**36.55**	**6.40**
C0881-098-2125-S	**1.181**	**30.00**	**32.26**	**143.49**	**34.18**	**5.98**
C0881-098-2250-S	**1.245**	**31.62**	**32.26**	**143.49**	**32.10**	**5.62**
C0881-098-2375-S	**1.309**	**33.25**	**32.26**	**143.49**	**30.26**	**5.30**
C0881-098-2500-S	**1.373**	**34.87**	**32.26**	**143.49**	**28.62**	**5.01**
C0881-098-2625-S	**1.437**	**36.49**	**32.26**	**143.49**	**27.14**	**4.75**
C0881-098-2750-S	**1.500**	**38.11**	**32.26**	**143.49**	**25.82**	**4.52**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0881-098-2875-M	0.881	22.38	0.098	2.49	2.875	73.03	1.411	35.83	1.210	30.73	41.44	184.34	28.30	4.95
C0881-098-3000-M	0.881	22.38	0.098	2.49	3.000	76.20	1.467	37.27	1.257	31.92	41.44	184.34	27.04	4.73
C0881-098-3250-M	0.881	22.38	0.098	2.49	3.250	82.55	1.581	40.15	1.351	34.30	41.44	184.34	24.83	4.34
C0881-098-3500-M	0.881	22.38	0.098	2.49	3.500	88.90	1.694	43.03	1.444	36.68	41.44	184.34	22.95	4.02
C0881-098-3750-M	0.881	22.38	0.098	2.49	3.750	95.25	1.808	45.91	1.538	39.06	41.44	184.34	21.33	3.73
C0881-098-4000-M	0.881	22.38	0.098	2.49	4.000	101.60	1.921	48.79	1.632	41.44	41.44	184.34	19.93	3.49
C0881-098-4250-M	0.881	22.38	0.098	2.49	4.250	107.95	2.034	51.67	1.725	43.82	41.44	184.34	18.70	3.27
C0881-098-4500-M	0.881	22.38	0.098	2.49	4.500	114.30	2.148	54.55	1.819	46.21	41.44	184.34	17.62	3.08
C0881-098-4750-M	0.881	22.38	0.098	2.49	4.750	120.65	2.261	57.43	1.913	48.59	41.44	184.34	16.65	2.91
C0881-098-5000-M	0.881	22.38	0.098	2.49	5.000	127.00	2.374	60.31	2.007	50.97	41.44	184.34	15.78	2.76
C0881-098-5250-M	0.881	22.38	0.098	2.49	5.250	133.35	2.488	63.19	2.100	53.35	41.44	184.34	15.00	2.63
C0881-098-5500-M	0.881	22.38	0.098	2.49	5.500	139.70	2.601	66.07	2.194	55.73	41.44	184.34	14.30	2.50
C0881-098-5750-M	0.881	22.38	0.098	2.49	5.750	146.05	2.714	68.95	2.288	58.11	41.44	184.34	13.65	2.39
C0881-098-6000-M	0.881	22.38	0.098	2.49	6.000	152.40	2.828	71.83	2.381	60.49	41.44	184.34	13.06	2.29
C0881-098-6250-M	0.881	22.38	0.098	2.49	6.250	158.75	2.941	74.70	2.475	62.87	41.44	184.34	12.52	2.19
C0881-098-6500-M	0.881	22.38	0.098	2.49	6.500	165.10	3.054	77.58	2.569	65.25	41.44	184.34	12.03	2.10
C0881-098-6750-M	0.881	22.38	0.098	2.49	6.750	171.45	3.168	80.46	2.662	67.63	41.44	184.34	11.57	2.02
C0881-098-7000-M	0.881	22.38	0.098	2.49	7.000	177.80	3.281	83.34	2.756	70.01	41.44	184.34	11.14	1.95
C0881-098-7500-M	0.881	22.38	0.098	2.49	7.500	190.50	3.508	89.10	2.944	74.77	41.44	184.34	10.38	1.82
C0881-098-8000-M	0.881	22.38	0.098	2.49	8.000	203.20	3.735	94.86	3.131	79.53	41.44	184.34	9.72	1.70
C0881-098-8500-M	0.881	22.38	0.098	2.49	8.500	215.90	3.961	100.62	3.318	84.29	41.44	184.34	9.13	1.60
C0881-098-9000-M	0.881	22.38	0.098	2.49	9.000	228.60	4.188	106.38	3.506	89.05	41.44	184.34	8.61	1.51
C0881-098-9500-M	0.881	22.38	0.098	2.49	9.500	241.30	4.415	112.14	3.693	93.81	41.44	184.34	8.15	1.43
C0881-105-1375-M	0.881	22.38	0.105	2.67	1.375	34.93	0.781	19.83	0.709	18.02	50.13	222.97	84.32	14.76
C0881-105-1500-M	0.881	22.38	0.105	2.67	1.500	38.10	0.842	21.38	0.762	19.35	50.13	222.97	76.15	13.33
C0881-105-1625-M	0.881	22.38	0.105	2.67	1.625	41.28	0.903	22.94	0.814	20.68	50.13	222.97	69.42	12.15
C0881-105-1750-M	0.881	22.38	0.105	2.67	1.750	44.45	0.964	24.49	0.867	22.02	50.13	222.97	63.79	11.16
C0881-105-1875-M	0.881	22.38	0.105	2.67	1.875	47.63	1.025	26.04	0.919	23.35	50.13	222.97	59.00	10.33
C0881-105-2000-M	0.881	22.38	0.105	2.67	2.000	50.80	1.087	27.60	0.972	24.68	50.13	222.97	54.88	9.60
C0881-105-2125-M	0.881	22.38	0.105	2.67	2.125	53.98	1.148	29.15	1.024	26.01	50.13	222.97	51.30	8.98
C0881-105-2250-M	0.881	22.38	0.105	2.67	2.250	57.15	1.209	30.71	1.077	27.35	50.13	222.97	48.15	8.43
C0881-105-2375-M	0.881	22.38	0.105	2.67	2.375	60.33	1.270	32.26	1.129	28.68	50.13	222.97	45.37	7.94
C0881-105-2500-M	0.881	22.38	0.105	2.67	2.500	63.50	1.331	33.82	1.182	30.01	50.13	222.97	42.90	7.51
C0881-105-2625-M	0.881	22.38	0.105	2.67	2.625	66.68	1.393	35.37	1.234	31.34	50.13	222.97	40.68	7.12
C0881-105-2750-M	0.881	22.38	0.105	2.67	2.750	69.85	1.454	36.93	1.286	32.68	50.13	222.97	38.68	6.77
C0881-105-2875-M	0.881	22.38	0.105	2.67	2.875	73.03	1.515	38.48	1.339	34.01	50.13	222.97	36.86	6.45
C0881-105-3000-M	0.881	22.38	0.105	2.67	3.000	76.20	1.576	40.04	1.391	35.34	50.13	222.97	35.21	6.16
C0881-105-3250-M	0.881	22.38	0.105	2.67	3.250	82.55	1.699	43.15	1.496	38.00	50.13	222.97	32.31	5.65
C0881-105-3500-M	0.881	22.38	0.105	2.67	3.500	88.90	1.821	46.26	1.601	40.67	50.13	222.97	29.86	5.23
C0881-105-3750-M	0.881	22.38	0.105	2.67	3.750	95.25	1.944	49.37	1.706	43.33	50.13	222.97	27.75	4.86
C0881-105-4000-M	0.881	22.38	0.105	2.67	4.000	101.60	2.066	52.48	1.811	46.00	50.13	222.97	25.92	4.54
C0881-105-4250-M	0.881	22.38	0.105	2.67	4.250	107.95	2.188	55.59	1.916	48.66	50.13	222.97	24.32	4.26
C0881-105-4500-M	0.881	22.38	0.105	2.67	4.500	114.30	2.311	58.70	2.021	51.33	50.13	222.97	22.90	4.01
C0881-105-4750-M	0.881	22.38	0.105	2.67	4.750	120.65	2.433	61.81	2.126	53.99	50.13	222.97	21.64	3.79
C0881-105-5000-M	0.881	22.38	0.105	2.67	5.000	127.00	2.556	64.92	2.231	56.66	50.13	222.97	20.51	3.59
C0881-105-5250-M	0.881	22.38	0.105	2.67	5.250	133.35	2.678	68.03	2.336	59.32	50.13	222.97	19.49	3.41
C0881-105-5500-M	0.881	22.38	0.105	2.67	5.500	139.70	2.801	71.14	2.440	61.99	50.13	222.97	18.57	3.25
C0881-105-5750-M	0.881	22.38	0.105	2.67	5.750	146.05	2.923	74.25	2.545	64.65	50.13	222.97	17.73	3.10
C0881-105-6000-M	0.881	22.38	0.105	2.67	6.000	152.40	3.045	77.36	2.650	67.32	50.13	222.97	16.97	2.97
C0881-105-6250-M	0.881	22.38	0.105	2.67	6.250	158.75	3.168	80.47	2.755	69.98	50.13	222.97	16.26	2.85
C0881-105-6500-M	0.881	22.38	0.105	2.67	6.500	165.10	3.290	83.58	2.860	72.65	50.13	222.97	15.62	2.73
C0881-105-6750-M	0.881	22.38	0.105	2.67	6.750	171.45	3.413	86.68	2.965	75.31	50.13	222.97	15.02	2.63
C0881-105-7000-M	0.881	22.38	0.105	2.67	7.000	177.80	3.535	89.79	3.070	77.98	50.13	222.97	14.47	2.53
C0881-105-7500-M	0.881	22.38	0.105	2.67	7.500	190.50	3.780	96.01	3.280	83.31	50.13	222.97	13.48	2.36
C0881-105-8000-M	0.881	22.38	0.105	2.67	8.000	203.20	4.025	102.23	3.490	88.64	50.13	222.97	12.61	2.21
C0881-105-8500-M	0.881	22.38	0.105	2.67	8.500	215.90	4.270	108.45	3.699	93.97	50.13	222.97	11.85	2.07
C0881-105-9000-M	0.881	22.38	0.105	2.67	9.000	228.60	4.515	114.67	3.909	99.30	50.13	222.97	11.18	1.96
C0881-105-9500-M	0.881	22.38	0.105	2.67	9.500	241.30	4.760	120.89	4.119	104.63	50.13	222.97	10.57	1.85
C0881-112-1250-M	0.881	22.38	0.112	2.85	1.250	31.75	0.763	19.38	0.711	18.06	59.86	266.28	122.94	21.51
C0881-112-1375-M	0.881	22.38	0.112	2.85	1.375	34.93	0.829	21.05	0.769	19.53	59.86	266.28	109.59	19.18
C0881-112-1500-M	0.881	22.38	0.112	2.85	1.500	38.10	0.894	22.72	0.827	21.00	59.86	266.28	98.85	17.30
C0881-112-1625-M	0.881	22.38	0.112	2.85	1.625	41.28	0.960	24.39	0.885	22.48	59.86	266.28	90.03	15.76
C0881-112-1750-M	0.881	22.38	0.112	2.85	1.750	44.45	1.026	26.05	0.943	23.95	59.86	266.28	82.66	14.46
C0881-112-1875-M	0.881	22.38	0.112	2.85	1.875	47.63	1.091	27.72	1.001	25.42	59.86	266.28	76.40	13.37

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0881-098-2875-S	1.564	39.73	32.26	143.49	24.61	4.31
C0881-098-3000-S	1.628	41.35	32.26	143.49	23.51	4.11
C0881-098-3250-S	1.756	44.60	32.26	143.49	21.59	3.78
C0881-098-3500-S	1.883	47.84	32.26	143.49	19.96	3.49
C0881-098-3750-S	2.011	51.08	32.26	143.49	18.55	3.25
C0881-098-4000-S	2.139	54.33	32.26	143.49	17.33	3.03
C0881-098-4250-S	2.267	57.57	32.26	143.49	16.26	2.85
C0881-098-4500-S	2.394	60.81	32.26	143.49	15.32	2.68
C0881-098-4750-S	2.522	64.06	32.26	143.49	14.48	2.53
C0881-098-5000-S	2.650	67.30	32.26	143.49	13.73	2.40
C0881-098-5250-S	2.777	70.54	32.26	143.49	13.05	2.28
C0881-098-5500-S	2.905	73.79	32.26	143.49	12.43	2.18
C0881-098-5750-S	3.033	77.03	32.26	143.49	11.87	2.08
C0881-098-6000-S	3.160	80.27	32.26	143.49	11.36	1.99
C0881-098-6250-S	3.288	83.51	32.26	143.49	10.89	1.91
C0881-098-6500-S	3.416	86.76	32.26	143.49	10.46	1.83
C0881-098-6750-S	3.543	90.00	32.26	143.49	10.06	1.76
C0881-098-7000-S	3.671	93.24	32.26	143.49	9.69	1.70
C0881-098-7500-S	3.926	99.73	32.26	143.49	9.03	1.58
C0881-098-8000-S	4.182	106.22	32.26	143.49	8.45	1.48
C0881-098-8500-S	4.437	112.70	32.26	143.49	7.94	1.39
C0881-098-9000-S	4.692	119.19	32.26	143.49	7.49	1.31
C0881-098-9500-S	4.948	125.68	32.26	143.49	7.09	1.24
C0881-105-1375-S	0.845	21.47	38.83	172.74	73.32	12.83
C0881-105-1500-S	0.914	23.20	38.83	172.74	66.22	11.59
C0881-105-1625-S	0.982	24.94	38.83	172.74	60.37	10.56
C0881-105-1750-S	1.050	26.67	38.83	172.74	55.47	9.71
C0881-105-1875-S	1.118	28.40	38.83	172.74	51.30	8.98
C0881-105-2000-S	1.186	30.13	38.83	172.74	47.72	8.35
C0881-105-2125-S	1.254	31.86	38.83	172.74	44.61	7.81
C0881-105-2250-S	1.323	33.59	38.83	172.74	41.87	7.33
C0881-105-2375-S	1.391	35.33	38.83	172.74	39.46	6.90
C0881-105-2500-S	1.459	37.06	38.83	172.74	37.30	6.53
C0881-105-2625-S	1.527	38.79	38.83	172.74	35.37	6.19
C0881-105-2750-S	1.595	40.52	38.83	172.74	33.63	5.89
C0881-105-2875-S	1.663	42.25	38.83	172.74	32.05	5.61
C0881-105-3000-S	1.732	43.98	38.83	172.74	30.62	5.36
C0881-105-3250-S	1.868	47.45	38.83	172.74	28.10	4.92
C0881-105-3500-S	2.004	50.91	38.83	172.74	25.96	4.54
C0881-105-3750-S	2.141	54.37	38.83	172.74	24.13	4.22
C0881-105-4000-S	2.277	57.84	38.83	172.74	22.54	3.94
C0881-105-4250-S	2.413	61.30	38.83	172.74	21.14	3.70
C0881-105-4500-S	2.550	64.76	38.83	172.74	19.91	3.48
C0881-105-4750-S	2.686	68.23	38.83	172.74	18.82	3.29
C0881-105-5000-S	2.822	71.69	38.83	172.74	17.83	3.12
C0881-105-5250-S	2.959	75.15	38.83	172.74	16.95	2.97
C0881-105-5500-S	3.095	78.61	38.83	172.74	16.15	2.83
C0881-105-5750-S	3.231	82.08	38.83	172.74	15.42	2.70
C0881-105-6000-S	3.368	85.54	38.83	172.74	14.75	2.58
C0881-105-6250-S	3.504	89.00	38.83	172.74	14.14	2.48
C0881-105-6500-S	3.640	92.47	38.83	172.74	13.58	2.38
C0881-105-6750-S	3.777	95.93	38.83	172.74	13.06	2.29
C0881-105-7000-S	3.913	99.39	38.83	172.74	12.58	2.20
C0881-105-7500-S	4.186	106.32	38.83	172.74	11.72	2.05
C0881-105-8000-S	4.459	113.25	38.83	172.74	10.97	1.92
C0881-105-8500-S	4.731	120.17	38.83	172.74	10.30	1.80
C0881-105-9000-S	5.004	127.10	38.83	172.74	9.72	1.70
C0881-105-9500-S	5.277	134.03	38.83	172.74	9.20	1.61
C0881-112-1250-S	0.818	20.79	46.15	205.28	106.90	18.71
C0881-112-1375-S	0.891	22.62	46.15	205.28	95.29	16.68
C0881-112-1500-S	0.963	24.46	46.15	205.28	85.96	15.04
C0881-112-1625-S	1.036	26.30	46.15	205.28	78.29	13.70
C0881-112-1750-S	1.108	28.14	46.15	205.28	71.88	12.58
C0881-112-1875-S	1.180	29.98	46.15	205.28	66.43	11.63

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0881-112-2000-M	0.881	22.38	0.112	2.85	2.000	50.80	1.157	29.39	1.059	26.89	59.86	266.28	71.02	12.43
C0881-112-2125-M	0.881	22.38	0.112	2.85	2.125	53.98	1.223	31.06	1.117	28.37	59.86	266.28	66.35	11.61
C0881-112-2250-M	0.881	22.38	0.112	2.85	2.250	57.15	1.288	32.73	1.175	29.84	59.86	266.28	62.26	10.90
C0881-112-2375-M	0.881	22.38	0.112	2.85	2.375	60.33	1.354	34.40	1.233	31.31	59.86	266.28	58.64	10.26
C0881-112-2500-M	0.881	22.38	0.112	2.85	2.500	63.50	1.420	36.06	1.291	32.78	59.86	266.28	55.42	9.70
C0881-112-2625-M	0.881	22.38	0.112	2.85	2.625	66.68	1.486	37.73	1.349	34.26	59.86	266.28	52.53	9.19
C0881-112-2750-M	0.881	22.38	0.112	2.85	2.750	69.85	1.551	39.40	1.407	35.73	59.86	266.28	49.93	8.74
C0881-112-2875-M	0.881	22.38	0.112	2.85	2.875	73.03	1.617	41.07	1.465	37.20	59.86	266.28	47.58	8.33
C0881-112-3000-M	0.881	22.38	0.112	2.85	3.000	76.20	1.683	42.74	1.523	38.67	59.86	266.28	45.44	7.95
C0881-112-3250-M	0.881	22.38	0.112	2.85	3.250	82.55	1.814	46.07	1.638	41.62	59.86	266.28	41.68	7.29
C0881-112-3500-M	0.881	22.38	0.112	2.85	3.500	88.90	1.945	49.41	1.754	44.56	59.86	266.28	38.50	6.74
C0881-112-3750-M	0.881	22.38	0.112	2.85	3.750	95.25	2.077	52.75	1.870	47.51	59.86	266.28	35.77	6.26
C0881-112-4000-M	0.881	22.38	0.112	2.85	4.000	101.60	2.208	56.08	1.986	50.45	59.86	266.28	33.40	5.85
C0881-112-4250-M	0.881	22.38	0.112	2.85	4.250	107.95	2.339	59.42	2.102	53.40	59.86	266.28	31.33	5.48
C0881-112-4500-M	0.881	22.38	0.112	2.85	4.500	114.30	2.471	62.75	2.218	56.34	59.86	266.28	29.50	5.16
C0881-112-4750-M	0.881	22.38	0.112	2.85	4.750	120.65	2.602	66.09	2.334	59.29	59.86	266.28	27.87	4.88
C0881-112-5000-M	0.881	22.38	0.112	2.85	5.000	127.00	2.733	69.43	2.450	62.23	59.86	266.28	26.41	4.62
C0881-112-5250-M	0.881	22.38	0.112	2.85	5.250	133.35	2.865	72.76	2.566	65.18	59.86	266.28	25.10	4.39
C0881-112-5500-M	0.881	22.38	0.112	2.85	5.500	139.70	2.996	76.10	2.682	68.12	59.86	266.28	23.91	4.18
C0881-112-5750-M	0.881	22.38	0.112	2.85	5.750	146.05	3.127	79.44	2.798	71.06	59.86	266.28	22.83	3.99
C0881-112-6000-M	0.881	22.38	0.112	2.85	6.000	152.40	3.259	82.77	2.914	74.01	59.86	266.28	21.84	3.82
C0881-112-6250-M	0.881	22.38	0.112	2.85	6.250	158.75	3.390	86.11	3.030	76.95	59.86	266.28	20.93	3.66
C0881-112-6500-M	0.881	22.38	0.112	2.85	6.500	165.10	3.521	89.45	3.146	79.90	59.86	266.28	20.10	3.52
C0881-112-6750-M	0.881	22.38	0.112	2.85	6.750	171.45	3.653	92.78	3.262	82.84	59.86	266.28	19.33	3.38
C0881-112-7000-M	0.881	22.38	0.112	2.85	7.000	177.80	3.784	96.12	3.378	85.79	59.86	266.28	18.62	3.26
C0881-112-7500-M	0.881	22.38	0.112	2.85	7.500	190.50	4.047	102.79	3.609	91.68	59.86	266.28	17.34	3.03
C0881-112-8000-M	0.881	22.38	0.112	2.85	8.000	203.20	4.310	109.46	3.841	97.57	59.86	266.28	16.22	2.84
C0881-112-8500-M	0.881	22.38	0.112	2.85	8.500	215.90	4.572	116.14	4.073	103.46	59.86	266.28	15.24	2.67
C0881-112-9000-M	0.881	22.38	0.112	2.85	9.000	228.60	4.835	122.81	4.305	109.35	59.86	266.28	14.37	2.52
C0881-112-9500-M	0.881	22.38	0.112	2.85	9.500	241.30	5.098	129.48	4.537	115.24	59.86	266.28	13.60	2.38
C0881-125-1250-M	0.881	22.38	0.125	3.18	1.250	31.75	0.839	21.31	0.805	20.44	80.86	359.70	196.66	34.42
C0881-125-1375-M	0.881	22.38	0.125	3.18	1.375	34.93	0.912	23.18	0.872	22.16	80.86	359.70	174.81	30.59
C0881-125-1500-M	0.881	22.38	0.125	3.18	1.500	38.10	0.986	25.05	0.940	23.88	80.86	359.70	157.33	27.53
C0881-125-1625-M	0.881	22.38	0.125	3.18	1.625	41.28	1.060	26.91	1.008	25.60	80.86	359.70	143.03	25.03
C0881-125-1750-M	0.881	22.38	0.125	3.18	1.750	44.45	1.133	28.78	1.076	27.32	80.86	359.70	131.11	22.94
C0881-125-1875-M	0.881	22.38	0.125	3.18	1.875	47.63	1.207	30.65	1.143	29.04	80.86	359.70	121.02	21.18
C0881-125-2000-M	0.881	22.38	0.125	3.18	2.000	50.80	1.280	32.52	1.211	30.76	80.86	359.70	112.38	19.67
C0881-125-2125-M	0.881	22.38	0.125	3.18	2.125	53.98	1.354	34.39	1.279	32.48	80.86	359.70	104.89	18.36
C0881-125-2250-M	0.881	22.38	0.125	3.18	2.250	57.15	1.428	36.26	1.347	34.20	80.86	359.70	98.33	17.21
C0881-125-2375-M	0.881	22.38	0.125	3.18	2.375	60.33	1.501	38.13	1.414	35.93	80.86	359.70	92.55	16.20
C0881-125-2500-M	0.881	22.38	0.125	3.18	2.500	63.50	1.575	40.00	1.482	37.65	80.86	359.70	87.41	15.30
C0881-125-2625-M	0.881	22.38	0.125	3.18	2.625	66.68	1.648	41.87	1.550	39.37	80.86	359.70	82.81	14.49
C0881-125-2750-M	0.881	22.38	0.125	3.18	2.750	69.85	1.722	43.74	1.618	41.09	80.86	359.70	78.67	13.77
C0881-125-2875-M	0.881	22.38	0.125	3.18	2.875	73.03	1.796	45.61	1.685	42.81	80.86	359.70	74.92	13.11
C0881-125-3000-M	0.881	22.38	0.125	3.18	3.000	76.20	1.869	47.48	1.753	44.53	80.86	359.70	71.51	12.51
C0881-125-3250-M	0.881	22.38	0.125	3.18	3.250	82.55	2.016	51.22	1.889	47.97	80.86	359.70	65.56	11.47
C0881-125-3500-M	0.881	22.38	0.125	3.18	3.500	88.90	2.164	54.96	2.024	51.42	80.86	359.70	60.51	10.59
C0881-125-3750-M	0.881	22.38	0.125	3.18	3.750	95.25	2.311	58.70	2.160	54.86	80.86	359.70	56.19	9.83
C0881-125-4000-M	0.881	22.38	0.125	3.18	4.000	101.60	2.458	62.44	2.295	58.30	80.86	359.70	52.44	9.18
C0881-125-4250-M	0.881	22.38	0.125	3.18	4.250	107.95	2.605	66.17	2.431	61.74	80.86	359.70	49.17	8.60
C0881-125-4500-M	0.881	22.38	0.125	3.18	4.500	114.30	2.752	69.91	2.566	65.18	80.86	359.70	46.27	8.10
C0881-125-4750-M	0.881	22.38	0.125	3.18	4.750	120.65	2.900	73.65	2.702	68.63	80.86	359.70	43.70	7.65
C0881-125-5000-M	0.881	22.38	0.125	3.18	5.000	127.00	3.047	77.39	2.837	72.07	80.86	359.70	41.40	7.25
C0881-125-5250-M	0.881	22.38	0.125	3.18	5.250	133.35	3.194	81.13	2.973	75.51	80.86	359.70	39.33	6.88
C0881-125-5500-M	0.881	22.38	0.125	3.18	5.500	139.70	3.341	84.87	3.108	78.95	80.86	359.70	37.46	6.56
C0881-125-5750-M	0.881	22.38	0.125	3.18	5.750	146.05	3.489	88.61	3.244	82.39	80.86	359.70	35.76	6.26
C0881-125-6000-M	0.881	22.38	0.125	3.18	6.000	152.40	3.636	92.35	3.379	85.84	80.86	359.70	34.20	5.99
C0881-125-6250-M	0.881	22.38	0.125	3.18	6.250	158.75	3.783	96.09	3.515	89.28	80.86	359.70	32.78	5.74
C0881-125-6500-M	0.881	22.38	0.125	3.18	6.500	165.10	3.930	99.83	3.650	92.72	80.86	359.70	31.47	5.51
C0881-125-6750-M	0.881	22.38	0.125	3.18	6.750	171.45	4.077	103.56	3.786	96.16	80.86	359.70	30.26	5.29
C0881-125-7000-M	0.881	22.38	0.125	3.18	7.000	177.80	4.225	107.30	3.921	99.61	80.86	359.70	29.14	5.10
C0881-125-7500-M	0.881	22.38	0.125	3.18	7.500	190.50	4.519	114.78	4.193	106.49	80.86	359.70	27.13	4.75
C0881-125-8000-M	0.881	22.38	0.125	3.18	8.000	203.20	4.813	122.26	4.464	113.37	80.86	359.70	25.38	4.44
C0881-125-8500-M	0.881	22.38	0.125	3.18	8.500	215.90	5.108	129.74	4.735	120.26	80.86	359.70	23.84	4.17

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0881-112-2000-S	1.253	31.82	46.15	205.28	61.76	10.81
C0881-112-2125-S	1.325	33.66	46.15	205.28	57.70	10.10
C0881-112-2250-S	1.398	35.50	46.15	205.28	54.14	9.47
C0881-112-2375-S	1.470	37.34	46.15	205.28	50.99	8.92
C0881-112-2500-S	1.542	39.18	46.15	205.28	48.19	8.43
C0881-112-2625-S	1.615	41.02	46.15	205.28	45.68	7.99
C0881-112-2750-S	1.687	42.85	46.15	205.28	43.42	7.60
C0881-112-2875-S	1.760	44.69	46.15	205.28	41.37	7.24
C0881-112-3000-S	1.832	46.53	46.15	205.28	39.51	6.91
C0881-112-3250-S	1.977	50.21	46.15	205.28	36.25	6.34
C0881-112-3500-S	2.122	53.89	46.15	205.28	33.48	5.86
C0881-112-3750-S	2.266	57.57	46.15	205.28	31.11	5.44
C0881-112-4000-S	2.411	61.25	46.15	205.28	29.05	5.08
C0881-112-4250-S	2.556	64.92	46.15	205.28	27.24	4.77
C0881-112-4500-S	2.701	68.60	46.15	205.28	25.65	4.49
C0881-112-4750-S	2.846	72.28	46.15	205.28	24.23	4.24
C0881-112-5000-S	2.991	75.96	46.15	205.28	22.97	4.02
C0881-112-5250-S	3.135	79.64	46.15	205.28	21.82	3.82
C0881-112-5500-S	3.280	83.32	46.15	205.28	20.79	3.64
C0881-112-5750-S	3.425	86.99	46.15	205.28	19.85	3.47
C0881-112-6000-S	3.570	90.67	46.15	205.28	18.99	3.32
C0881-112-6250-S	3.715	94.35	46.15	205.28	18.20	3.19
C0881-112-6500-S	3.859	98.03	46.15	205.28	17.48	3.06
C0881-112-6750-S	4.004	101.71	46.15	205.28	16.81	2.94
C0881-112-7000-S	4.149	105.39	46.15	205.28	16.19	2.83
C0881-112-7500-S	4.439	112.74	46.15	205.28	15.07	2.64
C0881-112-8000-S	4.728	120.10	46.15	205.28	14.11	2.47
C0881-112-8500-S	5.018	127.45	46.15	205.28	13.25	2.32
C0881-112-9000-S	5.308	134.81	46.15	205.28	12.50	2.19
C0881-112-9500-S	5.597	142.17	46.15	205.28	11.82	2.07
C0881-125-1250-S	0.889	22.58	61.75	274.68	171.01	29.93
C0881-125-1375-S	0.969	24.61	61.75	274.68	152.01	26.60
C0881-125-1500-S	1.049	26.64	61.75	274.68	136.81	23.94
C0881-125-1625-S	1.128	28.66	61.75	274.68	124.37	21.77
C0881-125-1750-S	1.208	30.69	61.75	274.68	114.01	19.95
C0881-125-1875-S	1.288	32.72	61.75	274.68	105.24	18.42
C0881-125-2000-S	1.368	34.75	61.75	274.68	97.72	17.10
C0881-125-2125-S	1.448	36.78	61.75	274.68	91.21	15.96
C0881-125-2250-S	1.528	38.81	61.75	274.68	85.51	14.96
C0881-125-2375-S	1.608	40.84	61.75	274.68	80.48	14.08
C0881-125-2500-S	1.688	42.86	61.75	274.68	76.01	13.30
C0881-125-2625-S	1.767	44.89	61.75	274.68	72.01	12.60
C0881-125-2750-S	1.847	46.92	61.75	274.68	68.41	11.97
C0881-125-2875-S	1.927	48.95	61.75	274.68	65.15	11.40
C0881-125-3000-S	2.007	50.98	61.75	274.68	62.19	10.88
C0881-125-3250-S	2.167	55.03	61.75	274.68	57.00	9.98
C0881-125-3500-S	2.326	59.09	61.75	274.68	52.62	9.21
C0881-125-3750-S	2.486	63.15	61.75	274.68	48.86	8.55
C0881-125-4000-S	2.646	67.21	61.75	274.68	45.60	7.98
C0881-125-4250-S	2.806	71.26	61.75	274.68	42.75	7.48
C0881-125-4500-S	2.965	75.32	61.75	274.68	40.24	7.04
C0881-125-4750-S	3.125	79.38	61.75	274.68	38.00	6.65
C0881-125-5000-S	3.285	83.43	61.75	274.68	36.00	6.30
C0881-125-5250-S	3.445	87.49	61.75	274.68	34.20	5.99
C0881-125-5500-S	3.604	91.55	61.75	274.68	32.57	5.70
C0881-125-5750-S	3.764	95.61	61.75	274.68	31.09	5.44
C0881-125-6000-S	3.924	99.66	61.75	274.68	29.74	5.20
C0881-125-6250-S	4.083	103.72	61.75	274.68	28.50	4.99
C0881-125-6500-S	4.243	107.78	61.75	274.68	27.36	4.79
C0881-125-6750-S	4.403	111.83	61.75	274.68	26.31	4.60
C0881-125-7000-S	4.563	115.89	61.75	274.68	25.34	4.43
C0881-125-7500-S	4.882	124.00	61.75	274.68	23.59	4.13
C0881-125-8000-S	5.202	132.12	61.75	274.68	22.07	3.86
C0881-125-8500-S	5.521	140.23	61.75	274.68	20.73	3.63

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0881-125-9000-M	**0.881**	**22.38**	**0.125**	**3.18**	**9.000**	**228.60**	**5.402**	**137.22**	**5.006**	**127.14**	**80.86**	**359.70**	**22.48**	**3.93**	**C0881-125-9000-S**	**5.840**	**148.35**	**61.75**	**274.68**	**19.54**	**3.42**
C0881-125-9500-M	**0.881**	**22.38**	**0.125**	**3.18**	**9.500**	**241.30**	**5.697**	**144.69**	**5.277**	**134.03**	**80.86**	**359.70**	**21.26**	**3.72**	**C0881-125-9500-S**	**6.160**	**156.46**	**61.75**	**274.68**	**18.49**	**3.24**
C0881-135-1250-M	**0.881**	**22.38**	**0.135**	**3.43**	**1.250**	**31.75**	**0.891**	**22.64**	**0.870**	**22.09**	**99.72**	**443.59**	**278.14**	**48.68**	**C0881-135-1250-S**	**0.937**	**23.81**	**75.58**	**336.21**	**241.86**	**42.33**
C0881-135-1375-M	**0.881**	**22.38**	**0.135**	**3.43**	**1.375**	**34.93**	**0.971**	**24.66**	**0.944**	**23.99**	**99.72**	**443.59**	**246.68**	**43.17**	**C0881-135-1375-S**	**1.023**	**25.97**	**75.58**	**336.21**	**214.50**	**37.54**
C0881-135-1500-M	**0.881**	**22.38**	**0.135**	**3.43**	**1.500**	**38.10**	**1.050**	**26.67**	**1.019**	**25.89**	**99.72**	**443.59**	**221.61**	**38.78**	**C0881-135-1500-S**	**1.108**	**28.14**	**75.58**	**336.21**	**192.70**	**33.72**
C0881-135-1625-M	**0.881**	**22.38**	**0.135**	**3.43**	**1.625**	**41.28**	**1.129**	**28.68**	**1.094**	**27.78**	**99.72**	**443.59**	**201.17**	**35.20**	**C0881-135-1625-S**	**1.193**	**30.30**	**75.58**	**336.21**	**174.93**	**30.61**
C0881-135-1750-M	**0.881**	**22.38**	**0.135**	**3.43**	**1.750**	**44.45**	**1.209**	**30.70**	**1.169**	**29.68**	**99.72**	**443.59**	**184.18**	**32.23**	**C0881-135-1750-S**	**1.278**	**32.46**	**75.58**	**336.21**	**160.15**	**28.03**
C0881-135-1875-M	**0.881**	**22.38**	**0.135**	**3.43**	**1.875**	**47.63**	**1.288**	**32.71**	**1.243**	**31.58**	**99.72**	**443.59**	**169.83**	**29.72**	**C0881-135-1875-S**	**1.363**	**34.63**	**75.58**	**336.21**	**147.68**	**25.84**
C0881-135-2000-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.000**	**50.80**	**1.367**	**34.72**	**1.318**	**33.48**	**99.72**	**443.59**	**157.56**	**27.57**	**C0881-135-2000-S**	**1.448**	**36.79**	**75.58**	**336.21**	**137.01**	**23.98**
C0881-135-2125-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.125**	**53.98**	**1.446**	**36.74**	**1.393**	**35.38**	**99.72**	**443.59**	**146.94**	**25.72**	**C0881-135-2125-S**	**1.533**	**38.95**	**75.58**	**336.21**	**127.78**	**22.36**
C0881-135-2250-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.250**	**57.15**	**1.526**	**38.75**	**1.468**	**37.28**	**99.72**	**443.59**	**137.67**	**24.09**	**C0881-135-2250-S**	**1.619**	**41.11**	**75.58**	**336.21**	**119.71**	**20.95**
C0881-135-2375-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.375**	**60.33**	**1.605**	**40.76**	**1.542**	**39.18**	**99.72**	**443.59**	**129.49**	**22.66**	**C0881-135-2375-S**	**1.704**	**43.28**	**75.58**	**336.21**	**112.60**	**19.71**
C0881-135-2500-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.500**	**63.50**	**1.684**	**42.78**	**1.617**	**41.08**	**99.72**	**443.59**	**122.23**	**21.39**	**C0881-135-2500-S**	**1.789**	**45.44**	**75.58**	**336.21**	**106.29**	**18.60**
C0881-135-2625-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.625**	**66.68**	**1.763**	**44.79**	**1.692**	**42.98**	**99.72**	**443.59**	**115.75**	**20.26**	**C0881-135-2625-S**	**1.874**	**47.60**	**75.58**	**336.21**	**100.65**	**17.61**
C0881-135-2750-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.750**	**69.85**	**1.843**	**46.80**	**1.767**	**44.87**	**99.72**	**443.59**	**109.91**	**19.23**	**C0881-135-2750-S**	**1.959**	**49.76**	**75.58**	**336.21**	**95.58**	**16.73**
C0881-135-2875-M	**0.881**	**22.38**	**0.135**	**3.43**	**2.875**	**73.03**	**1.922**	**48.82**	**1.841**	**46.77**	**99.72**	**443.59**	**104.64**	**18.31**	**C0881-135-2875-S**	**2.044**	**51.93**	**75.58**	**336.21**	**90.99**	**15.92**
C0881-135-3000-M	**0.881**	**22.38**	**0.135**	**3.43**	**3.000**	**76.20**	**2.001**	**50.83**	**1.916**	**48.67**	**99.72**	**443.59**	**99.85**	**17.47**	**C0881-135-3000-S**	**2.129**	**54.09**	**75.58**	**336.21**	**86.82**	**15.19**
C0881-135-3250-M	**0.881**	**22.38**	**0.135**	**3.43**	**3.250**	**82.55**	**2.160**	**54.86**	**2.066**	**52.47**	**99.72**	**443.59**	**91.47**	**16.01**	**C0881-135-3250-S**	**2.300**	**58.41**	**75.58**	**336.21**	**79.54**	**13.92**
C0881-135-3500-M	**0.881**	**22.38**	**0.135**	**3.43**	**3.500**	**88.90**	**2.318**	**58.89**	**2.215**	**56.27**	**99.72**	**443.59**	**84.39**	**14.77**	**C0881-135-3500-S**	**2.470**	**62.74**	**75.58**	**336.21**	**73.38**	**12.84**
C0881-135-3750-M	**0.881**	**22.38**	**0.135**	**3.43**	**3.750**	**95.25**	**2.477**	**62.91**	**2.365**	**60.07**	**99.72**	**443.59**	**78.33**	**13.71**	**C0881-135-3750-S**	**2.640**	**67.06**	**75.58**	**336.21**	**68.11**	**11.92**
C0881-135-4000-M	**0.881**	**22.38**	**0.135**	**3.43**	**4.000**	**101.60**	**2.635**	**66.94**	**2.514**	**63.86**	**99.72**	**443.59**	**73.08**	**12.79**	**C0881-135-4000-S**	**2.811**	**71.39**	**75.58**	**336.21**	**63.55**	**11.12**
C0881-135-4250-M	**0.881**	**22.38**	**0.135**	**3.43**	**4.250**	**107.95**	**2.794**	**70.97**	**2.664**	**67.66**	**99.72**	**443.59**	**68.49**	**11.99**	**C0881-135-4250-S**	**2.981**	**75.71**	**75.58**	**336.21**	**59.55**	**10.42**
C0881-135-4500-M	**0.881**	**22.38**	**0.135**	**3.43**	**4.500**	**114.30**	**2.952**	**74.99**	**2.813**	**71.46**	**99.72**	**443.59**	**64.44**	**11.28**	**C0881-135-4500-S**	**3.151**	**80.04**	**75.58**	**336.21**	**56.04**	**9.81**
C0881-135-4750-M	**0.881**	**22.38**	**0.135**	**3.43**	**4.750**	**120.65**	**3.111**	**79.02**	**2.963**	**75.26**	**99.72**	**443.59**	**60.84**	**10.65**	**C0881-135-4750-S**	**3.321**	**84.36**	**75.58**	**336.21**	**52.91**	**9.26**
C0881-135-5000-M	**0.881**	**22.38**	**0.135**	**3.43**	**5.000**	**127.00**	**3.270**	**83.05**	**3.112**	**79.05**	**99.72**	**443.59**	**57.63**	**10.08**	**C0881-135-5000-S**	**3.492**	**88.69**	**75.58**	**336.21**	**50.11**	**8.77**
C0881-135-5250-M	**0.881**	**22.38**	**0.135**	**3.43**	**5.250**	**133.35**	**3.428**	**87.07**	**3.262**	**82.85**	**99.72**	**443.59**	**54.74**	**9.58**	**C0881-135-5250-S**	**3.662**	**93.01**	**75.58**	**336.21**	**47.60**	**8.33**
C0881-135-5500-M	**0.881**	**22.38**	**0.135**	**3.43**	**5.500**	**139.70**	**3.587**	**91.10**	**3.411**	**86.65**	**99.72**	**443.59**	**52.12**	**9.12**	**C0881-135-5500-S**	**3.832**	**97.34**	**75.58**	**336.21**	**45.32**	**7.93**
C0881-135-5750-M	**0.881**	**22.38**	**0.135**	**3.43**	**5.750**	**146.05**	**3.745**	**95.13**	**3.561**	**90.45**	**99.72**	**443.59**	**49.74**	**8.70**	**C0881-135-5750-S**	**4.003**	**101.66**	**75.58**	**336.21**	**43.25**	**7.57**
C0881-135-6000-M	**0.881**	**22.38**	**0.135**	**3.43**	**6.000**	**152.40**	**3.904**	**99.15**	**3.710**	**94.25**	**99.72**	**443.59**	**47.57**	**8.32**	**C0881-135-6000-S**	**4.173**	**105.99**	**75.58**	**336.21**	**41.37**	**7.24**
C0881-135-6250-M	**0.881**	**22.38**	**0.135**	**3.43**	**6.250**	**158.75**	**4.062**	**103.18**	**3.860**	**98.04**	**99.72**	**443.59**	**45.58**	**7.98**	**C0881-135-6250-S**	**4.343**	**110.31**	**75.58**	**336.21**	**39.64**	**6.94**
C0881-135-6500-M	**0.881**	**22.38**	**0.135**	**3.43**	**6.500**	**165.10**	**4.221**	**107.21**	**4.010**	**101.84**	**99.72**	**443.59**	**43.75**	**7.66**	**C0881-135-6500-S**	**4.513**	**114.64**	**75.58**	**336.21**	**38.05**	**6.66**
C0881-135-6750-M	**0.881**	**22.38**	**0.135**	**3.43**	**6.750**	**171.45**	**4.379**	**111.23**	**4.159**	**105.64**	**99.72**	**443.59**	**42.07**	**7.36**	**C0881-135-6750-S**	**4.684**	**118.96**	**75.58**	**336.21**	**36.58**	**6.40**
C0881-135-7000-M	**0.881**	**22.38**	**0.135**	**3.43**	**7.000**	**177.80**	**4.538**	**115.26**	**4.309**	**109.44**	**99.72**	**443.59**	**40.50**	**7.09**	**C0881-135-7000-S**	**4.854**	**123.29**	**75.58**	**336.21**	**35.22**	**6.16**
C0881-135-7500-M	**0.881**	**22.38**	**0.135**	**3.43**	**7.500**	**190.50**	**4.855**	**123.32**	**4.608**	**117.03**	**99.72**	**443.59**	**37.70**	**6.60**	**C0881-135-7500-S**	**5.194**	**131.94**	**75.58**	**336.21**	**32.78**	**5.74**
C0881-135-8000-M	**0.881**	**22.38**	**0.135**	**3.43**	**8.000**	**203.20**	**5.172**	**131.37**	**4.907**	**124.63**	**99.72**	**443.59**	**35.26**	**6.17**	**C0881-135-8000-S**	**5.535**	**140.59**	**75.58**	**336.21**	**30.66**	**5.37**
C0881-135-8500-M	**0.881**	**22.38**	**0.135**	**3.43**	**8.500**	**215.90**	**5.489**	**139.42**	**5.206**	**132.22**	**99.72**	**443.59**	**33.12**	**5.80**	**C0881-135-8500-S**	**5.876**	**149.24**	**75.58**	**336.21**	**28.80**	**5.04**
C0881-135-9000-M	**0.881**	**22.38**	**0.135**	**3.43**	**9.000**	**228.60**	**5.806**	**147.48**	**5.505**	**139.82**	**99.72**	**443.59**	**31.22**	**5.46**	**C0881-135-9000-S**	**6.216**	**157.89**	**75.58**	**336.21**	**27.15**	**4.75**
C0881-135-9500-M	**0.881**	**22.38**	**0.135**	**3.43**	**9.500**	**241.30**	**6.123**	**155.53**	**5.804**	**147.41**	**99.72**	**443.59**	**29.53**	**5.17**	**C0881-135-9500-S**	**6.557**	**166.54**	**75.58**	**336.21**	**25.68**	**4.49**
C0881-148-1250-M	**0.881**	**22.38**	**0.148**	**3.76**	**1.250**	**31.75**	**0.952**	**24.18**	**0.945**	**23.99**	**127.90**	**568.95**	**429.41**	**75.15**	**C0881-148-1250-S**	**0.993**	**25.22**	**95.99**	**426.99**	**373.40**	**65.35**
C0881-148-1375-M	**0.881**	**22.38**	**0.148**	**3.76**	**1.375**	**34.93**	**1.038**	**26.37**	**1.028**	**26.10**	**127.90**	**568.95**	**379.66**	**66.44**	**C0881-148-1375-S**	**1.084**	**27.54**	**95.99**	**426.99**	**330.14**	**57.78**
C0881-148-1625-M	**0.881**	**22.38**	**0.148**	**3.76**	**1.625**	**41.28**	**1.210**	**30.74**	**1.194**	**30.32**	**127.90**	**568.95**	**308.25**	**53.94**	**C0881-148-1625-S**	**1.267**	**32.18**	**95.99**	**426.99**	**268.04**	**46.91**
C0881-148-1750-M	**0.881**	**22.38**	**0.148**	**3.76**	**1.750**	**44.45**	**1.296**	**32.92**	**1.277**	**32.43**	**127.90**	**568.95**	**281.75**	**49.31**	**C0881-148-1750-S**	**1.358**	**34.50**	**95.99**	**426.99**	**245.00**	**42.87**
C0881-148-1875-M	**0.881**	**22.38**	**0.148**	**3.76**	**1.875**	**47.63**	**1.382**	**35.10**	**1.360**	**34.54**	**127.90**	**568.95**	**259.44**	**45.40**	**C0881-148-1875-S**	**1.450**	**36.82**	**95.99**	**426.99**	**225.60**	**39.48**
C0881-148-2000-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.000**	**50.80**	**1.468**	**37.29**	**1.443**	**36.65**	**127.90**	**568.95**	**240.41**	**42.07**	**C0881-148-2000-S**	**1.541**	**39.14**	**95.99**	**426.99**	**209.05**	**36.58**
C0881-148-2125-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.125**	**53.98**	**1.554**	**39.47**	**1.526**	**38.76**	**127.90**	**568.95**	**223.98**	**39.20**	**C0881-148-2125-S**	**1.632**	**41.46**	**95.99**	**426.99**	**194.76**	**34.08**
C0881-148-2250-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.250**	**57.15**	**1.640**	**41.65**	**1.609**	**40.87**	**127.90**	**568.95**	**209.65**	**36.69**	**C0881-148-2250-S**	**1.723**	**43.78**	**95.99**	**426.99**	**182.31**	**31.90**
C0881-148-2375-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.375**	**60.33**	**1.726**	**43.84**	**1.692**	**42.97**	**127.90**	**568.95**	**197.05**	**34.48**	**C0881-148-2375-S**	**1.815**	**46.10**	**95.99**	**426.99**	**171.34**	**29.99**
C0881-148-2500-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.500**	**63.50**	**1.812**	**46.02**	**1.775**	**45.08**	**127.90**	**568.95**	**185.87**	**32.53**	**C0881-148-2500-S**	**1.906**	**48.41**	**95.99**	**426.99**	**161.63**	**28.28**
C0881-148-2625-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.625**	**66.68**	**1.898**	**48.20**	**1.858**	**47.19**	**127.90**	**568.95**	**175.89**	**30.78**	**C0881-148-2625-S**	**1.997**	**50.73**	**95.99**	**426.99**	**152.95**	**26.77**
C0881-148-2750-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.750**	**69.85**	**1.984**	**50.39**	**1.941**	**49.30**	**127.90**	**568.95**	**166.94**	**29.21**	**C0881-148-2750-S**	**2.089**	**53.05**	**95.99**	**426.99**	**145.16**	**25.40**
C0881-148-2875-M	**0.881**	**22.38**	**0.148**	**3.76**	**2.875**	**73.03**	**2.070**	**52.57**	**2.024**	**51.41**	**127.90**	**568.95**	**158.84**	**27.80**	**C0881-148-2875-S**	**2.180**	**55.37**	**95.99**	**426.99**	**138.13**	**24.17**
C0881-148-3000-M	**0.881**	**22.38**	**0.148**	**3.76**	**3.000**	**76.20**	**2.156**	**54.76**	**2.107**	**53.52**	**127.90**	**568.95**	**151.50**	**26.51**	**C0881-148-3000-S**	**2.271**	**57.69**	**95.99**	**426.99**	**131.74**	**23.05**
C0881-148-3250-M	**0.881**	**22.38**	**0.148**	**3.76**	**3.250**	**82.55**	**2.328**	**59.12**	**2.273**	**57.74**	**127.90**	**568.95**	**138.68**	**24.27**	**C0881-148-3250-S**	**2.454**	**62.33**	**95.99**	**426.99**	**120.59**	**21.10**
C0881-148-3500-M	**0.881**	**22.38**	**0.148**	**3.76**	**3.500**	**88.90**	**2.500**	**63.49**	**2.439**	**61.96**	**127.90**	**568.95**	**127.86**	**22.38**	**C0881-148-3500-S**	**2.637**	**66.97**	**95.99**	**426.99**	**111.18**	**19.46**
C0881-148-3750-M	**0.881**	**22.38**	**0.148**	**3.76**	**3.750**	**95.25**	**2.672**	**67.86**	**2.605**	**66.18**	**127.90**	**568.95**	**118.60**	**20.76**	**C0881-148-3750-S**	**2.819**	**71.61**	**95.99**	**426.99**	**103.13**	**18.05**
C0881-148-4000-M	**0.881**	**22.38**	**0.148**	**3.76**	**4.000**	**101.60**	**2.844**	**72.23**	**2.771**	**70.39**	**127.90**	**568.95**	**110.60**	**19.35**	**C0881-148-4000-S**	**3.002**	**76.25**	**95.99**	**426.99**	**96.17**	**16.83**
C0881-148-4250-M	**0.881**	**22.38**	**0.148**	**3.76**	**4.250**	**107.95**	**3.015**	**76.59**	**2.937**	**74.61**	**127.90**	**568.95**	**103.61**	**18.13**	**C0881-148-4250-S**	**3.185**	**80.89**	**95.99**	**426.99**	**90.09**	**15.77**
C0881-148-4500-M	**0.881**	**22.38**	**0.148**	**3.76**	**4.500**	**114.30**	**3.187**	**80.96**	**3.104**	**78.83**	**127.90**	**568.95**	**97.45**	**17.05**	**C0881-148-4500-S**	**3.367**	**85.53**	**95.99**	**426.99**	**84.74**	**14.83**
C0881-148-4750-M	**0.881**	**22.38**	**0.148**	**3.76**	**4.750**	**120.65**	**3.359**	**85.33**	**3.270**	**83.05**	**127.90**	**568.95**	**91.98**	**16.10**	**C0881-148-4750-S**	**3.550**	**90.16**	**95.99**	**426.99**	**79.98**	**14.00**
C0881-148-5000-M	**0.881**	**22.38**	**0.148**	**3.76**	**5.000**	**127.00**	**3.531**	**89.70**	**3.436**	**87.27**	**127.90**	**568.95**	**87.09**	**15.24**	**C0881-148-5000-S**	**3.732**	**94.80**	**95.99**	**426.99**	**75.73**	**13.25**
C0881-148-5250-M	**0.881**	**22.38**	**0.148**	**3.76**	**5.250**	**133.35**	**3.703**	**94.06**	**3.602**	**91.49**	**127.90**	**568.95**	**82.69**	**14.47**	**C0881-148-5250-S**	**3.915**	**99.44**	**95.99**	**426.99**	**71.91**	**12.58**
C0881-148-5500-M	**0.881**	**22.38**	**0.148**	**3.76**	**5.500**	**139.70**	**3.875**	**98.43**	**3.768**	**95.70**	**127.90**	**568.95**	**78.72**	**13.78**	**C0881-148-5500-S**	**4.098**	**104.08**	**95.99**	**426.99**	**68.45**	**11.98**
C0881-148-5750-M	**0.881**	**22.38**	**0.148**	**3.76**	**5.750**	**146.05**	**4.047**	**102.80**	**3.934**	**99.92**	**127.90**	**568.95**	**75.11**	**13.14**	**C0881-148-5750-S**	**4.280**	**108.72**	**95.99**	**426.99**	**65.31**	**11.43**
C0881-148-6250-M	**0.881**	**22.38**	**0.148**	**3.76**	**6.250**	**158.75**	**4.391**	**111.53**	**4.266**	**108.36**	**127.90**	**568.95**	**68.80**	**12.04**	**C0881-148-6250-S**	**4.646**	**118.00**	**95.99**	**426.99**	**59.83**	**10.47**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0881-148-6500-M	**0.881**	**22.38**	**0.148**	**3.76**	**6.500**	**165.10**	**4.563**	**115.90**	**4.432**	**112.58**	**127.90**	**568.95**	**66.03**	**11.56**	**C0881-148-6500-S**	**4.828**	**122.64**	**95.99**	**426.99**	**57.42**	**10.05**
C0881-148-6750-M	**0.881**	**22.38**	**0.148**	**3.76**	**6.750**	**171.45**	**4.735**	**120.27**	**4.598**	**116.80**	**127.90**	**568.95**	**63.47**	**11.11**	**C0881-148-6750-S**	**5.011**	**127.28**	**95.99**	**426.99**	**55.19**	**9.66**
C0881-148-7000-M	**0.881**	**22.38**	**0.148**	**3.76**	**7.000**	**177.80**	**4.907**	**124.63**	**4.764**	**121.01**	**127.90**	**568.95**	**61.11**	**10.69**	**C0881-148-7000-S**	**5.193**	**131.91**	**95.99**	**426.99**	**53.14**	**9.30**
C0881-148-7500-M	**0.881**	**22.38**	**0.148**	**3.76**	**7.500**	**190.50**	**5.251**	**133.37**	**5.097**	**129.45**	**127.90**	**568.95**	**56.87**	**9.95**	**C0881-148-7500-S**	**5.559**	**141.19**	**95.99**	**426.99**	**49.45**	**8.65**
C0881-148-8000-M	**0.881**	**22.38**	**0.148**	**3.76**	**8.000**	**203.20**	**5.595**	**142.10**	**5.429**	**137.89**	**127.90**	**568.95**	**53.18**	**9.31**	**C0881-148-8000-S**	**5.924**	**150.47**	**95.99**	**426.99**	**46.24**	**8.09**
C0881-148-8500-M	**0.881**	**22.38**	**0.148**	**3.76**	**8.500**	**215.90**	**5.939**	**150.84**	**5.761**	**146.32**	**127.90**	**568.95**	**49.93**	**8.74**	**C0881-148-8500-S**	**6.289**	**159.75**	**95.99**	**426.99**	**43.42**	**7.60**
C0881-148-9000-M	**0.881**	**22.38**	**0.148**	**3.76**	**9.000**	**228.60**	**6.282**	**159.57**	**6.093**	**154.76**	**127.90**	**568.95**	**47.07**	**8.24**	**C0881-148-9000-S**	**6.655**	**169.03**	**95.99**	**426.99**	**40.93**	**7.16**
C0881-148-9500-M	**0.881**	**22.38**	**0.148**	**3.76**	**9.500**	**241.30**	**6.626**	**168.31**	**6.425**	**163.20**	**127.90**	**568.95**	**44.51**	**7.79**	**C0881-148-9500-S**	**7.020**	**178.30**	**95.99**	**426.99**	**38.70**	**6.77**
C0881-162-1375-M	**0.881**	**22.38**	**0.162**	**4.12**	**1.375**	**34.93**	**1.145**	**29.08**	**1.104**	**28.05**	**136.53**	**607.33**	**593.08**	**103.79**	**C0881-162-1375-S**	**1.140**	**28.96**	**121.05**	**538.46**	**515.72**	**90.25**
C0881-162-1500-M	**0.881**	**22.38**	**0.162**	**4.12**	**1.500**	**38.10**	**1.241**	**31.52**	**1.195**	**30.35**	**137.40**	**611.19**	**530.04**	**92.76**	**C0881-162-1500-S**	**1.237**	**31.43**	**121.05**	**538.46**	**460.90**	**80.66**
C0881-162-1625-M	**0.881**	**22.38**	**0.162**	**4.12**	**1.625**	**41.28**	**1.337**	**33.95**	**1.286**	**32.66**	**138.10**	**614.31**	**479.11**	**83.84**	**C0881-162-1625-S**	**1.334**	**33.89**	**121.05**	**538.46**	**416.62**	**72.91**
C0881-162-1750-M	**0.881**	**22.38**	**0.162**	**4.12**	**1.750**	**44.45**	**1.377**	**34.98**	**1.377**	**34.97**	**163.04**	**725.23**	**437.11**	**76.49**	**C0881-162-1750-S**	**1.432**	**36.36**	**121.05**	**538.46**	**380.10**	**66.52**
C0881-162-1875-M	**0.881**	**22.38**	**0.162**	**4.12**	**1.875**	**47.63**	**1.469**	**37.32**	**1.468**	**37.28**	**163.04**	**725.23**	**401.89**	**70.33**	**C0881-162-1875-S**	**1.529**	**38.83**	**121.05**	**538.46**	**349.47**	**61.16**
C0881-162-2000-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.000**	**50.80**	**1.562**	**39.67**	**1.558**	**39.59**	**163.04**	**725.23**	**371.91**	**65.08**	**C0881-162-2000-S**	**1.626**	**41.29**	**121.05**	**538.46**	**323.40**	**56.60**
C0881-162-2125-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.125**	**53.98**	**1.654**	**42.01**	**1.649**	**41.89**	**163.04**	**725.23**	**346.10**	**60.57**	**C0881-162-2125-S**	**1.723**	**43.76**	**121.05**	**538.46**	**300.96**	**52.67**
C0881-162-2250-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.250**	**57.15**	**1.746**	**44.35**	**1.740**	**44.20**	**163.04**	**725.23**	**323.64**	**56.64**	**C0881-162-2250-S**	**1.820**	**46.22**	**121.05**	**538.46**	**281.42**	**49.25**
C0881-162-2375-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.375**	**60.33**	**1.839**	**46.70**	**1.831**	**46.51**	**163.04**	**725.23**	**303.91**	**53.18**	**C0881-162-2375-S**	**1.917**	**48.69**	**121.05**	**538.46**	**264.27**	**46.25**
C0881-162-2500-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.500**	**63.50**	**1.931**	**49.04**	**1.922**	**48.82**	**163.04**	**725.23**	**286.46**	**50.13**	**C0881-162-2500-S**	**2.014**	**51.16**	**121.05**	**538.46**	**249.09**	**43.59**
C0881-162-2625-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.625**	**66.68**	**2.023**	**51.39**	**2.013**	**51.12**	**163.04**	**725.23**	**270.89**	**47.41**	**C0881-162-2625-S**	**2.111**	**53.62**	**121.05**	**538.46**	**235.56**	**41.22**
C0881-162-2750-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.750**	**69.85**	**2.115**	**53.73**	**2.104**	**53.43**	**163.04**	**725.23**	**256.94**	**44.96**	**C0881-162-2750-S**	**2.208**	**56.09**	**121.05**	**538.46**	**223.42**	**39.10**
C0881-162-2875-M	**0.881**	**22.38**	**0.162**	**4.12**	**2.875**	**73.03**	**2.208**	**56.08**	**2.195**	**55.74**	**163.04**	**725.23**	**244.35**	**42.76**	**C0881-162-2875-S**	**2.305**	**58.55**	**121.05**	**538.46**	**212.47**	**37.18**
C0881-162-3000-M	**0.881**	**22.38**	**0.162**	**4.12**	**3.000**	**76.20**	**2.300**	**58.42**	**2.285**	**58.05**	**163.04**	**725.23**	**232.93**	**40.76**	**C0881-162-3000-S**	**2.402**	**61.02**	**121.05**	**538.46**	**202.55**	**35.45**
C0881-162-3250-M	**0.881**	**22.38**	**0.162**	**4.12**	**3.250**	**82.55**	**2.485**	**63.11**	**2.467**	**62.66**	**163.04**	**725.23**	**213.03**	**37.28**	**C0881-162-3250-S**	**2.597**	**65.95**	**121.05**	**538.46**	**185.24**	**32.42**
C0881-162-3500-M	**0.881**	**22.38**	**0.162**	**4.12**	**3.500**	**88.90**	**2.669**	**67.80**	**2.649**	**67.28**	**163.04**	**725.23**	**196.26**	**34.35**	**C0881-162-3500-S**	**2.791**	**70.88**	**121.05**	**538.46**	**170.66**	**29.87**
C0881-162-3750-M	**0.881**	**22.38**	**0.162**	**4.12**	**3.750**	**95.25**	**2.854**	**72.49**	**2.831**	**71.90**	**163.04**	**725.23**	**181.94**	**31.84**	**C0881-162-3750-S**	**2.985**	**75.82**	**121.05**	**538.46**	**158.21**	**27.69**
C0881-162-4000-M	**0.881**	**22.38**	**0.162**	**4.12**	**4.000**	**101.60**	**3.038**	**77.18**	**3.012**	**76.51**	**163.04**	**725.23**	**169.57**	**29.67**	**C0881-162-4000-S**	**3.179**	**80.75**	**121.05**	**538.46**	**147.45**	**25.80**
C0881-162-4250-M	**0.881**	**22.38**	**0.162**	**4.12**	**4.250**	**107.95**	**3.223**	**81.87**	**3.194**	**81.13**	**163.04**	**725.23**	**158.77**	**27.78**	**C0881-162-4250-S**	**3.373**	**85.68**	**121.05**	**538.46**	**138.06**	**24.16**
C0881-162-4500-M	**0.881**	**22.38**	**0.162**	**4.12**	**4.500**	**114.30**	**3.408**	**86.56**	**3.376**	**85.74**	**163.04**	**725.23**	**149.26**	**26.12**	**C0881-162-4500-S**	**3.567**	**90.61**	**121.05**	**538.46**	**129.80**	**22.71**
C0881-162-4750-M	**0.881**	**22.38**	**0.162**	**4.12**	**4.750**	**120.65**	**3.592**	**91.25**	**3.557**	**90.36**	**163.04**	**725.23**	**140.83**	**24.65**	**C0881-162-4750-S**	**3.762**	**95.54**	**121.05**	**538.46**	**122.46**	**21.43**
C0881-162-5000-M	**0.881**	**22.38**	**0.162**	**4.12**	**5.000**	**127.00**	**3.777**	**95.93**	**3.739**	**94.97**	**163.04**	**725.23**	**133.30**	**23.33**	**C0881-162-5000-S**	**3.956**	**100.47**	**121.05**	**538.46**	**115.92**	**20.29**
C0881-162-5250-M	**0.881**	**22.38**	**0.162**	**4.12**	**5.250**	**133.35**	**3.962**	**100.62**	**3.921**	**99.59**	**163.04**	**725.23**	**126.54**	**22.14**	**C0881-162-5250-S**	**4.150**	**105.41**	**121.05**	**538.46**	**110.03**	**19.26**
C0881-162-5500-M	**0.881**	**22.38**	**0.162**	**4.12**	**5.500**	**139.70**	**4.146**	**105.31**	**4.103**	**104.21**	**163.04**	**725.23**	**120.43**	**21.07**	**C0881-162-5500-S**	**4.344**	**110.34**	**121.05**	**538.46**	**104.72**	**18.33**
C0881-162-5750-M	**0.881**	**22.38**	**0.162**	**4.12**	**5.750**	**146.05**	**4.331**	**110.00**	**4.284**	**108.82**	**163.04**	**725.23**	**114.88**	**20.10**	**C0881-162-5750-S**	**4.538**	**115.27**	**121.05**	**538.46**	**99.89**	**17.48**
C0881-162-6000-M	**0.881**	**22.38**	**0.162**	**4.12**	**6.000**	**152.40**	**4.515**	**114.69**	**4.466**	**113.44**	**163.04**	**725.23**	**109.82**	**19.22**	**C0881-162-6000-S**	**4.732**	**120.20**	**121.05**	**538.46**	**95.49**	**16.71**
C0881-162-6250-M	**0.881**	**22.38**	**0.162**	**4.12**	**6.250**	**158.75**	**4.700**	**119.38**	**4.648**	**118.05**	**163.04**	**725.23**	**105.19**	**18.41**	**C0881-162-6250-S**	**4.927**	**125.13**	**121.05**	**538.46**	**91.47**	**16.01**
C0881-162-6500-M	**0.881**	**22.38**	**0.162**	**4.12**	**6.500**	**165.10**	**4.885**	**124.07**	**4.829**	**122.67**	**163.04**	**725.23**	**100.93**	**17.66**	**C0881-162-6500-S**	**5.121**	**130.07**	**121.05**	**538.46**	**87.76**	**15.36**
C0881-162-6750-M	**0.881**	**22.38**	**0.162**	**4.12**	**6.750**	**171.45**	**5.069**	**128.76**	**5.011**	**127.28**	**163.04**	**725.23**	**97.00**	**16.98**	**C0881-162-6750-S**	**5.315**	**135.00**	**121.05**	**538.46**	**84.35**	**14.76**
C0881-162-7000-M	**0.881**	**22.38**	**0.162**	**4.12**	**7.000**	**177.80**	**5.254**	**133.45**	**5.193**	**131.90**	**163.04**	**725.23**	**93.37**	**16.34**	**C0881-162-7000-S**	**5.509**	**139.93**	**121.05**	**538.46**	**81.19**	**14.21**
C0881-162-7500-M	**0.881**	**22.38**	**0.162**	**4.12**	**7.500**	**190.50**	**5.623**	**142.82**	**5.556**	**141.13**	**163.04**	**725.23**	**86.86**	**15.20**	**C0881-162-7500-S**	**5.897**	**149.79**	**121.05**	**538.46**	**75.53**	**13.22**
C0881-162-8000-M	**0.881**	**22.38**	**0.162**	**4.12**	**8.000**	**203.20**	**5.992**	**152.20**	**5.920**	**150.36**	**163.04**	**725.23**	**81.20**	**14.21**	**C0881-162-8000-S**	**6.286**	**159.66**	**121.05**	**538.46**	**70.61**	**12.36**
C0881-162-8500-M	**0.881**	**22.38**	**0.162**	**4.12**	**8.500**	**215.90**	**6.361**	**161.58**	**6.283**	**159.60**	**163.04**	**725.23**	**76.24**	**13.34**	**C0881-162-8500-S**	**6.674**	**169.52**	**121.05**	**538.46**	**66.29**	**11.60**
C0881-162-9000-M	**0.881**	**22.38**	**0.162**	**4.12**	**9.000**	**228.60**	**6.731**	**170.96**	**6.647**	**168.83**	**163.04**	**725.23**	**71.85**	**12.57**	**C0881-162-9000-S**	**7.062**	**179.38**	**121.05**	**538.46**	**62.47**	**10.93**
C0881-162-9500-M	**0.881**	**22.38**	**0.162**	**4.12**	**9.500**	**241.30**	**7.100**	**180.34**	**7.010**	**178.06**	**163.04**	**725.23**	**67.93**	**11.89**	**C0881-162-9500-S**	**7.451**	**189.25**	**121.05**	**538.46**	**59.07**	**10.34**
D13040	0.886	22.50	0.098	2.50	1.417	36.00	0.610	15.50	0.541	13.75	65.70	292.24	81.26	14.22	D23040	0.610	15.50	54.73	243.44	67.71	11.85
D13050	0.886	22.50	0.098	2.50	2.126	54.00	0.862	21.90	0.738	18.75	65.70	292.24	51.71	9.05	D23050	0.862	21.90	54.73	243.44	43.09	7.54
D13060	0.886	22.50	0.098	2.50	3.209	81.50	1.240	31.50	1.033	26.25	65.70	292.24	33.43	5.85	D23060	1.240	31.50	54.73	243.44	27.83	4.87
D13070	0.886	22.50	0.098	2.50	4.724	120.00	1.744	44.30	1.427	36.25	65.70	292.24	22.74	3.98	D23070	1.744	44.30	54.73	243.44	18.97	3.32
D13080	0.886	22.50	0.098	2.50	6.890	175.00	2.504	63.60	2.018	51.25	65.70	292.24	15.37	2.69	D23080	2.504	63.60	54.73	243.44	12.80	2.24
C0906-105-0875-M	**0.906**	**23.01**	**0.105**	**2.67**	**0.875**	**22.23**	**0.521**	**13.23**	**0.460**	**11.69**	**51.07**	**227.19**	**144.30**	**25.25**	**C0906-105-0875-S**	**0.560**	**14.23**	**37.84**	**168.31**	**120.20**	**21.04**
C0906-105-1000-M	**0.906**	**23.01**	**0.105**	**2.67**	**1.000**	**25.40**	**0.580**	**14.72**	**0.514**	**13.07**	**51.07**	**227.19**	**121.47**	**21.26**	**C0906-105-1000-S**	**0.626**	**15.90**	**37.84**	**168.31**	**101.19**	**17.71**
C0906-105-1250-M	**0.906**	**23.01**	**0.105**	**2.67**	**1.250**	**31.75**	**0.696**	**17.69**	**0.623**	**15.82**	**51.07**	**227.19**	**92.27**	**16.15**	**C0906-105-1250-S**	**0.758**	**19.25**	**37.84**	**168.31**	**76.86**	**13.45**
C0906-105-1500-M	**0.906**	**23.01**	**0.105**	**2.67**	**1.500**	**38.10**	**0.813**	**20.66**	**0.724**	**18.40**	**51.07**	**227.19**	**74.39**	**13.02**	**C0906-105-1500-S**	**0.889**	**22.59**	**37.84**	**168.31**	**61.97**	**10.84**
C0906-105-1750-M	**0.906**	**23.01**	**0.105**	**2.67**	**1.750**	**44.45**	**0.930**	**23.63**	**0.822**	**20.88**	**51.07**	**227.19**	**62.31**	**10.90**	**C0906-105-1750-S**	**1.021**	**25.93**	**37.84**	**168.31**	**51.90**	**9.08**
C0906-105-2000-M	**0.906**	**23.01**	**0.105**	**2.67**	**2.000**	**50.80**	**1.047**	**26.60**	**0.920**	**23.36**	**51.07**	**227.19**	**53.61**	**9.38**	**C0906-105-2000-S**	**1.153**	**29.28**	**37.84**	**168.31**	**44.66**	**7.81**
C0906-105-2250-M	**0.906**	**23.01**	**0.105**	**2.67**	**2.250**	**57.15**	**1.164**	**29.57**	**1.017**	**25.84**	**51.07**	**227.19**	**47.04**	**8.23**	**C0906-105-2250-S**	**1.284**	**32.62**	**37.84**	**168.31**	**39.18**	**6.86**
C0906-105-2500-M	**0.906**	**23.01**	**0.105**	**2.67**	**2.500**	**63.50**	**1.281**	**32.54**	**1.115**	**28.32**	**51.07**	**227.19**	**41.90**	**7.33**	**C0906-105-2500-S**	**1.416**	**35.96**	**37.84**	**168.31**	**34.90**	**6.11**
C0906-105-2750-M	**0.906**	**23.01**	**0.105**	**2.67**	**2.750**	**69.85**	**1.398**	**35.51**	**1.213**	**30.80**	**51.07**	**227.19**	**37.78**	**6.61**	**C0906-105-2750-S**	**1.548**	**39.31**	**37.84**	**168.31**	**31.47**	**5.51**
C0906-105-3000-M	**0.906**	**23.01**	**0.105**	**2.67**	**3.000**	**76.20**	**1.515**	**38.49**	**1.310**	**33.28**	**51.07**	**227.19**	**34.40**	**6.02**	**C0906-105-3000-S**	**1.680**	**42.66**	**37.84**	**168.31**	**28.66**	**5.01**
C0906-105-3500-M	**0.906**	**23.01**	**0.105**	**2.67**	**3.500**	**88.90**	**1.749**	**44.43**	**1.506**	**38.24**	**51.07**	**227.19**	**29.17**	**5.10**	**C0906-105-3500-S**	**1.943**	**49.35**	**37.84**	**168.31**	**24.30**	**4.25**
C0906-105-4000-M	**0.906**	**23.01**	**0.105**	**2.67**	**4.000**	**101.60**	**1.983**	**50.36**	**1.701**	**43.20**	**51.07**	**227.19**	**25.32**	**4.43**	**C0906-105-4000-S**	**2.206**	**56.03**	**37.84**	**168.31**	**21.09**	**3.69**
D13330	0.913	23.20	0.126	3.20	1.319	33.50	0.728	18.50	0.693	17.60	129.63	576.63	218.00	38.15	D23330	0.728	18.50	108.03	480.53	181.60	31.78
D13340	0.913	23.20	0.126	3.20	1.949	49.50	1.020	25.90	0.945	24.00	129.63	576.63	138.40	24.22	D23340	1.020	25.90	108.03	480.53	115.31	20.18
D13350	0.913	23.20	0.126	3.20	2.913	74.00	1.461	37.10	1.323	33.60	129.63	576.63	89.66	15.69	D23350	1.461	37.10	108.03	480.53	74.69	13.07
D13360	0.913	23.20	0.126	3.20	4.134	105.00	2.031	51.60	1.827	46.40	129.63	576.63	61.09	10.69	D23360	2.031	51.60	108.03	480.53	50.86	8.90

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D13370	0.913	23.20	0.126	3.20	6.102	155.00	2.882	73.20	2.583	65.60	129.63	576.63	41.20	7.21
C0938-080-0750-M	**0.938**	**23.83**	**0.080**	**2.03**	**0.750**	**19.05**	**0.435**	**11.05**	**0.248**	**6.31**	**23.26**	**103.48**	**73.91**	**12.93**
C0938-080-1000-M	**0.938**	**23.83**	**0.080**	**2.03**	**1.000**	**25.40**	**0.552**	**14.02**	**0.298**	**7.58**	**23.26**	**103.48**	**51.91**	**9.08**
C0938-080-1250-M	**0.938**	**23.83**	**0.080**	**2.03**	**1.250**	**31.75**	**0.669**	**16.98**	**0.348**	**8.84**	**23.26**	**103.48**	**40.01**	**7.00**
C0938-080-1500-M	**0.938**	**23.83**	**0.080**	**2.03**	**1.500**	**38.10**	**0.785**	**19.94**	**0.398**	**10.11**	**23.26**	**103.48**	**32.54**	**5.69**
C0938-080-1750-M	**0.938**	**23.83**	**0.080**	**2.03**	**1.750**	**44.45**	**0.902**	**22.91**	**0.448**	**11.38**	**23.26**	**103.48**	**27.43**	**4.80**
C0938-080-2000-M	**0.938**	**23.83**	**0.080**	**2.03**	**2.000**	**50.80**	**1.018**	**25.87**	**0.498**	**12.64**	**23.26**	**103.48**	**23.70**	**4.15**
C0938-080-2250-M	**0.938**	**23.83**	**0.080**	**2.03**	**2.250**	**57.15**	**1.135**	**28.82**	**0.543**	**13.80**	**23.26**	**103.48**	**20.86**	**3.65**
C0938-080-2500-M	**0.938**	**23.83**	**0.080**	**2.03**	**2.500**	**63.50**	**1.252**	**31.80**	**0.588**	**14.94**	**23.26**	**103.48**	**18.64**	**3.26**
C0938-080-2750-M	**0.938**	**23.83**	**0.080**	**2.03**	**2.750**	**69.85**	**1.369**	**34.76**	**0.633**	**16.08**	**23.26**	**103.48**	**16.84**	**2.95**
C0938-080-2938-M	**0.938**	**23.83**	**0.080**	**2.03**	**2.938**	**74.63**	**1.456**	**36.99**	**0.667**	**16.94**	**23.26**	**103.48**	**15.70**	**2.75**
C0938-080-3000-M	**0.938**	**23.83**	**0.080**	**2.03**	**3.000**	**76.20**	**1.484**	**37.70**	**0.678**	**17.22**	**23.26**	**103.48**	**15.35**	**2.69**
C0938-080-3500-M	**0.938**	**23.83**	**0.080**	**2.03**	**3.500**	**88.90**	**1.719**	**43.65**	**0.768**	**19.50**	**23.26**	**103.48**	**13.06**	**2.29**
C0938-080-4000-M	**0.938**	**23.83**	**0.080**	**2.03**	**4.000**	**101.60**	**1.952**	**49.58**	**0.857**	**21.78**	**23.26**	**103.48**	**11.36**	**1.99**
C0940-085-1625-M	**0.940**	**23.88**	**0.085**	**2.16**	**1.625**	**41.28**	**0.695**	**17.66**	**0.558**	**14.16**	**26.28**	**116.89**	**28.26**	**4.95**
C0940-085-1750-M	**0.940**	**23.88**	**0.085**	**2.16**	**1.750**	**44.45**	**0.740**	**18.80**	**0.590**	**14.99**	**26.28**	**116.89**	**26.03**	**4.55**
C0940-085-1875-M	**0.940**	**23.88**	**0.085**	**2.16**	**1.875**	**47.63**	**0.785**	**19.95**	**0.623**	**15.82**	**26.28**	**116.89**	**24.12**	**4.22**
C0940-085-2000-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.000**	**50.80**	**0.831**	**21.10**	**0.655**	**16.65**	**26.28**	**116.89**	**22.47**	**3.93**
C0940-085-2125-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.125**	**53.98**	**0.876**	**22.24**	**0.688**	**17.47**	**26.28**	**116.89**	**21.03**	**3.68**
C0940-085-2250-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.250**	**57.15**	**0.921**	**23.39**	**0.720**	**18.30**	**26.28**	**116.89**	**19.77**	**3.46**
C0940-085-2375-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.375**	**60.33**	**0.966**	**24.53**	**0.753**	**19.13**	**26.28**	**116.89**	**18.65**	**3.26**
C0940-085-2500-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.500**	**63.50**	**1.011**	**25.68**	**0.786**	**19.96**	**26.28**	**116.89**	**17.65**	**3.09**
C0940-085-2625-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.625**	**66.68**	**1.056**	**26.83**	**0.818**	**20.78**	**26.28**	**116.89**	**16.75**	**2.93**
C0940-085-2750-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.750**	**69.85**	**1.101**	**27.97**	**0.851**	**21.61**	**26.28**	**116.89**	**15.94**	**2.79**
C0940-085-2875-M	**0.940**	**23.88**	**0.085**	**2.16**	**2.875**	**73.03**	**1.146**	**29.12**	**0.883**	**22.44**	**26.28**	**116.89**	**15.20**	**2.66**
C0940-085-3000-M	**0.940**	**23.88**	**0.085**	**2.16**	**3.000**	**76.20**	**1.191**	**30.26**	**0.916**	**23.26**	**26.28**	**116.89**	**14.53**	**2.54**
C0940-085-3250-M	**0.940**	**23.88**	**0.085**	**2.16**	**3.250**	**82.55**	**1.282**	**32.56**	**0.981**	**24.92**	**26.28**	**116.89**	**13.35**	**2.34**
C0940-085-3500-M	**0.940**	**23.88**	**0.085**	**2.16**	**3.500**	**88.90**	**1.372**	**34.85**	**1.046**	**26.57**	**26.28**	**116.89**	**12.35**	**2.16**
C0940-085-3750-M	**0.940**	**23.88**	**0.085**	**2.16**	**3.750**	**95.25**	**1.462**	**37.14**	**1.111**	**28.23**	**26.28**	**116.89**	**11.49**	**2.01**
C0940-085-4000-M	**0.940**	**23.88**	**0.085**	**2.16**	**4.000**	**101.60**	**1.552**	**39.43**	**1.177**	**29.88**	**26.28**	**116.89**	**10.74**	**1.88**
C0940-085-4250-M	**0.940**	**23.88**	**0.085**	**2.16**	**4.250**	**107.95**	**1.643**	**41.72**	**1.242**	**31.54**	**26.28**	**116.89**	**10.08**	**1.76**
C0940-085-4500-M	**0.940**	**23.88**	**0.085**	**2.16**	**4.500**	**114.30**	**1.733**	**44.02**	**1.307**	**33.19**	**26.28**	**116.89**	**9.50**	**1.66**
C0940-085-4750-M	**0.940**	**23.88**	**0.085**	**2.16**	**4.750**	**120.65**	**1.823**	**46.31**	**1.372**	**34.85**	**26.28**	**116.89**	**8.98**	**1.57**
C0940-085-5000-M	**0.940**	**23.88**	**0.085**	**2.16**	**5.000**	**127.00**	**1.913**	**48.60**	**1.437**	**36.50**	**26.28**	**116.89**	**8.51**	**1.49**
C0940-085-5250-M	**0.940**	**23.88**	**0.085**	**2.16**	**5.250**	**133.35**	**2.004**	**50.89**	**1.502**	**38.16**	**26.28**	**116.89**	**8.10**	**1.42**
C0940-085-5500-M	**0.940**	**23.88**	**0.085**	**2.16**	**5.500**	**139.70**	**2.094**	**53.18**	**1.567**	**39.81**	**26.28**	**116.89**	**7.72**	**1.35**
C0940-085-5750-M	**0.940**	**23.88**	**0.085**	**2.16**	**5.750**	**146.05**	**2.184**	**55.48**	**1.633**	**41.47**	**26.28**	**116.89**	**7.37**	**1.29**
C0940-085-6000-M	**0.940**	**23.88**	**0.085**	**2.16**	**6.000**	**152.40**	**2.274**	**57.77**	**1.698**	**43.12**	**26.28**	**116.89**	**7.05**	**1.23**
C0940-085-6250-M	**0.940**	**23.88**	**0.085**	**2.16**	**6.250**	**158.75**	**2.365**	**60.06**	**1.763**	**44.78**	**26.28**	**116.89**	**6.76**	**1.18**
C0940-085-6500-M	**0.940**	**23.88**	**0.085**	**2.16**	**6.500**	**165.10**	**2.455**	**62.35**	**1.828**	**46.43**	**26.28**	**116.89**	**6.50**	**1.14**
C0940-085-6750-M	**0.940**	**23.88**	**0.085**	**2.16**	**6.750**	**171.45**	**2.545**	**64.64**	**1.893**	**48.08**	**26.28**	**116.89**	**6.25**	**1.09**
C0940-085-7000-M	**0.940**	**23.88**	**0.085**	**2.16**	**7.000**	**177.80**	**2.635**	**66.93**	**1.958**	**49.74**	**26.28**	**116.89**	**6.02**	**1.05**
C0940-085-7500-M	**0.940**	**23.88**	**0.085**	**2.16**	**7.500**	**190.50**	**2.816**	**71.52**	**2.089**	**53.05**	**26.28**	**116.89**	**5.61**	**0.98**
C0940-085-8000-M	**0.940**	**23.88**	**0.085**	**2.16**	**8.000**	**203.20**	**2.996**	**76.10**	**2.219**	**56.36**	**26.28**	**116.89**	**5.25**	**0.92**
C0940-085-8500-M	**0.940**	**23.88**	**0.085**	**2.16**	**8.500**	**215.90**	**3.177**	**80.69**	**2.349**	**59.67**	**26.28**	**116.89**	**4.94**	**0.86**
C0940-085-9000-M*	**0.940**	**23.88**	**0.085**	**2.16**	**9.000**	**228.60**	**3.411**	**86.65**	**2.546**	**64.68**	**26.28**	**116.89**	**4.70**	**0.82**
C0940-085-9500-M*	**0.940**	**23.88**	**0.085**	**2.16**	**9.500**	**241.30**	**3.592**	**91.23**	**2.677**	**67.99**	**26.28**	**116.89**	**4.45**	**0.78**
C0940-092-1500-M	**0.940**	**23.88**	**0.092**	**2.34**	**1.500**	**38.10**	**0.703**	**17.86**	**0.590**	**15.00**	**32.73**	**145.61**	**41.07**	**7.19**
C0940-092-1625-M	**0.940**	**23.88**	**0.092**	**2.34**	**1.625**	**41.28**	**0.752**	**19.11**	**0.628**	**15.95**	**32.73**	**145.61**	**37.51**	**6.56**
C0940-092-1750-M	**0.940**	**23.88**	**0.092**	**2.34**	**1.750**	**44.45**	**0.802**	**20.36**	**0.666**	**16.91**	**32.73**	**145.61**	**34.51**	**6.04**
C0940-092-1875-M	**0.940**	**23.88**	**0.092**	**2.34**	**1.875**	**47.63**	**0.851**	**21.61**	**0.704**	**17.87**	**32.73**	**145.61**	**31.96**	**5.59**
C0940-092-2000-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.000**	**50.80**	**0.900**	**22.86**	**0.741**	**18.83**	**32.73**	**145.61**	**29.76**	**5.21**
C0940-092-2125-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.125**	**53.98**	**0.949**	**24.12**	**0.779**	**19.79**	**32.73**	**145.61**	**27.85**	**4.87**
C0940-092-2250-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.250**	**57.15**	**0.999**	**25.37**	**0.817**	**20.75**	**32.73**	**145.61**	**26.16**	**4.58**
C0940-092-2375-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.375**	**60.33**	**1.048**	**26.62**	**0.855**	**21.70**	**32.73**	**145.61**	**24.67**	**4.32**
C0940-092-2500-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.500**	**63.50**	**1.097**	**27.87**	**0.892**	**22.66**	**32.73**	**145.61**	**23.34**	**4.08**
C0940-092-2625-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.625**	**66.68**	**1.147**	**29.12**	**0.930**	**23.62**	**32.73**	**145.61**	**22.14**	**3.87**
C0940-092-2750-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.750**	**69.85**	**1.196**	**30.38**	**0.968**	**24.58**	**32.73**	**145.61**	**21.06**	**3.69**
C0940-092-2875-M	**0.940**	**23.88**	**0.092**	**2.34**	**2.875**	**73.03**	**1.245**	**31.63**	**1.005**	**25.54**	**32.73**	**145.61**	**20.09**	**3.51**
C0940-092-3000-M	**0.940**	**23.88**	**0.092**	**2.34**	**3.000**	**76.20**	**1.294**	**32.88**	**1.043**	**26.50**	**32.73**	**145.61**	**19.19**	**3.36**
C0940-092-3250-M	**0.940**	**23.88**	**0.092**	**2.34**	**3.250**	**82.55**	**1.393**	**35.38**	**1.119**	**28.41**	**32.73**	**145.61**	**17.63**	**3.08**
C0940-092-3500-M	**0.940**	**23.88**	**0.092**	**2.34**	**3.500**	**88.90**	**1.492**	**37.89**	**1.194**	**30.33**	**32.73**	**145.61**	**16.30**	**2.85**
C0940-092-3750-M	**0.940**	**23.88**	**0.092**	**2.34**	**3.750**	**95.25**	**1.590**	**40.39**	**1.270**	**32.25**	**32.73**	**145.61**	**15.16**	**2.65**
C0940-092-4000-M	**0.940**	**23.88**	**0.092**	**2.34**	**4.000**	**101.60**	**1.689**	**42.90**	**1.345**	**34.16**	**32.73**	**145.61**	**14.16**	**2.48**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D23370	2.882	73.20	108.03	480.53	17.20	3.01
C0938-080-0750-S	**0.466**	**11.83**	**17.51**	**77.89**	**61.57**	**10.77**
C0938-080-1000-S	**0.595**	**15.11**	**17.51**	**77.89**	**43.24**	**7.57**
C0938-080-1250-S	**0.725**	**18.41**	**17.51**	**77.89**	**33.33**	**5.83**
C0938-080-1500-S	**0.854**	**21.69**	**17.51**	**77.89**	**27.11**	**4.74**
C0938-080-1750-S	**0.984**	**24.99**	**17.51**	**77.89**	**22.85**	**4.00**
C0938-080-2000-S	**1.113**	**28.27**	**17.51**	**77.89**	**19.74**	**3.45**
C0938-080-2250-S	**1.242**	**31.55**	**17.51**	**77.89**	**17.38**	**3.04**
C0938-080-2500-S	**1.372**	**34.86**	**17.51**	**77.89**	**15.53**	**2.72**
C0938-080-2750-S	**1.502**	**38.14**	**17.51**	**77.89**	**14.03**	**2.45**
C0938-080-2938-S	**1.599**	**40.62**	**17.51**	**77.89**	**13.08**	**2.29**
C0938-080-3000-S	**1.631**	**41.42**	**17.51**	**77.89**	**12.79**	**2.24**
C0938-080-3500-S	**1.890**	**48.02**	**17.51**	**77.89**	**10.88**	**1.90**
C0938-080-4000-S	**2.150**	**54.60**	**17.51**	**77.89**	**9.46**	**1.66**
C0940-085-1625-S	**0.786**	**19.96**	**20.62**	**91.74**	**24.58**	**4.30**
C0940-085-1750-S	**0.839**	**21.30**	**20.62**	**91.74**	**22.63**	**3.96**
C0940-085-1875-S	**0.892**	**22.65**	**20.62**	**91.74**	**20.97**	**3.67**
C0940-085-2000-S	**0.944**	**23.99**	**20.62**	**91.74**	**19.54**	**3.42**
C0940-085-2125-S	**0.997**	**25.33**	**20.62**	**91.74**	**18.29**	**3.20**
C0940-085-2250-S	**1.050**	**26.68**	**20.62**	**91.74**	**17.19**	**3.01**
C0940-085-2375-S	**1.103**	**28.02**	**20.62**	**91.74**	**16.22**	**2.84**
C0940-085-2500-S	**1.156**	**29.36**	**20.62**	**91.74**	**15.35**	**2.69**
C0940-085-2625-S	**1.209**	**30.71**	**20.62**	**91.74**	**14.57**	**2.55**
C0940-085-2750-S	**1.262**	**32.05**	**20.62**	**91.74**	**13.86**	**2.43**
C0940-085-2875-S	**1.315**	**33.40**	**20.62**	**91.74**	**13.22**	**2.31**
C0940-085-3000-S	**1.368**	**34.74**	**20.62**	**91.74**	**12.64**	**2.21**
C0940-085-3250-S	**1.473**	**37.43**	**20.62**	**91.74**	**11.61**	**2.03**
C0940-085-3500-S	**1.579**	**40.11**	**20.62**	**91.74**	**10.74**	**1.88**
C0940-085-3750-S	**1.685**	**42.80**	**20.62**	**91.74**	**9.99**	**1.75**
C0940-085-4000-S	**1.791**	**45.49**	**20.62**	**91.74**	**9.34**	**1.63**
C0940-085-4250-S	**1.897**	**48.18**	**20.62**	**91.74**	**8.76**	**1.53**
C0940-085-4500-S	**2.002**	**50.86**	**20.62**	**91.74**	**8.26**	**1.45**
C0940-085-4750-S	**2.108**	**53.55**	**20.62**	**91.74**	**7.81**	**1.37**
C0940-085-5000-S	**2.214**	**56.24**	**20.62**	**91.74**	**7.40**	**1.30**
C0940-085-5250-S	**2.320**	**58.93**	**20.62**	**91.74**	**7.04**	**1.23**
C0940-085-5500-S	**2.426**	**61.61**	**20.62**	**91.74**	**6.71**	**1.17**
C0940-085-5750-S	**2.532**	**64.30**	**20.62**	**91.74**	**6.41**	**1.12**
C0940-085-6000-S	**2.637**	**66.99**	**20.62**	**91.74**	**6.13**	**1.07**
C0940-085-6250-S	**2.743**	**69.68**	**20.62**	**91.74**	**5.88**	**1.03**
C0940-085-6500-S	**2.849**	**72.36**	**20.62**	**91.74**	**5.65**	**0.99**
C0940-085-6750-S	**2.955**	**75.05**	**20.62**	**91.74**	**5.43**	**0.95**
C0940-085-7000-S	**3.061**	**77.74**	**20.62**	**91.74**	**5.24**	**0.92**
C0940-085-7500-S	**3.272**	**83.11**	**20.62**	**91.74**	**4.88**	**0.85**
C0940-085-8000-S	**3.484**	**88.49**	**20.62**	**91.74**	**4.57**	**0.80**
C0940-085-8500-S	**3.695**	**93.86**	**20.62**	**91.74**	**4.29**	**0.75**
C0940-085-9000-S*	**3.956**	**100.48**	**20.62**	**91.74**	**4.09**	**0.72**
C0940-085-9500-S*	**4.168**	**105.86**	**20.62**	**91.74**	**3.87**	**0.68**
C0940-092-1500-S	**0.784**	**19.91**	**25.58**	**113.79**	**35.71**	**6.25**
C0940-092-1625-S	**0.841**	**21.35**	**25.58**	**113.79**	**32.62**	**5.71**
C0940-092-1750-S	**0.898**	**22.80**	**25.58**	**113.79**	**30.01**	**5.25**
C0940-092-1875-S	**0.955**	**24.25**	**25.58**	**113.79**	**27.79**	**4.86**
C0940-092-2000-S	**1.012**	**25.69**	**25.58**	**113.79**	**25.88**	**4.53**
C0940-092-2125-S	**1.069**	**27.14**	**25.58**	**113.79**	**24.21**	**4.24**
C0940-092-2250-S	**1.125**	**28.59**	**25.58**	**113.79**	**22.75**	**3.98**
C0940-092-2375-S	**1.182**	**30.03**	**25.58**	**113.79**	**21.45**	**3.75**
C0940-092-2500-S	**1.239**	**31.48**	**25.58**	**113.79**	**20.29**	**3.55**
C0940-092-2625-S	**1.296**	**32.93**	**25.58**	**113.79**	**19.25**	**3.37**
C0940-092-2750-S	**1.353**	**34.37**	**25.58**	**113.79**	**18.32**	**3.21**
C0940-092-2875-S	**1.410**	**35.82**	**25.58**	**113.79**	**17.47**	**3.06**
C0940-092-3000-S	**1.467**	**37.27**	**25.58**	**113.79**	**16.69**	**2.92**
C0940-092-3250-S	**1.581**	**40.16**	**25.58**	**113.79**	**15.33**	**2.68**
C0940-092-3500-S	**1.695**	**43.06**	**25.58**	**113.79**	**14.17**	**2.48**
C0940-092-3750-S	**1.809**	**45.95**	**25.58**	**113.79**	**13.18**	**2.31**
C0940-092-4000-S	**1.923**	**48.84**	**25.58**	**113.79**	**12.32**	**2.16**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0940-092-4250-M	0.940	23.88	0.092	2.34	4.250	107.95	1.787	45.40	1.420	36.08	32.73	145.61	13.29	2.33
C0940-092-4500-M	0.940	23.88	0.092	2.34	4.500	114.30	1.886	47.90	1.496	38.00	32.73	145.61	12.52	2.19
C0940-092-4750-M	0.940	23.88	0.092	2.34	4.750	120.65	1.985	50.41	1.571	39.91	32.73	145.61	11.84	2.07
C0940-092-5000-M	0.940	23.88	0.092	2.34	5.000	127.00	2.083	52.91	1.647	41.83	32.73	145.61	11.22	1.96
C0940-092-5250-M	0.940	23.88	0.092	2.34	5.250	133.35	2.182	55.42	1.722	43.75	32.73	145.61	10.67	1.87
C0940-092-5500-M	0.940	23.88	0.092	2.34	5.500	139.70	2.280	57.92	1.798	45.66	32.73	145.61	10.17	1.78
C0940-092-5750-M	0.940	23.88	0.092	2.34	5.750	146.05	2.379	60.42	1.873	47.58	32.73	145.61	9.71	1.70
C0940-092-6000-M	0.940	23.88	0.092	2.34	6.000	152.40	2.477	62.93	1.949	49.50	32.73	145.61	9.29	1.63
C0940-092-6250-M	0.940	23.88	0.092	2.34	6.250	158.75	2.576	65.43	2.024	51.41	32.73	145.61	8.91	1.56
C0940-092-6500-M	0.940	23.88	0.092	2.34	6.500	165.10	2.675	67.94	2.100	53.33	32.73	145.61	8.56	1.50
C0940-092-6750-M	0.940	23.88	0.092	2.34	6.750	171.45	2.773	70.44	2.175	55.25	32.73	145.61	8.23	1.44
C0940-092-7000-M	0.940	23.88	0.092	2.34	7.000	177.80	2.872	72.94	2.251	57.16	32.73	145.61	7.93	1.39
C0940-092-7500-M	0.940	23.88	0.092	2.34	7.500	190.50	3.069	77.95	2.401	61.00	32.73	145.61	7.39	1.29
C0940-092-8000-M*	0.940	23.88	0.092	2.34	8.000	203.20	3.322	84.38	2.621	66.58	32.73	145.61	7.00	1.22
C0940-092-8500-M*	0.940	23.88	0.092	2.34	8.500	215.90	3.519	89.38	2.772	70.41	32.73	145.61	6.57	1.15
C0940-092-9000-M*	0.940	23.88	0.092	2.34	9.000	228.60	3.716	94.39	2.923	74.24	32.73	145.61	6.20	1.08
C0940-092-9500-M*	0.940	23.88	0.092	2.34	9.500	241.30	3.913	99.40	3.074	78.08	32.73	145.61	5.86	1.03
C0940-098-1500-M	0.940	23.88	0.098	2.49	1.500	38.10	0.748	19.01	0.646	16.42	39.00	173.46	51.88	9.08
C0940-098-1625-M	0.940	23.88	0.098	2.49	1.625	41.28	0.801	20.35	0.689	17.49	39.00	173.46	47.34	8.28
C0940-098-1750-M	0.940	23.88	0.098	2.49	1.750	44.45	0.854	21.70	0.731	18.56	39.00	173.46	43.53	7.62
C0940-098-1875-M	0.940	23.88	0.098	2.49	1.875	47.63	0.907	23.04	0.773	19.64	39.00	173.46	40.29	7.05
C0940-098-2000-M	0.940	23.88	0.098	2.49	2.000	50.80	0.960	24.38	0.815	20.71	39.00	173.46	37.50	6.56
C0940-098-2125-M	0.940	23.88	0.098	2.49	2.125	53.98	1.013	25.73	0.858	21.78	39.00	173.46	35.07	6.14
C0940-098-2250-M	0.940	23.88	0.098	2.49	2.250	57.15	1.066	27.07	0.900	22.85	39.00	173.46	32.93	5.76
C0940-098-2375-M	0.940	23.88	0.098	2.49	2.375	60.33	1.119	28.42	0.942	23.93	39.00	173.46	31.04	5.43
C0940-098-2500-M	0.940	23.88	0.098	2.49	2.500	63.50	1.172	29.76	0.984	25.00	39.00	173.46	29.36	5.14
C0940-098-2625-M	0.940	23.88	0.098	2.49	2.625	66.68	1.225	31.11	1.027	26.07	39.00	173.46	27.85	4.87
C0940-098-2750-M	0.940	23.88	0.098	2.49	2.750	69.85	1.278	32.45	1.069	27.15	39.00	173.46	26.49	4.64
C0940-098-2875-M	0.940	23.88	0.098	2.49	2.875	73.03	1.331	33.80	1.111	28.22	39.00	173.46	25.25	4.42
C0940-098-3000-M	0.940	23.88	0.098	2.49	3.000	76.20	1.384	35.14	1.153	29.29	39.00	173.46	24.12	4.22
C0940-098-3250-M	0.940	23.88	0.098	2.49	3.250	82.55	1.489	37.83	1.238	31.44	39.00	173.46	22.15	3.88
C0940-098-3500-M	0.940	23.88	0.098	2.49	3.500	88.90	1.595	40.52	1.322	33.58	39.00	173.46	20.47	3.58
C0940-098-3750-M	0.940	23.88	0.098	2.49	3.750	95.25	1.701	43.21	1.407	35.73	39.00	173.46	19.03	3.33
C0940-098-4000-M	0.940	23.88	0.098	2.49	4.000	101.60	1.807	45.90	1.491	37.87	39.00	173.46	17.78	3.11
C0940-098-4250-M	0.940	23.88	0.098	2.49	4.250	107.95	1.913	48.59	1.576	40.02	39.00	173.46	16.69	2.92
C0940-098-4500-M	0.940	23.88	0.098	2.49	4.500	114.30	2.019	51.28	1.660	42.16	39.00	173.46	15.72	2.75
C0940-098-4750-M	0.940	23.88	0.098	2.49	4.750	120.65	2.125	53.97	1.744	44.31	39.00	173.46	14.85	2.60
C0940-098-5000-M	0.940	23.88	0.098	2.49	5.000	127.00	2.231	56.66	1.829	46.46	39.00	173.46	14.08	2.46
C0940-098-5250-M	0.940	23.88	0.098	2.49	5.250	133.35	2.336	59.35	1.913	48.60	39.00	173.46	13.38	2.34
C0940-098-5500-M	0.940	23.88	0.098	2.49	5.500	139.70	2.442	62.04	1.998	50.75	39.00	173.46	12.75	2.23
C0940-098-5750-M	0.940	23.88	0.098	2.49	5.750	146.05	2.548	64.73	2.082	52.89	39.00	173.46	12.18	2.13
C0940-098-6000-M	0.940	23.88	0.098	2.49	6.000	152.40	2.654	67.41	2.167	55.04	39.00	173.46	11.66	2.04
C0940-098-6250-M	0.940	23.88	0.098	2.49	6.250	158.75	2.760	70.10	2.251	57.18	39.00	173.46	11.17	1.96
C0940-098-6500-M	0.940	23.88	0.098	2.49	6.500	165.10	2.866	72.79	2.336	59.33	39.00	173.46	10.73	1.88
C0940-098-6750-M	0.940	23.88	0.098	2.49	6.750	171.45	2.972	75.48	2.420	61.47	39.00	173.46	10.32	1.81
C0940-098-7000-M	0.940	23.88	0.098	2.49	7.000	177.80	3.078	78.17	2.505	63.62	39.00	173.46	9.94	1.74
C0940-098-7500-M	0.940	23.88	0.098	2.49	7.500	190.50	3.289	83.55	2.674	67.91	39.00	173.46	9.26	1.62
C0940-098-8000-M	0.940	23.88	0.098	2.49	8.000	203.20	3.501	88.93	2.843	72.20	39.00	173.46	8.67	1.52
C0940-098-8500-M*	0.940	23.88	0.098	2.49	8.500	215.90	3.769	95.74	3.081	78.27	39.00	173.46	8.24	1.44
C0940-098-9000-M*	0.940	23.88	0.098	2.49	9.000	228.60	3.981	101.12	3.250	82.56	39.00	173.46	7.77	1.36
C0940-098-9500-M*	0.940	23.88	0.098	2.49	9.500	241.30	4.193	106.50	3.419	86.85	39.00	173.46	7.35	1.29
C0940-105-1375-M	0.940	23.88	0.105	2.67	1.375	34.93	0.743	18.88	0.663	16.85	47.19	209.91	74.70	13.07
C0940-105-1500-M	0.940	23.88	0.105	2.67	1.500	38.10	0.801	20.33	0.711	18.06	47.19	209.91	67.47	11.81
C0940-105-1625-M	0.940	23.88	0.105	2.67	1.625	41.28	0.858	21.79	0.758	19.27	47.19	209.91	61.51	10.76
C0940-105-1750-M	0.940	23.88	0.105	2.67	1.750	44.45	0.915	23.24	0.806	20.47	47.19	209.91	56.51	9.89
C0940-105-1875-M	0.940	23.88	0.105	2.67	1.875	47.63	0.972	24.69	0.854	21.68	47.19	209.91	52.27	9.15
C0940-105-2000-M	0.940	23.88	0.105	2.67	2.000	50.80	1.029	26.15	0.901	22.89	47.19	209.91	48.62	8.51
C0940-105-2125-M	0.940	23.88	0.105	2.67	2.125	53.98	1.087	27.60	0.949	24.09	47.19	209.91	45.45	7.95
C0940-105-2250-M	0.940	23.88	0.105	2.67	2.250	57.15	1.144	29.05	0.996	25.30	47.19	209.91	42.66	7.47
C0940-105-2375-M	0.940	23.88	0.105	2.67	2.375	60.33	1.201	30.51	1.044	26.51	47.19	209.91	40.20	7.03
C0940-105-2500-M	0.940	23.88	0.105	2.67	2.500	63.50	1.258	31.96	1.091	27.72	47.19	209.91	38.00	6.65
C0940-105-2625-M	0.940	23.88	0.105	2.67	2.625	66.68	1.316	33.41	1.139	28.92	47.19	209.91	36.04	6.31
C0940-105-2750-M	0.940	23.88	0.105	2.67	2.750	69.85	1.373	34.87	1.186	30.13	47.19	209.91	34.26	6.00
C0940-105-2875-M	0.940	23.88	0.105	2.67	2.875	73.03	1.430	36.32	1.234	31.34	47.19	209.91	32.66	5.71

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0940-092-4250-S	2.037	51.74	25.58	113.79	11.56	2.02
C0940-092-4500-S	2.151	54.63	25.58	113.79	10.89	1.91
C0940-092-4750-S	2.265	57.52	25.58	113.79	10.29	1.80
C0940-092-5000-S	2.379	60.42	25.58	113.79	9.76	1.71
C0940-092-5250-S	2.493	63.31	25.58	113.79	9.28	1.62
C0940-092-5500-S	2.607	66.21	25.58	113.79	8.84	1.55
C0940-092-5750-S	2.720	69.10	25.58	113.79	8.44	1.48
C0940-092-6000-S	2.834	71.99	25.58	113.79	8.08	1.41
C0940-092-6250-S	2.948	74.89	25.58	113.79	7.75	1.36
C0940-092-6500-S	3.062	77.78	25.58	113.79	7.44	1.30
C0940-092-6750-S	3.176	80.67	25.58	113.79	7.16	1.25
C0940-092-7000-S	3.290	83.57	25.58	113.79	6.90	1.21
C0940-092-7500-S	3.518	89.36	25.58	113.79	6.42	1.12
C0940-092-8000-S*	3.796	96.42	25.58	113.79	6.09	1.06
C0940-092-8500-S*	4.024	102.20	25.58	113.79	5.72	1.00
C0940-092-9000-S*	4.252	107.99	25.58	113.79	5.39	0.94
C0940-092-9500-S*	4.479	113.78	25.58	113.79	5.10	0.89
C0940-098-1500-S	0.827	21.01	30.35	135.02	45.11	7.89
C0940-098-1625-S	0.888	22.54	30.35	135.02	41.16	7.20
C0940-098-1750-S	0.948	24.08	30.35	135.02	37.85	6.62
C0940-098-1875-S	1.009	25.62	30.35	135.02	35.03	6.13
C0940-098-2000-S	1.069	27.15	30.35	135.02	32.61	5.71
C0940-098-2125-S	1.130	28.69	30.35	135.02	30.49	5.34
C0940-098-2250-S	1.190	30.23	30.35	135.02	28.64	5.01
C0940-098-2375-S	1.251	31.76	30.35	135.02	27.00	4.72
C0940-098-2500-S	1.311	33.30	30.35	135.02	25.53	4.47
C0940-098-2625-S	1.372	34.84	30.35	135.02	24.22	4.24
C0940-098-2750-S	1.432	36.37	30.35	135.02	23.03	4.03
C0940-098-2875-S	1.492	37.91	30.35	135.02	21.96	3.84
C0940-098-3000-S	1.553	39.45	30.35	135.02	20.98	3.67
C0940-098-3250-S	1.674	42.52	30.35	135.02	19.26	3.37
C0940-098-3500-S	1.795	45.59	30.35	135.02	17.80	3.12
C0940-098-3750-S	1.916	48.67	30.35	135.02	16.55	2.90
C0940-098-4000-S	2.037	51.74	30.35	135.02	15.46	2.71
C0940-098-4250-S	2.158	54.81	30.35	135.02	14.51	2.54
C0940-098-4500-S	2.279	57.88	30.35	135.02	13.67	2.39
C0940-098-4750-S	2.400	60.96	30.35	135.02	12.92	2.26
C0940-098-5000-S	2.521	64.03	30.35	135.02	12.24	2.14
C0940-098-5250-S	2.642	67.10	30.35	135.02	11.64	2.04
C0940-098-5500-S	2.763	70.18	30.35	135.02	11.09	1.94
C0940-098-5750-S	2.884	73.25	30.35	135.02	10.59	1.85
C0940-098-6000-S	3.005	76.32	30.35	135.02	10.14	1.77
C0940-098-6250-S	3.126	79.40	30.35	135.02	9.72	1.70
C0940-098-6500-S	3.247	82.47	30.35	135.02	9.33	1.63
C0940-098-6750-S	3.368	85.54	30.35	135.02	8.98	1.57
C0940-098-7000-S	3.489	88.62	30.35	135.02	8.65	1.51
C0940-098-7500-S	3.731	94.76	30.35	135.02	8.05	1.41
C0940-098-8000-S	3.973	100.91	30.35	135.02	7.54	1.32
C0940-098-8500-S*	4.265	108.34	30.35	135.02	7.17	1.25
C0940-098-9000-S*	4.507	114.48	30.35	135.02	6.76	1.18
C0940-098-9500-S*	4.749	120.63	30.35	135.02	6.39	1.12
C0940-105-1375-S	0.812	20.63	36.56	162.62	64.96	11.37
C0940-105-1500-S	0.877	22.27	36.56	162.62	58.67	10.27
C0940-105-1625-S	0.941	23.91	36.56	162.62	53.48	9.36
C0940-105-1750-S	1.006	25.55	36.56	162.62	49.14	8.60
C0940-105-1875-S	1.071	27.20	36.56	162.62	45.45	7.95
C0940-105-2000-S	1.135	28.84	36.56	162.62	42.28	7.40
C0940-105-2125-S	1.200	30.48	36.56	162.62	39.52	6.92
C0940-105-2250-S	1.265	32.12	36.56	162.62	37.10	6.49
C0940-105-2375-S	1.329	33.76	36.56	162.62	34.96	6.12
C0940-105-2500-S	1.394	35.40	36.56	162.62	33.05	5.78
C0940-105-2625-S	1.458	37.04	36.56	162.62	31.34	5.48
C0940-105-2750-S	1.523	38.68	36.56	162.62	29.79	5.21
C0940-105-2875-S	1.588	40.33	36.56	162.62	28.40	4.97

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0940-105-3000-M	0.940	23.88	0.105	2.67	3.000	76.20	1.487	37.78	1.281	32.54	47.19	209.91	31.19	5.46
C0940-105-3250-M	0.940	23.88	0.105	2.67	3.250	82.55	1.602	40.68	1.376	34.96	47.19	209.91	28.63	5.01
C0940-105-3500-M	0.940	23.88	0.105	2.67	3.500	88.90	1.716	43.59	1.471	37.37	47.19	209.91	26.45	4.63
C0940-105-3750-M	0.940	23.88	0.105	2.67	3.750	95.25	1.831	46.50	1.566	39.79	47.19	209.91	24.59	4.30
C0940-105-4000-M	0.940	23.88	0.105	2.67	4.000	101.60	1.945	49.40	1.661	42.20	47.19	209.91	22.96	4.02
C0940-105-4250-M	0.940	23.88	0.105	2.67	4.250	107.95	2.059	52.31	1.757	44.62	47.19	209.91	21.54	3.77
C0940-105-4500-M	0.940	23.88	0.105	2.67	4.500	114.30	2.174	55.22	1.852	47.03	47.19	209.91	20.29	3.55
C0940-105-4750-M	0.940	23.88	0.105	2.67	4.750	120.65	2.288	58.12	1.947	49.44	47.19	209.91	19.17	3.35
C0940-105-5000-M	0.940	23.88	0.105	2.67	5.000	127.00	2.403	61.03	2.042	51.86	47.19	209.91	18.17	3.18
C0940-105-5250-M	0.940	23.88	0.105	2.67	5.250	133.35	2.517	63.94	2.137	54.27	47.19	209.91	17.27	3.02
C0940-105-5500-M	0.940	23.88	0.105	2.67	5.500	139.70	2.632	66.84	2.232	56.69	47.19	209.91	16.45	2.88
C0940-105-5750-M	0.940	23.88	0.105	2.67	5.750	146.05	2.746	69.75	2.327	59.10	47.19	209.91	15.71	2.75
C0940-105-6000-M	0.940	23.88	0.105	2.67	6.000	152.40	2.861	72.66	2.422	61.52	47.19	209.91	15.03	2.63
C0940-105-6250-M	0.940	23.88	0.105	2.67	6.250	158.75	2.975	75.57	2.517	63.93	47.19	209.91	14.41	2.52
C0940-105-6500-M	0.940	23.88	0.105	2.67	6.500	165.10	3.089	78.47	2.612	66.34	47.19	209.91	13.84	2.42
C0940-105-6750-M	0.940	23.88	0.105	2.67	6.750	171.45	3.204	81.38	2.707	68.76	47.19	209.91	13.31	2.33
C0940-105-7000-M	0.940	23.88	0.105	2.67	7.000	177.80	3.318	84.29	2.802	71.17	47.19	209.91	12.82	2.24
C0940-105-7500-M	0.940	23.88	0.105	2.67	7.500	190.50	3.547	90.10	2.992	76.00	47.19	209.91	11.94	2.09
C0940-105-8000-M	0.940	23.88	0.105	2.67	8.000	203.20	3.776	95.91	3.182	80.83	47.19	209.91	11.17	1.96
C0940-105-8500-M	0.940	23.88	0.105	2.67	8.500	215.90	4.005	101.73	3.372	85.66	47.19	209.91	10.50	1.84
C0940-105-9000-M	0.940	23.88	0.105	2.67	9.000	228.60	4.234	107.54	3.562	90.49	47.19	209.91	9.90	1.73
C0940-105-9500-M	0.940	23.88	0.105	2.67	9.500	241.30	4.463	113.36	3.753	95.32	47.19	209.91	9.37	1.64
C0940-112-1375-M	0.940	23.88	0.112	2.85	1.375	34.93	0.790	20.07	0.721	18.32	56.38	250.79	96.40	16.87
C0940-112-1500-M	0.940	23.88	0.112	2.85	1.500	38.10	0.852	21.63	0.774	19.66	56.38	250.79	86.96	15.22
C0940-112-1625-M	0.940	23.88	0.112	2.85	1.625	41.28	0.913	23.19	0.827	21.00	56.38	250.79	79.20	13.86
C0940-112-1750-M	0.940	23.88	0.112	2.85	1.750	44.45	0.975	24.75	0.880	22.34	56.38	250.79	72.71	12.72
C0940-112-1875-M	0.940	23.88	0.112	2.85	1.875	47.63	1.036	26.32	0.932	23.68	56.38	250.79	67.21	11.76
C0940-112-2000-M	0.940	23.88	0.112	2.85	2.000	50.80	1.098	27.88	0.985	25.03	56.38	250.79	62.48	10.93
C0940-112-2125-M	0.940	23.88	0.112	2.85	2.125	53.98	1.159	29.44	1.038	26.37	56.38	250.79	58.37	10.21
C0940-112-2250-M	0.940	23.88	0.112	2.85	2.250	57.15	1.221	31.00	1.091	27.71	56.38	250.79	54.77	9.58
C0940-112-2375-M	0.940	23.88	0.112	2.85	2.375	60.33	1.282	32.56	1.144	29.05	56.38	250.79	51.58	9.03
C0940-112-2500-M	0.940	23.88	0.112	2.85	2.500	63.50	1.344	34.13	1.196	30.39	56.38	250.79	48.75	8.53
C0940-112-2625-M	0.940	23.88	0.112	2.85	2.625	66.68	1.405	35.69	1.249	31.73	56.38	250.79	46.21	8.09
C0940-112-2750-M	0.940	23.88	0.112	2.85	2.750	69.85	1.466	37.25	1.302	33.07	56.38	250.79	43.93	7.69
C0940-112-2875-M	0.940	23.88	0.112	2.85	2.875	73.03	1.528	38.81	1.355	34.41	56.38	250.79	41.86	7.32
C0940-112-3000-M	0.940	23.88	0.112	2.85	3.000	76.20	1.589	40.37	1.408	35.75	56.38	250.79	39.97	6.99
C0940-112-3250-M	0.940	23.88	0.112	2.85	3.250	82.55	1.712	43.50	1.513	38.43	56.38	250.79	36.67	6.42
C0940-112-3500-M	0.940	23.88	0.112	2.85	3.500	88.90	1.835	46.62	1.619	41.12	56.38	250.79	33.87	5.93
C0940-112-3750-M	0.940	23.88	0.112	2.85	3.750	95.25	1.958	49.74	1.724	43.80	56.38	250.79	31.47	5.51
C0940-112-4000-M	0.940	23.88	0.112	2.85	4.000	101.60	2.081	52.87	1.830	46.48	56.38	250.79	29.39	5.14
C0940-112-4250-M	0.940	23.88	0.112	2.85	4.250	107.95	2.204	55.99	1.935	49.16	56.38	250.79	27.56	4.82
C0940-112-4500-M	0.940	23.88	0.112	2.85	4.500	114.30	2.327	59.11	2.041	51.84	56.38	250.79	25.95	4.54
C0940-112-4750-M	0.940	23.88	0.112	2.85	4.750	120.65	2.450	62.24	2.147	54.52	56.38	250.79	24.52	4.29
C0940-112-5000-M	0.940	23.88	0.112	2.85	5.000	127.00	2.573	65.36	2.252	57.21	56.38	250.79	23.23	4.07
C0940-112-5250-M	0.940	23.88	0.112	2.85	5.250	133.35	2.696	68.48	2.358	59.89	56.38	250.79	22.08	3.86
C0940-112-5500-M	0.940	23.88	0.112	2.85	5.500	139.70	2.819	71.61	2.463	62.57	56.38	250.79	21.03	3.68
C0940-112-5750-M	0.940	23.88	0.112	2.85	5.750	146.05	2.942	74.73	2.569	65.25	56.38	250.79	20.08	3.51
C0940-112-6000-M	0.940	23.88	0.112	2.85	6.000	152.40	3.065	77.85	2.675	67.93	56.38	250.79	19.21	3.36
C0940-112-6250-M	0.940	23.88	0.112	2.85	6.250	158.75	3.188	80.98	2.780	70.61	56.38	250.79	18.41	3.22
C0940-112-6500-M	0.940	23.88	0.112	2.85	6.500	165.10	3.311	84.10	2.886	73.30	56.38	250.79	17.68	3.09
C0940-112-6750-M	0.940	23.88	0.112	2.85	6.750	171.45	3.434	87.22	2.991	75.98	56.38	250.79	17.00	2.98
C0940-112-7000-M	0.940	23.88	0.112	2.85	7.000	177.80	3.557	90.35	3.097	78.66	56.38	250.79	16.38	2.87
C0940-112-7500-M	0.940	23.88	0.112	2.85	7.500	190.50	3.803	96.59	3.308	84.02	56.38	250.79	15.25	2.67
C0940-112-8000-M	0.940	23.88	0.112	2.85	8.000	203.20	4.049	102.84	3.519	89.39	56.38	250.79	14.27	2.50
C0940-112-8500-M	0.940	23.88	0.112	2.85	8.500	215.90	4.295	109.09	3.730	94.75	56.38	250.79	13.41	2.35
C0940-112-9000-M	0.940	23.88	0.112	2.85	9.000	228.60	4.541	115.33	3.941	100.11	56.38	250.79	12.64	2.21
C0940-112-9500-M	0.940	23.88	0.112	2.85	9.500	241.30	4.787	121.58	4.153	105.48	56.38	250.79	11.96	2.09
C0940-125-1375-M	0.940	23.88	0.125	3.18	1.375	34.93	0.873	22.17	0.823	20.91	76.23	339.10	151.76	26.56
C0940-125-1500-M	0.940	23.88	0.125	3.18	1.500	38.10	0.942	23.92	0.886	22.49	76.23	339.10	136.58	23.90
C0940-125-1625-M	0.940	23.88	0.125	3.18	1.625	41.28	1.011	25.68	0.948	24.07	76.23	339.10	124.16	21.73
C0940-125-1750-M	0.940	23.88	0.125	3.18	1.750	44.45	1.080	27.44	1.010	25.66	76.23	339.10	113.82	19.92
C0940-125-1875-M	0.940	23.88	0.125	3.18	1.875	47.63	1.149	29.19	1.072	27.24	76.23	339.10	105.06	18.39
C0940-125-2000-M	0.940	23.88	0.125	3.18	2.000	50.80	1.219	30.95	1.135	28.82	76.23	339.10	97.56	17.07
C0940-125-2125-M	0.940	23.88	0.125	3.18	2.125	53.98	1.288	32.71	1.197	30.40	76.23	339.10	91.05	15.93

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0940-105-3000-S	1.652	41.97	36.56	162.62	27.13	4.75
C0940-105-3250-S	1.781	45.25	36.56	162.62	24.89	4.36
C0940-105-3500-S	1.911	48.53	36.56	162.62	23.00	4.03
C0940-105-3750-S	2.040	51.81	36.56	162.62	21.38	3.74
C0940-105-4000-S	2.169	55.10	36.56	162.62	19.97	3.49
C0940-105-4250-S	2.298	58.38	36.56	162.62	18.73	3.28
C0940-105-4500-S	2.428	61.66	36.56	162.62	17.64	3.09
C0940-105-4750-S	2.557	64.94	36.56	162.62	16.67	2.92
C0940-105-5000-S	2.686	68.23	36.56	162.62	15.80	2.76
C0940-105-5250-S	2.815	71.51	36.56	162.62	15.02	2.63
C0940-105-5500-S	2.945	74.79	36.56	162.62	14.31	2.50
C0940-105-5750-S	3.074	78.07	36.56	162.62	13.66	2.39
C0940-105-6000-S	3.203	81.36	36.56	162.62	13.07	2.29
C0940-105-6250-S	3.332	84.64	36.56	162.62	12.53	2.19
C0940-105-6500-S	3.461	87.92	36.56	162.62	12.03	2.11
C0940-105-6750-S	3.591	91.20	36.56	162.62	11.57	2.03
C0940-105-7000-S	3.720	94.49	36.56	162.62	11.15	1.95
C0940-105-7500-S	3.978	101.05	36.56	162.62	10.38	1.82
C0940-105-8000-S	4.237	107.62	36.56	162.62	9.72	1.70
C0940-105-8500-S	4.495	114.18	36.56	162.62	9.13	1.60
C0940-105-9000-S	4.754	120.75	36.56	162.62	8.61	1.51
C0940-105-9500-S	5.012	127.31	36.56	162.62	8.15	1.43
C0940-112-1375-S	0.857	21.76	43.46	193.34	83.83	14.67
C0940-112-1500-S	0.925	23.50	43.46	193.34	75.62	13.23
C0940-112-1625-S	0.994	25.24	43.46	193.34	68.87	12.05
C0940-112-1750-S	1.063	26.99	43.46	193.34	63.23	11.06
C0940-112-1875-S	1.131	28.73	43.46	193.34	58.44	10.23
C0940-112-2000-S	1.200	30.48	43.46	193.34	54.33	9.51
C0940-112-2125-S	1.269	32.22	43.46	193.34	50.76	8.88
C0940-112-2250-S	1.337	33.97	43.46	193.34	47.62	8.33
C0940-112-2375-S	1.406	35.71	43.46	193.34	44.86	7.85
C0940-112-2500-S	1.475	37.46	43.46	193.34	42.39	7.42
C0940-112-2625-S	1.543	39.20	43.46	193.34	40.19	7.03
C0940-112-2750-S	1.612	40.95	43.46	193.34	38.20	6.68
C0940-112-2875-S	1.681	42.69	43.46	193.34	36.40	6.37
C0940-112-3000-S	1.749	44.44	43.46	193.34	34.76	6.08
C0940-112-3250-S	1.887	47.93	43.46	193.34	31.89	5.58
C0940-112-3500-S	2.024	51.42	43.46	193.34	29.45	5.15
C0940-112-3750-S	2.162	54.91	43.46	193.34	27.36	4.79
C0940-112-4000-S	2.299	58.39	43.46	193.34	25.55	4.47
C0940-112-4250-S	2.436	61.88	43.46	193.34	23.97	4.19
C0940-112-4500-S	2.574	65.37	43.46	193.34	22.56	3.95
C0940-112-4750-S	2.711	68.86	43.46	193.34	21.32	3.73
C0940-112-5000-S	2.849	72.35	43.46	193.34	20.20	3.54
C0940-112-5250-S	2.986	75.84	43.46	193.34	19.20	3.36
C0940-112-5500-S	3.123	79.33	43.46	193.34	18.29	3.20
C0940-112-5750-S	3.261	82.82	43.46	193.34	17.46	3.06
C0940-112-6000-S	3.398	86.31	43.46	193.34	16.70	2.92
C0940-112-6250-S	3.535	89.80	43.46	193.34	16.01	2.80
C0940-112-6500-S	3.673	93.29	43.46	193.34	15.37	2.69
C0940-112-6750-S	3.810	96.78	43.46	193.34	14.79	2.59
C0940-112-7000-S	3.948	100.27	43.46	193.34	14.24	2.49
C0940-112-7500-S	4.222	107.25	43.46	193.34	13.26	2.32
C0940-112-8000-S	4.497	114.23	43.46	193.34	12.41	2.17
C0940-112-8500-S	4.772	121.21	43.46	193.34	11.66	2.04
C0940-112-9000-S	5.047	128.18	43.46	193.34	10.99	1.92
C0940-112-9500-S	5.321	135.16	43.46	193.34	10.40	1.82
C0940-125-1375-S	0.934	23.72	58.22	258.95	131.96	23.09
C0940-125-1500-S	1.010	25.65	58.22	258.95	118.77	20.78
C0940-125-1625-S	1.086	27.58	58.22	258.95	107.97	18.89
C0940-125-1750-S	1.162	29.51	58.22	258.95	98.97	17.32
C0940-125-1875-S	1.238	31.44	58.22	258.95	91.36	15.99
C0940-125-2000-S	1.314	33.37	58.22	258.95	84.83	14.85
C0940-125-2125-S	1.390	35.30	58.22	258.95	79.18	13.86

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0940-125-2250-M	**0.940**	**23.88**	**0.125**	**3.18**	**2.250**	**57.15**	**1.357**	**34.47**	**1.259**	**31.99**	**76.23**	**339.10**	**85.36**	**14.94**	**C0940-125-2250-S**	**1.466**	**37.23**	**58.22**	**258.95**	**74.23**	**12.99**
C0940-125-2375-M	**0.940**	**23.88**	**0.125**	**3.18**	**2.375**	**60.33**	**1.426**	**36.22**	**1.322**	**33.57**	**76.23**	**339.10**	**80.34**	**14.06**	**C0940-125-2375-S**	**1.542**	**39.16**	**58.22**	**258.95**	**69.86**	**12.23**
C0940-125-2500-M	**0.940**	**23.88**	**0.125**	**3.18**	**2.500**	**63.50**	**1.495**	**37.98**	**1.384**	**35.15**	**76.23**	**339.10**	**75.88**	**13.28**	**C0940-125-2500-S**	**1.618**	**41.09**	**58.22**	**258.95**	**65.98**	**11.55**
C0940-125-2625-M	**0.940**	**23.88**	**0.125**	**3.18**	**2.625**	**66.68**	**1.564**	**39.74**	**1.446**	**36.73**	**76.23**	**339.10**	**71.88**	**12.58**	**C0940-125-2625-S**	**1.694**	**43.02**	**58.22**	**258.95**	**62.51**	**10.94**
C0940-125-2750-M	**0.940**	**23.88**	**0.125**	**3.18**	**2.750**	**69.85**	**1.634**	**41.50**	**1.509**	**38.32**	**76.23**	**339.10**	**68.29**	**11.95**	**C0940-125-2750-S**	**1.770**	**44.95**	**58.22**	**258.95**	**59.38**	**10.39**
C0940-125-2875-M	**0.940**	**23.88**	**0.125**	**3.18**	**2.875**	**73.03**	**1.703**	**43.25**	**1.571**	**39.90**	**76.23**	**339.10**	**65.04**	**11.38**	**C0940-125-2875-S**	**1.846**	**46.88**	**58.22**	**258.95**	**56.56**	**9.90**
C0940-125-3000-M	**0.940**	**23.88**	**0.125**	**3.18**	**3.000**	**76.20**	**1.772**	**45.01**	**1.633**	**41.48**	**76.23**	**339.10**	**62.08**	**10.86**	**C0940-125-3000-S**	**1.922**	**48.81**	**58.22**	**258.95**	**53.98**	**9.45**
C0940-125-3250-M	**0.940**	**23.88**	**0.125**	**3.18**	**3.250**	**82.55**	**1.910**	**48.52**	**1.758**	**44.65**	**76.23**	**339.10**	**56.91**	**9.96**	**C0940-125-3250-S**	**2.074**	**52.67**	**58.22**	**258.95**	**49.49**	**8.66**
C0940-125-3500-M	**0.940**	**23.88**	**0.125**	**3.18**	**3.500**	**88.90**	**2.049**	**52.04**	**1.882**	**47.81**	**76.23**	**339.10**	**52.53**	**9.19**	**C0940-125-3500-S**	**2.226**	**56.53**	**58.22**	**258.95**	**45.68**	**7.99**
C0940-125-3750-M	**0.940**	**23.88**	**0.125**	**3.18**	**3.750**	**95.25**	**2.187**	**55.55**	**2.007**	**50.98**	**76.23**	**339.10**	**48.78**	**8.54**	**C0940-125-3750-S**	**2.378**	**60.39**	**58.22**	**258.95**	**42.42**	**7.42**
C0940-125-4000-M	**0.940**	**23.88**	**0.125**	**3.18**	**4.000**	**101.60**	**2.326**	**59.07**	**2.132**	**54.14**	**76.23**	**339.10**	**45.53**	**7.97**	**C0940-125-4000-S**	**2.529**	**64.25**	**58.22**	**258.95**	**39.59**	**6.93**
C0940-125-4250-M	**0.940**	**23.88**	**0.125**	**3.18**	**4.250**	**107.95**	**2.464**	**62.58**	**2.256**	**57.31**	**76.23**	**339.10**	**42.68**	**7.47**	**C0940-125-4250-S**	**2.681**	**68.11**	**58.22**	**258.95**	**37.11**	**6.49**
C0940-125-4500-M	**0.940**	**23.88**	**0.125**	**3.18**	**4.500**	**114.30**	**2.602**	**66.10**	**2.381**	**60.47**	**76.23**	**339.10**	**40.17**	**7.03**	**C0940-125-4500-S**	**2.833**	**71.97**	**58.22**	**258.95**	**34.93**	**6.11**
C0940-125-4750-M	**0.940**	**23.88**	**0.125**	**3.18**	**4.750**	**120.65**	**2.741**	**69.61**	**2.505**	**63.63**	**76.23**	**339.10**	**37.94**	**6.64**	**C0940-125-4750-S**	**2.985**	**75.83**	**58.22**	**258.95**	**32.99**	**5.77**
C0940-125-5000-M	**0.940**	**23.88**	**0.125**	**3.18**	**5.000**	**127.00**	**2.879**	**73.13**	**2.630**	**66.80**	**76.23**	**339.10**	**35.94**	**6.29**	**C0940-125-5000-S**	**3.137**	**79.69**	**58.22**	**258.95**	**31.25**	**5.47**
C0940-125-5250-M	**0.940**	**23.88**	**0.125**	**3.18**	**5.250**	**133.35**	**3.017**	**76.64**	**2.755**	**69.96**	**76.23**	**339.10**	**34.15**	**5.98**	**C0940-125-5250-S**	**3.289**	**83.55**	**58.22**	**258.95**	**29.69**	**5.20**
C0940-125-5500-M	**0.940**	**23.88**	**0.125**	**3.18**	**5.500**	**139.70**	**3.156**	**80.15**	**2.879**	**73.13**	**76.23**	**339.10**	**32.52**	**5.69**	**C0940-125-5500-S**	**3.441**	**87.41**	**58.22**	**258.95**	**28.28**	**4.95**
C0940-125-5750-M	**0.940**	**23.88**	**0.125**	**3.18**	**5.750**	**146.05**	**3.294**	**83.67**	**3.004**	**76.29**	**76.23**	**339.10**	**31.04**	**5.43**	**C0940-125-5750-S**	**3.593**	**91.27**	**58.22**	**258.95**	**26.99**	**4.72**
C0940-125-6000-M	**0.940**	**23.88**	**0.125**	**3.18**	**6.000**	**152.40**	**3.432**	**87.18**	**3.128**	**79.46**	**76.23**	**339.10**	**29.69**	**5.20**	**C0940-125-6000-S**	**3.745**	**95.13**	**58.22**	**258.95**	**25.82**	**4.52**
C0940-125-6250-M	**0.940**	**23.88**	**0.125**	**3.18**	**6.250**	**158.75**	**3.571**	**90.70**	**3.253**	**82.62**	**76.23**	**339.10**	**28.45**	**4.98**	**C0940-125-6250-S**	**3.897**	**98.99**	**58.22**	**258.95**	**24.74**	**4.33**
C0940-125-6500-M	**0.940**	**23.88**	**0.125**	**3.18**	**6.500**	**165.10**	**3.709**	**94.21**	**3.378**	**85.79**	**76.23**	**339.10**	**27.32**	**4.78**	**C0940-125-6500-S**	**4.049**	**102.85**	**58.22**	**258.95**	**23.75**	**4.16**
C0940-125-6750-M	**0.940**	**23.88**	**0.125**	**3.18**	**6.750**	**171.45**	**3.848**	**97.73**	**3.502**	**88.95**	**76.23**	**339.10**	**26.27**	**4.60**	**C0940-125-6750-S**	**4.201**	**106.71**	**58.22**	**258.95**	**22.84**	**4.00**
C0940-125-7000-M	**0.940**	**23.88**	**0.125**	**3.18**	**7.000**	**177.80**	**3.986**	**101.24**	**3.627**	**92.12**	**76.23**	**339.10**	**25.29**	**4.43**	**C0940-125-7000-S**	**4.353**	**110.57**	**58.22**	**258.95**	**21.99**	**3.85**
C0940-125-7500-M	**0.940**	**23.88**	**0.125**	**3.18**	**7.500**	**190.50**	**4.263**	**108.27**	**3.876**	**98.45**	**76.23**	**339.10**	**23.55**	**4.12**	**C0940-125-7500-S**	**4.657**	**118.29**	**58.22**	**258.95**	**20.48**	**3.58**
C0940-125-8000-M	**0.940**	**23.88**	**0.125**	**3.18**	**8.000**	**203.20**	**4.539**	**115.30**	**4.125**	**104.78**	**76.23**	**339.10**	**22.03**	**3.86**	**C0940-125-8000-S**	**4.961**	**126.01**	**58.22**	**258.95**	**19.16**	**3.35**
C0940-125-8500-M	**0.940**	**23.88**	**0.125**	**3.18**	**8.500**	**215.90**	**4.816**	**122.33**	**4.374**	**111.11**	**76.23**	**339.10**	**20.69**	**3.62**	**C0940-125-8500-S**	**5.265**	**133.73**	**58.22**	**258.95**	**18.00**	**3.15**
C0940-125-9000-M	**0.940**	**23.88**	**0.125**	**3.18**	**9.000**	**228.60**	**5.093**	**129.36**	**4.624**	**117.44**	**76.23**	**339.10**	**19.51**	**3.41**	**C0940-125-9000-S**	**5.569**	**141.45**	**58.22**	**258.95**	**16.97**	**2.97**
C0940-125-9500-M	**0.940**	**23.88**	**0.125**	**3.18**	**9.500**	**241.30**	**5.370**	**136.39**	**4.873**	**123.77**	**76.23**	**339.10**	**18.46**	**3.23**	**C0940-125-9500-S**	**5.873**	**149.17**	**58.22**	**258.95**	**16.05**	**2.81**
C0940-135-1375-M	0.940	23.88	0.135	3.43	1.375	34.93	0.931	23.65	0.895	22.75	94.09	418.53	212.00	37.10	C0940-135-1375-S	0.988	25.10	71.31	317.22	184.35	32.26
C0940-135-1500-M	0.940	23.88	0.135	3.43	1.500	38.10	1.006	25.55	0.965	24.50	94.09	418.53	190.45	33.33	C0940-135-1500-S	1.069	27.16	71.31	317.22	165.61	28.98
C0940-135-1625-M	0.940	23.88	0.135	3.43	1.625	41.28	1.081	27.45	1.034	26.26	94.09	418.53	172.88	30.25	C0940-135-1625-S	1.151	29.23	71.31	317.22	150.33	26.31
C0940-135-1750-M	0.940	23.88	0.135	3.43	1.750	44.45	1.156	29.35	1.103	28.02	94.09	418.53	158.28	27.70	C0940-135-1750-S	1.232	31.29	71.31	317.22	137.64	24.09
C0940-135-1875-M	0.940	23.88	0.135	3.43	1.875	47.63	1.230	31.25	1.172	29.78	94.09	418.53	145.95	25.54	C0940-135-1875-S	1.313	33.35	71.31	317.22	126.92	22.21
C0940-135-2000-M	0.940	23.88	0.135	3.43	2.000	50.80	1.305	33.15	1.242	31.54	94.09	418.53	135.41	23.70	C0940-135-2000-S	1.394	35.42	71.31	317.22	117.75	20.61
C0940-135-2125-M	0.940	23.88	0.135	3.43	2.125	53.98	1.380	35.05	1.311	33.30	94.09	418.53	126.28	22.10	C0940-135-2125-S	1.476	37.48	71.31	317.22	109.81	19.22
C0940-135-2250-M	0.940	23.88	0.135	3.43	2.250	57.15	1.455	36.95	1.380	35.05	94.09	418.53	118.31	20.70	C0940-135-2250-S	1.557	39.54	71.31	317.22	102.88	18.00
C0940-135-2375-M	0.940	23.88	0.135	3.43	2.375	60.33	1.530	38.85	1.449	36.81	94.09	418.53	111.29	19.48	C0940-135-2375-S	1.638	41.61	71.31	317.22	96.77	16.93
C0940-135-2500-M	0.940	23.88	0.135	3.43	2.500	63.50	1.604	40.75	1.519	38.57	94.09	418.53	105.05	18.38	C0940-135-2500-S	1.719	43.67	71.31	317.22	91.35	15.99
C0940-135-2625-M	0.940	23.88	0.135	3.43	2.625	66.68	1.679	42.65	1.588	40.33	94.09	418.53	99.47	17.41	C0940-135-2625-S	1.801	45.73	71.31	317.22	86.50	15.14
C0940-135-2750-M	0.940	23.88	0.135	3.43	2.750	69.85	1.754	44.55	1.657	42.09	94.09	418.53	94.46	16.53	C0940-135-2750-S	1.882	47.80	71.31	317.22	82.14	14.37
C0940-135-2875-M	0.940	23.88	0.135	3.43	2.875	73.03	1.829	46.45	1.726	43.85	94.09	418.53	89.93	15.74	C0940-135-2875-S	1.963	49.86	71.31	317.22	78.20	13.68
C0940-135-3000-M	0.940	23.88	0.135	3.43	3.000	76.20	1.903	48.35	1.795	45.61	94.09	418.53	85.81	15.02	C0940-135-3000-S	2.044	51.92	71.31	317.22	74.62	13.06
C0940-135-3250-M	0.940	23.88	0.135	3.43	3.250	82.55	2.053	52.15	1.934	49.12	94.09	418.53	78.61	13.76	C0940-135-3250-S	2.207	56.05	71.31	317.22	68.36	11.96
C0940-135-3500-M	0.940	23.88	0.135	3.43	3.500	88.90	2.203	55.95	2.072	52.64	94.09	418.53	72.53	12.69	C0940-135-3500-S	2.369	60.18	71.31	317.22	63.07	11.04
C0940-135-3750-M	0.940	23.88	0.135	3.43	3.750	95.25	2.352	59.75	2.211	56.16	94.09	418.53	67.32	11.78	C0940-135-3750-S	2.532	64.30	71.31	317.22	58.54	10.24
C0940-135-4000-M	0.940	23.88	0.135	3.43	4.000	101.60	2.502	63.55	2.349	59.67	94.09	418.53	62.80	10.99	C0940-135-4000-S	2.694	68.43	71.31	317.22	54.61	9.56
C0940-135-4250-M	0.940	23.88	0.135	3.43	4.250	107.95	2.651	67.35	2.488	63.19	94.09	418.53	58.86	10.30	C0940-135-4250-S	2.857	72.56	71.31	317.22	51.18	8.96
C0940-135-4500-M	0.940	23.88	0.135	3.43	4.500	114.30	2.801	71.15	2.626	66.71	94.09	418.53	55.38	9.69	C0940-135-4500-S	3.019	76.69	71.31	317.22	48.16	8.43
C0940-135-4750-M	0.940	23.88	0.135	3.43	4.750	120.65	2.951	74.95	2.765	70.22	94.09	418.53	52.29	9.15	C0940-135-4750-S	3.182	80.81	71.31	317.22	45.47	7.96
C0940-135-5000-M	0.940	23.88	0.135	3.43	5.000	127.00	3.100	78.74	2.903	73.74	94.09	418.53	49.53	8.67	C0940-135-5000-S	3.344	84.94	71.31	317.22	43.07	7.54
C0940-135-5250-M	0.940	23.88	0.135	3.43	5.250	133.35	3.250	82.54	3.042	77.26	94.09	418.53	47.04	8.23	C0940-135-5250-S	3.507	89.07	71.31	317.22	40.90	7.16
C0940-135-5500-M	0.940	23.88	0.135	3.43	5.500	139.70	3.399	86.34	3.180	80.77	94.09	418.53	44.79	7.84	C0940-135-5500-S	3.669	93.19	71.31	317.22	38.95	6.82
C0940-135-5750-M	0.940	23.88	0.135	3.43	5.750	146.05	3.549	90.14	3.319	84.29	94.09	418.53	42.75	7.48	C0940-135-5750-S	3.831	97.32	71.31	317.22	37.17	6.51
C0940-135-6000-M	0.940	23.88	0.135	3.43	6.000	152.40	3.699	93.94	3.457	87.81	94.09	418.53	40.88	7.15	C0940-135-6000-S	3.994	101.45	71.31	317.22	35.55	6.22
C0940-135-6250-M	0.940	23.88	0.135	3.43	6.250	158.75	3.848	97.74	3.595	91.33	94.09	418.53	39.17	6.86	C0940-135-6250-S	4.156	105.57	71.31	317.22	34.06	5.96
C0940-135-6500-M	0.940	23.88	0.135	3.43	6.500	165.10	3.998	101.54	3.734	94.84	94.09	418.53	37.60	6.58	C0940-135-6500-S	4.319	109.70	71.31	317.22	32.70	5.72
C0940-135-6750-M	0.940	23.88	0.135	3.43	6.750	171.45	4.147	105.34	3.872	98.36	94.09	418.53	36.15	6.33	C0940-135-6750-S	4.481	113.83	71.31	317.22	31.44	5.50
C0940-135-7000-M	0.940	23.88	0.135	3.43	7.000	177.80	4.297	109.14	4.011	101.88	94.09	418.53	34.81	6.09	C0940-135-7000-S	4.644	117.95	71.31	317.22	30.27	5.30
C0940-135-7500-M	0.940	23.88	0.135	3.43	7.500	190.50	4.596	116.74	4.288	108.91	94.09	418.53	32.40	5.67	C0940-135-7500-S	4.969	126.21	71.31	317.22	28.17	4.93
C0940-135-8000-M	0.940	23.88	0.135	3.43	8.000	203.20	4.895	124.34	4.565	115.94	94.09	418.53	30.31	5.30	C0940-135-8000-S	5.294	134.46	71.31	317.22	26.35	4.61
C0940-135-8500-M	0.940	23.88	0.135	3.43	8.500	215.90	5.194	131.94	4.842	122.98	94.09	418.53	28.46	4.98	C0940-135-8500-S	5.619	142.72	71.31	317.22	24.75	4.33
C0940-135-9000-M	0.940	23.88	0.135	3.43	9.000	228.60	5.494	139.54	5.119	130.01	94.09	418.53	26.83	4.70	C0940-135-9000-S	5.944	150.97	71.31	317.22	23.33	4.08
C0940-135-9500-M	0.940	23.88	0.135	3.43	9.500	241.30	5.793	147.14	5.395	137.04	94.09	418.53	25.38	4.44	C0940-135-9500-S	6.269	159.22	71.31	317.22	22.07	3.86
C0940-148-1375-M	0.940	23.88	0.148	3.76	1.375	34.93	1.000	25.40	0.980	24.90	120.83	537.46	322.16	56.38	C0940-148-1375-S	1.051	26.70	90.68	403.36	280.14	49.02

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0940-148-1500-M	0.940	23.88	0.148	3.76	1.500	38.10	1.082	27.47	1.058	26.87	120.83	537.46	288.72	50.53
C0940-148-1625-M	0.940	23.88	0.148	3.76	1.625	41.28	1.163	29.54	1.136	28.84	120.83	537.46	261.56	45.77
C0940-148-1750-M	0.940	23.88	0.148	3.76	1.750	44.45	1.245	31.61	1.213	30.82	120.83	537.46	239.07	41.84
C0940-148-1875-M	0.940	23.88	0.148	3.76	1.875	47.63	1.326	33.68	1.291	32.79	120.83	537.46	220.15	38.53
C0940-148-2000-M	0.940	23.88	0.148	3.76	2.000	50.80	1.408	35.76	1.368	34.76	120.83	537.46	204.00	35.70
C0940-148-2125-M	0.940	23.88	0.148	3.76	2.125	53.98	1.489	37.83	1.446	36.73	120.83	537.46	190.06	33.26
C0940-148-2250-M	0.940	23.88	0.148	3.76	2.250	57.15	1.571	39.90	1.524	38.70	120.83	537.46	177.90	31.13
C0940-148-2375-M	0.940	23.88	0.148	3.76	2.375	60.33	1.652	41.97	1.601	40.67	120.83	537.46	167.20	29.26
C0940-148-2500-M	0.940	23.88	0.148	3.76	2.500	63.50	1.734	44.04	1.679	42.64	120.83	537.46	157.72	27.60
C0940-148-2625-M	0.940	23.88	0.148	3.76	2.625	66.68	1.815	46.11	1.756	44.61	120.83	537.46	149.26	26.12
C0940-148-2750-M	0.940	23.88	0.148	3.76	2.750	69.85	1.897	48.18	1.834	46.58	120.83	537.46	141.65	24.79
C0940-148-2875-M	0.940	23.88	0.148	3.76	2.875	73.03	1.979	50.26	1.911	48.55	120.83	537.46	134.79	23.59
C0940-148-3000-M	0.940	23.88	0.148	3.76	3.000	76.20	2.060	52.33	1.989	50.52	120.83	537.46	128.56	22.50
C0940-148-3250-M	0.940	23.88	0.148	3.76	3.250	82.55	2.223	56.47	2.144	54.46	120.83	537.46	117.68	20.59
C0940-148-3500-M	0.940	23.88	0.148	3.76	3.500	88.90	2.386	60.61	2.299	58.40	120.83	537.46	108.49	18.99
C0940-148-3750-M	0.940	23.88	0.148	3.76	3.750	95.25	2.549	64.76	2.454	62.34	120.83	537.46	100.64	17.61
C0940-148-4000-M	0.940	23.88	0.148	3.76	4.000	101.60	2.713	68.90	2.610	66.28	120.83	537.46	93.85	16.42
C0940-148-4250-M	0.940	23.88	0.148	3.76	4.250	107.95	2.876	73.04	2.765	70.23	120.83	537.46	87.91	15.38
C0940-148-4500-M	0.940	23.88	0.148	3.76	4.500	114.30	3.039	77.18	2.920	74.17	120.83	537.46	82.69	14.47
C0940-148-4750-M	0.940	23.88	0.148	3.76	4.750	120.65	3.202	81.33	3.075	78.11	120.83	537.46	78.05	13.66
C0940-148-5000-M	0.940	23.88	0.148	3.76	5.000	127.00	3.365	85.47	3.230	82.05	120.83	537.46	73.90	12.93
C0940-148-5250-M	0.940	23.88	0.148	3.76	5.250	133.35	3.528	89.61	3.385	85.99	120.83	537.46	70.17	12.28
C0940-148-5500-M	0.940	23.88	0.148	3.76	5.500	139.70	3.691	93.76	3.541	89.93	120.83	537.46	66.80	11.69
C0940-148-5750-M	0.940	23.88	0.148	3.76	5.750	146.05	3.854	97.90	3.696	93.87	120.83	537.46	63.74	11.15
C0940-148-6000-M	0.940	23.88	0.148	3.76	6.000	152.40	4.017	102.04	3.851	97.81	120.83	537.46	60.94	10.66
C0940-148-6250-M	0.940	23.88	0.148	3.76	6.250	158.75	4.180	106.18	4.006	101.75	120.83	537.46	58.38	10.22
C0940-148-6500-M	0.940	23.88	0.148	3.76	6.500	165.10	4.344	110.33	4.161	105.69	120.83	537.46	56.03	9.81
C0940-148-6750-M	0.940	23.88	0.148	3.76	6.750	171.45	4.507	114.47	4.316	109.64	120.83	537.46	53.86	9.43
C0940-148-7000-M	0.940	23.88	0.148	3.76	7.000	177.80	4.670	118.61	4.472	113.58	120.83	537.46	51.85	9.07
C0940-148-7500-M	0.940	23.88	0.148	3.76	7.500	190.50	4.996	126.90	4.782	121.46	120.83	537.46	48.25	8.44
C0940-148-8000-M	0.940	23.88	0.148	3.76	8.000	203.20	5.322	135.18	5.092	129.34	120.83	537.46	45.12	7.90
C0940-148-8500-M	0.940	23.88	0.148	3.76	8.500	215.90	5.648	143.47	5.402	137.22	120.83	537.46	42.37	7.41
C0940-148-9000-M	0.940	23.88	0.148	3.76	9.000	228.60	5.975	151.76	5.713	145.10	120.83	537.46	39.94	6.99
C0940-148-9500-M	0.940	23.88	0.148	3.76	9.500	241.30	6.301	160.04	6.023	152.99	120.83	537.46	37.77	6.61
C0940-162-1375-M	0.940	23.88	0.162	4.12	1.375	34.93	1.064	27.04	1.060	26.93	154.24	686.11	496.73	86.93
C0940-162-1500-M	0.940	23.88	0.162	4.12	1.500	38.10	1.153	29.27	1.146	29.10	154.24	686.11	443.93	77.69
C0940-162-1625-M	0.940	23.88	0.162	4.12	1.625	41.28	1.241	31.51	1.231	31.28	154.24	686.11	401.28	70.22
C0940-162-1750-M	0.940	23.88	0.162	4.12	1.750	44.45	1.329	33.75	1.317	33.45	154.24	686.11	366.10	64.07
C0940-162-1875-M	0.940	23.88	0.162	4.12	1.875	47.63	1.417	35.99	1.403	35.63	154.24	686.11	336.60	58.90
C0940-162-2000-M	0.940	23.88	0.162	4.12	2.000	50.80	1.505	38.22	1.488	37.80	154.24	686.11	311.49	54.51
C0940-162-2125-M	0.940	23.88	0.162	4.12	2.125	53.98	1.593	40.46	1.574	39.98	154.24	686.11	289.87	50.73
C0940-162-2250-M	0.940	23.88	0.162	4.12	2.250	57.15	1.681	42.70	1.660	42.15	154.24	686.11	271.06	47.44
C0940-162-2375-M	0.940	23.88	0.162	4.12	2.375	60.33	1.769	44.93	1.745	44.33	154.24	686.11	254.54	44.54
C0940-162-2500-M	0.940	23.88	0.162	4.12	2.500	63.50	1.857	47.17	1.831	46.50	154.24	686.11	239.92	41.99
C0940-162-2625-M	0.940	23.88	0.162	4.12	2.625	66.68	1.945	49.41	1.916	48.68	154.24	686.11	226.89	39.70
C0940-162-2750-M	0.940	23.88	0.162	4.12	2.750	69.85	2.033	51.64	2.002	50.85	154.24	686.11	215.20	37.66
C0940-162-2875-M	0.940	23.88	0.162	4.12	2.875	73.03	2.121	53.88	2.088	53.03	154.24	686.11	204.65	35.81
C0940-162-3000-M	0.940	23.88	0.162	4.12	3.000	76.20	2.209	56.12	2.173	55.20	154.24	686.11	195.09	34.14
C0940-162-3250-M	0.940	23.88	0.162	4.12	3.250	82.55	2.386	60.59	2.345	59.55	154.24	686.11	178.42	31.22
C0940-162-3500-M	0.940	23.88	0.162	4.12	3.500	88.90	2.562	65.07	2.516	63.90	154.24	686.11	164.38	28.77
C0940-162-3750-M	0.940	23.88	0.162	4.12	3.750	95.25	2.738	69.54	2.687	68.25	154.24	686.11	152.38	26.67
C0940-162-4000-M	0.940	23.88	0.162	4.12	4.000	101.60	2.914	74.01	2.858	72.60	154.24	686.11	142.02	24.85
C0940-162-4250-M	0.940	23.88	0.162	4.12	4.250	107.95	3.090	78.49	3.030	76.95	154.24	686.11	132.98	23.27
C0940-162-4500-M	0.940	23.88	0.162	4.12	4.500	114.30	3.266	82.96	3.201	81.30	154.24	686.11	125.02	21.88
C0940-162-4750-M	0.940	23.88	0.162	4.12	4.750	120.65	3.442	87.44	3.372	85.65	154.24	686.11	117.95	20.64
C0940-162-5000-M	0.940	23.88	0.162	4.12	5.000	127.00	3.618	91.91	3.543	90.00	154.24	686.11	111.65	19.54
C0940-162-5250-M	0.940	23.88	0.162	4.12	5.250	133.35	3.795	96.38	3.715	94.35	154.24	686.11	105.98	18.55
C0940-162-5500-M	0.940	23.88	0.162	4.12	5.500	139.70	3.971	100.86	3.886	98.70	154.24	686.11	100.86	17.65
C0940-162-5750-M	0.940	23.88	0.162	4.12	5.750	146.05	4.147	105.33	4.057	103.05	154.24	686.11	96.22	16.84
C0940-162-6000-M	0.940	23.88	0.162	4.12	6.000	152.40	4.323	109.80	4.228	107.40	154.24	686.11	91.98	16.10
C0940-162-6250-M	0.940	23.88	0.162	4.12	6.250	158.75	4.499	114.28	4.400	111.75	154.24	686.11	88.10	15.42
C0940-162-6500-M	0.940	23.88	0.162	4.12	6.500	165.10	4.675	118.75	4.571	116.10	154.24	686.11	84.53	14.79
C0940-162-6750-M	0.940	23.88	0.162	4.12	6.750	171.45	4.851	123.23	4.742	120.45	154.24	686.11	81.24	14.22
C0940-162-7000-M	0.940	23.88	0.162	4.12	7.000	177.80	5.028	127.70	4.913	124.80	154.24	686.11	78.20	13.69

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0940-148-1500-S	1.139	28.93	90.68	403.36	251.06	43.93
C0940-148-1625-S	1.226	31.15	90.68	403.36	227.44	39.80
C0940-148-1750-S	1.314	33.37	90.68	403.36	207.89	36.38
C0940-148-1875-S	1.401	35.59	90.68	403.36	191.43	33.50
C0940-148-2000-S	1.489	37.82	90.68	403.36	177.39	31.04
C0940-148-2125-S	1.576	40.04	90.68	403.36	165.27	28.92
C0940-148-2250-S	1.664	42.26	90.68	403.36	154.69	27.07
C0940-148-2375-S	1.751	44.48	90.68	403.36	145.39	25.44
C0940-148-2500-S	1.839	46.71	90.68	403.36	137.15	24.00
C0940-148-2625-S	1.926	48.93	90.68	403.36	129.79	22.71
C0940-148-2750-S	2.014	51.15	90.68	403.36	123.18	21.56
C0940-148-2875-S	2.101	53.37	90.68	403.36	117.21	20.51
C0940-148-3000-S	2.189	55.60	90.68	403.36	111.79	19.56
C0940-148-3250-S	2.364	60.04	90.68	403.36	102.33	17.91
C0940-148-3500-S	2.539	64.49	90.68	403.36	94.34	16.51
C0940-148-3750-S	2.714	68.93	90.68	403.36	87.51	15.31
C0940-148-4000-S	2.889	73.38	90.68	403.36	81.61	14.28
C0940-148-4250-S	3.064	77.82	90.68	403.36	76.45	13.38
C0940-148-4500-S	3.239	82.27	90.68	403.36	71.90	12.58
C0940-148-4750-S	3.414	86.71	90.68	403.36	67.87	11.88
C0940-148-5000-S	3.589	91.16	90.68	403.36	64.26	11.25
C0940-148-5250-S	3.764	95.60	90.68	403.36	61.02	10.68
C0940-148-5500-S	3.939	100.05	90.68	403.36	58.09	10.16
C0940-148-5750-S	4.114	104.49	90.68	403.36	55.42	9.70
C0940-148-6000-S	4.289	108.94	90.68	403.36	52.99	9.27
C0940-148-6250-S	4.464	113.38	90.68	403.36	50.77	8.88
C0940-148-6500-S	4.639	117.83	90.68	403.36	48.72	8.53
C0940-148-6750-S	4.814	122.27	90.68	403.36	46.84	8.20
C0940-148-7000-S	4.989	126.72	90.68	403.36	45.09	7.89
C0940-148-7500-S	5.339	135.61	90.68	403.36	41.96	7.34
C0940-148-8000-S	5.689	144.50	90.68	403.36	39.24	6.87
C0940-148-8500-S	6.039	153.39	90.68	403.36	36.85	6.45
C0940-148-9000-S	6.389	162.28	90.68	403.36	34.73	6.08
C0940-148-9500-S	6.739	171.17	90.68	403.36	32.84	5.75
C0940-162-1375-S	1.110	28.19	114.52	509.42	431.94	75.59
C0940-162-1500-S	1.203	30.56	114.52	509.42	386.03	67.55
C0940-162-1625-S	1.297	32.94	114.52	509.42	348.94	61.06
C0940-162-1750-S	1.390	35.31	114.52	509.42	318.35	55.71
C0940-162-1875-S	1.484	37.69	114.52	509.42	292.69	51.22
C0940-162-2000-S	1.577	40.06	114.52	509.42	270.86	47.40
C0940-162-2125-S	1.671	42.43	114.52	509.42	252.07	44.11
C0940-162-2250-S	1.764	44.81	114.52	509.42	235.71	41.25
C0940-162-2375-S	1.858	47.18	114.52	509.42	221.34	38.73
C0940-162-2500-S	1.951	49.56	114.52	509.42	208.63	36.51
C0940-162-2625-S	2.045	51.93	114.52	509.42	197.29	34.53
C0940-162-2750-S	2.138	54.31	114.52	509.42	187.13	32.75
C0940-162-2875-S	2.231	56.68	114.52	509.42	177.96	31.14
C0940-162-3000-S	2.325	59.05	114.52	509.42	169.64	29.69
C0940-162-3250-S	2.512	63.80	114.52	509.42	155.15	27.15
C0940-162-3500-S	2.699	68.55	114.52	509.42	142.94	25.01
C0940-162-3750-S	2.886	73.30	114.52	509.42	132.51	23.19
C0940-162-4000-S	3.073	78.05	114.52	509.42	123.50	21.61
C0940-162-4250-S	3.260	82.79	114.52	509.42	115.63	20.24
C0940-162-4500-S	3.447	87.54	114.52	509.42	108.71	19.02
C0940-162-4750-S	3.633	92.29	114.52	509.42	102.57	17.95
C0940-162-5000-S	3.820	97.04	114.52	509.42	97.09	16.99
C0940-162-5250-S	4.007	101.79	114.52	509.42	92.16	16.13
C0940-162-5500-S	4.194	106.53	114.52	509.42	87.71	15.35
C0940-162-5750-S	4.381	111.28	114.52	509.42	83.67	14.64
C0940-162-6000-S	4.568	116.03	114.52	509.42	79.98	14.00
C0940-162-6250-S	4.755	120.78	114.52	509.42	76.61	13.41
C0940-162-6500-S	4.942	125.53	114.52	509.42	73.51	12.86
C0940-162-6750-S	5.129	130.27	114.52	509.42	70.65	12.36
C0940-162-7000-S	5.316	135.02	114.52	509.42	68.00	11.90

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0940-162-7500-M	**0.940**	**23.88**	**0.162**	**4.12**	**7.500**	**190.50**	**5.380**	**136.65**	**5.256**	**133.50**	**154.24**	**686.11**	**72.75**	**12.73**
C0940-162-8000-M	**0.940**	**23.88**	**0.162**	**4.12**	**8.000**	**203.20**	**5.732**	**145.60**	**5.598**	**142.20**	**154.24**	**686.11**	**68.01**	**11.90**
C0940-162-8500-M	**0.940**	**23.88**	**0.162**	**4.12**	**8.500**	**215.90**	**6.084**	**154.54**	**5.941**	**150.90**	**154.24**	**686.11**	**63.85**	**11.17**
C0940-162-9000-M	**0.940**	**23.88**	**0.162**	**4.12**	**9.000**	**228.60**	**6.437**	**163.49**	**6.284**	**159.60**	**154.24**	**686.11**	**60.17**	**10.53**
C0940-162-9500-M	**0.940**	**23.88**	**0.162**	**4.12**	**9.500**	**241.30**	**6.789**	**172.44**	**6.626**	**168.30**	**154.24**	**686.11**	**56.89**	**9.96**
C0940-177-1375-M	**0.940**	**23.88**	**0.177**	**4.50**	**1.375**	**34.93**	**1.169**	**29.69**	**1.132**	**28.76**	**159.97**	**711.58**	**775.96**	**135.79**
C0940-177-1500-M	**0.940**	**23.88**	**0.177**	**4.50**	**1.500**	**38.10**	**1.267**	**32.18**	**1.226**	**31.13**	**161.24**	**717.25**	**691.32**	**120.98**
C0940-177-1625-M	**0.940**	**23.88**	**0.177**	**4.50**	**1.625**	**41.28**	**1.365**	**34.66**	**1.319**	**33.50**	**162.27**	**721.80**	**623.33**	**109.08**
C0940-177-1750-M	**0.940**	**23.88**	**0.177**	**4.50**	**1.750**	**44.45**	**1.463**	**37.15**	**1.412**	**35.86**	**163.11**	**725.53**	**567.52**	**99.32**
C0940-177-1875-M	**0.940**	**23.88**	**0.177**	**4.50**	**1.875**	**47.63**	**1.561**	**39.64**	**1.505**	**38.23**	**163.81**	**728.65**	**520.88**	**91.15**
C0940-177-2000-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.000**	**50.80**	**1.658**	**42.12**	**1.598**	**40.59**	**164.40**	**731.30**	**481.32**	**84.23**
C0940-177-2125-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.125**	**53.98**	**1.756**	**44.61**	**1.691**	**42.96**	**164.91**	**733.57**	**447.35**	**78.29**
C0940-177-2250-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.250**	**57.15**	**1.854**	**47.10**	**1.784**	**45.32**	**165.36**	**735.55**	**417.86**	**73.12**
C0940-177-2375-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.375**	**60.33**	**1.952**	**49.59**	**1.878**	**47.69**	**165.75**	**737.28**	**392.01**	**68.60**
C0940-177-2500-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.500**	**63.50**	**2.050**	**52.07**	**1.971**	**50.06**	**166.09**	**738.81**	**369.18**	**64.61**
C0940-177-2625-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.625**	**66.68**	**2.064**	**52.44**	**2.064**	**52.42**	**195.54**	**869.80**	**348.86**	**61.05**
C0940-177-2750-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.750**	**69.85**	**2.159**	**54.83**	**2.157**	**54.79**	**195.54**	**869.80**	**330.66**	**57.87**
C0940-177-2875-M	**0.940**	**23.88**	**0.177**	**4.50**	**2.875**	**73.03**	**2.253**	**57.22**	**2.250**	**57.15**	**195.54**	**869.80**	**314.26**	**55.00**
C0940-177-3000-M	**0.940**	**23.88**	**0.177**	**4.50**	**3.000**	**76.20**	**2.347**	**59.61**	**2.343**	**59.52**	**195.54**	**869.80**	**299.42**	**52.40**
C0940-177-3250-M	**0.940**	**23.88**	**0.177**	**4.50**	**3.250**	**82.55**	**2.535**	**64.39**	**2.530**	**64.25**	**195.54**	**869.80**	**273.57**	**47.87**
C0940-177-3500-M	**0.940**	**23.88**	**0.177**	**4.50**	**3.500**	**88.90**	**2.724**	**69.18**	**2.716**	**68.98**	**195.54**	**869.80**	**251.83**	**44.07**
C0940-177-3750-M	**0.940**	**23.88**	**0.177**	**4.50**	**3.750**	**95.25**	**2.912**	**73.96**	**2.902**	**73.71**	**195.54**	**869.80**	**233.29**	**40.83**
C0940-177-4000-M	**0.940**	**23.88**	**0.177**	**4.50**	**4.000**	**101.60**	**3.100**	**78.74**	**3.088**	**78.45**	**195.54**	**869.80**	**217.30**	**38.03**
C0940-177-4250-M	**0.940**	**23.88**	**0.177**	**4.50**	**4.250**	**107.95**	**3.288**	**83.53**	**3.275**	**83.18**	**195.54**	**869.80**	**203.35**	**35.59**
C0940-177-4500-M	**0.940**	**23.88**	**0.177**	**4.50**	**4.500**	**114.30**	**3.477**	**88.31**	**3.461**	**87.91**	**195.54**	**869.80**	**191.09**	**33.44**
C0940-177-4750-M	**0.940**	**23.88**	**0.177**	**4.50**	**4.750**	**120.65**	**3.665**	**93.09**	**3.647**	**92.64**	**195.54**	**869.80**	**180.22**	**31.54**
C0940-177-5000-M	**0.940**	**23.88**	**0.177**	**4.50**	**5.000**	**127.00**	**3.853**	**97.87**	**3.834**	**97.37**	**195.54**	**869.80**	**170.53**	**29.84**
C0940-177-5250-M	**0.940**	**23.88**	**0.177**	**4.50**	**5.250**	**133.35**	**4.042**	**102.66**	**4.020**	**102.10**	**195.54**	**869.80**	**161.82**	**28.32**
C0940-177-5500-M	**0.940**	**23.88**	**0.177**	**4.50**	**5.500**	**139.70**	**4.230**	**107.44**	**4.206**	**106.83**	**195.54**	**869.80**	**153.96**	**26.94**
C0940-177-5750-M	**0.940**	**23.88**	**0.177**	**4.50**	**5.750**	**146.05**	**4.418**	**112.22**	**4.392**	**111.57**	**195.54**	**869.80**	**146.82**	**25.69**
C0940-177-6000-M	**0.940**	**23.88**	**0.177**	**4.50**	**6.000**	**152.40**	**4.607**	**117.01**	**4.579**	**116.30**	**195.54**	**869.80**	**140.32**	**24.56**
C0940-177-6250-M	**0.940**	**23.88**	**0.177**	**4.50**	**6.250**	**158.75**	**4.795**	**121.79**	**4.765**	**121.03**	**195.54**	**869.80**	**134.37**	**23.52**
C0940-177-6500-M	**0.940**	**23.88**	**0.177**	**4.50**	**6.500**	**165.10**	**4.983**	**126.57**	**4.951**	**125.76**	**195.54**	**869.80**	**128.91**	**22.56**
C0940-177-6750-M	**0.940**	**23.88**	**0.177**	**4.50**	**6.750**	**171.45**	**5.171**	**131.35**	**5.137**	**130.49**	**195.54**	**869.80**	**123.87**	**21.68**
C0940-177-7000-M	**0.940**	**23.88**	**0.177**	**4.50**	**7.000**	**177.80**	**5.360**	**136.14**	**5.324**	**135.22**	**195.54**	**869.80**	**119.21**	**20.86**
C0940-177-7500-M	**0.940**	**23.88**	**0.177**	**4.50**	**7.500**	**190.50**	**5.736**	**145.70**	**5.696**	**144.69**	**195.54**	**869.80**	**110.87**	**19.40**
C0940-177-8000-M	**0.940**	**23.88**	**0.177**	**4.50**	**8.000**	**203.20**	**6.113**	**155.27**	**6.069**	**154.15**	**195.54**	**869.80**	**103.62**	**18.13**
C0940-177-8500-M	**0.940**	**23.88**	**0.177**	**4.50**	**8.500**	**215.90**	**6.489**	**164.83**	**6.441**	**163.61**	**195.54**	**869.80**	**97.26**	**17.02**
C0940-177-9000-M	**0.940**	**23.88**	**0.177**	**4.50**	**9.000**	**228.60**	**6.866**	**174.40**	**6.814**	**173.07**	**195.54**	**869.80**	**91.63**	**16.04**
C0940-177-9500-M	**0.940**	**23.88**	**0.177**	**4.50**	**9.500**	**241.30**	**7.243**	**183.96**	**7.187**	**182.54**	**195.54**	**869.80**	**86.62**	**15.16**
D12920	0.945	24.00	0.087	2.20	1.543	39.20	0.551	14.00	0.476	12.10	37.26	165.73	37.54	6.57
D12930	0.945	24.00	0.087	2.20	2.327	59.10	0.768	19.50	0.650	16.50	37.26	165.73	23.94	4.19
D13530	0.945	24.00	0.157	4.00	1.319	33.50	0.874	22.20	0.866	22.00	240.30	1068.92	531.83	93.07
D13540	0.945	24.00	0.157	4.00	1.929	49.00	1.220	31.00	1.181	30.00	240.30	1068.92	338.46	59.23
D13550	0.945	24.00	0.157	4.00	2.835	72.00	1.740	44.20	1.654	42.00	240.30	1068.92	219.09	38.34
D13560	0.945	24.00	0.157	4.00	4.134	105.00	2.429	61.70	2.283	58.00	240.30	1068.92	149.09	26.09
D13570	0.945	24.00	0.157	4.00	5.906	150.00	3.453	87.70	3.228	82.00	240.30	1068.92	100.29	17.55
C0970-063-0750-M	**0.970**	**24.64**	**0.063**	**1.60**	**0.750**	**19.05**	**0.299**	**7.59**	**0.190**	**4.82**	**11.56**	**51.43**	**25.63**	**4.49**
C0970-063-1000-M	**0.970**	**24.64**	**0.063**	**1.60**	**1.000**	**25.40**	**0.368**	**9.35**	**0.225**	**5.71**	**11.56**	**51.43**	**18.30**	**3.20**
C0970-063-1250-M	**0.970**	**24.64**	**0.063**	**1.60**	**1.250**	**31.75**	**0.437**	**11.11**	**0.260**	**6.60**	**11.56**	**51.43**	**14.23**	**2.49**
C0970-063-1500-M	**0.970**	**24.64**	**0.063**	**1.60**	**1.500**	**38.10**	**0.507**	**12.87**	**0.295**	**7.48**	**11.56**	**51.43**	**11.64**	**2.04**
C0970-063-1750-M	**0.970**	**24.64**	**0.063**	**1.60**	**1.750**	**44.45**	**0.576**	**14.63**	**0.329**	**8.37**	**11.56**	**51.43**	**9.85**	**1.72**
C0970-063-2000-M	**0.970**	**24.64**	**0.063**	**1.60**	**2.000**	**50.80**	**0.645**	**16.37**	**0.364**	**9.26**	**11.56**	**51.43**	**8.53**	**1.49**
C0970-063-2250-M	**0.970**	**24.64**	**0.063**	**1.60**	**2.250**	**57.15**	**0.715**	**18.15**	**0.399**	**10.13**	**11.56**	**51.43**	**7.53**	**1.32**
C0970-063-2500-M	**0.970**	**24.64**	**0.063**	**1.60**	**2.500**	**63.50**	**0.785**	**19.93**	**0.430**	**10.93**	**11.56**	**51.43**	**6.74**	**1.18**
C0970-063-2750-M	**0.970**	**24.64**	**0.063**	**1.60**	**2.750**	**69.85**	**0.851**	**21.63**	**0.462**	**11.73**	**11.56**	**51.43**	**6.09**	**1.07**
C0970-063-3000-M	**0.970**	**24.64**	**0.063**	**1.60**	**3.000**	**76.20**	**0.920**	**23.38**	**0.493**	**12.53**	**11.56**	**51.43**	**5.56**	**0.97**
C0970-063-3500-M	**0.970**	**24.64**	**0.063**	**1.60**	**3.500**	**88.90**	**1.061**	**26.94**	**0.556**	**14.12**	**11.56**	**51.43**	**4.74**	**0.83**
C0970-063-4000-M	**0.970**	**24.64**	**0.063**	**1.60**	**4.000**	**101.60**	**1.200**	**30.49**	**0.618**	**15.71**	**11.56**	**51.43**	**4.13**	**0.72**
C0970-072-0750-M	**0.970**	**24.64**	**0.072**	**1.83**	**0.750**	**19.05**	**0.325**	**8.25**	**0.231**	**5.87**	**16.79**	**74.70**	**39.50**	**6.91**
C0970-072-1000-M	**0.970**	**24.64**	**0.072**	**1.83**	**1.000**	**25.40**	**0.399**	**10.14**	**0.278**	**7.06**	**16.79**	**74.70**	**27.96**	**4.89**
C0970-072-1250-M	**0.970**	**24.64**	**0.072**	**1.83**	**1.250**	**31.75**	**0.474**	**12.04**	**0.325**	**8.25**	**16.79**	**74.70**	**21.64**	**3.79**
C0970-072-1500-M	**0.970**	**24.64**	**0.072**	**1.83**	**1.500**	**38.10**	**0.549**	**13.93**	**0.371**	**9.44**	**16.79**	**74.70**	**17.65**	**3.09**
C0970-072-1750-M	**0.970**	**24.64**	**0.072**	**1.83**	**1.750**	**44.45**	**0.623**	**15.82**	**0.418**	**10.63**	**16.79**	**74.70**	**14.90**	**2.61**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0940-162-7500-S	**5.690**	**144.52**	**114.52**	**509.42**	**63.26**	**11.07**
C0940-162-8000-S	**6.064**	**154.02**	**114.52**	**509.42**	**59.14**	**10.35**
C0940-162-8500-S	**6.437**	**163.51**	**114.52**	**509.42**	**55.52**	**9.72**
C0940-162-9000-S	**6.811**	**173.01**	**114.52**	**509.42**	**52.33**	**9.16**
C0940-162-9500-S	**7.185**	**182.50**	**114.52**	**509.42**	**49.47**	**8.66**
C0940-177-1375-S	**1.162**	**29.52**	**143.52**	**638.39**	**674.75**	**118.08**
C0940-177-1500-S	**1.261**	**32.04**	**143.52**	**638.39**	**601.15**	**105.20**
C0940-177-1625-S	**1.360**	**34.55**	**143.52**	**638.39**	**542.03**	**94.86**
C0940-177-1750-S	**1.459**	**37.06**	**143.52**	**638.39**	**493.50**	**86.36**
C0940-177-1875-S	**1.558**	**39.58**	**143.52**	**638.39**	**452.94**	**79.26**
C0940-177-2000-S	**1.657**	**42.09**	**143.52**	**638.39**	**418.54**	**73.24**
C0940-177-2125-S	**1.756**	**44.60**	**143.52**	**638.39**	**389.00**	**68.08**
C0940-177-2250-S	**1.855**	**47.12**	**143.52**	**638.39**	**363.35**	**63.59**
C0940-177-2375-S	**1.954**	**49.63**	**143.52**	**638.39**	**340.88**	**59.65**
C0940-177-2500-S	**2.053**	**52.14**	**143.52**	**638.39**	**321.03**	**56.18**
C0940-177-2625-S	**2.152**	**54.66**	**143.52**	**638.39**	**303.36**	**53.09**
C0940-177-2750-S	**2.251**	**57.17**	**143.52**	**638.39**	**287.53**	**50.32**
C0940-177-2875-S	**2.350**	**59.69**	**143.52**	**638.39**	**273.27**	**47.82**
C0940-177-3000-S	**2.449**	**62.20**	**143.52**	**638.39**	**260.36**	**45.56**
C0940-177-3250-S	**2.647**	**67.23**	**143.52**	**638.39**	**237.89**	**41.63**
C0940-177-3500-S	**2.845**	**72.25**	**143.52**	**638.39**	**218.98**	**38.32**
C0940-177-3750-S	**3.043**	**77.28**	**143.52**	**638.39**	**202.86**	**35.50**
C0940-177-4000-S	**3.240**	**82.31**	**143.52**	**638.39**	**188.95**	**33.07**
C0940-177-4250-S	**3.438**	**87.34**	**143.52**	**638.39**	**176.83**	**30.94**
C0940-177-4500-S	**3.636**	**92.36**	**143.52**	**638.39**	**166.17**	**29.08**
C0940-177-4750-S	**3.834**	**97.39**	**143.52**	**638.39**	**156.72**	**27.43**
C0940-177-5000-S	**4.032**	**102.42**	**143.52**	**638.39**	**148.28**	**25.95**
C0940-177-5250-S	**4.230**	**107.44**	**143.52**	**638.39**	**140.71**	**24.62**
C0940-177-5500-S	**4.428**	**112.47**	**143.52**	**638.39**	**133.88**	**23.43**
C0940-177-5750-S	**4.626**	**117.50**	**143.52**	**638.39**	**127.67**	**22.34**
C0940-177-6000-S	**4.824**	**122.53**	**143.52**	**638.39**	**122.02**	**21.35**
C0940-177-6250-S	**5.022**	**127.55**	**143.52**	**638.39**	**116.85**	**20.45**
C0940-177-6500-S	**5.220**	**132.58**	**143.52**	**638.39**	**112.09**	**19.62**
C0940-177-6750-S	**5.418**	**137.61**	**143.52**	**638.39**	**107.71**	**18.85**
C0940-177-7000-S	**5.616**	**142.63**	**143.52**	**638.39**	**103.66**	**18.14**
C0940-177-7500-S	**6.011**	**152.69**	**143.52**	**638.39**	**96.41**	**16.87**
C0940-177-8000-S	**6.407**	**162.74**	**143.52**	**638.39**	**90.10**	**15.77**
C0940-177-8500-S	**6.803**	**172.80**	**143.52**	**638.39**	**84.57**	**14.80**
C0940-177-9000-S	**7.199**	**182.85**	**143.52**	**638.39**	**79.68**	**13.94**
C0940-177-9500-S	**7.595**	**192.91**	**143.52**	**638.39**	**75.33**	**13.18**
D22920	0.551	14.00	31.03	138.05	31.26	5.47
D22930	0.768	19.50	31.03	138.05	19.94	3.49
D23530	0.874	22.20	200.25	890.77	443.03	77.53
D23540	1.220	31.00	200.25	890.77	281.94	49.34
D23550	1.740	44.20	200.25	890.77	182.51	31.94
D23560	2.429	61.70	200.25	890.77	124.17	21.73
D23570	3.453	87.70	200.25	890.77	83.54	14.62
C0970-063-0750-S	**0.339**	**8.61**	**8.77**	**39.02**	**21.35**	**3.74**
C0970-063-1000-S	**0.425**	**10.78**	**8.77**	**39.02**	**15.24**	**2.67**
C0970-063-1250-S	**0.510**	**12.95**	**8.77**	**39.02**	**11.85**	**2.07**
C0970-063-1500-S	**0.595**	**15.12**	**8.77**	**39.02**	**9.70**	**1.70**
C0970-063-1750-S	**0.681**	**17.30**	**8.77**	**39.02**	**8.21**	**1.44**
C0970-063-2000-S	**0.765**	**19.44**	**8.77**	**39.02**	**7.11**	**1.24**
C0970-063-2250-S	**0.852**	**21.63**	**8.77**	**39.02**	**6.27**	**1.10**
C0970-063-2500-S	**0.938**	**23.82**	**8.77**	**39.02**	**5.61**	**0.98**
C0970-063-2750-S	**1.021**	**25.93**	**8.77**	**39.02**	**5.07**	**0.89**
C0970-063-3000-S	**1.106**	**28.09**	**8.77**	**39.02**	**4.63**	**0.81**
C0970-063-3500-S	**1.278**	**32.47**	**8.77**	**39.02**	**3.95**	**0.69**
C0970-063-4000-S	**1.450**	**36.84**	**8.77**	**39.02**	**3.44**	**0.60**
C0970-072-0750-S	**0.364**	**9.25**	**12.69**	**56.46**	**32.90**	**5.76**
C0970-072-1000-S	**0.455**	**11.56**	**12.69**	**56.46**	**23.29**	**4.08**
C0970-072-1250-S	**0.546**	**13.87**	**12.69**	**56.46**	**18.03**	**3.15**
C0970-072-1500-S	**0.637**	**16.17**	**12.69**	**56.46**	**14.70**	**2.57**
C0970-072-1750-S	**0.727**	**18.48**	**12.69**	**56.46**	**12.41**	**2.17**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0970-072-2000-M	0.970	24.64	0.072	1.83	2.000	50.80	0.698	17.73	0.464	11.78	16.79	74.70	12.90	2.26
C0970-072-2250-M	0.970	24.64	0.072	1.83	2.250	57.15	0.773	19.63	0.506	12.85	16.79	74.70	11.37	1.99
C0970-072-2500-M	0.970	24.64	0.072	1.83	2.500	63.50	0.847	21.52	0.548	13.92	16.79	74.70	10.16	1.78
C0970-072-2750-M	0.970	24.64	0.072	1.83	2.750	69.85	0.917	23.28	0.591	15.02	16.79	74.70	9.16	1.60
C0970-072-3000-M	0.970	24.64	0.072	1.83	3.000	76.20	0.996	25.30	0.632	16.06	16.79	74.70	8.38	1.47
C0970-072-3500-M	0.970	24.64	0.072	1.83	3.500	88.90	1.145	29.07	0.717	18.21	16.79	74.70	7.13	1.25
C0970-072-4000-M	0.970	24.64	0.072	1.83	4.000	101.60	1.296	32.91	0.801	20.34	16.79	74.70	6.21	1.09
C0970-080-0750-M	0.970	24.64	0.080	2.03	0.750	19.05	0.378	9.59	0.260	6.59	22.53	100.21	60.50	10.59
C0970-080-1000-M	0.970	24.64	0.080	2.03	1.000	25.40	0.483	12.28	0.309	7.86	22.53	100.21	43.60	7.63
C0970-080-1250-M	0.970	24.64	0.080	2.03	1.250	31.75	0.585	14.87	0.361	9.16	22.53	100.21	33.90	5.93
C0970-080-1500-M	0.970	24.64	0.080	2.03	1.500	38.10	0.684	17.37	0.413	10.49	22.53	100.21	27.60	4.83
C0970-080-1750-M	0.970	24.64	0.080	2.03	1.750	44.45	0.779	19.78	0.467	11.85	22.53	100.21	23.20	4.06
C0970-080-2000-M	0.970	24.64	0.080	2.03	2.000	50.80	0.879	22.33	0.517	13.13	22.53	100.21	20.10	3.52
C0970-080-2250-M	0.970	24.64	0.080	2.03	2.250	57.15	0.977	24.82	0.564	14.34	22.53	100.21	17.70	3.10
C0970-080-2500-M	0.970	24.64	0.080	2.03	2.500	63.50	1.074	27.28	0.612	15.55	22.53	100.21	15.80	2.77
C0970-080-2750-M	0.970	24.64	0.080	2.03	2.750	69.85	1.175	29.83	0.659	16.73	22.53	100.21	14.30	2.50
C0970-080-3000-M	0.970	24.64	0.080	2.03	3.000	76.20	1.267	32.18	0.708	17.97	22.53	100.21	13.00	2.28
C0970-080-3500-M	0.970	24.64	0.080	2.03	3.500	88.90	1.470	37.35	0.800	20.32	22.53	100.21	11.10	1.94
C0970-080-4000-M	0.970	24.64	0.080	2.03	4.000	101.60	1.677	42.61	0.891	22.64	22.53	100.21	9.70	1.70
C0970-085-0750-M	0.970	24.64	0.085	2.16	0.750	19.05	0.355	9.01	0.298	7.57	26.67	118.63	67.50	11.81
C0970-085-1000-M	0.970	24.64	0.085	2.16	1.000	25.40	0.536	13.60	0.326	8.27	26.67	118.63	57.43	10.05
C0970-085-1250-M	0.970	24.64	0.085	2.16	1.250	31.75	0.646	16.40	0.382	9.70	26.67	118.63	44.14	7.72
C0970-085-1500-M	0.970	24.64	0.085	2.16	1.500	38.10	0.756	19.20	0.438	11.13	26.67	118.63	35.84	6.27
C0970-085-1750-M	0.970	24.64	0.085	2.16	1.750	44.45	0.866	22.00	0.495	12.56	26.67	118.63	30.17	5.28
C0970-085-2000-M	0.970	24.64	0.085	2.16	2.000	50.80	0.976	24.80	0.549	13.95	26.67	118.63	26.05	4.56
C0970-085-2250-M	0.970	24.64	0.085	2.16	2.250	57.15	1.086	27.59	0.600	15.24	26.67	118.63	22.92	4.01
C0970-085-2500-M	0.970	24.64	0.085	2.16	2.500	63.50	1.196	30.39	0.651	16.53	26.67	118.63	20.46	3.58
C0970-085-2750-M	0.970	24.64	0.085	2.16	2.750	69.85	1.307	33.19	0.701	17.81	26.67	118.63	18.48	3.23
C0970-085-3000-M	0.970	24.64	0.085	2.16	3.000	76.20	1.416	35.97	0.752	19.11	26.67	118.63	16.84	2.95
C0970-085-3500-M	0.970	24.64	0.085	2.16	3.500	88.90	1.638	41.59	0.853	21.67	26.67	118.63	14.32	2.51
C0970-085-4000-M	0.970	24.64	0.085	2.16	4.000	101.60	1.858	47.19	0.955	24.25	26.67	118.63	12.45	2.18
C0970-092-0875-M	0.970	24.64	0.092	2.34	0.875	22.23	0.437	11.09	0.377	9.58	31.57	140.44	72.00	12.60
C0970-092-1000-M	0.970	24.64	0.092	2.34	1.000	25.40	0.488	12.40	0.418	10.62	31.21	138.83	61.00	10.68
C0970-092-1250-M	0.970	24.64	0.092	2.34	1.250	31.75	0.592	15.04	0.500	12.70	30.72	136.64	46.70	8.17
C0970-092-1500-M	0.970	24.64	0.092	2.34	1.500	38.10	0.696	17.68	0.582	14.78	30.38	135.16	37.80	6.62
C0970-092-2000-M	0.970	24.64	0.092	2.34	2.000	50.80	0.891	22.62	0.730	18.53	30.40	135.21	27.40	4.80
C0970-092-2500-M	0.970	24.64	0.092	2.34	2.500	63.50	1.085	27.55	0.877	22.27	30.43	135.34	21.50	3.76
C0970-092-3000-M	0.970	24.64	0.092	2.34	3.000	76.20	1.279	32.48	1.024	26.00	30.47	135.53	17.70	3.10
C0970-092-3500-M	0.970	24.64	0.092	2.34	3.500	88.90	1.475	37.46	1.173	29.80	30.38	135.14	15.00	2.63
C0970-092-4000-M	0.970	24.64	0.092	2.34	4.000	101.60	1.672	42.46	1.324	33.62	30.27	134.64	13.00	2.28
C0970-095-0875-M	0.970	24.64	0.095	2.41	0.875	22.23	0.476	12.09	0.368	9.35	36.32	161.57	91.00	15.93
C0970-095-1000-M	0.970	24.64	0.095	2.41	1.000	25.40	0.526	13.37	0.408	10.36	36.32	161.57	76.68	13.42
C0970-095-1250-M	0.970	24.64	0.095	2.41	1.250	31.75	0.627	15.92	0.488	12.39	36.32	161.57	58.27	10.20
C0970-095-1500-M	0.970	24.64	0.095	2.41	1.500	38.10	0.731	18.57	0.565	14.35	36.32	161.57	47.25	8.27
C0970-095-1750-M	0.970	24.64	0.095	2.41	1.750	44.45	0.836	21.23	0.638	16.21	36.32	161.57	39.73	6.95
C0970-095-2000-M	0.970	24.64	0.095	2.41	2.000	50.80	0.941	23.90	0.708	17.98	36.32	161.57	34.30	6.00
C0970-095-2250-M	0.970	24.64	0.095	2.41	2.250	57.15	1.055	26.80	0.773	19.63	36.32	161.57	30.40	5.32
C0970-095-2500-M	0.970	24.64	0.095	2.41	2.500	63.50	1.150	29.20	0.848	21.53	36.32	161.57	26.90	4.71
C0970-095-2750-M	0.970	24.64	0.095	2.41	2.750	69.85	1.254	31.85	0.918	23.31	36.32	161.57	24.28	4.25
C0970-095-3000-M	0.970	24.64	0.095	2.41	3.000	76.20	1.359	34.51	0.987	25.08	36.32	161.57	22.13	3.87
C0970-095-3500-M	0.970	24.64	0.095	2.41	3.500	88.90	1.563	39.70	1.129	28.68	36.32	161.57	18.75	3.28
C0970-095-4000-M	0.970	24.64	0.095	2.41	4.000	101.60	1.763	44.79	1.273	32.33	36.32	161.57	16.24	2.84
C0970-105-0875-M	0.970	24.64	0.105	2.67	0.875	22.23	0.516	13.11	0.419	10.65	47.92	213.14	133.50	23.36
C0970-105-1000-M	0.970	24.64	0.105	2.67	1.000	25.40	0.574	14.58	0.465	11.82	47.92	213.14	112.50	19.69
C0970-105-1250-M	0.970	24.64	0.105	2.67	1.250	31.75	0.686	17.43	0.561	14.24	47.92	213.14	85.00	14.88
C0970-105-1500-M	0.970	24.64	0.105	2.67	1.500	38.10	0.806	20.46	0.651	16.53	47.92	213.14	69.00	12.08
C0970-105-1750-M	0.970	24.64	0.105	2.67	1.750	44.45	0.909	23.10	0.743	18.86	47.92	213.14	57.00	9.98
C0970-105-2000-M	0.970	24.64	0.105	2.67	2.000	50.80	1.022	25.96	0.828	21.03	47.92	213.14	49.00	8.58
C0970-105-2250-M	0.970	24.64	0.105	2.67	2.250	57.15	1.136	28.85	0.913	23.18	47.92	213.14	43.00	7.53
C0970-105-2500-M	0.970	24.64	0.105	2.67	2.500	63.50	1.239	31.47	1.004	25.50	47.92	213.14	38.00	6.65
C0970-105-2750-M	0.970	24.64	0.105	2.67	2.750	69.85	1.341	34.05	1.096	27.84	47.92	213.14	34.00	5.95
C0970-105-3000-M	0.970	24.64	0.105	2.67	3.000	76.20	1.454	36.94	1.181	29.99	47.92	213.14	31.00	5.43
C0970-105-3500-M	0.970	24.64	0.105	2.67	3.500	88.90	1.725	43.82	1.323	33.60	47.92	213.14	27.00	4.73
C0970-105-4000-M	0.970	24.64	0.105	2.67	4.000	101.60	1.956	49.68	1.490	37.85	47.92	213.14	23.44	4.10

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0970-072-2000-S	0.819	20.80	12.69	56.46	10.75	1.88
C0970-072-2250-S	0.910	23.11	12.69	56.46	9.47	1.66
C0970-072-2500-S	1.000	25.41	12.69	56.46	8.46	1.48
C0970-072-2750-S	1.087	27.60	12.69	56.46	7.63	1.34
C0970-072-3000-S	1.182	30.02	12.69	56.46	6.98	1.22
C0970-072-3500-S	1.363	34.62	12.69	56.46	5.94	1.04
C0970-072-4000-S	1.546	39.28	12.69	56.46	5.17	0.91
C0970-080-0750-S	0.414	10.50	16.96	75.43	50.40	8.82
C0970-080-1000-S	0.533	13.54	16.96	75.43	36.32	6.36
C0970-080-1250-S	0.650	16.50	16.96	75.43	28.24	4.94
C0970-080-1500-S	0.762	19.37	16.96	75.43	22.99	4.02
C0970-080-1750-S	0.873	22.16	16.96	75.43	19.33	3.38
C0970-080-2000-S	0.987	25.08	16.96	75.43	16.74	2.93
C0970-080-2250-S	1.100	27.94	16.96	75.43	14.74	2.58
C0970-080-2500-S	1.212	30.78	16.96	75.43	13.16	2.30
C0970-080-2750-S	1.326	33.69	16.96	75.43	11.91	2.08
C0970-080-3000-S	1.434	36.43	16.96	75.43	10.83	1.90
C0970-080-3500-S	1.666	42.32	16.96	75.43	9.25	1.62
C0970-080-4000-S	1.901	48.30	16.96	75.43	8.08	1.41
C0970-085-0750-S	0.394	10.01	20.02	89.03	56.23	9.84
C0970-085-1000-S	0.582	14.77	20.02	89.03	47.84	8.37
C0970-085-1250-S	0.706	17.92	20.02	89.03	36.77	6.43
C0970-085-1500-S	0.830	21.07	20.02	89.03	29.86	5.22
C0970-085-1750-S	0.954	24.22	20.02	89.03	25.13	4.40
C0970-085-2000-S	1.078	27.37	20.02	89.03	21.70	3.80
C0970-085-2250-S	1.202	30.52	20.02	89.03	19.09	3.34
C0970-085-2500-S	1.326	33.67	20.02	89.03	17.04	2.98
C0970-085-2750-S	1.450	36.82	20.02	89.03	15.39	2.69
C0970-085-3000-S	1.573	39.96	20.02	89.03	14.03	2.45
C0970-085-3500-S	1.822	46.28	20.02	89.03	11.93	2.09
C0970-085-4000-S	2.070	52.58	20.02	89.03	10.37	1.81
C0970-092-0875-S	0.461	11.71	24.83	110.45	59.98	10.50
C0970-092-1000-S	0.511	12.99	24.83	110.45	50.81	8.89
C0970-092-1250-S	0.612	15.54	24.83	110.45	38.90	6.81
C0970-092-1500-S	0.711	18.07	24.83	110.45	31.49	5.51
C0970-092-2000-S	0.912	23.17	24.83	110.45	22.82	3.99
C0970-092-2500-S	1.114	28.28	24.83	110.45	17.91	3.13
C0970-092-3000-S	1.316	33.42	24.83	110.45	14.74	2.58
C0970-092-3500-S	1.513	38.42	24.83	110.45	12.50	2.19
C0970-092-4000-S	1.707	43.36	24.83	110.45	10.83	1.90
C0970-095-0875-S	0.518	13.15	27.09	120.50	75.80	13.27
C0970-095-1000-S	0.576	14.63	27.09	120.50	63.87	11.18
C0970-095-1250-S	0.692	17.57	27.09	120.50	48.54	8.49
C0970-095-1500-S	0.812	20.62	27.09	120.50	39.36	6.89
C0970-095-1750-S	0.931	23.66	27.09	120.50	33.10	5.79
C0970-095-2000-S	1.052	26.72	27.09	120.50	28.57	5.00
C0970-095-2250-S	1.180	29.98	27.09	120.50	25.32	4.43
C0970-095-2500-S	1.291	32.79	27.09	120.50	22.41	3.92
C0970-095-2750-S	1.411	35.83	27.09	120.50	20.23	3.54
C0970-095-3000-S	1.530	38.87	27.09	120.50	18.43	3.23
C0970-095-3500-S	1.766	44.85	27.09	120.50	15.62	2.73
C0970-095-4000-S	1.998	50.74	27.09	120.50	13.53	2.37
C0970-105-0875-S	0.556	14.12	35.50	157.90	111.21	19.46
C0970-105-1000-S	0.621	15.78	35.50	157.90	93.71	16.40
C0970-105-1250-S	0.749	19.02	35.50	157.90	70.81	12.39
C0970-105-1500-S	0.882	22.41	35.50	157.90	57.48	10.06
C0970-105-1750-S	1.002	25.46	35.50	157.90	47.48	8.31
C0970-105-2000-S	1.130	28.71	35.50	157.90	40.82	7.14
C0970-105-2250-S	1.259	31.98	35.50	157.90	35.82	6.27
C0970-105-2500-S	1.379	35.02	35.50	157.90	31.65	5.54
C0970-105-2750-S	1.497	38.01	35.50	157.90	28.32	4.96
C0970-105-3000-S	1.625	41.28	35.50	157.90	25.82	4.52
C0970-105-3500-S	1.922	48.81	35.50	157.90	22.49	3.94
C0970-105-4000-S	2.182	55.42	35.50	157.90	19.53	3.42

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0970-112-0875-M	**0.970**	**24.64**	**0.112**	**2.85**	**0.875**	**22.23**	**0.529**	**13.44**	**0.466**	**11.83**	**57.26**	**254.71**	**165.50**	**28.96**
C0970-112-1000-M	**0.970**	**24.64**	**0.112**	**2.85**	**1.000**	**25.40**	**0.588**	**14.94**	**0.520**	**13.20**	**57.26**	**254.71**	**139.00**	**24.33**
C0970-112-1250-M	**0.970**	**24.64**	**0.112**	**2.85**	**1.250**	**31.75**	**0.705**	**17.90**	**0.629**	**15.97**	**57.26**	**254.71**	**105.00**	**18.38**
C0970-112-1500-M	**0.970**	**24.64**	**0.112**	**2.85**	**1.500**	**38.10**	**0.826**	**20.99**	**0.731**	**18.56**	**57.26**	**254.71**	**85.00**	**14.88**
C0970-112-1750-M	**0.970**	**24.64**	**0.112**	**2.85**	**1.750**	**44.45**	**0.943**	**23.96**	**0.828**	**21.04**	**57.26**	**254.71**	**71.00**	**12.43**
C0970-112-2000-M	**0.970**	**24.64**	**0.112**	**2.85**	**2.000**	**50.80**	**1.061**	**26.96**	**0.926**	**23.51**	**57.26**	**254.71**	**61.00**	**10.68**
C0970-112-2250-M	**0.970**	**24.64**	**0.112**	**2.85**	**2.250**	**57.15**	**1.190**	**30.22**	**1.015**	**25.78**	**57.26**	**254.71**	**54.00**	**9.45**
C0970-112-2500-M	**0.970**	**24.64**	**0.112**	**2.85**	**2.500**	**63.50**	**1.291**	**32.79**	**1.131**	**28.73**	**56.83**	**252.81**	**47.00**	**8.23**
C0970-112-2750-M	**0.970**	**24.64**	**0.112**	**2.85**	**2.750**	**69.85**	**1.418**	**36.03**	**1.215**	**30.85**	**57.26**	**254.71**	**43.00**	**7.53**
C0970-112-3000-M	**0.970**	**24.64**	**0.112**	**2.85**	**3.000**	**76.20**	**1.532**	**38.91**	**1.315**	**33.40**	**57.26**	**254.71**	**39.00**	**6.83**
C0970-112-3500-M	**0.970**	**24.64**	**0.112**	**2.85**	**3.500**	**88.90**	**1.765**	**44.83**	**1.511**	**38.39**	**57.26**	**254.71**	**33.00**	**5.78**
C0970-112-4000-M	**0.970**	**24.64**	**0.112**	**2.85**	**4.000**	**101.60**	**2.001**	**50.82**	**1.706**	**43.32**	**57.26**	**254.71**	**28.64**	**5.01**
C0970-115-1750-M	**0.970**	**24.64**	**0.115**	**2.92**	**1.750**	**44.45**	**0.962**	**24.44**	**0.864**	**21.95**	**61.46**	**273.37**	**78.00**	**13.65**
C0970-115-2000-M	**0.970**	**24.64**	**0.115**	**2.92**	**2.000**	**50.80**	**1.094**	**27.79**	**0.956**	**24.28**	**61.59**	**273.96**	**68.00**	**11.90**
C0970-115-2250-M	**0.970**	**24.64**	**0.115**	**2.92**	**2.250**	**57.15**	**1.206**	**30.64**	**1.065**	**27.04**	**61.59**	**273.96**	**59.00**	**10.33**
C0970-115-2500-M	**0.970**	**24.64**	**0.115**	**2.92**	**2.500**	**63.50**	**1.327**	**33.70**	**1.176**	**29.86**	**61.01**	**271.40**	**52.00**	**9.10**
C0970-115-3000-M	**0.970**	**24.64**	**0.115**	**2.92**	**3.000**	**76.20**	**1.568**	**39.82**	**1.371**	**34.83**	**61.59**	**273.96**	**43.00**	**7.53**
C0970-115-3500-M	**0.970**	**24.64**	**0.115**	**2.92**	**3.500**	**88.90**	**1.813**	**46.04**	**1.591**	**40.40**	**60.74**	**270.19**	**36.00**	**6.30**
C0970-115-4000-M	**0.970**	**24.64**	**0.115**	**2.92**	**4.000**	**101.60**	**2.075**	**52.71**	**1.759**	**44.69**	**61.59**	**273.96**	**32.00**	**5.60**
C0970-120-1500-M	**0.970**	**24.64**	**0.120**	**3.05**	**1.500**	**38.10**	**0.891**	**22.63**	**0.790**	**20.07**	**69.24**	**308.00**	**113.67**	**19.89**
C0970-120-1750-M	**0.970**	**24.64**	**0.120**	**3.05**	**1.750**	**44.45**	**1.021**	**25.94**	**0.896**	**22.75**	**69.24**	**308.00**	**95.00**	**16.63**
C0970-120-2000-M	**0.970**	**24.64**	**0.120**	**3.05**	**2.000**	**50.80**	**1.156**	**29.35**	**0.998**	**25.34**	**69.24**	**308.00**	**82.00**	**14.35**
C0970-120-2250-M	**0.970**	**24.64**	**0.120**	**3.05**	**2.250**	**57.15**	**1.275**	**32.38**	**1.113**	**28.28**	**69.24**	**308.00**	**71.00**	**12.43**
C0970-120-2500-M	**0.970**	**24.64**	**0.120**	**3.05**	**2.500**	**63.50**	**1.418**	**36.02**	**1.208**	**30.67**	**69.24**	**308.00**	**64.00**	**11.20**
C0970-120-3000-M	**0.970**	**24.64**	**0.120**	**3.05**	**3.000**	**76.20**	**1.668**	**42.38**	**1.428**	**36.27**	**69.24**	**308.00**	**52.00**	**9.10**
C0970-120-3500-M	**0.970**	**24.64**	**0.120**	**3.05**	**3.500**	**88.90**	**1.926**	**48.93**	**1.642**	**41.71**	**69.24**	**308.00**	**44.00**	**7.70**
C0970-120-4000-M	**0.970**	**24.64**	**0.120**	**3.05**	**4.000**	**101.60**	**2.178**	**55.32**	**1.861**	**47.28**	**69.24**	**308.00**	**38.00**	**6.65**
C0970-125-0875-M	**0.970**	**24.64**	**0.125**	**3.18**	**0.875**	**22.23**	**0.594**	**15.10**	**0.512**	**12.99**	**77.46**	**344.55**	**276.00**	**48.30**
C0970-125-1000-M	**0.970**	**24.64**	**0.125**	**3.18**	**1.000**	**25.40**	**0.663**	**16.85**	**0.573**	**14.55**	**77.46**	**344.55**	**230.00**	**40.25**
C0970-125-1250-M	**0.970**	**24.64**	**0.125**	**3.18**	**1.250**	**31.75**	**0.801**	**20.34**	**0.696**	**17.68**	**77.46**	**344.55**	**172.50**	**30.19**
C0970-125-1500-M	**0.970**	**24.64**	**0.125**	**3.18**	**1.500**	**38.10**	**0.940**	**23.86**	**0.815**	**20.70**	**77.46**	**344.55**	**138.21**	**24.19**
C0970-125-1750-M	**0.970**	**24.64**	**0.125**	**3.18**	**1.750**	**44.45**	**1.077**	**27.37**	**0.925**	**23.50**	**77.46**	**344.55**	**115.17**	**20.15**
C0970-125-2000-M	**0.970**	**24.64**	**0.125**	**3.18**	**2.000**	**50.80**	**1.215**	**30.87**	**1.036**	**26.31**	**77.46**	**344.55**	**98.72**	**17.28**
C0970-125-2250-M	**0.970**	**24.64**	**0.125**	**3.18**	**2.250**	**57.15**	**1.353**	**34.37**	**1.146**	**29.12**	**77.46**	**344.55**	**86.38**	**15.12**
C0970-125-2500-M	**0.970**	**24.64**	**0.125**	**3.18**	**2.500**	**63.50**	**1.491**	**37.88**	**1.257**	**31.92**	**77.46**	**344.55**	**76.78**	**13.44**
C0970-125-3000-M	**0.970**	**24.64**	**0.125**	**3.18**	**3.000**	**76.20**	**1.767**	**44.88**	**1.478**	**37.54**	**77.46**	**344.55**	**62.82**	**10.99**
C0970-125-3500-M	**0.970**	**24.64**	**0.125**	**3.18**	**3.500**	**88.90**	**2.043**	**51.89**	**1.699**	**43.15**	**77.46**	**344.55**	**53.16**	**9.30**
C0970-125-4000-M	**0.970**	**24.64**	**0.125**	**3.18**	**4.000**	**101.60**	**2.319**	**58.89**	**1.920**	**48.76**	**77.46**	**344.55**	**46.07**	**8.06**
C0970-135-0875-M	**0.970**	**24.64**	**0.135**	**3.43**	**0.875**	**22.23**	**0.614**	**15.59**	**0.573**	**14.57**	**95.64**	**425.41**	**366.00**	**64.05**
C0970-135-1000-M	**0.970**	**24.64**	**0.135**	**3.43**	**1.000**	**25.40**	**0.684**	**17.38**	**0.647**	**16.43**	**95.64**	**425.41**	**303.00**	**53.03**
C0970-135-1500-M	**0.970**	**24.64**	**0.135**	**3.43**	**1.500**	**38.10**	**0.977**	**24.82**	**0.929**	**23.60**	**94.11**	**418.63**	**180.03**	**31.51**
C0970-135-1750-M	**0.970**	**24.64**	**0.135**	**3.43**	**1.750**	**44.45**	**1.121**	**28.47**	**1.060**	**26.94**	**94.11**	**418.63**	**149.62**	**26.18**
C0970-135-2000-M	**0.970**	**24.64**	**0.135**	**3.43**	**2.000**	**50.80**	**1.265**	**32.12**	**1.192**	**30.27**	**94.11**	**418.64**	**128.00**	**22.40**
C0970-135-2250-M	**0.970**	**24.64**	**0.135**	**3.43**	**2.250**	**57.15**	**1.408**	**35.78**	**1.323**	**33.60**	**94.12**	**418.65**	**111.84**	**19.57**
C0970-135-2500-M	**0.970**	**24.64**	**0.135**	**3.43**	**2.500**	**63.50**	**1.552**	**39.43**	**1.454**	**36.94**	**94.11**	**418.64**	**99.30**	**17.38**
C0970-135-3000-M	**0.970**	**24.64**	**0.135**	**3.43**	**3.000**	**76.20**	**1.840**	**46.73**	**1.717**	**43.61**	**94.11**	**418.60**	**81.11**	**14.19**
C0970-135-3500-M	**0.970**	**24.64**	**0.135**	**3.43**	**3.500**	**88.90**	**2.127**	**54.03**	**1.979**	**50.27**	**94.12**	**418.67**	**68.56**	**12.00**
C0970-135-4000-M	**0.970**	**24.64**	**0.135**	**3.43**	**4.000**	**101.60**	**2.415**	**61.33**	**2.242**	**56.94**	**94.12**	**418.68**	**59.37**	**10.39**
C0970-148-1000-M	**0.970**	**24.64**	**0.148**	**3.76**	**1.000**	**25.40**	**0.732**	**18.60**	**0.709**	**18.01**	**122.87**	**546.57**	**459.00**	**80.33**
C0970-148-1500-M	**0.970**	**24.64**	**0.148**	**3.76**	**1.500**	**38.10**	**1.059**	**26.89**	**1.030**	**26.16**	**118.47**	**526.97**	**268.40**	**46.97**
C0970-148-2000-M	**0.970**	**24.64**	**0.148**	**3.76**	**2.000**	**50.80**	**1.376**	**34.94**	**1.329**	**33.75**	**118.40**	**526.68**	**189.60**	**33.18**
C0970-148-2500-M	**0.970**	**24.64**	**0.148**	**3.76**	**2.500**	**63.50**	**1.692**	**42.98**	**1.627**	**41.33**	**118.43**	**526.79**	**146.60**	**25.66**
C0970-148-3000-M	**0.970**	**24.64**	**0.148**	**3.76**	**3.000**	**76.20**	**2.009**	**51.02**	**1.926**	**48.91**	**118.44**	**526.87**	**119.50**	**20.91**
C0970-148-3500-M	**0.970**	**24.64**	**0.148**	**3.76**	**3.500**	**88.90**	**2.325**	**59.05**	**2.223**	**56.47**	**118.58**	**527.46**	**100.90**	**17.66**
C0970-148-4000-M	**0.970**	**24.64**	**0.148**	**3.76**	**4.000**	**101.60**	**2.643**	**67.13**	**2.524**	**64.10**	**118.33**	**526.34**	**87.20**	**15.26**
C0970-162-1500-M	**0.970**	**24.64**	**0.162**	**4.12**	**1.500**	**38.10**	**1.123**	**28.52**	**1.109**	**28.17**	**156.59**	**696.54**	**415.20**	**72.66**
C0970-162-2000-M	**0.970**	**24.64**	**0.162**	**4.12**	**2.000**	**50.80**	**1.463**	**37.15**	**1.436**	**36.48**	**156.54**	**696.33**	**291.30**	**50.98**
C0970-162-2500-M	**0.970**	**24.64**	**0.162**	**4.12**	**2.500**	**63.50**	**1.802**	**45.77**	**1.763**	**44.78**	**156.61**	**696.62**	**224.40**	**39.27**
C0970-162-3000-M	**0.970**	**24.64**	**0.162**	**4.12**	**3.000**	**76.20**	**2.142**	**54.40**	**2.090**	**53.07**	**156.67**	**696.90**	**182.50**	**31.94**
C0970-162-3500-M	**0.970**	**24.64**	**0.162**	**4.12**	**3.500**	**88.90**	**2.482**	**63.04**	**2.417**	**61.40**	**156.48**	**696.07**	**153.70**	**26.90**
C0970-162-4000-M	**0.970**	**24.64**	**0.162**	**4.12**	**4.000**	**101.60**	**2.822**	**71.67**	**2.744**	**69.70**	**156.50**	**696.16**	**132.80**	**23.24**
C0975-074-0750-M	0.975	24.77	0.074	1.88	0.750	19.05	0.445	11.30	0.295	7.49	12.15	54.05	39.80	6.97
C0975-074-0875-M	0.975	24.77	0.074	1.88	0.880	22.35	0.512	13.00	0.317	8.05	12.15	54.05	33.00	5.78
C0975-074-1000-M	0.975	24.77	0.074	1.88	1.000	25.40	0.568	14.43	0.340	8.64	12.15	54.05	28.10	4.92

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0970-112-0875-S	**0.569**	**14.45**	**42.21**	**187.77**	**137.86**	**24.13**
C0970-112-1000-S	**0.635**	**16.14**	**42.21**	**187.77**	**115.79**	**20.26**
C0970-112-1250-S	**0.767**	**19.49**	**42.21**	**187.77**	**87.47**	**15.31**
C0970-112-1500-S	**0.904**	**22.96**	**42.21**	**187.77**	**70.81**	**12.39**
C0970-112-1750-S	**1.036**	**26.32**	**42.21**	**187.77**	**59.14**	**10.35**
C0970-112-2000-S	**1.169**	**29.70**	**42.21**	**187.77**	**50.81**	**8.89**
C0970-112-2250-S	**1.312**	**33.31**	**42.21**	**187.77**	**44.98**	**7.87**
C0970-112-2500-S	**1.422**	**36.11**	**42.21**	**187.77**	**39.15**	**6.85**
C0970-112-2750-S	**1.572**	**39.92**	**42.21**	**187.77**	**35.82**	**6.27**
C0970-112-3000-S	**1.701**	**43.20**	**42.21**	**187.77**	**32.49**	**5.69**
C0970-112-3500-S	**1.964**	**49.90**	**42.21**	**187.77**	**27.49**	**4.81**
C0970-112-4000-S	**2.231**	**56.66**	**42.21**	**187.77**	**23.86**	**4.17**
C0970-115-1750-S	**1.053**	**26.74**	**45.30**	**201.52**	**64.97**	**11.37**
C0970-115-2000-S	**1.200**	**30.48**	**45.30**	**201.52**	**56.64**	**9.91**
C0970-115-2250-S	**1.328**	**33.74**	**45.30**	**201.52**	**49.15**	**8.60**
C0970-115-2500-S	**1.454**	**36.93**	**45.30**	**201.52**	**43.32**	**7.58**
C0970-115-3000-S	**1.735**	**44.07**	**45.30**	**201.52**	**35.82**	**6.27**
C0970-115-3500-S	**1.989**	**50.53**	**45.30**	**201.52**	**29.99**	**5.25**
C0970-115-4000-S	**2.300**	**58.43**	**45.30**	**201.52**	**26.66**	**4.66**
C0970-120-1500-S	**0.964**	**24.49**	**50.75**	**225.74**	**94.69**	**16.57**
C0970-120-1750-S	**1.109**	**28.16**	**50.75**	**225.74**	**79.14**	**13.85**
C0970-120-2000-S	**1.257**	**31.93**	**50.75**	**225.74**	**68.31**	**11.95**
C0970-120-2250-S	**1.392**	**35.35**	**50.75**	**225.74**	**59.14**	**10.35**
C0970-120-2500-S	**1.548**	**39.32**	**50.75**	**225.74**	**53.31**	**9.33**
C0970-120-3000-S	**1.828**	**46.44**	**50.75**	**225.74**	**43.32**	**7.58**
C0970-120-3500-S	**2.115**	**53.73**	**50.75**	**225.74**	**36.65**	**6.41**
C0970-120-4000-S	**2.397**	**60.88**	**50.75**	**225.74**	**31.65**	**5.54**
C0970-125-0875-S	**0.629**	**15.98**	**56.56**	**251.60**	**229.91**	**40.23**
C0970-125-1000-S	**0.705**	**17.90**	**56.56**	**251.60**	**191.59**	**33.53**
C0970-125-1250-S	**0.856**	**21.75**	**56.56**	**251.60**	**143.69**	**25.15**
C0970-125-1500-S	**1.009**	**25.62**	**56.56**	**251.60**	**115.13**	**20.15**
C0970-125-1750-S	**1.160**	**29.47**	**56.56**	**251.60**	**95.94**	**16.79**
C0970-125-2000-S	**1.312**	**33.33**	**56.56**	**251.60**	**82.23**	**14.39**
C0970-125-2250-S	**1.464**	**37.18**	**56.56**	**251.60**	**71.96**	**12.59**
C0970-125-2500-S	**1.616**	**41.04**	**56.56**	**251.60**	**63.96**	**11.19**
C0970-125-3000-S	**1.919**	**48.75**	**56.56**	**251.60**	**52.33**	**9.16**
C0970-125-3500-S	**2.223**	**56.46**	**56.56**	**251.60**	**44.28**	**7.75**
C0970-125-4000-S	**2.526**	**64.16**	**56.56**	**251.60**	**38.38**	**6.72**
C0970-135-0875-S	**0.648**	**16.45**	**69.32**	**308.33**	**304.88**	**53.35**
C0970-135-1000-S	**0.725**	**18.42**	**69.32**	**308.33**	**252.40**	**44.17**
C0970-135-1500-S	**1.038**	**26.36**	**69.32**	**308.33**	**149.97**	**26.24**
C0970-135-1750-S	**1.194**	**30.32**	**69.32**	**308.33**	**124.63**	**21.81**
C0970-135-2000-S	**1.350**	**34.29**	**69.32**	**308.33**	**106.62**	**18.66**
C0970-135-2250-S	**1.506**	**38.25**	**69.32**	**308.33**	**93.16**	**16.30**
C0970-135-2500-S	**1.662**	**42.22**	**69.32**	**308.33**	**82.72**	**14.48**
C0970-135-3000-S	**1.974**	**50.14**	**69.32**	**308.33**	**67.57**	**11.82**
C0970-135-3500-S	**2.286**	**58.07**	**69.32**	**308.33**	**57.11**	**9.99**
C0970-135-4000-S	**2.598**	**66.00**	**69.32**	**308.33**	**49.46**	**8.65**
C0970-148-1000-S	**0.769**	**19.54**	**88.18**	**392.25**	**382.35**	**66.91**
C0970-148-1500-S	**1.106**	**28.08**	**88.18**	**392.25**	**223.58**	**39.13**
C0970-148-2000-S	**1.442**	**36.62**	**88.18**	**392.25**	**157.94**	**27.64**
C0970-148-2500-S	**1.778**	**45.16**	**88.18**	**392.25**	**122.12**	**21.37**
C0970-148-3000-S	**2.114**	**53.70**	**88.18**	**392.25**	**99.54**	**17.42**
C0970-148-3500-S	**2.451**	**62.25**	**88.18**	**392.25**	**84.05**	**14.71**
C0970-148-4000-S	**2.786**	**70.76**	**88.18**	**392.25**	**72.64**	**12.71**
C0970-162-1500-S	**1.178**	**29.92**	**111.44**	**495.71**	**345.86**	**60.53**
C0970-162-2000-S	**1.541**	**39.13**	**111.44**	**495.71**	**242.65**	**42.46**
C0970-162-2500-S	**1.904**	**48.36**	**111.44**	**495.71**	**186.93**	**32.71**
C0970-162-3000-S	**2.267**	**57.58**	**111.44**	**495.71**	**152.02**	**26.60**
C0970-162-3500-S	**2.630**	**66.79**	**111.44**	**495.71**	**128.03**	**22.41**
C0970-162-4000-S	**2.993**	**76.01**	**111.44**	**495.71**	**110.62**	**19.36**
C0975-074-0750-S	0.445	11.30	10.12	45.02	33.15	5.80
C0975-074-0875-S	0.512	13.00	10.12	45.02	27.49	4.81
C0975-074-1000-S	0.568	14.43	10.12	45.02	23.41	4.10

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0975-074-1250-M	0.975	24.77	0.074	1.88	1.250	31.75	0.691	17.55	0.386	9.80	12.15	54.05	21.70	3.80
C0975-074-1500-M	0.975	24.77	0.074	1.88	1.500	38.10	0.814	20.68	0.431	10.95	12.15	54.05	17.70	3.10
C0975-074-2000-M	0.975	24.77	0.074	1.88	2.000	50.80	1.061	26.95	0.522	13.26	12.15	54.05	12.90	2.26
C0975-074-2500-M	0.975	24.77	0.074	1.88	2.500	63.50	1.307	33.20	0.613	15.57	12.15	54.05	10.20	1.79
C0975-074-3000-M	0.975	24.77	0.074	1.88	3.000	76.20	1.554	39.47	0.704	17.88	12.15	54.05	8.40	1.47
C0975-074-3500-M	0.975	24.77	0.074	1.88	3.500	88.90	1.800	45.72	0.795	20.19	12.15	54.05	7.10	1.24
C0975-074-4000-M	0.975	24.77	0.074	1.88	4.000	101.60	2.047	51.99	0.886	22.50	12.15	54.05	6.20	1.09
C0975-085-0875-M	0.975	24.77	0.085	2.16	0.880	22.35	0.547	13.89	0.381	9.68	17.90	79.62	53.80	9.42
C0975-085-1000-M	0.975	24.77	0.085	2.16	1.000	25.40	0.608	15.44	0.411	10.44	17.90	79.62	45.70	8.00
C0975-085-1250-M	0.975	24.77	0.085	2.16	1.250	31.75	0.740	18.80	0.470	11.94	17.90	79.62	35.10	6.14
C0975-085-1500-M	0.975	24.77	0.085	2.16	1.500	38.10	0.872	22.15	0.530	13.46	17.90	79.62	28.50	4.99
C0975-085-2000-M	0.975	24.77	0.085	2.16	2.000	50.80	1.136	28.85	0.649	16.48	17.90	79.62	20.70	3.62
C0975-085-2500-M	0.975	24.77	0.085	2.16	2.500	63.50	1.400	35.56	0.769	19.53	17.90	79.62	16.30	2.85
C0975-085-3000-M	0.975	24.77	0.085	2.16	3.000	76.20	1.664	42.27	0.888	22.56	17.90	79.62	13.40	2.35
C0975-085-3500-M	0.975	24.77	0.085	2.16	3.500	88.90	1.928	48.97	1.007	25.58	17.90	79.62	11.40	2.00
C0975-092-0875-M	0.975	24.77	0.092	2.34	0.880	22.35	0.570	14.48	0.421	10.69	22.31	99.24	72.00	12.60
C0975-092-1000-M	0.975	24.77	0.092	2.34	1.000	25.40	0.634	16.10	0.456	11.58	22.31	99.24	61.00	10.68
C0975-092-1250-M	0.975	24.77	0.092	2.34	1.250	31.75	0.772	19.61	0.525	13.34	22.31	99.24	46.70	8.17
C0975-092-1500-M	0.975	24.77	0.092	2.34	1.500	38.10	0.910	23.11	0.594	15.09	22.31	99.24	37.80	6.62
C0975-092-2000-M	0.975	24.77	0.092	2.34	2.000	50.80	1.186	30.12	0.732	18.59	22.31	99.24	27.40	4.80
C0975-092-2500-M	0.975	24.77	0.092	2.34	2.500	63.50	1.461	37.11	0.871	22.12	22.31	99.24	21.50	3.76
C0975-092-3000-M	0.975	24.77	0.092	2.34	3.000	76.20	1.737	44.12	1.009	25.63	22.31	99.24	17.70	3.10
C0975-092-3500-M	0.975	24.77	0.092	2.34	3.500	88.90	2.013	51.13	1.147	29.13	22.31	99.24	15.00	2.63
C0975-092-4000-M	0.975	24.77	0.092	2.34	4.000	101.60	2.289	58.14	1.286	32.66	22.31	99.24	13.00	2.28
C0975-096-0875-M	0.975	24.77	0.096	2.44	0.880	22.35	0.583	14.81	0.444	11.28	25.11	111.69	84.60	14.81
C0975-096-1000-M	0.975	24.77	0.096	2.44	1.000	25.40	0.649	16.48	0.481	12.22	25.11	111.69	71.50	12.51
C0975-096-1250-M	0.975	24.77	0.096	2.44	1.250	31.75	0.790	20.07	0.556	14.12	25.11	111.69	54.60	9.56
C0975-096-1500-M	0.975	24.77	0.096	2.44	1.500	38.10	0.931	23.65	0.631	16.03	25.11	111.69	44.20	7.74
C0975-096-2000-M	0.975	24.77	0.096	2.44	2.000	50.80	1.214	30.84	0.780	19.81	25.11	111.69	31.90	5.58
C0975-096-2500-M	0.975	24.77	0.096	2.44	2.500	63.50	1.497	38.02	0.930	23.62	25.11	111.69	25.00	4.38
C0975-096-3000-M	0.975	24.77	0.096	2.44	3.000	76.20	1.779	45.19	1.079	27.41	25.11	111.69	20.60	3.61
C0975-096-3500-M	0.975	24.77	0.096	2.44	3.500	88.90	2.062	52.37	1.228	31.19	25.11	111.69	17.50	3.06
C0975-105-0880-M	0.975	24.77	0.105	2.67	0.880	22.35	0.610	15.49	0.496	12.60	32.19	143.19	119.10	20.84
C0975-105-1000-M	0.975	24.77	0.105	2.67	1.000	25.40	0.681	17.30	0.538	13.67	32.19	143.19	101.00	17.68
C0975-105-1250-M	0.975	24.77	0.105	2.67	1.250	31.75	0.830	21.08	0.626	15.90	32.19	143.19	76.70	13.42
C0975-105-1500-M	0.975	24.77	0.105	2.67	1.500	38.10	0.979	24.87	0.713	18.11	32.19	143.19	61.80	10.82
C0975-105-1750-M	0.975	24.77	0.105	2.67	1.750	44.45	1.129	28.68	0.800	20.32	32.19	143.19	51.80	9.07
C0975-105-2000-M	0.975	24.77	0.105	2.67	2.000	50.80	1.278	32.46	0.888	22.56	32.19	143.19	44.60	7.81
C0975-105-2250-M	0.975	24.77	0.105	2.67	2.250	57.15	1.427	36.25	0.975	24.77	32.19	143.19	39.10	6.84
C0975-105-2500-M	0.975	24.77	0.105	2.67	2.500	63.50	1.576	40.03	1.062	26.97	32.19	143.19	34.80	6.09
C0975-105-2750-M	0.975	24.77	0.105	2.67	2.750	69.85	1.725	43.82	1.149	29.18	32.19	143.19	31.40	5.50
C0975-105-3000-M	0.975	24.77	0.105	2.67	3.000	76.20	1.874	47.60	1.237	31.42	32.19	143.19	28.60	5.01
C0975-105-3500-M	0.975	24.77	0.105	2.67	3.500	88.90	2.173	55.19	1.411	35.84	32.19	143.19	24.30	4.25
C0975-105-4000-M	0.975	24.77	0.105	2.67	4.000	101.60	2.471	62.76	1.586	40.28	32.19	143.19	21.10	3.69
C0975-112-0880-M	0.975	24.77	0.112	2.85	0.880	22.35	0.631	16.03	0.535	13.59	38.48	171.17	154.70	27.07
C0975-112-1000-M	0.975	24.77	0.112	2.85	1.000	25.40	0.706	17.93	0.581	14.76	38.48	171.17	130.80	22.89
C0975-112-1250-M	0.975	24.77	0.112	2.85	1.250	31.75	0.861	21.87	0.679	17.25	38.48	171.17	98.90	17.31
C0975-112-1500-M	0.975	24.77	0.112	2.85	1.500	38.10	1.016	25.81	0.776	19.71	38.48	171.17	79.50	13.91
C0975-112-2000-M	0.975	24.77	0.112	2.85	2.000	50.80	1.327	33.71	0.970	24.64	38.48	171.17	57.10	9.99
C0975-112-2500-M	0.975	24.77	0.112	2.85	2.500	63.50	1.637	41.58	1.164	29.57	38.48	171.17	44.60	7.81
C0975-112-3000-M	0.975	24.77	0.112	2.85	3.000	76.20	1.947	49.45	1.358	34.49	38.48	171.17	36.60	6.41
C0975-112-3500-M	0.975	24.77	0.112	2.85	3.500	88.90	2.258	57.35	1.553	39.45	38.48	171.17	31.00	5.43
C0975-125-0880-M	0.975	24.77	0.125	3.18	0.880	22.35	0.669	16.99	0.602	15.29	52.04	231.49	246.60	43.16
C0975-125-1000-M	0.975	24.77	0.125	3.18	1.000	25.40	0.749	19.02	0.657	16.69	52.04	231.49	207.20	36.26
C0975-125-1250-M	0.975	24.77	0.125	3.18	1.250	31.75	0.915	23.24	0.772	19.61	52.04	231.49	155.40	27.20
C0975-125-1500-M	0.975	24.77	0.125	3.18	1.500	38.10	1.081	27.46	0.887	22.53	52.04	231.49	124.30	21.75
C0975-125-1750-M	0.975	24.77	0.125	3.18	1.750	44.45	1.248	31.70	1.002	25.45	52.04	231.49	103.60	18.13
C0975-125-2000-M	0.975	24.77	0.125	3.18	2.000	50.80	1.414	35.92	1.117	28.37	52.04	231.49	88.80	15.54
C0975-125-2250-M	0.975	24.77	0.125	3.18	2.250	57.15	1.580	40.13	1.232	31.29	52.04	231.49	77.70	13.60
C0975-125-2500-M	0.975	24.77	0.125	3.18	2.500	63.50	1.746	44.35	1.347	34.21	52.04	231.49	69.10	12.09
C0975-125-2750-M	0.975	24.77	0.125	3.18	2.750	69.85	1.913	48.59	1.462	37.13	52.04	231.49	62.20	10.89
C0975-125-3000-M	0.975	24.77	0.125	3.18	3.000	76.20	2.079	52.81	1.577	40.06	52.04	231.49	56.50	9.89
C0975-125-3500-M	0.975	24.77	0.125	3.18	3.500	88.90	2.411	61.24	1.807	45.90	52.04	231.49	47.80	8.37
C0975-125-4000-M	0.975	24.77	0.125	3.18	4.000	101.60	2.744	69.70	2.037	51.74	52.04	231.49	41.40	7.25

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0975-074-1250-S	0.691	17.55	10.12	45.02	18.08	3.16
C0975-074-1500-S	0.814	20.68	10.12	45.02	14.74	2.58
C0975-074-2000-S	1.061	26.95	10.12	45.02	10.75	1.88
C0975-074-2500-S	1.307	33.20	10.12	45.02	8.50	1.49
C0975-074-3000-S	1.554	39.47	10.12	45.02	7.00	1.22
C0975-074-3500-S	1.800	45.72	10.12	45.02	5.91	1.03
C0975-074-4000-S	2.047	51.99	10.12	45.02	5.17	0.90
C0975-085-0875-S	0.547	13.89	14.91	66.33	44.82	7.84
C0975-085-1000-S	0.608	15.44	14.91	66.33	38.07	6.66
C0975-085-1250-S	0.740	18.80	14.91	66.33	29.24	5.12
C0975-085-1500-S	0.872	22.15	14.91	66.33	23.74	4.15
C0975-085-2000-S	1.136	28.85	14.91	66.33	17.24	3.02
C0975-085-2500-S	1.400	35.56	14.91	66.33	13.58	2.38
C0975-085-3000-S	1.664	42.27	14.91	66.33	11.16	1.95
C0975-085-3500-S	1.928	48.97	14.91	66.33	9.50	1.66
C0975-092-0875-S	0.570	14.48	18.58	82.67	59.98	10.50
C0975-092-1000-S	0.634	16.10	18.58	82.67	50.81	8.89
C0975-092-1250-S	0.772	19.61	18.58	82.67	38.90	6.81
C0975-092-1500-S	0.910	23.11	18.58	82.67	31.49	5.51
C0975-092-2000-S	1.186	30.12	18.58	82.67	22.82	3.99
C0975-092-2500-S	1.461	37.11	18.58	82.67	17.91	3.13
C0975-092-3000-S	1.737	44.12	18.58	82.67	14.74	2.58
C0975-092-3500-S	2.013	51.13	18.58	82.67	12.50	2.19
C0975-092-4000-S	2.289	58.14	18.58	82.67	10.83	1.90
C0975-096-0875-S	0.583	14.81	20.92	93.04	70.47	12.33
C0975-096-1000-S	0.649	16.48	20.92	93.04	59.56	10.42
C0975-096-1250-S	0.790	20.07	20.92	93.04	45.48	7.96
C0975-096-1500-S	0.931	23.65	20.92	93.04	36.82	6.44
C0975-096-2000-S	1.214	30.84	20.92	93.04	26.57	4.65
C0975-096-2500-S	1.497	38.02	20.92	93.04	20.83	3.64
C0975-096-3000-S	1.779	45.19	20.92	93.04	17.16	3.00
C0975-096-3500-S	2.062	52.37	20.92	93.04	14.58	2.55
C0975-105-0880-S	0.610	15.49	26.81	119.28	99.21	17.36
C0975-105-1000-S	0.681	17.30	26.81	119.28	84.13	14.72
C0975-105-1250-S	0.830	21.08	26.81	119.28	63.89	11.18
C0975-105-1500-S	0.979	24.87	26.81	119.28	51.48	9.01
C0975-105-1750-S	1.129	28.68	26.81	119.28	43.15	7.55
C0975-105-2000-S	1.278	32.46	26.81	119.28	37.15	6.50
C0975-105-2250-S	1.427	36.25	26.81	119.28	32.57	5.70
C0975-105-2500-S	1.576	40.03	26.81	119.28	28.99	5.07
C0975-105-2750-S	1.725	43.82	26.81	119.28	26.16	4.58
C0975-105-3000-S	1.874	47.60	26.81	119.28	23.82	4.17
C0975-105-3500-S	2.173	55.19	26.81	119.28	20.24	3.54
C0975-105-4000-S	2.471	62.76	26.81	119.28	17.58	3.08
C0975-112-0880-S	0.631	16.03	32.05	142.58	128.87	22.55
C0975-112-1000-S	0.706	17.93	32.05	142.58	108.96	19.07
C0975-112-1250-S	0.861	21.87	32.05	142.58	82.38	14.42
C0975-112-1500-S	1.016	25.81	32.05	142.58	66.22	11.59
C0975-112-2000-S	1.327	33.71	32.05	142.58	47.56	8.32
C0975-112-2500-S	1.637	41.58	32.05	142.58	37.15	6.50
C0975-112-3000-S	1.947	49.45	32.05	142.58	30.49	5.34
C0975-112-3500-S	2.258	57.35	32.05	142.58	25.82	4.52
C0975-125-0880-S	0.669	16.99	43.35	192.83	205.42	35.95
C0975-125-1000-S	0.749	19.02	43.35	192.83	172.60	30.20
C0975-125-1250-S	0.915	23.24	43.35	192.83	129.45	22.65
C0975-125-1500-S	1.081	27.46	43.35	192.83	103.54	18.12
C0975-125-1750-S	1.248	31.70	43.35	192.83	86.30	15.10
C0975-125-2000-S	1.414	35.92	43.35	192.83	73.97	12.94
C0975-125-2250-S	1.580	40.13	43.35	192.83	64.72	11.33
C0975-125-2500-S	1.746	44.35	43.35	192.83	57.56	10.07
C0975-125-2750-S	1.913	48.59	43.35	192.83	51.81	9.07
C0975-125-3000-S	2.079	52.81	43.35	192.83	47.07	8.24
C0975-125-3500-S	2.411	61.24	43.35	192.83	39.82	6.97
C0975-125-4000-S	2.744	69.70	43.35	192.83	34.49	6.04

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0975-135-0880-M	0.975	24.77	0.135	3.43	0.880	22.35	0.699	17.75	0.643	16.33	64.46	286.73	356.60	62.41
C0975-135-1000-M	0.975	24.77	0.135	3.43	1.000	25.40	0.784	19.91	0.703	17.86	64.46	286.73	298.00	52.15
C0975-135-1500-M	0.975	24.77	0.135	3.43	1.500	38.10	1.135	28.83	0.953	24.21	64.46	286.73	176.80	30.94
C0975-135-2000-M	0.975	24.77	0.135	3.43	2.000	50.80	1.487	37.77	1.203	30.56	64.46	286.73	125.70	22.00
C0975-135-2500-M	0.975	24.77	0.135	3.43	2.500	63.50	1.839	46.71	1.453	36.91	64.46	286.73	97.50	17.06
C0975-135-3000-M	0.975	24.77	0.135	3.43	3.000	76.20	2.191	55.65	1.703	43.26	64.46	286.73	79.70	13.95
C0975-135-3500-M	0.975	24.77	0.135	3.43	3.500	88.90	2.543	64.59	1.953	49.61	64.46	286.73	67.30	11.78
C0975-135-4000-M	0.975	24.77	0.135	3.43	4.000	101.60	2.895	73.53	2.203	55.96	64.46	286.73	58.30	10.20
C0975-148-1000-M	0.975	24.77	0.148	3.76	1.000	25.40	0.820	20.83	0.763	19.38	82.53	367.11	459.00	80.33
C0975-148-1500-M	0.975	24.77	0.148	3.76	1.500	38.10	1.193	30.30	1.042	26.47	82.53	367.11	268.40	46.97
C0975-148-2000-M	0.975	24.77	0.148	3.76	2.000	50.80	1.565	39.75	1.322	33.58	82.53	367.11	189.60	33.18
C0975-148-2500-M	0.975	24.77	0.148	3.76	2.500	63.50	1.937	49.20	1.601	40.67	82.53	367.11	146.60	25.66
C0975-148-3000-M	0.975	24.77	0.148	3.76	3.000	76.20	2.309	58.65	1.880	47.75	82.53	367.11	119.50	20.91
C0975-148-3500-M	0.975	24.77	0.148	3.76	3.500	88.90	2.682	68.12	2.159	54.84	82.53	367.11	100.90	17.66
C0975-148-4000-M	0.975	24.77	0.148	3.76	4.000	101.60	3.054	77.57	2.439	61.95	82.53	367.11	87.20	15.26
C0975-162-1500-M	0.975	24.77	0.162	4.12	1.500	38.10	1.246	31.65	1.124	28.55	105.40	468.84	415.20	72.66
C0975-162-2000-M	0.975	24.77	0.162	4.12	2.000	50.80	1.638	41.61	1.430	36.32	105.40	468.84	291.30	50.98
C0975-162-2500-M	0.975	24.77	0.162	4.12	2.500	63.50	2.030	51.56	1.735	44.07	105.40	468.84	224.40	39.27
C0975-162-3000-M	0.975	24.77	0.162	4.12	3.000	76.20	2.422	61.52	2.041	51.84	105.40	468.84	182.50	31.94
C0975-162-3500-M	0.975	24.77	0.162	4.12	3.500	88.90	2.814	71.48	2.347	59.61	105.40	468.84	153.70	26.90
C0975-162-4000-M	0.975	24.77	0.162	4.12	4.000	101.60	3.206	81.43	2.652	67.36	105.40	468.84	132.80	23.24
C0999-085-1750-M	**0.999**	**25.38**	**0.085**	**2.16**	**1.750**	**44.45**	**0.706**	**17.93**	**0.548**	**13.91**	**24.80**	**110.30**	**23.75**	**4.16**
C0999-085-1875-M	**0.999**	**25.38**	**0.085**	**2.16**	**1.875**	**47.63**	**0.748**	**19.01**	**0.577**	**14.66**	**24.80**	**110.30**	**22.01**	**3.85**
C0999-085-2000-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.000**	**50.80**	**0.791**	**20.09**	**0.606**	**15.40**	**24.80**	**110.30**	**20.51**	**3.59**
C0999-085-2125-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.125**	**53.98**	**0.833**	**21.16**	**0.635**	**16.14**	**24.80**	**110.30**	**19.19**	**3.36**
C0999-085-2250-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.250**	**57.15**	**0.876**	**22.24**	**0.665**	**16.88**	**24.80**	**110.30**	**18.04**	**3.16**
C0999-085-2375-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.375**	**60.33**	**0.918**	**23.32**	**0.694**	**17.63**	**24.80**	**110.30**	**17.02**	**2.98**
C0999-085-2500-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.500**	**63.50**	**0.960**	**24.39**	**0.723**	**18.37**	**24.80**	**110.30**	**16.11**	**2.82**
C0999-085-2625-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.625**	**66.68**	**1.003**	**25.47**	**0.752**	**19.11**	**24.80**	**110.30**	**15.29**	**2.67**
C0999-085-2750-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.750**	**69.85**	**1.045**	**26.55**	**0.782**	**19.85**	**24.80**	**110.30**	**14.54**	**2.55**
C0999-085-2875-M	**0.999**	**25.38**	**0.085**	**2.16**	**2.875**	**73.03**	**1.088**	**27.62**	**0.811**	**20.59**	**24.80**	**110.30**	**13.87**	**2.43**
C0999-085-3000-M	**0.999**	**25.38**	**0.085**	**2.16**	**3.000**	**76.20**	**1.130**	**28.70**	**0.840**	**21.34**	**24.80**	**110.30**	**13.26**	**2.32**
C0999-085-3250-M	**0.999**	**25.38**	**0.085**	**2.16**	**3.250**	**82.55**	**1.215**	**30.86**	**0.898**	**22.82**	**24.80**	**110.30**	**12.18**	**2.13**
C0999-085-3500-M	**0.999**	**25.38**	**0.085**	**2.16**	**3.500**	**88.90**	**1.300**	**33.01**	**0.957**	**24.30**	**24.80**	**110.30**	**11.27**	**1.97**
C0999-085-3750-M	**0.999**	**25.38**	**0.085**	**2.16**	**3.750**	**95.25**	**1.384**	**35.16**	**1.015**	**25.79**	**24.80**	**110.30**	**10.48**	**1.83**
C0999-085-4000-M	**0.999**	**25.38**	**0.085**	**2.16**	**4.000**	**101.60**	**1.469**	**37.32**	**1.074**	**27.27**	**24.80**	**110.30**	**9.80**	**1.71**
C0999-085-4250-M	**0.999**	**25.38**	**0.085**	**2.16**	**4.250**	**107.95**	**1.554**	**39.47**	**1.132**	**28.76**	**24.80**	**110.30**	**9.20**	**1.61**
C0999-085-4500-M	**0.999**	**25.38**	**0.085**	**2.16**	**4.500**	**114.30**	**1.639**	**41.63**	**1.191**	**30.24**	**24.80**	**110.30**	**8.67**	**1.52**
C0999-085-4750-M	**0.999**	**25.38**	**0.085**	**2.16**	**4.750**	**120.65**	**1.724**	**43.78**	**1.249**	**31.73**	**24.80**	**110.30**	**8.19**	**1.43**
C0999-085-5000-M	**0.999**	**25.38**	**0.085**	**2.16**	**5.000**	**127.00**	**1.808**	**45.93**	**1.307**	**33.21**	**24.80**	**110.30**	**7.77**	**1.36**
C0999-085-5250-M	**0.999**	**25.38**	**0.085**	**2.16**	**5.250**	**133.35**	**1.893**	**48.09**	**1.366**	**34.69**	**24.80**	**110.30**	**7.39**	**1.29**
C0999-085-5500-M	**0.999**	**25.38**	**0.085**	**2.16**	**5.500**	**139.70**	**1.978**	**50.24**	**1.424**	**36.18**	**24.80**	**110.30**	**7.04**	**1.23**
C0999-085-5750-M	**0.999**	**25.38**	**0.085**	**2.16**	**5.750**	**146.05**	**2.063**	**52.40**	**1.483**	**37.66**	**24.80**	**110.30**	**6.73**	**1.18**
C0999-085-6000-M	**0.999**	**25.38**	**0.085**	**2.16**	**6.000**	**152.40**	**2.148**	**54.55**	**1.541**	**39.15**	**24.80**	**110.30**	**6.44**	**1.13**
C0999-085-6250-M	**0.999**	**25.38**	**0.085**	**2.16**	**6.250**	**158.75**	**2.232**	**56.70**	**1.600**	**40.63**	**24.80**	**110.30**	**6.17**	**1.08**
C0999-085-6500-M	**0.999**	**25.38**	**0.085**	**2.16**	**6.500**	**165.10**	**2.317**	**58.86**	**1.658**	**42.12**	**24.80**	**110.30**	**5.93**	**1.04**
C0999-085-6750-M	**0.999**	**25.38**	**0.085**	**2.16**	**6.750**	**171.45**	**2.402**	**61.01**	**1.717**	**43.60**	**24.80**	**110.30**	**5.70**	**1.00**
C0999-085-7000-M	**0.999**	**25.38**	**0.085**	**2.16**	**7.000**	**177.80**	**2.487**	**63.17**	**1.775**	**45.08**	**24.80**	**110.30**	**5.49**	**0.96**
C0999-085-7500-M	**0.999**	**25.38**	**0.085**	**2.16**	**7.500**	**190.50**	**2.656**	**67.47**	**1.892**	**48.05**	**24.80**	**110.30**	**5.12**	**0.90**
C0999-085-8000-M	**0.999**	**25.38**	**0.085**	**2.16**	**8.000**	**203.20**	**2.826**	**71.78**	**2.009**	**51.02**	**24.80**	**110.30**	**4.79**	**0.84**
C0999-085-8500-M	**0.999**	**25.38**	**0.085**	**2.16**	**8.500**	**215.90**	**2.996**	**76.09**	**2.126**	**53.99**	**24.80**	**110.30**	**4.51**	**0.79**
C0999-085-9000-M	**0.999**	**25.38**	**0.085**	**2.16**	**9.000**	**228.60**	**3.165**	**80.40**	**2.242**	**56.96**	**24.80**	**110.30**	**4.25**	**0.74**
C0999-085-9500-M	**0.999**	**25.38**	**0.085**	**2.16**	**9.500**	**241.30**	**3.335**	**84.71**	**2.359**	**59.93**	**24.80**	**110.30**	**4.02**	**0.70**
C0999-092-1625-M	**0.999**	**25.38**	**0.092**	**2.34**	**1.625**	**41.28**	**0.717**	**18.22**	**0.585**	**14.86**	**30.90**	**137.44**	**34.04**	**5.96**
C0999-092-1750-M	**0.999**	**25.38**	**0.092**	**2.34**	**1.750**	**44.45**	**0.764**	**19.39**	**0.619**	**15.72**	**30.90**	**137.44**	**31.32**	**5.48**
C0999-092-1875-M	**0.999**	**25.38**	**0.092**	**2.34**	**1.875**	**47.63**	**0.810**	**20.57**	**0.653**	**16.58**	**30.90**	**137.44**	**29.01**	**5.08**
C0999-092-2000-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.000**	**50.80**	**0.856**	**21.74**	**0.687**	**17.45**	**30.90**	**137.44**	**27.01**	**4.73**
C0999-092-2125-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.125**	**53.98**	**0.902**	**22.92**	**0.721**	**18.31**	**30.90**	**137.44**	**25.27**	**4.42**
C0999-092-2250-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.250**	**57.15**	**0.949**	**24.09**	**0.755**	**19.17**	**30.90**	**137.44**	**23.74**	**4.15**
C0999-092-2375-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.375**	**60.33**	**0.995**	**25.27**	**0.789**	**20.03**	**30.90**	**137.44**	**22.39**	**3.92**
C0999-092-2500-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.500**	**63.50**	**1.041**	**26.44**	**0.823**	**20.90**	**30.90**	**137.44**	**21.18**	**3.71**
C0999-092-2625-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.625**	**66.68**	**1.087**	**27.62**	**0.857**	**21.76**	**30.90**	**137.44**	**20.09**	**3.52**
C0999-092-2750-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.750**	**69.85**	**1.134**	**28.79**	**0.891**	**22.62**	**30.90**	**137.44**	**19.11**	**3.34**
C0999-092-2875-M	**0.999**	**25.38**	**0.092**	**2.34**	**2.875**	**73.03**	**1.180**	**29.97**	**0.925**	**23.49**	**30.90**	**137.44**	**18.23**	**3.19**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0975-135-0880-S	0.699	17.75	53.70	238.85	297.05	51.98
C0975-135-1000-S	0.784	19.91	53.70	238.85	248.23	43.44
C0975-135-1500-S	1.135	28.83	53.70	238.85	147.27	25.77
C0975-135-2000-S	1.487	37.77	53.70	238.85	104.71	18.32
C0975-135-2500-S	1.839	46.71	53.70	238.85	81.22	14.21
C0975-135-3000-S	2.191	55.65	53.70	238.85	66.39	11.62
C0975-135-3500-S	2.543	64.59	53.70	238.85	56.06	9.81
C0975-135-4000-S	2.895	73.53	53.70	238.85	48.56	8.50
C0975-148-1000-S	0.820	20.83	68.75	305.80	382.35	66.91
C0975-148-1500-S	1.193	30.30	68.75	305.80	223.58	39.13
C0975-148-2000-S	1.565	39.75	68.75	305.80	157.94	27.64
C0975-148-2500-S	1.937	49.20	68.75	305.80	122.12	21.37
C0975-148-3000-S	2.309	58.65	68.75	305.80	99.54	17.42
C0975-148-3500-S	2.682	68.12	68.75	305.80	84.05	14.71
C0975-148-4000-S	3.054	77.57	68.75	305.80	72.64	12.71
C0975-162-1500-S	1.246	31.65	87.80	390.55	345.86	60.53
C0975-162-2000-S	1.638	41.61	87.80	390.55	242.65	42.46
C0975-162-2500-S	2.030	51.56	87.80	390.55	186.93	32.71
C0975-162-3000-S	2.422	61.52	87.80	390.55	152.02	26.60
C0975-162-3500-S	2.814	71.48	87.80	390.55	128.03	22.41
C0975-162-4000-S	3.206	81.43	87.80	390.55	110.62	19.36
C0999-085-1750-S	**0.808**	**20.52**	**19.46**	**86.56**	**20.65**	**3.61**
C0999-085-1875-S	**0.858**	**21.80**	**19.46**	**86.56**	**19.14**	**3.35**
C0999-085-2000-S	**0.909**	**23.08**	**19.46**	**86.56**	**17.83**	**3.12**
C0999-085-2125-S	**0.959**	**24.36**	**19.46**	**86.56**	**16.69**	**2.92**
C0999-085-2250-S	**1.009**	**25.64**	**19.46**	**86.56**	**15.69**	**2.75**
C0999-085-2375-S	**1.060**	**26.92**	**19.46**	**86.56**	**14.80**	**2.59**
C0999-085-2500-S	**1.110**	**28.20**	**19.46**	**86.56**	**14.00**	**2.45**
C0999-085-2625-S	**1.161**	**29.49**	**19.46**	**86.56**	**13.29**	**2.33**
C0999-085-2750-S	**1.211**	**30.77**	**19.46**	**86.56**	**12.65**	**2.21**
C0999-085-2875-S	**1.262**	**32.05**	**19.46**	**86.56**	**12.06**	**2.11**
C0999-085-3000-S	**1.312**	**33.33**	**19.46**	**86.56**	**11.53**	**2.02**
C0999-085-3250-S	**1.413**	**35.89**	**19.46**	**86.56**	**10.59**	**1.85**
C0999-085-3500-S	**1.514**	**38.46**	**19.46**	**86.56**	**9.80**	**1.71**
C0999-085-3750-S	**1.615**	**41.02**	**19.46**	**86.56**	**9.12**	**1.60**
C0999-085-4000-S	**1.716**	**43.58**	**19.46**	**86.56**	**8.52**	**1.49**
C0999-085-4250-S	**1.817**	**46.14**	**19.46**	**86.56**	**8.00**	**1.40**
C0999-085-4500-S	**1.918**	**48.71**	**19.46**	**86.56**	**7.54**	**1.32**
C0999-085-4750-S	**2.019**	**51.27**	**19.46**	**86.56**	**7.12**	**1.25**
C0999-085-5000-S	**2.119**	**53.83**	**19.46**	**86.56**	**6.76**	**1.18**
C0999-085-5250-S	**2.220**	**56.40**	**19.46**	**86.56**	**6.42**	**1.12**
C0999-085-5500-S	**2.321**	**58.96**	**19.46**	**86.56**	**6.12**	**1.07**
C0999-085-5750-S	**2.422**	**61.52**	**19.46**	**86.56**	**5.85**	**1.02**
C0999-085-6000-S	**2.523**	**64.08**	**19.46**	**86.56**	**5.60**	**0.98**
C0999-085-6250-S	**2.624**	**66.65**	**19.46**	**86.56**	**5.37**	**0.94**
C0999-085-6500-S	**2.725**	**69.21**	**19.46**	**86.56**	**5.16**	**0.90**
C0999-085-6750-S	**2.826**	**71.77**	**19.46**	**86.56**	**4.96**	**0.87**
C0999-085-7000-S	**2.927**	**74.34**	**19.46**	**86.56**	**4.78**	**0.84**
C0999-085-7500-S	**3.128**	**79.46**	**19.46**	**86.56**	**4.45**	**0.78**
C0999-085-8000-S	**3.330**	**84.59**	**19.46**	**86.56**	**4.17**	**0.73**
C0999-085-8500-S	**3.532**	**89.71**	**19.46**	**86.56**	**3.92**	**0.69**
C0999-085-9000-S	**3.734**	**94.84**	**19.46**	**86.56**	**3.70**	**0.65**
C0999-085-9500-S	**3.936**	**99.97**	**19.46**	**86.56**	**3.50**	**0.61**
C0999-092-1625-S	**0.809**	**20.55**	**24.15**	**107.40**	**29.60**	**5.18**
C0999-092-1750-S	**0.863**	**21.93**	**24.15**	**107.40**	**27.24**	**4.77**
C0999-092-1875-S	**0.918**	**23.31**	**24.15**	**107.40**	**25.22**	**4.41**
C0999-092-2000-S	**0.972**	**24.69**	**24.15**	**107.40**	**23.49**	**4.11**
C0999-092-2125-S	**1.026**	**26.06**	**24.15**	**107.40**	**21.97**	**3.85**
C0999-092-2250-S	**1.080**	**27.44**	**24.15**	**107.40**	**20.64**	**3.61**
C0999-092-2375-S	**1.135**	**28.82**	**24.15**	**107.40**	**19.47**	**3.41**
C0999-092-2500-S	**1.189**	**30.20**	**24.15**	**107.40**	**18.42**	**3.22**
C0999-092-2625-S	**1.243**	**31.57**	**24.15**	**107.40**	**17.47**	**3.06**
C0999-092-2750-S	**1.297**	**32.95**	**24.15**	**107.40**	**16.62**	**2.91**
C0999-092-2875-S	**1.352**	**34.33**	**24.15**	**107.40**	**15.85**	**2.77**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0999-092-3000-M	0.999	25.38	0.092	2.34	3.000	76.20	1.226	31.14	0.959	24.35	30.90	137.44	17.42	3.05	**C0999-092-3000-S**	1.406	35.71	24.15	107.40	15.15	2.65
C0999-092-3250-M	0.999	25.38	0.092	2.34	3.250	82.55	1.319	33.49	1.027	26.08	30.90	137.44	16.00	2.80	**C0999-092-3250-S**	1.514	38.46	24.15	107.40	13.91	2.43
C0999-092-3500-M	0.999	25.38	0.092	2.34	3.500	88.90	1.411	35.84	1.095	27.80	30.90	137.44	14.79	2.59	**C0999-092-3500-S**	1.623	41.22	24.15	107.40	12.86	2.25
C0999-092-3750-M	0.999	25.38	0.092	2.34	3.750	95.25	1.504	38.19	1.163	29.53	30.90	137.44	13.75	2.41	**C0999-092-3750-S**	1.731	43.97	24.15	107.40	11.96	2.09
C0999-092-4000-M	0.999	25.38	0.092	2.34	4.000	101.60	1.596	40.54	1.231	31.25	30.90	137.44	12.85	2.25	**C0999-092-4000-S**	1.840	46.73	24.15	107.40	11.18	1.96
C0999-092-4250-M	0.999	25.38	0.092	2.34	4.250	107.95	1.689	42.89	1.298	32.98	30.90	137.44	12.06	2.11	**C0999-092-4250-S**	1.948	49.48	24.15	107.40	10.49	1.84
C0999-092-4500-M	0.999	25.38	0.092	2.34	4.500	114.30	1.781	45.24	1.366	34.71	30.90	137.44	11.36	1.99	**C0999-092-4500-S**	2.057	52.24	24.15	107.40	9.88	1.73
C0999-092-4750-M	0.999	25.38	0.092	2.34	4.750	120.65	1.874	47.59	1.434	36.43	30.90	137.44	10.74	1.88	**C0999-092-4750-S**	2.165	54.99	24.15	107.40	9.34	1.63
C0999-092-5000-M	0.999	25.38	0.092	2.34	5.000	127.00	1.966	49.94	1.502	38.16	30.90	137.44	10.18	1.78	**C0999-092-5000-S**	2.274	57.75	24.15	107.40	8.86	1.55
C0999-092-5250-M	0.999	25.38	0.092	2.34	5.250	133.35	2.059	52.29	1.570	39.89	30.90	137.44	9.68	1.69	**C0999-092-5250-S**	2.382	60.50	24.15	107.40	8.42	1.47
C0999-092-5500-M	0.999	25.38	0.092	2.34	5.500	139.70	2.151	54.64	1.638	41.61	30.90	137.44	9.23	1.61	**C0999-092-5500-S**	2.490	63.26	24.15	107.40	8.02	1.40
C0999-092-5750-M	0.999	25.38	0.092	2.34	5.750	146.05	2.244	56.99	1.706	43.34	30.90	137.44	8.81	1.54	**C0999-092-5750-S**	2.599	66.01	24.15	107.40	7.66	1.34
C0999-092-6000-M	0.999	25.38	0.092	2.34	6.000	152.40	2.336	59.34	1.774	45.06	30.90	137.44	8.43	1.48	**C0999-092-6000-S**	2.707	68.77	24.15	107.40	7.33	1.28
C0999-092-6250-M	0.999	25.38	0.092	2.34	6.250	158.75	2.429	61.69	1.842	46.79	30.90	137.44	8.09	1.42	**C0999-092-6250-S**	2.816	71.52	24.15	107.40	7.03	1.23
C0999-092-6500-M	0.999	25.38	0.092	2.34	6.500	165.10	2.521	64.04	1.910	48.52	30.90	137.44	7.77	1.36	**C0999-092-6500-S**	2.924	74.28	24.15	107.40	6.75	1.18
C0999-092-6750-M	0.999	25.38	0.092	2.34	6.750	171.45	2.614	66.39	1.978	50.24	30.90	137.44	7.47	1.31	**C0999-092-6750-S**	3.033	77.03	24.15	107.40	6.50	1.14
C0999-092-7000-M	0.999	25.38	0.092	2.34	7.000	177.80	2.706	68.74	2.046	51.97	30.90	137.44	7.20	1.26	**C0999-092-7000-S**	3.141	79.79	24.15	107.40	6.26	1.09
C0999-092-7500-M	0.999	25.38	0.092	2.34	7.500	190.50	2.891	73.44	2.182	55.42	30.90	137.44	6.70	1.17	**C0999-092-7500-S**	3.358	85.30	24.15	107.40	5.83	1.02
C0999-092-8000-M	0.999	25.38	0.092	2.34	8.000	203.20	3.076	78.14	2.318	58.87	30.90	137.44	6.28	1.10	**C0999-092-8000-S**	3.575	90.81	24.15	107.40	5.46	0.95
C0999-092-8500-M*	0.999	25.38	0.092	2.34	8.500	215.90	3.319	84.31	2.525	64.14	30.90	137.44	5.96	1.04	**C0999-092-8500-S***	3.844	97.64	24.15	107.40	5.19	0.91
C0999-092-9000-M*	0.999	25.38	0.092	2.34	9.000	228.60	3.504	89.01	2.661	67.60	30.90	137.44	5.62	0.98	**C0999-092-9000-S***	4.061	103.15	24.15	107.40	4.89	0.86
C0999-092-9500-M*	0.999	25.38	0.092	2.34	9.500	241.30	3.689	93.71	2.797	71.05	30.90	137.44	5.32	0.93	**C0999-092-9500-S***	4.278	108.66	24.15	107.40	4.62	0.81
C0999-098-1625-M	0.999	25.38	0.098	2.49	1.625	41.28	0.764	19.40	0.642	16.31	36.82	163.77	42.74	7.48	**C0999-098-1625-S**	0.854	21.69	28.66	127.48	37.17	6.50
C0999-098-1750-M	0.999	25.38	0.098	2.49	1.750	44.45	0.813	20.66	0.680	17.28	36.82	163.77	39.31	6.88	**C0999-098-1750-S**	0.911	23.15	28.66	127.48	34.18	5.98
C0999-098-1875-M	0.999	25.38	0.098	2.49	1.875	47.63	0.863	21.92	0.719	18.25	36.82	163.77	36.38	6.37	**C0999-098-1875-S**	0.969	24.61	28.66	127.48	31.63	5.54
C0999-098-2000-M	0.999	25.38	0.098	2.49	2.000	50.80	0.913	23.18	0.757	19.22	36.82	163.77	33.86	5.93	**C0999-098-2000-S**	1.027	26.07	28.66	127.48	29.44	5.15
C0999-098-2125-M	0.999	25.38	0.098	2.49	2.125	53.98	0.962	24.44	0.795	20.19	36.82	163.77	31.66	5.54	**C0999-098-2125-S**	1.084	27.54	28.66	127.48	27.53	4.82
C0999-098-2250-M	0.999	25.38	0.098	2.49	2.250	57.15	1.012	25.70	0.833	21.16	36.82	163.77	29.74	5.20	**C0999-098-2250-S**	1.142	29.00	28.66	127.48	25.86	4.53
C0999-098-2375-M	0.999	25.38	0.098	2.49	2.375	60.33	1.062	26.96	0.871	22.13	36.82	163.77	28.03	4.91	**C0999-098-2375-S**	1.199	30.46	28.66	127.48	24.38	4.27
C0999-098-2500-M	0.999	25.38	0.098	2.49	2.500	63.50	1.111	28.22	0.909	23.10	36.82	163.77	26.51	4.64	**C0999-098-2500-S**	1.257	31.92	28.66	127.48	23.05	4.03
C0999-098-2625-M	0.999	25.38	0.098	2.49	2.625	66.68	1.161	29.49	0.948	24.07	36.82	163.77	25.15	4.40	**C0999-098-2625-S**	1.314	33.38	28.66	127.48	21.87	3.83
C0999-098-2750-M	0.999	25.38	0.098	2.49	2.750	69.85	1.210	30.75	0.986	25.04	36.82	163.77	23.92	4.19	**C0999-098-2750-S**	1.372	34.85	28.66	127.48	20.80	3.64
C0999-098-2875-M	0.999	25.38	0.098	2.49	2.875	73.03	1.260	32.01	1.024	26.01	36.82	163.77	22.80	3.99	**C0999-098-2875-S**	1.429	36.31	28.66	127.48	19.83	3.47
C0999-098-3000-M	0.999	25.38	0.098	2.49	3.000	76.20	1.310	33.27	1.062	26.98	36.82	163.77	21.78	3.81	**C0999-098-3000-S**	1.487	37.77	28.66	127.48	18.94	3.31
C0999-098-3250-M	0.999	25.38	0.098	2.49	3.250	82.55	1.409	35.79	1.138	28.92	36.82	163.77	20.00	3.50	**C0999-098-3250-S**	1.602	40.69	28.66	127.48	17.39	3.04
C0999-098-3500-M	0.999	25.38	0.098	2.49	3.500	88.90	1.508	38.31	1.215	30.86	36.82	163.77	18.49	3.24	**C0999-098-3500-S**	1.717	43.62	28.66	127.48	16.08	2.81
C0999-098-3750-M	0.999	25.38	0.098	2.49	3.750	95.25	1.608	40.84	1.291	32.80	36.82	163.77	17.19	3.01	**C0999-098-3750-S**	1.832	46.54	28.66	127.48	14.95	2.62
C0999-098-4000-M	0.999	25.38	0.098	2.49	4.000	101.60	1.707	43.36	1.367	34.73	36.82	163.77	16.06	2.81	**C0999-098-4000-S**	1.947	49.46	28.66	127.48	13.96	2.44
C0999-098-4250-M	0.999	25.38	0.098	2.49	4.250	107.95	1.806	45.88	1.444	36.67	36.82	163.77	15.07	2.64	**C0999-098-4250-S**	2.062	52.39	28.66	127.48	13.10	2.29
C0999-098-4500-M	0.999	25.38	0.098	2.49	4.500	114.30	1.906	48.40	1.520	38.61	36.82	163.77	14.19	2.48	**C0999-098-4500-S**	2.178	55.31	28.66	127.48	12.34	2.16
C0999-098-4750-M	0.999	25.38	0.098	2.49	4.750	120.65	2.005	50.93	1.597	40.55	36.82	163.77	13.41	2.35	**C0999-098-4750-S**	2.293	58.23	28.66	127.48	11.66	2.04
C0999-098-5000-M	0.999	25.38	0.098	2.49	5.000	127.00	2.104	53.45	1.673	42.49	36.82	163.77	12.71	2.22	**C0999-098-5000-S**	2.408	61.16	28.66	127.48	11.06	1.93
C0999-098-5250-M	0.999	25.38	0.098	2.49	5.250	133.35	2.204	55.97	1.749	44.43	36.82	163.77	12.09	2.11	**C0999-098-5250-S**	2.523	64.08	28.66	127.48	10.51	1.84
C0999-098-5500-M	0.999	25.38	0.098	2.49	5.500	139.70	2.303	58.49	1.826	46.37	36.82	163.77	11.52	2.02	**C0999-098-5500-S**	2.638	67.00	28.66	127.48	10.01	1.75
C0999-098-5750-M	0.999	25.38	0.098	2.49	5.750	146.05	2.402	61.01	1.902	48.31	36.82	163.77	11.00	1.92	**C0999-098-5750-S**	2.753	69.93	28.66	127.48	9.56	1.67
C0999-098-6000-M	0.999	25.38	0.098	2.49	6.000	152.40	2.501	63.54	1.978	50.25	36.82	163.77	10.52	1.84	**C0999-098-6000-S**	2.868	72.85	28.66	127.48	9.15	1.60
C0999-098-6250-M	0.999	25.38	0.098	2.49	6.250	158.75	2.601	66.06	2.055	52.19	36.82	163.77	10.09	1.77	**C0999-098-6250-S**	2.983	75.78	28.66	127.48	8.77	1.54
C0999-098-6500-M	0.999	25.38	0.098	2.49	6.500	165.10	2.700	68.58	2.131	54.13	36.82	163.77	9.69	1.70	**C0999-098-6500-S**	3.098	78.70	28.66	127.48	8.43	1.47
C0999-098-6750-M	0.999	25.38	0.098	2.49	6.750	171.45	2.799	71.10	2.207	56.07	36.82	163.77	9.32	1.63	**C0999-098-6750-S**	3.213	81.62	28.66	127.48	8.10	1.42
C0999-098-7000-M	0.999	25.38	0.098	2.49	7.000	177.80	2.899	73.63	2.284	58.01	36.82	163.77	8.98	1.57	**C0999-098-7000-S**	3.329	84.55	28.66	127.48	7.81	1.37
C0999-098-7500-M*	0.999	25.38	0.098	2.49	7.500	190.50	3.156	80.17	2.509	63.74	36.82	163.77	8.48	1.48	**C0999-098-7500-S***	3.612	91.74	28.66	127.48	7.37	1.29
C0999-098-8000-M*	0.999	25.38	0.098	2.49	8.000	203.20	3.355	85.22	2.662	67.62	36.82	163.77	7.93	1.39	**C0999-098-8000-S***	3.842	97.58	28.66	127.48	6.89	1.21
C0999-098-8500-M*	0.999	25.38	0.098	2.49	8.500	215.90	3.554	90.26	2.815	71.49	36.82	163.77	7.44	1.30	**C0999-098-8500-S***	4.072	103.43	28.66	127.48	6.47	1.13
C0999-098-9000-M*	0.999	25.38	0.098	2.49	9.000	228.60	3.752	95.31	2.967	75.37	36.82	163.77	7.02	1.23	**C0999-098-9000-S***	4.302	109.28	28.66	127.48	6.10	1.07
C0999-098-9500-M*	0.999	25.38	0.098	2.49	9.500	241.30	3.951	100.35	3.120	79.25	36.82	163.77	6.64	1.16	**C0999-098-9500-S***	4.532	115.13	28.66	127.48	5.77	1.01
C0999-105-1500-M	0.999	25.38	0.105	2.67	1.500	38.10	0.764	19.40	0.666	16.91	44.57	198.26	60.55	10.60	**C0999-105-1500-S**	0.844	21.44	34.53	153.59	52.65	9.21
C0999-105-1625-M	0.999	25.38	0.105	2.67	1.625	41.28	0.818	20.77	0.709	18.01	44.57	198.26	55.20	9.66	**C0999-105-1625-S**	0.906	23.00	34.53	153.59	48.00	8.40
C0999-105-1750-M	0.999	25.38	0.105	2.67	1.750	44.45	0.871	22.13	0.752	19.10	44.57	198.26	50.72	8.88	**C0999-105-1750-S**	0.967	24.57	34.53	153.59	44.11	7.72
C0999-105-1875-M	0.999	25.38	0.105	2.67	1.875	47.63	0.925	23.49	0.795	20.20	44.57	198.26	46.91	8.21	**C0999-105-1875-S**	1.029	26.13	34.53	153.59	40.80	7.14
C0999-105-2000-M	0.999	25.38	0.105	2.67	2.000	50.80	0.979	24.86	0.838	21.29	44.57	198.26	43.64	7.64	**C0999-105-2000-S**	1.090	27.69	34.53	153.59	37.95	6.64
C0999-105-2125-M	0.999	25.38	0.105	2.67	2.125	53.98	1.032	26.22	0.881	22.39	44.57	198.26	40.79	7.14	**C0999-105-2125-S**	1.152	29.25	34.53	153.59	35.47	6.21
C0999-105-2250-M	0.999	25.38	0.105	2.67	2.250	57.15	1.086	27.58	0.925	23.49	44.57	198.26	38.29	6.70	**C0999-105-2250-S**	1.213	30.81	34.53	153.59	33.30	5.83
C0999-105-2375-M	0.999	25.38	0.105	2.67	2.375	60.33	1.140	28.95	0.968	24.58	44.57	198.26	36.08	6.31	**C0999-105-2375-S**	1.274	32.37	34.53	153.59	31.37	5.49
C0999-105-2500-M	0.999	25.38	0.105	2.67	2.500	63.50	1.193	30.31	1.011	25.68	44.57	198.26	34.11	5.97	**C0999-105-2500-S**	1.336	33.93	34.53	153.59	29.66	5.19

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0999-105-2625-M	0.999	25.38	0.105	2.67	2.625	66.68	1.247	31.67	1.054	26.77	44.57	198.26	32.34	5.66
C0999-105-2750-M	0.999	25.38	0.105	2.67	2.750	69.85	1.301	33.04	1.097	27.87	44.57	198.26	30.75	5.38
C0999-105-2875-M	0.999	25.38	0.105	2.67	2.875	73.03	1.354	34.40	1.140	28.96	44.57	198.26	29.31	5.13
C0999-105-3000-M	0.999	25.38	0.105	2.67	3.000	76.20	1.408	35.76	1.183	30.06	44.57	198.26	28.00	4.90
C0999-105-3250-M	0.999	25.38	0.105	2.67	3.250	82.55	1.515	38.49	1.270	32.25	44.57	198.26	25.70	4.50
C0999-105-3500-M	0.999	25.38	0.105	2.67	3.500	88.90	1.623	41.22	1.356	34.44	44.57	198.26	23.74	4.15
C0999-105-3750-M	0.999	25.38	0.105	2.67	3.750	95.25	1.730	43.94	1.442	36.64	44.57	198.26	22.07	3.86
C0999-105-4000-M	0.999	25.38	0.105	2.67	4.000	101.60	1.837	46.67	1.529	38.83	44.57	198.26	20.61	3.61
C0999-105-4250-M	0.999	25.38	0.105	2.67	4.250	107.95	1.945	49.40	1.615	41.02	44.57	198.26	19.34	3.38
C0999-105-4500-M	0.999	25.38	0.105	2.67	4.500	114.30	2.052	52.13	1.701	43.21	44.57	198.26	18.21	3.19
C0999-105-4750-M	0.999	25.38	0.105	2.67	4.750	120.65	2.160	54.85	1.788	45.40	44.57	198.26	17.21	3.01
C0999-105-5000-M	0.999	25.38	0.105	2.67	5.000	127.00	2.267	57.58	1.874	47.59	44.57	198.26	16.31	2.85
C0999-105-5250-M	0.999	25.38	0.105	2.67	5.250	133.35	2.374	60.31	1.960	49.79	44.57	198.26	15.50	2.71
C0999-105-5500-M	0.999	25.38	0.105	2.67	5.500	139.70	2.482	63.03	2.046	51.98	44.57	198.26	14.77	2.58
C0999-105-5750-M	0.999	25.38	0.105	2.67	5.750	146.05	2.589	65.76	2.133	54.17	44.57	198.26	14.10	2.47
C0999-105-6000-M	0.999	25.38	0.105	2.67	6.000	152.40	2.696	68.49	2.219	56.36	44.57	198.26	13.49	2.36
C0999-105-6250-M	0.999	25.38	0.105	2.67	6.250	158.75	2.804	71.21	2.305	58.55	44.57	198.26	12.93	2.26
C0999-105-6500-M	0.999	25.38	0.105	2.67	6.500	165.10	2.911	73.94	2.392	60.74	44.57	198.26	12.42	2.17
C0999-105-6750-M	0.999	25.38	0.105	2.67	6.750	171.45	3.018	76.67	2.478	62.94	44.57	198.26	11.94	2.09
C0999-105-7000-M	0.999	25.38	0.105	2.67	7.000	177.80	3.126	79.39	2.564	65.13	44.57	198.26	11.50	2.01
C0999-105-7500-M	0.999	25.38	0.105	2.67	7.500	190.50	3.340	84.85	2.737	69.51	44.57	198.26	10.72	1.88
C0999-105-8000-M	0.999	25.38	0.105	2.67	8.000	203.20	3.555	90.30	2.909	73.90	44.57	198.26	10.03	1.75
C0999-105-8500-M*	0.999	25.38	0.105	2.67	8.500	215.90	3.830	97.28	3.156	80.16	44.57	198.26	9.54	1.67
C0999-105-9000-M*	0.999	25.38	0.105	2.67	9.000	228.60	4.044	102.73	3.328	84.54	44.57	198.26	8.99	1.57
C0999-105-9500-M*	0.999	25.38	0.105	2.67	9.500	241.30	4.259	108.18	3.501	88.93	44.57	198.26	8.50	1.49
C0999-112-1500-M	0.999	25.38	0.112	2.85	1.500	38.10	0.813	20.66	0.727	18.46	53.27	236.96	77.57	13.57
C0999-112-1625-M	0.999	25.38	0.112	2.85	1.625	41.28	0.871	22.12	0.775	19.68	53.27	236.96	70.65	12.36
C0999-112-1750-M	0.999	25.38	0.112	2.85	1.750	44.45	0.929	23.59	0.823	20.90	53.27	236.96	64.86	11.35
C0999-112-1875-M	0.999	25.38	0.112	2.85	1.875	47.63	0.986	25.05	0.871	22.12	53.27	236.96	59.95	10.49
C0999-112-2000-M	0.999	25.38	0.112	2.85	2.000	50.80	1.044	26.52	0.919	23.35	53.27	236.96	55.73	9.75
C0999-112-2125-M	0.999	25.38	0.112	2.85	2.125	53.98	1.102	27.99	0.967	24.57	53.27	236.96	52.06	9.11
C0999-112-2250-M	0.999	25.38	0.112	2.85	2.250	57.15	1.160	29.45	1.015	25.79	53.27	236.96	48.85	8.55
C0999-112-2375-M	0.999	25.38	0.112	2.85	2.375	60.33	1.217	30.92	1.064	27.02	53.27	236.96	46.01	8.05
C0999-112-2500-M	0.999	25.38	0.112	2.85	2.500	63.50	1.275	32.38	1.112	28.24	53.27	236.96	43.49	7.61
C0999-112-2625-M	0.999	25.38	0.112	2.85	2.625	66.68	1.333	33.85	1.160	29.46	53.27	236.96	41.22	7.21
C0999-112-2750-M	0.999	25.38	0.112	2.85	2.750	69.85	1.390	35.32	1.208	30.68	53.27	236.96	39.18	6.86
C0999-112-2875-M	0.999	25.38	0.112	2.85	2.875	73.03	1.448	36.78	1.256	31.91	53.27	236.96	37.34	6.53
C0999-112-3000-M	0.999	25.38	0.112	2.85	3.000	76.20	1.506	38.25	1.304	33.13	53.27	236.96	35.65	6.24
C0999-112-3250-M	0.999	25.38	0.112	2.85	3.250	82.55	1.621	41.18	1.401	35.57	53.27	236.96	32.71	5.72
C0999-112-3500-M	0.999	25.38	0.112	2.85	3.500	88.90	1.737	44.11	1.497	38.02	53.27	236.96	30.21	5.29
C0999-112-3750-M	0.999	25.38	0.112	2.85	3.750	95.25	1.852	47.05	1.593	40.47	53.27	236.96	28.07	4.91
C0999-112-4000-M	0.999	25.38	0.112	2.85	4.000	101.60	1.968	49.98	1.689	42.91	53.27	236.96	26.21	4.59
C0999-112-4250-M	0.999	25.38	0.112	2.85	4.250	107.95	2.083	52.91	1.786	45.36	53.27	236.96	24.58	4.30
C0999-112-4500-M	0.999	25.38	0.112	2.85	4.500	114.30	2.198	55.84	1.882	47.80	53.27	236.96	23.15	4.05
C0999-112-4750-M	0.999	25.38	0.112	2.85	4.750	120.65	2.314	58.77	1.978	50.25	53.27	236.96	21.87	3.83
C0999-112-5000-M	0.999	25.38	0.112	2.85	5.000	127.00	2.429	61.71	2.075	52.69	53.27	236.96	20.72	3.63
C0999-112-5250-M	0.999	25.38	0.112	2.85	5.250	133.35	2.545	64.64	2.171	55.14	53.27	236.96	19.69	3.45
C0999-112-5500-M	0.999	25.38	0.112	2.85	5.500	139.70	2.660	67.57	2.267	57.58	53.27	236.96	18.76	3.28
C0999-112-5750-M	0.999	25.38	0.112	2.85	5.750	146.05	2.776	70.50	2.363	60.03	53.27	236.96	17.91	3.13
C0999-112-6000-M	0.999	25.38	0.112	2.85	6.000	152.40	2.891	73.43	2.460	62.47	53.27	236.96	17.14	3.00
C0999-112-6250-M	0.999	25.38	0.112	2.85	6.250	158.75	3.007	76.37	2.556	64.92	53.27	236.96	16.43	2.87
C0999-112-6500-M	0.999	25.38	0.112	2.85	6.500	165.10	3.122	79.30	2.652	67.37	53.27	236.96	15.77	2.76
C0999-112-6750-M	0.999	25.38	0.112	2.85	6.750	171.45	3.237	82.23	2.748	69.81	53.27	236.96	15.17	2.65
C0999-112-7000-M	0.999	25.38	0.112	2.85	7.000	177.80	3.353	85.16	2.845	72.26	53.27	236.96	14.61	2.56
C0999-112-7500-M	0.999	25.38	0.112	2.85	7.500	190.50	3.584	91.03	3.037	77.15	53.27	236.96	13.60	2.38
C0999-112-8000-M	0.999	25.38	0.112	2.85	8.000	203.20	3.815	96.89	3.230	82.04	53.27	236.96	12.73	2.23
C0999-112-8500-M	0.999	25.38	0.112	2.85	8.500	215.90	4.046	102.76	3.422	86.93	53.27	236.96	11.96	2.09
C0999-112-9000-M	0.999	25.38	0.112	2.85	9.000	228.60	4.276	108.62	3.615	91.82	53.27	236.96	11.28	1.97
C0999-112-9500-M	0.999	25.38	0.112	2.85	9.500	241.30	4.507	114.49	3.808	96.71	53.27	236.96	10.67	1.87
C0999-125-1500-M	0.999	25.38	0.125	3.18	1.500	38.10	0.901	22.89	0.835	21.22	72.09	320.66	120.41	21.07
C0999-125-1625-M	0.999	25.38	0.125	3.18	1.625	41.28	0.966	24.55	0.893	22.68	72.09	320.66	109.47	19.16
C0999-125-1750-M	0.999	25.38	0.125	3.18	1.750	44.45	1.032	26.20	0.950	24.13	72.09	320.66	100.35	17.56
C0999-125-1875-M	0.999	25.38	0.125	3.18	1.875	47.63	1.097	27.86	1.007	25.59	72.09	320.66	92.63	16.21
C0999-125-2000-M	0.999	25.38	0.125	3.18	2.000	50.80	1.162	29.51	1.065	27.04	72.09	320.66	86.01	15.05

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0999-105-2625-S	1.397	35.49	34.53	153.59	28.13	4.92
C0999-105-2750-S	1.459	37.05	34.53	153.59	26.74	4.68
C0999-105-2875-S	1.520	38.61	34.53	153.59	25.49	4.46
C0999-105-3000-S	1.582	40.18	34.53	153.59	24.35	4.26
C0999-105-3250-S	1.705	43.30	34.53	153.59	22.34	3.91
C0999-105-3500-S	1.828	46.42	34.53	153.59	20.65	3.61
C0999-105-3750-S	1.950	49.54	34.53	153.59	19.19	3.36
C0999-105-4000-S	2.073	52.66	34.53	153.59	17.92	3.14
C0999-105-4250-S	2.196	55.78	34.53	153.59	16.81	2.94
C0999-105-4500-S	2.319	58.91	34.53	153.59	15.83	2.77
C0999-105-4750-S	2.442	62.03	34.53	153.59	14.96	2.62
C0999-105-5000-S	2.565	65.15	34.53	153.59	14.18	2.48
C0999-105-5250-S	2.688	68.27	34.53	153.59	13.48	2.36
C0999-105-5500-S	2.811	71.39	34.53	153.59	12.84	2.25
C0999-105-5750-S	2.934	74.52	34.53	153.59	12.26	2.15
C0999-105-6000-S	3.057	77.64	34.53	153.59	11.73	2.05
C0999-105-6250-S	3.180	80.76	34.53	153.59	11.25	1.97
C0999-105-6500-S	3.302	83.88	34.53	153.59	10.80	1.89
C0999-105-6750-S	3.425	87.00	34.53	153.59	10.39	1.82
C0999-105-7000-S	3.548	90.13	34.53	153.59	10.00	1.75
C0999-105-7500-S	3.794	96.37	34.53	153.59	9.32	1.63
C0999-105-8000-S	4.040	102.61	34.53	153.59	8.72	1.53
C0999-105-8500-S*	4.339	110.21	34.53	153.59	8.30	1.45
C0999-105-9000-S*	4.585	116.46	34.53	153.59	7.82	1.37
C0999-105-9500-S*	4.831	122.70	34.53	153.59	7.40	1.29
C0999-112-1500-S	0.891	22.63	41.07	182.68	67.45	11.80
C0999-112-1625-S	0.956	24.29	41.07	182.68	61.43	10.75
C0999-112-1750-S	1.022	25.95	41.07	182.68	56.40	9.87
C0999-112-1875-S	1.087	27.61	41.07	182.68	52.13	9.12
C0999-112-2000-S	1.153	29.27	41.07	182.68	48.46	8.48
C0999-112-2125-S	1.218	30.93	41.07	182.68	45.27	7.92
C0999-112-2250-S	1.283	32.59	41.07	182.68	42.48	7.43
C0999-112-2375-S	1.349	34.25	41.07	182.68	40.01	7.00
C0999-112-2500-S	1.414	35.91	41.07	182.68	37.81	6.62
C0999-112-2625-S	1.479	37.57	41.07	182.68	35.85	6.27
C0999-112-2750-S	1.545	39.23	41.07	182.68	34.07	5.96
C0999-112-2875-S	1.610	40.89	41.07	182.68	32.47	5.68
C0999-112-3000-S	1.675	42.55	41.07	182.68	31.00	5.43
C0999-112-3250-S	1.806	45.87	41.07	182.68	28.44	4.98
C0999-112-3500-S	1.937	49.19	41.07	182.68	26.27	4.60
C0999-112-3750-S	2.067	52.51	41.07	182.68	24.41	4.27
C0999-112-4000-S	2.198	55.83	41.07	182.68	22.79	3.99
C0999-112-4250-S	2.329	59.15	41.07	182.68	21.38	3.74
C0999-112-4500-S	2.460	62.47	41.07	182.68	20.13	3.52
C0999-112-4750-S	2.590	65.79	41.07	182.68	19.02	3.33
C0999-112-5000-S	2.721	69.11	41.07	182.68	18.02	3.15
C0999-112-5250-S	2.852	72.43	41.07	182.68	17.12	3.00
C0999-112-5500-S	2.982	75.75	41.07	182.68	16.31	2.85
C0999-112-5750-S	3.113	79.07	41.07	182.68	15.57	2.73
C0999-112-6000-S	3.244	82.39	41.07	182.68	14.90	2.61
C0999-112-6250-S	3.375	85.71	41.07	182.68	14.28	2.50
C0999-112-6500-S	3.505	89.03	41.07	182.68	13.71	2.40
C0999-112-6750-S	3.636	92.35	41.07	182.68	13.19	2.31
C0999-112-7000-S	3.767	95.67	41.07	182.68	12.70	2.22
C0999-112-7500-S	4.028	102.31	41.07	182.68	11.83	2.07
C0999-112-8000-S	4.289	108.95	41.07	182.68	11.07	1.94
C0999-112-8500-S	4.551	115.59	41.07	182.68	10.40	1.82
C0999-112-9000-S	4.812	122.23	41.07	182.68	9.81	1.72
C0999-112-9500-S	5.074	128.87	41.07	182.68	9.28	1.62
C0999-125-1500-S	0.974	24.75	55.05	244.87	104.71	18.32
C0999-125-1625-S	1.047	26.59	55.05	244.87	95.19	16.66
C0999-125-1750-S	1.119	28.43	55.05	244.87	87.26	15.27
C0999-125-1875-S	1.192	30.27	55.05	244.87	80.55	14.10
C0999-125-2000-S	1.264	32.10	55.05	244.87	74.79	13.09

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0999-125-2125-M	**0.999**	**25.38**	**0.125**	**3.18**	**2.125**	**53.98**	**1.227**	**31.17**	**1.122**	**28.50**	**72.09**	**320.66**	**80.28**	**14.05**	**C0999-125-2125-S**	**1.336**	**33.94**	**55.05**	**244.87**	**69.81**	**12.22**
C0999-125-2250-M	**0.999**	**25.38**	**0.125**	**3.18**	**2.250**	**57.15**	**1.292**	**32.82**	**1.179**	**29.95**	**72.09**	**320.66**	**75.26**	**13.17**	**C0999-125-2250-S**	**1.409**	**35.78**	**55.05**	**244.87**	**65.44**	**11.45**
C0999-125-2375-M	**0.999**	**25.38**	**0.125**	**3.18**	**2.375**	**60.33**	**1.357**	**34.47**	**1.237**	**31.41**	**72.09**	**320.66**	**70.83**	**12.40**	**C0999-125-2375-S**	**1.481**	**37.62**	**55.05**	**244.87**	**61.59**	**10.78**
C0999-125-2500-M	**0.999**	**25.38**	**0.125**	**3.18**	**2.500**	**63.50**	**1.422**	**36.13**	**1.294**	**32.86**	**72.09**	**320.66**	**66.90**	**11.71**	**C0999-125-2500-S**	**1.554**	**39.46**	**55.05**	**244.87**	**58.17**	**10.18**
C0999-125-2625-M	**0.999**	**25.38**	**0.125**	**3.18**	**2.625**	**66.68**	**1.488**	**37.78**	**1.351**	**34.32**	**72.09**	**320.66**	**63.38**	**11.09**	**C0999-125-2625-S**	**1.626**	**41.30**	**55.05**	**244.87**	**55.11**	**9.64**
C0999-125-2750-M	**0.999**	**25.38**	**0.125**	**3.18**	**2.750**	**69.85**	**1.553**	**39.44**	**1.408**	**35.77**	**72.09**	**320.66**	**60.21**	**10.54**	**C0999-125-2750-S**	**1.699**	**43.14**	**55.05**	**244.87**	**52.35**	**9.16**
C0999-125-2875-M	**0.999**	**25.38**	**0.125**	**3.18**	**2.875**	**73.03**	**1.618**	**41.09**	**1.466**	**37.23**	**72.09**	**320.66**	**57.34**	**10.03**	**C0999-125-2875-S**	**1.771**	**44.98**	**55.05**	**244.87**	**49.86**	**8.73**
C0999-125-3000-M	**0.999**	**25.38**	**0.125**	**3.18**	**3.000**	**76.20**	**1.683**	**42.75**	**1.523**	**38.69**	**72.09**	**320.66**	**54.73**	**9.58**	**C0999-125-3000-S**	**1.843**	**46.82**	**55.05**	**244.87**	**47.60**	**8.33**
C0999-125-3250-M	**0.999**	**25.38**	**0.125**	**3.18**	**3.250**	**82.55**	**1.813**	**46.06**	**1.638**	**41.60**	**72.09**	**320.66**	**50.17**	**8.78**	**C0999-125-3250-S**	**1.988**	**50.50**	**55.05**	**244.87**	**43.63**	**7.63**
C0999-125-3500-M	**0.999**	**25.38**	**0.125**	**3.18**	**3.500**	**88.90**	**1.943**	**49.36**	**1.752**	**44.51**	**72.09**	**320.66**	**46.31**	**8.10**	**C0999-125-3500-S**	**2.133**	**54.18**	**55.05**	**244.87**	**40.27**	**7.05**
C0999-125-3750-M	**0.999**	**25.38**	**0.125**	**3.18**	**3.750**	**95.25**	**2.074**	**52.67**	**1.867**	**47.42**	**72.09**	**320.66**	**43.01**	**7.53**	**C0999-125-3750-S**	**2.278**	**57.86**	**55.05**	**244.87**	**37.40**	**6.54**
C0999-125-4000-M	**0.999**	**25.38**	**0.125**	**3.18**	**4.000**	**101.60**	**2.204**	**55.98**	**1.981**	**50.33**	**72.09**	**320.66**	**40.14**	**7.02**	**C0999-125-4000-S**	**2.423**	**61.54**	**55.05**	**244.87**	**34.90**	**6.11**
C0999-125-4250-M	**0.999**	**25.38**	**0.125**	**3.18**	**4.250**	**107.95**	**2.334**	**59.29**	**2.096**	**53.24**	**72.09**	**320.66**	**37.63**	**6.59**	**C0999-125-4250-S**	**2.568**	**65.22**	**55.05**	**244.87**	**32.72**	**5.73**
C0999-125-4500-M	**0.999**	**25.38**	**0.125**	**3.18**	**4.500**	**114.30**	**2.465**	**62.60**	**2.211**	**56.15**	**72.09**	**320.66**	**35.42**	**6.20**	**C0999-125-4500-S**	**2.712**	**68.90**	**55.05**	**244.87**	**30.80**	**5.39**
C0999-125-4750-M	**0.999**	**25.38**	**0.125**	**3.18**	**4.750**	**120.65**	**2.595**	**65.91**	**2.325**	**59.06**	**72.09**	**320.66**	**33.45**	**5.85**	**C0999-125-4750-S**	**2.857**	**72.58**	**55.05**	**244.87**	**29.09**	**5.09**
C0999-125-5000-M	**0.999**	**25.38**	**0.125**	**3.18**	**5.000**	**127.00**	**2.725**	**69.22**	**2.440**	**61.97**	**72.09**	**320.66**	**31.69**	**5.55**	**C0999-125-5000-S**	**3.002**	**76.26**	**55.05**	**244.87**	**27.56**	**4.82**
C0999-125-5250-M	**0.999**	**25.38**	**0.125**	**3.18**	**5.250**	**133.35**	**2.855**	**72.53**	**2.554**	**64.88**	**72.09**	**320.66**	**30.10**	**5.27**	**C0999-125-5250-S**	**3.147**	**79.93**	**55.05**	**244.87**	**26.18**	**4.58**
C0999-125-5500-M	**0.999**	**25.38**	**0.125**	**3.18**	**5.500**	**139.70**	**2.986**	**75.83**	**2.669**	**67.79**	**72.09**	**320.66**	**28.67**	**5.02**	**C0999-125-5500-S**	**3.292**	**83.61**	**55.05**	**244.87**	**24.93**	**4.36**
C0999-125-5750-M	**0.999**	**25.38**	**0.125**	**3.18**	**5.750**	**146.05**	**3.116**	**79.14**	**2.784**	**70.70**	**72.09**	**320.66**	**27.37**	**4.79**	**C0999-125-5750-S**	**3.437**	**87.29**	**55.05**	**244.87**	**23.80**	**4.16**
C0999-125-6000-M	**0.999**	**25.38**	**0.125**	**3.18**	**6.000**	**152.40**	**3.246**	**82.45**	**2.898**	**73.61**	**72.09**	**320.66**	**26.18**	**4.58**	**C0999-125-6000-S**	**3.582**	**90.97**	**55.05**	**244.87**	**22.76**	**3.98**
C0999-125-6250-M	**0.999**	**25.38**	**0.125**	**3.18**	**6.250**	**158.75**	**3.376**	**85.76**	**3.013**	**76.52**	**72.09**	**320.66**	**25.09**	**4.39**	**C0999-125-6250-S**	**3.726**	**94.65**	**55.05**	**244.87**	**21.81**	**3.82**
C0999-125-6500-M	**0.999**	**25.38**	**0.125**	**3.18**	**6.500**	**165.10**	**3.507**	**89.07**	**3.127**	**79.44**	**72.09**	**320.66**	**24.08**	**4.21**	**C0999-125-6500-S**	**3.871**	**98.33**	**55.05**	**244.87**	**20.94**	**3.66**
C0999-125-6750-M	**0.999**	**25.38**	**0.125**	**3.18**	**6.750**	**171.45**	**3.637**	**92.38**	**3.242**	**82.35**	**72.09**	**320.66**	**23.16**	**4.05**	**C0999-125-6750-S**	**4.016**	**102.01**	**55.05**	**244.87**	**20.14**	**3.52**
C0999-125-7000-M	**0.999**	**25.38**	**0.125**	**3.18**	**7.000**	**177.80**	**3.767**	**95.69**	**3.357**	**85.26**	**72.09**	**320.66**	**22.30**	**3.90**	**C0999-125-7000-S**	**4.161**	**105.69**	**55.05**	**244.87**	**19.39**	**3.39**
C0999-125-7500-M	**0.999**	**25.38**	**0.125**	**3.18**	**7.500**	**190.50**	**4.028**	**102.30**	**3.586**	**91.08**	**72.09**	**320.66**	**20.76**	**3.63**	**C0999-125-7500-S**	**4.451**	**113.05**	**55.05**	**244.87**	**18.05**	**3.16**
C0999-125-8000-M	**0.999**	**25.38**	**0.125**	**3.18**	**8.000**	**203.20**	**4.288**	**108.92**	**3.815**	**96.90**	**72.09**	**320.66**	**19.42**	**3.40**	**C0999-125-8000-S**	**4.740**	**120.41**	**55.05**	**244.87**	**16.89**	**2.96**
C0999-125-8500-M	**0.999**	**25.38**	**0.125**	**3.18**	**8.500**	**215.90**	**4.549**	**115.54**	**4.044**	**102.72**	**72.09**	**320.66**	**18.25**	**3.19**	**C0999-125-8500-S**	**5.030**	**127.77**	**55.05**	**244.87**	**15.87**	**2.78**
C0999-125-9000-M	**0.999**	**25.38**	**0.125**	**3.18**	**9.000**	**228.60**	**4.809**	**122.16**	**4.273**	**108.54**	**72.09**	**320.66**	**17.20**	**3.01**	**C0999-125-9000-S**	**5.320**	**135.12**	**55.05**	**244.87**	**14.96**	**2.62**
C0999-125-9500-M	**0.999**	**25.38**	**0.125**	**3.18**	**9.500**	**241.30**	**5.070**	**128.78**	**4.503**	**114.36**	**72.09**	**320.66**	**16.27**	**2.85**	**C0999-125-9500-S**	**5.610**	**142.48**	**55.05**	**244.87**	**14.15**	**2.48**
C0999-135-1500-M	**0.999**	**25.38**	**0.135**	**3.43**	**1.500**	**38.10**	**0.965**	**24.51**	**0.914**	**23.22**	**89.03**	**396.04**	**166.41**	**29.12**	**C0999-135-1500-S**	**1.034**	**26.25**	**67.48**	**300.17**	**144.70**	**25.32**
C0999-135-1625-M	**0.999**	**25.38**	**0.135**	**3.43**	**1.625**	**41.28**	**1.036**	**26.30**	**0.978**	**24.85**	**89.03**	**396.04**	**151.06**	**26.44**	**C0999-135-1625-S**	**1.111**	**28.23**	**67.48**	**300.17**	**131.36**	**22.99**
C0999-135-1750-M	**0.999**	**25.38**	**0.135**	**3.43**	**1.750**	**44.45**	**1.106**	**28.10**	**1.042**	**26.47**	**89.03**	**396.04**	**138.30**	**24.20**	**C0999-135-1750-S**	**1.189**	**30.20**	**67.48**	**300.17**	**120.26**	**21.05**
C0999-135-1875-M	**0.999**	**25.38**	**0.135**	**3.43**	**1.875**	**47.63**	**1.177**	**29.89**	**1.106**	**28.10**	**89.03**	**396.04**	**127.53**	**22.32**	**C0999-135-1875-S**	**1.266**	**32.17**	**67.48**	**300.17**	**110.89**	**19.41**
C0999-135-2000-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.000**	**50.80**	**1.247**	**31.69**	**1.170**	**29.73**	**89.03**	**396.04**	**118.31**	**20.70**	**C0999-135-2000-S**	**1.344**	**34.14**	**67.48**	**300.17**	**102.88**	**18.00**
C0999-135-2125-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.125**	**53.98**	**1.318**	**33.48**	**1.235**	**31.36**	**89.03**	**396.04**	**110.34**	**19.31**	**C0999-135-2125-S**	**1.422**	**36.11**	**67.48**	**300.17**	**95.95**	**16.79**
C0999-135-2250-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.250**	**57.15**	**1.389**	**35.27**	**1.299**	**32.98**	**89.03**	**396.04**	**103.38**	**18.09**	**C0999-135-2250-S**	**1.499**	**38.08**	**67.48**	**300.17**	**89.89**	**15.73**
C0999-135-2375-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.375**	**60.33**	**1.459**	**37.07**	**1.363**	**34.61**	**89.03**	**396.04**	**97.24**	**17.02**	**C0999-135-2375-S**	**1.577**	**40.05**	**67.48**	**300.17**	**84.55**	**14.80**
C0999-135-2500-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.500**	**63.50**	**1.530**	**38.86**	**1.427**	**36.24**	**89.03**	**396.04**	**91.79**	**16.06**	**C0999-135-2500-S**	**1.655**	**42.02**	**67.48**	**300.17**	**79.81**	**13.97**
C0999-135-2625-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.625**	**66.68**	**1.601**	**40.66**	**1.491**	**37.87**	**89.03**	**396.04**	**86.91**	**15.21**	**C0999-135-2625-S**	**1.732**	**44.00**	**67.48**	**300.17**	**75.58**	**13.23**
C0999-135-2750-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.750**	**69.85**	**1.671**	**42.45**	**1.555**	**39.50**	**89.03**	**396.04**	**82.53**	**14.44**	**C0999-135-2750-S**	**1.810**	**45.97**	**67.48**	**300.17**	**71.77**	**12.56**
C0999-135-2875-M	**0.999**	**25.38**	**0.135**	**3.43**	**2.875**	**73.03**	**1.742**	**44.24**	**1.619**	**41.12**	**89.03**	**396.04**	**78.57**	**13.75**	**C0999-135-2875-S**	**1.887**	**47.94**	**67.48**	**300.17**	**68.33**	**11.96**
C0999-135-3000-M	**0.999**	**25.38**	**0.135**	**3.43**	**3.000**	**76.20**	**1.813**	**46.04**	**1.683**	**42.75**	**89.03**	**396.04**	**74.98**	**13.12**	**C0999-135-3000-S**	**1.965**	**49.91**	**67.48**	**300.17**	**65.20**	**11.41**
C0999-135-3250-M	**0.999**	**25.38**	**0.135**	**3.43**	**3.250**	**82.55**	**1.954**	**49.63**	**1.811**	**46.01**	**89.03**	**396.04**	**68.69**	**12.02**	**C0999-135-3250-S**	**2.120**	**53.85**	**67.48**	**300.17**	**59.73**	**10.45**
C0999-135-3500-M	**0.999**	**25.38**	**0.135**	**3.43**	**3.500**	**88.90**	**2.095**	**53.21**	**1.939**	**49.26**	**89.03**	**396.04**	**63.37**	**11.09**	**C0999-135-3500-S**	**2.275**	**57.79**	**67.48**	**300.17**	**55.10**	**9.64**
C0999-135-3750-M	**0.999**	**25.38**	**0.135**	**3.43**	**3.750**	**95.25**	**2.236**	**56.80**	**2.068**	**52.52**	**89.03**	**396.04**	**58.82**	**10.29**	**C0999-135-3750-S**	**2.431**	**61.74**	**67.48**	**300.17**	**51.15**	**8.95**
C0999-135-4000-M	**0.999**	**25.38**	**0.135**	**3.43**	**4.000**	**101.60**	**2.378**	**60.39**	**2.196**	**55.77**	**89.03**	**396.04**	**54.88**	**9.60**	**C0999-135-4000-S**	**2.586**	**65.68**	**67.48**	**300.17**	**47.72**	**8.35**
C0999-135-4250-M	**0.999**	**25.38**	**0.135**	**3.43**	**4.250**	**107.95**	**2.519**	**63.98**	**2.324**	**59.03**	**89.03**	**396.04**	**51.43**	**9.00**	**C0999-135-4250-S**	**2.741**	**69.62**	**67.48**	**300.17**	**44.72**	**7.83**
C0999-135-4500-M	**0.999**	**25.38**	**0.135**	**3.43**	**4.500**	**114.30**	**2.660**	**67.57**	**2.452**	**62.28**	**89.03**	**396.04**	**48.39**	**8.47**	**C0999-135-4500-S**	**2.896**	**73.56**	**67.48**	**300.17**	**42.08**	**7.36**
C0999-135-4750-M	**0.999**	**25.38**	**0.135**	**3.43**	**4.750**	**120.65**	**2.801**	**71.15**	**2.580**	**65.54**	**89.03**	**396.04**	**45.69**	**8.00**	**C0999-135-4750-S**	**3.051**	**77.51**	**67.48**	**300.17**	**39.73**	**6.95**
C0999-135-5000-M	**0.999**	**25.38**	**0.135**	**3.43**	**5.000**	**127.00**	**2.943**	**74.74**	**2.708**	**68.79**	**89.03**	**396.04**	**43.27**	**7.57**	**C0999-135-5000-S**	**3.207**	**81.45**	**67.48**	**300.17**	**37.63**	**6.59**
C0999-135-5250-M	**0.999**	**25.38**	**0.135**	**3.43**	**5.250**	**133.35**	**3.084**	**78.33**	**2.837**	**72.05**	**89.03**	**396.04**	**41.10**	**7.19**	**C0999-135-5250-S**	**3.362**	**85.39**	**67.48**	**300.17**	**35.74**	**6.25**
C0999-135-5500-M	**0.999**	**25.38**	**0.135**	**3.43**	**5.500**	**139.70**	**3.225**	**81.92**	**2.965**	**75.31**	**89.03**	**396.04**	**39.14**	**6.85**	**C0999-135-5500-S**	**3.517**	**89.33**	**67.48**	**300.17**	**34.03**	**5.96**
C0999-135-5750-M	**0.999**	**25.38**	**0.135**	**3.43**	**5.750**	**146.05**	**3.366**	**85.50**	**3.093**	**78.56**	**89.03**	**396.04**	**37.35**	**6.54**	**C0999-135-5750-S**	**3.672**	**93.28**	**67.48**	**300.17**	**32.48**	**5.68**
C0999-135-6000-M	**0.999**	**25.38**	**0.135**	**3.43**	**6.000**	**152.40**	**3.508**	**89.09**	**3.221**	**81.82**	**89.03**	**396.04**	**35.72**	**6.25**	**C0999-135-6000-S**	**3.828**	**97.22**	**67.48**	**300.17**	**31.06**	**5.44**
C0999-135-6250-M	**0.999**	**25.38**	**0.135**	**3.43**	**6.250**	**158.75**	**3.649**	**92.68**	**3.349**	**85.07**	**89.03**	**396.04**	**34.23**	**5.99**	**C0999-135-6250-S**	**3.983**	**101.16**	**67.48**	**300.17**	**29.76**	**5.21**
C0999-135-6500-M	**0.999**	**25.38**	**0.135**	**3.43**	**6.500**	**165.10**	**3.790**	**96.27**	**3.477**	**88.33**	**89.03**	**396.04**	**32.85**	**5.75**	**C0999-135-6500-S**	**4.138**	**105.10**	**67.48**	**300.17**	**28.57**	**5.00**
C0999-135-6750-M	**0.999**	**25.38**	**0.135**	**3.43**	**6.750**	**171.45**	**3.931**	**99.86**	**3.606**	**91.58**	**89.03**	**396.04**	**31.59**	**5.53**	**C0999-135-6750-S**	**4.293**	**109.05**	**67.48**	**300.17**	**27.47**	**4.81**
C0999-135-7000-M	**0.999**	**25.38**	**0.135**	**3.43**	**7.000**	**177.80**	**4.073**	**103.44**	**3.734**	**94.84**	**89.03**	**396.04**	**30.41**	**5.32**	**C0999-135-7000-S**	**4.448**	**112.99**	**67.48**	**300.17**	**26.45**	**4.63**
C0999-135-7500-M	**0.999**	**25.38**	**0.135**	**3.43**	**7.500**	**190.50**	**4.355**	**110.62**	**3.990**	**101.35**	**89.03**	**396.04**	**28.31**	**4.95**	**C0999-135-7500-S**	**4.759**	**120.87**	**67.48**	**300.17**	**24.62**	**4.31**
C0999-135-8000-M	**0.999**	**25.38**	**0.135**	**3.43**	**8.000**	**203.20**	**4.638**	**117.80**	**4.246**	**107.86**	**89.03**	**396.04**	**26.48**	**4.63**	**C0999-135-8000-S**	**5.069**	**128.76**	**67.48**	**300.17**	**23.03**	**4.03**
C0999-135-8500-M	**0.999**	**25.38**	**0.135**	**3.43**	**8.500**	**215.90**	**4.920**	**124.97**	**4.503**	**114.37**	**89.03**	**396.04**	**24.87**	**4.35**	**C0999-135-8500-S**	**5.380**	**136.64**	**67.48**	**300.17**	**21.63**	**3.78**
C0999-135-9000-M	**0.999**	**25.38**	**0.135**	**3.43**	**9.000**	**228.60**	**5.203**	**132.15**	**4.759**	**120.88**	**89.03**	**396.04**	**23.45**	**4.10**	**C0999-135-9000-S**	**5.690**	**144.53**	**67.48**	**300.17**	**20.39**	**3.57**
C0999-135-9500-M	**0.999**	**25.38**	**0.135**	**3.43**	**9.500**	**241.30**	**5.485**	**139.32**	**5.015**	**127.39**	**89.03**	**396.04**	**22.18**	**3.88**	**C0999-135-9500-S**	**6.001**	**152.41**	**67.48**	**300.17**	**19.28**	**3.37**
C0999-148-1375-M	**0.999**	**25.38**	**0.148**	**3.76**	**1.375**	**34.93**	**0.964**	**24.48**	**0.936**	**23.77**	**114.44**	**509.07**	**278.28**	**48.70**	**C0999-148-1375-S**	**1.020**	**25.91**	**85.89**	**382.05**	**241.98**	**42.35**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0999-148-1500-M	0.999	25.38	0.148	3.76	1.500	38.10	1.041	26.44	1.008	25.61	114.44	509.07	249.39	43.64
C0999-148-1625-M	0.999	25.38	0.148	3.76	1.625	41.28	1.118	28.41	1.081	27.45	114.44	509.07	225.93	39.54
C0999-148-1750-M	0.999	25.38	0.148	3.76	1.750	44.45	1.196	30.37	1.153	29.28	114.44	509.07	206.51	36.14
C0999-148-1875-M	0.999	25.38	0.148	3.76	1.875	47.63	1.273	32.34	1.225	31.12	114.44	509.07	190.16	33.28
C0999-148-2000-M	0.999	25.38	0.148	3.76	2.000	50.80	1.351	34.30	1.298	32.96	114.44	509.07	176.21	30.84
C0999-148-2125-M	0.999	25.38	0.148	3.76	2.125	53.98	1.428	36.27	1.370	34.80	114.44	509.07	164.17	28.73
C0999-148-2250-M	0.999	25.38	0.148	3.76	2.250	57.15	1.505	38.23	1.443	36.64	114.44	509.07	153.67	26.89
C0999-148-2375-M	0.999	25.38	0.148	3.76	2.375	60.33	1.583	40.20	1.515	38.48	114.44	509.07	144.43	25.27
C0999-148-2500-M	0.999	25.38	0.148	3.76	2.500	63.50	1.660	42.16	1.587	40.32	114.44	509.07	136.24	23.84
C0999-148-2625-M	0.999	25.38	0.148	3.76	2.625	66.68	1.737	44.13	1.660	42.16	114.44	509.07	128.92	22.56
C0999-148-2750-M	0.999	25.38	0.148	3.76	2.750	69.85	1.815	46.09	1.732	44.00	114.44	509.07	122.36	21.41
C0999-148-2875-M	0.999	25.38	0.148	3.76	2.875	73.03	1.892	48.06	1.805	45.83	114.44	509.07	116.43	20.37
C0999-148-3000-M	0.999	25.38	0.148	3.76	3.000	76.20	1.969	50.02	1.877	47.67	114.44	509.07	111.04	19.43
C0999-148-3250-M	0.999	25.38	0.148	3.76	3.250	82.55	2.124	53.95	2.022	51.35	114.44	509.07	101.65	17.79
C0999-148-3500-M	0.999	25.38	0.148	3.76	3.500	88.90	2.279	57.88	2.166	55.03	114.44	509.07	93.72	16.40
C0999-148-3750-M	0.999	25.38	0.148	3.76	3.750	95.25	2.434	61.81	2.311	58.71	114.44	509.07	86.93	15.21
C0999-148-4000-M	0.999	25.38	0.148	3.76	4.000	101.60	2.588	65.74	2.456	62.38	114.44	509.07	81.07	14.19
C0999-148-4250-M	0.999	25.38	0.148	3.76	4.250	107.95	2.743	69.67	2.601	66.06	114.44	509.07	75.94	13.29
C0999-148-4500-M	0.999	25.38	0.148	3.76	4.500	114.30	2.898	73.60	2.746	69.74	114.44	509.07	71.42	12.50
C0999-148-4750-M	0.999	25.38	0.148	3.76	4.750	120.65	3.052	77.53	2.890	73.42	114.44	509.07	67.42	11.80
C0999-148-5000-M	0.999	25.38	0.148	3.76	5.000	127.00	3.207	81.46	3.035	77.10	114.44	509.07	63.83	11.17
C0999-148-5250-M	0.999	25.38	0.148	3.76	5.250	133.35	3.362	85.39	3.180	80.77	114.44	509.07	60.61	10.61
C0999-148-5500-M	0.999	25.38	0.148	3.76	5.500	139.70	3.517	89.32	3.325	84.45	114.44	509.07	57.70	10.10
C0999-148-5750-M	0.999	25.38	0.148	3.76	5.750	146.05	3.671	93.25	3.470	88.13	114.44	509.07	55.05	9.63
C0999-148-6000-M	0.999	25.38	0.148	3.76	6.000	152.40	3.826	97.18	3.614	91.81	114.44	509.07	52.64	9.21
C0999-148-6250-M	0.999	25.38	0.148	3.76	6.250	158.75	3.981	101.11	3.759	95.48	114.44	509.07	50.43	8.83
C0999-148-6500-M	0.999	25.38	0.148	3.76	6.500	165.10	4.135	105.04	3.904	99.16	114.44	509.07	48.40	8.47
C0999-148-6750-M	0.999	25.38	0.148	3.76	6.750	171.45	4.290	108.97	4.049	102.84	114.44	509.07	46.52	8.14
C0999-148-7000-M	0.999	25.38	0.148	3.76	7.000	177.80	4.445	112.90	4.194	106.52	114.44	509.07	44.79	7.84
C0999-148-7500-M	0.999	25.38	0.148	3.76	7.500	190.50	4.754	120.76	4.483	113.87	114.44	509.07	41.68	7.29
C0999-148-8000-M	0.999	25.38	0.148	3.76	8.000	203.20	5.064	128.62	4.773	121.23	114.44	509.07	38.98	6.82
C0999-148-8500-M	0.999	25.38	0.148	3.76	8.500	215.90	5.373	136.48	5.062	128.58	114.44	509.07	36.60	6.41
C0999-148-9000-M	0.999	25.38	0.148	3.76	9.000	228.60	5.683	144.34	5.352	135.94	114.44	509.07	34.50	6.04
C0999-148-9500-M	0.999	25.38	0.148	3.76	9.500	241.30	5.992	152.20	5.642	143.30	114.44	509.07	32.62	5.71
C0999-162-1500-M	0.999	25.38	0.162	4.12	1.500	38.10	1.114	28.30	1.098	27.89	146.27	650.64	378.92	66.31
C0999-162-1625-M	0.999	25.38	0.162	4.12	1.625	41.28	1.198	30.43	1.179	29.94	146.27	650.64	342.52	59.94
C0999-162-1750-M	0.999	25.38	0.162	4.12	1.750	44.45	1.282	32.56	1.259	31.99	146.27	650.64	312.49	54.69
C0999-162-1875-M	0.999	25.38	0.162	4.12	1.875	47.63	1.366	34.69	1.340	34.03	146.27	650.64	287.31	50.28
C0999-162-2000-M	0.999	25.38	0.162	4.12	2.000	50.80	1.450	36.83	1.420	36.08	146.27	650.64	265.88	46.53
C0999-162-2125-M	0.999	25.38	0.162	4.12	2.125	53.98	1.534	38.96	1.501	38.12	146.27	650.64	247.43	43.30
C0999-162-2250-M	0.999	25.38	0.162	4.12	2.250	57.15	1.618	41.09	1.582	40.17	146.27	650.64	231.37	40.49
C0999-162-2375-M	0.999	25.38	0.162	4.12	2.375	60.33	1.702	43.22	1.662	42.22	146.27	650.64	217.27	38.02
C0999-162-2500-M	0.999	25.38	0.162	4.12	2.500	63.50	1.786	45.36	1.743	44.26	146.27	650.64	204.79	35.84
C0999-162-2625-M	0.999	25.38	0.162	4.12	2.625	66.68	1.870	47.49	1.823	46.31	146.27	650.64	193.66	33.89
C0999-162-2750-M	0.999	25.38	0.162	4.12	2.750	69.85	1.954	49.62	1.904	48.36	146.27	650.64	183.68	32.14
C0999-162-2875-M	0.999	25.38	0.162	4.12	2.875	73.03	2.038	51.76	1.984	50.40	146.27	650.64	174.68	30.57
C0999-162-3000-M	0.999	25.38	0.162	4.12	3.000	76.20	2.122	53.89	2.065	52.45	146.27	650.64	166.52	29.14
C0999-162-3250-M	0.999	25.38	0.162	4.12	3.250	82.55	2.290	58.15	2.226	56.54	146.27	650.64	152.30	26.65
C0999-162-3500-M	0.999	25.38	0.162	4.12	3.500	88.90	2.457	62.42	2.387	60.63	146.27	650.64	140.31	24.55
C0999-162-3750-M	0.999	25.38	0.162	4.12	3.750	95.25	2.625	66.69	2.548	64.73	146.27	650.64	130.07	22.76
C0999-162-4000-M	0.999	25.38	0.162	4.12	4.000	101.60	2.793	70.95	2.709	68.82	146.27	650.64	121.22	21.21
C0999-162-4250-M	0.999	25.38	0.162	4.12	4.250	107.95	2.961	75.22	2.871	72.91	146.27	650.64	113.50	19.86
C0999-162-4500-M	0.999	25.38	0.162	4.12	4.500	114.30	3.129	79.48	3.032	77.01	146.27	650.64	106.71	18.67
C0999-162-4750-M	0.999	25.38	0.162	4.12	4.750	120.65	3.297	83.75	3.193	81.10	146.27	650.64	100.68	17.62
C0999-162-5000-M	0.999	25.38	0.162	4.12	5.000	127.00	3.465	88.01	3.354	85.19	146.27	650.64	95.30	16.68
C0999-162-5250-M	0.999	25.38	0.162	4.12	5.250	133.35	3.633	92.28	3.515	89.28	146.27	650.64	90.46	15.83
C0999-162-5500-M	0.999	25.38	0.162	4.12	5.500	139.70	3.801	96.55	3.676	93.38	146.27	650.64	86.09	15.07
C0999-162-5750-M	0.999	25.38	0.162	4.12	5.750	146.05	3.969	100.81	3.837	97.47	146.27	650.64	82.13	14.37
C0999-162-6000-M	0.999	25.38	0.162	4.12	6.000	152.40	4.137	105.08	3.998	101.56	146.27	650.64	78.51	13.74
C0999-162-6250-M	0.999	25.38	0.162	4.12	6.250	158.75	4.305	109.34	4.160	105.65	146.27	650.64	75.20	13.16
C0999-162-6500-M	0.999	25.38	0.162	4.12	6.500	165.10	4.473	113.61	4.321	109.75	146.27	650.64	72.15	12.63
C0999-162-6750-M	0.999	25.38	0.162	4.12	6.750	171.45	4.641	117.87	4.482	113.84	146.27	650.64	69.35	12.14
C0999-162-7000-M	0.999	25.38	0.162	4.12	7.000	177.80	4.809	122.14	4.643	117.93	146.27	650.64	66.75	11.68
C0999-162-7500-M	0.999	25.38	0.162	4.12	7.500	190.50	5.145	130.67	4.965	126.12	146.27	650.64	62.10	10.87

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0999-148-1500-S	1.104	28.04	85.89	382.05	216.86	37.95
C0999-148-1625-S	1.188	30.17	85.89	382.05	196.46	34.38
C0999-148-1750-S	1.272	32.30	85.89	382.05	179.57	31.43
C0999-148-1875-S	1.356	34.43	85.89	382.05	165.36	28.94
C0999-148-2000-S	1.439	36.56	85.89	382.05	153.23	26.81
C0999-148-2125-S	1.523	38.69	85.89	382.05	142.76	24.98
C0999-148-2250-S	1.607	40.82	85.89	382.05	133.62	23.38
C0999-148-2375-S	1.691	42.95	85.89	382.05	125.59	21.98
C0999-148-2500-S	1.775	45.08	85.89	382.05	118.47	20.73
C0999-148-2625-S	1.859	47.22	85.89	382.05	112.11	19.62
C0999-148-2750-S	1.943	49.35	85.89	382.05	106.40	18.62
C0999-148-2875-S	2.027	51.48	85.89	382.05	101.24	17.72
C0999-148-3000-S	2.111	53.61	85.89	382.05	96.56	16.90
C0999-148-3250-S	2.278	57.87	85.89	382.05	88.39	15.47
C0999-148-3500-S	2.446	62.13	85.89	382.05	81.49	14.26
C0999-148-3750-S	2.614	66.39	85.89	382.05	75.59	13.23
C0999-148-4000-S	2.782	70.65	85.89	382.05	70.49	12.34
C0999-148-4250-S	2.949	74.91	85.89	382.05	66.03	11.56
C0999-148-4500-S	3.117	79.17	85.89	382.05	62.11	10.87
C0999-148-4750-S	3.285	83.44	85.89	382.05	58.62	10.26
C0999-148-5000-S	3.453	87.70	85.89	382.05	55.51	9.71
C0999-148-5250-S	3.620	91.96	85.89	382.05	52.71	9.22
C0999-148-5500-S	3.788	96.22	85.89	382.05	50.17	8.78
C0999-148-5750-S	3.956	100.48	85.89	382.05	47.87	8.38
C0999-148-6000-S	4.124	104.74	85.89	382.05	45.78	8.01
C0999-148-6250-S	4.291	109.00	85.89	382.05	43.85	7.67
C0999-148-6500-S	4.459	113.26	85.89	382.05	42.09	7.37
C0999-148-6750-S	4.627	117.53	85.89	382.05	40.46	7.08
C0999-148-7000-S	4.795	121.79	85.89	382.05	38.95	6.82
C0999-148-7500-S	5.130	130.31	85.89	382.05	36.24	6.34
C0999-148-8000-S	5.466	138.83	85.89	382.05	33.89	5.93
C0999-148-8500-S	5.801	147.35	85.89	382.05	31.83	5.57
C0999-148-9000-S	6.137	155.88	85.89	382.05	30.00	5.25
C0999-148-9500-S	6.472	164.40	85.89	382.05	28.37	4.96
C0999-162-1500-S	1.170	29.73	108.60	483.08	329.50	57.66
C0999-162-1625-S	1.260	32.01	108.60	483.08	297.84	52.12
C0999-162-1750-S	1.350	34.30	108.60	483.08	271.73	47.55
C0999-162-1875-S	1.440	36.58	108.60	483.08	249.83	43.72
C0999-162-2000-S	1.530	38.87	108.60	483.08	231.20	40.46
C0999-162-2125-S	1.620	41.15	108.60	483.08	215.15	37.65
C0999-162-2250-S	1.710	43.44	108.60	483.08	201.19	35.21
C0999-162-2375-S	1.800	45.72	108.60	483.08	188.93	33.06
C0999-162-2500-S	1.890	48.01	108.60	483.08	178.08	31.16
C0999-162-2625-S	1.980	50.29	108.60	483.08	168.40	29.47
C0999-162-2750-S	2.070	52.58	108.60	483.08	159.72	27.95
C0999-162-2875-S	2.160	54.86	108.60	483.08	151.90	26.58
C0999-162-3000-S	2.250	57.15	108.60	483.08	144.80	25.34
C0999-162-3250-S	2.430	61.72	108.60	483.08	132.43	23.18
C0999-162-3500-S	2.610	66.29	108.60	483.08	122.01	21.35
C0999-162-3750-S	2.790	70.86	108.60	483.08	113.10	19.79
C0999-162-4000-S	2.970	75.43	108.60	483.08	105.41	18.45
C0999-162-4250-S	3.150	80.00	108.60	483.08	98.70	17.27
C0999-162-4500-S	3.330	84.57	108.60	483.08	92.79	16.24
C0999-162-4750-S	3.510	89.14	108.60	483.08	87.55	15.32
C0999-162-5000-S	3.689	93.71	108.60	483.08	82.87	14.50
C0999-162-5250-S	3.869	98.28	108.60	483.08	78.66	13.77
C0999-162-5500-S	4.049	102.85	108.60	483.08	74.86	13.10
C0999-162-5750-S	4.229	107.42	108.60	483.08	71.41	12.50
C0999-162-6000-S	4.409	111.99	108.60	483.08	68.27	11.95
C0999-162-6250-S	4.589	116.56	108.60	483.08	65.39	11.44
C0999-162-6500-S	4.769	121.13	108.60	483.08	62.74	10.98
C0999-162-6750-S	4.949	125.70	108.60	483.08	60.30	10.55
C0999-162-7000-S	5.129	130.27	108.60	483.08	58.04	10.16
C0999-162-7500-S	5.489	139.42	108.60	483.08	54.00	9.45

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C0999-162-8000-M	0.999	25.38	0.162	4.12	8.000	203.20	5.480	139.20	5.288	134.30	146.27	650.64	58.05	10.16	**C0999-162-8000-S**	5.849	148.56	108.60	483.08	50.48	8.83
C0999-162-8500-M	0.999	25.38	0.162	4.12	8.500	215.90	5.816	147.73	5.610	142.49	146.27	650.64	54.50	9.54	**C0999-162-8500-S**	6.209	157.70	108.60	483.08	47.39	8.29
C0999-162-9000-M	0.999	25.38	0.162	4.12	9.000	228.60	6.152	156.26	5.932	150.67	146.27	650.64	51.36	8.99	**C0999-162-9000-S**	6.568	166.84	108.60	483.08	44.66	7.82
C0999-162-9500-M	0.999	25.38	0.162	4.12	9.500	241.30	6.488	164.80	6.254	158.86	146.27	650.64	48.56	8.50	**C0999-162-9500-S**	6.928	175.98	108.60	483.08	42.23	7.39
C0999-177-1500-M	0.999	25.38	0.177	4.50	1.500	38.10	1.229	31.22	1.182	30.01	157.82	702.03	582.99	102.02	**C0999-177-1500-S**	1.231	31.27	136.30	606.28	506.95	88.72
C0999-177-1625-M	0.999	25.38	0.177	4.50	1.625	41.28	1.272	32.30	1.270	32.25	185.70	826.05	525.66	91.99	**C0999-177-1625-S**	1.327	33.70	136.30	606.28	457.09	79.99
C0999-177-1750-M	0.999	25.38	0.177	4.50	1.750	44.45	1.362	34.59	1.358	34.50	185.70	826.05	478.59	83.75	**C0999-177-1750-S**	1.422	36.13	136.30	606.28	416.16	72.83
C0999-177-1875-M	0.999	25.38	0.177	4.50	1.875	47.63	1.452	36.89	1.447	36.74	185.70	826.05	439.26	76.87	**C0999-177-1875-S**	1.518	38.56	136.30	606.28	381.96	66.84
C0999-177-2000-M	0.999	25.38	0.177	4.50	2.000	50.80	1.542	39.18	1.535	38.98	185.70	826.05	405.90	71.03	**C0999-177-2000-S**	1.614	40.99	136.30	606.28	352.95	61.77
C0999-177-2125-M	0.999	25.38	0.177	4.50	2.125	53.98	1.633	41.47	1.623	41.23	185.70	826.05	377.25	66.02	**C0999-177-2125-S**	1.710	43.42	136.30	606.28	328.04	57.41
C0999-177-2250-M	0.999	25.38	0.177	4.50	2.250	57.15	1.723	43.76	1.712	43.47	185.70	826.05	352.38	61.67	**C0999-177-2250-S**	1.805	45.85	136.30	606.28	306.42	53.62
C0999-177-2375-M	0.999	25.38	0.177	4.50	2.375	60.33	1.813	46.06	1.800	45.72	185.70	826.05	330.58	57.85	**C0999-177-2375-S**	1.901	48.28	136.30	606.28	287.46	50.31
C0999-177-2500-M	0.999	25.38	0.177	4.50	2.500	63.50	1.904	48.35	1.888	47.96	185.70	826.05	311.33	54.48	**C0999-177-2500-S**	1.997	50.71	136.30	606.28	270.72	47.38
C0999-177-2625-M	0.999	25.38	0.177	4.50	2.625	66.68	1.994	50.64	1.976	50.20	185.70	826.05	294.19	51.48	**C0999-177-2625-S**	2.092	53.14	136.30	606.28	255.82	44.77
C0999-177-2750-M	0.999	25.38	0.177	4.50	2.750	69.85	2.084	52.93	2.065	52.45	185.70	826.05	278.84	48.80	**C0999-177-2750-S**	2.188	55.57	136.30	606.28	242.47	42.43
C0999-177-2875-M	0.999	25.38	0.177	4.50	2.875	73.03	2.174	55.23	2.153	54.69	185.70	826.05	265.02	46.38	**C0999-177-2875-S**	2.284	58.00	136.30	606.28	230.45	40.33
C0999-177-3000-M	0.999	25.38	0.177	4.50	3.000	76.20	2.265	57.52	2.241	56.93	185.70	826.05	252.50	44.19	**C0999-177-3000-S**	2.379	60.43	136.30	606.28	219.56	38.42
C0999-177-3250-M	0.999	25.38	0.177	4.50	3.250	82.55	2.445	62.10	2.418	61.42	185.70	826.05	230.70	40.37	**C0999-177-3250-S**	2.571	65.29	136.30	606.28	200.61	35.11
C0999-177-3500-M	0.999	25.38	0.177	4.50	3.500	88.90	2.626	66.69	2.595	65.91	185.70	826.05	212.37	37.16	**C0999-177-3500-S**	2.762	70.15	136.30	606.28	184.67	32.32
C0999-177-3750-M	0.999	25.38	0.177	4.50	3.750	95.25	2.806	71.27	2.771	70.40	185.70	826.05	196.73	34.43	**C0999-177-3750-S**	2.953	75.01	136.30	606.28	171.07	29.94
C0999-177-4000-M	0.999	25.38	0.177	4.50	4.000	101.60	2.987	75.86	2.948	74.88	185.70	826.05	183.24	32.07	**C0999-177-4000-S**	3.145	79.87	136.30	606.28	159.34	27.89
C0999-177-4250-M	0.999	25.38	0.177	4.50	4.250	107.95	3.167	80.44	3.125	79.37	185.70	826.05	171.49	30.01	**C0999-177-4250-S**	3.336	84.73	136.30	606.28	149.12	26.10
C0999-177-4500-M	0.999	25.38	0.177	4.50	4.500	114.30	3.348	85.03	3.301	83.86	185.70	826.05	161.15	28.20	**C0999-177-4500-S**	3.527	89.59	136.30	606.28	140.13	24.52
C0999-177-4750-M	0.999	25.38	0.177	4.50	4.750	120.65	3.528	89.61	3.478	88.34	185.70	826.05	151.98	26.60	**C0999-177-4750-S**	3.719	94.45	136.30	606.28	132.16	23.13
C0999-177-5250-M	0.999	25.38	0.177	4.50	5.250	133.35	3.889	98.78	3.831	97.32	185.70	826.05	136.46	23.88	**C0999-177-5250-S**	4.101	104.18	136.30	606.28	118.66	20.77
C0999-177-5500-M	0.999	25.38	0.177	4.50	5.500	139.70	4.070	103.37	4.008	101.81	185.70	826.05	129.83	22.72	**C0999-177-5500-S**	4.293	109.04	136.30	606.28	112.90	19.76
C0999-177-5750-M	0.999	25.38	0.177	4.50	5.750	146.05	4.250	107.95	4.185	106.29	185.70	826.05	123.82	21.67	**C0999-177-5750-S**	4.484	113.90	136.30	606.28	107.67	18.84
C0999-177-6000-M	0.999	25.38	0.177	4.50	6.000	152.40	4.431	112.54	4.361	110.78	185.70	826.05	118.33	20.71	**C0999-177-6000-S**	4.675	118.76	136.30	606.28	102.90	18.01
C0999-177-6250-M	0.999	25.38	0.177	4.50	6.250	158.75	4.611	117.12	4.538	115.27	185.70	826.05	113.32	19.83	**C0999-177-6250-S**	4.867	123.62	136.30	606.28	98.54	17.24
C0999-177-6500-M	0.999	25.38	0.177	4.50	6.500	165.10	4.792	121.71	4.715	119.75	185.70	826.05	108.71	19.02	**C0999-177-6500-S**	5.058	128.48	136.30	606.28	94.53	16.54
C0999-177-6750-M	0.999	25.38	0.177	4.50	6.750	171.45	4.972	126.29	4.891	124.24	185.70	826.05	104.46	18.28	**C0999-177-6750-S**	5.249	133.34	136.30	606.28	90.83	15.90
C0999-177-7000-M	0.999	25.38	0.177	4.50	7.000	177.80	5.153	130.88	5.068	128.73	185.70	826.05	100.53	17.59	**C0999-177-7000-S**	5.441	138.20	136.30	606.28	87.42	15.30
C0999-177-7500-M	0.999	25.38	0.177	4.50	7.500	190.50	5.514	140.05	5.421	137.70	185.70	826.05	93.49	16.36	**C0999-177-7500-S**	5.824	147.92	136.30	606.28	81.30	14.23
C0999-177-8000-M	0.999	25.38	0.177	4.50	8.000	203.20	5.875	149.22	5.775	146.68	185.70	826.05	87.38	15.29	**C0999-177-8000-S**	6.206	157.64	136.30	606.28	75.98	13.30
C0999-177-8500-M	0.999	25.38	0.177	4.50	8.500	215.90	6.236	158.39	6.128	155.65	185.70	826.05	82.02	14.35	**C0999-177-8500-S**	6.589	167.36	136.30	606.28	71.32	12.48
C0999-177-9000-M	0.999	25.38	0.177	4.50	9.000	228.60	6.597	167.56	6.481	164.63	185.70	826.05	77.27	13.52	**C0999-177-9000-S**	6.972	177.08	136.30	606.28	67.19	11.76
C0999-177-9500-M	0.999	25.38	0.177	4.50	9.500	241.30	6.958	176.73	6.835	173.60	185.70	826.05	73.05	12.78	**C0999-177-9500-S**	7.354	186.80	136.30	606.28	63.52	11.12
C0999-192-1500-M	0.999	25.38	0.192	4.88	1.500	38.10	1.289	32.75	1.252	31.80	186.06	827.62	882.78	154.49	**C0999-192-1500-S**	1.282	32.56	167.45	744.87	767.64	134.34
C0999-192-1625-M	0.999	25.38	0.192	4.88	1.625	41.28	1.389	35.28	1.347	34.22	187.51	834.07	793.86	138.93	**C0999-192-1625-S**	1.382	35.11	167.45	744.87	690.32	120.81
C0999-192-1750-M	0.999	25.38	0.192	4.88	1.750	44.45	1.488	37.80	1.442	36.63	188.69	839.35	721.22	126.21	**C0999-192-1750-S**	1.483	37.67	167.45	744.87	627.15	109.75
C0999-192-1875-M	0.999	25.38	0.192	4.88	1.875	47.63	1.588	40.33	1.537	39.05	189.68	843.73	660.76	115.63	**C0999-192-1875-S**	1.584	40.22	167.45	744.87	574.57	100.55
C0999-192-2000-M	0.999	25.38	0.192	4.88	2.000	50.80	1.688	42.86	1.632	41.46	190.51	847.45	609.64	106.69	**C0999-192-2000-S**	1.684	42.78	167.45	744.87	530.13	92.77
C0999-192-2125-M	0.999	25.38	0.192	4.88	2.125	53.98	1.787	45.39	1.727	43.88	191.23	850.62	565.87	99.03	**C0999-192-2125-S**	1.785	45.33	167.45	744.87	492.06	86.11
C0999-192-2250-M	0.999	25.38	0.192	4.88	2.250	57.15	1.887	47.92	1.823	46.29	191.85	853.37	527.97	92.39	**C0999-192-2250-S**	1.885	47.89	167.45	744.87	459.10	80.34
C0999-192-2375-M	0.999	25.38	0.192	4.88	2.375	60.33	1.986	50.45	1.918	48.71	192.39	855.78	494.82	86.59	**C0999-192-2375-S**	1.986	50.44	167.45	744.87	430.28	75.30
C0999-192-2500-M	0.999	25.38	0.192	4.88	2.500	63.50	2.086	52.98	2.013	51.12	192.86	857.90	465.59	81.48	**C0999-192-2500-S**	2.086	52.99	167.45	744.87	404.86	70.85
C0999-192-2625-M	0.999	25.38	0.192	4.88	2.625	66.68	2.185	55.51	2.108	53.54	193.29	859.79	439.62	76.93	**C0999-192-2625-S**	2.187	55.55	167.45	744.87	382.28	66.90
C0999-192-2750-M	0.999	25.38	0.192	4.88	2.750	69.85	2.285	58.04	2.203	55.95	193.67	861.47	416.39	72.87	**C0999-192-2750-S**	2.288	58.10	167.45	744.87	362.08	63.36
C0999-192-2875-M	0.999	25.38	0.192	4.88	2.875	73.03	2.384	60.57	2.298	58.37	194.01	862.99	395.50	69.21	**C0999-192-2875-S**	2.388	60.66	167.45	744.87	343.91	60.18
C0999-192-3000-M	0.999	25.38	0.192	4.88	3.000	76.20	2.484	63.09	2.393	60.78	194.32	864.36	376.60	65.91	**C0999-192-3000-S**	2.489	63.21	167.45	744.87	327.48	57.31
C0999-192-3250-M	0.999	25.38	0.192	4.88	3.250	82.55	2.683	68.15	2.583	65.61	194.85	866.75	343.75	60.16	**C0999-192-3250-S**	2.690	68.32	167.45	744.87	298.91	52.31
C0999-192-3500-M	0.999	25.38	0.192	4.88	3.500	88.90	2.882	73.21	2.773	70.44	195.30	868.75	316.17	55.33	**C0999-192-3500-S**	2.891	73.43	167.45	744.87	274.93	48.11
C0999-192-3750-M	0.999	25.38	0.192	4.88	3.750	95.25	3.081	78.27	2.963	75.27	195.69	870.45	292.69	51.22	**C0999-192-3750-S**	3.092	78.54	167.45	744.87	254.51	44.54
C0999-192-4000-M	0.999	25.38	0.192	4.88	4.000	101.60	3.281	83.33	3.154	80.10	196.02	871.92	272.45	47.68	**C0999-192-4000-S**	3.293	83.65	167.45	744.87	236.91	41.46
C0999-192-4250-M	0.999	25.38	0.192	4.88	4.250	107.95	3.344	84.95	3.344	84.93	230.79	1026.62	254.83	44.60	**C0999-192-4250-S**	3.494	88.76	167.45	744.87	221.59	38.78
C0999-192-4500-M	0.999	25.38	0.192	4.88	4.500	114.30	3.536	89.81	3.534	89.76	230.79	1026.62	239.36	41.89	**C0999-192-4500-S**	3.695	93.86	167.45	744.87	208.14	36.42
C0999-192-4750-M	0.999	25.38	0.192	4.88	4.750	120.65	3.727	94.67	3.724	94.59	230.79	1026.62	225.65	39.49	**C0999-192-4750-S**	3.897	98.97	167.45	744.87	196.22	34.34
C0999-192-5000-M	0.999	25.38	0.192	4.88	5.000	127.00	3.919	99.53	3.914	99.42	230.79	1026.62	213.43	37.35	**C0999-192-5000-S**	4.098	104.08	167.45	744.87	185.59	32.48
C0999-192-5250-M	0.999	25.38	0.192	4.88	5.250	133.35	4.110	104.40	4.104	104.25	230.79	1026.62	202.46	35.43	**C0999-192-5250-S**	4.299	109.19	167.45	744.87	176.06	30.81
C0999-192-5500-M	0.999	25.38	0.192	4.88	5.500	139.70	4.302	109.26	4.295	109.08	230.79	1026.62	192.57	33.70	**C0999-192-5500-S**	4.500	114.30	167.45	744.87	167.45	29.30
C0999-192-5750-M	0.999	25.38	0.192	4.88	5.750	146.05	4.493	114.12	4.485	113.91	230.79	1026.62	183.60	32.13	**C0999-192-5750-S**	4.701	119.41	167.45	744.87	159.65	27.94
C0999-192-6000-M	0.999	25.38	0.192	4.88	6.000	152.40	4.684	118.98	4.675	118.74	230.79	1026.62	175.43	30.70	**C0999-192-6000-S**	4.902	124.52	167.45	744.87	152.54	26.70
C0999-192-6250-M	0.999	25.38	0.192	4.88	6.250	158.75	4.876	123.85	4.865	123.57	230.79	1026.62	167.95	29.39	**C0999-192-6250-S**	5.103	129.63	167.45	744.87	146.04	25.56
C0999-192-6500-M	0.999	25.38	0.192	4.88	6.500	165.10	5.067	128.71	5.055	128.40	230.79	1026.62	161.08	28.19	**C0999-192-6500-S**	5.305	134.73	167.45	744.87	140.07	24.51

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0999-192-6750-M	0.999	25.38	0.192	4.88	6.750	171.45	5.259	133.57	5.245	133.23	230.79	1026.62	154.76	27.08
C0999-192-7000-M	0.999	25.38	0.192	4.88	7.000	177.80	5.450	138.43	5.435	138.06	230.79	1026.62	148.91	26.06
C0999-192-7500-M	0.999	25.38	0.192	4.88	7.500	190.50	5.833	148.16	5.816	147.72	230.79	1026.62	138.45	24.23
C0999-192-8000-M	0.999	25.38	0.192	4.88	8.000	203.20	6.216	157.88	6.196	157.38	230.79	1026.62	129.36	22.64
C0999-192-8500-M	0.999	25.38	0.192	4.88	8.500	215.90	6.599	167.61	6.576	167.04	230.79	1026.62	121.39	21.24
C0999-192-9000-M	0.999	25.38	0.192	4.88	9.000	228.60	6.982	177.33	6.957	176.70	230.79	1026.62	114.34	20.01
C0999-192-9500-M	0.999	25.38	0.192	4.88	9.500	241.30	7.364	187.06	7.337	186.36	230.79	1026.62	108.07	18.91
C1010-112-1000-M	1.010	25.65	0.112	2.85	1.000	25.40	0.613	15.56	0.572	14.52	40.66	180.87	105.00	18.38
C1010-112-1500-M	1.010	25.65	0.112	2.85	1.500	38.10	0.880	22.35	0.809	20.55	39.68	176.50	64.00	11.20
C1010-112-2000-M	1.010	25.65	0.112	2.85	2.000	50.80	1.137	28.88	1.034	26.26	39.71	176.62	46.00	8.05
C1010-112-2500-M	1.010	25.65	0.112	2.85	2.500	63.50	1.391	35.34	1.256	31.89	39.91	177.53	36.00	6.30
C1010-112-3000-M	1.010	25.65	0.112	2.85	3.000	76.20	1.666	42.31	1.502	38.15	38.69	172.11	29.00	5.08
C1010-112-3500-M	1.010	25.65	0.112	2.85	3.500	88.90	1.905	48.38	1.705	43.29	39.88	177.39	25.00	4.38
C1010-112-4000-M	1.010	25.65	0.112	2.85	4.000	101.60	2.142	54.41	1.905	48.38	40.87	181.82	22.00	3.85
C1010-112-4500-M	1.010	25.65	0.112	2.85	4.500	114.30	2.430	61.73	2.169	55.08	39.32	174.91	19.00	3.33
C1016-120-1000-M	1.016	25.81	0.120	3.05	1.000	25.40	0.608	15.46	0.538	13.68	66.33	295.06	169.42	29.65
C1016-120-1500-M	1.016	25.81	0.120	3.05	1.500	38.10	0.851	21.61	0.763	19.38	66.33	295.06	102.19	17.88
C1016-120-2000-M	1.016	25.81	0.120	3.05	2.000	50.80	1.093	27.77	0.966	24.53	66.33	295.06	73.16	12.80
C1016-120-2250-M	1.016	25.81	0.120	3.05	2.250	57.15	1.215	30.85	1.067	27.10	66.33	295.06	64.06	11.21
C1016-120-2563-M	1.016	25.81	0.120	3.05	2.563	65.10	1.367	34.71	1.194	30.32	66.33	295.06	55.44	9.70
C1016-120-2750-M	1.016	25.81	0.120	3.05	2.750	69.85	1.457	37.01	1.270	32.25	66.33	295.06	51.30	8.98
C1016-120-3000-M	1.016	25.81	0.120	3.05	3.000	76.20	1.578	40.08	1.371	34.83	66.33	295.06	46.65	8.16
C1016-120-3500-M	1.016	25.81	0.120	3.05	3.500	88.90	1.821	46.25	1.574	39.98	66.33	295.06	39.50	6.91
C1016-120-4000-M	1.016	25.81	0.120	3.05	4.000	101.60	2.063	52.41	1.776	45.12	66.33	295.06	34.25	5.99
C1016-120-4500-M	1.016	25.81	0.120	3.05	4.500	114.30	2.306	58.57	1.979	50.27	66.33	295.06	30.23	5.29
C1058-085-1875-M	1.058	26.87	0.085	2.16	1.875	47.63	0.716	18.19	0.537	13.65	23.47	104.40	20.26	3.54
C1058-085-2000-M	1.058	26.87	0.085	2.16	2.000	50.80	0.756	19.21	0.564	14.32	23.47	104.40	18.87	3.30
C1058-085-2125-M	1.058	26.87	0.085	2.16	2.125	53.98	0.796	20.23	0.590	14.99	23.47	104.40	17.67	3.09
C1058-085-2250-M	1.058	26.87	0.085	2.16	2.250	57.15	0.836	21.25	0.616	15.66	23.47	104.40	16.60	2.91
C1058-085-2375-M	1.058	26.87	0.085	2.16	2.375	60.33	0.877	22.26	0.643	16.32	23.47	104.40	15.66	2.74
C1058-085-2500-M	1.058	26.87	0.085	2.16	2.500	63.50	0.917	23.28	0.669	16.99	23.47	104.40	14.82	2.59
C1058-085-2625-M	1.058	26.87	0.085	2.16	2.625	66.68	0.957	24.30	0.695	17.66	23.47	104.40	14.07	2.46
C1058-085-2750-M	1.058	26.87	0.085	2.16	2.750	69.85	0.997	25.32	0.722	18.33	23.47	104.40	13.39	2.34
C1058-085-2875-M	1.058	26.87	0.085	2.16	2.875	73.03	1.037	26.33	0.748	19.00	23.47	104.40	12.77	2.23
C1058-085-3000-M	1.058	26.87	0.085	2.16	3.000	76.20	1.077	27.35	0.774	19.67	23.47	104.40	12.20	2.14
C1058-085-3250-M	1.058	26.87	0.085	2.16	3.250	82.55	1.157	29.39	0.827	21.00	23.47	104.40	11.21	1.96
C1058-085-3500-M	1.058	26.87	0.085	2.16	3.500	88.90	1.237	31.42	0.880	22.34	23.47	104.40	10.37	1.81
C1058-085-3750-M	1.058	26.87	0.085	2.16	3.750	95.25	1.317	33.45	0.932	23.68	23.47	104.40	9.65	1.69
C1058-085-4000-M	1.058	26.87	0.085	2.16	4.000	101.60	1.397	35.49	0.985	25.01	23.47	104.40	9.02	1.58
C1058-085-4250-M	1.058	26.87	0.085	2.16	4.250	107.95	1.477	37.52	1.037	26.35	23.47	104.40	8.47	1.48
C1058-085-4500-M	1.058	26.87	0.085	2.16	4.500	114.30	1.557	39.56	1.090	27.69	23.47	104.40	7.98	1.40
C1058-085-4750-M	1.058	26.87	0.085	2.16	4.750	120.65	1.638	41.59	1.143	29.02	23.47	104.40	7.54	1.32
C1058-085-5000-M	1.058	26.87	0.085	2.16	5.000	127.00	1.718	43.63	1.195	30.36	23.47	104.40	7.15	1.25
C1058-085-5250-M	1.058	26.87	0.085	2.16	5.250	133.35	1.798	45.66	1.248	31.70	23.47	104.40	6.80	1.19
C1058-085-5500-M	1.058	26.87	0.085	2.16	5.500	139.70	1.878	47.70	1.301	33.03	23.47	104.40	6.48	1.13
C1058-085-5750-M	1.058	26.87	0.085	2.16	5.750	146.05	1.958	49.73	1.353	34.37	23.47	104.40	6.19	1.08
C1058-085-6000-M	1.058	26.87	0.085	2.16	6.000	152.40	2.038	51.77	1.406	35.71	23.47	104.40	5.92	1.04
C1058-085-6250-M	1.058	26.87	0.085	2.16	6.250	158.75	2.118	53.80	1.458	37.04	23.47	104.40	5.68	0.99
C1058-085-6500-M	1.058	26.87	0.085	2.16	6.500	165.10	2.198	55.84	1.511	38.38	23.47	104.40	5.46	0.95
C1058-085-6750-M	1.058	26.87	0.085	2.16	6.750	171.45	2.278	57.87	1.564	39.72	23.47	104.40	5.25	0.92
C1058-085-7000-M	1.058	26.87	0.085	2.16	7.000	177.80	2.358	59.91	1.616	41.06	23.47	104.40	5.06	0.88
C1058-085-7500-M	1.058	26.87	0.085	2.16	7.500	190.50	2.519	63.97	1.722	43.73	23.47	104.40	4.71	0.82
C1058-085-8000-M	1.058	26.87	0.085	2.16	8.000	203.20	2.679	68.04	1.827	46.40	23.47	104.40	4.41	0.77
C1058-085-8500-M	1.058	26.87	0.085	2.16	8.500	215.90	2.839	72.11	1.932	49.08	23.47	104.40	4.15	0.73
C1058-085-9000-M	1.058	26.87	0.085	2.16	9.000	228.60	2.999	76.18	2.037	51.75	23.47	104.40	3.91	0.68
C1058-085-9500-M	1.058	26.87	0.085	2.16	9.500	241.30	3.160	80.25	2.143	54.42	23.47	104.40	3.70	0.65
C1058-092-1875-M	1.058	26.87	0.092	2.34	1.875	47.63	0.774	19.66	0.609	15.46	29.25	130.12	26.57	4.65
C1058-092-2000-M	1.058	26.87	0.092	2.34	2.000	50.80	0.818	20.77	0.639	16.24	29.25	130.12	24.74	4.33
C1058-092-2125-M	1.058	26.87	0.092	2.34	2.125	53.98	0.861	21.87	0.670	17.02	29.25	130.12	23.15	4.05
C1058-092-2250-M	1.058	26.87	0.092	2.34	2.250	57.15	0.905	22.98	0.701	17.80	29.25	130.12	21.75	3.81
C1058-092-2375-M	1.058	26.87	0.092	2.34	2.375	60.33	0.948	24.09	0.731	18.58	29.25	130.12	20.51	3.59
C1058-092-2500-M	1.058	26.87	0.092	2.34	2.500	63.50	0.992	25.20	0.762	19.36	29.25	130.12	19.40	3.39
C1058-092-2625-M	1.058	26.87	0.092	2.34	2.625	66.68	1.036	26.30	0.793	20.14	29.25	130.12	18.41	3.22
C1058-092-2750-M	1.058	26.87	0.092	2.34	2.750	69.85	1.079	27.41	0.824	20.92	29.25	130.12	17.51	3.06

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C0999-192-6750-S	5.506	139.84	167.45	744.87	134.57	23.55
C0999-192-7000-S	5.707	144.95	167.45	744.87	129.49	22.66
C0999-192-7500-S	6.109	155.17	167.45	744.87	120.39	21.07
C0999-192-8000-S	6.511	165.39	167.45	744.87	112.49	19.68
C0999-192-8500-S	6.914	175.61	167.45	744.87	105.56	18.47
C0999-192-9000-S	7.316	185.82	167.45	744.87	99.43	17.40
C0999-192-9500-S	7.718	196.04	167.45	744.87	93.98	16.45
C1010-112-1000-S	0.613	15.56	33.87	150.66	87.47	15.31
C1010-112-1500-S	0.880	22.35	33.05	147.02	53.31	9.33
C1010-112-2000-S	1.137	28.88	33.07	147.12	38.32	6.71
C1010-112-2500-S	1.391	35.34	33.24	147.88	29.99	5.25
C1010-112-3000-S	1.666	42.31	32.23	143.37	24.16	4.23
C1010-112-3500-S	1.905	48.38	33.22	147.76	20.83	3.64
C1010-112-4000-S	2.142	54.41	34.05	151.46	18.33	3.21
C1010-112-4500-S	2.430	61.73	32.75	145.70	15.83	2.77
C1016-120-1000-S	0.656	16.65	48.62	216.26	141.13	24.70
C1016-120-1500-S	0.929	23.59	48.62	216.26	85.12	14.90
C1016-120-2000-S	1.202	30.54	48.62	216.26	60.94	10.66
C1016-120-2250-S	1.339	34.01	48.62	216.26	53.36	9.34
C1016-120-2563-S	1.510	38.36	48.62	216.26	46.18	8.08
C1016-120-2750-S	1.612	40.95	48.62	216.26	42.73	7.48
C1016-120-3000-S	1.749	44.42	48.62	216.26	38.86	6.80
C1016-120-3500-S	2.022	51.37	48.62	216.26	32.90	5.76
C1016-120-4000-S	2.296	58.32	48.62	216.26	28.53	4.99
C1016-120-4500-S	2.569	65.26	48.62	216.26	25.18	4.41
C1058-085-1875-S	0.829	21.06	18.42	81.93	17.61	3.08
C1058-085-2000-S	0.878	22.29	18.42	81.93	16.41	2.87
C1058-085-2125-S	0.926	23.52	18.42	81.93	15.36	2.69
C1058-085-2250-S	0.974	24.74	18.42	81.93	14.44	2.53
C1058-085-2375-S	1.023	25.97	18.42	81.93	13.62	2.38
C1058-085-2500-S	1.071	27.20	18.42	81.93	12.89	2.26
C1058-085-2625-S	1.119	28.43	18.42	81.93	12.23	2.14
C1058-085-2750-S	1.168	29.66	18.42	81.93	11.64	2.04
C1058-085-2875-S	1.216	30.88	18.42	81.93	11.10	1.94
C1058-085-3000-S	1.264	32.11	18.42	81.93	10.61	1.86
C1058-085-3250-S	1.361	34.57	18.42	81.93	9.75	1.71
C1058-085-3500-S	1.457	37.02	18.42	81.93	9.02	1.58
C1058-085-3750-S	1.554	39.48	18.42	81.93	8.39	1.47
C1058-085-4000-S	1.651	41.93	18.42	81.93	7.84	1.37
C1058-085-4250-S	1.747	44.39	18.42	81.93	7.36	1.29
C1058-085-4500-S	1.844	46.84	18.42	81.93	6.94	1.21
C1058-085-4750-S	1.941	49.30	18.42	81.93	6.56	1.15
C1058-085-5000-S	2.037	51.75	18.42	81.93	6.22	1.09
C1058-085-5250-S	2.134	54.21	18.42	81.93	5.91	1.03
C1058-085-5500-S	2.231	56.66	18.42	81.93	5.63	0.99
C1058-085-5750-S	2.327	59.12	18.42	81.93	5.38	0.94
C1058-085-6000-S	2.424	61.57	18.42	81.93	5.15	0.90
C1058-085-6250-S	2.521	64.03	18.42	81.93	4.94	0.86
C1058-085-6500-S	2.617	66.48	18.42	81.93	4.74	0.83
C1058-085-6750-S	2.714	68.94	18.42	81.93	4.56	0.80
C1058-085-7000-S	2.811	71.39	18.42	81.93	4.40	0.77
C1058-085-7500-S	3.004	76.30	18.42	81.93	4.10	0.72
C1058-085-8000-S	3.197	81.21	18.42	81.93	3.84	0.67
C1058-085-8500-S	3.391	86.12	18.42	81.93	3.61	0.63
C1058-085-9000-S	3.584	91.03	18.42	81.93	3.40	0.60
C1058-085-9500-S	3.777	95.94	18.42	81.93	3.22	0.56
C1058-092-1875-S	0.885	22.49	22.86	101.69	23.10	4.04
C1058-092-2000-S	0.937	23.81	22.86	101.69	21.51	3.76
C1058-092-2125-S	0.989	25.13	22.86	101.69	20.13	3.52
C1058-092-2250-S	1.041	26.44	22.86	101.69	18.91	3.31
C1058-092-2375-S	1.093	27.76	22.86	101.69	17.83	3.12
C1058-092-2500-S	1.145	29.08	22.86	101.69	16.87	2.95
C1058-092-2625-S	1.197	30.39	22.86	101.69	16.00	2.80
C1058-092-2750-S	1.248	31.71	22.86	101.69	15.22	2.66

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1058-092-2875-M	1.058	26.87	0.092	2.34	2.875	73.03	1.123	28.52	0.854	21.70	29.25	130.12	16.70	2.92
C1058-092-3000-M	1.058	26.87	0.092	2.34	3.000	76.20	1.166	29.63	0.885	22.48	29.25	130.12	15.95	2.79
C1058-092-3250-M	1.058	26.87	0.092	2.34	3.250	82.55	1.254	31.84	0.946	24.04	29.25	130.12	14.65	2.56
C1058-092-3500-M	1.058	26.87	0.092	2.34	3.500	88.90	1.341	34.06	1.008	25.60	29.25	130.12	13.55	2.37
C1058-092-3750-M	1.058	26.87	0.092	2.34	3.750	95.25	1.428	36.27	1.069	27.16	29.25	130.12	12.60	2.20
C1058-092-4000-M	1.058	26.87	0.092	2.34	4.000	101.60	1.515	38.49	1.131	28.72	29.25	130.12	11.77	2.06
C1058-092-4250-M	1.058	26.87	0.092	2.34	4.250	107.95	1.602	40.70	1.192	30.28	29.25	130.12	11.05	1.93
C1058-092-4500-M	1.058	26.87	0.092	2.34	4.500	114.30	1.690	42.92	1.253	31.84	29.25	130.12	10.41	1.82
C1058-092-4750-M	1.058	26.87	0.092	2.34	4.750	120.65	1.777	45.13	1.315	33.40	29.25	130.12	9.84	1.72
C1058-092-5000-M	1.058	26.87	0.092	2.34	5.000	127.00	1.864	47.35	1.376	34.96	29.25	130.12	9.33	1.63
C1058-092-5250-M	1.058	26.87	0.092	2.34	5.250	133.35	1.951	49.56	1.438	36.52	29.25	130.12	8.87	1.55
C1058-092-5500-M	1.058	26.87	0.092	2.34	5.500	139.70	2.039	51.78	1.499	38.08	29.25	130.12	8.45	1.48
C1058-092-5750-M	1.058	26.87	0.092	2.34	5.750	146.05	2.126	53.99	1.560	39.64	29.25	130.12	8.07	1.41
C1058-092-6000-M	1.058	26.87	0.092	2.34	6.000	152.40	2.213	56.21	1.622	41.20	29.25	130.12	7.73	1.35
C1058-092-6250-M	1.058	26.87	0.092	2.34	6.250	158.75	2.300	58.42	1.683	42.76	29.25	130.12	7.41	1.30
C1058-092-6500-M	1.058	26.87	0.092	2.34	6.500	165.10	2.387	60.64	1.745	44.32	29.25	130.12	7.11	1.24
C1058-092-6750-M	1.058	26.87	0.092	2.34	6.750	171.45	2.475	62.85	1.806	45.88	29.25	130.12	6.84	1.20
C1058-092-7000-M	1.058	26.87	0.092	2.34	7.000	177.80	2.562	65.07	1.868	47.44	29.25	130.12	6.59	1.15
C1058-092-7500-M	1.058	26.87	0.092	2.34	7.500	190.50	2.736	69.50	1.990	50.55	29.25	130.12	6.14	1.07
C1058-092-8000-M	1.058	26.87	0.092	2.34	8.000	203.20	2.911	73.93	2.113	53.67	29.25	130.12	5.75	1.01
C1058-092-8500-M	1.058	26.87	0.092	2.34	8.500	215.90	3.085	78.36	2.236	56.79	29.25	130.12	5.40	0.95
C1058-092-9000-M	1.058	26.87	0.092	2.34	9.000	228.60	3.260	82.79	2.359	59.91	29.25	130.12	5.10	0.89
C1058-092-9500-M	1.058	26.87	0.092	2.34	9.500	241.30	3.434	87.22	2.482	63.03	29.25	130.12	4.82	0.84
C1058-098-1750-M	1.058	26.87	0.098	2.49	1.750	44.45	0.777	19.74	0.636	16.15	34.87	155.10	35.85	6.27
C1058-098-1875-M	1.058	26.87	0.098	2.49	1.875	47.63	0.824	20.93	0.671	17.03	34.87	155.10	33.18	5.81
C1058-098-2000-M	1.058	26.87	0.098	2.49	2.000	50.80	0.871	22.12	0.705	17.91	34.87	155.10	30.88	5.40
C1058-098-2125-M	1.058	26.87	0.098	2.49	2.125	53.98	0.918	23.31	0.740	18.79	34.87	155.10	28.88	5.05
C1058-098-2250-M	1.058	26.87	0.098	2.49	2.250	57.15	0.964	24.50	0.774	19.67	34.87	155.10	27.12	4.75
C1058-098-2375-M	1.058	26.87	0.098	2.49	2.375	60.33	1.011	25.68	0.809	20.55	34.87	155.10	25.57	4.47
C1058-098-2500-M	1.058	26.87	0.098	2.49	2.500	63.50	1.058	26.87	0.844	21.43	34.87	155.10	24.18	4.23
C1058-098-2625-M	1.058	26.87	0.098	2.49	2.625	66.68	1.105	28.06	0.878	22.31	34.87	155.10	22.93	4.01
C1058-098-2750-M	1.058	26.87	0.098	2.49	2.750	69.85	1.151	29.25	0.913	23.19	34.87	155.10	21.81	3.82
C1058-098-2875-M	1.058	26.87	0.098	2.49	2.875	73.03	1.198	30.43	0.947	24.06	34.87	155.10	20.79	3.64
C1058-098-3000-M	1.058	26.87	0.098	2.49	3.000	76.20	1.245	31.62	0.982	24.94	34.87	155.10	19.87	3.48
C1058-098-3250-M	1.058	26.87	0.098	2.49	3.250	82.55	1.338	34.00	1.051	26.70	34.87	155.10	18.24	3.19
C1058-098-3500-M	1.058	26.87	0.098	2.49	3.500	88.90	1.432	36.37	1.120	28.46	34.87	155.10	16.86	2.95
C1058-098-3750-M	1.058	26.87	0.098	2.49	3.750	95.25	1.526	38.75	1.190	30.22	34.87	155.10	15.68	2.74
C1058-098-4000-M	1.058	26.87	0.098	2.49	4.000	101.60	1.619	41.12	1.259	31.97	34.87	155.10	14.64	2.56
C1058-098-4250-M	1.058	26.87	0.098	2.49	4.250	107.95	1.713	43.50	1.328	33.73	34.87	155.10	13.74	2.40
C1058-098-4500-M	1.058	26.87	0.098	2.49	4.500	114.30	1.806	45.88	1.397	35.49	34.87	155.10	12.94	2.27
C1058-098-4750-M	1.058	26.87	0.098	2.49	4.750	120.65	1.900	48.25	1.466	37.25	34.87	155.10	12.23	2.14
C1058-098-5000-M	1.058	26.87	0.098	2.49	5.000	127.00	1.993	50.63	1.536	39.01	34.87	155.10	11.60	2.03
C1058-098-5250-M	1.058	26.87	0.098	2.49	5.250	133.35	2.087	53.00	1.605	40.76	34.87	155.10	11.02	1.93
C1058-098-5500-M	1.058	26.87	0.098	2.49	5.500	139.70	2.180	55.38	1.674	42.52	34.87	155.10	10.50	1.84
C1058-098-5750-M	1.058	26.87	0.098	2.49	5.750	146.05	2.274	57.75	1.743	44.28	34.87	155.10	10.03	1.76
C1058-098-6000-M	1.058	26.87	0.098	2.49	6.000	152.40	2.367	60.13	1.812	46.04	34.87	155.10	9.60	1.68
C1058-098-6250-M	1.058	26.87	0.098	2.49	6.250	158.75	2.461	62.50	1.882	47.79	34.87	155.10	9.20	1.61
C1058-098-6500-M	1.058	26.87	0.098	2.49	6.500	165.10	2.554	64.88	1.951	49.55	34.87	155.10	8.84	1.55
C1058-098-6750-M	1.058	26.87	0.098	2.49	6.750	171.45	2.648	67.25	2.020	51.31	34.87	155.10	8.50	1.49
C1058-098-7000-M	1.058	26.87	0.098	2.49	7.000	177.80	2.741	69.63	2.089	53.07	34.87	155.10	8.19	1.43
C1058-098-7500-M	1.058	26.87	0.098	2.49	7.500	190.50	2.928	74.38	2.228	56.58	34.87	155.10	7.63	1.33
C1058-098-8000-M*	1.058	26.87	0.098	2.49	8.000	203.20	3.177	80.69	2.442	62.02	34.87	155.10	7.23	1.27
C1058-098-8500-M*	1.058	26.87	0.098	2.49	8.500	215.90	3.364	85.44	2.580	65.54	34.87	155.10	6.79	1.19
C1058-098-9000-M*	1.058	26.87	0.098	2.49	9.000	228.60	3.551	90.19	2.719	69.06	34.87	155.10	6.40	1.12
C1058-098-9500-M*	1.058	26.87	0.098	2.49	9.500	241.30	3.738	94.94	2.857	72.57	34.87	155.10	6.05	1.06
C1058-105-1625-M	1.058	26.87	0.105	2.67	1.625	41.28	0.782	19.86	0.665	16.89	42.22	187.81	50.09	8.76
C1058-105-1750-M	1.058	26.87	0.105	2.67	1.750	44.45	0.833	21.15	0.704	17.89	42.22	187.81	46.02	8.05
C1058-105-1875-M	1.058	26.87	0.105	2.67	1.875	47.63	0.883	22.43	0.743	18.88	42.22	187.81	42.56	7.45
C1058-105-2000-M	1.058	26.87	0.105	2.67	2.000	50.80	0.934	23.71	0.783	19.88	42.22	187.81	39.59	6.93
C1058-105-2125-M	1.058	26.87	0.105	2.67	2.125	53.98	0.984	25.00	0.822	20.88	42.22	187.81	37.01	6.48
C1058-105-2250-M	1.058	26.87	0.105	2.67	2.250	57.15	1.035	26.28	0.861	21.87	42.22	187.81	34.74	6.08
C1058-105-2375-M	1.058	26.87	0.105	2.67	2.375	60.33	1.085	27.56	0.900	22.87	42.22	187.81	32.73	5.73
C1058-105-2500-M	1.058	26.87	0.105	2.67	2.500	63.50	1.136	28.85	0.940	23.87	42.22	187.81	30.95	5.42
C1058-105-2625-M	1.058	26.87	0.105	2.67	2.625	66.68	1.186	30.13	0.979	24.87	42.22	187.81	29.35	5.14

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1058-092-2875-S	1.300	33.03	22.86	101.69	14.52	2.54
C1058-092-3000-S	1.352	34.34	22.86	101.69	13.87	2.43
C1058-092-3250-S	1.456	36.98	22.86	101.69	12.74	2.23
C1058-092-3500-S	1.560	39.61	22.86	101.69	11.78	2.06
C1058-092-3750-S	1.663	42.25	22.86	101.69	10.96	1.92
C1058-092-4000-S	1.767	44.88	22.86	101.69	10.24	1.79
C1058-092-4250-S	1.871	47.52	22.86	101.69	9.61	1.68
C1058-092-4500-S	1.974	50.15	22.86	101.69	9.05	1.58
C1058-092-4750-S	2.078	52.78	22.86	101.69	8.56	1.50
C1058-092-5000-S	2.182	55.42	22.86	101.69	8.11	1.42
C1058-092-5250-S	2.286	58.05	22.86	101.69	7.71	1.35
C1058-092-5500-S	2.389	60.69	22.86	101.69	7.35	1.29
C1058-092-5750-S	2.493	63.32	22.86	101.69	7.02	1.23
C1058-092-6000-S	2.597	65.95	22.86	101.69	6.72	1.18
C1058-092-6250-S	2.700	68.59	22.86	101.69	6.44	1.13
C1058-092-6500-S	2.804	71.22	22.86	101.69	6.19	1.08
C1058-092-6750-S	2.908	73.86	22.86	101.69	5.95	1.04
C1058-092-7000-S	3.011	76.49	22.86	101.69	5.73	1.00
C1058-092-7500-S	3.219	81.76	22.86	101.69	5.34	0.93
C1058-092-8000-S	3.426	87.03	22.86	101.69	5.00	0.87
C1058-092-8500-S	3.634	92.30	22.86	101.69	4.70	0.82
C1058-092-9000-S	3.841	97.56	22.86	101.69	4.43	0.78
C1058-092-9500-S	4.049	102.83	22.86	101.69	4.19	0.73
C1058-098-1750-S	0.879	22.33	27.14	120.73	31.17	5.46
C1058-098-1875-S	0.934	23.73	27.14	120.73	28.85	5.05
C1058-098-2000-S	0.989	25.13	27.14	120.73	26.85	4.70
C1058-098-2125-S	1.044	26.52	27.14	120.73	25.11	4.39
C1058-098-2250-S	1.099	27.92	27.14	120.73	23.58	4.13
C1058-098-2375-S	1.154	29.31	27.14	120.73	22.23	3.89
C1058-098-2500-S	1.209	30.71	27.14	120.73	21.03	3.68
C1058-098-2625-S	1.264	32.11	27.14	120.73	19.94	3.49
C1058-098-2750-S	1.319	33.50	27.14	120.73	18.97	3.32
C1058-098-2875-S	1.374	34.90	27.14	120.73	18.08	3.16
C1058-098-3000-S	1.429	36.29	27.14	120.73	17.28	3.02
C1058-098-3250-S	1.539	39.09	27.14	120.73	15.86	2.78
C1058-098-3500-S	1.649	41.88	27.14	120.73	14.66	2.57
C1058-098-3750-S	1.759	44.67	27.14	120.73	13.63	2.39
C1058-098-4000-S	1.869	47.46	27.14	120.73	12.73	2.23
C1058-098-4250-S	1.979	50.26	27.14	120.73	11.95	2.09
C1058-098-4500-S	2.088	53.05	27.14	120.73	11.26	1.97
C1058-098-4750-S	2.198	55.84	27.14	120.73	10.64	1.86
C1058-098-5000-S	2.308	58.63	27.14	120.73	10.08	1.76
C1058-098-5250-S	2.418	61.42	27.14	120.73	9.59	1.68
C1058-098-5500-S	2.528	64.22	27.14	120.73	9.13	1.60
C1058-098-5750-S	2.638	67.01	27.14	120.73	8.72	1.53
C1058-098-6000-S	2.748	69.80	27.14	120.73	8.35	1.46
C1058-098-6250-S	2.858	72.59	27.14	120.73	8.00	1.40
C1058-098-6500-S	2.968	75.38	27.14	120.73	7.68	1.34
C1058-098-6750-S	3.078	78.18	27.14	120.73	7.39	1.29
C1058-098-7000-S	3.188	80.97	27.14	120.73	7.12	1.25
C1058-098-7500-S	3.408	86.55	27.14	120.73	6.63	1.16
C1058-098-8000-S*	3.682	93.53	27.14	120.73	6.29	1.10
C1058-098-8500-S*	3.902	99.12	27.14	120.73	5.90	1.03
C1058-098-9000-S*	4.122	104.70	27.14	120.73	5.56	0.97
C1058-098-9500-S*	4.342	110.28	27.14	120.73	5.26	0.92
C1058-105-1625-S	0.874	22.20	32.71	145.50	43.55	7.62
C1058-105-1750-S	0.933	23.69	32.71	145.50	40.02	7.00
C1058-105-1875-S	0.991	25.18	32.71	145.50	37.01	6.48
C1058-105-2000-S	1.050	26.67	32.71	145.50	34.43	6.02
C1058-105-2125-S	1.109	28.16	32.71	145.50	32.18	5.63
C1058-105-2250-S	1.167	29.65	32.71	145.50	30.21	5.29
C1058-105-2375-S	1.226	31.14	32.71	145.50	28.47	4.98
C1058-105-2500-S	1.285	32.63	32.71	145.50	26.91	4.71
C1058-105-2625-S	1.343	34.12	32.71	145.50	25.52	4.47

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1058-105-2750-M	1.058	26.87	0.105	2.67	2.750	69.85	1.237	31.41	1.018	25.86	42.22	187.81	27.90	4.88
C1058-105-2875-M	1.058	26.87	0.105	2.67	2.875	73.03	1.287	32.70	1.057	26.86	42.22	187.81	26.59	4.65
C1058-105-3000-M	1.058	26.87	0.105	2.67	3.000	76.20	1.338	33.98	1.097	27.86	42.22	187.81	25.40	4.45
C1058-105-3250-M	1.058	26.87	0.105	2.67	3.250	82.55	1.439	36.55	1.175	29.85	42.22	187.81	23.31	4.08
C1058-105-3500-M	1.058	26.87	0.105	2.67	3.500	88.90	1.540	39.11	1.254	31.84	42.22	187.81	21.54	3.77
C1058-105-3750-M	1.058	26.87	0.105	2.67	3.750	95.25	1.641	41.68	1.332	33.84	42.22	187.81	20.02	3.50
C1058-105-4000-M	1.058	26.87	0.105	2.67	4.000	101.60	1.742	44.25	1.411	35.83	42.22	187.81	18.70	3.27
C1058-105-4250-M	1.058	26.87	0.105	2.67	4.250	107.95	1.843	46.81	1.489	37.83	42.22	187.81	17.54	3.07
C1058-105-4500-M	1.058	26.87	0.105	2.67	4.500	114.30	1.944	49.38	1.568	39.82	42.22	187.81	16.52	2.89
C1058-105-4750-M	1.058	26.87	0.105	2.67	4.750	120.65	2.045	51.95	1.646	41.82	42.22	187.81	15.61	2.73
C1058-105-5000-M	1.058	26.87	0.105	2.67	5.000	127.00	2.146	54.52	1.725	43.81	42.22	187.81	14.80	2.59
C1058-105-5250-M	1.058	26.87	0.105	2.67	5.250	133.35	2.247	57.08	1.803	45.80	42.22	187.81	14.06	2.46
C1058-105-5500-M	1.058	26.87	0.105	2.67	5.500	139.70	2.348	59.65	1.882	47.80	42.22	187.81	13.40	2.34
C1058-105-5750-M	1.058	26.87	0.105	2.67	5.750	146.05	2.449	62.22	1.960	49.79	42.22	187.81	12.79	2.24
C1058-105-6000-M	1.058	26.87	0.105	2.67	6.000	152.40	2.551	64.78	2.039	51.79	42.22	187.81	12.24	2.14
C1058-105-6250-M	1.058	26.87	0.105	2.67	6.250	158.75	2.652	67.35	2.117	53.78	42.22	187.81	11.73	2.05
C1058-105-6500-M	1.058	26.87	0.105	2.67	6.500	165.10	2.753	69.92	2.196	55.78	42.22	187.81	11.27	1.97
C1058-105-6750-M	1.058	26.87	0.105	2.67	6.750	171.45	2.854	72.48	2.274	57.77	42.22	187.81	10.84	1.90
C1058-105-7000-M	1.058	26.87	0.105	2.67	7.000	177.80	2.955	75.05	2.353	59.76	42.22	187.81	10.44	1.83
C1058-105-7500-M*	1.058	26.87	0.105	2.67	7.500	190.50	3.219	81.77	2.587	65.72	42.22	187.81	9.86	1.73
C1058-105-8000-M*	1.058	26.87	0.105	2.67	8.000	203.20	3.422	86.91	2.744	69.70	42.22	187.81	9.22	1.61
C1058-105-8500-M*	1.058	26.87	0.105	2.67	8.500	215.90	3.624	92.04	2.901	73.69	42.22	187.81	8.66	1.52
C1058-105-9000-M*	1.058	26.87	0.105	2.67	9.000	228.60	3.826	97.17	3.058	77.68	42.22	187.81	8.16	1.43
C1058-105-9500-M*	1.058	26.87	0.105	2.67	9.500	241.30	4.028	102.31	3.215	81.67	42.22	187.81	7.72	1.35
C1058-112-1625-M	1.058	26.87	0.112	2.85	1.625	41.28	0.833	21.16	0.728	18.49	50.48	224.55	63.75	11.16
C1058-112-1750-M	1.058	26.87	0.112	2.85	1.750	44.45	0.887	22.54	0.772	19.61	50.48	224.55	58.53	10.24
C1058-112-1875-M	1.058	26.87	0.112	2.85	1.875	47.63	0.942	23.92	0.816	20.73	50.48	224.55	54.10	9.47
C1058-112-2000-M	1.058	26.87	0.112	2.85	2.000	50.80	0.996	25.30	0.860	21.84	50.48	224.55	50.29	8.80
C1058-112-2125-M	1.058	26.87	0.112	2.85	2.125	53.98	1.051	26.68	0.904	22.96	50.48	224.55	46.98	8.22
C1058-112-2250-M	1.058	26.87	0.112	2.85	2.250	57.15	1.105	28.06	0.948	24.08	50.48	224.55	44.08	7.71
C1058-112-2375-M	1.058	26.87	0.112	2.85	2.375	60.33	1.159	29.44	0.992	25.19	50.48	224.55	41.52	7.27
C1058-112-2500-M	1.058	26.87	0.112	2.85	2.500	63.50	1.214	30.82	1.036	26.31	50.48	224.55	39.24	6.87
C1058-112-2625-M	1.058	26.87	0.112	2.85	2.625	66.68	1.268	32.21	1.080	27.43	50.48	224.55	37.20	6.51
C1058-112-2750-M	1.058	26.87	0.112	2.85	2.750	69.85	1.322	33.59	1.124	28.55	50.48	224.55	35.36	6.19
C1058-112-2875-M	1.058	26.87	0.112	2.85	2.875	73.03	1.377	34.97	1.168	29.66	50.48	224.55	33.69	5.90
C1058-112-3000-M	1.058	26.87	0.112	2.85	3.000	76.20	1.431	36.35	1.212	30.78	50.48	224.55	32.17	5.63
C1058-112-3250-M	1.058	26.87	0.112	2.85	3.250	82.55	1.540	39.11	1.300	33.01	50.48	224.55	29.52	5.17
C1058-112-3500-M	1.058	26.87	0.112	2.85	3.500	88.90	1.648	41.87	1.388	35.25	50.48	224.55	27.26	4.77
C1058-112-3750-M	1.058	26.87	0.112	2.85	3.750	95.25	1.757	44.63	1.476	37.48	50.48	224.55	25.33	4.43
C1058-112-4000-M	1.058	26.87	0.112	2.85	4.000	101.60	1.866	47.39	1.564	39.71	50.48	224.55	23.65	4.14
C1058-112-4250-M	1.058	26.87	0.112	2.85	4.250	107.95	1.974	50.15	1.652	41.95	50.48	224.55	22.18	3.88
C1058-112-4500-M	1.058	26.87	0.112	2.85	4.500	114.30	2.083	52.91	1.739	44.18	50.48	224.55	20.89	3.66
C1058-112-4750-M	1.058	26.87	0.112	2.85	4.750	120.65	2.192	55.67	1.827	46.42	50.48	224.55	19.73	3.45
C1058-112-5000-M	1.058	26.87	0.112	2.85	5.000	127.00	2.301	58.43	1.915	48.65	50.48	224.55	18.70	3.27
C1058-112-5250-M	1.058	26.87	0.112	2.85	5.250	133.35	2.409	61.19	2.003	50.88	50.48	224.55	17.77	3.11
C1058-112-5500-M	1.058	26.87	0.112	2.85	5.500	139.70	2.518	63.96	2.091	53.12	50.48	224.55	16.93	2.96
C1058-112-5750-M	1.058	26.87	0.112	2.85	5.750	146.05	2.627	66.72	2.179	55.35	50.48	224.55	16.16	2.83
C1058-112-6000-M	1.058	26.87	0.112	2.85	6.000	152.40	2.735	69.48	2.267	57.59	50.48	224.55	15.46	2.71
C1058-112-6250-M	1.058	26.87	0.112	2.85	6.250	158.75	2.844	72.24	2.355	59.82	50.48	224.55	14.82	2.59
C1058-112-6500-M	1.058	26.87	0.112	2.85	6.500	165.10	2.953	75.00	2.443	62.05	50.48	224.55	14.23	2.49
C1058-112-6750-M	1.058	26.87	0.112	2.85	6.750	171.45	3.061	77.76	2.531	64.29	50.48	224.55	13.69	2.40
C1058-112-7000-M	1.058	26.87	0.112	2.85	7.000	177.80	3.170	80.52	2.619	66.52	50.48	224.55	13.18	2.31
C1058-112-7500-M	1.058	26.87	0.112	2.85	7.500	190.50	3.388	86.04	2.795	70.99	50.48	224.55	12.28	2.15
C1058-112-8000-M	1.058	26.87	0.112	2.85	8.000	203.20	3.605	91.56	2.971	75.46	50.48	224.55	11.49	2.01
C1058-112-8500-M*	1.058	26.87	0.112	2.85	8.500	215.90	3.886	98.69	3.225	81.91	50.48	224.55	10.94	1.91
C1058-112-9000-M*	1.058	26.87	0.112	2.85	9.000	228.60	4.103	104.22	3.401	86.38	50.48	224.55	10.31	1.80
C1058-112-9500-M*	1.058	26.87	0.112	2.85	9.500	241.30	4.320	109.74	3.577	90.85	50.48	224.55	9.75	1.71
C1058-125-1500-M	1.058	26.87	0.125	3.18	1.500	38.10	0.864	21.96	0.790	20.06	68.36	304.07	107.55	18.82
C1058-125-1625-M	1.058	26.87	0.125	3.18	1.625	41.28	0.926	23.52	0.843	21.40	68.36	304.07	97.77	17.11
C1058-125-1750-M	1.058	26.87	0.125	3.18	1.750	44.45	0.987	25.08	0.895	22.74	68.36	304.07	89.62	15.68
C1058-125-1875-M	1.058	26.87	0.125	3.18	1.875	47.63	1.049	26.64	0.948	24.08	68.36	304.07	82.73	14.48
C1058-125-2000-M	1.058	26.87	0.125	3.18	2.000	50.80	1.110	28.20	1.001	25.42	68.36	304.07	76.82	13.44
C1058-125-2125-M	1.058	26.87	0.125	3.18	2.125	53.98	1.172	29.76	1.054	26.76	68.36	304.07	71.70	12.55
C1058-125-2250-M	1.058	26.87	0.125	3.18	2.250	57.15	1.233	31.32	1.106	28.10	68.36	304.07	67.22	11.76

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1058-105-2750-S	1.402	35.61	32.71	145.50	24.26	4.25
C1058-105-2875-S	1.460	37.10	32.71	145.50	23.12	4.05
C1058-105-3000-S	1.519	38.59	32.71	145.50	22.09	3.87
C1058-105-3250-S	1.636	41.56	32.71	145.50	20.27	3.55
C1058-105-3500-S	1.754	44.54	32.71	145.50	18.73	3.28
C1058-105-3750-S	1.871	47.52	32.71	145.50	17.41	3.05
C1058-105-4000-S	1.988	50.50	32.71	145.50	16.26	2.85
C1058-105-4250-S	2.106	53.48	32.71	145.50	15.25	2.67
C1058-105-4500-S	2.223	56.46	32.71	145.50	14.37	2.51
C1058-105-4750-S	2.340	59.44	32.71	145.50	13.57	2.38
C1058-105-5000-S	2.458	62.42	32.71	145.50	12.87	2.25
C1058-105-5250-S	2.575	65.40	32.71	145.50	12.23	2.14
C1058-105-5500-S	2.692	68.38	32.71	145.50	11.65	2.04
C1058-105-5750-S	2.809	71.36	32.71	145.50	11.12	1.95
C1058-105-6000-S	2.927	74.34	32.71	145.50	10.64	1.86
C1058-105-6250-S	3.044	77.32	32.71	145.50	10.20	1.79
C1058-105-6500-S	3.161	80.30	32.71	145.50	9.80	1.71
C1058-105-6750-S	3.279	83.28	32.71	145.50	9.42	1.65
C1058-105-7000-S	3.396	86.26	32.71	145.50	9.08	1.59
C1058-105-7500-S*	3.686	93.63	32.71	145.50	8.58	1.50
C1058-105-8000-S*	3.921	99.59	32.71	145.50	8.02	1.40
C1058-105-8500-S*	4.156	105.55	32.71	145.50	7.53	1.32
C1058-105-9000-S*	4.390	111.51	32.71	145.50	7.10	1.24
C1058-105-9500-S*	4.625	117.47	32.71	145.50	6.71	1.17
C1058-112-1625-S	0.923	23.44	38.92	173.11	55.44	9.70
C1058-112-1750-S	0.985	25.03	38.92	173.11	50.89	8.91
C1058-112-1875-S	1.048	26.61	38.92	173.11	47.04	8.23
C1058-112-2000-S	1.110	28.20	38.92	173.11	43.73	7.65
C1058-112-2125-S	1.172	29.78	38.92	173.11	40.86	7.15
C1058-112-2250-S	1.235	31.36	38.92	173.11	38.33	6.71
C1058-112-2375-S	1.297	32.95	38.92	173.11	36.11	6.32
C1058-112-2500-S	1.360	34.53	38.92	173.11	34.12	5.97
C1058-112-2625-S	1.422	36.12	38.92	173.11	32.35	5.66
C1058-112-2750-S	1.484	37.70	38.92	173.11	30.75	5.38
C1058-112-2875-S	1.547	39.28	38.92	173.11	29.30	5.13
C1058-112-3000-S	1.609	40.87	38.92	173.11	27.98	4.90
C1058-112-3250-S	1.734	44.04	38.92	173.11	25.67	4.49
C1058-112-3500-S	1.858	47.20	38.92	173.11	23.71	4.15
C1058-112-3750-S	1.983	50.37	38.92	173.11	22.03	3.85
C1058-112-4000-S	2.108	53.54	38.92	173.11	20.57	3.60
C1058-112-4250-S	2.233	56.71	38.92	173.11	19.29	3.38
C1058-112-4500-S	2.357	59.88	38.92	173.11	18.16	3.18
C1058-112-4750-S	2.482	63.04	38.92	173.11	17.16	3.00
C1058-112-5000-S	2.607	66.21	38.92	173.11	16.26	2.85
C1058-112-5250-S	2.732	69.38	38.92	173.11	15.45	2.70
C1058-112-5500-S	2.856	72.55	38.92	173.11	14.72	2.58
C1058-112-5750-S	2.981	75.72	38.92	173.11	14.05	2.46
C1058-112-6000-S	3.106	78.89	38.92	173.11	13.45	2.35
C1058-112-6250-S	3.230	82.05	38.92	173.11	12.89	2.26
C1058-112-6500-S	3.355	85.22	38.92	173.11	12.38	2.17
C1058-112-6750-S	3.480	88.39	38.92	173.11	11.90	2.08
C1058-112-7000-S	3.605	91.56	38.92	173.11	11.46	2.01
C1058-112-7500-S	3.854	97.89	38.92	173.11	10.67	1.87
C1058-112-8000-S	4.104	104.23	38.92	173.11	9.99	1.75
C1058-112-8500-S*	4.409	111.99	38.92	173.11	9.51	1.66
C1058-112-9000-S*	4.659	118.33	38.92	173.11	8.96	1.57
C1058-112-9500-S*	4.908	124.66	38.92	173.11	8.48	1.48
C1058-125-1500-S	0.942	23.92	52.20	232.20	93.52	16.37
C1058-125-1625-S	1.011	25.68	52.20	232.20	85.02	14.88
C1058-125-1750-S	1.080	27.44	52.20	232.20	77.93	13.64
C1058-125-1875-S	1.149	29.19	52.20	232.20	71.94	12.59
C1058-125-2000-S	1.219	30.95	52.20	232.20	66.80	11.69
C1058-125-2125-S	1.288	32.71	52.20	232.20	62.35	10.91
C1058-125-2250-S	1.357	34.47	52.20	232.20	58.45	10.23

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1058-125-2375-M	1.058	26.87	0.125	3.18	2.375	60.33	1.294	32.88	1.159	29.44	68.36	304.07	63.26	11.07	**C1058-125-2375-S**	1.426	36.22	52.20	232.20	55.01	9.63
C1058-125-2500-M	1.058	26.87	0.125	3.18	2.500	63.50	1.356	34.44	1.212	30.78	68.36	304.07	59.75	10.46	**C1058-125-2500-S**	1.495	37.98	52.20	232.20	51.96	9.09
C1058-125-2625-M	1.058	26.87	0.125	3.18	2.625	66.68	1.417	36.00	1.264	32.12	68.36	304.07	56.60	9.91	**C1058-125-2625-S**	1.564	39.74	52.20	232.20	49.22	8.61
C1058-125-2750-M	1.058	26.87	0.125	3.18	2.750	69.85	1.479	37.56	1.317	33.46	68.36	304.07	53.77	9.41	**C1058-125-2750-S**	1.634	41.49	52.20	232.20	46.76	8.18
C1058-125-2875-M	1.058	26.87	0.125	3.18	2.875	73.03	1.540	39.12	1.370	34.80	68.36	304.07	51.21	8.96	**C1058-125-2875-S**	1.703	43.25	52.20	232.20	44.53	7.79
C1058-125-3000-M	1.058	26.87	0.125	3.18	3.000	76.20	1.602	40.68	1.423	36.14	68.36	304.07	48.89	8.56	**C1058-125-3000-S**	1.772	45.01	52.20	232.20	42.51	7.44
C1058-125-3250-M	1.058	26.87	0.125	3.18	3.250	82.55	1.725	43.80	1.528	38.81	68.36	304.07	44.81	7.84	**C1058-125-3250-S**	1.910	48.52	52.20	232.20	38.97	6.82
C1058-125-3500-M	1.058	26.87	0.125	3.18	3.500	88.90	1.847	46.93	1.634	41.49	68.36	304.07	41.37	7.24	**C1058-125-3500-S**	2.049	52.04	52.20	232.20	35.97	6.29
C1058-125-3750-M	1.058	26.87	0.125	3.18	3.750	95.25	1.970	50.05	1.739	44.17	68.36	304.07	38.41	6.72	**C1058-125-3750-S**	2.187	55.55	52.20	232.20	33.40	5.85
C1058-125-4000-M	1.058	26.87	0.125	3.18	4.000	101.60	2.093	53.17	1.845	46.85	68.36	304.07	35.85	6.27	**C1058-125-4000-S**	2.325	59.07	52.20	232.20	31.17	5.46
C1058-125-4250-M	1.058	26.87	0.125	3.18	4.250	107.95	2.216	56.29	1.950	49.53	68.36	304.07	33.61	5.88	**C1058-125-4250-S**	2.464	62.58	52.20	232.20	29.23	5.11
C1058-125-4500-M	1.058	26.87	0.125	3.18	4.500	114.30	2.339	59.41	2.055	52.21	68.36	304.07	31.63	5.54	**C1058-125-4500-S**	2.602	66.10	52.20	232.20	27.51	4.81
C1058-125-4750-M	1.058	26.87	0.125	3.18	4.750	120.65	2.462	62.53	2.161	54.89	68.36	304.07	29.88	5.23	**C1058-125-4750-S**	2.741	69.61	52.20	232.20	25.98	4.55
C1058-125-5000-M	1.058	26.87	0.125	3.18	5.000	127.00	2.585	65.65	2.266	57.57	68.36	304.07	28.30	4.95	**C1058-125-5000-S**	2.879	73.13	52.20	232.20	24.61	4.31
C1058-125-5250-M	1.058	26.87	0.125	3.18	5.250	133.35	2.708	68.77	2.372	60.25	68.36	304.07	26.89	4.71	**C1058-125-5250-S**	3.017	76.64	52.20	232.20	23.38	4.09
C1058-125-5500-M	1.058	26.87	0.125	3.18	5.500	139.70	2.830	71.89	2.477	62.93	68.36	304.07	25.61	4.48	**C1058-125-5500-S**	3.156	80.15	52.20	232.20	22.27	3.90
C1058-125-5750-M	1.058	26.87	0.125	3.18	5.750	146.05	2.953	75.02	2.583	65.60	68.36	304.07	24.44	4.28	**C1058-125-5750-S**	3.294	83.67	52.20	232.20	21.26	3.72
C1058-125-6000-M	1.058	26.87	0.125	3.18	6.000	152.40	3.076	78.14	2.688	68.28	68.36	304.07	23.38	4.09	**C1058-125-6000-S**	3.432	87.18	52.20	232.20	20.33	3.56
C1058-125-6250-M	1.058	26.87	0.125	3.18	6.250	158.75	3.199	81.26	2.794	70.96	68.36	304.07	22.41	3.92	**C1058-125-6250-S**	3.571	90.70	52.20	232.20	19.48	3.41
C1058-125-6500-M	1.058	26.87	0.125	3.18	6.500	165.10	3.322	84.38	2.899	73.64	68.36	304.07	21.51	3.76	**C1058-125-6500-S**	3.709	94.21	52.20	232.20	18.70	3.27
C1058-125-6750-M	1.058	26.87	0.125	3.18	6.750	171.45	3.445	87.50	3.005	76.32	68.36	304.07	20.68	3.62	**C1058-125-6750-S**	3.847	97.73	52.20	232.20	17.99	3.15
C1058-125-7000-M	1.058	26.87	0.125	3.18	7.000	177.80	3.568	90.62	3.110	79.00	68.36	304.07	19.92	3.49	**C1058-125-7000-S**	3.986	101.24	52.20	232.20	17.32	3.03
C1058-125-7500-M	1.058	26.87	0.125	3.18	7.500	190.50	3.814	96.86	3.321	84.36	68.36	304.07	18.54	3.25	**C1058-125-7500-S**	4.263	108.27	52.20	232.20	16.12	2.82
C1058-125-8000-M	1.058	26.87	0.125	3.18	8.000	203.20	4.059	103.11	3.532	89.71	68.36	304.07	17.35	3.04	**C1058-125-8000-S**	4.539	115.30	52.20	232.20	15.08	2.64
C1058-125-8500-M	1.058	26.87	0.125	3.18	8.500	215.90	4.305	109.35	3.743	95.07	68.36	304.07	16.30	2.85	**C1058-125-8500-S**	4.816	122.33	52.20	232.20	14.17	2.48
C1058-125-9000-M	1.058	26.87	0.125	3.18	9.000	228.60	4.551	115.59	3.954	100.43	68.36	304.07	15.36	2.69	**C1058-125-9000-S**	5.093	129.36	52.20	232.20	13.36	2.34
C1058-125-9500-M	1.058	26.87	0.125	3.18	9.500	241.30	4.797	121.83	4.165	105.79	68.36	304.07	14.53	2.54	**C1058-125-9500-S**	5.370	136.39	52.20	232.20	12.64	2.21
C1058-135-1500-M	1.058	26.87	0.135	3.43	1.500	38.10	0.927	23.55	0.867	22.03	84.47	375.75	147.44	25.80	**C1058-135-1500-S**	1.001	25.42	64.03	284.80	128.21	22.44
C1058-135-1625-M	1.058	26.87	0.135	3.43	1.625	41.28	0.994	25.24	0.927	23.54	84.47	375.75	133.84	23.42	**C1058-135-1625-S**	1.075	27.30	64.03	284.80	116.38	20.37
C1058-135-1750-M	1.058	26.87	0.135	3.43	1.750	44.45	1.061	26.94	0.986	25.04	84.47	375.75	122.54	21.44	**C1058-135-1750-S**	1.149	29.19	64.03	284.80	106.55	18.65
C1058-135-1875-M	1.058	26.87	0.135	3.43	1.875	47.63	1.127	28.64	1.045	26.55	84.47	375.75	112.99	19.77	**C1058-135-1875-S**	1.223	31.07	64.03	284.80	98.25	17.19
C1058-135-2000-M	1.058	26.87	0.135	3.43	2.000	50.80	1.194	30.33	1.105	28.06	84.47	375.75	104.83	18.34	**C1058-135-2000-S**	1.298	32.96	64.03	284.80	91.16	15.95
C1058-135-2125-M	1.058	26.87	0.135	3.43	2.125	53.98	1.261	32.03	1.164	29.56	84.47	375.75	97.76	17.11	**C1058-135-2125-S**	1.372	34.85	64.03	284.80	85.01	14.88
C1058-135-2250-M	1.058	26.87	0.135	3.43	2.250	57.15	1.328	33.72	1.223	31.07	84.47	375.75	91.59	16.03	**C1058-135-2250-S**	1.446	36.73	64.03	284.80	79.65	13.94
C1058-135-2375-M	1.058	26.87	0.135	3.43	2.375	60.33	1.395	35.42	1.283	32.58	84.47	375.75	86.15	15.08	**C1058-135-2375-S**	1.520	38.62	64.03	284.80	74.92	13.11
C1058-135-2500-M	1.058	26.87	0.135	3.43	2.500	63.50	1.461	37.12	1.342	34.08	84.47	375.75	81.32	14.23	**C1058-135-2500-S**	1.595	40.50	64.03	284.80	70.72	12.38
C1058-135-2625-M	1.058	26.87	0.135	3.43	2.625	66.68	1.528	38.81	1.401	35.59	84.47	375.75	77.01	13.48	**C1058-135-2625-S**	1.669	42.39	64.03	284.80	66.96	11.72
C1058-135-2750-M	1.058	26.87	0.135	3.43	2.750	69.85	1.595	40.51	1.461	37.10	84.47	375.75	73.13	12.80	**C1058-135-2750-S**	1.743	44.28	64.03	284.80	63.59	11.13
C1058-135-2875-M	1.058	26.87	0.135	3.43	2.875	73.03	1.662	42.20	1.520	38.60	84.47	375.75	69.62	12.18	**C1058-135-2875-S**	1.817	46.16	64.03	284.80	60.54	10.59
C1058-135-3000-M	1.058	26.87	0.135	3.43	3.000	76.20	1.728	43.90	1.579	40.11	84.47	375.75	66.43	11.63	**C1058-135-3000-S**	1.892	48.05	64.03	284.80	57.77	10.11
C1058-135-3250-M	1.058	26.87	0.135	3.43	3.250	82.55	1.862	47.29	1.698	43.13	84.47	375.75	60.86	10.65	**C1058-135-3250-S**	2.040	51.82	64.03	284.80	52.92	9.26
C1058-135-3500-M	1.058	26.87	0.135	3.43	3.500	88.90	1.995	50.69	1.816	46.14	84.47	375.75	56.15	9.83	**C1058-135-3500-S**	2.189	55.59	64.03	284.80	48.82	8.54
C1058-135-3750-M	1.058	26.87	0.135	3.43	3.750	95.25	2.129	54.08	1.935	49.15	84.47	375.75	52.11	9.12	**C1058-135-3750-S**	2.337	59.36	64.03	284.80	45.32	7.93
C1058-135-4000-M	1.058	26.87	0.135	3.43	4.000	101.60	2.263	57.47	2.054	52.17	84.47	375.75	48.62	8.51	**C1058-135-4000-S**	2.486	63.13	64.03	284.80	42.28	7.40
C1058-135-4250-M	1.058	26.87	0.135	3.43	4.250	107.95	2.396	60.86	2.172	55.18	84.47	375.75	45.57	7.97	**C1058-135-4250-S**	2.634	66.91	64.03	284.80	39.62	6.93
C1058-135-4500-M	1.058	26.87	0.135	3.43	4.500	114.30	2.530	64.25	2.291	58.19	84.47	375.75	42.87	7.50	**C1058-135-4500-S**	2.783	70.68	64.03	284.80	37.28	6.52
C1058-135-4750-M	1.058	26.87	0.135	3.43	4.750	120.65	2.663	67.65	2.410	61.21	84.47	375.75	40.48	7.08	**C1058-135-4750-S**	2.931	74.45	64.03	284.80	35.20	6.16
C1058-135-5000-M	1.058	26.87	0.135	3.43	5.000	127.00	2.797	71.04	2.528	64.22	84.47	375.75	38.34	6.71	**C1058-135-5000-S**	3.080	78.22	64.03	284.80	33.34	5.83
C1058-135-5250-M	1.058	26.87	0.135	3.43	5.250	133.35	2.930	74.43	2.647	67.24	84.47	375.75	36.42	6.37	**C1058-135-5250-S**	3.228	81.99	64.03	284.80	31.67	5.54
C1058-135-5500-M	1.058	26.87	0.135	3.43	5.500	139.70	3.064	77.82	2.766	70.25	84.47	375.75	34.68	6.07	**C1058-135-5500-S**	3.377	85.77	64.03	284.80	30.15	5.28
C1058-135-5750-M	1.058	26.87	0.135	3.43	5.750	146.05	3.197	81.22	2.884	73.26	84.47	375.75	33.09	5.79	**C1058-135-5750-S**	3.525	89.54	64.03	284.80	28.78	5.04
C1058-135-6000-M	1.058	26.87	0.135	3.43	6.000	152.40	3.331	84.61	3.003	76.28	84.47	375.75	31.65	5.54	**C1058-135-6000-S**	3.674	93.31	64.03	284.80	27.52	4.82
C1058-135-6250-M	1.058	26.87	0.135	3.43	6.250	158.75	3.465	88.00	3.122	79.29	84.47	375.75	30.33	5.31	**C1058-135-6250-S**	3.822	97.08	64.03	284.80	26.37	4.61
C1058-135-6500-M	1.058	26.87	0.135	3.43	6.500	165.10	3.598	91.39	3.240	82.30	84.47	375.75	29.11	5.09	**C1058-135-6500-S**	3.971	100.85	64.03	284.80	25.31	4.43
C1058-135-6750-M	1.058	26.87	0.135	3.43	6.750	171.45	3.732	94.78	3.359	85.32	84.47	375.75	27.99	4.90	**C1058-135-6750-S**	4.119	104.63	64.03	284.80	24.34	4.26
C1058-135-7000-M	1.058	26.87	0.135	3.43	7.000	177.80	3.865	98.18	3.478	88.33	84.47	375.75	26.95	4.72	**C1058-135-7000-S**	4.268	108.40	64.03	284.80	23.43	4.10
C1058-135-7500-M	1.058	26.87	0.135	3.43	7.500	190.50	4.132	104.96	3.715	94.36	84.47	375.75	25.08	4.39	**C1058-135-7500-S**	4.565	115.94	64.03	284.80	21.81	3.82
C1058-135-8000-M	1.058	26.87	0.135	3.43	8.000	203.20	4.399	111.75	3.952	100.39	84.47	375.75	23.46	4.11	**C1058-135-8000-S**	4.862	123.48	64.03	284.80	20.40	3.57
C1058-135-8500-M	1.058	26.87	0.135	3.43	8.500	215.90	4.667	118.53	4.190	106.41	84.47	375.75	22.04	3.86	**C1058-135-8500-S**	5.159	131.03	64.03	284.80	19.16	3.35
C1058-135-9000-M	1.058	26.87	0.135	3.43	9.000	228.60	4.934	125.31	4.427	112.44	84.47	375.75	20.77	3.64	**C1058-135-9000-S**	5.456	138.57	64.03	284.80	18.06	3.16
C1058-135-9500-M	1.058	26.87	0.135	3.43	9.500	241.30	5.201	132.10	4.664	118.47	84.47	375.75	19.65	3.44	**C1058-135-9500-S**	5.753	146.12	64.03	284.80	17.09	2.99
C1058-148-1500-M	1.058	26.87	0.148	3.76	1.500	38.10	1.003	25.48	0.961	24.41	108.67	483.38	218.69	38.27	**C1058-148-1500-S**	1.071	27.21	81.55	362.77	190.16	33.28
C1058-148-1625-M	1.058	26.87	0.148	3.76	1.625	41.28	1.076	27.34	1.029	26.13	108.67	483.38	198.12	34.67	**C1058-148-1625-S**	1.152	29.25	81.55	362.77	172.28	30.15
C1058-148-1750-M	1.058	26.87	0.148	3.76	1.750	44.45	1.150	29.21	1.096	27.84	108.67	483.38	181.09	31.69	**C1058-148-1750-S**	1.232	31.29	81.55	362.77	157.47	27.56

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1058-148-1875-M	1.058	26.87	0.148	3.76	1.875	47.63	1.223	31.07	1.164	29.56	108.67	483.38	166.75	29.18
C1058-148-2000-M	1.058	26.87	0.148	3.76	2.000	50.80	1.297	32.94	1.231	31.27	108.67	483.38	154.52	27.04
C1058-148-2125-M	1.058	26.87	0.148	3.76	2.125	53.98	1.370	34.80	1.299	32.99	108.67	483.38	143.96	25.19
C1058-148-2250-M	1.058	26.87	0.148	3.76	2.250	57.15	1.444	36.67	1.366	34.70	108.67	483.38	134.75	23.58
C1058-148-2375-M	1.058	26.87	0.148	3.76	2.375	60.33	1.517	38.53	1.434	36.42	108.67	483.38	126.65	22.16
C1058-148-2500-M	1.058	26.87	0.148	3.76	2.500	63.50	1.590	40.40	1.501	38.13	108.67	483.38	119.47	20.91
C1058-148-2625-M	1.058	26.87	0.148	3.76	2.625	66.68	1.664	42.26	1.569	39.85	108.67	483.38	113.05	19.78
C1058-148-2750-M	1.058	26.87	0.148	3.76	2.750	69.85	1.737	44.12	1.636	41.56	108.67	483.38	107.29	18.78
C1058-148-2875-M	1.058	26.87	0.148	3.76	2.875	73.03	1.811	45.99	1.704	43.28	108.67	483.38	102.09	17.87
C1058-148-3000-M	1.058	26.87	0.148	3.76	3.000	76.20	1.884	47.85	1.771	44.99	108.67	483.38	97.37	17.04
C1058-148-3250-M	1.058	26.87	0.148	3.76	3.250	82.55	2.031	51.58	1.906	48.42	108.67	483.38	89.13	15.60
C1058-148-3500-M	1.058	26.87	0.148	3.76	3.500	88.90	2.178	55.31	2.042	51.85	108.67	483.38	82.18	14.38
C1058-148-3750-M	1.058	26.87	0.148	3.76	3.750	95.25	2.324	59.04	2.177	55.28	108.67	483.38	76.23	13.34
C1058-148-4000-M	1.058	26.87	0.148	3.76	4.000	101.60	2.471	62.77	2.312	58.71	108.67	483.38	71.09	12.44
C1058-148-4250-M	1.058	26.87	0.148	3.76	4.250	107.95	2.618	66.50	2.447	62.14	108.67	483.38	66.59	11.65
C1058-148-4500-M	1.058	26.87	0.148	3.76	4.500	114.30	2.765	70.23	2.582	65.57	108.67	483.38	62.63	10.96
C1058-148-4750-M	1.058	26.87	0.148	3.76	4.750	120.65	2.912	73.96	2.717	69.00	108.67	483.38	59.12	10.35
C1058-148-5000-M	1.058	26.87	0.148	3.76	5.000	127.00	3.059	77.69	2.852	72.43	108.67	483.38	55.97	9.80
C1058-148-5250-M	1.058	26.87	0.148	3.76	5.250	133.35	3.205	81.42	2.987	75.86	108.67	483.38	53.15	9.30
C1058-148-5500-M	1.058	26.87	0.148	3.76	5.500	139.70	3.352	85.15	3.122	79.29	108.67	483.38	50.60	8.85
C1058-148-5750-M	1.058	26.87	0.148	3.76	5.750	146.05	3.499	88.88	3.257	82.72	108.67	483.38	48.28	8.45
C1058-148-6000-M	1.058	26.87	0.148	3.76	6.000	152.40	3.646	92.60	3.392	86.16	108.67	483.38	46.16	8.08
C1058-148-6250-M	1.058	26.87	0.148	3.76	6.250	158.75	3.793	96.33	3.527	89.59	108.67	483.38	44.22	7.74
C1058-148-6500-M	1.058	26.87	0.148	3.76	6.500	165.10	3.939	100.06	3.662	93.02	108.67	483.38	42.44	7.43
C1058-148-6750-M	1.058	26.87	0.148	3.76	6.750	171.45	4.086	103.79	3.797	96.45	108.67	483.38	40.80	7.14
C1058-148-7000-M	1.058	26.87	0.148	3.76	7.000	177.80	4.233	107.52	3.932	99.88	108.67	483.38	39.28	6.87
C1058-148-7500-M	1.058	26.87	0.148	3.76	7.500	190.50	4.527	114.98	4.202	106.74	108.67	483.38	36.55	6.40
C1058-148-8000-M	1.058	26.87	0.148	3.76	8.000	203.20	4.820	122.44	4.472	113.60	108.67	483.38	34.18	5.98
C1058-148-8500-M	1.058	26.87	0.148	3.76	8.500	215.90	5.114	129.90	4.742	120.46	108.67	483.38	32.09	5.62
C1058-148-9000-M	1.058	26.87	0.148	3.76	9.000	228.60	5.408	137.36	5.012	127.32	108.67	483.38	30.25	5.29
C1058-148-9500-M	1.058	26.87	0.148	3.76	9.500	241.30	5.701	144.81	5.283	134.18	108.67	483.38	28.61	5.01
C1058-162-1500-M	1.058	26.87	0.162	4.12	1.500	38.10	1.077	27.36	1.053	26.73	139.03	618.42	328.69	57.52
C1058-162-1625-M	1.058	26.87	0.162	4.12	1.625	41.28	1.157	29.39	1.128	28.66	139.03	618.42	297.11	51.99
C1058-162-1750-M	1.058	26.87	0.162	4.12	1.750	44.45	1.237	31.42	1.204	30.58	139.03	618.42	271.06	47.44
C1058-162-1875-M	1.058	26.87	0.162	4.12	1.875	47.63	1.317	33.46	1.280	32.50	139.03	618.42	249.22	43.61
C1058-162-2000-M	1.058	26.87	0.162	4.12	2.000	50.80	1.397	35.49	1.355	34.43	139.03	618.42	230.63	40.36
C1058-162-2125-M	1.058	26.87	0.162	4.12	2.125	53.98	1.477	37.52	1.431	36.35	139.03	618.42	214.62	37.56
C1058-162-2250-M	1.058	26.87	0.162	4.12	2.250	57.15	1.557	39.55	1.507	38.27	139.03	618.42	200.69	35.12
C1058-162-2375-M	1.058	26.87	0.162	4.12	2.375	60.33	1.637	41.59	1.582	40.20	139.03	618.42	188.46	32.98
C1058-162-2500-M	1.058	26.87	0.162	4.12	2.500	63.50	1.717	43.62	1.658	42.12	139.03	618.42	177.64	31.09
C1058-162-2625-M	1.058	26.87	0.162	4.12	2.625	66.68	1.797	45.65	1.734	44.04	139.03	618.42	167.99	29.40
C1058-162-2750-M	1.058	26.87	0.162	4.12	2.750	69.85	1.877	47.69	1.810	45.96	139.03	618.42	159.33	27.88
C1058-162-2875-M	1.058	26.87	0.162	4.12	2.875	73.03	1.957	49.72	1.885	47.89	139.03	618.42	151.52	26.52
C1058-162-3000-M	1.058	26.87	0.162	4.12	3.000	76.20	2.038	51.75	1.961	49.81	139.03	618.42	144.45	25.28
C1058-162-3250-M	1.058	26.87	0.162	4.12	3.250	82.55	2.198	55.82	2.112	53.66	139.03	618.42	132.10	23.12
C1058-162-3500-M	1.058	26.87	0.162	4.12	3.500	88.90	2.358	59.89	2.264	57.50	139.03	618.42	121.71	21.30
C1058-162-3750-M	1.058	26.87	0.162	4.12	3.750	95.25	2.518	63.95	2.415	61.35	139.03	618.42	112.83	19.74
C1058-162-4000-M	1.058	26.87	0.162	4.12	4.000	101.60	2.678	68.02	2.567	65.20	139.03	618.42	105.15	18.40
C1058-162-4250-M	1.058	26.87	0.162	4.12	4.250	107.95	2.838	72.08	2.718	69.04	139.03	618.42	98.46	17.23
C1058-162-4500-M	1.058	26.87	0.162	4.12	4.500	114.30	2.998	76.15	2.870	72.89	139.03	618.42	92.56	16.20
C1058-162-4750-M	1.058	26.87	0.162	4.12	4.750	120.65	3.158	80.22	3.021	76.73	139.03	618.42	87.33	15.28
C1058-162-5000-M	1.058	26.87	0.162	4.12	5.000	127.00	3.318	84.28	3.172	80.58	139.03	618.42	82.66	14.47
C1058-162-5250-M	1.058	26.87	0.162	4.12	5.250	133.35	3.478	88.35	3.324	84.43	139.03	618.42	78.47	13.73
C1058-162-5500-M	1.058	26.87	0.162	4.12	5.500	139.70	3.638	92.41	3.475	88.27	139.03	618.42	74.68	13.07
C1058-162-5750-M	1.058	26.87	0.162	4.12	5.750	146.05	3.798	96.48	3.627	92.12	139.03	618.42	71.24	12.47
C1058-162-6000-M	1.058	26.87	0.162	4.12	6.000	152.40	3.959	100.55	3.778	95.97	139.03	618.42	68.10	11.92
C1058-162-6250-M	1.058	26.87	0.162	4.12	6.250	158.75	4.119	104.61	3.930	99.81	139.03	618.42	65.23	11.41
C1058-162-6500-M	1.058	26.87	0.162	4.12	6.500	165.10	4.279	108.68	4.081	103.66	139.03	618.42	62.59	10.95
C1058-162-6750-M	1.058	26.87	0.162	4.12	6.750	171.45	4.439	112.74	4.232	107.50	139.03	618.42	60.15	10.53
C1058-162-7000-M	1.058	26.87	0.162	4.12	7.000	177.80	4.599	116.81	4.384	111.35	139.03	618.42	57.90	10.13
C1058-162-7500-M	1.058	26.87	0.162	4.12	7.500	190.50	4.919	124.94	4.687	119.04	139.03	618.42	53.87	9.43
C1058-162-8000-M	1.058	26.87	0.162	4.12	8.000	203.20	5.239	133.07	4.990	126.73	139.03	618.42	50.36	8.81
C1058-162-8500-M	1.058	26.87	0.162	4.12	8.500	215.90	5.559	141.21	5.292	134.43	139.03	618.42	47.28	8.27
C1058-162-9000-M	1.058	26.87	0.162	4.12	9.000	228.60	5.879	149.34	5.595	142.12	139.03	618.42	44.55	7.80

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1058-148-1875-S	1.313	33.34	81.55	362.77	145.00	25.38
C1058-148-2000-S	1.393	35.38	81.55	362.77	134.36	23.51
C1058-148-2125-S	1.474	37.43	81.55	362.77	125.18	21.91
C1058-148-2250-S	1.554	39.47	81.55	362.77	117.17	20.51
C1058-148-2375-S	1.634	41.52	81.55	362.77	110.13	19.27
C1058-148-2500-S	1.715	43.56	81.55	362.77	103.88	18.18
C1058-148-2625-S	1.795	45.60	81.55	362.77	98.31	17.20
C1058-148-2750-S	1.876	47.65	81.55	362.77	93.30	16.33
C1058-148-2875-S	1.956	49.69	81.55	362.77	88.78	15.54
C1058-148-3000-S	2.037	51.74	81.55	362.77	84.67	14.82
C1058-148-3250-S	2.198	55.82	81.55	362.77	77.51	13.56
C1058-148-3500-S	2.359	59.91	81.55	362.77	71.46	12.51
C1058-148-3750-S	2.520	64.00	81.55	362.77	66.29	11.60
C1058-148-4000-S	2.681	68.09	81.55	362.77	61.81	10.82
C1058-148-4250-S	2.842	72.18	81.55	362.77	57.91	10.13
C1058-148-4500-S	3.003	76.26	81.55	362.77	54.46	9.53
C1058-148-4750-S	3.163	80.35	81.55	362.77	51.41	9.00
C1058-148-5000-S	3.324	84.44	81.55	362.77	48.67	8.52
C1058-148-5250-S	3.485	88.53	81.55	362.77	46.22	8.09
C1058-148-5500-S	3.646	92.62	81.55	362.77	44.00	7.70
C1058-148-5750-S	3.807	96.70	81.55	362.77	41.98	7.35
C1058-148-6000-S	3.968	100.79	81.55	362.77	40.14	7.02
C1058-148-6250-S	4.129	104.88	81.55	362.77	38.45	6.73
C1058-148-6500-S	4.290	108.97	81.55	362.77	36.91	6.46
C1058-148-6750-S	4.451	113.06	81.55	362.77	35.48	6.21
C1058-148-7000-S	4.612	117.15	81.55	362.77	34.15	5.98
C1058-148-7500-S	4.934	125.32	81.55	362.77	31.78	5.56
C1058-148-8000-S	5.256	133.50	81.55	362.77	29.72	5.20
C1058-148-8500-S	5.578	141.67	81.55	362.77	27.91	4.88
C1058-148-9000-S	5.900	149.85	81.55	362.77	26.31	4.60
C1058-148-9500-S	6.222	158.03	81.55	362.77	24.88	4.35
C1058-162-1500-S	1.139	28.93	103.22	459.16	285.82	50.02
C1058-162-1625-S	1.225	31.13	103.22	459.16	258.35	45.21
C1058-162-1750-S	1.312	33.33	103.22	459.16	235.71	41.25
C1058-162-1875-S	1.399	35.53	103.22	459.16	216.71	37.92
C1058-162-2000-S	1.485	37.73	103.22	459.16	200.55	35.10
C1058-162-2125-S	1.572	39.93	103.22	459.16	186.63	32.66
C1058-162-2250-S	1.659	42.13	103.22	459.16	174.52	30.54
C1058-162-2375-S	1.745	44.33	103.22	459.16	163.88	28.68
C1058-162-2500-S	1.832	46.53	103.22	459.16	154.47	27.03
C1058-162-2625-S	1.918	48.73	103.22	459.16	146.08	25.56
C1058-162-2750-S	2.005	50.93	103.22	459.16	138.55	24.25
C1058-162-2875-S	2.092	53.13	103.22	459.16	131.76	23.06
C1058-162-3000-S	2.178	55.33	103.22	459.16	125.61	21.98
C1058-162-3250-S	2.351	59.73	103.22	459.16	114.87	20.10
C1058-162-3500-S	2.525	64.13	103.22	459.16	105.83	18.52
C1058-162-3750-S	2.698	68.53	103.22	459.16	98.11	17.17
C1058-162-4000-S	2.871	72.93	103.22	459.16	91.44	16.00
C1058-162-4250-S	3.044	77.33	103.22	459.16	85.61	14.98
C1058-162-4500-S	3.218	81.73	103.22	459.16	80.49	14.09
C1058-162-4750-S	3.391	86.13	103.22	459.16	75.94	13.29
C1058-162-5000-S	3.564	90.53	103.22	459.16	71.88	12.58
C1058-162-5250-S	3.737	94.93	103.22	459.16	68.23	11.94
C1058-162-5500-S	3.910	99.33	103.22	459.16	64.94	11.36
C1058-162-5750-S	4.084	103.73	103.22	459.16	61.95	10.84
C1058-162-6000-S	4.257	108.13	103.22	459.16	59.22	10.36
C1058-162-6250-S	4.430	112.52	103.22	459.16	56.72	9.93
C1058-162-6500-S	4.603	116.92	103.22	459.16	54.42	9.52
C1058-162-6750-S	4.777	121.32	103.22	459.16	52.31	9.15
C1058-162-7000-S	4.950	125.72	103.22	459.16	50.35	8.81
C1058-162-7500-S	5.296	134.52	103.22	459.16	46.84	8.20
C1058-162-8000-S	5.643	143.32	103.22	459.16	43.79	7.66
C1058-162-8500-S	5.989	152.12	103.22	459.16	41.11	7.19
C1058-162-9000-S	6.336	160.92	103.22	459.16	38.74	6.78

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1058-162-9500-M	1.058	26.87	0.162	4.12	9.500	241.30	6.200	157.47	5.898	149.81	139.03	618.42	42.13	7.37
C1058-177-1500-M	1.058	26.87	0.177	4.50	1.500	38.10	1.147	29.12	1.138	28.92	176.72	786.07	500.10	87.52
C1058-177-1625-M	1.058	26.87	0.177	4.50	1.625	41.28	1.233	31.32	1.222	31.04	176.72	786.07	450.92	78.91
C1058-177-1750-M	1.058	26.87	0.177	4.50	1.750	44.45	1.320	33.52	1.306	33.17	176.72	786.07	410.54	71.84
C1058-177-1875-M	1.058	26.87	0.177	4.50	1.875	47.63	1.406	35.71	1.389	35.29	176.72	786.07	376.80	65.94
C1058-177-2000-M	1.058	26.87	0.177	4.50	2.000	50.80	1.492	37.91	1.473	37.42	176.72	786.07	348.19	60.93
C1058-177-2125-M	1.058	26.87	0.177	4.50	2.125	53.98	1.579	40.10	1.557	39.54	176.72	786.07	323.61	56.63
C1058-177-2250-M	1.058	26.87	0.177	4.50	2.250	57.15	1.665	42.30	1.640	41.66	176.72	786.07	302.28	52.90
C1058-177-2375-M	1.058	26.87	0.177	4.50	2.375	60.33	1.752	44.50	1.724	43.79	176.72	786.07	283.58	49.63
C1058-177-2500-M	1.058	26.87	0.177	4.50	2.500	63.50	1.838	46.69	1.808	45.91	176.72	786.07	267.06	46.74
C1058-177-2625-M	1.058	26.87	0.177	4.50	2.625	66.68	1.925	48.89	1.891	48.04	176.72	786.07	252.36	44.16
C1058-177-2750-M	1.058	26.87	0.177	4.50	2.750	69.85	2.011	51.08	1.975	50.16	176.72	786.07	239.20	41.86
C1058-177-2875-M	1.058	26.87	0.177	4.50	2.875	73.03	2.098	53.28	2.059	52.29	176.72	786.07	227.34	39.78
C1058-177-3000-M	1.058	26.87	0.177	4.50	3.000	76.20	2.184	55.48	2.142	54.41	176.72	786.07	216.60	37.90
C1058-177-3250-M	1.058	26.87	0.177	4.50	3.250	82.55	2.357	59.87	2.309	58.66	176.72	786.07	197.90	34.63
C1058-177-3500-M	1.058	26.87	0.177	4.50	3.500	88.90	2.530	64.26	2.477	62.91	176.72	786.07	182.17	31.88
C1058-177-3750-M	1.058	26.87	0.177	4.50	3.750	95.25	2.703	68.65	2.644	67.16	176.72	786.07	168.76	29.53
C1058-177-4000-M	1.058	26.87	0.177	4.50	4.000	101.60	2.876	73.04	2.811	71.41	176.72	786.07	157.19	27.51
C1058-177-4250-M	1.058	26.87	0.177	4.50	4.250	107.95	3.049	77.44	2.979	75.65	176.72	786.07	147.10	25.74
C1058-177-4500-M	1.058	26.87	0.177	4.50	4.500	114.30	3.222	81.83	3.146	79.90	176.72	786.07	138.23	24.19
C1058-177-4750-M	1.058	26.87	0.177	4.50	4.750	120.65	3.395	86.22	3.313	84.15	176.72	786.07	130.37	22.82
C1058-177-5000-M	1.058	26.87	0.177	4.50	5.000	127.00	3.567	90.61	3.480	88.40	176.72	786.07	123.36	21.59
C1058-177-5250-M	1.058	26.87	0.177	4.50	5.250	133.35	3.740	95.01	3.648	92.65	176.72	786.07	117.06	20.48
C1058-177-5500-M	1.058	26.87	0.177	4.50	5.500	139.70	3.913	99.40	3.815	96.90	176.72	786.07	111.37	19.49
C1058-177-5750-M	1.058	26.87	0.177	4.50	5.750	146.05	4.086	103.79	3.982	101.15	176.72	786.07	106.21	18.59
C1058-177-6000-M	1.058	26.87	0.177	4.50	6.000	152.40	4.259	108.18	4.149	105.40	176.72	786.07	101.51	17.76
C1058-177-6250-M	1.058	26.87	0.177	4.50	6.250	158.75	4.432	112.57	4.317	109.65	176.72	786.07	97.20	17.01
C1058-177-6500-M	1.058	26.87	0.177	4.50	6.500	165.10	4.605	116.97	4.484	113.89	176.72	786.07	93.25	16.32
C1058-177-6750-M	1.058	26.87	0.177	4.50	6.750	171.45	4.778	121.36	4.651	118.14	176.72	786.07	89.61	15.68
C1058-177-7000-M	1.058	26.87	0.177	4.50	7.000	177.80	4.951	125.75	4.819	122.39	176.72	786.07	86.23	15.09
C1058-177-7500-M	1.058	26.87	0.177	4.50	7.500	190.50	5.297	134.53	5.153	130.89	176.72	786.07	80.20	14.04
C1058-177-8000-M	1.058	26.87	0.177	4.50	8.000	203.20	5.642	143.32	5.488	139.39	176.72	786.07	74.96	13.12
C1058-177-8500-M	1.058	26.87	0.177	4.50	8.500	215.90	5.988	152.10	5.822	147.88	176.72	786.07	70.36	12.31
C1058-177-9000-M	1.058	26.87	0.177	4.50	9.000	228.60	6.334	160.89	6.157	156.38	176.72	786.07	66.29	11.60
C1058-177-9500-M	1.058	26.87	0.177	4.50	9.500	241.30	6.680	169.67	6.491	164.88	176.72	786.07	62.66	10.97
C1058-192-1500-M	1.058	26.87	0.192	4.88	1.500	38.10	1.256	31.89	1.212	30.80	183.15	814.69	749.32	131.13
C1058-192-1625-M	1.058	26.87	0.192	4.88	1.625	41.28	1.351	34.32	1.303	33.10	184.38	820.17	673.85	117.92
C1058-192-1750-M	1.058	26.87	0.192	4.88	1.750	44.45	1.447	36.76	1.394	35.40	185.39	824.65	612.19	107.13
C1058-192-1875-M	1.058	26.87	0.192	4.88	1.875	47.63	1.543	39.19	1.484	37.70	186.23	828.37	560.86	98.15
C1058-192-2000-M	1.058	26.87	0.192	4.88	2.000	50.80	1.639	41.62	1.575	40.01	186.93	831.52	517.48	90.56
C1058-192-2125-M	1.058	26.87	0.192	4.88	2.125	53.98	1.667	42.35	1.666	42.31	219.92	978.27	480.32	84.06
C1058-192-2250-M	1.058	26.87	0.192	4.88	2.250	57.15	1.759	44.69	1.756	44.61	219.92	978.27	448.15	78.43
C1058-192-2375-M	1.058	26.87	0.192	4.88	2.375	60.33	1.851	47.03	1.847	46.91	219.92	978.27	420.01	73.50
C1058-192-2500-M	1.058	26.87	0.192	4.88	2.500	63.50	1.944	49.37	1.938	49.21	219.92	978.27	395.20	69.16
C1058-192-2625-M	1.058	26.87	0.192	4.88	2.625	66.68	2.036	51.71	2.028	51.52	219.92	978.27	373.16	65.30
C1058-192-2750-M	1.058	26.87	0.192	4.88	2.750	69.85	2.128	54.05	2.119	53.82	219.92	978.27	353.44	61.85
C1058-192-2875-M	1.058	26.87	0.192	4.88	2.875	73.03	2.220	56.39	2.210	56.12	219.92	978.27	335.71	58.75
C1058-192-3000-M	1.058	26.87	0.192	4.88	3.000	76.20	2.312	58.73	2.300	58.42	219.92	978.27	319.67	55.94
C1058-192-3250-M	1.058	26.87	0.192	4.88	3.250	82.55	2.496	63.41	2.481	63.03	219.92	978.27	291.78	51.06
C1058-192-3500-M	1.058	26.87	0.192	4.88	3.500	88.90	2.681	68.09	2.663	67.63	219.92	978.27	268.37	46.96
C1058-192-3750-M	1.058	26.87	0.192	4.88	3.750	95.25	2.865	72.77	2.844	72.24	219.92	978.27	248.44	43.48
C1058-192-4000-M	1.058	26.87	0.192	4.88	4.000	101.60	3.049	77.45	3.025	76.84	219.92	978.27	231.26	40.47
C1058-192-4250-M	1.058	26.87	0.192	4.88	4.250	107.95	3.233	82.13	3.207	81.45	219.92	978.27	216.31	37.85
C1058-192-4500-M	1.058	26.87	0.192	4.88	4.500	114.30	3.418	86.81	3.388	86.05	219.92	978.27	203.17	35.55
C1058-192-4750-M	1.058	26.87	0.192	4.88	4.750	120.65	3.602	91.49	3.569	90.66	219.92	978.27	191.54	33.52
C1058-192-5000-M	1.058	26.87	0.192	4.88	5.000	127.00	3.786	96.17	3.750	95.26	219.92	978.27	181.16	31.70
C1058-192-5250-M	1.058	26.87	0.192	4.88	5.250	133.35	3.970	100.85	3.932	99.86	219.92	978.27	171.86	30.07
C1058-192-5500-M	1.058	26.87	0.192	4.88	5.500	139.70	4.155	105.53	4.113	104.47	219.92	978.27	163.46	28.60
C1058-192-5750-M	1.058	26.87	0.192	4.88	5.750	146.05	4.339	110.21	4.294	109.07	219.92	978.27	155.84	27.27
C1058-192-6000-M	1.058	26.87	0.192	4.88	6.000	152.40	4.523	114.89	4.476	113.68	219.92	978.27	148.90	26.06
C1058-192-6250-M	1.058	26.87	0.192	4.88	6.250	158.75	4.707	119.57	4.657	118.28	219.92	978.27	142.56	24.95
C1058-192-6500-M	1.058	26.87	0.192	4.88	6.500	165.10	4.892	124.25	4.838	122.89	219.92	978.27	136.73	23.93
C1058-192-6750-M	1.058	26.87	0.192	4.88	6.750	171.45	5.076	128.93	5.019	127.49	219.92	978.27	131.36	22.99
C1058-192-7000-M	1.058	26.87	0.192	4.88	7.000	177.80	5.260	133.61	5.201	132.10	219.92	978.27	126.40	22.12

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1058-162-9500-S	6.682	169.72	103.22	459.16	36.63	6.41
C1058-177-1500-S	1.202	30.52	129.70	576.93	434.87	76.10
C1058-177-1625-S	1.294	32.87	129.70	576.93	392.10	68.62
C1058-177-1750-S	1.387	35.22	129.70	576.93	356.99	62.47
C1058-177-1875-S	1.479	37.57	129.70	576.93	327.65	57.34
C1058-177-2000-S	1.572	39.92	129.70	576.93	302.77	52.98
C1058-177-2125-S	1.664	42.27	129.70	576.93	281.40	49.25
C1058-177-2250-S	1.757	44.62	129.70	576.93	262.85	46.00
C1058-177-2375-S	1.849	46.97	129.70	576.93	246.59	43.15
C1058-177-2500-S	1.941	49.31	129.70	576.93	232.23	40.64
C1058-177-2625-S	2.034	51.66	129.70	576.93	219.45	38.40
C1058-177-2750-S	2.126	54.01	129.70	576.93	208.00	36.40
C1058-177-2875-S	2.219	56.36	129.70	576.93	197.68	34.59
C1058-177-3000-S	2.311	58.71	129.70	576.93	188.34	32.96
C1058-177-3250-S	2.496	63.41	129.70	576.93	172.09	30.11
C1058-177-3500-S	2.681	68.10	129.70	576.93	158.41	27.72
C1058-177-3750-S	2.866	72.80	129.70	576.93	146.75	25.68
C1058-177-4000-S	3.051	77.50	129.70	576.93	136.69	23.92
C1058-177-4250-S	3.236	82.20	129.70	576.93	127.92	22.39
C1058-177-4500-S	3.421	86.89	129.70	576.93	120.20	21.04
C1058-177-4750-S	3.606	91.59	129.70	576.93	113.37	19.84
C1058-177-5000-S	3.791	96.29	129.70	576.93	107.27	18.77
C1058-177-5250-S	3.976	100.99	129.70	576.93	101.79	17.81
C1058-177-5500-S	4.161	105.68	129.70	576.93	96.84	16.95
C1058-177-5750-S	4.346	110.38	129.70	576.93	92.36	16.16
C1058-177-6000-S	4.531	115.08	129.70	576.93	88.27	15.45
C1058-177-6250-S	4.716	119.77	129.70	576.93	84.53	14.79
C1058-177-6500-S	4.900	124.47	129.70	576.93	81.09	14.19
C1058-177-6750-S	5.085	129.17	129.70	576.93	77.92	13.64
C1058-177-7000-S	5.270	133.87	129.70	576.93	74.99	13.12
C1058-177-7500-S	5.640	143.26	129.70	576.93	69.74	12.20
C1058-177-8000-S	6.010	152.66	129.70	576.93	65.18	11.41
C1058-177-8500-S	6.380	162.05	129.70	576.93	61.18	10.71
C1058-177-9000-S	6.750	171.45	129.70	576.93	57.64	10.09
C1058-177-9500-S	7.120	180.84	129.70	576.93	54.49	9.54
C1058-192-1500-S	1.255	31.88	159.57	709.78	651.59	114.03
C1058-192-1625-S	1.353	34.36	159.57	709.78	585.95	102.54
C1058-192-1750-S	1.450	36.84	159.57	709.78	532.33	93.16
C1058-192-1875-S	1.548	39.31	159.57	709.78	487.71	85.35
C1058-192-2000-S	1.645	41.79	159.57	709.78	449.98	78.75
C1058-192-2125-S	1.743	44.27	159.57	709.78	417.67	73.09
C1058-192-2250-S	1.841	46.75	159.57	709.78	389.69	68.20
C1058-192-2375-S	1.938	49.23	159.57	709.78	365.23	63.91
C1058-192-2500-S	2.036	51.71	159.57	709.78	343.65	60.14
C1058-192-2625-S	2.133	54.18	159.57	709.78	324.48	56.78
C1058-192-2750-S	2.231	56.66	159.57	709.78	307.34	53.78
C1058-192-2875-S	2.328	59.14	159.57	709.78	291.92	51.09
C1058-192-3000-S	2.426	61.62	159.57	709.78	277.97	48.64
C1058-192-3250-S	2.621	66.58	159.57	709.78	253.72	44.40
C1058-192-3500-S	2.816	71.53	159.57	709.78	233.37	40.84
C1058-192-3750-S	3.011	76.49	159.57	709.78	216.03	37.81
C1058-192-4000-S	3.207	81.45	159.57	709.78	201.10	35.19
C1058-192-4250-S	3.402	86.40	159.57	709.78	188.09	32.92
C1058-192-4500-S	3.597	91.36	159.57	709.78	176.67	30.92
C1058-192-4750-S	3.792	96.32	159.57	709.78	166.55	29.15
C1058-192-5000-S	3.987	101.27	159.57	709.78	157.53	27.57
C1058-192-5250-S	4.182	106.23	159.57	709.78	149.44	26.15
C1058-192-5500-S	4.377	111.19	159.57	709.78	142.14	24.87
C1058-192-5750-S	4.573	116.14	159.57	709.78	135.51	23.71
C1058-192-6000-S	4.768	121.10	159.57	709.78	129.48	22.66
C1058-192-6250-S	4.963	126.06	159.57	709.78	123.96	21.69
C1058-192-6500-S	5.158	131.01	159.57	709.78	118.90	20.81
C1058-192-6750-S	5.353	135.97	159.57	709.78	114.23	19.99
C1058-192-7000-S	5.548	140.92	159.57	709.78	109.91	19.23

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1058-192-7500-M	**1.058**	**26.87**	**0.192**	**4.88**	**7.500**	**190.50**	**5.629**	**142.97**	**5.563**	**141.31**	**219.92**	**978.27**	**117.52**	**20.57**	**C1058-192-7500-S**	**5.939**	**150.84**	**159.57**	**709.78**	**102.19**	**17.88**
C1058-192-8000-M	**1.058**	**26.87**	**0.192**	**4.88**	**8.000**	**203.20**	**5.997**	**152.33**	**5.926**	**150.52**	**219.92**	**978.27**	**109.80**	**19.22**	**C1058-192-8000-S**	**6.329**	**160.75**	**159.57**	**709.78**	**95.48**	**16.71**
C1058-192-8500-M	**1.058**	**26.87**	**0.192**	**4.88**	**8.500**	**215.90**	**6.366**	**161.69**	**6.288**	**159.72**	**219.92**	**978.27**	**103.04**	**18.03**	**C1058-192-8500-S**	**6.719**	**170.66**	**159.57**	**709.78**	**89.60**	**15.68**
C1058-192-9000-M	**1.058**	**26.87**	**0.192**	**4.88**	**9.000**	**228.60**	**6.734**	**171.05**	**6.651**	**168.93**	**219.92**	**978.27**	**97.06**	**16.98**	**C1058-192-9000-S**	**7.109**	**180.58**	**159.57**	**709.78**	**84.40**	**14.77**
C1058-192-9500-M	**1.058**	**26.87**	**0.192**	**4.88**	**9.500**	**241.30**	**7.103**	**180.41**	**7.013**	**178.14**	**219.92**	**978.27**	**91.73**	**16.05**	**C1058-192-9500-S**	**7.500**	**190.49**	**159.57**	**709.78**	**79.77**	**13.96**
C1058-207-1625-M	**1.058**	**26.87**	**0.207**	**5.26**	**1.625**	**41.28**	**1.410**	**35.81**	**1.372**	**34.85**	**213.62**	**950.22**	**993.13**	**173.80**	**C1058-207-1625-S**	**1.402**	**35.60**	**192.79**	**857.57**	**863.59**	**151.13**
C1058-207-1750-M	**1.058**	**26.87**	**0.207**	**5.26**	**1.750**	**44.45**	**1.511**	**38.38**	**1.469**	**37.30**	**215.25**	**957.49**	**900.21**	**157.54**	**C1058-207-1750-S**	**1.504**	**38.19**	**192.79**	**857.57**	**782.79**	**136.99**
C1058-207-1875-M	**1.058**	**26.87**	**0.207**	**5.26**	**1.875**	**47.63**	**1.612**	**40.94**	**1.565**	**39.76**	**216.61**	**963.52**	**823.19**	**144.06**	**C1058-207-1875-S**	**1.606**	**40.78**	**192.79**	**857.57**	**715.82**	**125.27**
C1058-207-2000-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.000**	**50.80**	**1.713**	**43.51**	**1.662**	**42.22**	**217.75**	**968.60**	**758.31**	**132.70**	**C1058-207-2000-S**	**1.708**	**43.37**	**192.79**	**857.57**	**659.40**	**115.40**
C1058-207-2125-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.125**	**53.98**	**1.814**	**46.07**	**1.759**	**44.68**	**218.72**	**972.93**	**702.91**	**123.01**	**C1058-207-2125-S**	**1.810**	**45.96**	**192.79**	**857.57**	**611.23**	**106.96**
C1058-207-2250-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.250**	**57.15**	**1.915**	**48.64**	**1.856**	**47.13**	**219.57**	**976.68**	**655.06**	**114.63**	**C1058-207-2250-S**	**1.912**	**48.55**	**192.79**	**857.57**	**569.61**	**99.68**
C1058-207-2375-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.375**	**60.33**	**2.016**	**51.20**	**1.952**	**49.59**	**220.30**	**979.95**	**613.30**	**107.33**	**C1058-207-2375-S**	**2.013**	**51.14**	**192.79**	**857.57**	**533.30**	**93.33**
C1058-207-2500-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.500**	**63.50**	**2.117**	**53.77**	**2.049**	**52.05**	**220.95**	**982.82**	**576.55**	**100.90**	**C1058-207-2500-S**	**2.115**	**53.73**	**192.79**	**857.57**	**501.35**	**87.74**
C1058-207-2625-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.625**	**66.68**	**2.218**	**56.33**	**2.146**	**54.51**	**221.52**	**985.37**	**543.95**	**95.19**	**C1058-207-2625-S**	**2.217**	**56.32**	**192.79**	**857.57**	**473.00**	**82.78**
C1058-207-2750-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.750**	**69.85**	**2.319**	**58.90**	**2.243**	**56.96**	**222.03**	**987.65**	**514.85**	**90.10**	**C1058-207-2750-S**	**2.319**	**58.91**	**192.79**	**857.57**	**447.69**	**78.35**
C1058-207-2875-M	**1.058**	**26.87**	**0.207**	**5.26**	**2.875**	**73.03**	**2.420**	**61.46**	**2.339**	**59.42**	**222.49**	**989.70**	**488.70**	**85.52**	**C1058-207-2875-S**	**2.421**	**61.50**	**192.79**	**857.57**	**424.95**	**74.37**
C1058-207-3000-M	**1.058**	**26.87**	**0.207**	**5.26**	**3.000**	**76.20**	**2.521**	**64.03**	**2.436**	**61.88**	**222.91**	**991.55**	**465.07**	**81.39**	**C1058-207-3000-S**	**2.523**	**64.09**	**192.79**	**857.57**	**404.41**	**70.77**
C1058-207-3250-M	**1.058**	**26.87**	**0.207**	**5.26**	**3.250**	**82.55**	**2.723**	**69.16**	**2.630**	**66.79**	**223.63**	**994.76**	**424.08**	**74.21**	**C1058-207-3250-S**	**2.727**	**69.27**	**192.79**	**857.57**	**368.76**	**64.53**
C1058-207-3500-M	**1.058**	**26.87**	**0.207**	**5.26**	**3.500**	**88.90**	**2.925**	**74.29**	**2.823**	**71.71**	**224.23**	**997.44**	**389.72**	**68.20**	**C1058-207-3500-S**	**2.931**	**74.45**	**192.79**	**857.57**	**338.89**	**59.31**
C1058-207-3750-M	**1.058**	**26.87**	**0.207**	**5.26**	**3.750**	**95.25**	**3.127**	**79.42**	**3.017**	**76.62**	**224.75**	**999.73**	**360.52**	**63.09**	**C1058-207-3750-S**	**3.135**	**79.63**	**192.79**	**857.57**	**313.49**	**54.86**
C1058-207-4000-M	**1.058**	**26.87**	**0.207**	**5.26**	**4.000**	**101.60**	**3.329**	**84.55**	**3.210**	**81.54**	**225.19**	**1001.70**	**335.38**	**58.69**	**C1058-207-4000-S**	**3.339**	**84.81**	**192.79**	**857.57**	**291.64**	**51.04**
C1058-207-4250-M	**1.058**	**26.87**	**0.207**	**5.26**	**4.250**	**107.95**	**3.531**	**89.68**	**3.404**	**86.45**	**225.58**	**1003.41**	**313.53**	**54.87**	**C1058-207-4250-S**	**3.543**	**89.99**	**192.79**	**857.57**	**272.63**	**47.71**
C1058-207-4500-M	**1.058**	**26.87**	**0.207**	**5.26**	**4.500**	**114.30**	**3.732**	**94.81**	**3.597**	**91.36**	**225.91**	**1004.91**	**294.34**	**51.51**	**C1058-207-4500-S**	**3.747**	**95.17**	**192.79**	**857.57**	**255.95**	**44.79**
C1058-207-4750-M	**1.058**	**26.87**	**0.207**	**5.26**	**4.750**	**120.65**	**3.934**	**99.93**	**3.791**	**96.28**	**226.21**	**1006.24**	**277.37**	**48.54**	**C1058-207-4750-S**	**3.951**	**100.35**	**192.79**	**857.57**	**241.19**	**42.21**
C1058-207-5000-M	**1.058**	**26.87**	**0.207**	**5.26**	**5.000**	**127.00**	**4.136**	**105.06**	**3.984**	**101.19**	**226.48**	**1007.42**	**262.25**	**45.89**	**C1058-207-5000-S**	**4.155**	**105.53**	**192.79**	**857.57**	**228.04**	**39.91**
C1058-207-5250-M	**1.058**	**26.87**	**0.207**	**5.26**	**5.250**	**133.35**	**4.338**	**110.19**	**4.177**	**106.11**	**226.72**	**1008.48**	**248.69**	**43.52**	**C1058-207-5250-S**	**4.359**	**110.71**	**192.79**	**857.57**	**216.26**	**37.84**
C1058-207-5500-M	**1.058**	**26.87**	**0.207**	**5.26**	**5.500**	**139.70**	**4.540**	**115.32**	**4.371**	**111.02**	**226.93**	**1009.44**	**236.47**	**41.38**	**C1058-207-5500-S**	**4.562**	**115.89**	**192.79**	**857.57**	**205.63**	**35.98**
C1058-207-5750-M	**1.058**	**26.87**	**0.207**	**5.26**	**5.750**	**146.05**	**4.742**	**120.45**	**4.564**	**115.94**	**227.13**	**1010.31**	**225.39**	**39.44**	**C1058-207-5750-S**	**4.766**	**121.06**	**192.79**	**857.57**	**195.99**	**34.30**
C1058-207-6000-M	**1.058**	**26.87**	**0.207**	**5.26**	**6.000**	**152.40**	**4.944**	**125.58**	**4.758**	**120.85**	**227.30**	**1011.10**	**215.30**	**37.68**	**C1058-207-6000-S**	**4.970**	**126.24**	**192.79**	**857.57**	**187.22**	**32.76**
C1058-207-6250-M	**1.058**	**26.87**	**0.207**	**5.26**	**6.250**	**158.75**	**5.146**	**130.71**	**4.951**	**125.77**	**227.47**	**1011.82**	**206.08**	**36.06**	**C1058-207-6250-S**	**5.174**	**131.42**	**192.79**	**857.57**	**179.20**	**31.36**
C1058-207-6500-M	**1.058**	**26.87**	**0.207**	**5.26**	**6.500**	**165.10**	**5.348**	**135.84**	**5.145**	**130.68**	**227.61**	**1012.48**	**197.61**	**34.58**	**C1058-207-6500-S**	**5.378**	**136.60**	**192.79**	**857.57**	**171.84**	**30.07**
C1058-207-6750-M	**1.058**	**26.87**	**0.207**	**5.26**	**6.750**	**171.45**	**5.550**	**140.97**	**5.338**	**135.60**	**227.75**	**1013.09**	**189.82**	**33.22**	**C1058-207-6750-S**	**5.582**	**141.78**	**192.79**	**857.57**	**165.06**	**28.89**
C1058-207-7000-M	**1.058**	**26.87**	**0.207**	**5.26**	**7.000**	**177.80**	**5.752**	**146.10**	**5.532**	**140.51**	**227.88**	**1013.65**	**182.61**	**31.96**	**C1058-207-7000-S**	**5.786**	**146.96**	**192.79**	**857.57**	**158.79**	**27.79**
C1058-207-7500-M	**1.058**	**26.87**	**0.207**	**5.26**	**7.500**	**190.50**	**6.156**	**156.36**	**5.919**	**150.34**	**228.11**	**1014.66**	**169.73**	**29.70**	**C1058-207-7500-S**	**6.194**	**157.32**	**192.79**	**857.57**	**147.59**	**25.83**
C1058-207-8000-M	**1.058**	**26.87**	**0.207**	**5.26**	**8.000**	**203.20**	**6.560**	**166.62**	**6.306**	**160.17**	**228.30**	**1015.54**	**158.54**	**27.74**	**C1058-207-8000-S**	**6.602**	**167.68**	**192.79**	**857.57**	**137.86**	**24.13**
C1058-207-8500-M	**1.058**	**26.87**	**0.207**	**5.26**	**8.500**	**215.90**	**6.693**	**170.00**	**6.693**	**170.00**	**268.77**	**1195.54**	**148.74**	**26.03**	**C1058-207-8500-S**	**7.009**	**178.04**	**192.79**	**857.57**	**129.34**	**22.63**
C1058-207-9000-M	**1.058**	**26.87**	**0.207**	**5.26**	**9.000**	**228.60**	**7.081**	**179.86**	**7.080**	**179.83**	**268.77**	**1195.54**	**140.08**	**24.51**	**C1058-207-9000-S**	**7.417**	**188.40**	**192.79**	**857.57**	**121.80**	**21.32**
C1058-207-9500-M	**1.058**	**26.87**	**0.207**	**5.26**	**9.500**	**241.30**	**7.470**	**189.73**	**7.467**	**189.66**	**268.77**	**1195.54**	**132.37**	**23.16**	**C1058-207-9500-S**	**7.825**	**198.76**	**192.79**	**857.57**	**115.10**	**20.14**
D12800	1.063	27.00	0.079	2.00	2.283	58.00	0.591	15.00	0.433	11.00	28.66	127.49	17.03	2.98	D22800	0.591	15.00	23.87	106.20	14.17	2.48
D12810	1.063	27.00	0.079	2.00	3.484	88.50	0.843	21.40	0.591	15.00	28.66	127.49	10.86	1.90	D22810	0.843	21.40	23.87	106.20	9.03	1.58
D12820	1.063	27.00	0.079	2.00	5.315	135.00	1.220	31.00	0.827	21.00	28.66	127.49	7.03	1.23	D22820	1.220	31.00	23.87	106.20	5.83	1.02
D12830	1.063	27.00	0.079	2.00	7.677	195.00	1.724	43.80	1.142	29.00	28.66	127.49	4.74	0.83	D22830	1.724	43.80	23.87	106.20	3.94	0.69
D12840	1.063	27.00	0.079	2.00	11.417	290.00	2.480	63.00	1.614	41.00	28.66	127.49	3.26	0.57	D22840	2.480	63.00	23.87	106.20	2.69	0.47
D13090	1.083	27.50	0.098	2.50	1.929	49.00	0.661	16.80	0.541	13.75	52.47	233.40	41.66	7.29	D23090	0.661	16.80	43.71	194.42	34.69	6.07
D13100	1.083	27.50	0.098	2.50	2.933	74.50	0.945	24.00	0.738	18.75	52.47	233.40	26.51	4.64	D23100	0.945	24.00	43.71	194.42	22.11	3.87
D13110	1.083	27.50	0.098	2.50	4.528	115.00	1.370	34.80	1.033	26.25	52.47	233.40	17.14	3.00	D23110	1.370	34.80	43.71	194.42	14.29	2.50
D13120	1.083	27.50	0.098	2.50	6.496	165.00	1.937	49.20	1.427	36.25	52.47	233.40	11.66	2.04	D23120	1.937	49.20	43.71	194.42	9.71	1.70
D13130	1.083	27.50	0.098	2.50	9.449	240.00	2.787	70.80	2.018	51.25	52.47	233.40	7.89	1.38	D23130	2.787	70.80	43.71	194.42	6.57	1.15
C1095-082-0875-M	**1.095**	**27.81**	**0.082**	**2.08**	**0.875**	**22.23**	**0.371**	**9.42**	**0.274**	**6.97**	**21.48**	**95.56**	**42.60**	**7.46**	**C1095-082-0875-S**	**0.420**	**10.66**	**16.15**	**71.84**	**35.49**	**6.21**
C1095-082-1000-M	**1.095**	**27.81**	**0.082**	**2.08**	**1.000**	**25.40**	**0.403**	**10.24**	**0.300**	**7.62**	**21.48**	**95.56**	**36.00**	**6.30**	**C1095-082-1000-S**	**0.461**	**11.72**	**16.15**	**71.84**	**29.99**	**5.25**
C1095-082-1250-M	**1.095**	**27.81**	**0.082**	**2.08**	**1.250**	**31.75**	**0.480**	**12.19**	**0.348**	**8.85**	**21.48**	**95.56**	**27.90**	**4.88**	**C1095-082-1250-S**	**0.555**	**14.10**	**16.15**	**71.84**	**23.24**	**4.07**
C1095-082-1500-M	**1.095**	**27.81**	**0.082**	**2.08**	**1.500**	**38.10**	**0.554**	**14.06**	**0.397**	**10.09**	**21.48**	**95.56**	**22.70**	**3.97**	**C1095-082-1500-S**	**0.646**	**16.41**	**16.15**	**71.84**	**18.91**	**3.31**
C1095-082-1750-M	**1.095**	**27.81**	**0.082**	**2.08**	**1.750**	**44.45**	**0.625**	**15.88**	**0.447**	**11.36**	**21.48**	**95.56**	**19.10**	**3.34**	**C1095-082-1750-S**	**0.735**	**18.67**	**16.15**	**71.84**	**15.91**	**2.78**
C1095-082-2000-M	**1.095**	**27.81**	**0.082**	**2.08**	**2.000**	**50.80**	**0.702**	**17.83**	**0.496**	**12.61**	**21.42**	**95.28**	**16.50**	**2.89**	**C1095-082-2000-S**	**0.825**	**20.95**	**16.15**	**71.84**	**13.75**	**2.41**
C1095-082-2500-M	**1.095**	**27.81**	**0.082**	**2.08**	**2.500**	**63.50**	**0.850**	**21.58**	**0.586**	**14.89**	**21.45**	**95.44**	**13.00**	**2.28**	**C1095-082-2500-S**	**1.009**	**25.62**	**16.15**	**71.84**	**10.83**	**1.90**
C1095-082-3000-M	**1.095**	**27.81**	**0.082**	**2.08**	**3.000**	**76.20**	**0.997**	**25.32**	**0.675**	**17.15**	**21.44**	**95.35**	**10.70**	**1.87**	**C1095-082-3000-S**	**1.188**	**30.18**	**16.15**	**71.84**	**8.91**	**1.56**
C1095-082-3500-M	**1.095**	**27.81**	**0.082**	**2.08**	**3.500**	**88.90**	**1.143**	**29.04**	**0.764**	**19.40**	**21.45**	**95.40**	**9.10**	**1.59**	**C1095-082-3500-S**	**1.369**	**34.78**	**16.15**	**71.84**	**7.58**	**1.33**
C1095-082-4000-M	**1.095**	**27.81**	**0.082**	**2.08**	**4.000**	**101.60**	**1.291**	**32.79**	**0.854**	**21.68**	**21.40**	**95.20**	**7.90**	**1.38**	**C1095-082-4000-S**	**1.546**	**39.26**	**16.15**	**71.84**	**6.58**	**1.15**
C1095-082-4500-M	**1.095**	**27.81**	**0.082**	**2.08**	**4.500**	**114.30**	**1.437**	**36.50**	**0.941**	**23.91**	**21.44**	**95.38**	**7.00**	**1.23**	**C1095-082-4500-S**	**1.730**	**43.95**	**16.15**	**71.84**	**5.83**	**1.02**
C1095-082-5000-M	**1.095**	**27.81**	**0.082**	**2.08**	**5.000**	**127.00**	**1.584**	**40.24**	**1.031**	**26.18**	**21.42**	**95.26**	**6.27**	**1.10**	**C1095-082-5000-S**	**1.908**	**48.46**	**16.15**	**71.84**	**5.22**	**0.91**
C1095-093-0875-M	**1.095**	**27.81**	**0.093**	**2.36**	**0.875**	**22.23**	**0.403**	**10.23**	**0.331**	**8.42**	**30.51**	**135.70**	**64.60**	**11.31**	**C1095-093-0875-S**	**0.452**	**11.47**	**22.78**	**101.34**	**53.81**	**9.42**
C1095-093-1000-M	**1.095**	**27.81**	**0.093**	**2.36**	**1.000**	**25.40**	**0.445**	**11.30**	**0.364**	**9.25**	**30.31**	**134.81**	**54.60**	**9.56**	**C1095-093-1000-S**	**0.499**	**12.68**	**22.78**	**101.34**	**45.48**	**7.96**
C1095-093-1250-M	**1.095**	**27.81**	**0.093**	**2.36**	**1.250**	**31.75**	**0.532**	**13.52**	**0.425**	**10.79**	**30.51**	**135.70**	**42.50**	**7.44**	**C1095-093-1250-S**	**0.606**	**15.40**	**22.78**	**101.34**	**35.40**	**6.20**
C1095-093-1500-M	**1.095**	**27.81**	**0.093**	**2.36**	**1.500**	**38.10**	**0.622**	**15.79**	**0.490**	**12.45**	**30.13**	**134.01**	**34.30**	**6.00**	**C1095-093-1500-S**	**0.703**	**17.85**	**22.78**	**101.34**	**28.57**	**5.00**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1095-093-1750-M	**1.095**	**27.81**	**0.093**	**2.36**	**1.750**	**44.45**	**0.710**	**18.04**	**0.553**	**14.05**	**30.05**	**133.65**	**28.90**	**5.06**	**C1095-093-1750-S**	**0.804**	**20.41**	**22.78**	**101.34**	**24.07**	**4.21**
C1095-093-2000-M	**1.095**	**27.81**	**0.093**	**2.36**	**2.000**	**50.80**	**0.797**	**20.26**	**0.614**	**15.61**	**29.94**	**133.20**	**24.90**	**4.36**	**C1095-093-2000-S**	**0.902**	**22.90**	**22.78**	**101.34**	**20.74**	**3.63**
C1095-093-2500-M	**1.095**	**27.81**	**0.093**	**2.36**	**2.500**	**63.50**	**0.966**	**24.55**	**0.731**	**18.56**	**29.90**	**133.02**	**19.50**	**3.41**	**C1095-093-2500-S**	**1.097**	**27.88**	**22.78**	**101.34**	**16.24**	**2.84**
C1095-093-3000-M	**1.095**	**27.81**	**0.093**	**2.36**	**3.000**	**76.20**	**1.136**	**28.86**	**0.848**	**21.53**	**29.82**	**132.65**	**16.00**	**2.80**	**C1095-093-3000-S**	**1.291**	**32.78**	**22.78**	**101.34**	**13.33**	**2.33**
C1095-093-3500-M	**1.095**	**27.81**	**0.093**	**2.36**	**3.500**	**88.90**	**1.302**	**33.07**	**0.960**	**24.38**	**30.00**	**133.45**	**13.65**	**2.39**	**C1095-093-3500-S**	**1.496**	**38.01**	**22.78**	**101.34**	**11.37**	**1.99**
C1095-093-4000-M	**1.095**	**27.81**	**0.093**	**2.36**	**4.000**	**101.60**	**1.472**	**37.38**	**1.077**	**27.35**	**29.93**	**133.16**	**11.84**	**2.07**	**C1095-093-4000-S**	**1.690**	**42.93**	**22.78**	**101.34**	**9.86**	**1.73**
C1095-093-4500-M	**1.095**	**27.81**	**0.093**	**2.36**	**4.500**	**114.30**	**1.646**	**41.80**	**1.199**	**30.45**	**29.69**	**132.05**	**10.40**	**1.82**	**C1095-093-4500-S**	**1.870**	**47.50**	**22.78**	**101.34**	**8.66**	**1.52**
C1095-105-0875-M	**1.095**	**27.81**	**0.105**	**2.67**	**0.875**	**22.23**	**0.454**	**11.52**	**0.398**	**10.11**	**41.00**	**182.38**	**97.30**	**17.03**	**C1095-105-0875-S**	**0.484**	**12.30**	**31.66**	**140.84**	**81.05**	**14.18**
C1095-105-1000-M	**1.095**	**27.81**	**0.105**	**2.67**	**1.000**	**25.40**	**0.507**	**12.88**	**0.441**	**11.20**	**40.37**	**179.55**	**81.87**	**14.33**	**C1095-105-1000-S**	**0.536**	**13.61**	**31.66**	**140.84**	**68.20**	**11.93**
C1095-105-1250-M	**1.095**	**27.81**	**0.105**	**2.67**	**1.250**	**31.75**	**0.614**	**15.59**	**0.527**	**13.38**	**39.50**	**175.71**	**62.10**	**10.87**	**C1095-105-1250-S**	**0.638**	**16.20**	**31.66**	**140.84**	**51.73**	**9.05**
C1095-105-1500-M	**1.095**	**27.81**	**0.105**	**2.67**	**1.500**	**38.10**	**0.721**	**18.31**	**0.613**	**15.56**	**38.95**	**173.26**	**50.00**	**8.75**	**C1095-105-1500-S**	**0.740**	**18.79**	**31.66**	**140.84**	**41.65**	**7.29**
C1095-105-1750-M	**1.095**	**27.81**	**0.105**	**2.67**	**1.750**	**44.45**	**0.824**	**20.92**	**0.693**	**17.61**	**38.91**	**173.06**	**42.00**	**7.35**	**C1095-105-1750-S**	**0.845**	**21.46**	**31.66**	**140.84**	**34.99**	**6.12**
C1095-105-2000-M	**1.095**	**27.81**	**0.105**	**2.67**	**2.000**	**50.80**	**0.923**	**23.44**	**0.770**	**19.55**	**38.95**	**173.24**	**36.16**	**6.33**	**C1095-105-2000-S**	**0.949**	**24.10**	**31.66**	**140.84**	**30.12**	**5.27**
C1095-105-2500-M	**1.095**	**27.81**	**0.105**	**2.67**	**2.500**	**63.50**	**1.123**	**28.52**	**0.924**	**23.46**	**38.88**	**172.94**	**28.23**	**4.94**	**C1095-105-2500-S**	**1.154**	**29.30**	**31.66**	**140.84**	**23.52**	**4.12**
C1095-105-3000-M	**1.095**	**27.81**	**0.105**	**2.67**	**3.000**	**76.20**	**1.322**	**33.58**	**1.077**	**27.36**	**38.90**	**173.03**	**23.18**	**4.06**	**C1095-105-3000-S**	**1.360**	**34.55**	**31.66**	**140.84**	**19.31**	**3.38**
C1095-105-3500-M	**1.095**	**27.81**	**0.105**	**2.67**	**3.500**	**88.90**	**1.521**	**38.63**	**1.230**	**31.25**	**38.91**	**173.07**	**19.66**	**3.44**	**C1095-105-3500-S**	**1.567**	**39.79**	**31.66**	**140.84**	**16.38**	**2.87**
C1095-105-4000-M	**1.095**	**27.81**	**0.105**	**2.67**	**4.000**	**101.60**	**1.720**	**43.69**	**1.384**	**35.14**	**38.92**	**173.12**	**17.07**	**2.99**	**C1095-105-4000-S**	**1.773**	**45.04**	**31.66**	**140.84**	**14.22**	**2.49**
C1095-105-4500-M	**1.095**	**27.81**	**0.105**	**2.67**	**4.500**	**114.30**	**1.920**	**48.77**	**1.538**	**39.06**	**38.88**	**172.95**	**15.07**	**2.64**	**C1095-105-4500-S**	**1.978**	**50.23**	**31.66**	**140.84**	**12.55**	**2.20**
C1095-112-0875-M	**1.095**	**27.81**	**0.112**	**2.85**	**0.875**	**22.23**	**0.509**	**12.92**	**0.406**	**10.31**	**51.11**	**227.35**	**139.50**	**24.41**	**C1095-112-0875-S**	**0.551**	**13.99**	**37.68**	**167.60**	**116.20**	**20.34**
C1095-112-1000-M	**1.095**	**27.81**	**0.112**	**2.85**	**1.000**	**25.40**	**0.563**	**14.30**	**0.449**	**11.40**	**51.11**	**227.35**	**117.00**	**20.48**	**C1095-112-1000-S**	**0.613**	**15.58**	**37.68**	**167.60**	**97.46**	**17.06**
C1095-112-1250-M	**1.095**	**27.81**	**0.112**	**2.85**	**1.250**	**31.75**	**0.689**	**17.51**	**0.620**	**15.74**	**39.94**	**177.68**	**71.23**	**12.47**	**C1095-112-1250-S**	**0.689**	**17.51**	**33.27**	**148.01**	**59.34**	**10.38**
C1095-112-1500-M	**1.095**	**27.81**	**0.112**	**2.85**	**1.500**	**38.10**	**0.797**	**20.23**	**0.706**	**17.93**	**41.83**	**186.07**	**59.47**	**10.41**	**C1095-112-1500-S**	**0.797**	**20.23**	**34.85**	**155.00**	**49.54**	**8.67**
C1095-112-1750-M	**1.095**	**27.81**	**0.112**	**2.85**	**1.750**	**44.45**	**0.896**	**22.76**	**0.783**	**19.88**	**43.69**	**194.34**	**51.16**	**8.95**	**C1095-112-1750-S**	**0.896**	**22.76**	**36.39**	**161.89**	**42.62**	**7.46**
C1095-112-2000-M	**1.095**	**27.81**	**0.112**	**2.85**	**2.000**	**50.80**	**0.996**	**25.29**	**0.859**	**21.82**	**45.08**	**200.53**	**44.88**	**7.85**	**C1095-112-2000-S**	**0.996**	**25.29**	**37.55**	**167.04**	**37.39**	**6.54**
C1095-112-2500-M	**1.095**	**27.81**	**0.112**	**2.85**	**2.500**	**63.50**	**1.211**	**30.76**	**0.941**	**23.91**	**51.11**	**227.35**	**39.65**	**6.94**	**C1095-112-2500-S**	**1.359**	**34.52**	**37.68**	**167.60**	**33.03**	**5.78**
C1095-112-3000-M	**1.095**	**27.81**	**0.112**	**2.85**	**3.000**	**76.20**	**1.438**	**36.52**	**1.091**	**27.71**	**51.11**	**227.35**	**32.72**	**5.73**	**C1095-112-3000-S**	**1.618**	**41.09**	**37.68**	**167.60**	**27.26**	**4.77**
C1095-112-3500-M	**1.095**	**27.81**	**0.112**	**2.85**	**3.500**	**88.90**	**1.659**	**42.14**	**1.244**	**31.60**	**51.11**	**227.35**	**27.76**	**4.86**	**C1095-112-3500-S**	**1.871**	**47.51**	**37.68**	**167.60**	**23.12**	**4.05**
C1095-112-4000-M	**1.095**	**27.81**	**0.112**	**2.85**	**4.000**	**101.60**	**1.873**	**47.58**	**1.401**	**35.58**	**51.11**	**227.35**	**24.03**	**4.21**	**C1095-112-4000-S**	**2.118**	**53.79**	**37.68**	**167.60**	**20.02**	**3.50**
C1095-112-4500-M	**1.095**	**27.81**	**0.112**	**2.85**	**4.500**	**114.30**	**2.094**	**53.18**	**1.554**	**39.46**	**51.11**	**227.35**	**21.24**	**3.72**	**C1095-112-4500-S**	**2.370**	**60.21**	**37.68**	**167.60**	**17.69**	**3.10**
C1095-120-1000-M	**1.095**	**27.81**	**0.120**	**3.05**	**1.000**	**25.40**	**0.596**	**15.13**	**0.490**	**12.45**	**61.85**	**275.14**	**153.00**	**26.78**	**C1095-120-1000-S**	**0.644**	**16.36**	**45.34**	**201.66**	**127.45**	**22.30**
C1095-120-1500-M	**1.095**	**27.81**	**0.120**	**3.05**	**1.500**	**38.10**	**0.831**	**21.11**	**0.683**	**17.34**	**61.85**	**275.14**	**92.50**	**16.19**	**C1095-120-1500-S**	**0.912**	**23.16**	**45.34**	**201.66**	**77.05**	**13.48**
C1095-120-1750-M	**1.095**	**27.81**	**0.120**	**3.05**	**1.750**	**44.45**	**0.949**	**24.10**	**0.777**	**19.73**	**61.85**	**275.14**	**77.20**	**13.51**	**C1095-120-1750-S**	**1.045**	**26.54**	**45.34**	**201.66**	**64.31**	**11.25**
C1095-120-2000-M	**1.095**	**27.81**	**0.120**	**3.05**	**2.000**	**50.80**	**1.067**	**27.10**	**0.863**	**21.93**	**61.85**	**275.14**	**66.30**	**11.60**	**C1095-120-2000-S**	**1.179**	**29.95**	**45.34**	**201.66**	**55.23**	**9.66**
C1095-120-2250-M	**1.095**	**27.81**	**0.120**	**3.05**	**2.250**	**57.15**	**1.184**	**30.06**	**0.951**	**24.15**	**61.85**	**275.14**	**58.00**	**10.15**	**C1095-120-2250-S**	**1.312**	**33.32**	**45.34**	**201.66**	**48.31**	**8.45**
C1095-120-2500-M	**1.095**	**27.81**	**0.120**	**3.05**	**2.500**	**63.50**	**1.301**	**33.05**	**1.037**	**26.35**	**61.85**	**275.14**	**51.60**	**9.03**	**C1095-120-2500-S**	**1.445**	**36.71**	**45.34**	**201.66**	**42.98**	**7.52**
C1095-120-3000-M	**1.095**	**27.81**	**0.120**	**3.05**	**3.000**	**76.20**	**1.538**	**39.06**	**1.210**	**30.73**	**61.85**	**275.14**	**42.30**	**7.40**	**C1095-120-3000-S**	**1.713**	**43.52**	**45.34**	**201.66**	**35.24**	**6.17**
C1095-120-3500-M	**1.095**	**27.81**	**0.120**	**3.05**	**3.500**	**88.90**	**1.772**	**45.01**	**1.384**	**35.15**	**61.85**	**275.14**	**35.80**	**6.27**	**C1095-120-3500-S**	**1.980**	**50.29**	**45.34**	**201.66**	**29.82**	**5.22**
C1095-120-4000-M	**1.095**	**27.81**	**0.120**	**3.05**	**4.000**	**101.60**	**2.005**	**50.92**	**1.559**	**39.60**	**61.85**	**275.14**	**31.00**	**5.43**	**C1095-120-4000-S**	**2.244**	**57.01**	**45.34**	**201.66**	**25.82**	**4.52**
C1095-120-4500-M	**1.095**	**27.81**	**0.120**	**3.05**	**4.500**	**114.30**	**2.234**	**56.75**	**1.736**	**44.10**	**61.85**	**275.14**	**27.30**	**4.78**	**C1095-120-4500-S**	**2.506**	**63.66**	**45.34**	**201.66**	**22.74**	**3.98**
C1095-125-0875-M	**1.095**	**27.81**	**0.125**	**3.18**	**0.875**	**22.23**	**0.566**	**14.37**	**0.455**	**11.54**	**69.23**	**307.97**	**224.00**	**39.20**	**C1095-125-0875-S**	**0.604**	**15.34**	**50.56**	**224.89**	**186.59**	**32.65**
C1095-125-1000-M	**1.095**	**27.81**	**0.125**	**3.18**	**1.000**	**25.40**	**0.629**	**15.97**	**0.505**	**12.82**	**69.23**	**307.97**	**186.50**	**32.64**	**C1095-125-1000-S**	**0.675**	**17.13**	**50.56**	**224.89**	**155.36**	**27.19**
C1095-125-1250-M	**1.095**	**27.81**	**0.125**	**3.18**	**1.250**	**31.75**	**0.755**	**19.19**	**0.605**	**15.36**	**69.23**	**307.97**	**140.00**	**24.50**	**C1095-125-1250-S**	**0.816**	**20.74**	**50.56**	**224.89**	**116.62**	**20.41**
C1095-125-1500-M	**1.095**	**27.81**	**0.125**	**3.18**	**1.500**	**38.10**	**0.882**	**22.40**	**0.705**	**17.90**	**69.23**	**307.97**	**112.00**	**19.60**	**C1095-125-1500-S**	**0.958**	**24.34**	**50.56**	**224.89**	**93.30**	**16.33**
C1095-125-1750-M	**1.095**	**27.81**	**0.125**	**3.18**	**1.750**	**44.45**	**0.989**	**25.13**	**0.817**	**20.75**	**69.23**	**307.97**	**91.00**	**15.93**	**C1095-125-1750-S**	**1.083**	**27.51**	**50.56**	**224.89**	**75.80**	**13.27**
C1095-125-2000-M	**1.095**	**27.81**	**0.125**	**3.18**	**2.000**	**50.80**	**1.124**	**28.54**	**0.901**	**22.89**	**69.23**	**307.97**	**79.00**	**13.83**	**C1095-125-2000-S**	**1.232**	**31.29**	**50.56**	**224.89**	**65.81**	**11.52**
C1095-125-2250-M	**1.095**	**27.81**	**0.125**	**3.18**	**2.250**	**57.15**	**1.247**	**31.66**	**0.994**	**25.25**	**69.23**	**307.97**	**69.00**	**12.08**	**C1095-125-2250-S**	**1.370**	**34.81**	**50.56**	**224.89**	**57.48**	**10.06**
C1095-125-2500-M	**1.095**	**27.81**	**0.125**	**3.18**	**2.500**	**63.50**	**1.365**	**34.67**	**1.090**	**27.68**	**69.23**	**307.97**	**61.00**	**10.68**	**C1095-125-2500-S**	**1.505**	**38.23**	**50.56**	**224.89**	**50.81**	**8.89**
C1095-125-3000-M	**1.095**	**27.81**	**0.125**	**3.18**	**3.000**	**76.20**	**1.615**	**41.03**	**1.272**	**32.31**	**69.23**	**307.97**	**50.00**	**8.75**	**C1095-125-3000-S**	**1.786**	**45.37**	**50.56**	**224.89**	**41.65**	**7.29**
C1095-125-3500-M	**1.095**	**27.81**	**0.125**	**3.18**	**3.500**	**88.90**	**1.852**	**47.03**	**1.464**	**37.19**	**69.23**	**307.97**	**42.00**	**7.35**	**C1095-125-3500-S**	**2.055**	**52.20**	**50.56**	**224.89**	**34.99**	**6.12**
C1095-125-4000-M	**1.095**	**27.81**	**0.125**	**3.18**	**4.000**	**101.60**	**2.077**	**52.75**	**1.664**	**42.28**	**69.23**	**307.97**	**36.00**	**6.30**	**C1095-125-4000-S**	**2.314**	**58.78**	**50.56**	**224.89**	**29.99**	**5.25**
C1095-125-4500-M	**1.095**	**27.81**	**0.125**	**3.18**	**4.500**	**114.30**	**2.336**	**59.35**	**1.840**	**46.73**	**69.23**	**307.97**	**32.00**	**5.60**	**C1095-125-4500-S**	**2.603**	**66.13**	**50.56**	**224.89**	**26.66**	**4.66**
C1095-135-1500-M	**1.095**	**27.81**	**0.135**	**3.43**	**1.500**	**38.10**	**0.895**	**22.73**	**0.828**	**21.02**	**84.70**	**376.77**	**140.00**	**24.50**	**C1095-135-1500-S**	**0.968**	**24.59**	**62.03**	**275.91**	**116.62**	**20.41**
C1095-135-2000-M	**1.095**	**27.81**	**0.135**	**3.43**	**2.000**	**50.80**	**1.149**	**29.18**	**1.048**	**26.63**	**85.12**	**378.64**	**100.00**	**17.50**	**C1095-135-2000-S**	**1.255**	**31.89**	**62.03**	**275.91**	**83.30**	**14.58**
C1095-135-2250-M	**1.095**	**27.81**	**0.135**	**3.43**	**2.250**	**57.15**	**1.277**	**32.45**	**1.153**	**29.28**	**85.58**	**380.68**	**88.00**	**15.40**	**C1095-135-2250-S**	**1.404**	**35.66**	**62.03**	**275.91**	**73.30**	**12.83**
C1095-135-2500-M	**1.095**	**27.81**	**0.135**	**3.43**	**2.500**	**63.50**	**1.403**	**35.63**	**1.264**	**32.11**	**85.58**	**380.68**	**78.00**	**13.65**	**C1095-135-2500-S**	**1.545**	**39.25**	**62.03**	**275.91**	**64.97**	**11.37**
C1095-135-3000-M	**1.095**	**27.81**	**0.135**	**3.43**	**3.000**	**76.20**	**1.663**	**42.23**	**1.479**	**37.56**	**85.58**	**380.68**	**64.00**	**11.20**	**C1095-135-3000-S**	**1.837**	**46.65**	**62.03**	**275.91**	**53.31**	**9.33**
C1095-135-3500-M	**1.095**	**27.81**	**0.135**	**3.43**	**3.500**	**88.90**	**1.923**	**48.84**	**1.727**	**43.86**	**83.58**	**371.80**	**53.00**	**9.28**	**C1095-135-3500-S**	**2.095**	**53.21**	**62.03**	**275.91**	**44.15**	**7.73**
C1095-135-4000-M	**1.095**	**27.81**	**0.135**	**3.43**	**4.000**	**101.60**	**2.176**	**55.26**	**1.947**	**49.44**	**83.92**	**373.28**	**46.00**	**8.05**	**C1095-135-4000-S**	**2.381**	**60.48**	**62.03**	**275.91**	**38.32**	**6.71**
C1095-135-4500-M	**1.095**	**27.81**	**0.135**	**3.43**	**4.500**	**114.30**	**2.453**	**62.30**	**2.196**	**55.78**	**81.89**	**364.28**	**40.00**	**7.00**	**C1095-135-4500-S**	**2.638**	**67.02**	**62.03**	**275.91**	**33.32**	**5.83**
C1095-135-5000-M	**1.095**	**27.81**	**0.135**	**3.43**	**5.000**	**127.00**	**2.700**	**68.57**	**2.408**	**61.17**	**82.81**	**368.36**	**36.00**	**6.30**	**C1095-135-5000-S**	**2.932**	**74.46**	**62.03**	**275.91**	**29.99**	**5.25**
C1100-085-0875-M	1.100	27.94	0.085	2.16	0.880	22.35	0.527	13.39	0.348	8.84	15.94	70.90	45.10	7.89	C1100-085-0875-S	0.527	13.39	13.28	59.06	37.57	6.57
C1100-085-1000-M	1.100	27.94	0.085	2.16	1.000	25.40	0.584	14.83	0.372	9.45	15.94	70.90	38.30	6.70	C1100-085-1000-S	0.584	14.83	13.28	59.06	31.90	5.58
C1100-085-1250-M	1.100	27.94	0.085	2.16	1.250	31.75	0.709	18.01	0.420	10.67	15.94	70.90	29.50	5.16	C1100-085-1250-S	0.709	18.01	13.28	59.06	24.57	4.30
C1100-085-1500-M	1.100	27.94	0.085	2.16	1.500	38.10	0.833	21.16	0.467	11.86	15.94	70.90	23.90	4.18	C1100-085-1500-S	0.833	21.16	13.28	59.06	19.91	3.48

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1100-085-2000-M	1.100	27.94	0.085	2.16	2.000	50.80	1.083	27.51	0.563	14.30	15.94	70.90	17.40	3.05
C1100-085-2500-M	1.100	27.94	0.085	2.16	2.500	63.50	1.332	33.83	0.659	16.74	15.94	70.90	13.70	2.40
C1100-085-3000-M	1.100	27.94	0.085	2.16	3.000	76.20	1.577	40.06	0.755	19.18	15.94	70.90	11.20	1.96
C1100-085-3500-M	1.100	27.94	0.085	2.16	3.500	88.90	1.831	46.51	0.851	21.62	15.94	70.90	9.60	1.68
C1100-085-4000-M	1.100	27.94	0.085	2.16	4.000	101.60	2.081	52.86	0.947	24.05	15.94	70.90	8.30	1.45
C1100-085-4500-M	1.100	27.94	0.085	2.16	4.500	114.30	2.330	59.18	1.043	26.49	15.94	70.90	7.30	1.28
C1100-085-5000-M	1.100	27.94	0.085	2.16	5.000	127.00	2.580	65.53	1.139	28.93	15.94	70.90	6.60	1.16
C1100-096-0875-M	1.100	27.94	0.096	2.44	0.880	22.35	0.559	14.20	0.406	10.31	22.39	99.60	69.80	12.22
C1100-096-1000-M	1.100	27.94	0.096	2.44	1.000	25.40	0.621	15.77	0.436	11.07	22.39	99.60	59.00	10.33
C1100-096-1250-M	1.100	27.94	0.096	2.44	1.250	31.75	0.753	19.13	0.497	12.62	22.39	99.60	45.10	7.89
C1100-096-1500-M	1.100	27.94	0.096	2.44	1.500	38.10	0.886	22.50	0.558	14.17	22.39	99.60	36.50	6.39
C1100-096-2000-M	1.100	27.94	0.096	2.44	2.000	50.80	1.151	29.24	0.679	17.25	22.39	99.60	26.40	4.62
C1100-096-2500-M	1.100	27.94	0.096	2.44	2.500	63.50	1.417	35.99	0.800	20.32	22.39	99.60	20.70	3.62
C1100-096-3000-M	1.100	27.94	0.096	2.44	3.000	76.20	1.682	42.72	0.922	23.42	22.39	99.60	17.00	2.98
C1100-096-3500-M	1.100	27.94	0.096	2.44	3.500	88.90	1.947	49.45	1.043	26.49	22.39	99.60	14.40	2.52
C1100-096-4000-M	1.100	27.94	0.096	2.44	4.000	101.60	2.212	56.18	1.165	29.59	22.39	99.60	12.50	2.19
C1100-096-4500-M	1.100	27.94	0.096	2.44	4.500	114.30	2.478	62.94	1.286	32.66	22.39	99.60	11.10	1.94
C1100-105-0875-M	1.100	27.94	0.105	2.67	0.880	22.35	0.586	14.88	0.453	11.51	28.73	127.80	97.70	17.10
C1100-105-1000-M	1.100	27.94	0.105	2.67	1.000	25.40	0.651	16.54	0.489	12.42	28.73	127.80	82.20	14.39
C1100-105-1250-M	1.100	27.94	0.105	2.67	1.250	31.75	0.790	20.07	0.561	14.25	28.73	127.80	62.50	10.94
C1100-105-1500-M	1.100	27.94	0.105	2.67	1.500	38.10	0.930	23.62	0.632	16.05	28.73	127.80	50.40	8.82
C1100-105-2000-M	1.100	27.94	0.105	2.67	2.000	50.80	1.208	30.68	0.776	19.71	28.73	127.80	36.30	6.35
C1100-105-2500-M	1.100	27.94	0.105	2.67	2.500	63.50	1.487	37.77	0.919	23.34	28.73	127.80	28.40	4.97
C1100-105-3000-M	1.100	27.94	0.105	2.67	3.000	76.20	1.766	44.86	1.062	26.97	28.73	127.80	23.30	4.08
C1100-105-3500-M	1.100	27.94	0.105	2.67	3.500	88.90	2.045	51.94	1.206	30.63	28.73	127.80	19.70	3.45
C1100-112-0875-M	1.100	27.94	0.112	2.85	0.880	22.35	0.606	15.39	0.489	12.42	34.36	152.84	125.50	21.96
C1100-112-1000-M	1.100	27.94	0.112	2.85	1.000	25.40	0.674	17.12	0.530	13.46	34.36	152.84	105.30	18.43
C1100-112-1250-M	1.100	27.94	0.112	2.85	1.250	31.75	0.818	20.78	0.610	15.49	34.36	152.84	79.60	13.93
C1100-112-1500-M	1.100	27.94	0.112	2.85	1.500	38.10	0.963	24.46	0.690	17.53	34.36	152.84	64.00	11.20
C1100-112-1750-M	1.100	27.94	0.112	2.85	1.750	44.45	1.108	28.14	0.771	19.58	34.36	152.84	53.50	9.36
C1100-112-2000-M	1.100	27.94	0.112	2.85	2.000	50.80	1.253	31.83	0.851	21.62	34.36	152.84	46.00	8.05
C1100-112-2250-M	1.100	27.94	0.112	2.85	2.250	57.15	1.398	35.51	0.932	23.67	34.36	152.84	40.30	7.05
C1100-112-2500-M	1.100	27.94	0.112	2.85	2.500	63.50	1.543	39.19	1.012	25.70	34.36	152.84	35.90	6.28
C1100-112-3000-M	1.100	27.94	0.112	2.85	3.000	76.20	1.832	46.53	1.173	29.79	34.36	152.84	29.40	5.15
C1100-112-3500-M	1.100	27.94	0.112	2.85	3.500	88.90	2.122	53.90	1.333	33.86	34.36	152.84	24.90	4.36
C1100-112-4000-M	1.100	27.94	0.112	2.85	4.000	101.60	2.412	61.26	1.494	37.95	34.36	152.84	21.60	3.78
C1100-112-4500-M	1.100	27.94	0.112	2.85	4.500	114.30	2.701	68.61	1.655	42.04	34.36	152.84	19.10	3.34
C1100-125-0880-M	1.100	27.94	0.125	3.18	0.880	22.35	0.640	16.26	0.556	14.12	46.54	207.02	194.30	34.00
C1100-125-1000-M	1.100	27.94	0.125	3.18	1.000	25.40	0.715	18.16	0.603	15.32	46.54	207.02	163.20	28.56
C1100-125-1250-M	1.100	27.94	0.125	3.18	1.250	31.75	0.870	22.10	0.699	17.75	46.54	207.02	122.40	21.42
C1100-125-1500-M	1.100	27.94	0.125	3.18	1.500	38.10	1.025	26.04	0.796	20.22	46.54	207.02	97.90	17.13
C1100-125-1750-M	1.100	27.94	0.125	3.18	1.750	44.45	1.180	29.97	0.893	22.68	46.54	207.02	81.60	14.28
C1100-125-2000-M	1.100	27.94	0.125	3.18	2.000	50.80	1.335	33.91	0.989	25.12	46.54	207.02	69.90	12.23
C1100-125-2250-M	1.100	27.94	0.125	3.18	2.250	57.15	1.490	37.85	1.086	27.58	46.54	207.02	61.20	10.71
C1100-125-2500-M	1.100	27.94	0.125	3.18	2.500	63.50	1.644	41.76	1.183	30.05	46.54	207.02	54.40	9.52
C1100-125-3000-M	1.100	27.94	0.125	3.18	3.000	76.20	1.954	49.63	1.376	34.95	46.54	207.02	44.50	7.79
C1100-125-3500-M	1.100	27.94	0.125	3.18	3.500	88.90	2.264	57.51	1.569	39.85	46.54	207.02	37.70	6.60
C1100-125-4000-M	1.100	27.94	0.125	3.18	4.000	101.60	2.574	65.38	1.763	44.78	46.54	207.02	32.60	5.71
C1100-125-4500-M	1.100	27.94	0.125	3.18	4.500	114.30	2.884	73.25	1.956	49.68	46.54	207.02	28.80	5.04
C1100-135-1500-M	1.100	27.94	0.135	3.43	1.500	38.10	1.070	27.18	0.874	22.20	57.51	255.82	133.70	23.40
C1100-135-2000-M	1.100	27.94	0.135	3.43	2.000	50.80	1.395	35.43	1.092	27.74	57.51	255.82	95.10	16.64
C1100-135-2500-M	1.100	27.94	0.135	3.43	2.500	63.50	1.720	43.69	1.310	33.27	57.51	255.82	73.80	12.92
C1100-135-3000-M	1.100	27.94	0.135	3.43	3.000	76.20	2.045	51.94	1.528	38.81	57.51	255.82	60.30	10.55
C1100-135-3500-M	1.100	27.94	0.135	3.43	3.500	88.90	2.371	60.22	1.746	44.35	57.51	255.82	50.90	8.91
C1100-135-4000-M	1.100	27.94	0.135	3.43	4.000	101.60	2.696	68.48	1.964	49.89	57.51	255.82	44.10	7.72
C1100-135-4500-M	1.100	27.94	0.135	3.43	4.500	114.30	3.021	76.73	2.182	55.42	57.51	255.82	38.90	6.81
C1100-135-5000-M	1.100	27.94	0.135	3.43	5.000	127.00	3.346	84.99	2.400	60.96	57.51	255.82	34.80	6.09
D13380	1.110	28.20	0.126	3.20	1.673	42.50	0.752	19.10	0.693	17.60	103.62	460.91	110.97	19.42
D13390	1.110	28.20	0.126	3.20	2.500	63.50	1.035	26.30	0.945	24.00	103.62	460.91	70.63	12.36
D13400	1.110	28.20	0.126	3.20	3.720	94.50	1.461	37.10	1.323	33.60	103.62	460.91	45.83	8.02
D13410	1.110	28.20	0.126	3.20	5.315	135.00	2.031	51.60	1.827	46.40	103.62	460.91	31.14	5.45
D13420	1.110	28.20	0.126	3.20	7.874	200.00	2.882	73.20	2.583	65.60	103.62	460.91	21.03	3.68
C1116-092-2000-M	**1.116**	**28.35**	**0.092**	**2.34**	**2.000**	**50.80**	**0.784**	**19.92**	**0.598**	**15.20**	**27.80**	**123.65**	**22.87**	**4.00**
C1116-092-2125-M	**1.116**	**28.35**	**0.092**	**2.34**	**2.125**	**53.98**	**0.826**	**20.97**	**0.626**	**15.91**	**27.80**	**123.65**	**21.39**	**3.74**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1100-085-2000-S	1.083	27.51	13.28	59.06	14.49	2.54
C1100-085-2500-S	1.332	33.83	13.28	59.06	11.41	2.00
C1100-085-3000-S	1.577	40.06	13.28	59.06	9.33	1.63
C1100-085-3500-S	1.831	46.51	13.28	59.06	8.00	1.40
C1100-085-4000-S	2.081	52.86	13.28	59.06	6.91	1.21
C1100-085-4500-S	2.330	59.18	13.28	59.06	6.08	1.06
C1100-085-5000-S	2.580	65.53	13.28	59.06	5.50	0.96
C1100-096-0875-S	0.559	14.20	18.65	82.96	58.14	10.18
C1100-096-1000-S	0.621	15.77	18.65	82.96	49.15	8.60
C1100-096-1250-S	0.753	19.13	18.65	82.96	37.57	6.57
C1100-096-1500-S	0.886	22.50	18.65	82.96	30.41	5.32
C1100-096-2000-S	1.151	29.24	18.65	82.96	21.99	3.85
C1100-096-2500-S	1.417	35.99	18.65	82.96	17.24	3.02
C1100-096-3000-S	1.682	42.72	18.65	82.96	14.16	2.48
C1100-096-3500-S	1.947	49.45	18.65	82.96	12.00	2.10
C1100-096-4000-S	2.212	56.18	18.65	82.96	10.41	1.82
C1100-096-4500-S	2.478	62.94	18.65	82.96	9.25	1.62
C1100-105-0875-S	0.586	14.88	23.93	106.46	81.38	14.24
C1100-105-1000-S	0.651	16.54	23.93	106.46	68.47	11.98
C1100-105-1250-S	0.790	20.07	23.93	106.46	52.06	9.11
C1100-105-1500-S	0.930	23.62	23.93	106.46	41.98	7.35
C1100-105-2000-S	1.208	30.68	23.93	106.46	30.24	5.29
C1100-105-2500-S	1.487	37.77	23.93	106.46	23.66	4.14
C1100-105-3000-S	1.766	44.86	23.93	106.46	19.41	3.40
C1100-105-3500-S	2.045	51.94	23.93	106.46	16.41	2.87
C1100-112-0875-S	0.606	15.39	28.62	127.32	104.54	18.29
C1100-112-1000-S	0.674	17.12	28.62	127.32	87.72	15.35
C1100-112-1250-S	0.818	20.78	28.62	127.32	66.31	11.60
C1100-112-1500-S	0.963	24.46	28.62	127.32	53.31	9.33
C1100-112-1750-S	1.108	28.14	28.62	127.32	44.57	7.80
C1100-112-2000-S	1.253	31.83	28.62	127.32	38.32	6.71
C1100-112-2250-S	1.398	35.51	28.62	127.32	33.57	5.87
C1100-112-2500-S	1.543	39.19	28.62	127.32	29.91	5.23
C1100-112-3000-S	1.832	46.53	28.62	127.32	24.49	4.29
C1100-112-3500-S	2.122	53.90	28.62	127.32	20.74	3.63
C1100-112-4000-S	2.412	61.26	28.62	127.32	17.99	3.15
C1100-112-4500-S	2.701	68.61	28.62	127.32	15.91	2.78
C1100-125-0880-S	0.640	16.26	38.77	172.45	161.85	28.32
C1100-125-1000-S	0.715	18.16	38.77	172.45	135.95	23.79
C1100-125-1250-S	0.870	22.10	38.77	172.45	101.96	17.84
C1100-125-1500-S	1.025	26.04	38.77	172.45	81.55	14.27
C1100-125-1750-S	1.180	29.97	38.77	172.45	67.97	11.90
C1100-125-2000-S	1.335	33.91	38.77	172.45	58.23	10.19
C1100-125-2250-S	1.490	37.85	38.77	172.45	50.98	8.92
C1100-125-2500-S	1.644	41.76	38.77	172.45	45.32	7.93
C1100-125-3000-S	1.954	49.63	38.77	172.45	37.07	6.49
C1100-125-3500-S	2.264	57.51	38.77	172.45	31.40	5.50
C1100-125-4000-S	2.574	65.38	38.77	172.45	27.16	4.75
C1100-125-4500-S	2.884	73.25	38.77	172.45	23.99	4.20
C1100-135-1500-S	1.070	27.18	47.91	213.10	111.37	19.49
C1100-135-2000-S	1.395	35.43	47.91	213.10	79.22	13.86
C1100-135-2500-S	1.720	43.69	47.91	213.10	61.48	10.76
C1100-135-3000-S	2.045	51.94	47.91	213.10	50.23	8.79
C1100-135-3500-S	2.371	60.22	47.91	213.10	42.40	7.42
C1100-135-4000-S	2.696	68.48	47.91	213.10	36.74	6.43
C1100-135-4500-S	3.021	76.73	47.91	213.10	32.40	5.67
C1100-135-5000-S	3.346	84.99	47.91	213.10	28.99	5.07
D23380	0.752	19.10	86.35	384.09	92.46	16.18
D23390	1.035	26.30	86.35	384.09	58.86	10.30
D23400	1.461	37.10	86.35	384.09	38.17	6.68
D23410	2.031	51.60	86.35	384.09	25.94	4.54
D23420	2.882	73.20	86.35	384.09	17.54	3.07
C1116-092-2000-S	**0.908**	**23.05**	**21.72**	**96.63**	**19.88**	**3.48**
C1116-092-2125-S	**0.957**	**24.32**	**21.72**	**96.63**	**18.60**	**3.26**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1116-092-2250-M	1.116	28.35	0.092	2.34	2.250	57.15	0.867	22.02	0.654	16.62	27.80	123.65	20.10	3.52	**C1116-092-2250-S**	1.007	25.58	21.72	96.63	17.48	3.06
C1116-092-2375-M	1.116	28.35	0.092	2.34	2.375	60.33	0.908	23.07	0.682	17.32	27.80	123.65	18.95	3.32	**C1116-092-2375-S**	1.057	26.85	21.72	96.63	16.48	2.88
C1116-092-2500-M	1.116	28.35	0.092	2.34	2.500	63.50	0.950	24.12	0.710	18.03	27.80	123.65	17.93	3.14	**C1116-092-2500-S**	1.107	28.11	21.72	96.63	15.59	2.73
C1116-092-2625-M	1.116	28.35	0.092	2.34	2.625	66.68	0.991	25.17	0.738	18.74	27.80	123.65	17.01	2.98	**C1116-092-2625-S**	1.157	29.38	21.72	96.63	14.79	2.59
C1116-092-2750-M	1.116	28.35	0.092	2.34	2.750	69.85	1.032	26.22	0.766	19.45	27.80	123.65	16.18	2.83	**C1116-092-2750-S**	1.206	30.64	21.72	96.63	14.07	2.46
C1116-092-2875-M	1.116	28.35	0.092	2.34	2.875	73.03	1.074	27.27	0.794	20.16	27.80	123.65	15.43	2.70	**C1116-092-2875-S**	1.256	31.91	21.72	96.63	13.42	2.35
C1116-092-3000-M	1.116	28.35	0.092	2.34	3.000	76.20	1.115	28.32	0.821	20.87	27.80	123.65	14.75	2.58	**C1116-092-3000-S**	1.306	33.17	21.72	96.63	12.82	2.24
C1116-092-3250-M	1.116	28.35	0.092	2.34	3.250	82.55	1.198	30.42	0.877	22.28	27.80	123.65	13.54	2.37	**C1116-092-3250-S**	1.406	35.70	21.72	96.63	11.78	2.06
C1116-092-3500-M	1.116	28.35	0.092	2.34	3.500	88.90	1.280	32.52	0.933	23.70	27.80	123.65	12.52	2.19	**C1116-092-3500-S**	1.505	38.23	21.72	96.63	10.89	1.91
C1116-092-3750-M	1.116	28.35	0.092	2.34	3.750	95.25	1.363	34.62	0.989	25.12	27.80	123.65	11.65	2.04	**C1116-092-3750-S**	1.605	40.76	21.72	96.63	10.13	1.77
C1116-092-4000-M	1.116	28.35	0.092	2.34	4.000	101.60	1.446	36.72	1.045	26.53	27.80	123.65	10.88	1.90	**C1116-092-4000-S**	1.704	43.29	21.72	96.63	9.46	1.66
C1116-092-4250-M	1.116	28.35	0.092	2.34	4.250	107.95	1.528	38.82	1.100	27.95	27.80	123.65	10.21	1.79	**C1116-092-4250-S**	1.804	45.82	21.72	96.63	8.88	1.55
C1116-092-4500-M	1.116	28.35	0.092	2.34	4.500	114.30	1.611	40.92	1.156	29.37	27.80	123.65	9.62	1.68	**C1116-092-4500-S**	1.904	48.35	21.72	96.63	8.37	1.46
C1116-092-4750-M	1.116	28.35	0.092	2.34	4.750	120.65	1.694	43.02	1.212	30.78	27.80	123.65	9.10	1.59	**C1116-092-4750-S**	2.003	50.88	21.72	96.63	7.91	1.38
C1116-092-5000-M	1.116	28.35	0.092	2.34	5.000	127.00	1.776	45.12	1.268	32.20	27.80	123.65	8.62	1.51	**C1116-092-5000-S**	2.103	53.41	21.72	96.63	7.50	1.31
C1116-092-5250-M	1.116	28.35	0.092	2.34	5.250	133.35	1.859	47.22	1.323	33.62	27.80	123.65	8.20	1.43	**C1116-092-5250-S**	2.202	55.94	21.72	96.63	7.13	1.25
C1116-092-5500-M	1.116	28.35	0.092	2.34	5.500	139.70	1.942	49.31	1.379	35.03	27.80	123.65	7.81	1.37	**C1116-092-5500-S**	2.302	58.47	21.72	96.63	6.79	1.19
C1116-092-5750-M	1.116	28.35	0.092	2.34	5.750	146.05	2.024	51.41	1.435	36.45	27.80	123.65	7.46	1.31	**C1116-092-5750-S**	2.402	61.00	21.72	96.63	6.49	1.14
C1116-092-6000-M	1.116	28.35	0.092	2.34	6.000	152.40	2.107	53.51	1.491	37.87	27.80	123.65	7.14	1.25	**C1116-092-6000-S**	2.501	63.53	21.72	96.63	6.21	1.09
C1116-092-6250-M	1.116	28.35	0.092	2.34	6.250	158.75	2.189	55.61	1.547	39.28	27.80	123.65	6.85	1.20	**C1116-092-6250-S**	2.601	66.06	21.72	96.63	5.95	1.04
C1116-092-6500-M	1.116	28.35	0.092	2.34	6.500	165.10	2.272	57.71	1.602	40.70	27.80	123.65	6.58	1.15	**C1116-092-6500-S**	2.700	68.59	21.72	96.63	5.72	1.00
C1116-092-6750-M	1.116	28.35	0.092	2.34	6.750	171.45	2.355	59.81	1.658	42.12	27.80	123.65	6.32	1.11	**C1116-092-6750-S**	2.800	71.12	21.72	96.63	5.50	0.96
C1116-092-7000-M	1.116	28.35	0.092	2.34	7.000	177.80	2.437	61.91	1.714	43.53	27.80	123.65	6.09	1.07	**C1116-092-7000-S**	2.900	73.65	21.72	96.63	5.30	0.93
C1116-092-7500-M	1.116	28.35	0.092	2.34	7.500	190.50	2.603	66.11	1.825	46.37	27.80	123.65	5.68	0.99	**C1116-092-7500-S**	3.099	78.71	21.72	96.63	4.94	0.86
C1116-092-8000-M	1.116	28.35	0.092	2.34	8.000	203.20	2.768	70.31	1.937	49.20	27.80	123.65	5.31	0.93	**C1116-092-8000-S**	3.298	83.77	21.72	96.63	4.62	0.81
C1116-092-8500-M	1.116	28.35	0.092	2.34	8.500	215.90	2.933	74.51	2.049	52.03	27.80	123.65	4.99	0.87	**C1116-092-8500-S**	3.497	88.83	21.72	96.63	4.34	0.76
C1116-092-9000-M	1.116	28.35	0.092	2.34	9.000	228.60	3.099	78.71	2.160	54.87	27.80	123.65	4.71	0.82	**C1116-092-9000-S**	3.697	93.89	21.72	96.63	4.10	0.72
C1116-092-9500-M	1.116	28.35	0.092	2.34	9.500	241.30	3.264	82.90	2.272	57.70	27.80	123.65	4.46	0.78	**C1116-092-9500-S**	3.896	98.95	21.72	96.63	3.88	0.68
C1116-098-1875-M	1.116	28.35	0.098	2.49	1.875	47.63	0.790	20.08	0.629	15.98	33.14	147.41	30.56	5.35	**C1116-098-1875-S**	0.904	22.97	25.80	114.75	26.57	4.65
C1116-098-2000-M	1.116	28.35	0.098	2.49	2.000	50.80	0.835	21.20	0.661	16.78	33.14	147.41	28.44	4.98	**C1116-098-2000-S**	0.957	24.30	25.80	114.75	24.73	4.33
C1116-098-2125-M	1.116	28.35	0.098	2.49	2.125	53.98	0.879	22.33	0.692	17.58	33.14	147.41	26.60	4.65	**C1116-098-2125-S**	1.010	25.64	25.80	114.75	23.13	4.05
C1116-098-2250-M	1.116	28.35	0.098	2.49	2.250	57.15	0.923	23.45	0.724	18.38	33.14	147.41	24.98	4.37	**C1116-098-2250-S**	1.062	26.98	25.80	114.75	21.72	3.80
C1116-098-2375-M	1.116	28.35	0.098	2.49	2.375	60.33	0.968	24.57	0.755	19.18	33.14	147.41	23.55	4.12	**C1116-098-2375-S**	1.115	28.32	25.80	114.75	20.47	3.58
C1116-098-2500-M	1.116	28.35	0.098	2.49	2.500	63.50	1.012	25.70	0.787	19.98	33.14	147.41	22.27	3.90	**C1116-098-2500-S**	1.168	29.66	25.80	114.75	19.36	3.39
C1116-098-2625-M	1.116	28.35	0.098	2.49	2.625	66.68	1.056	26.82	0.818	20.78	33.14	147.41	21.12	3.70	**C1116-098-2625-S**	1.220	31.00	25.80	114.75	18.37	3.21
C1116-098-2750-M	1.116	28.35	0.098	2.49	2.750	69.85	1.100	27.95	0.850	21.58	33.14	147.41	20.09	3.52	**C1116-098-2750-S**	1.273	32.34	25.80	114.75	17.47	3.06
C1116-098-2875-M	1.116	28.35	0.098	2.49	2.875	73.03	1.145	29.07	0.881	22.38	33.14	147.41	19.15	3.35	**C1116-098-2875-S**	1.326	33.68	25.80	114.75	16.65	2.91
C1116-098-3000-M	1.116	28.35	0.098	2.49	3.000	76.20	1.189	30.20	0.913	23.18	33.14	147.41	18.30	3.20	**C1116-098-3000-S**	1.379	35.02	25.80	114.75	15.91	2.78
C1116-098-3250-M	1.116	28.35	0.098	2.49	3.250	82.55	1.277	32.44	0.976	24.78	33.14	147.41	16.80	2.94	**C1116-098-3250-S**	1.484	37.70	25.80	114.75	14.61	2.56
C1116-098-3500-M	1.116	28.35	0.098	2.49	3.500	88.90	1.366	34.69	1.039	26.38	33.14	147.41	15.53	2.72	**C1116-098-3500-S**	1.590	40.37	25.80	114.75	13.50	2.36
C1116-098-3750-M	1.116	28.35	0.098	2.49	3.750	95.25	1.454	36.94	1.102	27.98	33.14	147.41	14.44	2.53	**C1116-098-3750-S**	1.695	43.05	25.80	114.75	12.55	2.20
C1116-098-4000-M	1.116	28.35	0.098	2.49	4.000	101.60	1.543	39.19	1.165	29.58	33.14	147.41	13.49	2.36	**C1116-098-4000-S**	1.800	45.73	25.80	114.75	11.73	2.05
C1116-098-4250-M	1.116	28.35	0.098	2.49	4.250	107.95	1.631	41.44	1.228	31.18	33.14	147.41	12.66	2.21	**C1116-098-4250-S**	1.906	48.41	25.80	114.75	11.01	1.93
C1116-098-4500-M	1.116	28.35	0.098	2.49	4.500	114.30	1.720	43.68	1.291	32.78	33.14	147.41	11.92	2.09	**C1116-098-4500-S**	2.011	51.09	25.80	114.75	10.37	1.81
C1116-098-4750-M	1.116	28.35	0.098	2.49	4.750	120.65	1.808	45.93	1.354	34.39	33.14	147.41	11.27	1.97	**C1116-098-4750-S**	2.117	53.77	25.80	114.75	9.80	1.71
C1116-098-5000-M	1.116	28.35	0.098	2.49	5.000	127.00	1.897	48.18	1.417	35.99	33.14	147.41	10.68	1.87	**C1116-098-5000-S**	2.222	56.44	25.80	114.75	9.29	1.63
C1116-098-5250-M	1.116	28.35	0.098	2.49	5.250	133.35	1.985	50.43	1.480	37.59	33.14	147.41	10.15	1.78	**C1116-098-5250-S**	2.328	59.12	25.80	114.75	8.83	1.54
C1116-098-5500-M	1.116	28.35	0.098	2.49	5.500	139.70	2.074	52.68	1.543	39.19	33.14	147.41	9.67	1.69	**C1116-098-5500-S**	2.433	61.80	25.80	114.75	8.41	1.47
C1116-098-5750-M	1.116	28.35	0.098	2.49	5.750	146.05	2.162	54.93	1.606	40.79	33.14	147.41	9.24	1.62	**C1116-098-5750-S**	2.539	64.48	25.80	114.75	8.03	1.41
C1116-098-6000-M	1.116	28.35	0.098	2.49	6.000	152.40	2.251	57.17	1.669	42.39	33.14	147.41	8.84	1.55	**C1116-098-6000-S**	2.644	67.16	25.80	114.75	7.69	1.35
C1116-098-6250-M	1.116	28.35	0.098	2.49	6.250	158.75	2.339	59.42	1.732	43.99	33.14	147.41	8.47	1.48	**C1116-098-6250-S**	2.749	69.83	25.80	114.75	7.37	1.29
C1116-098-6500-M	1.116	28.35	0.098	2.49	6.500	165.10	2.428	61.67	1.795	45.59	33.14	147.41	8.14	1.42	**C1116-098-6500-S**	2.855	72.51	25.80	114.75	7.08	1.24
C1116-098-6750-M	1.116	28.35	0.098	2.49	6.750	171.45	2.517	63.92	1.858	47.19	33.14	147.41	7.83	1.37	**C1116-098-6750-S**	2.960	75.19	25.80	114.75	6.81	1.19
C1116-098-7000-M	1.116	28.35	0.098	2.49	7.000	177.80	2.605	66.17	1.921	48.79	33.14	147.41	7.54	1.32	**C1116-098-7000-S**	3.066	77.87	25.80	114.75	6.56	1.15
C1116-098-7500-M	1.116	28.35	0.098	2.49	7.500	190.50	2.782	70.66	2.047	51.99	33.14	147.41	7.02	1.23	**C1116-098-7500-S**	3.277	83.23	25.80	114.75	6.11	1.07
C1116-098-8000-M	1.116	28.35	0.098	2.49	8.000	203.20	2.959	75.16	2.173	55.19	33.14	147.41	6.57	1.15	**C1116-098-8000-S**	3.488	88.58	25.80	114.75	5.72	1.00
C1116-098-8500-M	1.116	28.35	0.098	2.49	8.500	215.90	3.136	79.66	2.299	58.40	33.14	147.41	6.18	1.08	**C1116-098-8500-S**	3.698	93.94	25.80	114.75	5.37	0.94
C1116-098-9000-M	1.116	28.35	0.098	2.49	9.000	228.60	3.313	84.15	2.425	61.60	33.14	147.41	5.83	1.02	**C1116-098-9000-S**	3.909	99.30	25.80	114.75	5.07	0.89
C1116-098-9500-M*	1.116	28.35	0.098	2.49	9.500	241.30	3.553	90.26	2.629	66.78	33.14	147.41	5.57	0.98	**C1116-098-9500-S***	4.177	106.09	25.80	114.75	4.85	0.85
C1116-105-1750-M	1.116	28.35	0.105	2.67	1.750	44.45	0.799	20.29	0.662	16.82	40.14	178.55	42.19	7.38	**C1116-105-1750-S**	0.902	22.92	31.10	138.33	36.69	6.42
C1116-105-1875-M	1.116	28.35	0.105	2.67	1.875	47.63	0.846	21.50	0.698	17.73	40.14	178.55	39.03	6.83	**C1116-105-1875-S**	0.959	24.35	31.10	138.33	33.94	5.94
C1116-105-2000-M	1.116	28.35	0.105	2.67	2.000	50.80	0.894	22.71	0.734	18.64	40.14	178.55	36.30	6.35	**C1116-105-2000-S**	1.015	25.78	31.10	138.33	31.57	5.52
C1116-105-2125-M	1.116	28.35	0.105	2.67	2.125	53.98	0.942	23.93	0.770	19.56	40.14	178.55	33.93	5.94	**C1116-105-2125-S**	1.071	27.20	31.10	138.33	29.51	5.16
C1116-105-2250-M	1.116	28.35	0.105	2.67	2.250	57.15	0.990	25.14	0.806	20.47	40.14	178.55	31.85	5.57	**C1116-105-2250-S**	1.127	28.63	31.10	138.33	27.70	4.85

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1116-105-2375-M	1.116	28.35	0.105	2.67	2.375	60.33	1.038	26.35	0.842	21.38	40.14	178.55	30.01	5.25
C1116-105-2500-M	1.116	28.35	0.105	2.67	2.500	63.50	1.085	27.57	0.877	22.29	40.14	178.55	28.37	4.97
C1116-105-2625-M	1.116	28.35	0.105	2.67	2.625	66.68	1.133	28.78	0.913	23.20	40.14	178.55	26.91	4.71
C1116-105-2750-M	1.116	28.35	0.105	2.67	2.750	69.85	1.181	30.00	0.949	24.11	40.14	178.55	25.58	4.48
C1116-105-2875-M	1.116	28.35	0.105	2.67	2.875	73.03	1.229	31.21	0.985	25.02	40.14	178.55	24.38	4.27
C1116-105-3000-M	1.116	28.35	0.105	2.67	3.000	76.20	1.276	32.42	1.021	25.93	40.14	178.55	23.29	4.08
C1116-105-3250-M	1.116	28.35	0.105	2.67	3.250	82.55	1.372	34.85	1.093	27.75	40.14	178.55	21.37	3.74
C1116-105-3500-M	1.116	28.35	0.105	2.67	3.500	88.90	1.468	37.28	1.164	29.58	40.14	178.55	19.75	3.46
C1116-105-3750-M	1.116	28.35	0.105	2.67	3.750	95.25	1.563	39.70	1.236	31.40	40.14	178.55	18.36	3.21
C1116-105-4000-M	1.116	28.35	0.105	2.67	4.000	101.60	1.659	42.13	1.308	33.22	40.14	178.55	17.14	3.00
C1116-105-4250-M	1.116	28.35	0.105	2.67	4.250	107.95	1.754	44.56	1.380	35.04	40.14	178.55	16.08	2.81
C1116-105-4500-M	1.116	28.35	0.105	2.67	4.500	114.30	1.850	46.99	1.451	36.86	40.14	178.55	15.15	2.65
C1116-105-4750-M	1.116	28.35	0.105	2.67	4.750	120.65	1.945	49.41	1.523	38.68	40.14	178.55	14.31	2.50
C1116-105-5000-M	1.116	28.35	0.105	2.67	5.000	127.00	2.041	51.84	1.595	40.51	40.14	178.55	13.57	2.37
C1116-105-5250-M	1.116	28.35	0.105	2.67	5.250	133.35	2.137	54.27	1.666	42.33	40.14	178.55	12.89	2.26
C1116-105-5500-M	1.116	28.35	0.105	2.67	5.500	139.70	2.232	56.70	1.738	44.15	40.14	178.55	12.28	2.15
C1116-105-5750-M	1.116	28.35	0.105	2.67	5.750	146.05	2.328	59.12	1.810	45.97	40.14	178.55	11.73	2.05
C1116-105-6000-M	1.116	28.35	0.105	2.67	6.000	152.40	2.423	61.55	1.882	47.79	40.14	178.55	11.22	1.96
C1116-105-6250-M	1.116	28.35	0.105	2.67	6.250	158.75	2.519	63.98	1.953	49.62	40.14	178.55	10.76	1.88
C1116-105-6500-M	1.116	28.35	0.105	2.67	6.500	165.10	2.614	66.40	2.025	51.44	40.14	178.55	10.33	1.81
C1116-105-6750-M	1.116	28.35	0.105	2.67	6.750	171.45	2.710	68.83	2.097	53.26	40.14	178.55	9.94	1.74
C1116-105-7000-M	1.116	28.35	0.105	2.67	7.000	177.80	2.805	71.26	2.169	55.08	40.14	178.55	9.57	1.67
C1116-105-7500-M*	1.116	28.35	0.105	2.67	7.500	190.50	3.061	77.76	2.392	60.76	40.14	178.55	9.04	1.58
C1116-105-8000-M*	1.116	28.35	0.105	2.67	8.000	203.20	3.253	82.62	2.536	64.40	40.14	178.55	8.46	1.48
C1116-105-8500-M*	1.116	28.35	0.105	2.67	8.500	215.90	3.444	87.47	2.679	68.05	40.14	178.55	7.94	1.39
C1116-105-9000-M*	1.116	28.35	0.105	2.67	9.000	228.60	3.635	92.33	2.822	71.69	40.14	178.55	7.48	1.31
C1116-105-9500-M*	1.116	28.35	0.105	2.67	9.500	241.30	3.826	97.18	2.966	75.33	40.14	178.55	7.07	1.24
C1116-112-1750-M	1.116	28.35	0.112	2.85	1.750	44.45	0.851	21.62	0.727	18.47	48.01	213.54	53.41	9.35
C1116-112-1875-M	1.116	28.35	0.112	2.85	1.875	47.63	0.903	22.93	0.768	19.50	48.01	213.54	49.37	8.64
C1116-112-2000-M	1.116	28.35	0.112	2.85	2.000	50.80	0.954	24.23	0.808	20.52	48.01	213.54	45.90	8.03
C1116-112-2125-M	1.116	28.35	0.112	2.85	2.125	53.98	1.005	25.54	0.848	21.54	48.01	213.54	42.88	7.50
C1116-112-2250-M	1.116	28.35	0.112	2.85	2.250	57.15	1.057	26.84	0.889	22.57	48.01	213.54	40.23	7.04
C1116-112-2375-M	1.116	28.35	0.112	2.85	2.375	60.33	1.108	28.15	0.929	23.59	48.01	213.54	37.89	6.63
C1116-112-2500-M	1.116	28.35	0.112	2.85	2.500	63.50	1.160	29.45	0.969	24.62	48.01	213.54	35.81	6.27
C1116-112-2625-M	1.116	28.35	0.112	2.85	2.625	66.68	1.211	30.76	1.009	25.64	48.01	213.54	33.95	5.94
C1116-112-2750-M	1.116	28.35	0.112	2.85	2.750	69.85	1.262	32.06	1.050	26.66	48.01	213.54	32.27	5.65
C1116-112-2875-M	1.116	28.35	0.112	2.85	2.875	73.03	1.314	33.37	1.090	27.69	48.01	213.54	30.75	5.38
C1116-112-3000-M	1.116	28.35	0.112	2.85	3.000	76.20	1.365	34.67	1.130	28.71	48.01	213.54	29.36	5.14
C1116-112-3250-M	1.116	28.35	0.112	2.85	3.250	82.55	1.468	37.28	1.211	30.76	48.01	213.54	26.94	4.71
C1116-112-3500-M	1.116	28.35	0.112	2.85	3.500	88.90	1.571	39.89	1.292	32.81	48.01	213.54	24.88	4.35
C1116-112-3750-M	1.116	28.35	0.112	2.85	3.750	95.25	1.673	42.50	1.372	34.85	48.01	213.54	23.12	4.05
C1116-112-4000-M	1.116	28.35	0.112	2.85	4.000	101.60	1.776	45.11	1.453	36.90	48.01	213.54	21.59	3.78
C1116-112-4250-M	1.116	28.35	0.112	2.85	4.250	107.95	1.879	47.72	1.533	38.95	48.01	213.54	20.25	3.54
C1116-112-4500-M	1.116	28.35	0.112	2.85	4.500	114.30	1.982	50.33	1.614	41.00	48.01	213.54	19.06	3.34
C1116-112-4750-M	1.116	28.35	0.112	2.85	4.750	120.65	2.084	52.94	1.695	43.04	48.01	213.54	18.01	3.15
C1116-112-5000-M	1.116	28.35	0.112	2.85	5.000	127.00	2.187	55.55	1.775	45.09	48.01	213.54	17.07	2.99
C1116-112-5250-M	1.116	28.35	0.112	2.85	5.250	133.35	2.290	58.16	1.856	47.14	48.01	213.54	16.22	2.84
C1116-112-5500-M	1.116	28.35	0.112	2.85	5.500	139.70	2.393	60.77	1.937	49.19	48.01	213.54	15.45	2.70
C1116-112-5750-M	1.116	28.35	0.112	2.85	5.750	146.05	2.495	63.38	2.017	51.24	48.01	213.54	14.75	2.58
C1116-112-6000-M	1.116	28.35	0.112	2.85	6.000	152.40	2.598	65.99	2.098	53.28	48.01	213.54	14.11	2.47
C1116-112-6250-M	1.116	28.35	0.112	2.85	6.250	158.75	2.701	68.60	2.178	55.33	48.01	213.54	13.53	2.37
C1116-112-6500-M	1.116	28.35	0.112	2.85	6.500	165.10	2.804	71.21	2.259	57.38	48.01	213.54	12.99	2.27
C1116-112-6750-M	1.116	28.35	0.112	2.85	6.750	171.45	2.906	73.82	2.340	59.43	48.01	213.54	12.49	2.19
C1116-112-7000-M*	1.116	28.35	0.112	2.85	7.000	177.80	3.075	78.11	2.502	63.54	48.01	213.54	12.23	2.14
C1116-112-7500-M*	1.116	28.35	0.112	2.85	7.500	190.50	3.281	83.33	2.663	67.64	48.01	213.54	11.38	1.99
C1116-112-8000-M*	1.116	28.35	0.112	2.85	8.000	203.20	3.486	88.55	2.824	71.73	48.01	213.54	10.64	1.86
C1116-112-8500-M*	1.116	28.35	0.112	2.85	8.500	215.90	3.692	93.77	2.985	75.83	48.01	213.54	9.98	1.75
C1116-112-9000-M*	1.116	28.35	0.112	2.85	9.000	228.60	3.897	98.99	3.147	79.92	48.01	213.54	9.41	1.65
C1116-112-9500-M*	1.116	28.35	0.112	2.85	9.500	241.30	4.103	104.21	3.308	84.02	48.01	213.54	8.89	1.56
C1116-125-1625-M	1.116	28.35	0.125	3.18	1.625	41.28	0.890	22.59	0.798	20.26	65.04	289.31	88.43	15.48
C1116-125-1750-M	1.116	28.35	0.125	3.18	1.750	44.45	0.948	24.07	0.846	21.50	65.04	289.31	81.06	14.19
C1116-125-1875-M	1.116	28.35	0.125	3.18	1.875	47.63	1.006	25.55	0.895	22.73	65.04	289.31	74.83	13.09
C1116-125-2000-M	1.116	28.35	0.125	3.18	2.000	50.80	1.064	27.02	0.944	23.97	65.04	289.31	69.48	12.16
C1116-125-2125-M	1.116	28.35	0.125	3.18	2.125	53.98	1.122	28.50	0.992	25.21	65.04	289.31	64.85	11.35

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1116-105-2375-S	1.183	30.06	31.10	138.33	26.10	4.57
C1116-105-2500-S	1.240	31.49	31.10	138.33	24.67	4.32
C1116-105-2625-S	1.296	32.91	31.10	138.33	23.40	4.09
C1116-105-2750-S	1.352	34.34	31.10	138.33	22.25	3.89
C1116-105-2875-S	1.408	35.77	31.10	138.33	21.20	3.71
C1116-105-3000-S	1.464	37.20	31.10	138.33	20.25	3.54
C1116-105-3250-S	1.577	40.05	31.10	138.33	18.59	3.25
C1116-105-3500-S	1.689	42.91	31.10	138.33	17.17	3.01
C1116-105-3750-S	1.802	45.76	31.10	138.33	15.96	2.79
C1116-105-4000-S	1.914	48.62	31.10	138.33	14.91	2.61
C1116-105-4250-S	2.027	51.47	31.10	138.33	13.99	2.45
C1116-105-4500-S	2.139	54.33	31.10	138.33	13.17	2.30
C1116-105-4750-S	2.251	57.18	31.10	138.33	12.45	2.18
C1116-105-5000-S	2.364	60.04	31.10	138.33	11.80	2.06
C1116-105-5250-S	2.476	62.89	31.10	138.33	11.21	1.96
C1116-105-5500-S	2.589	65.75	31.10	138.33	10.68	1.87
C1116-105-5750-S	2.701	68.60	31.10	138.33	10.20	1.78
C1116-105-6000-S	2.813	71.46	31.10	138.33	9.76	1.71
C1116-105-6250-S	2.926	74.31	31.10	138.33	9.36	1.64
C1116-105-6500-S	3.038	77.17	31.10	138.33	8.98	1.57
C1116-105-6750-S	3.151	80.02	31.10	138.33	8.64	1.51
C1116-105-7000-S	3.263	82.88	31.10	138.33	8.32	1.46
C1116-105-7500-S*	3.546	90.06	31.10	138.33	7.86	1.38
C1116-105-8000-S*	3.770	95.77	31.10	138.33	7.35	1.29
C1116-105-8500-S*	3.995	101.48	31.10	138.33	6.90	1.21
C1116-105-9000-S*	4.220	107.19	31.10	138.33	6.51	1.14
C1116-105-9500-S*	4.445	112.90	31.10	138.33	6.15	1.08
C1116-112-1750-S	0.953	24.21	37.01	164.62	46.45	8.13
C1116-112-1875-S	1.013	25.73	37.01	164.62	42.93	7.51
C1116-112-2000-S	1.073	27.25	37.01	164.62	39.91	6.98
C1116-112-2125-S	1.132	28.76	37.01	164.62	37.28	6.52
C1116-112-2250-S	1.192	30.28	37.01	164.62	34.98	6.12
C1116-112-2375-S	1.252	31.80	37.01	164.62	32.95	5.77
C1116-112-2500-S	1.312	33.31	37.01	164.62	31.14	5.45
C1116-112-2625-S	1.371	34.83	37.01	164.62	29.52	5.17
C1116-112-2750-S	1.431	36.35	37.01	164.62	28.06	4.91
C1116-112-2875-S	1.491	37.87	37.01	164.62	26.74	4.68
C1116-112-3000-S	1.551	39.38	37.01	164.62	25.53	4.47
C1116-112-3250-S	1.670	42.42	37.01	164.62	23.42	4.10
C1116-112-3500-S	1.789	45.45	37.01	164.62	21.64	3.79
C1116-112-3750-S	1.909	48.49	37.01	164.62	20.10	3.52
C1116-112-4000-S	2.028	51.52	37.01	164.62	18.77	3.28
C1116-112-4250-S	2.148	54.56	37.01	164.62	17.61	3.08
C1116-112-4500-S	2.267	57.59	37.01	164.62	16.58	2.90
C1116-112-4750-S	2.387	60.62	37.01	164.62	15.66	2.74
C1116-112-5000-S	2.506	63.66	37.01	164.62	14.84	2.60
C1116-112-5250-S	2.626	66.69	37.01	164.62	14.10	2.47
C1116-112-5500-S	2.745	69.73	37.01	164.62	13.43	2.35
C1116-112-5750-S	2.865	72.76	37.01	164.62	12.83	2.24
C1116-112-6000-S	2.984	75.80	37.01	164.62	12.27	2.15
C1116-112-6250-S	3.104	78.83	37.01	164.62	11.76	2.06
C1116-112-6500-S	3.223	81.87	37.01	164.62	11.29	1.98
C1116-112-6750-S	3.343	84.90	37.01	164.62	10.86	1.90
C1116-112-7000-S*	3.520	89.42	37.01	164.62	10.64	1.86
C1116-112-7500-S*	3.759	95.49	37.01	164.62	9.89	1.73
C1116-112-8000-S*	3.998	101.56	37.01	164.62	9.25	1.62
C1116-112-8500-S*	4.237	107.63	37.01	164.62	8.68	1.52
C1116-112-9000-S*	4.476	113.70	37.01	164.62	8.18	1.43
C1116-112-9500-S*	4.715	119.76	37.01	164.62	7.73	1.35
C1116-125-1625-S	0.979	24.87	49.67	220.93	76.90	13.46
C1116-125-1750-S	1.045	26.55	49.67	220.93	70.49	12.34
C1116-125-1875-S	1.112	28.24	49.67	220.93	65.07	11.39
C1116-125-2000-S	1.178	29.92	49.67	220.93	60.42	10.57
C1116-125-2125-S	1.244	31.60	49.67	220.93	56.39	9.87

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1116-125-2250-M	1.116	28.35	0.125	3.18	2.250	57.15	1.180	29.98	1.041	26.44	65.04	289.31	60.80	10.64
C1116-125-2375-M	1.116	28.35	0.125	3.18	2.375	60.33	1.238	31.45	1.090	27.68	65.04	289.31	57.22	10.01
C1116-125-2500-M	1.116	28.35	0.125	3.18	2.500	63.50	1.296	32.93	1.138	28.91	65.04	289.31	54.04	9.46
C1116-125-2625-M	1.116	28.35	0.125	3.18	2.625	66.68	1.355	34.41	1.187	30.15	65.04	289.31	51.20	8.96
C1116-125-2750-M	1.116	28.35	0.125	3.18	2.750	69.85	1.413	35.88	1.236	31.38	65.04	289.31	48.64	8.51
C1116-125-2875-M	1.116	28.35	0.125	3.18	2.875	73.03	1.471	37.36	1.284	32.62	65.04	289.31	46.32	8.11
C1116-125-3000-M	1.116	28.35	0.125	3.18	3.000	76.20	1.529	38.84	1.333	33.86	65.04	289.31	44.22	7.74
C1116-125-3250-M	1.116	28.35	0.125	3.18	3.250	82.55	1.645	41.79	1.430	36.33	65.04	289.31	40.53	7.09
C1116-125-3500-M	1.116	28.35	0.125	3.18	3.500	88.90	1.762	44.74	1.528	38.80	65.04	289.31	37.41	6.55
C1116-125-3750-M	1.116	28.35	0.125	3.18	3.750	95.25	1.878	47.70	1.625	41.27	65.04	289.31	34.74	6.08
C1116-125-4000-M	1.116	28.35	0.125	3.18	4.000	101.60	1.994	50.65	1.722	43.74	65.04	289.31	32.43	5.67
C1116-125-4250-M	1.116	28.35	0.125	3.18	4.250	107.95	2.110	53.60	1.819	46.21	65.04	289.31	30.40	5.32
C1116-125-4500-M	1.116	28.35	0.125	3.18	4.500	114.30	2.227	56.56	1.917	48.69	65.04	289.31	28.61	5.01
C1116-125-4750-M	1.116	28.35	0.125	3.18	4.750	120.65	2.343	59.51	2.014	51.16	65.04	289.31	27.02	4.73
C1116-125-5000-M	1.116	28.35	0.125	3.18	5.000	127.00	2.459	62.46	2.111	53.63	65.04	289.31	25.60	4.48
C1116-125-5250-M	1.116	28.35	0.125	3.18	5.250	133.35	2.575	65.42	2.209	56.10	65.04	289.31	24.32	4.26
C1116-125-5500-M	1.116	28.35	0.125	3.18	5.500	139.70	2.692	68.37	2.306	58.57	65.04	289.31	23.16	4.05
C1116-125-5750-M	1.116	28.35	0.125	3.18	5.750	146.05	2.808	71.32	2.403	61.04	65.04	289.31	22.11	3.87
C1116-125-6000-M	1.116	28.35	0.125	3.18	6.000	152.40	2.924	74.28	2.501	63.52	65.04	289.31	21.15	3.70
C1116-125-6250-M	1.116	28.35	0.125	3.18	6.250	158.75	3.041	77.23	2.598	65.99	65.04	289.31	20.27	3.55
C1116-125-6500-M	1.116	28.35	0.125	3.18	6.500	165.10	3.157	80.18	2.695	68.46	65.04	289.31	19.46	3.40
C1116-125-6750-M	1.116	28.35	0.125	3.18	6.750	171.45	3.273	83.14	2.793	70.93	65.04	289.31	18.71	3.27
C1116-125-7000-M	1.116	28.35	0.125	3.18	7.000	177.80	3.389	86.09	2.890	73.40	65.04	289.31	18.01	3.15
C1116-125-7500-M	1.116	28.35	0.125	3.18	7.500	190.50	3.622	92.00	3.084	78.35	65.04	289.31	16.77	2.93
C1116-125-8000-M	1.116	28.35	0.125	3.18	8.000	203.20	3.855	97.90	3.279	83.29	65.04	289.31	15.69	2.75
C1116-125-8500-M	1.116	28.35	0.125	3.18	8.500	215.90	4.087	103.81	3.474	88.23	65.04	289.31	14.74	2.58
C1116-125-9000-M	1.116	28.35	0.125	3.18	9.000	228.60	4.320	109.72	3.668	93.18	65.04	289.31	13.90	2.43
C1116-125-9500-M	1.116	28.35	0.125	3.18	9.500	241.30	4.552	115.62	3.863	98.12	65.04	289.31	13.15	2.30
C1116-135-1625-M	1.116	28.35	0.135	3.43	1.625	41.28	0.956	24.28	0.880	22.35	80.41	357.69	120.21	21.04
C1116-135-1750-M	1.116	28.35	0.135	3.43	1.750	44.45	1.019	25.89	0.935	23.75	80.41	357.69	110.05	19.26
C1116-135-1875-M	1.116	28.35	0.135	3.43	1.875	47.63	1.083	27.50	0.990	25.14	80.41	357.69	101.48	17.76
C1116-135-2000-M	1.116	28.35	0.135	3.43	2.000	50.80	1.146	29.11	1.045	26.54	80.41	357.69	94.15	16.48
C1116-135-2125-M	1.116	28.35	0.135	3.43	2.125	53.98	1.209	30.71	1.100	27.94	80.41	357.69	87.80	15.37
C1116-135-2250-M	1.116	28.35	0.135	3.43	2.250	57.15	1.272	32.32	1.155	29.34	80.41	357.69	82.26	14.40
C1116-135-2375-M	1.116	28.35	0.135	3.43	2.375	60.33	1.336	33.93	1.210	30.73	80.41	357.69	77.38	13.54
C1116-135-2500-M	1.116	28.35	0.135	3.43	2.500	63.50	1.399	35.54	1.265	32.13	80.41	357.69	73.04	12.78
C1116-135-2625-M	1.116	28.35	0.135	3.43	2.625	66.68	1.462	37.14	1.320	33.53	80.41	357.69	69.16	12.10
C1116-135-2750-M	1.116	28.35	0.135	3.43	2.750	69.85	1.526	38.75	1.375	34.93	80.41	357.69	65.68	11.49
C1116-135-2875-M	1.116	28.35	0.135	3.43	2.875	73.03	1.589	40.36	1.430	36.32	80.41	357.69	62.53	10.94
C1116-135-3000-M	1.116	28.35	0.135	3.43	3.000	76.20	1.652	41.97	1.485	37.72	80.41	357.69	59.66	10.44
C1116-135-3250-M	1.116	28.35	0.135	3.43	3.250	82.55	1.779	45.18	1.595	40.52	80.41	357.69	54.66	9.56
C1116-135-3500-M	1.116	28.35	0.135	3.43	3.500	88.90	1.905	48.40	1.705	43.31	80.41	357.69	50.43	8.82
C1116-135-3750-M	1.116	28.35	0.135	3.43	3.750	95.25	2.032	51.61	1.815	46.11	80.41	357.69	46.80	8.19
C1116-135-4000-M	1.116	28.35	0.135	3.43	4.000	101.60	2.159	54.83	1.925	48.90	80.41	357.69	43.67	7.64
C1116-135-4250-M	1.116	28.35	0.135	3.43	4.250	107.95	2.285	58.04	2.035	51.70	80.41	357.69	40.92	7.16
C1116-135-4500-M	1.116	28.35	0.135	3.43	4.500	114.30	2.412	61.26	2.145	54.49	80.41	357.69	38.51	6.74
C1116-135-4750-M	1.116	28.35	0.135	3.43	4.750	120.65	2.538	64.47	2.255	57.29	80.41	357.69	36.36	6.36
C1116-135-5000-M	1.116	28.35	0.135	3.43	5.000	127.00	2.665	67.69	2.365	60.08	80.41	357.69	34.44	6.03
C1116-135-5250-M	1.116	28.35	0.135	3.43	5.250	133.35	2.791	70.90	2.475	62.88	80.41	357.69	32.71	5.72
C1116-135-5500-M	1.116	28.35	0.135	3.43	5.500	139.70	2.918	74.12	2.585	65.67	80.41	357.69	31.14	5.45
C1116-135-5750-M	1.116	28.35	0.135	3.43	5.750	146.05	3.045	77.33	2.696	68.47	80.41	357.69	29.72	5.20
C1116-135-6000-M	1.116	28.35	0.135	3.43	6.000	152.40	3.171	80.55	2.806	71.26	80.41	357.69	28.43	4.97
C1116-135-6250-M	1.116	28.35	0.135	3.43	6.250	158.75	3.298	83.76	2.916	74.06	80.41	357.69	27.24	4.77
C1116-135-6500-M	1.116	28.35	0.135	3.43	6.500	165.10	3.424	86.98	3.026	76.85	80.41	357.69	26.14	4.58
C1116-135-6750-M	1.116	28.35	0.135	3.43	6.750	171.45	3.551	90.19	3.136	79.65	80.41	357.69	25.14	4.40
C1116-135-7000-M	1.116	28.35	0.135	3.43	7.000	177.80	3.677	93.41	3.246	82.44	80.41	357.69	24.20	4.24
C1116-135-7500-M	1.116	28.35	0.135	3.43	7.500	190.50	3.931	99.84	3.466	88.03	80.41	357.69	22.53	3.94
C1116-135-8000-M	1.116	28.35	0.135	3.43	8.000	203.20	4.184	106.27	3.686	93.62	80.41	357.69	21.07	3.69
C1116-135-8500-M	1.116	28.35	0.135	3.43	8.500	215.90	4.437	112.70	3.906	99.21	80.41	357.69	19.79	3.46
C1116-135-9000-M	1.116	28.35	0.135	3.43	9.000	228.60	4.690	119.13	4.126	104.80	80.41	357.69	18.66	3.26
C1116-135-9500-M	1.116	28.35	0.135	3.43	9.500	241.30	4.943	125.56	4.346	110.39	80.41	357.69	17.65	3.09
C1116-148-1625-M	1.116	28.35	0.148	3.76	1.625	41.28	1.038	26.36	0.981	24.92	103.51	460.44	176.31	30.85
C1116-148-1750-M	1.116	28.35	0.148	3.76	1.750	44.45	1.108	28.13	1.044	26.52	103.51	460.44	161.15	28.20
C1116-148-1875-M	1.116	28.35	0.148	3.76	1.875	47.63	1.177	29.91	1.107	28.12	103.51	460.44	148.39	25.97

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1116-125-2250-S	1.311	33.29	49.67	220.93	52.87	9.25
C1116-125-2375-S	1.377	34.97	49.67	220.93	49.76	8.71
C1116-125-2500-S	1.443	36.65	49.67	220.93	46.99	8.22
C1116-125-2625-S	1.509	38.34	49.67	220.93	44.52	7.79
C1116-125-2750-S	1.576	40.02	49.67	220.93	42.29	7.40
C1116-125-2875-S	1.642	41.70	49.67	220.93	40.28	7.05
C1116-125-3000-S	1.708	43.39	49.67	220.93	38.45	6.73
C1116-125-3250-S	1.841	46.76	49.67	220.93	35.24	6.17
C1116-125-3500-S	1.973	50.12	49.67	220.93	32.53	5.69
C1116-125-3750-S	2.106	53.49	49.67	220.93	30.21	5.29
C1116-125-4000-S	2.238	56.86	49.67	220.93	28.20	4.93
C1116-125-4250-S	2.371	60.22	49.67	220.93	26.43	4.63
C1116-125-4500-S	2.504	63.59	49.67	220.93	24.88	4.35
C1116-125-4750-S	2.636	66.96	49.67	220.93	23.50	4.11
C1116-125-5000-S	2.769	70.33	49.67	220.93	22.26	3.90
C1116-125-5250-S	2.901	73.69	49.67	220.93	21.15	3.70
C1116-125-5500-S	3.034	77.06	49.67	220.93	20.14	3.52
C1116-125-5750-S	3.166	80.43	49.67	220.93	19.22	3.36
C1116-125-6000-S	3.299	83.79	49.67	220.93	18.39	3.22
C1116-125-6250-S	3.432	87.16	49.67	220.93	17.62	3.08
C1116-125-6500-S	3.564	90.53	49.67	220.93	16.92	2.96
C1116-125-6750-S	3.697	93.90	49.67	220.93	16.27	2.85
C1116-125-7000-S	3.829	97.26	49.67	220.93	15.66	2.74
C1116-125-7500-S	4.094	104.00	49.67	220.93	14.58	2.55
C1116-125-8000-S	4.359	110.73	49.67	220.93	13.64	2.39
C1116-125-8500-S	4.625	117.47	49.67	220.93	12.82	2.24
C1116-125-9000-S	4.890	124.20	49.67	220.93	12.08	2.11
C1116-125-9500-S	5.155	130.93	49.67	220.93	11.43	2.00
C1116-135-1625-S	1.042	26.46	60.95	271.11	104.53	18.29
C1116-135-1750-S	1.113	28.27	60.95	271.11	95.70	16.75
C1116-135-1875-S	1.184	30.08	60.95	271.11	88.24	15.44
C1116-135-2000-S	1.256	31.89	60.95	271.11	81.87	14.33
C1116-135-2125-S	1.327	33.70	60.95	271.11	76.35	13.36
C1116-135-2250-S	1.398	35.51	60.95	271.11	71.53	12.52
C1116-135-2375-S	1.469	37.32	60.95	271.11	67.28	11.77
C1116-135-2500-S	1.540	39.13	60.95	271.11	63.51	11.11
C1116-135-2625-S	1.612	40.93	60.95	271.11	60.14	10.52
C1116-135-2750-S	1.683	42.74	60.95	271.11	57.11	9.99
C1116-135-2875-S	1.754	44.55	60.95	271.11	54.37	9.51
C1116-135-3000-S	1.825	46.36	60.95	271.11	51.88	9.08
C1116-135-3250-S	1.968	49.98	60.95	271.11	47.53	8.32
C1116-135-3500-S	2.110	53.60	60.95	271.11	43.85	7.67
C1116-135-3750-S	2.252	57.21	60.95	271.11	40.70	7.12
C1116-135-4000-S	2.395	60.83	60.95	271.11	37.97	6.64
C1116-135-4250-S	2.537	64.45	60.95	271.11	35.59	6.23
C1116-135-4500-S	2.680	68.07	60.95	271.11	33.48	5.86
C1116-135-4750-S	2.822	71.68	60.95	271.11	31.61	5.53
C1116-135-5000-S	2.965	75.30	60.95	271.11	29.94	5.24
C1116-135-5250-S	3.107	78.92	60.95	271.11	28.44	4.98
C1116-135-5500-S	3.249	82.54	60.95	271.11	27.08	4.74
C1116-135-5750-S	3.392	86.15	60.95	271.11	25.85	4.52
C1116-135-6000-S	3.534	89.77	60.95	271.11	24.72	4.33
C1116-135-6250-S	3.677	93.39	60.95	271.11	23.68	4.14
C1116-135-6500-S	3.819	97.01	60.95	271.11	22.73	3.98
C1116-135-6750-S	3.962	100.62	60.95	271.11	21.86	3.82
C1116-135-7000-S	4.104	104.24	60.95	271.11	21.05	3.68
C1116-135-7500-S	4.389	111.48	60.95	271.11	19.59	3.43
C1116-135-8000-S	4.674	118.71	60.95	271.11	18.32	3.21
C1116-135-8500-S	4.958	125.95	60.95	271.11	17.21	3.01
C1116-135-9000-S	5.243	133.18	60.95	271.11	16.22	2.84
C1116-135-9500-S	5.528	140.42	60.95	271.11	15.35	2.69
C1116-148-1625-S	1.118	28.40	77.68	345.56	153.31	26.83
C1116-148-1750-S	1.196	30.37	77.68	345.56	140.13	24.52
C1116-148-1875-S	1.273	32.33	77.68	345.56	129.04	22.58

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1116-148-2000-M	1.116	28.35	0.148	3.76	2.000	50.80	1.247	31.68	1.170	29.72	103.51	460.44	137.51	24.06
C1116-148-2125-M	1.116	28.35	0.148	3.76	2.125	53.98	1.317	33.45	1.233	31.32	103.51	460.44	128.11	22.42
C1116-148-2250-M	1.116	28.35	0.148	3.76	2.250	57.15	1.387	35.22	1.296	32.92	103.51	460.44	119.92	20.99
C1116-148-2375-M	1.116	28.35	0.148	3.76	2.375	60.33	1.457	37.00	1.359	34.52	103.51	460.44	112.71	19.72
C1116-148-2500-M	1.116	28.35	0.148	3.76	2.500	63.50	1.526	38.77	1.422	36.13	103.51	460.44	106.31	18.60
C1116-148-2625-M	1.116	28.35	0.148	3.76	2.625	66.68	1.596	40.54	1.485	37.73	103.51	460.44	100.61	17.61
C1116-148-2750-M	1.116	28.35	0.148	3.76	2.750	69.85	1.666	42.31	1.548	39.33	103.51	460.44	95.48	16.71
C1116-148-2875-M	1.116	28.35	0.148	3.76	2.875	73.03	1.736	44.09	1.611	40.93	103.51	460.44	90.86	15.90
C1116-148-3000-M	1.116	28.35	0.148	3.76	3.000	76.20	1.805	45.86	1.674	42.53	103.51	460.44	86.66	15.16
C1116-148-3250-M	1.116	28.35	0.148	3.76	3.250	82.55	1.945	49.40	1.800	45.73	103.51	460.44	79.32	13.88
C1116-148-3500-M	1.116	28.35	0.148	3.76	3.500	88.90	2.085	52.95	1.927	48.93	103.51	460.44	73.13	12.80
C1116-148-3750-M	1.116	28.35	0.148	3.76	3.750	95.25	2.224	56.49	2.053	52.14	103.51	460.44	67.84	11.87
C1116-148-4000-M	1.116	28.35	0.148	3.76	4.000	101.60	2.364	60.04	2.179	55.34	103.51	460.44	63.26	11.07
C1116-148-4250-M	1.116	28.35	0.148	3.76	4.250	107.95	2.503	63.58	2.305	58.54	103.51	460.44	59.26	10.37
C1116-148-4500-M	1.116	28.35	0.148	3.76	4.500	114.30	2.643	67.13	2.431	61.74	103.51	460.44	55.74	9.75
C1116-148-4750-M	1.116	28.35	0.148	3.76	4.750	120.65	2.782	70.67	2.557	64.95	103.51	460.44	52.61	9.21
C1116-148-5000-M	1.116	28.35	0.148	3.76	5.000	127.00	2.922	74.22	2.683	68.15	103.51	460.44	49.81	8.72
C1116-148-5250-M	1.116	28.35	0.148	3.76	5.250	133.35	3.061	77.76	2.809	71.35	103.51	460.44	47.30	8.28
C1116-148-5500-M	1.116	28.35	0.148	3.76	5.500	139.70	3.201	81.31	2.935	74.55	103.51	460.44	45.03	7.88
C1116-148-5750-M	1.116	28.35	0.148	3.76	5.750	146.05	3.341	84.85	3.061	77.75	103.51	460.44	42.96	7.52
C1116-148-6000-M	1.116	28.35	0.148	3.76	6.000	152.40	3.480	88.40	3.187	80.96	103.51	460.44	41.08	7.19
C1116-148-6250-M	1.116	28.35	0.148	3.76	6.250	158.75	3.620	91.94	3.313	84.16	103.51	460.44	39.35	6.89
C1116-148-6500-M	1.116	28.35	0.148	3.76	6.500	165.10	3.759	95.49	3.439	87.36	103.51	460.44	37.77	6.61
C1116-148-6750-M	1.116	28.35	0.148	3.76	6.750	171.45	3.899	99.03	3.565	90.56	103.51	460.44	36.31	6.35
C1116-148-7000-M	1.116	28.35	0.148	3.76	7.000	177.80	4.038	102.58	3.692	93.77	103.51	460.44	34.95	6.12
C1116-148-7500-M	1.116	28.35	0.148	3.76	7.500	190.50	4.318	109.67	3.944	100.17	103.51	460.44	32.53	5.69
C1116-148-8000-M	1.116	28.35	0.148	3.76	8.000	203.20	4.597	116.75	4.196	106.57	103.51	460.44	30.42	5.32
C1116-148-8500-M	1.116	28.35	0.148	3.76	8.500	215.90	4.876	123.84	4.448	112.98	103.51	460.44	28.56	5.00
C1116-148-9000-M	1.116	28.35	0.148	3.76	9.000	228.60	5.155	130.93	4.700	119.38	103.51	460.44	26.92	4.71
C1116-148-9500-M	1.116	28.35	0.148	3.76	9.500	241.30	5.434	138.02	4.952	125.79	103.51	460.44	25.46	4.46
C1116-162-1625-M	1.116	28.35	0.162	4.12	1.625	41.28	1.119	28.42	1.081	27.46	132.53	589.54	261.84	45.82
C1116-162-1750-M	1.116	28.35	0.162	4.12	1.750	44.45	1.195	30.36	1.152	29.26	132.53	589.54	238.89	41.81
C1116-162-1875-M	1.116	28.35	0.162	4.12	1.875	47.63	1.272	32.30	1.223	31.07	132.53	589.54	219.63	38.44
C1116-162-2000-M	1.116	28.35	0.162	4.12	2.000	50.80	1.348	34.24	1.295	32.88	132.53	589.54	203.25	35.57
C1116-162-2125-M	1.116	28.35	0.162	4.12	2.125	53.98	1.424	36.18	1.366	34.69	132.53	589.54	189.15	33.10
C1116-162-2250-M	1.116	28.35	0.162	4.12	2.250	57.15	1.501	38.12	1.437	36.50	132.53	589.54	176.87	30.95
C1116-162-2375-M	1.116	28.35	0.162	4.12	2.375	60.33	1.577	40.06	1.508	38.30	132.53	589.54	166.09	29.07
C1116-162-2500-M	1.116	28.35	0.162	4.12	2.500	63.50	1.653	42.00	1.579	40.11	132.53	589.54	156.55	27.40
C1116-162-2625-M	1.116	28.35	0.162	4.12	2.625	66.68	1.730	43.94	1.650	41.92	132.53	589.54	148.05	25.91
C1116-162-2750-M	1.116	28.35	0.162	4.12	2.750	69.85	1.806	45.88	1.722	43.73	132.53	589.54	140.42	24.57
C1116-162-2875-M	1.116	28.35	0.162	4.12	2.875	73.03	1.883	47.82	1.793	45.54	132.53	589.54	133.54	23.37
C1116-162-3000-M	1.116	28.35	0.162	4.12	3.000	76.20	1.959	49.76	1.864	47.34	132.53	589.54	127.30	22.28
C1116-162-3250-M	1.116	28.35	0.162	4.12	3.250	82.55	2.112	53.63	2.006	50.96	132.53	589.54	116.42	20.37
C1116-162-3500-M	1.116	28.35	0.162	4.12	3.500	88.90	2.264	57.51	2.149	54.57	132.53	589.54	107.26	18.77
C1116-162-3750-M	1.116	28.35	0.162	4.12	3.750	95.25	2.417	61.39	2.291	58.19	132.53	589.54	99.43	17.40
C1116-162-4000-M	1.116	28.35	0.162	4.12	4.000	101.60	2.570	65.27	2.433	61.81	132.53	589.54	92.67	16.22
C1116-162-4250-M	1.116	28.35	0.162	4.12	4.250	107.95	2.723	69.15	2.576	65.42	132.53	589.54	86.77	15.18
C1116-162-4500-M	1.116	28.35	0.162	4.12	4.500	114.30	2.875	73.03	2.718	69.04	132.53	589.54	81.57	14.28
C1116-162-4750-M	1.116	28.35	0.162	4.12	4.750	120.65	3.028	76.91	2.860	72.65	132.53	589.54	76.97	13.47
C1116-162-5000-M	1.116	28.35	0.162	4.12	5.000	127.00	3.181	80.79	3.003	76.27	132.53	589.54	72.85	12.75
C1116-162-5250-M	1.116	28.35	0.162	4.12	5.250	133.35	3.333	84.67	3.145	79.88	132.53	589.54	69.15	12.10
C1116-162-5500-M	1.116	28.35	0.162	4.12	5.500	139.70	3.486	88.55	3.287	83.50	132.53	589.54	65.81	11.52
C1116-162-5750-M	1.116	28.35	0.162	4.12	5.750	146.05	3.639	92.43	3.430	87.12	132.53	589.54	62.78	10.99
C1116-162-6000-M	1.116	28.35	0.162	4.12	6.000	152.40	3.792	96.31	3.572	90.73	132.53	589.54	60.02	10.50
C1116-162-6250-M	1.116	28.35	0.162	4.12	6.250	158.75	3.944	100.19	3.714	94.35	132.53	589.54	57.48	10.06
C1116-162-6500-M	1.116	28.35	0.162	4.12	6.500	165.10	4.097	104.07	3.857	97.96	132.53	589.54	55.16	9.65
C1116-162-6750-M	1.116	28.35	0.162	4.12	6.750	171.45	4.250	107.95	3.999	101.58	132.53	589.54	53.01	9.28
C1116-162-7000-M	1.116	28.35	0.162	4.12	7.000	177.80	4.403	111.83	4.141	105.19	132.53	589.54	51.03	8.93
C1116-162-7500-M	1.116	28.35	0.162	4.12	7.500	190.50	4.708	119.59	4.426	112.43	132.53	589.54	47.47	8.31
C1116-162-8000-M	1.116	28.35	0.162	4.12	8.000	203.20	5.014	127.34	4.711	119.66	132.53	589.54	44.38	7.77
C1116-162-8500-M	1.116	28.35	0.162	4.12	8.500	215.90	5.319	135.10	4.996	126.89	132.53	589.54	41.67	7.29
C1116-162-9000-M	1.116	28.35	0.162	4.12	9.000	228.60	5.625	142.86	5.280	134.12	132.53	589.54	39.26	6.87
C1116-162-9500-M	1.116	28.35	0.162	4.12	9.500	241.30	5.930	150.62	5.565	141.35	132.53	589.54	37.12	6.50
C1116-177-1625-M	1.116	28.35	0.177	4.50	1.625	41.28	1.196	30.39	1.177	29.89	168.63	750.08	393.40	68.85

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1116-148-2000-S	1.350	34.30	77.68	345.56	119.57	20.93
C1116-148-2125-S	1.428	36.26	77.68	345.56	111.40	19.50
C1116-148-2250-S	1.505	38.23	77.68	345.56	104.27	18.25
C1116-148-2375-S	1.582	40.19	77.68	345.56	98.01	17.15
C1116-148-2500-S	1.660	42.16	77.68	345.56	92.45	16.18
C1116-148-2625-S	1.737	44.12	77.68	345.56	87.49	15.31
C1116-148-2750-S	1.814	46.08	77.68	345.56	83.03	14.53
C1116-148-2875-S	1.892	48.05	77.68	345.56	79.00	13.83
C1116-148-3000-S	1.969	50.01	77.68	345.56	75.35	13.19
C1116-148-3250-S	2.124	53.94	77.68	345.56	68.98	12.07
C1116-148-3500-S	2.278	57.87	77.68	345.56	63.59	11.13
C1116-148-3750-S	2.433	61.80	77.68	345.56	58.99	10.32
C1116-148-4000-S	2.588	65.73	77.68	345.56	55.01	9.63
C1116-148-4250-S	2.742	69.66	77.68	345.56	51.53	9.02
C1116-148-4500-S	2.897	73.59	77.68	345.56	48.47	8.48
C1116-148-4750-S	3.052	77.52	77.68	345.56	45.75	8.01
C1116-148-5000-S	3.207	81.45	77.68	345.56	43.32	7.58
C1116-148-5250-S	3.361	85.37	77.68	345.56	41.13	7.20
C1116-148-5500-S	3.516	89.30	77.68	345.56	39.15	6.85
C1116-148-5750-S	3.671	93.23	77.68	345.56	37.36	6.54
C1116-148-6000-S	3.825	97.16	77.68	345.56	35.72	6.25
C1116-148-6250-S	3.980	101.09	77.68	345.56	34.22	5.99
C1116-148-6500-S	4.135	105.02	77.68	345.56	32.84	5.75
C1116-148-6750-S	4.289	108.95	77.68	345.56	31.57	5.52
C1116-148-7000-S	4.444	112.88	77.68	345.56	30.39	5.32
C1116-148-7500-S	4.753	120.73	77.68	345.56	28.28	4.95
C1116-148-8000-S	5.063	128.59	77.68	345.56	26.45	4.63
C1116-148-8500-S	5.372	136.45	77.68	345.56	24.84	4.35
C1116-148-9000-S	5.681	144.31	77.68	345.56	23.41	4.10
C1116-148-9500-S	5.991	152.17	77.68	345.56	22.14	3.87
C1116-162-1625-S	1.193	30.30	98.40	437.72	227.69	39.85
C1116-162-1750-S	1.276	32.42	98.40	437.72	207.73	36.35
C1116-162-1875-S	1.360	34.54	98.40	437.72	190.99	33.42
C1116-162-2000-S	1.443	36.66	98.40	437.72	176.74	30.93
C1116-162-2125-S	1.527	38.78	98.40	437.72	164.48	28.78
C1116-162-2250-S	1.610	40.90	98.40	437.72	153.80	26.92
C1116-162-2375-S	1.694	43.02	98.40	437.72	144.43	25.27
C1116-162-2500-S	1.777	45.14	98.40	437.72	136.13	23.82
C1116-162-2625-S	1.861	47.26	98.40	437.72	128.74	22.53
C1116-162-2750-S	1.944	49.38	98.40	437.72	122.10	21.37
C1116-162-2875-S	2.028	51.50	98.40	437.72	116.12	20.32
C1116-162-3000-S	2.111	53.62	98.40	437.72	110.70	19.37
C1116-162-3250-S	2.278	57.86	98.40	437.72	101.24	17.72
C1116-162-3500-S	2.445	62.10	98.40	437.72	93.27	16.32
C1116-162-3750-S	2.612	66.34	98.40	437.72	86.46	15.13
C1116-162-4000-S	2.779	70.58	98.40	437.72	80.58	14.10
C1116-162-4250-S	2.946	74.82	98.40	437.72	75.45	13.20
C1116-162-4500-S	3.113	79.06	98.40	437.72	70.93	12.41
C1116-162-4750-S	3.280	83.30	98.40	437.72	66.93	11.71
C1116-162-5000-S	3.447	87.55	98.40	437.72	63.35	11.09
C1116-162-5250-S	3.614	91.79	98.40	437.72	60.13	10.52
C1116-162-5500-S	3.781	96.03	98.40	437.72	57.23	10.02
C1116-162-5750-S	3.948	100.27	98.40	437.72	54.59	9.55
C1116-162-6000-S	4.114	104.51	98.40	437.72	52.19	9.13
C1116-162-6250-S	4.281	108.75	98.40	437.72	49.99	8.75
C1116-162-6500-S	4.448	112.99	98.40	437.72	47.96	8.39
C1116-162-6750-S	4.615	117.23	98.40	437.72	46.10	8.07
C1116-162-7000-S	4.782	121.47	98.40	437.72	44.37	7.76
C1116-162-7500-S	5.116	129.95	98.40	437.72	41.28	7.22
C1116-162-8000-S	5.450	138.43	98.40	437.72	38.59	6.75
C1116-162-8500-S	5.784	146.91	98.40	437.72	36.23	6.34
C1116-162-9000-S	6.118	155.39	98.40	437.72	34.14	5.97
C1116-162-9500-S	6.452	163.88	98.40	437.72	32.28	5.65
C1116-177-1625-S	1.263	32.09	123.76	550.52	342.09	59.87

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1116-177-1750-M	1.116	28.35	0.177	4.50	1.750	44.45	1.279	32.49	1.256	31.90	168.63	750.08	358.18	62.68	**C1116-177-1750-S**	1.353	34.36	123.76	550.52	311.46	54.51
C1116-177-1875-M	1.116	28.35	0.177	4.50	1.875	47.63	1.362	34.60	1.335	33.91	168.63	750.08	328.74	57.53	**C1116-177-1875-S**	1.442	36.63	123.76	550.52	285.86	50.03
C1116-177-2000-M	1.116	28.35	0.177	4.50	2.000	50.80	1.445	36.70	1.414	35.92	168.63	750.08	303.78	53.16	**C1116-177-2000-S**	1.531	38.90	123.76	550.52	264.15	46.23
C1116-177-2125-M	1.116	28.35	0.177	4.50	2.125	53.98	1.528	38.80	1.493	37.93	168.63	750.08	282.34	49.41	**C1116-177-2125-S**	1.621	41.17	123.76	550.52	245.51	42.96
C1116-177-2250-M	1.116	28.35	0.177	4.50	2.250	57.15	1.611	40.91	1.573	39.95	168.63	750.08	263.72	46.15	**C1116-177-2250-S**	1.710	43.44	123.76	550.52	229.32	40.13
C1116-177-2375-M	1.116	28.35	0.177	4.50	2.375	60.33	1.693	43.01	1.652	41.96	168.63	750.08	247.41	43.30	**C1116-177-2375-S**	1.800	45.71	123.76	550.52	215.14	37.65
C1116-177-2500-M	1.116	28.35	0.177	4.50	2.500	63.50	1.776	45.12	1.731	43.97	168.63	750.08	233.00	40.77	**C1116-177-2500-S**	1.889	47.98	123.76	550.52	202.61	35.46
C1116-177-2625-M	1.116	28.35	0.177	4.50	2.625	66.68	1.859	47.22	1.810	45.98	168.63	750.08	220.17	38.53	**C1116-177-2625-S**	1.979	50.26	123.76	550.52	191.46	33.50
C1116-177-2750-M	1.116	28.35	0.177	4.50	2.750	69.85	1.942	49.33	1.889	47.99	168.63	750.08	208.69	36.52	**C1116-177-2750-S**	2.068	52.53	123.76	550.52	181.47	31.76
C1116-177-2875-M	1.116	28.35	0.177	4.50	2.875	73.03	2.025	51.43	1.969	50.00	168.63	750.08	198.34	34.71	**C1116-177-2875-S**	2.157	54.80	123.76	550.52	172.47	30.18
C1116-177-3000-M	1.116	28.35	0.177	4.50	3.000	76.20	2.108	53.53	2.048	52.01	168.63	750.08	188.97	33.07	**C1116-177-3000-S**	2.247	57.07	123.76	550.52	164.32	28.76
C1116-177-3250-M	1.116	28.35	0.177	4.50	3.250	82.55	2.273	57.74	2.206	56.03	168.63	750.08	172.66	30.21	**C1116-177-3250-S**	2.426	61.61	123.76	550.52	150.14	26.27
C1116-177-3500-M	1.116	28.35	0.177	4.50	3.500	88.90	2.439	61.95	2.364	60.06	168.63	750.08	158.94	27.81	**C1116-177-3500-S**	2.605	66.15	123.76	550.52	138.21	24.19
C1116-177-3750-M	1.116	28.35	0.177	4.50	3.750	95.25	2.605	66.16	2.523	64.08	168.63	750.08	147.24	25.77	**C1116-177-3750-S**	2.783	70.70	123.76	550.52	128.03	22.41
C1116-177-4000-M	1.116	28.35	0.177	4.50	4.000	101.60	2.770	70.37	2.681	68.10	168.63	750.08	137.14	24.00	**C1116-177-4000-S**	2.962	75.24	123.76	550.52	119.25	20.87
C1116-177-4250-M	1.116	28.35	0.177	4.50	4.250	107.95	2.936	74.58	2.839	72.12	168.63	750.08	128.34	22.46	**C1116-177-4250-S**	3.141	79.78	123.76	550.52	111.60	19.53
C1116-177-4500-M	1.116	28.35	0.177	4.50	4.500	114.30	3.102	78.79	2.998	76.14	168.63	750.08	120.60	21.11	**C1116-177-4500-S**	3.320	84.32	123.76	550.52	104.87	18.35
C1116-177-4750-M	1.116	28.35	0.177	4.50	4.750	120.65	3.267	82.99	3.156	80.17	168.63	750.08	113.74	19.91	**C1116-177-4750-S**	3.499	88.87	123.76	550.52	98.91	17.31
C1116-177-5000-M	1.116	28.35	0.177	4.50	5.000	127.00	3.433	87.20	3.315	84.19	168.63	750.08	107.62	18.83	**C1116-177-5000-S**	3.678	93.41	123.76	550.52	93.59	16.38
C1116-177-5250-M	1.116	28.35	0.177	4.50	5.250	133.35	3.599	91.41	3.473	88.21	168.63	750.08	102.13	17.87	**C1116-177-5250-S**	3.856	97.95	123.76	550.52	88.81	15.54
C1116-177-5500-M	1.116	28.35	0.177	4.50	5.500	139.70	3.765	95.62	3.631	92.23	168.63	750.08	97.17	17.00	**C1116-177-5500-S**	4.035	102.49	123.76	550.52	84.49	14.79
C1116-177-5750-M	1.116	28.35	0.177	4.50	5.750	146.05	3.930	99.83	3.790	96.26	168.63	750.08	92.66	16.22	**C1116-177-5750-S**	4.214	107.04	123.76	550.52	80.58	14.10
C1116-177-6000-M	1.116	28.35	0.177	4.50	6.000	152.40	4.096	104.04	3.948	100.28	168.63	750.08	88.56	15.50	**C1116-177-6000-S**	4.393	111.58	123.76	550.52	77.01	13.48
C1116-177-6250-M	1.116	28.35	0.177	4.50	6.250	158.75	4.262	108.25	4.106	104.30	168.63	750.08	84.81	14.84	**C1116-177-6250-S**	4.572	116.12	123.76	550.52	73.74	12.91
C1116-177-6500-M	1.116	28.35	0.177	4.50	6.500	165.10	4.427	112.45	4.265	108.32	168.63	750.08	81.36	14.24	**C1116-177-6500-S**	4.751	120.66	123.76	550.52	70.74	12.38
C1116-177-6750-M	1.116	28.35	0.177	4.50	6.750	171.45	4.593	116.66	4.423	112.34	168.63	750.08	78.18	13.68	**C1116-177-6750-S**	4.929	125.21	123.76	550.52	67.98	11.90
C1116-177-7000-M	1.116	28.35	0.177	4.50	7.000	177.80	4.759	120.87	4.581	116.37	168.63	750.08	75.24	13.17	**C1116-177-7000-S**	5.108	129.75	123.76	550.52	65.42	11.45
C1116-177-7500-M	1.116	28.35	0.177	4.50	7.500	190.50	5.090	129.29	4.898	124.41	168.63	750.08	69.97	12.24	**C1116-177-7500-S**	5.466	138.83	123.76	550.52	60.85	10.65
C1116-177-8000-M	1.116	28.35	0.177	4.50	8.000	203.20	5.421	137.71	5.215	132.45	168.63	750.08	65.40	11.44	**C1116-177-8000-S**	5.824	147.92	123.76	550.52	56.87	9.95
C1116-177-8500-M	1.116	28.35	0.177	4.50	8.500	215.90	5.753	146.12	5.531	140.50	168.63	750.08	61.38	10.74	**C1116-177-8500-S**	6.181	157.00	123.76	550.52	53.38	9.34
C1116-177-9000-M	1.116	28.35	0.177	4.50	9.000	228.60	6.084	154.54	5.848	148.54	168.63	750.08	57.83	10.12	**C1116-177-9000-S**	6.539	166.09	123.76	550.52	50.29	8.80
C1116-177-9500-M	1.116	28.35	0.177	4.50	9.500	241.30	6.416	162.96	6.165	156.59	168.63	750.08	54.67	9.57	**C1116-177-9500-S**	6.897	175.17	123.76	550.52	47.54	8.32
C1116-192-1625-M	1.116	28.35	0.192	4.88	1.625	41.28	1.264	32.11	1.261	32.02	210.08	934.50	582.27	101.90	**C1116-192-1625-S**	1.324	33.63	152.43	678.03	506.32	88.61
C1116-192-1750-M	1.116	28.35	0.192	4.88	1.750	44.45	1.353	34.36	1.347	34.21	210.08	934.50	528.99	92.57	**C1116-192-1750-S**	1.419	36.03	152.43	678.03	459.99	80.50
C1116-192-1875-M	1.116	28.35	0.192	4.88	1.875	47.63	1.442	36.61	1.433	36.41	210.08	934.50	484.64	84.81	**C1116-192-1875-S**	1.513	38.44	152.43	678.03	421.43	73.75
C1116-192-2000-M	1.116	28.35	0.192	4.88	2.000	50.80	1.530	38.87	1.520	38.60	210.08	934.50	447.15	78.25	**C1116-192-2000-S**	1.608	40.84	152.43	678.03	388.83	68.05
C1116-192-2125-M	1.116	28.35	0.192	4.88	2.125	53.98	1.619	41.12	1.606	40.79	210.08	934.50	415.05	72.63	**C1116-192-2125-S**	1.703	43.25	152.43	678.03	360.91	63.16
C1116-192-2250-M	1.116	28.35	0.192	4.88	2.250	57.15	1.707	43.37	1.692	42.99	210.08	934.50	387.25	67.77	**C1116-192-2250-S**	1.797	45.65	152.43	678.03	336.74	58.93
C1116-192-2375-M	1.116	28.35	0.192	4.88	2.375	60.33	1.796	45.62	1.779	45.18	210.08	934.50	362.93	63.51	**C1116-192-2375-S**	1.892	48.06	152.43	678.03	315.60	55.23
C1116-192-2500-M	1.116	28.35	0.192	4.88	2.500	63.50	1.885	47.87	1.865	47.37	210.08	934.50	341.49	59.76	**C1116-192-2500-S**	1.987	50.46	152.43	678.03	296.95	51.97
C1116-192-2625-M	1.116	28.35	0.192	4.88	2.625	66.68	1.973	50.13	1.951	49.57	210.08	934.50	322.45	56.43	**C1116-192-2625-S**	2.081	52.87	152.43	678.03	280.39	49.07
C1116-192-2750-M	1.116	28.35	0.192	4.88	2.750	69.85	2.062	52.38	2.038	51.76	210.08	934.50	305.41	53.45	**C1116-192-2750-S**	2.176	55.27	152.43	678.03	265.57	46.48
C1116-192-2875-M	1.116	28.35	0.192	4.88	2.875	73.03	2.151	54.63	2.124	53.95	210.08	934.50	290.09	50.76	**C1116-192-2875-S**	2.271	57.68	152.43	678.03	252.25	44.14
C1116-192-3000-M	1.116	28.35	0.192	4.88	3.000	76.20	2.239	56.88	2.210	56.15	210.08	934.50	276.22	48.34	**C1116-192-3000-S**	2.365	60.08	152.43	678.03	240.19	42.03
C1116-192-3250-M	1.116	28.35	0.192	4.88	3.250	82.55	2.417	61.39	2.383	60.53	210.08	934.50	252.13	44.12	**C1116-192-3250-S**	2.555	64.89	152.43	678.03	219.24	38.37
C1116-192-3500-M	1.116	28.35	0.192	4.88	3.500	88.90	2.594	65.89	2.556	64.92	210.08	934.50	231.90	40.58	**C1116-192-3500-S**	2.744	69.70	152.43	678.03	201.65	35.29
C1116-192-3750-M	1.116	28.35	0.192	4.88	3.750	95.25	2.771	70.39	2.729	69.31	210.08	934.50	214.68	37.57	**C1116-192-3750-S**	2.933	74.51	152.43	678.03	186.68	32.67
C1116-192-4000-M	1.116	28.35	0.192	4.88	4.000	101.60	2.949	74.90	2.901	73.69	210.08	934.50	199.83	34.97	**C1116-192-4000-S**	3.123	79.32	152.43	678.03	173.77	30.41
C1116-192-4250-M	1.116	28.35	0.192	4.88	4.250	107.95	3.126	79.40	3.074	78.08	210.08	934.50	186.91	32.71	**C1116-192-4250-S**	3.312	84.13	152.43	678.03	162.53	28.44
C1116-192-4500-M	1.116	28.35	0.192	4.88	4.500	114.30	3.303	83.90	3.247	82.47	210.08	934.50	175.56	30.72	**C1116-192-4500-S**	3.502	88.94	152.43	678.03	152.66	26.72
C1116-192-4750-M	1.116	28.35	0.192	4.88	4.750	120.65	3.481	88.41	3.419	86.85	210.08	934.50	165.51	28.96	**C1116-192-4750-S**	3.691	93.75	152.43	678.03	143.92	25.19
C1116-192-5000-M	1.116	28.35	0.192	4.88	5.000	127.00	3.658	92.91	3.592	91.24	210.08	934.50	156.54	27.40	**C1116-192-5000-S**	3.880	98.56	152.43	678.03	136.12	23.82
C1116-192-5250-M	1.116	28.35	0.192	4.88	5.250	133.35	3.835	97.42	3.765	95.63	210.08	934.50	148.50	25.99	**C1116-192-5250-S**	4.070	103.37	152.43	678.03	129.13	22.60
C1116-192-5500-M	1.116	28.35	0.192	4.88	5.500	139.70	4.013	101.92	3.938	100.02	210.08	934.50	141.24	24.72	**C1116-192-5500-S**	4.259	108.18	152.43	678.03	122.82	21.49
C1116-192-5750-M	1.116	28.35	0.192	4.88	5.750	146.05	4.190	106.42	4.110	104.40	210.08	934.50	134.66	23.57	**C1116-192-5750-S**	4.448	112.99	152.43	678.03	117.10	20.49
C1116-192-6000-M	1.116	28.35	0.192	4.88	6.000	152.40	4.367	110.93	4.283	108.79	210.08	934.50	128.67	22.52	**C1116-192-6000-S**	4.638	117.80	152.43	678.03	111.89	19.58
C1116-192-6250-M	1.116	28.35	0.192	4.88	6.250	158.75	4.545	115.43	4.456	113.18	210.08	934.50	123.19	21.56	**C1116-192-6250-S**	4.827	122.61	152.43	678.03	107.12	18.75
C1116-192-6500-M	1.116	28.35	0.192	4.88	6.500	165.10	4.722	119.94	4.628	117.56	210.08	934.50	118.15	20.68	**C1116-192-6500-S**	5.016	127.42	152.43	678.03	102.74	17.98
C1116-192-6750-M	1.116	28.35	0.192	4.88	6.750	171.45	4.899	124.44	4.801	121.95	210.08	934.50	113.51	19.86	**C1116-192-6750-S**	5.206	132.22	152.43	678.03	98.70	17.27
C1116-192-7000-M	1.116	28.35	0.192	4.88	7.000	177.80	5.077	128.94	4.974	126.34	210.08	934.50	109.22	19.11	**C1116-192-7000-S**	5.395	137.03	152.43	678.03	94.97	16.62
C1116-192-7500-M	1.116	28.35	0.192	4.88	7.500	190.50	5.431	137.95	5.319	135.11	210.08	934.50	101.55	17.77	**C1116-192-7500-S**	5.774	146.65	152.43	678.03	88.30	15.45
C1116-192-8000-M	1.116	28.35	0.192	4.88	8.000	203.20	5.786	146.96	5.665	143.89	210.08	934.50	94.88	16.60	**C1116-192-8000-S**	6.152	156.27	152.43	678.03	82.50	14.44
C1116-192-8500-M	1.116	28.35	0.192	4.88	8.500	215.90	6.140	155.97	6.010	152.66	210.08	934.50	89.03	15.58	**C1116-192-8500-S**	6.531	165.89	152.43	678.03	77.42	13.55
C1116-192-9000-M	1.116	28.35	0.192	4.88	9.000	228.60	6.495	164.97	6.356	161.43	210.08	934.50	83.87	14.68	**C1116-192-9000-S**	6.910	175.51	152.43	678.03	72.93	12.76

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1116-192-9500-M	**1.116**	**28.35**	**0.192**	**4.88**	**9.500**	**241.30**	**6.850**	**173.98**	**6.701**	**170.21**	**210.08**	**934.50**	**79.27**	**13.87**
C1116-207-1625-M	**1.116**	**28.35**	**0.207**	**5.26**	**1.625**	**41.28**	**1.377**	**34.97**	**1.333**	**33.85**	**211.19**	**939.41**	**850.39**	**148.82**
C1116-207-1750-M	**1.116**	**28.35**	**0.207**	**5.26**	**1.750**	**44.45**	**1.474**	**37.44**	**1.426**	**36.21**	**212.59**	**945.64**	**770.82**	**134.89**
C1116-207-1875-M	**1.116**	**28.35**	**0.207**	**5.26**	**1.875**	**47.63**	**1.572**	**39.92**	**1.518**	**38.56**	**213.75**	**950.80**	**704.87**	**123.35**
C1116-207-2000-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.000**	**50.80**	**1.669**	**42.40**	**1.611**	**40.92**	**214.73**	**955.15**	**649.32**	**113.63**
C1116-207-2125-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.125**	**53.98**	**1.767**	**44.88**	**1.704**	**43.27**	**215.56**	**958.86**	**601.88**	**105.33**
C1116-207-2250-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.250**	**57.15**	**1.864**	**47.36**	**1.796**	**45.63**	**216.28**	**962.07**	**560.90**	**98.16**
C1116-207-2375-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.375**	**60.33**	**1.962**	**49.83**	**1.889**	**47.98**	**216.91**	**964.86**	**525.15**	**91.90**
C1116-207-2500-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.500**	**63.50**	**2.060**	**52.31**	**1.982**	**50.34**	**217.46**	**967.33**	**493.68**	**86.39**
C1116-207-2625-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.625**	**66.68**	**2.157**	**54.79**	**2.074**	**52.69**	**217.95**	**969.51**	**465.77**	**81.51**
C1116-207-2750-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.750**	**69.85**	**2.255**	**57.27**	**2.167**	**55.05**	**218.39**	**971.46**	**440.85**	**77.15**
C1116-207-2875-M	**1.116**	**28.35**	**0.207**	**5.26**	**2.875**	**73.03**	**2.261**	**57.42**	**2.260**	**57.40**	**257.06**	**1143.48**	**418.46**	**73.23**
C1116-207-3000-M	**1.116**	**28.35**	**0.207**	**5.26**	**3.000**	**76.20**	**2.354**	**59.80**	**2.353**	**59.76**	**257.06**	**1143.48**	**398.23**	**69.69**
C1116-207-3250-M	**1.116**	**28.35**	**0.207**	**5.26**	**3.250**	**82.55**	**2.542**	**64.57**	**2.538**	**64.47**	**257.06**	**1143.48**	**363.12**	**63.55**
C1116-207-3500-M	**1.116**	**28.35**	**0.207**	**5.26**	**3.500**	**88.90**	**2.730**	**69.33**	**2.723**	**69.17**	**257.06**	**1143.48**	**333.71**	**58.40**
C1116-207-3750-M	**1.116**	**28.35**	**0.207**	**5.26**	**3.750**	**95.25**	**2.917**	**74.10**	**2.909**	**73.88**	**257.06**	**1143.48**	**308.70**	**54.02**
C1116-207-4000-M	**1.116**	**28.35**	**0.207**	**5.26**	**4.000**	**101.60**	**3.105**	**78.86**	**3.094**	**78.59**	**257.06**	**1143.48**	**287.18**	**50.26**
C1116-207-4250-M	**1.116**	**28.35**	**0.207**	**5.26**	**4.250**	**107.95**	**3.292**	**83.63**	**3.280**	**83.30**	**257.06**	**1143.48**	**268.46**	**46.98**
C1116-207-4500-M	**1.116**	**28.35**	**0.207**	**5.26**	**4.500**	**114.30**	**3.480**	**88.39**	**3.465**	**88.01**	**257.06**	**1143.48**	**252.04**	**44.11**
C1116-207-4750-M	**1.116**	**28.35**	**0.207**	**5.26**	**4.750**	**120.65**	**3.668**	**93.16**	**3.650**	**92.72**	**257.06**	**1143.48**	**237.51**	**41.56**
C1116-207-5000-M	**1.116**	**28.35**	**0.207**	**5.26**	**5.000**	**127.00**	**3.855**	**97.92**	**3.836**	**97.43**	**257.06**	**1143.48**	**224.56**	**39.30**
C1116-207-5250-M	**1.116**	**28.35**	**0.207**	**5.26**	**5.250**	**133.35**	**4.043**	**102.69**	**4.021**	**102.14**	**257.06**	**1143.48**	**212.95**	**37.27**
C1116-207-5500-M	**1.116**	**28.35**	**0.207**	**5.26**	**5.500**	**139.70**	**4.230**	**107.45**	**4.207**	**106.85**	**257.06**	**1143.48**	**202.48**	**35.43**
C1116-207-5750-M	**1.116**	**28.35**	**0.207**	**5.26**	**5.750**	**146.05**	**4.418**	**112.22**	**4.392**	**111.56**	**257.06**	**1143.48**	**193.00**	**33.77**
C1116-207-6000-M	**1.116**	**28.35**	**0.207**	**5.26**	**6.000**	**152.40**	**4.606**	**116.98**	**4.578**	**116.27**	**257.06**	**1143.48**	**184.36**	**32.26**
C1116-207-6250-M	**1.116**	**28.35**	**0.207**	**5.26**	**6.250**	**158.75**	**4.793**	**121.75**	**4.763**	**120.98**	**257.06**	**1143.48**	**176.46**	**30.88**
C1116-207-6500-M	**1.116**	**28.35**	**0.207**	**5.26**	**6.500**	**165.10**	**4.981**	**126.51**	**4.948**	**125.69**	**257.06**	**1143.48**	**169.21**	**29.61**
C1116-207-6750-M	**1.116**	**28.35**	**0.207**	**5.26**	**6.750**	**171.45**	**5.168**	**131.28**	**5.134**	**130.40**	**257.06**	**1143.48**	**162.54**	**28.44**
C1116-207-7000-M	**1.116**	**28.35**	**0.207**	**5.26**	**7.000**	**177.80**	**5.356**	**136.04**	**5.319**	**135.11**	**257.06**	**1143.48**	**156.37**	**27.36**
C1116-207-7500-M	**1.116**	**28.35**	**0.207**	**5.26**	**7.500**	**190.50**	**5.731**	**145.57**	**5.690**	**144.53**	**257.06**	**1143.48**	**145.33**	**25.43**
C1116-207-8000-M	**1.116**	**28.35**	**0.207**	**5.26**	**8.000**	**203.20**	**6.106**	**155.10**	**6.061**	**153.94**	**257.06**	**1143.48**	**135.75**	**23.76**
C1116-207-8500-M	**1.116**	**28.35**	**0.207**	**5.26**	**8.500**	**215.90**	**6.482**	**164.63**	**6.432**	**163.36**	**257.06**	**1143.48**	**127.36**	**22.29**
C1116-207-9000-M	**1.116**	**28.35**	**0.207**	**5.26**	**9.000**	**228.60**	**6.857**	**174.16**	**6.802**	**172.78**	**257.06**	**1143.48**	**119.94**	**20.99**
C1116-207-9500-M	**1.116**	**28.35**	**0.207**	**5.26**	**9.500**	**241.30**	**7.232**	**183.69**	**7.173**	**182.20**	**257.06**	**1143.48**	**113.34**	**19.83**
D13580	1.142	29.00	0.157	4.00	1.614	41.00	0.902	22.90	0.866	22.00	191.58	852.20	272.34	47.66
D13590	1.142	29.00	0.157	4.00	2.382	60.50	1.268	32.20	1.181	30.00	191.58	852.20	173.14	30.30
D13600	1.142	29.00	0.157	4.00	3.524	89.50	1.811	46.00	1.654	42.00	191.58	852.20	112.06	19.61
D13610	1.142	29.00	0.157	4.00	5.118	130.00	2.539	64.50	2.283	58.00	191.58	852.20	76.23	13.34
D13620	1.142	29.00	0.157	4.00	7.283	185.00	3.626	92.10	3.228	82.00	191.58	852.20	51.54	9.02
C1175-092-2125-M	**1.175**	**29.85**	**0.092**	**2.34**	**2.125**	**53.98**	**0.794**	**20.17**	**0.587**	**14.91**	**26.46**	**117.69**	**19.88**	**3.48**
C1175-092-2250-M	**1.175**	**29.85**	**0.092**	**2.34**	**2.250**	**57.15**	**0.833**	**21.17**	**0.613**	**15.56**	**26.46**	**117.69**	**18.68**	**3.27**
C1175-092-2375-M	**1.175**	**29.85**	**0.092**	**2.34**	**2.375**	**60.33**	**0.873**	**22.17**	**0.638**	**16.20**	**26.46**	**117.69**	**17.61**	**3.08**
C1175-092-2500-M	**1.175**	**29.85**	**0.092**	**2.34**	**2.500**	**63.50**	**0.912**	**23.16**	**0.663**	**16.85**	**26.46**	**117.69**	**16.66**	**2.92**
C1175-092-2625-M	**1.175**	**29.85**	**0.092**	**2.34**	**2.625**	**66.68**	**0.951**	**24.16**	**0.689**	**17.49**	**26.46**	**117.69**	**15.81**	**2.77**
C1175-092-2750-M	**1.175**	**29.85**	**0.092**	**2.34**	**2.750**	**69.85**	**0.991**	**25.16**	**0.714**	**18.14**	**26.46**	**117.69**	**15.04**	**2.63**
C1175-092-2875-M	**1.175**	**29.85**	**0.092**	**2.34**	**2.875**	**73.03**	**1.030**	**26.16**	**0.739**	**18.78**	**26.46**	**117.69**	**14.34**	**2.51**
C1175-092-3000-M	**1.175**	**29.85**	**0.092**	**2.34**	**3.000**	**76.20**	**1.069**	**27.16**	**0.765**	**19.43**	**26.46**	**117.69**	**13.70**	**2.40**
C1175-092-3250-M	**1.175**	**29.85**	**0.092**	**2.34**	**3.250**	**82.55**	**1.148**	**29.15**	**0.816**	**20.71**	**26.46**	**117.69**	**12.59**	**2.20**
C1175-092-3500-M	**1.175**	**29.85**	**0.092**	**2.34**	**3.500**	**88.90**	**1.226**	**31.15**	**0.866**	**22.00**	**26.46**	**117.69**	**11.64**	**2.04**
C1175-092-3750-M	**1.175**	**29.85**	**0.092**	**2.34**	**3.750**	**95.25**	**1.305**	**33.14**	**0.917**	**23.29**	**26.46**	**117.69**	**10.82**	**1.89**
C1175-092-4000-M	**1.175**	**29.85**	**0.092**	**2.34**	**4.000**	**101.60**	**1.383**	**35.14**	**0.968**	**24.58**	**26.46**	**117.69**	**10.11**	**1.77**
C1175-092-4250-M	**1.175**	**29.85**	**0.092**	**2.34**	**4.250**	**107.95**	**1.462**	**37.13**	**1.018**	**25.87**	**26.46**	**117.69**	**9.49**	**1.66**
C1175-092-4500-M	**1.175**	**29.85**	**0.092**	**2.34**	**4.500**	**114.30**	**1.541**	**39.13**	**1.069**	**27.16**	**26.46**	**117.69**	**8.94**	**1.56**
C1175-092-4750-M	**1.175**	**29.85**	**0.092**	**2.34**	**4.750**	**120.65**	**1.619**	**41.13**	**1.120**	**28.45**	**26.46**	**117.69**	**8.45**	**1.48**
C1175-092-5000-M	**1.175**	**29.85**	**0.092**	**2.34**	**5.000**	**127.00**	**1.698**	**43.12**	**1.171**	**29.74**	**26.46**	**117.69**	**8.01**	**1.40**
C1175-092-5250-M	**1.175**	**29.85**	**0.092**	**2.34**	**5.250**	**133.35**	**1.776**	**45.12**	**1.221**	**31.03**	**26.46**	**117.69**	**7.62**	**1.33**
C1175-092-5500-M	**1.175**	**29.85**	**0.092**	**2.34**	**5.500**	**139.70**	**1.855**	**47.11**	**1.272**	**32.31**	**26.46**	**117.69**	**7.26**	**1.27**
C1175-092-5750-M	**1.175**	**29.85**	**0.092**	**2.34**	**5.750**	**146.05**	**1.933**	**49.11**	**1.323**	**33.60**	**26.46**	**117.69**	**6.93**	**1.21**
C1175-092-6000-M	**1.175**	**29.85**	**0.092**	**2.34**	**6.000**	**152.40**	**2.012**	**51.11**	**1.374**	**34.89**	**26.46**	**117.69**	**6.63**	**1.16**
C1175-092-6250-M	**1.175**	**29.85**	**0.092**	**2.34**	**6.250**	**158.75**	**2.091**	**53.10**	**1.424**	**36.18**	**26.46**	**117.69**	**6.36**	**1.11**
C1175-092-6500-M	**1.175**	**29.85**	**0.092**	**2.34**	**6.500**	**165.10**	**2.169**	**55.10**	**1.475**	**37.47**	**26.46**	**117.69**	**6.11**	**1.07**
C1175-092-6750-M	**1.175**	**29.85**	**0.092**	**2.34**	**6.750**	**171.45**	**2.248**	**57.09**	**1.526**	**38.76**	**26.46**	**117.69**	**5.88**	**1.03**
C1175-092-7000-M	**1.175**	**29.85**	**0.092**	**2.34**	**7.000**	**177.80**	**2.326**	**59.09**	**1.577**	**40.05**	**26.46**	**117.69**	**5.66**	**0.99**
C1175-092-7500-M	**1.175**	**29.85**	**0.092**	**2.34**	**7.500**	**190.50**	**2.484**	**63.08**	**1.678**	**42.63**	**26.46**	**117.69**	**5.27**	**0.92**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1116-192-9500-S	**7.289**	**185.13**	**152.43**	**678.03**	**68.93**	**12.06**
C1116-207-1625-S	**1.376**	**34.94**	**184.40**	**820.23**	**739.47**	**129.41**
C1116-207-1750-S	**1.475**	**37.46**	**184.40**	**820.23**	**670.28**	**117.30**
C1116-207-1875-S	**1.574**	**39.98**	**184.40**	**820.23**	**612.93**	**107.26**
C1116-207-2000-S	**1.673**	**42.50**	**184.40**	**820.23**	**564.63**	**98.81**
C1116-207-2125-S	**1.773**	**45.03**	**184.40**	**820.23**	**523.38**	**91.59**
C1116-207-2250-S	**1.872**	**47.55**	**184.40**	**820.23**	**487.74**	**85.36**
C1116-207-2375-S	**1.971**	**50.07**	**184.40**	**820.23**	**456.65**	**79.91**
C1116-207-2500-S	**2.070**	**52.59**	**184.40**	**820.23**	**429.29**	**75.13**
C1116-207-2625-S	**2.170**	**55.11**	**184.40**	**820.23**	**405.02**	**70.88**
C1116-207-2750-S	**2.269**	**57.63**	**184.40**	**820.23**	**383.35**	**67.09**
C1116-207-2875-S	**2.368**	**60.15**	**184.40**	**820.23**	**363.88**	**63.68**
C1116-207-3000-S	**2.468**	**62.67**	**184.40**	**820.23**	**346.29**	**60.60**
C1116-207-3250-S	**2.666**	**67.72**	**184.40**	**820.23**	**315.76**	**55.26**
C1116-207-3500-S	**2.865**	**72.76**	**184.40**	**820.23**	**290.18**	**50.78**
C1116-207-3750-S	**3.063**	**77.80**	**184.40**	**820.23**	**268.43**	**46.98**
C1116-207-4000-S	**3.262**	**82.84**	**184.40**	**820.23**	**249.72**	**43.70**
C1116-207-4250-S	**3.460**	**87.89**	**184.40**	**820.23**	**233.45**	**40.85**
C1116-207-4500-S	**3.659**	**92.93**	**184.40**	**820.23**	**219.16**	**38.35**
C1116-207-4750-S	**3.857**	**97.97**	**184.40**	**820.23**	**206.53**	**36.14**
C1116-207-5000-S	**4.056**	**103.01**	**184.40**	**820.23**	**195.27**	**34.17**
C1116-207-5250-S	**4.254**	**108.06**	**184.40**	**820.23**	**185.17**	**32.41**
C1116-207-5500-S	**4.453**	**113.10**	**184.40**	**820.23**	**176.07**	**30.81**
C1116-207-5750-S	**4.651**	**118.14**	**184.40**	**820.23**	**167.82**	**29.37**
C1116-207-6000-S	**4.850**	**123.18**	**184.40**	**820.23**	**160.31**	**28.05**
C1116-207-6250-S	**5.048**	**128.23**	**184.40**	**820.23**	**153.44**	**26.85**
C1116-207-6500-S	**5.247**	**133.27**	**184.40**	**820.23**	**147.14**	**25.75**
C1116-207-6750-S	**5.445**	**138.31**	**184.40**	**820.23**	**141.33**	**24.73**
C1116-207-7000-S	**5.644**	**143.35**	**184.40**	**820.23**	**135.97**	**23.79**
C1116-207-7500-S	**6.041**	**153.44**	**184.40**	**820.23**	**126.38**	**22.12**
C1116-207-8000-S	**6.438**	**163.52**	**184.40**	**820.23**	**118.05**	**20.66**
C1116-207-8500-S	**6.835**	**173.61**	**184.40**	**820.23**	**110.75**	**19.38**
C1116-207-9000-S	**7.232**	**183.69**	**184.40**	**820.23**	**104.30**	**18.25**
C1116-207-9500-S	**7.629**	**193.78**	**184.40**	**820.23**	**98.56**	**17.25**
D23580	0.902	22.90	159.65	710.17	226.86	39.70
D23590	1.268	32.20	159.65	710.17	144.23	25.24
D23600	1.811	46.00	159.65	710.17	93.37	16.34
D23610	2.539	64.50	159.65	710.17	63.49	11.11
D23620	3.626	92.10	159.65	710.17	42.91	7.51
C1175-092-2125-S	**0.929**	**23.59**	**20.68**	**91.97**	**17.29**	**3.03**
C1175-092-2250-S	**0.977**	**24.81**	**20.68**	**91.97**	**16.24**	**2.84**
C1175-092-2375-S	**1.025**	**26.03**	**20.68**	**91.97**	**15.31**	**2.68**
C1175-092-2500-S	**1.073**	**27.25**	**20.68**	**91.97**	**14.49**	**2.54**
C1175-092-2625-S	**1.121**	**28.47**	**20.68**	**91.97**	**13.75**	**2.41**
C1175-092-2750-S	**1.169**	**29.69**	**20.68**	**91.97**	**13.08**	**2.29**
C1175-092-2875-S	**1.217**	**30.91**	**20.68**	**91.97**	**12.47**	**2.18**
C1175-092-3000-S	**1.265**	**32.12**	**20.68**	**91.97**	**11.92**	**2.09**
C1175-092-3250-S	**1.361**	**34.56**	**20.68**	**91.97**	**10.94**	**1.92**
C1175-092-3500-S	**1.457**	**37.00**	**20.68**	**91.97**	**10.12**	**1.77**
C1175-092-3750-S	**1.553**	**39.44**	**20.68**	**91.97**	**9.41**	**1.65**
C1175-092-4000-S	**1.649**	**41.87**	**20.68**	**91.97**	**8.79**	**1.54**
C1175-092-4250-S	**1.744**	**44.31**	**20.68**	**91.97**	**8.25**	**1.44**
C1175-092-4500-S	**1.840**	**46.75**	**20.68**	**91.97**	**7.77**	**1.36**
C1175-092-4750-S	**1.936**	**49.18**	**20.68**	**91.97**	**7.35**	**1.29**
C1175-092-5000-S	**2.032**	**51.62**	**20.68**	**91.97**	**6.97**	**1.22**
C1175-092-5250-S	**2.128**	**54.06**	**20.68**	**91.97**	**6.62**	**1.16**
C1175-092-5500-S	**2.224**	**56.49**	**20.68**	**91.97**	**6.31**	**1.10**
C1175-092-5750-S	**2.320**	**58.93**	**20.68**	**91.97**	**6.03**	**1.05**
C1175-092-6000-S	**2.416**	**61.37**	**20.68**	**91.97**	**5.77**	**1.01**
C1175-092-6250-S	**2.512**	**63.81**	**20.68**	**91.97**	**5.53**	**0.97**
C1175-092-6500-S	**2.608**	**66.24**	**20.68**	**91.97**	**5.31**	**0.93**
C1175-092-6750-S	**2.704**	**68.68**	**20.68**	**91.97**	**5.11**	**0.89**
C1175-092-7000-S	**2.800**	**71.12**	**20.68**	**91.97**	**4.92**	**0.86**
C1175-092-7500-S	**2.992**	**75.99**	**20.68**	**91.97**	**4.59**	**0.80**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1175-092-8000-M	1.175	29.85	0.092	2.34	8.000	203.20	2.641	67.07	1.780	45.20	26.46	117.69	4.94	0.86
C1175-092-8500-M	1.175	29.85	0.092	2.34	8.500	215.90	2.798	71.06	1.881	47.78	26.46	117.69	4.64	0.81
C1175-092-9000-M	1.175	29.85	0.092	2.34	9.000	228.60	2.955	75.06	1.983	50.36	26.46	117.69	4.38	0.77
C1175-092-9500-M	1.175	29.85	0.092	2.34	9.500	241.30	3.112	79.05	2.084	52.94	26.46	117.69	4.14	0.72
C1175-098-2000-M	1.175	29.85	0.098	2.49	2.000	50.80	0.802	20.38	0.620	15.76	31.55	140.33	26.34	4.61
C1175-098-2125-M	1.175	29.85	0.098	2.49	2.125	53.98	0.844	21.44	0.649	16.49	31.55	140.33	24.63	4.31
C1175-098-2250-M	1.175	29.85	0.098	2.49	2.250	57.15	0.886	22.51	0.678	17.22	31.55	140.33	23.13	4.05
C1175-098-2375-M	1.175	29.85	0.098	2.49	2.375	60.33	0.928	23.58	0.707	17.95	31.55	140.33	21.81	3.82
C1175-098-2500-M	1.175	29.85	0.098	2.49	2.500	63.50	0.970	24.65	0.735	18.68	31.55	140.33	20.62	3.61
C1175-098-2625-M	1.175	29.85	0.098	2.49	2.625	66.68	1.012	25.71	0.764	19.41	31.55	140.33	19.56	3.42
C1175-098-2750-M	1.175	29.85	0.098	2.49	2.750	69.85	1.054	26.78	0.793	20.14	31.55	140.33	18.60	3.26
C1175-098-2875-M	1.175	29.85	0.098	2.49	2.875	73.03	1.096	27.85	0.822	20.87	31.55	140.33	17.74	3.10
C1175-098-3000-M	1.175	29.85	0.098	2.49	3.000	76.20	1.138	28.91	0.850	21.60	31.55	140.33	16.95	2.97
C1175-098-3250-M	1.175	29.85	0.098	2.49	3.250	82.55	1.222	31.05	0.908	23.06	31.55	140.33	15.56	2.72
C1175-098-3500-M	1.175	29.85	0.098	2.49	3.500	88.90	1.306	33.18	0.965	24.52	31.55	140.33	14.38	2.52
C1175-098-3750-M	1.175	29.85	0.098	2.49	3.750	95.25	1.390	35.32	1.023	25.98	31.55	140.33	13.37	2.34
C1175-098-4000-M	1.175	29.85	0.098	2.49	4.000	101.60	1.474	37.45	1.080	27.44	31.55	140.33	12.49	2.19
C1175-098-4250-M	1.175	29.85	0.098	2.49	4.250	107.95	1.558	39.58	1.138	28.90	31.55	140.33	11.72	2.05
C1175-098-4500-M	1.175	29.85	0.098	2.49	4.500	114.30	1.642	41.72	1.195	30.35	31.55	140.33	11.04	1.93
C1175-098-4750-M	1.175	29.85	0.098	2.49	4.750	120.65	1.726	43.85	1.253	31.81	31.55	140.33	10.43	1.83
C1175-098-5000-M	1.175	29.85	0.098	2.49	5.000	127.00	1.810	45.99	1.310	33.27	31.55	140.33	9.89	1.73
C1175-098-5250-M	1.175	29.85	0.098	2.49	5.250	133.35	1.894	48.12	1.367	34.73	31.55	140.33	9.40	1.65
C1175-098-5500-M	1.175	29.85	0.098	2.49	5.500	139.70	1.979	50.25	1.425	36.19	31.55	140.33	8.96	1.57
C1175-098-5750-M	1.175	29.85	0.098	2.49	5.750	146.05	2.063	52.39	1.482	37.65	31.55	140.33	8.56	1.50
C1175-098-6000-M	1.175	29.85	0.098	2.49	6.000	152.40	2.147	54.52	1.540	39.11	31.55	140.33	8.19	1.43
C1175-098-6250-M	1.175	29.85	0.098	2.49	6.250	158.75	2.231	56.66	1.597	40.57	31.55	140.33	7.85	1.37
C1175-098-6500-M	1.175	29.85	0.098	2.49	6.500	165.10	2.315	58.79	1.655	42.03	31.55	140.33	7.54	1.32
C1175-098-6750-M	1.175	29.85	0.098	2.49	6.750	171.45	2.399	60.92	1.712	43.49	31.55	140.33	7.25	1.27
C1175-098-7000-M	1.175	29.85	0.098	2.49	7.000	177.80	2.483	63.06	1.770	44.95	31.55	140.33	6.98	1.22
C1175-098-7500-M	1.175	29.85	0.098	2.49	7.500	190.50	2.651	67.33	1.885	47.87	31.55	140.33	6.51	1.14
C1175-098-8000-M	1.175	29.85	0.098	2.49	8.000	203.20	2.819	71.59	2.000	50.79	31.55	140.33	6.09	1.07
C1175-098-8500-M	1.175	29.85	0.098	2.49	8.500	215.90	2.987	75.86	2.114	53.71	31.55	140.33	5.72	1.00
C1175-098-9000-M	1.175	29.85	0.098	2.49	9.000	228.60	3.155	80.13	2.229	56.63	31.55	140.33	5.40	0.94
C1175-098-9500-M	1.175	29.85	0.098	2.49	9.500	241.30	3.323	84.40	2.344	59.55	31.55	140.33	5.11	0.89
C1175-105-2000-M	1.175	29.85	0.105	2.67	2.000	50.80	0.859	21.81	0.690	17.53	38.22	170.01	33.49	5.86
C1175-105-2125-M	1.175	29.85	0.105	2.67	2.125	53.98	0.904	22.96	0.723	18.36	38.22	170.01	31.30	5.48
C1175-105-2250-M	1.175	29.85	0.105	2.67	2.250	57.15	0.949	24.11	0.756	19.19	38.22	170.01	29.38	5.14
C1175-105-2375-M	1.175	29.85	0.105	2.67	2.375	60.33	0.995	25.26	0.788	20.03	38.22	170.01	27.69	4.85
C1175-105-2500-M	1.175	29.85	0.105	2.67	2.500	63.50	1.040	26.41	0.821	20.86	38.22	170.01	26.18	4.58
C1175-105-2625-M	1.175	29.85	0.105	2.67	2.625	66.68	1.085	27.56	0.854	21.69	38.22	170.01	24.82	4.34
C1175-105-2750-M	1.175	29.85	0.105	2.67	2.750	69.85	1.130	28.71	0.887	22.53	38.22	170.01	23.60	4.13
C1175-105-2875-M	1.175	29.85	0.105	2.67	2.875	73.03	1.176	29.86	0.920	23.36	38.22	170.01	22.49	3.94
C1175-105-3000-M	1.175	29.85	0.105	2.67	3.000	76.20	1.221	31.01	0.952	24.19	38.22	170.01	21.48	3.76
C1175-105-3250-M	1.175	29.85	0.105	2.67	3.250	82.55	1.312	33.32	1.018	25.86	38.22	170.01	19.72	3.45
C1175-105-3500-M	1.175	29.85	0.105	2.67	3.500	88.90	1.402	35.62	1.084	27.52	38.22	170.01	18.22	3.19
C1175-105-3750-M	1.175	29.85	0.105	2.67	3.750	95.25	1.493	37.92	1.149	29.19	38.22	170.01	16.93	2.96
C1175-105-4000-M	1.175	29.85	0.105	2.67	4.000	101.60	1.583	40.22	1.215	30.86	38.22	170.01	15.82	2.77
C1175-105-4250-M	1.175	29.85	0.105	2.67	4.250	107.95	1.674	42.52	1.280	32.52	38.22	170.01	14.84	2.60
C1175-105-4500-M	1.175	29.85	0.105	2.67	4.500	114.30	1.765	44.82	1.346	34.19	38.22	170.01	13.97	2.45
C1175-105-4750-M	1.175	29.85	0.105	2.67	4.750	120.65	1.855	47.12	1.412	35.85	38.22	170.01	13.20	2.31
C1175-105-5000-M	1.175	29.85	0.105	2.67	5.000	127.00	1.946	49.42	1.477	37.52	38.22	170.01	12.51	2.19
C1175-105-5250-M	1.175	29.85	0.105	2.67	5.250	133.35	2.036	51.72	1.543	39.18	38.22	170.01	11.89	2.08
C1175-105-5500-M	1.175	29.85	0.105	2.67	5.500	139.70	2.127	54.02	1.608	40.85	38.22	170.01	11.33	1.98
C1175-105-5750-M	1.175	29.85	0.105	2.67	5.750	146.05	2.218	56.33	1.674	42.52	38.22	170.01	10.82	1.89
C1175-105-6000-M	1.175	29.85	0.105	2.67	6.000	152.40	2.308	58.63	1.739	44.18	38.22	170.01	10.35	1.81
C1175-105-6250-M	1.175	29.85	0.105	2.67	6.250	158.75	2.399	60.93	1.805	45.85	38.22	170.01	9.92	1.74
C1175-105-6500-M	1.175	29.85	0.105	2.67	6.500	165.10	2.489	63.23	1.871	47.51	38.22	170.01	9.53	1.67
C1175-105-6750-M	1.175	29.85	0.105	2.67	6.750	171.45	2.580	65.53	1.936	49.18	38.22	170.01	9.17	1.60
C1175-105-7000-M	1.175	29.85	0.105	2.67	7.000	177.80	2.671	67.83	2.002	50.85	38.22	170.01	8.83	1.54
C1175-105-7500-M	1.175	29.85	0.105	2.67	7.500	190.50	2.852	72.43	2.133	54.18	38.22	170.01	8.22	1.44
C1175-105-8000-M	1.175	29.85	0.105	2.67	8.000	203.20	3.033	77.04	2.264	57.51	38.22	170.01	7.70	1.35
C1175-105-8500-M*	1.175	29.85	0.105	2.67	8.500	215.90	3.281	83.34	2.478	62.94	38.22	170.01	7.32	1.28
C1175-105-9000-M*	1.175	29.85	0.105	2.67	9.000	228.60	3.462	87.94	2.609	66.27	38.22	170.01	6.90	1.21
C1175-105-9500-M*	1.175	29.85	0.105	2.67	9.500	241.30	3.643	92.54	2.740	69.61	38.22	170.01	6.53	1.14

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1175-092-8000-S	3.184	80.86	20.68	91.97	4.29	0.75
C1175-092-8500-S	3.376	85.74	20.68	91.97	4.04	0.71
C1175-092-9000-S	3.567	90.61	20.68	91.97	3.81	0.67
C1175-092-9500-S	3.759	95.49	20.68	91.97	3.60	0.63
C1175-098-2000-S	0.928	23.57	24.56	109.23	22.90	4.01
C1175-098-2125-S	0.979	24.85	24.56	109.23	21.42	3.75
C1175-098-2250-S	1.029	26.14	24.56	109.23	20.12	3.52
C1175-098-2375-S	1.080	27.43	24.56	109.23	18.96	3.32
C1175-098-2500-S	1.131	28.72	24.56	109.23	17.93	3.14
C1175-098-2625-S	1.181	30.01	24.56	109.23	17.01	2.98
C1175-098-2750-S	1.232	31.29	24.56	109.23	16.18	2.83
C1175-098-2875-S	1.283	32.58	24.56	109.23	15.42	2.70
C1175-098-3000-S	1.333	33.87	24.56	109.23	14.74	2.58
C1175-098-3250-S	1.435	36.45	24.56	109.23	13.53	2.37
C1175-098-3500-S	1.536	39.02	24.56	109.23	12.51	2.19
C1175-098-3750-S	1.638	41.60	24.56	109.23	11.63	2.03
C1175-098-4000-S	1.739	44.17	24.56	109.23	10.86	1.90
C1175-098-4250-S	1.841	46.75	24.56	109.23	10.19	1.78
C1175-098-4500-S	1.942	49.33	24.56	109.23	9.60	1.68
C1175-098-4750-S	2.043	51.90	24.56	109.23	9.07	1.59
C1175-098-5000-S	2.145	54.48	24.56	109.23	8.60	1.51
C1175-098-5250-S	2.246	57.05	24.56	109.23	8.18	1.43
C1175-098-5500-S	2.348	59.63	24.56	109.23	7.79	1.36
C1175-098-5750-S	2.449	62.21	24.56	109.23	7.44	1.30
C1175-098-6000-S	2.550	64.78	24.56	109.23	7.12	1.25
C1175-098-6250-S	2.652	67.36	24.56	109.23	6.83	1.19
C1175-098-6500-S	2.753	69.93	24.56	109.23	6.55	1.15
C1175-098-6750-S	2.855	72.51	24.56	109.23	6.30	1.10
C1175-098-7000-S	2.956	75.09	24.56	109.23	6.07	1.06
C1175-098-7500-S	3.159	80.24	24.56	109.23	5.66	0.99
C1175-098-8000-S	3.362	85.39	24.56	109.23	5.29	0.93
C1175-098-8500-S	3.565	90.54	24.56	109.23	4.98	0.87
C1175-098-9000-S	3.767	95.69	24.56	109.23	4.69	0.82
C1175-098-9500-S	3.970	100.85	24.56	109.23	4.44	0.78
C1175-105-2000-S	0.983	24.97	29.61	131.71	29.12	5.10
C1175-105-2125-S	1.037	26.34	29.61	131.71	27.22	4.76
C1175-105-2250-S	1.091	27.71	29.61	131.71	25.55	4.47
C1175-105-2375-S	1.145	29.09	29.61	131.71	24.08	4.21
C1175-105-2500-S	1.199	30.46	29.61	131.71	22.76	3.98
C1175-105-2625-S	1.253	31.83	29.61	131.71	21.58	3.78
C1175-105-2750-S	1.307	33.20	29.61	131.71	20.52	3.59
C1175-105-2875-S	1.361	34.57	29.61	131.71	19.56	3.42
C1175-105-3000-S	1.415	35.94	29.61	131.71	18.68	3.27
C1175-105-3250-S	1.523	38.69	29.61	131.71	17.15	3.00
C1175-105-3500-S	1.631	41.43	29.61	131.71	15.84	2.77
C1175-105-3750-S	1.739	44.17	29.61	131.71	14.72	2.58
C1175-105-4000-S	1.847	46.91	29.61	131.71	13.75	2.41
C1175-105-4250-S	1.955	49.66	29.61	131.71	12.90	2.26
C1175-105-4500-S	2.063	52.40	29.61	131.71	12.15	2.13
C1175-105-4750-S	2.171	55.14	29.61	131.71	11.48	2.01
C1175-105-5000-S	2.279	57.88	29.61	131.71	10.88	1.90
C1175-105-5250-S	2.387	60.63	29.61	131.71	10.34	1.81
C1175-105-5500-S	2.495	63.37	29.61	131.71	9.85	1.72
C1175-105-5750-S	2.603	66.11	29.61	131.71	9.41	1.65
C1175-105-6000-S	2.711	68.85	29.61	131.71	9.00	1.58
C1175-105-6250-S	2.819	71.60	29.61	131.71	8.63	1.51
C1175-105-6500-S	2.927	74.34	29.61	131.71	8.29	1.45
C1175-105-6750-S	3.035	77.08	29.61	131.71	7.97	1.39
C1175-105-7000-S	3.143	79.83	29.61	131.71	7.68	1.34
C1175-105-7500-S	3.359	85.31	29.61	131.71	7.15	1.25
C1175-105-8000-S	3.575	90.80	29.61	131.71	6.69	1.17
C1175-105-8500-S*	3.850	97.80	29.61	131.71	6.37	1.11
C1175-105-9000-S*	4.066	103.28	29.61	131.71	6.00	1.05
C1175-105-9500-S*	4.282	108.77	29.61	131.71	5.68	0.99

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1175-112-1875-M	1.175	29.85	0.112	2.85	1.875	47.63	0.867	22.02	0.723	18.38	45.72	203.37	45.35	7.94
C1175-112-2000-M	1.175	29.85	0.112	2.85	2.000	50.80	0.916	23.26	0.760	19.32	45.72	203.37	42.16	7.38
C1175-112-2125-M	1.175	29.85	0.112	2.85	2.125	53.98	0.964	24.49	0.797	20.25	45.72	203.37	39.39	6.89
C1175-112-2250-M	1.175	29.85	0.112	2.85	2.250	57.15	1.013	25.73	0.834	21.19	45.72	203.37	36.96	6.47
C1175-112-2375-M	1.175	29.85	0.112	2.85	2.375	60.33	1.062	26.97	0.871	22.13	45.72	203.37	34.81	6.09
C1175-112-2500-M	1.175	29.85	0.112	2.85	2.500	63.50	1.110	28.20	0.908	23.07	45.72	203.37	32.90	5.76
C1175-112-2625-M	1.175	29.85	0.112	2.85	2.625	66.68	1.159	29.44	0.945	24.01	45.72	203.37	31.19	5.46
C1175-112-2750-M	1.175	29.85	0.112	2.85	2.750	69.85	1.208	30.67	0.982	24.95	45.72	203.37	29.64	5.19
C1175-112-2875-M	1.175	29.85	0.112	2.85	2.875	73.03	1.256	31.91	1.019	25.89	45.72	203.37	28.25	4.94
C1175-112-3000-M	1.175	29.85	0.112	2.85	3.000	76.20	1.305	33.15	1.056	26.83	45.72	203.37	26.97	4.72
C1175-112-3250-M	1.175	29.85	0.112	2.85	3.250	82.55	1.402	35.62	1.130	28.71	45.72	203.37	24.75	4.33
C1175-112-3500-M	1.175	29.85	0.112	2.85	3.500	88.90	1.500	38.09	1.204	30.58	45.72	203.37	22.86	4.00
C1175-112-3750-M	1.175	29.85	0.112	2.85	3.750	95.25	1.597	40.57	1.278	32.46	45.72	203.37	21.24	3.72
C1175-112-4000-M	1.175	29.85	0.112	2.85	4.000	101.60	1.694	43.04	1.352	34.34	45.72	203.37	19.83	3.47
C1175-112-4250-M	1.175	29.85	0.112	2.85	4.250	107.95	1.792	45.51	1.426	36.22	45.72	203.37	18.60	3.25
C1175-112-4500-M	1.175	29.85	0.112	2.85	4.500	114.30	1.889	47.98	1.500	38.10	45.72	203.37	17.51	3.06
C1175-112-4750-M	1.175	29.85	0.112	2.85	4.750	120.65	1.986	50.46	1.574	39.97	45.72	203.37	16.54	2.90
C1175-112-5000-M	1.175	29.85	0.112	2.85	5.000	127.00	2.084	52.93	1.648	41.85	45.72	203.37	15.68	2.74
C1175-112-5250-M	1.175	29.85	0.112	2.85	5.250	133.35	2.181	55.40	1.722	43.73	45.72	203.37	14.90	2.61
C1175-112-5500-M	1.175	29.85	0.112	2.85	5.500	139.70	2.279	57.88	1.796	45.61	45.72	203.37	14.19	2.48
C1175-112-5750-M	1.175	29.85	0.112	2.85	5.750	146.05	2.376	60.35	1.870	47.49	45.72	203.37	13.55	2.37
C1175-112-6000-M	1.175	29.85	0.112	2.85	6.000	152.40	2.473	62.82	1.943	49.36	45.72	203.37	12.96	2.27
C1175-112-6250-M	1.175	29.85	0.112	2.85	6.250	158.75	2.571	65.29	2.017	51.24	45.72	203.37	12.43	2.17
C1175-112-6500-M	1.175	29.85	0.112	2.85	6.500	165.10	2.668	67.77	2.091	53.12	45.72	203.37	11.93	2.09
C1175-112-6750-M	1.175	29.85	0.112	2.85	6.750	171.45	2.765	70.24	2.165	55.00	45.72	203.37	11.47	2.01
C1175-112-7000-M*	1.175	29.85	0.112	2.85	7.000	177.80	2.931	74.45	2.324	59.02	45.72	203.37	11.24	1.97
C1175-112-7500-M*	1.175	29.85	0.112	2.85	7.500	190.50	3.126	79.39	2.472	62.78	45.72	203.37	10.45	1.83
C1175-112-8000-M*	1.175	29.85	0.112	2.85	8.000	203.20	3.320	84.34	2.619	66.53	45.72	203.37	9.77	1.71
C1175-112-8500-M*	1.175	29.85	0.112	2.85	8.500	215.90	3.515	89.29	2.767	70.29	45.72	203.37	9.17	1.61
C1175-112-9000-M*	1.175	29.85	0.112	2.85	9.000	228.60	3.710	94.23	2.915	74.05	45.72	203.37	8.64	1.51
C1175-112-9500-M*	1.175	29.85	0.112	2.85	9.500	241.30	3.905	99.18	3.063	77.80	45.72	203.37	8.17	1.43
C1175-125-1750-M	1.175	29.85	0.125	3.18	1.750	44.45	0.911	23.14	0.801	20.35	61.97	275.68	73.87	12.93
C1175-125-1875-M	1.175	29.85	0.125	3.18	1.875	47.63	0.966	24.54	0.846	21.49	61.97	275.68	68.19	11.93
C1175-125-2000-M	1.175	29.85	0.125	3.18	2.000	50.80	1.021	25.94	0.891	22.63	61.97	275.68	63.32	11.08
C1175-125-2125-M	1.175	29.85	0.125	3.18	2.125	53.98	1.076	27.34	0.936	23.77	61.97	275.68	59.10	10.34
C1175-125-2250-M	1.175	29.85	0.125	3.18	2.250	57.15	1.131	28.74	0.981	24.91	61.97	275.68	55.40	9.70
C1175-125-2375-M	1.175	29.85	0.125	3.18	2.375	60.33	1.186	30.14	1.026	26.05	61.97	275.68	52.14	9.13
C1175-125-2500-M	1.175	29.85	0.125	3.18	2.500	63.50	1.242	31.54	1.070	27.19	61.97	275.68	49.25	8.62
C1175-125-2625-M	1.175	29.85	0.125	3.18	2.625	66.68	1.297	32.94	1.115	28.33	61.97	275.68	46.66	8.16
C1175-125-2750-M	1.175	29.85	0.125	3.18	2.750	69.85	1.352	34.33	1.160	29.47	61.97	275.68	44.32	7.76
C1175-125-2875-M	1.175	29.85	0.125	3.18	2.875	73.03	1.407	35.73	1.205	30.61	61.97	275.68	42.21	7.39
C1175-125-3000-M	1.175	29.85	0.125	3.18	3.000	76.20	1.462	37.13	1.250	31.75	61.97	275.68	40.29	7.05
C1175-125-3250-M	1.175	29.85	0.125	3.18	3.250	82.55	1.572	39.93	1.340	34.03	61.97	275.68	36.94	6.46
C1175-125-3500-M	1.175	29.85	0.125	3.18	3.500	88.90	1.682	42.73	1.430	36.31	61.97	275.68	34.09	5.97
C1175-125-3750-M	1.175	29.85	0.125	3.18	3.750	95.25	1.792	45.53	1.519	38.59	61.97	275.68	31.66	5.54
C1175-125-4000-M	1.175	29.85	0.125	3.18	4.000	101.60	1.903	48.33	1.609	40.87	61.97	275.68	29.55	5.17
C1175-125-4250-M	1.175	29.85	0.125	3.18	4.250	107.95	2.013	51.12	1.699	43.15	61.97	275.68	27.70	4.85
C1175-125-4500-M	1.175	29.85	0.125	3.18	4.500	114.30	2.123	53.92	1.789	45.43	61.97	275.68	26.07	4.56
C1175-125-4750-M	1.175	29.85	0.125	3.18	4.750	120.65	2.233	56.72	1.878	47.71	61.97	275.68	24.62	4.31
C1175-125-5000-M	1.175	29.85	0.125	3.18	5.000	127.00	2.343	59.52	1.968	49.99	61.97	275.68	23.33	4.08
C1175-125-5250-M	1.175	29.85	0.125	3.18	5.250	133.35	2.453	62.32	2.058	52.27	61.97	275.68	22.16	3.88
C1175-125-5500-M	1.175	29.85	0.125	3.18	5.500	139.70	2.564	65.12	2.148	54.55	61.97	275.68	21.11	3.69
C1175-125-5750-M	1.175	29.85	0.125	3.18	5.750	146.05	2.674	67.92	2.238	56.83	61.97	275.68	20.15	3.53
C1175-125-6000-M	1.175	29.85	0.125	3.18	6.000	152.40	2.784	70.71	2.327	59.11	61.97	275.68	19.27	3.37
C1175-125-6250-M	1.175	29.85	0.125	3.18	6.250	158.75	2.894	73.51	2.417	61.39	61.97	275.68	18.47	3.23
C1175-125-6500-M	1.175	29.85	0.125	3.18	6.500	165.10	3.004	76.31	2.507	63.67	61.97	275.68	17.73	3.10
C1175-125-6750-M	1.175	29.85	0.125	3.18	6.750	171.45	3.115	79.11	2.597	65.95	61.97	275.68	17.05	2.98
C1175-125-7000-M	1.175	29.85	0.125	3.18	7.000	177.80	3.225	81.91	2.686	68.23	61.97	275.68	16.42	2.87
C1175-125-7500-M	1.175	29.85	0.125	3.18	7.500	190.50	3.445	87.50	2.866	72.80	61.97	275.68	15.28	2.67
C1175-125-8000-M*	1.175	29.85	0.125	3.18	8.000	203.20	3.735	94.88	3.132	79.55	61.97	275.68	14.53	2.54
C1175-125-8500-M*	1.175	29.85	0.125	3.18	8.500	215.90	3.956	100.47	3.311	84.11	61.97	275.68	13.64	2.39
C1175-125-9000-M*	1.175	29.85	0.125	3.18	9.000	228.60	4.176	106.07	3.491	88.67	61.97	275.68	12.85	2.25
C1175-125-9500-M*	1.175	29.85	0.125	3.18	9.500	241.30	4.396	111.67	3.671	93.23	61.97	275.68	12.14	2.13
C1175-135-1750-M	1.175	29.85	0.135	3.43	1.750	44.45	0.981	24.91	0.887	22.54	76.65	340.96	99.65	17.44

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1175-112-1875-S	0.981	24.92	35.25	156.78	39.44	6.90
C1175-112-2000-S	1.039	26.38	35.25	156.78	36.66	6.42
C1175-112-2125-S	1.096	27.84	35.25	156.78	34.25	5.99
C1175-112-2250-S	1.153	29.29	35.25	156.78	32.14	5.62
C1175-112-2375-S	1.211	30.75	35.25	156.78	30.27	5.30
C1175-112-2500-S	1.268	32.21	35.25	156.78	28.61	5.01
C1175-112-2625-S	1.325	33.66	35.25	156.78	27.12	4.75
C1175-112-2750-S	1.383	35.12	35.25	156.78	25.78	4.51
C1175-112-2875-S	1.440	36.58	35.25	156.78	24.56	4.30
C1175-112-3000-S	1.497	38.03	35.25	156.78	23.46	4.10
C1175-112-3250-S	1.612	40.94	35.25	156.78	21.52	3.77
C1175-112-3500-S	1.727	43.86	35.25	156.78	19.88	3.48
C1175-112-3750-S	1.841	46.77	35.25	156.78	18.47	3.23
C1175-112-4000-S	1.956	49.68	35.25	156.78	17.24	3.02
C1175-112-4250-S	2.071	52.60	35.25	156.78	16.17	2.83
C1175-112-4500-S	2.185	55.51	35.25	156.78	15.23	2.66
C1175-112-4750-S	2.300	58.42	35.25	156.78	14.39	2.52
C1175-112-5000-S	2.415	61.33	35.25	156.78	13.63	2.39
C1175-112-5250-S	2.529	64.25	35.25	156.78	12.96	2.27
C1175-112-5500-S	2.644	67.16	35.25	156.78	12.34	2.16
C1175-112-5750-S	2.759	70.07	35.25	156.78	11.78	2.06
C1175-112-6000-S	2.873	72.98	35.25	156.78	11.27	1.97
C1175-112-6250-S	2.988	75.90	35.25	156.78	10.81	1.89
C1175-112-6500-S	3.103	78.81	35.25	156.78	10.38	1.82
C1175-112-6750-S	3.217	81.72	35.25	156.78	9.98	1.75
C1175-112-7000-S*	3.393	86.17	35.25	156.78	9.77	1.71
C1175-112-7500-S*	3.622	92.00	35.25	156.78	9.09	1.59
C1175-112-8000-S*	3.851	97.83	35.25	156.78	8.50	1.49
C1175-112-8500-S*	4.081	103.65	35.25	156.78	7.98	1.40
C1175-112-9000-S*	4.310	109.48	35.25	156.78	7.52	1.32
C1175-112-9500-S*	4.539	115.30	35.25	156.78	7.11	1.24
C1175-125-1750-S	1.013	25.74	47.33	210.52	64.24	11.24
C1175-125-1875-S	1.077	27.35	47.33	210.52	59.30	10.38
C1175-125-2000-S	1.140	28.97	47.33	210.52	55.06	9.64
C1175-125-2125-S	1.204	30.58	47.33	210.52	51.39	8.99
C1175-125-2250-S	1.268	32.20	47.33	210.52	48.18	8.43
C1175-125-2375-S	1.331	33.81	47.33	210.52	45.34	7.94
C1175-125-2500-S	1.395	35.43	47.33	210.52	42.82	7.49
C1175-125-2625-S	1.458	37.05	47.33	210.52	40.57	7.10
C1175-125-2750-S	1.522	38.66	47.33	210.52	38.54	6.74
C1175-125-2875-S	1.586	40.28	47.33	210.52	36.71	6.42
C1175-125-3000-S	1.649	41.89	47.33	210.52	35.04	6.13
C1175-125-3250-S	1.776	45.12	47.33	210.52	32.12	5.62
C1175-125-3500-S	1.904	48.35	47.33	210.52	29.65	5.19
C1175-125-3750-S	2.031	51.58	47.33	210.52	27.53	4.82
C1175-125-4000-S	2.158	54.82	47.33	210.52	25.69	4.50
C1175-125-4250-S	2.285	58.05	47.33	210.52	24.09	4.22
C1175-125-4500-S	2.413	61.28	47.33	210.52	22.67	3.97
C1175-125-4750-S	2.540	64.51	47.33	210.52	21.41	3.75
C1175-125-5000-S	2.667	67.74	47.33	210.52	20.29	3.55
C1175-125-5250-S	2.794	70.97	47.33	210.52	19.27	3.37
C1175-125-5500-S	2.921	74.20	47.33	210.52	18.35	3.21
C1175-125-5750-S	3.049	77.43	47.33	210.52	17.52	3.07
C1175-125-6000-S	3.176	80.66	47.33	210.52	16.76	2.93
C1175-125-6250-S	3.303	83.90	47.33	210.52	16.06	2.81
C1175-125-6500-S	3.430	87.13	47.33	210.52	15.42	2.70
C1175-125-6750-S	3.557	90.36	47.33	210.52	14.82	2.59
C1175-125-7000-S	3.685	93.59	47.33	210.52	14.28	2.50
C1175-125-7500-S	3.939	100.05	47.33	210.52	13.29	2.33
C1175-125-8000-S*	4.255	108.07	47.33	210.52	12.64	2.21
C1175-125-8500-S*	4.509	114.53	47.33	210.52	11.86	2.08
C1175-125-9000-S*	4.764	121.00	47.33	210.52	11.17	1.95
C1175-125-9500-S*	5.018	127.46	47.33	210.52	10.56	1.85
C1175-135-1750-S	1.080	27.42	58.10	258.43	86.65	15.16

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1175-135-1875-M	1.175	29.85	0.135	3.43	1.875	47.63	1.041	26.44	0.938	23.83	76.65	340.96	91.89	16.08
C1175-135-2000-M	1.175	29.85	0.135	3.43	2.000	50.80	1.101	27.96	0.989	25.13	76.65	340.96	85.25	14.92
C1175-135-2125-M	1.175	29.85	0.135	3.43	2.125	53.98	1.161	29.49	1.040	26.42	76.65	340.96	79.51	13.91
C1175-135-2250-M	1.175	29.85	0.135	3.43	2.250	57.15	1.221	31.01	1.091	27.72	76.65	340.96	74.49	13.03
C1175-135-2375-M	1.175	29.85	0.135	3.43	2.375	60.33	1.281	32.54	1.142	29.01	76.65	340.96	70.06	12.26
C1175-135-2500-M	1.175	29.85	0.135	3.43	2.500	63.50	1.341	34.06	1.193	30.31	76.65	340.96	66.14	11.57
C1175-135-2625-M	1.175	29.85	0.135	3.43	2.625	66.68	1.401	35.59	1.244	31.60	76.65	340.96	62.63	10.96
C1175-135-2750-M	1.175	29.85	0.135	3.43	2.750	69.85	1.461	37.11	1.295	32.90	76.65	340.96	59.47	10.41
C1175-135-2875-M	1.175	29.85	0.135	3.43	2.875	73.03	1.521	38.64	1.346	34.20	76.65	340.96	56.62	9.91
C1175-135-3000-M	1.175	29.85	0.135	3.43	3.000	76.20	1.581	40.16	1.397	35.49	76.65	340.96	54.02	9.45
C1175-135-3250-M	1.175	29.85	0.135	3.43	3.250	82.55	1.701	43.21	1.499	38.08	76.65	340.96	49.49	8.66
C1175-135-3500-M	1.175	29.85	0.135	3.43	3.500	88.90	1.821	46.26	1.601	40.67	76.65	340.96	45.66	7.99
C1175-135-3750-M	1.175	29.85	0.135	3.43	3.750	95.25	1.941	49.31	1.703	43.26	76.65	340.96	42.38	7.42
C1175-135-4000-M	1.175	29.85	0.135	3.43	4.000	101.60	2.061	52.36	1.805	45.85	76.65	340.96	39.54	6.92
C1175-135-4250-M	1.175	29.85	0.135	3.43	4.250	107.95	2.181	55.41	1.907	48.44	76.65	340.96	37.06	6.48
C1175-135-4500-M	1.175	29.85	0.135	3.43	4.500	114.30	2.302	58.46	2.009	51.03	76.65	340.96	34.87	6.10
C1175-135-4750-M	1.175	29.85	0.135	3.43	4.750	120.65	2.422	61.51	2.111	53.62	76.65	340.96	32.92	5.76
C1175-135-5000-M	1.175	29.85	0.135	3.43	5.000	127.00	2.542	64.56	2.213	56.22	76.65	340.96	31.18	5.46
C1175-135-5250-M	1.175	29.85	0.135	3.43	5.250	133.35	2.662	67.61	2.315	58.81	76.65	340.96	29.62	5.18
C1175-135-5500-M	1.175	29.85	0.135	3.43	5.500	139.70	2.782	70.66	2.417	61.40	76.65	340.96	28.20	4.93
C1175-135-5750-M	1.175	29.85	0.135	3.43	5.750	146.05	2.902	73.71	2.519	63.99	76.65	340.96	26.91	4.71
C1175-135-6000-M	1.175	29.85	0.135	3.43	6.000	152.40	3.022	76.76	2.621	66.58	76.65	340.96	25.74	4.50
C1175-135-6250-M	1.175	29.85	0.135	3.43	6.250	158.75	3.142	79.81	2.723	69.17	76.65	340.96	24.66	4.32
C1175-135-6500-M	1.175	29.85	0.135	3.43	6.500	165.10	3.262	82.86	2.825	71.76	76.65	340.96	23.67	4.14
C1175-135-6750-M	1.175	29.85	0.135	3.43	6.750	171.45	3.382	85.91	2.927	74.35	76.65	340.96	22.76	3.98
C1175-135-7000-M	1.175	29.85	0.135	3.43	7.000	177.80	3.502	88.96	3.029	76.94	76.65	340.96	21.91	3.83
C1175-135-7500-M	1.175	29.85	0.135	3.43	7.500	190.50	3.742	95.05	3.233	82.12	76.65	340.96	20.40	3.57
C1175-135-8000-M	1.175	29.85	0.135	3.43	8.000	203.20	3.982	101.15	3.437	87.30	76.65	340.96	19.08	3.34
C1175-135-8500-M	1.175	29.85	0.135	3.43	8.500	215.90	4.223	107.25	3.641	92.48	76.65	340.96	17.92	3.14
C1175-135-9000-M	1.175	29.85	0.135	3.43	9.000	228.60	4.463	113.35	3.845	97.67	76.65	340.96	16.89	2.96
C1175-135-9500-M	1.175	29.85	0.135	3.43	9.500	241.30	4.703	119.45	4.049	102.85	76.65	340.96	15.98	2.80
C1175-148-1625-M	1.175	29.85	0.148	3.76	1.625	41.28	1.001	25.43	0.936	23.77	98.73	439.17	158.30	27.70
C1175-148-1750-M	1.175	29.85	0.148	3.76	1.750	44.45	1.068	27.12	0.995	25.26	98.73	439.17	144.69	25.32
C1175-148-1875-M	1.175	29.85	0.148	3.76	1.875	47.63	1.134	28.80	1.053	26.76	98.73	439.17	133.24	23.32
C1175-148-2000-M	1.175	29.85	0.148	3.76	2.000	50.80	1.200	30.49	1.112	28.25	98.73	439.17	123.47	21.61
C1175-148-2125-M	1.175	29.85	0.148	3.76	2.125	53.98	1.267	32.17	1.171	29.74	98.73	439.17	115.03	20.13
C1175-148-2250-M	1.175	29.85	0.148	3.76	2.250	57.15	1.333	33.86	1.230	31.24	98.73	439.17	107.67	18.84
C1175-148-2375-M	1.175	29.85	0.148	3.76	2.375	60.33	1.399	35.54	1.289	32.73	98.73	439.17	101.20	17.71
C1175-148-2500-M	1.175	29.85	0.148	3.76	2.500	63.50	1.466	37.23	1.347	34.22	98.73	439.17	95.46	16.70
C1175-148-2625-M	1.175	29.85	0.148	3.76	2.625	66.68	1.532	38.91	1.406	35.72	98.73	439.17	90.33	15.81
C1175-148-2750-M	1.175	29.85	0.148	3.76	2.750	69.85	1.598	40.60	1.465	37.21	98.73	439.17	85.73	15.00
C1175-148-2875-M	1.175	29.85	0.148	3.76	2.875	73.03	1.665	42.28	1.524	38.70	98.73	439.17	81.58	14.28
C1175-148-3000-M	1.175	29.85	0.148	3.76	3.000	76.20	1.731	43.97	1.583	40.20	98.73	439.17	77.81	13.62
C1175-148-3250-M	1.175	29.85	0.148	3.76	3.250	82.55	1.864	47.34	1.700	43.18	98.73	439.17	71.22	12.46
C1175-148-3500-M	1.175	29.85	0.148	3.76	3.500	88.90	1.996	50.71	1.818	46.17	98.73	439.17	65.66	11.49
C1175-148-3750-M	1.175	29.85	0.148	3.76	3.750	95.25	2.129	54.08	1.935	49.15	98.73	439.17	60.91	10.66
C1175-148-4000-M	1.175	29.85	0.148	3.76	4.000	101.60	2.262	57.45	2.053	52.14	98.73	439.17	56.80	9.94
C1175-148-4250-M	1.175	29.85	0.148	3.76	4.250	107.95	2.394	60.82	2.170	55.13	98.73	439.17	53.21	9.31
C1175-148-4500-M	1.175	29.85	0.148	3.76	4.500	114.30	2.527	64.19	2.288	58.11	98.73	439.17	50.04	8.76
C1175-148-4750-M	1.175	29.85	0.148	3.76	4.750	120.65	2.660	67.56	2.406	61.10	98.73	439.17	47.24	8.27
C1175-148-5000-M	1.175	29.85	0.148	3.76	5.000	127.00	2.793	70.93	2.523	64.09	98.73	439.17	44.73	7.83
C1175-148-5250-M	1.175	29.85	0.148	3.76	5.250	133.35	2.925	74.30	2.641	67.07	98.73	439.17	42.47	7.43
C1175-148-5500-M	1.175	29.85	0.148	3.76	5.500	139.70	3.058	77.67	2.758	70.06	98.73	439.17	40.43	7.07
C1175-148-5750-M	1.175	29.85	0.148	3.76	5.750	146.05	3.191	81.04	2.876	73.05	98.73	439.17	38.57	6.75
C1175-148-6000-M	1.175	29.85	0.148	3.76	6.000	152.40	3.323	84.41	2.993	76.03	98.73	439.17	36.88	6.45
C1175-148-6250-M	1.175	29.85	0.148	3.76	6.250	158.75	3.456	87.78	3.111	79.02	98.73	439.17	35.34	6.18
C1175-148-6500-M	1.175	29.85	0.148	3.76	6.500	165.10	3.589	91.15	3.229	82.01	98.73	439.17	33.91	5.93
C1175-148-6750-M	1.175	29.85	0.148	3.76	6.750	171.45	3.721	94.52	3.346	84.99	98.73	439.17	32.60	5.70
C1175-148-7000-M	1.175	29.85	0.148	3.76	7.000	177.80	3.854	97.89	3.464	87.98	98.73	439.17	31.38	5.49
C1175-148-7500-M	1.175	29.85	0.148	3.76	7.500	190.50	4.119	104.63	3.699	93.95	98.73	439.17	29.20	5.11
C1175-148-8000-M	1.175	29.85	0.148	3.76	8.000	203.20	4.385	111.37	3.934	99.92	98.73	439.17	27.31	4.78
C1175-148-8500-M	1.175	29.85	0.148	3.76	8.500	215.90	4.650	118.11	4.169	105.90	98.73	439.17	25.64	4.49
C1175-148-9000-M	1.175	29.85	0.148	3.76	9.000	228.60	4.915	124.85	4.404	111.87	98.73	439.17	24.17	4.23
C1175-148-9500-M	1.175	29.85	0.148	3.76	9.500	241.30	5.181	131.59	4.639	117.84	98.73	439.17	22.86	4.00

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1175-135-1875-S	1.148	29.16	58.10	258.43	79.90	13.98
C1175-135-2000-S	1.216	30.89	58.10	258.43	74.13	12.97
C1175-135-2125-S	1.285	32.63	58.10	258.43	69.13	12.10
C1175-135-2250-S	1.353	34.37	58.10	258.43	64.77	11.33
C1175-135-2375-S	1.421	36.10	58.10	258.43	60.92	10.66
C1175-135-2500-S	1.490	37.84	58.10	258.43	57.51	10.06
C1175-135-2625-S	1.558	39.58	58.10	258.43	54.46	9.53
C1175-135-2750-S	1.627	41.31	58.10	258.43	51.71	9.05
C1175-135-2875-S	1.695	43.05	58.10	258.43	49.23	8.62
C1175-135-3000-S	1.763	44.79	58.10	258.43	46.98	8.22
C1175-135-3250-S	1.900	48.26	58.10	258.43	43.04	7.53
C1175-135-3500-S	2.037	51.73	58.10	258.43	39.70	6.95
C1175-135-3750-S	2.173	55.21	58.10	258.43	36.85	6.45
C1175-135-4000-S	2.310	58.68	58.10	258.43	34.38	6.02
C1175-135-4250-S	2.447	62.15	58.10	258.43	32.22	5.64
C1175-135-4500-S	2.584	65.63	58.10	258.43	30.32	5.31
C1175-135-4750-S	2.720	69.10	58.10	258.43	28.63	5.01
C1175-135-5000-S	2.857	72.57	58.10	258.43	27.11	4.74
C1175-135-5250-S	2.994	76.05	58.10	258.43	25.75	4.51
C1175-135-5500-S	3.131	79.52	58.10	258.43	24.52	4.29
C1175-135-5750-S	3.267	82.99	58.10	258.43	23.40	4.10
C1175-135-6000-S	3.404	86.47	58.10	258.43	22.38	3.92
C1175-135-6250-S	3.541	89.94	58.10	258.43	21.45	3.75
C1175-135-6500-S	3.678	93.41	58.10	258.43	20.59	3.60
C1175-135-6750-S	3.814	96.89	58.10	258.43	19.79	3.46
C1175-135-7000-S	3.951	100.36	58.10	258.43	19.06	3.33
C1175-135-7500-S	4.225	107.31	58.10	258.43	17.74	3.10
C1175-135-8000-S	4.498	114.25	58.10	258.43	16.59	2.90
C1175-135-8500-S	4.772	121.20	58.10	258.43	15.58	2.73
C1175-135-9000-S	5.045	128.15	58.10	258.43	14.69	2.57
C1175-135-9500-S	5.319	135.09	58.10	258.43	13.89	2.43
C1175-148-1625-S	1.087	27.60	74.09	329.59	137.66	24.09
C1175-148-1750-S	1.161	29.49	74.09	329.59	125.82	22.02
C1175-148-1875-S	1.235	31.38	74.09	329.59	115.86	20.28
C1175-148-2000-S	1.310	33.27	74.09	329.59	107.36	18.79
C1175-148-2125-S	1.384	35.16	74.09	329.59	100.02	17.50
C1175-148-2250-S	1.459	37.05	74.09	329.59	93.63	16.38
C1175-148-2375-S	1.533	38.94	74.09	329.59	88.00	15.40
C1175-148-2500-S	1.607	40.83	74.09	329.59	83.01	14.53
C1175-148-2625-S	1.682	42.72	74.09	329.59	78.55	13.75
C1175-148-2750-S	1.756	44.60	74.09	329.59	74.55	13.05
C1175-148-2875-S	1.830	46.49	74.09	329.59	70.94	12.41
C1175-148-3000-S	1.905	48.38	74.09	329.59	67.66	11.84
C1175-148-3250-S	2.054	52.16	74.09	329.59	61.93	10.84
C1175-148-3500-S	2.202	55.94	74.09	329.59	57.10	9.99
C1175-148-3750-S	2.351	59.72	74.09	329.59	52.97	9.27
C1175-148-4000-S	2.500	63.50	74.09	329.59	49.39	8.64
C1175-148-4250-S	2.649	67.27	74.09	329.59	46.27	8.10
C1175-148-4500-S	2.797	71.05	74.09	329.59	43.52	7.62
C1175-148-4750-S	2.946	74.83	74.09	329.59	41.07	7.19
C1175-148-5000-S	3.095	78.61	74.09	329.59	38.89	6.81
C1175-148-5250-S	3.244	82.39	74.09	329.59	36.93	6.46
C1175-148-5500-S	3.392	86.16	74.09	329.59	35.15	6.15
C1175-148-5750-S	3.541	89.94	74.09	329.59	33.54	5.87
C1175-148-6000-S	3.690	93.72	74.09	329.59	32.07	5.61
C1175-148-6250-S	3.839	97.50	74.09	329.59	30.73	5.38
C1175-148-6500-S	3.987	101.28	74.09	329.59	29.49	5.16
C1175-148-6750-S	4.136	105.06	74.09	329.59	28.35	4.96
C1175-148-7000-S	4.285	108.83	74.09	329.59	27.29	4.78
C1175-148-7500-S	4.582	116.39	74.09	329.59	25.40	4.44
C1175-148-8000-S	4.880	123.95	74.09	329.59	23.75	4.16
C1175-148-8500-S	5.177	131.50	74.09	329.59	22.30	3.90
C1175-148-9000-S	5.475	139.06	74.09	329.59	21.02	3.68
C1175-148-9500-S	5.772	146.61	74.09	329.59	19.88	3.48

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1175-162-1625-M	1.175	29.85	0.162	4.12	1.625	41.28	1.082	27.48	1.036	26.30	126.50	562.68	232.99	40.77
C1175-162-1750-M	1.175	29.85	0.162	4.12	1.750	44.45	1.155	29.33	1.102	28.00	126.50	562.68	212.56	37.20
C1175-162-1875-M	1.175	29.85	0.162	4.12	1.875	47.63	1.228	31.18	1.169	29.70	126.50	562.68	195.43	34.20
C1175-162-2000-M	1.175	29.85	0.162	4.12	2.000	50.80	1.301	33.03	1.236	31.39	126.50	562.68	180.86	31.65
C1175-162-2125-M	1.175	29.85	0.162	4.12	2.125	53.98	1.373	34.88	1.303	33.09	126.50	562.68	168.30	29.45
C1175-162-2250-M	1.175	29.85	0.162	4.12	2.250	57.15	1.446	36.73	1.370	34.79	126.50	562.68	157.38	27.54
C1175-162-2375-M	1.175	29.85	0.162	4.12	2.375	60.33	1.519	38.58	1.436	36.49	126.50	562.68	147.79	25.86
C1175-162-2500-M	1.175	29.85	0.162	4.12	2.500	63.50	1.592	40.43	1.503	38.18	126.50	562.68	139.30	24.38
C1175-162-2625-M	1.175	29.85	0.162	4.12	2.625	66.68	1.665	42.28	1.570	39.88	126.50	562.68	131.73	23.05
C1175-162-2750-M	1.175	29.85	0.162	4.12	2.750	69.85	1.738	44.13	1.637	41.58	126.50	562.68	124.94	21.87
C1175-162-2875-M	1.175	29.85	0.162	4.12	2.875	73.03	1.810	45.98	1.704	43.27	126.50	562.68	118.82	20.79
C1175-162-3000-M	1.175	29.85	0.162	4.12	3.000	76.20	1.883	47.83	1.770	44.97	126.50	562.68	113.27	19.82
C1175-162-3250-M	1.175	29.85	0.162	4.12	3.250	82.55	2.029	51.53	1.904	48.36	126.50	562.68	103.59	18.13
C1175-162-3500-M	1.175	29.85	0.162	4.12	3.500	88.90	2.175	55.23	2.038	51.76	126.50	562.68	95.44	16.70
C1175-162-3750-M	1.175	29.85	0.162	4.12	3.750	95.25	2.320	58.93	2.171	55.15	126.50	562.68	88.48	15.48
C1175-162-4000-M	1.175	29.85	0.162	4.12	4.000	101.60	2.466	62.63	2.305	58.55	126.50	562.68	82.46	14.43
C1175-162-4250-M	1.175	29.85	0.162	4.12	4.250	107.95	2.612	66.33	2.439	61.94	126.50	562.68	77.21	13.51
C1175-162-4500-M	1.175	29.85	0.162	4.12	4.500	114.30	2.757	70.03	2.572	65.33	126.50	562.68	72.59	12.70
C1175-162-4750-M	1.175	29.85	0.162	4.12	4.750	120.65	2.903	73.73	2.706	68.73	126.50	562.68	68.49	11.98
C1175-162-5000-M	1.175	29.85	0.162	4.12	5.000	127.00	3.049	77.43	2.839	72.12	126.50	562.68	64.82	11.34
C1175-162-5250-M	1.175	29.85	0.162	4.12	5.250	133.35	3.194	81.13	2.973	75.52	126.50	562.68	61.53	10.77
C1175-162-5500-M	1.175	29.85	0.162	4.12	5.500	139.70	3.340	84.83	3.107	78.91	126.50	562.68	58.56	10.25
C1175-162-5750-M	1.175	29.85	0.162	4.12	5.750	146.05	3.486	88.53	3.240	82.30	126.50	562.68	55.86	9.78
C1175-162-6000-M	1.175	29.85	0.162	4.12	6.000	152.40	3.631	92.23	3.374	85.70	126.50	562.68	53.40	9.35
C1175-162-6250-M	1.175	29.85	0.162	4.12	6.250	158.75	3.777	95.93	3.508	89.09	126.50	562.68	51.15	8.95
C1175-162-6500-M	1.175	29.85	0.162	4.12	6.500	165.10	3.923	99.63	3.641	92.49	126.50	562.68	49.08	8.59
C1175-162-6750-M	1.175	29.85	0.162	4.12	6.750	171.45	4.068	103.33	3.775	95.88	126.50	562.68	47.17	8.25
C1175-162-7000-M	1.175	29.85	0.162	4.12	7.000	177.80	4.214	107.03	3.908	99.27	126.50	562.68	45.40	7.95
C1175-162-7500-M	1.175	29.85	0.162	4.12	7.500	190.50	4.505	114.43	4.176	106.06	126.50	562.68	42.24	7.39
C1175-162-8000-M	1.175	29.85	0.162	4.12	8.000	203.20	4.797	121.83	4.443	112.85	126.50	562.68	39.49	6.91
C1175-162-8500-M	1.175	29.85	0.162	4.12	8.500	215.90	5.088	129.23	4.710	119.64	126.50	562.68	37.07	6.49
C1175-162-9000-M	1.175	29.85	0.162	4.12	9.000	228.60	5.379	136.63	4.977	126.43	126.50	562.68	34.94	6.11
C1175-162-9500-M	1.175	29.85	0.162	4.12	9.500	241.30	5.671	144.03	5.245	133.21	126.50	562.68	33.03	5.78
C1175-177-1625-M	1.175	29.85	0.177	4.50	1.625	41.28	1.160	29.48	1.132	28.76	161.08	716.50	346.76	60.68
C1175-177-1750-M	1.175	29.85	0.177	4.50	1.750	44.45	1.240	31.49	1.207	30.66	161.08	716.50	315.71	55.25
C1175-177-1875-M	1.175	29.85	0.177	4.50	1.875	47.63	1.319	33.51	1.282	32.56	161.08	716.50	289.77	50.71
C1175-177-2000-M	1.175	29.85	0.177	4.50	2.000	50.80	1.398	35.52	1.357	34.47	161.08	716.50	267.76	46.86
C1175-177-2125-M	1.175	29.85	0.177	4.50	2.125	53.98	1.478	37.54	1.432	36.37	161.08	716.50	248.86	43.55
C1175-177-2250-M	1.175	29.85	0.177	4.50	2.250	57.15	1.557	39.55	1.507	38.27	161.08	716.50	232.46	40.68
C1175-177-2375-M	1.175	29.85	0.177	4.50	2.375	60.33	1.636	41.56	1.581	40.17	161.08	716.50	218.08	38.16
C1175-177-2500-M	1.175	29.85	0.177	4.50	2.500	63.50	1.716	43.58	1.656	42.07	161.08	716.50	205.38	35.94
C1175-177-2625-M	1.175	29.85	0.177	4.50	2.625	66.68	1.795	45.59	1.731	43.97	161.08	716.50	194.07	33.96
C1175-177-2750-M	1.175	29.85	0.177	4.50	2.750	69.85	1.874	47.61	1.806	45.87	161.08	716.50	183.95	32.19
C1175-177-2875-M	1.175	29.85	0.177	4.50	2.875	73.03	1.954	49.62	1.881	47.77	161.08	716.50	174.83	30.59
C1175-177-3000-M	1.175	29.85	0.177	4.50	3.000	76.20	2.033	51.64	1.955	49.67	161.08	716.50	166.57	29.15
C1175-177-3250-M	1.175	29.85	0.177	4.50	3.250	82.55	2.192	55.67	2.105	53.47	161.08	716.50	152.19	26.63
C1175-177-3500-M	1.175	29.85	0.177	4.50	3.500	88.90	2.350	59.70	2.255	57.27	161.08	716.50	140.09	24.52
C1175-177-3750-M	1.175	29.85	0.177	4.50	3.750	95.25	2.509	63.73	2.404	61.07	161.08	716.50	129.78	22.71
C1175-177-4000-M	1.175	29.85	0.177	4.50	4.000	101.60	2.668	67.75	2.554	64.87	161.08	716.50	120.88	21.15
C1175-177-4250-M	1.175	29.85	0.177	4.50	4.250	107.95	2.826	71.78	2.704	68.67	161.08	716.50	113.13	19.80
C1175-177-4500-M	1.175	29.85	0.177	4.50	4.500	114.30	2.985	75.81	2.853	72.47	161.08	716.50	106.30	18.60
C1175-177-4750-M	1.175	29.85	0.177	4.50	4.750	120.65	3.143	79.84	3.003	76.27	161.08	716.50	100.26	17.55
C1175-177-5000-M	1.175	29.85	0.177	4.50	5.000	127.00	3.302	83.87	3.153	80.07	161.08	716.50	94.86	16.60
C1175-177-5250-M	1.175	29.85	0.177	4.50	5.250	133.35	3.461	87.90	3.302	83.87	161.08	716.50	90.02	15.75
C1175-177-5500-M	1.175	29.85	0.177	4.50	5.500	139.70	3.619	91.93	3.452	87.68	161.08	716.50	85.65	14.99
C1175-177-5750-M	1.175	29.85	0.177	4.50	5.750	146.05	3.778	95.96	3.601	91.48	161.08	716.50	81.68	14.29
C1175-177-6000-M	1.175	29.85	0.177	4.50	6.000	152.40	3.937	99.99	3.751	95.28	161.08	716.50	78.06	13.66
C1175-177-6250-M	1.175	29.85	0.177	4.50	6.250	158.75	4.095	104.02	3.901	99.08	161.08	716.50	74.75	13.08
C1175-177-6500-M	1.175	29.85	0.177	4.50	6.500	165.10	4.254	108.05	4.050	102.88	161.08	716.50	71.71	12.55
C1175-177-6750-M	1.175	29.85	0.177	4.50	6.750	171.45	4.412	112.08	4.200	106.68	161.08	716.50	68.91	12.06
C1175-177-7000-M	1.175	29.85	0.177	4.50	7.000	177.80	4.571	116.11	4.350	110.48	161.08	716.50	66.32	11.61
C1175-177-7500-M	1.175	29.85	0.177	4.50	7.500	190.50	4.888	124.16	4.649	118.08	161.08	716.50	61.68	10.79
C1175-177-8000-M	1.175	29.85	0.177	4.50	8.000	203.20	5.206	132.22	4.948	125.68	161.08	716.50	57.64	10.09
C1175-177-8500-M	1.175	29.85	0.177	4.50	8.500	215.90	5.523	140.28	5.247	133.28	161.08	716.50	54.11	9.47

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1175-162-1625-S	1.161	29.50	93.92	417.77	202.60	35.45
C1175-162-1750-S	1.242	31.54	93.92	417.77	184.84	32.35
C1175-162-1875-S	1.322	33.59	93.92	417.77	169.94	29.74
C1175-162-2000-S	1.403	35.63	93.92	417.77	157.27	27.52
C1175-162-2125-S	1.483	37.67	93.92	417.77	146.35	25.61
C1175-162-2250-S	1.564	39.72	93.92	417.77	136.85	23.95
C1175-162-2375-S	1.644	41.76	93.92	417.77	128.51	22.49
C1175-162-2500-S	1.725	43.81	93.92	417.77	121.13	21.20
C1175-162-2625-S	1.805	45.85	93.92	417.77	114.55	20.05
C1175-162-2750-S	1.886	47.89	93.92	417.77	108.65	19.01
C1175-162-2875-S	1.966	49.94	93.92	417.77	103.32	18.08
C1175-162-3000-S	2.046	51.98	93.92	417.77	98.50	17.24
C1175-162-3250-S	2.207	56.07	93.92	417.77	90.08	15.76
C1175-162-3500-S	2.368	60.16	93.92	417.77	82.99	14.52
C1175-162-3750-S	2.529	64.24	93.92	417.77	76.94	13.46
C1175-162-4000-S	2.690	68.33	93.92	417.77	71.70	12.55
C1175-162-4250-S	2.851	72.42	93.92	417.77	67.14	11.75
C1175-162-4500-S	3.012	76.50	93.92	417.77	63.12	11.05
C1175-162-4750-S	3.173	80.59	93.92	417.77	59.55	10.42
C1175-162-5000-S	3.334	84.68	93.92	417.77	56.37	9.86
C1175-162-5250-S	3.495	88.77	93.92	417.77	53.51	9.36
C1175-162-5500-S	3.656	92.85	93.92	417.77	50.92	8.91
C1175-162-5750-S	3.817	96.94	93.92	417.77	48.58	8.50
C1175-162-6000-S	3.978	101.03	93.92	417.77	46.44	8.13
C1175-162-6250-S	4.138	105.12	93.92	417.77	44.48	7.78
C1175-162-6500-S	4.299	109.20	93.92	417.77	42.68	7.47
C1175-162-6750-S	4.460	113.29	93.92	417.77	41.02	7.18
C1175-162-7000-S	4.621	117.38	93.92	417.77	39.48	6.91
C1175-162-7500-S	4.943	125.55	93.92	417.77	36.73	6.43
C1175-162-8000-S	5.265	133.73	93.92	417.77	34.34	6.01
C1175-162-8500-S	5.587	141.90	93.92	417.77	32.24	5.64
C1175-162-9000-S	5.909	150.08	93.92	417.77	30.38	5.32
C1175-162-9500-S	6.230	158.25	93.92	417.77	28.73	5.03
C1175-177-1625-S	1.233	31.32	118.22	525.87	301.53	52.77
C1175-177-1750-S	1.319	33.51	118.22	525.87	274.53	48.04
C1175-177-1875-S	1.406	35.71	118.22	525.87	251.97	44.10
C1175-177-2000-S	1.492	37.90	118.22	525.87	232.84	40.75
C1175-177-2125-S	1.579	40.10	118.22	525.87	216.40	37.87
C1175-177-2250-S	1.665	42.29	118.22	525.87	202.14	35.37
C1175-177-2375-S	1.752	44.49	118.22	525.87	189.63	33.19
C1175-177-2500-S	1.838	46.69	118.22	525.87	178.59	31.25
C1175-177-2625-S	1.924	48.88	118.22	525.87	168.76	29.53
C1175-177-2750-S	2.011	51.08	118.22	525.87	159.95	27.99
C1175-177-2875-S	2.097	53.27	118.22	525.87	152.02	26.60
C1175-177-3000-S	2.184	55.47	118.22	525.87	144.84	25.35
C1175-177-3250-S	2.357	59.86	118.22	525.87	132.34	23.16
C1175-177-3500-S	2.530	64.25	118.22	525.87	121.82	21.32
C1175-177-3750-S	2.702	68.64	118.22	525.87	112.85	19.75
C1175-177-4000-S	2.875	73.03	118.22	525.87	105.12	18.40
C1175-177-4250-S	3.048	77.42	118.22	525.87	98.37	17.21
C1175-177-4500-S	3.221	81.82	118.22	525.87	92.44	16.18
C1175-177-4750-S	3.394	86.21	118.22	525.87	87.18	15.26
C1175-177-5000-S	3.567	90.60	118.22	525.87	82.49	14.44
C1175-177-5250-S	3.740	94.99	118.22	525.87	78.28	13.70
C1175-177-5500-S	3.913	99.38	118.22	525.87	74.48	13.03
C1175-177-5750-S	4.085	103.77	118.22	525.87	71.03	12.43
C1175-177-6000-S	4.258	108.16	118.22	525.87	67.88	11.88
C1175-177-6250-S	4.431	112.55	118.22	525.87	65.00	11.38
C1175-177-6500-S	4.604	116.95	118.22	525.87	62.36	10.91
C1175-177-6750-S	4.777	121.34	118.22	525.87	59.92	10.49
C1175-177-7000-S	4.950	125.73	118.22	525.87	57.67	10.09
C1175-177-7500-S	5.296	134.51	118.22	525.87	53.63	9.39
C1175-177-8000-S	5.641	143.29	118.22	525.87	50.12	8.77
C1175-177-8500-S	5.987	152.08	118.22	525.87	47.05	8.23

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1175-177-9000-M	1.175	29.85	0.177	4.50	9.000	228.60	5.840	148.34	5.547	140.89	161.08	716.50	50.98	8.92
C1175-177-9500-M	1.175	29.85	0.177	4.50	9.500	241.30	6.157	156.40	5.846	148.49	161.08	716.50	48.19	8.43
C1175-192-1625-M	1.175	29.85	0.192	4.88	1.625	41.28	1.230	31.24	1.218	30.95	200.86	893.49	508.61	89.01
C1175-192-1750-M	1.175	29.85	0.192	4.88	1.750	44.45	1.315	33.41	1.301	33.03	200.86	893.49	462.06	80.86
C1175-192-1875-M	1.175	29.85	0.192	4.88	1.875	47.63	1.401	35.57	1.383	35.12	200.86	893.49	423.33	74.08
C1175-192-2000-M	1.175	29.85	0.192	4.88	2.000	50.80	1.486	37.74	1.465	37.20	200.86	893.49	390.58	68.35
C1175-192-2125-M	1.175	29.85	0.192	4.88	2.125	53.98	1.571	39.90	1.547	39.29	200.86	893.49	362.54	63.44
C1175-192-2250-M	1.175	29.85	0.192	4.88	2.250	57.15	1.656	42.07	1.629	41.38	200.86	893.49	338.25	59.19
C1175-192-2375-M	1.175	29.85	0.192	4.88	2.375	60.33	1.741	44.23	1.711	43.46	200.86	893.49	317.02	55.48
C1175-192-2500-M	1.175	29.85	0.192	4.88	2.500	63.50	1.827	46.40	1.793	45.55	200.86	893.49	298.29	52.20
C1175-192-2625-M	1.175	29.85	0.192	4.88	2.625	66.68	1.912	48.56	1.875	47.63	200.86	893.49	281.65	49.29
C1175-192-2750-M	1.175	29.85	0.192	4.88	2.750	69.85	1.997	50.73	1.957	49.72	200.86	893.49	266.77	46.68
C1175-192-2875-M	1.175	29.85	0.192	4.88	2.875	73.03	2.082	52.89	2.040	51.80	200.86	893.49	253.38	44.34
C1175-192-3000-M	1.175	29.85	0.192	4.88	3.000	76.20	2.167	55.05	2.122	53.89	200.86	893.49	241.28	42.22
C1175-192-3250-M	1.175	29.85	0.192	4.88	3.250	82.55	2.338	59.38	2.286	58.06	200.86	893.49	220.23	38.54
C1175-192-3500-M	1.175	29.85	0.192	4.88	3.500	88.90	2.508	63.71	2.450	62.23	200.86	893.49	202.56	35.45
C1175-192-3750-M	1.175	29.85	0.192	4.88	3.750	95.25	2.679	68.04	2.614	66.40	200.86	893.49	187.52	32.82
C1175-192-4000-M	1.175	29.85	0.192	4.88	4.000	101.60	2.849	72.37	2.778	70.57	200.86	893.49	174.55	30.55
C1175-192-4250-M	1.175	29.85	0.192	4.88	4.250	107.95	3.020	76.70	2.943	74.75	200.86	893.49	163.26	28.57
C1175-192-4500-M	1.175	29.85	0.192	4.88	4.500	114.30	3.190	81.03	3.107	78.92	200.86	893.49	153.35	26.84
C1175-192-4750-M	1.175	29.85	0.192	4.88	4.750	120.65	3.361	85.36	3.271	83.09	200.86	893.49	144.57	25.30
C1175-192-5000-M	1.175	29.85	0.192	4.88	5.000	127.00	3.531	89.69	3.435	87.26	200.86	893.49	136.74	23.93
C1175-192-5250-M	1.175	29.85	0.192	4.88	5.250	133.35	3.701	94.02	3.600	91.43	200.86	893.49	129.71	22.70
C1175-192-5500-M	1.175	29.85	0.192	4.88	5.500	139.70	3.872	98.35	3.764	95.60	200.86	893.49	123.37	21.59
C1175-192-5750-M	1.175	29.85	0.192	4.88	5.750	146.05	4.042	102.68	3.928	99.77	200.86	893.49	117.63	20.58
C1175-192-6000-M	1.175	29.85	0.192	4.88	6.000	152.40	4.213	107.00	4.092	103.94	200.86	893.49	112.39	19.67
C1175-192-6250-M	1.175	29.85	0.192	4.88	6.250	158.75	4.383	111.33	4.256	108.11	200.86	893.49	107.60	18.83
C1175-192-6500-M	1.175	29.85	0.192	4.88	6.500	165.10	4.554	115.66	4.421	112.29	200.86	893.49	103.20	18.06
C1175-192-6750-M	1.175	29.85	0.192	4.88	6.750	171.45	4.724	119.99	4.585	116.46	200.86	893.49	99.15	17.35
C1175-192-7000-M	1.175	29.85	0.192	4.88	7.000	177.80	4.895	124.32	4.749	120.63	200.86	893.49	95.40	16.70
C1175-192-7500-M	1.175	29.85	0.192	4.88	7.500	190.50	5.235	132.98	5.078	128.97	200.86	893.49	88.70	15.52
C1175-192-8000-M	1.175	29.85	0.192	4.88	8.000	203.20	5.576	141.64	5.406	137.31	200.86	893.49	82.88	14.50
C1175-192-8500-M	1.175	29.85	0.192	4.88	8.500	215.90	5.917	150.30	5.734	145.66	200.86	893.49	77.77	13.61
C1175-192-9000-M	1.175	29.85	0.192	4.88	9.000	228.60	6.258	158.96	6.063	154.00	200.86	893.49	73.26	12.82
C1175-192-9500-M	1.175	29.85	0.192	4.88	9.500	241.30	6.599	167.61	6.391	162.34	200.86	893.49	69.24	12.12
C1175-207-1750-M	1.175	29.85	0.207	5.26	1.750	44.45	1.437	36.51	1.382	35.11	208.69	928.32	667.50	116.81
C1175-207-1875-M	1.175	29.85	0.207	5.26	1.875	47.63	1.472	37.39	1.471	37.36	246.04	1094.43	610.39	106.82
C1175-207-2000-M	1.175	29.85	0.207	5.26	2.000	50.80	1.562	39.69	1.559	39.61	246.04	1094.43	562.29	98.40
C1175-207-2125-M	1.175	29.85	0.207	5.26	2.125	53.98	1.653	41.98	1.648	41.86	246.04	1094.43	521.21	91.21
C1175-207-2250-M	1.175	29.85	0.207	5.26	2.250	57.15	1.743	44.28	1.737	44.11	246.04	1094.43	485.72	85.00
C1175-207-2375-M	1.175	29.85	0.207	5.26	2.375	60.33	1.834	46.58	1.825	46.37	246.04	1094.43	454.76	79.58
C1175-207-2500-M	1.175	29.85	0.207	5.26	2.500	63.50	1.924	48.88	1.914	48.62	246.04	1094.43	427.51	74.81
C1175-207-2625-M	1.175	29.85	0.207	5.26	2.625	66.68	2.015	51.18	2.003	50.87	246.04	1094.43	403.34	70.58
C1175-207-2750-M	1.175	29.85	0.207	5.26	2.750	69.85	2.106	53.48	2.091	53.12	246.04	1094.43	381.76	66.81
C1175-207-2875-M	1.175	29.85	0.207	5.26	2.875	73.03	2.196	55.78	2.180	55.37	246.04	1094.43	362.37	63.41
C1175-207-3000-M	1.175	29.85	0.207	5.26	3.000	76.20	2.287	58.08	2.269	57.62	246.04	1094.43	344.85	60.35
C1175-207-3250-M	1.175	29.85	0.207	5.26	3.250	82.55	2.468	62.68	2.446	62.13	246.04	1094.43	314.45	55.03
C1175-207-3500-M	1.175	29.85	0.207	5.26	3.500	88.90	2.649	67.27	2.623	66.63	246.04	1094.43	288.98	50.57
C1175-207-3750-M	1.175	29.85	0.207	5.26	3.750	95.25	2.830	71.87	2.801	71.13	246.04	1094.43	267.32	46.78
C1175-207-4000-M	1.175	29.85	0.207	5.26	4.000	101.60	3.011	76.47	2.978	75.64	246.04	1094.43	248.69	43.52
C1175-207-4250-M	1.175	29.85	0.207	5.26	4.250	107.95	3.192	81.07	3.155	80.14	246.04	1094.43	232.48	40.68
C1175-207-4500-M	1.175	29.85	0.207	5.26	4.500	114.30	3.373	85.67	3.332	84.64	246.04	1094.43	218.25	38.19
C1175-207-4750-M	1.175	29.85	0.207	5.26	4.750	120.65	3.554	90.26	3.510	89.15	246.04	1094.43	205.67	35.99
C1175-207-5000-M	1.175	29.85	0.207	5.26	5.000	127.00	3.735	94.86	3.687	93.65	246.04	1094.43	194.46	34.03
C1175-207-5250-M	1.175	29.85	0.207	5.26	5.250	133.35	3.916	99.46	3.864	98.15	246.04	1094.43	184.41	32.27
C1175-207-5500-M	1.175	29.85	0.207	5.26	5.500	139.70	4.097	104.06	4.042	102.66	246.04	1094.43	175.34	30.68
C1175-207-5750-M	1.175	29.85	0.207	5.26	5.750	146.05	4.278	108.66	4.219	107.16	246.04	1094.43	167.13	29.25
C1175-207-6000-M	1.175	29.85	0.207	5.26	6.000	152.40	4.459	113.25	4.396	111.66	246.04	1094.43	159.65	27.94
C1175-207-6250-M	1.175	29.85	0.207	5.26	6.250	158.75	4.640	117.85	4.574	116.17	246.04	1094.43	152.81	26.74
C1175-207-6500-M	1.175	29.85	0.207	5.26	6.500	165.10	4.821	122.45	4.751	120.67	246.04	1094.43	146.53	25.64
C1175-207-6750-M	1.175	29.85	0.207	5.26	6.750	171.45	5.002	127.05	4.928	125.17	246.04	1094.43	140.75	24.63
C1175-207-7000-M	1.175	29.85	0.207	5.26	7.000	177.80	5.183	131.65	5.105	129.68	246.04	1094.43	135.41	23.70
C1175-207-7500-M	1.175	29.85	0.207	5.26	7.500	190.50	5.545	140.84	5.460	138.68	246.04	1094.43	125.85	22.02
C1175-207-8000-M	1.175	29.85	0.207	5.26	8.000	203.20	5.907	150.04	5.815	147.69	246.04	1094.43	117.56	20.57

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1175-177-9000-S	6.333	160.86	118.22	525.87	44.33	7.76
C1175-177-9500-S	6.679	169.64	118.22	525.87	41.90	7.33
C1175-192-1625-S	1.295	32.91	145.74	648.27	442.27	77.40
C1175-192-1750-S	1.387	35.24	145.74	648.27	401.80	70.31
C1175-192-1875-S	1.479	37.57	145.74	648.27	368.11	64.42
C1175-192-2000-S	1.571	39.90	145.74	648.27	339.64	59.44
C1175-192-2125-S	1.663	42.23	145.74	648.27	315.25	55.17
C1175-192-2250-S	1.755	44.56	145.74	648.27	294.13	51.47
C1175-192-2375-S	1.846	46.90	145.74	648.27	275.67	48.24
C1175-192-2500-S	1.938	49.23	145.74	648.27	259.38	45.39
C1175-192-2625-S	2.030	51.56	145.74	648.27	244.91	42.86
C1175-192-2750-S	2.122	53.89	145.74	648.27	231.98	40.60
C1175-192-2875-S	2.214	56.22	145.74	648.27	220.33	38.56
C1175-192-3000-S	2.305	58.56	145.74	648.27	209.81	36.72
C1175-192-3250-S	2.489	63.22	145.74	648.27	191.50	33.51
C1175-192-3500-S	2.673	67.88	145.74	648.27	176.14	30.82
C1175-192-3750-S	2.856	72.55	145.74	648.27	163.06	28.54
C1175-192-4000-S	3.040	77.21	145.74	648.27	151.78	26.56
C1175-192-4250-S	3.223	81.88	145.74	648.27	141.97	24.84
C1175-192-4500-S	3.407	86.54	145.74	648.27	133.35	23.34
C1175-192-4750-S	3.591	91.20	145.74	648.27	125.71	22.00
C1175-192-5000-S	3.774	95.87	145.74	648.27	118.90	20.81
C1175-192-5250-S	3.958	100.53	145.74	648.27	112.79	19.74
C1175-192-5500-S	4.142	105.20	145.74	648.27	107.28	18.77
C1175-192-5750-S	4.325	109.86	145.74	648.27	102.28	17.90
C1175-192-6000-S	4.509	114.52	145.74	648.27	97.73	17.10
C1175-192-6250-S	4.692	119.19	145.74	648.27	93.57	16.37
C1175-192-6500-S	4.876	123.85	145.74	648.27	89.74	15.70
C1175-192-6750-S	5.060	128.51	145.74	648.27	86.22	15.09
C1175-192-7000-S	5.243	133.18	145.74	648.27	82.96	14.52
C1175-192-7500-S	5.610	142.51	145.74	648.27	77.13	13.50
C1175-192-8000-S	5.978	151.83	145.74	648.27	72.07	12.61
C1175-192-8500-S	6.345	161.16	145.74	648.27	67.63	11.83
C1175-192-9000-S	6.712	170.49	145.74	648.27	63.70	11.15
C1175-192-9500-S	7.079	179.82	145.74	648.27	60.21	10.54
C1175-207-1750-S	1.446	36.73	176.49	785.05	580.44	101.58
C1175-207-1875-S	1.542	39.18	176.49	785.05	530.78	92.89
C1175-207-2000-S	1.639	41.63	176.49	785.05	488.94	85.57
C1175-207-2125-S	1.736	44.08	176.49	785.05	453.22	79.31
C1175-207-2250-S	1.832	46.54	176.49	785.05	422.37	73.91
C1175-207-2375-S	1.929	48.99	176.49	785.05	395.44	69.20
C1175-207-2500-S	2.025	51.44	176.49	785.05	371.75	65.06
C1175-207-2625-S	2.122	53.89	176.49	785.05	350.73	61.38
C1175-207-2750-S	2.218	56.35	176.49	785.05	331.96	58.09
C1175-207-2875-S	2.315	58.80	176.49	785.05	315.10	55.14
C1175-207-3000-S	2.411	61.25	176.49	785.05	299.87	52.48
C1175-207-3250-S	2.605	66.16	176.49	785.05	273.44	47.85
C1175-207-3500-S	2.798	71.06	176.49	785.05	251.29	43.97
C1175-207-3750-S	2.991	75.97	176.49	785.05	232.45	40.68
C1175-207-4000-S	3.184	80.87	176.49	785.05	216.25	37.84
C1175-207-4250-S	3.377	85.78	176.49	785.05	202.16	35.38
C1175-207-4500-S	3.570	90.68	176.49	785.05	189.79	33.21
C1175-207-4750-S	3.763	95.58	176.49	785.05	178.84	31.30
C1175-207-5000-S	3.956	100.49	176.49	785.05	169.09	29.59
C1175-207-5250-S	4.149	105.39	176.49	785.05	160.35	28.06
C1175-207-5500-S	4.342	110.30	176.49	785.05	152.47	26.68
C1175-207-5750-S	4.536	115.20	176.49	785.05	145.33	25.43
C1175-207-6000-S	4.729	120.11	176.49	785.05	138.82	24.29
C1175-207-6250-S	4.922	125.01	176.49	785.05	132.88	23.25
C1175-207-6500-S	5.115	129.92	176.49	785.05	127.42	22.30
C1175-207-6750-S	5.308	134.82	176.49	785.05	122.39	21.42
C1175-207-7000-S	5.501	139.73	176.49	785.05	117.75	20.61
C1175-207-7500-S	5.887	149.54	176.49	785.05	109.44	19.15
C1175-207-8000-S	6.274	159.35	176.49	785.05	102.22	17.89

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1175-207-8500-M	**1.175**	**29.85**	**0.207**	**5.26**	**8.500**	**215.90**	**6.269**	**159.24**	**6.169**	**156.70**	**246.04**	**1094.43**	**110.29**	**19.30**
C1175-207-9000-M	**1.175**	**29.85**	**0.207**	**5.26**	**9.000**	**228.60**	**6.631**	**168.43**	**6.524**	**165.70**	**246.04**	**1094.43**	**103.87**	**18.18**
C1175-207-9500-M	**1.175**	**29.85**	**0.207**	**5.26**	**9.500**	**241.30**	**6.993**	**177.63**	**6.878**	**174.71**	**246.04**	**1094.43**	**98.15**	**17.18**
C1175-225-1750-M	**1.175**	**29.85**	**0.225**	**5.72**	**1.750**	**44.45**	**1.508**	**38.31**	**1.466**	**37.23**	**246.89**	**1098.23**	**1022.02**	**178.85**
C1175-225-1875-M	**1.175**	**29.85**	**0.225**	**5.72**	**1.875**	**47.63**	**1.608**	**40.85**	**1.561**	**39.66**	**248.61**	**1105.86**	**932.37**	**163.16**
C1175-225-2000-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.000**	**50.80**	**1.708**	**43.39**	**1.657**	**42.08**	**250.05**	**1112.26**	**857.18**	**150.01**
C1175-225-2125-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.125**	**53.98**	**1.808**	**45.93**	**1.752**	**44.51**	**251.27**	**1117.70**	**793.21**	**138.81**
C1175-225-2250-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.250**	**57.15**	**1.908**	**48.47**	**1.848**	**46.93**	**252.32**	**1122.39**	**738.13**	**129.17**
C1175-225-2375-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.375**	**60.33**	**2.008**	**51.01**	**1.943**	**49.36**	**253.24**	**1126.46**	**690.20**	**120.78**
C1175-225-2500-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.500**	**63.50**	**2.108**	**53.54**	**2.039**	**51.79**	**254.04**	**1130.04**	**648.11**	**113.42**
C1175-225-2625-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.625**	**66.68**	**2.208**	**56.08**	**2.134**	**54.21**	**254.76**	**1133.21**	**610.86**	**106.90**
C1175-225-2750-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.750**	**69.85**	**2.308**	**58.62**	**2.230**	**56.64**	**255.39**	**1136.04**	**577.66**	**101.09**
C1175-225-2875-M	**1.175**	**29.85**	**0.225**	**5.72**	**2.875**	**73.03**	**2.408**	**61.16**	**2.325**	**59.06**	**255.96**	**1138.57**	**547.89**	**95.88**
C1175-225-3000-M	**1.175**	**29.85**	**0.225**	**5.72**	**3.000**	**76.20**	**2.508**	**63.70**	**2.421**	**61.49**	**256.47**	**1140.85**	**521.03**	**91.18**
C1175-225-3250-M	**1.175**	**29.85**	**0.225**	**5.72**	**3.250**	**82.55**	**2.708**	**68.77**	**2.612**	**66.34**	**257.36**	**1144.81**	**474.51**	**83.04**
C1175-225-3750-M	**1.175**	**29.85**	**0.225**	**5.72**	**3.750**	**95.25**	**3.107**	**78.93**	**2.994**	**76.05**	**258.74**	**1150.93**	**402.62**	**70.46**
C1175-225-4000-M	**1.175**	**29.85**	**0.225**	**5.72**	**4.000**	**101.60**	**3.307**	**84.00**	**3.185**	**80.90**	**259.28**	**1153.34**	**374.26**	**65.50**
C1175-225-4250-M	**1.175**	**29.85**	**0.225**	**5.72**	**4.250**	**107.95**	**3.507**	**89.08**	**3.376**	**85.75**	**259.75**	**1155.44**	**349.64**	**61.19**
C1175-225-4500-M	**1.175**	**29.85**	**0.225**	**5.72**	**4.500**	**114.30**	**3.707**	**94.16**	**3.567**	**90.60**	**260.17**	**1157.27**	**328.06**	**57.41**
C1175-225-4750-M	**1.175**	**29.85**	**0.225**	**5.72**	**4.750**	**120.65**	**3.907**	**99.23**	**3.758**	**95.45**	**260.53**	**1158.89**	**308.98**	**54.07**
C1175-225-5000-M	**1.175**	**29.85**	**0.225**	**5.72**	**5.000**	**127.00**	**4.107**	**104.31**	**3.949**	**100.31**	**260.85**	**1160.34**	**292.01**	**51.10**
C1175-225-5250-M	**1.175**	**29.85**	**0.225**	**5.72**	**5.250**	**133.35**	**4.307**	**109.39**	**4.140**	**105.16**	**261.15**	**1161.63**	**276.80**	**48.44**
C1175-225-5500-M	**1.175**	**29.85**	**0.225**	**5.72**	**5.500**	**139.70**	**4.331**	**110.01**	**4.331**	**110.01**	**307.53**	**1367.96**	**263.10**	**46.04**
C1175-225-5750-M	**1.175**	**29.85**	**0.225**	**5.72**	**5.750**	**146.05**	**4.523**	**114.89**	**4.522**	**114.86**	**307.53**	**1367.96**	**250.69**	**43.87**
C1175-225-6000-M	**1.175**	**29.85**	**0.225**	**5.72**	**6.000**	**152.40**	**4.715**	**119.77**	**4.713**	**119.71**	**307.53**	**1367.96**	**239.39**	**41.89**
C1175-225-6250-M	**1.175**	**29.85**	**0.225**	**5.72**	**6.250**	**158.75**	**4.908**	**124.65**	**4.904**	**124.56**	**307.53**	**1367.96**	**229.07**	**40.09**
C1175-225-6500-M	**1.175**	**29.85**	**0.225**	**5.72**	**6.500**	**165.10**	**5.100**	**129.53**	**5.095**	**129.42**	**307.53**	**1367.96**	**219.61**	**38.43**
C1175-225-6750-M	**1.175**	**29.85**	**0.225**	**5.72**	**6.750**	**171.45**	**5.292**	**134.41**	**5.286**	**134.27**	**307.53**	**1367.96**	**210.89**	**36.91**
C1175-225-7000-M	**1.175**	**29.85**	**0.225**	**5.72**	**7.000**	**177.80**	**5.484**	**139.29**	**5.477**	**139.12**	**307.53**	**1367.96**	**202.84**	**35.50**
C1175-225-7500-M	**1.175**	**29.85**	**0.225**	**5.72**	**7.500**	**190.50**	**5.868**	**149.05**	**5.859**	**148.82**	**307.53**	**1367.96**	**188.46**	**32.98**
C1175-225-8000-M	**1.175**	**29.85**	**0.225**	**5.72**	**8.000**	**203.20**	**6.252**	**158.81**	**6.241**	**158.53**	**307.53**	**1367.96**	**175.98**	**30.80**
C1175-225-8500-M	**1.175**	**29.85**	**0.225**	**5.72**	**8.500**	**215.90**	**6.637**	**168.57**	**6.623**	**168.23**	**307.53**	**1367.96**	**165.05**	**28.88**
C1175-225-9000-M	**1.175**	**29.85**	**0.225**	**5.72**	**9.000**	**228.60**	**7.021**	**178.33**	**7.005**	**177.94**	**307.53**	**1367.96**	**155.40**	**27.19**
C1175-225-9500-M	**1.175**	**29.85**	**0.225**	**5.72**	**9.500**	**241.30**	**7.405**	**188.09**	**7.387**	**187.64**	**307.53**	**1367.96**	**146.81**	**25.69**
D13260	1.181	30.00	0.110	2.80	1.850	47.00	0.705	17.90	0.606	15.40	58.20	258.90	50.74	8.88
D13270	1.181	30.00	0.110	2.80	2.783	70.70	0.980	24.90	0.827	21.00	58.20	258.90	32.29	5.65
D13780	1.181	30.00	0.197	5.00	1.614	41.00	1.087	27.60	1.083	27.50	352.74	1569.06	666.86	116.70
D13790	1.181	30.00	0.197	5.00	2.362	60.00	1.516	38.50	1.476	37.50	352.74	1569.06	423.09	74.04
D13800	1.181	30.00	0.197	5.00	3.445	87.50	2.161	54.90	2.067	52.50	352.74	1569.06	273.49	47.86
D13810	1.181	30.00	0.197	5.00	4.921	125.00	3.020	76.70	2.854	72.50	352.74	1569.06	186.23	32.59
D13820	1.181	30.00	0.197	5.00	7.087	180.00	4.291	109.00	4.035	102.50	352.74	1569.06	125.54	21.97
C1218-085-0875-M	**1.218**	**30.94**	**0.085**	**2.16**	**0.875**	**22.23**	**0.357**	**9.06**	**0.279**	**7.08**	**18.97**	**84.37**	**36.60**	**6.41**
C1218-085-1000-M	**1.218**	**30.94**	**0.085**	**2.16**	**1.000**	**25.40**	**0.396**	**10.05**	**0.303**	**7.70**	**18.80**	**83.62**	**31.10**	**5.44**
C1218-085-1500-M	**1.218**	**30.94**	**0.085**	**2.16**	**1.500**	**38.10**	**0.551**	**13.99**	**0.403**	**10.23**	**18.41**	**81.90**	**19.40**	**3.40**
C1218-085-2000-M	**1.218**	**30.94**	**0.085**	**2.16**	**2.000**	**50.80**	**0.706**	**17.94**	**0.502**	**12.74**	**18.24**	**81.15**	**14.10**	**2.47**
C1218-085-2500-M	**1.218**	**30.94**	**0.085**	**2.16**	**2.500**	**63.50**	**0.855**	**21.73**	**0.593**	**15.07**	**18.26**	**81.21**	**11.10**	**1.94**
C1218-085-3000-M	**1.218**	**30.94**	**0.085**	**2.16**	**3.000**	**76.20**	**1.004**	**25.50**	**0.685**	**17.39**	**18.16**	**80.79**	**9.10**	**1.59**
C1218-085-3500-M	**1.218**	**30.94**	**0.085**	**2.16**	**3.500**	**88.90**	**1.147**	**29.14**	**0.769**	**19.53**	**18.35**	**81.63**	**7.80**	**1.37**
C1218-085-4000-M	**1.218**	**30.94**	**0.085**	**2.16**	**4.000**	**101.60**	**1.301**	**33.04**	**0.866**	**21.99**	**18.08**	**80.44**	**6.70**	**1.17**
C1218-085-4500-M	**1.218**	**30.94**	**0.085**	**2.16**	**4.500**	**114.30**	**1.441**	**36.60**	**0.946**	**24.03**	**18.36**	**81.65**	**6.00**	**1.05**
C1218-085-5000-M	**1.218**	**30.94**	**0.085**	**2.16**	**5.000**	**127.00**	**1.598**	**40.58**	**1.047**	**26.60**	**18.03**	**80.21**	**5.30**	**0.93**
C1218-095-0875-M	**1.218**	**30.94**	**0.095**	**2.41**	**0.875**	**22.23**	**0.385**	**9.77**	**0.309**	**7.85**	**29.23**	**130.01**	**59.60**	**10.43**
C1218-095-1000-M	**1.218**	**30.94**	**0.095**	**2.41**	**1.000**	**25.40**	**0.423**	**10.74**	**0.337**	**8.56**	**29.09**	**129.41**	**50.40**	**8.82**
C1218-095-1250-M	**1.218**	**30.94**	**0.095**	**2.41**	**1.250**	**31.75**	**0.506**	**12.85**	**0.393**	**9.99**	**28.65**	**127.45**	**38.50**	**6.74**
C1218-095-1500-M	**1.218**	**30.94**	**0.095**	**2.41**	**1.500**	**38.10**	**0.589**	**14.96**	**0.450**	**11.42**	**28.33**	**126.01**	**31.10**	**5.44**
C1218-095-1750-M	**1.218**	**30.94**	**0.095**	**2.41**	**1.750**	**44.45**	**0.672**	**17.08**	**0.506**	**12.86**	**28.13**	**125.12**	**26.10**	**4.57**
C1218-095-2000-M	**1.218**	**30.94**	**0.095**	**2.41**	**2.000**	**50.80**	**0.755**	**19.18**	**0.562**	**14.29**	**28.01**	**124.58**	**22.50**	**3.94**
C1218-095-2250-M	**1.218**	**30.94**	**0.095**	**2.41**	**2.250**	**57.15**	**0.836**	**21.24**	**0.616**	**15.65**	**27.99**	**124.52**	**19.80**	**3.47**
C1218-095-2500-M	**1.218**	**30.94**	**0.095**	**2.41**	**2.500**	**63.50**	**0.916**	**23.26**	**0.668**	**16.97**	**27.88**	**124.02**	**17.60**	**3.08**
C1218-095-2750-M	**1.218**	**30.94**	**0.095**	**2.41**	**2.750**	**69.85**	**0.994**	**25.24**	**0.718**	**18.24**	**27.92**	**124.21**	**15.90**	**2.78**
C1218-095-3000-M	**1.218**	**30.94**	**0.095**	**2.41**	**3.000**	**76.20**	**1.072**	**27.23**	**0.768**	**19.51**	**27.96**	**124.36**	**14.50**	**2.54**
C1218-095-3500-M	**1.218**	**30.94**	**0.095**	**2.41**	**3.500**	**88.90**	**1.229**	**31.22**	**0.870**	**22.10**	**27.93**	**124.24**	**12.30**	**2.15**
C1218-095-4000-M	**1.218**	**30.94**	**0.095**	**2.41**	**4.000**	**101.60**	**1.385**	**35.19**	**0.970**	**24.64**	**27.98**	**124.44**	**10.70**	**1.87**
C1218-095-4500-M	**1.218**	**30.94**	**0.095**	**2.41**	**4.500**	**114.30**	**1.539**	**39.10**	**1.068**	**27.12**	**28.13**	**125.12**	**9.50**	**1.66**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1175-207-8500-S	**6.660**	**169.16**	**176.49**	**785.05**	**95.90**	**16.78**
C1175-207-9000-S	**7.046**	**178.97**	**176.49**	**785.05**	**90.32**	**15.81**
C1175-207-9500-S	**7.432**	**188.78**	**176.49**	**785.05**	**85.35**	**14.94**
C1175-225-1750-S	**1.505**	**38.23**	**217.63**	**968.05**	**888.71**	**155.52**
C1175-225-1875-S	**1.607**	**40.81**	**217.63**	**968.05**	**810.76**	**141.88**
C1175-225-2000-S	**1.708**	**43.38**	**217.63**	**968.05**	**745.37**	**130.44**
C1175-225-2125-S	**1.809**	**45.96**	**217.63**	**968.05**	**689.75**	**120.71**
C1175-225-2250-S	**1.911**	**48.54**	**217.63**	**968.05**	**641.85**	**112.32**
C1175-225-2375-S	**2.012**	**51.11**	**217.63**	**968.05**	**600.17**	**105.03**
C1175-225-2500-S	**2.114**	**53.69**	**217.63**	**968.05**	**563.58**	**98.63**
C1175-225-2625-S	**2.215**	**56.27**	**217.63**	**968.05**	**531.19**	**92.96**
C1175-225-2750-S	**2.317**	**58.85**	**217.63**	**968.05**	**502.32**	**87.91**
C1175-225-2875-S	**2.418**	**61.42**	**217.63**	**968.05**	**476.42**	**83.37**
C1175-225-3000-S	**2.520**	**64.00**	**217.63**	**968.05**	**453.07**	**79.29**
C1175-225-3250-S	**2.723**	**69.15**	**217.63**	**968.05**	**412.62**	**72.21**
C1175-225-3750-S	**3.128**	**79.46**	**217.63**	**968.05**	**350.10**	**61.27**
C1175-225-4000-S	**3.331**	**84.61**	**217.63**	**968.05**	**325.45**	**56.95**
C1175-225-4250-S	**3.534**	**89.77**	**217.63**	**968.05**	**304.03**	**53.21**
C1175-225-4500-S	**3.737**	**94.92**	**217.63**	**968.05**	**285.27**	**49.92**
C1175-225-4750-S	**3.940**	**100.08**	**217.63**	**968.05**	**268.68**	**47.02**
C1175-225-5000-S	**4.143**	**105.23**	**217.63**	**968.05**	**253.92**	**44.44**
C1175-225-5250-S	**4.346**	**110.38**	**217.63**	**968.05**	**240.69**	**42.12**
C1175-225-5500-S	**4.549**	**115.54**	**217.63**	**968.05**	**228.78**	**40.04**
C1175-225-5750-S	**4.752**	**120.69**	**217.63**	**968.05**	**217.99**	**38.15**
C1175-225-6000-S	**4.955**	**125.85**	**217.63**	**968.05**	**208.17**	**36.43**
C1175-225-6250-S	**5.157**	**131.00**	**217.63**	**968.05**	**199.20**	**34.86**
C1175-225-6500-S	**5.360**	**136.15**	**217.63**	**968.05**	**190.96**	**33.42**
C1175-225-6750-S	**5.563**	**141.31**	**217.63**	**968.05**	**183.39**	**32.09**
C1175-225-7000-S	**5.766**	**146.46**	**217.63**	**968.05**	**176.39**	**30.87**
C1175-225-7500-S	**6.172**	**156.77**	**217.63**	**968.05**	**163.88**	**28.68**
C1175-225-8000-S	**6.578**	**167.08**	**217.63**	**968.05**	**153.02**	**26.78**
C1175-225-8500-S	**6.984**	**177.38**	**217.63**	**968.05**	**143.52**	**25.12**
C1175-225-9000-S	**7.389**	**187.69**	**217.63**	**968.05**	**135.13**	**23.65**
C1175-225-9500-S	**7.795**	**198.00**	**217.63**	**968.05**	**127.66**	**22.34**
D23260	0.705	17.90	48.50	215.75	42.29	7.40
D23270	0.980	24.90	48.50	215.75	26.91	4.71
D23780	1.087	27.60	293.95	1307.55	555.49	97.21
D23790	1.516	38.50	293.95	1307.55	352.46	61.68
D23800	2.161	54.90	293.95	1307.55	227.83	39.87
D23810	3.020	76.70	293.95	1307.55	155.14	27.15
D23820	4.291	109.00	293.95	1307.55	104.57	18.30
C1218-085-0875-S	**0.357**	**9.06**	**15.80**	**70.28**	**30.49**	**5.34**
C1218-085-1000-S	**0.396**	**10.05**	**15.66**	**69.65**	**25.91**	**4.53**
C1218-085-1500-S	**0.551**	**13.99**	**15.34**	**68.23**	**16.16**	**2.83**
C1218-085-2000-S	**0.706**	**17.94**	**15.20**	**67.60**	**11.75**	**2.06**
C1218-085-2500-S	**0.855**	**21.73**	**15.21**	**67.64**	**9.25**	**1.62**
C1218-085-3000-S	**1.004**	**25.50**	**15.13**	**67.30**	**7.58**	**1.33**
C1218-085-3500-S	**1.147**	**29.14**	**15.29**	**67.99**	**6.50**	**1.14**
C1218-085-4000-S	**1.301**	**33.04**	**15.06**	**67.01**	**5.58**	**0.98**
C1218-085-4500-S	**1.441**	**36.60**	**15.29**	**68.01**	**5.00**	**0.87**
C1218-085-5000-S	**1.598**	**40.58**	**15.02**	**66.81**	**4.42**	**0.77**
C1218-095-0875-S	**0.436**	**11.07**	**21.80**	**96.97**	**49.65**	**8.69**
C1218-095-1000-S	**0.481**	**12.21**	**21.80**	**96.97**	**41.98**	**7.35**
C1218-095-1250-S	**0.570**	**14.48**	**21.80**	**96.97**	**32.07**	**5.61**
C1218-095-1500-S	**0.659**	**16.73**	**21.80**	**96.97**	**25.91**	**4.53**
C1218-095-1750-S	**0.747**	**18.98**	**21.80**	**96.97**	**21.74**	**3.80**
C1218-095-2000-S	**0.837**	**21.26**	**21.80**	**96.97**	**18.74**	**3.28**
C1218-095-2250-S	**0.928**	**23.58**	**21.80**	**96.97**	**16.49**	**2.89**
C1218-095-2500-S	**1.013**	**25.73**	**21.80**	**96.97**	**14.66**	**2.57**
C1218-095-2750-S	**1.104**	**28.04**	**21.80**	**96.97**	**13.25**	**2.32**
C1218-095-3000-S	**1.195**	**30.36**	**21.80**	**96.97**	**12.08**	**2.11**
C1218-095-3500-S	**1.372**	**34.86**	**21.80**	**96.97**	**10.25**	**1.79**
C1218-095-4000-S	**1.554**	**39.48**	**21.80**	**96.97**	**8.91**	**1.56**
C1218-095-4500-S	**1.745**	**44.33**	**21.80**	**96.97**	**7.91**	**1.38**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1218-095-5000-M	**1.218**	**30.94**	**0.095**	**2.41**	**5.000**	**127.00**	**1.697**	**43.10**	**1.170**	**29.71**	**28.08**	**124.89**	**8.50**	**1.49**	**C1218-095-5000-S**	**1.921**	**48.80**	**21.80**	**96.97**	**7.08**	**1.24**
C1218-105-0875-M	**1.218**	**30.94**	**0.105**	**2.67**	**0.875**	**22.23**	**0.422**	**10.73**	**0.360**	**9.14**	**37.34**	**166.09**	**82.50**	**14.44**	**C1218-105-0875-S**	**0.459**	**11.65**	**28.61**	**127.27**	**68.72**	**12.03**
C1218-105-1000-M	**1.218**	**30.94**	**0.105**	**2.67**	**1.000**	**25.40**	**0.470**	**11.93**	**0.395**	**10.03**	**36.86**	**163.96**	**69.50**	**12.16**	**C1218-105-1000-S**	**0.506**	**12.85**	**28.61**	**127.27**	**57.89**	**10.13**
C1218-105-1250-M	**1.218**	**30.94**	**0.105**	**2.67**	**1.250**	**31.75**	**0.564**	**14.33**	**0.466**	**11.82**	**36.20**	**161.04**	**52.80**	**9.24**	**C1218-105-1250-S**	**0.599**	**15.23**	**28.61**	**127.27**	**43.98**	**7.70**
C1218-105-1500-M	**1.218**	**30.94**	**0.105**	**2.67**	**1.500**	**38.10**	**0.660**	**16.75**	**0.537**	**13.63**	**35.72**	**158.89**	**42.50**	**7.44**	**C1218-105-1500-S**	**0.692**	**17.57**	**28.61**	**127.27**	**35.40**	**6.20**
C1218-105-2000-M	**1.218**	**30.94**	**0.105**	**2.67**	**2.000**	**50.80**	**0.847**	**21.51**	**0.676**	**17.16**	**35.40**	**157.46**	**30.70**	**5.37**	**C1218-105-2000-S**	**0.881**	**22.38**	**28.61**	**127.27**	**25.57**	**4.48**
C1218-105-2500-M	**1.218**	**30.94**	**0.105**	**2.67**	**2.500**	**63.50**	**1.025**	**26.03**	**0.803**	**20.39**	**35.41**	**157.49**	**24.00**	**4.20**	**C1218-105-2500-S**	**1.069**	**27.15**	**28.61**	**127.27**	**19.99**	**3.50**
C1218-105-3000-M	**1.218**	**30.94**	**0.105**	**2.67**	**3.000**	**76.20**	**1.203**	**30.55**	**0.930**	**23.62**	**35.41**	**157.50**	**19.70**	**3.45**	**C1218-105-3000-S**	**1.256**	**31.91**	**28.61**	**127.27**	**16.41**	**2.87**
C1218-105-3500-M	**1.218**	**30.94**	**0.105**	**2.67**	**3.500**	**88.90**	**1.381**	**35.07**	**1.057**	**26.85**	**35.39**	**157.43**	**16.70**	**2.92**	**C1218-105-3500-S**	**1.443**	**36.66**	**28.61**	**127.27**	**13.91**	**2.43**
C1218-105-4000-M	**1.218**	**30.94**	**0.105**	**2.67**	**4.000**	**101.60**	**1.559**	**39.59**	**1.184**	**30.08**	**35.40**	**157.47**	**14.50**	**2.54**	**C1218-105-4000-S**	**1.631**	**41.43**	**28.61**	**127.27**	**12.08**	**2.11**
C1218-105-4500-M	**1.218**	**30.94**	**0.105**	**2.67**	**4.500**	**114.30**	**1.737**	**44.12**	**1.312**	**33.33**	**35.36**	**157.31**	**12.80**	**2.24**	**C1218-105-4500-S**	**1.817**	**46.14**	**28.61**	**127.27**	**10.66**	**1.87**
C1218-105-5000-M	**1.218**	**30.94**	**0.105**	**2.67**	**5.000**	**127.00**	**1.912**	**48.57**	**1.435**	**36.46**	**35.51**	**157.96**	**11.50**	**2.01**	**C1218-105-5000-S**	**2.013**	**51.14**	**28.61**	**127.27**	**9.58**	**1.68**
C1218-112-0875-M	**1.218**	**30.94**	**0.112**	**2.85**	**0.875**	**22.23**	**0.450**	**11.43**	**0.384**	**9.75**	**46.21**	**205.54**	**108.75**	**19.03**	**C1218-112-0875-S**	**0.499**	**12.67**	**34.06**	**151.52**	**90.59**	**15.85**
C1218-112-1000-M	**1.218**	**30.94**	**0.112**	**2.85**	**1.000**	**25.40**	**0.493**	**12.52**	**0.423**	**10.74**	**46.21**	**205.54**	**91.12**	**15.95**	**C1218-112-1000-S**	**0.551**	**14.00**	**34.06**	**151.52**	**75.90**	**13.28**
C1218-112-1250-M	**1.218**	**30.94**	**0.112**	**2.85**	**1.250**	**31.75**	**0.592**	**15.03**	**0.500**	**12.69**	**45.41**	**201.99**	**69.00**	**12.08**	**C1218-112-1250-S**	**0.657**	**16.70**	**34.06**	**151.52**	**57.48**	**10.06**
C1218-112-1500-M	**1.218**	**30.94**	**0.112**	**2.85**	**1.500**	**38.10**	**0.692**	**17.58**	**0.577**	**14.66**	**44.77**	**199.14**	**55.42**	**9.70**	**C1218-112-1500-S**	**0.762**	**19.36**	**34.06**	**151.52**	**46.17**	**8.08**
C1218-112-2000-M	**1.218**	**30.94**	**0.112**	**2.85**	**2.000**	**50.80**	**0.890**	**22.61**	**0.729**	**18.52**	**44.20**	**196.59**	**39.82**	**6.97**	**C1218-112-2000-S**	**0.973**	**24.72**	**34.06**	**151.52**	**33.17**	**5.80**
C1218-112-2500-M	**1.218**	**30.94**	**0.112**	**2.85**	**2.500**	**63.50**	**1.078**	**27.37**	**0.868**	**22.05**	**44.19**	**196.57**	**31.07**	**5.44**	**C1218-112-2500-S**	**1.184**	**30.07**	**34.06**	**151.52**	**25.88**	**4.53**
C1218-112-3000-M	**1.218**	**30.94**	**0.112**	**2.85**	**3.000**	**76.20**	**1.265**	**32.13**	**1.007**	**25.57**	**44.21**	**196.64**	**25.48**	**4.46**	**C1218-112-3000-S**	**1.395**	**35.44**	**34.06**	**151.52**	**21.23**	**3.71**
C1218-112-3500-M	**1.218**	**30.94**	**0.112**	**2.85**	**3.500**	**88.90**	**1.453**	**36.90**	**1.146**	**29.11**	**44.20**	**196.62**	**21.59**	**3.78**	**C1218-112-3500-S**	**1.606**	**40.79**	**34.06**	**151.52**	**17.98**	**3.15**
C1218-112-4000-M	**1.218**	**30.94**	**0.112**	**2.85**	**4.000**	**101.60**	**1.640**	**41.66**	**1.285**	**32.64**	**44.20**	**196.61**	**18.73**	**3.28**	**C1218-112-4000-S**	**1.817**	**46.15**	**34.06**	**151.52**	**15.60**	**2.73**
C1218-125-0875-M	**1.218**	**30.94**	**0.125**	**3.18**	**0.875**	**22.23**	**0.504**	**12.81**	**0.436**	**11.08**	**62.65**	**278.70**	**169.00**	**29.58**	**C1218-125-0875-S**	**0.550**	**13.97**	**45.75**	**203.51**	**140.78**	**24.64**
C1218-125-1000-M	**1.218**	**30.94**	**0.125**	**3.18**	**1.000**	**25.40**	**0.556**	**14.11**	**0.482**	**12.25**	**62.65**	**278.70**	**141.00**	**24.68**	**C1218-125-1000-S**	**0.610**	**15.51**	**45.75**	**203.51**	**117.45**	**20.55**
C1218-125-1250-M	**1.218**	**30.94**	**0.125**	**3.18**	**1.250**	**31.75**	**0.656**	**16.67**	**0.576**	**14.62**	**62.65**	**278.70**	**105.50**	**18.46**	**C1218-125-1250-S**	**0.729**	**18.53**	**45.75**	**203.51**	**87.88**	**15.38**
C1218-125-1500-M	**1.218**	**30.94**	**0.125**	**3.18**	**1.500**	**38.10**	**0.766**	**19.45**	**0.668**	**16.97**	**62.02**	**275.87**	**84.48**	**14.78**	**C1218-125-1500-S**	**0.850**	**21.59**	**45.75**	**203.51**	**70.37**	**12.32**
C1218-125-2000-M	**1.218**	**30.94**	**0.125**	**3.18**	**2.000**	**50.80**	**0.986**	**25.04**	**0.847**	**21.52**	**61.20**	**272.22**	**60.34**	**10.56**	**C1218-125-2000-S**	**1.090**	**27.68**	**45.75**	**203.51**	**50.26**	**8.80**
C1218-125-2250-M	**1.218**	**30.94**	**0.125**	**3.18**	**2.250**	**57.15**	**1.091**	**27.72**	**0.931**	**23.65**	**61.12**	**271.87**	**52.75**	**9.23**	**C1218-125-2250-S**	**1.209**	**30.70**	**45.75**	**203.51**	**43.94**	**7.69**
C1218-125-2500-M	**1.218**	**30.94**	**0.125**	**3.18**	**2.500**	**63.50**	**1.196**	**30.38**	**1.014**	**25.76**	**61.20**	**272.21**	**46.93**	**8.21**	**C1218-125-2500-S**	**1.330**	**33.77**	**45.75**	**203.51**	**39.09**	**6.84**
C1218-125-3000-M	**1.218**	**30.94**	**0.125**	**3.18**	**3.000**	**76.20**	**1.406**	**35.72**	**1.181**	**30.00**	**61.20**	**272.24**	**38.40**	**6.72**	**C1218-125-3000-S**	**1.570**	**39.87**	**45.75**	**203.51**	**31.99**	**5.60**
C1218-125-3500-M	**1.218**	**30.94**	**0.125**	**3.18**	**3.500**	**88.90**	**1.616**	**41.06**	**1.348**	**34.25**	**61.20**	**272.21**	**32.49**	**5.69**	**C1218-125-3500-S**	**1.810**	**45.96**	**45.75**	**203.51**	**27.06**	**4.74**
C1218-125-4000-M	**1.218**	**30.94**	**0.125**	**3.18**	**4.000**	**101.60**	**1.827**	**46.40**	**1.515**	**38.49**	**61.20**	**272.24**	**28.16**	**4.93**	**C1218-125-4000-S**	**2.050**	**52.06**	**45.75**	**203.51**	**23.46**	**4.10**
C1218-125-4500-M	**1.218**	**30.94**	**0.125**	**3.18**	**4.500**	**114.30**	**2.036**	**51.71**	**1.681**	**42.70**	**61.29**	**272.61**	**24.87**	**4.35**	**C1218-125-4500-S**	**2.292**	**58.21**	**45.75**	**203.51**	**20.72**	**3.63**
C1218-125-5000-M	**1.218**	**30.94**	**0.125**	**3.18**	**5.000**	**127.00**	**2.246**	**57.05**	**1.848**	**46.94**	**61.28**	**272.57**	**22.25**	**3.89**	**C1218-125-5000-S**	**2.532**	**64.30**	**45.75**	**203.51**	**18.53**	**3.24**
C1218-135-0875-M	**1.218**	**30.94**	**0.135**	**3.43**	**0.875**	**22.23**	**0.565**	**14.35**	**0.457**	**11.62**	**77.51**	**344.79**	**250.00**	**43.75**	**C1218-135-0875-S**	**0.605**	**15.37**	**56.18**	**249.90**	**208.25**	**36.44**
C1218-135-1000-M	**1.218**	**30.94**	**0.135**	**3.43**	**1.000**	**25.40**	**0.626**	**15.89**	**0.507**	**12.87**	**77.51**	**344.79**	**207.00**	**36.23**	**C1218-135-1000-S**	**0.674**	**17.12**	**56.18**	**249.90**	**172.43**	**30.18**
C1218-135-1250-M	**1.218**	**30.94**	**0.135**	**3.43**	**1.250**	**31.75**	**0.747**	**18.97**	**0.605**	**15.37**	**77.51**	**344.79**	**154.00**	**26.95**	**C1218-135-1250-S**	**0.812**	**20.63**	**56.18**	**249.90**	**128.28**	**22.45**
C1218-135-1500-M	**1.218**	**30.94**	**0.135**	**3.43**	**1.500**	**38.10**	**0.869**	**22.07**	**0.702**	**17.84**	**77.51**	**344.79**	**122.85**	**21.50**	**C1218-135-1500-S**	**0.951**	**24.16**	**56.18**	**249.90**	**102.33**	**17.91**
C1218-135-2000-M	**1.218**	**30.94**	**0.135**	**3.43**	**2.000**	**50.80**	**1.113**	**28.26**	**0.894**	**22.70**	**77.51**	**344.79**	**87.34**	**15.28**	**C1218-135-2000-S**	**1.228**	**31.19**	**56.18**	**249.90**	**72.75**	**12.73**
C1218-135-2500-M	**1.218**	**30.94**	**0.135**	**3.43**	**2.500**	**63.50**	**1.356**	**34.44**	**1.070**	**27.17**	**77.51**	**344.79**	**67.76**	**11.86**	**C1218-135-2500-S**	**1.505**	**38.22**	**56.18**	**249.90**	**56.44**	**9.88**
C1218-135-3000-M	**1.218**	**30.94**	**0.135**	**3.43**	**3.000**	**76.20**	**1.600**	**40.63**	**1.246**	**31.65**	**77.51**	**344.79**	**55.35**	**9.69**	**C1218-135-3000-S**	**1.782**	**45.25**	**56.18**	**249.90**	**46.11**	**8.07**
C1218-135-3500-M	**1.218**	**30.94**	**0.135**	**3.43**	**3.500**	**88.90**	**1.843**	**46.81**	**1.422**	**36.13**	**77.51**	**344.79**	**46.78**	**8.19**	**C1218-135-3500-S**	**2.058**	**52.28**	**56.18**	**249.90**	**38.97**	**6.82**
C1218-135-4000-M	**1.218**	**30.94**	**0.135**	**3.43**	**4.000**	**101.60**	**2.087**	**53.00**	**1.599**	**40.61**	**77.51**	**344.79**	**40.51**	**7.09**	**C1218-135-4000-S**	**2.335**	**59.31**	**56.18**	**249.90**	**33.75**	**5.91**
C1225-085-0875-M	1.225	31.12	0.085	2.16	0.880	22.35	0.487	12.37	0.330	8.38	14.40	64.05	36.60	6.41	C1225-085-0875-S	0.487	12.37	12.00	53.36	30.49	5.34
C1225-085-1000-M	1.225	31.12	0.085	2.16	1.000	25.40	0.537	13.64	0.351	8.92	14.40	64.05	31.10	5.44	C1225-085-1000-S	0.537	13.64	12.00	53.36	25.91	4.53
C1225-085-1500-M	1.225	31.12	0.085	2.16	1.500	38.10	0.759	19.28	0.434	11.02	14.40	64.05	19.40	3.40	C1225-085-1500-S	0.759	19.28	12.00	53.36	16.16	2.83
C1225-085-2000-M	1.225	31.12	0.085	2.16	2.000	50.80	0.980	24.89	0.518	13.16	14.40	64.05	14.10	2.47	C1225-085-2000-S	0.980	24.89	12.00	53.36	11.75	2.06
C1225-085-2500-M	1.225	31.12	0.085	2.16	2.500	63.50	1.201	30.51	0.601	15.27	14.40	64.05	11.10	1.94	C1225-085-2500-S	1.201	30.51	12.00	53.36	9.25	1.62
C1225-085-3000-M	1.225	31.12	0.085	2.16	3.000	76.20	1.423	36.14	0.684	17.37	14.40	64.05	9.10	1.59	C1225-085-3000-S	1.423	36.14	12.00	53.36	7.58	1.33
C1225-085-3500-M	1.225	31.12	0.085	2.16	3.500	88.90	1.644	41.76	0.768	19.51	14.40	64.05	7.80	1.37	C1225-085-3500-S	1.644	41.76	12.00	53.36	6.50	1.14
C1225-085-4000-M	1.225	31.12	0.085	2.16	4.000	101.60	1.865	47.37	0.851	21.62	14.40	64.05	6.70	1.17	C1225-085-4000-S	1.865	47.37	12.00	53.36	5.58	0.98
C1225-085-4500-M	1.225	31.12	0.085	2.16	4.500	114.30	2.087	53.01	0.934	23.72	14.40	64.05	6.00	1.05	C1225-085-4500-S	2.087	53.01	12.00	53.36	5.00	0.87
C1225-085-5000-M	1.225	31.12	0.085	2.16	5.000	127.00	2.308	58.62	1.018	25.86	14.40	64.05	5.30	0.93	C1225-085-5000-S	2.308	58.62	12.00	53.36	4.42	0.77
C1225-096-0875-M	1.225	31.12	0.096	2.44	0.880	22.35	0.541	13.74	0.377	9.58	20.20	89.85	59.60	10.43	C1225-096-0875-S	0.541	13.74	16.83	74.85	49.65	8.69
C1225-096-1000-M	1.225	31.12	0.096	2.44	1.000	25.40	0.599	15.21	0.402	10.21	20.20	89.85	50.40	8.82	C1225-096-1000-S	0.599	15.21	16.83	74.85	41.98	7.35
C1225-096-1250-M	1.225	31.12	0.096	2.44	1.250	31.75	0.725	18.42	0.452	11.48	20.20	89.85	38.50	6.74	C1225-096-1250-S	0.725	18.42	16.83	74.85	32.07	5.61
C1225-096-1500-M	1.225	31.12	0.096	2.44	1.500	38.10	0.851	21.62	0.502	12.75	20.20	89.85	31.10	5.44	C1225-096-1500-S	0.851	21.62	16.83	74.85	25.91	4.53
C1225-096-1750-M	1.225	31.12	0.096	2.44	1.750	44.45	0.977	24.82	0.552	14.02	20.20	89.85	26.10	4.57	C1225-096-1750-S	0.977	24.82	16.83	74.85	21.74	3.80
C1225-096-2000-M	1.225	31.12	0.096	2.44	2.000	50.80	1.103	28.02	0.602	15.29	20.20	89.85	22.50	3.94	C1225-096-2000-S	1.103	28.02	16.83	74.85	18.74	3.28
C1225-096-2250-M	1.225	31.12	0.096	2.44	2.250	57.15	1.229	31.22	0.652	16.56	20.20	89.85	19.80	3.47	C1225-096-2250-S	1.229	31.22	16.83	74.85	16.49	2.89
C1225-096-2500-M	1.225	31.12	0.096	2.44	2.500	63.50	1.355	34.42	0.702	17.83	20.20	89.85	17.60	3.08	C1225-096-2500-S	1.355	34.42	16.83	74.85	14.66	2.57
C1225-096-2750-M	1.225	31.12	0.096	2.44	2.750	69.85	1.481	37.62	0.752	19.10	20.20	89.85	15.90	2.78	C1225-096-2750-S	1.481	37.62	16.83	74.85	13.25	2.32
C1225-096-3000-M	1.225	31.12	0.096	2.44	3.000	76.20	1.607	40.82	0.802	20.37	20.20	89.85	14.50	2.54	C1225-096-3000-S	1.607	40.82	16.83	74.85	12.08	2.11
C1225-096-3500-M	1.225	31.12	0.096	2.44	3.500	88.90	1.859	47.22	0.902	22.91	20.20	89.85	12.30	2.15	C1225-096-3500-S	1.859	47.22	16.83	74.85	10.25	1.79
C1225-096-4000-M	1.225	31.12	0.096	2.44	4.000	101.60	2.111	53.62	1.002	25.45	20.20	89.85	10.70	1.87	C1225-096-4000-S	2.111	53.62	16.83	74.85	8.91	1.56

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1225-096-4500-M	1.225	31.12	0.096	2.44	4.500	114.30	2.363	60.02	1.102	27.99	20.20	89.85	9.50	1.66
C1225-096-5000-M	1.225	31.12	0.096	2.44	5.000	127.00	2.615	66.42	1.202	30.53	20.20	89.85	8.50	1.49
C1225-105-0875-M	1.225	31.12	0.105	2.67	0.880	22.35	0.566	14.38	0.421	10.69	25.93	115.34	82.50	14.44
C1225-105-1000-M	1.225	31.12	0.105	2.67	1.000	25.40	0.627	15.93	0.450	11.43	25.93	115.34	69.50	12.16
C1225-105-1250-M	1.225	31.12	0.105	2.67	1.250	31.75	0.759	19.28	0.510	12.95	25.93	115.34	52.80	9.24
C1225-105-1500-M	1.225	31.12	0.105	2.67	1.500	38.10	0.891	22.63	0.569	14.45	25.93	115.34	42.50	7.44
C1225-105-2000-M	1.225	31.12	0.105	2.67	2.000	50.80	1.154	29.31	0.688	17.48	25.93	115.34	30.70	5.37
C1225-105-2500-M	1.225	31.12	0.105	2.67	2.500	63.50	1.418	36.02	0.807	20.50	25.93	115.34	24.00	4.20
C1225-105-3000-M	1.225	31.12	0.105	2.67	3.000	76.20	1.682	42.72	0.926	23.52	25.93	115.34	19.70	3.45
C1225-105-3500-M	1.225	31.12	0.105	2.67	3.500	88.90	1.946	49.43	1.045	26.54	25.93	115.34	16.70	2.92
C1225-105-4000-M	1.225	31.12	0.105	2.67	4.000	101.60	2.209	56.11	1.164	29.57	25.93	115.34	14.50	2.54
C1225-105-4500-M	1.225	31.12	0.105	2.67	4.500	114.30	2.473	62.81	1.283	32.59	25.93	115.34	12.80	2.24
C1225-105-5000-M	1.225	31.12	0.105	2.67	5.000	127.00	2.737	69.52	1.402	35.61	25.93	115.34	11.50	2.01
C1225-112-0875-M	1.225	31.12	0.112	2.85	0.880	22.35	0.585	14.86	0.455	11.56	31.03	138.03	105.10	18.39
C1225-112-1000-M	1.225	31.12	0.112	2.85	1.000	25.40	0.648	16.46	0.488	12.40	31.03	138.03	88.20	15.44
C1225-112-1250-M	1.225	31.12	0.112	2.85	1.250	31.75	0.785	19.94	0.556	14.12	31.03	138.03	66.70	11.67
C1225-112-1500-M	1.225	31.12	0.112	2.85	1.500	38.10	0.921	23.39	0.623	15.82	31.03	138.03	53.60	9.38
C1225-112-2000-M	1.225	31.12	0.112	2.85	2.000	50.80	1.195	30.35	0.757	19.23	31.03	138.03	38.50	6.74
C1225-112-2500-M	1.225	31.12	0.112	2.85	2.500	63.50	1.468	37.29	0.891	22.63	31.03	138.03	30.10	5.27
C1225-112-3000-M	1.225	31.12	0.112	2.85	3.000	76.20	1.741	44.22	1.026	26.06	31.03	138.03	24.60	4.31
C1225-112-3500-M	1.225	31.12	0.112	2.85	3.500	88.90	2.014	51.16	1.160	29.46	31.03	138.03	20.90	3.66
C1225-112-4000-M	1.225	31.12	0.112	2.85	4.000	101.60	2.288	58.12	1.294	32.87	31.03	138.03	18.10	3.17
C1225-125-0875-M	1.225	31.12	0.125	3.18	0.880	22.35	0.619	15.72	0.517	13.13	42.07	187.14	161.30	28.23
C1225-125-1000-M	1.225	31.12	0.125	3.18	1.000	25.40	0.687	17.45	0.558	14.17	42.07	187.14	134.40	23.52
C1225-125-1250-M	1.225	31.12	0.125	3.18	1.250	31.75	0.833	21.16	0.639	16.23	42.07	187.14	100.80	17.64
C1225-125-1500-M	1.225	31.12	0.125	3.18	1.500	38.10	0.978	24.84	0.721	18.31	42.07	187.14	80.60	14.11
C1225-125-1750-M	1.225	31.12	0.125	3.18	1.750	44.45	1.124	28.55	0.803	20.40	42.07	187.14	67.20	11.76
C1225-125-2000-M	1.225	31.12	0.125	3.18	2.000	50.80	1.270	32.26	0.885	22.48	42.07	187.14	57.60	10.08
C1225-125-2250-M	1.225	31.12	0.125	3.18	2.250	57.15	1.415	35.94	0.966	24.54	42.07	187.14	50.40	8.82
C1225-125-2500-M	1.225	31.12	0.125	3.18	2.500	63.50	1.561	39.65	1.048	26.62	42.07	187.14	44.80	7.84
C1225-125-2750-M	1.225	31.12	0.125	3.18	2.750	69.85	1.707	43.36	1.130	28.70	42.07	187.14	40.30	7.05
C1225-125-3000-M	1.225	31.12	0.125	3.18	3.000	76.20	1.852	47.04	1.212	30.78	42.07	187.14	36.70	6.42
C1225-125-3500-M	1.225	31.12	0.125	3.18	3.500	88.90	2.144	54.46	1.375	34.93	42.07	187.14	31.00	5.43
C1225-125-4000-M	1.225	31.12	0.125	3.18	4.000	101.60	2.435	61.85	1.539	39.09	42.07	187.14	26.90	4.71
C1225-125-4500-M	1.225	31.12	0.125	3.18	4.500	114.30	2.726	69.24	1.702	43.23	42.07	187.14	23.70	4.15
C1225-125-5000-M	1.225	31.12	0.125	3.18	5.000	127.00	3.018	76.66	1.865	47.37	42.07	187.14	21.20	3.71
C1225-135-0880-M	1.225	31.12	0.135	3.43	0.880	22.35	0.643	16.33	0.565	14.35	52.03	231.44	219.20	38.36
C1225-135-1000-M	1.225	31.12	0.135	3.43	1.000	25.40	0.716	18.19	0.609	15.47	52.03	231.44	183.10	32.04
C1225-135-1250-M	1.225	31.12	0.135	3.43	1.250	31.75	0.869	22.07	0.702	17.83	52.03	231.44	136.40	23.87
C1225-135-1500-M	1.225	31.12	0.135	3.43	1.500	38.10	1.021	25.93	0.795	20.19	52.03	231.44	108.70	19.02
C1225-135-2000-M	1.225	31.12	0.135	3.43	2.000	50.80	1.327	33.71	0.982	24.94	52.03	231.44	77.30	13.53
C1225-135-2500-M	1.225	31.12	0.135	3.43	2.500	63.50	1.632	41.45	1.168	29.67	52.03	231.44	60.00	10.50
C1225-135-3000-M	1.225	31.12	0.135	3.43	3.000	76.20	1.938	49.23	1.354	34.39	52.03	231.44	49.00	8.58
C1225-135-3500-M	1.225	31.12	0.135	3.43	3.500	88.90	2.243	56.97	1.540	39.12	52.03	231.44	41.40	7.25
C1225-148-0880-M	1.225	31.12	0.148	3.76	0.880	22.35	0.674	17.12	0.621	15.77	67.00	298.03	325.00	56.88
C1225-148-1000-M	1.225	31.12	0.148	3.76	1.000	25.40	0.751	19.08	0.673	17.09	67.00	298.03	269.60	47.18
C1225-148-1250-M	1.225	31.12	0.148	3.76	1.250	31.75	0.913	23.19	0.781	19.84	67.00	298.03	198.90	34.81
C1225-148-1500-M	1.225	31.12	0.148	3.76	1.500	38.10	1.075	27.31	0.888	22.56	67.00	298.03	157.60	27.58
C1225-148-2000-M	1.225	31.12	0.148	3.76	2.000	50.80	1.398	35.51	1.104	28.04	67.00	298.03	111.40	19.50
C1225-148-2500-M	1.225	31.12	0.148	3.76	2.500	63.50	1.722	43.74	1.319	33.50	67.00	298.03	86.10	15.07
C1225-148-3000-M	1.225	31.12	0.148	3.76	3.000	76.20	2.045	51.94	1.534	38.96	67.00	298.03	70.20	12.29
C1225-148-3500-M	1.225	31.12	0.148	3.76	3.500	88.90	2.369	60.17	1.749	44.42	67.00	298.03	59.20	10.36
C1225-148-4000-M	1.225	31.12	0.148	3.76	4.000	101.60	2.692	68.38	1.965	49.91	67.00	298.03	51.20	8.96
C1225-148-4500-M	1.225	31.12	0.148	3.76	4.500	114.30	3.016	76.61	2.180	55.37	67.00	298.03	45.10	7.89
C1225-148-5000-M	1.225	31.12	0.148	3.76	5.000	127.00	3.339	84.81	2.395	60.83	67.00	298.03	40.30	7.05
C1225-162-1000-M	1.225	31.12	0.162	4.12	1.000	25.40	0.793	20.14	0.727	18.47	85.90	382.10	414.60	72.56
C1225-162-1500-M	1.225	31.12	0.162	4.12	1.500	38.10	1.140	28.96	0.965	24.51	85.90	382.10	238.30	41.70
C1225-162-2000-M	1.225	31.12	0.162	4.12	2.000	50.80	1.486	37.74	1.204	30.58	85.90	382.10	167.20	29.26
C1225-162-2500-M	1.225	31.12	0.162	4.12	2.500	63.50	1.833	46.56	1.442	36.63	85.90	382.10	128.80	22.54
C1225-162-3000-M	1.225	31.12	0.162	4.12	3.000	76.20	2.180	55.37	1.680	42.67	85.90	382.10	104.70	18.32
C1225-162-3500-M	1.225	31.12	0.162	4.12	3.500	88.90	2.526	64.16	1.918	48.72	85.90	382.10	88.20	15.44
C1225-162-4000-M	1.225	31.12	0.162	4.12	4.000	101.60	2.873	72.97	2.157	54.79	85.90	382.10	76.20	13.34
C1225-162-4500-M	1.225	31.12	0.162	4.12	4.500	114.30	3.220	81.79	2.395	60.83	85.90	382.10	67.10	11.74
C1225-162-5000-M	1.225	31.12	0.162	4.12	5.000	127.00	3.567	90.60	2.633	66.88	85.90	382.10	59.90	10.48

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1225-096-4500-S	2.363	60.02	16.83	74.85	7.91	1.38
C1225-096-5000-S	2.615	66.42	16.83	74.85	7.08	1.24
C1225-105-0875-S	0.566	14.38	21.60	96.08	68.72	12.03
C1225-105-1000-S	0.627	15.93	21.60	96.08	57.89	10.13
C1225-105-1250-S	0.759	19.28	21.60	96.08	43.98	7.70
C1225-105-1500-S	0.891	22.63	21.60	96.08	35.40	6.20
C1225-105-2000-S	1.154	29.31	21.60	96.08	25.57	4.48
C1225-105-2500-S	1.418	36.02	21.60	96.08	19.99	3.50
C1225-105-3000-S	1.682	42.72	21.60	96.08	16.41	2.87
C1225-105-3500-S	1.946	49.43	21.60	96.08	13.91	2.43
C1225-105-4000-S	2.209	56.11	21.60	96.08	12.08	2.11
C1225-105-4500-S	2.473	62.81	21.60	96.08	10.66	1.87
C1225-105-5000-S	2.737	69.52	21.60	96.08	9.58	1.68
C1225-112-0875-S	0.585	14.86	25.85	114.98	87.55	15.32
C1225-112-1000-S	0.648	16.46	25.85	114.98	73.47	12.86
C1225-112-1250-S	0.785	19.94	25.85	114.98	55.56	9.72
C1225-112-1500-S	0.921	23.39	25.85	114.98	44.65	7.81
C1225-112-2000-S	1.195	30.35	25.85	114.98	32.07	5.61
C1225-112-2500-S	1.468	37.29	25.85	114.98	25.07	4.39
C1225-112-3000-S	1.741	44.22	25.85	114.98	20.49	3.59
C1225-112-3500-S	2.014	51.16	25.85	114.98	17.41	3.05
C1225-112-4000-S	2.288	58.12	25.85	114.98	15.08	2.64
C1225-125-0875-S	0.619	15.72	35.04	155.88	134.36	23.51
C1225-125-1000-S	0.687	17.45	35.04	155.88	111.96	19.59
C1225-125-1250-S	0.833	21.16	35.04	155.88	83.97	14.69
C1225-125-1500-S	0.978	24.84	35.04	155.88	67.14	11.75
C1225-125-1750-S	1.124	28.55	35.04	155.88	55.98	9.80
C1225-125-2000-S	1.270	32.26	35.04	155.88	47.98	8.40
C1225-125-2250-S	1.415	35.94	35.04	155.88	41.98	7.35
C1225-125-2500-S	1.561	39.65	35.04	155.88	37.32	6.53
C1225-125-2750-S	1.707	43.36	35.04	155.88	33.57	5.87
C1225-125-3000-S	1.852	47.04	35.04	155.88	30.57	5.35
C1225-125-3500-S	2.144	54.46	35.04	155.88	25.82	4.52
C1225-125-4000-S	2.435	61.85	35.04	155.88	22.41	3.92
C1225-125-4500-S	2.726	69.24	35.04	155.88	19.74	3.45
C1225-125-5000-S	3.018	76.66	35.04	155.88	17.66	3.09
C1225-135-0880-S	0.643	16.33	43.34	192.79	182.59	31.95
C1225-135-1000-S	0.716	18.19	43.34	192.79	152.52	26.69
C1225-135-1250-S	0.869	22.07	43.34	192.79	113.62	19.88
C1225-135-1500-S	1.021	25.93	43.34	192.79	90.55	15.85
C1225-135-2000-S	1.327	33.71	43.34	192.79	64.39	11.27
C1225-135-2500-S	1.632	41.45	43.34	192.79	49.98	8.75
C1225-135-3000-S	1.938	49.23	43.34	192.79	40.82	7.14
C1225-135-3500-S	2.243	56.97	43.34	192.79	34.49	6.04
C1225-148-0880-S	0.674	17.12	55.81	248.26	270.73	47.38
C1225-148-1000-S	0.751	19.08	55.81	248.26	224.58	39.30
C1225-148-1250-S	0.913	23.19	55.81	248.26	165.68	28.99
C1225-148-1500-S	1.075	27.31	55.81	248.26	131.28	22.97
C1225-148-2000-S	1.398	35.51	55.81	248.26	92.80	16.24
C1225-148-2500-S	1.722	43.74	55.81	248.26	71.72	12.55
C1225-148-3000-S	2.045	51.94	55.81	248.26	58.48	10.23
C1225-148-3500-S	2.369	60.17	55.81	248.26	49.31	8.63
C1225-148-4000-S	2.692	68.38	55.81	248.26	42.65	7.46
C1225-148-4500-S	3.016	76.61	55.81	248.26	37.57	6.57
C1225-148-5000-S	3.339	84.81	55.81	248.26	33.57	5.87
C1225-162-1000-S	0.793	20.14	71.55	318.29	345.36	60.44
C1225-162-1500-S	1.140	28.96	71.55	318.29	198.50	34.74
C1225-162-2000-S	1.486	37.74	71.55	318.29	139.28	24.37
C1225-162-2500-S	1.833	46.56	71.55	318.29	107.29	18.78
C1225-162-3000-S	2.180	55.37	71.55	318.29	87.22	15.26
C1225-162-3500-S	2.526	64.16	71.55	318.29	73.47	12.86
C1225-162-4000-S	2.873	72.97	71.55	318.29	63.48	11.11
C1225-162-4500-S	3.220	81.79	71.55	318.29	55.89	9.78
C1225-162-5000-S	3.567	90.60	71.55	318.29	49.90	8.73

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1225-177-1500-M	1.225	31.12	0.177	4.50	1.500	38.10	1.190	30.23	1.057	26.85	109.36	486.46	353.00	61.78
C1225-177-2000-M	1.225	31.12	0.177	4.50	2.000	50.80	1.555	39.50	1.325	33.66	109.36	486.46	245.80	43.02
C1225-177-2500-M	1.225	31.12	0.177	4.50	2.500	63.50	1.920	48.77	1.594	40.49	109.36	486.46	188.50	32.99
C1225-177-3000-M	1.225	31.12	0.177	4.50	3.000	76.20	2.285	58.04	1.862	47.29	109.36	486.46	152.90	26.76
C1225-177-3500-M	1.225	31.12	0.177	4.50	3.500	88.90	2.650	67.31	2.130	54.10	109.36	486.46	128.60	22.51
C1225-177-4000-M	1.225	31.12	0.177	4.50	4.000	101.60	3.014	76.56	2.398	60.91	109.36	486.46	110.90	19.41
C1225-177-4500-M	1.225	31.12	0.177	4.50	4.500	114.30	3.379	85.83	2.666	67.72	109.36	486.46	97.60	17.08
C1225-177-5000-M	1.225	31.12	0.177	4.50	5.000	127.00	3.744	95.10	2.934	74.52	109.36	486.46	87.10	15.24
C1225-192-1500-M	1.225	31.12	0.192	4.88	1.500	38.10	1.236	31.39	1.139	28.93	136.13	605.54	516.10	90.32
C1225-192-2000-M	1.225	31.12	0.192	4.88	2.000	50.80	1.618	41.10	1.435	36.45	136.13	605.54	356.40	62.37
C1225-192-2500-M	1.225	31.12	0.192	4.88	2.500	63.50	2.000	50.80	1.730	43.94	136.13	605.54	272.20	47.64
C1225-192-3000-M	1.225	31.12	0.192	4.88	3.000	76.20	2.382	60.50	2.025	51.44	136.13	605.54	220.20	38.54
C1225-192-3500-M	1.225	31.12	0.192	4.88	3.500	88.90	2.764	70.21	2.321	58.95	136.13	605.54	184.80	32.34
C1225-192-4000-M	1.225	31.12	0.192	4.88	4.000	101.60	3.145	79.88	2.616	66.45	136.13	605.54	159.30	27.88
C1225-192-4500-M	1.225	31.12	0.192	4.88	4.500	114.30	3.527	89.59	2.912	73.96	136.13	605.54	139.90	24.48
C1225-192-5000-M	1.225	31.12	0.192	4.88	5.000	127.00	3.909	99.29	3.207	81.46	136.13	605.54	124.80	21.84
C1225-207-2000-M	1.225	31.12	0.207	5.26	2.000	50.80	1.669	42.39	1.543	39.19	166.93	742.54	504.80	88.34
C1225-207-2500-M	1.225	31.12	0.207	5.26	2.500	63.50	2.065	52.45	1.867	47.42	166.93	742.54	383.80	67.17
C1225-207-3000-M	1.225	31.12	0.207	5.26	3.000	76.20	2.461	62.51	2.190	55.63	166.93	742.54	309.60	54.18
C1225-207-3500-M	1.225	31.12	0.207	5.26	3.500	88.90	2.857	72.57	2.514	63.86	166.93	742.54	259.40	45.40
C1225-207-4000-M	1.225	31.12	0.207	5.26	4.000	101.60	3.252	82.60	2.837	72.06	166.93	742.54	223.20	39.06
C1225-207-4500-M	1.225	31.12	0.207	5.26	4.500	114.30	3.648	92.66	3.161	80.29	166.93	742.54	195.90	34.28
C1225-207-5000-M	1.225	31.12	0.207	5.26	5.000	127.00	4.044	102.72	3.484	88.49	166.93	742.54	174.60	30.56
C1234-098-2250-M	**1.234**	**31.34**	**0.098**	**2.49**	**2.250**	**57.15**	**0.854**	**21.68**	**0.638**	**16.19**	**30.10**	**133.89**	**21.56**	**3.77**
C1234-098-2375-M	**1.234**	**31.34**	**0.098**	**2.49**	**2.375**	**60.33**	**0.894**	**22.70**	**0.664**	**16.86**	**30.10**	**133.89**	**20.32**	**3.56**
C1234-098-2500-M	**1.234**	**31.34**	**0.098**	**2.49**	**2.500**	**63.50**	**0.934**	**23.71**	**0.690**	**17.53**	**30.10**	**133.89**	**19.22**	**3.36**
C1234-098-2625-M	**1.234**	**31.34**	**0.098**	**2.49**	**2.625**	**66.68**	**0.974**	**24.73**	**0.716**	**18.20**	**30.10**	**133.89**	**18.23**	**3.19**
C1234-098-2750-M	**1.234**	**31.34**	**0.098**	**2.49**	**2.750**	**69.85**	**1.014**	**25.75**	**0.743**	**18.86**	**30.10**	**133.89**	**17.34**	**3.03**
C1234-098-2875-M	**1.234**	**31.34**	**0.098**	**2.49**	**2.875**	**73.03**	**1.054**	**26.76**	**0.769**	**19.53**	**30.10**	**133.89**	**16.53**	**2.89**
C1234-098-3000-M	**1.234**	**31.34**	**0.098**	**2.49**	**3.000**	**76.20**	**1.094**	**27.78**	**0.795**	**20.20**	**30.10**	**133.89**	**15.79**	**2.76**
C1234-098-3250-M	**1.234**	**31.34**	**0.098**	**2.49**	**3.250**	**82.55**	**1.174**	**29.81**	**0.848**	**21.53**	**30.10**	**133.89**	**14.50**	**2.54**
C1234-098-3500-M	**1.234**	**31.34**	**0.098**	**2.49**	**3.500**	**88.90**	**1.254**	**31.85**	**0.900**	**22.87**	**30.10**	**133.89**	**13.40**	**2.35**
C1234-098-3750-M	**1.234**	**31.34**	**0.098**	**2.49**	**3.750**	**95.25**	**1.334**	**33.88**	**0.953**	**24.20**	**30.10**	**133.89**	**12.46**	**2.18**
C1234-098-4000-M	**1.234**	**31.34**	**0.098**	**2.49**	**4.000**	**101.60**	**1.414**	**35.91**	**1.005**	**25.54**	**30.10**	**133.89**	**11.64**	**2.04**
C1234-098-4250-M	**1.234**	**31.34**	**0.098**	**2.49**	**4.250**	**107.95**	**1.494**	**37.95**	**1.058**	**26.87**	**30.10**	**133.89**	**10.92**	**1.91**
C1234-098-4500-M	**1.234**	**31.34**	**0.098**	**2.49**	**4.500**	**114.30**	**1.574**	**39.98**	**1.111**	**28.21**	**30.10**	**133.89**	**10.29**	**1.80**
C1234-098-4750-M	**1.234**	**31.34**	**0.098**	**2.49**	**4.750**	**120.65**	**1.654**	**42.01**	**1.163**	**29.54**	**30.10**	**133.89**	**9.72**	**1.70**
C1234-098-5000-M	**1.234**	**31.34**	**0.098**	**2.49**	**5.000**	**127.00**	**1.734**	**44.05**	**1.216**	**30.88**	**30.10**	**133.89**	**9.22**	**1.61**
C1234-098-5250-M	**1.234**	**31.34**	**0.098**	**2.49**	**5.250**	**133.35**	**1.814**	**46.08**	**1.268**	**32.21**	**30.10**	**133.89**	**8.76**	**1.53**
C1234-098-5500-M	**1.234**	**31.34**	**0.098**	**2.49**	**5.500**	**139.70**	**1.894**	**48.11**	**1.321**	**33.55**	**30.10**	**133.89**	**8.35**	**1.46**
C1234-098-5750-M	**1.234**	**31.34**	**0.098**	**2.49**	**5.750**	**146.05**	**1.974**	**50.14**	**1.373**	**34.88**	**30.10**	**133.89**	**7.97**	**1.40**
C1234-098-6000-M	**1.234**	**31.34**	**0.098**	**2.49**	**6.000**	**152.40**	**2.054**	**52.18**	**1.426**	**36.22**	**30.10**	**133.89**	**7.63**	**1.33**
C1234-098-6250-M	**1.234**	**31.34**	**0.098**	**2.49**	**6.250**	**158.75**	**2.134**	**54.21**	**1.478**	**37.55**	**30.10**	**133.89**	**7.31**	**1.28**
C1234-098-6500-M	**1.234**	**31.34**	**0.098**	**2.49**	**6.500**	**165.10**	**2.214**	**56.24**	**1.531**	**38.89**	**30.10**	**133.89**	**7.02**	**1.23**
C1234-098-6750-M	**1.234**	**31.34**	**0.098**	**2.49**	**6.750**	**171.45**	**2.294**	**58.28**	**1.583**	**40.22**	**30.10**	**133.89**	**6.76**	**1.18**
C1234-098-7000-M	**1.234**	**31.34**	**0.098**	**2.49**	**7.000**	**177.80**	**2.374**	**60.31**	**1.636**	**41.55**	**30.10**	**133.89**	**6.51**	**1.14**
C1234-098-7500-M	**1.234**	**31.34**	**0.098**	**2.49**	**7.500**	**190.50**	**2.534**	**64.38**	**1.741**	**44.22**	**30.10**	**133.89**	**6.06**	**1.06**
C1234-098-8000-M	**1.234**	**31.34**	**0.098**	**2.49**	**8.000**	**203.20**	**2.695**	**68.44**	**1.846**	**46.89**	**30.10**	**133.89**	**5.67**	**0.99**
C1234-098-8500-M	**1.234**	**31.34**	**0.098**	**2.49**	**8.500**	**215.90**	**2.855**	**72.51**	**1.951**	**49.56**	**30.10**	**133.89**	**5.33**	**0.93**
C1234-098-9000-M	**1.234**	**31.34**	**0.098**	**2.49**	**9.000**	**228.60**	**3.015**	**76.57**	**2.056**	**52.23**	**30.10**	**133.89**	**5.03**	**0.88**
C1234-098-9500-M	**1.234**	**31.34**	**0.098**	**2.49**	**9.500**	**241.30**	**3.175**	**80.64**	**2.162**	**54.90**	**30.10**	**133.89**	**4.76**	**0.83**
C1234-105-2125-M	**1.234**	**31.34**	**0.105**	**2.67**	**2.125**	**53.98**	**0.870**	**22.10**	**0.681**	**17.30**	**36.47**	**162.24**	**29.07**	**5.09**
C1234-105-2250-M	**1.234**	**31.34**	**0.105**	**2.67**	**2.250**	**57.15**	**0.913**	**23.19**	**0.711**	**18.06**	**36.47**	**162.24**	**27.28**	**4.77**
C1234-105-2375-M	**1.234**	**31.34**	**0.105**	**2.67**	**2.375**	**60.33**	**0.956**	**24.29**	**0.741**	**18.83**	**36.47**	**162.24**	**25.71**	**4.50**
C1234-105-2500-M	**1.234**	**31.34**	**0.105**	**2.67**	**2.500**	**63.50**	**0.999**	**25.38**	**0.771**	**19.59**	**36.47**	**162.24**	**24.31**	**4.25**
C1234-105-2625-M	**1.234**	**31.34**	**0.105**	**2.67**	**2.625**	**66.68**	**1.042**	**26.48**	**0.801**	**20.35**	**36.47**	**162.24**	**23.05**	**4.03**
C1234-105-2750-M	**1.234**	**31.34**	**0.105**	**2.67**	**2.750**	**69.85**	**1.086**	**27.57**	**0.831**	**21.12**	**36.47**	**162.24**	**21.91**	**3.83**
C1234-105-2875-M	**1.234**	**31.34**	**0.105**	**2.67**	**2.875**	**73.03**	**1.129**	**28.67**	**0.861**	**21.88**	**36.47**	**162.24**	**20.89**	**3.65**
C1234-105-3000-M	**1.234**	**31.34**	**0.105**	**2.67**	**3.000**	**76.20**	**1.172**	**29.76**	**0.892**	**22.64**	**36.47**	**162.24**	**19.95**	**3.49**
C1234-105-3250-M	**1.234**	**31.34**	**0.105**	**2.67**	**3.250**	**82.55**	**1.258**	**31.95**	**0.952**	**24.17**	**36.47**	**162.24**	**18.31**	**3.20**
C1234-105-3500-M	**1.234**	**31.34**	**0.105**	**2.67**	**3.500**	**88.90**	**1.344**	**34.14**	**1.012**	**25.70**	**36.47**	**162.24**	**16.92**	**2.96**
C1234-105-3750-M	**1.234**	**31.34**	**0.105**	**2.67**	**3.750**	**95.25**	**1.430**	**36.33**	**1.072**	**27.23**	**36.47**	**162.24**	**15.72**	**2.75**
C1234-105-4000-M	**1.234**	**31.34**	**0.105**	**2.67**	**4.000**	**101.60**	**1.516**	**38.52**	**1.132**	**28.75**	**36.47**	**162.24**	**14.69**	**2.57**
C1234-105-4250-M	**1.234**	**31.34**	**0.105**	**2.67**	**4.250**	**107.95**	**1.603**	**40.71**	**1.192**	**30.28**	**36.47**	**162.24**	**13.78**	**2.41**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1225-177-1500-S	1.190	30.23	91.10	405.22	294.05	51.46
C1225-177-2000-S	1.555	39.50	91.10	405.22	204.75	35.83
C1225-177-2500-S	1.920	48.77	91.10	405.22	157.02	27.48
C1225-177-3000-S	2.285	58.04	91.10	405.22	127.37	22.29
C1225-177-3500-S	2.650	67.31	91.10	405.22	107.12	18.75
C1225-177-4000-S	3.014	76.56	91.10	405.22	92.38	16.17
C1225-177-4500-S	3.379	85.83	91.10	405.22	81.30	14.23
C1225-177-5000-S	3.744	95.10	91.10	405.22	72.55	12.70
C1225-192-1500-S	1.236	31.39	113.40	504.41	429.91	75.23
C1225-192-2000-S	1.618	41.10	113.40	504.41	296.88	51.95
C1225-192-2500-S	2.000	50.80	113.40	504.41	226.74	39.68
C1225-192-3000-S	2.382	60.50	113.40	504.41	183.43	32.10
C1225-192-3500-S	2.764	70.21	113.40	504.41	153.94	26.94
C1225-192-4000-S	3.145	79.88	113.40	504.41	132.70	23.22
C1225-192-4500-S	3.527	89.59	113.40	504.41	116.54	20.39
C1225-192-5000-S	3.909	99.29	113.40	504.41	103.96	18.19
C1225-207-2000-S	1.669	42.39	139.05	618.54	420.50	73.59
C1225-207-2500-S	2.065	52.45	139.05	618.54	319.71	55.95
C1225-207-3000-S	2.461	62.51	139.05	618.54	257.90	45.13
C1225-207-3500-S	2.857	72.57	139.05	618.54	216.08	37.81
C1225-207-4000-S	3.252	82.60	139.05	618.54	185.93	32.54
C1225-207-4500-S	3.648	92.66	139.05	618.54	163.19	28.56
C1225-207-5000-S	4.044	102.72	139.05	618.54	145.44	25.45
C1234-098-2250-S	**1.000**	**25.40**	**23.43**	**104.22**	**18.74**	**3.28**
C1234-098-2375-S	**1.049**	**26.64**	**23.43**	**104.22**	**17.67**	**3.09**
C1234-098-2500-S	**1.098**	**27.89**	**23.43**	**104.22**	**16.71**	**2.92**
C1234-098-2625-S	**1.147**	**29.13**	**23.43**	**104.22**	**15.85**	**2.77**
C1234-098-2750-S	**1.196**	**30.37**	**23.43**	**104.22**	**15.07**	**2.64**
C1234-098-2875-S	**1.245**	**31.61**	**23.43**	**104.22**	**14.37**	**2.51**
C1234-098-3000-S	**1.294**	**32.86**	**23.43**	**104.22**	**13.73**	**2.40**
C1234-098-3250-S	**1.391**	**35.34**	**23.43**	**104.22**	**12.61**	**2.21**
C1234-098-3500-S	**1.489**	**37.83**	**23.43**	**104.22**	**11.65**	**2.04**
C1234-098-3750-S	**1.587**	**40.31**	**23.43**	**104.22**	**10.83**	**1.90**
C1234-098-4000-S	**1.685**	**42.80**	**23.43**	**104.22**	**10.12**	**1.77**
C1234-098-4250-S	**1.783**	**45.28**	**23.43**	**104.22**	**9.50**	**1.66**
C1234-098-4500-S	**1.881**	**47.77**	**23.43**	**104.22**	**8.95**	**1.57**
C1234-098-4750-S	**1.979**	**50.26**	**23.43**	**104.22**	**8.45**	**1.48**
C1234-098-5000-S	**2.076**	**52.74**	**23.43**	**104.22**	**8.01**	**1.40**
C1234-098-5250-S	**2.174**	**55.23**	**23.43**	**104.22**	**7.62**	**1.33**
C1234-098-5500-S	**2.272**	**57.71**	**23.43**	**104.22**	**7.26**	**1.27**
C1234-098-5750-S	**2.370**	**60.20**	**23.43**	**104.22**	**6.93**	**1.21**
C1234-098-6000-S	**2.468**	**62.68**	**23.43**	**104.22**	**6.63**	**1.16**
C1234-098-6250-S	**2.566**	**65.17**	**23.43**	**104.22**	**6.36**	**1.11**
C1234-098-6500-S	**2.664**	**67.65**	**23.43**	**104.22**	**6.11**	**1.07**
C1234-098-6750-S	**2.761**	**70.14**	**23.43**	**104.22**	**5.87**	**1.03**
C1234-098-7000-S	**2.859**	**72.63**	**23.43**	**104.22**	**5.66**	**0.99**
C1234-098-7500-S	**3.055**	**77.60**	**23.43**	**104.22**	**5.27**	**0.92**
C1234-098-8000-S	**3.251**	**82.57**	**23.43**	**104.22**	**4.93**	**0.86**
C1234-098-8500-S	**3.446**	**87.54**	**23.43**	**104.22**	**4.64**	**0.81**
C1234-098-9000-S	**3.642**	**92.51**	**23.43**	**104.22**	**4.37**	**0.77**
C1234-098-9500-S	**3.838**	**97.48**	**23.43**	**104.22**	**4.14**	**0.72**
C1234-105-2125-S	**1.007**	**25.58**	**28.26**	**125.69**	**25.27**	**4.42**
C1234-105-2250-S	**1.059**	**26.90**	**28.26**	**125.69**	**23.73**	**4.15**
C1234-105-2375-S	**1.111**	**28.22**	**28.26**	**125.69**	**22.36**	**3.91**
C1234-105-2500-S	**1.163**	**29.54**	**28.26**	**125.69**	**21.14**	**3.70**
C1234-105-2625-S	**1.215**	**30.86**	**28.26**	**125.69**	**20.04**	**3.51**
C1234-105-2750-S	**1.267**	**32.18**	**28.26**	**125.69**	**19.06**	**3.33**
C1234-105-2875-S	**1.319**	**33.51**	**28.26**	**125.69**	**18.16**	**3.18**
C1234-105-3000-S	**1.371**	**34.83**	**28.26**	**125.69**	**17.35**	**3.04**
C1234-105-3250-S	**1.475**	**37.47**	**28.26**	**125.69**	**15.92**	**2.79**
C1234-105-3500-S	**1.579**	**40.11**	**28.26**	**125.69**	**14.71**	**2.57**
C1234-105-3750-S	**1.683**	**42.75**	**28.26**	**125.69**	**13.67**	**2.39**
C1234-105-4000-S	**1.787**	**45.40**	**28.26**	**125.69**	**12.77**	**2.23**
C1234-105-4250-S	**1.891**	**48.04**	**28.26**	**125.69**	**11.98**	**2.10**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1234-105-4500-M	**1.234**	**31.34**	**0.105**	**2.67**	**4.500**	**114.30**	**1.689**	**42.89**	**1.252**	**31.81**	**36.47**	**162.24**	**12.97**	**2.27**
C1234-105-4750-M	**1.234**	**31.34**	**0.105**	**2.67**	**4.750**	**120.65**	**1.775**	**45.08**	**1.312**	**33.34**	**36.47**	**162.24**	**12.26**	**2.15**
C1234-105-5000-M	**1.234**	**31.34**	**0.105**	**2.67**	**5.000**	**127.00**	**1.861**	**47.27**	**1.373**	**34.86**	**36.47**	**162.24**	**11.62**	**2.03**
C1234-105-5250-M	**1.234**	**31.34**	**0.105**	**2.67**	**5.250**	**133.35**	**1.947**	**49.46**	**1.433**	**36.39**	**36.47**	**162.24**	**11.04**	**1.93**
C1234-105-5500-M	**1.234**	**31.34**	**0.105**	**2.67**	**5.500**	**139.70**	**2.033**	**51.65**	**1.493**	**37.92**	**36.47**	**162.24**	**10.52**	**1.84**
C1234-105-5750-M	**1.234**	**31.34**	**0.105**	**2.67**	**5.750**	**146.05**	**2.120**	**53.84**	**1.553**	**39.44**	**36.47**	**162.24**	**10.05**	**1.76**
C1234-105-6000-M	**1.234**	**31.34**	**0.105**	**2.67**	**6.000**	**152.40**	**2.206**	**56.03**	**1.613**	**40.97**	**36.47**	**162.24**	**9.61**	**1.68**
C1234-105-6250-M	**1.234**	**31.34**	**0.105**	**2.67**	**6.250**	**158.75**	**2.292**	**58.22**	**1.673**	**42.50**	**36.47**	**162.24**	**9.22**	**1.61**
C1234-105-6500-M	**1.234**	**31.34**	**0.105**	**2.67**	**6.500**	**165.10**	**2.378**	**60.40**	**1.733**	**44.03**	**36.47**	**162.24**	**8.85**	**1.55**
C1234-105-6750-M	**1.234**	**31.34**	**0.105**	**2.67**	**6.750**	**171.45**	**2.464**	**62.59**	**1.793**	**45.55**	**36.47**	**162.24**	**8.51**	**1.49**
C1234-105-7000-M	**1.234**	**31.34**	**0.105**	**2.67**	**7.000**	**177.80**	**2.550**	**64.78**	**1.854**	**47.08**	**36.47**	**162.24**	**8.20**	**1.43**
C1234-105-7500-M	**1.234**	**31.34**	**0.105**	**2.67**	**7.500**	**190.50**	**2.723**	**69.16**	**1.974**	**50.13**	**36.47**	**162.24**	**7.64**	**1.34**
C1234-105-8000-M	**1.234**	**31.34**	**0.105**	**2.67**	**8.000**	**203.20**	**2.895**	**73.54**	**2.094**	**53.19**	**36.47**	**162.24**	**7.15**	**1.25**
C1234-105-8500-M	**1.234**	**31.34**	**0.105**	**2.67**	**8.500**	**215.90**	**3.068**	**77.92**	**2.214**	**56.24**	**36.47**	**162.24**	**6.71**	**1.17**
C1234-105-9000-M	**1.234**	**31.34**	**0.105**	**2.67**	**9.000**	**228.60**	**3.240**	**82.29**	**2.335**	**59.30**	**36.47**	**162.24**	**6.33**	**1.11**
C1234-105-9500-M	**1.234**	**31.34**	**0.105**	**2.67**	**9.500**	**241.30**	**3.412**	**86.67**	**2.455**	**62.35**	**36.47**	**162.24**	**5.99**	**1.05**
C1234-112-2000-M	1.234	31.34	0.112	2.85	2.000	50.80	0.881	22.38	0.718	18.24	43.64	194.12	39.01	6.83
C1234-112-2125-M	1.234	31.34	0.112	2.85	2.125	53.98	0.927	23.56	0.752	19.10	43.64	194.12	36.44	6.38
C1234-112-2250-M	1.234	31.34	0.112	2.85	2.250	57.15	0.974	24.73	0.786	19.96	43.64	194.12	34.19	5.98
C1234-112-2375-M	1.234	31.34	0.112	2.85	2.375	60.33	1.020	25.91	0.820	20.83	43.64	194.12	32.21	5.64
C1234-112-2500-M	1.234	31.34	0.112	2.85	2.500	63.50	1.066	27.08	0.854	21.69	43.64	194.12	30.44	5.33
C1234-112-2625-M	1.234	31.34	0.112	2.85	2.625	66.68	1.113	28.26	0.888	22.55	43.64	194.12	28.85	5.05
C1234-112-2750-M	1.234	31.34	0.112	2.85	2.750	69.85	1.159	29.43	0.922	23.42	43.64	194.12	27.43	4.80
C1234-112-2875-M	1.234	31.34	0.112	2.85	2.875	73.03	1.205	30.61	0.956	24.28	43.64	194.12	26.13	4.57
C1234-112-3000-M	1.234	31.34	0.112	2.85	3.000	76.20	1.251	31.78	0.990	25.14	43.64	194.12	24.96	4.37
C1234-112-3250-M	1.234	31.34	0.112	2.85	3.250	82.55	1.344	34.13	1.058	26.87	43.64	194.12	22.89	4.01
C1234-112-3500-M	1.234	31.34	0.112	2.85	3.500	88.90	1.436	36.48	1.126	28.59	43.64	194.12	21.15	3.70
C1234-112-3750-M	1.234	31.34	0.112	2.85	3.750	95.25	1.529	38.83	1.194	30.32	43.64	194.12	19.65	3.44
C1234-112-4000-M	1.234	31.34	0.112	2.85	4.000	101.60	1.621	41.18	1.262	32.05	43.64	194.12	18.35	3.21
C1234-112-4250-M	1.234	31.34	0.112	2.85	4.250	107.95	1.714	43.53	1.330	33.77	43.64	194.12	17.21	3.01
C1234-112-4500-M	1.234	31.34	0.112	2.85	4.500	114.30	1.806	45.88	1.398	35.50	43.64	194.12	16.20	2.84
C1234-112-4750-M	1.234	31.34	0.112	2.85	4.750	120.65	1.899	48.23	1.466	37.23	43.64	194.12	15.31	2.68
C1234-112-5000-M	1.234	31.34	0.112	2.85	5.000	127.00	1.991	50.58	1.534	38.95	43.64	194.12	14.51	2.54
C1234-112-5250-M	1.234	31.34	0.112	2.85	5.250	133.35	2.084	52.93	1.601	40.68	43.64	194.12	13.78	2.41
C1234-112-5500-M	1.234	31.34	0.112	2.85	5.500	139.70	2.176	55.28	1.669	42.40	43.64	194.12	13.13	2.30
C1234-112-5750-M	1.234	31.34	0.112	2.85	5.750	146.05	2.269	57.63	1.737	44.13	43.64	194.12	12.54	2.19
C1234-112-6000-M	1.234	31.34	0.112	2.85	6.000	152.40	2.361	59.98	1.805	45.86	43.64	194.12	11.99	2.10
C1234-112-6250-M	1.234	31.34	0.112	2.85	6.250	158.75	2.454	62.33	1.873	47.58	43.64	194.12	11.50	2.01
C1234-112-6500-M	1.234	31.34	0.112	2.85	6.500	165.10	2.547	64.68	1.941	49.31	43.64	194.12	11.04	1.93
C1234-112-6750-M	1.234	31.34	0.112	2.85	6.750	171.45	2.639	67.03	2.009	51.03	43.64	194.12	10.62	1.86
C1234-112-7000-M	1.234	31.34	0.112	2.85	7.000	177.80	2.732	69.38	2.077	52.76	43.64	194.12	10.22	1.79
C1234-112-7500-M	1.234	31.34	0.112	2.85	7.500	190.50	2.917	74.08	2.213	56.21	43.64	194.12	9.52	1.67
C1234-112-8000-M*	**1.234**	**31.34**	**0.112**	**2.85**	**8.000**	**203.20**	**3.172**	**80.57**	**2.436**	**61.88**	**43.64**	**194.12**	**9.04**	**1.58**
C1234-112-8500-M*	**1.234**	**31.34**	**0.112**	**2.85**	**8.500**	**215.90**	**3.357**	**85.27**	**2.572**	**65.33**	**43.64**	**194.12**	**8.49**	**1.49**
C1234-112-9000-M*	**1.234**	**31.34**	**0.112**	**2.85**	**9.000**	**228.60**	**3.542**	**89.97**	**2.708**	**68.78**	**43.64**	**194.12**	**8.00**	**1.40**
C1234-112-9500-M*	**1.234**	**31.34**	**0.112**	**2.85**	**9.500**	**241.30**	**3.727**	**94.67**	**2.844**	**72.24**	**43.64**	**194.12**	**7.56**	**1.32**
C1234-125-1875-M	**1.234**	**31.34**	**0.125**	**3.18**	**1.875**	**47.63**	**0.930**	**23.63**	**0.802**	**20.36**	**59.18**	**263.24**	**62.64**	**10.96**
C1234-125-2000-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.000**	**50.80**	**0.983**	**24.96**	**0.843**	**21.42**	**59.18**	**263.24**	**58.16**	**10.18**
C1234-125-2125-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.125**	**53.98**	**1.035**	**26.29**	**0.885**	**22.47**	**59.18**	**263.24**	**54.29**	**9.50**
C1234-125-2250-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.250**	**57.15**	**1.087**	**27.61**	**0.926**	**23.52**	**59.18**	**263.24**	**50.89**	**8.91**
C1234-125-2375-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.375**	**60.33**	**1.140**	**28.94**	**0.968**	**24.58**	**59.18**	**263.24**	**47.90**	**8.38**
C1234-125-2500-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.500**	**63.50**	**1.192**	**30.27**	**1.009**	**25.63**	**59.18**	**263.24**	**45.24**	**7.92**
C1234-125-2625-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.625**	**66.68**	**1.244**	**31.60**	**1.050**	**26.68**	**59.18**	**263.24**	**42.86**	**7.50**
C1234-125-2750-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.750**	**69.85**	**1.296**	**32.93**	**1.092**	**27.74**	**59.18**	**263.24**	**40.72**	**7.13**
C1234-125-2875-M	**1.234**	**31.34**	**0.125**	**3.18**	**2.875**	**73.03**	**1.349**	**34.26**	**1.133**	**28.79**	**59.18**	**263.24**	**38.78**	**6.79**
C1234-125-3000-M	**1.234**	**31.34**	**0.125**	**3.18**	**3.000**	**76.20**	**1.401**	**35.59**	**1.175**	**29.84**	**59.18**	**263.24**	**37.01**	**6.48**
C1234-125-3250-M	**1.234**	**31.34**	**0.125**	**3.18**	**3.250**	**82.55**	**1.506**	**38.25**	**1.258**	**31.95**	**59.18**	**263.24**	**33.93**	**5.94**
C1234-125-3500-M	**1.234**	**31.34**	**0.125**	**3.18**	**3.500**	**88.90**	**1.610**	**40.90**	**1.341**	**34.06**	**59.18**	**263.24**	**31.32**	**5.48**
C1234-125-3750-M	**1.234**	**31.34**	**0.125**	**3.18**	**3.750**	**95.25**	**1.715**	**43.56**	**1.424**	**36.16**	**59.18**	**263.24**	**29.08**	**5.09**
C1234-125-4000-M	**1.234**	**31.34**	**0.125**	**3.18**	**4.000**	**101.60**	**1.820**	**46.22**	**1.507**	**38.27**	**59.18**	**263.24**	**27.14**	**4.75**
C1234-125-4250-M	**1.234**	**31.34**	**0.125**	**3.18**	**4.250**	**107.95**	**1.924**	**48.88**	**1.590**	**40.38**	**59.18**	**263.24**	**25.45**	**4.45**
C1234-125-4500-M	**1.234**	**31.34**	**0.125**	**3.18**	**4.500**	**114.30**	**2.029**	**51.54**	**1.673**	**42.48**	**59.18**	**263.24**	**23.95**	**4.19**
C1234-125-4750-M	**1.234**	**31.34**	**0.125**	**3.18**	**4.750**	**120.65**	**2.134**	**54.19**	**1.756**	**44.59**	**59.18**	**263.24**	**22.62**	**3.96**
C1234-125-5000-M	**1.234**	**31.34**	**0.125**	**3.18**	**5.000**	**127.00**	**2.238**	**56.85**	**1.838**	**46.70**	**59.18**	**263.24**	**21.43**	**3.75**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1234-105-4500-S	**1.995**	**50.68**	**28.26**	**125.69**	**11.28**	**1.97**
C1234-105-4750-S	**2.099**	**53.33**	**28.26**	**125.69**	**10.66**	**1.87**
C1234-105-5000-S	**2.203**	**55.97**	**28.26**	**125.69**	**10.10**	**1.77**
C1234-105-5250-S	**2.308**	**58.61**	**28.26**	**125.69**	**9.60**	**1.68**
C1234-105-5500-S	**2.412**	**61.25**	**28.26**	**125.69**	**9.15**	**1.60**
C1234-105-5750-S	**2.516**	**63.90**	**28.26**	**125.69**	**8.74**	**1.53**
C1234-105-6000-S	**2.620**	**66.54**	**28.26**	**125.69**	**8.36**	**1.46**
C1234-105-6250-S	**2.724**	**69.18**	**28.26**	**125.69**	**8.01**	**1.40**
C1234-105-6500-S	**2.828**	**71.82**	**28.26**	**125.69**	**7.70**	**1.35**
C1234-105-6750-S	**2.932**	**74.47**	**28.26**	**125.69**	**7.40**	**1.30**
C1234-105-7000-S	**3.036**	**77.11**	**28.26**	**125.69**	**7.13**	**1.25**
C1234-105-7500-S	**3.244**	**82.40**	**28.26**	**125.69**	**6.64**	**1.16**
C1234-105-8000-S	**3.452**	**87.68**	**28.26**	**125.69**	**6.21**	**1.09**
C1234-105-8500-S	**3.660**	**92.97**	**28.26**	**125.69**	**5.84**	**1.02**
C1234-105-9000-S	**3.868**	**98.25**	**28.26**	**125.69**	**5.51**	**0.96**
C1234-105-9500-S	**4.076**	**103.54**	**28.26**	**125.69**	**5.21**	**0.91**
C1234-112-2000-S	1.008	25.61	33.64	149.65	33.92	5.94
C1234-112-2125-S	1.063	27.01	33.64	149.65	31.69	5.55
C1234-112-2250-S	1.119	28.41	33.64	149.65	29.73	5.20
C1234-112-2375-S	1.174	29.81	33.64	149.65	28.01	4.90
C1234-112-2500-S	1.229	31.21	33.64	149.65	26.47	4.63
C1234-112-2625-S	1.284	32.62	33.64	149.65	25.09	4.39
C1234-112-2750-S	1.339	34.02	33.64	149.65	23.85	4.17
C1234-112-2875-S	1.394	35.42	33.64	149.65	22.72	3.98
C1234-112-3000-S	1.450	36.82	33.64	149.65	21.70	3.80
C1234-112-3250-S	1.560	39.63	33.64	149.65	19.91	3.48
C1234-112-3500-S	1.670	42.43	33.64	149.65	18.39	3.22
C1234-112-3750-S	1.781	45.23	33.64	149.65	17.09	2.99
C1234-112-4000-S	1.891	48.04	33.64	149.65	15.95	2.79
C1234-112-4250-S	2.002	50.84	33.64	149.65	14.96	2.62
C1234-112-4500-S	2.112	53.64	33.64	149.65	14.09	2.47
C1234-112-4750-S	2.222	56.45	33.64	149.65	13.31	2.33
C1234-112-5000-S	2.333	59.25	33.64	149.65	12.61	2.21
C1234-112-5250-S	2.443	62.06	33.64	149.65	11.99	2.10
C1234-112-5500-S	2.554	64.86	33.64	149.65	11.42	2.00
C1234-112-5750-S	2.664	67.66	33.64	149.65	10.90	1.91
C1234-112-6000-S	2.774	70.47	33.64	149.65	10.43	1.83
C1234-112-6250-S	2.885	73.27	33.64	149.65	10.00	1.75
C1234-112-6500-S	2.995	76.07	33.64	149.65	9.60	1.68
C1234-112-6750-S	3.105	78.88	33.64	149.65	9.23	1.62
C1234-112-7000-S	3.216	81.68	33.64	149.65	8.89	1.56
C1234-112-7500-S	3.437	87.29	33.64	149.65	8.28	1.45
C1234-112-8000-S*	**3.720**	**94.49**	**33.64**	**149.65**	**7.86**	**1.38**
C1234-112-8500-S*	**3.941**	**100.09**	**33.64**	**149.65**	**7.38**	**1.29**
C1234-112-9000-S*	**4.161**	**105.70**	**33.64**	**149.65**	**6.95**	**1.22**
C1234-112-9500-S*	**4.382**	**111.31**	**33.64**	**149.65**	**6.57**	**1.15**
C1234-125-1875-S	**1.045**	**26.55**	**45.19**	**201.02**	**54.47**	**9.53**
C1234-125-2000-S	**1.106**	**28.10**	**45.19**	**201.02**	**50.58**	**8.85**
C1234-125-2125-S	**1.168**	**29.66**	**45.19**	**201.02**	**47.21**	**8.26**
C1234-125-2250-S	**1.229**	**31.21**	**45.19**	**201.02**	**44.26**	**7.74**
C1234-125-2375-S	**1.290**	**32.77**	**45.19**	**201.02**	**41.65**	**7.29**
C1234-125-2500-S	**1.351**	**34.32**	**45.19**	**201.02**	**39.34**	**6.88**
C1234-125-2625-S	**1.412**	**35.87**	**45.19**	**201.02**	**37.27**	**6.52**
C1234-125-2750-S	**1.474**	**37.43**	**45.19**	**201.02**	**35.40**	**6.20**
C1234-125-2875-S	**1.535**	**38.98**	**45.19**	**201.02**	**33.72**	**5.90**
C1234-125-3000-S	**1.596**	**40.54**	**45.19**	**201.02**	**32.19**	**5.63**
C1234-125-3250-S	**1.718**	**43.64**	**45.19**	**201.02**	**29.50**	**5.16**
C1234-125-3500-S	**1.841**	**46.75**	**45.19**	**201.02**	**27.23**	**4.77**
C1234-125-3750-S	**1.963**	**49.86**	**45.19**	**201.02**	**25.29**	**4.43**
C1234-125-4000-S	**2.085**	**52.97**	**45.19**	**201.02**	**23.60**	**4.13**
C1234-125-4250-S	**2.208**	**56.07**	**45.19**	**201.02**	**22.13**	**3.87**
C1234-125-4500-S	**2.330**	**59.18**	**45.19**	**201.02**	**20.83**	**3.64**
C1234-125-4750-S	**2.452**	**62.29**	**45.19**	**201.02**	**19.67**	**3.44**
C1234-125-5000-S	**2.575**	**65.40**	**45.19**	**201.02**	**18.63**	**3.26**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1234-125-5250-M	1.234	31.34	0.125	3.18	5.250	133.35	2.343	59.51	1.921	48.80	59.18	263.24	20.36	3.56
C1234-125-5500-M	1.234	31.34	0.125	3.18	5.500	139.70	2.448	62.17	2.004	50.91	59.18	263.24	19.39	3.39
C1234-125-5750-M	1.234	31.34	0.125	3.18	5.750	146.05	2.552	64.83	2.087	53.02	59.18	263.24	18.51	3.24
C1234-125-6000-M	1.234	31.34	0.125	3.18	6.000	152.40	2.657	67.49	2.170	55.13	59.18	263.24	17.70	3.10
C1234-125-6250-M	1.234	31.34	0.125	3.18	6.250	158.75	2.762	70.14	2.253	57.23	59.18	263.24	16.96	2.97
C1234-125-6500-M	1.234	31.34	0.125	3.18	6.500	165.10	2.866	72.80	2.336	59.34	59.18	263.24	16.29	2.85
C1234-125-6750-M	1.234	31.34	0.125	3.18	6.750	171.45	2.971	75.46	2.419	61.45	59.18	263.24	15.66	2.74
C1234-125-7000-M*	1.234	31.34	0.125	3.18	7.000	177.80	3.148	79.96	2.592	65.83	59.18	263.24	15.36	2.69
C1234-125-7500-M*	1.234	31.34	0.125	3.18	7.500	190.50	3.357	85.28	2.758	70.05	59.18	263.24	14.29	2.50
C1234-125-8000-M*	1.234	31.34	0.125	3.18	8.000	203.20	3.567	90.60	2.924	74.26	59.18	263.24	13.35	2.34
C1234-125-8500-M*	1.234	31.34	0.125	3.18	8.500	215.90	3.776	95.91	3.090	78.47	59.18	263.24	12.53	2.19
C1234-125-9000-M*	1.234	31.34	0.125	3.18	9.000	228.60	3.985	101.23	3.255	82.69	59.18	263.24	11.80	2.07
C1234-125-9500-M*	1.234	31.34	0.125	3.18	9.500	241.30	4.195	106.54	3.421	86.90	59.18	263.24	11.16	1.95
C1234-135-1875-M	1.234	31.34	0.135	3.43	1.875	47.63	1.003	25.47	0.891	22.63	73.22	325.70	83.93	14.69
C1234-135-2000-M	1.234	31.34	0.135	3.43	2.000	50.80	1.060	26.91	0.938	23.83	73.22	325.70	77.86	13.63
C1234-135-2125-M	1.234	31.34	0.135	3.43	2.125	53.98	1.117	28.36	0.986	25.04	73.22	325.70	72.62	12.71
C1234-135-2250-M	1.234	31.34	0.135	3.43	2.250	57.15	1.174	29.81	1.033	26.24	73.22	325.70	68.03	11.91
C1234-135-2375-M	1.234	31.34	0.135	3.43	2.375	60.33	1.231	31.26	1.080	27.44	73.22	325.70	63.99	11.20
C1234-135-2500-M	1.234	31.34	0.135	3.43	2.500	63.50	1.288	32.71	1.128	28.64	73.22	325.70	60.41	10.57
C1234-135-2625-M	1.234	31.34	0.135	3.43	2.625	66.68	1.345	34.16	1.175	29.84	73.22	325.70	57.20	10.01
C1234-135-2750-M	1.234	31.34	0.135	3.43	2.750	69.85	1.402	35.61	1.222	31.05	73.22	325.70	54.32	9.51
C1234-135-2875-M	1.234	31.34	0.135	3.43	2.875	73.03	1.459	37.06	1.270	32.25	73.22	325.70	51.71	9.05
C1234-135-3000-M	1.234	31.34	0.135	3.43	3.000	76.20	1.516	38.51	1.317	33.45	73.22	325.70	49.34	8.63
C1234-135-3250-M	1.234	31.34	0.135	3.43	3.250	82.55	1.630	41.41	1.412	35.85	73.22	325.70	45.20	7.91
C1234-135-3500-M	1.234	31.34	0.135	3.43	3.500	88.90	1.744	44.30	1.506	38.26	73.22	325.70	41.70	7.30
C1234-135-3750-M	1.234	31.34	0.135	3.43	3.750	95.25	1.858	47.20	1.601	40.66	73.22	325.70	38.71	6.77
C1234-135-4000-M	1.234	31.34	0.135	3.43	4.000	101.60	1.972	50.10	1.695	43.06	73.22	325.70	36.11	6.32
C1234-135-4250-M	1.234	31.34	0.135	3.43	4.250	107.95	2.087	53.00	1.790	45.47	73.22	325.70	33.85	5.92
C1234-135-4500-M	1.234	31.34	0.135	3.43	4.500	114.30	2.201	55.90	1.885	47.87	73.22	325.70	31.84	5.57
C1234-135-4750-M	1.234	31.34	0.135	3.43	4.750	120.65	2.315	58.80	1.979	50.27	73.22	325.70	30.07	5.26
C1234-135-5000-M	1.234	31.34	0.135	3.43	5.000	127.00	2.429	61.69	2.074	52.68	73.22	325.70	28.48	4.98
C1234-135-5250-M	1.234	31.34	0.135	3.43	5.250	133.35	2.543	64.59	2.169	55.08	73.22	325.70	27.05	4.73
C1234-135-5500-M	1.234	31.34	0.135	3.43	5.500	139.70	2.657	67.49	2.263	57.49	73.22	325.70	25.76	4.51
C1234-135-5750-M	1.234	31.34	0.135	3.43	5.750	146.05	2.771	70.39	2.358	59.89	73.22	325.70	24.58	4.30
C1234-135-6000-M	1.234	31.34	0.135	3.43	6.000	152.40	2.885	73.29	2.452	62.29	73.22	325.70	23.51	4.11
C1234-135-6250-M	1.234	31.34	0.135	3.43	6.250	158.75	2.999	76.19	2.547	64.70	73.22	325.70	22.53	3.94
C1234-135-6500-M	1.234	31.34	0.135	3.43	6.500	165.10	3.114	79.08	2.642	67.10	73.22	325.70	21.62	3.78
C1234-135-6750-M	1.234	31.34	0.135	3.43	6.750	171.45	3.228	81.98	2.736	69.50	73.22	325.70	20.79	3.64
C1234-135-7000-M	1.234	31.34	0.135	3.43	7.000	177.80	3.342	84.88	2.831	71.91	73.22	325.70	20.02	3.50
C1234-135-7500-M	1.234	31.34	0.135	3.43	7.500	190.50	3.570	90.68	3.020	76.71	73.22	325.70	18.63	3.26
C1234-135-8000-M	1.234	31.34	0.135	3.43	8.000	203.20	3.798	96.47	3.210	81.52	73.22	325.70	17.43	3.05
C1234-135-8500-M*	1.234	31.34	0.135	3.43	8.500	215.90	4.100	104.13	3.489	88.63	73.22	325.70	16.64	2.91
C1234-135-9000-M*	1.234	31.34	0.135	3.43	9.000	228.60	4.328	109.93	3.679	93.44	73.22	325.70	15.67	2.74
C1234-135-9500-M*	1.234	31.34	0.135	3.43	9.500	241.30	4.556	115.73	3.868	98.25	73.22	325.70	14.81	2.59
C1234-148-1750-M	1.234	31.34	0.148	3.76	1.750	44.45	1.031	26.18	0.949	24.10	94.36	419.72	131.16	22.95
C1234-148-1875-M	1.234	31.34	0.148	3.76	1.875	47.63	1.094	27.78	1.004	25.49	94.36	419.72	120.77	21.14
C1234-148-2000-M	1.234	31.34	0.148	3.76	2.000	50.80	1.157	29.38	1.059	26.89	94.36	419.72	111.91	19.58
C1234-148-2125-M	1.234	31.34	0.148	3.76	2.125	53.98	1.220	30.99	1.113	28.28	94.36	419.72	104.27	18.25
C1234-148-2250-M	1.234	31.34	0.148	3.76	2.250	57.15	1.283	32.59	1.168	29.67	94.36	419.72	97.60	17.08
C1234-148-2375-M	1.234	31.34	0.148	3.76	2.375	60.33	1.346	34.20	1.223	31.07	94.36	419.72	91.73	16.05
C1234-148-2500-M	1.234	31.34	0.148	3.76	2.500	63.50	1.409	35.80	1.278	32.46	94.36	419.72	86.53	15.14
C1234-148-2625-M	1.234	31.34	0.148	3.76	2.625	66.68	1.473	37.41	1.333	33.85	94.36	419.72	81.88	14.33
C1234-148-2750-M	1.234	31.34	0.148	3.76	2.750	69.85	1.536	39.01	1.388	35.25	94.36	419.72	77.71	13.60
C1234-148-2875-M	1.234	31.34	0.148	3.76	2.875	73.03	1.599	40.61	1.442	36.64	94.36	419.72	73.94	12.94
C1234-148-3000-M	1.234	31.34	0.148	3.76	3.000	76.20	1.662	42.22	1.497	38.03	94.36	419.72	70.53	12.34
C1234-148-3250-M	1.234	31.34	0.148	3.76	3.250	82.55	1.788	45.43	1.607	40.82	94.36	419.72	64.56	11.30
C1234-148-3500-M	1.234	31.34	0.148	3.76	3.500	88.90	1.915	48.63	1.717	43.60	94.36	419.72	59.52	10.42
C1234-148-3750-M	1.234	31.34	0.148	3.76	3.750	95.25	2.041	51.84	1.826	46.39	94.36	419.72	55.21	9.66
C1234-148-4000-M	1.234	31.34	0.148	3.76	4.000	101.60	2.167	55.05	1.936	49.18	94.36	419.72	51.49	9.01
C1234-148-4250-M	1.234	31.34	0.148	3.76	4.250	107.95	2.294	58.26	2.046	51.96	94.36	419.72	48.23	8.44
C1234-148-4500-M	1.234	31.34	0.148	3.76	4.500	114.30	2.420	61.47	2.155	54.75	94.36	419.72	45.36	7.94
C1234-148-4750-M	1.234	31.34	0.148	3.76	4.750	120.65	2.546	64.67	2.265	57.54	94.36	419.72	42.82	7.49
C1234-148-5000-M	1.234	31.34	0.148	3.76	5.000	127.00	2.673	67.88	2.375	60.32	94.36	419.72	40.54	7.09
C1234-148-5250-M	1.234	31.34	0.148	3.76	5.250	133.35	2.799	71.09	2.485	63.11	94.36	419.72	38.49	6.74

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1234-125-5250-S	2.697	68.51	45.19	201.02	17.70	3.10
C1234-125-5500-S	2.819	71.61	45.19	201.02	16.86	2.95
C1234-125-5750-S	2.942	74.72	45.19	201.02	16.09	2.82
C1234-125-6000-S	3.064	77.83	45.19	201.02	15.39	2.69
C1234-125-6250-S	3.186	80.94	45.19	201.02	14.75	2.58
C1234-125-6500-S	3.309	84.04	45.19	201.02	14.16	2.48
C1234-125-6750-S	3.431	87.15	45.19	201.02	13.62	2.38
C1234-125-7000-S*	3.617	91.88	45.19	201.02	13.36	2.34
C1234-125-7500-S*	3.862	98.10	45.19	201.02	12.42	2.17
C1234-125-8000-S*	4.107	104.31	45.19	201.02	11.61	2.03
C1234-125-8500-S*	4.351	110.53	45.19	201.02	10.89	1.91
C1234-125-9000-S*	4.596	116.74	45.19	201.02	10.26	1.80
C1234-125-9500-S*	4.841	122.96	45.19	201.02	9.70	1.70
C1234-135-1875-S	1.115	28.31	55.50	246.86	72.98	12.77
C1234-135-2000-S	1.180	29.98	55.50	246.86	67.71	11.85
C1234-135-2125-S	1.246	31.65	55.50	246.86	63.14	11.05
C1234-135-2250-S	1.312	33.32	55.50	246.86	59.16	10.35
C1234-135-2375-S	1.378	34.99	55.50	246.86	55.65	9.74
C1234-135-2500-S	1.443	36.66	55.50	246.86	52.53	9.19
C1234-135-2625-S	1.509	38.33	55.50	246.86	49.74	8.70
C1234-135-2750-S	1.575	40.00	55.50	246.86	47.23	8.27
C1234-135-2875-S	1.641	41.68	55.50	246.86	44.96	7.87
C1234-135-3000-S	1.707	43.35	55.50	246.86	42.91	7.51
C1234-135-3250-S	1.838	46.69	55.50	246.86	39.31	6.88
C1234-135-3500-S	1.970	50.03	55.50	246.86	36.26	6.35
C1234-135-3750-S	2.101	53.37	55.50	246.86	33.66	5.89
C1234-135-4000-S	2.233	56.71	55.50	246.86	31.40	5.50
C1234-135-4250-S	2.364	60.05	55.50	246.86	29.43	5.15
C1234-135-4500-S	2.496	63.39	55.50	246.86	27.69	4.85
C1234-135-4750-S	2.627	66.74	55.50	246.86	26.15	4.58
C1234-135-5000-S	2.759	70.08	55.50	246.86	24.76	4.33
C1234-135-5250-S	2.890	73.42	55.50	246.86	23.52	4.12
C1234-135-5500-S	3.022	76.76	55.50	246.86	22.40	3.92
C1234-135-5750-S	3.154	80.10	55.50	246.86	21.37	3.74
C1234-135-6000-S	3.285	83.44	55.50	246.86	20.44	3.58
C1234-135-6250-S	3.417	86.78	55.50	246.86	19.59	3.43
C1234-135-6500-S	3.548	90.13	55.50	246.86	18.80	3.29
C1234-135-6750-S	3.680	93.47	55.50	246.86	18.08	3.16
C1234-135-7000-S	3.811	96.81	55.50	246.86	17.40	3.05
C1234-135-7500-S	4.074	103.49	55.50	246.86	16.20	2.84
C1234-135-8000-S	4.338	110.17	55.50	246.86	15.15	2.65
C1234-135-8500-S*	4.665	118.48	55.50	246.86	14.47	2.53
C1234-135-9000-S*	4.928	125.16	55.50	246.86	13.63	2.38
C1234-135-9500-S*	5.191	131.85	55.50	246.86	12.88	2.25
C1234-148-1750-S	1.129	28.68	70.81	314.99	114.05	19.96
C1234-148-1875-S	1.201	30.50	70.81	314.99	105.02	18.38
C1234-148-2000-S	1.272	32.32	70.81	314.99	97.32	17.03
C1234-148-2125-S	1.344	34.14	70.81	314.99	90.67	15.87
C1234-148-2250-S	1.416	35.96	70.81	314.99	84.87	14.85
C1234-148-2375-S	1.487	37.78	70.81	314.99	79.76	13.96
C1234-148-2500-S	1.559	39.59	70.81	314.99	75.24	13.17
C1234-148-2625-S	1.630	41.41	70.81	314.99	71.20	12.46
C1234-148-2750-S	1.702	43.23	70.81	314.99	67.57	11.83
C1234-148-2875-S	1.774	45.05	70.81	314.99	64.30	11.25
C1234-148-3000-S	1.845	46.87	70.81	314.99	61.33	10.73
C1234-148-3250-S	1.989	50.51	70.81	314.99	56.14	9.82
C1234-148-3500-S	2.132	54.15	70.81	314.99	51.76	9.06
C1234-148-3750-S	2.275	57.79	70.81	314.99	48.01	8.40
C1234-148-4000-S	2.418	61.42	70.81	314.99	44.77	7.83
C1234-148-4250-S	2.562	65.06	70.81	314.99	41.94	7.34
C1234-148-4500-S	2.705	68.70	70.81	314.99	39.45	6.90
C1234-148-4750-S	2.848	72.34	70.81	314.99	37.23	6.52
C1234-148-5000-S	2.991	75.98	70.81	314.99	35.25	6.17
C1234-148-5250-S	3.134	79.62	70.81	314.99	33.47	5.86

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1234-148-5500-M	1.234	31.34	0.148	3.76	5.500	139.70	2.925	74.30	2.594	65.90	94.36	419.72	36.65	6.41
C1234-148-5750-M	1.234	31.34	0.148	3.76	5.750	146.05	3.051	77.51	2.704	68.68	94.36	419.72	34.97	6.12
C1234-148-6000-M	1.234	31.34	0.148	3.76	6.000	152.40	3.178	80.71	2.814	71.47	94.36	419.72	33.43	5.85
C1234-148-6250-M	1.234	31.34	0.148	3.76	6.250	158.75	3.304	83.92	2.923	74.25	94.36	419.72	32.03	5.61
C1234-148-6500-M	1.234	31.34	0.148	3.76	6.500	165.10	3.430	87.13	3.033	77.04	94.36	419.72	30.74	5.38
C1234-148-6750-M	1.234	31.34	0.148	3.76	6.750	171.45	3.557	90.34	3.143	79.83	94.36	419.72	29.55	5.17
C1234-148-7000-M	1.234	31.34	0.148	3.76	7.000	177.80	3.683	93.55	3.252	82.61	94.36	419.72	28.45	4.98
C1234-148-7500-M	1.234	31.34	0.148	3.76	7.500	190.50	3.936	99.96	3.472	88.19	94.36	419.72	26.47	4.63
C1234-148-8000-M	1.234	31.34	0.148	3.76	8.000	203.20	4.188	106.38	3.691	93.76	94.36	419.72	24.75	4.33
C1234-148-8500-M	1.234	31.34	0.148	3.76	8.500	215.90	4.441	112.80	3.911	99.33	94.36	419.72	23.25	4.07
C1234-148-9000-M	1.234	31.34	0.148	3.76	9.000	228.60	4.693	119.21	4.130	104.90	94.36	419.72	21.91	3.83
C1234-148-9500-M	1.234	31.34	0.148	3.76	9.500	241.30	4.946	125.63	4.349	110.48	94.36	419.72	20.72	3.63
C1234-162-1750-M	1.234	31.34	0.162	4.12	1.750	44.45	1.117	28.37	1.056	26.81	120.96	538.07	191.10	33.44
C1234-162-1875-M	1.234	31.34	0.162	4.12	1.875	47.63	1.187	30.14	1.118	28.40	120.96	538.07	175.70	30.75
C1234-162-2000-M	1.234	31.34	0.162	4.12	2.000	50.80	1.256	31.90	1.181	30.00	120.96	538.07	162.59	28.45
C1234-162-2125-M	1.234	31.34	0.162	4.12	2.125	53.98	1.326	33.67	1.244	31.59	120.96	538.07	151.31	26.48
C1234-162-2250-M	1.234	31.34	0.162	4.12	2.250	57.15	1.395	35.43	1.306	33.18	120.96	538.07	141.49	24.76
C1234-162-2375-M	1.234	31.34	0.162	4.12	2.375	60.33	1.465	37.20	1.369	34.78	120.96	538.07	132.87	23.25
C1234-162-2500-M	1.234	31.34	0.162	4.12	2.500	63.50	1.534	38.97	1.432	36.37	120.96	538.07	125.23	21.92
C1234-162-2625-M	1.234	31.34	0.162	4.12	2.625	66.68	1.604	40.73	1.495	37.96	120.96	538.07	118.43	20.73
C1234-162-2750-M	1.234	31.34	0.162	4.12	2.750	69.85	1.673	42.50	1.557	39.55	120.96	538.07	112.33	19.66
C1234-162-2875-M	1.234	31.34	0.162	4.12	2.875	73.03	1.743	44.26	1.620	41.15	120.96	538.07	106.82	18.69
C1234-162-3000-M	1.234	31.34	0.162	4.12	3.000	76.20	1.812	46.03	1.683	42.74	120.96	538.07	101.83	17.82
C1234-162-3250-M	1.234	31.34	0.162	4.12	3.250	82.55	1.951	49.56	1.808	45.92	120.96	538.07	93.13	16.30
C1234-162-3500-M	1.234	31.34	0.162	4.12	3.500	88.90	2.090	53.09	1.933	49.11	120.96	538.07	85.80	15.02
C1234-162-3750-M	1.234	31.34	0.162	4.12	3.750	95.25	2.229	56.62	2.059	52.30	120.96	538.07	79.54	13.92
C1234-162-4000-M	1.234	31.34	0.162	4.12	4.000	101.60	2.368	60.15	2.184	55.48	120.96	538.07	74.13	12.97
C1234-162-4250-M	1.234	31.34	0.162	4.12	4.250	107.95	2.507	63.68	2.310	58.67	120.96	538.07	69.41	12.15
C1234-162-4500-M	1.234	31.34	0.162	4.12	4.500	114.30	2.646	67.22	2.435	61.85	120.96	538.07	65.26	11.42
C1234-162-4750-M	1.234	31.34	0.162	4.12	4.750	120.65	2.785	70.75	2.561	65.04	120.96	538.07	61.57	10.77
C1234-162-5000-M	1.234	31.34	0.162	4.12	5.000	127.00	2.924	74.28	2.686	68.22	120.96	538.07	58.28	10.20
C1234-162-5250-M	1.234	31.34	0.162	4.12	5.250	133.35	3.063	77.81	2.811	71.41	120.96	538.07	55.32	9.68
C1234-162-5500-M	1.234	31.34	0.162	4.12	5.500	139.70	3.202	81.34	2.937	74.59	120.96	538.07	52.65	9.21
C1234-162-5750-M	1.234	31.34	0.162	4.12	5.750	146.05	3.341	84.87	3.062	77.78	120.96	538.07	50.22	8.79
C1234-162-6000-M	1.234	31.34	0.162	4.12	6.000	152.40	3.480	88.40	3.188	80.97	120.96	538.07	48.01	8.40
C1234-162-6250-M	1.234	31.34	0.162	4.12	6.250	158.75	3.619	91.93	3.313	84.15	120.96	538.07	45.99	8.05
C1234-162-6500-M	1.234	31.34	0.162	4.12	6.500	165.10	3.759	95.47	3.438	87.34	120.96	538.07	44.12	7.72
C1234-162-6750-M	1.234	31.34	0.162	4.12	6.750	171.45	3.898	99.00	3.564	90.52	120.96	538.07	42.41	7.42
C1234-162-7000-M	1.234	31.34	0.162	4.12	7.000	177.80	4.037	102.53	3.689	93.71	120.96	538.07	40.82	7.14
C1234-162-7500-M	1.234	31.34	0.162	4.12	7.500	190.50	4.315	109.59	3.940	100.08	120.96	538.07	37.98	6.65
C1234-162-8000-M	1.234	31.34	0.162	4.12	8.000	203.20	4.593	116.65	4.191	106.45	120.96	538.07	35.50	6.21
C1234-162-8500-M	1.234	31.34	0.162	4.12	8.500	215.90	4.871	123.72	4.442	112.82	120.96	538.07	33.33	5.83
C1234-162-9000-M	1.234	31.34	0.162	4.12	9.000	228.60	5.149	130.78	4.693	119.19	120.96	538.07	31.41	5.50
C1234-162-9500-M	1.234	31.34	0.162	4.12	9.500	241.30	5.427	137.84	4.943	125.56	120.96	538.07	29.70	5.20
C1234-177-1750-M	1.234	31.34	0.177	4.50	1.750	44.45	1.202	30.54	1.161	29.48	154.14	685.64	281.38	49.24
C1234-177-1875-M	1.234	31.34	0.177	4.50	1.875	47.63	1.278	32.47	1.231	31.28	154.14	685.64	258.26	45.19
C1234-177-2000-M	1.234	31.34	0.177	4.50	2.000	50.80	1.354	34.39	1.302	33.07	154.14	685.64	238.64	41.76
C1234-177-2125-M	1.234	31.34	0.177	4.50	2.125	53.98	1.430	36.32	1.373	34.87	154.14	685.64	221.80	38.82
C1234-177-2250-M	1.234	31.34	0.177	4.50	2.250	57.15	1.506	38.25	1.443	36.66	154.14	685.64	207.18	36.26
C1234-177-2375-M	1.234	31.34	0.177	4.50	2.375	60.33	1.582	40.18	1.514	38.46	154.14	685.64	194.36	34.01
C1234-177-2500-M	1.234	31.34	0.177	4.50	2.500	63.50	1.658	42.11	1.585	40.25	154.14	685.64	183.04	32.03
C1234-177-2625-M	1.234	31.34	0.177	4.50	2.625	66.68	1.734	44.04	1.655	42.05	154.14	685.64	172.97	30.27
C1234-177-2750-M	1.234	31.34	0.177	4.50	2.750	69.85	1.810	45.97	1.726	43.84	154.14	685.64	163.94	28.69
C1234-177-2875-M	1.234	31.34	0.177	4.50	2.875	73.03	1.886	47.90	1.797	45.64	154.14	685.64	155.82	27.27
C1234-177-3000-M	1.234	31.34	0.177	4.50	3.000	76.20	1.962	49.83	1.867	47.43	154.14	685.64	148.45	25.98
C1234-177-3250-M	1.234	31.34	0.177	4.50	3.250	82.55	2.114	53.69	2.009	51.02	154.14	685.64	135.64	23.74
C1234-177-3500-M	1.234	31.34	0.177	4.50	3.500	88.90	2.266	57.54	2.150	54.61	154.14	685.64	124.86	21.85
C1234-177-3750-M	1.234	31.34	0.177	4.50	3.750	95.25	2.417	61.40	2.291	58.20	154.14	685.64	115.67	20.24
C1234-177-4000-M	1.234	31.34	0.177	4.50	4.000	101.60	2.569	65.26	2.433	61.79	154.14	685.64	107.74	18.85
C1234-177-4250-M	1.234	31.34	0.177	4.50	4.250	107.95	2.721	69.12	2.574	65.38	154.14	685.64	100.82	17.64
C1234-177-4500-M	1.234	31.34	0.177	4.50	4.500	114.30	2.873	72.98	2.715	68.97	154.14	685.64	94.74	16.58
C1234-177-4750-M	1.234	31.34	0.177	4.50	4.750	120.65	3.025	76.84	2.857	72.56	154.14	685.64	89.36	15.64
C1234-177-5000-M	1.234	31.34	0.177	4.50	5.000	127.00	3.177	80.69	2.998	76.15	154.14	685.64	84.55	14.80
C1234-177-5250-M	1.234	31.34	0.177	4.50	5.250	133.35	3.329	84.55	3.139	79.74	154.14	685.64	80.23	14.04

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1234-148-5500-S	3.278	83.25	70.81	314.99	31.87	5.58
C1234-148-5750-S	3.421	86.89	70.81	314.99	30.41	5.32
C1234-148-6000-S	3.564	90.53	70.81	314.99	29.07	5.09
C1234-148-6250-S	3.707	94.17	70.81	314.99	27.85	4.87
C1234-148-6500-S	3.851	97.81	70.81	314.99	26.73	4.68
C1234-148-6750-S	3.994	101.45	70.81	314.99	25.69	4.50
C1234-148-7000-S	4.137	105.08	70.81	314.99	24.74	4.33
C1234-148-7500-S	4.424	112.36	70.81	314.99	23.02	4.03
C1234-148-8000-S	4.710	119.64	70.81	314.99	21.53	3.77
C1234-148-8500-S	4.997	126.91	70.81	314.99	20.21	3.54
C1234-148-9000-S	5.283	134.19	70.81	314.99	19.05	3.33
C1234-148-9500-S	5.570	141.47	70.81	314.99	18.02	3.15
C1234-162-1750-S	1.210	30.72	89.81	399.50	166.17	29.08
C1234-162-1875-S	1.287	32.69	89.81	399.50	152.78	26.74
C1234-162-2000-S	1.365	34.67	89.81	399.50	141.39	24.74
C1234-162-2125-S	1.442	36.64	89.81	399.50	131.57	23.03
C1234-162-2250-S	1.520	38.61	89.81	399.50	123.03	21.53
C1234-162-2375-S	1.598	40.58	89.81	399.50	115.54	20.22
C1234-162-2500-S	1.675	42.55	89.81	399.50	108.90	19.06
C1234-162-2625-S	1.753	44.52	89.81	399.50	102.98	18.02
C1234-162-2750-S	1.831	46.50	89.81	399.50	97.68	17.09
C1234-162-2875-S	1.908	48.47	89.81	399.50	92.89	16.26
C1234-162-3000-S	1.986	50.44	89.81	399.50	88.55	15.50
C1234-162-3250-S	2.141	54.38	89.81	399.50	80.99	14.17
C1234-162-3500-S	2.296	58.32	89.81	399.50	74.61	13.06
C1234-162-3750-S	2.452	62.27	89.81	399.50	69.17	12.10
C1234-162-4000-S	2.607	66.21	89.81	399.50	64.46	11.28
C1234-162-4250-S	2.762	70.15	89.81	399.50	60.36	10.56
C1234-162-4500-S	2.917	74.10	89.81	399.50	56.74	9.93
C1234-162-4750-S	3.072	78.04	89.81	399.50	53.54	9.37
C1234-162-5000-S	3.228	81.98	89.81	399.50	50.68	8.87
C1234-162-5250-S	3.383	85.93	89.81	399.50	48.10	8.42
C1234-162-5500-S	3.538	89.87	89.81	399.50	45.78	8.01
C1234-162-5750-S	3.693	93.81	89.81	399.50	43.67	7.64
C1234-162-6000-S	3.849	97.76	89.81	399.50	41.75	7.31
C1234-162-6250-S	4.004	101.70	89.81	399.50	39.99	7.00
C1234-162-6500-S	4.159	105.64	89.81	399.50	38.37	6.71
C1234-162-6750-S	4.314	109.59	89.81	399.50	36.88	6.45
C1234-162-7000-S	4.470	113.53	89.81	399.50	35.50	6.21
C1234-162-7500-S	4.780	121.42	89.81	399.50	33.02	5.78
C1234-162-8000-S	5.091	129.30	89.81	399.50	30.87	5.40
C1234-162-8500-S	5.401	137.19	89.81	399.50	28.98	5.07
C1234-162-9000-S	5.712	145.08	89.81	399.50	27.31	4.78
C1234-162-9500-S	6.022	152.96	89.81	399.50	25.82	4.52
C1234-177-1750-S	1.288	32.71	113.13	503.22	244.68	42.82
C1234-177-1875-S	1.371	34.83	113.13	503.22	224.57	39.30
C1234-177-2000-S	1.455	36.95	113.13	503.22	207.52	36.32
C1234-177-2125-S	1.538	39.08	113.13	503.22	192.87	33.75
C1234-177-2250-S	1.622	41.20	113.13	503.22	180.15	31.53
C1234-177-2375-S	1.706	43.32	113.13	503.22	169.01	29.58
C1234-177-2500-S	1.789	45.45	113.13	503.22	159.17	27.85
C1234-177-2625-S	1.873	47.57	113.13	503.22	150.41	26.32
C1234-177-2750-S	1.956	49.69	113.13	503.22	142.56	24.95
C1234-177-2875-S	2.040	51.82	113.13	503.22	135.49	23.71
C1234-177-3000-S	2.124	53.94	113.13	503.22	129.09	22.59
C1234-177-3250-S	2.291	58.19	113.13	503.22	117.95	20.64
C1234-177-3500-S	2.458	62.43	113.13	503.22	108.57	19.00
C1234-177-3750-S	2.625	66.68	113.13	503.22	100.58	17.60
C1234-177-4000-S	2.792	70.93	113.13	503.22	93.68	16.39
C1234-177-4250-S	2.960	75.17	113.13	503.22	87.67	15.34
C1234-177-4500-S	3.127	79.42	113.13	503.22	82.39	14.42
C1234-177-4750-S	3.294	83.67	113.13	503.22	77.70	13.60
C1234-177-5000-S	3.461	87.92	113.13	503.22	73.52	12.87
C1234-177-5250-S	3.628	92.16	113.13	503.22	69.77	12.21

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1234-177-5500-M	1.234	31.34	0.177	4.50	5.500	139.70	3.481	88.41	3.281	83.33	154.14	685.64	76.33	13.36
C1234-177-5750-M	1.234	31.34	0.177	4.50	5.750	146.05	3.633	92.27	3.422	86.92	154.14	685.64	72.80	12.74
C1234-177-6000-M	1.234	31.34	0.177	4.50	6.000	152.40	3.785	96.13	3.563	90.51	154.14	685.64	69.57	12.18
C1234-177-6250-M	1.234	31.34	0.177	4.50	6.250	158.75	3.936	99.99	3.705	94.10	154.14	685.64	66.62	11.66
C1234-177-6500-M	1.234	31.34	0.177	4.50	6.500	165.10	4.088	103.84	3.846	97.68	154.14	685.64	63.91	11.18
C1234-177-6750-M	1.234	31.34	0.177	4.50	6.750	171.45	4.240	107.70	3.987	101.27	154.14	685.64	61.42	10.75
C1234-177-7000-M	1.234	31.34	0.177	4.50	7.000	177.80	4.392	111.56	4.128	104.86	154.14	685.64	59.10	10.34
C1234-177-7500-M	1.234	31.34	0.177	4.50	7.500	190.50	4.696	119.28	4.411	112.04	154.14	685.64	54.97	9.62
C1234-177-8000-M	1.234	31.34	0.177	4.50	8.000	203.20	5.000	126.99	4.694	119.22	154.14	685.64	51.37	8.99
C1234-177-8500-M	1.234	31.34	0.177	4.50	8.500	215.90	5.304	134.71	4.976	126.40	154.14	685.64	48.22	8.44
C1234-177-9000-M	1.234	31.34	0.177	4.50	9.000	228.60	5.607	142.43	5.259	133.58	154.14	685.64	45.43	7.95
C1234-177-9500-M	1.234	31.34	0.177	4.50	9.500	241.30	5.911	150.14	5.542	140.76	154.14	685.64	42.95	7.52
C1234-192-1750-M	1.234	31.34	0.192	4.88	1.750	44.45	1.279	32.49	1.256	31.89	192.36	855.67	408.37	71.46
C1234-192-1875-M	1.234	31.34	0.192	4.88	1.875	47.63	1.361	34.57	1.334	33.87	192.36	855.67	374.13	65.47
C1234-192-2000-M	1.234	31.34	0.192	4.88	2.000	50.80	1.443	36.65	1.412	35.86	192.36	855.67	345.19	60.41
C1234-192-2125-M	1.234	31.34	0.192	4.88	2.125	53.98	1.525	38.73	1.490	37.84	192.36	855.67	320.41	56.07
C1234-192-2250-M	1.234	31.34	0.192	4.88	2.250	57.15	1.607	40.81	1.568	39.82	192.36	855.67	298.94	52.32
C1234-192-2375-M	1.234	31.34	0.192	4.88	2.375	60.33	1.688	42.89	1.646	41.80	192.36	855.67	280.18	49.03
C1234-192-2500-M	1.234	31.34	0.192	4.88	2.500	63.50	1.770	44.97	1.724	43.78	192.36	855.67	263.62	46.13
C1234-192-2625-M	1.234	31.34	0.192	4.88	2.625	66.68	1.852	47.05	1.802	45.76	192.36	855.67	248.92	43.56
C1234-192-2750-M	1.234	31.34	0.192	4.88	2.750	69.85	1.934	49.13	1.880	47.74	192.36	855.67	235.77	41.26
C1234-192-2875-M	1.234	31.34	0.192	4.88	2.875	73.03	2.016	51.21	1.958	49.72	192.36	855.67	223.94	39.19
C1234-192-3000-M	1.234	31.34	0.192	4.88	3.000	76.20	2.098	53.29	2.036	51.71	192.36	855.67	213.24	37.32
C1234-192-3250-M	1.234	31.34	0.192	4.88	3.250	82.55	2.262	57.45	2.192	55.67	192.36	855.67	194.64	34.06
C1234-192-3500-M	1.234	31.34	0.192	4.88	3.500	88.90	2.425	61.61	2.348	59.63	192.36	855.67	179.02	31.33
C1234-192-3750-M	1.234	31.34	0.192	4.88	3.750	95.25	2.589	65.77	2.504	63.59	192.36	855.67	165.73	29.00
C1234-192-4000-M	1.234	31.34	0.192	4.88	4.000	101.60	2.753	69.93	2.660	67.56	192.36	855.67	154.27	27.00
C1234-192-4250-M	1.234	31.34	0.192	4.88	4.250	107.95	2.917	74.09	2.816	71.52	192.36	855.67	144.29	25.25
C1234-192-4500-M	1.234	31.34	0.192	4.88	4.500	114.30	3.081	78.25	2.972	75.48	192.36	855.67	135.53	23.72
C1234-192-4750-M	1.234	31.34	0.192	4.88	4.750	120.65	3.244	82.41	3.128	79.44	192.36	855.67	127.77	22.36
C1234-192-5000-M	1.234	31.34	0.192	4.88	5.000	127.00	3.408	86.57	3.284	83.41	192.36	855.67	120.85	21.15
C1234-192-5250-M	1.234	31.34	0.192	4.88	5.250	133.35	3.572	90.73	3.440	87.37	192.36	855.67	114.64	20.06
C1234-192-5500-M	1.234	31.34	0.192	4.88	5.500	139.70	3.736	94.89	3.596	91.33	192.36	855.67	109.04	19.08
C1234-192-5750-M	1.234	31.34	0.192	4.88	5.750	146.05	3.900	99.05	3.752	95.29	192.36	855.67	103.96	18.19
C1234-192-6000-M	1.234	31.34	0.192	4.88	6.000	152.40	4.063	103.21	3.908	99.26	192.36	855.67	99.33	17.38
C1234-192-6250-M	1.234	31.34	0.192	4.88	6.250	158.75	4.227	107.37	4.064	103.22	192.36	855.67	95.10	16.64
C1234-192-6500-M	1.234	31.34	0.192	4.88	6.500	165.10	4.391	111.53	4.220	107.18	192.36	855.67	91.21	15.96
C1234-192-6750-M	1.234	31.34	0.192	4.88	6.750	171.45	4.555	115.69	4.376	111.14	192.36	855.67	87.63	15.33
C1234-192-7000-M	1.234	31.34	0.192	4.88	7.000	177.80	4.719	119.85	4.532	115.11	192.36	855.67	84.32	14.76
C1234-192-7500-M	1.234	31.34	0.192	4.88	7.500	190.50	5.046	128.17	4.844	123.03	192.36	855.67	78.39	13.72
C1234-192-8000-M	1.234	31.34	0.192	4.88	8.000	203.20	5.374	136.49	5.156	130.96	192.36	855.67	73.24	12.82
C1234-192-8500-M	1.234	31.34	0.192	4.88	8.500	215.90	5.701	144.81	5.468	138.88	192.36	855.67	68.73	12.03
C1234-192-9000-M	1.234	31.34	0.192	4.88	9.000	228.60	6.029	153.13	5.780	146.81	192.36	855.67	64.74	11.33
C1234-192-9500-M	1.234	31.34	0.192	4.88	9.500	241.30	6.356	161.45	6.092	154.73	192.36	855.67	61.19	10.71
C1234-207-1750-M	1.234	31.34	0.207	5.26	1.750	44.45	1.347	34.21	1.340	34.03	235.83	1049.02	585.19	102.41
C1234-207-1875-M	1.234	31.34	0.207	5.26	1.875	47.63	1.434	36.43	1.424	36.18	235.83	1049.02	535.12	93.65
C1234-207-2000-M	1.234	31.34	0.207	5.26	2.000	50.80	1.522	38.65	1.509	38.33	235.83	1049.02	492.95	86.27
C1234-207-2125-M	1.234	31.34	0.207	5.26	2.125	53.98	1.609	40.87	1.594	40.48	235.83	1049.02	456.94	79.96
C1234-207-2250-M	1.234	31.34	0.207	5.26	2.250	57.15	1.696	43.08	1.678	42.63	235.83	1049.02	425.83	74.52
C1234-207-2375-M	1.234	31.34	0.207	5.26	2.375	60.33	1.783	45.30	1.763	44.78	235.83	1049.02	398.68	69.77
C1234-207-2500-M	1.234	31.34	0.207	5.26	2.500	63.50	1.871	47.52	1.848	46.93	235.83	1049.02	374.79	65.59
C1234-207-2625-M	1.234	31.34	0.207	5.26	2.625	66.68	1.958	49.73	1.932	49.08	235.83	1049.02	353.60	61.88
C1234-207-2750-M	1.234	31.34	0.207	5.26	2.750	69.85	2.045	51.95	2.017	51.23	235.83	1049.02	334.68	58.57
C1234-207-2875-M	1.234	31.34	0.207	5.26	2.875	73.03	2.133	54.17	2.102	53.38	235.83	1049.02	317.68	55.59
C1234-207-3000-M	1.234	31.34	0.207	5.26	3.000	76.20	2.220	56.39	2.186	55.53	235.83	1049.02	302.33	52.91
C1234-207-3250-M	1.234	31.34	0.207	5.26	3.250	82.55	2.395	60.82	2.356	59.84	235.83	1049.02	275.68	48.24
C1234-207-3500-M	1.234	31.34	0.207	5.26	3.500	88.90	2.569	65.26	2.525	64.14	235.83	1049.02	253.34	44.34
C1234-207-3750-M	1.234	31.34	0.207	5.26	3.750	95.25	2.744	69.69	2.694	68.44	235.83	1049.02	234.36	41.01
C1234-207-4000-M	1.234	31.34	0.207	5.26	4.000	101.60	2.918	74.12	2.864	72.74	235.83	1049.02	218.02	38.15
C1234-207-4250-M	1.234	31.34	0.207	5.26	4.250	107.95	3.093	78.56	3.033	77.04	235.83	1049.02	203.81	35.67
C1234-207-4500-M	1.234	31.34	0.207	5.26	4.500	114.30	3.267	82.99	3.202	81.34	235.83	1049.02	191.34	33.48
C1234-207-4750-M	1.234	31.34	0.207	5.26	4.750	120.65	3.442	87.43	3.372	85.64	235.83	1049.02	180.31	31.55
C1234-207-5000-M	1.234	31.34	0.207	5.26	5.000	127.00	3.617	91.86	3.541	89.95	235.83	1049.02	170.48	29.83
C1234-207-5250-M	1.234	31.34	0.207	5.26	5.250	133.35	3.791	96.30	3.711	94.25	235.83	1049.02	161.67	28.29

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1234-177-5500-S	3.796	96.41	113.13	503.22	66.38	11.62
C1234-177-5750-S	3.963	100.66	113.13	503.22	63.30	11.08
C1234-177-6000-S	4.130	104.90	113.13	503.22	60.50	10.59
C1234-177-6250-S	4.297	109.15	113.13	503.22	57.93	10.14
C1234-177-6500-S	4.464	113.40	113.13	503.22	55.58	9.73
C1234-177-6750-S	4.632	117.64	113.13	503.22	53.40	9.35
C1234-177-7000-S	4.799	121.89	113.13	503.22	51.40	8.99
C1234-177-7500-S	5.133	130.38	113.13	503.22	47.80	8.36
C1234-177-8000-S	5.468	138.88	113.13	503.22	44.67	7.82
C1234-177-8500-S	5.802	147.37	113.13	503.22	41.93	7.34
C1234-177-9000-S	6.136	155.87	113.13	503.22	39.51	6.91
C1234-177-9500-S	6.471	164.36	113.13	503.22	37.35	6.54
C1234-192-1750-S	1.357	34.47	139.57	620.83	355.10	62.14
C1234-192-1875-S	1.446	36.73	139.57	620.83	325.33	56.93
C1234-192-2000-S	1.535	38.99	139.57	620.83	300.17	52.53
C1234-192-2125-S	1.624	41.25	139.57	620.83	278.62	48.76
C1234-192-2250-S	1.713	43.51	139.57	620.83	259.95	45.49
C1234-192-2375-S	1.802	45.77	139.57	620.83	243.63	42.64
C1234-192-2500-S	1.891	48.04	139.57	620.83	229.24	40.12
C1234-192-2625-S	1.980	50.30	139.57	620.83	216.45	37.88
C1234-192-2750-S	2.069	52.56	139.57	620.83	205.02	35.88
C1234-192-2875-S	2.158	54.82	139.57	620.83	194.73	34.08
C1234-192-3000-S	2.247	57.08	139.57	620.83	185.42	32.45
C1234-192-3250-S	2.425	61.60	139.57	620.83	169.25	29.62
C1234-192-3500-S	2.603	66.13	139.57	620.83	155.67	27.24
C1234-192-3750-S	2.782	70.65	139.57	620.83	144.11	25.22
C1234-192-4000-S	2.960	75.17	139.57	620.83	134.15	23.48
C1234-192-4250-S	3.138	79.70	139.57	620.83	125.47	21.96
C1234-192-4500-S	3.316	84.22	139.57	620.83	117.85	20.62
C1234-192-4750-S	3.494	88.74	139.57	620.83	111.10	19.44
C1234-192-5000-S	3.672	93.26	139.57	620.83	105.08	18.39
C1234-192-5250-S	3.850	97.79	139.57	620.83	99.69	17.44
C1234-192-5500-S	4.028	102.31	139.57	620.83	94.81	16.59
C1234-192-5750-S	4.206	106.83	139.57	620.83	90.40	15.82
C1234-192-6000-S	4.384	111.36	139.57	620.83	86.37	15.12
C1234-192-6250-S	4.562	115.88	139.57	620.83	82.69	14.47
C1234-192-6500-S	4.740	120.40	139.57	620.83	79.31	13.88
C1234-192-6750-S	4.918	124.93	139.57	620.83	76.20	13.33
C1234-192-7000-S	5.096	129.45	139.57	620.83	73.32	12.83
C1234-192-7500-S	5.453	138.49	139.57	620.83	68.17	11.93
C1234-192-8000-S	5.809	147.54	139.57	620.83	63.69	11.15
C1234-192-8500-S	6.165	156.59	139.57	620.83	59.77	10.46
C1234-192-9000-S	6.521	165.63	139.57	620.83	56.30	9.85
C1234-192-9500-S	6.877	174.68	139.57	620.83	53.21	9.31
C1234-207-1750-S	1.418	36.01	169.16	752.48	508.86	89.05
C1234-207-1875-S	1.511	38.39	169.16	752.48	465.33	81.43
C1234-207-2000-S	1.605	40.78	169.16	752.48	428.65	75.01
C1234-207-2125-S	1.699	43.16	169.16	752.48	397.34	69.53
C1234-207-2250-S	1.793	45.55	169.16	752.48	370.28	64.80
C1234-207-2375-S	1.887	47.93	169.16	752.48	346.68	60.67
C1234-207-2500-S	1.981	50.32	169.16	752.48	325.91	57.03
C1234-207-2625-S	2.075	52.70	169.16	752.48	307.48	53.81
C1234-207-2750-S	2.169	55.09	169.16	752.48	291.03	50.93
C1234-207-2875-S	2.263	57.47	169.16	752.48	276.25	48.34
C1234-207-3000-S	2.357	59.86	169.16	752.48	262.89	46.01
C1234-207-3250-S	2.544	64.63	169.16	752.48	239.72	41.95
C1234-207-3500-S	2.732	69.40	169.16	752.48	220.30	38.55
C1234-207-3750-S	2.920	74.17	169.16	752.48	203.79	35.66
C1234-207-4000-S	3.108	78.94	169.16	752.48	189.58	33.18
C1234-207-4250-S	3.295	83.71	169.16	752.48	177.23	31.01
C1234-207-4500-S	3.483	88.48	169.16	752.48	166.38	29.12
C1234-207-4750-S	3.671	93.25	169.16	752.48	156.79	27.44
C1234-207-5000-S	3.859	98.02	169.16	752.48	148.24	25.94
C1234-207-5250-S	4.047	102.79	169.16	752.48	140.58	24.60

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1234-207-5500-M	1.234	31.34	0.207	5.26	5.500	139.70	3.966	100.73	3.880	98.55	235.83	1049.02	153.72	26.90
C1234-207-5750-M	1.234	31.34	0.207	5.26	5.750	146.05	4.140	105.17	4.049	102.85	235.83	1049.02	146.52	25.64
C1234-207-6000-M	1.234	31.34	0.207	5.26	6.000	152.40	4.315	109.60	4.219	107.15	235.83	1049.02	139.96	24.49
C1234-207-6250-M	1.234	31.34	0.207	5.26	6.250	158.75	4.490	114.04	4.388	111.45	235.83	1049.02	133.96	23.44
C1234-207-6500-M	1.234	31.34	0.207	5.26	6.500	165.10	4.664	118.47	4.557	115.75	235.83	1049.02	128.46	22.48
C1234-207-6750-M	1.234	31.34	0.207	5.26	6.750	171.45	4.839	122.91	4.727	120.06	235.83	1049.02	123.39	21.59
C1234-207-7000-M	1.234	31.34	0.207	5.26	7.000	177.80	5.013	127.34	4.896	124.36	235.83	1049.02	118.71	20.77
C1234-207-7500-M	1.234	31.34	0.207	5.26	7.500	190.50	5.363	136.21	5.235	132.96	235.83	1049.02	110.33	19.31
C1234-207-8000-M	1.234	31.34	0.207	5.26	8.000	203.20	5.712	145.08	5.573	141.56	235.83	1049.02	103.06	18.04
C1234-207-8500-M	1.234	31.34	0.207	5.26	8.500	215.90	6.061	153.95	5.912	150.16	235.83	1049.02	96.69	16.92
C1234-207-9000-M	1.234	31.34	0.207	5.26	9.000	228.60	6.410	162.82	6.251	158.77	235.83	1049.02	91.06	15.93
C1234-207-9500-M	1.234	31.34	0.207	5.26	9.500	241.30	6.759	171.69	6.589	167.37	235.83	1049.02	86.05	15.06
C1234-225-1750-M	1.234	31.34	0.225	5.72	1.750	44.45	1.475	37.47	1.427	36.24	243.85	1084.68	887.81	155.37
C1234-225-1875-M	1.234	31.34	0.225	5.72	1.875	47.63	1.572	39.93	1.519	38.57	245.34	1091.31	809.93	141.74
C1234-225-2000-M	1.234	31.34	0.225	5.72	2.000	50.80	1.669	42.39	1.610	40.90	246.58	1096.86	744.61	130.31
C1234-225-2125-M	1.234	31.34	0.225	5.72	2.125	53.98	1.766	44.85	1.702	43.24	247.65	1101.59	689.05	120.58
C1234-225-2250-M	1.234	31.34	0.225	5.72	2.250	57.15	1.862	47.30	1.794	45.57	248.56	1105.66	641.20	112.21
C1234-225-2375-M	1.234	31.34	0.225	5.72	2.375	60.33	1.959	49.76	1.886	47.90	249.36	1109.20	599.56	104.92
C1234-225-2500-M	1.234	31.34	0.225	5.72	2.500	63.50	2.056	52.22	1.977	50.23	250.06	1112.31	563.00	98.53
C1234-225-2625-M	1.234	31.34	0.225	5.72	2.625	66.68	2.153	54.68	2.069	52.56	250.68	1115.07	530.64	92.86
C1234-225-2750-M	1.234	31.34	0.225	5.72	2.750	69.85	2.162	54.91	2.161	54.89	295.12	1312.76	501.81	87.82
C1234-225-2875-M	1.234	31.34	0.225	5.72	2.875	73.03	2.255	57.27	2.253	57.22	295.12	1312.76	475.94	83.29
C1234-225-3000-M	1.234	31.34	0.225	5.72	3.000	76.20	2.348	59.64	2.345	59.55	295.12	1312.76	452.61	79.21
C1234-225-3250-M	1.234	31.34	0.225	5.72	3.250	82.55	2.534	64.36	2.528	64.21	295.12	1312.76	412.20	72.13
C1234-225-3500-M	1.234	31.34	0.225	5.72	3.500	88.90	2.720	69.09	2.712	68.87	295.12	1312.76	378.41	66.22
C1234-225-4000-M	1.234	31.34	0.225	5.72	4.000	101.60	3.092	78.54	3.079	78.20	295.12	1312.76	325.11	56.89
C1234-225-4250-M	1.234	31.34	0.225	5.72	4.250	107.95	3.278	83.27	3.262	82.86	295.12	1312.76	303.72	53.15
C1234-225-4500-M	1.234	31.34	0.225	5.72	4.500	114.30	3.464	88.00	3.446	87.52	295.12	1312.76	284.98	49.87
C1234-225-4750-M	1.234	31.34	0.225	5.72	4.750	120.65	3.650	92.72	3.629	92.18	295.12	1312.76	268.41	46.97
C1234-225-5000-M	1.234	31.34	0.225	5.72	5.000	127.00	3.837	97.45	3.813	96.84	295.12	1312.76	253.66	44.39
C1234-225-5250-M	1.234	31.34	0.225	5.72	5.250	133.35	4.023	102.17	3.996	101.51	295.12	1312.76	240.45	42.08
C1234-225-5500-M	1.234	31.34	0.225	5.72	5.500	139.70	4.209	106.90	4.180	106.17	295.12	1312.76	228.55	40.00
C1234-225-5750-M	1.234	31.34	0.225	5.72	5.750	146.05	4.395	111.63	4.363	110.83	295.12	1312.76	217.76	38.11
C1234-225-6250-M	1.234	31.34	0.225	5.72	6.250	158.75	4.767	121.08	4.730	120.15	295.12	1312.76	198.99	34.82
C1234-225-6500-M	1.234	31.34	0.225	5.72	6.500	165.10	4.953	125.81	4.914	124.82	295.12	1312.76	190.77	33.38
C1234-225-6750-M	1.234	31.34	0.225	5.72	6.750	171.45	5.139	130.53	5.098	129.48	295.12	1312.76	183.20	32.06
C1234-225-7000-M	1.234	31.34	0.225	5.72	7.000	177.80	5.325	135.26	5.281	134.14	295.12	1312.76	176.21	30.84
C1234-225-7500-M	1.234	31.34	0.225	5.72	7.500	190.50	5.697	144.71	5.648	143.46	295.12	1312.76	163.71	28.65
C1234-225-8000-M	1.234	31.34	0.225	5.72	8.000	203.20	6.069	154.16	6.015	152.79	295.12	1312.76	152.87	26.75
C1234-225-8500-M	1.234	31.34	0.225	5.72	8.500	215.90	6.442	163.62	6.382	162.11	295.12	1312.76	143.37	25.09
C1234-225-9000-M	1.234	31.34	0.225	5.72	9.000	228.60	6.814	173.07	6.749	171.43	295.12	1312.76	134.99	23.62
C1234-225-9500-M	1.234	31.34	0.225	5.72	9.500	241.30	7.186	182.52	7.116	180.76	295.12	1312.76	127.53	22.32
C1293-105-2250-M	1.293	32.84	0.105	2.67	2.250	57.15	0.881	22.38	0.671	17.05	34.88	155.15	25.48	4.46
C1293-105-2375-M	1.293	32.84	0.105	2.67	2.375	60.33	0.922	23.42	0.699	17.76	34.88	155.15	24.01	4.20
C1293-105-2500-M	1.293	32.84	0.105	2.67	2.500	63.50	0.963	24.47	0.727	18.46	34.88	155.15	22.70	3.97
C1293-105-2625-M	1.293	32.84	0.105	2.67	2.625	66.68	1.004	25.51	0.754	19.16	34.88	155.15	21.52	3.77
C1293-105-2750-M	1.293	32.84	0.105	2.67	2.750	69.85	1.046	26.56	0.782	19.86	34.88	155.15	20.46	3.58
C1293-105-2875-M	1.293	32.84	0.105	2.67	2.875	73.03	1.087	27.60	0.810	20.56	34.88	155.15	19.50	3.41
C1293-105-3000-M	1.293	32.84	0.105	2.67	3.000	76.20	1.128	28.65	0.837	21.27	34.88	155.15	18.63	3.26
C1293-105-3250-M	1.293	32.84	0.105	2.67	3.250	82.55	1.210	30.73	0.893	22.67	34.88	155.15	17.10	2.99
C1293-105-3500-M	1.293	32.84	0.105	2.67	3.500	88.90	1.292	32.82	0.948	24.07	34.88	155.15	15.80	2.76
C1293-105-3750-M	1.293	32.84	0.105	2.67	3.750	95.25	1.374	34.91	1.003	25.48	34.88	155.15	14.68	2.57
C1293-105-4000-M	1.293	32.84	0.105	2.67	4.000	101.60	1.457	37.00	1.058	26.88	34.88	155.15	13.71	2.40
C1293-105-4250-M	1.293	32.84	0.105	2.67	4.250	107.95	1.539	39.09	1.114	28.28	34.88	155.15	12.87	2.25
C1293-105-4500-M	1.293	32.84	0.105	2.67	4.500	114.30	1.621	41.18	1.169	29.69	34.88	155.15	12.12	2.12
C1293-105-4750-M	1.293	32.84	0.105	2.67	4.750	120.65	1.703	43.27	1.224	31.09	34.88	155.15	11.45	2.00
C1293-105-5000-M	1.293	32.84	0.105	2.67	5.000	127.00	1.786	45.36	1.279	32.50	34.88	155.15	10.85	1.90
C1293-105-5250-M	1.293	32.84	0.105	2.67	5.250	133.35	1.868	47.44	1.335	33.90	34.88	155.15	10.31	1.80
C1293-105-5500-M	1.293	32.84	0.105	2.67	5.500	139.70	1.950	49.53	1.390	35.30	34.88	155.15	9.83	1.72
C1293-105-5750-M	1.293	32.84	0.105	2.67	5.750	146.05	2.032	51.62	1.445	36.71	34.88	155.15	9.38	1.64
C1293-105-6000-M	1.293	32.84	0.105	2.67	6.000	152.40	2.115	53.71	1.500	38.11	34.88	155.15	8.98	1.57
C1293-105-6250-M	1.293	32.84	0.105	2.67	6.250	158.75	2.197	55.80	1.556	39.51	34.88	155.15	8.61	1.51
C1293-105-6500-M	1.293	32.84	0.105	2.67	6.500	165.10	2.279	57.89	1.611	40.92	34.88	155.15	8.26	1.45
C1293-105-6750-M	1.293	32.84	0.105	2.67	6.750	171.45	2.361	59.98	1.666	42.32	34.88	155.15	7.95	1.39

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1234-207-5500-S	4.234	107.56	169.16	752.48	133.67	23.39
C1234-207-5750-S	4.422	112.33	169.16	752.48	127.41	22.30
C1234-207-6000-S	4.610	117.09	169.16	752.48	121.70	21.30
C1234-207-6250-S	4.798	121.86	169.16	752.48	116.49	20.39
C1234-207-6500-S	4.986	126.63	169.16	752.48	111.71	19.55
C1234-207-6750-S	5.173	131.40	169.16	752.48	107.30	18.78
C1234-207-7000-S	5.361	136.17	169.16	752.48	103.23	18.06
C1234-207-7500-S	5.737	145.71	169.16	752.48	95.94	16.79
C1234-207-8000-S	6.112	155.25	169.16	752.48	89.62	15.68
C1234-207-8500-S	6.488	164.79	169.16	752.48	84.08	14.71
C1234-207-9000-S	6.864	174.33	169.16	752.48	79.18	13.86
C1234-207-9500-S	7.239	183.87	169.16	752.48	74.82	13.09
C1234-225-1750-S	1.479	37.58	208.84	928.99	772.01	135.10
C1234-225-1875-S	1.578	40.09	208.84	928.99	704.29	123.25
C1234-225-2000-S	1.677	42.61	208.84	928.99	647.49	113.31
C1234-225-2125-S	1.776	45.12	208.84	928.99	599.17	104.85
C1234-225-2250-S	1.875	47.64	208.84	928.99	557.56	97.57
C1234-225-2375-S	1.974	50.15	208.84	928.99	521.36	91.24
C1234-225-2500-S	2.073	52.66	208.84	928.99	489.57	85.67
C1234-225-2625-S	2.172	55.18	208.84	928.99	461.43	80.75
C1234-225-2750-S	2.271	57.69	208.84	928.99	436.35	76.36
C1234-225-2875-S	2.370	60.21	208.84	928.99	413.86	72.43
C1234-225-3000-S	2.469	62.72	208.84	928.99	393.57	68.88
C1234-225-3250-S	2.667	67.75	208.84	928.99	358.43	62.73
C1234-225-3500-S	2.865	72.78	208.84	928.99	329.05	57.58
C1234-225-4000-S	3.261	82.84	208.84	928.99	282.71	49.47
C1234-225-4250-S	3.459	87.86	208.84	928.99	264.11	46.22
C1234-225-4500-S	3.657	92.89	208.84	928.99	247.81	43.37
C1234-225-4750-S	3.855	97.92	208.84	928.99	233.40	40.84
C1234-225-5000-S	4.053	102.95	208.84	928.99	220.57	38.60
C1234-225-5250-S	4.251	107.98	208.84	928.99	209.09	36.59
C1234-225-5500-S	4.449	113.01	208.84	928.99	198.74	34.78
C1234-225-5750-S	4.647	118.04	208.84	928.99	189.36	33.14
C1234-225-6250-S	5.043	128.09	208.84	928.99	173.04	30.28
C1234-225-6500-S	5.241	133.12	208.84	928.99	165.89	29.03
C1234-225-6750-S	5.439	138.15	208.84	928.99	159.30	27.88
C1234-225-7000-S	5.637	143.18	208.84	928.99	153.22	26.81
C1234-225-7500-S	6.033	153.24	208.84	928.99	142.36	24.91
C1234-225-8000-S	6.429	163.29	208.84	928.99	132.93	23.26
C1234-225-8500-S	6.825	173.35	208.84	928.99	124.67	21.82
C1234-225-9000-S	7.221	183.41	208.84	928.99	117.38	20.54
C1234-225-9500-S	7.617	193.47	208.84	928.99	110.90	19.41
C1293-105-2250-S	1.030	26.17	27.02	120.19	22.16	3.88
C1293-105-2375-S	1.081	27.45	27.02	120.19	20.88	3.65
C1293-105-2500-S	1.131	28.72	27.02	120.19	19.74	3.45
C1293-105-2625-S	1.181	30.00	27.02	120.19	18.72	3.28
C1293-105-2750-S	1.231	31.28	27.02	120.19	17.79	3.11
C1293-105-2875-S	1.282	32.56	27.02	120.19	16.96	2.97
C1293-105-3000-S	1.332	33.83	27.02	120.19	16.20	2.83
C1293-105-3250-S	1.433	36.39	27.02	120.19	14.87	2.60
C1293-105-3500-S	1.533	38.94	27.02	120.19	13.74	2.40
C1293-105-3750-S	1.634	41.49	27.02	120.19	12.77	2.23
C1293-105-4000-S	1.734	44.05	27.02	120.19	11.93	2.09
C1293-105-4250-S	1.835	46.60	27.02	120.19	11.19	1.96
C1293-105-4500-S	1.935	49.15	27.02	120.19	10.54	1.84
C1293-105-4750-S	2.036	51.71	27.02	120.19	9.96	1.74
C1293-105-5000-S	2.136	54.26	27.02	120.19	9.44	1.65
C1293-105-5250-S	2.237	56.81	27.02	120.19	8.97	1.57
C1293-105-5500-S	2.337	59.37	27.02	120.19	8.54	1.50
C1293-105-5750-S	2.438	61.92	27.02	120.19	8.16	1.43
C1293-105-6000-S	2.538	64.48	27.02	120.19	7.81	1.37
C1293-105-6250-S	2.639	67.03	27.02	120.19	7.48	1.31
C1293-105-6500-S	2.739	69.58	27.02	120.19	7.19	1.26
C1293-105-6750-S	2.840	72.14	27.02	120.19	6.91	1.21

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

SPEC

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1293-105-7000-M	1.293	32.84	0.105	2.67	7.000	177.80	2.444	62.07	1.721	43.72	34.88	155.15	7.66	1.34
C1293-105-7500-M	1.293	32.84	0.105	2.67	7.500	190.50	2.608	66.24	1.832	46.53	34.88	155.15	7.13	1.25
C1293-105-8000-M	1.293	32.84	0.105	2.67	8.000	203.20	2.773	70.42	1.943	49.34	34.88	155.15	6.67	1.17
C1293-105-8500-M	1.293	32.84	0.105	2.67	8.500	215.90	2.937	74.60	2.053	52.15	34.88	155.15	6.27	1.10
C1293-105-9000-M	1.293	32.84	0.105	2.67	9.000	228.60	3.101	78.78	2.164	54.95	34.88	155.15	5.91	1.03
C1293-105-9500-M	1.293	32.84	0.105	2.67	9.500	241.30	3.266	82.95	2.274	57.76	34.88	155.15	5.60	0.98
C1293-112-2125-M	1.293	32.84	0.112	2.85	2.125	53.98	0.895	22.72	0.711	18.07	41.74	185.67	33.92	5.94
C1293-112-2250-M	1.293	32.84	0.112	2.85	2.250	57.15	0.939	23.84	0.743	18.86	41.74	185.67	31.83	5.57
C1293-112-2375-M	1.293	32.84	0.112	2.85	2.375	60.33	0.983	24.96	0.774	19.66	41.74	185.67	29.98	5.25
C1293-112-2500-M	1.293	32.84	0.112	2.85	2.500	63.50	1.027	26.08	0.805	20.45	41.74	185.67	28.33	4.96
C1293-112-2625-M	1.293	32.84	0.112	2.85	2.625	66.68	1.071	27.20	0.836	21.25	41.74	185.67	26.86	4.70
C1293-112-2750-M	1.293	32.84	0.112	2.85	2.750	69.85	1.115	28.32	0.868	22.04	41.74	185.67	25.53	4.47
C1293-112-2875-M	1.293	32.84	0.112	2.85	2.875	73.03	1.159	29.44	0.899	22.84	41.74	185.67	24.33	4.26
C1293-112-3000-M	1.293	32.84	0.112	2.85	3.000	76.20	1.203	30.56	0.930	23.63	41.74	185.67	23.23	4.07
C1293-112-3250-M	1.293	32.84	0.112	2.85	3.250	82.55	1.291	32.80	0.993	25.22	41.74	185.67	21.31	3.73
C1293-112-3500-M	1.293	32.84	0.112	2.85	3.500	88.90	1.380	35.04	1.056	26.81	41.74	185.67	19.68	3.44
C1293-112-3750-M	1.293	32.84	0.112	2.85	3.750	95.25	1.468	37.28	1.118	28.40	41.74	185.67	18.29	3.20
C1293-112-4000-M	1.293	32.84	0.112	2.85	4.000	101.60	1.556	39.52	1.181	29.99	41.74	185.67	17.08	2.99
C1293-112-4250-M	1.293	32.84	0.112	2.85	4.250	107.95	1.644	41.76	1.243	31.58	41.74	185.67	16.02	2.80
C1293-112-4500-M	1.293	32.84	0.112	2.85	4.500	114.30	1.732	44.00	1.306	33.17	41.74	185.67	15.08	2.64
C1293-112-4750-M	1.293	32.84	0.112	2.85	4.750	120.65	1.820	46.24	1.369	34.76	41.74	185.67	14.25	2.49
C1293-112-5000-M	1.293	32.84	0.112	2.85	5.000	127.00	1.909	48.48	1.431	36.35	41.74	185.67	13.50	2.36
C1293-112-5250-M	1.293	32.84	0.112	2.85	5.250	133.35	1.997	50.72	1.494	37.94	41.74	185.67	12.83	2.25
C1293-112-5500-M	1.293	32.84	0.112	2.85	5.500	139.70	2.085	52.96	1.556	39.53	41.74	185.67	12.22	2.14
C1293-112-5750-M	1.293	32.84	0.112	2.85	5.750	146.05	2.173	55.20	1.619	41.12	41.74	185.67	11.67	2.04
C1293-112-6000-M	1.293	32.84	0.112	2.85	6.000	152.40	2.261	57.44	1.682	42.71	41.74	185.67	11.16	1.95
C1293-112-6250-M	1.293	32.84	0.112	2.85	6.250	158.75	2.350	59.68	1.744	44.30	41.74	185.67	10.70	1.87
C1293-112-6500-M	1.293	32.84	0.112	2.85	6.500	165.10	2.438	61.92	1.807	45.89	41.74	185.67	10.28	1.80
C1293-112-6750-M	1.293	32.84	0.112	2.85	6.750	171.45	2.526	64.16	1.869	47.48	41.74	185.67	9.88	1.73
C1293-112-7000-M	1.293	32.84	0.112	2.85	7.000	177.80	2.614	66.40	1.932	49.07	41.74	185.67	9.52	1.67
C1293-112-7500-M	1.293	32.84	0.112	2.85	7.500	190.50	2.790	70.88	2.057	52.26	41.74	185.67	8.86	1.55
C1293-112-8000-M	1.293	32.84	0.112	2.85	8.000	203.20	2.967	75.36	2.183	55.44	41.74	185.67	8.29	1.45
C1293-112-8500-M	1.293	32.84	0.112	2.85	8.500	215.90	3.143	79.84	2.308	58.62	41.74	185.67	7.79	1.36
C1293-112-9000-M*	1.293	32.84	0.112	2.85	9.000	228.60	3.392	86.16	2.522	64.07	41.74	185.67	7.44	1.30
C1293-112-9500-M*	1.293	32.84	0.112	2.85	9.500	241.30	3.568	90.64	2.648	67.25	41.74	185.67	7.04	1.23
C1293-125-2000-M	1.293	32.84	0.125	3.18	2.000	50.80	0.947	24.07	0.800	20.32	56.62	251.87	53.80	9.41
C1293-125-2125-M	1.293	32.84	0.125	3.18	2.125	53.98	0.997	25.33	0.838	21.29	56.62	251.87	50.21	8.79
C1293-125-2250-M	1.293	32.84	0.125	3.18	2.250	57.15	1.047	26.60	0.877	22.27	56.62	251.87	47.07	8.24
C1293-125-2375-M	1.293	32.84	0.125	3.18	2.375	60.33	1.097	27.86	0.915	23.24	56.62	251.87	44.30	7.75
C1293-125-2500-M	1.293	32.84	0.125	3.18	2.500	63.50	1.147	29.13	0.953	24.22	56.62	251.87	41.84	7.32
C1293-125-2625-M	1.293	32.84	0.125	3.18	2.625	66.68	1.197	30.39	0.992	25.19	56.62	251.87	39.64	6.94
C1293-125-2750-M	1.293	32.84	0.125	3.18	2.750	69.85	1.246	31.66	1.030	26.17	56.62	251.87	37.66	6.59
C1293-125-2875-M	1.293	32.84	0.125	3.18	2.875	73.03	1.296	32.92	1.069	27.14	56.62	251.87	35.87	6.28
C1293-125-3000-M	1.293	32.84	0.125	3.18	3.000	76.20	1.346	34.19	1.107	28.12	56.62	251.87	34.24	5.99
C1293-125-3250-M	1.293	32.84	0.125	3.18	3.250	82.55	1.446	36.72	1.184	30.07	56.62	251.87	31.38	5.49
C1293-125-3500-M	1.293	32.84	0.125	3.18	3.500	88.90	1.545	39.25	1.260	32.01	56.62	251.87	28.97	5.07
C1293-125-3750-M	1.293	32.84	0.125	3.18	3.750	95.25	1.645	41.78	1.337	33.96	56.62	251.87	26.90	4.71
C1293-125-4000-M	1.293	32.84	0.125	3.18	4.000	101.60	1.745	44.31	1.414	35.91	56.62	251.87	25.11	4.39
C1293-125-4250-M	1.293	32.84	0.125	3.18	4.250	107.95	1.844	46.84	1.491	37.86	56.62	251.87	23.54	4.12
C1293-125-4500-M	1.293	32.84	0.125	3.18	4.500	114.30	1.944	49.38	1.567	39.81	56.62	251.87	22.15	3.88
C1293-125-4750-M	1.293	32.84	0.125	3.18	4.750	120.65	2.044	51.91	1.644	41.76	56.62	251.87	20.92	3.66
C1293-125-5000-M	1.293	32.84	0.125	3.18	5.000	127.00	2.143	54.44	1.721	43.71	56.62	251.87	19.82	3.47
C1293-125-5250-M	1.293	32.84	0.125	3.18	5.250	133.35	2.243	56.97	1.798	45.66	56.62	251.87	18.83	3.30
C1293-125-5500-M	1.293	32.84	0.125	3.18	5.500	139.70	2.342	59.50	1.875	47.61	56.62	251.87	17.93	3.14
C1293-125-5750-M	1.293	32.84	0.125	3.18	5.750	146.05	2.442	62.03	1.951	49.56	56.62	251.87	17.12	3.00
C1293-125-6000-M	1.293	32.84	0.125	3.18	6.000	152.40	2.542	64.56	2.028	51.51	56.62	251.87	16.37	2.87
C1293-125-6250-M	1.293	32.84	0.125	3.18	6.250	158.75	2.641	67.09	2.105	53.46	56.62	251.87	15.69	2.75
C1293-125-6500-M	1.293	32.84	0.125	3.18	6.500	165.10	2.741	69.62	2.182	55.41	56.62	251.87	15.06	2.64
C1293-125-6750-M*	1.293	32.84	0.125	3.18	6.750	171.45	2.916	74.06	2.351	59.72	56.62	251.87	14.77	2.58
C1293-125-7000-M*	1.293	32.84	0.125	3.18	7.000	177.80	3.016	76.59	2.428	61.67	56.62	251.87	14.21	2.49
C1293-125-7500-M*	1.293	32.84	0.125	3.18	7.500	190.50	3.215	81.66	2.582	65.57	56.62	251.87	13.21	2.31
C1293-125-8000-M*	1.293	32.84	0.125	3.18	8.000	203.20	3.414	86.72	2.735	69.47	56.62	251.87	12.35	2.16
C1293-125-8500-M*	1.293	32.84	0.125	3.18	8.500	215.90	3.613	91.78	2.889	73.37	56.62	251.87	11.59	2.03
C1293-125-9000-M*	1.293	32.84	0.125	3.18	9.000	228.60	3.813	96.84	3.042	77.27	56.62	251.87	10.92	1.91

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1293-105-7000-S	2.941	74.69	27.02	120.19	6.66	1.16
C1293-105-7500-S	3.142	79.80	27.02	120.19	6.20	1.09
C1293-105-8000-S	3.343	84.90	27.02	120.19	5.80	1.02
C1293-105-8500-S	3.544	90.01	27.02	120.19	5.45	0.95
C1293-105-9000-S	3.745	95.12	27.02	120.19	5.14	0.90
C1293-105-9500-S	3.946	100.23	27.02	120.19	4.87	0.85
C1293-112-2125-S	1.034	26.27	32.18	143.13	29.50	5.16
C1293-112-2250-S	1.087	27.62	32.18	143.13	27.68	4.84
C1293-112-2375-S	1.141	28.97	32.18	143.13	26.07	4.56
C1293-112-2500-S	1.194	30.33	32.18	143.13	24.64	4.31
C1293-112-2625-S	1.247	31.68	32.18	143.13	23.35	4.09
C1293-112-2750-S	1.300	33.03	32.18	143.13	22.20	3.88
C1293-112-2875-S	1.354	34.39	32.18	143.13	21.15	3.70
C1293-112-3000-S	1.407	35.74	32.18	143.13	20.20	3.54
C1293-112-3250-S	1.514	38.44	32.18	143.13	18.53	3.24
C1293-112-3500-S	1.620	41.15	32.18	143.13	17.12	3.00
C1293-112-3750-S	1.727	43.86	32.18	143.13	15.90	2.78
C1293-112-4000-S	1.833	46.56	32.18	143.13	14.85	2.60
C1293-112-4250-S	1.940	49.27	32.18	143.13	13.93	2.44
C1293-112-4500-S	2.046	51.98	32.18	143.13	13.11	2.29
C1293-112-4750-S	2.153	54.68	32.18	143.13	12.39	2.17
C1293-112-5000-S	2.259	57.39	32.18	143.13	11.74	2.05
C1293-112-5250-S	2.366	60.09	32.18	143.13	11.16	1.95
C1293-112-5500-S	2.472	62.80	32.18	143.13	10.63	1.86
C1293-112-5750-S	2.579	65.51	32.18	143.13	10.15	1.78
C1293-112-6000-S	2.686	68.21	32.18	143.13	9.71	1.70
C1293-112-6250-S	2.792	70.92	32.18	143.13	9.31	1.63
C1293-112-6500-S	2.899	73.62	32.18	143.13	8.94	1.56
C1293-112-6750-S	3.005	76.33	32.18	143.13	8.59	1.50
C1293-112-7000-S	3.112	79.04	32.18	143.13	8.28	1.45
C1293-112-7500-S	3.325	84.45	32.18	143.13	7.71	1.35
C1293-112-8000-S	3.538	89.86	32.18	143.13	7.21	1.26
C1293-112-8500-S	3.751	95.27	32.18	143.13	6.78	1.19
C1293-112-9000-S*	4.028	102.32	32.18	143.13	6.47	1.13
C1293-112-9500-S*	4.241	107.73	32.18	143.13	6.12	1.07
C1293-125-2000-S	1.076	27.32	43.24	192.34	46.78	8.19
C1293-125-2125-S	1.135	28.82	43.24	192.34	43.66	7.64
C1293-125-2250-S	1.194	30.32	43.24	192.34	40.93	7.16
C1293-125-2375-S	1.253	31.82	43.24	192.34	38.53	6.74
C1293-125-2500-S	1.312	33.32	43.24	192.34	36.39	6.37
C1293-125-2625-S	1.371	34.81	43.24	192.34	34.47	6.03
C1293-125-2750-S	1.430	36.31	43.24	192.34	32.75	5.73
C1293-125-2875-S	1.489	37.81	43.24	192.34	31.19	5.46
C1293-125-3000-S	1.548	39.31	43.24	192.34	29.77	5.21
C1293-125-3250-S	1.665	42.30	43.24	192.34	27.29	4.78
C1293-125-3500-S	1.783	45.30	43.24	192.34	25.19	4.41
C1293-125-3750-S	1.901	48.30	43.24	192.34	23.39	4.09
C1293-125-4000-S	2.019	51.29	43.24	192.34	21.83	3.82
C1293-125-4250-S	2.137	54.29	43.24	192.34	20.47	3.58
C1293-125-4500-S	2.255	57.28	43.24	192.34	19.26	3.37
C1293-125-4750-S	2.373	60.28	43.24	192.34	18.19	3.18
C1293-125-5000-S	2.491	63.28	43.24	192.34	17.24	3.02
C1293-125-5250-S	2.609	66.27	43.24	192.34	16.37	2.87
C1293-125-5500-S	2.727	69.27	43.24	192.34	15.59	2.73
C1293-125-5750-S	2.845	72.26	43.24	192.34	14.89	2.60
C1293-125-6000-S	2.963	75.26	43.24	192.34	14.24	2.49
C1293-125-6250-S	3.081	78.26	43.24	192.34	13.64	2.39
C1293-125-6500-S	3.199	81.25	43.24	192.34	13.10	2.29
C1293-125-6750-S*	3.383	85.93	43.24	192.34	12.84	2.25
C1293-125-7000-S*	3.501	88.92	43.24	192.34	12.36	2.16
C1293-125-7500-S*	3.737	94.91	43.24	192.34	11.49	2.01
C1293-125-8000-S*	3.973	100.91	43.24	192.34	10.74	1.88
C1293-125-8500-S*	4.209	106.90	43.24	192.34	10.08	1.76
C1293-125-9000-S*	4.445	112.89	43.24	192.34	9.49	1.66

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1293-125-9500-M*	1.293	32.84	0.125	3.18	9.500	241.30	4.012	101.90	3.196	81.17	56.62	251.87	10.32	1.81
C1293-135-2000-M	1.293	32.84	0.135	3.43	2.000	50.80	1.022	25.96	0.892	22.65	70.08	311.72	71.65	12.54
C1293-135-2125-M	1.293	32.84	0.135	3.43	2.125	53.98	1.076	27.34	0.936	23.77	70.08	311.72	66.82	11.69
C1293-135-2250-M	1.293	32.84	0.135	3.43	2.250	57.15	1.131	28.72	0.980	24.88	70.08	311.72	62.60	10.96
C1293-135-2375-M	1.293	32.84	0.135	3.43	2.375	60.33	1.185	30.10	1.024	26.00	70.08	311.72	58.89	10.31
C1293-135-2500-M	1.293	32.84	0.135	3.43	2.500	63.50	1.239	31.48	1.068	27.12	70.08	311.72	55.59	9.73
C1293-135-2625-M	1.293	32.84	0.135	3.43	2.625	66.68	1.294	32.86	1.112	28.23	70.08	311.72	52.64	9.21
C1293-135-2750-M	1.293	32.84	0.135	3.43	2.750	69.85	1.348	34.24	1.156	29.35	70.08	311.72	49.98	8.75
C1293-135-2875-M	1.293	32.84	0.135	3.43	2.875	73.03	1.402	35.62	1.199	30.47	70.08	311.72	47.58	8.33
C1293-135-3000-M	1.293	32.84	0.135	3.43	3.000	76.20	1.457	37.00	1.243	31.58	70.08	311.72	45.40	7.95
C1293-135-3250-M	1.293	32.84	0.135	3.43	3.250	82.55	1.565	39.76	1.331	33.82	70.08	311.72	41.60	7.28
C1293-135-3500-M	1.293	32.84	0.135	3.43	3.500	88.90	1.674	42.52	1.419	36.05	70.08	311.72	38.38	6.72
C1293-135-3750-M	1.293	32.84	0.135	3.43	3.750	95.25	1.783	45.28	1.507	38.28	70.08	311.72	35.62	6.23
C1293-135-4000-M	1.293	32.84	0.135	3.43	4.000	101.60	1.891	48.04	1.595	40.51	70.08	311.72	33.23	5.82
C1293-135-4250-M	1.293	32.84	0.135	3.43	4.250	107.95	2.000	50.80	1.683	42.75	70.08	311.72	31.14	5.45
C1293-135-4500-M	1.293	32.84	0.135	3.43	4.500	114.30	2.109	53.56	1.771	44.98	70.08	311.72	29.30	5.13
C1293-135-4750-M	1.293	32.84	0.135	3.43	4.750	120.65	2.217	56.32	1.859	47.21	70.08	311.72	27.67	4.84
C1293-135-5000-M	1.293	32.84	0.135	3.43	5.000	127.00	2.326	59.08	1.947	49.45	70.08	311.72	26.21	4.59
C1293-135-5250-M	1.293	32.84	0.135	3.43	5.250	133.35	2.435	61.84	2.035	51.68	70.08	311.72	24.89	4.36
C1293-135-5500-M	1.293	32.84	0.135	3.43	5.500	139.70	2.543	64.60	2.122	53.91	70.08	311.72	23.70	4.15
C1293-135-5750-M	1.293	32.84	0.135	3.43	5.750	146.05	2.652	67.36	2.210	56.14	70.08	311.72	22.62	3.96
C1293-135-6000-M	1.293	32.84	0.135	3.43	6.000	152.40	2.761	70.12	2.298	58.38	70.08	311.72	21.63	3.79
C1293-135-6250-M	1.293	32.84	0.135	3.43	6.250	158.75	2.869	72.88	2.386	60.61	70.08	311.72	20.73	3.63
C1293-135-6500-M	1.293	32.84	0.135	3.43	6.500	165.10	2.978	75.64	2.474	62.84	70.08	311.72	19.90	3.48
C1293-135-6750-M	1.293	32.84	0.135	3.43	6.750	171.45	3.087	78.40	2.562	65.08	70.08	311.72	19.13	3.35
C1293-135-7000-M	1.293	32.84	0.135	3.43	7.000	177.80	3.195	81.16	2.650	67.31	70.08	311.72	18.42	3.22
C1293-135-7500-M*	1.293	32.84	0.135	3.43	7.500	190.50	3.489	88.62	2.920	74.17	70.08	311.72	17.47	3.06
C1293-135-8000-M*	1.293	32.84	0.135	3.43	8.000	203.20	3.706	94.14	3.096	78.63	70.08	311.72	16.32	2.86
C1293-135-8500-M*	1.293	32.84	0.135	3.43	8.500	215.90	3.923	99.66	3.272	83.10	70.08	311.72	15.31	2.68
C1293-135-9000-M*	1.293	32.84	0.135	3.43	9.000	228.60	4.141	105.18	3.447	87.57	70.08	311.72	14.42	2.52
C1293-135-9500-M*	1.293	32.84	0.135	3.43	9.500	241.30	4.358	110.70	3.623	92.03	70.08	311.72	13.63	2.39
C1293-148-1875-M	1.293	32.84	0.148	3.76	1.875	47.63	1.056	26.83	0.958	24.32	90.34	401.87	110.38	19.32
C1293-148-2000-M	1.293	32.84	0.148	3.76	2.000	50.80	1.117	28.36	1.009	25.63	90.34	401.87	102.28	17.90
C1293-148-2125-M	1.293	32.84	0.148	3.76	2.125	53.98	1.177	29.89	1.060	26.93	90.34	401.87	95.29	16.68
C1293-148-2250-M	1.293	32.84	0.148	3.76	2.250	57.15	1.237	31.42	1.111	28.23	90.34	401.87	89.20	15.61
C1293-148-2375-M	1.293	32.84	0.148	3.76	2.375	60.33	1.297	32.95	1.162	29.53	90.34	401.87	83.83	14.67
C1293-148-2500-M	1.293	32.84	0.148	3.76	2.500	63.50	1.358	34.48	1.214	30.83	90.34	401.87	79.08	13.84
C1293-148-2625-M	1.293	32.84	0.148	3.76	2.625	66.68	1.418	36.01	1.265	32.13	90.34	401.87	74.83	13.10
C1293-148-2750-M	1.293	32.84	0.148	3.76	2.750	69.85	1.478	37.54	1.316	33.43	90.34	401.87	71.02	12.43
C1293-148-2875-M	1.293	32.84	0.148	3.76	2.875	73.03	1.538	39.07	1.367	34.73	90.34	401.87	67.58	11.83
C1293-148-3000-M	1.293	32.84	0.148	3.76	3.000	76.20	1.598	40.60	1.419	36.03	90.34	401.87	64.46	11.28
C1293-148-3250-M	1.293	32.84	0.148	3.76	3.250	82.55	1.719	43.66	1.521	38.63	90.34	401.87	59.00	10.33
C1293-148-3500-M	1.293	32.84	0.148	3.76	3.500	88.90	1.839	46.71	1.623	41.23	90.34	401.87	54.40	9.52
C1293-148-3750-M	1.293	32.84	0.148	3.76	3.750	95.25	1.960	49.77	1.726	43.83	90.34	401.87	50.46	8.83
C1293-148-4000-M	1.293	32.84	0.148	3.76	4.000	101.60	2.080	52.83	1.828	46.44	90.34	401.87	47.05	8.23
C1293-148-4250-M	1.293	32.84	0.148	3.76	4.250	107.95	2.200	55.89	1.931	49.04	90.34	401.87	44.08	7.71
C1293-148-4500-M	1.293	32.84	0.148	3.76	4.500	114.30	2.321	58.95	2.033	51.64	90.34	401.87	41.46	7.25
C1293-148-4750-M	1.293	32.84	0.148	3.76	4.750	120.65	2.441	62.01	2.135	54.24	90.34	401.87	39.13	6.85
C1293-148-5000-M	1.293	32.84	0.148	3.76	5.000	127.00	2.562	65.06	2.238	56.84	90.34	401.87	37.05	6.48
C1293-148-5250-M	1.293	32.84	0.148	3.76	5.250	133.35	2.682	68.12	2.340	59.44	90.34	401.87	35.18	6.16
C1293-148-5500-M	1.293	32.84	0.148	3.76	5.500	139.70	2.802	71.18	2.443	62.04	90.34	401.87	33.49	5.86
C1293-148-5750-M	1.293	32.84	0.148	3.76	5.750	146.05	2.923	74.24	2.545	64.65	90.34	401.87	31.96	5.59
C1293-148-6000-M	1.293	32.84	0.148	3.76	6.000	152.40	3.043	77.30	2.648	67.25	90.34	401.87	30.56	5.35
C1293-148-6250-M	1.293	32.84	0.148	3.76	6.250	158.75	3.164	80.36	2.750	69.85	90.34	401.87	29.27	5.12
C1293-148-6500-M	1.293	32.84	0.148	3.76	6.500	165.10	3.284	83.41	2.852	72.45	90.34	401.87	28.09	4.92
C1293-148-6750-M	1.293	32.84	0.148	3.76	6.750	171.45	3.404	86.47	2.955	75.05	90.34	401.87	27.00	4.73
C1293-148-7000-M	1.293	32.84	0.148	3.76	7.000	177.80	3.525	89.53	3.057	77.65	90.34	401.87	26.00	4.55
C1293-148-7500-M	1.293	32.84	0.148	3.76	7.500	190.50	3.766	95.65	3.262	82.85	90.34	401.87	24.19	4.23
C1293-148-8000-M	1.293	32.84	0.148	3.76	8.000	203.20	4.006	101.76	3.467	88.06	90.34	401.87	22.62	3.96
C1293-148-8500-M	1.293	32.84	0.148	3.76	8.500	215.90	4.247	107.88	3.672	93.26	90.34	401.87	21.24	3.72
C1293-148-9000-M	1.293	32.84	0.148	3.76	9.000	228.60	4.488	114.00	3.876	98.46	90.34	401.87	20.02	3.50
C1293-148-9500-M	1.293	32.84	0.148	3.76	9.500	241.30	4.729	120.11	4.081	103.67	90.34	401.87	18.94	3.31
C1293-162-1875-M	1.293	32.84	0.162	4.12	1.875	47.63	1.148	29.16	1.071	27.19	115.88	515.46	159.38	27.89
C1293-162-2000-M	1.293	32.84	0.162	4.12	2.000	50.80	1.214	30.84	1.129	28.69	115.88	515.46	147.49	25.81

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1293-125-9500-S*	4.680	118.88	43.24	192.34	8.97	1.57
C1293-135-2000-S	1.147	29.15	53.12	236.27	62.30	10.90
C1293-135-2125-S	1.211	30.76	53.12	236.27	58.11	10.17
C1293-135-2250-S	1.274	32.37	53.12	236.27	54.44	9.53
C1293-135-2375-S	1.338	33.98	53.12	236.27	51.21	8.96
C1293-135-2500-S	1.401	35.59	53.12	236.27	48.34	8.46
C1293-135-2625-S	1.465	37.20	53.12	236.27	45.77	8.01
C1293-135-2750-S	1.528	38.81	53.12	236.27	43.46	7.61
C1293-135-2875-S	1.591	40.42	53.12	236.27	41.38	7.24
C1293-135-3000-S	1.655	42.03	53.12	236.27	39.48	6.91
C1293-135-3250-S	1.782	45.25	53.12	236.27	36.17	6.33
C1293-135-3500-S	1.908	48.47	53.12	236.27	33.37	5.84
C1293-135-3750-S	2.035	51.69	53.12	236.27	30.97	5.42
C1293-135-4000-S	2.162	54.91	53.12	236.27	28.90	5.06
C1293-135-4250-S	2.289	58.13	53.12	236.27	27.08	4.74
C1293-135-4500-S	2.416	61.35	53.12	236.27	25.48	4.46
C1293-135-4750-S	2.542	64.58	53.12	236.27	24.06	4.21
C1293-135-5000-S	2.669	67.80	53.12	236.27	22.79	3.99
C1293-135-5250-S	2.796	71.02	53.12	236.27	21.64	3.79
C1293-135-5500-S	2.923	74.24	53.12	236.27	20.61	3.61
C1293-135-5750-S	3.050	77.46	53.12	236.27	19.67	3.44
C1293-135-6000-S	3.176	80.68	53.12	236.27	18.81	3.29
C1293-135-6250-S	3.303	83.90	53.12	236.27	18.02	3.15
C1293-135-6500-S	3.430	87.12	53.12	236.27	17.30	3.03
C1293-135-6750-S	3.557	90.34	53.12	236.27	16.63	2.91
C1293-135-7000-S	3.684	93.56	53.12	236.27	16.02	2.80
C1293-135-7500-S*	4.004	101.69	53.12	236.27	15.19	2.66
C1293-135-8000-S*	4.257	108.14	53.12	236.27	14.19	2.48
C1293-135-8500-S*	4.511	114.58	53.12	236.27	13.32	2.33
C1293-135-9000-S*	4.765	121.02	53.12	236.27	12.54	2.19
C1293-135-9500-S*	5.018	127.46	53.12	236.27	11.85	2.07
C1293-148-1875-S	1.169	29.68	67.80	301.60	95.98	16.80
C1293-148-2000-S	1.238	31.44	67.80	301.60	88.94	15.56
C1293-148-2125-S	1.307	33.19	67.80	301.60	82.86	14.50
C1293-148-2250-S	1.376	34.95	67.80	301.60	77.56	13.57
C1293-148-2375-S	1.445	36.70	67.80	301.60	72.90	12.76
C1293-148-2500-S	1.514	38.45	67.80	301.60	68.76	12.03
C1293-148-2625-S	1.583	40.21	67.80	301.60	65.07	11.39
C1293-148-2750-S	1.652	41.96	67.80	301.60	61.76	10.81
C1293-148-2875-S	1.721	43.72	67.80	301.60	58.76	10.28
C1293-148-3000-S	1.790	45.47	67.80	301.60	56.05	9.81
C1293-148-3250-S	1.928	48.98	67.80	301.60	51.31	8.98
C1293-148-3500-S	2.067	52.49	67.80	301.60	47.30	8.28
C1293-148-3750-S	2.205	56.00	67.80	301.60	43.88	7.68
C1293-148-4000-S	2.343	59.51	67.80	301.60	40.92	7.16
C1293-148-4250-S	2.481	63.02	67.80	301.60	38.33	6.71
C1293-148-4500-S	2.619	66.53	67.80	301.60	36.05	6.31
C1293-148-4750-S	2.757	70.04	67.80	301.60	34.03	5.95
C1293-148-5000-S	2.896	73.55	67.80	301.60	32.22	5.64
C1293-148-5250-S	3.034	77.05	67.80	301.60	30.59	5.35
C1293-148-5500-S	3.172	80.56	67.80	301.60	29.12	5.10
C1293-148-5750-S	3.310	84.07	67.80	301.60	27.79	4.86
C1293-148-6000-S	3.448	87.58	67.80	301.60	26.57	4.65
C1293-148-6250-S	3.586	91.09	67.80	301.60	25.45	4.45
C1293-148-6500-S	3.724	94.60	67.80	301.60	24.43	4.27
C1293-148-6750-S	3.863	98.11	67.80	301.60	23.48	4.11
C1293-148-7000-S	4.001	101.62	67.80	301.60	22.61	3.96
C1293-148-7500-S	4.277	108.64	67.80	301.60	21.04	3.68
C1293-148-8000-S	4.553	115.66	67.80	301.60	19.67	3.44
C1293-148-8500-S	4.830	122.67	67.80	301.60	18.47	3.23
C1293-148-9000-S	5.106	129.69	67.80	301.60	17.41	3.05
C1293-148-9500-S	5.382	136.71	67.80	301.60	16.47	2.88
C1293-162-1875-S	1.254	31.86	86.04	382.71	138.59	24.25
C1293-162-2000-S	1.329	33.76	86.04	382.71	128.25	22.44

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1293-162-2125-M	1.293	32.84	0.162	4.12	2.125	53.98	1.281	32.53	1.188	30.18	115.88	515.46	137.25	24.02	**C1293-162-2125-S**	1.404	35.66	86.04	382.71	119.35	20.89
C1293-162-2250-M	1.293	32.84	0.162	4.12	2.250	57.15	1.347	34.22	1.247	31.68	115.88	515.46	128.35	22.46	**C1293-162-2250-S**	1.479	37.57	86.04	382.71	111.61	19.53
C1293-162-2375-M	1.293	32.84	0.162	4.12	2.375	60.33	1.414	35.90	1.306	33.17	115.88	515.46	120.52	21.09	**C1293-162-2375-S**	1.554	39.47	86.04	382.71	104.80	18.34
C1293-162-2500-M	1.293	32.84	0.162	4.12	2.500	63.50	1.480	37.59	1.365	34.67	115.88	515.46	113.60	19.88	**C1293-162-2500-S**	1.629	41.38	86.04	382.71	98.78	17.29
C1293-162-2625-M	1.293	32.84	0.162	4.12	2.625	66.68	1.546	39.28	1.424	36.16	115.88	515.46	107.43	18.80	**C1293-162-2625-S**	1.704	43.28	86.04	382.71	93.42	16.35
C1293-162-2750-M	1.293	32.84	0.162	4.12	2.750	69.85	1.613	40.96	1.483	37.66	115.88	515.46	101.89	17.83	**C1293-162-2750-S**	1.779	45.19	86.04	382.71	88.60	15.51
C1293-162-2875-M	1.293	32.84	0.162	4.12	2.875	73.03	1.679	42.65	1.542	39.15	115.88	515.46	96.90	16.96	**C1293-162-2875-S**	1.854	47.09	86.04	382.71	84.26	14.75
C1293-162-3000-M	1.293	32.84	0.162	4.12	3.000	76.20	1.746	44.34	1.600	40.65	115.88	515.46	92.38	16.17	**C1293-162-3000-S**	1.929	48.99	86.04	382.71	80.33	14.06
C1293-162-3250-M	1.293	32.84	0.162	4.12	3.250	82.55	1.878	47.71	1.718	43.64	115.88	515.46	84.48	14.78	**C1293-162-3250-S**	2.079	52.80	86.04	382.71	73.46	12.86
C1293-162-3500-M	1.293	32.84	0.162	4.12	3.500	88.90	2.011	51.08	1.836	46.63	115.88	515.46	77.83	13.62	**C1293-162-3500-S**	2.229	56.61	86.04	382.71	67.68	11.84
C1293-162-3750-M	1.293	32.84	0.162	4.12	3.750	95.25	2.144	54.46	1.954	49.62	115.88	515.46	72.15	12.63	**C1293-162-3750-S**	2.379	60.42	86.04	382.71	62.74	10.98
C1293-162-4000-M	1.293	32.84	0.162	4.12	4.000	101.60	2.277	57.83	2.071	52.61	115.88	515.46	67.25	11.77	**C1293-162-4000-S**	2.529	64.23	86.04	382.71	58.47	10.23
C1293-162-4250-M	1.293	32.84	0.162	4.12	4.250	107.95	2.410	61.20	2.189	55.60	115.88	515.46	62.96	11.02	**C1293-162-4250-S**	2.679	68.04	86.04	382.71	54.75	9.58
C1293-162-4500-M	1.293	32.84	0.162	4.12	4.500	114.30	2.542	64.58	2.307	58.59	115.88	515.46	59.19	10.36	**C1293-162-4500-S**	2.829	71.84	86.04	382.71	51.47	9.01
C1293-162-4750-M	1.293	32.84	0.162	4.12	4.750	120.65	2.675	67.95	2.424	61.58	115.88	515.46	55.85	9.77	**C1293-162-4750-S**	2.978	75.65	86.04	382.71	48.57	8.50
C1293-162-5000-M	1.293	32.84	0.162	4.12	5.000	127.00	2.808	71.32	2.542	64.57	115.88	515.46	52.87	9.25	**C1293-162-5000-S**	3.128	79.46	86.04	382.71	45.97	8.04
C1293-162-5250-M	1.293	32.84	0.162	4.12	5.250	133.35	2.941	74.70	2.660	67.56	115.88	515.46	50.18	8.78	**C1293-162-5250-S**	3.278	83.27	86.04	382.71	43.64	7.64
C1293-162-5500-M	1.293	32.84	0.162	4.12	5.500	139.70	3.074	78.07	2.778	70.55	115.88	515.46	47.76	8.36	**C1293-162-5500-S**	3.428	87.08	86.04	382.71	41.53	7.27
C1293-162-5750-M	1.293	32.84	0.162	4.12	5.750	146.05	3.206	81.44	2.895	73.54	115.88	515.46	45.56	7.97	**C1293-162-5750-S**	3.578	90.89	86.04	382.71	39.62	6.93
C1293-162-6000-M	1.293	32.84	0.162	4.12	6.000	152.40	3.339	84.82	3.013	76.53	115.88	515.46	43.55	7.62	**C1293-162-6000-S**	3.728	94.69	86.04	382.71	37.87	6.63
C1293-162-6250-M	1.293	32.84	0.162	4.12	6.250	158.75	3.472	88.19	3.131	79.52	115.88	515.46	41.71	7.30	**C1293-162-6250-S**	3.878	98.50	86.04	382.71	36.27	6.35
C1293-162-6500-M	1.293	32.84	0.162	4.12	6.500	165.10	3.605	91.56	3.249	82.51	115.88	515.46	40.03	7.00	**C1293-162-6500-S**	4.028	102.31	86.04	382.71	34.80	6.09
C1293-162-6750-M	1.293	32.84	0.162	4.12	6.750	171.45	3.738	94.94	3.366	85.50	115.88	515.46	38.47	6.73	**C1293-162-6750-S**	4.178	106.12	86.04	382.71	33.45	5.85
C1293-162-7000-M	1.293	32.84	0.162	4.12	7.000	177.80	3.870	98.31	3.484	88.49	115.88	515.46	37.03	6.48	**C1293-162-7000-S**	4.328	109.93	86.04	382.71	32.20	5.63
C1293-162-7500-M	1.293	32.84	0.162	4.12	7.500	190.50	4.136	105.06	3.720	94.48	115.88	515.46	34.45	6.03	**C1293-162-7500-S**	4.628	117.54	86.04	382.71	29.95	5.24
C1293-162-8000-M	1.293	32.84	0.162	4.12	8.000	203.20	4.402	111.80	3.955	100.46	115.88	515.46	32.20	5.64	**C1293-162-8000-S**	4.928	125.16	86.04	382.71	28.00	4.90
C1293-162-8500-M	1.293	32.84	0.162	4.12	8.500	215.90	4.667	118.55	4.190	106.44	115.88	515.46	30.23	5.29	**C1293-162-8500-S**	5.227	132.78	86.04	382.71	26.29	4.60
C1293-162-9000-M	1.293	32.84	0.162	4.12	9.000	228.60	4.933	125.29	4.426	112.42	115.88	515.46	28.49	4.99	**C1293-162-9000-S**	5.527	140.39	86.04	382.71	24.78	4.34
C1293-162-9500-M	1.293	32.84	0.162	4.12	9.500	241.30	5.198	132.04	4.661	118.40	115.88	515.46	26.94	4.71	**C1293-162-9500-S**	5.827	148.01	86.04	382.71	23.43	4.10
C1293-177-1750-M	1.293	32.84	0.177	4.50	1.750	44.45	1.167	29.63	1.117	28.37	147.75	657.21	253.22	44.31	**C1293-177-1750-S**	1.258	31.94	108.44	482.36	220.19	38.53
C1293-177-1875-M	1.293	32.84	0.177	4.50	1.875	47.63	1.239	31.48	1.183	30.06	147.75	657.21	232.41	40.67	**C1293-177-1875-S**	1.338	34.00	108.44	482.36	202.09	35.37
C1293-177-2000-M	1.293	32.84	0.177	4.50	2.000	50.80	1.312	33.33	1.250	31.75	147.75	657.21	214.76	37.58	**C1293-177-2000-S**	1.419	36.05	108.44	482.36	186.75	32.68
C1293-177-2125-M	1.293	32.84	0.177	4.50	2.125	53.98	1.385	35.17	1.317	33.45	147.75	657.21	199.60	34.93	**C1293-177-2125-S**	1.500	38.11	108.44	482.36	173.57	30.37
C1293-177-2250-M	1.293	32.84	0.177	4.50	2.250	57.15	1.458	37.02	1.384	35.14	147.75	657.21	186.44	32.63	**C1293-177-2250-S**	1.581	40.16	108.44	482.36	162.12	28.37
C1293-177-2375-M	1.293	32.84	0.177	4.50	2.375	60.33	1.530	38.87	1.450	36.84	147.75	657.21	174.91	30.61	**C1293-177-2375-S**	1.662	42.22	108.44	482.36	152.10	26.62
C1293-177-2500-M	1.293	32.84	0.177	4.50	2.500	63.50	1.603	40.72	1.517	38.53	147.75	657.21	164.72	28.83	**C1293-177-2500-S**	1.743	44.27	108.44	482.36	143.24	25.07
C1293-177-2625-M	1.293	32.84	0.177	4.50	2.625	66.68	1.676	42.57	1.584	40.23	147.75	657.21	155.66	27.24	**C1293-177-2625-S**	1.824	46.33	108.44	482.36	135.35	23.69
C1293-177-2750-M	1.293	32.84	0.177	4.50	2.750	69.85	1.749	44.41	1.650	41.92	147.75	657.21	147.53	25.82	**C1293-177-2750-S**	1.905	48.38	108.44	482.36	128.29	22.45
C1293-177-2875-M	1.293	32.84	0.177	4.50	2.875	73.03	1.821	46.26	1.717	43.62	147.75	657.21	140.22	24.54	**C1293-177-2875-S**	1.986	50.44	108.44	482.36	121.93	21.34
C1293-177-3000-M	1.293	32.84	0.177	4.50	3.000	76.20	1.894	48.11	1.784	45.31	147.75	657.21	133.60	23.38	**C1293-177-3000-S**	2.067	52.49	108.44	482.36	116.17	20.33
C1293-177-3250-M	1.293	32.84	0.177	4.50	3.250	82.55	2.040	51.81	1.917	48.70	147.75	657.21	122.06	21.36	**C1293-177-3250-S**	2.228	56.60	108.44	482.36	106.14	18.57
C1293-177-3500-M	1.293	32.84	0.177	4.50	3.500	88.90	2.185	55.50	2.051	52.09	147.75	657.21	112.36	19.66	**C1293-177-3500-S**	2.390	60.71	108.44	482.36	97.71	17.10
C1293-177-3750-M	1.293	32.84	0.177	4.50	3.750	95.25	2.331	59.20	2.184	55.48	147.75	657.21	104.09	18.22	**C1293-177-3750-S**	2.552	64.82	108.44	482.36	90.51	15.84
C1293-177-4000-M	1.293	32.84	0.177	4.50	4.000	101.60	2.476	62.89	2.318	58.87	147.75	657.21	96.95	16.97	**C1293-177-4000-S**	2.714	68.93	108.44	482.36	84.31	14.75
C1293-177-4250-M	1.293	32.84	0.177	4.50	4.250	107.95	2.622	66.59	2.451	62.25	147.75	657.21	90.73	15.88	**C1293-177-4250-S**	2.876	73.04	108.44	482.36	78.90	13.81
C1293-177-4500-M	1.293	32.84	0.177	4.50	4.500	114.30	2.767	70.28	2.584	65.64	147.75	657.21	85.26	14.92	**C1293-177-4500-S**	3.037	77.15	108.44	482.36	74.14	12.97
C1293-177-4750-M	1.293	32.84	0.177	4.50	4.750	120.65	2.913	73.98	2.718	69.03	147.75	657.21	80.41	14.07	**C1293-177-4750-S**	3.199	81.26	108.44	482.36	69.92	12.24
C1293-177-5000-M	1.293	32.84	0.177	4.50	5.000	127.00	3.058	77.68	2.851	72.42	147.75	657.21	76.09	13.31	**C1293-177-5000-S**	3.361	85.37	108.44	482.36	66.16	11.58
C1293-177-5250-M	1.293	32.84	0.177	4.50	5.250	133.35	3.204	81.37	2.985	75.81	147.75	657.21	72.20	12.64	**C1293-177-5250-S**	3.523	89.48	108.44	482.36	62.78	10.99
C1293-177-5500-M	1.293	32.84	0.177	4.50	5.500	139.70	3.349	85.07	3.118	79.20	147.75	657.21	68.69	12.02	**C1293-177-5500-S**	3.685	93.59	108.44	482.36	59.73	10.45
C1293-177-5750-M	1.293	32.84	0.177	4.50	5.750	146.05	3.495	88.76	3.252	82.59	147.75	657.21	65.51	11.46	**C1293-177-5750-S**	3.846	97.70	108.44	482.36	56.97	9.97
C1293-177-6000-M	1.293	32.84	0.177	4.50	6.000	152.40	3.640	92.46	3.385	85.98	147.75	657.21	62.61	10.96	**C1293-177-6000-S**	4.008	101.81	108.44	482.36	54.44	9.53
C1293-177-6250-M	1.293	32.84	0.177	4.50	6.250	158.75	3.786	96.16	3.518	89.37	147.75	657.21	59.96	10.49	**C1293-177-6250-S**	4.170	105.92	108.44	482.36	52.13	9.12
C1293-177-6500-M	1.293	32.84	0.177	4.50	6.500	165.10	3.931	99.85	3.652	92.75	147.75	657.21	57.52	10.07	**C1293-177-6500-S**	4.332	110.03	108.44	482.36	50.01	8.75
C1293-177-6750-M	1.293	32.84	0.177	4.50	6.750	171.45	4.077	103.55	3.785	96.14	147.75	657.21	55.27	9.67	**C1293-177-6750-S**	4.494	114.14	108.44	482.36	48.06	8.41
C1293-177-7000-M	1.293	32.84	0.177	4.50	7.000	177.80	4.222	107.24	3.919	99.53	147.75	657.21	53.19	9.31	**C1293-177-7000-S**	4.655	118.25	108.44	482.36	46.25	8.09
C1293-177-7500-M	1.293	32.84	0.177	4.50	7.500	190.50	4.513	114.64	4.185	106.31	147.75	657.21	49.47	8.66	**C1293-177-7500-S**	4.979	126.47	108.44	482.36	43.02	7.53
C1293-177-8000-M	1.293	32.84	0.177	4.50	8.000	203.20	4.804	122.03	4.452	113.09	147.75	657.21	46.23	8.09	**C1293-177-8000-S**	5.303	134.69	108.44	482.36	40.20	7.04
C1293-177-8500-M	1.293	32.84	0.177	4.50	8.500	215.90	5.095	129.42	4.719	119.87	147.75	657.21	43.40	7.59	**C1293-177-8500-S**	5.626	142.91	108.44	482.36	37.73	6.60
C1293-177-9000-M	1.293	32.84	0.177	4.50	9.000	228.60	5.386	136.81	4.986	126.64	147.75	657.21	40.89	7.15	**C1293-177-9000-S**	5.950	151.13	108.44	482.36	35.55	6.22
C1293-177-9500-M	1.293	32.84	0.177	4.50	9.500	241.30	5.677	144.20	5.253	133.42	147.75	657.21	38.65	6.76	**C1293-177-9500-S**	6.273	159.35	108.44	482.36	33.61	5.88
C1293-192-1750-M	1.293	32.84	0.192	4.88	1.750	44.45	1.244	31.60	1.212	30.80	184.51	820.74	364.64	63.81	**C1293-192-1750-S**	1.328	33.73	133.87	595.49	317.08	55.49
C1293-192-1875-M	1.293	32.84	0.192	4.88	1.875	47.63	1.323	33.60	1.286	32.68	184.51	820.74	334.07	58.46	**C1293-192-1875-S**	1.414	35.92	133.87	595.49	290.50	50.84
C1293-192-2000-M	1.293	32.84	0.192	4.88	2.000	50.80	1.401	35.60	1.361	34.56	184.51	820.74	308.23	53.94	**C1293-192-2000-S**	1.501	38.11	133.87	595.49	268.03	46.90

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1293-192-2125-M	1.293	32.84	0.192	4.88	2.125	53.98	1.480	37.59	1.435	36.44	184.51	820.74	286.10	50.07
C1293-192-2250-M	1.293	32.84	0.192	4.88	2.250	57.15	1.559	39.59	1.509	38.32	184.51	820.74	266.93	46.71
C1293-192-2375-M	1.293	32.84	0.192	4.88	2.375	60.33	1.637	41.59	1.583	40.20	184.51	820.74	250.18	43.78
C1293-192-2500-M	1.293	32.84	0.192	4.88	2.500	63.50	1.716	43.59	1.657	42.08	184.51	820.74	235.40	41.19
C1293-192-2625-M	1.293	32.84	0.192	4.88	2.625	66.68	1.795	45.59	1.731	43.96	184.51	820.74	222.27	38.90
C1293-192-2750-M	1.293	32.84	0.192	4.88	2.750	69.85	1.874	47.59	1.805	45.84	184.51	820.74	210.52	36.84
C1293-192-2875-M	1.293	32.84	0.192	4.88	2.875	73.03	1.952	49.59	1.879	47.72	184.51	820.74	199.96	34.99
C1293-192-3000-M	1.293	32.84	0.192	4.88	3.000	76.20	2.031	51.59	1.953	49.61	184.51	820.74	190.41	33.32
C1293-192-3250-M	1.293	32.84	0.192	4.88	3.250	82.55	2.188	55.58	2.101	53.37	184.51	820.74	173.80	30.41
C1293-192-3500-M	1.293	32.84	0.192	4.88	3.500	88.90	2.346	59.58	2.249	57.13	184.51	820.74	159.85	27.97
C1293-192-3750-M	1.293	32.84	0.192	4.88	3.750	95.25	2.503	63.58	2.397	60.89	184.51	820.74	147.98	25.90
C1293-192-4000-M	1.293	32.84	0.192	4.88	4.000	101.60	2.661	67.58	2.545	64.65	184.51	820.74	137.75	24.11
C1293-192-4250-M	1.293	32.84	0.192	4.88	4.250	107.95	2.818	71.58	2.693	68.41	184.51	820.74	128.84	22.55
C1293-192-4500-M	1.293	32.84	0.192	4.88	4.500	114.30	2.975	75.57	2.842	72.18	184.51	820.74	121.02	21.18
C1293-192-4750-M	1.293	32.84	0.192	4.88	4.750	120.65	3.133	79.57	2.990	75.94	184.51	820.74	114.09	19.97
C1293-192-5000-M	1.293	32.84	0.192	4.88	5.000	127.00	3.290	83.57	3.138	79.70	184.51	820.74	107.91	18.88
C1293-192-5250-M	1.293	32.84	0.192	4.88	5.250	133.35	3.448	87.57	3.286	83.46	184.51	820.74	102.36	17.91
C1293-192-5500-M	1.293	32.84	0.192	4.88	5.500	139.70	3.605	91.56	3.434	87.22	184.51	820.74	97.36	17.04
C1293-192-5750-M	1.293	32.84	0.192	4.88	5.750	146.05	3.762	95.56	3.582	90.99	184.51	820.74	92.83	16.24
C1293-192-6000-M	1.293	32.84	0.192	4.88	6.000	152.40	3.920	99.56	3.730	94.75	184.51	820.74	88.69	15.52
C1293-192-6250-M	1.293	32.84	0.192	4.88	6.250	158.75	4.077	103.56	3.878	98.51	184.51	820.74	84.91	14.86
C1293-192-6500-M	1.293	32.84	0.192	4.88	6.500	165.10	4.234	107.56	4.026	102.27	184.51	820.74	81.44	14.25
C1293-192-6750-M	1.293	32.84	0.192	4.88	6.750	171.45	4.392	111.55	4.175	106.03	184.51	820.74	78.24	13.69
C1293-192-7000-M	1.293	32.84	0.192	4.88	7.000	177.80	4.549	115.55	4.323	109.79	184.51	820.74	75.29	13.18
C1293-192-7500-M	1.293	32.84	0.192	4.88	7.500	190.50	4.864	123.55	4.619	117.32	184.51	820.74	70.00	12.25
C1293-192-8000-M	1.293	32.84	0.192	4.88	8.000	203.20	5.179	131.54	4.915	124.84	184.51	820.74	65.40	11.45
C1293-192-8500-M	1.293	32.84	0.192	4.88	8.500	215.90	5.494	139.54	5.211	132.37	184.51	820.74	61.37	10.74
C1293-192-9000-M	1.293	32.84	0.192	4.88	9.000	228.60	5.808	147.53	5.507	139.89	184.51	820.74	57.81	10.12
C1293-192-9500-M	1.293	32.84	0.192	4.88	9.500	241.30	6.123	155.53	5.804	147.41	184.51	820.74	54.64	9.56
C1293-207-1875-M	1.293	32.84	0.207	5.26	1.875	47.63	1.398	35.50	1.379	35.03	226.37	1006.94	474.24	82.99
C1293-207-2000-M	1.293	32.84	0.207	5.26	2.000	50.80	1.482	37.64	1.460	37.08	226.37	1006.94	436.86	76.45
C1293-207-2125-M	1.293	32.84	0.207	5.26	2.125	53.98	1.566	39.78	1.541	39.13	226.37	1006.94	404.95	70.87
C1293-207-2250-M	1.293	32.84	0.207	5.26	2.250	57.15	1.650	41.91	1.622	41.19	226.37	1006.94	377.38	66.04
C1293-207-2375-M	1.293	32.84	0.207	5.26	2.375	60.33	1.734	44.05	1.702	43.24	226.37	1006.94	353.32	61.83
C1293-207-2500-M	1.293	32.84	0.207	5.26	2.500	63.50	1.818	46.19	1.783	45.29	226.37	1006.94	332.15	58.13
C1293-207-2625-M	1.293	32.84	0.207	5.26	2.625	66.68	1.903	48.33	1.864	47.34	226.37	1006.94	313.37	54.84
C1293-207-2750-M	1.293	32.84	0.207	5.26	2.750	69.85	1.987	50.46	1.945	49.40	226.37	1006.94	296.60	51.91
C1293-207-2875-M	1.293	32.84	0.207	5.26	2.875	73.03	2.071	52.60	2.026	51.45	226.37	1006.94	281.54	49.27
C1293-207-3000-M	1.293	32.84	0.207	5.26	3.000	76.20	2.155	54.74	2.106	53.50	226.37	1006.94	267.93	46.89
C1293-207-3250-M	1.293	32.84	0.207	5.26	3.250	82.55	2.323	59.02	2.268	57.61	226.37	1006.94	244.31	42.75
C1293-207-3500-M	1.293	32.84	0.207	5.26	3.500	88.90	2.492	63.29	2.430	61.71	226.37	1006.94	224.52	39.29
C1293-207-3750-M	1.293	32.84	0.207	5.26	3.750	95.25	2.660	67.57	2.591	65.81	226.37	1006.94	207.69	36.35
C1293-207-4000-M	1.293	32.84	0.207	5.26	4.000	101.60	2.828	71.84	2.753	69.92	226.37	1006.94	193.21	33.81
C1293-207-4250-M	1.293	32.84	0.207	5.26	4.250	107.95	2.997	76.12	2.914	74.02	226.37	1006.94	180.62	31.61
C1293-207-4500-M	1.293	32.84	0.207	5.26	4.500	114.30	3.165	80.39	3.076	78.13	226.37	1006.94	169.57	29.67
C1293-207-4750-M	1.293	32.84	0.207	5.26	4.750	120.65	3.333	84.67	3.238	82.23	226.37	1006.94	159.79	27.96
C1293-207-5000-M	1.293	32.84	0.207	5.26	5.000	127.00	3.502	88.94	3.399	86.34	226.37	1006.94	151.08	26.44
C1293-207-5250-M	1.293	32.84	0.207	5.26	5.250	133.35	3.670	93.22	3.561	90.44	226.37	1006.94	143.27	25.07
C1293-207-5500-M	1.293	32.84	0.207	5.26	5.500	139.70	3.838	97.49	3.722	94.55	226.37	1006.94	136.23	23.84
C1293-207-5750-M	1.293	32.84	0.207	5.26	5.750	146.05	4.007	101.77	3.884	98.65	226.37	1006.94	129.85	22.72
C1293-207-6000-M	1.293	32.84	0.207	5.26	6.000	152.40	4.175	106.04	4.046	102.76	226.37	1006.94	124.04	21.71
C1293-207-6250-M	1.293	32.84	0.207	5.26	6.250	158.75	4.343	110.32	4.207	106.86	226.37	1006.94	118.72	20.78
C1293-207-6500-M	1.293	32.84	0.207	5.26	6.500	165.10	4.512	114.60	4.369	110.97	226.37	1006.94	113.85	19.92
C1293-207-6750-M	1.293	32.84	0.207	5.26	6.750	171.45	4.680	118.87	4.530	115.07	226.37	1006.94	109.35	19.14
C1293-207-7000-M	1.293	32.84	0.207	5.26	7.000	177.80	4.848	123.15	4.692	119.18	226.37	1006.94	105.20	18.41
C1293-207-7500-M	1.293	32.84	0.207	5.26	7.500	190.50	5.185	131.70	5.015	127.39	226.37	1006.94	97.78	17.11
C1293-207-8000-M	1.293	32.84	0.207	5.26	8.000	203.20	5.522	140.25	5.338	135.60	226.37	1006.94	91.34	15.98
C1293-207-8500-M	1.293	32.84	0.207	5.26	8.500	215.90	5.858	148.80	5.662	143.80	226.37	1006.94	85.69	15.00
C1293-207-9000-M	1.293	32.84	0.207	5.26	9.000	228.60	6.195	157.35	5.985	152.01	226.37	1006.94	80.70	14.12
C1293-207-9500-M	1.293	32.84	0.207	5.26	9.500	241.30	6.531	165.90	6.308	160.22	226.37	1006.94	76.26	13.34
C1293-225-1875-M	1.293	32.84	0.225	5.72	1.875	47.63	1.477	37.50	1.477	37.50	283.56	1261.36	711.63	124.54
C1293-225-2000-M	1.293	32.84	0.225	5.72	2.000	50.80	1.567	39.79	1.565	39.74	283.56	1261.36	654.24	114.49
C1293-225-2125-M	1.293	32.84	0.225	5.72	2.125	53.98	1.657	42.08	1.653	41.98	283.56	1261.36	605.42	105.95
C1293-225-2250-M	1.293	32.84	0.225	5.72	2.250	57.15	1.747	44.37	1.741	44.21	283.56	1261.36	563.37	98.59

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1293-192-2125-S	1.587	40.31	133.87	595.49	248.78	43.54
C1293-192-2250-S	1.673	42.50	133.87	595.49	232.12	40.62
C1293-192-2375-S	1.760	44.69	133.87	595.49	217.54	38.07
C1293-192-2500-S	1.846	46.89	133.87	595.49	204.69	35.82
C1293-192-2625-S	1.932	49.08	133.87	595.49	193.28	33.82
C1293-192-2750-S	2.019	51.28	133.87	595.49	183.06	32.04
C1293-192-2875-S	2.105	53.47	133.87	595.49	173.88	30.43
C1293-192-3000-S	2.191	55.66	133.87	595.49	165.57	28.97
C1293-192-3250-S	2.364	60.05	133.87	595.49	151.13	26.45
C1293-192-3500-S	2.537	64.44	133.87	595.49	139.00	24.33
C1293-192-3750-S	2.710	68.82	133.87	595.49	128.68	22.52
C1293-192-4000-S	2.882	73.21	133.87	595.49	119.78	20.96
C1293-192-4250-S	3.055	77.60	133.87	595.49	112.04	19.61
C1293-192-4500-S	3.228	81.99	133.87	595.49	105.23	18.42
C1293-192-4750-S	3.401	86.37	133.87	595.49	99.21	17.36
C1293-192-5000-S	3.573	90.76	133.87	595.49	93.83	16.42
C1293-192-5250-S	3.746	95.15	133.87	595.49	89.01	15.58
C1293-192-5500-S	3.919	99.54	133.87	595.49	84.66	14.82
C1293-192-5750-S	4.091	103.92	133.87	595.49	80.72	14.13
C1293-192-6000-S	4.264	108.31	133.87	595.49	77.12	13.50
C1293-192-6250-S	4.437	112.70	133.87	595.49	73.84	12.92
C1293-192-6500-S	4.610	117.09	133.87	595.49	70.82	12.39
C1293-192-6750-S	4.782	121.47	133.87	595.49	68.04	11.91
C1293-192-7000-S	4.955	125.86	133.87	595.49	65.47	11.46
C1293-192-7500-S	5.301	134.64	133.87	595.49	60.87	10.65
C1293-192-8000-S	5.646	143.41	133.87	595.49	56.87	9.95
C1293-192-8500-S	5.992	152.18	133.87	595.49	53.37	9.34
C1293-192-9000-S	6.337	160.96	133.87	595.49	50.27	8.80
C1293-192-9500-S	6.682	169.73	133.87	595.49	47.51	8.31
C1293-207-1875-S	1.481	37.62	162.38	722.29	412.38	72.17
C1293-207-2000-S	1.573	39.94	162.38	722.29	379.88	66.48
C1293-207-2125-S	1.664	42.26	162.38	722.29	352.13	61.62
C1293-207-2250-S	1.755	44.58	162.38	722.29	328.16	57.43
C1293-207-2375-S	1.846	46.90	162.38	722.29	307.24	53.77
C1293-207-2500-S	1.938	49.22	162.38	722.29	288.83	50.54
C1293-207-2625-S	2.029	51.54	162.38	722.29	272.50	47.69
C1293-207-2750-S	2.120	53.86	162.38	722.29	257.92	45.14
C1293-207-2875-S	2.212	56.18	162.38	722.29	244.82	42.84
C1293-207-3000-S	2.303	58.50	162.38	722.29	232.98	40.77
C1293-207-3250-S	2.486	63.14	162.38	722.29	212.44	37.18
C1293-207-3500-S	2.668	67.77	162.38	722.29	195.23	34.17
C1293-207-3750-S	2.851	72.41	162.38	722.29	180.60	31.61
C1293-207-4000-S	3.034	77.05	162.38	722.29	168.01	29.40
C1293-207-4250-S	3.216	81.69	162.38	722.29	157.06	27.49
C1293-207-4500-S	3.399	86.33	162.38	722.29	147.45	25.80
C1293-207-4750-S	3.581	90.97	162.38	722.29	138.95	24.32
C1293-207-5000-S	3.764	95.61	162.38	722.29	131.38	22.99
C1293-207-5250-S	3.947	100.24	162.38	722.29	124.59	21.80
C1293-207-5500-S	4.129	104.88	162.38	722.29	118.46	20.73
C1293-207-5750-S	4.312	109.52	162.38	722.29	112.91	19.76
C1293-207-6000-S	4.495	114.16	162.38	722.29	107.86	18.88
C1293-207-6250-S	4.677	118.80	162.38	722.29	103.24	18.07
C1293-207-6500-S	4.860	123.44	162.38	722.29	99.00	17.32
C1293-207-6750-S	5.042	128.08	162.38	722.29	95.09	16.64
C1293-207-7000-S	5.225	132.72	162.38	722.29	91.48	16.01
C1293-207-7500-S	5.590	141.99	162.38	722.29	85.03	14.88
C1293-207-8000-S	5.955	151.27	162.38	722.29	79.42	13.90
C1293-207-8500-S	6.321	160.55	162.38	722.29	74.51	13.04
C1293-207-9000-S	6.686	169.82	162.38	722.29	70.17	12.28
C1293-207-9500-S	7.051	179.10	162.38	722.29	66.31	11.60
C1293-225-1875-S	1.551	39.39	200.67	892.61	618.81	108.29
C1293-225-2000-S	1.647	41.84	200.67	892.61	568.90	99.56
C1293-225-2125-S	1.744	44.29	200.67	892.61	526.45	92.13
C1293-225-2250-S	1.840	46.75	200.67	892.61	489.89	85.73

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1293-225-2375-M	1.293	32.84	0.225	5.72	2.375	60.33	1.837	46.65	1.829	46.45	283.56	1261.36	526.79	92.19	**C1293-225-2375-S**	1.937	49.20	200.67	892.61	458.08	80.16
C1293-225-2500-M	1.293	32.84	0.225	5.72	2.500	63.50	1.927	48.94	1.917	48.69	283.56	1261.36	494.67	86.57	**C1293-225-2500-S**	2.033	51.65	200.67	892.61	430.15	75.28
C1293-225-2625-M	1.293	32.84	0.225	5.72	2.625	66.68	2.017	51.23	2.005	50.93	283.56	1261.36	466.24	81.59	**C1293-225-2625-S**	2.130	54.10	200.67	892.61	405.43	70.95
C1293-225-2750-M	1.293	32.84	0.225	5.72	2.750	69.85	2.107	53.51	2.093	53.16	283.56	1261.36	440.90	77.16	**C1293-225-2750-S**	2.227	56.56	200.67	892.61	383.39	67.09
C1293-225-2875-M	1.293	32.84	0.225	5.72	2.875	73.03	2.197	55.80	2.181	55.40	283.56	1261.36	418.17	73.18	**C1293-225-2875-S**	2.323	59.01	200.67	892.61	363.63	63.64
C1293-225-3000-M	1.293	32.84	0.225	5.72	3.000	76.20	2.287	58.09	2.269	57.64	283.56	1261.36	397.68	69.59	**C1293-225-3000-S**	2.420	61.46	200.67	892.61	345.80	60.52
C1293-225-3250-M	1.293	32.84	0.225	5.72	3.250	82.55	2.467	62.66	2.445	62.11	283.56	1261.36	362.17	63.38	**C1293-225-3250-S**	2.613	66.37	200.67	892.61	314.93	55.11
C1293-225-3500-M	1.293	32.84	0.225	5.72	3.500	88.90	2.647	67.24	2.621	66.58	283.56	1261.36	332.48	58.18	**C1293-225-3500-S**	2.806	71.27	200.67	892.61	289.12	50.60
C1293-225-3750-M	1.293	32.84	0.225	5.72	3.750	95.25	2.827	71.81	2.798	71.06	283.56	1261.36	307.29	53.78	**C1293-225-3750-S**	2.999	76.18	200.67	892.61	267.21	46.76
C1293-225-4000-M	1.293	32.84	0.225	5.72	4.000	101.60	3.007	76.39	2.974	75.53	283.56	1261.36	285.65	49.99	**C1293-225-4000-S**	3.192	81.08	200.67	892.61	248.40	43.47
C1293-225-4250-M	1.293	32.84	0.225	5.72	4.250	107.95	3.187	80.96	3.150	80.01	283.56	1261.36	266.86	46.70	**C1293-225-4250-S**	3.385	85.99	200.67	892.61	232.05	40.61
C1293-225-4500-M	1.293	32.84	0.225	5.72	4.500	114.30	3.368	85.53	3.326	84.48	283.56	1261.36	250.39	43.82	**C1293-225-4500-S**	3.578	90.89	200.67	892.61	217.73	38.10
C1293-225-4750-M	1.293	32.84	0.225	5.72	4.750	120.65	3.548	90.11	3.502	88.96	283.56	1261.36	235.83	41.27	**C1293-225-4750-S**	3.771	95.80	200.67	892.61	205.07	35.89
C1293-225-5000-M	1.293	32.84	0.225	5.72	5.000	127.00	3.728	94.68	3.678	93.43	283.56	1261.36	222.87	39.00	**C1293-225-5000-S**	3.965	100.70	200.67	892.61	193.80	33.92
C1293-225-5250-M	1.293	32.84	0.225	5.72	5.250	133.35	3.908	99.26	3.854	97.90	283.56	1261.36	211.27	36.97	**C1293-225-5250-S**	4.158	105.61	200.67	892.61	183.71	32.15
C1293-225-5500-M	1.293	32.84	0.225	5.72	5.500	139.70	4.088	103.83	4.031	102.38	283.56	1261.36	200.81	35.14	**C1293-225-5500-S**	4.351	110.51	200.67	892.61	174.61	30.56
C1293-225-5750-M	1.293	32.84	0.225	5.72	5.750	146.05	4.268	108.41	4.207	106.85	283.56	1261.36	191.33	33.48	**C1293-225-5750-S**	4.544	115.42	200.67	892.61	166.38	29.12
C1293-225-6000-M	1.293	32.84	0.225	5.72	6.000	152.40	4.448	112.98	4.383	111.33	283.56	1261.36	182.72	31.98	**C1293-225-6000-S**	4.737	120.32	200.67	892.61	158.88	27.80
C1293-225-6250-M	1.293	32.84	0.225	5.72	6.250	158.75	4.628	117.55	4.559	115.80	283.56	1261.36	174.84	30.60	**C1293-225-6250-S**	4.930	125.23	200.67	892.61	152.04	26.61
C1293-225-6500-M	1.293	32.84	0.225	5.72	6.500	165.10	4.808	122.13	4.735	120.27	283.56	1261.36	167.62	29.33	**C1293-225-6500-S**	5.123	130.13	200.67	892.61	145.75	25.51
C1293-225-6750-M	1.293	32.84	0.225	5.72	6.750	171.45	4.988	126.70	4.911	124.75	283.56	1261.36	160.96	28.17	**C1293-225-6750-S**	5.316	135.04	200.67	892.61	139.97	24.49
C1293-225-7000-M	1.293	32.84	0.225	5.72	7.000	177.80	5.168	131.28	5.087	129.22	283.56	1261.36	154.82	27.09	**C1293-225-7000-S**	5.509	139.94	200.67	892.61	134.63	23.56
C1293-225-7500-M	1.293	32.84	0.225	5.72	7.500	190.50	5.529	140.43	5.440	138.17	283.56	1261.36	143.84	25.17	**C1293-225-7500-S**	5.896	149.75	200.67	892.61	125.08	21.89
C1293-225-8000-M	1.293	32.84	0.225	5.72	8.000	203.20	5.889	149.58	5.792	147.12	283.56	1261.36	134.31	23.50	**C1293-225-8000-S**	6.282	159.56	200.67	892.61	116.80	20.44
C1293-225-8500-M	1.293	32.84	0.225	5.72	8.500	215.90	6.249	158.72	6.144	156.07	283.56	1261.36	125.97	22.05	**C1293-225-8500-S**	6.668	169.37	200.67	892.61	109.54	19.17
C1293-225-9000-M	1.293	32.84	0.225	5.72	9.000	228.60	6.609	167.87	6.497	165.01	283.56	1261.36	118.61	20.76	**C1293-225-9000-S**	7.054	179.18	200.67	892.61	103.14	18.05
C1293-225-9500-M	1.293	32.84	0.225	5.72	9.500	241.30	6.969	177.02	6.849	173.96	283.56	1261.36	112.05	19.61	**C1293-225-9500-S**	7.441	188.99	200.67	892.61	97.44	17.05
C1293-250-1875-M	1.293	32.84	0.250	6.35	1.875	47.63	1.632	41.44	1.589	40.35	297.42	1323.00	1221.49	213.76	**C1293-250-1875-S**	1.629	41.38	261.18	1161.78	1062.17	185.88
C1293-250-2000-M	1.293	32.84	0.250	6.35	2.000	50.80	1.732	44.00	1.685	42.80	299.59	1332.63	1119.70	195.95	**C1293-250-2000-S**	1.732	43.99	261.18	1161.78	973.65	170.39
C1293-250-2125-M	1.293	32.84	0.250	6.35	2.125	53.98	1.833	46.57	1.782	45.26	301.42	1340.77	1033.57	180.87	**C1293-250-2125-S**	1.834	46.59	261.18	1161.78	898.76	157.28
C1293-250-2250-M	1.293	32.84	0.250	6.35	2.250	57.15	1.934	49.13	1.879	47.72	302.99	1347.75	959.74	167.96	**C1293-250-2250-S**	1.937	49.20	261.18	1161.78	834.56	146.05
C1293-250-2375-M	1.293	32.84	0.250	6.35	2.375	60.33	2.035	51.70	1.975	50.17	304.35	1353.79	895.76	156.76	**C1293-250-2375-S**	2.040	51.81	261.18	1161.78	778.92	136.31
C1293-250-2500-M	1.293	32.84	0.250	6.35	2.500	63.50	2.136	54.26	2.072	52.63	305.53	1359.09	839.78	146.96	**C1293-250-2500-S**	2.142	54.42	261.18	1161.78	730.24	127.79
C1293-250-2625-M	1.293	32.84	0.250	6.35	2.625	66.68	2.237	56.82	2.169	55.08	306.58	1363.76	790.38	138.32	**C1293-250-2625-S**	2.245	57.02	261.18	1161.78	687.29	120.27
C1293-250-2750-M	1.293	32.84	0.250	6.35	2.750	69.85	2.338	59.39	2.265	57.54	307.52	1367.91	746.47	130.63	**C1293-250-2750-S**	2.348	59.63	261.18	1161.78	649.10	113.59
C1293-250-2875-M	1.293	32.84	0.250	6.35	2.875	73.03	2.439	61.95	2.362	60.00	308.35	1371.62	707.18	123.76	**C1293-250-2875-S**	2.450	62.24	261.18	1161.78	614.94	107.61
C1293-250-3000-M	1.293	32.84	0.250	6.35	3.000	76.20	2.540	64.51	2.459	62.45	309.10	1374.96	671.82	117.57	**C1293-250-3000-S**	2.553	64.84	261.18	1161.78	584.19	102.23
C1293-250-3250-M	1.293	32.84	0.250	6.35	3.250	82.55	2.742	69.64	2.652	67.36	310.40	1380.74	610.75	106.88	**C1293-250-3250-S**	2.758	70.06	261.18	1161.78	531.08	92.94
C1293-250-3500-M	1.293	32.84	0.250	6.35	3.500	88.90	2.944	74.77	2.845	72.27	311.48	1385.55	559.85	97.97	**C1293-250-3500-S**	2.964	75.27	261.18	1161.78	486.83	85.19
C1293-250-3750-M	1.293	32.84	0.250	6.35	3.750	95.25	3.145	79.90	3.039	77.19	312.40	1389.62	516.79	90.44	**C1293-250-3750-S**	3.169	80.49	261.18	1161.78	449.38	78.64
C1293-250-4000-M	1.293	32.84	0.250	6.35	4.000	101.60	3.347	85.02	3.232	82.10	313.18	1393.11	479.87	83.98	**C1293-250-4000-S**	3.374	85.70	261.18	1161.78	417.28	73.02
C1293-250-4250-M	1.293	32.84	0.250	6.35	4.250	107.95	3.549	90.15	3.426	87.01	313.86	1396.13	447.88	78.38	**C1293-250-4250-S**	3.579	90.92	261.18	1161.78	389.46	68.16
C1293-250-4500-M	1.293	32.84	0.250	6.35	4.500	114.30	3.751	95.28	3.619	91.92	314.46	1398.78	419.89	73.48	**C1293-250-4500-S**	3.785	96.13	261.18	1161.78	365.12	63.90
C1293-250-4750-M	1.293	32.84	0.250	6.35	4.750	120.65	3.953	100.41	3.812	96.83	314.98	1401.11	395.19	69.16	**C1293-250-4750-S**	3.990	101.35	261.18	1161.78	343.64	60.14
C1293-250-5000-M	1.293	32.84	0.250	6.35	5.000	127.00	4.155	105.53	4.006	101.74	315.45	1403.19	373.23	65.32	**C1293-250-5000-S**	4.195	106.56	261.18	1161.78	324.55	56.80
C1293-250-5250-M	1.293	32.84	0.250	6.35	5.250	133.35	4.357	110.66	4.199	106.66	315.87	1405.04	353.59	61.88	**C1293-250-5250-S**	4.401	111.77	261.18	1161.78	307.47	53.81
C1293-250-5500-M	1.293	32.84	0.250	6.35	5.500	139.70	4.559	115.79	4.392	111.57	316.24	1406.71	335.91	58.78	**C1293-250-5500-S**	4.606	116.99	261.18	1161.78	292.10	51.12
C1293-250-5750-M	1.293	32.84	0.250	6.35	5.750	146.05	4.760	120.91	4.586	116.48	316.58	1408.23	319.92	55.99	**C1293-250-5750-S**	4.811	122.20	261.18	1161.78	278.19	48.68
C1293-250-6000-M	1.293	32.84	0.250	6.35	6.000	152.40	4.962	126.04	4.779	121.39	316.89	1409.60	305.37	53.44	**C1293-250-6000-S**	5.016	127.42	261.18	1161.78	265.54	46.47
C1293-250-6250-M	1.293	32.84	0.250	6.35	6.250	158.75	5.164	131.17	4.973	126.30	317.17	1410.86	292.10	51.12	**C1293-250-6250-S**	5.222	132.63	261.18	1161.78	254.00	44.45
C1293-250-6500-M	1.293	32.84	0.250	6.35	6.500	165.10	5.366	136.30	5.166	131.21	317.43	1412.01	279.93	48.99	**C1293-250-6500-S**	5.427	137.85	261.18	1161.78	243.41	42.60
C1293-250-6750-M	1.293	32.84	0.250	6.35	6.750	171.45	5.568	141.42	5.359	136.13	317.67	1413.06	268.73	47.03	**C1293-250-6750-S**	5.632	143.06	261.18	1161.78	233.68	40.89
C1293-250-7000-M	1.293	32.84	0.250	6.35	7.000	177.80	5.770	146.55	5.553	141.04	317.89	1414.04	258.39	45.22	**C1293-250-7000-S**	5.838	148.28	261.18	1161.78	224.69	39.32
C1293-250-7500-M	1.293	32.84	0.250	6.35	7.500	190.50	6.173	156.81	5.939	150.86	318.28	1415.79	239.94	41.99	**C1293-250-7500-S**	6.248	158.70	261.18	1161.78	208.64	36.51
C1293-250-8000-M	1.293	32.84	0.250	6.35	8.000	203.20	6.577	167.06	6.326	160.68	318.62	1417.30	223.94	39.19	**C1293-250-8000-S**	6.659	169.13	261.18	1161.78	194.73	34.08
C1293-250-8500-M	1.293	32.84	0.250	6.35	8.500	215.90	6.981	177.32	6.713	170.51	318.92	1418.62	209.94	36.74	**C1293-250-8500-S**	7.069	179.56	261.18	1161.78	182.56	31.95
C1293-250-9000-M	1.293	32.84	0.250	6.35	9.000	228.60	7.385	187.57	7.100	180.33	319.18	1419.79	197.59	34.58	**C1293-250-9000-S**	7.480	189.99	261.18	1161.78	171.82	30.07
C1293-250-9500-M	1.293	32.84	0.250	6.35	9.500	241.30	7.788	197.83	7.486	190.15	319.41	1420.83	186.62	32.66	**C1293-250-9500-S**	7.891	200.42	261.18	1161.78	162.28	28.40
C1351-105-2375-M	1.351	34.32	0.105	2.67	2.375	60.33	0.892	22.66	0.662	16.82	33.44	148.75	22.55	3.95	**C1351-105-2375-S**	1.054	26.77	25.91	115.24	19.61	3.43
C1351-105-2500-M	1.351	34.32	0.105	2.67	2.500	63.50	0.932	23.66	0.688	17.46	33.44	148.75	21.32	3.73	**C1351-105-2500-S**	1.103	28.01	25.91	115.24	18.54	3.24
C1351-105-2625-M	1.351	34.32	0.105	2.67	2.625	66.68	0.971	24.66	0.713	18.11	33.44	148.75	20.22	3.54	**C1351-105-2625-S**	1.151	29.25	25.91	115.24	17.58	3.08
C1351-105-2750-M	1.351	34.32	0.105	2.67	2.750	69.85	1.010	25.66	0.739	18.76	33.44	148.75	19.22	3.36	**C1351-105-2750-S**	1.200	30.48	25.91	115.24	16.72	2.93
C1351-105-2875-M	1.351	34.32	0.105	2.67	2.875	73.03	1.050	26.66	0.764	19.41	33.44	148.75	18.32	3.21	**C1351-105-2875-S**	1.249	31.72	25.91	115.24	15.93	2.79
C1351-105-3000-M	1.351	34.32	0.105	2.67	3.000	76.20	1.089	27.66	0.790	20.05	33.44	148.75	17.50	3.06	**C1351-105-3000-S**	1.298	32.96	25.91	115.24	15.22	2.66

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1351-105-3250-M	1.351	34.32	0.105	2.67	3.250	82.55	1.168	29.67	0.841	21.35	33.44	148.75	16.06	2.81
C1351-105-3500-M	1.351	34.32	0.105	2.67	3.500	88.90	1.247	31.67	0.892	22.65	33.44	148.75	14.84	2.60
C1351-105-3750-M	1.351	34.32	0.105	2.67	3.750	95.25	1.325	33.67	0.943	23.94	33.44	148.75	13.79	2.41
C1351-105-4000-M	1.351	34.32	0.105	2.67	4.000	101.60	1.404	35.67	0.994	25.24	33.44	148.75	12.88	2.25
C1351-105-4250-M	1.351	34.32	0.105	2.67	4.250	107.95	1.483	37.67	1.045	26.53	33.44	148.75	12.09	2.11
C1351-105-4500-M	1.351	34.32	0.105	2.67	4.500	114.30	1.562	39.67	1.095	27.83	33.44	148.75	11.38	1.99
C1351-105-4750-M	1.351	34.32	0.105	2.67	4.750	120.65	1.641	41.67	1.146	29.12	33.44	148.75	10.75	1.88
C1351-105-5000-M	1.351	34.32	0.105	2.67	5.000	127.00	1.719	43.67	1.197	30.42	33.44	148.75	10.19	1.78
C1351-105-5250-M	1.351	34.32	0.105	2.67	5.250	133.35	1.798	45.67	1.248	31.71	33.44	148.75	9.69	1.70
C1351-105-5500-M	1.351	34.32	0.105	2.67	5.500	139.70	1.877	47.67	1.299	33.01	33.44	148.75	9.23	1.62
C1351-105-5750-M	1.351	34.32	0.105	2.67	5.750	146.05	1.956	49.68	1.350	34.30	33.44	148.75	8.81	1.54
C1351-105-6000-M	1.351	34.32	0.105	2.67	6.000	152.40	2.035	51.68	1.401	35.60	33.44	148.75	8.43	1.48
C1351-105-6250-M	1.351	34.32	0.105	2.67	6.250	158.75	2.113	53.68	1.452	36.89	33.44	148.75	8.08	1.41
C1351-105-6500-M	1.351	34.32	0.105	2.67	6.500	165.10	2.192	55.68	1.503	38.19	33.44	148.75	7.76	1.36
C1351-105-6750-M	1.351	34.32	0.105	2.67	6.750	171.45	2.271	57.68	1.554	39.48	33.44	148.75	7.47	1.31
C1351-105-7000-M	1.351	34.32	0.105	2.67	7.000	177.80	2.350	59.68	1.605	40.78	33.44	148.75	7.19	1.26
C1351-105-7500-M	1.351	34.32	0.105	2.67	7.500	190.50	2.507	63.68	1.707	43.37	33.44	148.75	6.70	1.17
C1351-105-8000-M	1.351	34.32	0.105	2.67	8.000	203.20	2.665	67.68	1.809	45.96	33.44	148.75	6.27	1.10
C1351-105-8500-M	1.351	34.32	0.105	2.67	8.500	215.90	2.822	71.69	1.911	48.55	33.44	148.75	5.89	1.03
C1351-105-9000-M	1.351	34.32	0.105	2.67	9.000	228.60	2.980	75.69	2.013	51.14	33.44	148.75	5.56	0.97
C1351-105-9500-M	1.351	34.32	0.105	2.67	9.500	241.30	3.137	79.69	2.115	53.73	33.44	148.75	5.26	0.92
C1351-112-2375-M	1.351	34.32	0.112	2.85	2.375	60.33	0.950	24.12	0.733	18.62	40.02	178.04	28.08	4.91
C1351-112-2500-M	1.351	34.32	0.112	2.85	2.500	63.50	0.992	25.20	0.762	19.36	40.02	178.04	26.54	4.64
C1351-112-2625-M	1.351	34.32	0.112	2.85	2.625	66.68	1.034	26.27	0.791	20.09	40.02	178.04	25.16	4.40
C1351-112-2750-M	1.351	34.32	0.112	2.85	2.750	69.85	1.076	27.34	0.820	20.83	40.02	178.04	23.91	4.18
C1351-112-2875-M	1.351	34.32	0.112	2.85	2.875	73.03	1.119	28.41	0.849	21.56	40.02	178.04	22.79	3.99
C1351-112-3000-M	1.351	34.32	0.112	2.85	3.000	76.20	1.161	29.48	0.878	22.30	40.02	178.04	21.76	3.81
C1351-112-3250-M	1.351	34.32	0.112	2.85	3.250	82.55	1.245	31.62	0.936	23.77	40.02	178.04	19.96	3.49
C1351-112-3500-M	1.351	34.32	0.112	2.85	3.500	88.90	1.329	33.77	0.994	25.24	40.02	178.04	18.44	3.23
C1351-112-3750-M	1.351	34.32	0.112	2.85	3.750	95.25	1.414	35.91	1.052	26.71	40.02	178.04	17.13	3.00
C1351-112-4000-M	1.351	34.32	0.112	2.85	4.000	101.60	1.498	38.05	1.109	28.18	40.02	178.04	16.00	2.80
C1351-112-4250-M	1.351	34.32	0.112	2.85	4.250	107.95	1.582	40.19	1.167	29.65	40.02	178.04	15.00	2.63
C1351-112-4500-M	1.351	34.32	0.112	2.85	4.500	114.30	1.667	42.34	1.225	31.12	40.02	178.04	14.13	2.47
C1351-112-4750-M	1.351	34.32	0.112	2.85	4.750	120.65	1.751	44.48	1.283	32.59	40.02	178.04	13.35	2.34
C1351-112-5000-M	1.351	34.32	0.112	2.85	5.000	127.00	1.836	46.62	1.341	34.06	40.02	178.04	12.65	2.21
C1351-112-5250-M	1.351	34.32	0.112	2.85	5.250	133.35	1.920	48.76	1.399	35.53	40.02	178.04	12.02	2.10
C1351-112-5500-M	1.351	34.32	0.112	2.85	5.500	139.70	2.004	50.91	1.457	37.00	40.02	178.04	11.45	2.00
C1351-112-5750-M	1.351	34.32	0.112	2.85	5.750	146.05	2.089	53.05	1.515	38.47	40.02	178.04	10.93	1.91
C1351-112-6000-M	1.351	34.32	0.112	2.85	6.000	152.40	2.173	55.19	1.572	39.94	40.02	178.04	10.46	1.83
C1351-112-6250-M	1.351	34.32	0.112	2.85	6.250	158.75	2.257	57.34	1.630	41.41	40.02	178.04	10.02	1.75
C1351-112-6500-M	1.351	34.32	0.112	2.85	6.500	165.10	2.342	59.48	1.688	42.88	40.02	178.04	9.63	1.68
C1351-112-6750-M	1.351	34.32	0.112	2.85	6.750	171.45	2.426	61.62	1.746	44.35	40.02	178.04	9.26	1.62
C1351-112-7000-M	1.351	34.32	0.112	2.85	7.000	177.80	2.510	63.76	1.804	45.82	40.02	178.04	8.92	1.56
C1351-112-7500-M	1.351	34.32	0.112	2.85	7.500	190.50	2.679	68.05	1.920	48.76	40.02	178.04	8.30	1.45
C1351-112-8000-M	1.351	34.32	0.112	2.85	8.000	203.20	2.848	72.33	2.036	51.70	40.02	178.04	7.77	1.36
C1351-112-8500-M	1.351	34.32	0.112	2.85	8.500	215.90	3.016	76.62	2.151	54.64	40.02	178.04	7.30	1.28
C1351-112-9000-M	1.351	34.32	0.112	2.85	9.000	228.60	3.185	80.90	2.267	57.58	40.02	178.04	6.88	1.20
C1351-112-9500-M	1.351	34.32	0.112	2.85	9.500	241.30	3.354	85.19	2.383	60.52	40.02	178.04	6.51	1.14
C1351-125-2125-M	1.351	34.32	0.125	3.18	2.125	53.98	0.964	24.48	0.797	20.24	54.31	241.59	46.78	8.19
C1351-125-2250-M	1.351	34.32	0.125	3.18	2.250	57.15	1.011	25.69	0.833	21.15	54.31	241.59	43.85	7.67
C1351-125-2375-M	1.351	34.32	0.125	3.18	2.375	60.33	1.059	26.90	0.868	22.05	54.31	241.59	41.27	7.22
C1351-125-2500-M	1.351	34.32	0.125	3.18	2.500	63.50	1.107	28.11	0.904	22.96	54.31	241.59	38.98	6.82
C1351-125-2625-M	1.351	34.32	0.125	3.18	2.625	66.68	1.154	29.32	0.939	23.86	54.31	241.59	36.93	6.46
C1351-125-2750-M	1.351	34.32	0.125	3.18	2.750	69.85	1.202	30.53	0.975	24.77	54.31	241.59	35.08	6.14
C1351-125-2875-M	1.351	34.32	0.125	3.18	2.875	73.03	1.249	31.73	1.011	25.67	54.31	241.59	33.41	5.85
C1351-125-3000-M	1.351	34.32	0.125	3.18	3.000	76.20	1.297	32.94	1.046	26.58	54.31	241.59	31.89	5.58
C1351-125-3250-M	1.351	34.32	0.125	3.18	3.250	82.55	1.392	35.36	1.118	28.39	54.31	241.59	29.23	5.12
C1351-125-3500-M	1.351	34.32	0.125	3.18	3.500	88.90	1.487	37.78	1.189	30.20	54.31	241.59	26.99	4.72
C1351-125-3750-M	1.351	34.32	0.125	3.18	3.750	95.25	1.583	40.20	1.260	32.00	54.31	241.59	25.06	4.39
C1351-125-4000-M	1.351	34.32	0.125	3.18	4.000	101.60	1.678	42.61	1.331	33.81	54.31	241.59	23.39	4.09
C1351-125-4250-M	1.351	34.32	0.125	3.18	4.250	107.95	1.773	45.03	1.403	35.62	54.31	241.59	21.93	3.84
C1351-125-4500-M	1.351	34.32	0.125	3.18	4.500	114.30	1.868	47.45	1.474	37.43	54.31	241.59	20.64	3.61
C1351-125-4750-M	1.351	34.32	0.125	3.18	4.750	120.65	1.963	49.87	1.545	39.24	54.31	241.59	19.49	3.41
C1351-125-5000-M	1.351	34.32	0.125	3.18	5.000	127.00	2.058	52.28	1.616	41.05	54.31	241.59	18.46	3.23

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1351-105-3250-S	1.395	35.43	25.91	115.24	13.97	2.44
C1351-105-3500-S	1.492	37.91	25.91	115.24	12.91	2.26
C1351-105-3750-S	1.590	40.38	25.91	115.24	11.99	2.10
C1351-105-4000-S	1.687	42.86	25.91	115.24	11.20	1.96
C1351-105-4250-S	1.785	45.34	25.91	115.24	10.51	1.84
C1351-105-4500-S	1.882	47.81	25.91	115.24	9.90	1.73
C1351-105-4750-S	1.980	50.29	25.91	115.24	9.35	1.64
C1351-105-5000-S	2.077	52.76	25.91	115.24	8.86	1.55
C1351-105-5250-S	2.175	55.24	25.91	115.24	8.42	1.47
C1351-105-5500-S	2.272	57.71	25.91	115.24	8.03	1.40
C1351-105-5750-S	2.370	60.19	25.91	115.24	7.66	1.34
C1351-105-6000-S	2.467	62.66	25.91	115.24	7.33	1.28
C1351-105-6250-S	2.564	65.14	25.91	115.24	7.03	1.23
C1351-105-6500-S	2.662	67.61	25.91	115.24	6.75	1.18
C1351-105-6750-S	2.759	70.09	25.91	115.24	6.49	1.14
C1351-105-7000-S	2.857	72.56	25.91	115.24	6.25	1.09
C1351-105-7500-S	3.052	77.51	25.91	115.24	5.82	1.02
C1351-105-8000-S	3.247	82.47	25.91	115.24	5.45	0.95
C1351-105-8500-S	3.442	87.42	25.91	115.24	5.12	0.90
C1351-105-9000-S	3.636	92.37	25.91	115.24	4.83	0.85
C1351-105-9500-S	3.831	97.32	25.91	115.24	4.57	0.80
C1351-112-2375-S	1.111	28.23	30.86	137.25	24.42	4.27
C1351-112-2500-S	1.163	29.54	30.86	137.25	23.08	4.04
C1351-112-2625-S	1.215	30.85	30.86	137.25	21.88	3.83
C1351-112-2750-S	1.266	32.16	30.86	137.25	20.80	3.64
C1351-112-2875-S	1.318	33.47	30.86	137.25	19.81	3.47
C1351-112-3000-S	1.369	34.78	30.86	137.25	18.92	3.31
C1351-112-3250-S	1.473	37.40	30.86	137.25	17.36	3.04
C1351-112-3500-S	1.576	40.02	30.86	137.25	16.03	2.81
C1351-112-3750-S	1.679	42.64	30.86	137.25	14.90	2.61
C1351-112-4000-S	1.782	45.26	30.86	137.25	13.91	2.43
C1351-112-4250-S	1.885	47.88	30.86	137.25	13.05	2.28
C1351-112-4500-S	1.988	50.50	30.86	137.25	12.28	2.15
C1351-112-4750-S	2.091	53.12	30.86	137.25	11.61	2.03
C1351-112-5000-S	2.195	55.74	30.86	137.25	11.00	1.92
C1351-112-5250-S	2.298	58.36	30.86	137.25	10.45	1.83
C1351-112-5500-S	2.401	60.98	30.86	137.25	9.96	1.74
C1351-112-5750-S	2.504	63.60	30.86	137.25	9.51	1.66
C1351-112-6000-S	2.607	66.22	30.86	137.25	9.09	1.59
C1351-112-6250-S	2.710	68.84	30.86	137.25	8.72	1.53
C1351-112-6500-S	2.813	71.46	30.86	137.25	8.37	1.46
C1351-112-6750-S	2.917	74.08	30.86	137.25	8.05	1.41
C1351-112-7000-S	3.020	76.70	30.86	137.25	7.75	1.36
C1351-112-7500-S	3.226	81.94	30.86	137.25	7.22	1.26
C1351-112-8000-S	3.432	87.18	30.86	137.25	6.76	1.18
C1351-112-8500-S	3.639	92.42	30.86	137.25	6.35	1.11
C1351-112-9000-S	3.845	97.66	30.86	137.25	5.99	1.05
C1351-112-9500-S	4.051	102.90	30.86	137.25	5.66	0.99
C1351-125-2125-S	1.105	28.07	41.48	184.49	40.67	7.12
C1351-125-2250-S	1.162	29.52	41.48	184.49	38.13	6.67
C1351-125-2375-S	1.219	30.97	41.48	184.49	35.89	6.28
C1351-125-2500-S	1.276	32.42	41.48	184.49	33.90	5.93
C1351-125-2625-S	1.333	33.87	41.48	184.49	32.11	5.62
C1351-125-2750-S	1.390	35.32	41.48	184.49	30.51	5.34
C1351-125-2875-S	1.447	36.76	41.48	184.49	29.05	5.08
C1351-125-3000-S	1.504	38.21	41.48	184.49	27.73	4.85
C1351-125-3250-S	1.618	41.11	41.48	184.49	25.42	4.45
C1351-125-3500-S	1.733	44.01	41.48	184.49	23.47	4.11
C1351-125-3750-S	1.847	46.90	41.48	184.49	21.79	3.81
C1351-125-4000-S	1.961	49.80	41.48	184.49	20.34	3.56
C1351-125-4250-S	2.075	52.70	41.48	184.49	19.07	3.34
C1351-125-4500-S	2.189	55.59	41.48	184.49	17.94	3.14
C1351-125-4750-S	2.303	58.49	41.48	184.49	16.95	2.97
C1351-125-5000-S	2.417	61.39	41.48	184.49	16.06	2.81

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1351-125-5250-M	1.351	34.32	0.125	3.18	5.250	133.35	2.154	54.70	1.688	42.86	54.31	241.59	17.54	3.07
C1351-125-5500-M	1.351	34.32	0.125	3.18	5.500	139.70	2.249	57.12	1.759	44.67	54.31	241.59	16.71	2.92
C1351-125-5750-M	1.351	34.32	0.125	3.18	5.750	146.05	2.344	59.54	1.830	46.48	54.31	241.59	15.95	2.79
C1351-125-6000-M	1.351	34.32	0.125	3.18	6.000	152.40	2.439	61.95	1.901	48.29	54.31	241.59	15.25	2.67
C1351-125-6250-M	1.351	34.32	0.125	3.18	6.250	158.75	2.534	64.37	1.973	50.10	54.31	241.59	14.62	2.56
C1351-125-6500-M	1.351	34.32	0.125	3.18	6.500	165.10	2.630	66.79	2.044	51.91	54.31	241.59	14.03	2.46
C1351-125-6750-M	1.351	34.32	0.125	3.18	6.750	171.45	2.725	69.21	2.115	53.72	54.31	241.59	13.49	2.36
C1351-125-7000-M	1.351	34.32	0.125	3.18	7.000	177.80	2.820	71.62	2.186	55.53	54.31	241.59	12.99	2.27
C1351-125-7500-M*	1.351	34.32	0.125	3.18	7.500	190.50	3.088	78.43	2.424	61.58	54.31	241.59	12.31	2.15
C1351-125-8000-M*	1.351	34.32	0.125	3.18	8.000	203.20	3.278	83.26	2.567	65.20	54.31	241.59	11.50	2.01
C1351-125-8500-M*	1.351	34.32	0.125	3.18	8.500	215.90	3.468	88.10	2.709	68.82	54.31	241.59	10.79	1.89
C1351-125-9000-M*	1.351	34.32	0.125	3.18	9.000	228.60	3.659	92.93	2.852	72.44	54.31	241.59	10.17	1.78
C1351-125-9500-M*	1.351	34.32	0.125	3.18	9.500	241.30	3.849	97.77	2.994	76.06	54.31	241.59	9.61	1.68
C1351-135-2125-M	1.351	34.32	0.135	3.43	2.125	53.98	1.040	26.42	0.891	22.63	67.24	299.08	61.97	10.84
C1351-135-2250-M	1.351	34.32	0.135	3.43	2.250	57.15	1.092	27.73	0.932	23.67	67.24	299.08	58.06	10.16
C1351-135-2375-M	1.351	34.32	0.135	3.43	2.375	60.33	1.144	29.05	0.973	24.71	67.24	299.08	54.61	9.56
C1351-135-2500-M	1.351	34.32	0.135	3.43	2.500	63.50	1.196	30.37	1.014	25.75	67.24	299.08	51.55	9.02
C1351-135-2625-M	1.351	34.32	0.135	3.43	2.625	66.68	1.248	31.69	1.055	26.79	67.24	299.08	48.81	8.54
C1351-135-2750-M	1.351	34.32	0.135	3.43	2.750	69.85	1.299	33.00	1.096	27.83	67.24	299.08	46.35	8.11
C1351-135-2875-M	1.351	34.32	0.135	3.43	2.875	73.03	1.351	34.32	1.137	28.87	67.24	299.08	44.13	7.72
C1351-135-3000-M	1.351	34.32	0.135	3.43	3.000	76.20	1.403	35.64	1.177	29.91	67.24	299.08	42.11	7.37
C1351-135-3250-M	1.351	34.32	0.135	3.43	3.250	82.55	1.507	38.28	1.259	31.99	67.24	299.08	38.57	6.75
C1351-135-3500-M	1.351	34.32	0.135	3.43	3.500	88.90	1.611	40.91	1.341	34.07	67.24	299.08	35.59	6.23
C1351-135-3750-M	1.351	34.32	0.135	3.43	3.750	95.25	1.714	43.55	1.423	36.15	67.24	299.08	33.03	5.78
C1351-135-4000-M	1.351	34.32	0.135	3.43	4.000	101.60	1.818	46.18	1.505	38.22	67.24	299.08	30.82	5.39
C1351-135-4250-M	1.351	34.32	0.135	3.43	4.250	107.95	1.922	48.82	1.587	40.30	67.24	299.08	28.88	5.05
C1351-135-4500-M	1.351	34.32	0.135	3.43	4.500	114.30	2.026	51.46	1.669	42.38	67.24	299.08	27.18	4.76
C1351-135-4750-M	1.351	34.32	0.135	3.43	4.750	120.65	2.130	54.09	1.751	44.46	67.24	299.08	25.66	4.49
C1351-135-5000-M	1.351	34.32	0.135	3.43	5.000	127.00	2.233	56.73	1.832	46.54	67.24	299.08	24.30	4.25
C1351-135-5250-M	1.351	34.32	0.135	3.43	5.250	133.35	2.337	59.36	1.914	48.62	67.24	299.08	23.08	4.04
C1351-135-5500-M	1.351	34.32	0.135	3.43	5.500	139.70	2.441	62.00	1.996	50.70	67.24	299.08	21.98	3.85
C1351-135-5750-M	1.351	34.32	0.135	3.43	5.750	146.05	2.545	64.63	2.078	52.78	67.24	299.08	20.98	3.67
C1351-135-6000-M	1.351	34.32	0.135	3.43	6.000	152.40	2.648	67.27	2.160	54.86	67.24	299.08	20.06	3.51
C1351-135-6250-M	1.351	34.32	0.135	3.43	6.250	158.75	2.752	69.91	2.242	56.94	67.24	299.08	19.22	3.36
C1351-135-6500-M	1.351	34.32	0.135	3.43	6.500	165.10	2.856	72.54	2.324	59.02	67.24	299.08	18.45	3.23
C1351-135-6750-M*	1.351	34.32	0.135	3.43	6.750	171.45	3.039	77.18	2.503	63.58	67.24	299.08	18.12	3.17
C1351-135-7000-M*	1.351	34.32	0.135	3.43	7.000	177.80	3.142	79.82	2.585	65.65	67.24	299.08	17.43	3.05
C1351-135-7500-M*	1.351	34.32	0.135	3.43	7.500	190.50	3.350	85.09	2.749	69.81	67.24	299.08	16.20	2.84
C1351-135-8000-M*	1.351	34.32	0.135	3.43	8.000	203.20	3.558	90.36	2.912	73.97	67.24	299.08	15.14	2.65
C1351-135-8500-M*	1.351	34.32	0.135	3.43	8.500	215.90	3.765	95.63	3.076	78.13	67.24	299.08	14.20	2.49
C1351-135-9000-M*	1.351	34.32	0.135	3.43	9.000	228.60	3.973	100.91	3.240	82.29	67.24	299.08	13.37	2.34
C1351-135-9500-M*	1.351	34.32	0.135	3.43	9.500	241.30	4.180	106.18	3.403	86.45	67.24	299.08	12.64	2.21
C1351-148-2000-M	1.351	34.32	0.148	3.76	2.000	50.80	1.080	27.44	0.964	24.48	86.71	385.72	94.28	16.50
C1351-148-2125-M	1.351	34.32	0.148	3.76	2.125	53.98	1.138	28.90	1.012	25.70	86.71	385.72	87.83	15.37
C1351-148-2250-M	1.351	34.32	0.148	3.76	2.250	57.15	1.195	30.36	1.060	26.91	86.71	385.72	82.21	14.39
C1351-148-2375-M	1.351	34.32	0.148	3.76	2.375	60.33	1.253	31.82	1.107	28.13	86.71	385.72	77.27	13.52
C1351-148-2500-M	1.351	34.32	0.148	3.76	2.500	63.50	1.310	33.28	1.155	29.35	86.71	385.72	72.89	12.76
C1351-148-2625-M	1.351	34.32	0.148	3.76	2.625	66.68	1.368	34.74	1.203	30.56	86.71	385.72	68.98	12.07
C1351-148-2750-M	1.351	34.32	0.148	3.76	2.750	69.85	1.425	36.20	1.251	31.78	86.71	385.72	65.46	11.46
C1351-148-2875-M	1.351	34.32	0.148	3.76	2.875	73.03	1.483	37.67	1.299	33.00	86.71	385.72	62.29	10.90
C1351-148-3000-M	1.351	34.32	0.148	3.76	3.000	76.20	1.540	39.13	1.347	34.21	86.71	385.72	59.41	10.40
C1351-148-3250-M	1.351	34.32	0.148	3.76	3.250	82.55	1.655	42.05	1.443	36.65	86.71	385.72	54.38	9.52
C1351-148-3500-M	1.351	34.32	0.148	3.76	3.500	88.90	1.771	44.97	1.539	39.08	86.71	385.72	50.14	8.77
C1351-148-3750-M	1.351	34.32	0.148	3.76	3.750	95.25	1.886	47.89	1.634	41.51	86.71	385.72	46.51	8.14
C1351-148-4000-M	1.351	34.32	0.148	3.76	4.000	101.60	2.001	50.82	1.730	43.95	86.71	385.72	43.37	7.59
C1351-148-4250-M	1.351	34.32	0.148	3.76	4.250	107.95	2.116	53.74	1.826	46.38	86.71	385.72	40.63	7.11
C1351-148-4500-M	1.351	34.32	0.148	3.76	4.500	114.30	2.231	56.66	1.922	48.81	86.71	385.72	38.21	6.69
C1351-148-4750-M	1.351	34.32	0.148	3.76	4.750	120.65	2.346	59.58	2.018	51.25	86.71	385.72	36.07	6.31
C1351-148-5000-M	1.351	34.32	0.148	3.76	5.000	127.00	2.461	62.51	2.113	53.68	86.71	385.72	34.15	5.98
C1351-148-5250-M	1.351	34.32	0.148	3.76	5.250	133.35	2.576	65.43	2.209	56.11	86.71	385.72	32.43	5.67
C1351-148-5500-M	1.351	34.32	0.148	3.76	5.500	139.70	2.691	68.35	2.305	58.55	86.71	385.72	30.87	5.40
C1351-148-5750-M	1.351	34.32	0.148	3.76	5.750	146.05	2.806	71.27	2.401	60.98	86.71	385.72	29.46	5.15
C1351-148-6000-M	1.351	34.32	0.148	3.76	6.000	152.40	2.921	74.20	2.497	63.41	86.71	385.72	28.16	4.93
C1351-148-6250-M	1.351	34.32	0.148	3.76	6.250	158.75	3.036	77.12	2.592	65.85	86.71	385.72	26.98	4.72

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1351-125-5250-S	2.531	64.28	41.48	184.49	15.25	2.67
C1351-125-5500-S	2.645	67.18	41.48	184.49	14.53	2.54
C1351-125-5750-S	2.759	70.08	41.48	184.49	13.87	2.43
C1351-125-6000-S	2.873	72.97	41.48	184.49	13.26	2.32
C1351-125-6250-S	2.987	75.87	41.48	184.49	12.71	2.22
C1351-125-6500-S	3.101	78.77	41.48	184.49	12.20	2.14
C1351-125-6750-S	3.215	81.66	41.48	184.49	11.73	2.05
C1351-125-7000-S	3.329	84.56	41.48	184.49	11.30	1.98
C1351-125-7500-S*	3.625	92.08	41.48	184.49	10.70	1.87
C1351-125-8000-S*	3.853	97.87	41.48	184.49	10.00	1.75
C1351-125-8500-S*	4.081	103.66	41.48	184.49	9.39	1.64
C1351-125-9000-S*	4.309	109.46	41.48	184.49	8.84	1.55
C1351-125-9500-S*	4.537	115.25	41.48	184.49	8.36	1.46
C1351-135-2125-S	1.179	29.95	50.96	226.69	53.89	9.43
C1351-135-2250-S	1.241	31.51	50.96	226.69	50.48	8.83
C1351-135-2375-S	1.302	33.07	50.96	226.69	47.49	8.31
C1351-135-2500-S	1.363	34.62	50.96	226.69	44.82	7.84
C1351-135-2625-S	1.424	36.18	50.96	226.69	42.45	7.43
C1351-135-2750-S	1.486	37.73	50.96	226.69	40.31	7.05
C1351-135-2875-S	1.547	39.29	50.96	226.69	38.37	6.71
C1351-135-3000-S	1.608	40.85	50.96	226.69	36.61	6.41
C1351-135-3250-S	1.731	43.96	50.96	226.69	33.54	5.87
C1351-135-3500-S	1.853	47.07	50.96	226.69	30.95	5.42
C1351-135-3750-S	1.976	50.18	50.96	226.69	28.72	5.03
C1351-135-4000-S	2.098	53.30	50.96	226.69	26.80	4.69
C1351-135-4250-S	2.221	56.41	50.96	226.69	25.12	4.40
C1351-135-4500-S	2.343	59.52	50.96	226.69	23.63	4.14
C1351-135-4750-S	2.466	62.63	50.96	226.69	22.31	3.90
C1351-135-5000-S	2.588	65.75	50.96	226.69	21.13	3.70
C1351-135-5250-S	2.711	68.86	50.96	226.69	20.07	3.51
C1351-135-5500-S	2.834	71.97	50.96	226.69	19.11	3.34
C1351-135-5750-S	2.956	75.09	50.96	226.69	18.24	3.19
C1351-135-6000-S	3.079	78.20	50.96	226.69	17.45	3.05
C1351-135-6250-S	3.201	81.31	50.96	226.69	16.72	2.93
C1351-135-6500-S	3.324	84.42	50.96	226.69	16.05	2.81
C1351-135-6750-S*	3.515	89.28	50.96	226.69	15.75	2.76
C1351-135-7000-S*	3.638	92.40	50.96	226.69	15.16	2.65
C1351-135-7500-S*	3.883	98.62	50.96	226.69	14.09	2.47
C1351-135-8000-S*	4.128	104.85	50.96	226.69	13.16	2.30
C1351-135-8500-S*	4.373	111.07	50.96	226.69	12.35	2.16
C1351-135-9000-S*	4.618	117.30	50.96	226.69	11.63	2.04
C1351-135-9500-S*	4.863	123.52	50.96	226.69	10.99	1.92
C1351-148-2000-S	1.206	30.64	65.08	289.48	81.98	14.35
C1351-148-2125-S	1.273	32.33	65.08	289.48	76.38	13.37
C1351-148-2250-S	1.340	34.03	65.08	289.48	71.49	12.51
C1351-148-2375-S	1.406	35.72	65.08	289.48	67.19	11.76
C1351-148-2500-S	1.473	37.42	65.08	289.48	63.38	11.09
C1351-148-2625-S	1.540	39.12	65.08	289.48	59.98	10.50
C1351-148-2750-S	1.607	40.81	65.08	289.48	56.92	9.96
C1351-148-2875-S	1.674	42.51	65.08	289.48	54.17	9.48
C1351-148-3000-S	1.740	44.20	65.08	289.48	51.66	9.04
C1351-148-3250-S	1.874	47.60	65.08	289.48	47.29	8.28
C1351-148-3500-S	2.007	50.99	65.08	289.48	43.60	7.63
C1351-148-3750-S	2.141	54.38	65.08	289.48	40.44	7.08
C1351-148-4000-S	2.274	57.77	65.08	289.48	37.71	6.60
C1351-148-4250-S	2.408	61.16	65.08	289.48	35.33	6.18
C1351-148-4500-S	2.542	64.55	65.08	289.48	33.23	5.81
C1351-148-4750-S	2.675	67.95	65.08	289.48	31.36	5.49
C1351-148-5000-S	2.809	71.34	65.08	289.48	29.70	5.20
C1351-148-5250-S	2.942	74.73	65.08	289.48	28.20	4.93
C1351-148-5500-S	3.076	78.12	65.08	289.48	26.84	4.70
C1351-148-5750-S	3.209	81.51	65.08	289.48	25.61	4.48
C1351-148-6000-S	3.343	84.90	65.08	289.48	24.49	4.29
C1351-148-6250-S	3.476	88.30	65.08	289.48	23.46	4.11

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1351-148-6500-M	1.351	34.32	0.148	3.76	6.500	165.10	3.151	80.04	2.688	68.28	86.71	385.72	25.89	4.53
C1351-148-6750-M	1.351	34.32	0.148	3.76	6.750	171.45	3.266	82.96	2.784	70.71	86.71	385.72	24.89	4.36
C1351-148-7000-M	1.351	34.32	0.148	3.76	7.000	177.80	3.381	85.89	2.880	73.15	86.71	385.72	23.96	4.19
C1351-148-7500-M	1.351	34.32	0.148	3.76	7.500	190.50	3.611	91.73	3.071	78.01	86.71	385.72	22.30	3.90
C1351-148-8000-M	1.351	34.32	0.148	3.76	8.000	203.20	3.842	97.57	3.263	82.88	86.71	385.72	20.85	3.65
C1351-148-8500-M*	1.351	34.32	0.148	3.76	8.500	215.90	4.152	105.45	3.553	90.26	86.71	385.72	19.94	3.49
C1351-148-9000-M*	1.351	34.32	0.148	3.76	9.000	228.60	4.382	111.29	3.745	95.12	86.71	385.72	18.78	3.29
C1351-148-9500-M*	1.351	34.32	0.148	3.76	9.500	241.30	4.612	117.14	3.937	99.99	86.71	385.72	17.74	3.10
C1351-162-1875-M	1.351	34.32	0.162	4.12	1.875	47.63	1.112	28.26	1.027	26.08	111.27	494.96	145.92	25.54
C1351-162-2000-M	1.351	34.32	0.162	4.12	2.000	50.80	1.176	29.87	1.082	27.49	111.27	494.96	135.04	23.63
C1351-162-2125-M	1.351	34.32	0.162	4.12	2.125	53.98	1.240	31.48	1.137	28.89	111.27	494.96	125.67	21.99
C1351-162-2250-M	1.351	34.32	0.162	4.12	2.250	57.15	1.303	33.10	1.193	30.30	111.27	494.96	117.51	20.56
C1351-162-2375-M	1.351	34.32	0.162	4.12	2.375	60.33	1.367	34.71	1.248	31.70	111.27	494.96	110.35	19.31
C1351-162-2500-M	1.351	34.32	0.162	4.12	2.500	63.50	1.430	36.33	1.303	33.11	111.27	494.96	104.01	18.20
C1351-162-2625-M	1.351	34.32	0.162	4.12	2.625	66.68	1.494	37.94	1.359	34.51	111.27	494.96	98.36	17.21
C1351-162-2750-M	1.351	34.32	0.162	4.12	2.750	69.85	1.557	39.56	1.414	35.92	111.27	494.96	93.29	16.33
C1351-162-2875-M	1.351	34.32	0.162	4.12	2.875	73.03	1.621	41.17	1.469	37.32	111.27	494.96	88.72	15.53
C1351-162-3000-M	1.351	34.32	0.162	4.12	3.000	76.20	1.684	42.78	1.525	38.73	111.27	494.96	84.58	14.80
C1351-162-3250-M	1.351	34.32	0.162	4.12	3.250	82.55	1.811	46.01	1.635	41.54	111.27	494.96	77.35	13.54
C1351-162-3500-M	1.351	34.32	0.162	4.12	3.500	88.90	1.939	49.24	1.746	44.35	111.27	494.96	71.26	12.47
C1351-162-3750-M	1.351	34.32	0.162	4.12	3.750	95.25	2.066	52.47	1.857	47.16	111.27	494.96	66.06	11.56
C1351-162-4000-M	1.351	34.32	0.162	4.12	4.000	101.60	2.193	55.70	1.967	49.97	111.27	494.96	61.57	10.77
C1351-162-4250-M	1.351	34.32	0.162	4.12	4.250	107.95	2.320	58.92	2.078	52.79	111.27	494.96	57.65	10.09
C1351-162-4500-M	1.351	34.32	0.162	4.12	4.500	114.30	2.447	62.15	2.189	55.60	111.27	494.96	54.20	9.48
C1351-162-4750-M	1.351	34.32	0.162	4.12	4.750	120.65	2.574	65.38	2.300	58.41	111.27	494.96	51.14	8.95
C1351-162-5000-M	1.351	34.32	0.162	4.12	5.000	127.00	2.701	68.61	2.410	61.22	111.27	494.96	48.40	8.47
C1351-162-5250-M	1.351	34.32	0.162	4.12	5.250	133.35	2.828	71.84	2.521	64.03	111.27	494.96	45.95	8.04
C1351-162-5500-M	1.351	34.32	0.162	4.12	5.500	139.70	2.955	75.06	2.632	66.84	111.27	494.96	43.73	7.65
C1351-162-5750-M	1.351	34.32	0.162	4.12	5.750	146.05	3.082	78.29	2.742	69.65	111.27	494.96	41.71	7.30
C1351-162-6000-M	1.351	34.32	0.162	4.12	6.000	152.40	3.209	81.52	2.853	72.46	111.27	494.96	39.87	6.98
C1351-162-6250-M	1.351	34.32	0.162	4.12	6.250	158.75	3.337	84.75	2.964	75.27	111.27	494.96	38.19	6.68
C1351-162-6500-M	1.351	34.32	0.162	4.12	6.500	165.10	3.464	87.98	3.074	78.08	111.27	494.96	36.65	6.41
C1351-162-6750-M	1.351	34.32	0.162	4.12	6.750	171.45	3.591	91.20	3.185	80.90	111.27	494.96	35.22	6.16
C1351-162-7000-M	1.351	34.32	0.162	4.12	7.000	177.80	3.718	94.43	3.296	83.71	111.27	494.96	33.90	5.93
C1351-162-7500-M	1.351	34.32	0.162	4.12	7.500	190.50	3.972	100.89	3.517	89.33	111.27	494.96	31.54	5.52
C1351-162-8000-M	1.351	34.32	0.162	4.12	8.000	203.20	4.226	107.35	3.738	94.95	111.27	494.96	29.49	5.16
C1351-162-8500-M	1.351	34.32	0.162	4.12	8.500	215.90	4.480	113.80	3.960	100.57	111.27	494.96	27.68	4.84
C1351-162-9000-M	1.351	34.32	0.162	4.12	9.000	228.60	4.735	120.26	4.181	106.20	111.27	494.96	26.09	4.57
C1351-162-9500-M	1.351	34.32	0.162	4.12	9.500	241.30	4.989	126.71	4.402	111.82	111.27	494.96	24.67	4.32
C1351-177-1875-M	1.351	34.32	0.177	4.50	1.875	47.63	1.203	30.56	1.139	28.92	141.94	631.39	211.26	36.97
C1351-177-2000-M	1.351	34.32	0.177	4.50	2.000	50.80	1.273	32.33	1.202	30.53	141.94	631.39	195.22	34.16
C1351-177-2125-M	1.351	34.32	0.177	4.50	2.125	53.98	1.343	34.10	1.265	32.13	141.94	631.39	181.44	31.75
C1351-177-2250-M	1.351	34.32	0.177	4.50	2.250	57.15	1.412	35.88	1.328	33.73	141.94	631.39	169.48	29.66
C1351-177-2375-M	1.351	34.32	0.177	4.50	2.375	60.33	1.482	37.65	1.391	35.33	141.94	631.39	158.99	27.82
C1351-177-2500-M	1.351	34.32	0.177	4.50	2.500	63.50	1.552	39.42	1.454	36.93	141.94	631.39	149.73	26.20
C1351-177-2625-M	1.351	34.32	0.177	4.50	2.625	66.68	1.622	41.19	1.517	38.53	141.94	631.39	141.49	24.76
C1351-177-2750-M	1.351	34.32	0.177	4.50	2.750	69.85	1.692	42.97	1.580	40.13	141.94	631.39	134.11	23.47
C1351-177-2875-M	1.351	34.32	0.177	4.50	2.875	73.03	1.761	44.74	1.643	41.73	141.94	631.39	127.46	22.31
C1351-177-3000-M	1.351	34.32	0.177	4.50	3.000	76.20	1.831	46.51	1.706	43.34	141.94	631.39	121.44	21.25
C1351-177-3250-M	1.351	34.32	0.177	4.50	3.250	82.55	1.971	50.06	1.832	46.54	141.94	631.39	110.96	19.42
C1351-177-3500-M	1.351	34.32	0.177	4.50	3.500	88.90	2.110	53.60	1.958	49.74	141.94	631.39	102.14	17.87
C1351-177-3750-M	1.351	34.32	0.177	4.50	3.750	95.25	2.250	57.15	2.084	52.94	141.94	631.39	94.62	16.56
C1351-177-4000-M	1.351	34.32	0.177	4.50	4.000	101.60	2.389	60.69	2.210	56.15	141.94	631.39	88.13	15.42
C1351-177-4250-M	1.351	34.32	0.177	4.50	4.250	107.95	2.529	64.24	2.337	59.35	141.94	631.39	82.48	14.43
C1351-177-4500-M	1.351	34.32	0.177	4.50	4.500	114.30	2.669	67.78	2.463	62.55	141.94	631.39	77.50	13.56
C1351-177-4750-M	1.351	34.32	0.177	4.50	4.750	120.65	2.808	71.33	2.589	65.75	141.94	631.39	73.10	12.79
C1351-177-5000-M	1.351	34.32	0.177	4.50	5.000	127.00	2.948	74.87	2.715	68.96	141.94	631.39	69.16	12.10
C1351-177-5250-M	1.351	34.32	0.177	4.50	5.250	133.35	3.087	78.42	2.841	72.16	141.94	631.39	65.63	11.49
C1351-177-5500-M	1.351	34.32	0.177	4.50	5.500	139.70	3.227	81.96	2.967	75.36	141.94	631.39	62.44	10.93
C1351-177-5750-M	1.351	34.32	0.177	4.50	5.750	146.05	3.366	85.51	3.093	78.56	141.94	631.39	59.55	10.42
C1351-177-6000-M	1.351	34.32	0.177	4.50	6.000	152.40	3.506	89.05	3.219	81.77	141.94	631.39	56.91	9.96
C1351-177-6250-M	1.351	34.32	0.177	4.50	6.250	158.75	3.646	92.60	3.345	84.97	141.94	631.39	54.50	9.54
C1351-177-6500-M	1.351	34.32	0.177	4.50	6.500	165.10	3.785	96.14	3.471	88.17	141.94	631.39	52.28	9.15
C1351-177-6750-M	1.351	34.32	0.177	4.50	6.750	171.45	3.925	99.69	3.597	91.37	141.94	631.39	50.24	8.79

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1351-148-6500-S	3.610	91.69	65.08	289.48	22.52	3.94
C1351-148-6750-S	3.743	95.08	65.08	289.48	21.64	3.79
C1351-148-7000-S	3.877	98.47	65.08	289.48	20.84	3.65
C1351-148-7500-S	4.144	105.26	65.08	289.48	19.39	3.39
C1351-148-8000-S	4.411	112.04	65.08	289.48	18.13	3.17
C1351-148-8500-S*	4.747	120.57	65.08	289.48	17.34	3.03
C1351-148-9000-S*	5.014	127.36	65.08	289.48	16.33	2.86
C1351-148-9500-S*	5.281	134.14	65.08	289.48	15.43	2.70
C1351-162-1875-S	1.224	31.09	82.61	367.49	126.89	22.21
C1351-162-2000-S	1.296	32.93	82.61	367.49	117.43	20.55
C1351-162-2125-S	1.369	34.77	82.61	367.49	109.28	19.12
C1351-162-2250-S	1.442	36.61	82.61	367.49	102.18	17.88
C1351-162-2375-S	1.514	38.46	82.61	367.49	95.96	16.79
C1351-162-2500-S	1.587	40.30	82.61	367.49	90.44	15.83
C1351-162-2625-S	1.659	42.14	82.61	367.49	85.53	14.97
C1351-162-2750-S	1.732	43.98	82.61	367.49	81.12	14.20
C1351-162-2875-S	1.804	45.83	82.61	367.49	77.15	13.50
C1351-162-3000-S	1.877	47.67	82.61	367.49	73.55	12.87
C1351-162-3250-S	2.022	51.35	82.61	367.49	67.26	11.77
C1351-162-3500-S	2.167	55.04	82.61	367.49	61.97	10.84
C1351-162-3750-S	2.312	58.72	82.61	367.49	57.45	10.05
C1351-162-4000-S	2.457	62.41	82.61	367.49	53.54	9.37
C1351-162-4250-S	2.602	66.09	82.61	367.49	50.13	8.77
C1351-162-4500-S	2.747	69.77	82.61	367.49	47.13	8.25
C1351-162-4750-S	2.892	73.46	82.61	367.49	44.47	7.78
C1351-162-5000-S	3.037	77.14	82.61	367.49	42.09	7.37
C1351-162-5250-S	3.182	80.83	82.61	367.49	39.95	6.99
C1351-162-5500-S	3.327	84.51	82.61	367.49	38.02	6.65
C1351-162-5750-S	3.472	88.20	82.61	367.49	36.27	6.35
C1351-162-6000-S	3.617	91.88	82.61	367.49	34.67	6.07
C1351-162-6250-S	3.762	95.56	82.61	367.49	33.21	5.81
C1351-162-6500-S	3.907	99.25	82.61	367.49	31.87	5.58
C1351-162-6750-S	4.052	102.93	82.61	367.49	30.63	5.36
C1351-162-7000-S	4.198	106.62	82.61	367.49	29.48	5.16
C1351-162-7500-S	4.488	113.99	82.61	367.49	27.43	4.80
C1351-162-8000-S	4.778	121.36	82.61	367.49	25.64	4.49
C1351-162-8500-S	5.068	128.72	82.61	367.49	24.07	4.21
C1351-162-9000-S	5.358	136.09	82.61	367.49	22.68	3.97
C1351-162-9500-S	5.648	143.46	82.61	367.49	21.45	3.75
C1351-177-1875-S	1.308	33.22	104.18	463.41	183.71	32.15
C1351-177-2000-S	1.386	35.21	104.18	463.41	169.75	29.71
C1351-177-2125-S	1.465	37.20	104.18	463.41	157.77	27.61
C1351-177-2250-S	1.543	39.19	104.18	463.41	147.37	25.79
C1351-177-2375-S	1.621	41.19	104.18	463.41	138.26	24.19
C1351-177-2500-S	1.700	43.18	104.18	463.41	130.20	22.79
C1351-177-2625-S	1.778	45.17	104.18	463.41	123.04	21.53
C1351-177-2750-S	1.857	47.16	104.18	463.41	116.62	20.41
C1351-177-2875-S	1.935	49.15	104.18	463.41	110.84	19.40
C1351-177-3000-S	2.013	51.14	104.18	463.41	105.60	18.48
C1351-177-3250-S	2.170	55.12	104.18	463.41	96.48	16.88
C1351-177-3500-S	2.327	59.11	104.18	463.41	88.82	15.54
C1351-177-3750-S	2.484	63.09	104.18	463.41	82.28	14.40
C1351-177-4000-S	2.641	67.07	104.18	463.41	76.64	13.41
C1351-177-4250-S	2.797	71.05	104.18	463.41	71.72	12.55
C1351-177-4500-S	2.954	75.04	104.18	463.41	67.39	11.79
C1351-177-4750-S	3.111	79.02	104.18	463.41	63.56	11.12
C1351-177-5000-S	3.268	83.00	104.18	463.41	60.14	10.52
C1351-177-5250-S	3.425	86.98	104.18	463.41	57.07	9.99
C1351-177-5500-S	3.581	90.97	104.18	463.41	54.30	9.50
C1351-177-5750-S	3.738	94.95	104.18	463.41	51.78	9.06
C1351-177-6000-S	3.895	98.93	104.18	463.41	49.49	8.66
C1351-177-6250-S	4.052	102.91	104.18	463.41	47.39	8.29
C1351-177-6500-S	4.209	106.90	104.18	463.41	45.46	7.96
C1351-177-6750-S	4.365	110.88	104.18	463.41	43.69	7.65

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1351-177-7000-M	1.351	34.32	0.177	4.50	7.000	177.80	4.064	103.23	3.723	94.58	141.94	631.39	48.35	8.46	**C1351-177-7000-S**	4.522	114.86	104.18	463.41	42.04	7.36
C1351-177-7500-M	1.351	34.32	0.177	4.50	7.500	190.50	4.343	110.32	3.976	100.98	141.94	631.39	44.97	7.87	**C1351-177-7500-S**	4.836	122.83	104.18	463.41	39.10	6.84
C1351-177-8000-M	1.351	34.32	0.177	4.50	8.000	203.20	4.622	117.41	4.228	107.39	141.94	631.39	42.03	7.35	**C1351-177-8000-S**	5.149	130.79	104.18	463.41	36.54	6.40
C1351-177-8500-M	1.351	34.32	0.177	4.50	8.500	215.90	4.902	124.50	4.480	113.79	141.94	631.39	39.45	6.90	**C1351-177-8500-S**	5.463	138.76	104.18	463.41	34.30	6.00
C1351-177-9000-M	1.351	34.32	0.177	4.50	9.000	228.60	5.181	131.59	4.732	120.20	141.94	631.39	37.17	6.50	**C1351-177-9000-S**	5.776	146.72	104.18	463.41	32.32	5.66
C1351-177-9500-M	1.351	34.32	0.177	4.50	9.500	241.30	5.460	138.68	4.984	126.60	141.94	631.39	35.13	6.15	**C1351-177-9500-S**	6.090	154.69	104.18	463.41	30.55	5.35
C1351-192-1875-M	1.351	34.32	0.192	4.88	1.875	47.63	1.287	32.68	1.242	31.55	177.36	788.93	301.52	52.77	**C1351-192-1875-S**	1.384	35.16	128.68	572.41	262.20	45.88
C1351-192-2000-M	1.351	34.32	0.192	4.88	2.000	50.80	1.362	34.61	1.312	33.34	177.36	788.93	278.20	48.69	**C1351-192-2000-S**	1.468	37.29	128.68	572.41	241.91	42.33
C1351-192-2125-M	1.351	34.32	0.192	4.88	2.125	53.98	1.438	36.53	1.383	35.12	177.36	788.93	258.23	45.19	**C1351-192-2125-S**	1.552	39.42	128.68	572.41	224.55	39.30
C1351-192-2250-M	1.351	34.32	0.192	4.88	2.250	57.15	1.514	38.45	1.453	36.91	177.36	788.93	240.93	42.16	**C1351-192-2250-S**	1.636	41.55	128.68	572.41	209.50	36.66
C1351-192-2375-M	1.351	34.32	0.192	4.88	2.375	60.33	1.590	40.37	1.523	38.70	177.36	788.93	225.80	39.52	**C1351-192-2375-S**	1.720	43.68	128.68	572.41	196.35	34.36
C1351-192-2500-M	1.351	34.32	0.192	4.88	2.500	63.50	1.665	42.30	1.594	40.48	177.36	788.93	212.46	37.18	**C1351-192-2500-S**	1.803	45.81	128.68	572.41	184.75	32.33
C1351-192-2625-M	1.351	34.32	0.192	4.88	2.625	66.68	1.741	44.22	1.664	42.27	177.36	788.93	200.61	35.11	**C1351-192-2625-S**	1.887	47.94	128.68	572.41	174.45	30.53
C1351-192-2750-M	1.351	34.32	0.192	4.88	2.750	69.85	1.817	46.14	1.734	44.06	177.36	788.93	190.01	33.25	**C1351-192-2750-S**	1.971	50.07	128.68	572.41	165.23	28.92
C1351-192-2875-M	1.351	34.32	0.192	4.88	2.875	73.03	1.892	48.06	1.805	45.84	177.36	788.93	180.48	31.58	**C1351-192-2875-S**	2.055	52.20	128.68	572.41	156.94	27.46
C1351-192-3000-M	1.351	34.32	0.192	4.88	3.000	76.20	1.968	49.99	1.875	47.63	177.36	788.93	171.86	30.07	**C1351-192-3000-S**	2.139	54.33	128.68	572.41	149.44	26.15
C1351-192-3250-M	1.351	34.32	0.192	4.88	3.250	82.55	2.119	53.83	2.016	51.20	177.36	788.93	156.86	27.45	**C1351-192-3250-S**	2.307	58.59	128.68	572.41	136.40	23.87
C1351-192-3500-M	1.351	34.32	0.192	4.88	3.500	88.90	2.271	57.68	2.156	54.77	177.36	788.93	144.28	25.25	**C1351-192-3500-S**	2.474	62.85	128.68	572.41	125.46	21.96
C1351-192-3750-M	1.351	34.32	0.192	4.88	3.750	95.25	2.422	61.52	2.297	58.35	177.36	788.93	133.56	23.37	**C1351-192-3750-S**	2.642	67.11	128.68	572.41	116.14	20.32
C1351-192-4000-M	1.351	34.32	0.192	4.88	4.000	101.60	2.573	65.37	2.438	61.92	177.36	788.93	124.33	21.76	**C1351-192-4000-S**	2.810	71.37	128.68	572.41	108.11	18.92
C1351-192-4250-M	1.351	34.32	0.192	4.88	4.250	107.95	2.725	69.21	2.578	65.49	177.36	788.93	116.29	20.35	**C1351-192-4250-S**	2.977	75.63	128.68	572.41	101.12	17.70
C1351-192-4500-M	1.351	34.32	0.192	4.88	4.500	114.30	2.876	73.06	2.719	69.07	177.36	788.93	109.23	19.11	**C1351-192-4500-S**	3.145	79.89	128.68	572.41	94.98	16.62
C1351-192-4750-M	1.351	34.32	0.192	4.88	4.750	120.65	3.028	76.90	2.860	72.64	177.36	788.93	102.97	18.02	**C1351-192-4750-S**	3.313	84.15	128.68	572.41	89.54	15.67
C1351-192-5000-M	1.351	34.32	0.192	4.88	5.000	127.00	3.179	80.75	3.000	76.21	177.36	788.93	97.39	17.04	**C1351-192-5000-S**	3.481	88.41	128.68	572.41	84.69	14.82
C1351-192-5250-M	1.351	34.32	0.192	4.88	5.250	133.35	3.330	84.59	3.141	79.79	177.36	788.93	92.39	16.17	**C1351-192-5250-S**	3.648	92.67	128.68	572.41	80.34	14.06
C1351-192-5500-M	1.351	34.32	0.192	4.88	5.500	139.70	3.482	88.44	3.282	83.36	177.36	788.93	87.88	15.38	**C1351-192-5500-S**	3.816	96.93	128.68	572.41	76.41	13.37
C1351-192-5750-M	1.351	34.32	0.192	4.88	5.750	146.05	3.633	92.28	3.422	86.93	177.36	788.93	83.78	14.66	**C1351-192-5750-S**	3.984	101.19	128.68	572.41	72.85	12.75
C1351-192-6000-M	1.351	34.32	0.192	4.88	6.000	152.40	3.784	96.13	3.563	90.50	177.36	788.93	80.05	14.01	**C1351-192-6000-S**	4.151	105.45	128.68	572.41	69.61	12.18
C1351-192-6250-M	1.351	34.32	0.192	4.88	6.250	158.75	3.936	99.97	3.704	94.08	177.36	788.93	76.64	13.41	**C1351-192-6250-S**	4.319	109.70	128.68	572.41	66.64	11.66
C1351-192-6500-M	1.351	34.32	0.192	4.88	6.500	165.10	4.087	103.81	3.844	97.65	177.36	788.93	73.51	12.86	**C1351-192-6500-S**	4.487	113.96	128.68	572.41	63.92	11.19
C1351-192-6750-M	1.351	34.32	0.192	4.88	6.750	171.45	4.239	107.66	3.985	101.22	177.36	788.93	70.62	12.36	**C1351-192-6750-S**	4.655	118.22	128.68	572.41	61.41	10.75
C1351-192-7000-M	1.351	34.32	0.192	4.88	7.000	177.80	4.390	111.50	4.126	104.80	177.36	788.93	67.95	11.89	**C1351-192-7000-S**	4.822	122.48	128.68	572.41	59.09	10.34
C1351-192-7500-M	1.351	34.32	0.192	4.88	7.500	190.50	4.693	119.19	4.407	111.94	177.36	788.93	63.18	11.06	**C1351-192-7500-S**	5.158	131.00	128.68	572.41	54.94	9.61
C1351-192-8000-M	1.351	34.32	0.192	4.88	8.000	203.20	4.995	126.88	4.688	119.09	177.36	788.93	59.03	10.33	**C1351-192-8000-S**	5.493	139.52	128.68	572.41	51.33	8.98
C1351-192-8500-M	1.351	34.32	0.192	4.88	8.500	215.90	5.298	134.57	4.970	126.23	177.36	788.93	55.39	9.69	**C1351-192-8500-S**	5.828	148.04	128.68	572.41	48.17	8.43
C1351-192-9000-M	1.351	34.32	0.192	4.88	9.000	228.60	5.601	142.26	5.251	133.38	177.36	788.93	52.18	9.13	**C1351-192-9000-S**	6.164	156.56	128.68	572.41	45.37	7.94
C1351-192-9500-M	1.351	34.32	0.192	4.88	9.500	241.30	5.904	149.95	5.532	140.53	177.36	788.93	49.32	8.63	**C1351-192-9500-S**	6.499	165.08	128.68	572.41	42.88	7.50
C1351-207-1875-M	1.351	34.32	0.207	5.26	1.875	47.63	1.363	34.62	1.336	33.94	217.73	968.52	425.09	74.39	**C1351-207-1875-S**	1.452	36.89	156.18	694.73	369.65	64.69
C1351-207-2000-M	1.351	34.32	0.207	5.26	2.000	50.80	1.444	36.68	1.413	35.89	217.73	968.52	391.59	68.53	**C1351-207-2000-S**	1.541	39.15	156.18	694.73	340.51	59.59
C1351-207-2125-M	1.351	34.32	0.207	5.26	2.125	53.98	1.525	38.74	1.490	37.85	217.73	968.52	362.98	63.52	**C1351-207-2125-S**	1.630	41.41	156.18	694.73	315.64	55.24
C1351-207-2250-M	1.351	34.32	0.207	5.26	2.250	57.15	1.606	40.80	1.567	39.81	217.73	968.52	338.27	59.20	**C1351-207-2250-S**	1.719	43.66	156.18	694.73	294.15	51.48
C1351-207-2375-M	1.351	34.32	0.207	5.26	2.375	60.33	1.688	42.86	1.645	41.77	217.73	968.52	316.71	55.42	**C1351-207-2375-S**	1.808	45.92	156.18	694.73	275.40	48.19
C1351-207-2500-M	1.351	34.32	0.207	5.26	2.500	63.50	1.769	44.92	1.722	43.73	217.73	968.52	297.73	52.10	**C1351-207-2500-S**	1.897	48.18	156.18	694.73	258.89	45.31
C1351-207-2625-M	1.351	34.32	0.207	5.26	2.625	66.68	1.850	46.99	1.799	45.69	217.73	968.52	280.90	49.16	**C1351-207-2625-S**	1.986	50.43	156.18	694.73	244.26	42.75
C1351-207-2750-M	1.351	34.32	0.207	5.26	2.750	69.85	1.931	49.05	1.876	47.65	217.73	968.52	265.87	46.53	**C1351-207-2750-S**	2.074	52.69	156.18	694.73	231.19	40.46
C1351-207-2875-M	1.351	34.32	0.207	5.26	2.875	73.03	2.012	51.11	1.953	49.61	217.73	968.52	252.36	44.16	**C1351-207-2875-S**	2.163	54.95	156.18	694.73	219.45	38.40
C1351-207-3000-M	1.351	34.32	0.207	5.26	3.000	76.20	2.093	53.17	2.030	51.56	217.73	968.52	240.16	42.03	**C1351-207-3000-S**	2.252	57.20	156.18	694.73	208.84	36.55
C1351-207-3250-M	1.351	34.32	0.207	5.26	3.250	82.55	2.256	57.30	2.184	55.48	217.73	968.52	218.99	38.32	**C1351-207-3250-S**	2.430	61.72	156.18	694.73	190.43	33.32
C1351-207-3500-M	1.351	34.32	0.207	5.26	3.500	88.90	2.418	61.42	2.339	59.40	217.73	968.52	201.25	35.22	**C1351-207-3500-S**	2.608	66.23	156.18	694.73	175.00	30.63
C1351-207-3750-M	1.351	34.32	0.207	5.26	3.750	95.25	2.580	65.54	2.493	63.32	217.73	968.52	186.17	32.58	**C1351-207-3750-S**	2.785	70.75	156.18	694.73	161.89	28.33
C1351-207-4000-M	1.351	34.32	0.207	5.26	4.000	101.60	2.743	69.67	2.647	67.23	217.73	968.52	173.19	30.31	**C1351-207-4000-S**	2.963	75.26	156.18	694.73	150.60	26.36
C1351-207-4250-M	1.351	34.32	0.207	5.26	4.250	107.95	2.905	73.79	2.801	71.15	217.73	968.52	161.90	28.33	**C1351-207-4250-S**	3.141	79.77	156.18	694.73	140.79	24.64
C1351-207-4500-M	1.351	34.32	0.207	5.26	4.500	114.30	3.068	77.92	2.955	75.07	217.73	968.52	152.00	26.60	**C1351-207-4500-S**	3.318	84.29	156.18	694.73	132.17	23.13
C1351-207-4750-M	1.351	34.32	0.207	5.26	4.750	120.65	3.230	82.04	3.110	78.99	217.73	968.52	143.23	25.07	**C1351-207-4750-S**	3.496	88.80	156.18	694.73	124.55	21.80
C1351-207-5000-M	1.351	34.32	0.207	5.26	5.000	127.00	3.392	86.16	3.264	82.90	217.73	968.52	135.43	23.70	**C1351-207-5000-S**	3.674	93.31	156.18	694.73	117.76	20.61
C1351-207-5250-M	1.351	34.32	0.207	5.26	5.250	133.35	3.555	90.29	3.418	86.82	217.73	968.52	128.43	22.47	**C1351-207-5250-S**	3.851	97.83	156.18	694.73	111.67	19.54
C1351-207-5500-M	1.351	34.32	0.207	5.26	5.500	139.70	3.717	94.41	3.572	90.74	217.73	968.52	122.11	21.37	**C1351-207-5500-S**	4.029	102.34	156.18	694.73	106.18	18.58
C1351-207-5750-M	1.351	34.32	0.207	5.26	5.750	146.05	3.879	98.53	3.727	94.66	217.73	968.52	116.39	20.37	**C1351-207-5750-S**	4.207	106.85	156.18	694.73	101.21	17.71
C1351-207-6000-M	1.351	34.32	0.207	5.26	6.000	152.40	4.042	102.66	3.881	98.57	217.73	968.52	111.18	19.46	**C1351-207-6000-S**	4.385	111.37	156.18	694.73	96.68	16.92
C1351-207-6250-M	1.351	34.32	0.207	5.26	6.250	158.75	4.204	106.78	4.035	102.49	217.73	968.52	106.42	18.62	**C1351-207-6250-S**	4.562	115.88	156.18	694.73	92.54	16.19
C1351-207-6500-M	1.351	34.32	0.207	5.26	6.500	165.10	4.366	110.91	4.189	106.41	217.73	968.52	102.05	17.86	**C1351-207-6500-S**	4.740	120.39	156.18	694.73	88.74	15.53
C1351-207-6750-M	1.351	34.32	0.207	5.26	6.750	171.45	4.529	115.03	4.344	110.33	217.73	968.52	98.02	17.15	**C1351-207-6750-S**	4.918	124.91	156.18	694.73	85.24	14.92
C1351-207-7000-M	1.351	34.32	0.207	5.26	7.000	177.80	4.691	119.15	4.498	114.24	217.73	968.52	94.30	16.50	**C1351-207-7000-S**	5.095	129.42	156.18	694.73	82.00	14.35
C1351-207-7500-M	1.351	34.32	0.207	5.26	7.500	190.50	5.016	127.40	4.806	122.08	217.73	968.52	87.65	15.34	**C1351-207-7500-S**	5.451	138.45	156.18	694.73	76.21	13.34

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1351-207-8000-M	1.351	34.32	0.207	5.26	8.000	203.20	5.340	135.65	5.115	129.91	217.73	968.52	81.87	14.33
C1351-207-8500-M	1.351	34.32	0.207	5.26	8.500	215.90	5.665	143.90	5.423	137.75	217.73	968.52	76.81	13.44
C1351-207-9000-M	1.351	34.32	0.207	5.26	9.000	228.60	5.990	152.14	5.732	145.58	217.73	968.52	72.33	12.66
C1351-207-9500-M	1.351	34.32	0.207	5.26	9.500	241.30	6.315	160.39	6.040	153.42	217.73	968.52	68.35	11.96
C1351-225-1875-M	1.351	34.32	0.225	5.72	1.875	47.63	1.444	36.67	1.436	36.47	272.97	1214.25	632.83	110.75
C1351-225-2000-M	1.351	34.32	0.225	5.72	2.000	50.80	1.531	38.88	1.520	38.62	272.97	1214.25	581.80	101.81
C1351-225-2125-M	1.351	34.32	0.225	5.72	2.125	53.98	1.618	41.10	1.605	40.76	272.97	1214.25	538.38	94.22
C1351-225-2250-M	1.351	34.32	0.225	5.72	2.250	57.15	1.705	43.31	1.689	42.91	272.97	1214.25	500.99	87.67
C1351-225-2375-M	1.351	34.32	0.225	5.72	2.375	60.33	1.792	45.52	1.774	45.06	272.97	1214.25	468.46	81.98
C1351-225-2500-M	1.351	34.32	0.225	5.72	2.500	63.50	1.879	47.74	1.858	47.20	272.97	1214.25	439.89	76.98
C1351-225-2625-M	1.351	34.32	0.225	5.72	2.625	66.68	1.967	49.95	1.943	49.35	272.97	1214.25	414.61	72.56
C1351-225-2750-M	1.351	34.32	0.225	5.72	2.750	69.85	2.054	52.17	2.027	51.50	272.97	1214.25	392.08	68.61
C1351-225-2875-M	1.351	34.32	0.225	5.72	2.875	73.03	2.141	54.38	2.112	53.64	272.97	1214.25	371.87	65.08
C1351-225-3000-M	1.351	34.32	0.225	5.72	3.000	76.20	2.228	56.59	2.196	55.79	272.97	1214.25	353.64	61.89
C1351-225-3250-M	1.351	34.32	0.225	5.72	3.250	82.55	2.402	61.02	2.365	60.08	272.97	1214.25	322.07	56.36
C1351-225-3500-M	1.351	34.32	0.225	5.72	3.500	88.90	2.577	65.45	2.535	64.38	272.97	1214.25	295.67	51.74
C1351-225-3750-M	1.351	34.32	0.225	5.72	3.750	95.25	2.751	69.88	2.704	68.67	272.97	1214.25	273.27	47.82
C1351-225-4000-M	1.351	34.32	0.225	5.72	4.000	101.60	2.925	74.31	2.873	72.96	272.97	1214.25	254.02	44.45
C1351-225-4250-M	1.351	34.32	0.225	5.72	4.250	107.95	3.100	78.73	3.042	77.26	272.97	1214.25	237.31	41.53
C1351-225-4500-M	1.351	34.32	0.225	5.72	4.500	114.30	3.274	83.16	3.211	81.55	272.97	1214.25	222.66	38.97
C1351-225-4750-M	1.351	34.32	0.225	5.72	4.750	120.65	3.448	87.59	3.380	85.84	272.97	1214.25	209.72	36.70
C1351-225-5000-M	1.351	34.32	0.225	5.72	5.000	127.00	3.623	92.02	3.549	90.14	272.97	1214.25	198.19	34.68
C1351-225-5250-M	1.351	34.32	0.225	5.72	5.250	133.35	3.797	96.44	3.718	94.43	272.97	1214.25	187.87	32.88
C1351-225-5500-M	1.351	34.32	0.225	5.72	5.500	139.70	3.971	100.87	3.887	98.72	272.97	1214.25	178.57	31.25
C1351-225-5750-M	1.351	34.32	0.225	5.72	5.750	146.05	4.146	105.30	4.056	103.01	272.97	1214.25	170.15	29.78
C1351-225-6000-M	1.351	34.32	0.225	5.72	6.000	152.40	4.320	109.73	4.225	107.31	272.97	1214.25	162.48	28.43
C1351-225-6250-M	1.351	34.32	0.225	5.72	6.250	158.75	4.494	114.16	4.394	111.60	272.97	1214.25	155.48	27.21
C1351-225-6500-M	1.351	34.32	0.225	5.72	6.500	165.10	4.669	118.58	4.563	115.89	272.97	1214.25	149.06	26.08
C1351-225-6750-M	1.351	34.32	0.225	5.72	6.750	171.45	4.843	123.01	4.732	120.19	272.97	1214.25	143.14	25.05
C1351-225-7000-M	1.351	34.32	0.225	5.72	7.000	177.80	5.017	127.44	4.901	124.48	272.97	1214.25	137.68	24.09
C1351-225-7500-M	1.351	34.32	0.225	5.72	7.500	190.50	5.366	136.29	5.239	133.07	272.97	1214.25	127.91	22.38
C1351-225-8000-M	1.351	34.32	0.225	5.72	8.000	203.20	5.715	145.15	5.577	141.65	272.97	1214.25	119.44	20.90
C1351-225-8500-M	1.351	34.32	0.225	5.72	8.500	215.90	6.063	154.01	5.915	150.24	272.97	1214.25	112.02	19.60
C1351-225-9000-M	1.351	34.32	0.225	5.72	9.000	228.60	6.412	162.86	6.253	158.82	272.97	1214.25	105.47	18.46
C1351-225-9500-M	1.351	34.32	0.225	5.72	9.500	241.30	6.761	171.72	6.591	167.41	272.97	1214.25	99.65	17.44
C1351-250-2000-M	1.351	34.32	0.250	6.35	2.000	50.80	1.699	43.15	1.646	41.80	296.77	1320.09	985.47	172.46
C1351-250-2125-M	1.351	34.32	0.250	6.35	2.125	53.98	1.797	45.64	1.739	44.17	298.38	1327.25	909.66	159.19
C1351-250-2250-M	1.351	34.32	0.250	6.35	2.250	57.15	1.895	48.14	1.832	46.55	299.76	1333.39	844.68	147.82
C1351-250-2375-M	1.351	34.32	0.250	6.35	2.375	60.33	1.993	50.63	1.926	48.92	300.96	1338.72	788.37	137.97
C1351-250-2500-M	1.351	34.32	0.250	6.35	2.500	63.50	2.091	53.12	2.019	51.29	302.00	1343.37	739.10	129.34
C1351-250-2625-M	1.351	34.32	0.250	6.35	2.625	66.68	2.190	55.61	2.113	53.66	302.93	1347.48	695.62	121.73
C1351-250-2750-M	1.351	34.32	0.250	6.35	2.750	69.85	2.288	58.11	2.206	56.03	303.75	1351.14	656.98	114.97
C1351-250-2875-M	1.351	34.32	0.250	6.35	2.875	73.03	2.386	60.60	2.299	58.41	304.48	1354.41	622.40	108.92
C1351-250-3000-M	1.351	34.32	0.250	6.35	3.000	76.20	2.484	63.09	2.393	60.78	305.14	1357.35	591.28	103.47
C1351-250-3250-M	1.351	34.32	0.250	6.35	3.250	82.55	2.680	68.08	2.580	65.52	306.29	1362.43	537.53	94.07
C1351-250-3500-M	1.351	34.32	0.250	6.35	3.500	88.90	2.876	73.06	2.766	70.27	307.24	1366.66	492.73	86.23
C1351-250-3750-M	1.351	34.32	0.250	6.35	3.750	95.25	3.073	78.05	2.953	75.01	308.04	1370.24	454.83	79.60
C1351-250-4000-M	1.351	34.32	0.250	6.35	4.000	101.60	3.142	79.80	3.140	79.76	362.41	1612.09	422.34	73.91
C1351-250-4250-M	1.351	34.32	0.250	6.35	4.250	107.95	3.331	84.60	3.327	84.50	362.41	1612.09	394.19	68.98
C1351-250-4500-M	1.351	34.32	0.250	6.35	4.500	114.30	3.519	89.39	3.514	89.24	362.41	1612.09	369.55	64.67
C1351-250-4750-M	1.351	34.32	0.250	6.35	4.750	120.65	3.708	94.18	3.700	93.99	362.41	1612.09	347.81	60.87
C1351-250-5000-M	1.351	34.32	0.250	6.35	5.000	127.00	3.897	98.98	3.887	98.73	362.41	1612.09	328.49	57.49
C1351-250-5250-M	1.351	34.32	0.250	6.35	5.250	133.35	4.085	103.77	4.074	103.48	362.41	1612.09	311.20	54.46
C1351-250-5500-M	1.351	34.32	0.250	6.35	5.500	139.70	4.274	108.56	4.261	108.22	362.41	1612.09	295.64	51.74
C1351-250-5750-M	1.351	34.32	0.250	6.35	5.750	146.05	4.463	113.36	4.447	112.97	362.41	1612.09	281.56	49.27
C1351-250-6000-M	1.351	34.32	0.250	6.35	6.000	152.40	4.652	118.15	4.634	117.71	362.41	1612.09	268.76	47.03
C1351-250-6250-M	1.351	34.32	0.250	6.35	6.250	158.75	4.840	122.94	4.821	122.46	362.41	1612.09	257.08	44.99
C1351-250-6500-M	1.351	34.32	0.250	6.35	6.500	165.10	5.029	127.74	5.008	127.20	362.41	1612.09	246.37	43.11
C1351-250-6750-M	1.351	34.32	0.250	6.35	6.750	171.45	5.218	132.53	5.195	131.94	362.41	1612.09	236.51	41.39
C1351-250-7000-M	1.351	34.32	0.250	6.35	7.000	177.80	5.406	137.32	5.381	136.69	362.41	1612.09	227.42	39.80
C1351-250-7500-M	1.351	34.32	0.250	6.35	7.500	190.50	5.784	146.91	5.755	146.18	362.41	1612.09	211.17	36.95
C1351-250-8000-M	1.351	34.32	0.250	6.35	8.000	203.20	6.161	156.49	6.129	155.67	362.41	1612.09	197.09	34.49
C1351-250-8500-M	1.351	34.32	0.250	6.35	8.500	215.90	6.539	166.08	6.502	165.15	362.41	1612.09	184.78	32.34
C1351-250-9000-M	1.351	34.32	0.250	6.35	9.000	228.60	6.916	175.67	6.876	174.64	362.41	1612.09	173.91	30.43

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1351-207-8000-S	5.806	147.48	156.18	694.73	71.19	12.46
C1351-207-8500-S	6.162	156.50	156.18	694.73	66.79	11.69
C1351-207-9000-S	6.517	165.53	156.18	694.73	62.90	11.01
C1351-207-9500-S	6.872	174.56	156.18	694.73	59.44	10.40
C1351-225-1875-S	1.524	38.71	193.17	859.27	550.29	96.30
C1351-225-2000-S	1.618	41.10	193.17	859.27	505.91	88.53
C1351-225-2125-S	1.712	43.49	193.17	859.27	468.16	81.93
C1351-225-2250-S	1.807	45.89	193.17	859.27	435.64	76.24
C1351-225-2375-S	1.901	48.28	193.17	859.27	407.36	71.29
C1351-225-2500-S	1.995	50.67	193.17	859.27	382.52	66.94
C1351-225-2625-S	2.089	53.07	193.17	859.27	360.53	63.09
C1351-225-2750-S	2.183	55.46	193.17	859.27	340.94	59.66
C1351-225-2875-S	2.278	57.85	193.17	859.27	323.37	56.59
C1351-225-3000-S	2.372	60.24	193.17	859.27	307.51	53.81
C1351-225-3250-S	2.560	65.03	193.17	859.27	280.06	49.01
C1351-225-3500-S	2.749	69.82	193.17	859.27	257.10	44.99
C1351-225-3750-S	2.937	74.60	193.17	859.27	237.62	41.58
C1351-225-4000-S	3.125	79.39	193.17	859.27	220.89	38.66
C1351-225-4250-S	3.314	84.17	193.17	859.27	206.36	36.11
C1351-225-4500-S	3.502	88.96	193.17	859.27	193.62	33.88
C1351-225-4750-S	3.691	93.74	193.17	859.27	182.36	31.91
C1351-225-5000-S	3.879	98.53	193.17	859.27	172.34	30.16
C1351-225-5250-S	4.068	103.32	193.17	859.27	163.37	28.59
C1351-225-5500-S	4.256	108.10	193.17	859.27	155.28	27.17
C1351-225-5750-S	4.444	112.89	193.17	859.27	147.96	25.89
C1351-225-6000-S	4.633	117.67	193.17	859.27	141.29	24.73
C1351-225-6250-S	4.821	122.46	193.17	859.27	135.20	23.66
C1351-225-6500-S	5.010	127.24	193.17	859.27	129.61	22.68
C1351-225-6750-S	5.198	132.03	193.17	859.27	124.47	21.78
C1351-225-7000-S	5.386	136.82	193.17	859.27	119.72	20.95
C1351-225-7500-S	5.763	146.39	193.17	859.27	111.23	19.46
C1351-225-8000-S	6.140	155.96	193.17	859.27	103.86	18.18
C1351-225-8500-S	6.517	165.53	193.17	859.27	97.41	17.05
C1351-225-9000-S	6.894	175.10	193.17	859.27	91.72	16.05
C1351-225-9500-S	7.271	184.67	193.17	859.27	86.65	15.16
C1351-250-2000-S	1.706	43.34	251.76	1119.90	856.93	149.96
C1351-250-2125-S	1.807	45.89	251.76	1119.90	791.01	138.43
C1351-250-2250-S	1.907	48.44	251.76	1119.90	734.51	128.54
C1351-250-2375-S	2.008	51.00	251.76	1119.90	685.54	119.97
C1351-250-2500-S	2.108	53.55	251.76	1119.90	642.69	112.47
C1351-250-2625-S	2.209	56.10	251.76	1119.90	604.89	105.86
C1351-250-2750-S	2.309	58.66	251.76	1119.90	571.28	99.97
C1351-250-2875-S	2.410	61.21	251.76	1119.90	541.22	94.71
C1351-250-3000-S	2.510	63.76	251.76	1119.90	514.16	89.98
C1351-250-3250-S	2.711	68.87	251.76	1119.90	467.41	81.80
C1351-250-3500-S	2.912	73.97	251.76	1119.90	428.46	74.98
C1351-250-3750-S	3.113	79.08	251.76	1119.90	395.50	69.21
C1351-250-4000-S	3.314	84.19	251.76	1119.90	367.25	64.27
C1351-250-4250-S	3.516	89.29	251.76	1119.90	342.77	59.98
C1351-250-4500-S	3.717	94.40	251.76	1119.90	321.35	56.24
C1351-250-4750-S	3.918	99.51	251.76	1119.90	302.44	52.93
C1351-250-5000-S	4.119	104.61	251.76	1119.90	285.64	49.99
C1351-250-5250-S	4.320	109.72	251.76	1119.90	270.61	47.36
C1351-250-5500-S	4.521	114.82	251.76	1119.90	257.08	44.99
C1351-250-5750-S	4.722	119.93	251.76	1119.90	244.84	42.85
C1351-250-6000-S	4.923	125.04	251.76	1119.90	233.71	40.90
C1351-250-6250-S	5.124	130.14	251.76	1119.90	223.55	39.12
C1351-250-6500-S	5.325	135.25	251.76	1119.90	214.23	37.49
C1351-250-6750-S	5.526	140.36	251.76	1119.90	205.66	35.99
C1351-250-7000-S	5.727	145.46	251.76	1119.90	197.75	34.61
C1351-250-7500-S	6.129	155.67	251.76	1119.90	183.63	32.13
C1351-250-8000-S	6.531	165.89	251.76	1119.90	171.39	29.99
C1351-250-8500-S	6.933	176.10	251.76	1119.90	160.67	28.12
C1351-250-9000-S	7.335	186.31	251.76	1119.90	151.22	26.46

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1351-250-9500-M	**1.351**	**34.32**	**0.250**	**6.35**	**9.500**	**241.30**	**7.293**	**185.25**	**7.249**	**184.13**	**362.41**	**1612.09**	**164.24**	**28.74**
D13140	1.358	34.50	0.098	2.50	2.815	71.50	0.760	19.30	0.541	13.75	41.01	182.40	19.89	3.48
D13150	1.358	34.50	0.098	2.50	4.331	110.00	1.098	27.90	0.738	18.75	41.01	182.40	12.69	2.22
D13160	1.358	34.50	0.098	2.50	6.693	170.00	1.614	41.00	1.033	26.25	41.01	182.40	8.17	1.43
D13170	1.358	34.50	0.098	2.50	9.646	245.00	2.287	58.10	1.427	36.25	41.01	182.40	5.54	0.97
D13180	1.358	34.50	0.098	2.50	14.173	360.00	3.303	83.90	2.018	51.25	41.01	182.40	3.77	0.66
D13430	1.386	35.20	0.126	3.20	2.303	58.50	0.780	19.80	0.693	17.60	81.13	360.88	53.20	9.31
D13440	1.386	35.20	0.126	3.20	3.484	88.50	1.079	27.40	0.945	24.00	81.13	360.88	33.83	5.92
D13450	1.386	35.20	0.126	3.20	5.315	135.00	1.528	38.80	1.323	33.60	81.13	360.88	21.83	3.82
D13460	1.386	35.20	0.126	3.20	7.480	190.00	2.130	54.10	1.827	46.40	81.13	360.88	14.91	2.61
D13470	1.386	35.20	0.126	3.20	11.024	280.00	3.031	77.00	2.583	65.60	81.13	360.88	10.06	1.76
C1400-162-2250-M	**1.400**	**35.56**	**0.162**	**4.12**	**2.250**	**57.15**	**1.280**	**32.50**	**1.105**	**28.08**	**112.57**	**500.74**	**116.00**	**20.30**
C1400-162-2500-M	**1.400**	**35.56**	**0.162**	**4.12**	**2.500**	**63.50**	**1.407**	**35.74**	**1.202**	**30.53**	**112.57**	**500.74**	**103.00**	**18.03**
C1400-162-3000-M	**1.400**	**35.56**	**0.162**	**4.12**	**3.000**	**76.20**	**1.660**	**42.16**	**1.397**	**35.48**	**112.57**	**500.74**	**84.00**	**14.70**
C1400-162-3500-M	**1.400**	**35.56**	**0.162**	**4.12**	**3.500**	**88.90**	**1.892**	**48.05**	**1.608**	**40.85**	**112.57**	**500.74**	**70.00**	**12.25**
C1400-162-4000-M	**1.400**	**35.56**	**0.162**	**4.12**	**4.000**	**101.60**	**2.155**	**54.73**	**1.795**	**45.60**	**112.57**	**500.74**	**61.00**	**10.68**
C1400-162-4250-M	**1.400**	**35.56**	**0.162**	**4.12**	**4.250**	**107.95**	**2.275**	**57.79**	**1.897**	**48.19**	**112.57**	**500.74**	**57.00**	**9.98**
C1400-162-4500-M	**1.400**	**35.56**	**0.162**	**4.12**	**4.500**	**114.30**	**2.415**	**61.35**	**1.984**	**50.39**	**112.57**	**500.74**	**54.00**	**9.45**
C1400-162-5000-M	**1.400**	**35.56**	**0.162**	**4.12**	**5.000**	**127.00**	**2.655**	**67.43**	**2.189**	**55.61**	**112.57**	**500.74**	**48.00**	**8.40**
C1400-162-5250-M	**1.400**	**35.56**	**0.162**	**4.12**	**5.250**	**133.35**	**2.748**	**69.81**	**2.313**	**58.74**	**112.57**	**500.74**	**45.00**	**7.88**
C1400-177-2250-M	**1.400**	**35.56**	**0.177**	**4.50**	**2.250**	**57.15**	**1.400**	**35.56**	**1.220**	**30.99**	**143.66**	**639.01**	**169.00**	**29.58**
C1400-177-2500-M	**1.400**	**35.56**	**0.177**	**4.50**	**2.500**	**63.50**	**1.536**	**39.01**	**1.334**	**33.88**	**143.66**	**639.01**	**149.00**	**26.08**
C1400-177-3000-M	**1.400**	**35.56**	**0.177**	**4.50**	**3.000**	**76.20**	**1.803**	**45.79**	**1.566**	**39.78**	**143.66**	**639.01**	**120.00**	**21.00**
C1400-177-3500-M	**1.400**	**35.56**	**0.177**	**4.50**	**3.500**	**88.90**	**2.063**	**52.41**	**1.805**	**45.85**	**143.66**	**639.01**	**100.00**	**17.50**
C1400-177-4000-M	**1.400**	**35.56**	**0.177**	**4.50**	**4.000**	**101.60**	**2.349**	**59.66**	**2.019**	**51.29**	**143.66**	**639.01**	**87.00**	**15.23**
C1400-177-4250-M	**1.400**	**35.56**	**0.177**	**4.50**	**4.250**	**107.95**	**2.454**	**62.34**	**2.164**	**54.95**	**143.66**	**639.01**	**80.00**	**14.00**
C1400-177-4500-M	**1.400**	**35.56**	**0.177**	**4.50**	**4.500**	**114.30**	**2.610**	**66.29**	**2.258**	**57.35**	**143.66**	**639.01**	**76.00**	**13.30**
C1400-177-5000-M	**1.400**	**35.56**	**0.177**	**4.50**	**5.000**	**127.00**	**2.918**	**74.12**	**2.449**	**62.21**	**143.66**	**639.01**	**69.00**	**12.08**
C1400-177-5250-M	**1.400**	**35.56**	**0.177**	**4.50**	**5.250**	**133.35**	**3.040**	**77.21**	**2.577**	**65.46**	**143.66**	**639.01**	**65.00**	**11.38**
C1410-112-2500-M	**1.410**	**35.81**	**0.112**	**2.85**	**2.500**	**63.50**	**0.960**	**24.39**	**0.723**	**18.36**	**38.42**	**170.89**	**24.95**	**4.37**
C1410-112-2625-M	**1.410**	**35.81**	**0.112**	**2.85**	**2.625**	**66.68**	**1.001**	**25.41**	**0.750**	**19.04**	**38.42**	**170.89**	**23.65**	**4.14**
C1410-112-2750-M	**1.410**	**35.81**	**0.112**	**2.85**	**2.750**	**69.85**	**1.041**	**26.44**	**0.776**	**19.72**	**38.42**	**170.89**	**22.48**	**3.93**
C1410-112-2875-M	**1.410**	**35.81**	**0.112**	**2.85**	**2.875**	**73.03**	**1.081**	**27.47**	**0.803**	**20.40**	**38.42**	**170.89**	**21.42**	**3.75**
C1410-112-3000-M	**1.410**	**35.81**	**0.112**	**2.85**	**3.000**	**76.20**	**1.122**	**28.49**	**0.830**	**21.08**	**38.42**	**170.89**	**20.45**	**3.58**
C1410-112-3250-M	**1.410**	**35.81**	**0.112**	**2.85**	**3.250**	**82.55**	**1.203**	**30.55**	**0.883**	**22.44**	**38.42**	**170.89**	**18.76**	**3.28**
C1410-112-3500-M	**1.410**	**35.81**	**0.112**	**2.85**	**3.500**	**88.90**	**1.284**	**32.60**	**0.937**	**23.80**	**38.42**	**170.89**	**17.33**	**3.03**
C1410-112-3750-M	**1.410**	**35.81**	**0.112**	**2.85**	**3.750**	**95.25**	**1.364**	**34.65**	**0.991**	**25.16**	**38.42**	**170.89**	**16.10**	**2.82**
C1410-112-4000-M	**1.410**	**35.81**	**0.112**	**2.85**	**4.000**	**101.60**	**1.445**	**36.71**	**1.044**	**26.52**	**38.42**	**170.89**	**15.04**	**2.63**
C1410-112-4250-M	**1.410**	**35.81**	**0.112**	**2.85**	**4.250**	**107.95**	**1.526**	**38.76**	**1.098**	**27.88**	**38.42**	**170.89**	**14.10**	**2.47**
C1410-112-4500-M	**1.410**	**35.81**	**0.112**	**2.85**	**4.500**	**114.30**	**1.607**	**40.82**	**1.151**	**29.24**	**38.42**	**170.89**	**13.28**	**2.32**
C1410-112-4750-M	**1.410**	**35.81**	**0.112**	**2.85**	**4.750**	**120.65**	**1.688**	**42.87**	**1.205**	**30.60**	**38.42**	**170.89**	**12.55**	**2.20**
C1410-112-5000-M	**1.410**	**35.81**	**0.112**	**2.85**	**5.000**	**127.00**	**1.769**	**44.92**	**1.258**	**31.96**	**38.42**	**170.89**	**11.89**	**2.08**
C1410-112-5250-M	**1.410**	**35.81**	**0.112**	**2.85**	**5.250**	**133.35**	**1.849**	**46.98**	**1.312**	**33.32**	**38.42**	**170.89**	**11.30**	**1.98**
C1410-112-5500-M	**1.410**	**35.81**	**0.112**	**2.85**	**5.500**	**139.70**	**1.930**	**49.03**	**1.365**	**34.68**	**38.42**	**170.89**	**10.76**	**1.88**
C1410-112-5750-M	**1.410**	**35.81**	**0.112**	**2.85**	**5.750**	**146.05**	**2.011**	**51.08**	**1.419**	**36.04**	**38.42**	**170.89**	**10.28**	**1.80**
C1410-112-6000-M	**1.410**	**35.81**	**0.112**	**2.85**	**6.000**	**152.40**	**2.092**	**53.14**	**1.473**	**37.40**	**38.42**	**170.89**	**9.83**	**1.72**
C1410-112-6250-M	**1.410**	**35.81**	**0.112**	**2.85**	**6.250**	**158.75**	**2.173**	**55.19**	**1.526**	**38.76**	**38.42**	**170.89**	**9.42**	**1.65**
C1410-112-6500-M	**1.410**	**35.81**	**0.112**	**2.85**	**6.500**	**165.10**	**2.254**	**57.25**	**1.580**	**40.12**	**38.42**	**170.89**	**9.05**	**1.58**
C1410-112-6750-M	**1.410**	**35.81**	**0.112**	**2.85**	**6.750**	**171.45**	**2.335**	**59.30**	**1.633**	**41.48**	**38.42**	**170.89**	**8.70**	**1.52**
C1410-112-7000-M	**1.410**	**35.81**	**0.112**	**2.85**	**7.000**	**177.80**	**2.415**	**61.35**	**1.687**	**42.84**	**38.42**	**170.89**	**8.38**	**1.47**
C1410-112-7500-M	**1.410**	**35.81**	**0.112**	**2.85**	**7.500**	**190.50**	**2.577**	**65.46**	**1.794**	**45.56**	**38.42**	**170.89**	**7.80**	**1.37**
C1410-112-8000-M	**1.410**	**35.81**	**0.112**	**2.85**	**8.000**	**203.20**	**2.739**	**69.57**	**1.901**	**48.29**	**38.42**	**170.89**	**7.30**	**1.28**
C1410-112-8500-M	**1.410**	**35.81**	**0.112**	**2.85**	**8.500**	**215.90**	**2.901**	**73.68**	**2.008**	**51.01**	**38.42**	**170.89**	**6.86**	**1.20**
C1410-112-9000-M	**1.410**	**35.81**	**0.112**	**2.85**	**9.000**	**228.60**	**3.062**	**77.78**	**2.115**	**53.73**	**38.42**	**170.89**	**6.47**	**1.13**
C1410-112-9500-M	**1.410**	**35.81**	**0.112**	**2.85**	**9.500**	**241.30**	**3.224**	**81.89**	**2.222**	**56.45**	**38.42**	**170.89**	**6.12**	**1.07**
C1410-125-2250-M	**1.410**	**35.81**	**0.125**	**3.18**	**2.250**	**57.15**	**0.979**	**24.85**	**0.792**	**20.11**	**52.15**	**231.96**	**41.01**	**7.18**
C1410-125-2375-M	**1.410**	**35.81**	**0.125**	**3.18**	**2.375**	**60.33**	**1.024**	**26.01**	**0.825**	**20.95**	**52.15**	**231.96**	**38.60**	**6.76**
C1410-125-2500-M	**1.410**	**35.81**	**0.125**	**3.18**	**2.500**	**63.50**	**1.070**	**27.17**	**0.858**	**21.79**	**52.15**	**231.96**	**36.46**	**6.38**
C1410-125-2625-M	**1.410**	**35.81**	**0.125**	**3.18**	**2.625**	**66.68**	**1.115**	**28.32**	**0.891**	**22.63**	**52.15**	**231.96**	**34.54**	**6.04**
C1410-125-2750-M	**1.410**	**35.81**	**0.125**	**3.18**	**2.750**	**69.85**	**1.161**	**29.48**	**0.924**	**23.47**	**52.15**	**231.96**	**32.81**	**5.74**
C1410-125-2875-M	**1.410**	**35.81**	**0.125**	**3.18**	**2.875**	**73.03**	**1.206**	**30.64**	**0.957**	**24.31**	**52.15**	**231.96**	**31.25**	**5.47**
C1410-125-3000-M	**1.410**	**35.81**	**0.125**	**3.18**	**3.000**	**76.20**	**1.252**	**31.79**	**0.990**	**25.15**	**52.15**	**231.96**	**29.83**	**5.22**
C1410-125-3250-M	**1.410**	**35.81**	**0.125**	**3.18**	**3.250**	**82.55**	**1.343**	**34.11**	**1.056**	**26.83**	**52.15**	**231.96**	**27.34**	**4.78**
C1410-125-3500-M	**1.410**	**35.81**	**0.125**	**3.18**	**3.500**	**88.90**	**1.434**	**36.42**	**1.123**	**28.52**	**52.15**	**231.96**	**25.24**	**4.42**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1351-250-9500-S	**7.737**	**196.52**	**251.76**	**1119.90**	**142.82**	**24.99**
D23140	0.760	19.30	34.16	151.94	16.57	2.90
D23150	1.098	27.90	34.16	151.94	10.57	1.85
D23160	1.614	41.00	34.16	151.94	6.80	1.19
D23170	2.287	58.10	34.16	151.94	4.63	0.81
D23180	3.303	83.90	34.16	151.94	3.14	0.55
D23430	0.780	19.80	67.61	300.73	44.34	7.76
D23440	1.079	27.40	67.61	300.73	28.17	4.93
D23450	1.528	38.80	67.61	300.73	18.17	3.18
D23460	2.130	54.10	67.61	300.73	12.40	2.17
D23470	3.031	77.00	67.61	300.73	8.40	1.47
C1400-162-2250-S	**1.423**	**36.14**	**79.92**	**355.52**	**96.63**	**16.91**
C1400-162-2500-S	**1.568**	**39.84**	**79.92**	**355.52**	**85.80**	**15.01**
C1400-162-3000-S	**1.858**	**47.19**	**79.92**	**355.52**	**69.97**	**12.25**
C1400-162-3500-S	**2.129**	**54.09**	**79.92**	**355.52**	**58.31**	**10.20**
C1400-162-4000-S	**2.427**	**61.65**	**79.92**	**355.52**	**50.81**	**8.89**
C1400-162-4250-S	**2.567**	**65.19**	**79.92**	**355.52**	**47.48**	**8.31**
C1400-162-4500-S	**2.723**	**69.17**	**79.92**	**355.52**	**44.98**	**7.87**
C1400-162-5000-S	**3.001**	**76.23**	**79.92**	**355.52**	**39.98**	**7.00**
C1400-162-5250-S	**3.118**	**79.19**	**79.92**	**355.52**	**37.49**	**6.56**
C1400-177-2250-S	**1.534**	**38.96**	**100.82**	**448.48**	**140.78**	**24.64**
C1400-177-2500-S	**1.688**	**42.87**	**100.82**	**448.48**	**124.12**	**21.72**
C1400-177-3000-S	**1.991**	**50.58**	**100.82**	**448.48**	**99.96**	**17.49**
C1400-177-3500-S	**2.290**	**58.16**	**100.82**	**448.48**	**83.30**	**14.58**
C1400-177-4000-S	**2.609**	**66.26**	**100.82**	**448.48**	**72.47**	**12.68**
C1400-177-4250-S	**2.737**	**69.52**	**100.82**	**448.48**	**66.64**	**11.66**
C1400-177-4500-S	**2.907**	**73.85**	**100.82**	**448.48**	**63.31**	**11.08**
C1400-177-5000-S	**3.246**	**82.44**	**100.82**	**448.48**	**57.48**	**10.06**
C1400-177-5250-S	**3.388**	**86.05**	**100.82**	**448.48**	**54.15**	**9.48**
C1410-112-2500-S	**1.135**	**28.82**	**29.62**	**131.74**	**21.69**	**3.80**
C1410-112-2625-S	**1.185**	**30.09**	**29.62**	**131.74**	**20.56**	**3.60**
C1410-112-2750-S	**1.235**	**31.37**	**29.62**	**131.74**	**19.55**	**3.42**
C1410-112-2875-S	**1.285**	**32.64**	**29.62**	**131.74**	**18.63**	**3.26**
C1410-112-3000-S	**1.335**	**33.91**	**29.62**	**131.74**	**17.79**	**3.11**
C1410-112-3250-S	**1.435**	**36.45**	**29.62**	**131.74**	**16.32**	**2.86**
C1410-112-3500-S	**1.535**	**38.99**	**29.62**	**131.74**	**15.07**	**2.64**
C1410-112-3750-S	**1.635**	**41.53**	**29.62**	**131.74**	**14.00**	**2.45**
C1410-112-4000-S	**1.735**	**44.07**	**29.62**	**131.74**	**13.08**	**2.29**
C1410-112-4250-S	**1.835**	**46.61**	**29.62**	**131.74**	**12.26**	**2.15**
C1410-112-4500-S	**1.935**	**49.15**	**29.62**	**131.74**	**11.55**	**2.02**
C1410-112-4750-S	**2.035**	**51.69**	**29.62**	**131.74**	**10.91**	**1.91**
C1410-112-5000-S	**2.135**	**54.24**	**29.62**	**131.74**	**10.34**	**1.81**
C1410-112-5250-S	**2.235**	**56.78**	**29.62**	**131.74**	**9.82**	**1.72**
C1410-112-5500-S	**2.335**	**59.32**	**29.62**	**131.74**	**9.36**	**1.64**
C1410-112-5750-S	**2.435**	**61.86**	**29.62**	**131.74**	**8.94**	**1.56**
C1410-112-6000-S	**2.535**	**64.40**	**29.62**	**131.74**	**8.55**	**1.50**
C1410-112-6250-S	**2.635**	**66.94**	**29.62**	**131.74**	**8.19**	**1.43**
C1410-112-6500-S	**2.736**	**69.48**	**29.62**	**131.74**	**7.87**	**1.38**
C1410-112-6750-S	**2.836**	**72.02**	**29.62**	**131.74**	**7.57**	**1.32**
C1410-112-7000-S	**2.936**	**74.56**	**29.62**	**131.74**	**7.29**	**1.28**
C1410-112-7500-S	**3.136**	**79.65**	**29.62**	**131.74**	**6.79**	**1.19**
C1410-112-8000-S	**3.336**	**84.73**	**29.62**	**131.74**	**6.35**	**1.11**
C1410-112-8500-S	**3.536**	**89.81**	**29.62**	**131.74**	**5.97**	**1.04**
C1410-112-9000-S	**3.736**	**94.89**	**29.62**	**131.74**	**5.63**	**0.98**
C1410-112-9500-S	**3.936**	**99.98**	**29.62**	**131.74**	**5.32**	**0.93**
C1410-125-2250-S	**1.133**	**28.79**	**39.82**	**177.13**	**35.66**	**6.24**
C1410-125-2375-S	**1.189**	**30.19**	**39.82**	**177.13**	**33.57**	**5.87**
C1410-125-2500-S	**1.244**	**31.59**	**39.82**	**177.13**	**31.70**	**5.55**
C1410-125-2625-S	**1.299**	**33.00**	**39.82**	**177.13**	**30.03**	**5.26**
C1410-125-2750-S	**1.354**	**34.40**	**39.82**	**177.13**	**28.53**	**4.99**
C1410-125-2875-S	**1.409**	**35.80**	**39.82**	**177.13**	**27.17**	**4.76**
C1410-125-3000-S	**1.465**	**37.20**	**39.82**	**177.13**	**25.94**	**4.54**
C1410-125-3250-S	**1.575**	**40.01**	**39.82**	**177.13**	**23.78**	**4.16**
C1410-125-3500-S	**1.686**	**42.81**	**39.82**	**177.13**	**21.95**	**3.84**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1410-125-3750-M	1.410	35.81	0.125	3.18	3.750	95.25	1.525	38.73	1.189	30.20	52.15	231.96	23.44	4.10
C1410-125-4000-M	1.410	35.81	0.125	3.18	4.000	101.60	1.616	41.05	1.255	31.88	52.15	231.96	21.87	3.83
C1410-125-4250-M	1.410	35.81	0.125	3.18	4.250	107.95	1.707	43.36	1.321	33.56	52.15	231.96	20.51	3.59
C1410-125-4500-M	1.410	35.81	0.125	3.18	4.500	114.30	1.798	45.67	1.387	35.24	52.15	231.96	19.30	3.38
C1410-125-4750-M	1.410	35.81	0.125	3.18	4.750	120.65	1.889	47.98	1.453	36.92	52.15	231.96	18.23	3.19
C1410-125-5000-M	1.410	35.81	0.125	3.18	5.000	127.00	1.980	50.30	1.520	38.60	52.15	231.96	17.27	3.02
C1410-125-5250-M	1.410	35.81	0.125	3.18	5.250	133.35	2.071	52.61	1.586	40.28	52.15	231.96	16.41	2.87
C1410-125-5500-M	1.410	35.81	0.125	3.18	5.500	139.70	2.162	54.92	1.652	41.96	52.15	231.96	15.62	2.73
C1410-125-5750-M	1.410	35.81	0.125	3.18	5.750	146.05	2.253	57.24	1.718	43.64	52.15	231.96	14.91	2.61
C1410-125-6000-M	1.410	35.81	0.125	3.18	6.000	152.40	2.344	59.55	1.784	45.32	52.15	231.96	14.27	2.50
C1410-125-6250-M	1.410	35.81	0.125	3.18	6.250	158.75	2.436	61.86	1.850	47.00	52.15	231.96	13.67	2.39
C1410-125-6500-M	1.410	35.81	0.125	3.18	6.500	165.10	2.527	64.18	1.917	48.68	52.15	231.96	13.12	2.30
C1410-125-6750-M	1.410	35.81	0.125	3.18	6.750	171.45	2.618	66.49	1.983	50.36	52.15	231.96	12.62	2.21
C1410-125-7000-M	1.410	35.81	0.125	3.18	7.000	177.80	2.709	68.80	2.049	52.04	52.15	231.96	12.15	2.13
C1410-125-7500-M	1.410	35.81	0.125	3.18	7.500	190.50	2.891	73.43	2.181	55.41	52.15	231.96	11.31	1.98
C1410-125-8000-M*	1.410	35.81	0.125	3.18	8.000	203.20	3.152	80.07	2.412	61.26	52.15	231.96	10.76	1.88
C1410-125-8500-M*	1.410	35.81	0.125	3.18	8.500	215.90	3.335	84.70	2.544	64.62	52.15	231.96	10.10	1.77
C1410-125-9000-M*	1.410	35.81	0.125	3.18	9.000	228.60	3.517	89.32	2.676	67.98	52.15	231.96	9.51	1.66
C1410-125-9500-M*	1.410	35.81	0.125	3.18	9.500	241.30	3.699	93.95	2.809	71.34	52.15	231.96	8.99	1.57
C1410-135-2250-M	1.410	35.81	0.135	3.43	2.250	57.15	1.056	26.82	0.887	22.54	64.57	287.22	54.07	9.46
C1410-135-2375-M	1.410	35.81	0.135	3.43	2.375	60.33	1.105	28.08	0.926	23.51	64.57	287.22	50.86	8.90
C1410-135-2500-M	1.410	35.81	0.135	3.43	2.500	63.50	1.155	29.34	0.964	24.48	64.57	287.22	48.01	8.40
C1410-135-2625-M	1.410	35.81	0.135	3.43	2.625	66.68	1.205	30.60	1.002	25.44	64.57	287.22	45.46	7.96
C1410-135-2750-M	1.410	35.81	0.135	3.43	2.750	69.85	1.254	31.86	1.040	26.41	64.57	287.22	43.17	7.55
C1410-135-2875-M	1.410	35.81	0.135	3.43	2.875	73.03	1.304	33.12	1.078	27.38	64.57	287.22	41.10	7.19
C1410-135-3000-M	1.410	35.81	0.135	3.43	3.000	76.20	1.354	34.38	1.116	28.35	64.57	287.22	39.22	6.86
C1410-135-3250-M	1.410	35.81	0.135	3.43	3.250	82.55	1.453	36.90	1.192	30.29	64.57	287.22	35.93	6.29
C1410-135-3500-M	1.410	35.81	0.135	3.43	3.500	88.90	1.552	39.42	1.269	32.22	64.57	287.22	33.15	5.80
C1410-135-3750-M	1.410	35.81	0.135	3.43	3.750	95.25	1.651	41.94	1.345	34.16	64.57	287.22	30.77	5.38
C1410-135-4000-M	1.410	35.81	0.135	3.43	4.000	101.60	1.750	44.46	1.421	36.10	64.57	287.22	28.70	5.02
C1410-135-4250-M	1.410	35.81	0.135	3.43	4.250	107.95	1.850	46.98	1.497	38.03	64.57	287.22	26.90	4.71
C1410-135-4500-M	1.410	35.81	0.135	3.43	4.500	114.30	1.949	49.50	1.574	39.97	64.57	287.22	25.31	4.43
C1410-135-4750-M	1.410	35.81	0.135	3.43	4.750	120.65	2.048	52.02	1.650	41.91	64.57	287.22	23.90	4.18
C1410-135-5000-M	1.410	35.81	0.135	3.43	5.000	127.00	2.147	54.54	1.726	43.84	64.57	287.22	22.64	3.96
C1410-135-5250-M	1.410	35.81	0.135	3.43	5.250	133.35	2.247	57.06	1.802	45.78	64.57	287.22	21.50	3.76
C1410-135-5500-M	1.410	35.81	0.135	3.43	5.500	139.70	2.346	59.58	1.879	47.72	64.57	287.22	20.47	3.58
C1410-135-5750-M	1.410	35.81	0.135	3.43	5.750	146.05	2.445	62.10	1.955	49.65	64.57	287.22	19.54	3.42
C1410-135-6000-M	1.410	35.81	0.135	3.43	6.000	152.40	2.544	64.62	2.031	51.59	64.57	287.22	18.69	3.27
C1410-135-6250-M	1.410	35.81	0.135	3.43	6.250	158.75	2.643	67.14	2.107	53.53	64.57	287.22	17.90	3.13
C1410-135-6500-M	1.410	35.81	0.135	3.43	6.500	165.10	2.743	69.66	2.184	55.46	64.57	287.22	17.19	3.01
C1410-135-6750-M*	1.410	35.81	0.135	3.43	6.750	171.45	2.923	74.25	2.360	59.96	64.57	287.22	16.87	2.95
C1410-135-7000-M*	1.410	35.81	0.135	3.43	7.000	177.80	3.023	76.77	2.437	61.89	64.57	287.22	16.23	2.84
C1410-135-7500-M*	1.410	35.81	0.135	3.43	7.500	190.50	3.221	81.81	2.589	65.77	64.57	287.22	15.09	2.64
C1410-135-8000-M*	1.410	35.81	0.135	3.43	8.000	203.20	3.419	86.85	2.742	69.64	64.57	287.22	14.10	2.47
C1410-135-8500-M*	1.410	35.81	0.135	3.43	8.500	215.90	3.618	91.89	2.894	73.51	64.57	287.22	13.23	2.31
C1410-135-9000-M*	1.410	35.81	0.135	3.43	9.000	228.60	3.816	96.94	3.047	77.39	64.57	287.22	12.46	2.18
C1410-135-9500-M*	1.410	35.81	0.135	3.43	9.500	241.30	4.015	101.98	3.199	81.26	64.57	287.22	11.77	2.06
C1410-148-2125-M	1.410	35.81	0.148	3.76	2.125	53.98	1.101	27.97	0.966	24.54	83.30	370.55	81.35	14.24
C1410-148-2250-M	1.410	35.81	0.148	3.76	2.250	57.15	1.156	29.36	1.011	25.68	83.30	370.55	76.15	13.33
C1410-148-2375-M	1.410	35.81	0.148	3.76	2.375	60.33	1.211	30.76	1.056	26.82	83.30	370.55	71.57	12.52
C1410-148-2500-M	1.410	35.81	0.148	3.76	2.500	63.50	1.266	32.16	1.101	27.96	83.30	370.55	67.51	11.81
C1410-148-2625-M	1.410	35.81	0.148	3.76	2.625	66.68	1.321	33.55	1.145	29.10	83.30	370.55	63.89	11.18
C1410-148-2750-M	1.410	35.81	0.148	3.76	2.750	69.85	1.376	34.95	1.190	30.23	83.30	370.55	60.63	10.61
C1410-148-2875-M	1.410	35.81	0.148	3.76	2.875	73.03	1.431	36.35	1.235	31.37	83.30	370.55	57.69	10.10
C1410-148-3000-M	1.410	35.81	0.148	3.76	3.000	76.20	1.486	37.75	1.280	32.51	83.30	370.55	55.03	9.63
C1410-148-3250-M	1.410	35.81	0.148	3.76	3.250	82.55	1.596	40.54	1.369	34.79	83.30	370.55	50.37	8.81
C1410-148-3500-M	1.410	35.81	0.148	3.76	3.500	88.90	1.706	43.34	1.459	37.06	83.30	370.55	46.44	8.13
C1410-148-3750-M	1.410	35.81	0.148	3.76	3.750	95.25	1.816	46.13	1.549	39.34	83.30	370.55	43.08	7.54
C1410-148-4000-M	1.410	35.81	0.148	3.76	4.000	101.60	1.926	48.93	1.638	41.61	83.30	370.55	40.17	7.03
C1410-148-4250-M	1.410	35.81	0.148	3.76	4.250	107.95	2.036	51.72	1.728	43.89	83.30	370.55	37.63	6.59
C1410-148-4500-M	1.410	35.81	0.148	3.76	4.500	114.30	2.146	54.52	1.817	46.16	83.30	370.55	35.39	6.19
C1410-148-4750-M	1.410	35.81	0.148	3.76	4.750	120.65	2.256	57.31	1.907	48.44	83.30	370.55	33.41	5.85
C1410-148-5000-M	1.410	35.81	0.148	3.76	5.000	127.00	2.366	60.11	1.997	50.72	83.30	370.55	31.63	5.54
C1410-148-5250-M	1.410	35.81	0.148	3.76	5.250	133.35	2.476	62.90	2.086	52.99	83.30	370.55	30.03	5.26

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1410-125-3750-S	1.796	45.62	39.82	177.13	20.38	3.57
C1410-125-4000-S	1.906	48.42	39.82	177.13	19.02	3.33
C1410-125-4250-S	2.017	51.23	39.82	177.13	17.83	3.12
C1410-125-4500-S	2.127	54.03	39.82	177.13	16.78	2.94
C1410-125-4750-S	2.238	56.84	39.82	177.13	15.85	2.77
C1410-125-5000-S	2.348	59.64	39.82	177.13	15.02	2.63
C1410-125-5250-S	2.458	62.45	39.82	177.13	14.27	2.50
C1410-125-5500-S	2.569	65.25	39.82	177.13	13.59	2.38
C1410-125-5750-S	2.679	68.05	39.82	177.13	12.97	2.27
C1410-125-6000-S	2.790	70.86	39.82	177.13	12.40	2.17
C1410-125-6250-S	2.900	73.66	39.82	177.13	11.89	2.08
C1410-125-6500-S	3.011	76.47	39.82	177.13	11.41	2.00
C1410-125-6750-S	3.121	79.27	39.82	177.13	10.97	1.92
C1410-125-7000-S	3.231	82.08	39.82	177.13	10.57	1.85
C1410-125-7500-S	3.452	87.69	39.82	177.13	9.84	1.72
C1410-125-8000-S*	3.743	95.07	39.82	177.13	9.35	1.64
C1410-125-8500-S*	3.964	100.68	39.82	177.13	8.78	1.54
C1410-125-9000-S*	4.185	106.29	39.82	177.13	8.27	1.45
C1410-125-9500-S*	4.405	111.90	39.82	177.13	7.82	1.37
C1410-135-2250-S	1.209	30.71	48.94	217.70	47.02	8.23
C1410-135-2375-S	1.268	32.22	48.94	217.70	44.23	7.74
C1410-135-2500-S	1.328	33.72	48.94	217.70	41.75	7.31
C1410-135-2625-S	1.387	35.23	48.94	217.70	39.53	6.92
C1410-135-2750-S	1.446	36.74	48.94	217.70	37.54	6.57
C1410-135-2875-S	1.506	38.24	48.94	217.70	35.74	6.25
C1410-135-3000-S	1.565	39.75	48.94	217.70	34.10	5.97
C1410-135-3250-S	1.683	42.76	48.94	217.70	31.24	5.47
C1410-135-3500-S	1.802	45.77	48.94	217.70	28.82	5.04
C1410-135-3750-S	1.921	48.78	48.94	217.70	26.75	4.68
C1410-135-4000-S	2.039	51.80	48.94	217.70	24.96	4.37
C1410-135-4250-S	2.158	54.81	48.94	217.70	23.39	4.09
C1410-135-4500-S	2.276	57.82	48.94	217.70	22.01	3.85
C1410-135-4750-S	2.395	60.83	48.94	217.70	20.78	3.64
C1410-135-5000-S	2.514	63.84	48.94	217.70	19.68	3.44
C1410-135-5250-S	2.632	66.86	48.94	217.70	18.70	3.27
C1410-135-5500-S	2.751	69.87	48.94	217.70	17.80	3.12
C1410-135-5750-S	2.869	72.88	48.94	217.70	16.99	2.97
C1410-135-6000-S	2.988	75.89	48.94	217.70	16.25	2.84
C1410-135-6250-S	3.106	78.90	48.94	217.70	15.57	2.72
C1410-135-6500-S	3.225	81.91	48.94	217.70	14.94	2.62
C1410-135-6750-S*	3.415	86.73	48.94	217.70	14.67	2.57
C1410-135-7000-S*	3.533	89.74	48.94	217.70	14.12	2.47
C1410-135-7500-S*	3.770	95.77	48.94	217.70	13.12	2.30
C1410-135-8000-S*	4.007	101.79	48.94	217.70	12.26	2.15
C1410-135-8500-S*	4.245	107.81	48.94	217.70	11.50	2.01
C1410-135-9000-S*	4.482	113.84	48.94	217.70	10.83	1.90
C1410-135-9500-S*	4.719	119.86	48.94	217.70	10.24	1.79
C1410-148-2125-S	1.241	31.53	62.52	278.09	70.74	12.38
C1410-148-2250-S	1.306	33.17	62.52	278.09	66.21	11.59
C1410-148-2375-S	1.370	34.81	62.52	278.09	62.23	10.89
C1410-148-2500-S	1.435	36.45	62.52	278.09	58.70	10.27
C1410-148-2625-S	1.500	38.09	62.52	278.09	55.55	9.72
C1410-148-2750-S	1.564	39.73	62.52	278.09	52.72	9.23
C1410-148-2875-S	1.629	41.37	62.52	278.09	50.17	8.78
C1410-148-3000-S	1.693	43.01	62.52	278.09	47.85	8.37
C1410-148-3250-S	1.823	46.29	62.52	278.09	43.80	7.66
C1410-148-3500-S	1.952	49.58	62.52	278.09	40.38	7.07
C1410-148-3750-S	2.081	52.86	62.52	278.09	37.46	6.56
C1410-148-4000-S	2.210	56.14	62.52	278.09	34.93	6.11
C1410-148-4250-S	2.339	59.42	62.52	278.09	32.72	5.73
C1410-148-4500-S	2.469	62.70	62.52	278.09	30.78	5.39
C1410-148-4750-S	2.598	65.98	62.52	278.09	29.05	5.08
C1410-148-5000-S	2.727	69.27	62.52	278.09	27.50	4.81
C1410-148-5250-S	2.856	72.55	62.52	278.09	26.12	4.57

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1410-148-5500-M	1.410	35.81	0.148	3.76	5.500	139.70	2.586	65.70	2.176	55.27	83.30	370.55	28.59	5.00
C1410-148-5750-M	1.410	35.81	0.148	3.76	5.750	146.05	2.696	68.49	2.265	57.54	83.30	370.55	27.28	4.77
C1410-148-6000-M	1.410	35.81	0.148	3.76	6.000	152.40	2.806	71.28	2.355	59.82	83.30	370.55	26.09	4.56
C1410-148-6250-M	1.410	35.81	0.148	3.76	6.250	158.75	2.917	74.08	2.445	62.09	83.30	370.55	24.99	4.37
C1410-148-6500-M	1.410	35.81	0.148	3.76	6.500	165.10	3.027	76.87	2.534	64.37	83.30	370.55	23.98	4.20
C1410-148-6750-M	1.410	35.81	0.148	3.76	6.750	171.45	3.137	79.67	2.624	66.65	83.30	370.55	23.05	4.03
C1410-148-7000-M*	1.410	35.81	0.148	3.76	7.000	177.80	3.329	84.57	2.816	71.52	83.30	370.55	22.70	3.97
C1410-148-7500-M*	1.410	35.81	0.148	3.76	7.500	190.50	3.550	90.16	2.995	76.07	83.30	370.55	21.09	3.69
C1410-148-8000-M*	1.410	35.81	0.148	3.76	8.000	203.20	3.770	95.75	3.174	80.63	83.30	370.55	19.69	3.45
C1410-148-8500-M*	1.410	35.81	0.148	3.76	8.500	215.90	3.990	101.34	3.353	85.18	83.30	370.55	18.47	3.23
C1410-148-9000-M*	1.410	35.81	0.148	3.76	9.000	228.60	4.210	106.93	3.533	89.73	83.30	370.55	17.39	3.04
C1410-148-9500-M*	1.410	35.81	0.148	3.76	9.500	241.30	4.430	112.52	3.712	94.28	83.30	370.55	16.43	2.88
C1410-162-2000-M	1.410	35.81	0.162	4.12	2.000	50.80	1.140	28.95	1.037	26.35	106.93	475.67	124.30	21.75
C1410-162-2125-M	1.410	35.81	0.162	4.12	2.125	53.98	1.201	30.49	1.089	27.67	106.93	475.67	115.67	20.24
C1410-162-2250-M	1.410	35.81	0.162	4.12	2.250	57.15	1.261	32.04	1.141	28.99	106.93	475.67	108.16	18.93
C1410-162-2375-M	1.410	35.81	0.162	4.12	2.375	60.33	1.322	33.58	1.193	30.31	106.93	475.67	101.57	17.77
C1410-162-2500-M	1.410	35.81	0.162	4.12	2.500	63.50	1.383	35.13	1.245	31.63	106.93	475.67	95.74	16.75
C1410-162-2625-M	1.410	35.81	0.162	4.12	2.625	66.68	1.444	36.67	1.297	32.95	106.93	475.67	90.54	15.84
C1410-162-2750-M	1.410	35.81	0.162	4.12	2.750	69.85	1.505	38.22	1.349	34.27	106.93	475.67	85.87	15.03
C1410-162-2875-M	1.410	35.81	0.162	4.12	2.875	73.03	1.566	39.76	1.401	35.59	106.93	475.67	81.66	14.29
C1410-162-3000-M	1.410	35.81	0.162	4.12	3.000	76.20	1.626	41.31	1.453	36.91	106.93	475.67	77.85	13.62
C1410-162-3250-M	1.410	35.81	0.162	4.12	3.250	82.55	1.748	44.40	1.557	39.55	106.93	475.67	71.20	12.46
C1410-162-3500-M	1.410	35.81	0.162	4.12	3.500	88.90	1.870	47.49	1.661	42.19	106.93	475.67	65.59	11.48
C1410-162-3750-M	1.410	35.81	0.162	4.12	3.750	95.25	1.991	50.58	1.765	44.83	106.93	475.67	60.81	10.64
C1410-162-4000-M	1.410	35.81	0.162	4.12	4.000	101.60	2.113	53.67	1.869	47.47	106.93	475.67	56.67	9.92
C1410-162-4250-M	1.410	35.81	0.162	4.12	4.250	107.95	2.235	56.76	1.973	50.12	106.93	475.67	53.06	9.29
C1410-162-4500-M	1.410	35.81	0.162	4.12	4.500	114.30	2.356	59.85	2.077	52.76	106.93	475.67	49.89	8.73
C1410-162-4750-M	1.410	35.81	0.162	4.12	4.750	120.65	2.478	62.94	2.181	55.40	106.93	475.67	47.07	8.24
C1410-162-5000-M	1.410	35.81	0.162	4.12	5.000	127.00	2.600	66.03	2.285	58.04	106.93	475.67	44.55	7.80
C1410-162-5250-M	1.410	35.81	0.162	4.12	5.250	133.35	2.721	69.12	2.389	60.68	106.93	475.67	42.29	7.40
C1410-162-5500-M	1.410	35.81	0.162	4.12	5.500	139.70	2.843	72.21	2.493	63.32	106.93	475.67	40.25	7.04
C1410-162-5750-M	1.410	35.81	0.162	4.12	5.750	146.05	2.965	75.30	2.597	65.96	106.93	475.67	38.39	6.72
C1410-162-6000-M	1.410	35.81	0.162	4.12	6.000	152.40	3.086	78.40	2.701	68.60	106.93	475.67	36.70	6.42
C1410-162-6250-M	1.410	35.81	0.162	4.12	6.250	158.75	3.208	81.49	2.805	71.24	106.93	475.67	35.15	6.15
C1410-162-6500-M	1.410	35.81	0.162	4.12	6.500	165.10	3.330	84.58	2.909	73.88	106.93	475.67	33.73	5.90
C1410-162-6750-M	1.410	35.81	0.162	4.12	6.750	171.45	3.451	87.67	3.013	76.53	106.93	475.67	32.42	5.67
C1410-162-7000-M	1.410	35.81	0.162	4.12	7.000	177.80	3.573	90.76	3.117	79.17	106.93	475.67	31.21	5.46
C1410-162-7500-M	1.410	35.81	0.162	4.12	7.500	190.50	3.816	96.94	3.325	84.45	106.93	475.67	29.03	5.08
C1410-162-8000-M	1.410	35.81	0.162	4.12	8.000	203.20	4.060	103.12	3.533	89.73	106.93	475.67	27.14	4.75
C1410-162-8500-M	1.410	35.81	0.162	4.12	8.500	215.90	4.303	109.30	3.741	95.01	106.93	475.67	25.48	4.46
C1410-162-9000-M	1.410	35.81	0.162	4.12	9.000	228.60	4.546	115.48	3.949	100.29	106.93	475.67	24.01	4.20
C1410-162-9500-M	1.410	35.81	0.162	4.12	9.500	241.30	4.790	121.66	4.157	105.58	106.93	475.67	22.70	3.97
C1410-177-2000-M	1.410	35.81	0.177	4.50	2.000	50.80	1.235	31.38	1.155	29.35	136.47	607.06	178.48	31.23
C1410-177-2125-M	1.410	35.81	0.177	4.50	2.125	53.98	1.302	33.08	1.215	30.86	136.47	607.06	165.88	29.03
C1410-177-2250-M	1.410	35.81	0.177	4.50	2.250	57.15	1.369	34.78	1.274	32.37	136.47	607.06	154.95	27.12
C1410-177-2375-M	1.410	35.81	0.177	4.50	2.375	60.33	1.436	36.48	1.334	33.88	136.47	607.06	145.36	25.44
C1410-177-2500-M	1.410	35.81	0.177	4.50	2.500	63.50	1.503	38.18	1.394	35.40	136.47	607.06	136.90	23.96
C1410-177-2625-M	1.410	35.81	0.177	4.50	2.625	66.68	1.570	39.88	1.453	36.91	136.47	607.06	129.36	22.64
C1410-177-2750-M	1.410	35.81	0.177	4.50	2.750	69.85	1.637	41.58	1.513	38.42	136.47	607.06	122.61	21.46
C1410-177-2875-M	1.410	35.81	0.177	4.50	2.875	73.03	1.704	43.28	1.572	39.93	136.47	607.06	116.53	20.39
C1410-177-3000-M	1.410	35.81	0.177	4.50	3.000	76.20	1.771	44.98	1.632	41.44	136.47	607.06	111.03	19.43
C1410-177-3250-M	1.410	35.81	0.177	4.50	3.250	82.55	1.905	48.38	1.751	44.47	136.47	607.06	101.44	17.75
C1410-177-3500-M	1.410	35.81	0.177	4.50	3.500	88.90	2.039	51.78	1.870	47.49	136.47	607.06	93.38	16.34
C1410-177-3750-M	1.410	35.81	0.177	4.50	3.750	95.25	2.172	55.18	1.989	50.51	136.47	607.06	86.51	15.14
C1410-177-4000-M	1.410	35.81	0.177	4.50	4.000	101.60	2.306	58.58	2.108	53.54	136.47	607.06	80.58	14.10
C1410-177-4250-M	1.410	35.81	0.177	4.50	4.250	107.95	2.440	61.98	2.227	56.56	136.47	607.06	75.41	13.20
C1410-177-4500-M	1.410	35.81	0.177	4.50	4.500	114.30	2.574	65.38	2.346	59.58	136.47	607.06	70.86	12.40
C1410-177-4750-M	1.410	35.81	0.177	4.50	4.750	120.65	2.708	68.78	2.465	62.61	136.47	607.06	66.83	11.70
C1410-177-5000-M	1.410	35.81	0.177	4.50	5.000	127.00	2.842	72.18	2.584	65.63	136.47	607.06	63.23	11.07
C1410-177-5250-M	1.410	35.81	0.177	4.50	5.250	133.35	2.976	75.58	2.703	68.66	136.47	607.06	60.00	10.50
C1410-177-5500-M	1.410	35.81	0.177	4.50	5.500	139.70	3.109	78.98	2.822	71.68	136.47	607.06	57.09	9.99
C1410-177-5750-M	1.410	35.81	0.177	4.50	5.750	146.05	3.243	82.38	2.941	74.70	136.47	607.06	54.44	9.53
C1410-177-6000-M	1.410	35.81	0.177	4.50	6.000	152.40	3.377	85.78	3.060	77.73	136.47	607.06	52.03	9.11
C1410-177-6250-M	1.410	35.81	0.177	4.50	6.250	158.75	3.511	89.18	3.179	80.75	136.47	607.06	49.83	8.72

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1410-148-5500-S	2.985	75.83	62.52	278.09	24.86	4.35
C1410-148-5750-S	3.115	79.11	62.52	278.09	23.72	4.15
C1410-148-6000-S	3.244	82.39	62.52	278.09	22.68	3.97
C1410-148-6250-S	3.373	85.67	62.52	278.09	21.73	3.80
C1410-148-6500-S	3.502	88.96	62.52	278.09	20.85	3.65
C1410-148-6750-S	3.631	92.24	62.52	278.09	20.05	3.51
C1410-148-7000-S*	3.832	97.34	62.52	278.09	19.74	3.45
C1410-148-7500-S*	4.091	103.90	62.52	278.09	18.34	3.21
C1410-148-8000-S*	4.349	110.46	62.52	278.09	17.12	3.00
C1410-148-8500-S*	4.607	117.03	62.52	278.09	16.06	2.81
C1410-148-9000-S*	4.866	123.59	62.52	278.09	15.12	2.65
C1410-148-9500-S*	5.124	130.15	62.52	278.09	14.29	2.50
C1410-162-2000-S	1.265	32.14	79.40	353.17	108.08	18.91
C1410-162-2125-S	1.336	33.93	79.40	353.17	100.58	17.60
C1410-162-2250-S	1.406	35.71	79.40	353.17	94.06	16.46
C1410-162-2375-S	1.476	37.49	79.40	353.17	88.32	15.46
C1410-162-2500-S	1.546	39.28	79.40	353.17	83.25	14.57
C1410-162-2625-S	1.617	41.06	79.40	353.17	78.73	13.78
C1410-162-2750-S	1.687	42.84	79.40	353.17	74.67	13.07
C1410-162-2875-S	1.757	44.63	79.40	353.17	71.01	12.43
C1410-162-3000-S	1.827	46.41	79.40	353.17	67.69	11.85
C1410-162-3250-S	1.968	49.98	79.40	353.17	61.91	10.83
C1410-162-3500-S	2.108	53.54	79.40	353.17	57.04	9.98
C1410-162-3750-S	2.248	57.11	79.40	353.17	52.88	9.25
C1410-162-4000-S	2.389	60.68	79.40	353.17	49.28	8.62
C1410-162-4250-S	2.529	64.24	79.40	353.17	46.14	8.07
C1410-162-4500-S	2.670	67.81	79.40	353.17	43.38	7.59
C1410-162-4750-S	2.810	71.38	79.40	353.17	40.93	7.16
C1410-162-5000-S	2.951	74.94	79.40	353.17	38.74	6.78
C1410-162-5250-S	3.091	78.51	79.40	353.17	36.77	6.44
C1410-162-5500-S	3.231	82.08	79.40	353.17	35.00	6.12
C1410-162-5750-S	3.372	85.65	79.40	353.17	33.39	5.84
C1410-162-6000-S	3.512	89.21	79.40	353.17	31.92	5.59
C1410-162-6250-S	3.653	92.78	79.40	353.17	30.57	5.35
C1410-162-6500-S	3.793	96.35	79.40	353.17	29.33	5.13
C1410-162-6750-S	3.934	99.91	79.40	353.17	28.19	4.93
C1410-162-7000-S	4.074	103.48	79.40	353.17	27.13	4.75
C1410-162-7500-S	4.355	110.61	79.40	353.17	25.24	4.42
C1410-162-8000-S	4.636	117.75	79.40	353.17	23.60	4.13
C1410-162-8500-S	4.917	124.88	79.40	353.17	22.16	3.88
C1410-162-9000-S	5.197	132.01	79.40	353.17	20.88	3.65
C1410-162-9500-S	5.478	139.15	79.40	353.17	19.74	3.45
C1410-177-2000-S	1.355	34.41	100.16	445.55	155.20	27.16
C1410-177-2125-S	1.431	36.34	100.16	445.55	144.25	25.24
C1410-177-2250-S	1.507	38.27	100.16	445.55	134.74	23.58
C1410-177-2375-S	1.583	40.20	100.16	445.55	126.40	22.12
C1410-177-2500-S	1.659	42.13	100.16	445.55	119.04	20.83
C1410-177-2625-S	1.735	44.06	100.16	445.55	112.49	19.69
C1410-177-2750-S	1.811	45.99	100.16	445.55	106.62	18.66
C1410-177-2875-S	1.887	47.92	100.16	445.55	101.33	17.73
C1410-177-3000-S	1.963	49.85	100.16	445.55	96.55	16.90
C1410-177-3250-S	2.115	53.71	100.16	445.55	88.21	15.44
C1410-177-3500-S	2.266	57.57	100.16	445.55	81.20	14.21
C1410-177-3750-S	2.418	61.43	100.16	445.55	75.22	13.16
C1410-177-4000-S	2.570	65.29	100.16	445.55	70.07	12.26
C1410-177-4250-S	2.722	69.15	100.16	445.55	65.57	11.47
C1410-177-4500-S	2.874	73.01	100.16	445.55	61.62	10.78
C1410-177-4750-S	3.026	76.87	100.16	445.55	58.11	10.17
C1410-177-5000-S	3.178	80.73	100.16	445.55	54.99	9.62
C1410-177-5250-S	3.330	84.59	100.16	445.55	52.18	9.13
C1410-177-5500-S	3.482	88.45	100.16	445.55	49.64	8.69
C1410-177-5750-S	3.634	92.31	100.16	445.55	47.34	8.29
C1410-177-6000-S	3.786	96.17	100.16	445.55	45.25	7.92
C1410-177-6250-S	3.938	100.03	100.16	445.55	43.33	7.58

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1410-177-6500-M	1.410	35.81	0.177	4.50	6.500	165.10	3.645	92.58	3.298	83.77	136.47	607.06	47.80	8.37
C1410-177-6750-M	1.410	35.81	0.177	4.50	6.750	171.45	3.779	95.98	3.417	86.80	136.47	607.06	45.93	8.04
C1410-177-7000-M	1.410	35.81	0.177	4.50	7.000	177.80	3.913	99.38	3.536	89.82	136.47	607.06	44.20	7.74
C1410-177-7500-M	1.410	35.81	0.177	4.50	7.500	190.50	4.180	106.18	3.774	95.87	136.47	607.06	41.11	7.19
C1410-177-8000-M	1.410	35.81	0.177	4.50	8.000	203.20	4.448	112.98	4.012	101.92	136.47	607.06	38.42	6.72
C1410-177-8500-M	1.410	35.81	0.177	4.50	8.500	215.90	4.716	119.78	4.250	107.96	136.47	607.06	36.06	6.31
C1410-177-9000-M	1.410	35.81	0.177	4.50	9.000	228.60	4.984	126.58	4.489	114.01	136.47	607.06	33.98	5.95
C1410-177-9500-M	1.410	35.81	0.177	4.50	9.500	241.30	5.251	133.38	4.727	120.06	136.47	607.06	32.12	5.62
C1410-192-2000-M	1.410	35.81	0.192	4.88	2.000	50.80	1.325	33.65	1.266	32.15	170.61	758.91	252.66	44.21
C1410-192-2125-M	1.410	35.81	0.192	4.88	2.125	53.98	1.398	35.50	1.333	33.85	170.61	758.91	234.52	41.04
C1410-192-2250-M	1.410	35.81	0.192	4.88	2.250	57.15	1.470	37.34	1.399	35.54	170.61	758.91	218.81	38.29
C1410-192-2375-M	1.410	35.81	0.192	4.88	2.375	60.33	1.543	39.19	1.466	37.24	170.61	758.91	205.07	35.89
C1410-192-2500-M	1.410	35.81	0.192	4.88	2.500	63.50	1.616	41.04	1.533	38.93	170.61	758.91	192.95	33.77
C1410-192-2625-M	1.410	35.81	0.192	4.88	2.625	66.68	1.689	42.89	1.599	40.63	170.61	758.91	182.19	31.88
C1410-192-2750-M	1.410	35.81	0.192	4.88	2.750	69.85	1.761	44.74	1.666	42.32	170.61	758.91	172.57	30.20
C1410-192-2875-M	1.410	35.81	0.192	4.88	2.875	73.03	1.834	46.59	1.733	44.02	170.61	758.91	163.91	28.68
C1410-192-3000-M	1.410	35.81	0.192	4.88	3.000	76.20	1.907	48.43	1.800	45.71	170.61	758.91	156.07	27.31
C1410-192-3250-M	1.410	35.81	0.192	4.88	3.250	82.55	2.052	52.13	1.933	49.10	170.61	758.91	142.46	24.93
C1410-192-3500-M	1.410	35.81	0.192	4.88	3.500	88.90	2.198	55.83	2.067	52.49	170.61	758.91	131.03	22.93
C1410-192-3750-M	1.410	35.81	0.192	4.88	3.750	95.25	2.343	59.52	2.200	55.88	170.61	758.91	121.30	21.23
C1410-192-4000-M	1.410	35.81	0.192	4.88	4.000	101.60	2.489	63.22	2.333	59.27	170.61	758.91	112.91	19.76
C1410-192-4250-M	1.410	35.81	0.192	4.88	4.250	107.95	2.635	66.92	2.467	62.66	170.61	758.91	105.61	18.48
C1410-192-4500-M	1.410	35.81	0.192	4.88	4.500	114.30	2.780	70.61	2.600	66.05	170.61	758.91	99.20	17.36
C1410-192-4750-M	1.410	35.81	0.192	4.88	4.750	120.65	2.926	74.31	2.734	69.44	170.61	758.91	93.52	16.37
C1410-192-5000-M	1.410	35.81	0.192	4.88	5.000	127.00	3.071	78.01	2.867	72.83	170.61	758.91	88.45	15.48
C1410-192-5250-M	1.410	35.81	0.192	4.88	5.250	133.35	3.217	81.70	3.001	76.22	170.61	758.91	83.91	14.68
C1410-192-5500-M	1.410	35.81	0.192	4.88	5.500	139.70	3.362	85.40	3.134	79.61	170.61	758.91	79.81	13.97
C1410-192-5750-M	1.410	35.81	0.192	4.88	5.750	146.05	3.508	89.10	3.268	83.00	170.61	758.91	76.09	13.32
C1410-192-6000-M	1.410	35.81	0.192	4.88	6.000	152.40	3.653	92.79	3.401	86.39	170.61	758.91	72.70	12.72
C1410-192-6250-M	1.410	35.81	0.192	4.88	6.250	158.75	3.799	96.49	3.535	89.78	170.61	758.91	69.60	12.18
C1410-192-6500-M	1.410	35.81	0.192	4.88	6.500	165.10	3.944	100.19	3.668	93.17	170.61	758.91	66.76	11.68
C1410-192-6750-M	1.410	35.81	0.192	4.88	6.750	171.45	4.090	103.88	3.801	96.56	170.61	758.91	64.14	11.22
C1410-192-7000-M	1.410	35.81	0.192	4.88	7.000	177.80	4.235	107.58	3.935	99.95	170.61	758.91	61.71	10.80
C1410-192-7500-M	1.410	35.81	0.192	4.88	7.500	190.50	4.526	114.97	4.202	106.73	170.61	758.91	57.38	10.04
C1410-192-8000-M	1.410	35.81	0.192	4.88	8.000	203.20	4.818	122.37	4.469	113.51	170.61	758.91	53.61	9.38
C1410-192-8500-M	1.410	35.81	0.192	4.88	8.500	215.90	5.109	129.76	4.736	120.29	170.61	758.91	50.31	8.80
C1410-192-9000-M	1.410	35.81	0.192	4.88	9.000	228.60	5.400	137.15	5.003	127.07	170.61	758.91	47.39	8.29
C1410-192-9500-M	1.410	35.81	0.192	4.88	9.500	241.30	5.691	144.55	5.269	133.84	170.61	758.91	44.79	7.84
C1410-207-2000-M	1.410	35.81	0.207	5.26	2.000	50.80	1.407	35.73	1.367	34.73	209.56	932.17	353.31	61.83
C1410-207-2125-M	1.410	35.81	0.207	5.26	2.125	53.98	1.485	37.72	1.441	36.60	209.56	932.17	327.50	57.31
C1410-207-2250-M	1.410	35.81	0.207	5.26	2.250	57.15	1.563	39.71	1.514	38.46	209.56	932.17	305.20	53.41
C1410-207-2375-M	1.410	35.81	0.207	5.26	2.375	60.33	1.642	41.70	1.588	40.33	209.56	932.17	285.75	50.01
C1410-207-2500-M	1.410	35.81	0.207	5.26	2.500	63.50	1.720	43.68	1.661	42.20	209.56	932.17	268.62	47.01
C1410-207-2625-M	1.410	35.81	0.207	5.26	2.625	66.68	1.798	45.67	1.735	44.06	209.56	932.17	253.44	44.35
C1410-207-2750-M	1.410	35.81	0.207	5.26	2.750	69.85	1.876	47.66	1.808	45.93	209.56	932.17	239.88	41.98
C1410-207-2875-M	1.410	35.81	0.207	5.26	2.875	73.03	1.955	49.65	1.882	47.80	209.56	932.17	227.69	39.85
C1410-207-3000-M	1.410	35.81	0.207	5.26	3.000	76.20	2.033	51.64	1.955	49.67	209.56	932.17	216.69	37.92
C1410-207-3250-M	1.410	35.81	0.207	5.26	3.250	82.55	2.189	55.61	2.102	53.40	209.56	932.17	197.58	34.58
C1410-207-3500-M	1.410	35.81	0.207	5.26	3.500	88.90	2.346	59.59	2.249	57.13	209.56	932.17	181.58	31.78
C1410-207-3750-M	1.410	35.81	0.207	5.26	3.750	95.25	2.502	63.56	2.396	60.87	209.56	932.17	167.97	29.39
C1410-207-4000-M	1.410	35.81	0.207	5.26	4.000	101.60	2.659	67.54	2.543	64.60	209.56	932.17	156.26	27.35
C1410-207-4250-M	1.410	35.81	0.207	5.26	4.250	107.95	2.815	71.51	2.690	68.34	209.56	932.17	146.08	25.56
C1410-207-4500-M	1.410	35.81	0.207	5.26	4.500	114.30	2.972	75.49	2.837	72.07	209.56	932.17	137.14	24.00
C1410-207-4750-M	1.410	35.81	0.207	5.26	4.750	120.65	3.128	79.46	2.984	75.80	209.56	932.17	129.23	22.62
C1410-207-5000-M	1.410	35.81	0.207	5.26	5.000	127.00	3.285	83.44	3.131	79.54	209.56	932.17	122.19	21.38
C1410-207-5250-M	1.410	35.81	0.207	5.26	5.250	133.35	3.441	87.41	3.278	83.27	209.56	932.17	115.87	20.28
C1410-207-5500-M	1.410	35.81	0.207	5.26	5.500	139.70	3.598	91.39	3.425	87.00	209.56	932.17	110.18	19.28
C1410-207-5750-M	1.410	35.81	0.207	5.26	5.750	146.05	3.754	95.36	3.572	90.74	209.56	932.17	105.01	18.38
C1410-207-6000-M	1.410	35.81	0.207	5.26	6.000	152.40	3.911	99.34	3.719	94.47	209.56	932.17	100.31	17.55
C1410-207-6250-M	1.410	35.81	0.207	5.26	6.250	158.75	4.067	103.31	3.866	98.21	209.56	932.17	96.02	16.80
C1410-207-6500-M	1.410	35.81	0.207	5.26	6.500	165.10	4.224	107.29	4.013	101.94	209.56	932.17	92.07	16.11
C1410-207-6750-M	1.410	35.81	0.207	5.26	6.750	171.45	4.380	111.26	4.160	105.67	209.56	932.17	88.44	15.48
C1410-207-7000-M	1.410	35.81	0.207	5.26	7.000	177.80	4.537	115.24	4.307	109.41	209.56	932.17	85.08	14.89
C1410-207-7500-M	1.410	35.81	0.207	5.26	7.500	190.50	4.850	123.19	4.601	116.88	209.56	932.17	79.08	13.84

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1410-177-6500-S	4.090	103.89	100.16	445.55	41.57	7.27
C1410-177-6750-S	4.242	107.75	100.16	445.55	39.94	6.99
C1410-177-7000-S	4.394	111.61	100.16	445.55	38.44	6.73
C1410-177-7500-S	4.698	119.33	100.16	445.55	35.75	6.26
C1410-177-8000-S	5.002	127.05	100.16	445.55	33.41	5.85
C1410-177-8500-S	5.306	134.77	100.16	445.55	31.36	5.49
C1410-177-9000-S	5.610	142.49	100.16	445.55	29.55	5.17
C1410-177-9500-S	5.914	150.21	100.16	445.55	27.93	4.89
C1410-192-2000-S	1.437	36.49	123.79	550.63	219.70	38.45
C1410-192-2125-S	1.518	38.56	123.79	550.63	203.93	35.69
C1410-192-2250-S	1.599	40.62	123.79	550.63	190.27	33.30
C1410-192-2375-S	1.681	42.69	123.79	550.63	178.32	31.21
C1410-192-2500-S	1.762	44.76	123.79	550.63	167.79	29.36
C1410-192-2625-S	1.844	46.83	123.79	550.63	158.43	27.72
C1410-192-2750-S	1.925	48.90	123.79	550.63	150.06	26.26
C1410-192-2875-S	2.006	50.96	123.79	550.63	142.53	24.94
C1410-192-3000-S	2.088	53.03	123.79	550.63	135.72	23.75
C1410-192-3250-S	2.251	57.17	123.79	550.63	123.88	21.68
C1410-192-3500-S	2.414	61.30	123.79	550.63	113.94	19.94
C1410-192-3750-S	2.576	65.44	123.79	550.63	105.48	18.46
C1410-192-4000-S	2.739	69.58	123.79	550.63	98.18	17.18
C1410-192-4250-S	2.902	73.71	123.79	550.63	91.84	16.07
C1410-192-4500-S	3.065	77.85	123.79	550.63	86.26	15.09
C1410-192-4750-S	3.228	81.99	123.79	550.63	81.32	14.23
C1410-192-5000-S	3.391	86.12	123.79	550.63	76.91	13.46
C1410-192-5250-S	3.553	90.26	123.79	550.63	72.96	12.77
C1410-192-5500-S	3.716	94.39	123.79	550.63	69.40	12.14
C1410-192-5750-S	3.879	98.53	123.79	550.63	66.16	11.58
C1410-192-6000-S	4.042	102.67	123.79	550.63	63.22	11.06
C1410-192-6250-S	4.205	106.80	123.79	550.63	60.52	10.59
C1410-192-6500-S	4.368	110.94	123.79	550.63	58.05	10.16
C1410-192-6750-S	4.530	115.07	123.79	550.63	55.77	9.76
C1410-192-7000-S	4.693	119.21	123.79	550.63	53.66	9.39
C1410-192-7500-S	5.019	127.48	123.79	550.63	49.89	8.73
C1410-192-8000-S	5.345	135.75	123.79	550.63	46.62	8.16
C1410-192-8500-S	5.670	144.03	123.79	550.63	43.75	7.66
C1410-192-9000-S	5.996	152.30	123.79	550.63	41.21	7.21
C1410-192-9500-S	6.322	160.57	123.79	550.63	38.95	6.82
C1410-207-2000-S	1.511	38.37	150.32	668.66	307.23	53.76
C1410-207-2125-S	1.597	40.57	150.32	668.66	284.78	49.84
C1410-207-2250-S	1.684	42.76	150.32	668.66	265.39	46.44
C1410-207-2375-S	1.770	44.96	150.32	668.66	248.48	43.48
C1410-207-2500-S	1.856	47.15	150.32	668.66	233.59	40.88
C1410-207-2625-S	1.943	49.35	150.32	668.66	220.38	38.57
C1410-207-2750-S	2.029	51.55	150.32	668.66	208.59	36.50
C1410-207-2875-S	2.116	53.74	150.32	668.66	197.99	34.65
C1410-207-3000-S	2.202	55.94	150.32	668.66	188.42	32.97
C1410-207-3250-S	2.375	60.33	150.32	668.66	171.81	30.07
C1410-207-3500-S	2.548	64.72	150.32	668.66	157.89	27.63
C1410-207-3750-S	2.721	69.11	150.32	668.66	146.06	25.56
C1410-207-4000-S	2.894	73.50	150.32	668.66	135.88	23.78
C1410-207-4250-S	3.067	77.89	150.32	668.66	127.02	22.23
C1410-207-4500-S	3.239	82.28	150.32	668.66	119.25	20.87
C1410-207-4750-S	3.412	86.67	150.32	668.66	112.38	19.67
C1410-207-5000-S	3.585	91.06	150.32	668.66	106.25	18.59
C1410-207-5250-S	3.758	95.46	150.32	668.66	100.76	17.63
C1410-207-5500-S	3.931	99.85	150.32	668.66	95.80	16.77
C1410-207-5750-S	4.104	104.24	150.32	668.66	91.32	15.98
C1410-207-6000-S	4.277	108.63	150.32	668.66	87.23	15.27
C1410-207-6250-S	4.450	113.02	150.32	668.66	83.49	14.61
C1410-207-6500-S	4.622	117.41	150.32	668.66	80.06	14.01
C1410-207-6750-S	4.795	121.80	150.32	668.66	76.90	13.46
C1410-207-7000-S	4.968	126.19	150.32	668.66	73.98	12.95
C1410-207-7500-S	5.314	134.97	150.32	668.66	68.76	12.03

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1410-207-8000-M	1.410	35.81	0.207	5.26	8.000	203.20	5.163	131.14	4.895	124.34	209.56	932.17	73.87	12.93	**C1410-207-8000-S**	5.660	143.76	150.32	668.66	64.23	11.24
C1410-207-8500-M	1.410	35.81	0.207	5.26	8.500	215.90	5.476	139.09	5.189	131.81	209.56	932.17	69.30	12.13	**C1410-207-8500-S**	6.005	152.54	150.32	668.66	60.26	10.55
C1410-207-9000-M	1.410	35.81	0.207	5.26	9.000	228.60	5.789	147.04	5.483	139.28	209.56	932.17	65.26	11.42	**C1410-207-9000-S**	6.351	161.32	150.32	668.66	56.75	9.93
C1410-207-9500-M	1.410	35.81	0.207	5.26	9.500	241.30	6.102	154.99	5.777	146.75	209.56	932.17	61.67	10.79	**C1410-207-9500-S**	6.697	170.10	150.32	668.66	53.63	9.38
C1410-225-2000-M	1.410	35.81	0.225	5.72	2.000	50.80	1.495	37.98	1.477	37.50	262.92	1169.53	520.95	91.17	**C1410-225-2000-S**	1.589	40.37	186.06	827.62	453.00	79.28
C1410-225-2125-M	1.410	35.81	0.225	5.72	2.125	53.98	1.580	40.12	1.558	39.56	262.92	1169.53	482.07	84.36	**C1410-225-2125-S**	1.681	42.70	186.06	827.62	419.20	73.36
C1410-225-2250-M	1.410	35.81	0.225	5.72	2.250	57.15	1.664	42.26	1.639	41.62	262.92	1169.53	448.60	78.50	**C1410-225-2250-S**	1.773	45.04	186.06	827.62	390.08	68.26
C1410-225-2375-M	1.410	35.81	0.225	5.72	2.375	60.33	1.748	44.40	1.719	43.67	262.92	1169.53	419.47	73.41	**C1410-225-2375-S**	1.865	47.37	186.06	827.62	364.75	63.83
C1410-225-2500-M	1.410	35.81	0.225	5.72	2.500	63.50	1.833	46.55	1.800	45.73	262.92	1169.53	393.89	68.93	**C1410-225-2500-S**	1.957	49.70	186.06	827.62	342.51	59.94
C1410-225-2625-M	1.410	35.81	0.225	5.72	2.625	66.68	1.917	48.69	1.881	47.79	262.92	1169.53	371.25	64.97	**C1410-225-2625-S**	2.049	52.04	186.06	827.62	322.83	56.49
C1410-225-2750-M	1.410	35.81	0.225	5.72	2.750	69.85	2.001	50.83	1.962	49.84	262.92	1169.53	351.08	61.44	**C1410-225-2750-S**	2.141	54.37	186.06	827.62	305.28	53.42
C1410-225-2875-M	1.410	35.81	0.225	5.72	2.875	73.03	2.085	52.97	2.043	51.90	262.92	1169.53	332.98	58.27	**C1410-225-2875-S**	2.232	56.70	186.06	827.62	289.55	50.67
C1410-225-3000-M	1.410	35.81	0.225	5.72	3.000	76.20	2.170	55.11	2.124	53.96	262.92	1169.53	316.66	55.41	**C1410-225-3000-S**	2.324	59.04	186.06	827.62	275.35	48.19
C1410-225-3250-M	1.410	35.81	0.225	5.72	3.250	82.55	2.338	59.39	2.286	58.07	262.92	1169.53	288.38	50.47	**C1410-225-3250-S**	2.508	63.70	186.06	827.62	250.77	43.88
C1410-225-3500-M	1.410	35.81	0.225	5.72	3.500	88.90	2.507	63.68	2.448	62.18	262.92	1169.53	264.75	46.33	**C1410-225-3500-S**	2.692	68.37	186.06	827.62	230.21	40.29
C1410-225-3750-M	1.410	35.81	0.225	5.72	3.750	95.25	2.675	67.96	2.610	66.30	262.92	1169.53	244.69	42.82	**C1410-225-3750-S**	2.876	73.04	186.06	827.62	212.77	37.24
C1410-225-4000-M	1.410	35.81	0.225	5.72	4.000	101.60	2.844	72.24	2.772	70.41	262.92	1169.53	227.46	39.80	**C1410-225-4000-S**	3.059	77.71	186.06	827.62	197.79	34.61
C1410-225-4250-M	1.410	35.81	0.225	5.72	4.250	107.95	3.013	76.52	2.934	74.53	262.92	1169.53	212.49	37.19	**C1410-225-4250-S**	3.243	82.37	186.06	827.62	184.78	32.34
C1410-225-4500-M	1.410	35.81	0.225	5.72	4.500	114.30	3.181	80.80	3.096	78.64	262.92	1169.53	199.38	34.89	**C1410-225-4500-S**	3.427	87.04	186.06	827.62	173.37	30.34
C1410-225-4750-M	1.410	35.81	0.225	5.72	4.750	120.65	3.350	85.09	3.258	82.75	262.92	1169.53	187.79	32.86	**C1410-225-4750-S**	3.611	91.71	186.06	827.62	163.29	28.58
C1410-225-5000-M	1.410	35.81	0.225	5.72	5.000	127.00	3.518	89.37	3.420	86.87	262.92	1169.53	177.47	31.06	**C1410-225-5000-S**	3.794	96.38	186.06	827.62	154.32	27.01
C1410-225-5250-M	1.410	35.81	0.225	5.72	5.250	133.35	3.687	93.65	3.582	90.98	262.92	1169.53	168.22	29.44	**C1410-225-5250-S**	3.978	101.04	186.06	827.62	146.28	25.60
C1410-225-5500-M	1.410	35.81	0.225	5.72	5.500	139.70	3.856	97.93	3.744	95.09	262.92	1169.53	159.90	27.98	**C1410-225-5500-S**	4.162	105.71	186.06	827.62	139.04	24.33
C1410-225-5750-M	1.410	35.81	0.225	5.72	5.750	146.05	4.024	102.22	3.906	99.21	262.92	1169.53	152.35	26.66	**C1410-225-5750-S**	4.346	110.38	186.06	827.62	132.48	23.18
C1410-225-6000-M	1.410	35.81	0.225	5.72	6.000	152.40	4.193	106.50	4.068	103.32	262.92	1169.53	145.49	25.46	**C1410-225-6000-S**	4.529	115.05	186.06	827.62	126.51	22.14
C1410-225-6250-M	1.410	35.81	0.225	5.72	6.250	158.75	4.361	110.78	4.230	107.43	262.92	1169.53	139.22	24.36	**C1410-225-6250-S**	4.713	119.71	186.06	827.62	121.06	21.19
C1410-225-6500-M	1.410	35.81	0.225	5.72	6.500	165.10	4.530	115.06	4.392	111.55	262.92	1169.53	133.47	23.36	**C1410-225-6500-S**	4.897	124.38	186.06	827.62	116.06	20.31
C1410-225-6750-M	1.410	35.81	0.225	5.72	6.750	171.45	4.699	119.35	4.554	115.66	262.92	1169.53	128.17	22.43	**C1410-225-6750-S**	5.081	129.05	186.06	827.62	111.45	19.50
C1410-225-7000-M	1.410	35.81	0.225	5.72	7.000	177.80	4.867	123.63	4.715	119.77	262.92	1169.53	123.28	21.57	**C1410-225-7000-S**	5.264	133.71	186.06	827.62	107.20	18.76
C1410-225-7500-M	1.410	35.81	0.225	5.72	7.500	190.50	5.204	132.19	5.039	128.00	262.92	1169.53	114.54	20.04	**C1410-225-7500-S**	5.632	143.05	186.06	827.62	99.60	17.43
C1410-225-8000-M	1.410	35.81	0.225	5.72	8.000	203.20	5.542	140.76	5.363	136.23	262.92	1169.53	106.95	18.72	**C1410-225-8000-S**	5.999	152.38	186.06	827.62	93.00	16.28
C1410-225-8500-M	1.410	35.81	0.225	5.72	8.500	215.90	5.879	149.32	5.687	144.45	262.92	1169.53	100.31	17.55	**C1410-225-8500-S**	6.367	161.72	186.06	827.62	87.22	15.26
C1410-225-9000-M	1.410	35.81	0.225	5.72	9.000	228.60	6.216	157.89	6.011	152.68	262.92	1169.53	94.44	16.53	**C1410-225-9000-S**	6.734	171.05	186.06	827.62	82.12	14.37
C1410-225-9500-M	1.410	35.81	0.225	5.72	9.500	241.30	6.553	166.45	6.335	160.91	262.92	1169.53	89.22	15.61	**C1410-225-9500-S**	7.102	180.39	186.06	827.62	77.59	13.58
C1410-250-2000-M	1.410	35.81	0.250	6.35	2.000	50.80	1.665	42.29	1.606	40.79	292.69	1301.93	873.67	152.89	**C1410-250-2000-S**	1.680	42.68	242.78	1079.93	759.71	132.95
C1410-250-2125-M	1.410	35.81	0.250	6.35	2.125	53.98	1.760	44.71	1.696	43.08	294.11	1308.28	806.47	141.13	**C1410-250-2125-S**	1.779	45.18	242.78	1079.93	701.28	122.72
C1410-250-2250-M	1.410	35.81	0.250	6.35	2.250	57.15	1.856	47.13	1.786	45.36	295.34	1313.73	748.86	131.05	**C1410-250-2250-S**	1.877	47.68	242.78	1079.93	651.18	113.96
C1410-250-2375-M	1.410	35.81	0.250	6.35	2.375	60.33	1.951	49.55	1.876	47.65	296.40	1318.45	698.94	122.31	**C1410-250-2375-S**	1.976	50.18	242.78	1079.93	607.77	106.36
C1410-250-2500-M	1.410	35.81	0.250	6.35	2.500	63.50	1.967	49.95	1.966	49.94	349.47	1554.54	655.25	114.67	**C1410-250-2500-S**	2.074	52.68	242.78	1079.93	569.79	99.71
C1410-250-2625-M	1.410	35.81	0.250	6.35	2.625	66.68	2.058	52.28	2.056	52.23	349.47	1554.54	616.71	107.92	**C1410-250-2625-S**	2.172	55.18	242.78	1079.93	536.27	93.85
C1410-250-2750-M	1.410	35.81	0.250	6.35	2.750	69.85	2.150	54.61	2.146	54.52	349.47	1554.54	582.45	101.93	**C1410-250-2750-S**	2.271	57.67	242.78	1079.93	506.48	88.63
C1410-250-2875-M	1.410	35.81	0.250	6.35	2.875	73.03	2.242	56.94	2.236	56.80	349.47	1554.54	551.79	96.56	**C1410-250-2875-S**	2.369	60.17	242.78	1079.93	479.82	83.97
C1410-250-3000-M	1.410	35.81	0.250	6.35	3.000	76.20	2.333	59.27	2.326	59.09	349.47	1554.54	524.20	91.74	**C1410-250-3000-S**	2.467	62.67	242.78	1079.93	455.83	79.77
C1410-250-3250-M	1.410	35.81	0.250	6.35	3.250	82.55	2.517	63.92	2.507	63.67	349.47	1554.54	476.55	83.40	**C1410-250-3250-S**	2.664	67.67	242.78	1079.93	414.39	72.52
C1410-250-3500-M	1.410	35.81	0.250	6.35	3.500	88.90	2.700	68.58	2.687	68.24	349.47	1554.54	436.84	76.45	**C1410-250-3500-S**	2.861	72.67	242.78	1079.93	379.86	66.47
C1410-250-3750-M	1.410	35.81	0.250	6.35	3.750	95.25	2.883	73.24	2.867	72.82	349.47	1554.54	403.23	70.57	**C1410-250-3750-S**	3.058	77.66	242.78	1079.93	350.64	61.36
C1410-250-4000-M	1.410	35.81	0.250	6.35	4.000	101.60	3.067	77.89	3.047	77.39	349.47	1554.54	374.43	65.53	**C1410-250-4000-S**	3.254	82.66	242.78	1079.93	325.59	56.98
C1410-250-4250-M	1.410	35.81	0.250	6.35	4.250	107.95	3.250	82.55	3.227	81.97	349.47	1554.54	349.47	61.16	**C1410-250-4250-S**	3.451	87.66	242.78	1079.93	303.89	53.18
C1410-250-4500-M	1.410	35.81	0.250	6.35	4.500	114.30	3.433	87.21	3.407	86.55	349.47	1554.54	327.63	57.33	**C1410-250-4500-S**	3.648	92.65	242.78	1079.93	284.89	49.86
C1410-250-4750-M	1.410	35.81	0.250	6.35	4.750	120.65	3.617	91.86	3.587	91.12	349.47	1554.54	308.36	53.96	**C1410-250-4750-S**	3.845	97.65	242.78	1079.93	268.13	46.92
C1410-250-5000-M	1.410	35.81	0.250	6.35	5.000	127.00	3.800	96.52	3.768	95.70	349.47	1554.54	291.22	50.96	**C1410-250-5000-S**	4.041	102.65	242.78	1079.93	253.24	44.32
C1410-250-5250-M	1.410	35.81	0.250	6.35	5.250	133.35	3.983	101.18	3.948	100.27	349.47	1554.54	275.90	48.28	**C1410-250-5250-S**	4.238	107.65	242.78	1079.93	239.91	41.98
C1410-250-5500-M	1.410	35.81	0.250	6.35	5.500	139.70	4.167	105.83	4.128	104.85	349.47	1554.54	262.10	45.87	**C1410-250-5500-S**	4.435	112.64	242.78	1079.93	227.91	39.88
C1410-250-5750-M	1.410	35.81	0.250	6.35	5.750	146.05	4.350	110.49	4.308	109.42	349.47	1554.54	249.62	43.68	**C1410-250-5750-S**	4.632	117.64	242.78	1079.93	217.06	37.99
C1410-250-6000-M	1.410	35.81	0.250	6.35	6.000	152.40	4.533	115.15	4.488	114.00	349.47	1554.54	238.27	41.70	**C1410-250-6000-S**	4.828	122.64	242.78	1079.93	207.20	36.26
C1410-250-6250-M	1.410	35.81	0.250	6.35	6.250	158.75	4.717	119.80	4.668	118.58	349.47	1554.54	227.91	39.88	**C1410-250-6250-S**	5.025	127.64	242.78	1079.93	198.19	34.68
C1410-250-6500-M	1.410	35.81	0.250	6.35	6.500	165.10	4.900	124.46	4.848	123.15	349.47	1554.54	218.42	38.22	**C1410-250-6500-S**	5.222	132.63	242.78	1079.93	189.93	33.24
C1410-250-6750-M	1.410	35.81	0.250	6.35	6.750	171.45	5.083	129.12	5.029	127.73	349.47	1554.54	209.68	36.69	**C1410-250-6750-S**	5.418	137.63	242.78	1079.93	182.33	31.91
C1410-250-7000-M	1.410	35.81	0.250	6.35	7.000	177.80	5.267	133.77	5.209	132.30	349.47	1554.54	201.62	35.28	**C1410-250-7000-S**	5.615	142.63	242.78	1079.93	175.32	30.68
C1410-250-7500-M	1.410	35.81	0.250	6.35	7.500	190.50	5.633	143.09	5.569	141.45	349.47	1554.54	187.22	32.76	**C1410-250-7500-S**	6.009	152.62	242.78	1079.93	162.80	28.49
C1410-250-8000-M	1.410	35.81	0.250	6.35	8.000	203.20	6.000	152.40	5.929	150.61	349.47	1554.54	174.73	30.58	**C1410-250-8000-S**	6.402	162.62	242.78	1079.93	151.94	26.59
C1410-250-8500-M	1.410	35.81	0.250	6.35	8.500	215.90	6.367	161.71	6.290	159.76	349.47	1554.54	163.81	28.67	**C1410-250-8500-S**	6.796	172.61	242.78	1079.93	142.45	24.93
C1410-250-9000-M	1.410	35.81	0.250	6.35	9.000	228.60	6.733	171.03	6.650	168.91	349.47	1554.54	154.18	26.98	**C1410-250-9000-S**	7.189	182.60	242.78	1079.93	134.07	23.46
C1410-250-9500-M	1.410	35.81	0.250	6.35	9.500	241.30	7.100	180.34	7.010	178.06	349.47	1554.54	145.61	25.48	**C1410-250-9500-S**	7.583	192.60	242.78	1079.93	126.62	22.16

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D13630	1.417	36.00	0.157	4.00	2.106	53.50	0.945	24.00	0.866	22.00	149.69	665.87	130.00	22.75
D13640	1.417	36.00	0.157	4.00	3.130	79.50	1.311	33.30	1.181	30.00	149.69	665.87	82.40	14.42
D13650	1.417	36.00	0.157	4.00	4.724	120.00	1.858	47.20	1.654	42.00	149.69	665.87	53.43	9.35
D13660	1.417	36.00	0.157	4.00	6.693	170.00	2.591	65.80	2.283	58.00	149.69	665.87	36.29	6.35
D13670	1.417	36.00	0.157	4.00	9.843	250.00	3.685	93.60	3.228	82.00	149.69	665.87	24.57	4.30
D13830	1.457	37.00	0.197	5.00	2.008	51.00	1.130	28.70	1.083	27.50	275.58	1225.83	316.63	55.41
D13840	1.457	37.00	0.197	5.00	2.953	75.00	1.583	40.20	1.476	37.50	275.58	1225.83	201.71	35.30
D13850	1.457	37.00	0.197	5.00	4.331	110.00	2.264	57.50	2.067	52.50	275.58	1225.83	130.57	22.85
D13860	1.457	37.00	0.197	5.00	6.299	160.00	3.169	80.50	2.854	72.50	275.58	1225.83	88.51	15.49
D13870	1.457	37.00	0.197	5.00	9.055	230.00	4.528	115.00	4.035	102.50	275.58	1225.83	59.94	10.49
C1460-112-1500-M	1.460	37.08	0.112	2.85	1.500	38.10	0.864	21.95	0.531	13.49	26.23	116.68	41.30	7.23
C1460-112-2000-M	1.460	37.08	0.112	2.85	2.000	50.80	1.115	28.32	0.629	15.98	26.23	116.68	29.60	5.18
C1460-112-2500-M	1.460	37.08	0.112	2.85	2.500	63.50	1.366	34.70	0.727	18.47	26.23	116.68	23.10	4.04
C1460-112-3000-M	1.460	37.08	0.112	2.85	3.000	76.20	1.617	41.07	0.825	20.96	26.23	116.68	19.00	3.33
C1460-112-3500-M	1.460	37.08	0.112	2.85	3.500	88.90	1.868	47.45	0.924	23.47	26.23	116.68	16.10	2.82
C1460-112-4000-M	1.460	37.08	0.112	2.85	4.000	101.60	2.119	53.82	1.022	25.96	26.23	116.68	13.90	2.43
C1460-125-1500-M	1.460	37.08	0.125	3.18	1.500	38.10	0.913	23.19	0.616	15.65	35.61	158.40	60.70	10.62
C1460-125-2000-M	1.460	37.08	0.125	3.18	2.000	50.80	1.179	29.95	0.738	18.75	35.61	158.40	43.40	7.60
C1460-125-2500-M	1.460	37.08	0.125	3.18	2.500	63.50	1.444	36.68	0.859	21.82	35.61	158.40	33.70	5.90
C1460-125-3000-M	1.460	37.08	0.125	3.18	3.000	76.20	1.709	43.41	0.981	24.92	35.61	158.40	27.60	4.83
C1460-125-3500-M	1.460	37.08	0.125	3.18	3.500	88.90	1.975	50.17	1.102	27.99	35.61	158.40	23.30	4.08
C1460-125-4000-M	1.460	37.08	0.125	3.18	4.000	101.60	2.240	56.90	1.224	31.09	35.61	158.40	20.20	3.54
C1460-135-1500-M	1.460	37.08	0.135	3.43	1.500	38.10	0.951	24.16	0.682	17.32	44.09	196.12	80.30	14.05
C1460-135-2000-M	1.460	37.08	0.135	3.43	2.000	50.80	1.228	31.19	0.823	20.90	44.09	196.12	57.10	9.99
C1460-135-2500-M	1.460	37.08	0.135	3.43	2.500	63.50	1.505	38.23	0.963	24.46	44.09	196.12	44.30	7.75
C1460-135-3000-M	1.460	37.08	0.135	3.43	3.000	76.20	1.782	45.26	1.103	28.02	44.09	196.12	36.20	6.34
C1460-135-3500-M	1.460	37.08	0.135	3.43	3.500	88.90	2.059	52.30	1.243	31.57	44.09	196.12	30.60	5.36
C1460-135-4000-M	1.460	37.08	0.135	3.43	4.000	101.60	2.336	59.33	1.393	35.38	44.09	196.12	26.50	4.64
C1460-148-1500-M	1.460	37.08	0.148	3.76	1.500	38.10	1.000	25.40	0.768	19.51	56.86	252.93	113.70	19.90
C1460-148-2000-M	1.460	37.08	0.148	3.76	2.000	50.80	1.292	32.82	0.933	23.70	56.86	252.93	80.30	14.05
C1460-148-2500-M	1.460	37.08	0.148	3.76	2.500	63.50	1.585	40.26	1.098	27.89	56.86	252.93	62.10	10.87
C1460-148-3000-M	1.460	37.08	0.148	3.76	3.000	76.20	1.877	47.68	1.263	32.08	56.86	252.93	50.60	8.86
C1460-148-3500-M	1.460	37.08	0.148	3.76	3.500	88.90	2.169	55.09	1.428	36.27	56.86	252.93	42.70	7.47
C1460-148-4000-M	1.460	37.08	0.148	3.76	4.000	101.60	2.462	62.53	1.593	40.46	56.86	252.93	37.00	6.48
C1460-162-1500-M	1.460	37.08	0.162	4.12	1.500	38.10	1.051	26.70	0.857	21.77	72.94	324.45	162.40	28.42
C1460-162-2000-M	1.460	37.08	0.162	4.12	2.000	50.80	1.360	34.54	1.049	26.64	72.94	324.45	114.00	19.95
C1460-162-2500-M	1.460	37.08	0.162	4.12	2.500	63.50	1.669	42.39	1.241	31.52	72.94	324.45	87.80	15.37
C1460-162-3000-M	1.460	37.08	0.162	4.12	3.000	76.20	1.978	50.24	1.433	36.40	72.94	324.45	71.40	12.50
C1460-162-3500-M	1.460	37.08	0.162	4.12	3.500	88.90	2.287	58.09	1.625	41.28	72.94	324.45	60.10	10.52
C1460-162-4000-M	1.460	37.08	0.162	4.12	4.000	101.60	2.596	65.94	1.817	46.15	72.94	324.45	52.00	9.10
C1460-162-4500-M	1.460	37.08	0.162	4.12	4.500	114.30	2.905	73.79	2.009	51.03	72.94	324.45	45.70	8.00
C1460-162-5000-M	1.460	37.08	0.162	4.12	5.000	127.00	3.214	81.64	2.201	55.91	72.94	324.45	40.80	7.14
C1469-125-2500-M	**1.469**	**37.31**	**0.125**	**3.18**	**2.500**	**63.50**	**1.036**	**26.31**	**0.816**	**20.74**	**50.14**	**223.05**	**34.25**	**5.99**
C1469-125-2625-M	**1.469**	**37.31**	**0.125**	**3.18**	**2.625**	**66.68**	**1.080**	**27.42**	**0.847**	**21.52**	**50.14**	**223.05**	**32.45**	**5.68**
C1469-125-2750-M	**1.469**	**37.31**	**0.125**	**3.18**	**2.750**	**69.85**	**1.123**	**28.53**	**0.878**	**22.30**	**50.14**	**223.05**	**30.83**	**5.39**
C1469-125-2875-M	**1.469**	**37.31**	**0.125**	**3.18**	**2.875**	**73.03**	**1.167**	**29.64**	**0.909**	**23.08**	**50.14**	**223.05**	**29.36**	**5.14**
C1469-125-3000-M	**1.469**	**37.31**	**0.125**	**3.18**	**3.000**	**76.20**	**1.211**	**30.75**	**0.940**	**23.86**	**50.14**	**223.05**	**28.02**	**4.90**
C1469-125-3250-M	**1.469**	**37.31**	**0.125**	**3.18**	**3.250**	**82.55**	**1.298**	**32.97**	**1.001**	**25.43**	**50.14**	**223.05**	**25.69**	**4.50**
C1469-125-3500-M	**1.469**	**37.31**	**0.125**	**3.18**	**3.500**	**88.90**	**1.385**	**35.19**	**1.063**	**26.99**	**50.14**	**223.05**	**23.71**	**4.15**
C1469-125-3750-M	**1.469**	**37.31**	**0.125**	**3.18**	**3.750**	**95.25**	**1.473**	**37.40**	**1.124**	**28.56**	**50.14**	**223.05**	**22.02**	**3.85**
C1469-125-4000-M	**1.469**	**37.31**	**0.125**	**3.18**	**4.000**	**101.60**	**1.560**	**39.62**	**1.186**	**30.12**	**50.14**	**223.05**	**20.55**	**3.60**
C1469-125-4250-M	**1.469**	**37.31**	**0.125**	**3.18**	**4.250**	**107.95**	**1.647**	**41.84**	**1.247**	**31.68**	**50.14**	**223.05**	**19.27**	**3.37**
C1469-125-4500-M	**1.469**	**37.31**	**0.125**	**3.18**	**4.500**	**114.30**	**1.735**	**44.06**	**1.309**	**33.25**	**50.14**	**223.05**	**18.13**	**3.17**
C1469-125-4750-M	**1.469**	**37.31**	**0.125**	**3.18**	**4.750**	**120.65**	**1.822**	**46.28**	**1.370**	**34.81**	**50.14**	**223.05**	**17.13**	**3.00**
C1469-125-5000-M	**1.469**	**37.31**	**0.125**	**3.18**	**5.000**	**127.00**	**1.909**	**48.49**	**1.432**	**36.37**	**50.14**	**223.05**	**16.22**	**2.84**
C1469-125-5250-M	**1.469**	**37.31**	**0.125**	**3.18**	**5.250**	**133.35**	**1.997**	**50.71**	**1.494**	**37.94**	**50.14**	**223.05**	**15.41**	**2.70**
C1469-125-5500-M	**1.469**	**37.31**	**0.125**	**3.18**	**5.500**	**139.70**	**2.084**	**52.93**	**1.555**	**39.50**	**50.14**	**223.05**	**14.68**	**2.57**
C1469-125-5750-M	**1.469**	**37.31**	**0.125**	**3.18**	**5.750**	**146.05**	**2.171**	**55.15**	**1.617**	**41.06**	**50.14**	**223.05**	**14.01**	**2.45**
C1469-125-6000-M	**1.469**	**37.31**	**0.125**	**3.18**	**6.000**	**152.40**	**2.259**	**57.37**	**1.678**	**42.63**	**50.14**	**223.05**	**13.40**	**2.35**
C1469-125-6250-M	**1.469**	**37.31**	**0.125**	**3.18**	**6.250**	**158.75**	**2.346**	**59.58**	**1.740**	**44.19**	**50.14**	**223.05**	**12.84**	**2.25**
C1469-125-6500-M	**1.469**	**37.31**	**0.125**	**3.18**	**6.500**	**165.10**	**2.433**	**61.80**	**1.801**	**45.75**	**50.14**	**223.05**	**12.33**	**2.16**
C1469-125-6750-M	**1.469**	**37.31**	**0.125**	**3.18**	**6.750**	**171.45**	**2.521**	**64.02**	**1.863**	**47.32**	**50.14**	**223.05**	**11.86**	**2.07**
C1469-125-7000-M	**1.469**	**37.31**	**0.125**	**3.18**	**7.000**	**177.80**	**2.608**	**66.24**	**1.924**	**48.88**	**50.14**	**223.05**	**11.42**	**2.00**
C1469-125-7500-M	**1.469**	**37.31**	**0.125**	**3.18**	**7.500**	**190.50**	**2.782**	**70.68**	**2.047**	**52.01**	**50.14**	**223.05**	**10.63**	**1.86**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D23630	0.945	24.00	124.74	554.89	108.29	18.95
D23640	1.311	33.30	124.74	554.89	68.63	12.01
D23650	1.858	47.20	124.74	554.89	44.51	7.79
D23660	2.591	65.80	124.74	554.89	30.23	5.29
D23670	3.685	93.60	124.74	554.89	20.46	3.58
D23830	1.130	28.70	229.65	1021.53	263.77	46.16
D23840	1.583	40.20	229.65	1021.53	168.00	29.40
D23850	2.264	57.50	229.65	1021.53	108.74	19.03
D23860	3.169	80.50	229.65	1021.53	73.71	12.90
D23870	4.528	115.00	229.65	1021.53	49.94	8.74
C1460-112-1500-S	0.864	21.95	21.85	97.19	34.40	6.02
C1460-112-2000-S	1.115	28.32	21.85	97.19	24.66	4.31
C1460-112-2500-S	1.366	34.70	21.85	97.19	19.24	3.37
C1460-112-3000-S	1.617	41.07	21.85	97.19	15.83	2.77
C1460-112-3500-S	1.868	47.45	21.85	97.19	13.41	2.35
C1460-112-4000-S	2.119	53.82	21.85	97.19	11.58	2.03
C1460-125-1500-S	0.913	23.19	29.66	131.95	50.56	8.85
C1460-125-2000-S	1.179	29.95	29.66	131.95	36.15	6.33
C1460-125-2500-S	1.444	36.68	29.66	131.95	28.07	4.91
C1460-125-3000-S	1.709	43.41	29.66	131.95	22.99	4.02
C1460-125-3500-S	1.975	50.17	29.66	131.95	19.41	3.40
C1460-125-4000-S	2.240	56.90	29.66	131.95	16.83	2.94
C1460-135-1500-S	0.951	24.16	36.73	163.37	66.89	11.71
C1460-135-2000-S	1.228	31.19	36.73	163.37	47.56	8.32
C1460-135-2500-S	1.505	38.23	36.73	163.37	36.90	6.46
C1460-135-3000-S	1.782	45.26	36.73	163.37	30.16	5.28
C1460-135-3500-S	2.059	52.30	36.73	163.37	25.49	4.46
C1460-135-4000-S	2.336	59.33	36.73	163.37	22.08	3.86
C1460-148-1500-S	1.000	25.40	47.36	210.69	94.71	16.57
C1460-148-2000-S	1.292	32.82	47.36	210.69	66.89	11.71
C1460-148-2500-S	1.585	40.26	47.36	210.69	51.73	9.05
C1460-148-3000-S	1.877	47.68	47.36	210.69	42.15	7.38
C1460-148-3500-S	2.169	55.09	47.36	210.69	35.57	6.22
C1460-148-4000-S	2.462	62.53	47.36	210.69	30.82	5.39
C1460-162-1500-S	1.051	26.70	60.76	270.27	135.28	23.67
C1460-162-2000-S	1.360	34.54	60.76	270.27	94.96	16.62
C1460-162-2500-S	1.669	42.39	60.76	270.27	73.14	12.80
C1460-162-3000-S	1.978	50.24	60.76	270.27	59.48	10.41
C1460-162-3500-S	2.287	58.09	60.76	270.27	50.06	8.76
C1460-162-4000-S	2.596	65.94	60.76	270.27	43.32	7.58
C1460-162-4500-S	2.905	73.79	60.76	270.27	38.07	6.66
C1460-162-5000-S	3.214	81.64	60.76	270.27	33.99	5.95
C1469-125-2500-S	**1.214**	**30.84**	**38.29**	**170.33**	**29.78**	**5.21**
C1469-125-2625-S	**1.268**	**32.20**	**38.29**	**170.33**	**28.22**	**4.94**
C1469-125-2750-S	**1.321**	**33.56**	**38.29**	**170.33**	**26.81**	**4.69**
C1469-125-2875-S	**1.375**	**34.93**	**38.29**	**170.33**	**25.53**	**4.47**
C1469-125-3000-S	**1.429**	**36.29**	**38.29**	**170.33**	**24.37**	**4.26**
C1469-125-3250-S	**1.536**	**39.01**	**38.29**	**170.33**	**22.34**	**3.91**
C1469-125-3500-S	**1.643**	**41.73**	**38.29**	**170.33**	**20.62**	**3.61**
C1469-125-3750-S	**1.750**	**44.45**	**38.29**	**170.33**	**19.15**	**3.35**
C1469-125-4000-S	**1.857**	**47.17**	**38.29**	**170.33**	**17.87**	**3.13**
C1469-125-4250-S	**1.964**	**49.89**	**38.29**	**170.33**	**16.75**	**2.93**
C1469-125-4500-S	**2.071**	**52.61**	**38.29**	**170.33**	**15.77**	**2.76**
C1469-125-4750-S	**2.179**	**55.34**	**38.29**	**170.33**	**14.89**	**2.61**
C1469-125-5000-S	**2.286**	**58.06**	**38.29**	**170.33**	**14.11**	**2.47**
C1469-125-5250-S	**2.393**	**60.78**	**38.29**	**170.33**	**13.40**	**2.35**
C1469-125-5500-S	**2.500**	**63.50**	**38.29**	**170.33**	**12.76**	**2.23**
C1469-125-5750-S	**2.607**	**66.22**	**38.29**	**170.33**	**12.18**	**2.13**
C1469-125-6000-S	**2.714**	**68.94**	**38.29**	**170.33**	**11.65**	**2.04**
C1469-125-6250-S	**2.821**	**71.66**	**38.29**	**170.33**	**11.17**	**1.95**
C1469-125-6500-S	**2.929**	**74.39**	**38.29**	**170.33**	**10.72**	**1.88**
C1469-125-6750-S	**3.036**	**77.11**	**38.29**	**170.33**	**10.31**	**1.80**
C1469-125-7000-S	**3.143**	**79.83**	**38.29**	**170.33**	**9.93**	**1.74**
C1469-125-7500-S	**3.357**	**85.27**	**38.29**	**170.33**	**9.24**	**1.62**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1469-125-8000-M	1.469	37.31	0.125	3.18	8.000	203.20	2.957	75.11	2.171	55.13	50.14	223.05	9.94	1.74
C1469-125-8500-M	1.469	37.31	0.125	3.18	8.500	215.90	3.132	79.55	2.294	58.26	50.14	223.05	9.34	1.63
C1469-125-9000-M	1.469	37.31	0.125	3.18	9.000	228.60	3.306	83.98	2.417	61.39	50.14	223.05	8.81	1.54
C1469-125-9500-M*	1.469	37.31	0.125	3.18	9.500	241.30	3.562	90.49	2.640	67.07	50.14	223.05	8.45	1.48
C1469-135-2375-M	1.469	37.31	0.135	3.43	2.375	60.33	1.071	27.19	0.882	22.41	62.10	276.26	47.61	8.33
C1469-135-2500-M	1.469	37.31	0.135	3.43	2.500	63.50	1.118	28.40	0.918	23.31	62.10	276.26	44.94	7.86
C1469-135-2625-M	1.469	37.31	0.135	3.43	2.625	66.68	1.166	29.61	0.953	24.22	62.10	276.26	42.56	7.45
C1469-135-2750-M	1.469	37.31	0.135	3.43	2.750	69.85	1.213	30.81	0.989	25.12	62.10	276.26	40.41	7.07
C1469-135-2875-M	1.469	37.31	0.135	3.43	2.875	73.03	1.261	32.02	1.025	26.02	62.10	276.26	38.47	6.73
C1469-135-3000-M	1.469	37.31	0.135	3.43	3.000	76.20	1.308	33.23	1.060	26.93	62.10	276.26	36.71	6.42
C1469-135-3250-M	1.469	37.31	0.135	3.43	3.250	82.55	1.403	35.64	1.131	28.73	62.10	276.26	33.63	5.89
C1469-135-3500-M	1.469	37.31	0.135	3.43	3.500	88.90	1.498	38.06	1.202	30.54	62.10	276.26	31.03	5.43
C1469-135-3750-M	1.469	37.31	0.135	3.43	3.750	95.25	1.593	40.47	1.274	32.35	62.10	276.26	28.80	5.04
C1469-135-4000-M	1.469	37.31	0.135	3.43	4.000	101.60	1.689	42.89	1.345	34.15	62.10	276.26	26.87	4.70
C1469-135-4250-M	1.469	37.31	0.135	3.43	4.250	107.95	1.784	45.30	1.416	35.96	62.10	276.26	25.18	4.41
C1469-135-4500-M	1.469	37.31	0.135	3.43	4.500	114.30	1.879	47.72	1.487	37.77	62.10	276.26	23.69	4.15
C1469-135-4750-M	1.469	37.31	0.135	3.43	4.750	120.65	1.974	50.13	1.558	39.57	62.10	276.26	22.37	3.91
C1469-135-5000-M	1.469	37.31	0.135	3.43	5.000	127.00	2.069	52.55	1.629	41.38	62.10	276.26	21.19	3.71
C1469-135-5250-M	1.469	37.31	0.135	3.43	5.250	133.35	2.164	54.96	1.700	43.19	62.10	276.26	20.12	3.52
C1469-135-5500-M	1.469	37.31	0.135	3.43	5.500	139.70	2.259	57.38	1.771	44.99	62.10	276.26	19.16	3.35
C1469-135-5750-M	1.469	37.31	0.135	3.43	5.750	146.05	2.354	59.79	1.842	46.80	62.10	276.26	18.29	3.20
C1469-135-6000-M	1.469	37.31	0.135	3.43	6.000	152.40	2.449	62.21	1.914	48.61	62.10	276.26	17.49	3.06
C1469-135-6250-M	1.469	37.31	0.135	3.43	6.250	158.75	2.544	64.62	1.985	50.41	62.10	276.26	16.76	2.93
C1469-135-6500-M	1.469	37.31	0.135	3.43	6.500	165.10	2.639	67.04	2.056	52.22	62.10	276.26	16.09	2.82
C1469-135-6750-M	1.469	37.31	0.135	3.43	6.750	171.45	2.734	69.45	2.127	54.02	62.10	276.26	15.47	2.71
C1469-135-7000-M	1.469	37.31	0.135	3.43	7.000	177.80	2.829	71.87	2.198	55.83	62.10	276.26	14.89	2.61
C1469-135-7500-M*	1.469	37.31	0.135	3.43	7.500	190.50	3.103	78.82	2.444	62.07	62.10	276.26	14.13	2.47
C1469-135-8000-M*	1.469	37.31	0.135	3.43	8.000	203.20	3.293	83.65	2.586	65.68	62.10	276.26	13.20	2.31
C1469-135-8500-M*	1.469	37.31	0.135	3.43	8.500	215.90	3.484	88.48	2.728	69.29	62.10	276.26	12.38	2.17
C1469-135-9000-M*	1.469	37.31	0.135	3.43	9.000	228.60	3.674	93.31	2.870	72.91	62.10	276.26	11.66	2.04
C1469-135-9500-M*	1.469	37.31	0.135	3.43	9.500	241.30	3.864	98.14	3.013	76.52	62.10	276.26	11.02	1.93
C1469-148-2250-M	1.469	37.31	0.148	3.76	2.250	57.15	1.120	28.44	0.966	24.55	80.15	356.50	70.92	12.41
C1469-148-2375-M	1.469	37.31	0.148	3.76	2.375	60.33	1.173	29.78	1.008	25.61	80.15	356.50	66.65	11.66
C1469-148-2500-M	1.469	37.31	0.148	3.76	2.500	63.50	1.225	31.12	1.050	26.68	80.15	356.50	62.87	11.00
C1469-148-2625-M	1.469	37.31	0.148	3.76	2.625	66.68	1.278	32.46	1.092	27.74	80.15	356.50	59.50	10.41
C1469-148-2750-M	1.469	37.31	0.148	3.76	2.750	69.85	1.331	33.80	1.134	28.81	80.15	356.50	56.47	9.88
C1469-148-2875-M	1.469	37.31	0.148	3.76	2.875	73.03	1.383	35.14	1.176	29.87	80.15	356.50	53.73	9.40
C1469-148-3000-M	1.469	37.31	0.148	3.76	3.000	76.20	1.436	36.48	1.218	30.94	80.15	356.50	51.25	8.97
C1469-148-3250-M	1.469	37.31	0.148	3.76	3.250	82.55	1.541	39.15	1.302	33.07	80.15	356.50	46.91	8.21
C1469-148-3500-M	1.469	37.31	0.148	3.76	3.500	88.90	1.647	41.83	1.386	35.20	80.15	356.50	43.25	7.57
C1469-148-3750-M	1.469	37.31	0.148	3.76	3.750	95.25	1.752	44.51	1.470	37.33	80.15	356.50	40.12	7.02
C1469-148-4000-M	1.469	37.31	0.148	3.76	4.000	101.60	1.858	47.19	1.554	39.46	80.15	356.50	37.41	6.55
C1469-148-4250-M	1.469	37.31	0.148	3.76	4.250	107.95	1.963	49.86	1.637	41.59	80.15	356.50	35.05	6.13
C1469-148-4500-M	1.469	37.31	0.148	3.76	4.500	114.30	2.068	52.54	1.721	43.72	80.15	356.50	32.96	5.77
C1469-148-4750-M	1.469	37.31	0.148	3.76	4.750	120.65	2.174	55.22	1.805	45.85	80.15	356.50	31.11	5.44
C1469-148-5000-M	1.469	37.31	0.148	3.76	5.000	127.00	2.279	57.89	1.889	47.98	80.15	356.50	29.46	5.16
C1469-148-5250-M	1.469	37.31	0.148	3.76	5.250	133.35	2.385	60.57	1.973	50.11	80.15	356.50	27.97	4.89
C1469-148-5500-M	1.469	37.31	0.148	3.76	5.500	139.70	2.490	63.25	2.057	52.25	80.15	356.50	26.63	4.66
C1469-148-5750-M	1.469	37.31	0.148	3.76	5.750	146.05	2.596	65.93	2.141	54.38	80.15	356.50	25.41	4.45
C1469-148-6000-M	1.469	37.31	0.148	3.76	6.000	152.40	2.701	68.60	2.225	56.51	80.15	356.50	24.29	4.25
C1469-148-6250-M	1.469	37.31	0.148	3.76	6.250	158.75	2.806	71.28	2.309	58.64	80.15	356.50	23.27	4.07
C1469-148-6500-M	1.469	37.31	0.148	3.76	6.500	165.10	2.912	73.96	2.392	60.77	80.15	356.50	22.34	3.91
C1469-148-6750-M*	1.469	37.31	0.148	3.76	6.750	171.45	3.103	78.81	2.582	65.58	80.15	356.50	21.97	3.85
C1469-148-7000-M*	1.469	37.31	0.148	3.76	7.000	177.80	3.208	81.49	2.666	67.71	80.15	356.50	21.14	3.70
C1469-148-7500-M*	1.469	37.31	0.148	3.76	7.500	190.50	3.419	86.84	2.834	71.98	80.15	356.50	19.64	3.44
C1469-148-8000-M*	1.469	37.31	0.148	3.76	8.000	203.20	3.630	92.20	3.001	76.24	80.15	356.50	18.34	3.21
C1469-148-8500-M*	1.469	37.31	0.148	3.76	8.500	215.90	3.841	97.55	3.169	80.50	80.15	356.50	17.20	3.01
C1469-148-9000-M*	1.469	37.31	0.148	3.76	9.000	228.60	4.051	102.91	3.337	84.76	80.15	356.50	16.20	2.83
C1469-148-9500-M*	1.469	37.31	0.148	3.76	9.500	241.30	4.262	108.26	3.505	89.02	80.15	356.50	15.30	2.68
C1469-162-2125-M	1.469	37.31	0.162	4.12	2.125	53.98	1.164	29.57	1.044	26.53	102.92	457.79	107.12	18.75
C1469-162-2250-M	1.469	37.31	0.162	4.12	2.250	57.15	1.223	31.05	1.093	27.77	102.92	457.79	100.16	17.53
C1469-162-2375-M	1.469	37.31	0.162	4.12	2.375	60.33	1.281	32.53	1.142	29.01	102.92	457.79	94.06	16.46
C1469-162-2500-M	1.469	37.31	0.162	4.12	2.500	63.50	1.339	34.01	1.191	30.25	102.92	457.79	88.66	15.51
C1469-162-2625-M	1.469	37.31	0.162	4.12	2.625	66.68	1.397	35.50	1.240	31.49	102.92	457.79	83.84	14.67

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1469-125-8000-S	3.571	90.71	38.29	170.33	8.65	1.51
C1469-125-8500-S	3.786	96.16	38.29	170.33	8.12	1.42
C1469-125-9000-S	4.000	101.60	38.29	170.33	7.66	1.34
C1469-125-9500-S*	4.286	108.86	38.29	170.33	7.34	1.29
C1469-135-2375-S	1.238	31.44	47.07	209.39	41.40	7.24
C1469-135-2500-S	1.295	32.90	47.07	209.39	39.08	6.84
C1469-135-2625-S	1.353	34.36	47.07	209.39	37.00	6.48
C1469-135-2750-S	1.410	35.82	47.07	209.39	35.14	6.15
C1469-135-2875-S	1.468	37.28	47.07	209.39	33.45	5.85
C1469-135-3000-S	1.525	38.74	47.07	209.39	31.92	5.59
C1469-135-3250-S	1.640	41.66	47.07	209.39	29.24	5.12
C1469-135-3500-S	1.755	44.58	47.07	209.39	26.98	4.72
C1469-135-3750-S	1.870	47.50	47.07	209.39	25.04	4.38
C1469-135-4000-S	1.985	50.42	47.07	209.39	23.36	4.09
C1469-135-4250-S	2.100	53.34	47.07	209.39	21.90	3.83
C1469-135-4500-S	2.215	56.26	47.07	209.39	20.60	3.61
C1469-135-4750-S	2.330	59.18	47.07	209.39	19.45	3.40
C1469-135-5000-S	2.445	62.10	47.07	209.39	18.42	3.22
C1469-135-5250-S	2.560	65.02	47.07	209.39	17.50	3.06
C1469-135-5500-S	2.675	67.94	47.07	209.39	16.66	2.92
C1469-135-5750-S	2.790	70.86	47.07	209.39	15.90	2.78
C1469-135-6000-S	2.905	73.78	47.07	209.39	15.21	2.66
C1469-135-6250-S	3.020	76.70	47.07	209.39	14.57	2.55
C1469-135-6500-S	3.135	79.62	47.07	209.39	13.99	2.45
C1469-135-6750-S	3.250	82.54	47.07	209.39	13.45	2.35
C1469-135-7000-S	3.365	85.46	47.07	209.39	12.95	2.27
C1469-135-7500-S*	3.668	93.16	47.07	209.39	12.28	2.15
C1469-135-8000-S*	3.898	99.00	47.07	209.39	11.47	2.01
C1469-135-8500-S*	4.127	104.84	47.07	209.39	10.77	1.88
C1469-135-9000-S*	4.357	110.68	47.07	209.39	10.14	1.77
C1469-135-9500-S*	4.587	116.52	47.07	209.39	9.58	1.68
C1469-148-2250-S	1.275	32.38	60.15	267.55	61.67	10.79
C1469-148-2375-S	1.337	33.97	60.15	267.55	57.96	10.14
C1469-148-2500-S	1.400	35.56	60.15	267.55	54.67	9.57
C1469-148-2625-S	1.462	37.15	60.15	267.55	51.74	9.05
C1469-148-2750-S	1.525	38.74	60.15	267.55	49.10	8.59
C1469-148-2875-S	1.588	40.33	60.15	267.55	46.72	8.18
C1469-148-3000-S	1.650	41.92	60.15	267.55	44.56	7.80
C1469-148-3250-S	1.775	45.10	60.15	267.55	40.79	7.14
C1469-148-3500-S	1.901	48.28	60.15	267.55	37.61	6.58
C1469-148-3750-S	2.026	51.46	60.15	267.55	34.89	6.10
C1469-148-4000-S	2.151	54.64	60.15	267.55	32.53	5.69
C1469-148-4250-S	2.276	57.82	60.15	267.55	30.47	5.33
C1469-148-4500-S	2.401	61.00	60.15	267.55	28.66	5.02
C1469-148-4750-S	2.527	64.18	60.15	267.55	27.05	4.73
C1469-148-5000-S	2.652	67.36	60.15	267.55	25.62	4.48
C1469-148-5250-S	2.777	70.54	60.15	267.55	24.32	4.26
C1469-148-5500-S	2.902	73.72	60.15	267.55	23.15	4.05
C1469-148-5750-S	3.027	76.90	60.15	267.55	22.09	3.87
C1469-148-6000-S	3.153	80.08	60.15	267.55	21.13	3.70
C1469-148-6250-S	3.278	83.26	60.15	267.55	20.24	3.54
C1469-148-6500-S	3.403	86.44	60.15	267.55	19.42	3.40
C1469-148-6750-S*	3.602	91.50	60.15	267.55	19.11	3.34
C1469-148-7000-S*	3.727	94.68	60.15	267.55	18.38	3.22
C1469-148-7500-S*	3.978	101.04	60.15	267.55	17.08	2.99
C1469-148-8000-S*	4.228	107.40	60.15	267.55	15.95	2.79
C1469-148-8500-S*	4.479	113.76	60.15	267.55	14.96	2.62
C1469-148-9000-S*	4.729	120.12	60.15	267.55	14.08	2.46
C1469-148-9500-S*	4.979	126.48	60.15	267.55	13.31	2.33
C1469-162-2125-S	1.305	33.14	76.41	339.90	93.15	16.30
C1469-162-2250-S	1.373	34.87	76.41	339.90	87.10	15.24
C1469-162-2375-S	1.441	36.60	76.41	339.90	81.79	14.31
C1469-162-2500-S	1.509	38.32	76.41	339.90	77.09	13.49
C1469-162-2625-S	1.577	40.05	76.41	339.90	72.91	12.76

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1469-162-2750-M	1.469	37.31	0.162	4.12	2.750	69.85	1.456	36.98	1.289	32.73	102.92	457.79	79.52	13.92
C1469-162-2875-M	1.469	37.31	0.162	4.12	2.875	73.03	1.514	38.46	1.338	33.98	102.92	457.79	75.62	13.23
C1469-162-3000-M	1.469	37.31	0.162	4.12	3.000	76.20	1.572	39.94	1.387	35.22	102.92	457.79	72.09	12.62
C1469-162-3250-M	1.469	37.31	0.162	4.12	3.250	82.55	1.689	42.90	1.484	37.70	102.92	457.79	65.93	11.54
C1469-162-3500-M	1.469	37.31	0.162	4.12	3.500	88.90	1.806	45.86	1.582	40.18	102.92	457.79	60.74	10.63
C1469-162-3750-M	1.469	37.31	0.162	4.12	3.750	95.25	1.922	48.83	1.680	42.67	102.92	457.79	56.31	9.85
C1469-162-4000-M	1.469	37.31	0.162	4.12	4.000	101.60	2.039	51.79	1.778	45.15	102.92	457.79	52.48	9.18
C1469-162-4250-M	1.469	37.31	0.162	4.12	4.250	107.95	2.156	54.75	1.875	47.63	102.92	457.79	49.14	8.60
C1469-162-4500-M	1.469	37.31	0.162	4.12	4.500	114.30	2.272	57.71	1.973	50.11	102.92	457.79	46.20	8.08
C1469-162-4750-M	1.469	37.31	0.162	4.12	4.750	120.65	2.389	60.68	2.071	52.60	102.92	457.79	43.59	7.63
C1469-162-5000-M	1.469	37.31	0.162	4.12	5.000	127.00	2.505	63.64	2.169	55.08	102.92	457.79	41.26	7.22
C1469-162-5250-M	1.469	37.31	0.162	4.12	5.250	133.35	2.622	66.60	2.266	57.56	102.92	457.79	39.16	6.85
C1469-162-5500-M	1.469	37.31	0.162	4.12	5.500	139.70	2.739	69.56	2.364	60.05	102.92	457.79	37.27	6.52
C1469-162-5750-M	1.469	37.31	0.162	4.12	5.750	146.05	2.855	72.53	2.462	62.53	102.92	457.79	35.55	6.22
C1469-162-6000-M	1.469	37.31	0.162	4.12	6.000	152.40	2.972	75.49	2.560	65.01	102.92	457.79	33.99	5.95
C1469-162-6250-M	1.469	37.31	0.162	4.12	6.250	158.75	3.089	78.45	2.657	67.49	102.92	457.79	32.55	5.70
C1469-162-6500-M	1.469	37.31	0.162	4.12	6.500	165.10	3.205	81.41	2.755	69.98	102.92	457.79	31.24	5.47
C1469-162-6750-M	1.469	37.31	0.162	4.12	6.750	171.45	3.322	84.38	2.853	72.46	102.92	457.79	30.02	5.25
C1469-162-7000-M	1.469	37.31	0.162	4.12	7.000	177.80	3.439	87.34	2.951	74.94	102.92	457.79	28.90	5.06
C1469-162-7500-M	1.469	37.31	0.162	4.12	7.500	190.50	3.672	93.26	3.146	79.91	102.92	457.79	26.88	4.70
C1469-162-8000-M	1.469	37.31	0.162	4.12	8.000	203.20	3.905	99.19	3.342	84.87	102.92	457.79	25.13	4.40
C1469-162-8500-M*	1.469	37.31	0.162	4.12	8.500	215.90	4.225	107.31	3.644	92.55	102.92	457.79	24.07	4.21
C1469-162-9000-M*	1.469	37.31	0.162	4.12	9.000	228.60	4.458	113.23	3.839	97.52	102.92	457.79	22.66	3.97
C1469-162-9500-M*	1.469	37.31	0.162	4.12	9.500	241.30	4.691	119.16	4.035	102.48	102.92	457.79	21.40	3.75
C1469-177-2125-M	1.469	37.31	0.177	4.50	2.125	53.98	1.264	32.11	1.168	29.67	131.40	584.48	152.67	26.72
C1469-177-2250-M	1.469	37.31	0.177	4.50	2.250	57.15	1.329	33.75	1.224	31.10	131.40	584.48	142.61	24.96
C1469-177-2375-M	1.469	37.31	0.177	4.50	2.375	60.33	1.393	35.38	1.281	32.52	131.40	584.48	133.78	23.41
C1469-177-2500-M	1.469	37.31	0.177	4.50	2.500	63.50	1.457	37.01	1.337	33.95	131.40	584.48	125.99	22.05
C1469-177-2625-M	1.469	37.31	0.177	4.50	2.625	66.68	1.521	38.64	1.393	35.38	131.40	584.48	119.06	20.83
C1469-177-2750-M	1.469	37.31	0.177	4.50	2.750	69.85	1.586	40.27	1.449	36.81	131.40	584.48	112.85	19.75
C1469-177-2875-M	1.469	37.31	0.177	4.50	2.875	73.03	1.650	41.91	1.505	38.24	131.40	584.48	107.25	18.77
C1469-177-3000-M	1.469	37.31	0.177	4.50	3.000	76.20	1.714	43.54	1.562	39.66	131.40	584.48	102.18	17.88
C1469-177-3250-M	1.469	37.31	0.177	4.50	3.250	82.55	1.843	46.80	1.674	42.52	131.40	584.48	93.36	16.34
C1469-177-3500-M	1.469	37.31	0.177	4.50	3.500	88.90	1.971	50.07	1.786	45.37	131.40	584.48	85.94	15.04
C1469-177-3750-M	1.469	37.31	0.177	4.50	3.750	95.25	2.100	53.33	1.899	48.23	131.40	584.48	79.62	13.93
C1469-177-4000-M	1.469	37.31	0.177	4.50	4.000	101.60	2.228	56.59	2.011	51.09	131.40	584.48	74.16	12.98
C1469-177-4250-M	1.469	37.31	0.177	4.50	4.250	107.95	2.357	59.86	2.124	53.94	131.40	584.48	69.40	12.14
C1469-177-4500-M	1.469	37.31	0.177	4.50	4.500	114.30	2.485	63.12	2.236	56.80	131.40	584.48	65.21	11.41
C1469-177-4750-M	1.469	37.31	0.177	4.50	4.750	120.65	2.614	66.39	2.348	59.65	131.40	584.48	61.51	10.76
C1469-177-5000-M	1.469	37.31	0.177	4.50	5.000	127.00	2.742	69.65	2.461	62.51	131.40	584.48	58.20	10.18
C1469-177-5250-M	1.469	37.31	0.177	4.50	5.250	133.35	2.871	72.92	2.573	65.36	131.40	584.48	55.22	9.66
C1469-177-5500-M	1.469	37.31	0.177	4.50	5.500	139.70	2.999	76.18	2.686	68.22	131.40	584.48	52.54	9.19
C1469-177-5750-M	1.469	37.31	0.177	4.50	5.750	146.05	3.128	79.44	2.798	71.07	131.40	584.48	50.11	8.77
C1469-177-6000-M	1.469	37.31	0.177	4.50	6.000	152.40	3.256	82.71	2.911	73.93	131.40	584.48	47.89	8.38
C1469-177-6250-M	1.469	37.31	0.177	4.50	6.250	158.75	3.385	85.97	3.023	76.78	131.40	584.48	45.86	8.03
C1469-177-6500-M	1.469	37.31	0.177	4.50	6.500	165.10	3.513	89.24	3.135	79.64	131.40	584.48	43.99	7.70
C1469-177-6750-M	1.469	37.31	0.177	4.50	6.750	171.45	3.642	92.50	3.248	82.50	131.40	584.48	42.27	7.40
C1469-177-7000-M	1.469	37.31	0.177	4.50	7.000	177.80	3.770	95.76	3.360	85.35	131.40	584.48	40.68	7.12
C1469-177-7500-M	1.469	37.31	0.177	4.50	7.500	190.50	4.027	102.29	3.585	91.06	131.40	584.48	37.84	6.62
C1469-177-8000-M	1.469	37.31	0.177	4.50	8.000	203.20	4.284	108.82	3.810	96.77	131.40	584.48	35.36	6.19
C1469-177-8500-M	1.469	37.31	0.177	4.50	8.500	215.90	4.541	115.35	4.035	102.48	131.40	584.48	33.19	5.81
C1469-177-9000-M	1.469	37.31	0.177	4.50	9.000	228.60	4.798	121.88	4.260	108.19	131.40	584.48	31.27	5.47
C1469-177-9500-M	1.469	37.31	0.177	4.50	9.500	241.30	5.055	128.40	4.484	113.91	131.40	584.48	29.56	5.17
C1469-192-2000-M	1.469	37.31	0.192	4.88	2.000	50.80	1.289	32.74	1.222	31.03	164.33	731.00	231.09	40.44
C1469-192-2125-M	1.469	37.31	0.192	4.88	2.125	53.98	1.359	34.52	1.285	32.64	164.33	731.00	214.50	37.54
C1469-192-2250-M	1.469	37.31	0.192	4.88	2.250	57.15	1.429	36.29	1.348	34.24	164.33	731.00	200.13	35.02
C1469-192-2375-M	1.469	37.31	0.192	4.88	2.375	60.33	1.499	38.07	1.411	35.85	164.33	731.00	187.57	32.82
C1469-192-2500-M	1.469	37.31	0.192	4.88	2.500	63.50	1.569	39.85	1.475	37.46	164.33	731.00	176.49	30.89
C1469-192-2625-M	1.469	37.31	0.192	4.88	2.625	66.68	1.639	41.63	1.538	39.07	164.33	731.00	166.64	29.16
C1469-192-2750-M	1.469	37.31	0.192	4.88	2.750	69.85	1.709	43.40	1.601	40.67	164.33	731.00	157.84	27.62
C1469-192-2875-M	1.469	37.31	0.192	4.88	2.875	73.03	1.779	45.18	1.665	42.28	164.33	731.00	149.92	26.24
C1469-192-3000-M	1.469	37.31	0.192	4.88	3.000	76.20	1.849	46.96	1.728	43.89	164.33	731.00	142.76	24.98
C1469-192-3250-M	1.469	37.31	0.192	4.88	3.250	82.55	1.989	50.52	1.855	47.11	164.33	731.00	130.30	22.80
C1469-192-3500-M	1.469	37.31	0.192	4.88	3.500	88.90	2.129	54.07	1.981	50.32	164.33	731.00	119.85	20.97

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1469-162-2750-S	1.645	41.78	76.41	339.90	69.15	12.10
C1469-162-2875-S	1.713	43.51	76.41	339.90	65.76	11.51
C1469-162-3000-S	1.781	45.24	76.41	339.90	62.69	10.97
C1469-162-3250-S	1.917	48.70	76.41	339.90	57.33	10.03
C1469-162-3500-S	2.053	52.15	76.41	339.90	52.82	9.24
C1469-162-3750-S	2.189	55.61	76.41	339.90	48.97	8.57
C1469-162-4000-S	2.326	59.07	76.41	339.90	45.64	7.99
C1469-162-4250-S	2.462	62.53	76.41	339.90	42.73	7.48
C1469-162-4500-S	2.598	65.98	76.41	339.90	40.17	7.03
C1469-162-4750-S	2.734	69.44	76.41	339.90	37.90	6.63
C1469-162-5000-S	2.870	72.90	76.41	339.90	35.88	6.28
C1469-162-5250-S	3.006	76.36	76.41	339.90	34.06	5.96
C1469-162-5500-S	3.142	79.81	76.41	339.90	32.41	5.67
C1469-162-5750-S	3.278	83.27	76.41	339.90	30.92	5.41
C1469-162-6000-S	3.415	86.73	76.41	339.90	29.56	5.17
C1469-162-6250-S	3.551	90.19	76.41	339.90	28.31	4.95
C1469-162-6500-S	3.687	93.65	76.41	339.90	27.16	4.75
C1469-162-6750-S	3.823	97.10	76.41	339.90	26.11	4.57
C1469-162-7000-S	3.959	100.56	76.41	339.90	25.13	4.40
C1469-162-7500-S	4.231	107.48	76.41	339.90	23.38	4.09
C1469-162-8000-S	4.504	114.39	76.41	339.90	21.85	3.82
C1469-162-8500-S*	4.850	123.18	76.41	339.90	20.93	3.66
C1469-162-9000-S*	5.122	130.10	76.41	339.90	19.70	3.45
C1469-162-9500-S*	5.394	137.01	76.41	339.90	18.61	3.26
C1469-177-2125-S	1.399	35.52	96.44	428.98	132.76	23.23
C1469-177-2250-S	1.472	37.40	96.44	428.98	124.00	21.70
C1469-177-2375-S	1.546	39.27	96.44	428.98	116.33	20.36
C1469-177-2500-S	1.620	41.14	96.44	428.98	109.56	19.17
C1469-177-2625-S	1.693	43.01	96.44	428.98	103.53	18.12
C1469-177-2750-S	1.767	44.89	96.44	428.98	98.13	17.17
C1469-177-2875-S	1.841	46.76	96.44	428.98	93.26	16.32
C1469-177-3000-S	1.915	48.63	96.44	428.98	88.86	15.55
C1469-177-3250-S	2.062	52.38	96.44	428.98	81.19	14.21
C1469-177-3500-S	2.210	56.12	96.44	428.98	74.73	13.08
C1469-177-3750-S	2.357	59.87	96.44	428.98	69.23	12.12
C1469-177-4000-S	2.504	63.61	96.44	428.98	64.49	11.28
C1469-177-4250-S	2.652	67.36	96.44	428.98	60.35	10.56
C1469-177-4500-S	2.799	71.10	96.44	428.98	56.71	9.92
C1469-177-4750-S	2.947	74.85	96.44	428.98	53.48	9.36
C1469-177-5000-S	3.094	78.60	96.44	428.98	50.61	8.86
C1469-177-5250-S	3.242	82.34	96.44	428.98	48.02	8.40
C1469-177-5500-S	3.389	86.09	96.44	428.98	45.69	8.00
C1469-177-5750-S	3.537	89.83	96.44	428.98	43.57	7.62
C1469-177-6000-S	3.684	93.58	96.44	428.98	41.64	7.29
C1469-177-6250-S	3.832	97.32	96.44	428.98	39.88	6.98
C1469-177-6500-S	3.979	101.07	96.44	428.98	38.25	6.69
C1469-177-6750-S	4.126	104.81	96.44	428.98	36.76	6.43
C1469-177-7000-S	4.274	108.56	96.44	428.98	35.38	6.19
C1469-177-7500-S	4.569	116.05	96.44	428.98	32.90	5.76
C1469-177-8000-S	4.864	123.54	96.44	428.98	30.75	5.38
C1469-177-8500-S	5.159	131.03	96.44	428.98	28.86	5.05
C1469-177-9000-S	5.454	138.52	96.44	428.98	27.19	4.76
C1469-177-9500-S	5.748	146.01	96.44	428.98	25.71	4.50
C1469-192-2000-S	1.407	35.73	119.23	530.38	200.95	35.17
C1469-192-2125-S	1.486	37.74	119.23	530.38	186.52	32.64
C1469-192-2250-S	1.565	39.75	119.23	530.38	174.03	30.45
C1469-192-2375-S	1.644	41.76	119.23	530.38	163.10	28.54
C1469-192-2500-S	1.723	43.77	119.23	530.38	153.47	26.86
C1469-192-2625-S	1.802	45.78	119.23	530.38	144.91	25.36
C1469-192-2750-S	1.881	47.78	119.23	530.38	137.25	24.02
C1469-192-2875-S	1.960	49.79	119.23	530.38	130.36	22.81
C1469-192-3000-S	2.039	51.80	119.23	530.38	124.14	21.72
C1469-192-3250-S	2.198	55.82	119.23	530.38	113.31	19.83
C1469-192-3500-S	2.356	59.84	119.23	530.38	104.22	18.24

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1469-192-3750-M	1.469	37.31	0.192	4.88	3.750	95.25	2.269	57.63	2.108	53.54	164.33	731.00	110.95	19.42	**C1469-192-3750-S**	2.514	63.86	119.23	530.38	96.48	16.88
C1469-192-4000-M	1.469	37.31	0.192	4.88	4.000	101.60	2.409	61.18	2.234	56.75	164.33	731.00	103.28	18.07	**C1469-192-4000-S**	2.672	67.88	119.23	530.38	89.81	15.72
C1469-192-4250-M	1.469	37.31	0.192	4.88	4.250	107.95	2.549	64.74	2.361	59.97	164.33	731.00	96.60	16.90	**C1469-192-4250-S**	2.831	71.90	119.23	530.38	84.00	14.70
C1469-192-4500-M	1.469	37.31	0.192	4.88	4.500	114.30	2.689	68.29	2.488	63.18	164.33	731.00	90.73	15.88	**C1469-192-4500-S**	2.989	75.91	119.23	530.38	78.90	13.81
C1469-192-4750-M	1.469	37.31	0.192	4.88	4.750	120.65	2.829	71.85	2.614	66.40	164.33	731.00	85.54	14.97	**C1469-192-4750-S**	3.147	79.93	119.23	530.38	74.38	13.02
C1469-192-5000-M	1.469	37.31	0.192	4.88	5.000	127.00	2.969	75.41	2.741	69.62	164.33	731.00	80.90	14.16	**C1469-192-5000-S**	3.305	83.95	119.23	530.38	70.35	12.31
C1469-192-5250-M	1.469	37.31	0.192	4.88	5.250	133.35	3.109	78.96	2.867	72.83	164.33	731.00	76.75	13.43	**C1469-192-5250-S**	3.463	87.97	119.23	530.38	66.74	11.68
C1469-192-5500-M	1.469	37.31	0.192	4.88	5.500	139.70	3.249	82.52	2.994	76.05	164.33	731.00	73.00	12.77	**C1469-192-5500-S**	3.622	91.99	119.23	530.38	63.48	11.11
C1469-192-5750-M	1.469	37.31	0.192	4.88	5.750	146.05	3.389	86.07	3.121	79.26	164.33	731.00	69.60	12.18	**C1469-192-5750-S**	3.780	96.01	119.23	530.38	60.52	10.59
C1469-192-6000-M	1.469	37.31	0.192	4.88	6.000	152.40	3.529	89.63	3.247	82.48	164.33	731.00	66.50	11.64	**C1469-192-6000-S**	3.938	100.02	119.23	530.38	57.82	10.12
C1469-192-6250-M	1.469	37.31	0.192	4.88	6.250	158.75	3.669	93.18	3.374	85.69	164.33	731.00	63.66	11.14	**C1469-192-6250-S**	4.096	104.04	119.23	530.38	55.36	9.69
C1469-192-6500-M	1.469	37.31	0.192	4.88	6.500	165.10	3.809	96.74	3.500	88.91	164.33	731.00	61.06	10.69	**C1469-192-6500-S**	4.254	108.06	119.23	530.38	53.10	9.29
C1469-192-6750-M	1.469	37.31	0.192	4.88	6.750	171.45	3.949	100.30	3.627	92.13	164.33	731.00	58.66	10.27	**C1469-192-6750-S**	4.413	112.08	119.23	530.38	51.01	8.93
C1469-192-7000-M	1.469	37.31	0.192	4.88	7.000	177.80	4.089	103.85	3.754	95.34	164.33	731.00	56.45	9.88	**C1469-192-7000-S**	4.571	116.10	119.23	530.38	49.08	8.59
C1469-192-7500-M	1.469	37.31	0.192	4.88	7.500	190.50	4.369	110.96	4.007	101.77	164.33	731.00	52.48	9.18	**C1469-192-7500-S**	4.887	124.14	119.23	530.38	45.64	7.99
C1469-192-8000-M	1.469	37.31	0.192	4.88	8.000	203.20	4.649	118.07	4.260	108.20	164.33	731.00	49.03	8.58	**C1469-192-8000-S**	5.204	132.17	119.23	530.38	42.64	7.46
C1469-192-8500-M	1.469	37.31	0.192	4.88	8.500	215.90	4.929	125.19	4.513	114.64	164.33	731.00	46.01	8.05	**C1469-192-8500-S**	5.520	140.21	119.23	530.38	40.01	7.00
C1469-192-9000-M	1.469	37.31	0.192	4.88	9.000	228.60	5.209	132.30	4.766	121.07	164.33	731.00	43.34	7.59	**C1469-192-9000-S**	5.836	148.25	119.23	530.38	37.69	6.60
C1469-192-9500-M	1.469	37.31	0.192	4.88	9.500	241.30	5.489	139.41	5.020	127.50	164.33	731.00	40.97	7.17	**C1469-192-9500-S**	6.153	156.28	119.23	530.38	35.62	6.23
C1469-207-2000-M	1.469	37.31	0.207	5.26	2.000	50.80	1.371	34.83	1.323	33.61	201.95	898.32	321.19	56.21	**C1469-207-2000-S**	1.481	37.63	144.86	644.38	279.30	48.88
C1469-207-2125-M	1.469	37.31	0.207	5.26	2.125	53.98	1.447	36.75	1.393	35.39	201.95	898.32	297.73	52.10	**C1469-207-2125-S**	1.565	39.76	144.86	644.38	258.89	45.31
C1469-207-2250-M	1.469	37.31	0.207	5.26	2.250	57.15	1.522	38.66	1.463	37.17	201.95	898.32	277.46	48.55	**C1469-207-2250-S**	1.650	41.90	144.86	644.38	241.27	42.22
C1469-207-2375-M	1.469	37.31	0.207	5.26	2.375	60.33	1.598	40.58	1.533	38.95	201.95	898.32	259.77	45.46	**C1469-207-2375-S**	1.734	44.04	144.86	644.38	225.89	39.53
C1469-207-2500-M	1.469	37.31	0.207	5.26	2.500	63.50	1.673	42.49	1.603	40.73	201.95	898.32	244.20	42.74	**C1469-207-2500-S**	1.818	46.17	144.86	644.38	212.35	37.16
C1469-207-2625-M	1.469	37.31	0.207	5.26	2.625	66.68	1.748	44.41	1.673	42.51	201.95	898.32	230.40	40.32	**C1469-207-2625-S**	1.902	48.31	144.86	644.38	200.35	35.06
C1469-207-2750-M	1.469	37.31	0.207	5.26	2.750	69.85	1.824	46.33	1.744	44.29	201.95	898.32	218.07	38.16	**C1469-207-2750-S**	1.986	50.45	144.86	644.38	189.63	33.18
C1469-207-2875-M	1.469	37.31	0.207	5.26	2.875	73.03	1.899	48.24	1.814	46.06	201.95	898.32	206.99	36.22	**C1469-207-2875-S**	2.070	52.58	144.86	644.38	179.99	31.50
C1469-207-3000-M	1.469	37.31	0.207	5.26	3.000	76.20	1.975	50.16	1.884	47.84	201.95	898.32	196.99	34.47	**C1469-207-3000-S**	2.154	54.72	144.86	644.38	171.29	29.98
C1469-207-3250-M	1.469	37.31	0.207	5.26	3.250	82.55	2.126	53.99	2.024	51.40	201.95	898.32	179.62	31.43	**C1469-207-3250-S**	2.323	58.99	144.86	644.38	156.19	27.33
C1469-207-3500-M	1.469	37.31	0.207	5.26	3.500	88.90	2.277	57.83	2.164	54.96	201.95	898.32	165.07	28.89	**C1469-207-3500-S**	2.491	63.27	144.86	644.38	143.54	25.12
C1469-207-3750-M	1.469	37.31	0.207	5.26	3.750	95.25	2.427	61.66	2.304	58.52	201.95	898.32	152.70	26.72	**C1469-207-3750-S**	2.659	67.54	144.86	644.38	132.78	23.24
C1469-207-4000-M	1.469	37.31	0.207	5.26	4.000	101.60	2.578	65.49	2.444	62.07	201.95	898.32	142.06	24.86	**C1469-207-4000-S**	2.827	71.81	144.86	644.38	123.53	21.62
C1469-207-4250-M	1.469	37.31	0.207	5.26	4.250	107.95	2.729	69.32	2.584	65.63	201.95	898.32	132.80	23.24	**C1469-207-4250-S**	2.996	76.09	144.86	644.38	115.48	20.21
C1469-207-4500-M	1.469	37.31	0.207	5.26	4.500	114.30	2.880	73.16	2.724	69.19	201.95	898.32	124.67	21.82	**C1469-207-4500-S**	3.164	80.36	144.86	644.38	108.41	18.97
C1469-207-4750-M	1.469	37.31	0.207	5.26	4.750	120.65	3.031	76.99	2.864	72.75	201.95	898.32	117.48	20.56	**C1469-207-4750-S**	3.332	84.63	144.86	644.38	102.16	17.88
C1469-207-5000-M	1.469	37.31	0.207	5.26	5.000	127.00	3.182	80.82	3.004	76.31	201.95	898.32	111.08	19.44	**C1469-207-5000-S**	3.500	88.91	144.86	644.38	96.59	16.90
C1469-207-5250-M	1.469	37.31	0.207	5.26	5.250	133.35	3.333	84.65	3.144	79.86	201.95	898.32	105.34	18.43	**C1469-207-5250-S**	3.668	93.18	144.86	644.38	91.60	16.03
C1469-207-5500-M	1.469	37.31	0.207	5.26	5.500	139.70	3.484	88.49	3.284	83.42	201.95	898.32	100.16	17.53	**C1469-207-5500-S**	3.837	97.45	144.86	644.38	87.10	15.24
C1469-207-5750-M	1.469	37.31	0.207	5.26	5.750	146.05	3.635	92.32	3.424	86.98	201.95	898.32	95.47	16.71	**C1469-207-5750-S**	4.005	101.73	144.86	644.38	83.01	14.53
C1469-207-6000-M	1.469	37.31	0.207	5.26	6.000	152.40	3.785	96.15	3.564	90.54	201.95	898.32	91.19	15.96	**C1469-207-6000-S**	4.173	106.00	144.86	644.38	79.30	13.88
C1469-207-6250-M	1.469	37.31	0.207	5.26	6.250	158.75	3.936	99.98	3.704	94.09	201.95	898.32	87.29	15.28	**C1469-207-6250-S**	4.341	110.27	144.86	644.38	75.90	13.28
C1469-207-6500-M	1.469	37.31	0.207	5.26	6.500	165.10	4.087	103.82	3.845	97.65	201.95	898.32	83.70	14.65	**C1469-207-6500-S**	4.510	114.55	144.86	644.38	72.78	12.74
C1469-207-6750-M	1.469	37.31	0.207	5.26	6.750	171.45	4.238	107.65	3.985	101.21	201.95	898.32	80.40	14.07	**C1469-207-6750-S**	4.678	118.82	144.86	644.38	69.91	12.23
C1469-207-7000-M	1.469	37.31	0.207	5.26	7.000	177.80	4.389	111.48	4.125	104.77	201.95	898.32	77.35	13.54	**C1469-207-7000-S**	4.846	123.09	144.86	644.38	67.26	11.77
C1469-207-7500-M	1.469	37.31	0.207	5.26	7.500	190.50	4.691	119.15	4.405	111.88	201.95	898.32	71.89	12.58	**C1469-207-7500-S**	5.183	131.64	144.86	644.38	62.51	10.94
C1469-207-8000-M	1.469	37.31	0.207	5.26	8.000	203.20	4.993	126.81	4.685	119.00	201.95	898.32	67.15	11.75	**C1469-207-8000-S**	5.519	140.19	144.86	644.38	58.39	10.22
C1469-207-8500-M	1.469	37.31	0.207	5.26	8.500	215.90	5.294	134.48	4.965	126.11	201.95	898.32	63.00	11.02	**C1469-207-8500-S**	5.856	148.73	144.86	644.38	54.78	9.59
C1469-207-9000-M	1.469	37.31	0.207	5.26	9.000	228.60	5.596	142.14	5.245	133.23	201.95	898.32	59.33	10.38	**C1469-207-9000-S**	6.192	157.28	144.86	644.38	51.59	9.03
C1469-207-9500-M	1.469	37.31	0.207	5.26	9.500	241.30	5.898	149.81	5.525	140.35	201.95	898.32	56.07	9.81	**C1469-207-9500-S**	6.529	165.83	144.86	644.38	48.75	8.53
C1469-225-2000-M	1.469	37.31	0.225	5.72	2.000	50.80	1.461	37.11	1.434	36.42	253.53	1127.77	470.23	82.29	**C1469-225-2000-S**	1.561	39.66	179.41	798.08	408.90	71.56
C1469-225-2125-M	1.469	37.31	0.225	5.72	2.125	53.98	1.542	39.18	1.512	38.39	253.53	1127.77	435.14	76.15	**C1469-225-2125-S**	1.651	41.93	179.41	798.08	378.38	66.22
C1469-225-2250-M	1.469	37.31	0.225	5.72	2.250	57.15	1.624	41.25	1.589	40.36	253.53	1127.77	404.92	70.86	**C1469-225-2250-S**	1.740	44.21	179.41	798.08	352.11	61.62
C1469-225-2375-M	1.469	37.31	0.225	5.72	2.375	60.33	1.705	43.32	1.667	42.33	253.53	1127.77	378.63	66.26	**C1469-225-2375-S**	1.830	46.48	179.41	798.08	329.24	57.62
C1469-225-2500-M	1.469	37.31	0.225	5.72	2.500	63.50	1.787	45.39	1.744	44.30	253.53	1127.77	355.54	62.22	**C1469-225-2500-S**	1.920	48.76	179.41	798.08	309.17	54.10
C1469-225-2625-M	1.469	37.31	0.225	5.72	2.625	66.68	1.868	47.46	1.822	46.27	253.53	1127.77	335.11	58.64	**C1469-225-2625-S**	2.009	51.04	179.41	798.08	291.40	50.99
C1469-225-2750-M	1.469	37.31	0.225	5.72	2.750	69.85	1.950	49.53	1.899	48.24	253.53	1127.77	316.90	55.46	**C1469-225-2750-S**	2.099	53.31	179.41	798.08	275.56	48.22
C1469-225-2875-M	1.469	37.31	0.225	5.72	2.875	73.03	2.031	51.60	1.977	50.21	253.53	1127.77	300.56	52.60	**C1469-225-2875-S**	2.189	55.59	179.41	798.08	261.36	45.74
C1469-225-3000-M	1.469	37.31	0.225	5.72	3.000	76.20	2.113	53.67	2.054	52.18	253.53	1127.77	285.83	50.02	**C1469-225-3000-S**	2.278	57.86	179.41	798.08	248.55	43.50
C1469-225-3250-M	1.469	37.31	0.225	5.72	3.250	82.55	2.276	57.81	2.209	56.12	253.53	1127.77	260.31	45.55	**C1469-225-3250-S**	2.457	62.42	179.41	798.08	226.35	39.61
C1469-225-3500-M	1.469	37.31	0.225	5.72	3.500	88.90	2.439	61.95	2.364	60.06	253.53	1127.77	238.97	41.82	**C1469-225-3500-S**	2.637	66.97	179.41	798.08	207.80	36.37
C1469-225-3750-M	1.469	37.31	0.225	5.72	3.750	95.25	2.602	66.09	2.520	64.00	253.53	1127.77	220.87	38.65	**C1469-225-3750-S**	2.816	71.52	179.41	798.08	192.06	33.61
C1469-225-4000-M	1.469	37.31	0.225	5.72	4.000	101.60	2.765	70.23	2.675	67.93	253.53	1127.77	205.31	35.93	**C1469-225-4000-S**	2.995	76.07	179.41	798.08	178.53	31.24
C1469-225-4250-M	1.469	37.31	0.225	5.72	4.250	107.95	2.928	74.38	2.830	71.87	253.53	1127.77	191.81	33.57	**C1469-225-4250-S**	3.174	80.63	179.41	798.08	166.79	29.19
C1469-225-4500-M	1.469	37.31	0.225	5.72	4.500	114.30	3.091	78.52	2.985	75.81	253.53	1127.77	179.97	31.49	**C1469-225-4500-S**	3.354	85.18	179.41	798.08	156.49	27.39

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1469-225-4750-M	1.469	37.31	0.225	5.72	4.750	120.65	3.254	82.66	3.140	79.75	253.53	1127.77	169.50	29.66
C1469-225-5000-M	1.469	37.31	0.225	5.72	5.000	127.00	3.417	86.80	3.295	83.69	253.53	1127.77	160.19	28.03
C1469-225-5250-M	1.469	37.31	0.225	5.72	5.250	133.35	3.580	90.94	3.450	87.63	253.53	1127.77	151.85	26.57
C1469-225-5500-M	1.469	37.31	0.225	5.72	5.500	139.70	3.743	95.08	3.605	91.57	253.53	1127.77	144.33	25.26
C1469-225-5750-M	1.469	37.31	0.225	5.72	5.750	146.05	3.906	99.22	3.760	95.51	253.53	1127.77	137.52	24.07
C1469-225-6000-M	1.469	37.31	0.225	5.72	6.000	152.40	4.069	103.36	3.915	99.45	253.53	1127.77	131.33	22.98
C1469-225-6250-M	1.469	37.31	0.225	5.72	6.250	158.75	4.232	107.50	4.070	103.38	253.53	1127.77	125.67	21.99
C1469-225-6500-M	1.469	37.31	0.225	5.72	6.500	165.10	4.396	111.65	4.225	107.32	253.53	1127.77	120.47	21.08
C1469-225-6750-M	1.469	37.31	0.225	5.72	6.750	171.45	4.559	115.79	4.380	111.26	253.53	1127.77	115.69	20.25
C1469-225-7000-M	1.469	37.31	0.225	5.72	7.000	177.80	4.722	119.93	4.535	115.20	253.53	1127.77	111.28	19.47
C1469-225-7500-M	1.469	37.31	0.225	5.72	7.500	190.50	5.048	128.21	4.846	123.08	253.53	1127.77	103.38	18.09
C1469-225-8000-M	1.469	37.31	0.225	5.72	8.000	203.20	5.374	136.49	5.156	130.96	253.53	1127.77	96.54	16.89
C1469-225-8500-M	1.469	37.31	0.225	5.72	8.500	215.90	5.700	144.78	5.466	138.84	253.53	1127.77	90.54	15.84
C1469-225-9000-M	1.469	37.31	0.225	5.72	9.000	228.60	6.026	153.06	5.776	146.71	253.53	1127.77	85.25	14.92
C1469-225-9500-M	1.469	37.31	0.225	5.72	9.500	241.30	6.352	161.34	6.086	154.59	253.53	1127.77	80.54	14.09
C1469-250-2125-M	1.469	37.31	0.250	6.35	2.125	53.98	1.657	42.09	1.653	42.00	337.34	1500.55	721.14	126.20
C1469-250-2250-M	1.469	37.31	0.250	6.35	2.250	57.15	1.746	44.35	1.740	44.20	337.34	1500.55	669.63	117.19
C1469-250-2375-M	1.469	37.31	0.250	6.35	2.375	60.33	1.835	46.62	1.827	46.41	337.34	1500.55	624.99	109.37
C1469-250-2500-M	1.469	37.31	0.250	6.35	2.500	63.50	1.924	48.88	1.914	48.61	337.34	1500.55	585.93	102.54
C1469-250-2625-M	1.469	37.31	0.250	6.35	2.625	66.68	2.013	51.14	2.001	50.82	337.34	1500.55	551.46	96.51
C1469-250-2750-M	1.469	37.31	0.250	6.35	2.750	69.85	2.102	53.40	2.087	53.02	337.34	1500.55	520.83	91.14
C1469-250-2875-M	1.469	37.31	0.250	6.35	2.875	73.03	2.191	55.66	2.174	55.22	337.34	1500.55	493.41	86.35
C1469-250-3000-M	1.469	37.31	0.250	6.35	3.000	76.20	2.280	57.92	2.261	57.43	337.34	1500.55	468.74	82.03
C1469-250-3250-M	1.469	37.31	0.250	6.35	3.250	82.55	2.458	62.44	2.435	61.84	337.34	1500.55	426.13	74.57
C1469-250-3500-M	1.469	37.31	0.250	6.35	3.500	88.90	2.636	66.96	2.608	66.25	337.34	1500.55	390.62	68.36
C1469-250-3750-M	1.469	37.31	0.250	6.35	3.750	95.25	2.814	71.49	2.782	70.66	337.34	1500.55	360.57	63.10
C1469-250-4000-M	1.469	37.31	0.250	6.35	4.000	101.60	2.992	76.01	2.955	75.07	337.34	1500.55	334.82	58.59
C1469-250-4250-M	1.469	37.31	0.250	6.35	4.250	107.95	3.171	80.53	3.129	79.48	337.34	1500.55	312.50	54.69
C1469-250-4500-M	1.469	37.31	0.250	6.35	4.500	114.30	3.349	85.05	3.303	83.89	337.34	1500.55	292.97	51.27
C1469-250-4750-M	1.469	37.31	0.250	6.35	4.750	120.65	3.527	89.57	3.476	88.30	337.34	1500.55	275.73	48.25
C1469-250-5000-M	1.469	37.31	0.250	6.35	5.000	127.00	3.705	94.10	3.650	92.71	337.34	1500.55	260.41	45.57
C1469-250-5250-M	1.469	37.31	0.250	6.35	5.250	133.35	3.883	98.62	3.823	97.11	337.34	1500.55	246.71	43.17
C1469-250-5500-M	1.469	37.31	0.250	6.35	5.500	139.70	4.061	103.14	3.997	101.52	337.34	1500.55	234.37	41.02
C1469-250-5750-M	1.469	37.31	0.250	6.35	5.750	146.05	4.239	107.66	4.171	105.93	337.34	1500.55	223.21	39.06
C1469-250-6000-M	1.469	37.31	0.250	6.35	6.000	152.40	4.417	112.19	4.344	110.34	337.34	1500.55	213.07	37.29
C1469-250-6250-M	1.469	37.31	0.250	6.35	6.250	158.75	4.595	116.71	4.518	114.75	337.34	1500.55	203.80	35.67
C1469-250-6500-M	1.469	37.31	0.250	6.35	6.500	165.10	4.773	121.23	4.691	119.16	337.34	1500.55	195.31	34.18
C1469-250-6750-M	1.469	37.31	0.250	6.35	6.750	171.45	4.951	125.75	4.865	123.57	337.34	1500.55	187.50	32.81
C1469-250-7000-M	1.469	37.31	0.250	6.35	7.000	177.80	5.129	130.27	5.039	127.98	337.34	1500.55	180.29	31.55
C1469-250-7500-M	1.469	37.31	0.250	6.35	7.500	190.50	5.485	139.32	5.386	136.80	337.34	1500.55	167.41	29.30
C1469-250-8000-M	1.469	37.31	0.250	6.35	8.000	203.20	5.841	148.36	5.733	145.62	337.34	1500.55	156.25	27.34
C1469-250-8500-M	1.469	37.31	0.250	6.35	8.500	215.90	6.197	157.41	6.080	154.44	337.34	1500.55	146.48	25.63
C1469-250-9000-M	1.469	37.31	0.250	6.35	9.000	228.60	6.553	166.45	6.427	163.26	337.34	1500.55	137.87	24.13
C1469-250-9500-M	1.469	37.31	0.250	6.35	9.500	241.30	6.909	175.49	6.775	172.08	337.34	1500.55	130.21	22.79
C1528-125-2625-M	1.528	38.81	0.125	3.18	2.625	66.68	1.047	26.60	0.807	20.51	48.29	214.80	30.61	5.36
C1528-125-2750-M	1.528	38.81	0.125	3.18	2.750	69.85	1.089	27.67	0.836	21.24	48.29	214.80	29.08	5.09
C1528-125-2875-M	1.528	38.81	0.125	3.18	2.875	73.03	1.131	28.74	0.865	21.97	48.29	214.80	27.69	4.85
C1528-125-3000-M	1.528	38.81	0.125	3.18	3.000	76.20	1.173	29.80	0.893	22.69	48.29	214.80	26.44	4.63
C1528-125-3250-M	1.528	38.81	0.125	3.18	3.250	82.55	1.257	31.93	0.951	24.15	48.29	214.80	24.23	4.24
C1528-125-3500-M	1.528	38.81	0.125	3.18	3.500	88.90	1.341	34.06	1.008	25.61	48.29	214.80	22.37	3.91
C1528-125-3750-M	1.528	38.81	0.125	3.18	3.750	95.25	1.425	36.20	1.066	27.06	48.29	214.80	20.77	3.63
C1528-125-4000-M	1.528	38.81	0.125	3.18	4.000	101.60	1.509	38.33	1.123	28.52	48.29	214.80	19.39	3.39
C1528-125-4250-M	1.528	38.81	0.125	3.18	4.250	107.95	1.593	40.46	1.180	29.98	48.29	214.80	18.17	3.18
C1528-125-4500-M	1.528	38.81	0.125	3.18	4.500	114.30	1.677	42.59	1.238	31.44	48.29	214.80	17.11	2.99
C1528-125-4750-M	1.528	38.81	0.125	3.18	4.750	120.65	1.761	44.72	1.295	32.89	48.29	214.80	16.16	2.83
C1528-125-5000-M	1.528	38.81	0.125	3.18	5.000	127.00	1.845	46.86	1.352	34.35	48.29	214.80	15.30	2.68
C1528-125-5250-M	1.528	38.81	0.125	3.18	5.250	133.35	1.929	48.99	1.410	35.81	48.29	214.80	14.54	2.54
C1528-125-5500-M	1.528	38.81	0.125	3.18	5.500	139.70	2.013	51.12	1.467	37.26	48.29	214.80	13.85	2.42
C1528-125-5750-M	1.528	38.81	0.125	3.18	5.750	146.05	2.097	53.25	1.524	38.72	48.29	214.80	13.22	2.31
C1528-125-6000-M	1.528	38.81	0.125	3.18	6.000	152.40	2.180	55.38	1.582	40.18	48.29	214.80	12.64	2.21
C1528-125-6250-M	1.528	38.81	0.125	3.18	6.250	158.75	2.264	57.52	1.639	41.63	48.29	214.80	12.12	2.12
C1528-125-6500-M	1.528	38.81	0.125	3.18	6.500	165.10	2.348	59.65	1.696	43.09	48.29	214.80	11.63	2.04
C1528-125-6750-M	1.528	38.81	0.125	3.18	6.750	171.45	2.432	61.78	1.754	44.55	48.29	214.80	11.18	1.96
C1528-125-7000-M	1.528	38.81	0.125	3.18	7.000	177.80	2.516	63.91	1.811	46.00	48.29	214.80	10.77	1.88

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1469-225-4750-S	3.533	89.73	179.41	798.08	147.39	25.79
C1469-225-5000-S	3.712	94.28	179.41	798.08	139.30	24.38
C1469-225-5250-S	3.891	98.84	179.41	798.08	132.04	23.11
C1469-225-5500-S	4.070	103.39	179.41	798.08	125.50	21.96
C1469-225-5750-S	4.250	107.94	179.41	798.08	119.58	20.93
C1469-225-6000-S	4.429	112.49	179.41	798.08	114.20	19.98
C1469-225-6250-S	4.608	117.05	179.41	798.08	109.27	19.12
C1469-225-6500-S	4.787	121.60	179.41	798.08	104.76	18.33
C1469-225-6750-S	4.967	126.15	179.41	798.08	100.60	17.61
C1469-225-7000-S	5.146	130.70	179.41	798.08	96.76	16.93
C1469-225-7500-S	5.504	139.81	179.41	798.08	89.90	15.73
C1469-225-8000-S	5.863	148.91	179.41	798.08	83.95	14.69
C1469-225-8500-S	6.221	158.02	179.41	798.08	78.73	13.78
C1469-225-9000-S	6.580	167.12	179.41	798.08	74.13	12.97
C1469-225-9500-S	6.938	176.23	179.41	798.08	70.03	12.26
C1469-250-2125-S	1.751	44.48	234.35	1042.42	627.08	109.74
C1469-250-2250-S	1.848	46.93	234.35	1042.42	582.29	101.90
C1469-250-2375-S	1.944	49.37	234.35	1042.42	543.47	95.11
C1469-250-2500-S	2.040	51.82	234.35	1042.42	509.50	89.16
C1469-250-2625-S	2.136	54.26	234.35	1042.42	479.53	83.92
C1469-250-2750-S	2.233	56.71	234.35	1042.42	452.89	79.26
C1469-250-2875-S	2.329	59.15	234.35	1042.42	429.06	75.08
C1469-250-3000-S	2.425	61.60	234.35	1042.42	407.60	71.33
C1469-250-3250-S	2.618	66.49	234.35	1042.42	370.55	64.85
C1469-250-3500-S	2.810	71.38	234.35	1042.42	339.67	59.44
C1469-250-3750-S	3.003	76.27	234.35	1042.42	313.54	54.87
C1469-250-4000-S	3.195	81.16	234.35	1042.42	291.15	50.95
C1469-250-4250-S	3.388	86.04	234.35	1042.42	271.74	47.55
C1469-250-4500-S	3.580	90.93	234.35	1042.42	254.75	44.58
C1469-250-4750-S	3.773	95.82	234.35	1042.42	239.77	41.96
C1469-250-5000-S	3.965	100.71	234.35	1042.42	226.45	39.63
C1469-250-5250-S	4.158	105.60	234.35	1042.42	214.53	37.54
C1469-250-5500-S	4.350	110.49	234.35	1042.42	203.80	35.67
C1469-250-5750-S	4.543	115.38	234.35	1042.42	194.10	33.97
C1469-250-6000-S	4.735	120.27	234.35	1042.42	185.27	32.42
C1469-250-6250-S	4.928	125.16	234.35	1042.42	177.22	31.01
C1469-250-6500-S	5.120	130.05	234.35	1042.42	169.84	29.72
C1469-250-6750-S	5.313	134.94	234.35	1042.42	163.04	28.53
C1469-250-7000-S	5.505	139.83	234.35	1042.42	156.77	27.43
C1469-250-7500-S	5.890	149.61	234.35	1042.42	145.57	25.48
C1469-250-8000-S	6.275	159.39	234.35	1042.42	135.87	23.78
C1469-250-8500-S	6.660	169.17	234.35	1042.42	127.38	22.29
C1469-250-9000-S	7.045	178.95	234.35	1042.42	119.88	20.98
C1469-250-9500-S	7.430	188.73	234.35	1042.42	113.22	19.81
C1528-125-2625-S	1.240	31.48	36.88	164.03	26.62	4.66
C1528-125-2750-S	1.292	32.81	36.88	164.03	25.29	4.43
C1528-125-2875-S	1.344	34.13	36.88	164.03	24.08	4.21
C1528-125-3000-S	1.396	35.45	36.88	164.03	22.99	4.02
C1528-125-3250-S	1.500	38.10	36.88	164.03	21.07	3.69
C1528-125-3500-S	1.604	40.74	36.88	164.03	19.45	3.40
C1528-125-3750-S	1.708	43.39	36.88	164.03	18.06	3.16
C1528-125-4000-S	1.812	46.04	36.88	164.03	16.86	2.95
C1528-125-4250-S	1.917	48.68	36.88	164.03	15.80	2.77
C1528-125-4500-S	2.021	51.33	36.88	164.03	14.87	2.60
C1528-125-4750-S	2.125	53.97	36.88	164.03	14.05	2.46
C1528-125-5000-S	2.229	56.62	36.88	164.03	13.31	2.33
C1528-125-5250-S	2.333	59.26	36.88	164.03	12.64	2.21
C1528-125-5500-S	2.437	61.91	36.88	164.03	12.04	2.11
C1528-125-5750-S	2.542	64.56	36.88	164.03	11.49	2.01
C1528-125-6000-S	2.646	67.20	36.88	164.03	10.99	1.92
C1528-125-6250-S	2.750	69.85	36.88	164.03	10.54	1.84
C1528-125-6500-S	2.854	72.49	36.88	164.03	10.11	1.77
C1528-125-6750-S	2.958	75.14	36.88	164.03	9.73	1.70
C1528-125-7000-S	3.062	77.78	36.88	164.03	9.37	1.64

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1528-125-7500-M	1.528	38.81	0.125	3.18	7.500	190.50	2.684	68.18	1.926	48.92	48.29	214.80	10.03	1.75
C1528-125-8000-M	1.528	38.81	0.125	3.18	8.000	203.20	2.852	72.44	2.041	51.83	48.29	214.80	9.38	1.64
C1528-125-8500-M	1.528	38.81	0.125	3.18	8.500	215.90	3.020	76.70	2.155	54.75	48.29	214.80	8.81	1.54
C1528-125-9000-M	1.528	38.81	0.125	3.18	9.000	228.60	3.188	80.97	2.270	57.66	48.29	214.80	8.31	1.45
C1528-125-9500-M	1.528	38.81	0.125	3.18	9.500	241.30	3.356	85.23	2.385	60.57	48.29	214.80	7.86	1.38
C1528-135-2500-M	1.528	38.81	0.135	3.43	2.500	63.50	1.084	27.54	0.876	22.25	59.82	266.09	42.25	7.39
C1528-135-2625-M	1.528	38.81	0.135	3.43	2.625	66.68	1.130	28.70	0.909	23.10	59.82	266.09	40.01	7.00
C1528-135-2750-M	1.528	38.81	0.135	3.43	2.750	69.85	1.176	29.86	0.943	23.94	59.82	266.09	37.99	6.65
C1528-135-2875-M	1.528	38.81	0.135	3.43	2.875	73.03	1.221	31.02	0.976	24.78	59.82	266.09	36.17	6.33
C1528-135-3000-M	1.528	38.81	0.135	3.43	3.000	76.20	1.267	32.18	1.009	25.63	59.82	266.09	34.51	6.04
C1528-135-3250-M	1.528	38.81	0.135	3.43	3.250	82.55	1.358	34.50	1.075	27.32	59.82	266.09	31.62	5.53
C1528-135-3500-M	1.528	38.81	0.135	3.43	3.500	88.90	1.449	36.81	1.142	29.00	59.82	266.09	29.17	5.10
C1528-135-3750-M	1.528	38.81	0.135	3.43	3.750	95.25	1.541	39.13	1.208	30.69	59.82	266.09	27.08	4.74
C1528-135-4000-M	1.528	38.81	0.135	3.43	4.000	101.60	1.632	41.45	1.275	32.38	59.82	266.09	25.26	4.42
C1528-135-4250-M	1.528	38.81	0.135	3.43	4.250	107.95	1.723	43.77	1.341	34.07	59.82	266.09	23.67	4.14
C1528-135-4500-M	1.528	38.81	0.135	3.43	4.500	114.30	1.814	46.09	1.408	35.75	59.82	266.09	22.27	3.90
C1528-135-4750-M	1.528	38.81	0.135	3.43	4.750	120.65	1.906	48.41	1.474	37.44	59.82	266.09	21.03	3.68
C1528-135-5000-M	1.528	38.81	0.135	3.43	5.000	127.00	1.997	50.73	1.540	39.13	59.82	266.09	19.92	3.49
C1528-135-5250-M	1.528	38.81	0.135	3.43	5.250	133.35	2.088	53.04	1.607	40.82	59.82	266.09	18.92	3.31
C1528-135-5500-M	1.528	38.81	0.135	3.43	5.500	139.70	2.180	55.36	1.673	42.50	59.82	266.09	18.02	3.15
C1528-135-5750-M	1.528	38.81	0.135	3.43	5.750	146.05	2.271	57.68	1.740	44.19	59.82	266.09	17.19	3.01
C1528-135-6000-M	1.528	38.81	0.135	3.43	6.000	152.40	2.362	60.00	1.806	45.88	59.82	266.09	16.44	2.88
C1528-135-6250-M	1.528	38.81	0.135	3.43	6.250	158.75	2.453	62.32	1.873	47.57	59.82	266.09	15.76	2.76
C1528-135-6500-M	1.528	38.81	0.135	3.43	6.500	165.10	2.545	64.64	1.939	49.25	59.82	266.09	15.12	2.65
C1528-135-6750-M	1.528	38.81	0.135	3.43	6.750	171.45	2.636	66.95	2.006	50.94	59.82	266.09	14.54	2.54
C1528-135-7000-M	1.528	38.81	0.135	3.43	7.000	177.80	2.727	69.27	2.072	52.63	59.82	266.09	14.00	2.45
C1528-135-7500-M	1.528	38.81	0.135	3.43	7.500	190.50	2.910	73.91	2.205	56.00	59.82	266.09	13.03	2.28
C1528-135-8000-M*	1.528	38.81	0.135	3.43	8.000	203.20	3.178	80.72	2.444	62.07	59.82	266.09	12.41	2.17
C1528-135-8500-M*	1.528	38.81	0.135	3.43	8.500	215.90	3.361	85.36	2.576	65.44	59.82	266.09	11.64	2.04
C1528-135-9000-M*	1.528	38.81	0.135	3.43	9.000	228.60	3.543	90.00	2.709	68.82	59.82	266.09	10.96	1.92
C1528-135-9500-M*	1.528	38.81	0.135	3.43	9.500	241.30	3.726	94.64	2.842	72.19	59.82	266.09	10.36	1.81
C1528-148-2375-M	1.528	38.81	0.148	3.76	2.375	60.33	1.137	28.88	0.965	24.50	77.21	343.47	62.38	10.92
C1528-148-2500-M	1.528	38.81	0.148	3.76	2.500	63.50	1.188	30.17	1.004	25.50	77.21	343.47	58.84	10.30
C1528-148-2625-M	1.528	38.81	0.148	3.76	2.625	66.68	1.238	31.45	1.043	26.50	77.21	343.47	55.68	9.74
C1528-148-2750-M	1.528	38.81	0.148	3.76	2.750	69.85	1.289	32.74	1.083	27.50	77.21	343.47	52.85	9.25
C1528-148-2875-M	1.528	38.81	0.148	3.76	2.875	73.03	1.339	34.02	1.122	28.49	77.21	343.47	50.28	8.80
C1528-148-3000-M	1.528	38.81	0.148	3.76	3.000	76.20	1.390	35.31	1.161	29.49	77.21	343.47	47.96	8.39
C1528-148-3250-M	1.528	38.81	0.148	3.76	3.250	82.55	1.491	37.87	1.240	31.49	77.21	343.47	43.90	7.68
C1528-148-3500-M	1.528	38.81	0.148	3.76	3.500	88.90	1.592	40.44	1.318	33.49	77.21	343.47	40.48	7.08
C1528-148-3750-M	1.528	38.81	0.148	3.76	3.750	95.25	1.693	43.01	1.397	35.48	77.21	343.47	37.55	6.57
C1528-148-4000-M	1.528	38.81	0.148	3.76	4.000	101.60	1.795	45.58	1.476	37.48	77.21	343.47	35.01	6.13
C1528-148-4250-M	1.528	38.81	0.148	3.76	4.250	107.95	1.896	48.15	1.554	39.48	77.21	343.47	32.80	5.74
C1528-148-4500-M	1.528	38.81	0.148	3.76	4.500	114.30	1.997	50.72	1.633	41.47	77.21	343.47	30.85	5.40
C1528-148-4750-M	1.528	38.81	0.148	3.76	4.750	120.65	2.098	53.29	1.711	43.47	77.21	343.47	29.12	5.10
C1528-148-5000-M	1.528	38.81	0.148	3.76	5.000	127.00	2.199	55.86	1.790	45.47	77.21	343.47	27.57	4.82
C1528-148-5250-M	1.528	38.81	0.148	3.76	5.250	133.35	2.300	58.43	1.869	47.47	77.21	343.47	26.18	4.58
C1528-148-5500-M	1.528	38.81	0.148	3.76	5.500	139.70	2.401	61.00	1.947	49.46	77.21	343.47	24.92	4.36
C1528-148-5750-M	1.528	38.81	0.148	3.76	5.750	146.05	2.503	63.57	2.026	51.46	77.21	343.47	23.78	4.16
C1528-148-6000-M	1.528	38.81	0.148	3.76	6.000	152.40	2.604	66.13	2.105	53.46	77.21	343.47	22.74	3.98
C1528-148-6250-M	1.528	38.81	0.148	3.76	6.250	158.75	2.705	68.70	2.183	55.45	77.21	343.47	21.78	3.81
C1528-148-6500-M	1.528	38.81	0.148	3.76	6.500	165.10	2.806	71.27	2.262	57.45	77.21	343.47	20.90	3.66
C1528-148-6750-M*	1.528	38.81	0.148	3.76	6.750	171.45	2.995	76.08	2.449	62.21	77.21	343.47	20.57	3.60
C1528-148-7000-M*	1.528	38.81	0.148	3.76	7.000	177.80	3.096	78.65	2.528	64.21	77.21	343.47	19.78	3.46
C1528-148-7500-M*	1.528	38.81	0.148	3.76	7.500	190.50	3.299	83.79	2.685	68.20	77.21	343.47	18.38	3.22
C1528-148-8000-M*	1.528	38.81	0.148	3.76	8.000	203.20	3.501	88.93	2.842	72.20	77.21	343.47	17.16	3.00
C1528-148-8500-M*	1.528	38.81	0.148	3.76	8.500	215.90	3.703	94.06	3.000	76.19	77.21	343.47	16.10	2.82
C1528-148-9000-M*	1.528	38.81	0.148	3.76	9.000	228.60	3.906	99.20	3.157	80.18	77.21	343.47	15.16	2.65
C1528-148-9500-M*	1.528	38.81	0.148	3.76	9.500	241.30	4.108	104.34	3.314	84.18	77.21	343.47	14.32	2.51
C1528-162-2250-M	1.528	38.81	0.162	4.12	2.250	57.15	1.186	30.14	1.049	26.64	99.18	441.19	93.26	16.32
C1528-162-2375-M	1.528	38.81	0.162	4.12	2.375	60.33	1.242	31.56	1.095	27.80	99.18	441.19	87.57	15.33
C1528-162-2500-M	1.528	38.81	0.162	4.12	2.500	63.50	1.298	32.98	1.141	28.97	99.18	441.19	82.54	14.45
C1528-162-2625-M	1.528	38.81	0.162	4.12	2.625	66.68	1.354	34.40	1.187	30.14	99.18	441.19	78.06	13.66
C1528-162-2750-M	1.528	38.81	0.162	4.12	2.750	69.85	1.410	35.82	1.233	31.31	99.18	441.19	74.04	12.96
C1528-162-2875-M	1.528	38.81	0.162	4.12	2.875	73.03	1.466	37.24	1.279	32.48	99.18	441.19	70.41	12.32

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1528-125-7500-S	3.271	83.08	36.88	164.03	8.72	1.53
C1528-125-8000-S	3.479	88.37	36.88	164.03	8.16	1.43
C1528-125-8500-S	3.687	93.66	36.88	164.03	7.66	1.34
C1528-125-9000-S	3.896	98.95	36.88	164.03	7.22	1.26
C1528-125-9500-S	4.104	104.24	36.88	164.03	6.83	1.20
C1528-135-2500-S	1.266	32.16	45.34	201.68	36.74	6.43
C1528-135-2625-S	1.322	33.57	45.34	201.68	34.79	6.09
C1528-135-2750-S	1.378	34.99	45.34	201.68	33.04	5.78
C1528-135-2875-S	1.433	36.41	45.34	201.68	31.45	5.50
C1528-135-3000-S	1.489	37.83	45.34	201.68	30.01	5.25
C1528-135-3250-S	1.601	40.66	45.34	201.68	27.49	4.81
C1528-135-3500-S	1.713	43.50	45.34	201.68	25.37	4.44
C1528-135-3750-S	1.824	46.34	45.34	201.68	23.54	4.12
C1528-135-4000-S	1.936	49.17	45.34	201.68	21.97	3.84
C1528-135-4250-S	2.048	52.01	45.34	201.68	20.59	3.60
C1528-135-4500-S	2.159	54.84	45.34	201.68	19.37	3.39
C1528-135-4750-S	2.271	57.68	45.34	201.68	18.29	3.20
C1528-135-5000-S	2.383	60.52	45.34	201.68	17.32	3.03
C1528-135-5250-S	2.494	63.35	45.34	201.68	16.45	2.88
C1528-135-5500-S	2.606	66.19	45.34	201.68	15.67	2.74
C1528-135-5750-S	2.717	69.02	45.34	201.68	14.95	2.62
C1528-135-6000-S	2.829	71.86	45.34	201.68	14.30	2.50
C1528-135-6250-S	2.941	74.70	45.34	201.68	13.70	2.40
C1528-135-6500-S	3.052	77.53	45.34	201.68	13.15	2.30
C1528-135-6750-S	3.164	80.37	45.34	201.68	12.64	2.21
C1528-135-7000-S	3.276	83.20	45.34	201.68	12.17	2.13
C1528-135-7500-S	3.499	88.88	45.34	201.68	11.33	1.98
C1528-135-8000-S*	3.797	96.45	45.34	201.68	10.79	1.89
C1528-135-8500-S*	4.020	102.12	45.34	201.68	10.12	1.77
C1528-135-9000-S*	4.244	107.79	45.34	201.68	9.53	1.67
C1528-135-9500-S*	4.467	113.46	45.34	201.68	9.01	1.58
C1528-148-2375-S	1.307	33.19	57.95	257.77	54.24	9.49
C1528-148-2500-S	1.367	34.73	57.95	257.77	51.16	8.95
C1528-148-2625-S	1.428	36.28	57.95	257.77	48.42	8.47
C1528-148-2750-S	1.489	37.82	57.95	257.77	45.95	8.04
C1528-148-2875-S	1.550	39.36	57.95	257.77	43.73	7.65
C1528-148-3000-S	1.610	40.91	57.95	257.77	41.70	7.30
C1528-148-3250-S	1.732	43.99	57.95	257.77	38.17	6.68
C1528-148-3500-S	1.854	47.08	57.95	257.77	35.20	6.16
C1528-148-3750-S	1.975	50.17	57.95	257.77	32.65	5.71
C1528-148-4000-S	2.097	53.25	57.95	257.77	30.44	5.33
C1528-148-4250-S	2.218	56.34	57.95	257.77	28.52	4.99
C1528-148-4500-S	2.340	59.43	57.95	257.77	26.82	4.69
C1528-148-4750-S	2.461	62.51	57.95	257.77	25.32	4.43
C1528-148-5000-S	2.583	65.60	57.95	257.77	23.97	4.20
C1528-148-5250-S	2.704	68.69	57.95	257.77	22.76	3.98
C1528-148-5500-S	2.826	71.77	57.95	257.77	21.67	3.79
C1528-148-5750-S	2.947	74.86	57.95	257.77	20.68	3.62
C1528-148-6000-S	3.069	77.95	57.95	257.77	19.77	3.46
C1528-148-6250-S	3.190	81.03	57.95	257.77	18.94	3.31
C1528-148-6500-S	3.312	84.12	57.95	257.77	18.18	3.18
C1528-148-6750-S*	3.509	89.14	57.95	257.77	17.88	3.13
C1528-148-7000-S*	3.631	92.23	57.95	257.77	17.20	3.01
C1528-148-7500-S*	3.874	98.40	57.95	257.77	15.98	2.80
C1528-148-8000-S*	4.117	104.57	57.95	257.77	14.92	2.61
C1528-148-8500-S*	4.360	110.75	57.95	257.77	14.00	2.45
C1528-148-9000-S*	4.603	116.92	57.95	257.77	13.18	2.31
C1528-148-9500-S*	4.846	123.09	57.95	257.77	12.45	2.18
C1528-162-2250-S	1.342	34.08	73.64	327.57	81.09	14.19
C1528-162-2375-S	1.408	35.76	73.64	327.57	76.15	13.33
C1528-162-2500-S	1.474	37.44	73.64	327.57	71.78	12.56
C1528-162-2625-S	1.540	39.12	73.64	327.57	67.88	11.88
C1528-162-2750-S	1.606	40.80	73.64	327.57	64.38	11.27
C1528-162-2875-S	1.672	42.47	73.64	327.57	61.23	10.71

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1528-162-3000-M	1.528	38.81	0.162	4.12	3.000	76.20	1.522	38.67	1.325	33.64	99.18	441.19	67.12	11.75
C1528-162-3250-M	1.528	38.81	0.162	4.12	3.250	82.55	1.634	41.51	1.417	35.98	99.18	441.19	61.39	10.74
C1528-162-3500-M	1.528	38.81	0.162	4.12	3.500	88.90	1.746	44.35	1.509	38.32	99.18	441.19	56.55	9.90
C1528-162-3750-M	1.528	38.81	0.162	4.12	3.750	95.25	1.858	47.20	1.600	40.65	99.18	441.19	52.43	9.17
C1528-162-4000-M	1.528	38.81	0.162	4.12	4.000	101.60	1.970	50.04	1.692	42.99	99.18	441.19	48.86	8.55
C1528-162-4250-M	1.528	38.81	0.162	4.12	4.250	107.95	2.082	52.88	1.784	45.32	99.18	441.19	45.75	8.01
C1528-162-4500-M	1.528	38.81	0.162	4.12	4.500	114.30	2.194	55.73	1.876	47.66	99.18	441.19	43.01	7.53
C1528-162-4750-M	1.528	38.81	0.162	4.12	4.750	120.65	2.306	58.57	1.968	50.00	99.18	441.19	40.58	7.10
C1528-162-5000-M	1.528	38.81	0.162	4.12	5.000	127.00	2.418	61.41	2.060	52.33	99.18	441.19	38.41	6.72
C1528-162-5250-M	1.528	38.81	0.162	4.12	5.250	133.35	2.530	64.26	2.152	54.67	99.18	441.19	36.46	6.38
C1528-162-5500-M	1.528	38.81	0.162	4.12	5.500	139.70	2.642	67.10	2.244	57.00	99.18	441.19	34.70	6.07
C1528-162-5750-M	1.528	38.81	0.162	4.12	5.750	146.05	2.754	69.94	2.336	59.34	99.18	441.19	33.10	5.79
C1528-162-6000-M	1.528	38.81	0.162	4.12	6.000	152.40	2.866	72.79	2.428	61.68	99.18	441.19	31.64	5.54
C1528-162-6250-M	1.528	38.81	0.162	4.12	6.250	158.75	2.978	75.63	2.520	64.01	99.18	441.19	30.31	5.30
C1528-162-6500-M	1.528	38.81	0.162	4.12	6.500	165.10	3.090	78.47	2.612	66.35	99.18	441.19	29.08	5.09
C1528-162-6750-M	1.528	38.81	0.162	4.12	6.750	171.45	3.202	81.32	2.704	68.68	99.18	441.19	27.95	4.89
C1528-162-7000-M	1.528	38.81	0.162	4.12	7.000	177.80	3.313	84.16	2.796	71.02	99.18	441.19	26.90	4.71
C1528-162-7500-M*	1.528	38.81	0.162	4.12	7.500	190.50	3.627	92.12	3.090	78.50	99.18	441.19	25.61	4.48
C1528-162-8000-M*	1.528	38.81	0.162	4.12	8.000	203.20	3.851	97.81	3.274	83.17	99.18	441.19	23.90	4.18
C1528-162-8500-M*	1.528	38.81	0.162	4.12	8.500	215.90	4.075	103.49	3.458	87.84	99.18	441.19	22.41	3.92
C1528-162-9000-M*	1.528	38.81	0.162	4.12	9.000	228.60	4.298	109.18	3.642	92.51	99.18	441.19	21.10	3.69
C1528-162-9500-M*	1.528	38.81	0.162	4.12	9.500	241.30	4.522	114.87	3.826	97.19	99.18	441.19	19.93	3.49
C1528-177-2125-M	1.528	38.81	0.177	4.50	2.125	53.98	1.229	31.21	1.124	28.55	126.68	563.48	141.34	24.73
C1528-177-2250-M	1.528	38.81	0.177	4.50	2.250	57.15	1.290	32.78	1.177	29.90	126.68	563.48	132.02	23.10
C1528-177-2375-M	1.528	38.81	0.177	4.50	2.375	60.33	1.352	34.35	1.230	31.25	126.68	563.48	123.85	21.67
C1528-177-2500-M	1.528	38.81	0.177	4.50	2.500	63.50	1.414	35.91	1.283	32.60	126.68	563.48	116.64	20.41
C1528-177-2625-M	1.528	38.81	0.177	4.50	2.625	66.68	1.476	37.48	1.337	33.95	126.68	563.48	110.22	19.29
C1528-177-2750-M	1.528	38.81	0.177	4.50	2.750	69.85	1.537	39.05	1.390	35.30	126.68	563.48	104.47	18.28
C1528-177-2875-M	1.528	38.81	0.177	4.50	2.875	73.03	1.599	40.62	1.443	36.65	126.68	563.48	99.29	17.38
C1528-177-3000-M	1.528	38.81	0.177	4.50	3.000	76.20	1.661	42.19	1.496	37.99	126.68	563.48	94.60	16.55
C1528-177-3250-M	1.528	38.81	0.177	4.50	3.250	82.55	1.784	45.32	1.602	40.69	126.68	563.48	86.43	15.13
C1528-177-3500-M	1.528	38.81	0.177	4.50	3.500	88.90	1.908	48.46	1.708	43.39	126.68	563.48	79.56	13.92
C1528-177-3750-M	1.528	38.81	0.177	4.50	3.750	95.25	2.031	51.60	1.814	46.09	126.68	563.48	73.71	12.90
C1528-177-4000-M	1.528	38.81	0.177	4.50	4.000	101.60	2.155	54.73	1.921	48.78	126.68	563.48	68.65	12.01
C1528-177-4250-M	1.528	38.81	0.177	4.50	4.250	107.95	2.278	57.87	2.027	51.48	126.68	563.48	64.25	11.24
C1528-177-4500-M	1.528	38.81	0.177	4.50	4.500	114.30	2.402	61.01	2.133	54.18	126.68	563.48	60.37	10.57
C1528-177-4750-M	1.528	38.81	0.177	4.50	4.750	120.65	2.525	64.14	2.239	56.88	126.68	563.48	56.94	9.96
C1528-177-5000-M	1.528	38.81	0.177	4.50	5.000	127.00	2.649	67.28	2.346	59.58	126.68	563.48	53.88	9.43
C1528-177-5250-M	1.528	38.81	0.177	4.50	5.250	133.35	2.772	70.41	2.452	62.27	126.68	563.48	51.13	8.95
C1528-177-5500-M	1.528	38.81	0.177	4.50	5.500	139.70	2.896	73.55	2.558	64.97	126.68	563.48	48.64	8.51
C1528-177-5750-M	1.528	38.81	0.177	4.50	5.750	146.05	3.019	76.69	2.664	67.67	126.68	563.48	46.39	8.12
C1528-177-6000-M	1.528	38.81	0.177	4.50	6.000	152.40	3.143	79.82	2.770	70.37	126.68	563.48	44.33	7.76
C1528-177-6250-M	1.528	38.81	0.177	4.50	6.250	158.75	3.266	82.96	2.877	73.06	126.68	563.48	42.45	7.43
C1528-177-6500-M	1.528	38.81	0.177	4.50	6.500	165.10	3.390	86.10	2.983	75.76	126.68	563.48	40.73	7.13
C1528-177-6750-M	1.528	38.81	0.177	4.50	6.750	171.45	3.513	89.23	3.089	78.46	126.68	563.48	39.14	6.85
C1528-177-7000-M	1.528	38.81	0.177	4.50	7.000	177.80	3.637	92.37	3.195	81.16	126.68	563.48	37.66	6.59
C1528-177-7500-M	1.528	38.81	0.177	4.50	7.500	190.50	3.884	98.64	3.408	86.55	126.68	563.48	35.03	6.13
C1528-177-8000-M	1.528	38.81	0.177	4.50	8.000	203.20	4.130	104.91	3.620	91.95	126.68	563.48	32.74	5.73
C1528-177-8500-M	1.528	38.81	0.177	4.50	8.500	215.90	4.377	111.19	3.832	97.34	126.68	563.48	30.73	5.38
C1528-177-9000-M	1.528	38.81	0.177	4.50	9.000	228.60	4.624	117.46	4.045	102.74	126.68	563.48	28.95	5.07
C1528-177-9500-M	1.528	38.81	0.177	4.50	9.500	241.30	4.871	123.73	4.257	108.14	126.68	563.48	27.37	4.79
C1528-192-2125-M	1.528	38.81	0.192	4.88	2.125	53.98	1.322	33.59	1.240	31.49	158.49	705.00	197.44	34.55
C1528-192-2250-M	1.528	38.81	0.192	4.88	2.250	57.15	1.390	35.30	1.300	33.01	158.49	705.00	184.22	32.24
C1528-192-2375-M	1.528	38.81	0.192	4.88	2.375	60.33	1.457	37.01	1.360	34.54	158.49	705.00	172.65	30.21
C1528-192-2500-M	1.528	38.81	0.192	4.88	2.500	63.50	1.524	38.72	1.420	36.06	158.49	705.00	162.45	28.43
C1528-192-2625-M	1.528	38.81	0.192	4.88	2.625	66.68	1.592	40.43	1.480	37.59	158.49	705.00	153.39	26.84
C1528-192-2750-M	1.528	38.81	0.192	4.88	2.750	69.85	1.659	42.14	1.540	39.11	158.49	705.00	145.29	25.43
C1528-192-2875-M	1.528	38.81	0.192	4.88	2.875	73.03	1.726	43.85	1.600	40.64	158.49	705.00	138.00	24.15
C1528-192-3000-M	1.528	38.81	0.192	4.88	3.000	76.20	1.794	45.56	1.660	42.17	158.49	705.00	131.40	23.00
C1528-192-3250-M	1.528	38.81	0.192	4.88	3.250	82.55	1.929	48.99	1.780	45.22	158.49	705.00	119.94	20.99
C1528-192-3500-M	1.528	38.81	0.192	4.88	3.500	88.90	2.063	52.41	1.900	48.27	158.49	705.00	110.32	19.31
C1528-192-3750-M	1.528	38.81	0.192	4.88	3.750	95.25	2.198	55.83	2.020	51.32	158.49	705.00	102.12	17.87
C1528-192-4000-M	1.528	38.81	0.192	4.88	4.000	101.60	2.333	59.25	2.140	54.37	158.49	705.00	95.06	16.64
C1528-192-4250-M	1.528	38.81	0.192	4.88	4.250	107.95	2.468	62.67	2.261	57.42	158.49	705.00	88.92	15.56

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1528-162-3000-S	1.738	44.15	73.64	327.57	58.37	10.21
C1528-162-3250-S	1.870	47.51	73.64	327.57	53.38	9.34
C1528-162-3500-S	2.003	50.86	73.64	327.57	49.18	8.61
C1528-162-3750-S	2.135	54.22	73.64	327.57	45.59	7.98
C1528-162-4000-S	2.267	57.58	73.64	327.57	42.49	7.44
C1528-162-4250-S	2.399	60.93	73.64	327.57	39.78	6.96
C1528-162-4500-S	2.531	64.29	73.64	327.57	37.40	6.55
C1528-162-4750-S	2.663	67.64	73.64	327.57	35.29	6.18
C1528-162-5000-S	2.795	71.00	73.64	327.57	33.40	5.85
C1528-162-5250-S	2.927	74.36	73.64	327.57	31.71	5.55
C1528-162-5500-S	3.060	77.71	73.64	327.57	30.18	5.28
C1528-162-5750-S	3.192	81.07	73.64	327.57	28.79	5.04
C1528-162-6000-S	3.324	84.42	73.64	327.57	27.52	4.82
C1528-162-6250-S	3.456	87.78	73.64	327.57	26.36	4.61
C1528-162-6500-S	3.588	91.14	73.64	327.57	25.29	4.43
C1528-162-6750-S	3.720	94.49	73.64	327.57	24.31	4.25
C1528-162-7000-S	3.852	97.85	73.64	327.57	23.40	4.09
C1528-162-7500-S*	4.193	106.50	73.64	327.57	22.27	3.90
C1528-162-8000-S*	4.457	113.21	73.64	327.57	20.79	3.64
C1528-162-8500-S*	4.721	119.92	73.64	327.57	19.49	3.41
C1528-162-9000-S*	4.986	126.64	73.64	327.57	18.34	3.21
C1528-162-9500-S*	5.250	133.35	73.64	327.57	17.33	3.03
C1528-177-2125-S	1.369	34.76	92.97	413.57	122.90	21.51
C1528-177-2250-S	1.440	36.58	92.97	413.57	114.80	20.09
C1528-177-2375-S	1.512	38.40	92.97	413.57	107.70	18.85
C1528-177-2500-S	1.583	40.22	92.97	413.57	101.43	17.75
C1528-177-2625-S	1.655	42.04	92.97	413.57	95.84	16.77
C1528-177-2750-S	1.727	43.85	92.97	413.57	90.84	15.90
C1528-177-2875-S	1.798	45.67	92.97	413.57	86.34	15.11
C1528-177-3000-S	1.870	47.49	92.97	413.57	82.26	14.40
C1528-177-3250-S	2.013	51.13	92.97	413.57	75.16	13.15
C1528-177-3500-S	2.156	54.77	92.97	413.57	69.19	12.11
C1528-177-3750-S	2.299	58.40	92.97	413.57	64.09	11.22
C1528-177-4000-S	2.443	62.04	92.97	413.57	59.70	10.45
C1528-177-4250-S	2.586	65.68	92.97	413.57	55.87	9.78
C1528-177-4500-S	2.729	69.32	92.97	413.57	52.50	9.19
C1528-177-4750-S	2.872	72.95	92.97	413.57	49.51	8.66
C1528-177-5000-S	3.015	76.59	92.97	413.57	46.85	8.20
C1528-177-5250-S	3.159	80.23	92.97	413.57	44.46	7.78
C1528-177-5500-S	3.302	83.87	92.97	413.57	42.30	7.40
C1528-177-5750-S	3.445	87.51	92.97	413.57	40.34	7.06
C1528-177-6000-S	3.588	91.14	92.97	413.57	38.55	6.75
C1528-177-6250-S	3.732	94.78	92.97	413.57	36.92	6.46
C1528-177-6500-S	3.875	98.42	92.97	413.57	35.42	6.20
C1528-177-6750-S	4.018	102.06	92.97	413.57	34.03	5.96
C1528-177-7000-S	4.161	105.69	92.97	413.57	32.75	5.73
C1528-177-7500-S	4.448	112.97	92.97	413.57	30.46	5.33
C1528-177-8000-S	4.734	120.24	92.97	413.57	28.47	4.98
C1528-177-8500-S	5.020	127.52	92.97	413.57	26.72	4.68
C1528-177-9000-S	5.307	134.79	92.97	413.57	25.17	4.41
C1528-177-9500-S	5.593	142.07	92.97	413.57	23.80	4.16
C1528-192-2125-S	1.455	36.96	114.99	511.52	171.69	30.05
C1528-192-2250-S	1.532	38.92	114.99	511.52	160.19	28.03
C1528-192-2375-S	1.609	40.87	114.99	511.52	150.13	26.27
C1528-192-2500-S	1.686	42.82	114.99	511.52	141.26	24.72
C1528-192-2625-S	1.763	44.78	114.99	511.52	133.38	23.34
C1528-192-2750-S	1.840	46.73	114.99	511.52	126.34	22.11
C1528-192-2875-S	1.917	48.68	114.99	511.52	120.00	21.00
C1528-192-3000-S	1.994	50.64	114.99	511.52	114.26	20.00
C1528-192-3250-S	2.147	54.54	114.99	511.52	104.30	18.25
C1528-192-3500-S	2.301	58.45	114.99	511.52	95.93	16.79
C1528-192-3750-S	2.455	62.36	114.99	511.52	88.80	15.54
C1528-192-4000-S	2.609	66.27	114.99	511.52	82.66	14.47
C1528-192-4250-S	2.763	70.17	114.99	511.52	77.32	13.53

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1528-192-4500-M	1.528	38.81	0.192	4.88	4.500	114.30	2.602	66.10	2.381	60.47	158.49	705.00	83.52	14.62
C1528-192-4750-M	1.528	38.81	0.192	4.88	4.750	120.65	2.737	69.52	2.501	63.52	158.49	705.00	78.73	13.78
C1528-192-5000-M	1.528	38.81	0.192	4.88	5.000	127.00	2.872	72.94	2.621	66.57	158.49	705.00	74.47	13.03
C1528-192-5250-M	1.528	38.81	0.192	4.88	5.250	133.35	3.006	76.36	2.741	69.62	158.49	705.00	70.64	12.36
C1528-192-5500-M	1.528	38.81	0.192	4.88	5.500	139.70	3.141	79.79	2.861	72.67	158.49	705.00	67.19	11.76
C1528-192-5750-M	1.528	38.81	0.192	4.88	5.750	146.05	3.276	83.21	2.981	75.72	158.49	705.00	64.06	11.21
C1528-192-6000-M	1.528	38.81	0.192	4.88	6.000	152.40	3.411	86.63	3.101	78.78	158.49	705.00	61.21	10.71
C1528-192-6250-M	1.528	38.81	0.192	4.88	6.250	158.75	3.545	90.05	3.221	81.83	158.49	705.00	58.60	10.26
C1528-192-6500-M	1.528	38.81	0.192	4.88	6.500	165.10	3.680	93.47	3.342	84.88	158.49	705.00	56.21	9.84
C1528-192-6750-M	1.528	38.81	0.192	4.88	6.750	171.45	3.815	96.90	3.462	87.93	158.49	705.00	54.00	9.45
C1528-192-7000-M	1.528	38.81	0.192	4.88	7.000	177.80	3.950	100.32	3.582	90.98	158.49	705.00	51.96	9.09
C1528-192-7500-M	1.528	38.81	0.192	4.88	7.500	190.50	4.219	107.16	3.822	97.08	158.49	705.00	48.31	8.45
C1528-192-8000-M	1.528	38.81	0.192	4.88	8.000	203.20	4.489	114.01	4.062	103.18	158.49	705.00	45.14	7.90
C1528-192-8500-M	1.528	38.81	0.192	4.88	8.500	215.90	4.758	120.85	4.302	109.28	158.49	705.00	42.35	7.41
C1528-192-9000-M	1.528	38.81	0.192	4.88	9.000	228.60	5.027	127.70	4.543	115.38	158.49	705.00	39.90	6.98
C1528-192-9500-M	1.528	38.81	0.192	4.88	9.500	241.30	5.297	134.54	4.783	121.49	158.49	705.00	37.71	6.60
C1528-207-2125-M	1.528	38.81	0.207	5.26	2.125	53.98	1.410	35.81	1.348	34.24	194.85	866.74	272.49	47.69
C1528-207-2250-M	1.528	38.81	0.207	5.26	2.250	57.15	1.483	37.66	1.415	35.93	194.85	866.74	253.94	44.44
C1528-207-2375-M	1.528	38.81	0.207	5.26	2.375	60.33	1.555	39.51	1.481	37.63	194.85	866.74	237.76	41.61
C1528-207-2500-M	1.528	38.81	0.207	5.26	2.500	63.50	1.628	41.36	1.548	39.32	194.85	866.74	223.51	39.11
C1528-207-2625-M	1.528	38.81	0.207	5.26	2.625	66.68	1.701	43.20	1.615	41.02	194.85	866.74	210.87	36.90
C1528-207-2750-M	1.528	38.81	0.207	5.26	2.750	69.85	1.774	45.05	1.682	42.71	194.85	866.74	199.59	34.93
C1528-207-2875-M	1.528	38.81	0.207	5.26	2.875	73.03	1.846	46.90	1.748	44.41	194.85	866.74	189.45	33.15
C1528-207-3000-M	1.528	38.81	0.207	5.26	3.000	76.20	1.919	48.75	1.815	46.10	194.85	866.74	180.29	31.55
C1528-207-3250-M	1.528	38.81	0.207	5.26	3.250	82.55	2.065	52.45	1.948	49.49	194.85	866.74	164.40	28.77
C1528-207-3500-M	1.528	38.81	0.207	5.26	3.500	88.90	2.210	56.14	2.082	52.88	194.85	866.74	151.08	26.44
C1528-207-3750-M	1.528	38.81	0.207	5.26	3.750	95.25	2.356	59.84	2.215	56.27	194.85	866.74	139.76	24.46
C1528-207-4000-M	1.528	38.81	0.207	5.26	4.000	101.60	2.501	63.53	2.349	59.66	194.85	866.74	130.02	22.75
C1528-207-4250-M	1.528	38.81	0.207	5.26	4.250	107.95	2.647	67.23	2.482	63.05	194.85	866.74	121.54	21.27
C1528-207-4500-M	1.528	38.81	0.207	5.26	4.500	114.30	2.792	70.93	2.616	66.44	194.85	866.74	114.11	19.97
C1528-207-4750-M	1.528	38.81	0.207	5.26	4.750	120.65	2.938	74.62	2.749	69.83	194.85	866.74	107.53	18.82
C1528-207-5000-M	1.528	38.81	0.207	5.26	5.000	127.00	3.083	78.32	2.882	73.21	194.85	866.74	101.67	17.79
C1528-207-5250-M	1.528	38.81	0.207	5.26	5.250	133.35	3.229	82.01	3.016	76.60	194.85	866.74	96.41	16.87
C1528-207-5500-M	1.528	38.81	0.207	5.26	5.500	139.70	3.374	85.71	3.149	79.99	194.85	866.74	91.67	16.04
C1528-207-5750-M	1.528	38.81	0.207	5.26	5.750	146.05	3.520	89.41	3.283	83.38	194.85	866.74	87.38	15.29
C1528-207-6000-M	1.528	38.81	0.207	5.26	6.000	152.40	3.665	93.10	3.416	86.77	194.85	866.74	83.47	14.61
C1528-207-6250-M	1.528	38.81	0.207	5.26	6.250	158.75	3.811	96.80	3.550	90.16	194.85	866.74	79.89	13.98
C1528-207-6500-M	1.528	38.81	0.207	5.26	6.500	165.10	3.957	100.50	3.683	93.55	194.85	866.74	76.61	13.41
C1528-207-6750-M	1.528	38.81	0.207	5.26	6.750	171.45	4.102	104.19	3.817	96.94	194.85	866.74	73.59	12.88
C1528-207-7000-M	1.528	38.81	0.207	5.26	7.000	177.80	4.248	107.89	3.950	100.33	194.85	866.74	70.79	12.39
C1528-207-7500-M	1.528	38.81	0.207	5.26	7.500	190.50	4.539	115.28	4.217	107.11	194.85	866.74	65.80	11.51
C1528-207-8000-M	1.528	38.81	0.207	5.26	8.000	203.20	4.830	122.67	4.484	113.89	194.85	866.74	61.46	10.76
C1528-207-8500-M	1.528	38.81	0.207	5.26	8.500	215.90	5.121	130.07	4.751	120.66	194.85	866.74	57.66	10.09
C1528-207-9000-M	1.528	38.81	0.207	5.26	9.000	228.60	5.412	137.46	5.017	127.44	194.85	866.74	54.30	9.50
C1528-207-9500-M	1.528	38.81	0.207	5.26	9.500	241.30	5.703	144.85	5.284	134.22	194.85	866.74	51.31	8.98
C1528-225-2125-M	1.528	38.81	0.225	5.72	2.125	53.98	1.506	38.26	1.467	37.26	244.76	1088.73	395.61	69.23
C1528-225-2250-M	1.528	38.81	0.225	5.72	2.250	57.15	1.585	40.26	1.541	39.15	244.76	1088.73	368.14	64.42
C1528-225-2375-M	1.528	38.81	0.225	5.72	2.375	60.33	1.664	42.27	1.615	41.03	244.76	1088.73	344.23	60.24
C1528-225-2500-M	1.528	38.81	0.225	5.72	2.500	63.50	1.743	44.27	1.690	42.92	244.76	1088.73	323.24	56.57
C1528-225-2625-M	1.528	38.81	0.225	5.72	2.625	66.68	1.822	46.27	1.764	44.80	244.76	1088.73	304.67	53.32
C1528-225-2750-M	1.528	38.81	0.225	5.72	2.750	69.85	1.900	48.27	1.838	46.69	244.76	1088.73	288.11	50.42
C1528-225-2875-M	1.528	38.81	0.225	5.72	2.875	73.03	1.979	50.27	1.912	48.57	244.76	1088.73	273.26	47.82
C1528-225-3000-M	1.528	38.81	0.225	5.72	3.000	76.20	2.058	52.28	1.987	50.46	244.76	1088.73	259.86	45.48
C1528-225-3250-M	1.528	38.81	0.225	5.72	3.250	82.55	2.216	56.28	2.135	54.23	244.76	1088.73	236.66	41.42
C1528-225-3500-M	1.528	38.81	0.225	5.72	3.500	88.90	2.373	60.29	2.283	58.00	244.76	1088.73	217.26	38.02
C1528-225-3750-M	1.528	38.81	0.225	5.72	3.750	95.25	2.531	64.29	2.432	61.77	244.76	1088.73	200.80	35.14
C1528-225-4000-M	1.528	38.81	0.225	5.72	4.000	101.60	2.689	68.29	2.580	65.54	244.76	1088.73	186.66	32.67
C1528-225-4250-M	1.528	38.81	0.225	5.72	4.250	107.95	2.846	72.30	2.729	69.31	244.76	1088.73	174.38	30.52
C1528-225-4500-M	1.528	38.81	0.225	5.72	4.500	114.30	3.004	76.30	2.877	73.08	244.76	1088.73	163.62	28.63
C1528-225-4750-M	1.528	38.81	0.225	5.72	4.750	120.65	3.162	80.31	3.026	76.85	244.76	1088.73	154.11	26.97
C1528-225-5000-M	1.528	38.81	0.225	5.72	5.000	127.00	3.319	84.31	3.174	80.62	244.76	1088.73	145.64	25.49
C1528-225-5250-M	1.528	38.81	0.225	5.72	5.250	133.35	3.477	88.32	3.322	84.39	244.76	1088.73	138.05	24.16
C1528-225-5500-M	1.528	38.81	0.225	5.72	5.500	139.70	3.635	92.32	3.471	88.16	244.76	1088.73	131.22	22.96
C1528-225-5750-M	1.528	38.81	0.225	5.72	5.750	146.05	3.792	96.33	3.619	91.93	244.76	1088.73	125.03	21.88

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1528-192-4500-S	2.917	74.08	114.99	511.52	72.62	12.71
C1528-192-4750-S	3.070	77.99	114.99	511.52	68.46	11.98
C1528-192-5000-S	3.224	81.89	114.99	511.52	64.76	11.33
C1528-192-5250-S	3.378	85.80	114.99	511.52	61.43	10.75
C1528-192-5500-S	3.532	89.71	114.99	511.52	58.43	10.22
C1528-192-5750-S	3.686	93.62	114.99	511.52	55.71	9.75
C1528-192-6000-S	3.839	97.52	114.99	511.52	53.23	9.31
C1528-192-6250-S	3.993	101.43	114.99	511.52	50.96	8.92
C1528-192-6500-S	4.147	105.34	114.99	511.52	48.87	8.55
C1528-192-6750-S	4.301	109.24	114.99	511.52	46.95	8.22
C1528-192-7000-S	4.455	113.15	114.99	511.52	45.18	7.91
C1528-192-7500-S	4.762	120.97	114.99	511.52	42.01	7.35
C1528-192-8000-S	5.070	128.78	114.99	511.52	39.25	6.87
C1528-192-8500-S	5.378	136.59	114.99	511.52	36.83	6.45
C1528-192-9000-S	5.685	144.41	114.99	511.52	34.69	6.07
C1528-192-9500-S	5.993	152.22	114.99	511.52	32.79	5.74
C1528-207-2125-S	1.535	38.99	139.77	621.72	236.95	41.47
C1528-207-2250-S	1.617	41.07	139.77	621.72	220.82	38.64
C1528-207-2375-S	1.699	43.15	139.77	621.72	206.74	36.18
C1528-207-2500-S	1.781	45.23	139.77	621.72	194.36	34.01
C1528-207-2625-S	1.863	47.31	139.77	621.72	183.37	32.09
C1528-207-2750-S	1.945	49.39	139.77	621.72	173.56	30.37
C1528-207-2875-S	2.027	51.48	139.77	621.72	164.74	28.83
C1528-207-3000-S	2.108	53.56	139.77	621.72	156.78	27.44
C1528-207-3250-S	2.272	57.72	139.77	621.72	142.96	25.02
C1528-207-3500-S	2.436	61.88	139.77	621.72	131.38	22.99
C1528-207-3750-S	2.600	66.04	139.77	621.72	121.53	21.27
C1528-207-4000-S	2.764	70.20	139.77	621.72	113.06	19.78
C1528-207-4250-S	2.928	74.36	139.77	621.72	105.69	18.50
C1528-207-4500-S	3.091	78.52	139.77	621.72	99.22	17.36
C1528-207-4750-S	3.255	82.68	139.77	621.72	93.50	16.36
C1528-207-5000-S	3.419	86.84	139.77	621.72	88.41	15.47
C1528-207-5250-S	3.583	91.00	139.77	621.72	83.84	14.67
C1528-207-5500-S	3.747	95.16	139.77	621.72	79.71	13.95
C1528-207-5750-S	3.910	99.32	139.77	621.72	75.98	13.30
C1528-207-6000-S	4.074	103.49	139.77	621.72	72.58	12.70
C1528-207-6250-S	4.238	107.65	139.77	621.72	69.47	12.16
C1528-207-6500-S	4.402	111.81	139.77	621.72	66.62	11.66
C1528-207-6750-S	4.566	115.97	139.77	621.72	63.99	11.20
C1528-207-7000-S	4.729	120.13	139.77	621.72	61.56	10.77
C1528-207-7500-S	5.057	128.45	139.77	621.72	57.22	10.01
C1528-207-8000-S	5.385	136.77	139.77	621.72	53.44	9.35
C1528-207-8500-S	5.712	145.09	139.77	621.72	50.14	8.77
C1528-207-9000-S	6.040	153.42	139.77	621.72	47.22	8.26
C1528-207-9500-S	6.368	161.74	139.77	621.72	44.62	7.81
C1528-225-2125-S	1.622	41.19	173.20	770.45	344.01	60.20
C1528-225-2250-S	1.709	43.41	173.20	770.45	320.12	56.02
C1528-225-2375-S	1.796	45.63	173.20	770.45	299.33	52.38
C1528-225-2500-S	1.884	47.85	173.20	770.45	281.08	49.19
C1528-225-2625-S	1.971	50.07	173.20	770.45	264.93	46.36
C1528-225-2750-S	2.059	52.29	173.20	770.45	250.53	43.84
C1528-225-2875-S	2.146	54.51	173.20	770.45	237.62	41.58
C1528-225-3000-S	2.234	56.73	173.20	770.45	225.97	39.54
C1528-225-3250-S	2.408	61.17	173.20	770.45	205.79	36.01
C1528-225-3500-S	2.583	65.61	173.20	770.45	188.92	33.06
C1528-225-3750-S	2.758	70.05	173.20	770.45	174.61	30.56
C1528-225-4000-S	2.933	74.50	173.20	770.45	162.32	28.41
C1528-225-4250-S	3.108	78.94	173.20	770.45	151.64	26.54
C1528-225-4500-S	3.283	83.38	173.20	770.45	142.28	24.90
C1528-225-4750-S	3.457	87.82	173.20	770.45	134.00	23.45
C1528-225-5000-S	3.632	92.26	173.20	770.45	126.64	22.16
C1528-225-5250-S	3.807	96.70	173.20	770.45	120.05	21.01
C1528-225-5500-S	3.982	101.14	173.20	770.45	114.10	19.97
C1528-225-5750-S	4.157	105.59	173.20	770.45	108.72	19.03

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1528-225-6000-M	1.528	38.81	0.225	5.72	6.000	152.40	3.950	100.33	3.768	95.70	244.76	1088.73	119.40	20.89
C1528-225-6250-M	1.528	38.81	0.225	5.72	6.250	158.75	4.108	104.34	3.916	99.47	244.76	1088.73	114.25	19.99
C1528-225-6500-M	1.528	38.81	0.225	5.72	6.500	165.10	4.265	108.34	4.065	103.24	244.76	1088.73	109.53	19.17
C1528-225-6750-M	1.528	38.81	0.225	5.72	6.750	171.45	4.423	112.35	4.213	107.01	244.76	1088.73	105.18	18.41
C1528-225-7000-M	1.528	38.81	0.225	5.72	7.000	177.80	4.581	116.35	4.361	110.78	244.76	1088.73	101.17	17.70
C1528-225-7500-M	1.528	38.81	0.225	5.72	7.500	190.50	4.896	124.36	4.658	118.32	244.76	1088.73	93.99	16.45
C1528-225-8000-M	1.528	38.81	0.225	5.72	8.000	203.20	5.211	132.37	4.955	125.86	244.76	1088.73	87.77	15.36
C1528-225-8500-M	1.528	38.81	0.225	5.72	8.500	215.90	5.527	140.38	5.252	133.40	244.76	1088.73	82.32	14.41
C1528-225-9000-M	1.528	38.81	0.225	5.72	9.000	228.60	5.842	148.39	5.549	140.94	244.76	1088.73	77.50	13.56
C1528-225-9500-M	1.528	38.81	0.225	5.72	9.500	241.30	6.157	156.40	5.846	148.48	244.76	1088.73	73.22	12.81
C1528-250-2125-M	1.528	38.81	0.250	6.35	2.125	53.98	1.623	41.24	1.612	40.94	325.95	1449.88	649.85	113.72
C1528-250-2250-M	1.528	38.81	0.250	6.35	2.250	57.15	1.710	43.43	1.695	43.06	325.95	1449.88	603.43	105.60
C1528-250-2375-M	1.528	38.81	0.250	6.35	2.375	60.33	1.796	45.63	1.779	45.18	325.95	1449.88	563.20	98.56
C1528-250-2500-M	1.528	38.81	0.250	6.35	2.500	63.50	1.883	47.82	1.862	47.31	325.95	1449.88	528.00	92.40
C1528-250-2625-M	1.528	38.81	0.250	6.35	2.625	66.68	1.969	50.02	1.946	49.43	325.95	1449.88	496.94	86.96
C1528-250-2750-M	1.528	38.81	0.250	6.35	2.750	69.85	2.056	52.21	2.030	51.55	325.95	1449.88	469.33	82.13
C1528-250-2875-M	1.528	38.81	0.250	6.35	2.875	73.03	2.142	54.41	2.113	53.68	325.95	1449.88	444.63	77.81
C1528-250-3000-M	1.528	38.81	0.250	6.35	3.000	76.20	2.228	56.60	2.197	55.80	325.95	1449.88	422.40	73.92
C1528-250-3250-M	1.528	38.81	0.250	6.35	3.250	82.55	2.401	60.99	2.364	60.04	325.95	1449.88	384.00	67.20
C1528-250-3500-M	1.528	38.81	0.250	6.35	3.500	88.90	2.574	65.38	2.531	64.29	325.95	1449.88	352.00	61.60
C1528-250-3750-M	1.528	38.81	0.250	6.35	3.750	95.25	2.747	69.77	2.698	68.54	325.95	1449.88	324.92	56.86
C1528-250-4000-M	1.528	38.81	0.250	6.35	4.000	101.60	2.920	74.16	2.865	72.78	325.95	1449.88	301.72	52.80
C1528-250-4250-M	1.528	38.81	0.250	6.35	4.250	107.95	3.093	78.55	3.033	77.03	325.95	1449.88	281.60	49.28
C1528-250-4500-M	1.528	38.81	0.250	6.35	4.500	114.30	3.265	82.94	3.200	81.28	325.95	1449.88	264.00	46.20
C1528-250-4750-M	1.528	38.81	0.250	6.35	4.750	120.65	3.438	87.33	3.367	85.52	325.95	1449.88	248.47	43.48
C1528-250-5000-M	1.528	38.81	0.250	6.35	5.000	127.00	3.611	91.72	3.534	89.77	325.95	1449.88	234.67	41.07
C1528-250-5250-M	1.528	38.81	0.250	6.35	5.250	133.35	3.784	96.11	3.701	94.02	325.95	1449.88	222.32	38.91
C1528-250-5500-M	1.528	38.81	0.250	6.35	5.500	139.70	3.957	100.50	3.869	98.26	325.95	1449.88	211.20	36.96
C1528-250-5750-M	1.528	38.81	0.250	6.35	5.750	146.05	4.130	104.89	4.036	102.51	325.95	1449.88	201.14	35.20
C1528-250-6000-M	1.528	38.81	0.250	6.35	6.000	152.40	4.302	109.28	4.203	106.75	325.95	1449.88	192.00	33.60
C1528-250-6250-M	1.528	38.81	0.250	6.35	6.250	158.75	4.475	113.67	4.370	111.00	325.95	1449.88	183.65	32.14
C1528-250-6500-M	1.528	38.81	0.250	6.35	6.500	165.10	4.648	118.06	4.537	115.25	325.95	1449.88	176.00	30.80
C1528-250-6750-M	1.528	38.81	0.250	6.35	6.750	171.45	4.821	122.45	4.704	119.49	325.95	1449.88	168.96	29.57
C1528-250-7000-M	1.528	38.81	0.250	6.35	7.000	177.80	4.994	126.84	4.872	123.74	325.95	1449.88	162.46	28.43
C1528-250-7500-M	1.528	38.81	0.250	6.35	7.500	190.50	5.339	135.62	5.206	132.23	325.95	1449.88	150.86	26.40
C1528-250-8000-M	1.528	38.81	0.250	6.35	8.000	203.20	5.685	144.40	5.540	140.72	325.95	1449.88	140.80	24.64
C1528-250-8500-M	1.528	38.81	0.250	6.35	8.500	215.90	6.031	153.18	5.875	149.22	325.95	1449.88	132.00	23.10
C1528-250-9000-M	1.528	38.81	0.250	6.35	9.000	228.60	6.376	161.96	6.209	157.71	325.95	1449.88	124.24	21.74
C1528-250-9500-M	1.528	38.81	0.250	6.35	9.500	241.30	6.722	170.74	6.543	166.20	325.95	1449.88	117.33	20.53
C1580-207-2500-M	1.580	40.13	0.207	5.26	2.500	63.50	1.581	40.16	1.490	37.85	192.93	858.21	210.00	36.75
C1580-207-3000-M	1.580	40.13	0.207	5.26	3.000	76.20	1.857	47.18	1.738	44.16	194.26	864.11	170.00	29.75
C1580-207-3500-M	1.580	40.13	0.207	5.26	3.500	88.90	2.140	54.37	1.996	50.69	193.06	858.78	142.00	24.85
C1580-207-4000-M	1.580	40.13	0.207	5.26	4.000	101.60	2.435	61.84	2.266	57.57	189.40	842.50	121.00	21.18
C1580-207-4500-M	1.580	40.13	0.207	5.26	4.500	114.30	2.704	68.67	2.506	63.65	192.20	854.96	107.00	18.73
C1580-207-5000-M	1.580	40.13	0.207	5.26	5.000	127.00	2.991	75.96	2.768	70.30	190.90	849.17	95.00	16.63
C1580-207-5500-M	1.580	40.13	0.207	5.26	5.500	139.70	3.263	82.88	3.012	76.50	192.37	855.70	86.00	15.05
C1580-207-6000-M	1.580	40.13	0.207	5.26	6.000	152.40	3.523	89.48	3.240	82.30	195.68	870.43	79.00	13.83
C1586-125-2750-M	1.586	40.28	0.125	3.18	2.750	69.85	1.059	26.90	0.799	20.28	46.59	207.26	27.55	4.82
C1586-125-2875-M	1.586	40.28	0.125	3.18	2.875	73.03	1.099	27.92	0.825	20.96	46.59	207.26	26.24	4.59
C1586-125-3000-M	1.586	40.28	0.125	3.18	3.000	76.20	1.140	28.95	0.852	21.65	46.59	207.26	25.05	4.38
C1586-125-3250-M	1.586	40.28	0.125	3.18	3.250	82.55	1.221	31.01	0.906	23.01	46.59	207.26	22.96	4.02
C1586-125-3500-M	1.586	40.28	0.125	3.18	3.500	88.90	1.302	33.06	0.959	24.37	46.59	207.26	21.20	3.71
C1586-125-3750-M	1.586	40.28	0.125	3.18	3.750	95.25	1.383	35.12	1.013	25.73	46.59	207.26	19.68	3.44
C1586-125-4000-M	1.586	40.28	0.125	3.18	4.000	101.60	1.463	37.17	1.067	27.09	46.59	207.26	18.37	3.21
C1586-125-4250-M	1.586	40.28	0.125	3.18	4.250	107.95	1.544	39.23	1.120	28.45	46.59	207.26	17.22	3.01
C1586-125-4500-M	1.586	40.28	0.125	3.18	4.500	114.30	1.625	41.28	1.174	29.81	46.59	207.26	16.21	2.84
C1586-125-4750-M	1.586	40.28	0.125	3.18	4.750	120.65	1.706	43.34	1.227	31.18	46.59	207.26	15.31	2.68
C1586-125-5000-M	1.586	40.28	0.125	3.18	5.000	127.00	1.787	45.39	1.281	32.54	46.59	207.26	14.50	2.54
C1586-125-5250-M	1.586	40.28	0.125	3.18	5.250	133.35	1.868	47.45	1.335	33.90	46.59	207.26	13.78	2.41
C1586-125-5500-M	1.586	40.28	0.125	3.18	5.500	139.70	1.949	49.50	1.388	35.26	46.59	207.26	13.12	2.30
C1586-125-5750-M	1.586	40.28	0.125	3.18	5.750	146.05	2.030	51.55	1.442	36.62	46.59	207.26	12.52	2.19
C1586-125-6000-M	1.586	40.28	0.125	3.18	6.000	152.40	2.111	53.61	1.495	37.98	46.59	207.26	11.98	2.10
C1586-125-6250-M	1.586	40.28	0.125	3.18	6.250	158.75	2.192	55.66	1.549	39.35	46.59	207.26	11.48	2.01
C1586-125-6500-M	1.586	40.28	0.125	3.18	6.500	165.10	2.272	57.72	1.603	40.71	46.59	207.26	11.02	1.93

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1528-225-6000-S	4.332	110.03	173.20	770.45	103.82	18.17
C1528-225-6250-S	4.507	114.47	173.20	770.45	99.35	17.39
C1528-225-6500-S	4.681	118.91	173.20	770.45	95.24	16.67
C1528-225-6750-S	4.856	123.35	173.20	770.45	91.46	16.01
C1528-225-7000-S	5.031	127.79	173.20	770.45	87.97	15.40
C1528-225-7500-S	5.381	136.67	173.20	770.45	81.73	14.30
C1528-225-8000-S	5.731	145.56	173.20	770.45	76.32	13.36
C1528-225-8500-S	6.080	154.44	173.20	770.45	71.58	12.53
C1528-225-9000-S	6.430	163.32	173.20	770.45	67.39	11.79
C1528-225-9500-S	6.780	172.20	173.20	770.45	63.67	11.14
C1528-250-2125-S	1.724	43.80	226.43	1007.22	565.08	98.89
C1528-250-2250-S	1.818	46.19	226.43	1007.22	524.72	91.83
C1528-250-2375-S	1.913	48.58	226.43	1007.22	489.74	85.70
C1528-250-2500-S	2.007	50.97	226.43	1007.22	459.13	80.35
C1528-250-2625-S	2.101	53.37	226.43	1007.22	432.12	75.62
C1528-250-2750-S	2.195	55.76	226.43	1007.22	408.12	71.42
C1528-250-2875-S	2.289	58.15	226.43	1007.22	386.64	67.66
C1528-250-3000-S	2.384	60.54	226.43	1007.22	367.31	64.28
C1528-250-3250-S	2.572	65.33	226.43	1007.22	333.91	58.43
C1528-250-3500-S	2.760	70.11	226.43	1007.22	306.09	53.57
C1528-250-3750-S	2.949	74.89	226.43	1007.22	282.54	49.44
C1528-250-4000-S	3.137	79.68	226.43	1007.22	262.36	45.91
C1528-250-4250-S	3.325	84.46	226.43	1007.22	244.87	42.85
C1528-250-4500-S	3.514	89.25	226.43	1007.22	229.57	40.17
C1528-250-4750-S	3.702	94.03	226.43	1007.22	216.06	37.81
C1528-250-5000-S	3.890	98.82	226.43	1007.22	204.06	35.71
C1528-250-5250-S	4.079	103.60	226.43	1007.22	193.32	33.83
C1528-250-5500-S	4.267	108.38	226.43	1007.22	183.65	32.14
C1528-250-5750-S	4.455	113.17	226.43	1007.22	174.91	30.61
C1528-250-6000-S	4.644	117.95	226.43	1007.22	166.96	29.22
C1528-250-6250-S	4.832	122.74	226.43	1007.22	159.70	27.95
C1528-250-6500-S	5.020	127.52	226.43	1007.22	153.04	26.78
C1528-250-6750-S	5.209	132.30	226.43	1007.22	146.92	25.71
C1528-250-7000-S	5.397	137.09	226.43	1007.22	141.27	24.72
C1528-250-7500-S	5.774	146.66	226.43	1007.22	131.18	22.96
C1528-250-8000-S	6.151	156.23	226.43	1007.22	122.44	21.43
C1528-250-8500-S	6.527	165.79	226.43	1007.22	114.78	20.09
C1528-250-9000-S	6.904	175.36	226.43	1007.22	108.03	18.91
C1528-250-9500-S	7.281	184.93	226.43	1007.22	102.03	17.86
C1580-207-2500-S	1.725	43.82	135.56	602.99	174.93	30.61
C1580-207-3000-S	2.043	51.89	135.56	602.99	141.61	24.78
C1580-207-3500-S	2.354	59.79	135.56	602.99	118.29	20.70
C1580-207-4000-S	2.655	67.44	135.56	602.99	100.79	17.64
C1580-207-4500-S	2.979	75.67	135.56	602.99	89.13	15.60
C1580-207-5000-S	3.287	83.49	135.56	602.99	79.14	13.85
C1580-207-5500-S	3.608	91.64	135.56	602.99	71.64	12.54
C1580-207-6000-S	3.940	100.08	135.56	602.99	65.81	11.52
C1586-125-2750-S	1.265	32.13	35.58	158.27	23.96	4.19
C1586-125-2875-S	1.316	33.42	35.58	158.27	22.82	3.99
C1586-125-3000-S	1.366	34.71	35.58	158.27	21.78	3.81
C1586-125-3250-S	1.468	37.29	35.58	158.27	19.97	3.49
C1586-125-3500-S	1.569	39.86	35.58	158.27	18.43	3.23
C1586-125-3750-S	1.671	42.44	35.58	158.27	17.11	2.99
C1586-125-4000-S	1.772	45.02	35.58	158.27	15.97	2.80
C1586-125-4250-S	1.874	47.60	35.58	158.27	14.98	2.62
C1586-125-4500-S	1.975	50.18	35.58	158.27	14.09	2.47
C1586-125-4750-S	2.077	52.75	35.58	158.27	13.31	2.33
C1586-125-5000-S	2.178	55.33	35.58	158.27	12.61	2.21
C1586-125-5250-S	2.280	57.91	35.58	158.27	11.98	2.10
C1586-125-5500-S	2.381	60.49	35.58	158.27	11.41	2.00
C1586-125-5750-S	2.483	63.07	35.58	158.27	10.89	1.91
C1586-125-6000-S	2.584	65.64	35.58	158.27	10.42	1.82
C1586-125-6250-S	2.686	68.22	35.58	158.27	9.98	1.75
C1586-125-6500-S	2.787	70.80	35.58	158.27	9.58	1.68

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1586-125-6750-M	1.586	40.28	0.125	3.18	6.750	171.45	2.353	59.77	1.656	42.07	46.59	207.26	10.60	1.85
C1586-125-7000-M	1.586	40.28	0.125	3.18	7.000	177.80	2.434	61.83	1.710	43.43	46.59	207.26	10.21	1.79
C1586-125-7500-M	1.586	40.28	0.125	3.18	7.500	190.50	2.596	65.94	1.817	46.15	46.59	207.26	9.50	1.66
C1586-125-8000-M	1.586	40.28	0.125	3.18	8.000	203.20	2.758	70.05	1.924	48.88	46.59	207.26	8.89	1.56
C1586-125-8500-M	1.586	40.28	0.125	3.18	8.500	215.90	2.920	74.16	2.032	51.60	46.59	207.26	8.35	1.46
C1586-125-9000-M	1.586	40.28	0.125	3.18	9.000	228.60	3.081	78.27	2.139	54.32	46.59	207.26	7.87	1.38
C1586-125-9500-M	1.586	40.28	0.125	3.18	9.500	241.30	3.243	82.38	2.246	57.05	46.59	207.26	7.45	1.30
C1586-135-2625-M	1.586	40.28	0.135	3.43	2.625	66.68	1.098	27.88	0.870	22.09	57.73	256.78	37.80	6.61
C1586-135-2750-M	1.586	40.28	0.135	3.43	2.750	69.85	1.142	29.00	0.901	22.88	57.73	256.78	35.89	6.28
C1586-135-2875-M	1.586	40.28	0.135	3.43	2.875	73.03	1.186	30.11	0.932	23.67	57.73	256.78	34.17	5.98
C1586-135-3000-M	1.586	40.28	0.135	3.43	3.000	76.20	1.230	31.23	0.963	24.46	57.73	256.78	32.61	5.71
C1586-135-3250-M	1.586	40.28	0.135	3.43	3.250	82.55	1.317	33.46	1.025	26.04	57.73	256.78	29.87	5.23
C1586-135-3500-M	1.586	40.28	0.135	3.43	3.500	88.90	1.405	35.69	1.087	27.62	57.73	256.78	27.56	4.82
C1586-135-3750-M	1.586	40.28	0.135	3.43	3.750	95.25	1.493	37.93	1.150	29.20	57.73	256.78	25.58	4.48
C1586-135-4000-M	1.586	40.28	0.135	3.43	4.000	101.60	1.581	40.16	1.212	30.78	57.73	256.78	23.86	4.18
C1586-135-4250-M	1.586	40.28	0.135	3.43	4.250	107.95	1.669	42.39	1.274	32.36	57.73	256.78	22.37	3.91
C1586-135-4500-M	1.586	40.28	0.135	3.43	4.500	114.30	1.757	44.62	1.336	33.94	57.73	256.78	21.04	3.68
C1586-135-4750-M	1.586	40.28	0.135	3.43	4.750	120.65	1.845	46.85	1.399	35.52	57.73	256.78	19.87	3.48
C1586-135-5000-M	1.586	40.28	0.135	3.43	5.000	127.00	1.933	49.09	1.461	37.10	57.73	256.78	18.82	3.29
C1586-135-5250-M	1.586	40.28	0.135	3.43	5.250	133.35	2.020	51.32	1.523	38.68	57.73	256.78	17.87	3.13
C1586-135-5500-M	1.586	40.28	0.135	3.43	5.500	139.70	2.108	53.55	1.585	40.26	57.73	256.78	17.02	2.98
C1586-135-5750-M	1.586	40.28	0.135	3.43	5.750	146.05	2.196	55.78	1.647	41.84	57.73	256.78	16.24	2.84
C1586-135-6000-M	1.586	40.28	0.135	3.43	6.000	152.40	2.284	58.01	1.710	43.42	57.73	256.78	15.54	2.72
C1586-135-6250-M	1.586	40.28	0.135	3.43	6.250	158.75	2.372	60.25	1.772	45.00	57.73	256.78	14.89	2.60
C1586-135-6500-M	1.586	40.28	0.135	3.43	6.500	165.10	2.460	62.48	1.834	46.59	57.73	256.78	14.29	2.50
C1586-135-6750-M	1.586	40.28	0.135	3.43	6.750	171.45	2.548	64.71	1.896	48.17	57.73	256.78	13.74	2.40
C1586-135-7000-M	1.586	40.28	0.135	3.43	7.000	177.80	2.635	66.94	1.959	49.75	57.73	256.78	13.23	2.31
C1586-135-7500-M	1.586	40.28	0.135	3.43	7.500	190.50	2.811	71.40	2.083	52.91	57.73	256.78	12.31	2.15
C1586-135-8000-M	1.586	40.28	0.135	3.43	8.000	203.20	2.987	75.87	2.207	56.07	57.73	256.78	11.52	2.02
C1586-135-8500-M	1.586	40.28	0.135	3.43	8.500	215.90	3.163	80.33	2.332	59.23	57.73	256.78	10.82	1.89
C1586-135-9000-M	1.586	40.28	0.135	3.43	9.000	228.60	3.338	84.80	2.456	62.39	57.73	256.78	10.20	1.78
C1586-135-9500-M*	1.586	40.28	0.135	3.43	9.500	241.30	3.602	91.48	2.689	68.30	57.73	256.78	9.79	1.71
C1586-148-2500-M	1.586	40.28	0.148	3.76	2.500	63.50	1.154	29.30	0.962	24.43	74.53	331.54	55.36	9.69
C1586-148-2625-M	1.586	40.28	0.148	3.76	2.625	66.68	1.202	30.54	0.999	25.37	74.53	331.54	52.39	9.17
C1586-148-2750-M	1.586	40.28	0.148	3.76	2.750	69.85	1.251	31.77	1.036	26.31	74.53	331.54	49.72	8.70
C1586-148-2875-M	1.586	40.28	0.148	3.76	2.875	73.03	1.300	33.01	1.073	27.25	74.53	331.54	47.31	8.28
C1586-148-3000-M	1.586	40.28	0.148	3.76	3.000	76.20	1.348	34.25	1.110	28.18	74.53	331.54	45.12	7.90
C1586-148-3250-M	1.586	40.28	0.148	3.76	3.250	82.55	1.446	36.72	1.183	30.06	74.53	331.54	41.30	7.23
C1586-148-3500-M	1.586	40.28	0.148	3.76	3.500	88.90	1.543	39.19	1.257	31.94	74.53	331.54	38.08	6.66
C1586-148-3750-M	1.586	40.28	0.148	3.76	3.750	95.25	1.640	41.66	1.331	33.81	74.53	331.54	35.33	6.18
C1586-148-4000-M	1.586	40.28	0.148	3.76	4.000	101.60	1.737	44.13	1.405	35.69	74.53	331.54	32.94	5.76
C1586-148-4250-M	1.586	40.28	0.148	3.76	4.250	107.95	1.835	46.60	1.479	37.56	74.53	331.54	30.86	5.40
C1586-148-4500-M	1.586	40.28	0.148	3.76	4.500	114.30	1.932	49.07	1.553	39.44	74.53	331.54	29.02	5.08
C1586-148-4750-M	1.586	40.28	0.148	3.76	4.750	120.65	2.029	51.54	1.627	41.31	74.53	331.54	27.39	4.79
C1586-148-5000-M	1.586	40.28	0.148	3.76	5.000	127.00	2.127	54.01	1.700	43.19	74.53	331.54	25.94	4.54
C1586-148-5250-M	1.586	40.28	0.148	3.76	5.250	133.35	2.224	56.48	1.774	45.07	74.53	331.54	24.63	4.31
C1586-148-5500-M	1.586	40.28	0.148	3.76	5.500	139.70	2.321	58.96	1.848	46.94	74.53	331.54	23.45	4.10
C1586-148-5750-M	1.586	40.28	0.148	3.76	5.750	146.05	2.418	61.43	1.922	48.82	74.53	331.54	22.37	3.91
C1586-148-6000-M	1.586	40.28	0.148	3.76	6.000	152.40	2.516	63.90	1.996	50.69	74.53	331.54	21.39	3.74
C1586-148-6250-M	1.586	40.28	0.148	3.76	6.250	158.75	2.613	66.37	2.070	52.57	74.53	331.54	20.49	3.59
C1586-148-6500-M	1.586	40.28	0.148	3.76	6.500	165.10	2.710	68.84	2.144	54.45	74.53	331.54	19.67	3.44
C1586-148-6750-M	1.586	40.28	0.148	3.76	6.750	171.45	2.808	71.31	2.217	56.32	74.53	331.54	18.91	3.31
C1586-148-7000-M*	1.586	40.28	0.148	3.76	7.000	177.80	2.995	76.08	2.403	61.03	74.53	331.54	18.61	3.26
C1586-148-7500-M*	1.586	40.28	0.148	3.76	7.500	190.50	3.190	81.02	2.551	64.79	74.53	331.54	17.29	3.03
C1586-148-8000-M*	1.586	40.28	0.148	3.76	8.000	203.20	3.384	85.96	2.698	68.54	74.53	331.54	16.15	2.83
C1586-148-8500-M*	1.586	40.28	0.148	3.76	8.500	215.90	3.579	90.90	2.846	72.29	74.53	331.54	15.15	2.65
C1586-148-9000-M*	1.586	40.28	0.148	3.76	9.000	228.60	3.773	95.85	2.994	76.04	74.53	331.54	14.26	2.50
C1586-148-9500-M*	1.586	40.28	0.148	3.76	9.500	241.30	3.968	100.79	3.141	79.79	74.53	331.54	13.47	2.36
C1586-162-2375-M	1.586	40.28	0.162	4.12	2.375	60.33	1.207	30.67	1.051	26.70	95.76	425.98	82.01	14.35
C1586-162-2500-M	1.586	40.28	0.162	4.12	2.500	63.50	1.261	32.03	1.095	27.80	95.76	425.98	77.30	13.53
C1586-162-2625-M	1.586	40.28	0.162	4.12	2.625	66.68	1.315	33.40	1.138	28.91	95.76	425.98	73.10	12.79
C1586-162-2750-M	1.586	40.28	0.162	4.12	2.750	69.85	1.369	34.77	1.181	30.01	95.76	425.98	69.34	12.13
C1586-162-2875-M	1.586	40.28	0.162	4.12	2.875	73.03	1.423	36.14	1.225	31.11	95.76	425.98	65.94	11.54
C1586-162-3000-M	1.586	40.28	0.162	4.12	3.000	76.20	1.477	37.50	1.268	32.21	95.76	425.98	62.86	11.00

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1586-125-6750-S	2.889	73.38	35.58	158.27	9.22	1.61
C1586-125-7000-S	2.990	75.96	35.58	158.27	8.87	1.55
C1586-125-7500-S	3.193	81.11	35.58	158.27	8.26	1.45
C1586-125-8000-S	3.396	86.27	35.58	158.27	7.73	1.35
C1586-125-8500-S	3.599	91.42	35.58	158.27	7.26	1.27
C1586-125-9000-S	3.802	96.58	35.58	158.27	6.85	1.20
C1586-125-9500-S	4.005	101.74	35.58	158.27	6.48	1.13
C1586-135-2625-S	1.294	32.86	43.75	194.63	32.87	5.75
C1586-135-2750-S	1.348	34.24	43.75	194.63	31.21	5.46
C1586-135-2875-S	1.402	35.62	43.75	194.63	29.71	5.20
C1586-135-3000-S	1.457	37.00	43.75	194.63	28.35	4.96
C1586-135-3250-S	1.565	39.76	43.75	194.63	25.97	4.55
C1586-135-3500-S	1.674	42.52	43.75	194.63	23.96	4.19
C1586-135-3750-S	1.783	45.28	43.75	194.63	22.24	3.89
C1586-135-4000-S	1.892	48.04	43.75	194.63	20.75	3.63
C1586-135-4250-S	2.000	50.81	43.75	194.63	19.45	3.40
C1586-135-4500-S	2.109	53.57	43.75	194.63	18.30	3.20
C1586-135-4750-S	2.218	56.33	43.75	194.63	17.28	3.02
C1586-135-5000-S	2.326	59.09	43.75	194.63	16.36	2.86
C1586-135-5250-S	2.435	61.85	43.75	194.63	15.54	2.72
C1586-135-5500-S	2.544	64.61	43.75	194.63	14.80	2.59
C1586-135-5750-S	2.652	67.37	43.75	194.63	14.13	2.47
C1586-135-6000-S	2.761	70.13	43.75	194.63	13.51	2.36
C1586-135-6250-S	2.870	72.89	43.75	194.63	12.94	2.27
C1586-135-6500-S	2.978	75.65	43.75	194.63	12.42	2.17
C1586-135-6750-S	3.087	78.41	43.75	194.63	11.95	2.09
C1586-135-7000-S	3.196	81.17	43.75	194.63	11.50	2.01
C1586-135-7500-S	3.413	86.69	43.75	194.63	10.71	1.87
C1586-135-8000-S	3.630	92.21	43.75	194.63	10.01	1.75
C1586-135-8500-S	3.848	97.73	43.75	194.63	9.41	1.65
C1586-135-9000-S	4.065	103.26	43.75	194.63	8.87	1.55
C1586-135-9500-S*	4.359	110.71	43.75	194.63	8.51	1.49
C1586-148-2500-S	1.338	33.99	55.94	248.82	48.14	8.42
C1586-148-2625-S	1.397	35.49	55.94	248.82	45.56	7.97
C1586-148-2750-S	1.456	36.99	55.94	248.82	43.24	7.57
C1586-148-2875-S	1.515	38.49	55.94	248.82	41.14	7.20
C1586-148-3000-S	1.574	39.99	55.94	248.82	39.24	6.87
C1586-148-3250-S	1.693	42.99	55.94	248.82	35.92	6.29
C1586-148-3500-S	1.811	45.99	55.94	248.82	33.11	5.79
C1586-148-3750-S	1.929	49.00	55.94	248.82	30.72	5.38
C1586-148-4000-S	2.047	52.00	55.94	248.82	28.64	5.01
C1586-148-4250-S	2.165	55.00	55.94	248.82	26.83	4.70
C1586-148-4500-S	2.284	58.00	55.94	248.82	25.24	4.42
C1586-148-4750-S	2.402	61.01	55.94	248.82	23.82	4.17
C1586-148-5000-S	2.520	64.01	55.94	248.82	22.56	3.95
C1586-148-5250-S	2.638	67.01	55.94	248.82	21.42	3.75
C1586-148-5500-S	2.756	70.01	55.94	248.82	20.39	3.57
C1586-148-5750-S	2.875	73.01	55.94	248.82	19.45	3.40
C1586-148-6000-S	2.993	76.02	55.94	248.82	18.60	3.26
C1586-148-6250-S	3.111	79.02	55.94	248.82	17.82	3.12
C1586-148-6500-S	3.229	82.02	55.94	248.82	17.10	2.99
C1586-148-6750-S	3.347	85.02	55.94	248.82	16.44	2.88
C1586-148-7000-S*	3.544	90.01	55.94	248.82	16.18	2.83
C1586-148-7500-S*	3.780	96.01	55.94	248.82	15.04	2.63
C1586-148-8000-S*	4.016	102.02	55.94	248.82	14.04	2.46
C1586-148-8500-S*	4.253	108.02	55.94	248.82	13.17	2.30
C1586-148-9000-S*	4.489	114.03	55.94	248.82	12.40	2.17
C1586-148-9500-S*	4.726	120.03	55.94	248.82	11.72	2.05
C1586-162-2375-S	1.378	35.00	71.10	316.28	71.32	12.48
C1586-162-2500-S	1.442	36.63	71.10	316.28	67.22	11.76
C1586-162-2625-S	1.506	38.26	71.10	316.28	63.57	11.12
C1586-162-2750-S	1.571	39.90	71.10	316.28	60.29	10.55
C1586-162-2875-S	1.635	41.53	71.10	316.28	57.34	10.03
C1586-162-3000-S	1.699	43.16	71.10	316.28	54.66	9.57

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1586-162-3250-M	1.586	40.28	0.162	4.12	3.250	82.55	1.584	40.24	1.355	34.41	95.76	425.98	57.49	10.06
C1586-162-3500-M	1.586	40.28	0.162	4.12	3.500	88.90	1.692	42.97	1.441	36.61	95.76	425.98	52.96	9.27
C1586-162-3750-M	1.586	40.28	0.162	4.12	3.750	95.25	1.800	45.71	1.528	38.81	95.76	425.98	49.10	8.59
C1586-162-4000-M	1.586	40.28	0.162	4.12	4.000	101.60	1.907	48.44	1.615	41.02	95.76	425.98	45.76	8.01
C1586-162-4250-M	1.586	40.28	0.162	4.12	4.250	107.95	2.015	51.18	1.701	43.22	95.76	425.98	42.85	7.50
C1586-162-4500-M	1.586	40.28	0.162	4.12	4.500	114.30	2.123	53.91	1.788	45.42	95.76	425.98	40.28	7.05
C1586-162-4750-M	1.586	40.28	0.162	4.12	4.750	120.65	2.230	56.65	1.875	47.62	95.76	425.98	38.01	6.65
C1586-162-5000-M	1.586	40.28	0.162	4.12	5.000	127.00	2.338	59.38	1.962	49.82	95.76	425.98	35.97	6.30
C1586-162-5250-M	1.586	40.28	0.162	4.12	5.250	133.35	2.446	62.12	2.048	52.02	95.76	425.98	34.15	5.98
C1586-162-5500-M	1.586	40.28	0.162	4.12	5.500	139.70	2.553	64.85	2.135	54.23	95.76	425.98	32.50	5.69
C1586-162-5750-M	1.586	40.28	0.162	4.12	5.750	146.05	2.661	67.59	2.222	56.43	95.76	425.98	31.00	5.43
C1586-162-6000-M	1.586	40.28	0.162	4.12	6.000	152.40	2.769	70.32	2.308	58.63	95.76	425.98	29.64	5.19
C1586-162-6250-M	1.586	40.28	0.162	4.12	6.250	158.75	2.876	73.06	2.395	60.83	95.76	425.98	28.39	4.97
C1586-162-6500-M	1.586	40.28	0.162	4.12	6.500	165.10	2.984	75.79	2.482	63.03	95.76	425.98	27.24	4.77
C1586-162-6750-M*	1.586	40.28	0.162	4.12	6.750	171.45	3.184	80.87	2.682	68.13	95.76	425.98	26.85	4.70
C1586-162-7000-M*	1.586	40.28	0.162	4.12	7.000	177.80	3.291	83.60	2.769	70.33	95.76	425.98	25.82	4.52
C1586-162-7500-M*	1.586	40.28	0.162	4.12	7.500	190.50	3.507	89.07	2.942	74.73	95.76	425.98	23.98	4.20
C1586-162-8000-M*	1.586	40.28	0.162	4.12	8.000	203.20	3.722	94.54	3.116	79.14	95.76	425.98	22.39	3.92
C1586-162-8500-M*	1.586	40.28	0.162	4.12	8.500	215.90	3.938	100.01	3.289	83.54	95.76	425.98	20.99	3.67
C1586-162-9000-M*	1.586	40.28	0.162	4.12	9.000	228.60	4.153	105.48	3.462	87.94	95.76	425.98	19.76	3.46
C1586-162-9500-M*	1.586	40.28	0.162	4.12	9.500	241.30	4.368	110.95	3.636	92.35	95.76	425.98	18.66	3.27
C1586-177-2250-M	1.586	40.28	0.177	4.50	2.250	57.15	1.255	31.89	1.134	28.80	122.35	544.22	123.00	21.53
C1586-177-2375-M	1.586	40.28	0.177	4.50	2.375	60.33	1.315	33.39	1.184	30.07	122.35	544.22	115.40	20.19
C1586-177-2500-M	1.586	40.28	0.177	4.50	2.500	63.50	1.374	34.90	1.234	31.35	122.35	544.22	108.67	19.02
C1586-177-2625-M	1.586	40.28	0.177	4.50	2.625	66.68	1.434	36.41	1.285	32.63	122.35	544.22	102.69	17.97
C1586-177-2750-M	1.586	40.28	0.177	4.50	2.750	69.85	1.493	37.92	1.335	33.90	122.35	544.22	97.34	17.03
C1586-177-2875-M	1.586	40.28	0.177	4.50	2.875	73.03	1.552	39.43	1.385	35.18	122.35	544.22	92.51	16.19
C1586-177-3000-M	1.586	40.28	0.177	4.50	3.000	76.20	1.612	40.94	1.435	36.46	122.35	544.22	88.14	15.42
C1586-177-3250-M	1.586	40.28	0.177	4.50	3.250	82.55	1.731	43.96	1.536	39.01	122.35	544.22	80.53	14.09
C1586-177-3500-M	1.586	40.28	0.177	4.50	3.500	88.90	1.850	46.98	1.636	41.56	122.35	544.22	74.13	12.97
C1586-177-3750-M	1.586	40.28	0.177	4.50	3.750	95.25	1.968	50.00	1.737	44.11	122.35	544.22	68.67	12.02
C1586-177-4000-M	1.586	40.28	0.177	4.50	4.000	101.60	2.087	53.02	1.837	46.67	122.35	544.22	63.96	11.19
C1586-177-4250-M	1.586	40.28	0.177	4.50	4.250	107.95	2.206	56.04	1.938	49.22	122.35	544.22	59.86	10.48
C1586-177-4500-M	1.586	40.28	0.177	4.50	4.500	114.30	2.325	59.05	2.038	51.77	122.35	544.22	56.25	9.84
C1586-177-4750-M	1.586	40.28	0.177	4.50	4.750	120.65	2.444	62.07	2.139	54.32	122.35	544.22	53.05	9.28
C1586-177-5000-M	1.586	40.28	0.177	4.50	5.000	127.00	2.563	65.09	2.239	56.87	122.35	544.22	50.20	8.78
C1586-177-5250-M	1.586	40.28	0.177	4.50	5.250	133.35	2.682	68.11	2.340	59.43	122.35	544.22	47.63	8.34
C1586-177-5500-M	1.586	40.28	0.177	4.50	5.500	139.70	2.800	71.13	2.440	61.98	122.35	544.22	45.32	7.93
C1586-177-5750-M	1.586	40.28	0.177	4.50	5.750	146.05	2.919	74.15	2.541	64.53	122.35	544.22	43.22	7.56
C1586-177-6000-M	1.586	40.28	0.177	4.50	6.000	152.40	3.038	77.17	2.641	67.08	122.35	544.22	41.31	7.23
C1586-177-6250-M	1.586	40.28	0.177	4.50	6.250	158.75	3.157	80.19	2.742	69.64	122.35	544.22	39.56	6.92
C1586-177-6500-M	1.586	40.28	0.177	4.50	6.500	165.10	3.276	83.20	2.842	72.19	122.35	544.22	37.95	6.64
C1586-177-6750-M	1.586	40.28	0.177	4.50	6.750	171.45	3.395	86.22	2.943	74.74	122.35	544.22	36.46	6.38
C1586-177-7000-M	1.586	40.28	0.177	4.50	7.000	177.80	3.513	89.24	3.043	77.29	122.35	544.22	35.09	6.14
C1586-177-7500-M	1.586	40.28	0.177	4.50	7.500	190.50	3.751	95.28	3.244	82.40	122.35	544.22	32.64	5.71
C1586-177-8000-M	1.586	40.28	0.177	4.50	8.000	203.20	3.989	101.32	3.445	87.50	122.35	544.22	30.50	5.34
C1586-177-8500-M*	1.586	40.28	0.177	4.50	8.500	215.90	4.319	109.71	3.761	95.52	122.35	544.22	29.27	5.12
C1586-177-9000-M*	1.586	40.28	0.177	4.50	9.000	228.60	4.557	115.75	3.962	100.63	122.35	544.22	27.54	4.82
C1586-177-9500-M*	1.586	40.28	0.177	4.50	9.500	241.30	4.795	121.79	4.163	105.73	122.35	544.22	26.00	4.55
C1586-192-2250-M	1.586	40.28	0.192	4.88	2.250	57.15	1.353	34.37	1.255	31.87	153.13	681.14	170.75	29.88
C1586-192-2375-M	1.586	40.28	0.192	4.88	2.375	60.33	1.418	36.02	1.312	33.32	153.13	681.14	160.03	28.00
C1586-192-2500-M	1.586	40.28	0.192	4.88	2.500	63.50	1.483	37.67	1.369	34.77	153.13	681.14	150.57	26.35
C1586-192-2625-M	1.586	40.28	0.192	4.88	2.625	66.68	1.548	39.32	1.426	36.21	153.13	681.14	142.17	24.88
C1586-192-2750-M	1.586	40.28	0.192	4.88	2.750	69.85	1.613	40.97	1.483	37.66	153.13	681.14	134.66	23.57
C1586-192-2875-M	1.586	40.28	0.192	4.88	2.875	73.03	1.678	42.62	1.540	39.11	153.13	681.14	127.90	22.38
C1586-192-3000-M	1.586	40.28	0.192	4.88	3.000	76.20	1.743	44.27	1.597	40.56	153.13	681.14	121.79	21.31
C1586-192-3250-M	1.586	40.28	0.192	4.88	3.250	82.55	1.873	47.56	1.711	43.46	153.13	681.14	111.17	19.45
C1586-192-3500-M	1.586	40.28	0.192	4.88	3.500	88.90	2.002	50.86	1.825	46.36	153.13	681.14	102.25	17.89
C1586-192-3750-M	1.586	40.28	0.192	4.88	3.750	95.25	2.132	54.16	1.939	49.25	153.13	681.14	94.66	16.56
C1586-192-4000-M	1.586	40.28	0.192	4.88	4.000	101.60	2.262	57.46	2.053	52.15	153.13	681.14	88.11	15.42
C1586-192-4250-M	1.586	40.28	0.192	4.88	4.250	107.95	2.392	60.76	2.167	55.05	153.13	681.14	82.41	14.42
C1586-192-4500-M	1.586	40.28	0.192	4.88	4.500	114.30	2.522	64.05	2.281	57.95	153.13	681.14	77.41	13.55
C1586-192-4750-M	1.586	40.28	0.192	4.88	4.750	120.65	2.652	67.35	2.395	60.84	153.13	681.14	72.98	12.77
C1586-192-5000-M	1.586	40.28	0.192	4.88	5.000	127.00	2.782	70.65	2.510	63.74	153.13	681.14	69.02	12.08

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1586-162-3250-S	1.828	46.42	71.10	316.28	49.99	8.75
C1586-162-3500-S	1.956	49.69	71.10	316.28	46.06	8.06
C1586-162-3750-S	2.085	52.95	71.10	316.28	42.69	7.47
C1586-162-4000-S	2.213	56.21	71.10	316.28	39.79	6.96
C1586-162-4250-S	2.342	59.48	71.10	316.28	37.26	6.52
C1586-162-4500-S	2.470	62.74	71.10	316.28	35.03	6.13
C1586-162-4750-S	2.599	66.00	71.10	316.28	33.05	5.78
C1586-162-5000-S	2.727	69.27	71.10	316.28	31.28	5.47
C1586-162-5250-S	2.855	72.53	71.10	316.28	29.69	5.20
C1586-162-5500-S	2.984	75.79	71.10	316.28	28.26	4.95
C1586-162-5750-S	3.112	79.06	71.10	316.28	26.96	4.72
C1586-162-6000-S	3.241	82.32	71.10	316.28	25.77	4.51
C1586-162-6250-S	3.369	85.58	71.10	316.28	24.68	4.32
C1586-162-6500-S	3.498	88.84	71.10	316.28	23.68	4.14
C1586-162-6750-S*	3.705	94.11	71.10	316.28	23.35	4.09
C1586-162-7000-S*	3.834	97.37	71.10	316.28	22.46	3.93
C1586-162-7500-S*	4.090	103.90	71.10	316.28	20.85	3.65
C1586-162-8000-S*	4.347	110.42	71.10	316.28	19.47	3.41
C1586-162-8500-S*	4.604	116.95	71.10	316.28	18.25	3.19
C1586-162-9000-S*	4.861	123.48	71.10	316.28	17.18	3.01
C1586-162-9500-S*	5.118	130.00	71.10	316.28	16.23	2.84
C1586-177-2250-S	1.410	35.83	89.80	399.43	106.96	18.72
C1586-177-2375-S	1.480	37.59	89.80	399.43	100.34	17.56
C1586-177-2500-S	1.550	39.36	89.80	399.43	94.50	16.54
C1586-177-2625-S	1.619	41.13	89.80	399.43	89.30	15.63
C1586-177-2750-S	1.689	42.90	89.80	399.43	84.64	14.81
C1586-177-2875-S	1.759	44.67	89.80	399.43	80.44	14.08
C1586-177-3000-S	1.828	46.44	89.80	399.43	76.64	13.41
C1586-177-3250-S	1.968	49.98	89.80	399.43	70.03	12.25
C1586-177-3500-S	2.107	53.52	89.80	399.43	64.46	11.28
C1586-177-3750-S	2.246	57.06	89.80	399.43	59.72	10.45
C1586-177-4000-S	2.386	60.59	89.80	399.43	55.62	9.73
C1586-177-4250-S	2.525	64.13	89.80	399.43	52.05	9.11
C1586-177-4500-S	2.664	67.67	89.80	399.43	48.91	8.56
C1586-177-4750-S	2.803	71.21	89.80	399.43	46.13	8.07
C1586-177-5000-S	2.943	74.75	89.80	399.43	43.65	7.64
C1586-177-5250-S	3.082	78.29	89.80	399.43	41.42	7.25
C1586-177-5500-S	3.221	81.82	89.80	399.43	39.41	6.90
C1586-177-5750-S	3.361	85.36	89.80	399.43	37.58	6.58
C1586-177-6000-S	3.500	88.90	89.80	399.43	35.92	6.29
C1586-177-6250-S	3.639	92.44	89.80	399.43	34.40	6.02
C1586-177-6500-S	3.779	95.98	89.80	399.43	33.00	5.77
C1586-177-6750-S	3.918	99.51	89.80	399.43	31.71	5.55
C1586-177-7000-S	4.057	103.05	89.80	399.43	30.51	5.34
C1586-177-7500-S	4.336	110.13	89.80	399.43	28.38	4.97
C1586-177-8000-S	4.614	117.21	89.80	399.43	26.52	4.64
C1586-177-8500-S*	4.971	126.27	89.80	399.43	25.45	4.45
C1586-177-9000-S*	5.250	133.35	89.80	399.43	23.95	4.19
C1586-177-9500-S*	5.529	140.43	89.80	399.43	22.61	3.96
C1586-192-2250-S	1.502	38.14	111.10	494.20	148.47	25.98
C1586-192-2375-S	1.577	40.05	111.10	494.20	139.15	24.35
C1586-192-2500-S	1.651	41.95	111.10	494.20	130.93	22.91
C1586-192-2625-S	1.726	43.85	111.10	494.20	123.63	21.64
C1586-192-2750-S	1.801	45.75	111.10	494.20	117.10	20.49
C1586-192-2875-S	1.876	47.65	111.10	494.20	111.22	19.46
C1586-192-3000-S	1.951	49.55	111.10	494.20	105.91	18.53
C1586-192-3250-S	2.101	53.36	111.10	494.20	96.67	16.92
C1586-192-3500-S	2.250	57.16	111.10	494.20	88.91	15.56
C1586-192-3750-S	2.400	60.96	111.10	494.20	82.31	14.40
C1586-192-4000-S	2.550	64.77	111.10	494.20	76.62	13.41
C1586-192-4250-S	2.700	68.57	111.10	494.20	71.66	12.54
C1586-192-4500-S	2.849	72.38	111.10	494.20	67.31	11.78
C1586-192-4750-S	2.999	76.18	111.10	494.20	63.46	11.10
C1586-192-5000-S	3.149	79.98	111.10	494.20	60.02	10.50

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1586-192-5250-M	1.586	40.28	0.192	4.88	5.250	133.35	2.911	73.95	2.624	66.64	153.13	681.14	65.48	11.46
C1586-192-5500-M	1.586	40.28	0.192	4.88	5.500	139.70	3.041	77.25	2.738	69.54	153.13	681.14	62.28	10.90
C1586-192-5750-M	1.586	40.28	0.192	4.88	5.750	146.05	3.171	80.54	2.852	72.43	153.13	681.14	59.38	10.39
C1586-192-6000-M	1.586	40.28	0.192	4.88	6.000	152.40	3.301	83.84	2.966	75.33	153.13	681.14	56.73	9.93
C1586-192-6250-M	1.586	40.28	0.192	4.88	6.250	158.75	3.431	87.14	3.080	78.23	153.13	681.14	54.32	9.51
C1586-192-6500-M	1.586	40.28	0.192	4.88	6.500	165.10	3.561	90.44	3.194	81.13	153.13	681.14	52.09	9.12
C1586-192-6750-M	1.586	40.28	0.192	4.88	6.750	171.45	3.690	93.74	3.308	84.02	153.13	681.14	50.05	8.76
C1586-192-7000-M	1.586	40.28	0.192	4.88	7.000	177.80	3.820	97.04	3.422	86.92	153.13	681.14	48.16	8.43
C1586-192-7500-M	1.586	40.28	0.192	4.88	7.500	190.50	4.080	103.63	3.650	92.72	153.13	681.14	44.77	7.84
C1586-192-8000-M	1.586	40.28	0.192	4.88	8.000	203.20	4.340	110.23	3.878	98.51	153.13	681.14	41.83	7.32
C1586-192-8500-M	1.586	40.28	0.192	4.88	8.500	215.90	4.599	116.82	4.107	104.31	153.13	681.14	39.26	6.87
C1586-192-9000-M	1.586	40.28	0.192	4.88	9.000	228.60	4.859	123.42	4.335	110.10	153.13	681.14	36.98	6.47
C1586-192-9500-M	1.586	40.28	0.192	4.88	9.500	241.30	5.119	130.02	4.563	115.90	153.13	681.14	34.95	6.12
C1586-207-2125-M	1.586	40.28	0.207	5.26	2.125	53.98	1.375	34.94	1.305	33.16	188.32	837.71	251.25	43.97
C1586-207-2250-M	1.586	40.28	0.207	5.26	2.250	57.15	1.446	36.72	1.369	34.77	188.32	837.71	234.15	40.98
C1586-207-2375-M	1.586	40.28	0.207	5.26	2.375	60.33	1.516	38.51	1.433	36.39	188.32	837.71	219.22	38.36
C1586-207-2500-M	1.586	40.28	0.207	5.26	2.500	63.50	1.586	40.29	1.496	38.00	188.32	837.71	206.09	36.07
C1586-207-2625-M	1.586	40.28	0.207	5.26	2.625	66.68	1.656	42.07	1.560	39.62	188.32	837.71	194.43	34.03
C1586-207-2750-M	1.586	40.28	0.207	5.26	2.750	69.85	1.727	43.86	1.623	41.23	188.32	837.71	184.03	32.21
C1586-207-2875-M	1.586	40.28	0.207	5.26	2.875	73.03	1.797	45.64	1.687	42.85	188.32	837.71	174.68	30.57
C1586-207-3000-M	1.586	40.28	0.207	5.26	3.000	76.20	1.867	47.43	1.751	44.47	188.32	837.71	166.24	29.09
C1586-207-3250-M	1.586	40.28	0.207	5.26	3.250	82.55	2.008	50.99	1.878	47.70	188.32	837.71	151.59	26.53
C1586-207-3500-M	1.586	40.28	0.207	5.26	3.500	88.90	2.148	54.56	2.005	50.93	188.32	837.71	139.31	24.38
C1586-207-3750-M	1.586	40.28	0.207	5.26	3.750	95.25	2.289	58.13	2.132	54.16	188.32	837.71	128.87	22.55
C1586-207-4000-M	1.586	40.28	0.207	5.26	4.000	101.60	2.429	61.70	2.259	57.39	188.32	837.71	119.88	20.98
C1586-207-4250-M	1.586	40.28	0.207	5.26	4.250	107.95	2.570	65.27	2.387	60.62	188.32	837.71	112.07	19.61
C1586-207-4500-M	1.586	40.28	0.207	5.26	4.500	114.30	2.710	68.84	2.514	63.85	188.32	837.71	105.21	18.41
C1586-207-4750-M	1.586	40.28	0.207	5.26	4.750	120.65	2.851	72.40	2.641	67.08	188.32	837.71	99.15	17.35
C1586-207-5000-M	1.586	40.28	0.207	5.26	5.000	127.00	2.991	75.97	2.768	70.32	188.32	837.71	93.74	16.40
C1586-207-5250-M	1.586	40.28	0.207	5.26	5.250	133.35	3.131	79.54	2.896	73.55	188.32	837.71	88.90	15.56
C1586-207-5500-M	1.586	40.28	0.207	5.26	5.500	139.70	3.272	83.11	3.023	76.78	188.32	837.71	84.53	14.79
C1586-207-5750-M	1.586	40.28	0.207	5.26	5.750	146.05	3.412	86.68	3.150	80.01	188.32	837.71	80.57	14.10
C1586-207-6000-M	1.586	40.28	0.207	5.26	6.000	152.40	3.553	90.24	3.277	83.24	188.32	837.71	76.96	13.47
C1586-207-6250-M	1.586	40.28	0.207	5.26	6.250	158.75	3.693	93.81	3.404	86.47	188.32	837.71	73.66	12.89
C1586-207-6500-M	1.586	40.28	0.207	5.26	6.500	165.10	3.834	97.38	3.532	89.70	188.32	837.71	70.64	12.36
C1586-207-6750-M	1.586	40.28	0.207	5.26	6.750	171.45	3.974	100.95	3.659	92.93	188.32	837.71	67.85	11.87
C1586-207-7000-M	1.586	40.28	0.207	5.26	7.000	177.80	4.115	104.52	3.786	96.16	188.32	837.71	65.27	11.42
C1586-207-7500-M	1.586	40.28	0.207	5.26	7.500	190.50	4.396	111.65	4.040	102.63	188.32	837.71	60.67	10.62
C1586-207-8000-M	1.586	40.28	0.207	5.26	8.000	203.20	4.677	118.79	4.295	109.09	188.32	837.71	56.67	9.92
C1586-207-8500-M	1.586	40.28	0.207	5.26	8.500	215.90	4.958	125.93	4.549	115.55	188.32	837.71	53.17	9.30
C1586-207-9000-M	1.586	40.28	0.207	5.26	9.000	228.60	5.239	133.06	4.804	122.01	188.32	837.71	50.07	8.76
C1586-207-9500-M	1.586	40.28	0.207	5.26	9.500	241.30	5.520	140.20	5.058	128.48	188.32	837.71	47.31	8.28
C1586-225-2125-M	1.586	40.28	0.225	5.72	2.125	53.98	1.472	37.39	1.425	36.19	236.67	1052.77	362.54	63.44
C1586-225-2250-M	1.586	40.28	0.225	5.72	2.250	57.15	1.548	39.33	1.496	38.00	236.67	1052.77	337.36	59.04
C1586-225-2375-M	1.586	40.28	0.225	5.72	2.375	60.33	1.625	41.27	1.567	39.80	236.67	1052.77	315.45	55.20
C1586-225-2500-M	1.586	40.28	0.225	5.72	2.500	63.50	1.701	43.21	1.638	41.61	236.67	1052.77	296.22	51.84
C1586-225-2625-M	1.586	40.28	0.225	5.72	2.625	66.68	1.777	45.14	1.709	43.41	236.67	1052.77	279.20	48.86
C1586-225-2750-M	1.586	40.28	0.225	5.72	2.750	69.85	1.854	47.08	1.780	45.22	236.67	1052.77	264.02	46.20
C1586-225-2875-M	1.586	40.28	0.225	5.72	2.875	73.03	1.930	49.02	1.851	47.02	236.67	1052.77	250.41	43.82
C1586-225-3000-M	1.586	40.28	0.225	5.72	3.000	76.20	2.006	50.96	1.922	48.83	236.67	1052.77	238.14	41.67
C1586-225-3250-M	1.586	40.28	0.225	5.72	3.250	82.55	2.159	54.83	2.064	52.44	236.67	1052.77	216.87	37.95
C1586-225-3500-M	1.586	40.28	0.225	5.72	3.500	88.90	2.311	58.71	2.207	56.05	236.67	1052.77	199.10	34.84
C1586-225-3750-M	1.586	40.28	0.225	5.72	3.750	95.25	2.464	62.58	2.349	59.66	236.67	1052.77	184.02	32.20
C1586-225-4000-M	1.586	40.28	0.225	5.72	4.000	101.60	2.616	66.46	2.491	63.27	236.67	1052.77	171.06	29.93
C1586-225-4250-M	1.586	40.28	0.225	5.72	4.250	107.95	2.769	70.33	2.633	66.88	236.67	1052.77	159.80	27.97
C1586-225-4500-M	1.586	40.28	0.225	5.72	4.500	114.30	2.922	74.21	2.775	70.49	236.67	1052.77	149.94	26.24
C1586-225-4750-M	1.586	40.28	0.225	5.72	4.750	120.65	3.074	78.08	2.917	74.10	236.67	1052.77	141.22	24.71
C1586-225-5000-M	1.586	40.28	0.225	5.72	5.000	127.00	3.227	81.96	3.059	77.71	236.67	1052.77	133.46	23.36
C1586-225-5250-M	1.586	40.28	0.225	5.72	5.250	133.35	3.379	85.83	3.202	81.32	236.67	1052.77	126.51	22.14
C1586-225-5500-M	1.586	40.28	0.225	5.72	5.500	139.70	3.532	89.71	3.344	84.93	236.67	1052.77	120.25	21.04
C1586-225-5750-M	1.586	40.28	0.225	5.72	5.750	146.05	3.684	93.58	3.486	88.54	236.67	1052.77	114.58	20.05
C1586-225-6000-M	1.586	40.28	0.225	5.72	6.000	152.40	3.837	97.46	3.628	92.15	236.67	1052.77	109.41	19.15
C1586-225-6250-M	1.586	40.28	0.225	5.72	6.250	158.75	3.989	101.33	3.770	95.76	236.67	1052.77	104.70	18.32
C1586-225-6500-M	1.586	40.28	0.225	5.72	6.500	165.10	4.142	105.21	3.912	99.37	236.67	1052.77	100.37	17.57

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1586-192-5250-S	3.299	83.79	111.10	494.20	56.94	9.96
C1586-192-5500-S	3.448	87.59	111.10	494.20	54.15	9.48
C1586-192-5750-S	3.598	91.39	111.10	494.20	51.63	9.04
C1586-192-6000-S	3.748	95.20	111.10	494.20	49.33	8.63
C1586-192-6250-S	3.898	99.00	111.10	494.20	47.23	8.27
C1586-192-6500-S	4.047	102.80	111.10	494.20	45.30	7.93
C1586-192-6750-S	4.197	106.61	111.10	494.20	43.52	7.62
C1586-192-7000-S	4.347	110.41	111.10	494.20	41.88	7.33
C1586-192-7500-S	4.646	118.02	111.10	494.20	38.93	6.81
C1586-192-8000-S	4.946	125.63	111.10	494.20	36.38	6.37
C1586-192-8500-S	5.245	133.23	111.10	494.20	34.14	5.97
C1586-192-9000-S	5.545	140.84	111.10	494.20	32.16	5.63
C1586-192-9500-S	5.844	148.45	111.10	494.20	30.39	5.32
C1586-207-2125-S	1.507	38.27	135.09	600.90	218.48	38.23
C1586-207-2250-S	1.587	40.30	135.09	600.90	203.61	35.63
C1586-207-2375-S	1.666	42.33	135.09	600.90	190.63	33.36
C1586-207-2500-S	1.746	44.35	135.09	600.90	179.21	31.36
C1586-207-2625-S	1.826	46.38	135.09	600.90	169.07	29.59
C1586-207-2750-S	1.906	48.41	135.09	600.90	160.03	28.00
C1586-207-2875-S	1.986	50.44	135.09	600.90	151.90	26.58
C1586-207-3000-S	2.066	52.46	135.09	600.90	144.56	25.30
C1586-207-3250-S	2.225	56.52	135.09	600.90	131.81	23.07
C1586-207-3500-S	2.385	60.57	135.09	600.90	121.14	21.20
C1586-207-3750-S	2.544	64.63	135.09	600.90	112.06	19.61
C1586-207-4000-S	2.704	68.68	135.09	600.90	104.25	18.24
C1586-207-4250-S	2.864	72.74	135.09	600.90	97.45	17.05
C1586-207-4500-S	3.023	76.80	135.09	600.90	91.49	16.01
C1586-207-4750-S	3.183	80.85	135.09	600.90	86.21	15.09
C1586-207-5000-S	3.343	84.91	135.09	600.90	81.51	14.26
C1586-207-5250-S	3.502	88.96	135.09	600.90	77.30	13.53
C1586-207-5500-S	3.662	93.02	135.09	600.90	73.50	12.86
C1586-207-5750-S	3.822	97.07	135.09	600.90	70.06	12.26
C1586-207-6000-S	3.981	101.13	135.09	600.90	66.92	11.71
C1586-207-6250-S	4.141	105.18	135.09	600.90	64.05	11.21
C1586-207-6500-S	4.301	109.24	135.09	600.90	61.42	10.75
C1586-207-6750-S	4.460	113.29	135.09	600.90	59.00	10.33
C1586-207-7000-S	4.620	117.35	135.09	600.90	56.76	9.93
C1586-207-7500-S	4.939	125.46	135.09	600.90	52.76	9.23
C1586-207-8000-S	5.259	133.57	135.09	600.90	49.28	8.62
C1586-207-8500-S	5.578	141.68	135.09	600.90	46.23	8.09
C1586-207-9000-S	5.897	149.79	135.09	600.90	43.54	7.62
C1586-207-9500-S	6.217	157.90	135.09	600.90	41.14	7.20
C1586-225-2125-S	1.594	40.48	167.48	745.00	315.25	55.17
C1586-225-2250-S	1.679	42.65	167.48	745.00	293.36	51.34
C1586-225-2375-S	1.764	44.82	167.48	745.00	274.31	48.00
C1586-225-2500-S	1.850	46.98	167.48	745.00	257.58	45.08
C1586-225-2625-S	1.935	49.15	167.48	745.00	242.78	42.49
C1586-225-2750-S	2.020	51.32	167.48	745.00	229.58	40.18
C1586-225-2875-S	2.106	53.49	167.48	745.00	217.75	38.11
C1586-225-3000-S	2.191	55.66	167.48	745.00	207.08	36.24
C1586-225-3250-S	2.362	59.99	167.48	745.00	188.59	33.00
C1586-225-3500-S	2.533	64.33	167.48	745.00	173.13	30.30
C1586-225-3750-S	2.703	68.66	167.48	745.00	160.01	28.00
C1586-225-4000-S	2.874	73.00	167.48	745.00	148.74	26.03
C1586-225-4250-S	3.045	77.34	167.48	745.00	138.96	24.32
C1586-225-4500-S	3.215	81.67	167.48	745.00	130.38	22.82
C1586-225-4750-S	3.386	86.01	167.48	745.00	122.80	21.49
C1586-225-5000-S	3.557	90.34	167.48	745.00	116.05	20.31
C1586-225-5250-S	3.728	94.68	167.48	745.00	110.01	19.25
C1586-225-5500-S	3.898	99.02	167.48	745.00	104.56	18.30
C1586-225-5750-S	4.069	103.35	167.48	745.00	99.63	17.44
C1586-225-6000-S	4.240	107.69	167.48	745.00	95.14	16.65
C1586-225-6250-S	4.410	112.02	167.48	745.00	91.04	15.93
C1586-225-6500-S	4.581	116.36	167.48	745.00	87.28	15.27

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1586-225-6750-M	1.586	40.28	0.225	5.72	6.750	171.45	4.295	109.08	4.054	102.98	236.67	1052.77	96.39	16.87
C1586-225-7000-M	1.586	40.28	0.225	5.72	7.000	177.80	4.447	112.96	4.197	106.59	236.67	1052.77	92.71	16.22
C1586-225-7500-M	1.586	40.28	0.225	5.72	7.500	190.50	4.752	120.71	4.481	113.81	236.67	1052.77	86.13	15.07
C1586-225-8000-M	1.586	40.28	0.225	5.72	8.000	203.20	5.057	128.46	4.765	121.03	236.67	1052.77	80.43	14.08
C1586-225-8500-M	1.586	40.28	0.225	5.72	8.500	215.90	5.363	136.21	5.049	128.25	236.67	1052.77	75.44	13.20
C1586-225-9000-M	1.586	40.28	0.225	5.72	9.000	228.60	5.668	143.96	5.334	135.47	236.67	1052.77	71.02	12.43
C1586-225-9500-M	1.586	40.28	0.225	5.72	9.500	241.30	5.973	151.71	5.618	142.69	236.67	1052.77	67.10	11.74
C1586-250-2250-M	1.586	40.28	0.250	6.35	2.250	57.15	1.675	42.54	1.652	41.96	315.42	1403.05	548.44	95.98
C1586-250-2375-M	1.586	40.28	0.250	6.35	2.375	60.33	1.759	44.67	1.733	44.01	315.42	1403.05	511.88	89.58
C1586-250-2500-M	1.586	40.28	0.250	6.35	2.500	63.50	1.843	46.81	1.813	46.05	315.42	1403.05	479.89	83.98
C1586-250-2625-M	1.586	40.28	0.250	6.35	2.625	66.68	1.927	48.94	1.894	48.10	315.42	1403.05	451.66	79.04
C1586-250-2750-M	1.586	40.28	0.250	6.35	2.750	69.85	2.011	51.07	1.974	50.14	315.42	1403.05	426.57	74.65
C1586-250-2875-M	1.586	40.28	0.250	6.35	2.875	73.03	2.094	53.20	2.055	52.19	315.42	1403.05	404.12	70.72
C1586-250-3000-M	1.586	40.28	0.250	6.35	3.000	76.20	2.178	55.33	2.135	54.23	315.42	1403.05	383.91	67.18
C1586-250-3250-M	1.586	40.28	0.250	6.35	3.250	82.55	2.346	59.59	2.296	58.32	315.42	1403.05	349.01	61.08
C1586-250-3500-M	1.586	40.28	0.250	6.35	3.500	88.90	2.514	63.86	2.457	62.41	315.42	1403.05	319.92	55.99
C1586-250-3750-M	1.586	40.28	0.250	6.35	3.750	95.25	2.682	68.12	2.618	66.50	315.42	1403.05	295.32	51.68
C1586-250-4000-M	1.586	40.28	0.250	6.35	4.000	101.60	2.850	72.38	2.779	70.59	315.42	1403.05	274.22	47.99
C1586-250-4250-M	1.586	40.28	0.250	6.35	4.250	107.95	3.018	76.65	2.940	74.68	315.42	1403.05	255.94	44.79
C1586-250-4500-M	1.586	40.28	0.250	6.35	4.500	114.30	3.185	80.91	3.101	78.77	315.42	1403.05	239.94	41.99
C1586-250-4750-M	1.586	40.28	0.250	6.35	4.750	120.65	3.353	85.17	3.262	82.86	315.42	1403.05	225.83	39.52
C1586-250-5000-M	1.586	40.28	0.250	6.35	5.000	127.00	3.521	89.44	3.423	86.95	315.42	1403.05	213.28	37.32
C1586-250-5250-M	1.586	40.28	0.250	6.35	5.250	133.35	3.689	93.70	3.584	91.04	315.42	1403.05	202.06	35.36
C1586-250-5500-M	1.586	40.28	0.250	6.35	5.500	139.70	3.857	97.96	3.745	95.13	315.42	1403.05	191.96	33.59
C1586-250-5750-M	1.586	40.28	0.250	6.35	5.750	146.05	4.025	102.23	3.906	99.22	315.42	1403.05	182.81	31.99
C1586-250-6000-M	1.586	40.28	0.250	6.35	6.000	152.40	4.192	106.49	4.067	103.31	315.42	1403.05	174.50	30.54
C1586-250-6250-M	1.586	40.28	0.250	6.35	6.250	158.75	4.360	110.75	4.228	107.40	315.42	1403.05	166.92	29.21
C1586-250-6500-M	1.586	40.28	0.250	6.35	6.500	165.10	4.528	115.02	4.389	111.49	315.42	1403.05	159.96	27.99
C1586-250-6750-M	1.586	40.28	0.250	6.35	6.750	171.45	4.696	119.28	4.550	115.58	315.42	1403.05	153.56	26.87
C1586-250-7000-M	1.586	40.28	0.250	6.35	7.000	177.80	4.864	123.54	4.711	119.67	315.42	1403.05	147.66	25.84
C1586-250-7500-M	1.586	40.28	0.250	6.35	7.500	190.50	5.200	132.07	5.033	127.84	315.42	1403.05	137.11	23.99
C1586-250-8000-M	1.586	40.28	0.250	6.35	8.000	203.20	5.535	140.59	5.355	136.02	315.42	1403.05	127.97	22.39
C1586-250-8500-M	1.586	40.28	0.250	6.35	8.500	215.90	5.871	149.12	5.677	144.20	315.42	1403.05	119.97	21.00
C1586-250-9000-M	1.586	40.28	0.250	6.35	9.000	228.60	6.207	157.65	5.999	152.38	315.42	1403.05	112.91	19.76
C1586-250-9500-M	1.586	40.28	0.250	6.35	9.500	241.30	6.542	166.17	6.321	160.56	315.42	1403.05	106.64	18.66
C1645-135-2750-M	1.645	41.78	0.135	3.43	2.750	69.85	1.110	28.20	0.862	21.89	55.74	247.96	33.99	5.95
C1645-135-2875-M	1.645	41.78	0.135	3.43	2.875	73.03	1.152	29.27	0.891	22.63	55.74	247.96	32.36	5.66
C1645-135-3000-M	1.645	41.78	0.135	3.43	3.000	76.20	1.195	30.35	0.920	23.37	55.74	247.96	30.88	5.40
C1645-135-3250-M	1.645	41.78	0.135	3.43	3.250	82.55	1.280	32.50	0.978	24.85	55.74	247.96	28.29	4.95
C1645-135-3500-M	1.645	41.78	0.135	3.43	3.500	88.90	1.364	34.65	1.037	26.33	55.74	247.96	26.10	4.57
C1645-135-3750-M	1.645	41.78	0.135	3.43	3.750	95.25	1.449	36.80	1.095	27.81	55.74	247.96	24.23	4.24
C1645-135-4000-M	1.645	41.78	0.135	3.43	4.000	101.60	1.534	38.95	1.153	29.29	55.74	247.96	22.60	3.96
C1645-135-4250-M	1.645	41.78	0.135	3.43	4.250	107.95	1.618	41.10	1.212	30.77	55.74	247.96	21.18	3.71
C1645-135-4500-M	1.645	41.78	0.135	3.43	4.500	114.30	1.703	43.26	1.270	32.25	55.74	247.96	19.93	3.49
C1645-135-4750-M	1.645	41.78	0.135	3.43	4.750	120.65	1.788	45.41	1.328	33.73	55.74	247.96	18.82	3.29
C1645-135-5000-M	1.645	41.78	0.135	3.43	5.000	127.00	1.872	47.56	1.386	35.22	55.74	247.96	17.82	3.12
C1645-135-5250-M	1.645	41.78	0.135	3.43	5.250	133.35	1.957	49.71	1.445	36.70	55.74	247.96	16.93	2.96
C1645-135-5500-M	1.645	41.78	0.135	3.43	5.500	139.70	2.042	51.86	1.503	38.18	55.74	247.96	16.12	2.82
C1645-135-5750-M	1.645	41.78	0.135	3.43	5.750	146.05	2.126	54.01	1.561	39.66	55.74	247.96	15.38	2.69
C1645-135-6000-M	1.645	41.78	0.135	3.43	6.000	152.40	2.211	56.16	1.620	41.14	55.74	247.96	14.71	2.57
C1645-135-6250-M	1.645	41.78	0.135	3.43	6.250	158.75	2.296	58.31	1.678	42.62	55.74	247.96	14.10	2.47
C1645-135-6500-M	1.645	41.78	0.135	3.43	6.500	165.10	2.381	60.46	1.736	44.10	55.74	247.96	13.53	2.37
C1645-135-6750-M	1.645	41.78	0.135	3.43	6.750	171.45	2.465	62.62	1.795	45.58	55.74	247.96	13.01	2.28
C1645-135-7000-M	1.645	41.78	0.135	3.43	7.000	177.80	2.550	64.77	1.853	47.06	55.74	247.96	12.53	2.19
C1645-135-7500-M	1.645	41.78	0.135	3.43	7.500	190.50	2.719	69.07	1.969	50.02	55.74	247.96	11.66	2.04
C1645-135-8000-M	1.645	41.78	0.135	3.43	8.000	203.20	2.889	73.37	2.086	52.98	55.74	247.96	10.91	1.91
C1645-135-8500-M	1.645	41.78	0.135	3.43	8.500	215.90	3.058	77.67	2.203	55.95	55.74	247.96	10.24	1.79
C1645-135-9000-M	1.645	41.78	0.135	3.43	9.000	228.60	3.227	81.98	2.319	58.91	55.74	247.96	9.66	1.69
C1645-135-9500-M	1.645	41.78	0.135	3.43	9.500	241.30	3.397	86.28	2.436	61.87	55.74	247.96	9.13	1.60
C1645-148-2625-M	1.645	41.78	0.148	3.76	2.625	66.68	1.169	29.68	0.957	24.31	71.99	320.22	49.43	8.65
C1645-148-2750-M	1.645	41.78	0.148	3.76	2.750	69.85	1.215	30.87	0.992	25.19	71.99	320.22	46.91	8.21
C1645-148-2875-M	1.645	41.78	0.148	3.76	2.875	73.03	1.262	32.06	1.027	26.07	71.99	320.22	44.64	7.81
C1645-148-3000-M	1.645	41.78	0.148	3.76	3.000	76.20	1.309	33.25	1.061	26.96	71.99	320.22	42.57	7.45
C1645-148-3250-M	1.645	41.78	0.148	3.76	3.250	82.55	1.403	35.63	1.131	28.72	71.99	320.22	38.97	6.82

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1586-225-6750-S	4.752	120.70	167.48	745.00	83.82	14.67
C1586-225-7000-S	4.922	125.03	167.48	745.00	80.62	14.11
C1586-225-7500-S	5.264	133.70	167.48	745.00	74.90	13.11
C1586-225-8000-S	5.605	142.38	167.48	745.00	69.94	12.24
C1586-225-8500-S	5.947	151.05	167.48	745.00	65.60	11.48
C1586-225-9000-S	6.288	159.72	167.48	745.00	61.76	10.81
C1586-225-9500-S	6.630	168.39	167.48	745.00	58.35	10.21
C1586-250-2250-S	1.791	45.48	219.12	974.69	476.91	83.46
C1586-250-2375-S	1.883	47.82	219.12	974.69	445.11	77.89
C1586-250-2500-S	1.975	50.16	219.12	974.69	417.29	73.03
C1586-250-2625-S	2.067	52.50	219.12	974.69	392.75	68.73
C1586-250-2750-S	2.159	54.85	219.12	974.69	370.93	64.91
C1586-250-2875-S	2.251	57.19	219.12	974.69	351.40	61.50
C1586-250-3000-S	2.344	59.53	219.12	974.69	333.83	58.42
C1586-250-3250-S	2.528	64.21	219.12	974.69	303.49	53.11
C1586-250-3500-S	2.712	68.89	219.12	974.69	278.20	48.68
C1586-250-3750-S	2.897	73.58	219.12	974.69	256.80	44.94
C1586-250-4000-S	3.081	78.26	219.12	974.69	238.45	41.73
C1586-250-4250-S	3.265	82.94	219.12	974.69	222.56	38.95
C1586-250-4500-S	3.450	87.63	219.12	974.69	208.65	36.51
C1586-250-4750-S	3.634	92.31	219.12	974.69	196.37	34.37
C1586-250-5000-S	3.819	96.99	219.12	974.69	185.46	32.46
C1586-250-5250-S	4.003	101.67	219.12	974.69	175.70	30.75
C1586-250-5500-S	4.187	106.36	219.12	974.69	166.92	29.21
C1586-250-5750-S	4.372	111.04	219.12	974.69	158.97	27.82
C1586-250-6000-S	4.556	115.72	219.12	974.69	151.74	26.56
C1586-250-6250-S	4.740	120.40	219.12	974.69	145.15	25.40
C1586-250-6500-S	4.925	125.09	219.12	974.69	139.10	24.34
C1586-250-6750-S	5.109	129.77	219.12	974.69	133.53	23.37
C1586-250-7000-S	5.293	134.45	219.12	974.69	128.40	22.47
C1586-250-7500-S	5.662	143.82	219.12	974.69	119.23	20.86
C1586-250-8000-S	6.031	153.18	219.12	974.69	111.28	19.47
C1586-250-8500-S	6.400	162.55	219.12	974.69	104.32	18.26
C1586-250-9000-S	6.768	171.92	219.12	974.69	98.19	17.18
C1586-250-9500-S	7.137	181.28	219.12	974.69	92.73	16.23
C1645-135-2750-S	1.321	33.54	42.25	187.94	29.56	5.17
C1645-135-2875-S	1.374	34.89	42.25	187.94	28.14	4.92
C1645-135-3000-S	1.427	36.23	42.25	187.94	26.85	4.70
C1645-135-3250-S	1.532	38.92	42.25	187.94	24.60	4.31
C1645-135-3500-S	1.638	41.61	42.25	187.94	22.70	3.97
C1645-135-3750-S	1.744	44.30	42.25	187.94	21.07	3.69
C1645-135-4000-S	1.850	46.99	42.25	187.94	19.65	3.44
C1645-135-4250-S	1.956	49.69	42.25	187.94	18.42	3.22
C1645-135-4500-S	2.062	52.38	42.25	187.94	17.33	3.03
C1645-135-4750-S	2.168	55.07	42.25	187.94	16.36	2.86
C1645-135-5000-S	2.274	57.76	42.25	187.94	15.50	2.71
C1645-135-5250-S	2.380	60.45	42.25	187.94	14.72	2.58
C1645-135-5500-S	2.486	63.14	42.25	187.94	14.02	2.45
C1645-135-5750-S	2.592	65.83	42.25	187.94	13.38	2.34
C1645-135-6000-S	2.697	68.52	42.25	187.94	12.79	2.24
C1645-135-6250-S	2.803	71.21	42.25	187.94	12.26	2.15
C1645-135-6500-S	2.909	73.90	42.25	187.94	11.77	2.06
C1645-135-6750-S	3.015	76.59	42.25	187.94	11.31	1.98
C1645-135-7000-S	3.121	79.28	42.25	187.94	10.89	1.91
C1645-135-7500-S	3.333	84.66	42.25	187.94	10.14	1.77
C1645-135-8000-S	3.545	90.04	42.25	187.94	9.48	1.66
C1645-135-8500-S	3.757	95.42	42.25	187.94	8.91	1.56
C1645-135-9000-S	3.968	100.80	42.25	187.94	8.40	1.47
C1645-135-9500-S	4.180	106.18	42.25	187.94	7.94	1.39
C1645-148-2625-S	1.368	34.75	54.03	240.32	42.98	7.52
C1645-148-2750-S	1.426	36.21	54.03	240.32	40.79	7.14
C1645-148-2875-S	1.483	37.67	54.03	240.32	38.81	6.79
C1645-148-3000-S	1.541	39.13	54.03	240.32	37.02	6.48
C1645-148-3250-S	1.656	42.05	54.03	240.32	33.89	5.93

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1645-148-3500-M	1.645	41.78	0.148	3.76	3.500	88.90	1.496	38.01	1.200	30.48	71.99	320.22	35.93	6.29
C1645-148-3750-M	1.645	41.78	0.148	3.76	3.750	95.25	1.590	40.39	1.269	32.24	71.99	320.22	33.33	5.83
C1645-148-4000-M	1.645	41.78	0.148	3.76	4.000	101.60	1.684	42.77	1.339	34.00	71.99	320.22	31.08	5.44
C1645-148-4250-M	1.645	41.78	0.148	3.76	4.250	107.95	1.777	45.15	1.408	35.77	71.99	320.22	29.11	5.09
C1645-148-4500-M	1.645	41.78	0.148	3.76	4.500	114.30	1.871	47.53	1.478	37.53	71.99	320.22	27.38	4.79
C1645-148-4750-M	1.645	41.78	0.148	3.76	4.750	120.65	1.965	49.90	1.547	39.29	71.99	320.22	25.85	4.52
C1645-148-5000-M	1.645	41.78	0.148	3.76	5.000	127.00	2.058	52.28	1.616	41.05	71.99	320.22	24.47	4.28
C1645-148-5250-M	1.645	41.78	0.148	3.76	5.250	133.35	2.152	54.66	1.686	42.82	71.99	320.22	23.24	4.07
C1645-148-5500-M	1.645	41.78	0.148	3.76	5.500	139.70	2.246	57.04	1.755	44.58	71.99	320.22	22.12	3.87
C1645-148-5750-M	1.645	41.78	0.148	3.76	5.750	146.05	2.339	59.42	1.824	46.34	71.99	320.22	21.11	3.69
C1645-148-6000-M	1.645	41.78	0.148	3.76	6.000	152.40	2.433	61.80	1.894	48.10	71.99	320.22	20.18	3.53
C1645-148-6250-M	1.645	41.78	0.148	3.76	6.250	158.75	2.527	64.18	1.963	49.86	71.99	320.22	19.34	3.38
C1645-148-6500-M	1.645	41.78	0.148	3.76	6.500	165.10	2.620	66.56	2.033	51.63	71.99	320.22	18.56	3.25
C1645-148-6750-M	1.645	41.78	0.148	3.76	6.750	171.45	2.714	68.94	2.102	53.39	71.99	320.22	17.84	3.12
C1645-148-7000-M	1.645	41.78	0.148	3.76	7.000	177.80	2.808	71.32	2.171	55.15	71.99	320.22	17.17	3.00
C1645-148-7500-M*	1.645	41.78	0.148	3.76	7.500	190.50	3.088	78.43	2.424	61.58	71.99	320.22	16.32	2.86
C1645-148-8000-M*	1.645	41.78	0.148	3.76	8.000	203.20	3.275	83.18	2.563	65.10	71.99	320.22	15.24	2.67
C1645-148-8500-M*	1.645	41.78	0.148	3.76	8.500	215.90	3.462	87.94	2.702	68.63	71.99	320.22	14.29	2.50
C1645-148-9000-M*	1.645	41.78	0.148	3.76	9.000	228.60	3.650	92.70	2.841	72.15	71.99	320.22	13.46	2.35
C1645-148-9500-M*	1.645	41.78	0.148	3.76	9.500	241.30	3.837	97.46	2.979	75.68	71.99	320.22	12.71	2.22
C1645-162-2500-M	1.645	41.78	0.162	4.12	2.500	63.50	1.226	31.14	1.051	26.70	92.52	411.53	72.62	12.71
C1645-162-2625-M	1.645	41.78	0.162	4.12	2.625	66.68	1.278	32.46	1.092	27.74	92.52	411.53	68.67	12.02
C1645-162-2750-M	1.645	41.78	0.162	4.12	2.750	69.85	1.330	33.77	1.133	28.78	92.52	411.53	65.14	11.40
C1645-162-2875-M	1.645	41.78	0.162	4.12	2.875	73.03	1.381	35.09	1.174	29.81	92.52	411.53	61.94	10.84
C1645-162-3000-M	1.645	41.78	0.162	4.12	3.000	76.20	1.433	36.41	1.215	30.85	92.52	411.53	59.05	10.33
C1645-162-3250-M	1.645	41.78	0.162	4.12	3.250	82.55	1.537	39.04	1.296	32.93	92.52	411.53	54.01	9.45
C1645-162-3500-M	1.645	41.78	0.162	4.12	3.500	88.90	1.641	41.67	1.378	35.00	92.52	411.53	49.75	8.71
C1645-162-3750-M	1.645	41.78	0.162	4.12	3.750	95.25	1.744	44.30	1.460	37.08	92.52	411.53	46.12	8.07
C1645-162-4000-M	1.645	41.78	0.162	4.12	4.000	101.60	1.848	46.93	1.541	39.15	92.52	411.53	42.99	7.52
C1645-162-4250-M	1.645	41.78	0.162	4.12	4.250	107.95	1.951	49.57	1.623	41.23	92.52	411.53	40.25	7.04
C1645-162-4500-M	1.645	41.78	0.162	4.12	4.500	114.30	2.055	52.20	1.705	43.30	92.52	411.53	37.84	6.62
C1645-162-4750-M	1.645	41.78	0.162	4.12	4.750	120.65	2.159	54.83	1.786	45.38	92.52	411.53	35.70	6.25
C1645-162-5000-M	1.645	41.78	0.162	4.12	5.000	127.00	2.262	57.46	1.868	47.45	92.52	411.53	33.79	5.91
C1645-162-5250-M	1.645	41.78	0.162	4.12	5.250	133.35	2.366	60.10	1.950	49.53	92.52	411.53	32.08	5.61
C1645-162-5500-M	1.645	41.78	0.162	4.12	5.500	139.70	2.470	62.73	2.032	51.60	92.52	411.53	30.53	5.34
C1645-162-5750-M	1.645	41.78	0.162	4.12	5.750	146.05	2.573	65.36	2.113	53.68	92.52	411.53	29.12	5.10
C1645-162-6000-M	1.645	41.78	0.162	4.12	6.000	152.40	2.677	67.99	2.195	55.75	92.52	411.53	27.84	4.87
C1645-162-6250-M	1.645	41.78	0.162	4.12	6.250	158.75	2.780	70.62	2.277	57.83	92.52	411.53	26.67	4.67
C1645-162-6500-M	1.645	41.78	0.162	4.12	6.500	165.10	2.884	73.26	2.358	59.90	92.52	411.53	25.59	4.48
C1645-162-6750-M*	1.645	41.78	0.162	4.12	6.750	171.45	3.083	78.30	2.557	64.95	92.52	411.53	25.23	4.41
C1645-162-7000-M*	1.645	41.78	0.162	4.12	7.000	177.80	3.186	80.93	2.639	67.03	92.52	411.53	24.26	4.25
C1645-162-7500-M*	1.645	41.78	0.162	4.12	7.500	190.50	3.393	86.19	2.802	71.18	92.52	411.53	22.53	3.94
C1645-162-8000-M*	1.645	41.78	0.162	4.12	8.000	203.20	3.601	91.46	2.966	75.33	92.52	411.53	21.03	3.68
C1645-162-8500-M*	1.645	41.78	0.162	4.12	8.500	215.90	3.808	96.72	3.129	79.48	92.52	411.53	19.72	3.45
C1645-162-9000-M*	1.645	41.78	0.162	4.12	9.000	228.60	4.015	101.99	3.292	83.63	92.52	411.53	18.56	3.25
C1645-162-9500-M*	1.645	41.78	0.162	4.12	9.500	241.30	4.223	107.25	3.456	87.78	92.52	411.53	17.53	3.07
C1645-177-2375-M	1.645	41.78	0.177	4.50	2.375	60.33	1.279	32.49	1.140	28.96	118.23	525.92	107.88	18.88
C1645-177-2500-M	1.645	41.78	0.177	4.50	2.500	63.50	1.336	33.94	1.188	30.16	118.23	525.92	101.60	17.78
C1645-177-2625-M	1.645	41.78	0.177	4.50	2.625	66.68	1.394	35.40	1.235	31.37	118.23	525.92	96.01	16.80
C1645-177-2750-M	1.645	41.78	0.177	4.50	2.750	69.85	1.451	36.85	1.283	32.58	118.23	525.92	91.00	15.92
C1645-177-2875-M	1.645	41.78	0.177	4.50	2.875	73.03	1.508	38.30	1.330	33.78	118.23	525.92	86.49	15.14
C1645-177-3000-M	1.645	41.78	0.177	4.50	3.000	76.20	1.565	39.76	1.378	34.99	118.23	525.92	82.40	14.42
C1645-177-3250-M	1.645	41.78	0.177	4.50	3.250	82.55	1.680	42.66	1.473	37.40	118.23	525.92	75.29	13.18
C1645-177-3500-M	1.645	41.78	0.177	4.50	3.500	88.90	1.794	45.57	1.568	39.82	118.23	525.92	69.31	12.13
C1645-177-3750-M	1.645	41.78	0.177	4.50	3.750	95.25	1.908	48.48	1.663	42.23	118.23	525.92	64.20	11.24
C1645-177-4000-M	1.645	41.78	0.177	4.50	4.000	101.60	2.023	51.38	1.758	44.65	118.23	525.92	59.80	10.47
C1645-177-4250-M	1.645	41.78	0.177	4.50	4.250	107.95	2.137	54.29	1.853	47.06	118.23	525.92	55.96	9.79
C1645-177-4500-M	1.645	41.78	0.177	4.50	4.500	114.30	2.252	57.20	1.948	49.47	118.23	525.92	52.59	9.20
C1645-177-4750-M	1.645	41.78	0.177	4.50	4.750	120.65	2.366	60.10	2.043	51.89	118.23	525.92	49.60	8.68
C1645-177-5000-M	1.645	41.78	0.177	4.50	5.000	127.00	2.481	63.01	2.138	54.30	118.23	525.92	46.93	8.21
C1645-177-5250-M	1.645	41.78	0.177	4.50	5.250	133.35	2.595	65.92	2.233	56.72	118.23	525.92	44.53	7.79
C1645-177-5500-M	1.645	41.78	0.177	4.50	5.500	139.70	2.710	68.82	2.328	59.13	118.23	525.92	42.37	7.41
C1645-177-5750-M	1.645	41.78	0.177	4.50	5.750	146.05	2.824	71.73	2.423	61.54	118.23	525.92	40.41	7.07
C1645-177-6000-M	1.645	41.78	0.177	4.50	6.000	152.40	2.938	74.64	2.518	63.96	118.23	525.92	38.62	6.76

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1645-148-3500-S	1.771	44.98	54.03	240.32	31.24	5.47
C1645-148-3750-S	1.886	47.90	54.03	240.32	28.98	5.07
C1645-148-4000-S	2.001	50.82	54.03	240.32	27.03	4.73
C1645-148-4250-S	2.116	53.75	54.03	240.32	25.32	4.43
C1645-148-4500-S	2.231	56.67	54.03	240.32	23.81	4.17
C1645-148-4750-S	2.346	59.59	54.03	240.32	22.48	3.93
C1645-148-5000-S	2.461	62.52	54.03	240.32	21.28	3.72
C1645-148-5250-S	2.576	65.44	54.03	240.32	20.21	3.54
C1645-148-5500-S	2.691	68.36	54.03	240.32	19.24	3.37
C1645-148-5750-S	2.806	71.28	54.03	240.32	18.35	3.21
C1645-148-6000-S	2.922	74.21	54.03	240.32	17.55	3.07
C1645-148-6250-S	3.037	77.13	54.03	240.32	16.81	2.94
C1645-148-6500-S	3.152	80.05	54.03	240.32	16.14	2.82
C1645-148-6750-S	3.267	82.98	54.03	240.32	15.51	2.71
C1645-148-7000-S	3.382	85.90	54.03	240.32	14.93	2.61
C1645-148-7500-S*	3.692	93.77	54.03	240.32	14.19	2.48
C1645-148-8000-S*	3.922	99.62	54.03	240.32	13.25	2.32
C1645-148-8500-S*	4.152	105.46	54.03	240.32	12.43	2.17
C1645-148-9000-S*	4.382	111.31	54.03	240.32	11.70	2.05
C1645-148-9500-S*	4.612	117.16	54.03	240.32	11.05	1.93
C1645-162-2500-S	1.412	35.87	68.69	305.55	63.15	11.05
C1645-162-2625-S	1.475	37.46	68.69	305.55	59.72	10.45
C1645-162-2750-S	1.537	39.05	68.69	305.55	56.64	9.91
C1645-162-2875-S	1.600	40.63	68.69	305.55	53.87	9.43
C1645-162-3000-S	1.662	42.22	68.69	305.55	51.35	8.99
C1645-162-3250-S	1.787	45.40	68.69	305.55	46.96	8.22
C1645-162-3500-S	1.912	48.57	68.69	305.55	43.27	7.57
C1645-162-3750-S	2.037	51.75	68.69	305.55	40.11	7.02
C1645-162-4000-S	2.162	54.92	68.69	305.55	37.38	6.54
C1645-162-4250-S	2.287	58.10	68.69	305.55	35.00	6.13
C1645-162-4500-S	2.412	61.28	68.69	305.55	32.90	5.76
C1645-162-4750-S	2.537	64.45	68.69	305.55	31.05	5.43
C1645-162-5000-S	2.662	67.63	68.69	305.55	29.39	5.14
C1645-162-5250-S	2.787	70.80	68.69	305.55	27.90	4.88
C1645-162-5500-S	2.913	73.98	68.69	305.55	26.55	4.65
C1645-162-5750-S	3.038	77.15	68.69	305.55	25.32	4.43
C1645-162-6000-S	3.163	80.33	68.69	305.55	24.21	4.24
C1645-162-6250-S	3.288	83.50	68.69	305.55	23.19	4.06
C1645-162-6500-S	3.413	86.68	68.69	305.55	22.25	3.89
C1645-162-6750-S*	3.619	91.91	68.69	305.55	21.94	3.84
C1645-162-7000-S*	3.744	95.09	68.69	305.55	21.09	3.69
C1645-162-7500-S*	3.994	101.44	68.69	305.55	19.59	3.43
C1645-162-8000-S*	4.244	107.79	68.69	305.55	18.29	3.20
C1645-162-8500-S*	4.494	114.14	68.69	305.55	17.15	3.00
C1645-162-9000-S*	4.744	120.49	68.69	305.55	16.14	2.82
C1645-162-9500-S*	4.994	126.85	68.69	305.55	15.24	2.67
C1645-177-2375-S	1.450	36.83	86.78	385.99	93.81	16.42
C1645-177-2500-S	1.518	38.55	86.78	385.99	88.35	15.46
C1645-177-2625-S	1.586	40.27	86.78	385.99	83.49	14.61
C1645-177-2750-S	1.653	42.00	86.78	385.99	79.13	13.85
C1645-177-2875-S	1.721	43.72	86.78	385.99	75.21	13.16
C1645-177-3000-S	1.789	45.44	86.78	385.99	71.65	12.54
C1645-177-3250-S	1.925	48.88	86.78	385.99	65.47	11.46
C1645-177-3500-S	2.060	52.33	86.78	385.99	60.27	10.55
C1645-177-3750-S	2.196	55.77	86.78	385.99	55.83	9.77
C1645-177-4000-S	2.331	59.21	86.78	385.99	52.00	9.10
C1645-177-4250-S	2.467	62.66	86.78	385.99	48.66	8.52
C1645-177-4500-S	2.602	66.10	86.78	385.99	45.73	8.00
C1645-177-4750-S	2.738	69.55	86.78	385.99	43.13	7.55
C1645-177-5000-S	2.874	72.99	86.78	385.99	40.81	7.14
C1645-177-5250-S	3.009	76.43	86.78	385.99	38.73	6.78
C1645-177-5500-S	3.145	79.88	86.78	385.99	36.84	6.45
C1645-177-5750-S	3.280	83.32	86.78	385.99	35.14	6.15
C1645-177-6000-S	3.416	86.76	86.78	385.99	33.58	5.88

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1645-177-6250-M	1.645	41.78	0.177	4.50	6.250	158.75	3.053	77.54	2.613	66.37	118.23	525.92	36.98	6.47
C1645-177-6500-M	1.645	41.78	0.177	4.50	6.500	165.10	3.167	80.45	2.708	68.79	118.23	525.92	35.48	6.21
C1645-177-6750-M	1.645	41.78	0.177	4.50	6.750	171.45	3.282	83.36	2.803	71.20	118.23	525.92	34.09	5.97
C1645-177-7000-M	1.645	41.78	0.177	4.50	7.000	177.80	3.396	86.26	2.898	73.61	118.23	525.92	32.81	5.74
C1645-177-7500-M*	1.645	41.78	0.177	4.50	7.500	190.50	3.721	94.51	3.207	81.45	118.23	525.92	31.29	5.48
C1645-177-8000-M*	1.645	41.78	0.177	4.50	8.000	203.20	3.950	100.33	3.397	86.28	118.23	525.92	29.19	5.11
C1645-177-8500-M*	1.645	41.78	0.177	4.50	8.500	215.90	4.179	106.14	3.587	91.11	118.23	525.92	27.36	4.79
C1645-177-9000-M*	1.645	41.78	0.177	4.50	9.000	228.60	4.408	111.95	3.777	95.94	118.23	525.92	25.75	4.51
C1645-177-9500-M*	1.645	41.78	0.177	4.50	9.500	241.30	4.637	117.77	3.967	100.77	118.23	525.92	24.31	4.25
C1645-192-2250-M	1.645	41.78	0.192	4.88	2.250	57.15	1.318	33.48	1.211	30.77	148.02	658.43	158.85	27.80
C1645-192-2375-M	1.645	41.78	0.192	4.88	2.375	60.33	1.381	35.07	1.266	32.14	148.02	658.43	148.88	26.05
C1645-192-2500-M	1.645	41.78	0.192	4.88	2.500	63.50	1.443	36.66	1.320	33.52	148.02	658.43	140.08	24.51
C1645-192-2625-M	1.645	41.78	0.192	4.88	2.625	66.68	1.506	38.25	1.374	34.90	148.02	658.43	132.27	23.15
C1645-192-2750-M	1.645	41.78	0.192	4.88	2.750	69.85	1.568	39.84	1.428	36.27	148.02	658.43	125.28	21.92
C1645-192-2875-M	1.645	41.78	0.192	4.88	2.875	73.03	1.631	41.43	1.482	37.65	148.02	658.43	118.99	20.82
C1645-192-3000-M	1.645	41.78	0.192	4.88	3.000	76.20	1.694	43.02	1.536	39.02	148.02	658.43	113.31	19.83
C1645-192-3250-M	1.645	41.78	0.192	4.88	3.250	82.55	1.819	46.20	1.645	41.77	148.02	658.43	103.42	18.10
C1645-192-3500-M	1.645	41.78	0.192	4.88	3.500	88.90	1.944	49.38	1.753	44.52	148.02	658.43	95.13	16.65
C1645-192-3750-M	1.645	41.78	0.192	4.88	3.750	95.25	2.069	52.56	1.861	47.27	148.02	658.43	88.06	15.41
C1645-192-4000-M	1.645	41.78	0.192	4.88	4.000	101.60	2.194	55.73	1.969	50.02	148.02	658.43	81.97	14.35
C1645-192-4250-M	1.645	41.78	0.192	4.88	4.250	107.95	2.319	58.91	2.078	52.77	148.02	658.43	76.67	13.42
C1645-192-4500-M	1.645	41.78	0.192	4.88	4.500	114.30	2.445	62.09	2.186	55.52	148.02	658.43	72.01	12.60
C1645-192-4750-M	1.645	41.78	0.192	4.88	4.750	120.65	2.570	65.27	2.294	58.27	148.02	658.43	67.89	11.88
C1645-192-5000-M	1.645	41.78	0.192	4.88	5.000	127.00	2.695	68.45	2.403	61.02	148.02	658.43	64.21	11.24
C1645-192-5250-M	1.645	41.78	0.192	4.88	5.250	133.35	2.820	71.63	2.511	63.77	148.02	658.43	60.92	10.66
C1645-192-5500-M	1.645	41.78	0.192	4.88	5.500	139.70	2.945	74.81	2.619	66.52	148.02	658.43	57.94	10.14
C1645-192-5750-M	1.645	41.78	0.192	4.88	5.750	146.05	3.070	77.99	2.727	69.27	148.02	658.43	55.24	9.67
C1645-192-6000-M	1.645	41.78	0.192	4.88	6.000	152.40	3.196	81.17	2.836	72.02	148.02	658.43	52.78	9.24
C1645-192-6250-M	1.645	41.78	0.192	4.88	6.250	158.75	3.321	84.34	2.944	74.78	148.02	658.43	50.53	8.84
C1645-192-6500-M	1.645	41.78	0.192	4.88	6.500	165.10	3.446	87.52	3.052	77.53	148.02	658.43	48.47	8.48
C1645-192-6750-M	1.645	41.78	0.192	4.88	6.750	171.45	3.571	90.70	3.160	80.28	148.02	658.43	46.56	8.15
C1645-192-7000-M	1.645	41.78	0.192	4.88	7.000	177.80	3.696	93.88	3.269	83.03	148.02	658.43	44.80	7.84
C1645-192-7500-M	1.645	41.78	0.192	4.88	7.500	190.50	3.946	100.24	3.485	88.53	148.02	658.43	41.65	7.29
C1645-192-8000-M	1.645	41.78	0.192	4.88	8.000	203.20	4.197	106.60	3.702	94.03	148.02	658.43	38.92	6.81
C1645-192-8500-M	1.645	41.78	0.192	4.88	8.500	215.90	4.447	112.96	3.918	99.53	148.02	658.43	36.52	6.39
C1645-192-9000-M	1.645	41.78	0.192	4.88	9.000	228.60	4.697	119.31	4.135	105.03	148.02	658.43	34.40	6.02
C1645-192-9500-M	1.645	41.78	0.192	4.88	9.500	241.30	4.948	125.67	4.352	110.53	148.02	658.43	32.52	5.69
C1645-207-2250-M	1.645	41.78	0.207	5.26	2.250	57.15	1.410	35.81	1.325	33.65	182.10	810.04	216.76	37.93
C1645-207-2375-M	1.645	41.78	0.207	5.26	2.375	60.33	1.478	37.53	1.385	35.19	182.10	810.04	202.94	35.52
C1645-207-2500-M	1.645	41.78	0.207	5.26	2.500	63.50	1.545	39.26	1.446	36.73	182.10	810.04	190.78	33.39
C1645-207-2625-M	1.645	41.78	0.207	5.26	2.625	66.68	1.613	40.98	1.506	38.26	182.10	810.04	180.00	31.50
C1645-207-2750-M	1.645	41.78	0.207	5.26	2.750	69.85	1.681	42.70	1.567	39.80	182.10	810.04	170.36	29.81
C1645-207-2875-M	1.645	41.78	0.207	5.26	2.875	73.03	1.749	44.42	1.628	41.34	182.10	810.04	161.71	28.30
C1645-207-3000-M	1.645	41.78	0.207	5.26	3.000	76.20	1.817	46.14	1.688	42.88	182.10	810.04	153.90	26.93
C1645-207-3250-M	1.645	41.78	0.207	5.26	3.250	82.55	1.952	49.59	1.809	45.96	182.10	810.04	140.33	24.56
C1645-207-3500-M	1.645	41.78	0.207	5.26	3.500	88.90	2.088	53.03	1.931	49.04	182.10	810.04	128.96	22.57
C1645-207-3750-M	1.645	41.78	0.207	5.26	3.750	95.25	2.224	56.48	2.052	52.12	182.10	810.04	119.30	20.88
C1645-207-4000-M	1.645	41.78	0.207	5.26	4.000	101.60	2.359	59.92	2.173	55.19	182.10	810.04	110.98	19.42
C1645-207-4250-M	1.645	41.78	0.207	5.26	4.250	107.95	2.495	63.37	2.294	58.27	182.10	810.04	103.75	18.16
C1645-207-4500-M	1.645	41.78	0.207	5.26	4.500	114.30	2.630	66.81	2.415	61.35	182.10	810.04	97.40	17.04
C1645-207-4750-M	1.645	41.78	0.207	5.26	4.750	120.65	2.766	70.25	2.537	64.43	182.10	810.04	91.78	16.06
C1645-207-5000-M	1.645	41.78	0.207	5.26	5.000	127.00	2.902	73.70	2.658	67.51	182.10	810.04	86.78	15.19
C1645-207-5250-M	1.645	41.78	0.207	5.26	5.250	133.35	3.037	77.14	2.779	70.59	182.10	810.04	82.29	14.40
C1645-207-5500-M	1.645	41.78	0.207	5.26	5.500	139.70	3.173	80.59	2.900	73.66	182.10	810.04	78.25	13.69
C1645-207-5750-M	1.645	41.78	0.207	5.26	5.750	146.05	3.308	84.03	3.021	76.74	182.10	810.04	74.58	13.05
C1645-207-6000-M	1.645	41.78	0.207	5.26	6.000	152.40	3.444	87.48	3.143	79.82	182.10	810.04	71.24	12.47
C1645-207-6250-M	1.645	41.78	0.207	5.26	6.250	158.75	3.580	90.92	3.264	82.90	182.10	810.04	68.19	11.93
C1645-207-6500-M	1.645	41.78	0.207	5.26	6.500	165.10	3.715	94.37	3.385	85.98	182.10	810.04	65.39	11.44
C1645-207-6750-M	1.645	41.78	0.207	5.26	6.750	171.45	3.851	97.81	3.506	89.05	182.10	810.04	62.81	10.99
C1645-207-7000-M	1.645	41.78	0.207	5.26	7.000	177.80	3.986	101.25	3.627	92.13	182.10	810.04	60.43	10.57
C1645-207-7500-M	1.645	41.78	0.207	5.26	7.500	190.50	4.258	108.14	3.870	98.29	182.10	810.04	56.16	9.83
C1645-207-8000-M	1.645	41.78	0.207	5.26	8.000	203.20	4.529	115.03	4.112	104.45	182.10	810.04	52.46	9.18
C1645-207-8500-M	1.645	41.78	0.207	5.26	8.500	215.90	4.800	121.92	4.354	110.60	182.10	810.04	49.22	8.61
C1645-207-9000-M	1.645	41.78	0.207	5.26	9.000	228.60	5.071	128.81	4.597	116.76	182.10	810.04	46.35	8.11

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1645-177-6250-S	3.551	90.21	86.78	385.99	32.16	5.63
C1645-177-6500-S	3.687	93.65	86.78	385.99	30.85	5.40
C1645-177-6750-S	3.823	97.10	86.78	385.99	29.64	5.19
C1645-177-7000-S	3.958	100.54	86.78	385.99	28.53	4.99
C1645-177-7500-S*	4.310	109.48	86.78	385.99	27.21	4.76
C1645-177-8000-S*	4.582	116.37	86.78	385.99	25.38	4.44
C1645-177-8500-S*	4.853	123.26	86.78	385.99	23.79	4.16
C1645-177-9000-S*	5.124	130.15	86.78	385.99	22.39	3.92
C1645-177-9500-S*	5.395	137.03	86.78	385.99	21.14	3.70
C1645-192-2250-S	1.472	37.40	107.40	477.72	138.13	24.17
C1645-192-2375-S	1.545	39.25	107.40	477.72	129.46	22.65
C1645-192-2500-S	1.618	41.11	107.40	477.72	121.81	21.32
C1645-192-2625-S	1.691	42.96	107.40	477.72	115.02	20.13
C1645-192-2750-S	1.764	44.81	107.40	477.72	108.94	19.06
C1645-192-2875-S	1.837	46.66	107.40	477.72	103.47	18.11
C1645-192-3000-S	1.910	48.51	107.40	477.72	98.53	17.24
C1645-192-3250-S	2.056	52.22	107.40	477.72	89.93	15.74
C1645-192-3500-S	2.202	55.92	107.40	477.72	82.72	14.48
C1645-192-3750-S	2.347	59.63	107.40	477.72	76.57	13.40
C1645-192-4000-S	2.493	63.33	107.40	477.72	71.28	12.47
C1645-192-4250-S	2.639	67.03	107.40	477.72	66.67	11.67
C1645-192-4500-S	2.785	70.74	107.40	477.72	62.62	10.96
C1645-192-4750-S	2.931	74.44	107.40	477.72	59.04	10.33
C1645-192-5000-S	3.077	78.15	107.40	477.72	55.84	9.77
C1645-192-5250-S	3.222	81.85	107.40	477.72	52.97	9.27
C1645-192-5500-S	3.368	85.55	107.40	477.72	50.38	8.82
C1645-192-5750-S	3.514	89.26	107.40	477.72	48.03	8.41
C1645-192-6000-S	3.660	92.96	107.40	477.72	45.90	8.03
C1645-192-6250-S	3.806	96.67	107.40	477.72	43.94	7.69
C1645-192-6500-S	3.952	100.37	107.40	477.72	42.14	7.38
C1645-192-6750-S	4.097	104.08	107.40	477.72	40.49	7.09
C1645-192-7000-S	4.243	107.78	107.40	477.72	38.96	6.82
C1645-192-7500-S	4.535	115.19	107.40	477.72	36.22	6.34
C1645-192-8000-S	4.827	122.60	107.40	477.72	33.84	5.92
C1645-192-8500-S	5.118	130.00	107.40	477.72	31.76	5.56
C1645-192-9000-S	5.410	137.41	107.40	477.72	29.92	5.24
C1645-192-9500-S	5.702	144.82	107.40	477.72	28.27	4.95
C1645-207-2250-S	1.557	39.55	130.63	581.05	188.49	32.99
C1645-207-2375-S	1.635	41.52	130.63	581.05	176.47	30.88
C1645-207-2500-S	1.713	43.50	130.63	581.05	165.90	29.03
C1645-207-2625-S	1.790	45.48	130.63	581.05	156.52	27.39
C1645-207-2750-S	1.868	47.45	130.63	581.05	148.14	25.93
C1645-207-2875-S	1.946	49.43	130.63	581.05	140.62	24.61
C1645-207-3000-S	2.024	51.41	130.63	581.05	133.82	23.42
C1645-207-3250-S	2.180	55.36	130.63	581.05	122.03	21.35
C1645-207-3500-S	2.335	59.31	130.63	581.05	112.14	19.62
C1645-207-3750-S	2.491	63.27	130.63	581.05	103.74	18.15
C1645-207-4000-S	2.646	67.22	130.63	581.05	96.50	16.89
C1645-207-4250-S	2.802	71.17	130.63	581.05	90.21	15.79
C1645-207-4500-S	2.958	75.13	130.63	581.05	84.70	14.82
C1645-207-4750-S	3.113	79.08	130.63	581.05	79.81	13.97
C1645-207-5000-S	3.269	83.03	130.63	581.05	75.46	13.21
C1645-207-5250-S	3.425	86.98	130.63	581.05	71.56	12.52
C1645-207-5500-S	3.580	90.94	130.63	581.05	68.04	11.91
C1645-207-5750-S	3.736	94.89	130.63	581.05	64.85	11.35
C1645-207-6000-S	3.891	98.84	130.63	581.05	61.95	10.84
C1645-207-6250-S	4.047	102.80	130.63	581.05	59.30	10.38
C1645-207-6500-S	4.203	106.75	130.63	581.05	56.86	9.95
C1645-207-6750-S	4.358	110.70	130.63	581.05	54.62	9.56
C1645-207-7000-S	4.514	114.66	130.63	581.05	52.55	9.20
C1645-207-7500-S	4.825	122.56	130.63	581.05	48.84	8.55
C1645-207-8000-S	5.137	130.47	130.63	581.05	45.62	7.98
C1645-207-8500-S	5.448	138.37	130.63	581.05	42.80	7.49
C1645-207-9000-S	5.759	146.28	130.63	581.05	40.31	7.05

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL						
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1645-207-9500-M	**1.645**	**41.78**	**0.207**	**5.26**	**9.500**	**241.30**	**5.342**	**135.70**	**4.839**	**122.91**	**182.10**	**810.04**	**43.80**	**7.67**	**C1645-207-9500-S**	**6.070**	**154.19**	**130.63**	**581.05**	**38.09**	**6.67**
C1645-225-2250-M	**1.645**	**41.78**	**0.225**	**5.72**	**2.250**	**57.15**	**1.513**	**38.42**	**1.452**	**36.87**	**228.95**	**1018.44**	**310.48**	**54.33**	**C1645-225-2250-S**	**1.650**	**41.91**	**162.02**	**720.71**	**269.98**	**47.25**
C1645-225-2375-M	**1.645**	**41.78**	**0.225**	**5.72**	**2.375**	**60.33**	**1.586**	**40.29**	**1.520**	**38.60**	**228.95**	**1018.44**	**290.32**	**50.81**	**C1645-225-2375-S**	**1.733**	**44.02**	**162.02**	**720.71**	**252.45**	**44.18**
C1645-225-2500-M	**1.645**	**41.78**	**0.225**	**5.72**	**2.500**	**63.50**	**1.660**	**42.17**	**1.588**	**40.32**	**228.95**	**1018.44**	**272.62**	**47.71**	**C1645-225-2500-S**	**1.817**	**46.14**	**162.02**	**720.71**	**237.06**	**41.49**
C1645-225-2625-M	**1.645**	**41.78**	**0.225**	**5.72**	**2.625**	**66.68**	**1.734**	**44.04**	**1.656**	**42.05**	**228.95**	**1018.44**	**256.95**	**44.97**	**C1645-225-2625-S**	**1.900**	**48.26**	**162.02**	**720.71**	**223.43**	**39.10**
C1645-225-2750-M	**1.645**	**41.78**	**0.225**	**5.72**	**2.750**	**69.85**	**1.808**	**45.92**	**1.724**	**43.78**	**228.95**	**1018.44**	**242.98**	**42.52**	**C1645-225-2750-S**	**1.983**	**50.37**	**162.02**	**720.71**	**211.29**	**36.98**
C1645-225-2875-M	**1.645**	**41.78**	**0.225**	**5.72**	**2.875**	**73.03**	**1.882**	**47.79**	**1.792**	**45.50**	**228.95**	**1018.44**	**230.46**	**40.33**	**C1645-225-2875-S**	**2.067**	**52.49**	**162.02**	**720.71**	**200.40**	**35.07**
C1645-225-3000-M	**1.645**	**41.78**	**0.225**	**5.72**	**3.000**	**76.20**	**1.955**	**49.67**	**1.860**	**47.23**	**228.95**	**1018.44**	**219.16**	**38.35**	**C1645-225-3000-S**	**2.150**	**54.61**	**162.02**	**720.71**	**190.58**	**33.35**
C1645-225-3250-M	**1.645**	**41.78**	**0.225**	**5.72**	**3.250**	**82.55**	**2.103**	**53.41**	**1.995**	**50.69**	**228.95**	**1018.44**	**199.59**	**34.93**	**C1645-225-3250-S**	**2.316**	**58.84**	**162.02**	**720.71**	**173.56**	**30.37**
C1645-225-3500-M	**1.645**	**41.78**	**0.225**	**5.72**	**3.500**	**88.90**	**2.250**	**57.16**	**2.131**	**54.14**	**228.95**	**1018.44**	**183.23**	**32.07**	**C1645-225-3500-S**	**2.483**	**63.07**	**162.02**	**720.71**	**159.33**	**27.88**
C1645-225-3750-M	**1.645**	**41.78**	**0.225**	**5.72**	**3.750**	**95.25**	**2.398**	**60.91**	**2.267**	**57.59**	**228.95**	**1018.44**	**169.35**	**29.64**	**C1645-225-3750-S**	**2.650**	**67.30**	**162.02**	**720.71**	**147.26**	**25.77**
C1645-225-4000-M	**1.645**	**41.78**	**0.225**	**5.72**	**4.000**	**101.60**	**2.546**	**64.66**	**2.403**	**61.05**	**228.95**	**1018.44**	**157.43**	**27.55**	**C1645-225-4000-S**	**2.816**	**71.54**	**162.02**	**720.71**	**136.89**	**23.96**
C1645-225-4250-M	**1.645**	**41.78**	**0.225**	**5.72**	**4.250**	**107.95**	**2.693**	**68.41**	**2.539**	**64.50**	**228.95**	**1018.44**	**147.07**	**25.74**	**C1645-225-4250-S**	**2.983**	**75.77**	**162.02**	**720.71**	**127.89**	**22.38**
C1645-225-4500-M	**1.645**	**41.78**	**0.225**	**5.72**	**4.500**	**114.30**	**2.841**	**72.16**	**2.675**	**67.96**	**228.95**	**1018.44**	**137.99**	**24.15**	**C1645-225-4500-S**	**3.150**	**80.00**	**162.02**	**720.71**	**119.99**	**21.00**
C1645-225-4750-M	**1.645**	**41.78**	**0.225**	**5.72**	**4.750**	**120.65**	**2.988**	**75.90**	**2.811**	**71.41**	**228.95**	**1018.44**	**129.97**	**22.74**	**C1645-225-4750-S**	**3.316**	**84.24**	**162.02**	**720.71**	**113.02**	**19.78**
C1645-225-5000-M	**1.645**	**41.78**	**0.225**	**5.72**	**5.000**	**127.00**	**3.136**	**79.65**	**2.947**	**74.86**	**228.95**	**1018.44**	**122.83**	**21.49**	**C1645-225-5000-S**	**3.483**	**88.47**	**162.02**	**720.71**	**106.81**	**18.69**
C1645-225-5250-M	**1.645**	**41.78**	**0.225**	**5.72**	**5.250**	**133.35**	**3.284**	**83.40**	**3.083**	**78.32**	**228.95**	**1018.44**	**116.43**	**20.38**	**C1645-225-5250-S**	**3.650**	**92.70**	**162.02**	**720.71**	**101.24**	**17.72**
C1645-225-5500-M	**1.645**	**41.78**	**0.225**	**5.72**	**5.500**	**139.70**	**3.431**	**87.15**	**3.219**	**81.77**	**228.95**	**1018.44**	**110.67**	**19.37**	**C1645-225-5500-S**	**3.816**	**96.93**	**162.02**	**720.71**	**96.23**	**16.84**
C1645-225-5750-M	**1.645**	**41.78**	**0.225**	**5.72**	**5.750**	**146.05**	**3.579**	**90.90**	**3.355**	**85.22**	**228.95**	**1018.44**	**105.45**	**18.45**	**C1645-225-5750-S**	**3.983**	**101.17**	**162.02**	**720.71**	**91.69**	**16.05**
C1645-225-6000-M	**1.645**	**41.78**	**0.225**	**5.72**	**6.000**	**152.40**	**3.726**	**94.65**	**3.491**	**88.68**	**228.95**	**1018.44**	**100.70**	**17.62**	**C1645-225-6000-S**	**4.150**	**105.40**	**162.02**	**720.71**	**87.56**	**15.32**
C1645-225-6250-M	**1.645**	**41.78**	**0.225**	**5.72**	**6.250**	**158.75**	**3.874**	**98.40**	**3.627**	**92.13**	**228.95**	**1018.44**	**96.36**	**16.86**	**C1645-225-6250-S**	**4.316**	**109.63**	**162.02**	**720.71**	**83.79**	**14.66**
C1645-225-6500-M	**1.645**	**41.78**	**0.225**	**5.72**	**6.500**	**165.10**	**4.021**	**102.14**	**3.763**	**95.59**	**228.95**	**1018.44**	**92.37**	**16.17**	**C1645-225-6500-S**	**4.483**	**113.87**	**162.02**	**720.71**	**80.33**	**14.06**
C1645-225-6750-M	**1.645**	**41.78**	**0.225**	**5.72**	**6.750**	**171.45**	**4.169**	**105.89**	**3.899**	**99.04**	**228.95**	**1018.44**	**88.71**	**15.52**	**C1645-225-6750-S**	**4.650**	**118.10**	**162.02**	**720.71**	**77.14**	**13.50**
C1645-225-7000-M	**1.645**	**41.78**	**0.225**	**5.72**	**7.000**	**177.80**	**4.317**	**109.64**	**4.035**	**102.49**	**228.95**	**1018.44**	**85.32**	**14.93**	**C1645-225-7000-S**	**4.816**	**122.33**	**162.02**	**720.71**	**74.19**	**12.98**
C1645-225-7500-M	**1.645**	**41.78**	**0.225**	**5.72**	**7.500**	**190.50**	**4.612**	**117.14**	**4.307**	**109.40**	**228.95**	**1018.44**	**79.27**	**13.87**	**C1645-225-7500-S**	**5.150**	**130.80**	**162.02**	**720.71**	**68.93**	**12.06**
C1645-225-8000-M	**1.645**	**41.78**	**0.225**	**5.72**	**8.000**	**203.20**	**4.907**	**124.64**	**4.579**	**116.31**	**228.95**	**1018.44**	**74.02**	**12.95**	**C1645-225-8000-S**	**5.483**	**139.26**	**162.02**	**720.71**	**64.37**	**11.26**
C1645-225-8500-M	**1.645**	**41.78**	**0.225**	**5.72**	**8.500**	**215.90**	**5.202**	**132.13**	**4.851**	**123.22**	**228.95**	**1018.44**	**69.42**	**12.15**	**C1645-225-8500-S**	**5.816**	**147.73**	**162.02**	**720.71**	**60.37**	**10.56**
C1645-225-9000-M	**1.645**	**41.78**	**0.225**	**5.72**	**9.000**	**228.60**	**5.497**	**139.63**	**5.123**	**130.13**	**228.95**	**1018.44**	**65.36**	**11.44**	**C1645-225-9000-S**	**6.149**	**156.20**	**162.02**	**720.71**	**56.84**	**9.95**
C1645-225-9500-M	**1.645**	**41.78**	**0.225**	**5.72**	**9.500**	**241.30**	**5.792**	**147.13**	**5.395**	**137.03**	**228.95**	**1018.44**	**61.75**	**10.81**	**C1645-225-9500-S**	**6.483**	**164.66**	**162.02**	**720.71**	**53.70**	**9.40**
C1645-250-2250-M	**1.645**	**41.78**	**0.250**	**6.35**	**2.250**	**57.15**	**1.640**	**41.66**	**1.609**	**40.88**	**305.34**	**1358.23**	**500.77**	**87.63**	**C1645-250-2250-S**	**1.763**	**44.78**	**212.12**	**943.55**	**435.45**	**76.20**
C1645-250-2375-M	**1.645**	**41.78**	**0.250**	**6.35**	**2.375**	**60.33**	**1.722**	**43.73**	**1.687**	**42.84**	**305.34**	**1358.23**	**467.38**	**81.79**	**C1645-250-2375-S**	**1.853**	**47.07**	**212.12**	**943.55**	**406.42**	**71.12**
C1645-250-2500-M	**1.645**	**41.78**	**0.250**	**6.35**	**2.500**	**63.50**	**1.803**	**45.80**	**1.764**	**44.81**	**305.34**	**1358.23**	**438.17**	**76.68**	**C1645-250-2500-S**	**1.943**	**49.36**	**212.12**	**943.55**	**381.02**	**66.68**
C1645-250-2625-M	**1.645**	**41.78**	**0.250**	**6.35**	**2.625**	**66.68**	**1.885**	**47.87**	**1.842**	**46.78**	**305.34**	**1358.23**	**412.40**	**72.17**	**C1645-250-2625-S**	**2.033**	**51.65**	**212.12**	**943.55**	**358.60**	**62.76**
C1645-250-2750-M	**1.645**	**41.78**	**0.250**	**6.35**	**2.750**	**69.85**	**1.966**	**49.94**	**1.919**	**48.74**	**305.34**	**1358.23**	**389.48**	**68.16**	**C1645-250-2750-S**	**2.124**	**53.94**	**212.12**	**943.55**	**338.68**	**59.27**
C1645-250-2875-M	**1.645**	**41.78**	**0.250**	**6.35**	**2.875**	**73.03**	**2.047**	**52.01**	**1.997**	**50.71**	**305.34**	**1358.23**	**368.99**	**64.57**	**C1645-250-2875-S**	**2.214**	**56.23**	**212.12**	**943.55**	**320.86**	**56.15**
C1645-250-3000-M	**1.645**	**41.78**	**0.250**	**6.35**	**3.000**	**76.20**	**2.129**	**54.07**	**2.074**	**52.68**	**305.34**	**1358.23**	**350.54**	**61.34**	**C1645-250-3000-S**	**2.304**	**58.52**	**212.12**	**943.55**	**304.81**	**53.34**
C1645-250-3250-M	**1.645**	**41.78**	**0.250**	**6.35**	**3.250**	**82.55**	**2.292**	**58.21**	**2.229**	**56.61**	**305.34**	**1358.23**	**318.67**	**55.77**	**C1645-250-3250-S**	**2.485**	**63.11**	**212.12**	**943.55**	**277.10**	**48.49**
C1645-250-3500-M	**1.645**	**41.78**	**0.250**	**6.35**	**3.500**	**88.90**	**2.455**	**62.35**	**2.384**	**60.55**	**305.34**	**1358.23**	**292.11**	**51.12**	**C1645-250-3500-S**	**2.665**	**67.69**	**212.12**	**943.55**	**254.01**	**44.45**
C1645-250-3750-M	**1.645**	**41.78**	**0.250**	**6.35**	**3.750**	**95.25**	**2.618**	**66.49**	**2.539**	**64.48**	**305.34**	**1358.23**	**269.64**	**47.19**	**C1645-250-3750-S**	**2.845**	**72.27**	**212.12**	**943.55**	**234.47**	**41.03**
C1645-250-4000-M	**1.645**	**41.78**	**0.250**	**6.35**	**4.000**	**101.60**	**2.780**	**70.62**	**2.694**	**68.42**	**305.34**	**1358.23**	**250.38**	**43.82**	**C1645-250-4000-S**	**3.026**	**76.85**	**212.12**	**943.55**	**217.72**	**38.10**
C1645-250-4250-M	**1.645**	**41.78**	**0.250**	**6.35**	**4.250**	**107.95**	**2.943**	**74.76**	**2.848**	**72.35**	**305.34**	**1358.23**	**233.69**	**40.90**	**C1645-250-4250-S**	**3.206**	**81.44**	**212.12**	**943.55**	**203.21**	**35.56**
C1645-250-4500-M	**1.645**	**41.78**	**0.250**	**6.35**	**4.500**	**114.30**	**3.106**	**78.90**	**3.003**	**76.29**	**305.34**	**1358.23**	**219.09**	**38.34**	**C1645-250-4500-S**	**3.387**	**86.02**	**212.12**	**943.55**	**190.51**	**33.34**
C1645-250-4750-M	**1.645**	**41.78**	**0.250**	**6.35**	**4.750**	**120.65**	**3.269**	**83.04**	**3.158**	**80.22**	**305.34**	**1358.23**	**206.20**	**36.08**	**C1645-250-4750-S**	**3.567**	**90.60**	**212.12**	**943.55**	**179.30**	**31.38**
C1645-250-5000-M	**1.645**	**41.78**	**0.250**	**6.35**	**5.000**	**127.00**	**3.432**	**87.17**	**3.313**	**84.15**	**305.34**	**1358.23**	**194.74**	**34.08**	**C1645-250-5000-S**	**3.747**	**95.18**	**212.12**	**943.55**	**169.34**	**29.63**
C1645-250-5250-M	**1.645**	**41.78**	**0.250**	**6.35**	**5.250**	**133.35**	**3.595**	**91.31**	**3.468**	**88.09**	**305.34**	**1358.23**	**184.49**	**32.29**	**C1645-250-5250-S**	**3.928**	**99.77**	**212.12**	**943.55**	**160.43**	**28.07**
C1645-250-5500-M	**1.645**	**41.78**	**0.250**	**6.35**	**5.500**	**139.70**	**3.758**	**95.45**	**3.623**	**92.02**	**305.34**	**1358.23**	**175.27**	**30.67**	**C1645-250-5500-S**	**4.108**	**104.35**	**212.12**	**943.55**	**152.41**	**26.67**
C1645-250-5750-M	**1.645**	**41.78**	**0.250**	**6.35**	**5.750**	**146.05**	**3.921**	**99.59**	**3.778**	**95.96**	**305.34**	**1358.23**	**166.92**	**29.21**	**C1645-250-5750-S**	**4.289**	**108.93**	**212.12**	**943.55**	**145.15**	**25.40**
C1645-250-6000-M	**1.645**	**41.78**	**0.250**	**6.35**	**6.000**	**152.40**	**4.084**	**103.72**	**3.933**	**99.89**	**305.34**	**1358.23**	**159.33**	**27.88**	**C1645-250-6000-S**	**4.469**	**113.51**	**212.12**	**943.55**	**138.55**	**24.25**
C1645-250-6250-M	**1.645**	**41.78**	**0.250**	**6.35**	**6.250**	**158.75**	**4.247**	**107.86**	**4.088**	**103.83**	**305.34**	**1358.23**	**152.41**	**26.67**	**C1645-250-6250-S**	**4.649**	**118.10**	**212.12**	**943.55**	**132.53**	**23.19**
C1645-250-6500-M	**1.645**	**41.78**	**0.250**	**6.35**	**6.500**	**165.10**	**4.409**	**112.00**	**4.243**	**107.76**	**305.34**	**1358.23**	**146.06**	**25.56**	**C1645-250-6500-S**	**4.830**	**122.68**	**212.12**	**943.55**	**127.01**	**22.23**
C1645-250-6750-M	**1.645**	**41.78**	**0.250**	**6.35**	**6.750**	**171.45**	**4.572**	**116.14**	**4.397**	**111.69**	**305.34**	**1358.23**	**140.21**	**24.54**	**C1645-250-6750-S**	**5.010**	**127.26**	**212.12**	**943.55**	**121.93**	**21.34**
C1645-250-7000-M	**1.645**	**41.78**	**0.250**	**6.35**	**7.000**	**177.80**	**4.735**	**120.27**	**4.552**	**115.63**	**305.34**	**1358.23**	**134.82**	**23.59**	**C1645-250-7000-S**	**5.191**	**131.84**	**212.12**	**943.55**	**117.24**	**20.52**
C1645-250-7500-M	**1.645**	**41.78**	**0.250**	**6.35**	**7.500**	**190.50**	**5.061**	**128.55**	**4.862**	**123.50**	**305.34**	**1358.23**	**125.19**	**21.91**	**C1645-250-7500-S**	**5.551**	**141.01**	**212.12**	**943.55**	**108.86**	**19.05**
C1645-250-8000-M	**1.645**	**41.78**	**0.250**	**6.35**	**8.000**	**203.20**	**5.387**	**136.82**	**5.172**	**131.37**	**305.34**	**1358.23**	**116.85**	**20.45**	**C1645-250-8000-S**	**5.912**	**150.17**	**212.12**	**943.55**	**101.60**	**17.78**
C1645-250-8500-M	**1.645**	**41.78**	**0.250**	**6.35**	**8.500**	**215.90**	**5.713**	**145.10**	**5.482**	**139.24**	**305.34**	**1358.23**	**109.54**	**19.17**	**C1645-250-8500-S**	**6.273**	**159.34**	**212.12**	**943.55**	**95.25**	**16.67**
C1645-250-9000-M	**1.645**	**41.78**	**0.250**	**6.35**	**9.000**	**228.60**	**6.038**	**153.37**	**5.791**	**147.10**	**305.34**	**1358.23**	**103.10**	**18.04**	**C1645-250-9000-S**	**6.634**	**168.50**	**212.12**	**943.55**	**89.65**	**15.69**
C1645-250-9500-M	**1.645**	**41.78**	**0.250**	**6.35**	**9.500**	**241.30**	**6.364**	**161.65**	**6.101**	**154.97**	**305.34**	**1358.23**	**97.37**	**17.04**	**C1645-250-9500-S**	**6.995**	**177.67**	**212.12**	**943.55**	**84.67**	**14.82**
C1687-135-1500-M	1.687	42.85	0.135	3.43	1.500	38.10	0.903	22.94	0.605	15.37	38.40	170.81	64.40	11.27	C1687-135-1500-S	0.903	22.94	31.99	142.29	53.65	9.39
C1687-135-2000-M	1.687	42.85	0.135	3.43	2.000	50.80	1.161	29.49	0.714	18.14	38.40	170.81	45.80	8.02	C1687-135-2000-S	1.161	29.49	31.99	142.29	38.15	6.68
C1687-135-2500-M	1.687	42.85	0.135	3.43	2.500	63.50	1.418	36.02	0.823	20.90	38.40	170.81	35.50	6.21	C1687-135-2500-S	1.418	36.02	31.99	142.29	29.57	5.18
C1687-135-3000-M	1.687	42.85	0.135	3.43	3.000	76.20	1.676	42.57	0.932	23.67	38.40	170.81	29.00	5.08	C1687-135-3000-S	1.676	42.57	31.99	142.29	24.16	4.23
C1687-135-3500-M	1.687	42.85	0.135	3.43	3.500	88.90	1.933	49.10	1.041	26.44	38.40	170.81	24.50	4.29	C1687-135-3500-S	1.933	49.10	31.99	142.29	20.41	3.57
C1687-135-4000-M	1.687	42.85	0.135	3.43	4.000	101.60	2.191	55.65	1.150	29.21	38.40	170.81	21.20	3.71	C1687-135-4000-S	2.191	55.65	31.99	142.29	17.66	3.09
C1687-135-4500-M	1.687	42.85	0.135	3.43	4.500	114.30	2.449	62.20	1.259	31.98	38.40	170.81	18.70	3.27	C1687-135-4500-S	2.449	62.20	31.99	142.29	15.58	2.73

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1687-135-5000-M	1.687	42.85	0.135	3.43	5.000	127.00	2.706	68.73	1.368	34.75	38.40	170.81	16.70	2.92
C1687-148-1500-M	1.687	42.85	0.148	3.76	1.500	38.10	0.947	24.05	0.682	17.32	49.57	220.50	89.70	15.70
C1687-148-2000-M	1.687	42.85	0.148	3.76	2.000	50.80	1.218	30.94	0.812	20.62	49.57	220.50	63.40	11.10
C1687-148-2500-M	1.687	42.85	0.148	3.76	2.500	63.50	1.488	37.80	0.942	23.93	49.57	220.50	49.00	8.58
C1687-148-3000-M	1.687	42.85	0.148	3.76	3.000	76.20	1.758	44.65	1.071	27.20	49.57	220.50	39.90	6.98
C1687-148-3500-M	1.687	42.85	0.148	3.76	3.500	88.90	2.029	51.54	1.201	30.51	49.57	220.50	33.70	5.90
C1687-148-4000-M	1.687	42.85	0.148	3.76	4.000	101.60	2.299	58.39	1.331	33.81	49.57	220.50	29.10	5.09
C1687-148-4500-M	1.687	42.85	0.148	3.76	4.500	114.30	2.570	65.28	1.461	37.11	49.57	220.50	25.70	4.50
C1687-148-5000-M	1.687	42.85	0.148	3.76	5.000	127.00	2.840	72.14	1.590	40.39	49.57	220.50	22.90	4.01
C1687-162-1500-M	1.687	42.85	0.162	4.12	1.500	38.10	0.994	25.25	0.765	19.43	63.65	283.13	125.80	22.02
C1687-162-2000-M	1.687	42.85	0.162	4.12	2.000	50.80	1.279	32.49	0.918	23.32	63.65	283.13	88.20	15.44
C1687-162-2500-M	1.687	42.85	0.162	4.12	2.500	63.50	1.563	39.70	1.070	27.18	63.65	283.13	68.00	11.90
C1687-162-3000-M	1.687	42.85	0.162	4.12	3.000	76.20	1.848	46.94	1.223	31.06	63.65	283.13	55.30	9.68
C1687-162-3500-M	1.687	42.85	0.162	4.12	3.500	88.90	2.133	54.18	1.376	34.95	63.65	283.13	46.60	8.16
C1687-162-4000-M	1.687	42.85	0.162	4.12	4.000	101.60	2.418	61.42	1.529	38.84	63.65	283.13	40.20	7.04
C1687-162-4500-M	1.687	42.85	0.162	4.12	4.500	114.30	2.703	68.66	1.682	42.72	63.65	283.13	35.40	6.20
C1687-162-5000-M	1.687	42.85	0.162	4.12	5.000	127.00	2.987	75.87	1.835	46.61	63.65	283.13	31.60	5.53
C1687-177-1500-M	1.687	42.85	0.177	4.50	1.500	38.10	1.043	26.49	0.851	21.62	81.26	361.46	177.70	31.10
C1687-177-2000-M	1.687	42.85	0.177	4.50	2.000	50.80	1.343	34.11	1.029	26.14	81.26	361.46	123.70	21.65
C1687-177-2500-M	1.687	42.85	0.177	4.50	2.500	63.50	1.644	41.76	1.207	30.66	81.26	361.46	94.90	16.61
C1687-177-3000-M	1.687	42.85	0.177	4.50	3.000	76.20	1.944	49.38	1.385	35.18	81.26	361.46	76.90	13.46
C1687-177-3500-M	1.687	42.85	0.177	4.50	3.500	88.90	2.244	57.00	1.563	39.70	81.26	361.46	64.70	11.32
C1687-177-4000-M	1.687	42.85	0.177	4.50	4.000	101.60	2.545	64.64	1.741	44.22	81.26	361.46	55.80	9.77
C1687-177-4500-M	1.687	42.85	0.177	4.50	4.500	114.30	2.845	72.26	1.920	48.77	81.26	361.46	49.10	8.59
C1687-177-5000-M	1.687	42.85	0.177	4.50	5.000	127.00	3.146	79.91	2.098	53.29	81.26	361.46	43.80	7.67
C1687-192-1500-M	1.687	42.85	0.192	4.88	1.500	38.10	1.089	27.66	0.934	23.72	101.60	451.94	247.40	43.30
C1687-192-2000-M	1.687	42.85	0.192	4.88	2.000	50.80	1.405	35.69	1.137	28.88	101.60	451.94	170.90	29.91
C1687-192-2500-M	1.687	42.85	0.192	4.88	2.500	63.50	1.721	43.71	1.340	34.04	101.60	451.94	130.50	22.84
C1687-192-3000-M	1.687	42.85	0.192	4.88	3.000	76.20	2.037	51.74	1.543	39.19	101.60	451.94	105.60	18.48
C1687-192-3500-M	1.687	42.85	0.192	4.88	3.500	88.90	2.353	59.77	1.747	44.37	101.60	451.94	88.60	15.51
C1687-192-4000-M	1.687	42.85	0.192	4.88	4.000	101.60	2.669	67.79	1.950	49.53	101.60	451.94	76.40	13.37
C1687-192-4500-M	1.687	42.85	0.192	4.88	4.500	114.30	2.985	75.82	2.153	54.69	101.60	451.94	67.10	11.74
C1687-192-5000-M	1.687	42.85	0.192	4.88	5.000	127.00	3.302	83.87	2.356	59.84	101.60	451.94	59.80	10.47
D13480	1.701	43.20	0.126	3.20	3.228	82.00	0.835	21.20	0.693	17.60	64.82	288.32	27.20	4.76
D13490	1.701	43.20	0.126	3.20	4.921	125.00	1.169	29.70	0.945	24.00	64.82	288.32	17.31	3.03
D13500	1.701	43.20	0.126	3.20	7.480	190.00	1.665	42.30	1.323	33.60	64.82	288.32	11.20	1.96
D13510	1.701	43.20	0.126	3.20	10.827	275.00	2.331	59.20	1.827	46.40	64.82	288.32	7.60	1.33
D13520	1.701	43.20	0.126	3.20	15.945	405.00	3.327	84.50	2.583	65.60	64.82	288.32	5.14	0.90
C1704-135-2875-M	**1.704**	**43.28**	**0.135**	**3.43**	**2.875**	**73.03**	**1.122**	**28.50**	**0.853**	**21.68**	**53.89**	**239.72**	**30.75**	**5.38**
C1704-135-3000-M	**1.704**	**43.28**	**0.135**	**3.43**	**3.000**	**76.20**	**1.163**	**29.54**	**0.881**	**22.37**	**53.89**	**239.72**	**29.34**	**5.13**
C1704-135-3250-M	**1.704**	**43.28**	**0.135**	**3.43**	**3.250**	**82.55**	**1.245**	**31.62**	**0.935**	**23.76**	**53.89**	**239.72**	**26.88**	**4.70**
C1704-135-3500-M	**1.704**	**43.28**	**0.135**	**3.43**	**3.500**	**88.90**	**1.327**	**33.70**	**0.990**	**25.15**	**53.89**	**239.72**	**24.80**	**4.34**
C1704-135-3750-M	**1.704**	**43.28**	**0.135**	**3.43**	**3.750**	**95.25**	**1.408**	**35.77**	**1.045**	**26.54**	**53.89**	**239.72**	**23.01**	**4.03**
C1704-135-4000-M	**1.704**	**43.28**	**0.135**	**3.43**	**4.000**	**101.60**	**1.490**	**37.85**	**1.100**	**27.93**	**53.89**	**239.72**	**21.47**	**3.76**
C1704-135-4250-M	**1.704**	**43.28**	**0.135**	**3.43**	**4.250**	**107.95**	**1.572**	**39.93**	**1.154**	**29.32**	**53.89**	**239.72**	**20.12**	**3.52**
C1704-135-4500-M	**1.704**	**43.28**	**0.135**	**3.43**	**4.500**	**114.30**	**1.654**	**42.00**	**1.209**	**30.71**	**53.89**	**239.72**	**18.93**	**3.31**
C1704-135-4750-M	**1.704**	**43.28**	**0.135**	**3.43**	**4.750**	**120.65**	**1.735**	**44.08**	**1.264**	**32.10**	**53.89**	**239.72**	**17.88**	**3.13**
C1704-135-5000-M	**1.704**	**43.28**	**0.135**	**3.43**	**5.000**	**127.00**	**1.817**	**46.16**	**1.318**	**33.49**	**53.89**	**239.72**	**16.93**	**2.96**
C1704-135-5250-M	**1.704**	**43.28**	**0.135**	**3.43**	**5.250**	**133.35**	**1.899**	**48.24**	**1.373**	**34.88**	**53.89**	**239.72**	**16.08**	**2.81**
C1704-135-5500-M	**1.704**	**43.28**	**0.135**	**3.43**	**5.500**	**139.70**	**1.981**	**50.31**	**1.428**	**36.26**	**53.89**	**239.72**	**15.31**	**2.68**
C1704-135-5750-M	**1.704**	**43.28**	**0.135**	**3.43**	**5.750**	**146.05**	**2.063**	**52.39**	**1.482**	**37.65**	**53.89**	**239.72**	**14.62**	**2.56**
C1704-135-6000-M	**1.704**	**43.28**	**0.135**	**3.43**	**6.000**	**152.40**	**2.144**	**54.47**	**1.537**	**39.04**	**53.89**	**239.72**	**13.98**	**2.45**
C1704-135-6250-M	**1.704**	**43.28**	**0.135**	**3.43**	**6.250**	**158.75**	**2.226**	**56.54**	**1.592**	**40.43**	**53.89**	**239.72**	**13.39**	**2.34**
C1704-135-6500-M	**1.704**	**43.28**	**0.135**	**3.43**	**6.500**	**165.10**	**2.308**	**58.62**	**1.647**	**41.82**	**53.89**	**239.72**	**12.86**	**2.25**
C1704-135-6750-M	**1.704**	**43.28**	**0.135**	**3.43**	**6.750**	**171.45**	**2.390**	**60.70**	**1.701**	**43.21**	**53.89**	**239.72**	**12.36**	**2.16**
C1704-135-7000-M	**1.704**	**43.28**	**0.135**	**3.43**	**7.000**	**177.80**	**2.471**	**62.78**	**1.756**	**44.60**	**53.89**	**239.72**	**11.90**	**2.08**
C1704-135-7500-M	**1.704**	**43.28**	**0.135**	**3.43**	**7.500**	**190.50**	**2.635**	**66.93**	**1.865**	**47.38**	**53.89**	**239.72**	**11.08**	**1.94**
C1704-135-8000-M	**1.704**	**43.28**	**0.135**	**3.43**	**8.000**	**203.20**	**2.799**	**71.08**	**1.975**	**50.16**	**53.89**	**239.72**	**10.36**	**1.81**
C1704-135-8500-M	**1.704**	**43.28**	**0.135**	**3.43**	**8.500**	**215.90**	**2.962**	**75.24**	**2.084**	**52.94**	**53.89**	**239.72**	**9.73**	**1.70**
C1704-135-9000-M	**1.704**	**43.28**	**0.135**	**3.43**	**9.000**	**228.60**	**3.126**	**79.39**	**2.194**	**55.72**	**53.89**	**239.72**	**9.17**	**1.61**
C1704-135-9500-M	**1.704**	**43.28**	**0.135**	**3.43**	**9.500**	**241.30**	**3.289**	**83.55**	**2.303**	**58.49**	**53.89**	**239.72**	**8.68**	**1.52**
C1704-148-2750-M	**1.704**	**43.28**	**0.148**	**3.76**	**2.750**	**69.85**	**1.183**	**30.04**	**0.951**	**24.17**	**69.61**	**309.63**	**44.41**	**7.77**
C1704-148-2875-M	**1.704**	**43.28**	**0.148**	**3.76**	**2.875**	**73.03**	**1.228**	**31.19**	**0.984**	**24.99**	**69.61**	**309.63**	**42.26**	**7.40**
C1704-148-3000-M	**1.704**	**43.28**	**0.148**	**3.76**	**3.000**	**76.20**	**1.273**	**32.33**	**1.017**	**25.82**	**69.61**	**309.63**	**40.31**	**7.05**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1687-135-5000-S	2.706	68.73	31.99	142.29	13.91	2.43
C1687-148-1500-S	0.947	24.05	41.29	183.68	74.72	13.08
C1687-148-2000-S	1.218	30.94	41.29	183.68	52.81	9.24
C1687-148-2500-S	1.488	37.80	41.29	183.68	40.82	7.14
C1687-148-3000-S	1.758	44.65	41.29	183.68	33.24	5.82
C1687-148-3500-S	2.029	51.54	41.29	183.68	28.07	4.91
C1687-148-4000-S	2.299	58.39	41.29	183.68	24.24	4.24
C1687-148-4500-S	2.570	65.28	41.29	183.68	21.41	3.75
C1687-148-5000-S	2.840	72.14	41.29	183.68	19.08	3.34
C1687-162-1500-S	0.994	25.25	53.02	235.85	104.79	18.34
C1687-162-2000-S	1.279	32.49	53.02	235.85	73.47	12.86
C1687-162-2500-S	1.563	39.70	53.02	235.85	56.64	9.91
C1687-162-3000-S	1.848	46.94	53.02	235.85	46.07	8.06
C1687-162-3500-S	2.133	54.18	53.02	235.85	38.82	6.79
C1687-162-4000-S	2.418	61.42	53.02	235.85	33.49	5.86
C1687-162-4500-S	2.703	68.66	53.02	235.85	29.49	5.16
C1687-162-5000-S	2.987	75.87	53.02	235.85	26.32	4.61
C1687-177-1500-S	1.043	26.49	67.69	301.10	148.02	25.90
C1687-177-2000-S	1.343	34.11	67.69	301.10	103.04	18.03
C1687-177-2500-S	1.644	41.76	67.69	301.10	79.05	13.83
C1687-177-3000-S	1.944	49.38	67.69	301.10	64.06	11.21
C1687-177-3500-S	2.244	57.00	67.69	301.10	53.90	9.43
C1687-177-4000-S	2.545	64.64	67.69	301.10	46.48	8.13
C1687-177-4500-S	2.845	72.26	67.69	301.10	40.90	7.16
C1687-177-5000-S	3.146	79.91	67.69	301.10	36.49	6.38
C1687-192-1500-S	1.089	27.66	84.63	376.47	206.08	36.06
C1687-192-2000-S	1.405	35.69	84.63	376.47	142.36	24.91
C1687-192-2500-S	1.721	43.71	84.63	376.47	108.71	19.02
C1687-192-3000-S	2.037	51.74	84.63	376.47	87.97	15.39
C1687-192-3500-S	2.353	59.77	84.63	376.47	73.80	12.92
C1687-192-4000-S	2.669	67.79	84.63	376.47	63.64	11.14
C1687-192-4500-S	2.985	75.82	84.63	376.47	55.89	9.78
C1687-192-5000-S	3.302	83.87	84.63	376.47	49.81	8.72
D23480	0.835	21.20	54.01	240.27	22.69	3.97
D23490	1.169	29.70	54.01	240.27	14.40	2.52
D23500	1.665	42.30	54.01	240.27	9.31	1.63
D23510	2.331	59.20	54.01	240.27	6.34	1.11
D23520	3.327	84.50	54.01	240.27	4.29	0.75
C1704-135-2875-S	**1.347**	**34.22**	**40.85**	**181.69**	**26.73**	**4.68**
C1704-135-3000-S	**1.399**	**35.53**	**40.85**	**181.69**	**25.51**	**4.46**
C1704-135-3250-S	**1.502**	**38.16**	**40.85**	**181.69**	**23.37**	**4.09**
C1704-135-3500-S	**1.606**	**40.78**	**40.85**	**181.69**	**21.56**	**3.77**
C1704-135-3750-S	**1.709**	**43.41**	**40.85**	**181.69**	**20.01**	**3.50**
C1704-135-4000-S	**1.812**	**46.03**	**40.85**	**181.69**	**18.67**	**3.27**
C1704-135-4250-S	**1.916**	**48.66**	**40.85**	**181.69**	**17.50**	**3.06**
C1704-135-4500-S	**2.019**	**51.28**	**40.85**	**181.69**	**16.46**	**2.88**
C1704-135-4750-S	**2.122**	**53.91**	**40.85**	**181.69**	**15.55**	**2.72**
C1704-135-5000-S	**2.226**	**56.54**	**40.85**	**181.69**	**14.72**	**2.58**
C1704-135-5250-S	**2.329**	**59.16**	**40.85**	**181.69**	**13.99**	**2.45**
C1704-135-5500-S	**2.433**	**61.79**	**40.85**	**181.69**	**13.32**	**2.33**
C1704-135-5750-S	**2.536**	**64.41**	**40.85**	**181.69**	**12.71**	**2.22**
C1704-135-6000-S	**2.639**	**67.04**	**40.85**	**181.69**	**12.15**	**2.13**
C1704-135-6250-S	**2.743**	**69.66**	**40.85**	**181.69**	**11.65**	**2.04**
C1704-135-6500-S	**2.846**	**72.29**	**40.85**	**181.69**	**11.18**	**1.96**
C1704-135-6750-S	**2.949**	**74.91**	**40.85**	**181.69**	**10.75**	**1.88**
C1704-135-7000-S	**3.053**	**77.54**	**40.85**	**181.69**	**10.35**	**1.81**
C1704-135-7500-S	**3.260**	**82.79**	**40.85**	**181.69**	**9.63**	**1.69**
C1704-135-8000-S	**3.466**	**88.04**	**40.85**	**181.69**	**9.01**	**1.58**
C1704-135-8500-S	**3.673**	**93.29**	**40.85**	**181.69**	**8.46**	**1.48**
C1704-135-9000-S	**3.880**	**98.55**	**40.85**	**181.69**	**7.98**	**1.40**
C1704-135-9500-S	**4.086**	**103.80**	**40.85**	**181.69**	**7.55**	**1.32**
C1704-148-2750-S	**1.397**	**35.49**	**52.24**	**232.38**	**38.62**	**6.76**
C1704-148-2875-S	**1.453**	**36.92**	**52.24**	**232.38**	**36.75**	**6.43**
C1704-148-3000-S	**1.509**	**38.34**	**52.24**	**232.38**	**35.05**	**6.13**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1704-148-3250-M	1.704	43.28	0.148	3.76	3.250	82.55	1.363	34.63	1.082	27.48	69.61	309.63	36.90	6.46
C1704-148-3500-M	1.704	43.28	0.148	3.76	3.500	88.90	1.454	36.92	1.147	29.14	69.61	309.63	34.02	5.95
C1704-148-3750-M	1.704	43.28	0.148	3.76	3.750	95.25	1.544	39.22	1.212	30.80	69.61	309.63	31.55	5.52
C1704-148-4000-M	1.704	43.28	0.148	3.76	4.000	101.60	1.634	41.51	1.278	32.45	69.61	309.63	29.42	5.15
C1704-148-4250-M	1.704	43.28	0.148	3.76	4.250	107.95	1.725	43.81	1.343	34.11	69.61	309.63	27.56	4.82
C1704-148-4500-M	1.704	43.28	0.148	3.76	4.500	114.30	1.815	46.10	1.408	35.77	69.61	309.63	25.93	4.54
C1704-148-4750-M	1.704	43.28	0.148	3.76	4.750	120.65	1.905	48.39	1.473	37.43	69.61	309.63	24.47	4.28
C1704-148-5000-M	1.704	43.28	0.148	3.76	5.000	127.00	1.996	50.69	1.539	39.08	69.61	309.63	23.17	4.05
C1704-148-5250-M	1.704	43.28	0.148	3.76	5.250	133.35	2.086	52.98	1.604	40.74	69.61	309.63	22.00	3.85
C1704-148-5500-M	1.704	43.28	0.148	3.76	5.500	139.70	2.176	55.28	1.669	42.40	69.61	309.63	20.94	3.67
C1704-148-5750-M	1.704	43.28	0.148	3.76	5.750	146.05	2.267	57.57	1.734	44.06	69.61	309.63	19.98	3.50
C1704-148-6000-M	1.704	43.28	0.148	3.76	6.000	152.40	2.357	59.87	1.800	45.71	69.61	309.63	19.11	3.34
C1704-148-6250-M	1.704	43.28	0.148	3.76	6.250	158.75	2.447	62.16	1.865	47.37	69.61	309.63	18.31	3.20
C1704-148-6500-M	1.704	43.28	0.148	3.76	6.500	165.10	2.538	64.46	1.930	49.03	69.61	309.63	17.57	3.07
C1704-148-6750-M	1.704	43.28	0.148	3.76	6.750	171.45	2.628	66.75	1.996	50.69	69.61	309.63	16.89	2.96
C1704-148-7000-M	1.704	43.28	0.148	3.76	7.000	177.80	2.718	69.04	2.061	52.34	69.61	309.63	16.26	2.84
C1704-148-7500-M	1.704	43.28	0.148	3.76	7.500	190.50	2.899	73.63	2.191	55.66	69.61	309.63	15.13	2.65
C1704-148-8000-M	1.704	43.28	0.148	3.76	8.000	203.20	3.080	78.22	2.322	58.97	69.61	309.63	14.15	2.48
C1704-148-8500-M*	1.704	43.28	0.148	3.76	8.500	215.90	3.355	85.21	2.569	65.26	69.61	309.63	13.53	2.37
C1704-148-9000-M*	1.704	43.28	0.148	3.76	9.000	228.60	3.535	89.80	2.700	68.57	69.61	309.63	12.74	2.23
C1704-148-9500-M*	1.704	43.28	0.148	3.76	9.500	241.30	3.716	94.39	2.830	71.89	69.61	309.63	12.04	2.11
C1704-162-2625-M	1.704	43.28	0.162	4.12	2.625	66.68	1.243	31.58	1.049	26.66	89.48	398.02	64.76	11.33
C1704-162-2750-M	1.704	43.28	0.162	4.12	2.750	69.85	1.293	32.85	1.088	27.64	89.48	398.02	61.42	10.75
C1704-162-2875-M	1.704	43.28	0.162	4.12	2.875	73.03	1.343	34.12	1.127	28.61	89.48	398.02	58.41	10.22
C1704-162-3000-M	1.704	43.28	0.162	4.12	3.000	76.20	1.393	35.39	1.165	29.59	89.48	398.02	55.69	9.74
C1704-162-3250-M	1.704	43.28	0.162	4.12	3.250	82.55	1.493	37.92	1.242	31.55	89.48	398.02	50.93	8.91
C1704-162-3500-M	1.704	43.28	0.162	4.12	3.500	88.90	1.593	40.46	1.319	33.51	89.48	398.02	46.92	8.21
C1704-162-3750-M	1.704	43.28	0.162	4.12	3.750	95.25	1.693	43.00	1.396	35.46	89.48	398.02	43.50	7.61
C1704-162-4000-M	1.704	43.28	0.162	4.12	4.000	101.60	1.793	45.53	1.473	37.42	89.48	398.02	40.54	7.09
C1704-162-4250-M	1.704	43.28	0.162	4.12	4.250	107.95	1.893	48.07	1.550	39.38	89.48	398.02	37.96	6.64
C1704-162-4500-M	1.704	43.28	0.162	4.12	4.500	114.30	1.992	50.61	1.627	41.34	89.48	398.02	35.68	6.24
C1704-162-4750-M	1.704	43.28	0.162	4.12	4.750	120.65	2.092	53.14	1.704	43.29	89.48	398.02	33.67	5.89
C1704-162-5000-M	1.704	43.28	0.162	4.12	5.000	127.00	2.192	55.68	1.782	45.25	89.48	398.02	31.87	5.58
C1704-162-5250-M	1.704	43.28	0.162	4.12	5.250	133.35	2.292	58.22	1.859	47.21	89.48	398.02	30.25	5.29
C1704-162-5500-M	1.704	43.28	0.162	4.12	5.500	139.70	2.392	60.76	1.936	49.17	89.48	398.02	28.79	5.04
C1704-162-5750-M	1.704	43.28	0.162	4.12	5.750	146.05	2.492	63.29	2.013	51.12	89.48	398.02	27.46	4.81
C1704-162-6000-M	1.704	43.28	0.162	4.12	6.000	152.40	2.592	65.83	2.090	53.08	89.48	398.02	26.25	4.59
C1704-162-6250-M	1.704	43.28	0.162	4.12	6.250	158.75	2.692	68.37	2.167	55.04	89.48	398.02	25.15	4.40
C1704-162-6500-M	1.704	43.28	0.162	4.12	6.500	165.10	2.791	70.90	2.244	57.00	89.48	398.02	24.13	4.22
C1704-162-6750-M*	1.704	43.28	0.162	4.12	6.750	171.45	2.989	75.91	2.441	62.00	89.48	398.02	23.79	4.16
C1704-162-7000-M*	1.704	43.28	0.162	4.12	7.000	177.80	3.089	78.45	2.518	63.96	89.48	398.02	22.88	4.00
C1704-162-7500-M*	1.704	43.28	0.162	4.12	7.500	190.50	3.288	83.52	2.672	67.88	89.48	398.02	21.25	3.72
C1704-162-8000-M*	1.704	43.28	0.162	4.12	8.000	203.20	3.488	88.60	2.826	71.79	89.48	398.02	19.83	3.47
C1704-162-8500-M*	1.704	43.28	0.162	4.12	8.500	215.90	3.688	93.67	2.981	75.71	89.48	398.02	18.59	3.25
C1704-162-9000-M*	1.704	43.28	0.162	4.12	9.000	228.60	3.888	98.74	3.135	79.62	89.48	398.02	17.50	3.06
C1704-162-9500-M*	1.704	43.28	0.162	4.12	9.500	241.30	4.087	103.82	3.289	83.54	89.48	398.02	16.53	2.89
C1704-177-2500-M	1.704	43.28	0.177	4.50	2.500	63.50	1.301	33.04	1.144	29.05	114.38	508.78	95.39	16.69
C1704-177-2625-M	1.704	43.28	0.177	4.50	2.625	66.68	1.356	34.44	1.189	30.19	114.38	508.78	90.14	15.77
C1704-177-2750-M	1.704	43.28	0.177	4.50	2.750	69.85	1.411	35.85	1.234	31.34	114.38	508.78	85.43	14.95
C1704-177-2875-M	1.704	43.28	0.177	4.50	2.875	73.03	1.466	37.25	1.279	32.48	114.38	508.78	81.20	14.21
C1704-177-3000-M	1.704	43.28	0.177	4.50	3.000	76.20	1.522	38.65	1.324	33.62	114.38	508.78	77.36	13.54
C1704-177-3250-M	1.704	43.28	0.177	4.50	3.250	82.55	1.632	41.45	1.414	35.91	114.38	508.78	70.68	12.37
C1704-177-3500-M	1.704	43.28	0.177	4.50	3.500	88.90	1.742	44.25	1.504	38.19	114.38	508.78	65.07	11.39
C1704-177-3750-M	1.704	43.28	0.177	4.50	3.750	95.25	1.852	47.05	1.593	40.47	114.38	508.78	60.28	10.55
C1704-177-4000-M	1.704	43.28	0.177	4.50	4.000	101.60	1.963	49.85	1.683	42.76	114.38	508.78	56.14	9.83
C1704-177-4250-M	1.704	43.28	0.177	4.50	4.250	107.95	2.073	52.66	1.773	45.04	114.38	508.78	52.54	9.19
C1704-177-4500-M	1.704	43.28	0.177	4.50	4.500	114.30	2.183	55.46	1.863	47.33	114.38	508.78	49.37	8.64
C1704-177-4750-M	1.704	43.28	0.177	4.50	4.750	120.65	2.294	58.26	1.953	49.61	114.38	508.78	46.57	8.15
C1704-177-5000-M	1.704	43.28	0.177	4.50	5.000	127.00	2.404	61.06	2.043	51.90	114.38	508.78	44.06	7.71
C1704-177-5250-M	1.704	43.28	0.177	4.50	5.250	133.35	2.514	63.86	2.133	54.18	114.38	508.78	41.81	7.32
C1704-177-5500-M	1.704	43.28	0.177	4.50	5.500	139.70	2.625	66.67	2.223	56.47	114.38	508.78	39.78	6.96
C1704-177-5750-M	1.704	43.28	0.177	4.50	5.750	146.05	2.735	69.47	2.313	58.75	114.38	508.78	37.94	6.64
C1704-177-6000-M	1.704	43.28	0.177	4.50	6.000	152.40	2.845	72.27	2.403	61.04	114.38	508.78	36.26	6.34
C1704-177-6250-M	1.704	43.28	0.177	4.50	6.250	158.75	2.956	75.07	2.493	63.32	114.38	508.78	34.72	6.08

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1704-148-3250-S	1.622	41.19	52.24	232.38	32.08	5.61
C1704-148-3500-S	1.734	44.04	52.24	232.38	29.58	5.18
C1704-148-3750-S	1.846	46.89	52.24	232.38	27.44	4.80
C1704-148-4000-S	1.958	49.74	52.24	232.38	25.59	4.48
C1704-148-4250-S	2.070	52.59	52.24	232.38	23.97	4.19
C1704-148-4500-S	2.183	55.44	52.24	232.38	22.54	3.95
C1704-148-4750-S	2.295	58.29	52.24	232.38	21.28	3.72
C1704-148-5000-S	2.407	61.14	52.24	232.38	20.15	3.53
C1704-148-5250-S	2.519	63.99	52.24	232.38	19.13	3.35
C1704-148-5500-S	2.631	66.84	52.24	232.38	18.21	3.19
C1704-148-5750-S	2.744	69.69	52.24	232.38	17.38	3.04
C1704-148-6000-S	2.856	72.54	52.24	232.38	16.62	2.91
C1704-148-6250-S	2.968	75.39	52.24	232.38	15.92	2.79
C1704-148-6500-S	3.080	78.24	52.24	232.38	15.28	2.67
C1704-148-6750-S	3.192	81.09	52.24	232.38	14.68	2.57
C1704-148-7000-S	3.305	83.94	52.24	232.38	14.14	2.47
C1704-148-7500-S	3.529	89.64	52.24	232.38	13.16	2.30
C1704-148-8000-S	3.753	95.34	52.24	232.38	12.30	2.15
C1704-148-8500-S*	4.059	103.11	52.24	232.38	11.76	2.06
C1704-148-9000-S*	4.284	108.81	52.24	232.38	11.08	1.94
C1704-148-9500-S*	4.508	114.51	52.24	232.38	10.47	1.83
C1704-162-2625-S	1.445	36.71	66.43	295.52	56.31	9.85
C1704-162-2750-S	1.506	38.26	66.43	295.52	53.41	9.35
C1704-162-2875-S	1.567	39.80	66.43	295.52	50.80	8.89
C1704-162-3000-S	1.628	41.35	66.43	295.52	48.42	8.47
C1704-162-3250-S	1.750	44.45	66.43	295.52	44.29	7.75
C1704-162-3500-S	1.872	47.54	66.43	295.52	40.80	7.14
C1704-162-3750-S	1.993	50.63	66.43	295.52	37.82	6.62
C1704-162-4000-S	2.115	53.73	66.43	295.52	35.25	6.17
C1704-162-4250-S	2.237	56.82	66.43	295.52	33.01	5.78
C1704-162-4500-S	2.359	59.92	66.43	295.52	31.03	5.43
C1704-162-4750-S	2.481	63.01	66.43	295.52	29.28	5.12
C1704-162-5000-S	2.603	66.11	66.43	295.52	27.71	4.85
C1704-162-5250-S	2.724	69.20	66.43	295.52	26.31	4.60
C1704-162-5500-S	2.846	72.29	66.43	295.52	25.03	4.38
C1704-162-5750-S	2.968	75.39	66.43	295.52	23.88	4.18
C1704-162-6000-S	3.090	78.48	66.43	295.52	22.83	4.00
C1704-162-6250-S	3.212	81.58	66.43	295.52	21.87	3.83
C1704-162-6500-S	3.334	84.67	66.43	295.52	20.98	3.67
C1704-162-6750-S*	3.538	89.88	66.43	295.52	20.69	3.62
C1704-162-7000-S*	3.660	92.97	66.43	295.52	19.89	3.48
C1704-162-7500-S*	3.904	99.16	66.43	295.52	18.47	3.23
C1704-162-8000-S*	4.148	105.35	66.43	295.52	17.25	3.02
C1704-162-8500-S*	4.391	111.54	66.43	295.52	16.17	2.83
C1704-162-9000-S*	4.635	117.72	66.43	295.52	15.22	2.66
C1704-162-9500-S*	4.878	123.91	66.43	295.52	14.38	2.52
C1704-177-2500-S	1.488	37.79	83.95	373.42	82.95	14.52
C1704-177-2625-S	1.554	39.47	83.95	373.42	78.38	13.72
C1704-177-2750-S	1.620	41.15	83.95	373.42	74.29	13.00
C1704-177-2875-S	1.686	42.83	83.95	373.42	70.61	12.36
C1704-177-3000-S	1.752	44.50	83.95	373.42	67.27	11.77
C1704-177-3250-S	1.884	47.86	83.95	373.42	61.46	10.76
C1704-177-3500-S	2.016	51.21	83.95	373.42	56.58	9.90
C1704-177-3750-S	2.148	54.57	83.95	373.42	52.42	9.17
C1704-177-4000-S	2.281	57.92	83.95	373.42	48.82	8.54
C1704-177-4250-S	2.413	61.28	83.95	373.42	45.69	8.00
C1704-177-4500-S	2.545	64.64	83.95	373.42	42.93	7.51
C1704-177-4750-S	2.677	67.99	83.95	373.42	40.49	7.09
C1704-177-5000-S	2.809	71.35	83.95	373.42	38.31	6.70
C1704-177-5250-S	2.941	74.70	83.95	373.42	36.36	6.36
C1704-177-5500-S	3.073	78.06	83.95	373.42	34.59	6.05
C1704-177-5750-S	3.205	81.41	83.95	373.42	32.99	5.77
C1704-177-6000-S	3.337	84.77	83.95	373.42	31.53	5.52
C1704-177-6250-S	3.469	88.12	83.95	373.42	30.19	5.28

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1704-177-6500-M	1.704	43.28	0.177	4.50	6.500	165.10	3.066	77.87	2.583	65.60	114.38	508.78	33.31	5.83
C1704-177-6750-M*	1.704	43.28	0.177	4.50	6.750	171.45	3.275	83.19	2.795	70.99	114.38	508.78	32.92	5.76
C1704-177-7000-M*	1.704	43.28	0.177	4.50	7.000	177.80	3.385	85.99	2.885	73.28	114.38	508.78	31.64	5.54
C1704-177-7500-M*	1.704	43.28	0.177	4.50	7.500	190.50	3.606	91.59	3.065	77.85	114.38	508.78	29.37	5.14
C1704-177-8000-M*	1.704	43.28	0.177	4.50	8.000	203.20	3.827	97.20	3.245	82.42	114.38	508.78	27.41	4.80
C1704-177-8500-M*	1.704	43.28	0.177	4.50	8.500	215.90	4.047	102.80	3.425	86.98	114.38	508.78	25.69	4.50
C1704-177-9000-M*	1.704	43.28	0.177	4.50	9.000	228.60	4.268	108.40	3.604	91.55	114.38	508.78	24.17	4.23
C1704-177-9500-M*	1.704	43.28	0.177	4.50	9.500	241.30	4.489	114.01	3.784	96.12	114.38	508.78	22.82	3.99
C1704-192-2375-M	1.704	43.28	0.192	4.88	2.375	60.33	1.346	34.18	1.222	31.04	143.24	637.14	139.14	24.35
C1704-192-2500-M	1.704	43.28	0.192	4.88	2.500	63.50	1.406	35.71	1.273	32.35	143.24	637.14	130.92	22.91
C1704-192-2625-M	1.704	43.28	0.192	4.88	2.625	66.68	1.466	37.24	1.325	33.65	143.24	637.14	123.61	21.63
C1704-192-2750-M	1.704	43.28	0.192	4.88	2.750	69.85	1.527	38.78	1.376	34.96	143.24	637.14	117.08	20.49
C1704-192-2875-M	1.704	43.28	0.192	4.88	2.875	73.03	1.587	40.31	1.428	36.26	143.24	637.14	111.21	19.46
C1704-192-3000-M	1.704	43.28	0.192	4.88	3.000	76.20	1.647	41.84	1.479	37.57	143.24	637.14	105.90	18.53
C1704-192-3250-M	1.704	43.28	0.192	4.88	3.250	82.55	1.768	44.91	1.582	40.18	143.24	637.14	96.66	16.91
C1704-192-3500-M	1.704	43.28	0.192	4.88	3.500	88.90	1.889	47.98	1.685	42.79	143.24	637.14	88.90	15.56
C1704-192-3750-M	1.704	43.28	0.192	4.88	3.750	95.25	2.010	51.04	1.788	45.40	143.24	637.14	82.30	14.40
C1704-192-4000-M	1.704	43.28	0.192	4.88	4.000	101.60	2.130	54.11	1.890	48.02	143.24	637.14	76.61	13.41
C1704-192-4250-M	1.704	43.28	0.192	4.88	4.250	107.95	2.251	57.18	1.993	50.63	143.24	637.14	71.66	12.54
C1704-192-4500-M	1.704	43.28	0.192	4.88	4.500	114.30	2.372	60.24	2.096	53.24	143.24	637.14	67.30	11.78
C1704-192-4750-M	1.704	43.28	0.192	4.88	4.750	120.65	2.493	63.31	2.199	55.85	143.24	637.14	63.45	11.10
C1704-192-5000-M	1.704	43.28	0.192	4.88	5.000	127.00	2.613	66.38	2.302	58.46	143.24	637.14	60.01	10.50
C1704-192-5250-M	1.704	43.28	0.192	4.88	5.250	133.35	2.734	69.44	2.404	61.07	143.24	637.14	56.93	9.96
C1704-192-5500-M	1.704	43.28	0.192	4.88	5.500	139.70	2.855	72.51	2.507	63.69	143.24	637.14	54.15	9.48
C1704-192-5750-M	1.704	43.28	0.192	4.88	5.750	146.05	2.975	75.58	2.610	66.30	143.24	637.14	51.63	9.03
C1704-192-6000-M	1.704	43.28	0.192	4.88	6.000	152.40	3.096	78.64	2.713	68.91	143.24	637.14	49.33	8.63
C1704-192-6250-M	1.704	43.28	0.192	4.88	6.250	158.75	3.217	81.71	2.816	71.52	143.24	637.14	47.23	8.26
C1704-192-6500-M	1.704	43.28	0.192	4.88	6.500	165.10	3.338	84.78	2.919	74.13	143.24	637.14	45.29	7.93
C1704-192-6750-M	1.704	43.28	0.192	4.88	6.750	171.45	3.458	87.84	3.021	76.74	143.24	637.14	43.52	7.62
C1704-192-7000-M	1.704	43.28	0.192	4.88	7.000	177.80	3.579	90.91	3.124	79.36	143.24	637.14	41.87	7.33
C1704-192-7500-M	1.704	43.28	0.192	4.88	7.500	190.50	3.821	97.04	3.330	84.58	143.24	637.14	38.93	6.81
C1704-192-8000-M	1.704	43.28	0.192	4.88	8.000	203.20	4.062	103.18	3.536	89.80	143.24	637.14	36.37	6.37
C1704-192-8500-M	1.704	43.28	0.192	4.88	8.500	215.90	4.304	109.31	3.741	95.02	143.24	637.14	34.13	5.97
C1704-192-9000-M*	1.704	43.28	0.192	4.88	9.000	228.60	4.644	117.96	4.069	103.36	143.24	637.14	32.89	5.75
C1704-192-9500-M*	1.704	43.28	0.192	4.88	9.500	241.30	4.886	124.10	4.275	108.59	143.24	637.14	31.04	5.43
C1704-207-2375-M	1.704	43.28	0.207	5.26	2.375	60.33	1.441	36.61	1.340	34.05	176.27	784.09	188.80	33.04
C1704-207-2500-M	1.704	43.28	0.207	5.26	2.500	63.50	1.507	38.27	1.398	35.51	176.27	784.09	177.48	31.06
C1704-207-2625-M	1.704	43.28	0.207	5.26	2.625	66.68	1.572	39.94	1.456	36.98	176.27	784.09	167.45	29.30
C1704-207-2750-M	1.704	43.28	0.207	5.26	2.750	69.85	1.638	41.60	1.514	38.45	176.27	784.09	158.49	27.74
C1704-207-2875-M	1.704	43.28	0.207	5.26	2.875	73.03	1.703	43.26	1.571	39.91	176.27	784.09	150.44	26.33
C1704-207-3000-M	1.704	43.28	0.207	5.26	3.000	76.20	1.769	44.93	1.629	41.38	176.27	784.09	143.17	25.05
C1704-207-3250-M	1.704	43.28	0.207	5.26	3.250	82.55	1.900	48.25	1.745	44.31	176.27	784.09	130.55	22.85
C1704-207-3500-M	1.704	43.28	0.207	5.26	3.500	88.90	2.031	51.58	1.860	47.24	176.27	784.09	119.97	20.99
C1704-207-3750-M	1.704	43.28	0.207	5.26	3.750	95.25	2.162	54.91	1.975	50.18	176.27	784.09	110.98	19.42
C1704-207-4000-M	1.704	43.28	0.207	5.26	4.000	101.60	2.293	58.23	2.091	53.11	176.27	784.09	103.24	18.07
C1704-207-4250-M	1.704	43.28	0.207	5.26	4.250	107.95	2.424	61.56	2.206	56.04	176.27	784.09	96.51	16.89
C1704-207-4500-M	1.704	43.28	0.207	5.26	4.500	114.30	2.555	64.89	2.322	58.98	176.27	784.09	90.61	15.86
C1704-207-4750-M	1.704	43.28	0.207	5.26	4.750	120.65	2.686	68.21	2.437	61.91	176.27	784.09	85.39	14.94
C1704-207-5000-M	1.704	43.28	0.207	5.26	5.000	127.00	2.817	71.54	2.553	64.84	176.27	784.09	80.73	14.13
C1704-207-5250-M	1.704	43.28	0.207	5.26	5.250	133.35	2.948	74.87	2.668	67.77	176.27	784.09	76.56	13.40
C1704-207-5500-M	1.704	43.28	0.207	5.26	5.500	139.70	3.078	78.19	2.784	70.71	176.27	784.09	72.79	12.74
C1704-207-5750-M	1.704	43.28	0.207	5.26	5.750	146.05	3.209	81.52	2.899	73.64	176.27	784.09	69.38	12.14
C1704-207-6000-M	1.704	43.28	0.207	5.26	6.000	152.40	3.340	84.85	3.015	76.57	176.27	784.09	66.28	11.60
C1704-207-6250-M	1.704	43.28	0.207	5.26	6.250	158.75	3.471	88.17	3.130	79.51	176.27	784.09	63.44	11.10
C1704-207-6500-M	1.704	43.28	0.207	5.26	6.500	165.10	3.602	91.50	3.246	82.44	176.27	784.09	60.83	10.65
C1704-207-6750-M	1.704	43.28	0.207	5.26	6.750	171.45	3.733	94.83	3.361	85.37	176.27	784.09	58.43	10.23
C1704-207-7000-M	1.704	43.28	0.207	5.26	7.000	177.80	3.864	98.15	3.477	88.30	176.27	784.09	56.22	9.84
C1704-207-7500-M	1.704	43.28	0.207	5.26	7.500	190.50	4.126	104.81	3.707	94.17	176.27	784.09	52.25	9.14
C1704-207-8000-M	1.704	43.28	0.207	5.26	8.000	203.20	4.388	111.46	3.938	100.04	176.27	784.09	48.80	8.54
C1704-207-8500-M	1.704	43.28	0.207	5.26	8.500	215.90	4.650	118.11	4.169	105.90	176.27	784.09	45.79	8.01
C1704-207-9000-M	1.704	43.28	0.207	5.26	9.000	228.60	4.912	124.77	4.400	111.77	176.27	784.09	43.12	7.55
C1704-207-9500-M	1.704	43.28	0.207	5.26	9.500	241.30	5.174	131.42	4.631	117.63	176.27	784.09	40.75	7.13
C1704-225-2375-M	1.704	43.28	0.225	5.72	2.375	60.33	1.550	39.36	1.474	37.44	221.71	986.20	268.60	47.00
C1704-225-2500-M	1.704	43.28	0.225	5.72	2.500	63.50	1.621	41.17	1.539	39.09	221.71	986.20	252.22	44.14

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1704-177-6500-S	3.601	91.48	83.95	373.42	28.96	5.07
C1704-177-6750-S*	3.817	96.95	83.95	373.42	28.62	5.01
C1704-177-7000-S*	3.949	100.31	83.95	373.42	27.52	4.82
C1704-177-7500-S*	4.213	107.02	83.95	373.42	25.54	4.47
C1704-177-8000-S*	4.478	113.73	83.95	373.42	23.83	4.17
C1704-177-8500-S*	4.742	120.44	83.95	373.42	22.34	3.91
C1704-177-9000-S*	5.006	127.15	83.95	373.42	21.02	3.68
C1704-177-9500-S*	5.270	133.86	83.95	373.42	19.85	3.47
C1704-192-2375-S	1.516	38.51	103.93	462.28	120.99	21.17
C1704-192-2500-S	1.587	40.31	103.93	462.28	113.84	19.92
C1704-192-2625-S	1.658	42.12	103.93	462.28	107.49	18.81
C1704-192-2750-S	1.729	43.92	103.93	462.28	101.81	17.82
C1704-192-2875-S	1.800	45.73	103.93	462.28	96.70	16.92
C1704-192-3000-S	1.871	47.53	103.93	462.28	92.08	16.11
C1704-192-3250-S	2.014	51.14	103.93	462.28	84.05	14.71
C1704-192-3500-S	2.156	54.75	103.93	462.28	77.31	13.53
C1704-192-3750-S	2.298	58.36	103.93	462.28	71.57	12.52
C1704-192-4000-S	2.440	61.97	103.93	462.28	66.62	11.66
C1704-192-4250-S	2.582	65.59	103.93	462.28	62.31	10.90
C1704-192-4500-S	2.724	69.20	103.93	462.28	58.53	10.24
C1704-192-4750-S	2.866	72.81	103.93	462.28	55.17	9.66
C1704-192-5000-S	3.009	76.42	103.93	462.28	52.19	9.13
C1704-192-5250-S	3.151	80.03	103.93	462.28	49.50	8.66
C1704-192-5500-S	3.293	83.64	103.93	462.28	47.09	8.24
C1704-192-5750-S	3.435	87.25	103.93	462.28	44.89	7.86
C1704-192-6000-S	3.577	90.86	103.93	462.28	42.89	7.51
C1704-192-6250-S	3.719	94.47	103.93	462.28	41.07	7.19
C1704-192-6500-S	3.861	98.08	103.93	462.28	39.39	6.89
C1704-192-6750-S	4.004	101.69	103.93	462.28	37.84	6.62
C1704-192-7000-S	4.146	105.30	103.93	462.28	36.41	6.37
C1704-192-7500-S	4.430	112.52	103.93	462.28	33.85	5.92
C1704-192-8000-S	4.714	119.74	103.93	462.28	31.63	5.54
C1704-192-8500-S	4.999	126.96	103.93	462.28	29.68	5.19
C1704-192-9000-S*	5.366	136.29	103.93	462.28	28.60	5.00
C1704-192-9500-S*	5.650	143.51	103.93	462.28	26.99	4.72
C1704-207-2375-S	1.605	40.76	126.44	562.44	164.17	28.73
C1704-207-2500-S	1.681	42.69	126.44	562.44	154.33	27.01
C1704-207-2625-S	1.757	44.62	126.44	562.44	145.61	25.48
C1704-207-2750-S	1.833	46.55	126.44	562.44	137.82	24.12
C1704-207-2875-S	1.908	48.47	126.44	562.44	130.82	22.89
C1704-207-3000-S	1.984	50.40	126.44	562.44	124.49	21.79
C1704-207-3250-S	2.136	54.26	126.44	562.44	113.52	19.87
C1704-207-3500-S	2.288	58.11	126.44	562.44	104.32	18.26
C1704-207-3750-S	2.440	61.97	126.44	562.44	96.50	16.89
C1704-207-4000-S	2.592	65.83	126.44	562.44	89.78	15.71
C1704-207-4250-S	2.743	69.68	126.44	562.44	83.93	14.69
C1704-207-4500-S	2.895	73.54	126.44	562.44	78.79	13.79
C1704-207-4750-S	3.047	77.39	126.44	562.44	74.25	12.99
C1704-207-5000-S	3.199	81.25	126.44	562.44	70.20	12.29
C1704-207-5250-S	3.351	85.11	126.44	562.44	66.57	11.65
C1704-207-5500-S	3.502	88.96	126.44	562.44	63.30	11.08
C1704-207-5750-S	3.654	92.82	126.44	562.44	60.33	10.56
C1704-207-6000-S	3.806	96.67	126.44	562.44	57.63	10.09
C1704-207-6250-S	3.958	100.53	126.44	562.44	55.16	9.65
C1704-207-6500-S	4.110	104.39	126.44	562.44	52.90	9.26
C1704-207-6750-S	4.262	108.24	126.44	562.44	50.81	8.89
C1704-207-7000-S	4.413	112.10	126.44	562.44	48.88	8.55
C1704-207-7500-S	4.717	119.81	126.44	562.44	45.43	7.95
C1704-207-8000-S	5.021	127.52	126.44	562.44	42.44	7.43
C1704-207-8500-S	5.324	135.24	126.44	562.44	39.81	6.97
C1704-207-9000-S	5.628	142.95	126.44	562.44	37.50	6.56
C1704-207-9500-S	5.931	150.66	126.44	562.44	35.43	6.20
C1704-225-2375-S	1.703	43.26	156.89	697.89	233.56	40.87
C1704-225-2500-S	1.785	45.33	156.89	697.89	219.32	38.38

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1704-225-2625-M	**1.704**	**43.28**	**0.225**	**5.72**	**2.625**	**66.68**	**1.692**	**42.99**	**1.604**	**40.75**	**221.71**	**986.20**	**237.73**	**41.60**
C1704-225-2750-M	**1.704**	**43.28**	**0.225**	**5.72**	**2.750**	**69.85**	**1.764**	**44.80**	**1.669**	**42.40**	**221.71**	**986.20**	**224.81**	**39.34**
C1704-225-2875-M	**1.704**	**43.28**	**0.225**	**5.72**	**2.875**	**73.03**	**1.835**	**46.61**	**1.734**	**44.05**	**221.71**	**986.20**	**213.22**	**37.31**
C1704-225-3000-M	**1.704**	**43.28**	**0.225**	**5.72**	**3.000**	**76.20**	**1.907**	**48.43**	**1.799**	**45.70**	**221.71**	**986.20**	**202.77**	**35.48**
C1704-225-3250-M	**1.704**	**43.28**	**0.225**	**5.72**	**3.250**	**82.55**	**2.049**	**52.05**	**1.929**	**49.01**	**221.71**	**986.20**	**184.66**	**32.32**
C1704-225-3500-M	**1.704**	**43.28**	**0.225**	**5.72**	**3.500**	**88.90**	**2.192**	**55.68**	**2.059**	**52.31**	**221.71**	**986.20**	**169.53**	**29.67**
C1704-225-3750-M	**1.704**	**43.28**	**0.225**	**5.72**	**3.750**	**95.25**	**2.335**	**59.31**	**2.190**	**55.61**	**221.71**	**986.20**	**156.68**	**27.42**
C1704-225-4000-M	**1.704**	**43.28**	**0.225**	**5.72**	**4.000**	**101.60**	**2.478**	**62.94**	**2.320**	**58.92**	**221.71**	**986.20**	**145.65**	**25.49**
C1704-225-4250-M	**1.704**	**43.28**	**0.225**	**5.72**	**4.250**	**107.95**	**2.621**	**66.56**	**2.450**	**62.22**	**221.71**	**986.20**	**136.07**	**23.81**
C1704-225-4500-M	**1.704**	**43.28**	**0.225**	**5.72**	**4.500**	**114.30**	**2.763**	**70.19**	**2.580**	**65.53**	**221.71**	**986.20**	**127.67**	**22.34**
C1704-225-4750-M	**1.704**	**43.28**	**0.225**	**5.72**	**4.750**	**120.65**	**2.906**	**73.82**	**2.710**	**68.83**	**221.71**	**986.20**	**120.25**	**21.04**
C1704-225-5000-M	**1.704**	**43.28**	**0.225**	**5.72**	**5.000**	**127.00**	**3.049**	**77.44**	**2.840**	**72.13**	**221.71**	**986.20**	**113.64**	**19.89**
C1704-225-5250-M	**1.704**	**43.28**	**0.225**	**5.72**	**5.250**	**133.35**	**3.192**	**81.07**	**2.970**	**75.44**	**221.71**	**986.20**	**107.72**	**18.85**
C1704-225-5500-M	**1.704**	**43.28**	**0.225**	**5.72**	**5.500**	**139.70**	**3.335**	**84.70**	**3.100**	**78.74**	**221.71**	**986.20**	**102.39**	**17.92**
C1704-225-5750-M	**1.704**	**43.28**	**0.225**	**5.72**	**5.750**	**146.05**	**3.477**	**88.33**	**3.230**	**82.05**	**221.71**	**986.20**	**97.56**	**17.07**
C1704-225-6000-M	**1.704**	**43.28**	**0.225**	**5.72**	**6.000**	**152.40**	**3.620**	**91.95**	**3.360**	**85.35**	**221.71**	**986.20**	**93.16**	**16.30**
C1704-225-6250-M	**1.704**	**43.28**	**0.225**	**5.72**	**6.250**	**158.75**	**3.763**	**95.58**	**3.490**	**88.65**	**221.71**	**986.20**	**89.15**	**15.60**
C1704-225-6500-M	**1.704**	**43.28**	**0.225**	**5.72**	**6.500**	**165.10**	**3.906**	**99.21**	**3.620**	**91.96**	**221.71**	**986.20**	**85.46**	**14.96**
C1704-225-6750-M	**1.704**	**43.28**	**0.225**	**5.72**	**6.750**	**171.45**	**4.049**	**102.84**	**3.751**	**95.26**	**221.71**	**986.20**	**82.07**	**14.36**
C1704-225-7000-M	**1.704**	**43.28**	**0.225**	**5.72**	**7.000**	**177.80**	**4.191**	**106.46**	**3.881**	**98.57**	**221.71**	**986.20**	**78.94**	**13.81**
C1704-225-7500-M	**1.704**	**43.28**	**0.225**	**5.72**	**7.500**	**190.50**	**4.477**	**113.72**	**4.141**	**105.18**	**221.71**	**986.20**	**73.34**	**12.83**
C1704-225-8000-M	**1.704**	**43.28**	**0.225**	**5.72**	**8.000**	**203.20**	**4.763**	**120.97**	**4.401**	**111.78**	**221.71**	**986.20**	**68.48**	**11.98**
C1704-225-8500-M	**1.704**	**43.28**	**0.225**	**5.72**	**8.500**	**215.90**	**5.048**	**128.23**	**4.661**	**118.39**	**221.71**	**986.20**	**64.23**	**11.24**
C1704-225-9000-M	**1.704**	**43.28**	**0.225**	**5.72**	**9.000**	**228.60**	**5.334**	**135.48**	**4.921**	**125.00**	**221.71**	**986.20**	**60.47**	**10.58**
C1704-225-9500-M	**1.704**	**43.28**	**0.225**	**5.72**	**9.500**	**241.30**	**5.619**	**142.73**	**5.181**	**131.61**	**221.71**	**986.20**	**57.13**	**10.00**
C1704-250-2375-M	**1.704**	**43.28**	**0.250**	**6.35**	**2.375**	**60.33**	**1.686**	**42.82**	**1.642**	**41.71**	**295.85**	**1316.02**	**429.20**	**75.11**
C1704-250-2500-M	**1.704**	**43.28**	**0.250**	**6.35**	**2.500**	**63.50**	**1.765**	**44.82**	**1.717**	**43.60**	**295.85**	**1316.02**	**402.37**	**70.42**
C1704-250-2625-M	**1.704**	**43.28**	**0.250**	**6.35**	**2.625**	**66.68**	**1.844**	**46.83**	**1.791**	**45.50**	**295.85**	**1316.02**	**378.70**	**66.27**
C1704-250-2750-M	**1.704**	**43.28**	**0.250**	**6.35**	**2.750**	**69.85**	**1.923**	**48.84**	**1.866**	**47.39**	**295.85**	**1316.02**	**357.67**	**62.59**
C1704-250-2875-M	**1.704**	**43.28**	**0.250**	**6.35**	**2.875**	**73.03**	**2.002**	**50.85**	**1.940**	**49.28**	**295.85**	**1316.02**	**338.84**	**59.30**
C1704-250-3000-M	**1.704**	**43.28**	**0.250**	**6.35**	**3.000**	**76.20**	**2.081**	**52.86**	**2.015**	**51.17**	**295.85**	**1316.02**	**321.90**	**56.33**
C1704-250-3250-M	**1.704**	**43.28**	**0.250**	**6.35**	**3.250**	**82.55**	**2.239**	**56.87**	**2.164**	**54.96**	**295.85**	**1316.02**	**292.64**	**51.21**
C1704-250-3500-M	**1.704**	**43.28**	**0.250**	**6.35**	**3.500**	**88.90**	**2.397**	**60.89**	**2.313**	**58.74**	**295.85**	**1316.02**	**268.25**	**46.94**
C1704-250-3750-M	**1.704**	**43.28**	**0.250**	**6.35**	**3.750**	**95.25**	**2.555**	**64.90**	**2.462**	**62.52**	**295.85**	**1316.02**	**247.61**	**43.33**
C1704-250-4000-M	**1.704**	**43.28**	**0.250**	**6.35**	**4.000**	**101.60**	**2.713**	**68.92**	**2.611**	**66.31**	**295.85**	**1316.02**	**229.93**	**40.24**
C1704-250-4250-M	**1.704**	**43.28**	**0.250**	**6.35**	**4.250**	**107.95**	**2.871**	**72.93**	**2.759**	**70.09**	**295.85**	**1316.02**	**214.60**	**37.55**
C1704-250-4500-M	**1.704**	**43.28**	**0.250**	**6.35**	**4.500**	**114.30**	**3.029**	**76.95**	**2.908**	**73.87**	**295.85**	**1316.02**	**201.19**	**35.21**
C1704-250-4750-M	**1.704**	**43.28**	**0.250**	**6.35**	**4.750**	**120.65**	**3.188**	**80.96**	**3.057**	**77.66**	**295.85**	**1316.02**	**189.35**	**33.14**
C1704-250-5000-M	**1.704**	**43.28**	**0.250**	**6.35**	**5.000**	**127.00**	**3.346**	**84.98**	**3.206**	**81.44**	**295.85**	**1316.02**	**178.83**	**31.30**
C1704-250-5250-M	**1.704**	**43.28**	**0.250**	**6.35**	**5.250**	**133.35**	**3.504**	**88.99**	**3.355**	**85.23**	**295.85**	**1316.02**	**169.42**	**29.65**
C1704-250-5500-M	**1.704**	**43.28**	**0.250**	**6.35**	**5.500**	**139.70**	**3.662**	**93.01**	**3.504**	**89.01**	**295.85**	**1316.02**	**160.95**	**28.17**
C1704-250-5750-M	**1.704**	**43.28**	**0.250**	**6.35**	**5.750**	**146.05**	**3.820**	**97.03**	**3.653**	**92.79**	**295.85**	**1316.02**	**153.29**	**26.82**
C1704-250-6000-M	**1.704**	**43.28**	**0.250**	**6.35**	**6.000**	**152.40**	**3.978**	**101.04**	**3.802**	**96.58**	**295.85**	**1316.02**	**146.32**	**25.61**
C1704-250-6250-M	**1.704**	**43.28**	**0.250**	**6.35**	**6.250**	**158.75**	**4.136**	**105.06**	**3.951**	**100.36**	**295.85**	**1316.02**	**139.96**	**24.49**
C1704-250-6500-M	**1.704**	**43.28**	**0.250**	**6.35**	**6.500**	**165.10**	**4.294**	**109.07**	**4.100**	**104.14**	**295.85**	**1316.02**	**134.12**	**23.47**
C1704-250-6750-M	**1.704**	**43.28**	**0.250**	**6.35**	**6.750**	**171.45**	**4.452**	**113.09**	**4.249**	**107.93**	**295.85**	**1316.02**	**128.76**	**22.53**
C1704-250-7000-M	**1.704**	**43.28**	**0.250**	**6.35**	**7.000**	**177.80**	**4.610**	**117.10**	**4.398**	**111.71**	**295.85**	**1316.02**	**123.81**	**21.67**
C1704-250-7500-M	**1.704**	**43.28**	**0.250**	**6.35**	**7.500**	**190.50**	**4.927**	**125.13**	**4.696**	**119.28**	**295.85**	**1316.02**	**114.96**	**20.12**
C1704-250-8000-M	**1.704**	**43.28**	**0.250**	**6.35**	**8.000**	**203.20**	**5.243**	**133.17**	**4.994**	**126.85**	**295.85**	**1316.02**	**107.30**	**18.78**
C1704-250-8500-M	**1.704**	**43.28**	**0.250**	**6.35**	**8.500**	**215.90**	**5.559**	**141.20**	**5.292**	**134.41**	**295.85**	**1316.02**	**100.59**	**17.60**
C1704-250-9000-M	**1.704**	**43.28**	**0.250**	**6.35**	**9.000**	**228.60**	**5.875**	**149.23**	**5.590**	**141.98**	**295.85**	**1316.02**	**94.68**	**16.57**
C1704-250-9500-M	**1.704**	**43.28**	**0.250**	**6.35**	**9.500**	**241.30**	**6.191**	**157.26**	**5.888**	**149.55**	**295.85**	**1316.02**	**89.42**	**15.65**
D13680	1.732	44.00	0.157	4.00	2.795	71.00	0.992	25.20	0.866	22.00	119.71	532.50	66.69	11.67
D13690	1.732	44.00	0.157	4.00	4.134	105.00	1.382	35.10	1.181	30.00	119.71	532.50	42.29	7.40
D13700	1.732	44.00	0.157	4.00	6.299	160.00	1.969	50.00	1.654	42.00	119.71	532.50	27.37	4.79
D13710	1.732	44.00	0.157	4.00	9.252	235.00	2.748	69.80	2.283	58.00	119.71	532.50	18.63	3.26
D13720	1.732	44.00	0.157	4.00	13.386	340.00	3.921	99.60	3.228	82.00	119.71	532.50	12.57	2.20
C1763-148-2875-M	**1.763**	**44.78**	**0.148**	**3.76**	**2.875**	**73.03**	**1.196**	**30.38**	**0.945**	**24.00**	**67.38**	**299.72**	**40.13**	**7.02**
C1763-148-3000-M	**1.763**	**44.78**	**0.148**	**3.76**	**3.000**	**76.20**	**1.240**	**31.49**	**0.976**	**24.78**	**67.38**	**299.72**	**38.28**	**6.70**
C1763-148-3250-M	**1.763**	**44.78**	**0.148**	**3.76**	**3.250**	**82.55**	**1.327**	**33.70**	**1.037**	**26.34**	**67.38**	**299.72**	**35.04**	**6.13**
C1763-148-3500-M	**1.763**	**44.78**	**0.148**	**3.76**	**3.500**	**88.90**	**1.414**	**35.92**	**1.098**	**27.90**	**67.38**	**299.72**	**32.30**	**5.65**
C1763-148-3750-M	**1.763**	**44.78**	**0.148**	**3.76**	**3.750**	**95.25**	**1.501**	**38.14**	**1.160**	**29.46**	**67.38**	**299.72**	**29.97**	**5.24**
C1763-148-4000-M	**1.763**	**44.78**	**0.148**	**3.76**	**4.000**	**101.60**	**1.589**	**40.35**	**1.221**	**31.02**	**67.38**	**299.72**	**27.94**	**4.89**
C1763-148-4250-M	**1.763**	**44.78**	**0.148**	**3.76**	**4.250**	**107.95**	**1.676**	**42.57**	**1.283**	**32.58**	**67.38**	**299.72**	**26.18**	**4.58**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1704-225-2625-S	**1.866**	**47.40**	**156.89**	**697.89**	**206.72**	**36.18**
C1704-225-2750-S	**1.947**	**49.46**	**156.89**	**697.89**	**195.48**	**34.21**
C1704-225-2875-S	**2.029**	**51.53**	**156.89**	**697.89**	**185.41**	**32.45**
C1704-225-3000-S	**2.110**	**53.60**	**156.89**	**697.89**	**176.32**	**30.86**
C1704-225-3250-S	**2.273**	**57.73**	**156.89**	**697.89**	**160.58**	**28.10**
C1704-225-3500-S	**2.436**	**61.87**	**156.89**	**697.89**	**147.41**	**25.80**
C1704-225-3750-S	**2.598**	**66.00**	**156.89**	**697.89**	**136.25**	**23.84**
C1704-225-4000-S	**2.761**	**70.14**	**156.89**	**697.89**	**126.65**	**22.16**
C1704-225-4250-S	**2.924**	**74.27**	**156.89**	**697.89**	**118.32**	**20.71**
C1704-225-4500-S	**3.087**	**78.40**	**156.89**	**697.89**	**111.02**	**19.43**
C1704-225-4750-S	**3.250**	**82.54**	**156.89**	**697.89**	**104.56**	**18.30**
C1704-225-5000-S	**3.412**	**86.67**	**156.89**	**697.89**	**98.82**	**17.29**
C1704-225-5250-S	**3.575**	**90.81**	**156.89**	**697.89**	**93.67**	**16.39**
C1704-225-5500-S	**3.738**	**94.94**	**156.89**	**697.89**	**89.03**	**15.58**
C1704-225-5750-S	**3.901**	**99.07**	**156.89**	**697.89**	**84.83**	**14.85**
C1704-225-6000-S	**4.063**	**103.21**	**156.89**	**697.89**	**81.01**	**14.18**
C1704-225-6250-S	**4.226**	**107.34**	**156.89**	**697.89**	**77.52**	**13.57**
C1704-225-6500-S	**4.389**	**111.48**	**156.89**	**697.89**	**74.32**	**13.01**
C1704-225-6750-S	**4.552**	**115.61**	**156.89**	**697.89**	**71.37**	**12.49**
C1704-225-7000-S	**4.714**	**119.74**	**156.89**	**697.89**	**68.64**	**12.01**
C1704-225-7500-S	**5.040**	**128.01**	**156.89**	**697.89**	**63.78**	**11.16**
C1704-225-8000-S	**5.365**	**136.28**	**156.89**	**697.89**	**59.55**	**10.42**
C1704-225-8500-S	**5.691**	**144.55**	**156.89**	**697.89**	**55.85**	**9.77**
C1704-225-9000-S	**6.016**	**152.82**	**156.89**	**697.89**	**52.59**	**9.20**
C1704-225-9500-S	**6.342**	**161.09**	**156.89**	**697.89**	**49.68**	**8.69**
C1704-250-2375-S	**1.824**	**46.34**	**205.53**	**914.23**	**373.22**	**65.31**
C1704-250-2500-S	**1.913**	**48.58**	**205.53**	**914.23**	**349.89**	**61.23**
C1704-250-2625-S	**2.001**	**50.82**	**205.53**	**914.23**	**329.31**	**57.63**
C1704-250-2750-S	**2.089**	**53.06**	**205.53**	**914.23**	**311.01**	**54.43**
C1704-250-2875-S	**2.177**	**55.31**	**205.53**	**914.23**	**294.64**	**51.56**
C1704-250-3000-S	**2.266**	**57.55**	**205.53**	**914.23**	**279.91**	**48.98**
C1704-250-3250-S	**2.442**	**62.03**	**205.53**	**914.23**	**254.47**	**44.53**
C1704-250-3500-S	**2.619**	**66.52**	**205.53**	**914.23**	**233.26**	**40.82**
C1704-250-3750-S	**2.795**	**71.00**	**205.53**	**914.23**	**215.32**	**37.68**
C1704-250-4000-S	**2.972**	**75.49**	**205.53**	**914.23**	**199.94**	**34.99**
C1704-250-4250-S	**3.149**	**79.97**	**205.53**	**914.23**	**186.61**	**32.66**
C1704-250-4500-S	**3.325**	**84.46**	**205.53**	**914.23**	**174.95**	**30.62**
C1704-250-4750-S	**3.502**	**88.94**	**205.53**	**914.23**	**164.65**	**28.81**
C1704-250-5000-S	**3.678**	**93.43**	**205.53**	**914.23**	**155.51**	**27.21**
C1704-250-5250-S	**3.855**	**97.91**	**205.53**	**914.23**	**147.32**	**25.78**
C1704-250-5500-S	**4.031**	**102.40**	**205.53**	**914.23**	**139.96**	**24.49**
C1704-250-5750-S	**4.208**	**106.88**	**205.53**	**914.23**	**133.29**	**23.33**
C1704-250-6000-S	**4.385**	**111.37**	**205.53**	**914.23**	**127.23**	**22.27**
C1704-250-6250-S	**4.561**	**115.85**	**205.53**	**914.23**	**121.70**	**21.30**
C1704-250-6500-S	**4.738**	**120.34**	**205.53**	**914.23**	**116.63**	**20.41**
C1704-250-6750-S	**4.914**	**124.82**	**205.53**	**914.23**	**111.97**	**19.59**
C1704-250-7000-S	**5.091**	**129.31**	**205.53**	**914.23**	**107.66**	**18.84**
C1704-250-7500-S	**5.444**	**138.28**	**205.53**	**914.23**	**99.97**	**17.49**
C1704-250-8000-S	**5.797**	**147.25**	**205.53**	**914.23**	**93.30**	**16.33**
C1704-250-8500-S	**6.150**	**156.22**	**205.53**	**914.23**	**87.47**	**15.31**
C1704-250-9000-S	**6.504**	**165.19**	**205.53**	**914.23**	**82.33**	**14.41**
C1704-250-9500-S	**6.857**	**174.16**	**205.53**	**914.23**	**77.75**	**13.61**
D23680	0.992	25.20	99.76	443.75	55.54	9.72
D23690	1.382	35.10	99.76	443.75	35.20	6.16
D23700	1.969	50.00	99.76	443.75	22.80	3.99
D23710	2.748	69.80	99.76	443.75	15.54	2.72
D23720	3.921	99.60	99.76	443.75	10.46	1.83
C1763-148-2875-S	**1.426**	**36.22**	**50.57**	**224.94**	**34.90**	**6.11**
C1763-148-3000-S	**1.481**	**37.61**	**50.57**	**224.94**	**33.29**	**5.82**
C1763-148-3250-S	**1.590**	**40.39**	**50.57**	**224.94**	**30.47**	**5.33**
C1763-148-3500-S	**1.700**	**43.18**	**50.57**	**224.94**	**28.09**	**4.92**
C1763-148-3750-S	**1.809**	**45.96**	**50.57**	**224.94**	**26.06**	**4.56**
C1763-148-4000-S	**1.919**	**48.74**	**50.57**	**224.94**	**24.30**	**4.25**
C1763-148-4250-S	**2.028**	**51.52**	**50.57**	**224.94**	**22.76**	**3.98**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1763-148-4500-M	1.763	44.78	0.148	3.76	4.500	114.30	1.763	44.79	1.344	34.14	67.38	299.72	24.62	4.31
C1763-148-4750-M	1.763	44.78	0.148	3.76	4.750	120.65	1.850	47.00	1.406	35.71	67.38	299.72	23.24	4.07
C1763-148-5000-M	1.763	44.78	0.148	3.76	5.000	127.00	1.938	49.22	1.467	37.27	67.38	299.72	22.00	3.85
C1763-148-5250-M	1.763	44.78	0.148	3.76	5.250	133.35	2.025	51.43	1.529	38.83	67.38	299.72	20.89	3.66
C1763-148-5500-M	1.763	44.78	0.148	3.76	5.500	139.70	2.112	53.65	1.590	40.39	67.38	299.72	19.89	3.48
C1763-148-5750-M	1.763	44.78	0.148	3.76	5.750	146.05	2.199	55.87	1.652	41.95	67.38	299.72	18.98	3.32
C1763-148-6000-M	1.763	44.78	0.148	3.76	6.000	152.40	2.287	58.08	1.713	43.51	67.38	299.72	18.15	3.18
C1763-148-6250-M	1.763	44.78	0.148	3.76	6.250	158.75	2.374	60.30	1.774	45.07	67.38	299.72	17.38	3.04
C1763-148-6500-M	1.763	44.78	0.148	3.76	6.500	165.10	2.461	62.52	1.836	46.63	67.38	299.72	16.68	2.92
C1763-148-6750-M	1.763	44.78	0.148	3.76	6.750	171.45	2.548	64.73	1.897	48.19	67.38	299.72	16.04	2.81
C1763-148-7000-M	1.763	44.78	0.148	3.76	7.000	177.80	2.636	66.95	1.959	49.75	67.38	299.72	15.44	2.70
C1763-148-7500-M	1.763	44.78	0.148	3.76	7.500	190.50	2.810	71.38	2.082	52.88	67.38	299.72	14.37	2.51
C1763-148-8000-M	1.763	44.78	0.148	3.76	8.000	203.20	2.985	75.81	2.205	56.00	67.38	299.72	13.44	2.35
C1763-148-8500-M	1.763	44.78	0.148	3.76	8.500	215.90	3.159	80.24	2.328	59.12	67.38	299.72	12.62	2.21
C1763-148-9000-M	1.763	44.78	0.148	3.76	9.000	228.60	3.334	84.68	2.451	62.24	67.38	299.72	11.89	2.08
C1763-148-9500-M*	1.763	44.78	0.148	3.76	9.500	241.30	3.605	91.56	2.692	68.39	67.38	299.72	11.43	2.00
C1763-162-2750-M	1.763	44.78	0.162	4.12	2.750	69.85	1.259	31.99	1.046	26.58	86.63	385.36	58.12	10.17
C1763-162-2875-M	1.763	44.78	0.162	4.12	2.875	73.03	1.308	33.22	1.083	27.50	86.63	385.36	55.27	9.67
C1763-162-3000-M	1.763	44.78	0.162	4.12	3.000	76.20	1.356	34.44	1.119	28.42	86.63	385.36	52.69	9.22
C1763-162-3250-M	1.763	44.78	0.162	4.12	3.250	82.55	1.452	36.89	1.192	30.27	86.63	385.36	48.19	8.43
C1763-162-3500-M	1.763	44.78	0.162	4.12	3.500	88.90	1.549	39.34	1.265	32.12	86.63	385.36	44.40	7.77
C1763-162-3750-M	1.763	44.78	0.162	4.12	3.750	95.25	1.645	41.79	1.337	33.97	86.63	385.36	41.16	7.20
C1763-162-4000-M	1.763	44.78	0.162	4.12	4.000	101.60	1.742	44.23	1.410	35.82	86.63	385.36	38.36	6.71
C1763-162-4250-M	1.763	44.78	0.162	4.12	4.250	107.95	1.838	46.68	1.483	37.66	86.63	385.36	35.92	6.29
C1763-162-4500-M	1.763	44.78	0.162	4.12	4.500	114.30	1.934	49.13	1.556	39.51	86.63	385.36	33.77	5.91
C1763-162-4750-M	1.763	44.78	0.162	4.12	4.750	120.65	2.031	51.58	1.628	41.36	86.63	385.36	31.86	5.58
C1763-162-5000-M	1.763	44.78	0.162	4.12	5.000	127.00	2.127	54.03	1.701	43.21	86.63	385.36	30.16	5.28
C1763-162-5250-M	1.763	44.78	0.162	4.12	5.250	133.35	2.224	56.48	1.774	45.06	86.63	385.36	28.62	5.01
C1763-162-5500-M	1.763	44.78	0.162	4.12	5.500	139.70	2.320	58.93	1.847	46.91	86.63	385.36	27.24	4.77
C1763-162-5750-M	1.763	44.78	0.162	4.12	5.750	146.05	2.416	61.37	1.919	48.75	86.63	385.36	25.99	4.55
C1763-162-6000-M	1.763	44.78	0.162	4.12	6.000	152.40	2.513	63.82	1.992	50.60	86.63	385.36	24.84	4.35
C1763-162-6250-M	1.763	44.78	0.162	4.12	6.250	158.75	2.609	66.27	2.065	52.45	86.63	385.36	23.79	4.16
C1763-162-6500-M	1.763	44.78	0.162	4.12	6.500	165.10	2.706	68.72	2.138	54.30	86.63	385.36	22.83	4.00
C1763-162-6750-M	1.763	44.78	0.162	4.12	6.750	171.45	2.802	71.17	2.210	56.15	86.63	385.36	21.94	3.84
C1763-162-7000-M	1.763	44.78	0.162	4.12	7.000	177.80	2.898	73.62	2.283	57.99	86.63	385.36	21.12	3.70
C1763-162-7500-M*	1.763	44.78	0.162	4.12	7.500	190.50	3.191	81.04	2.552	64.81	86.63	385.36	20.10	3.52
C1763-162-8000-M*	1.763	44.78	0.162	4.12	8.000	203.20	3.383	85.94	2.697	68.51	86.63	385.36	18.77	3.28
C1763-162-8500-M*	1.763	44.78	0.162	4.12	8.500	215.90	3.576	90.84	2.843	72.21	86.63	385.36	17.60	3.08
C1763-162-9000-M*	1.763	44.78	0.162	4.12	9.000	228.60	3.769	95.73	2.988	75.90	86.63	385.36	16.56	2.90
C1763-162-9500-M*	1.763	44.78	0.162	4.12	9.500	241.30	3.962	100.63	3.134	79.60	86.63	385.36	15.64	2.74
C1763-177-2625-M	1.763	44.78	0.177	4.50	2.625	66.68	1.321	33.55	1.145	29.10	110.76	492.70	84.94	14.87
C1763-177-2750-M	1.763	44.78	0.177	4.50	2.750	69.85	1.374	34.91	1.188	30.18	110.76	492.70	80.51	14.09
C1763-177-2875-M	1.763	44.78	0.177	4.50	2.875	73.03	1.428	36.26	1.231	31.26	110.76	492.70	76.52	13.39
C1763-177-3000-M	1.763	44.78	0.177	4.50	3.000	76.20	1.481	37.61	1.273	32.34	110.76	492.70	72.91	12.76
C1763-177-3250-M	1.763	44.78	0.177	4.50	3.250	82.55	1.587	40.31	1.358	34.50	110.76	492.70	66.61	11.66
C1763-177-3500-M	1.763	44.78	0.177	4.50	3.500	88.90	1.694	43.02	1.444	36.67	110.76	492.70	61.32	10.73
C1763-177-3750-M	1.763	44.78	0.177	4.50	3.750	95.25	1.800	45.72	1.529	38.83	110.76	492.70	56.81	9.94
C1763-177-4000-M	1.763	44.78	0.177	4.50	4.000	101.60	1.907	48.43	1.614	41.00	110.76	492.70	52.91	9.26
C1763-177-4250-M	1.763	44.78	0.177	4.50	4.250	107.95	2.013	51.13	1.699	43.16	110.76	492.70	49.52	8.67
C1763-177-4500-M	1.763	44.78	0.177	4.50	4.500	114.30	2.119	53.83	1.784	45.32	110.76	492.70	46.53	8.14
C1763-177-4750-M	1.763	44.78	0.177	4.50	4.750	120.65	2.226	56.54	1.870	47.49	110.76	492.70	43.88	7.68
C1763-177-5000-M	1.763	44.78	0.177	4.50	5.000	127.00	2.332	59.24	1.955	49.65	110.76	492.70	41.52	7.27
C1763-177-5250-M	1.763	44.78	0.177	4.50	5.250	133.35	2.439	61.95	2.040	51.81	110.76	492.70	39.40	6.90
C1763-177-5500-M	1.763	44.78	0.177	4.50	5.500	139.70	2.545	64.65	2.125	53.98	110.76	492.70	37.49	6.56
C1763-177-5750-M	1.763	44.78	0.177	4.50	5.750	146.05	2.652	67.35	2.210	56.14	110.76	492.70	35.75	6.26
C1763-177-6000-M	1.763	44.78	0.177	4.50	6.000	152.40	2.758	70.06	2.295	58.30	110.76	492.70	34.17	5.98
C1763-177-6250-M	1.763	44.78	0.177	4.50	6.250	158.75	2.865	72.76	2.381	60.47	110.76	492.70	32.72	5.73
C1763-177-6500-M	1.763	44.78	0.177	4.50	6.500	165.10	2.971	75.47	2.466	62.63	110.76	492.70	31.39	5.49
C1763-177-6750-M*	1.763	44.78	0.177	4.50	6.750	171.45	3.179	80.75	2.677	67.98	110.76	492.70	31.02	5.43
C1763-177-7000-M*	1.763	44.78	0.177	4.50	7.000	177.80	3.286	83.46	2.762	70.15	110.76	492.70	29.82	5.22
C1763-177-7500-M*	1.763	44.78	0.177	4.50	7.500	190.50	3.499	88.86	2.932	74.47	110.76	492.70	27.68	4.84
C1763-177-8000-M*	1.763	44.78	0.177	4.50	8.000	203.20	3.711	94.27	3.102	78.80	110.76	492.70	25.83	4.52
C1763-177-8500-M*	1.763	44.78	0.177	4.50	8.500	215.90	3.924	99.68	3.273	83.13	110.76	492.70	24.21	4.24
C1763-177-9000-M*	1.763	44.78	0.177	4.50	9.000	228.60	4.137	105.09	3.443	87.46	110.76	492.70	22.78	3.99

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1763-148-4500-S	2.138	54.30	50.57	224.94	21.41	3.75
C1763-148-4750-S	2.248	57.09	50.57	224.94	20.21	3.54
C1763-148-5000-S	2.357	59.87	50.57	224.94	19.13	3.35
C1763-148-5250-S	2.467	62.65	50.57	224.94	18.17	3.18
C1763-148-5500-S	2.576	65.43	50.57	224.94	17.30	3.03
C1763-148-5750-S	2.686	68.22	50.57	224.94	16.50	2.89
C1763-148-6000-S	2.795	71.00	50.57	224.94	15.78	2.76
C1763-148-6250-S	2.905	73.78	50.57	224.94	15.12	2.65
C1763-148-6500-S	3.014	76.56	50.57	224.94	14.51	2.54
C1763-148-6750-S	3.124	79.35	50.57	224.94	13.95	2.44
C1763-148-7000-S	3.233	82.13	50.57	224.94	13.43	2.35
C1763-148-7500-S	3.452	87.69	50.57	224.94	12.49	2.19
C1763-148-8000-S	3.672	93.26	50.57	224.94	11.68	2.04
C1763-148-8500-S	3.891	98.82	50.57	224.94	10.97	1.92
C1763-148-9000-S	4.110	104.39	50.57	224.94	10.34	1.81
C1763-148-9500-S*	4.412	112.06	50.57	224.94	9.94	1.74
C1763-162-2750-S	1.477	37.52	64.32	286.11	50.54	8.84
C1763-162-2875-S	1.537	39.03	64.32	286.11	48.06	8.41
C1763-162-3000-S	1.596	40.54	64.32	286.11	45.82	8.02
C1763-162-3250-S	1.715	43.56	64.32	286.11	41.90	7.33
C1763-162-3500-S	1.834	46.58	64.32	286.11	38.61	6.76
C1763-162-3750-S	1.953	49.60	64.32	286.11	35.79	6.26
C1763-162-4000-S	2.072	52.62	64.32	286.11	33.36	5.84
C1763-162-4250-S	2.190	55.64	64.32	286.11	31.23	5.47
C1763-162-4500-S	2.309	58.66	64.32	286.11	29.36	5.14
C1763-162-4750-S	2.428	61.68	64.32	286.11	27.70	4.85
C1763-162-5000-S	2.547	64.69	64.32	286.11	26.22	4.59
C1763-162-5250-S	2.666	67.71	64.32	286.11	24.89	4.36
C1763-162-5500-S	2.785	70.73	64.32	286.11	23.69	4.15
C1763-162-5750-S	2.904	73.75	64.32	286.11	22.60	3.95
C1763-162-6000-S	3.022	76.77	64.32	286.11	21.60	3.78
C1763-162-6250-S	3.141	79.79	64.32	286.11	20.69	3.62
C1763-162-6500-S	3.260	82.81	64.32	286.11	19.85	3.47
C1763-162-6750-S	3.379	85.83	64.32	286.11	19.08	3.34
C1763-162-7000-S	3.498	88.85	64.32	286.11	18.37	3.21
C1763-162-7500-S*	3.821	97.04	64.32	286.11	17.48	3.06
C1763-162-8000-S*	4.058	103.08	64.32	286.11	16.32	2.86
C1763-162-8500-S*	4.296	109.12	64.32	286.11	15.30	2.68
C1763-162-9000-S*	4.534	115.15	64.32	286.11	14.40	2.52
C1763-162-9500-S*	4.771	121.19	64.32	286.11	13.60	2.38
C1763-177-2625-S	1.524	38.72	81.29	361.62	73.87	12.93
C1763-177-2750-S	1.589	40.36	81.29	361.62	70.01	12.25
C1763-177-2875-S	1.653	41.99	81.29	361.62	66.54	11.64
C1763-177-3000-S	1.718	43.63	81.29	361.62	63.40	11.09
C1763-177-3250-S	1.847	46.90	81.29	361.62	57.92	10.14
C1763-177-3500-S	1.975	50.17	81.29	361.62	53.32	9.33
C1763-177-3750-S	2.104	53.45	81.29	361.62	49.40	8.64
C1763-177-4000-S	2.233	56.72	81.29	361.62	46.01	8.05
C1763-177-4250-S	2.362	59.99	81.29	361.62	43.06	7.53
C1763-177-4500-S	2.491	63.26	81.29	361.62	40.46	7.08
C1763-177-4750-S	2.620	66.54	81.29	361.62	38.16	6.68
C1763-177-5000-S	2.748	69.81	81.29	361.62	36.11	6.32
C1763-177-5250-S	2.877	73.08	81.29	361.62	34.26	6.00
C1763-177-5500-S	3.006	76.36	81.29	361.62	32.60	5.70
C1763-177-5750-S	3.135	79.63	81.29	361.62	31.09	5.44
C1763-177-6000-S	3.264	82.90	81.29	361.62	29.71	5.20
C1763-177-6250-S	3.393	86.17	81.29	361.62	28.45	4.98
C1763-177-6500-S	3.521	89.45	81.29	361.62	27.29	4.78
C1763-177-6750-S*	3.736	94.90	81.29	361.62	26.97	4.72
C1763-177-7000-S*	3.865	98.17	81.29	361.62	25.93	4.54
C1763-177-7500-S*	4.123	104.71	81.29	361.62	24.07	4.21
C1763-177-8000-S*	4.380	111.26	81.29	361.62	22.46	3.93
C1763-177-8500-S*	4.638	117.81	81.29	361.62	21.05	3.68
C1763-177-9000-S*	4.896	124.35	81.29	361.62	19.81	3.47

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1763-177-9500-M*	1.763	44.78	0.177	4.50	9.500	241.30	4.350	110.50	3.613	91.78	110.76	492.70	21.51	3.76
C1763-192-2500-M	1.763	44.78	0.192	4.88	2.500	63.50	1.371	34.82	1.230	31.24	138.74	617.17	122.86	21.50
C1763-192-2625-M	1.763	44.78	0.192	4.88	2.625	66.68	1.429	36.30	1.279	32.48	138.74	617.17	116.00	20.30
C1763-192-2750-M	1.763	44.78	0.192	4.88	2.750	69.85	1.487	37.78	1.328	33.72	138.74	617.17	109.88	19.23
C1763-192-2875-M	1.763	44.78	0.192	4.88	2.875	73.03	1.546	39.26	1.376	34.96	138.74	617.17	104.36	18.26
C1763-192-3000-M	1.763	44.78	0.192	4.88	3.000	76.20	1.604	40.74	1.425	36.20	138.74	617.17	99.38	17.39
C1763-192-3250-M	1.763	44.78	0.192	4.88	3.250	82.55	1.720	43.70	1.523	38.68	138.74	617.17	90.71	15.87
C1763-192-3500-M	1.763	44.78	0.192	4.88	3.500	88.90	1.837	46.66	1.621	41.16	138.74	617.17	83.43	14.60
C1763-192-3750-M	1.763	44.78	0.192	4.88	3.750	95.25	1.954	49.62	1.718	43.65	138.74	617.17	77.23	13.52
C1763-192-4000-M	1.763	44.78	0.192	4.88	4.000	101.60	2.070	52.58	1.816	46.13	138.74	617.17	71.89	12.58
C1763-192-4250-M	1.763	44.78	0.192	4.88	4.250	107.95	2.187	55.54	1.914	48.61	138.74	617.17	67.24	11.77
C1763-192-4500-M	1.763	44.78	0.192	4.88	4.500	114.30	2.303	58.50	2.011	51.09	138.74	617.17	63.16	11.05
C1763-192-4750-M	1.763	44.78	0.192	4.88	4.750	120.65	2.420	61.46	2.109	53.57	138.74	617.17	59.54	10.42
C1763-192-5000-M	1.763	44.78	0.192	4.88	5.000	127.00	2.536	64.42	2.207	56.05	138.74	617.17	56.32	9.86
C1763-192-5250-M	1.763	44.78	0.192	4.88	5.250	133.35	2.653	67.39	2.304	58.53	138.74	617.17	53.43	9.35
C1763-192-5500-M	1.763	44.78	0.192	4.88	5.500	139.70	2.770	70.35	2.402	61.01	138.74	617.17	50.81	8.89
C1763-192-5750-M	1.763	44.78	0.192	4.88	5.750	146.05	2.886	73.31	2.500	63.49	138.74	617.17	48.45	8.48
C1763-192-6000-M	1.763	44.78	0.192	4.88	6.000	152.40	3.003	76.27	2.597	65.98	138.74	617.17	46.29	8.10
C1763-192-6250-M	1.763	44.78	0.192	4.88	6.250	158.75	3.119	79.23	2.695	68.46	138.74	617.17	44.32	7.76
C1763-192-6500-M	1.763	44.78	0.192	4.88	6.500	165.10	3.236	82.19	2.793	70.94	138.74	617.17	42.51	7.44
C1763-192-6750-M	1.763	44.78	0.192	4.88	6.750	171.45	3.352	85.15	2.890	73.42	138.74	617.17	40.84	7.15
C1763-192-7000-M	1.763	44.78	0.192	4.88	7.000	177.80	3.469	88.11	2.988	75.90	138.74	617.17	39.29	6.88
C1763-192-7500-M*	1.763	44.78	0.192	4.88	7.500	190.50	3.805	96.64	3.310	84.08	138.74	617.17	37.55	6.57
C1763-192-8000-M*	1.763	44.78	0.192	4.88	8.000	203.20	4.038	102.56	3.505	89.04	138.74	617.17	35.02	6.13
C1763-192-8500-M*	1.763	44.78	0.192	4.88	8.500	215.90	4.271	108.48	3.701	94.00	138.74	617.17	32.81	5.74
C1763-192-9000-M*	1.763	44.78	0.192	4.88	9.000	228.60	4.504	114.40	3.896	98.96	138.74	617.17	30.86	5.40
C1763-192-9500-M*	1.763	44.78	0.192	4.88	9.500	241.30	4.737	120.32	4.092	103.93	138.74	617.17	29.13	5.10
C1763-207-2500-M	1.763	44.78	0.207	5.26	2.500	63.50	1.470	37.34	1.353	34.36	170.79	759.71	165.84	29.02
C1763-207-2625-M	1.763	44.78	0.207	5.26	2.625	66.68	1.533	38.95	1.408	35.76	170.79	759.71	156.47	27.38
C1763-207-2750-M	1.763	44.78	0.207	5.26	2.750	69.85	1.597	40.56	1.463	37.16	170.79	759.71	148.10	25.92
C1763-207-2875-M	1.763	44.78	0.207	5.26	2.875	73.03	1.660	42.17	1.518	38.56	170.79	759.71	140.57	24.60
C1763-207-3000-M	1.763	44.78	0.207	5.26	3.000	76.20	1.723	43.77	1.573	39.95	170.79	759.71	133.78	23.41
C1763-207-3250-M	1.763	44.78	0.207	5.26	3.250	82.55	1.850	46.99	1.683	42.75	170.79	759.71	121.99	21.35
C1763-207-3500-M	1.763	44.78	0.207	5.26	3.500	88.90	1.976	50.20	1.793	45.54	170.79	759.71	112.10	19.62
C1763-207-3750-M	1.763	44.78	0.207	5.26	3.750	95.25	2.103	53.42	1.903	48.34	170.79	759.71	103.70	18.15
C1763-207-4000-M	1.763	44.78	0.207	5.26	4.000	101.60	2.230	56.63	2.013	51.13	170.79	759.71	96.47	16.88
C1763-207-4250-M	1.763	44.78	0.207	5.26	4.250	107.95	2.356	59.85	2.123	53.93	170.79	759.71	90.19	15.78
C1763-207-4500-M	1.763	44.78	0.207	5.26	4.500	114.30	2.483	63.06	2.233	56.72	170.79	759.71	84.67	14.82
C1763-207-4750-M	1.763	44.78	0.207	5.26	4.750	120.65	2.609	66.28	2.343	59.52	170.79	759.71	79.79	13.96
C1763-207-5000-M	1.763	44.78	0.207	5.26	5.000	127.00	2.736	69.49	2.453	62.31	170.79	759.71	75.44	13.20
C1763-207-5250-M	1.763	44.78	0.207	5.26	5.250	133.35	2.863	72.71	2.563	65.11	170.79	759.71	71.54	12.52
C1763-207-5500-M	1.763	44.78	0.207	5.26	5.500	139.70	2.989	75.92	2.673	67.90	170.79	759.71	68.02	11.90
C1763-207-5750-M	1.763	44.78	0.207	5.26	5.750	146.05	3.116	79.14	2.783	70.70	170.79	759.71	64.83	11.35
C1763-207-6000-M	1.763	44.78	0.207	5.26	6.000	152.40	3.242	82.35	2.893	73.49	170.79	759.71	61.93	10.84
C1763-207-6250-M	1.763	44.78	0.207	5.26	6.250	158.75	3.369	85.57	3.003	76.29	170.79	759.71	59.28	10.37
C1763-207-6500-M	1.763	44.78	0.207	5.26	6.500	165.10	3.495	88.78	3.113	79.08	170.79	759.71	56.84	9.95
C1763-207-6750-M	1.763	44.78	0.207	5.26	6.750	171.45	3.622	92.00	3.224	81.88	170.79	759.71	54.60	9.56
C1763-207-7000-M	1.763	44.78	0.207	5.26	7.000	177.80	3.749	95.21	3.334	84.67	170.79	759.71	52.53	9.19
C1763-207-7500-M	1.763	44.78	0.207	5.26	7.500	190.50	4.002	101.64	3.554	90.26	170.79	759.71	48.82	8.54
C1763-207-8000-M	1.763	44.78	0.207	5.26	8.000	203.20	4.255	108.08	3.774	95.85	170.79	759.71	45.60	7.98
C1763-207-8500-M	1.763	44.78	0.207	5.26	8.500	215.90	4.508	114.51	3.994	101.44	170.79	759.71	42.78	7.49
C1763-207-9000-M	1.763	44.78	0.207	5.26	9.000	228.60	4.761	120.94	4.214	107.03	170.79	759.71	40.29	7.05
C1763-207-9500-M	1.763	44.78	0.207	5.26	9.500	241.30	5.014	127.37	4.434	112.62	170.79	759.71	38.08	6.66
C1763-225-2375-M	1.763	44.78	0.225	5.72	2.375	60.33	1.514	38.47	1.431	36.34	214.89	955.87	249.69	43.70
C1763-225-2500-M	1.763	44.78	0.225	5.72	2.500	63.50	1.584	40.22	1.493	37.92	214.89	955.87	234.47	41.03
C1763-225-2625-M	1.763	44.78	0.225	5.72	2.625	66.68	1.653	41.98	1.555	39.50	214.89	955.87	220.99	38.67
C1763-225-2750-M	1.763	44.78	0.225	5.72	2.750	69.85	1.722	43.73	1.617	41.08	214.89	955.87	208.98	36.57
C1763-225-2875-M	1.763	44.78	0.225	5.72	2.875	73.03	1.791	45.49	1.680	42.66	214.89	955.87	198.21	34.69
C1763-225-3000-M	1.763	44.78	0.225	5.72	3.000	76.20	1.860	47.24	1.742	44.24	214.89	955.87	188.49	32.99
C1763-225-3250-M	1.763	44.78	0.225	5.72	3.250	82.55	1.998	50.75	1.866	47.40	214.89	955.87	171.66	30.04
C1763-225-3500-M	1.763	44.78	0.225	5.72	3.500	88.90	2.136	54.27	1.991	50.56	214.89	955.87	157.59	27.58
C1763-225-3750-M	1.763	44.78	0.225	5.72	3.750	95.25	2.275	57.78	2.115	53.72	214.89	955.87	145.66	25.49
C1763-225-4000-M	1.763	44.78	0.225	5.72	4.000	101.60	2.413	61.29	2.239	56.88	214.89	955.87	135.40	23.69
C1763-225-4250-M	1.763	44.78	0.225	5.72	4.250	107.95	2.551	64.80	2.364	60.04	214.89	955.87	126.49	22.14

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1763-177-9500-S*	5.153	130.90	81.29	361.62	18.70	3.27
C1763-192-2500-S	1.558	39.57	100.67	447.79	106.83	18.70
C1763-192-2625-S	1.627	41.33	100.67	447.79	100.87	17.65
C1763-192-2750-S	1.696	43.09	100.67	447.79	95.54	16.72
C1763-192-2875-S	1.766	44.85	100.67	447.79	90.75	15.88
C1763-192-3000-S	1.835	46.61	100.67	447.79	86.41	15.12
C1763-192-3250-S	1.974	50.13	100.67	447.79	78.88	13.80
C1763-192-3500-S	2.112	53.65	100.67	447.79	72.55	12.70
C1763-192-3750-S	2.251	57.18	100.67	447.79	67.16	11.75
C1763-192-4000-S	2.390	60.70	100.67	447.79	62.52	10.94
C1763-192-4250-S	2.528	64.22	100.67	447.79	58.47	10.23
C1763-192-4500-S	2.667	67.74	100.67	447.79	54.92	9.61
C1763-192-4750-S	2.806	71.27	100.67	447.79	51.78	9.06
C1763-192-5000-S	2.944	74.79	100.67	447.79	48.97	8.57
C1763-192-5250-S	3.083	78.31	100.67	447.79	46.46	8.13
C1763-192-5500-S	3.222	81.83	100.67	447.79	44.19	7.73
C1763-192-5750-S	3.360	85.35	100.67	447.79	42.13	7.37
C1763-192-6000-S	3.499	88.88	100.67	447.79	40.25	7.04
C1763-192-6250-S	3.638	92.40	100.67	447.79	38.54	6.74
C1763-192-6500-S	3.776	95.92	100.67	447.79	36.96	6.47
C1763-192-6750-S	3.915	99.44	100.67	447.79	35.51	6.21
C1763-192-7000-S	4.054	102.97	100.67	447.79	34.17	5.98
C1763-192-7500-S*	4.417	112.18	100.67	447.79	32.65	5.71
C1763-192-8000-S*	4.694	119.23	100.67	447.79	30.45	5.33
C1763-192-8500-S*	4.971	126.27	100.67	447.79	28.53	4.99
C1763-192-9000-S*	5.249	133.32	100.67	447.79	26.84	4.70
C1763-192-9500-S*	5.526	140.36	100.67	447.79	25.33	4.43
C1763-207-2500-S	1.650	41.92	122.51	544.95	144.21	25.24
C1763-207-2625-S	1.725	43.80	122.51	544.95	136.06	23.81
C1763-207-2750-S	1.799	45.69	122.51	544.95	128.78	22.54
C1763-207-2875-S	1.873	47.57	122.51	544.95	122.24	21.39
C1763-207-3000-S	1.947	49.45	122.51	544.95	116.33	20.36
C1763-207-3250-S	2.095	53.21	122.51	544.95	106.07	18.56
C1763-207-3500-S	2.243	56.98	122.51	544.95	97.48	17.06
C1763-207-3750-S	2.391	60.74	122.51	544.95	90.18	15.78
C1763-207-4000-S	2.540	64.51	122.51	544.95	83.89	14.68
C1763-207-4250-S	2.688	68.27	122.51	544.95	78.42	13.72
C1763-207-4500-S	2.836	72.03	122.51	544.95	73.62	12.88
C1763-207-4750-S	2.984	75.80	122.51	544.95	69.38	12.14
C1763-207-5000-S	3.132	79.56	122.51	544.95	65.60	11.48
C1763-207-5250-S	3.281	83.33	122.51	544.95	62.21	10.89
C1763-207-5500-S	3.429	87.09	122.51	544.95	59.15	10.35
C1763-207-5750-S	3.577	90.85	122.51	544.95	56.38	9.87
C1763-207-6000-S	3.725	94.62	122.51	544.95	53.85	9.42
C1763-207-6250-S	3.873	98.38	122.51	544.95	51.55	9.02
C1763-207-6500-S	4.022	102.15	122.51	544.95	49.43	8.65
C1763-207-6750-S	4.170	105.91	122.51	544.95	47.48	8.31
C1763-207-7000-S	4.318	109.67	122.51	544.95	45.68	7.99
C1763-207-7500-S	4.614	117.20	122.51	544.95	42.45	7.43
C1763-207-8000-S	4.911	124.73	122.51	544.95	39.66	6.94
C1763-207-8500-S	5.207	132.26	122.51	544.95	37.20	6.51
C1763-207-9000-S	5.503	139.79	122.51	544.95	35.04	6.13
C1763-207-9500-S	5.800	147.31	122.51	544.95	33.11	5.79
C1763-225-2375-S	1.675	42.54	152.07	676.43	217.13	38.00
C1763-225-2500-S	1.754	44.56	152.07	676.43	203.89	35.68
C1763-225-2625-S	1.834	46.58	152.07	676.43	192.17	33.63
C1763-225-2750-S	1.913	48.60	152.07	676.43	181.72	31.80
C1763-225-2875-S	1.993	50.62	152.07	676.43	172.36	30.16
C1763-225-3000-S	2.072	52.63	152.07	676.43	163.91	28.68
C1763-225-3250-S	2.231	56.67	152.07	676.43	149.27	26.12
C1763-225-3500-S	2.390	60.71	152.07	676.43	137.04	23.98
C1763-225-3750-S	2.549	64.75	152.07	676.43	126.66	22.16
C1763-225-4000-S	2.708	68.79	152.07	676.43	117.74	20.60
C1763-225-4250-S	2.867	72.83	152.07	676.43	109.99	19.25

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1763-225-4500-M	**1.763**	**44.78**	**0.225**	**5.72**	**4.500**	**114.30**	**2.689**	**68.31**	**2.488**	**63.20**	**214.89**	**955.87**	**118.68**	**20.77**
C1763-225-4750-M	**1.763**	**44.78**	**0.225**	**5.72**	**4.750**	**120.65**	**2.828**	**71.82**	**2.613**	**66.36**	**214.89**	**955.87**	**111.78**	**19.56**
C1763-225-5000-M	**1.763**	**44.78**	**0.225**	**5.72**	**5.000**	**127.00**	**2.966**	**75.33**	**2.737**	**69.53**	**214.89**	**955.87**	**105.64**	**18.49**
C1763-225-5250-M	**1.763**	**44.78**	**0.225**	**5.72**	**5.250**	**133.35**	**3.104**	**78.84**	**2.862**	**72.69**	**214.89**	**955.87**	**100.14**	**17.52**
C1763-225-5500-M	**1.763**	**44.78**	**0.225**	**5.72**	**5.500**	**139.70**	**3.242**	**82.35**	**2.986**	**75.85**	**214.89**	**955.87**	**95.18**	**16.66**
C1763-225-5750-M	**1.763**	**44.78**	**0.225**	**5.72**	**5.750**	**146.05**	**3.381**	**85.87**	**3.111**	**79.01**	**214.89**	**955.87**	**90.69**	**15.87**
C1763-225-6000-M	**1.763**	**44.78**	**0.225**	**5.72**	**6.000**	**152.40**	**3.519**	**89.38**	**3.235**	**82.17**	**214.89**	**955.87**	**86.61**	**15.16**
C1763-225-6250-M	**1.763**	**44.78**	**0.225**	**5.72**	**6.250**	**158.75**	**3.657**	**92.89**	**3.359**	**85.33**	**214.89**	**955.87**	**82.87**	**14.50**
C1763-225-6500-M	**1.763**	**44.78**	**0.225**	**5.72**	**6.500**	**165.10**	**3.795**	**96.40**	**3.484**	**88.49**	**214.89**	**955.87**	**79.45**	**13.90**
C1763-225-6750-M	**1.763**	**44.78**	**0.225**	**5.72**	**6.750**	**171.45**	**3.933**	**99.91**	**3.608**	**91.65**	**214.89**	**955.87**	**76.30**	**13.35**
C1763-225-7000-M	**1.763**	**44.78**	**0.225**	**5.72**	**7.000**	**177.80**	**4.072**	**103.42**	**3.733**	**94.81**	**214.89**	**955.87**	**73.38**	**12.84**
C1763-225-7500-M	**1.763**	**44.78**	**0.225**	**5.72**	**7.500**	**190.50**	**4.348**	**110.44**	**3.982**	**101.13**	**214.89**	**955.87**	**68.18**	**11.93**
C1763-225-8000-M	**1.763**	**44.78**	**0.225**	**5.72**	**8.000**	**203.20**	**4.625**	**117.47**	**4.230**	**107.45**	**214.89**	**955.87**	**63.66**	**11.14**
C1763-225-8500-M	**1.763**	**44.78**	**0.225**	**5.72**	**8.500**	**215.90**	**4.901**	**124.49**	**4.479**	**113.77**	**214.89**	**955.87**	**59.71**	**10.45**
C1763-225-9000-M	**1.763**	**44.78**	**0.225**	**5.72**	**9.000**	**228.60**	**5.178**	**131.51**	**4.728**	**120.10**	**214.89**	**955.87**	**56.22**	**9.84**
C1763-225-9500-M	**1.763**	**44.78**	**0.225**	**5.72**	**9.500**	**241.30**	**5.454**	**138.53**	**4.977**	**126.42**	**214.89**	**955.87**	**53.11**	**9.29**
C1763-250-2375-M	**1.763**	**44.78**	**0.250**	**6.35**	**2.375**	**60.33**	**1.651**	**41.93**	**1.599**	**40.62**	**286.91**	**1276.24**	**396.19**	**69.33**
C1763-250-2500-M	**1.763**	**44.78**	**0.250**	**6.35**	**2.500**	**63.50**	**1.728**	**43.88**	**1.671**	**42.44**	**286.91**	**1276.24**	**371.43**	**65.00**
C1763-250-2625-M	**1.763**	**44.78**	**0.250**	**6.35**	**2.625**	**66.68**	**1.804**	**45.83**	**1.742**	**44.26**	**286.91**	**1276.24**	**349.58**	**61.18**
C1763-250-2750-M	**1.763**	**44.78**	**0.250**	**6.35**	**2.750**	**69.85**	**1.881**	**47.78**	**1.814**	**46.08**	**286.91**	**1276.24**	**330.16**	**57.78**
C1763-250-2875-M	**1.763**	**44.78**	**0.250**	**6.35**	**2.875**	**73.03**	**1.958**	**49.73**	**1.886**	**47.90**	**286.91**	**1276.24**	**312.78**	**54.74**
C1763-250-3000-M	**1.763**	**44.78**	**0.250**	**6.35**	**3.000**	**76.20**	**2.034**	**51.67**	**1.957**	**49.71**	**286.91**	**1276.24**	**297.14**	**52.00**
C1763-250-3250-M	**1.763**	**44.78**	**0.250**	**6.35**	**3.250**	**82.55**	**2.188**	**55.57**	**2.100**	**53.35**	**286.91**	**1276.24**	**270.13**	**47.27**
C1763-250-3500-M	**1.763**	**44.78**	**0.250**	**6.35**	**3.500**	**88.90**	**2.341**	**59.47**	**2.244**	**56.99**	**286.91**	**1276.24**	**247.62**	**43.33**
C1763-250-3750-M	**1.763**	**44.78**	**0.250**	**6.35**	**3.750**	**95.25**	**2.495**	**63.37**	**2.387**	**60.63**	**286.91**	**1276.24**	**228.57**	**40.00**
C1763-250-4000-M	**1.763**	**44.78**	**0.250**	**6.35**	**4.000**	**101.60**	**2.648**	**67.26**	**2.530**	**64.27**	**286.91**	**1276.24**	**212.24**	**37.14**
C1763-250-4250-M	**1.763**	**44.78**	**0.250**	**6.35**	**4.250**	**107.95**	**2.802**	**71.16**	**2.673**	**67.90**	**286.91**	**1276.24**	**198.09**	**34.67**
C1763-250-4500-M	**1.763**	**44.78**	**0.250**	**6.35**	**4.500**	**114.30**	**2.955**	**75.06**	**2.817**	**71.54**	**286.91**	**1276.24**	**185.71**	**32.50**
C1763-250-4750-M	**1.763**	**44.78**	**0.250**	**6.35**	**4.750**	**120.65**	**3.109**	**78.96**	**2.960**	**75.18**	**286.91**	**1276.24**	**174.79**	**30.59**
C1763-250-5000-M	**1.763**	**44.78**	**0.250**	**6.35**	**5.000**	**127.00**	**3.262**	**82.85**	**3.103**	**78.82**	**286.91**	**1276.24**	**165.08**	**28.89**
C1763-250-5250-M	**1.763**	**44.78**	**0.250**	**6.35**	**5.250**	**133.35**	**3.415**	**86.75**	**3.246**	**82.46**	**286.91**	**1276.24**	**156.39**	**27.37**
C1763-250-5500-M	**1.763**	**44.78**	**0.250**	**6.35**	**5.500**	**139.70**	**3.569**	**90.65**	**3.389**	**86.09**	**286.91**	**1276.24**	**148.57**	**26.00**
C1763-250-5750-M	**1.763**	**44.78**	**0.250**	**6.35**	**5.750**	**146.05**	**3.722**	**94.55**	**3.533**	**89.73**	**286.91**	**1276.24**	**141.50**	**24.76**
C1763-250-6000-M	**1.763**	**44.78**	**0.250**	**6.35**	**6.000**	**152.40**	**3.876**	**98.44**	**3.676**	**93.37**	**286.91**	**1276.24**	**135.06**	**23.64**
C1763-250-6250-M	**1.763**	**44.78**	**0.250**	**6.35**	**6.250**	**158.75**	**4.029**	**102.34**	**3.819**	**97.01**	**286.91**	**1276.24**	**129.19**	**22.61**
C1763-250-6500-M	**1.763**	**44.78**	**0.250**	**6.35**	**6.500**	**165.10**	**4.183**	**106.24**	**3.962**	**100.64**	**286.91**	**1276.24**	**123.81**	**21.67**
C1763-250-6750-M	**1.763**	**44.78**	**0.250**	**6.35**	**6.750**	**171.45**	**4.336**	**110.14**	**4.106**	**104.28**	**286.91**	**1276.24**	**118.86**	**20.80**
C1763-250-7000-M	**1.763**	**44.78**	**0.250**	**6.35**	**7.000**	**177.80**	**4.490**	**114.03**	**4.249**	**107.92**	**286.91**	**1276.24**	**114.29**	**20.00**
C1763-250-7500-M	**1.763**	**44.78**	**0.250**	**6.35**	**7.500**	**190.50**	**4.796**	**121.83**	**4.535**	**115.20**	**286.91**	**1276.24**	**106.12**	**18.57**
C1763-250-8000-M	**1.763**	**44.78**	**0.250**	**6.35**	**8.000**	**203.20**	**5.103**	**129.62**	**4.822**	**122.47**	**286.91**	**1276.24**	**99.05**	**17.33**
C1763-250-8500-M	**1.763**	**44.78**	**0.250**	**6.35**	**8.500**	**215.90**	**5.410**	**137.42**	**5.108**	**129.75**	**286.91**	**1276.24**	**92.86**	**16.25**
C1763-250-9000-M	**1.763**	**44.78**	**0.250**	**6.35**	**9.000**	**228.60**	**5.717**	**145.21**	**5.395**	**137.02**	**286.91**	**1276.24**	**87.40**	**15.29**
C1763-250-9500-M	**1.763**	**44.78**	**0.250**	**6.35**	**9.500**	**241.30**	**6.024**	**153.01**	**5.681**	**144.30**	**286.91**	**1276.24**	**82.54**	**14.44**
D13880	1.772	45.00	0.197	5.00	2.520	64.00	1.165	29.60	1.083	27.50	220.46	980.67	161.94	28.34
D13890	1.772	45.00	0.197	5.00	3.760	95.50	1.618	41.10	1.476	37.50	220.46	980.67	103.09	18.04
D13900	1.772	45.00	0.197	5.00	5.512	140.00	2.299	58.40	2.067	52.50	220.46	980.67	66.69	11.67
D13910	1.772	45.00	0.197	5.00	8.071	205.00	3.205	81.40	2.854	72.50	220.46	980.67	45.37	7.94
D13920	1.772	45.00	0.197	5.00	11.811	300.00	4.567	116.00	4.035	102.50	220.46	980.67	30.63	5.36
C1821-148-3000-M	**1.821**	**46.25**	**0.148**	**3.76**	**3.000**	**76.20**	**1.209**	**30.72**	**0.938**	**23.83**	**65.32**	**290.57**	**36.48**	**6.38**
C1821-148-3250-M	**1.821**	**46.25**	**0.148**	**3.76**	**3.250**	**82.55**	**1.294**	**32.87**	**0.996**	**25.30**	**65.32**	**290.57**	**33.40**	**5.84**
C1821-148-3500-M	**1.821**	**46.25**	**0.148**	**3.76**	**3.500**	**88.90**	**1.378**	**35.01**	**1.054**	**26.78**	**65.32**	**290.57**	**30.79**	**5.39**
C1821-148-3750-M	**1.821**	**46.25**	**0.148**	**3.76**	**3.750**	**95.25**	**1.463**	**37.16**	**1.112**	**28.25**	**65.32**	**290.57**	**28.56**	**5.00**
C1821-148-4000-M	**1.821**	**46.25**	**0.148**	**3.76**	**4.000**	**101.60**	**1.547**	**39.30**	**1.170**	**29.72**	**65.32**	**290.57**	**26.63**	**4.66**
C1821-148-4250-M	**1.821**	**46.25**	**0.148**	**3.76**	**4.250**	**107.95**	**1.632**	**41.45**	**1.228**	**31.20**	**65.32**	**290.57**	**24.95**	**4.37**
C1821-148-4500-M	**1.821**	**46.25**	**0.148**	**3.76**	**4.500**	**114.30**	**1.716**	**43.59**	**1.286**	**32.67**	**65.32**	**290.57**	**23.47**	**4.11**
C1821-148-4750-M	**1.821**	**46.25**	**0.148**	**3.76**	**4.750**	**120.65**	**1.801**	**45.74**	**1.344**	**34.14**	**65.32**	**290.57**	**22.15**	**3.88**
C1821-148-5000-M	**1.821**	**46.25**	**0.148**	**3.76**	**5.000**	**127.00**	**1.885**	**47.88**	**1.402**	**35.62**	**65.32**	**290.57**	**20.97**	**3.67**
C1821-148-5250-M	**1.821**	**46.25**	**0.148**	**3.76**	**5.250**	**133.35**	**1.970**	**50.03**	**1.460**	**37.09**	**65.32**	**290.57**	**19.91**	**3.48**
C1821-148-5500-M	**1.821**	**46.25**	**0.148**	**3.76**	**5.500**	**139.70**	**2.054**	**52.17**	**1.518**	**38.56**	**65.32**	**290.57**	**18.96**	**3.32**
C1821-148-5750-M	**1.821**	**46.25**	**0.148**	**3.76**	**5.750**	**146.05**	**2.139**	**54.32**	**1.576**	**40.04**	**65.32**	**290.57**	**18.09**	**3.17**
C1821-148-6000-M	**1.821**	**46.25**	**0.148**	**3.76**	**6.000**	**152.40**	**2.223**	**56.46**	**1.634**	**41.51**	**65.32**	**290.57**	**17.30**	**3.03**
C1821-148-6250-M	**1.821**	**46.25**	**0.148**	**3.76**	**6.250**	**158.75**	**2.307**	**58.61**	**1.692**	**42.98**	**65.32**	**290.57**	**16.57**	**2.90**
C1821-148-6500-M	**1.821**	**46.25**	**0.148**	**3.76**	**6.500**	**165.10**	**2.392**	**60.75**	**1.750**	**44.46**	**65.32**	**290.57**	**15.90**	**2.78**
C1821-148-6750-M	**1.821**	**46.25**	**0.148**	**3.76**	**6.750**	**171.45**	**2.476**	**62.90**	**1.808**	**45.93**	**65.32**	**290.57**	**15.29**	**2.67**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1763-225-4500-S	**3.027**	**76.87**	**152.07**	**676.43**	**103.20**	**18.06**
C1763-225-4750-S	**3.186**	**80.91**	**152.07**	**676.43**	**97.20**	**17.01**
C1763-225-5000-S	**3.345**	**84.95**	**152.07**	**676.43**	**91.86**	**16.08**
C1763-225-5250-S	**3.504**	**88.99**	**152.07**	**676.43**	**87.08**	**15.24**
C1763-225-5500-S	**3.663**	**93.03**	**152.07**	**676.43**	**82.77**	**14.48**
C1763-225-5750-S	**3.822**	**97.07**	**152.07**	**676.43**	**78.86**	**13.80**
C1763-225-6000-S	**3.981**	**101.11**	**152.07**	**676.43**	**75.31**	**13.18**
C1763-225-6250-S	**4.140**	**105.15**	**152.07**	**676.43**	**72.06**	**12.61**
C1763-225-6500-S	**4.299**	**109.19**	**152.07**	**676.43**	**69.09**	**12.09**
C1763-225-6750-S	**4.458**	**113.23**	**152.07**	**676.43**	**66.34**	**11.61**
C1763-225-7000-S	**4.617**	**117.27**	**152.07**	**676.43**	**63.81**	**11.17**
C1763-225-7500-S	**4.935**	**125.35**	**152.07**	**676.43**	**59.29**	**10.38**
C1763-225-8000-S	**5.253**	**133.43**	**152.07**	**676.43**	**55.36**	**9.69**
C1763-225-8500-S	**5.571**	**141.51**	**152.07**	**676.43**	**51.92**	**9.09**
C1763-225-9000-S	**5.889**	**149.59**	**152.07**	**676.43**	**48.89**	**8.55**
C1763-225-9500-S	**6.207**	**157.67**	**152.07**	**676.43**	**46.18**	**8.08**
C1763-250-2375-S	**1.796**	**45.63**	**199.31**	**886.59**	**344.51**	**60.29**
C1763-250-2500-S	**1.883**	**47.83**	**199.31**	**886.59**	**322.98**	**56.52**
C1763-250-2625-S	**1.969**	**50.02**	**199.31**	**886.59**	**303.98**	**53.20**
C1763-250-2750-S	**2.056**	**52.22**	**199.31**	**886.59**	**287.09**	**50.24**
C1763-250-2875-S	**2.142**	**54.41**	**199.31**	**886.59**	**271.98**	**47.60**
C1763-250-3000-S	**2.229**	**56.61**	**199.31**	**886.59**	**258.38**	**45.22**
C1763-250-3250-S	**2.401**	**61.00**	**199.31**	**886.59**	**234.90**	**41.11**
C1763-250-3500-S	**2.574**	**65.39**	**199.31**	**886.59**	**215.32**	**37.68**
C1763-250-3750-S	**2.747**	**69.78**	**199.31**	**886.59**	**198.76**	**34.78**
C1763-250-4000-S	**2.920**	**74.17**	**199.31**	**886.59**	**184.56**	**32.30**
C1763-250-4250-S	**3.093**	**78.56**	**199.31**	**886.59**	**172.26**	**30.14**
C1763-250-4500-S	**3.266**	**82.95**	**199.31**	**886.59**	**161.49**	**28.26**
C1763-250-4750-S	**3.439**	**87.34**	**199.31**	**886.59**	**151.99**	**26.60**
C1763-250-5000-S	**3.612**	**91.73**	**199.31**	**886.59**	**143.55**	**25.12**
C1763-250-5250-S	**3.784**	**96.12**	**199.31**	**886.59**	**135.99**	**23.80**
C1763-250-5500-S	**3.957**	**100.51**	**199.31**	**886.59**	**129.19**	**22.61**
C1763-250-5750-S	**4.130**	**104.90**	**199.31**	**886.59**	**123.04**	**21.53**
C1763-250-6000-S	**4.303**	**109.29**	**199.31**	**886.59**	**117.45**	**20.55**
C1763-250-6250-S	**4.476**	**113.69**	**199.31**	**886.59**	**112.34**	**19.66**
C1763-250-6500-S	**4.649**	**118.08**	**199.31**	**886.59**	**107.66**	**18.84**
C1763-250-6750-S	**4.822**	**122.47**	**199.31**	**886.59**	**103.35**	**18.09**
C1763-250-7000-S	**4.994**	**126.86**	**199.31**	**886.59**	**99.38**	**17.39**
C1763-250-7500-S	**5.340**	**135.64**	**199.31**	**886.59**	**92.28**	**16.15**
C1763-250-8000-S	**5.686**	**144.42**	**199.31**	**886.59**	**86.13**	**15.07**
C1763-250-8500-S	**6.032**	**153.20**	**199.31**	**886.59**	**80.75**	**14.13**
C1763-250-9000-S	**6.377**	**161.98**	**199.31**	**886.59**	**76.00**	**13.30**
C1763-250-9500-S	**6.723**	**170.76**	**199.31**	**886.59**	**71.77**	**12.56**
D23880	1.165	29.60	183.72	817.23	134.91	23.61
D23890	1.618	41.10	183.72	817.23	85.89	15.03
D23900	2.299	58.40	183.72	817.23	55.54	9.72
D23910	3.205	81.40	183.72	817.23	37.77	6.61
D23920	4.567	116.00	183.72	817.23	25.49	4.46
C1821-148-3000-S	**1.455**	**36.95**	**49.02**	**218.07**	**31.72**	**5.55**
C1821-148-3250-S	**1.562**	**39.67**	**49.02**	**218.07**	**29.04**	**5.08**
C1821-148-3500-S	**1.669**	**42.39**	**49.02**	**218.07**	**26.77**	**4.69**
C1821-148-3750-S	**1.776**	**45.11**	**49.02**	**218.07**	**24.84**	**4.35**
C1821-148-4000-S	**1.883**	**47.83**	**49.02**	**218.07**	**23.16**	**4.05**
C1821-148-4250-S	**1.990**	**50.55**	**49.02**	**218.07**	**21.70**	**3.80**
C1821-148-4500-S	**2.097**	**53.27**	**49.02**	**218.07**	**20.41**	**3.57**
C1821-148-4750-S	**2.205**	**56.00**	**49.02**	**218.07**	**19.26**	**3.37**
C1821-148-5000-S	**2.312**	**58.72**	**49.02**	**218.07**	**18.24**	**3.19**
C1821-148-5250-S	**2.419**	**61.44**	**49.02**	**218.07**	**17.32**	**3.03**
C1821-148-5500-S	**2.526**	**64.16**	**49.02**	**218.07**	**16.48**	**2.88**
C1821-148-5750-S	**2.633**	**66.88**	**49.02**	**218.07**	**15.73**	**2.75**
C1821-148-6000-S	**2.740**	**69.60**	**49.02**	**218.07**	**15.04**	**2.63**
C1821-148-6250-S	**2.847**	**72.32**	**49.02**	**218.07**	**14.41**	**2.52**
C1821-148-6500-S	**2.954**	**75.04**	**49.02**	**218.07**	**13.83**	**2.42**
C1821-148-6750-S	**3.062**	**77.76**	**49.02**	**218.07**	**13.29**	**2.33**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1821-148-7000-M	1.821	46.25	0.148	3.76	7.000	177.80	2.561	65.04	1.866	47.40	65.32	290.57	14.72	2.58
C1821-148-7500-M	1.821	46.25	0.148	3.76	7.500	190.50	2.730	69.33	1.982	50.35	65.32	290.57	13.69	2.40
C1821-148-8000-M	1.821	46.25	0.148	3.76	8.000	203.20	2.899	73.62	2.098	53.30	65.32	290.57	12.81	2.24
C1821-148-8500-M	1.821	46.25	0.148	3.76	8.500	215.90	3.068	77.92	2.214	56.24	65.32	290.57	12.02	2.10
C1821-148-9000-M	1.821	46.25	0.148	3.76	9.000	228.60	3.236	82.21	2.330	59.19	65.32	290.57	11.33	1.98
C1821-148-9500-M	1.821	46.25	0.148	3.76	9.500	241.30	3.405	86.50	2.446	62.14	65.32	290.57	10.72	1.88
C1821-162-2875-M	1.821	46.25	0.162	4.12	2.875	73.03	1.275	32.39	1.043	26.48	84.00	373.66	52.51	9.19
C1821-162-3000-M	1.821	46.25	0.162	4.12	3.000	76.20	1.322	33.58	1.077	27.36	84.00	373.66	50.06	8.76
C1821-162-3250-M	1.821	46.25	0.162	4.12	3.250	82.55	1.415	35.94	1.146	29.11	84.00	373.66	45.78	8.01
C1821-162-3500-M	1.821	46.25	0.162	4.12	3.500	88.90	1.508	38.31	1.215	30.85	84.00	373.66	42.18	7.38
C1821-162-3750-M	1.821	46.25	0.162	4.12	3.750	95.25	1.602	40.68	1.284	32.60	84.00	373.66	39.10	6.84
C1821-162-4000-M	1.821	46.25	0.162	4.12	4.000	101.60	1.695	43.05	1.352	34.35	84.00	373.66	36.44	6.38
C1821-162-4250-M	1.821	46.25	0.162	4.12	4.250	107.95	1.788	45.42	1.421	36.10	84.00	373.66	34.12	5.97
C1821-162-4500-M	1.821	46.25	0.162	4.12	4.500	114.30	1.881	47.78	1.490	37.85	84.00	373.66	32.08	5.61
C1821-162-4750-M	1.821	46.25	0.162	4.12	4.750	120.65	1.974	50.15	1.559	39.60	84.00	373.66	30.27	5.30
C1821-162-5000-M	1.821	46.25	0.162	4.12	5.000	127.00	2.068	52.52	1.628	41.34	84.00	373.66	28.65	5.01
C1821-162-5250-M	1.821	46.25	0.162	4.12	5.250	133.35	2.161	54.89	1.697	43.09	84.00	373.66	27.19	4.76
C1821-162-5500-M	1.821	46.25	0.162	4.12	5.500	139.70	2.254	57.25	1.765	44.84	84.00	373.66	25.88	4.53
C1821-162-5750-M	1.821	46.25	0.162	4.12	5.750	146.05	2.347	59.62	1.834	46.59	84.00	373.66	24.69	4.32
C1821-162-6000-M	1.821	46.25	0.162	4.12	6.000	152.40	2.441	61.99	1.903	48.34	84.00	373.66	23.60	4.13
C1821-162-6250-M	1.821	46.25	0.162	4.12	6.250	158.75	2.534	64.36	1.972	50.09	84.00	373.66	22.60	3.96
C1821-162-6500-M	1.821	46.25	0.162	4.12	6.500	165.10	2.627	66.73	2.041	51.83	84.00	373.66	21.69	3.80
C1821-162-6750-M	1.821	46.25	0.162	4.12	6.750	171.45	2.720	69.09	2.110	53.58	84.00	373.66	20.85	3.65
C1821-162-7000-M	1.821	46.25	0.162	4.12	7.000	177.80	2.813	71.46	2.178	55.33	84.00	373.66	20.07	3.51
C1821-162-7500-M	1.821	46.25	0.162	4.12	7.500	190.50	3.000	76.20	2.316	58.83	84.00	373.66	18.67	3.27
C1821-162-8000-M*	1.821	46.25	0.162	4.12	8.000	203.20	3.288	83.51	2.579	65.51	84.00	373.66	17.83	3.12
C1821-162-8500-M*	1.821	46.25	0.162	4.12	8.500	215.90	3.474	88.25	2.717	69.01	84.00	373.66	16.72	2.93
C1821-162-9000-M*	1.821	46.25	0.162	4.12	9.000	228.60	3.661	92.99	2.855	72.51	84.00	373.66	15.73	2.75
C1821-162-9500-M*	1.821	46.25	0.162	4.12	9.500	241.30	3.847	97.72	2.992	76.00	84.00	373.66	14.86	2.60
C1821-177-2750-M	1.821	46.25	0.177	4.50	2.750	69.85	1.340	34.04	1.146	29.11	107.42	477.84	76.20	13.34
C1821-177-2875-M	1.821	46.25	0.177	4.50	2.875	73.03	1.392	35.35	1.187	30.14	107.42	477.84	72.43	12.67
C1821-177-3000-M	1.821	46.25	0.177	4.50	3.000	76.20	1.443	36.66	1.227	31.16	107.42	477.84	69.00	12.08
C1821-177-3250-M	1.821	46.25	0.177	4.50	3.250	82.55	1.546	39.27	1.308	33.22	107.42	477.84	63.05	11.03
C1821-177-3500-M	1.821	46.25	0.177	4.50	3.500	88.90	1.649	41.89	1.389	35.27	107.42	477.84	58.04	10.16
C1821-177-3750-M	1.821	46.25	0.177	4.50	3.750	95.25	1.752	44.50	1.469	37.32	107.42	477.84	53.77	9.41
C1821-177-4000-M	1.821	46.25	0.177	4.50	4.000	101.60	1.855	47.11	1.550	39.37	107.42	477.84	50.08	8.76
C1821-177-4250-M	1.821	46.25	0.177	4.50	4.250	107.95	1.958	49.73	1.631	41.43	107.42	477.84	46.87	8.20
C1821-177-4500-M	1.821	46.25	0.177	4.50	4.500	114.30	2.061	52.34	1.712	43.48	107.42	477.84	44.04	7.71
C1821-177-4750-M	1.821	46.25	0.177	4.50	4.750	120.65	2.164	54.96	1.793	45.53	107.42	477.84	41.53	7.27
C1821-177-5000-M	1.821	46.25	0.177	4.50	5.000	127.00	2.267	57.57	1.873	47.58	107.42	477.84	39.30	6.88
C1821-177-5250-M	1.821	46.25	0.177	4.50	5.250	133.35	2.369	60.18	1.954	49.64	107.42	477.84	37.29	6.53
C1821-177-5500-M	1.821	46.25	0.177	4.50	5.500	139.70	2.472	62.80	2.035	51.69	107.42	477.84	35.48	6.21
C1821-177-5750-M	1.821	46.25	0.177	4.50	5.750	146.05	2.575	65.41	2.116	53.74	107.42	477.84	33.84	5.92
C1821-177-6000-M	1.821	46.25	0.177	4.50	6.000	152.40	2.678	68.03	2.197	55.79	107.42	477.84	32.34	5.66
C1821-177-6250-M	1.821	46.25	0.177	4.50	6.250	158.75	2.781	70.64	2.277	57.85	107.42	477.84	30.97	5.42
C1821-177-6500-M	1.821	46.25	0.177	4.50	6.500	165.10	2.884	73.25	2.358	59.90	107.42	477.84	29.71	5.20
C1821-177-6750-M*	1.821	46.25	0.177	4.50	6.750	171.45	3.091	78.51	2.568	65.22	107.42	477.84	29.36	5.14
C1821-177-7000-M*	1.821	46.25	0.177	4.50	7.000	177.80	3.194	81.13	2.648	67.27	107.42	477.84	28.23	4.94
C1821-177-7500-M*	1.821	46.25	0.177	4.50	7.500	190.50	3.400	86.35	2.810	71.38	107.42	477.84	26.20	4.59
C1821-177-8000-M*	1.821	46.25	0.177	4.50	8.000	203.20	3.606	91.58	2.972	75.48	107.42	477.84	24.45	4.28
C1821-177-8500-M*	1.821	46.25	0.177	4.50	8.500	215.90	3.811	96.81	3.133	79.58	107.42	477.84	22.91	4.01
C1821-177-9000-M*	1.821	46.25	0.177	4.50	9.000	228.60	4.017	102.04	3.295	83.69	107.42	477.84	21.56	3.77
C1821-177-9500-M*	1.821	46.25	0.177	4.50	9.500	241.30	4.223	107.27	3.456	87.79	107.42	477.84	20.36	3.56
C1821-192-2625-M	1.821	46.25	0.192	4.88	2.625	66.68	1.394	35.42	1.236	31.40	134.59	598.69	109.38	19.14
C1821-192-2750-M	1.821	46.25	0.192	4.88	2.750	69.85	1.451	36.85	1.283	32.58	134.59	598.69	103.60	18.13
C1821-192-2875-M	1.821	46.25	0.192	4.88	2.875	73.03	1.507	38.28	1.329	33.76	134.59	598.69	98.40	17.22
C1821-192-3000-M	1.821	46.25	0.192	4.88	3.000	76.20	1.564	39.71	1.376	34.94	134.59	598.69	93.70	16.40
C1821-192-3250-M	1.821	46.25	0.192	4.88	3.250	82.55	1.676	42.58	1.468	37.30	134.59	598.69	85.52	14.97
C1821-192-3500-M	1.821	46.25	0.192	4.88	3.500	88.90	1.789	45.44	1.561	39.66	134.59	598.69	78.66	13.77
C1821-192-3750-M	1.821	46.25	0.192	4.88	3.750	95.25	1.902	48.30	1.654	42.02	134.59	598.69	72.82	12.74
C1821-192-4000-M	1.821	46.25	0.192	4.88	4.000	101.60	2.014	51.17	1.747	44.38	134.59	598.69	67.79	11.86
C1821-192-4250-M	1.821	46.25	0.192	4.88	4.250	107.95	2.127	54.03	1.840	46.74	134.59	598.69	63.40	11.10
C1821-192-4500-M	1.821	46.25	0.192	4.88	4.500	114.30	2.240	56.89	1.933	49.10	134.59	598.69	59.55	10.42
C1821-192-4750-M	1.821	46.25	0.192	4.88	4.750	120.65	2.353	59.76	2.026	51.46	134.59	598.69	56.14	9.82

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1821-148-7000-S	3.169	80.48	49.02	218.07	12.80	2.24
C1821-148-7500-S	3.383	85.93	49.02	218.07	11.91	2.08
C1821-148-8000-S	3.597	91.37	49.02	218.07	11.14	1.95
C1821-148-8500-S	3.811	96.81	49.02	218.07	10.46	1.83
C1821-148-9000-S	4.026	102.25	49.02	218.07	9.86	1.72
C1821-148-9500-S	4.240	107.69	49.02	218.07	9.32	1.63
C1821-162-2875-S	1.509	38.33	62.37	277.43	45.66	7.99
C1821-162-3000-S	1.567	39.81	62.37	277.43	43.53	7.62
C1821-162-3250-S	1.683	42.76	62.37	277.43	39.81	6.97
C1821-162-3500-S	1.799	45.71	62.37	277.43	36.68	6.42
C1821-162-3750-S	1.916	48.66	62.37	277.43	34.00	5.95
C1821-162-4000-S	2.032	51.61	62.37	277.43	31.69	5.55
C1821-162-4250-S	2.148	54.56	62.37	277.43	29.67	5.19
C1821-162-4500-S	2.264	57.51	62.37	277.43	27.89	4.88
C1821-162-4750-S	2.380	60.46	62.37	277.43	26.32	4.61
C1821-162-5000-S	2.496	63.41	62.37	277.43	24.91	4.36
C1821-162-5250-S	2.612	66.36	62.37	277.43	23.65	4.14
C1821-162-5500-S	2.729	69.31	62.37	277.43	22.50	3.94
C1821-162-5750-S	2.845	72.26	62.37	277.43	21.47	3.76
C1821-162-6000-S	2.961	75.21	62.37	277.43	20.52	3.59
C1821-162-6250-S	3.077	78.16	62.37	277.43	19.66	3.44
C1821-162-6500-S	3.193	81.11	62.37	277.43	18.86	3.30
C1821-162-6750-S	3.309	84.06	62.37	277.43	18.13	3.17
C1821-162-7000-S	3.425	87.01	62.37	277.43	17.45	3.05
C1821-162-7500-S	3.658	92.90	62.37	277.43	16.23	2.84
C1821-162-8000-S*	3.977	101.01	62.37	277.43	15.50	2.71
C1821-162-8500-S*	4.209	106.91	62.37	277.43	14.54	2.54
C1821-162-9000-S*	4.441	112.81	62.37	277.43	13.68	2.39
C1821-162-9500-S*	4.674	118.71	62.37	277.43	12.92	2.26
C1821-177-2750-S	1.560	39.63	78.84	350.71	66.26	11.60
C1821-177-2875-S	1.623	41.23	78.84	350.71	62.98	11.02
C1821-177-3000-S	1.686	42.82	78.84	350.71	60.00	10.50
C1821-177-3250-S	1.812	46.02	78.84	350.71	54.82	9.59
C1821-177-3500-S	1.938	49.22	78.84	350.71	50.47	8.83
C1821-177-3750-S	2.064	52.41	78.84	350.71	46.75	8.18
C1821-177-4000-S	2.189	55.61	78.84	350.71	43.55	7.62
C1821-177-4250-S	2.315	58.81	78.84	350.71	40.75	7.13
C1821-177-4500-S	2.441	62.00	78.84	350.71	38.30	6.70
C1821-177-4750-S	2.567	65.20	78.84	350.71	36.12	6.32
C1821-177-5000-S	2.693	68.40	78.84	350.71	34.17	5.98
C1821-177-5250-S	2.819	71.59	78.84	350.71	32.43	5.67
C1821-177-5500-S	2.945	74.79	78.84	350.71	30.85	5.40
C1821-177-5750-S	3.070	77.99	78.84	350.71	29.42	5.15
C1821-177-6000-S	3.196	81.18	78.84	350.71	28.12	4.92
C1821-177-6250-S	3.322	84.38	78.84	350.71	26.93	4.71
C1821-177-6500-S	3.448	87.58	78.84	350.71	25.83	4.52
C1821-177-6750-S*	3.662	93.01	78.84	350.71	25.53	4.47
C1821-177-7000-S*	3.788	96.20	78.84	350.71	24.54	4.30
C1821-177-7500-S*	4.039	102.60	78.84	350.71	22.78	3.99
C1821-177-8000-S*	4.291	108.99	78.84	350.71	21.26	3.72
C1821-177-8500-S*	4.543	115.38	78.84	350.71	19.92	3.49
C1821-177-9000-S*	4.794	121.78	78.84	350.71	18.75	3.28
C1821-177-9500-S*	5.046	128.17	78.84	350.71	17.70	3.10
C1821-192-2625-S	1.598	40.60	97.65	434.38	95.11	16.64
C1821-192-2750-S	1.666	42.32	97.65	434.38	90.08	15.76
C1821-192-2875-S	1.734	44.04	97.65	434.38	85.56	14.97
C1821-192-3000-S	1.801	45.76	97.65	434.38	81.48	14.26
C1821-192-3250-S	1.937	49.20	97.65	434.38	74.37	13.01
C1821-192-3500-S	2.072	52.64	97.65	434.38	68.40	11.97
C1821-192-3750-S	2.208	56.08	97.65	434.38	63.32	11.08
C1821-192-4000-S	2.343	59.52	97.65	434.38	58.94	10.32
C1821-192-4250-S	2.479	62.96	97.65	434.38	55.13	9.65
C1821-192-4500-S	2.614	66.40	97.65	434.38	51.78	9.06
C1821-192-4750-S	2.750	69.84	97.65	434.38	48.82	8.54

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1821-192-5000-M	1.821	46.25	0.192	4.88	5.000	127.00	2.465	62.62	2.119	53.82	134.59	598.69	53.10	9.29
C1821-192-5250-M	1.821	46.25	0.192	4.88	5.250	133.35	2.578	65.48	2.212	56.18	134.59	598.69	50.37	8.82
C1821-192-5500-M	1.821	46.25	0.192	4.88	5.500	139.70	2.691	68.35	2.305	58.54	134.59	598.69	47.91	8.38
C1821-192-5750-M	1.821	46.25	0.192	4.88	5.750	146.05	2.803	71.21	2.398	60.90	134.59	598.69	45.68	7.99
C1821-192-6000-M	1.821	46.25	0.192	4.88	6.000	152.40	2.916	74.07	2.491	63.26	134.59	598.69	43.65	7.64
C1821-192-6250-M	1.821	46.25	0.192	4.88	6.250	158.75	3.029	76.93	2.584	65.62	134.59	598.69	41.79	7.31
C1821-192-6500-M	1.821	46.25	0.192	4.88	6.500	165.10	3.142	79.80	2.676	67.98	134.59	598.69	40.08	7.01
C1821-192-6750-M	1.821	46.25	0.192	4.88	6.750	171.45	3.254	82.66	2.769	70.34	134.59	598.69	38.50	6.74
C1821-192-7000-M*	1.821	46.25	0.192	4.88	7.000	177.80	3.473	88.20	2.993	76.01	134.59	598.69	38.16	6.68
C1821-192-7500-M*	1.821	46.25	0.192	4.88	7.500	190.50	3.698	93.93	3.178	80.73	134.59	598.69	35.40	6.20
C1821-192-8000-M*	1.821	46.25	0.192	4.88	8.000	203.20	3.923	99.65	3.364	85.45	134.59	598.69	33.02	5.78
C1821-192-8500-M*	1.821	46.25	0.192	4.88	8.500	215.90	4.149	105.38	3.550	90.17	134.59	598.69	30.93	5.41
C1821-192-9000-M*	1.821	46.25	0.192	4.88	9.000	228.60	4.374	111.11	3.736	94.89	134.59	598.69	29.10	5.09
C1821-192-9500-M*	1.821	46.25	0.192	4.88	9.500	241.30	4.600	116.83	3.922	99.61	134.59	598.69	27.47	4.81
C1821-207-2500-M	1.821	46.25	0.207	5.26	2.500	63.50	1.436	36.48	1.311	33.29	165.72	737.14	155.75	27.26
C1821-207-2625-M	1.821	46.25	0.207	5.26	2.625	66.68	1.497	38.03	1.363	34.62	165.72	737.14	146.95	25.72
C1821-207-2750-M	1.821	46.25	0.207	5.26	2.750	69.85	1.559	39.59	1.416	35.96	165.72	737.14	139.09	24.34
C1821-207-2875-M	1.821	46.25	0.207	5.26	2.875	73.03	1.620	41.14	1.468	37.29	165.72	737.14	132.02	23.10
C1821-207-3000-M	1.821	46.25	0.207	5.26	3.000	76.20	1.681	42.70	1.521	38.62	165.72	737.14	125.64	21.99
C1821-207-3250-M	1.821	46.25	0.207	5.26	3.250	82.55	1.804	45.81	1.626	41.29	165.72	737.14	114.56	20.05
C1821-207-3500-M	1.821	46.25	0.207	5.26	3.500	88.90	1.926	48.92	1.731	43.96	165.72	737.14	105.28	18.42
C1821-207-3750-M	1.821	46.25	0.207	5.26	3.750	95.25	2.048	52.03	1.836	46.62	165.72	737.14	97.39	17.04
C1821-207-4000-M	1.821	46.25	0.207	5.26	4.000	101.60	2.171	55.14	1.941	49.29	165.72	737.14	90.60	15.86
C1821-207-4250-M	1.821	46.25	0.207	5.26	4.250	107.95	2.293	58.25	2.046	51.96	165.72	737.14	84.70	14.82
C1821-207-4500-M	1.821	46.25	0.207	5.26	4.500	114.30	2.416	61.36	2.151	54.62	165.72	737.14	79.52	13.92
C1821-207-4750-M	1.821	46.25	0.207	5.26	4.750	120.65	2.538	64.48	2.256	57.29	165.72	737.14	74.93	13.11
C1821-207-5000-M	1.821	46.25	0.207	5.26	5.000	127.00	2.661	67.59	2.361	59.96	165.72	737.14	70.85	12.40
C1821-207-5250-M	1.821	46.25	0.207	5.26	5.250	133.35	2.783	70.70	2.466	62.62	165.72	737.14	67.18	11.76
C1821-207-5500-M	1.821	46.25	0.207	5.26	5.500	139.70	2.906	73.81	2.571	65.29	165.72	737.14	63.88	11.18
C1821-207-5750-M	1.821	46.25	0.207	5.26	5.750	146.05	3.028	76.92	2.675	67.96	165.72	737.14	60.89	10.66
C1821-207-6000-M	1.821	46.25	0.207	5.26	6.000	152.40	3.151	80.03	2.780	70.62	165.72	737.14	58.16	10.18
C1821-207-6250-M	1.821	46.25	0.207	5.26	6.250	158.75	3.273	83.14	2.885	73.29	165.72	737.14	55.67	9.74
C1821-207-6500-M	1.821	46.25	0.207	5.26	6.500	165.10	3.396	86.25	2.990	75.96	165.72	737.14	53.39	9.34
C1821-207-6750-M	1.821	46.25	0.207	5.26	6.750	171.45	3.518	89.37	3.095	78.62	165.72	737.14	51.28	8.97
C1821-207-7000-M	1.821	46.25	0.207	5.26	7.000	177.80	3.641	92.48	3.200	81.29	165.72	737.14	49.33	8.63
C1821-207-7500-M	1.821	46.25	0.207	5.26	7.500	190.50	3.886	98.70	3.410	86.62	165.72	737.14	45.85	8.02
C1821-207-8000-M	1.821	46.25	0.207	5.26	8.000	203.20	4.131	104.92	3.620	91.96	165.72	737.14	42.83	7.50
C1821-207-8500-M	1.821	46.25	0.207	5.26	8.500	215.90	4.376	111.14	3.830	97.29	165.72	737.14	40.18	7.03
C1821-207-9000-M*	1.821	46.25	0.207	5.26	9.000	228.60	4.726	120.05	4.171	105.94	165.72	737.14	38.78	6.79
C1821-207-9500-M*	1.821	46.25	0.207	5.26	9.500	241.30	4.971	126.27	4.381	111.27	165.72	737.14	36.59	6.40
C1821-225-2500-M	1.821	46.25	0.225	5.72	2.500	63.50	1.548	39.33	1.449	36.81	208.57	927.76	219.16	38.35
C1821-225-2625-M	1.821	46.25	0.225	5.72	2.625	66.68	1.615	41.03	1.509	38.33	208.57	927.76	206.56	36.15
C1821-225-2750-M	1.821	46.25	0.225	5.72	2.750	69.85	1.682	42.73	1.569	39.84	208.57	927.76	195.34	34.18
C1821-225-2875-M	1.821	46.25	0.225	5.72	2.875	73.03	1.749	44.43	1.628	41.35	208.57	927.76	185.27	32.42
C1821-225-3000-M	1.821	46.25	0.225	5.72	3.000	76.20	1.816	46.13	1.688	42.87	208.57	927.76	176.19	30.83
C1821-225-3250-M	1.821	46.25	0.225	5.72	3.250	82.55	1.950	49.53	1.807	45.89	208.57	927.76	160.46	28.08
C1821-225-3500-M	1.821	46.25	0.225	5.72	3.500	88.90	2.084	52.94	1.926	48.92	208.57	927.76	147.30	25.78
C1821-225-3750-M	1.821	46.25	0.225	5.72	3.750	95.25	2.218	56.34	2.045	51.94	208.57	927.76	136.15	23.83
C1821-225-4000-M	1.821	46.25	0.225	5.72	4.000	101.60	2.352	59.74	2.164	54.97	208.57	927.76	126.56	22.15
C1821-225-4250-M	1.821	46.25	0.225	5.72	4.250	107.95	2.486	63.14	2.283	58.00	208.57	927.76	118.23	20.69
C1821-225-4500-M	1.821	46.25	0.225	5.72	4.500	114.30	2.620	66.54	2.402	61.02	208.57	927.76	110.93	19.41
C1821-225-4750-M	1.821	46.25	0.225	5.72	4.750	120.65	2.754	69.95	2.522	64.05	208.57	927.76	104.48	18.28
C1821-225-5000-M	1.821	46.25	0.225	5.72	5.000	127.00	2.888	73.35	2.641	67.07	208.57	927.76	98.74	17.28
C1821-225-5250-M	1.821	46.25	0.225	5.72	5.250	133.35	3.022	76.75	2.760	70.10	208.57	927.76	93.60	16.38
C1821-225-5500-M	1.821	46.25	0.225	5.72	5.500	139.70	3.156	80.15	2.879	73.13	208.57	927.76	88.97	15.57
C1821-225-5750-M	1.821	46.25	0.225	5.72	5.750	146.05	3.290	83.56	2.998	76.15	208.57	927.76	84.77	14.83
C1821-225-6000-M	1.821	46.25	0.225	5.72	6.000	152.40	3.424	86.96	3.117	79.18	208.57	927.76	80.95	14.17
C1821-225-6250-M	1.821	46.25	0.225	5.72	6.250	158.75	3.557	90.36	3.236	82.20	208.57	927.76	77.46	13.56
C1821-225-6500-M	1.821	46.25	0.225	5.72	6.500	165.10	3.691	93.76	3.356	85.23	208.57	927.76	74.26	13.00
C1821-225-6750-M	1.821	46.25	0.225	5.72	6.750	171.45	3.825	97.16	3.475	88.26	208.57	927.76	71.31	12.48
C1821-225-7000-M	1.821	46.25	0.225	5.72	7.000	177.80	3.959	100.57	3.594	91.28	208.57	927.76	68.59	12.00
C1821-225-7500-M	1.821	46.25	0.225	5.72	7.500	190.50	4.227	107.37	3.832	97.34	208.57	927.76	63.73	11.15
C1821-225-8000-M	1.821	46.25	0.225	5.72	8.000	203.20	4.495	114.17	4.070	103.39	208.57	927.76	59.51	10.41
C1821-225-8500-M	1.821	46.25	0.225	5.72	8.500	215.90	4.763	120.98	4.309	109.44	208.57	927.76	55.81	9.77

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1821-192-5000-S	2.885	73.28	97.65	434.38	46.17	8.08
C1821-192-5250-S	3.021	76.72	97.65	434.38	43.80	7.67
C1821-192-5500-S	3.156	80.16	97.65	434.38	41.66	7.29
C1821-192-5750-S	3.291	83.60	97.65	434.38	39.72	6.95
C1821-192-6000-S	3.427	87.04	97.65	434.38	37.95	6.64
C1821-192-6250-S	3.562	90.48	97.65	434.38	36.33	6.36
C1821-192-6500-S	3.698	93.93	97.65	434.38	34.85	6.10
C1821-192-6750-S	3.833	97.37	97.65	434.38	33.48	5.86
C1821-192-7000-S*	4.057	103.04	97.65	434.38	33.18	5.81
C1821-192-7500-S*	4.328	109.92	97.65	434.38	30.78	5.39
C1821-192-8000-S*	4.599	116.80	97.65	434.38	28.71	5.02
C1821-192-8500-S*	4.869	123.68	97.65	434.38	26.90	4.71
C1821-192-9000-S*	5.140	130.57	97.65	434.38	25.30	4.43
C1821-192-9500-S*	5.411	137.45	97.65	434.38	23.88	4.18
C1821-207-2500-S	1.622	41.21	118.87	528.76	135.44	23.70
C1821-207-2625-S	1.695	43.05	118.87	528.76	127.78	22.36
C1821-207-2750-S	1.767	44.89	118.87	528.76	120.94	21.17
C1821-207-2875-S	1.840	46.72	118.87	528.76	114.80	20.09
C1821-207-3000-S	1.912	48.56	118.87	528.76	109.25	19.12
C1821-207-3250-S	2.057	52.24	118.87	528.76	99.62	17.43
C1821-207-3500-S	2.202	55.92	118.87	528.76	91.55	16.02
C1821-207-3750-S	2.346	59.60	118.87	528.76	84.69	14.82
C1821-207-4000-S	2.491	63.28	118.87	528.76	78.79	13.79
C1821-207-4250-S	2.636	66.95	118.87	528.76	73.65	12.89
C1821-207-4500-S	2.781	70.63	118.87	528.76	69.14	12.10
C1821-207-4750-S	2.926	74.31	118.87	528.76	65.16	11.40
C1821-207-5000-S	3.070	77.99	118.87	528.76	61.61	10.78
C1821-207-5250-S	3.215	81.67	118.87	528.76	58.42	10.22
C1821-207-5500-S	3.360	85.35	118.87	528.76	55.55	9.72
C1821-207-5750-S	3.505	89.02	118.87	528.76	52.95	9.27
C1821-207-6000-S	3.650	92.70	118.87	528.76	50.58	8.85
C1821-207-6250-S	3.795	96.38	118.87	528.76	48.41	8.47
C1821-207-6500-S	3.939	100.06	118.87	528.76	46.42	8.12
C1821-207-6750-S	4.084	103.74	118.87	528.76	44.59	7.80
C1821-207-7000-S	4.229	107.42	118.87	528.76	42.90	7.51
C1821-207-7500-S	4.519	114.77	118.87	528.76	39.87	6.98
C1821-207-8000-S	4.808	122.13	118.87	528.76	37.24	6.52
C1821-207-8500-S	5.098	129.49	118.87	528.76	34.94	6.11
C1821-207-9000-S*	5.475	139.05	118.87	528.76	33.72	5.90
C1821-207-9500-S*	5.764	146.41	118.87	528.76	31.82	5.57
C1821-225-2500-S	1.726	43.83	147.60	656.54	190.57	33.35
C1821-225-2625-S	1.803	45.80	147.60	656.54	179.62	31.43
C1821-225-2750-S	1.881	47.78	147.60	656.54	169.86	29.73
C1821-225-2875-S	1.959	49.75	147.60	656.54	161.10	28.19
C1821-225-3000-S	2.037	51.73	147.60	656.54	153.21	26.81
C1821-225-3250-S	2.192	55.68	147.60	656.54	139.53	24.42
C1821-225-3500-S	2.348	59.63	147.60	656.54	128.09	22.42
C1821-225-3750-S	2.503	63.58	147.60	656.54	118.39	20.72
C1821-225-4000-S	2.659	67.53	147.60	656.54	110.05	19.26
C1821-225-4250-S	2.814	71.49	147.60	656.54	102.81	17.99
C1821-225-4500-S	2.970	75.44	147.60	656.54	96.46	16.88
C1821-225-4750-S	3.125	79.39	147.60	656.54	90.86	15.90
C1821-225-5000-S	3.281	83.34	147.60	656.54	85.86	15.03
C1821-225-5250-S	3.437	87.29	147.60	656.54	81.39	14.24
C1821-225-5500-S	3.592	91.24	147.60	656.54	77.36	13.54
C1821-225-5750-S	3.748	95.19	147.60	656.54	73.71	12.90
C1821-225-6000-S	3.903	99.14	147.60	656.54	70.39	12.32
C1821-225-6250-S	4.059	103.09	147.60	656.54	67.36	11.79
C1821-225-6500-S	4.214	107.04	147.60	656.54	64.57	11.30
C1821-225-6750-S	4.370	111.00	147.60	656.54	62.01	10.85
C1821-225-7000-S	4.525	114.95	147.60	656.54	59.65	10.44
C1821-225-7500-S	4.837	122.85	147.60	656.54	55.42	9.70
C1821-225-8000-S	5.148	130.75	147.60	656.54	51.75	9.06
C1821-225-8500-S	5.459	138.65	147.60	656.54	48.53	8.49

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1821-225-9000-M	1.821	46.25	0.225	5.72	9.000	228.60	5.031	127.78	4.547	115.49	208.57	927.76	52.55	9.20
C1821-225-9500-M	1.821	46.25	0.225	5.72	9.500	241.30	5.299	134.59	4.785	121.54	208.57	927.76	49.64	8.69
C1821-250-2500-M	1.821	46.25	0.250	6.35	2.500	63.50	1.692	42.98	1.627	41.33	278.61	1239.30	344.92	60.36
C1821-250-2625-M	1.821	46.25	0.250	6.35	2.625	66.68	1.767	44.88	1.696	43.08	278.61	1239.30	324.63	56.81
C1821-250-2750-M	1.821	46.25	0.250	6.35	2.750	69.85	1.841	46.77	1.765	44.83	278.61	1239.30	306.59	53.65
C1821-250-2875-M	1.821	46.25	0.250	6.35	2.875	73.03	1.916	48.66	1.834	46.58	278.61	1239.30	290.46	50.83
C1821-250-3000-M	1.821	46.25	0.250	6.35	3.000	76.20	1.990	50.55	1.903	48.33	278.61	1239.30	275.93	48.29
C1821-250-3250-M	1.821	46.25	0.250	6.35	3.250	82.55	2.139	54.34	2.041	51.83	278.61	1239.30	250.85	43.90
C1821-250-3500-M	1.821	46.25	0.250	6.35	3.500	88.90	2.288	58.12	2.178	55.33	278.61	1239.30	229.94	40.24
C1821-250-3750-M	1.821	46.25	0.250	6.35	3.750	95.25	2.437	61.91	2.316	58.83	278.61	1239.30	212.26	37.14
C1821-250-4000-M	1.821	46.25	0.250	6.35	4.000	101.60	2.586	65.70	2.454	62.33	278.61	1239.30	197.09	34.49
C1821-250-4250-M	1.821	46.25	0.250	6.35	4.250	107.95	2.735	69.48	2.592	65.83	278.61	1239.30	183.96	32.19
C1821-250-4500-M	1.821	46.25	0.250	6.35	4.500	114.30	2.884	73.27	2.729	69.33	278.61	1239.30	172.46	30.18
C1821-250-4750-M	1.821	46.25	0.250	6.35	4.750	120.65	3.034	77.05	2.867	72.83	278.61	1239.30	162.31	28.40
C1821-250-5000-M	1.821	46.25	0.250	6.35	5.000	127.00	3.183	80.84	3.005	76.33	278.61	1239.30	153.30	26.83
C1821-250-5250-M	1.821	46.25	0.250	6.35	5.250	133.35	3.332	84.62	3.143	79.82	278.61	1239.30	145.23	25.41
C1821-250-5500-M	1.821	46.25	0.250	6.35	5.500	139.70	3.481	88.41	3.280	83.32	278.61	1239.30	137.97	24.14
C1821-250-5750-M	1.821	46.25	0.250	6.35	5.750	146.05	3.630	92.19	3.418	86.82	278.61	1239.30	131.40	22.99
C1821-250-6000-M	1.821	46.25	0.250	6.35	6.000	152.40	3.779	95.98	3.556	90.32	278.61	1239.30	125.42	21.95
C1821-250-6250-M	1.821	46.25	0.250	6.35	6.250	158.75	3.928	99.76	3.694	93.82	278.61	1239.30	119.97	20.99
C1821-250-6500-M	1.821	46.25	0.250	6.35	6.500	165.10	4.077	103.55	3.832	97.32	278.61	1239.30	114.97	20.12
C1821-250-6750-M	1.821	46.25	0.250	6.35	6.750	171.45	4.226	107.33	3.969	100.82	278.61	1239.30	110.37	19.32
C1821-250-7000-M	1.821	46.25	0.250	6.35	7.000	177.80	4.375	111.12	4.107	104.32	278.61	1239.30	106.13	18.57
C1821-250-7500-M	1.821	46.25	0.250	6.35	7.500	190.50	4.673	118.69	4.383	111.32	278.61	1239.30	98.55	17.25
C1821-250-8000-M	1.821	46.25	0.250	6.35	8.000	203.20	4.971	126.26	4.658	118.32	278.61	1239.30	91.98	16.10
C1821-250-8500-M	1.821	46.25	0.250	6.35	8.500	215.90	5.269	133.83	4.934	125.32	278.61	1239.30	86.23	15.09
C1821-250-9000-M	1.821	46.25	0.250	6.35	9.000	228.60	5.567	141.40	5.209	132.32	278.61	1239.30	81.16	14.20
C1821-250-9500-M	1.821	46.25	0.250	6.35	9.500	241.30	5.865	148.97	5.485	139.32	278.61	1239.30	76.65	13.41
C1880-148-3250-M	1.880	47.75	0.148	3.76	3.250	82.55	1.263	32.08	0.958	24.33	63.35	281.81	31.88	5.58
C1880-148-3500-M	1.880	47.75	0.148	3.76	3.500	88.90	1.345	34.16	1.013	25.72	63.35	281.81	29.40	5.14
C1880-148-3750-M	1.880	47.75	0.148	3.76	3.750	95.25	1.427	36.23	1.067	27.11	63.35	281.81	27.27	4.77
C1880-148-4000-M	1.880	47.75	0.148	3.76	4.000	101.60	1.508	38.31	1.122	28.50	63.35	281.81	25.43	4.45
C1880-148-4250-M	1.880	47.75	0.148	3.76	4.250	107.95	1.590	40.39	1.177	29.89	63.35	281.81	23.82	4.17
C1880-148-4500-M	1.880	47.75	0.148	3.76	4.500	114.30	1.672	42.47	1.232	31.28	63.35	281.81	22.40	3.92
C1880-148-4750-M	1.880	47.75	0.148	3.76	4.750	120.65	1.754	44.55	1.286	32.67	63.35	281.81	21.15	3.70
C1880-148-5000-M	1.880	47.75	0.148	3.76	5.000	127.00	1.836	46.63	1.341	34.06	63.35	281.81	20.02	3.50
C1880-148-5250-M	1.880	47.75	0.148	3.76	5.250	133.35	1.917	48.70	1.396	35.46	63.35	281.81	19.01	3.33
C1880-148-5500-M	1.880	47.75	0.148	3.76	5.500	139.70	1.999	50.78	1.451	36.85	63.35	281.81	18.10	3.17
C1880-148-5750-M	1.880	47.75	0.148	3.76	5.750	146.05	2.081	52.86	1.505	38.24	63.35	281.81	17.27	3.02
C1880-148-6000-M	1.880	47.75	0.148	3.76	6.000	152.40	2.163	54.94	1.560	39.63	63.35	281.81	16.51	2.89
C1880-148-6250-M	1.880	47.75	0.148	3.76	6.250	158.75	2.245	57.02	1.615	41.02	63.35	281.81	15.82	2.77
C1880-148-6500-M	1.880	47.75	0.148	3.76	6.500	165.10	2.327	59.10	1.670	42.41	63.35	281.81	15.18	2.66
C1880-148-6750-M	1.880	47.75	0.148	3.76	6.750	171.45	2.408	61.17	1.724	43.80	63.35	281.81	14.59	2.55
C1880-148-7000-M	1.880	47.75	0.148	3.76	7.000	177.80	2.490	63.25	1.779	45.19	63.35	281.81	14.05	2.46
C1880-148-7500-M	1.880	47.75	0.148	3.76	7.500	190.50	2.654	67.41	1.889	47.97	63.35	281.81	13.07	2.29
C1880-148-8000-M	1.880	47.75	0.148	3.76	8.000	203.20	2.818	71.57	1.998	50.75	63.35	281.81	12.23	2.14
C1880-148-8500-M	1.880	47.75	0.148	3.76	8.500	215.90	2.981	75.72	2.108	53.54	63.35	281.81	11.48	2.01
C1880-148-9000-M	1.880	47.75	0.148	3.76	9.000	228.60	3.145	79.88	2.217	56.32	63.35	281.81	10.82	1.89
C1880-148-9500-M	1.880	47.75	0.148	3.76	9.500	241.30	3.309	84.04	2.327	59.10	63.35	281.81	10.23	1.79
C1880-162-3000-M	1.880	47.75	0.162	4.12	3.000	76.20	1.290	32.76	1.037	26.35	81.48	362.46	47.64	8.34
C1880-162-3250-M	1.880	47.75	0.162	4.12	3.250	82.55	1.380	35.05	1.102	28.00	81.48	362.46	43.57	7.63
C1880-162-3500-M	1.880	47.75	0.162	4.12	3.500	88.90	1.470	37.34	1.168	29.66	81.48	362.46	40.14	7.03
C1880-162-3750-M	1.880	47.75	0.162	4.12	3.750	95.25	1.560	39.63	1.233	31.31	81.48	362.46	37.21	6.51
C1880-162-4000-M	1.880	47.75	0.162	4.12	4.000	101.60	1.651	41.93	1.298	32.96	81.48	362.46	34.68	6.07
C1880-162-4250-M	1.880	47.75	0.162	4.12	4.250	107.95	1.741	44.22	1.363	34.62	81.48	362.46	32.47	5.68
C1880-162-4500-M	1.880	47.75	0.162	4.12	4.500	114.30	1.831	46.51	1.428	36.27	81.48	362.46	30.53	5.34
C1880-162-4750-M	1.880	47.75	0.162	4.12	4.750	120.65	1.921	48.80	1.493	37.93	81.48	362.46	28.81	5.04
C1880-162-5000-M	1.880	47.75	0.162	4.12	5.000	127.00	2.011	51.09	1.558	39.58	81.48	362.46	27.27	4.77
C1880-162-5250-M	1.880	47.75	0.162	4.12	5.250	133.35	2.102	53.38	1.623	41.24	81.48	362.46	25.88	4.53
C1880-162-5500-M	1.880	47.75	0.162	4.12	5.500	139.70	2.192	55.67	1.689	42.89	81.48	362.46	24.63	4.31
C1880-162-5750-M	1.880	47.75	0.162	4.12	5.750	146.05	2.282	57.97	1.754	44.54	81.48	362.46	23.50	4.11
C1880-162-6000-M	1.880	47.75	0.162	4.12	6.000	152.40	2.372	60.26	1.819	46.20	81.48	362.46	22.46	3.93
C1880-162-6250-M	1.880	47.75	0.162	4.12	6.250	158.75	2.463	62.55	1.884	47.85	81.48	362.46	21.51	3.76
C1880-162-6500-M	1.880	47.75	0.162	4.12	6.500	165.10	2.553	64.84	1.949	49.51	81.48	362.46	20.64	3.61

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1821-225-9000-S	5.770	146.55	147.60	656.54	45.69	8.00
C1821-225-9500-S	6.081	154.46	147.60	656.54	43.17	7.55
C1821-250-2500-S	1.855	47.11	193.55	860.93	299.93	52.49
C1821-250-2625-S	1.939	49.26	193.55	860.93	282.28	49.40
C1821-250-2750-S	2.024	51.41	193.55	860.93	266.60	46.66
C1821-250-2875-S	2.109	53.56	193.55	860.93	252.57	44.20
C1821-250-3000-S	2.193	55.71	193.55	860.93	239.94	41.99
C1821-250-3250-S	2.363	60.01	193.55	860.93	218.13	38.17
C1821-250-3500-S	2.532	64.31	193.55	860.93	199.95	34.99
C1821-250-3750-S	2.701	68.61	193.55	860.93	184.57	32.30
C1821-250-4000-S	2.871	72.92	193.55	860.93	171.39	29.99
C1821-250-4250-S	3.040	77.22	193.55	860.93	159.96	27.99
C1821-250-4500-S	3.209	81.52	193.55	860.93	149.96	26.24
C1821-250-4750-S	3.379	85.82	193.55	860.93	141.14	24.70
C1821-250-5000-S	3.548	90.12	193.55	860.93	133.30	23.33
C1821-250-5250-S	3.717	94.42	193.55	860.93	126.29	22.10
C1821-250-5500-S	3.887	98.72	193.55	860.93	119.97	20.99
C1821-250-5750-S	4.056	103.02	193.55	860.93	114.26	20.00
C1821-250-6000-S	4.225	107.33	193.55	860.93	109.06	19.09
C1821-250-6250-S	4.395	111.63	193.55	860.93	104.32	18.26
C1821-250-6500-S	4.564	115.93	193.55	860.93	99.98	17.50
C1821-250-6750-S	4.733	120.23	193.55	860.93	95.98	16.80
C1821-250-7000-S	4.903	124.53	193.55	860.93	92.29	16.15
C1821-250-7500-S	5.241	133.13	193.55	860.93	85.69	15.00
C1821-250-8000-S	5.580	141.73	193.55	860.93	79.98	14.00
C1821-250-8500-S	5.919	150.34	193.55	860.93	74.98	13.12
C1821-250-9000-S	6.257	158.94	193.55	860.93	70.57	12.35
C1821-250-9500-S	6.596	167.54	193.55	860.93	66.65	11.66
C1880-148-3250-S	1.535	38.99	47.55	211.50	27.72	4.85
C1880-148-3500-S	1.640	41.65	47.55	211.50	25.56	4.47
C1880-148-3750-S	1.745	44.32	47.55	211.50	23.71	4.15
C1880-148-4000-S	1.850	46.98	47.55	211.50	22.11	3.87
C1880-148-4250-S	1.954	49.64	47.55	211.50	20.71	3.62
C1880-148-4500-S	2.059	52.31	47.55	211.50	19.48	3.41
C1880-148-4750-S	2.164	54.97	47.55	211.50	18.39	3.22
C1880-148-5000-S	2.269	57.63	47.55	211.50	17.41	3.05
C1880-148-5250-S	2.374	60.30	47.55	211.50	16.53	2.89
C1880-148-5500-S	2.479	62.96	47.55	211.50	15.74	2.75
C1880-148-5750-S	2.584	65.62	47.55	211.50	15.02	2.63
C1880-148-6000-S	2.688	68.29	47.55	211.50	14.36	2.51
C1880-148-6250-S	2.793	70.95	47.55	211.50	13.76	2.41
C1880-148-6500-S	2.898	73.61	47.55	211.50	13.20	2.31
C1880-148-6750-S	3.003	76.28	47.55	211.50	12.69	2.22
C1880-148-7000-S	3.108	78.94	47.55	211.50	12.22	2.14
C1880-148-7500-S	3.318	84.27	47.55	211.50	11.37	1.99
C1880-148-8000-S	3.527	89.59	47.55	211.50	10.63	1.86
C1880-148-8500-S	3.737	94.92	47.55	211.50	9.98	1.75
C1880-148-9000-S	3.947	100.25	47.55	211.50	9.41	1.65
C1880-148-9500-S	4.156	105.57	47.55	211.50	8.90	1.56
C1880-162-3000-S	1.540	39.11	60.50	269.11	41.43	7.25
C1880-162-3250-S	1.653	41.99	60.50	269.11	37.89	6.63
C1880-162-3500-S	1.767	44.88	60.50	269.11	34.91	6.11
C1880-162-3750-S	1.880	47.76	60.50	269.11	32.36	5.66
C1880-162-4000-S	1.994	50.65	60.50	269.11	30.16	5.28
C1880-162-4250-S	2.108	53.53	60.50	269.11	28.24	4.94
C1880-162-4500-S	2.221	56.42	60.50	269.11	26.55	4.65
C1880-162-4750-S	2.335	59.30	60.50	269.11	25.05	4.38
C1880-162-5000-S	2.448	62.19	60.50	269.11	23.71	4.15
C1880-162-5250-S	2.562	65.07	60.50	269.11	22.51	3.94
C1880-162-5500-S	2.675	67.96	60.50	269.11	21.42	3.75
C1880-162-5750-S	2.789	70.84	60.50	269.11	20.43	3.58
C1880-162-6000-S	2.903	73.73	60.50	269.11	19.53	3.42
C1880-162-6250-S	3.016	76.61	60.50	269.11	18.71	3.27
C1880-162-6500-S	3.130	79.50	60.50	269.11	17.95	3.14

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1880-162-6750-M	1.880	47.75	0.162	4.12	6.750	171.45	2.643	67.13	2.014	51.16	81.48	362.46	19.84	3.47
C1880-162-7000-M	1.880	47.75	0.162	4.12	7.000	177.80	2.733	69.42	2.079	52.81	81.48	362.46	19.10	3.34
C1880-162-7500-M	1.880	47.75	0.162	4.12	7.500	190.50	2.914	74.01	2.210	56.12	81.48	362.46	17.77	3.11
C1880-162-8000-M	1.880	47.75	0.162	4.12	8.000	203.20	3.094	78.59	2.340	59.43	81.48	362.46	16.61	2.91
C1880-162-8500-M*	1.880	47.75	0.162	4.12	8.500	215.90	3.378	85.80	2.598	65.99	81.48	362.46	15.91	2.78
C1880-162-9000-M*	1.880	47.75	0.162	4.12	9.000	228.60	3.559	90.39	2.728	69.30	81.48	362.46	14.98	2.62
C1880-162-9500-M*	1.880	47.75	0.162	4.12	9.500	241.30	3.739	94.97	2.858	72.61	81.48	362.46	14.14	2.48
C1880-177-2875-M	1.880	47.75	0.177	4.50	2.875	73.03	1.358	34.49	1.145	29.07	104.22	463.61	68.70	12.02
C1880-177-3000-M	1.880	47.75	0.177	4.50	3.000	76.20	1.408	35.75	1.183	30.04	104.22	463.61	65.45	11.45
C1880-177-3250-M	1.880	47.75	0.177	4.50	3.250	82.55	1.507	38.28	1.260	31.99	104.22	463.61	59.80	10.46
C1880-177-3500-M	1.880	47.75	0.177	4.50	3.500	88.90	1.607	40.81	1.336	33.94	104.22	463.61	55.05	9.63
C1880-177-3750-M	1.880	47.75	0.177	4.50	3.750	95.25	1.706	43.34	1.413	35.89	104.22	463.61	51.00	8.92
C1880-177-4000-M	1.880	47.75	0.177	4.50	4.000	101.60	1.806	45.87	1.489	37.83	104.22	463.61	47.50	8.31
C1880-177-4250-M	1.880	47.75	0.177	4.50	4.250	107.95	1.905	48.39	1.566	39.78	104.22	463.61	44.45	7.78
C1880-177-4500-M	1.880	47.75	0.177	4.50	4.500	114.30	2.005	50.92	1.643	41.73	104.22	463.61	41.77	7.31
C1880-177-4750-M	1.880	47.75	0.177	4.50	4.750	120.65	2.104	53.45	1.719	43.67	104.22	463.61	39.40	6.89
C1880-177-5000-M	1.880	47.75	0.177	4.50	5.000	127.00	2.204	55.98	1.796	45.62	104.22	463.61	37.28	6.52
C1880-177-5250-M	1.880	47.75	0.177	4.50	5.250	133.35	2.303	58.51	1.873	47.57	104.22	463.61	35.37	6.19
C1880-177-5500-M	1.880	47.75	0.177	4.50	5.500	139.70	2.403	61.04	1.949	49.51	104.22	463.61	33.65	5.89
C1880-177-5750-M	1.880	47.75	0.177	4.50	5.750	146.05	2.503	63.56	2.026	51.46	104.22	463.61	32.09	5.62
C1880-177-6000-M	1.880	47.75	0.177	4.50	6.000	152.40	2.602	66.09	2.103	53.41	104.22	463.61	30.67	5.37
C1880-177-6250-M	1.880	47.75	0.177	4.50	6.250	158.75	2.702	68.62	2.179	55.35	104.22	463.61	29.37	5.14
C1880-177-6500-M	1.880	47.75	0.177	4.50	6.500	165.10	2.801	71.15	2.256	57.30	104.22	463.61	28.18	4.93
C1880-177-6750-M	1.880	47.75	0.177	4.50	6.750	171.45	2.901	73.68	2.332	59.25	104.22	463.61	27.08	4.74
C1880-177-7000-M*	1.880	47.75	0.177	4.50	7.000	177.80	3.107	78.91	2.541	64.53	104.22	463.61	26.77	4.68
C1880-177-7500-M*	1.880	47.75	0.177	4.50	7.500	190.50	3.306	83.97	2.694	68.43	104.22	463.61	24.85	4.35
C1880-177-8000-M*	1.880	47.75	0.177	4.50	8.000	203.20	3.505	89.03	2.847	72.32	104.22	463.61	23.19	4.06
C1880-177-8500-M*	1.880	47.75	0.177	4.50	8.500	215.90	3.704	94.08	3.001	76.21	104.22	463.61	21.73	3.80
C1880-177-9000-M*	1.880	47.75	0.177	4.50	9.000	228.60	3.903	99.14	3.154	80.11	104.22	463.61	20.45	3.58
C1880-177-9500-M*	1.880	47.75	0.177	4.50	9.500	241.30	4.102	104.20	3.307	84.00	104.22	463.61	19.31	3.38
C1880-192-2750-M	1.880	47.75	0.192	4.88	2.750	69.85	1.416	35.96	1.240	31.48	130.61	580.98	97.90	17.13
C1880-192-2875-M	1.880	47.75	0.192	4.88	2.875	73.03	1.470	37.35	1.284	32.61	130.61	580.98	92.99	16.27
C1880-192-3000-M	1.880	47.75	0.192	4.88	3.000	76.20	1.525	38.73	1.328	33.73	130.61	580.98	88.55	15.50
C1880-192-3250-M	1.880	47.75	0.192	4.88	3.250	82.55	1.634	41.50	1.416	35.97	130.61	580.98	80.82	14.14
C1880-192-3500-M	1.880	47.75	0.192	4.88	3.500	88.90	1.743	44.27	1.505	38.22	130.61	580.98	74.34	13.01
C1880-192-3750-M	1.880	47.75	0.192	4.88	3.750	95.25	1.852	47.04	1.593	40.46	130.61	580.98	68.82	12.04
C1880-192-4000-M	1.880	47.75	0.192	4.88	4.000	101.60	1.961	49.81	1.681	42.71	130.61	580.98	64.06	11.21
C1880-192-4250-M	1.880	47.75	0.192	4.88	4.250	107.95	2.070	52.58	1.770	44.95	130.61	580.98	59.92	10.49
C1880-192-4500-M	1.880	47.75	0.192	4.88	4.500	114.30	2.179	55.35	1.858	47.20	130.61	580.98	56.28	9.85
C1880-192-4750-M	1.880	47.75	0.192	4.88	4.750	120.65	2.288	58.12	1.947	49.44	130.61	580.98	53.06	9.28
C1880-192-5000-M	1.880	47.75	0.192	4.88	5.000	127.00	2.397	60.89	2.035	51.69	130.61	580.98	50.18	8.78
C1880-192-5250-M	1.880	47.75	0.192	4.88	5.250	133.35	2.506	63.66	2.123	53.93	130.61	580.98	47.60	8.33
C1880-192-5500-M	1.880	47.75	0.192	4.88	5.500	139.70	2.615	66.43	2.212	56.18	130.61	580.98	45.28	7.92
C1880-192-5750-M	1.880	47.75	0.192	4.88	5.750	146.05	2.724	69.20	2.300	58.42	130.61	580.98	43.17	7.55
C1880-192-6000-M	1.880	47.75	0.192	4.88	6.000	152.40	2.833	71.97	2.388	60.66	130.61	580.98	41.25	7.22
C1880-192-6250-M	1.880	47.75	0.192	4.88	6.250	158.75	2.942	74.74	2.477	62.91	130.61	580.98	39.49	6.91
C1880-192-6500-M	1.880	47.75	0.192	4.88	6.500	165.10	3.052	77.51	2.565	65.15	130.61	580.98	37.87	6.63
C1880-192-6750-M*	1.880	47.75	0.192	4.88	6.750	171.45	3.269	83.03	2.787	70.80	130.61	580.98	37.52	6.57
C1880-192-7000-M*	1.880	47.75	0.192	4.88	7.000	177.80	3.378	85.80	2.876	73.04	130.61	580.98	36.06	6.31
C1880-192-7500-M*	1.880	47.75	0.192	4.88	7.500	190.50	3.596	91.34	3.052	77.53	130.61	580.98	33.46	5.85
C1880-192-8000-M*	1.880	47.75	0.192	4.88	8.000	203.20	3.814	96.88	3.229	82.02	130.61	580.98	31.20	5.46
C1880-192-8500-M*	1.880	47.75	0.192	4.88	8.500	215.90	4.032	102.42	3.406	86.51	130.61	580.98	29.23	5.12
C1880-192-9000-M*	1.880	47.75	0.192	4.88	9.000	228.60	4.250	107.95	3.583	91.00	130.61	580.98	27.50	4.81
C1880-192-9500-M*	1.880	47.75	0.192	4.88	9.500	241.30	4.468	113.49	3.759	95.49	130.61	580.98	25.96	4.54
C1880-207-2625-M	1.880	47.75	0.207	5.26	2.625	66.68	1.462	37.15	1.320	33.53	160.85	715.49	138.36	24.21
C1880-207-2750-M	1.880	47.75	0.207	5.26	2.750	69.85	1.522	38.65	1.370	34.80	160.85	715.49	130.95	22.92
C1880-207-2875-M	1.880	47.75	0.207	5.26	2.875	73.03	1.581	40.16	1.420	36.07	160.85	715.49	124.30	21.75
C1880-207-3000-M	1.880	47.75	0.207	5.26	3.000	76.20	1.640	41.66	1.470	37.35	160.85	715.49	118.29	20.70
C1880-207-3250-M	1.880	47.75	0.207	5.26	3.250	82.55	1.759	44.67	1.570	39.89	160.85	715.49	107.87	18.88
C1880-207-3500-M	1.880	47.75	0.207	5.26	3.500	88.90	1.877	47.68	1.671	42.43	160.85	715.49	99.13	17.35
C1880-207-3750-M	1.880	47.75	0.207	5.26	3.750	95.25	1.996	50.70	1.771	44.98	160.85	715.49	91.70	16.05
C1880-207-4000-M	1.880	47.75	0.207	5.26	4.000	101.60	2.114	53.71	1.871	47.52	160.85	715.49	85.31	14.93
C1880-207-4250-M	1.880	47.75	0.207	5.26	4.250	107.95	2.233	56.72	1.971	50.06	160.85	715.49	79.75	13.96
C1880-207-4500-M	1.880	47.75	0.207	5.26	4.500	114.30	2.352	59.73	2.071	52.60	160.85	715.49	74.87	13.10

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1880-162-6750-S	3.243	82.38	60.50	269.11	17.25	3.02
C1880-162-7000-S	3.357	85.27	60.50	269.11	16.61	2.91
C1880-162-7500-S	3.584	91.03	60.50	269.11	15.45	2.70
C1880-162-8000-S	3.811	96.80	60.50	269.11	14.44	2.53
C1880-162-8500-S*	4.127	104.82	60.50	269.11	13.83	2.42
C1880-162-9000-S*	4.354	110.59	60.50	269.11	13.02	2.28
C1880-162-9500-S*	4.581	116.36	60.50	269.11	12.30	2.15
C1880-177-2875-S	1.594	40.50	76.50	340.27	59.73	10.45
C1880-177-3000-S	1.656	42.06	76.50	340.27	56.91	9.96
C1880-177-3250-S	1.779	45.18	76.50	340.27	52.00	9.10
C1880-177-3500-S	1.902	48.31	76.50	340.27	47.87	8.38
C1880-177-3750-S	2.025	51.43	76.50	340.27	44.34	7.76
C1880-177-4000-S	2.148	54.56	76.50	340.27	41.30	7.23
C1880-177-4250-S	2.271	57.68	76.50	340.27	38.65	6.76
C1880-177-4500-S	2.394	60.81	76.50	340.27	36.32	6.36
C1880-177-4750-S	2.517	63.93	76.50	340.27	34.26	5.99
C1880-177-5000-S	2.640	67.06	76.50	340.27	32.41	5.67
C1880-177-5250-S	2.763	70.18	76.50	340.27	30.76	5.38
C1880-177-5500-S	2.886	73.30	76.50	340.27	29.26	5.12
C1880-177-5750-S	3.009	76.43	76.50	340.27	27.91	4.88
C1880-177-6000-S	3.132	79.55	76.50	340.27	26.67	4.67
C1880-177-6250-S	3.255	82.68	76.50	340.27	25.54	4.47
C1880-177-6500-S	3.378	85.80	76.50	340.27	24.50	4.29
C1880-177-6750-S	3.501	88.93	76.50	340.27	23.54	4.12
C1880-177-7000-S*	3.714	94.33	76.50	340.27	23.28	4.07
C1880-177-7500-S*	3.960	100.58	76.50	340.27	21.61	3.78
C1880-177-8000-S*	4.206	106.83	76.50	340.27	20.16	3.53
C1880-177-8500-S*	4.452	113.08	76.50	340.27	18.90	3.31
C1880-177-9000-S*	4.698	119.33	76.50	340.27	17.78	3.11
C1880-177-9500-S*	4.944	125.58	76.50	340.27	16.79	2.94
C1880-192-2750-S	1.637	41.58	94.76	421.53	85.13	14.90
C1880-192-2875-S	1.703	43.26	94.76	421.53	80.86	14.15
C1880-192-3000-S	1.769	44.94	94.76	421.53	77.00	13.47
C1880-192-3250-S	1.902	48.30	94.76	421.53	70.28	12.30
C1880-192-3500-S	2.034	51.66	94.76	421.53	64.64	11.31
C1880-192-3750-S	2.166	55.03	94.76	421.53	59.84	10.47
C1880-192-4000-S	2.299	58.39	94.76	421.53	55.70	9.75
C1880-192-4250-S	2.431	61.75	94.76	421.53	52.10	9.12
C1880-192-4500-S	2.564	65.11	94.76	421.53	48.94	8.56
C1880-192-4750-S	2.696	68.48	94.76	421.53	46.14	8.07
C1880-192-5000-S	2.828	71.84	94.76	421.53	43.64	7.64
C1880-192-5250-S	2.961	75.20	94.76	421.53	41.40	7.24
C1880-192-5500-S	3.093	78.56	94.76	421.53	39.37	6.89
C1880-192-5750-S	3.225	81.93	94.76	421.53	37.54	6.57
C1880-192-6000-S	3.358	85.29	94.76	421.53	35.87	6.28
C1880-192-6250-S	3.490	88.65	94.76	421.53	34.34	6.01
C1880-192-6500-S	3.623	92.01	94.76	421.53	32.93	5.76
C1880-192-6750-S*	3.845	97.67	94.76	421.53	32.63	5.71
C1880-192-7000-S*	3.978	101.03	94.76	421.53	31.36	5.49
C1880-192-7500-S*	4.243	107.76	94.76	421.53	29.09	5.09
C1880-192-8000-S*	4.507	114.48	94.76	421.53	27.13	4.75
C1880-192-8500-S*	4.772	121.21	94.76	421.53	25.42	4.45
C1880-192-9000-S*	5.037	127.93	94.76	421.53	23.91	4.18
C1880-192-9500-S*	5.302	134.66	94.76	421.53	22.57	3.95
C1880-207-2625-S	1.666	42.32	115.38	513.23	120.31	21.05
C1880-207-2750-S	1.737	44.11	115.38	513.23	113.87	19.93
C1880-207-2875-S	1.808	45.91	115.38	513.23	108.09	18.92
C1880-207-3000-S	1.878	47.71	115.38	513.23	102.86	18.00
C1880-207-3250-S	2.020	51.31	115.38	513.23	93.80	16.41
C1880-207-3500-S	2.161	54.90	115.38	513.23	86.20	15.08
C1880-207-3750-S	2.303	58.50	115.38	513.23	79.74	13.95
C1880-207-4000-S	2.445	62.09	115.38	513.23	74.18	12.98
C1880-207-4250-S	2.586	65.69	115.38	513.23	69.35	12.14
C1880-207-4500-S	2.728	69.28	115.38	513.23	65.10	11.39

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1880-207-4750-M	1.880	47.75	0.207	5.26	4.750	120.65	2.470	62.74	2.171	55.15	160.85	715.49	70.55	12.35
C1880-207-5000-M	1.880	47.75	0.207	5.26	5.000	127.00	2.589	65.75	2.271	57.69	160.85	715.49	66.71	11.67
C1880-207-5250-M	1.880	47.75	0.207	5.26	5.250	133.35	2.707	68.76	2.371	60.23	160.85	715.49	63.26	11.07
C1880-207-5500-M	1.880	47.75	0.207	5.26	5.500	139.70	2.826	71.77	2.471	62.78	160.85	715.49	60.15	10.53
C1880-207-5750-M	1.880	47.75	0.207	5.26	5.750	146.05	2.944	74.78	2.572	65.32	160.85	715.49	57.33	10.03
C1880-207-6000-M	1.880	47.75	0.207	5.26	6.000	152.40	3.063	77.80	2.672	67.86	160.85	715.49	54.76	9.58
C1880-207-6250-M	1.880	47.75	0.207	5.26	6.250	158.75	3.181	80.81	2.772	70.41	160.85	715.49	52.42	9.17
C1880-207-6500-M	1.880	47.75	0.207	5.26	6.500	165.10	3.300	83.82	2.872	72.95	160.85	715.49	50.26	8.80
C1880-207-6750-M	1.880	47.75	0.207	5.26	6.750	171.45	3.418	86.83	2.972	75.49	160.85	715.49	48.28	8.45
C1880-207-7000-M	1.880	47.75	0.207	5.26	7.000	177.80	3.537	89.84	3.072	78.03	160.85	715.49	46.45	8.13
C1880-207-7500-M	1.880	47.75	0.207	5.26	7.500	190.50	3.774	95.86	3.272	83.12	160.85	715.49	43.17	7.55
C1880-207-8000-M*	1.880	47.75	0.207	5.26	8.000	203.20	4.120	104.65	3.607	91.62	160.85	715.49	41.46	7.25
C1880-207-8500-M*	1.880	47.75	0.207	5.26	8.500	215.90	4.357	110.67	3.807	96.71	160.85	715.49	38.83	6.79
C1880-207-9000-M*	1.880	47.75	0.207	5.26	9.000	228.60	4.594	116.69	4.008	101.79	160.85	715.49	36.51	6.39
C1880-207-9500-M*	1.880	47.75	0.207	5.26	9.500	241.30	4.831	122.72	4.208	106.88	160.85	715.49	34.45	6.03
C1880-225-2625-M	1.880	47.75	0.225	5.72	2.625	66.68	1.579	40.11	1.464	37.19	202.50	900.77	193.61	33.88
C1880-225-2750-M	1.880	47.75	0.225	5.72	2.750	69.85	1.644	41.76	1.521	38.64	202.50	900.77	183.09	32.04
C1880-225-2875-M	1.880	47.75	0.225	5.72	2.875	73.03	1.709	43.40	1.578	40.09	202.50	900.77	173.65	30.39
C1880-225-3000-M	1.880	47.75	0.225	5.72	3.000	76.20	1.774	45.05	1.635	41.53	202.50	900.77	165.14	28.90
C1880-225-3250-M	1.880	47.75	0.225	5.72	3.250	82.55	1.904	48.35	1.749	44.43	202.50	900.77	150.39	26.32
C1880-225-3500-M	1.880	47.75	0.225	5.72	3.500	88.90	2.033	51.65	1.863	47.33	202.50	900.77	138.07	24.16
C1880-225-3750-M	1.880	47.75	0.225	5.72	3.750	95.25	2.163	54.94	1.977	50.22	202.50	900.77	127.61	22.33
C1880-225-4000-M	1.880	47.75	0.225	5.72	4.000	101.60	2.293	58.24	2.091	53.12	202.50	900.77	118.62	20.76
C1880-225-4250-M	1.880	47.75	0.225	5.72	4.250	107.95	2.423	61.53	2.205	56.01	202.50	900.77	110.82	19.39
C1880-225-4500-M	1.880	47.75	0.225	5.72	4.500	114.30	2.552	64.83	2.319	58.91	202.50	900.77	103.98	18.20
C1880-225-4750-M	1.880	47.75	0.225	5.72	4.750	120.65	2.682	68.13	2.433	61.80	202.50	900.77	97.93	17.14
C1880-225-5000-M	1.880	47.75	0.225	5.72	5.000	127.00	2.812	71.42	2.547	64.70	202.50	900.77	92.55	16.20
C1880-225-5250-M	1.880	47.75	0.225	5.72	5.250	133.35	2.942	74.72	2.661	67.59	202.50	900.77	87.73	15.35
C1880-225-5500-M	1.880	47.75	0.225	5.72	5.500	139.70	3.072	78.02	2.775	70.49	202.50	900.77	83.39	14.59
C1880-225-5750-M	1.880	47.75	0.225	5.72	5.750	146.05	3.201	81.31	2.889	73.38	202.50	900.77	79.45	13.90
C1880-225-6000-M	1.880	47.75	0.225	5.72	6.000	152.40	3.331	84.61	3.003	76.28	202.50	900.77	75.87	13.28
C1880-225-6250-M	1.880	47.75	0.225	5.72	6.250	158.75	3.461	87.91	3.117	79.17	202.50	900.77	72.60	12.71
C1880-225-6500-M	1.880	47.75	0.225	5.72	6.500	165.10	3.591	91.20	3.231	82.07	202.50	900.77	69.60	12.18
C1880-225-6750-M	1.880	47.75	0.225	5.72	6.750	171.45	3.720	94.50	3.345	84.96	202.50	900.77	66.84	11.70
C1880-225-7000-M	1.880	47.75	0.225	5.72	7.000	177.80	3.850	97.80	3.459	87.86	202.50	900.77	64.29	11.25
C1880-225-7500-M	1.880	47.75	0.225	5.72	7.500	190.50	4.110	104.39	3.687	93.65	202.50	900.77	59.73	10.45
C1880-225-8000-M	1.880	47.75	0.225	5.72	8.000	203.20	4.369	110.98	3.915	99.44	202.50	900.77	55.78	9.76
C1880-225-8500-M	1.880	47.75	0.225	5.72	8.500	215.90	4.629	117.57	4.143	105.23	202.50	900.77	52.31	9.15
C1880-225-9000-M	1.880	47.75	0.225	5.72	9.000	228.60	4.888	124.17	4.371	111.02	202.50	900.77	49.25	8.62
C1880-225-9500-M	1.880	47.75	0.225	5.72	9.500	241.30	5.148	130.76	4.599	116.81	202.50	900.77	46.53	8.14
C1880-250-2500-M	1.880	47.75	0.250	6.35	2.500	63.50	1.658	42.10	1.584	40.24	270.62	1203.77	321.26	56.22
C1880-250-2625-M	1.880	47.75	0.250	6.35	2.625	66.68	1.730	43.94	1.651	41.93	270.62	1203.77	302.37	52.91
C1880-250-2750-M	1.880	47.75	0.250	6.35	2.750	69.85	1.802	45.78	1.717	43.61	270.62	1203.77	285.57	49.97
C1880-250-2875-M	1.880	47.75	0.250	6.35	2.875	73.03	1.875	47.62	1.783	45.29	270.62	1203.77	270.54	47.34
C1880-250-3000-M	1.880	47.75	0.250	6.35	3.000	76.20	1.947	49.46	1.849	46.97	270.62	1203.77	257.01	44.98
C1880-250-3250-M	1.880	47.75	0.250	6.35	3.250	82.55	2.092	53.13	1.982	50.34	270.62	1203.77	233.65	40.89
C1880-250-3500-M	1.880	47.75	0.250	6.35	3.500	88.90	2.236	56.81	2.114	53.70	270.62	1203.77	214.18	37.48
C1880-250-3750-M	1.880	47.75	0.250	6.35	3.750	95.25	2.381	60.48	2.247	57.06	270.62	1203.77	197.70	34.60
C1880-250-4000-M	1.880	47.75	0.250	6.35	4.000	101.60	2.526	64.16	2.379	60.43	270.62	1203.77	183.58	32.13
C1880-250-4250-M	1.880	47.75	0.250	6.35	4.250	107.95	2.671	67.83	2.511	63.79	270.62	1203.77	171.34	29.98
C1880-250-4500-M	1.880	47.75	0.250	6.35	4.500	114.30	2.815	71.51	2.644	67.15	270.62	1203.77	160.63	28.11
C1880-250-4750-M	1.880	47.75	0.250	6.35	4.750	120.65	2.960	75.18	2.776	70.52	270.62	1203.77	151.18	26.46
C1880-250-5000-M	1.880	47.75	0.250	6.35	5.000	127.00	3.105	78.86	2.909	73.88	270.62	1203.77	142.78	24.99
C1880-250-5250-M	1.880	47.75	0.250	6.35	5.250	133.35	3.249	82.53	3.041	77.25	270.62	1203.77	135.27	23.67
C1880-250-5500-M	1.880	47.75	0.250	6.35	5.500	139.70	3.394	86.21	3.174	80.61	270.62	1203.77	128.51	22.49
C1880-250-5750-M	1.880	47.75	0.250	6.35	5.750	146.05	3.539	89.89	3.306	83.97	270.62	1203.77	122.39	21.42
C1880-250-6000-M	1.880	47.75	0.250	6.35	6.000	152.40	3.684	93.56	3.438	87.34	270.62	1203.77	116.82	20.44
C1880-250-6250-M	1.880	47.75	0.250	6.35	6.250	158.75	3.828	97.24	3.571	90.70	270.62	1203.77	111.74	19.56
C1880-250-6500-M	1.880	47.75	0.250	6.35	6.500	165.10	3.973	100.91	3.703	94.06	270.62	1203.77	107.09	18.74
C1880-250-6750-M	1.880	47.75	0.250	6.35	6.750	171.45	4.118	104.59	3.836	97.43	270.62	1203.77	102.80	17.99
C1880-250-7000-M	1.880	47.75	0.250	6.35	7.000	177.80	4.262	108.26	3.968	100.79	270.62	1203.77	98.85	17.30
C1880-250-7500-M	1.880	47.75	0.250	6.35	7.500	190.50	4.552	115.61	4.233	107.52	270.62	1203.77	91.79	16.06
C1880-250-8000-M	1.880	47.75	0.250	6.35	8.000	203.20	4.841	122.97	4.498	114.25	270.62	1203.77	85.67	14.99
C1880-250-8500-M	1.880	47.75	0.250	6.35	8.500	215.90	5.131	130.32	4.763	120.97	270.62	1203.77	80.32	14.06

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1880-207-4750-S	2.869	72.88	115.38	513.23	61.35	10.74
C1880-207-5000-S	3.011	76.48	115.38	513.23	58.00	10.15
C1880-207-5250-S	3.152	80.07	115.38	513.23	55.01	9.63
C1880-207-5500-S	3.294	83.67	115.38	513.23	52.30	9.15
C1880-207-5750-S	3.436	87.26	115.38	513.23	49.85	8.72
C1880-207-6000-S	3.577	90.86	115.38	513.23	47.62	8.33
C1880-207-6250-S	3.719	94.45	115.38	513.23	45.58	7.98
C1880-207-6500-S	3.860	98.05	115.38	513.23	43.71	7.65
C1880-207-6750-S	4.002	101.65	115.38	513.23	41.98	7.35
C1880-207-7000-S	4.143	105.24	115.38	513.23	40.39	7.07
C1880-207-7500-S	4.426	112.43	115.38	513.23	37.54	6.57
C1880-207-8000-S*	4.799	121.90	115.38	513.23	36.05	6.31
C1880-207-8500-S*	5.083	129.10	115.38	513.23	33.76	5.91
C1880-207-9000-S*	5.366	136.29	115.38	513.23	31.75	5.56
C1880-207-9500-S*	5.649	143.48	115.38	513.23	29.96	5.24
C1880-225-2625-S	1.774	45.05	143.30	637.44	168.36	29.46
C1880-225-2750-S	1.850	46.99	143.30	637.44	159.21	27.86
C1880-225-2875-S	1.926	48.92	143.30	637.44	151.00	26.42
C1880-225-3000-S	2.002	50.85	143.30	637.44	143.60	25.13
C1880-225-3250-S	2.154	54.72	143.30	637.44	130.78	22.89
C1880-225-3500-S	2.306	58.58	143.30	637.44	120.06	21.01
C1880-225-3750-S	2.459	62.45	143.30	637.44	110.96	19.42
C1880-225-4000-S	2.611	66.31	143.30	637.44	103.15	18.05
C1880-225-4250-S	2.763	70.18	143.30	637.44	96.36	16.86
C1880-225-4500-S	2.915	74.04	143.30	637.44	90.41	15.82
C1880-225-4750-S	3.067	77.91	143.30	637.44	85.16	14.90
C1880-225-5000-S	3.219	81.77	143.30	637.44	80.48	14.08
C1880-225-5250-S	3.372	85.64	143.30	637.44	76.29	13.35
C1880-225-5500-S	3.524	89.50	143.30	637.44	72.51	12.69
C1880-225-5750-S	3.676	93.37	143.30	637.44	69.09	12.09
C1880-225-6000-S	3.828	97.23	143.30	637.44	65.98	11.55
C1880-225-6250-S	3.980	101.10	143.30	637.44	63.13	11.05
C1880-225-6500-S	4.132	104.96	143.30	637.44	60.53	10.59
C1880-225-6750-S	4.285	108.83	143.30	637.44	58.12	10.17
C1880-225-7000-S	4.437	112.69	143.30	637.44	55.90	9.78
C1880-225-7500-S	4.741	120.42	143.30	637.44	51.94	9.09
C1880-225-8000-S	5.045	128.15	143.30	637.44	48.50	8.49
C1880-225-8500-S	5.350	135.88	143.30	637.44	45.49	7.96
C1880-225-9000-S	5.654	143.61	143.30	637.44	42.83	7.49
C1880-225-9500-S	5.958	151.34	143.30	637.44	40.46	7.08
C1880-250-2500-S	1.827	46.41	188.00	836.25	279.36	48.89
C1880-250-2625-S	1.910	48.51	188.00	836.25	262.93	46.01
C1880-250-2750-S	1.993	50.62	188.00	836.25	248.32	43.46
C1880-250-2875-S	2.076	52.73	188.00	836.25	235.25	41.17
C1880-250-3000-S	2.159	54.83	188.00	836.25	223.49	39.11
C1880-250-3250-S	2.325	59.05	188.00	836.25	203.17	35.55
C1880-250-3500-S	2.491	63.26	188.00	836.25	186.24	32.59
C1880-250-3750-S	2.656	67.47	188.00	836.25	171.91	30.08
C1880-250-4000-S	2.822	71.69	188.00	836.25	159.63	27.94
C1880-250-4250-S	2.988	75.90	188.00	836.25	148.99	26.07
C1880-250-4500-S	3.154	80.11	188.00	836.25	139.68	24.44
C1880-250-4750-S	3.320	84.33	188.00	836.25	131.46	23.01
C1880-250-5000-S	3.486	88.54	188.00	836.25	124.16	21.73
C1880-250-5250-S	3.652	92.75	188.00	836.25	117.63	20.58
C1880-250-5500-S	3.818	96.97	188.00	836.25	111.74	19.56
C1880-250-5750-S	3.983	101.18	188.00	836.25	106.42	18.62
C1880-250-6000-S	4.149	105.39	188.00	836.25	101.59	17.78
C1880-250-6250-S	4.315	109.61	188.00	836.25	97.17	17.00
C1880-250-6500-S	4.481	113.82	188.00	836.25	93.12	16.30
C1880-250-6750-S	4.647	118.03	188.00	836.25	89.40	15.64
C1880-250-7000-S	4.813	122.25	188.00	836.25	85.96	15.04
C1880-250-7500-S	5.145	130.67	188.00	836.25	79.82	13.97
C1880-250-8000-S	5.476	139.10	188.00	836.25	74.50	13.04
C1880-250-8500-S	5.808	147.53	188.00	836.25	69.84	12.22

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1880-250-9000-M	**1.880**	**47.75**	**0.250**	**6.35**	**9.000**	**228.60**	**5.420**	**137.67**	**5.028**	**127.70**	**270.62**	**1203.77**	**75.59**	**13.23**
C1880-250-9500-M	**1.880**	**47.75**	**0.250**	**6.35**	**9.500**	**241.30**	**5.709**	**145.02**	**5.292**	**134.43**	**270.62**	**1203.77**	**71.39**	**12.49**
C1937-148-2000-M	1.937	49.20	0.148	3.76	2.000	50.80	1.158	29.41	0.716	18.19	43.42	193.14	51.60	9.03
C1937-148-2500-M	1.937	49.20	0.148	3.76	2.500	63.50	1.411	35.84	0.817	20.75	43.42	193.14	39.90	6.98
C1937-148-3000-M	1.937	49.20	0.148	3.76	3.000	76.20	1.664	42.27	0.919	23.34	43.42	193.14	32.50	5.69
C1937-148-3500-M	1.937	49.20	0.148	3.76	3.500	88.90	1.917	48.69	1.020	25.91	43.42	193.14	27.40	4.80
C1937-148-4000-M	1.937	49.20	0.148	3.76	4.000	101.60	2.170	55.12	1.122	28.50	43.42	193.14	23.70	4.15
C1937-148-4500-M	1.937	49.20	0.148	3.76	4.500	114.30	2.422	61.52	1.223	31.06	43.42	193.14	20.90	3.66
C1937-148-5000-M	1.937	49.20	0.148	3.76	5.000	127.00	2.675	67.95	1.324	33.63	43.42	193.14	18.70	3.27
C1937-148-5500-M	1.937	49.20	0.148	3.76	5.500	139.70	2.928	74.37	1.426	36.22	43.42	193.14	16.90	2.96
C1937-162-2000-M	1.937	49.20	0.162	4.12	2.000	50.80	1.212	30.78	0.810	20.57	55.80	248.21	70.80	12.39
C1937-162-2500-M	1.937	49.20	0.162	4.12	2.500	63.50	1.477	37.52	0.931	23.65	55.80	248.21	54.50	9.54
C1937-162-3000-M	1.937	49.20	0.162	4.12	3.000	76.20	1.742	44.25	1.052	26.72	55.80	248.21	44.30	7.75
C1937-162-3500-M	1.937	49.20	0.162	4.12	3.500	88.90	2.007	50.98	1.173	29.79	55.80	248.21	37.40	6.55
C1937-162-4000-M	1.937	49.20	0.162	4.12	4.000	101.60	2.272	57.71	1.293	32.84	55.80	248.21	32.30	5.65
C1937-162-4500-M	1.937	49.20	0.162	4.12	4.500	114.30	2.537	64.44	1.414	35.92	55.80	248.21	28.40	4.97
C1937-162-5000-M	1.937	49.20	0.162	4.12	5.000	127.00	2.801	71.15	1.535	38.99	55.80	248.21	25.40	4.45
C1937-162-5500-M	1.937	49.20	0.162	4.12	5.500	139.70	3.066	77.88	1.656	42.06	55.80	248.21	22.90	4.01
C1937-177-2500-M	1.937	49.20	0.177	4.50	2.500	63.50	1.549	39.34	1.054	26.77	71.29	317.11	74.90	13.11
C1937-177-3000-M	1.937	49.20	0.177	4.50	3.000	76.20	1.827	46.41	1.196	30.38	71.29	317.11	60.80	10.64
C1937-177-3500-M	1.937	49.20	0.177	4.50	3.500	88.90	2.105	53.47	1.339	34.01	71.29	317.11	51.10	8.94
C1937-177-4000-M	1.937	49.20	0.177	4.50	4.000	101.60	2.383	60.53	1.481	37.62	71.29	317.11	44.10	7.72
C1937-177-4500-M	1.937	49.20	0.177	4.50	4.500	114.30	2.662	67.61	1.624	41.25	71.29	317.11	38.80	6.79
C1937-177-5000-M	1.937	49.20	0.177	4.50	5.000	127.00	2.940	74.68	1.766	44.86	71.29	317.11	34.60	6.06
C1937-177-5500-M	1.937	49.20	0.177	4.50	5.500	139.70	3.218	81.74	1.908	48.46	71.29	317.11	31.20	5.46
C1937-177-6000-M	1.937	49.20	0.177	4.50	6.000	152.40	3.497	88.82	2.051	52.10	71.29	317.11	28.50	4.99
C1937-192-2500-M	1.937	49.20	0.192	4.88	2.500	63.50	1.620	41.15	1.176	29.87	89.23	396.91	101.40	17.75
C1937-192-3000-M	1.937	49.20	0.192	4.88	3.000	76.20	1.912	48.56	1.341	34.06	89.23	396.91	82.00	14.35
C1937-192-3500-M	1.937	49.20	0.192	4.88	3.500	88.90	2.204	55.98	1.505	38.23	89.23	396.91	68.80	12.04
C1937-192-4000-M	1.937	49.20	0.192	4.88	4.000	101.60	2.496	63.40	1.670	42.42	89.23	396.91	59.30	10.38
C1937-192-4500-M	1.937	49.20	0.192	4.88	4.500	114.30	2.788	70.82	1.834	46.58	89.23	396.91	52.10	9.12
C1937-192-5000-M	1.937	49.20	0.192	4.88	5.000	127.00	3.080	78.23	1.999	50.77	89.23	396.91	46.50	8.14
C1937-192-5500-M	1.937	49.20	0.192	4.88	5.500	139.70	3.372	85.65	2.164	54.97	89.23	396.91	41.90	7.33
C1937-192-6000-M	1.937	49.20	0.192	4.88	6.000	152.40	3.664	93.07	2.328	59.13	89.23	396.91	38.20	6.69
C1937-207-2500-M	1.937	49.20	0.207	5.26	2.500	63.50	1.690	42.93	1.297	32.94	109.73	488.10	135.40	23.70
C1937-207-3000-M	1.937	49.20	0.207	5.26	3.000	76.20	1.995	50.67	1.483	37.67	109.73	488.10	109.20	19.11
C1937-207-3500-M	1.937	49.20	0.207	5.26	3.500	88.90	2.301	58.44	1.670	42.42	109.73	488.10	91.50	16.01
C1937-207-4000-M	1.937	49.20	0.207	5.26	4.000	101.60	2.607	66.22	1.857	47.17	109.73	488.10	78.80	13.79
C1937-207-4500-M	1.937	49.20	0.207	5.26	4.500	114.30	2.913	73.99	2.044	51.92	109.73	488.10	69.10	12.09
C1937-207-5000-M	1.937	49.20	0.207	5.26	5.000	127.00	3.219	81.76	2.230	56.64	109.73	488.10	61.60	10.78
C1937-207-5500-M	1.937	49.20	0.207	5.26	5.500	139.70	3.524	89.51	2.417	61.39	109.73	488.10	55.50	9.71
C1937-207-6000-M	1.937	49.20	0.207	5.26	6.000	152.40	3.830	97.28	2.604	66.14	109.73	488.10	50.60	8.86
C1937-225-2500-M	**1.937**	**49.20**	**0.225**	**5.72**	**2.500**	**63.50**	**1.477**	**37.51**	**1.361**	**34.57**	**198.51**	**883.03**	**194.00**	**33.95**
C1937-225-3000-M	**1.937**	**49.20**	**0.225**	**5.72**	**3.000**	**76.20**	**1.733**	**44.01**	**1.584**	**40.24**	**197.71**	**879.46**	**156.00**	**27.30**
C1937-225-3500-M	**1.937**	**49.20**	**0.225**	**5.72**	**3.500**	**88.90**	**1.979**	**50.28**	**1.797**	**45.63**	**199.20**	**886.08**	**131.00**	**22.93**
C1937-225-4000-M	**1.937**	**49.20**	**0.225**	**5.72**	**4.000**	**101.60**	**2.236**	**56.80**	**2.021**	**51.34**	**197.54**	**878.70**	**112.00**	**19.60**
C1937-225-4500-M	**1.937**	**49.20**	**0.225**	**5.72**	**4.500**	**114.30**	**2.490**	**63.25**	**2.242**	**56.96**	**196.95**	**876.06**	**98.00**	**17.15**
C1937-225-5000-M	**1.937**	**49.20**	**0.225**	**5.72**	**5.000**	**127.00**	**2.728**	**69.30**	**2.444**	**62.07**	**199.92**	**889.29**	**88.00**	**15.40**
C1937-225-5500-M	**1.937**	**49.20**	**0.225**	**5.72**	**5.500**	**139.70**	**2.985**	**75.82**	**2.668**	**67.77**	**198.69**	**883.81**	**79.00**	**13.83**
C1937-225-6000-M	**1.937**	**49.20**	**0.225**	**5.72**	**6.000**	**152.40**	**3.233**	**82.11**	**2.882**	**73.19**	**199.24**	**886.26**	**72.00**	**12.60**
C1937-250-2500-M	**1.937**	**49.20**	**0.250**	**6.35**	**2.500**	**63.50**	**1.638**	**41.62**	**1.561**	**39.64**	**255.01**	**1134.34**	**296.00**	**51.80**
C1937-250-3000-M	**1.937**	**49.20**	**0.250**	**6.35**	**3.000**	**76.20**	**1.924**	**48.86**	**1.820**	**46.24**	**255.09**	**1134.71**	**237.00**	**41.48**
C1937-250-3500-M	**1.937**	**49.20**	**0.250**	**6.35**	**3.500**	**88.90**	**2.205**	**56.01**	**2.076**	**52.72**	**256.37**	**1140.38**	**198.00**	**34.65**
C1937-250-4000-M	**1.937**	**49.20**	**0.250**	**6.35**	**4.000**	**101.60**	**2.496**	**63.39**	**2.342**	**59.48**	**254.24**	**1130.93**	**169.00**	**29.58**
C1937-250-4500-M	**1.937**	**49.20**	**0.250**	**6.35**	**4.500**	**114.30**	**2.779**	**70.59**	**2.599**	**66.02**	**254.67**	**1132.82**	**148.00**	**25.90**
C1937-250-5000-M	**1.937**	**49.20**	**0.250**	**6.35**	**5.000**	**127.00**	**3.058**	**77.67**	**2.851**	**72.41**	**256.37**	**1140.38**	**132.00**	**23.10**
C1937-250-5500-M	**1.937**	**49.20**	**0.250**	**6.35**	**5.500**	**139.70**	**3.339**	**84.80**	**3.105**	**78.86**	**257.22**	**1144.16**	**119.00**	**20.83**
C1937-250-6000-M	**1.937**	**49.20**	**0.250**	**6.35**	**6.000**	**152.40**	**3.626**	**92.11**	**3.368**	**85.54**	**256.37**	**1140.38**	**108.00**	**18.90**
C1939-162-3250-M	**1.939**	**49.25**	**0.162**	**4.12**	**3.250**	**82.55**	**1.347**	**34.22**	**1.062**	**26.98**	**79.11**	**351.90**	**41.58**	**7.28**
C1939-162-3500-M	**1.939**	**49.25**	**0.162**	**4.12**	**3.500**	**88.90**	**1.435**	**36.44**	**1.124**	**28.54**	**79.11**	**351.90**	**38.31**	**6.70**
C1939-162-3750-M	**1.939**	**49.25**	**0.162**	**4.12**	**3.750**	**95.25**	**1.522**	**38.66**	**1.185**	**30.11**	**79.11**	**351.90**	**35.51**	**6.21**
C1939-162-4000-M	**1.939**	**49.25**	**0.162**	**4.12**	**4.000**	**101.60**	**1.610**	**40.88**	**1.247**	**31.68**	**79.11**	**351.90**	**33.10**	**5.79**
C1939-162-4250-M	**1.939**	**49.25**	**0.162**	**4.12**	**4.250**	**107.95**	**1.697**	**43.10**	**1.309**	**33.24**	**79.11**	**351.90**	**30.99**	**5.42**
C1939-162-4500-M	**1.939**	**49.25**	**0.162**	**4.12**	**4.500**	**114.30**	**1.784**	**45.32**	**1.370**	**34.81**	**79.11**	**351.90**	**29.13**	**5.10**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1880-250-9000-S	**6.140**	**155.95**	**188.00**	**836.25**	**65.73**	**11.50**
C1880-250-9500-S	**6.472**	**164.38**	**188.00**	**836.25**	**62.08**	**10.86**
C1937-148-2000-S	1.158	29.41	36.17	160.89	42.98	7.52
C1937-148-2500-S	1.411	35.84	36.17	160.89	33.24	5.82
C1937-148-3000-S	1.664	42.27	36.17	160.89	27.07	4.74
C1937-148-3500-S	1.917	48.69	36.17	160.89	22.82	3.99
C1937-148-4000-S	2.170	55.12	36.17	160.89	19.74	3.45
C1937-148-4500-S	2.422	61.52	36.17	160.89	17.41	3.05
C1937-148-5000-S	2.675	67.95	36.17	160.89	15.58	2.73
C1937-148-5500-S	2.928	74.37	36.17	160.89	14.08	2.46
C1937-162-2000-S	1.212	30.78	46.48	206.76	58.98	10.32
C1937-162-2500-S	1.477	37.52	46.48	206.76	45.40	7.94
C1937-162-3000-S	1.742	44.25	46.48	206.76	36.90	6.46
C1937-162-3500-S	2.007	50.98	46.48	206.76	31.15	5.45
C1937-162-4000-S	2.272	57.71	46.48	206.76	26.91	4.71
C1937-162-4500-S	2.537	64.44	46.48	206.76	23.66	4.14
C1937-162-5000-S	2.801	71.15	46.48	206.76	21.16	3.70
C1937-162-5500-S	3.066	77.88	46.48	206.76	19.08	3.34
C1937-177-2500-S	1.549	39.34	59.38	264.16	62.39	10.92
C1937-177-3000-S	1.827	46.41	59.38	264.16	50.65	8.86
C1937-177-3500-S	2.105	53.47	59.38	264.16	42.57	7.45
C1937-177-4000-S	2.383	60.53	59.38	264.16	36.74	6.43
C1937-177-4500-S	2.662	67.61	59.38	264.16	32.32	5.66
C1937-177-5000-S	2.940	74.68	59.38	264.16	28.82	5.04
C1937-177-5500-S	3.218	81.74	59.38	264.16	25.99	4.55
C1937-177-6000-S	3.497	88.82	59.38	264.16	23.74	4.15
C1937-192-2500-S	1.620	41.15	74.33	330.63	84.47	14.78
C1937-192-3000-S	1.912	48.56	74.33	330.63	68.31	11.95
C1937-192-3500-S	2.204	55.98	74.33	330.63	57.31	10.03
C1937-192-4000-S	2.496	63.40	74.33	330.63	49.40	8.64
C1937-192-4500-S	2.788	70.82	74.33	330.63	43.40	7.59
C1937-192-5000-S	3.080	78.23	74.33	330.63	38.74	6.78
C1937-192-5500-S	3.372	85.65	74.33	330.63	34.90	6.11
C1937-192-6000-S	3.664	93.07	74.33	330.63	31.82	5.57
C1937-207-2500-S	1.690	42.93	91.41	406.59	112.79	19.74
C1937-207-3000-S	1.995	50.67	91.41	406.59	90.96	15.92
C1937-207-3500-S	2.301	58.45	91.41	406.59	76.22	13.34
C1937-207-4000-S	2.607	66.22	91.41	406.59	65.64	11.49
C1937-207-4500-S	2.913	73.99	91.41	406.59	57.56	10.07
C1937-207-5000-S	3.219	81.76	91.41	406.59	51.31	8.98
C1937-207-5500-S	3.524	89.51	91.41	406.59	46.23	8.09
C1937-207-6000-S	3.830	97.28	91.41	406.59	42.15	7.38
C1937-225-2500-S	**1.638**	**41.59**	**139.38**	**619.98**	**161.60**	**28.28**
C1937-225-3000-S	**1.927**	**48.96**	**139.38**	**619.98**	**129.95**	**22.74**
C1937-225-3500-S	**2.223**	**56.46**	**139.38**	**619.98**	**109.12**	**19.10**
C1937-225-4000-S	**2.506**	**63.65**	**139.38**	**619.98**	**93.30**	**16.33**
C1937-225-4500-S	**2.793**	**70.93**	**139.38**	**619.98**	**81.63**	**14.29**
C1937-225-5000-S	**3.099**	**78.71**	**139.38**	**619.98**	**73.30**	**12.83**
C1937-225-5500-S	**3.382**	**85.90**	**139.38**	**619.98**	**65.81**	**11.52**
C1937-225-6000-S	**3.676**	**93.37**	**139.38**	**619.98**	**59.98**	**10.50**
C1937-250-2500-S	**1.758**	**44.66**	**182.92**	**813.67**	**246.57**	**43.15**
C1937-250-3000-S	**2.073**	**52.67**	**182.92**	**813.67**	**197.42**	**34.55**
C1937-250-3500-S	**2.391**	**60.73**	**182.92**	**813.67**	**164.93**	**28.86**
C1937-250-4000-S	**2.701**	**68.60**	**182.92**	**813.67**	**140.78**	**24.64**
C1937-250-4500-S	**3.016**	**76.61**	**182.92**	**813.67**	**123.28**	**21.57**
C1937-250-5000-S	**3.336**	**84.75**	**182.92**	**813.67**	**109.96**	**19.24**
C1937-250-5500-S	**3.655**	**92.83**	**182.92**	**813.67**	**99.13**	**17.35**
C1937-250-6000-S	**3.967**	**100.76**	**182.92**	**813.67**	**89.96**	**15.74**
C1939-162-3250-S	**1.625**	**41.28**	**58.74**	**261.28**	**36.15**	**6.33**
C1939-162-3500-S	**1.737**	**44.11**	**58.74**	**261.28**	**33.31**	**5.83**
C1939-162-3750-S	**1.848**	**46.93**	**58.74**	**261.28**	**30.88**	**5.40**
C1939-162-4000-S	**1.959**	**49.76**	**58.74**	**261.28**	**28.78**	**5.04**
C1939-162-4250-S	**2.070**	**52.58**	**58.74**	**261.28**	**26.95**	**4.72**
C1939-162-4500-S	**2.181**	**55.41**	**58.74**	**261.28**	**25.33**	**4.43**

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Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL							
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C1939-162-4750-M	1.939	49.25	0.162	4.12	4.750	120.65	1.872	47.54	1.432	36.38	79.11	351.90	27.49	4.81	**C1939-162-4750-S**	2.293	58.23	58.74	261.28	23.90	4.18
C1939-162-5000-M	1.939	49.25	0.162	4.12	5.000	127.00	1.959	49.77	1.494	37.94	79.11	351.90	26.02	4.55	**C1939-162-5000-S**	2.404	61.05	58.74	261.28	22.62	3.96
C1939-162-5250-M	1.939	49.25	0.162	4.12	5.250	133.35	2.047	51.99	1.555	39.51	79.11	351.90	24.70	4.32	**C1939-162-5250-S**	2.515	63.88	58.74	261.28	21.48	3.76
C1939-162-5500-M	1.939	49.25	0.162	4.12	5.500	139.70	2.134	54.21	1.617	41.08	79.11	351.90	23.50	4.11	**C1939-162-5500-S**	2.626	66.70	58.74	261.28	20.44	3.58
C1939-162-5750-M	1.939	49.25	0.162	4.12	5.750	146.05	2.222	56.43	1.679	42.64	79.11	351.90	22.42	3.92	**C1939-162-5750-S**	2.737	69.53	58.74	261.28	19.50	3.41
C1939-162-6000-M	1.939	49.25	0.162	4.12	6.000	152.40	2.309	58.65	1.740	44.21	79.11	351.90	21.43	3.75	**C1939-162-6000-S**	2.848	72.35	58.74	261.28	18.64	3.26
C1939-162-6250-M	1.939	49.25	0.162	4.12	6.250	158.75	2.396	60.87	1.802	45.78	79.11	351.90	20.53	3.59	**C1939-162-6250-S**	2.960	75.18	58.74	261.28	17.85	3.12
C1939-162-6500-M	1.939	49.25	0.162	4.12	6.500	165.10	2.484	63.09	1.864	47.34	79.11	351.90	19.70	3.45	**C1939-162-6500-S**	3.071	78.00	58.74	261.28	17.13	3.00
C1939-162-6750-M	1.939	49.25	0.162	4.12	6.750	171.45	2.571	65.31	1.926	48.91	79.11	351.90	18.93	3.31	**C1939-162-6750-S**	3.182	80.82	58.74	261.28	16.46	2.88
C1939-162-7000-M	1.939	49.25	0.162	4.12	7.000	177.80	2.659	67.53	1.987	50.47	79.11	351.90	18.22	3.19	**C1939-162-7000-S**	3.293	83.65	58.74	261.28	15.85	2.77
C1939-162-7500-M	1.939	49.25	0.162	4.12	7.500	190.50	2.834	71.97	2.111	53.61	79.11	351.90	16.95	2.97	**C1939-162-7500-S**	3.516	89.30	58.74	261.28	14.74	2.58
C1939-162-8000-M	1.939	49.25	0.162	4.12	8.000	203.20	3.008	76.41	2.234	56.74	79.11	351.90	15.85	2.77	**C1939-162-8000-S**	3.738	94.94	58.74	261.28	13.78	2.41
C1939-162-8500-M	1.939	49.25	0.162	4.12	8.500	215.90	3.183	80.85	2.357	59.87	79.11	351.90	14.88	2.60	**C1939-162-8500-S**	3.960	100.59	58.74	261.28	12.94	2.26
C1939-162-9000-M	1.939	49.25	0.162	4.12	9.000	228.60	3.358	85.30	2.481	63.01	79.11	351.90	14.02	2.45	**C1939-162-9000-S**	4.183	106.24	58.74	261.28	12.19	2.13
C1939-162-9500-M	1.939	49.25	0.162	4.12	9.500	241.30	3.533	89.74	2.604	66.14	79.11	351.90	13.26	2.32	**C1939-162-9500-S**	4.405	111.89	58.74	261.28	11.53	2.02
C1939-177-3000-M	1.939	49.25	0.177	4.50	3.000	76.20	1.374	34.91	1.142	29.00	101.21	450.19	62.25	10.89	**C1939-177-3000-S**	1.628	41.35	74.28	330.42	54.13	9.47
C1939-177-3250-M	1.939	49.25	0.177	4.50	3.250	82.55	1.471	37.35	1.214	30.85	101.21	450.19	56.88	9.95	**C1939-177-3250-S**	1.748	44.40	74.28	330.42	49.46	8.66
C1939-177-3500-M	1.939	49.25	0.177	4.50	3.500	88.90	1.567	39.80	1.287	32.70	101.21	450.19	52.36	9.16	**C1939-177-3500-S**	1.868	47.46	74.28	330.42	45.53	7.97
C1939-177-3750-M	1.939	49.25	0.177	4.50	3.750	95.25	1.663	42.25	1.360	34.54	101.21	450.19	48.50	8.49	**C1939-177-3750-S**	1.989	50.52	74.28	330.42	42.18	7.38
C1939-177-4000-M	1.939	49.25	0.177	4.50	4.000	101.60	1.760	44.70	1.433	36.39	101.21	450.19	45.18	7.91	**C1939-177-4000-S**	2.109	53.57	74.28	330.42	39.29	6.87
C1939-177-4250-M	1.939	49.25	0.177	4.50	4.250	107.95	1.856	47.15	1.505	38.24	101.21	450.19	42.28	7.40	**C1939-177-4250-S**	2.230	56.63	74.28	330.42	36.76	6.43
C1939-177-4500-M	1.939	49.25	0.177	4.50	4.500	114.30	1.953	49.60	1.578	40.09	101.21	450.19	39.73	6.95	**C1939-177-4500-S**	2.350	59.69	74.28	330.42	34.55	6.05
C1939-177-4750-M	1.939	49.25	0.177	4.50	4.750	120.65	2.049	52.04	1.651	41.93	101.21	450.19	37.47	6.56	**C1939-177-4750-S**	2.470	62.74	74.28	330.42	32.58	5.70
C1939-177-5000-M	1.939	49.25	0.177	4.50	5.000	127.00	2.145	54.49	1.724	43.78	101.21	450.19	35.45	6.20	**C1939-177-5000-S**	2.591	65.80	74.28	330.42	30.83	5.40
C1939-177-5250-M	1.939	49.25	0.177	4.50	5.250	133.35	2.242	56.94	1.796	45.63	101.21	450.19	33.64	5.89	**C1939-177-5250-S**	2.711	68.86	74.28	330.42	29.26	5.12
C1939-177-5500-M	1.939	49.25	0.177	4.50	5.500	139.70	2.338	59.39	1.869	47.48	101.21	450.19	32.01	5.60	**C1939-177-5500-S**	2.831	71.91	74.28	330.42	27.83	4.87
C1939-177-5750-M	1.939	49.25	0.177	4.50	5.750	146.05	2.435	61.84	1.942	49.33	101.21	450.19	30.53	5.34	**C1939-177-5750-S**	2.952	74.97	74.28	330.42	26.54	4.65
C1939-177-6000-M	1.939	49.25	0.177	4.50	6.000	152.40	2.531	64.29	2.015	51.17	101.21	450.19	29.17	5.11	**C1939-177-6000-S**	3.072	78.03	74.28	330.42	25.37	4.44
C1939-177-6250-M	1.939	49.25	0.177	4.50	6.250	158.75	2.627	66.73	2.087	53.02	101.21	450.19	27.94	4.89	**C1939-177-6250-S**	3.192	81.09	74.28	330.42	24.29	4.25
C1939-177-6500-M	1.939	49.25	0.177	4.50	6.500	165.10	2.724	69.18	2.160	54.87	101.21	450.19	26.80	4.69	**C1939-177-6500-S**	3.313	84.14	74.28	330.42	23.31	4.08
C1939-177-6750-M	1.939	49.25	0.177	4.50	6.750	171.45	2.820	71.63	2.233	56.72	101.21	450.19	25.75	4.51	**C1939-177-6750-S**	3.433	87.20	74.28	330.42	22.39	3.92
C1939-177-7000-M	1.939	49.25	0.177	4.50	7.000	177.80	2.917	74.08	2.306	58.57	101.21	450.19	24.79	4.34	**C1939-177-7000-S**	3.553	90.26	74.28	330.42	21.55	3.77
C1939-177-7500-M*	1.939	49.25	0.177	4.50	7.500	190.50	3.218	81.74	2.586	65.67	101.21	450.19	23.64	4.14	**C1939-177-7500-S***	3.886	98.70	74.28	330.42	20.55	3.60
C1939-177-8000-M*	1.939	49.25	0.177	4.50	8.000	203.20	3.411	86.64	2.731	69.37	101.21	450.19	22.05	3.86	**C1939-177-8000-S***	4.127	104.82	74.28	330.42	19.18	3.36
C1939-177-8500-M*	1.939	49.25	0.177	4.50	8.500	215.90	3.604	91.53	2.877	73.07	101.21	450.19	20.67	3.62	**C1939-177-8500-S***	4.367	110.93	74.28	330.42	17.97	3.15
C1939-177-9000-M*	1.939	49.25	0.177	4.50	9.000	228.60	3.796	96.43	3.022	76.76	101.21	450.19	19.45	3.40	**C1939-177-9000-S***	4.608	117.04	74.28	330.42	16.91	2.96
C1939-177-9500-M*	1.939	49.25	0.177	4.50	9.500	241.30	3.989	101.33	3.168	80.46	101.21	450.19	18.37	3.21	**C1939-177-9500-S***	4.849	123.16	74.28	330.42	15.97	2.79
C1939-192-2875-M	1.939	49.25	0.192	4.88	2.875	73.03	1.436	36.47	1.241	31.52	126.85	564.27	88.15	15.43	**C1939-192-2875-S**	1.674	42.53	92.04	409.41	76.65	13.41
C1939-192-3000-M	1.939	49.25	0.192	4.88	3.000	76.20	1.489	37.81	1.283	32.59	126.85	564.27	83.94	14.69	**C1939-192-3000-S**	1.739	44.17	92.04	409.41	72.99	12.77
C1939-192-3250-M	1.939	49.25	0.192	4.88	3.250	82.55	1.594	40.50	1.367	34.73	126.85	564.27	76.62	13.41	**C1939-192-3250-S**	1.869	47.46	92.04	409.41	66.62	11.66
C1939-192-3500-M	1.939	49.25	0.192	4.88	3.500	88.90	1.700	43.18	1.451	36.86	126.85	564.27	70.47	12.33	**C1939-192-3500-S**	1.998	50.75	92.04	409.41	61.28	10.72
C1939-192-3750-M	1.939	49.25	0.192	4.88	3.750	95.25	1.805	45.86	1.535	39.00	126.85	564.27	65.24	11.42	**C1939-192-3750-S**	2.128	54.04	92.04	409.41	56.73	9.93
C1939-192-4000-M	1.939	49.25	0.192	4.88	4.000	101.60	1.911	48.54	1.620	41.14	126.85	564.27	60.73	10.63	**C1939-192-4000-S**	2.257	57.33	92.04	409.41	52.81	9.24
C1939-192-4250-M	1.939	49.25	0.192	4.88	4.250	107.95	2.017	51.22	1.704	43.27	126.85	564.27	56.80	9.94	**C1939-192-4250-S**	2.387	60.62	92.04	409.41	49.39	8.64
C1939-192-4500-M	1.939	49.25	0.192	4.88	4.500	114.30	2.122	53.90	1.788	45.41	126.85	564.27	53.35	9.34	**C1939-192-4500-S**	2.516	63.91	92.04	409.41	46.39	8.12
C1939-192-4750-M	1.939	49.25	0.192	4.88	4.750	120.65	2.228	56.59	1.872	47.54	126.85	564.27	50.29	8.80	**C1939-192-4750-S**	2.645	67.20	92.04	409.41	43.73	7.65
C1939-192-5000-M	1.939	49.25	0.192	4.88	5.000	127.00	2.333	59.27	1.956	49.68	126.85	564.27	47.57	8.32	**C1939-192-5000-S**	2.775	70.48	92.04	409.41	41.37	7.24
C1939-192-5250-M	1.939	49.25	0.192	4.88	5.250	133.35	2.439	61.95	2.040	51.82	126.85	564.27	45.13	7.90	**C1939-192-5250-S**	2.904	73.77	92.04	409.41	39.24	6.87
C1939-192-5500-M	1.939	49.25	0.192	4.88	5.500	139.70	2.545	64.63	2.124	53.95	126.85	564.27	42.92	7.51	**C1939-192-5500-S**	3.034	77.06	92.04	409.41	37.32	6.53
C1939-192-5750-M	1.939	49.25	0.192	4.88	5.750	146.05	2.650	67.31	2.208	56.09	126.85	564.27	40.92	7.16	**C1939-192-5750-S**	3.163	80.35	92.04	409.41	35.58	6.23
C1939-192-6000-M	1.939	49.25	0.192	4.88	6.000	152.40	2.756	69.99	2.292	58.22	126.85	564.27	39.10	6.84	**C1939-192-6000-S**	3.293	83.64	92.04	409.41	34.00	5.95
C1939-192-6250-M	1.939	49.25	0.192	4.88	6.250	158.75	2.861	72.68	2.376	60.36	126.85	564.27	37.43	6.55	**C1939-192-6250-S**	3.422	86.93	92.04	409.41	32.55	5.70
C1939-192-6500-M	1.939	49.25	0.192	4.88	6.500	165.10	2.967	75.36	2.460	62.50	126.85	564.27	35.90	6.28	**C1939-192-6500-S**	3.552	90.22	92.04	409.41	31.22	5.46
C1939-192-6750-M*	1.939	49.25	0.192	4.88	6.750	171.45	3.183	80.86	2.682	68.11	126.85	564.27	35.57	6.22	**C1939-192-6750-S***	3.774	95.86	92.04	409.41	30.93	5.41
C1939-192-7000-M*	1.939	49.25	0.192	4.88	7.000	177.80	3.289	83.54	2.766	70.25	126.85	564.27	34.18	5.98	**C1939-192-7000-S***	3.903	99.15	92.04	409.41	29.72	5.20
C1939-192-7500-M*	1.939	49.25	0.192	4.88	7.500	190.50	3.500	88.90	2.934	74.52	126.85	564.27	31.71	5.55	**C1939-192-7500-S***	4.162	105.73	92.04	409.41	27.58	4.83
C1939-192-8000-M*	1.939	49.25	0.192	4.88	8.000	203.20	3.711	94.26	3.102	78.79	126.85	564.27	29.58	5.18	**C1939-192-8000-S***	4.421	112.31	92.04	409.41	25.72	4.50
C1939-192-8500-M*	1.939	49.25	0.192	4.88	8.500	215.90	3.922	99.63	3.270	83.06	126.85	564.27	27.71	4.85	**C1939-192-8500-S***	4.680	118.88	92.04	409.41	24.10	4.22
C1939-192-9000-M*	1.939	49.25	0.192	4.88	9.000	228.60	4.133	104.99	3.438	87.34	126.85	564.27	26.07	4.56	**C1939-192-9000-S***	4.939	125.46	92.04	409.41	22.67	3.97
C1939-192-9500-M*	1.939	49.25	0.192	4.88	9.500	241.30	4.345	110.35	3.607	91.61	126.85	564.27	24.61	4.31	**C1939-192-9500-S***	5.198	132.04	92.04	409.41	21.40	3.74
C1939-207-2750-M	1.939	49.25	0.207	5.26	2.750	69.85	1.487	37.77	1.327	33.71	156.25	695.05	123.71	21.65	**C1939-207-2750-S**	1.708	43.38	112.08	498.57	107.57	18.82
C1939-207-2875-M	1.939	49.25	0.207	5.26	2.875	73.03	1.544	39.23	1.375	34.92	156.25	695.05	117.42	20.55	**C1939-207-2875-S**	1.777	45.14	112.08	498.57	102.11	17.87
C1939-207-3000-M	1.939	49.25	0.207	5.26	3.000	76.20	1.602	40.68	1.423	36.14	156.25	695.05	111.75	19.56	**C1939-207-3000-S**	1.847	46.90	112.08	498.57	97.17	17.01
C1939-207-3250-M	1.939	49.25	0.207	5.26	3.250	82.55	1.717	43.60	1.518	38.56	156.25	695.05	101.90	17.83	**C1939-207-3250-S**	1.985	50.42	112.08	498.57	88.61	15.51

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1939-207-3500-M	1.939	49.25	0.207	5.26	3.500	88.90	1.831	46.52	1.614	40.99	156.25	695.05	93.64	16.39
C1939-207-3750-M	1.939	49.25	0.207	5.26	3.750	95.25	1.946	49.43	1.709	43.42	156.25	695.05	86.63	15.16
C1939-207-4000-M	1.939	49.25	0.207	5.26	4.000	101.60	2.061	52.35	1.805	45.84	156.25	695.05	80.59	14.10
C1939-207-4250-M	1.939	49.25	0.207	5.26	4.250	107.95	2.176	55.27	1.900	48.27	156.25	695.05	75.33	13.18
C1939-207-4500-M	1.939	49.25	0.207	5.26	4.500	114.30	2.291	58.18	1.996	50.69	156.25	695.05	70.72	12.38
C1939-207-4750-M	1.939	49.25	0.207	5.26	4.750	120.65	2.405	61.10	2.091	53.12	156.25	695.05	66.65	11.66
C1939-207-5000-M	1.939	49.25	0.207	5.26	5.000	127.00	2.520	64.02	2.187	55.55	156.25	695.05	63.01	11.03
C1939-207-5250-M	1.939	49.25	0.207	5.26	5.250	133.35	2.635	66.93	2.282	57.97	156.25	695.05	59.76	10.46
C1939-207-5500-M	1.939	49.25	0.207	5.26	5.500	139.70	2.750	69.85	2.378	60.40	156.25	695.05	56.82	9.94
C1939-207-5750-M	1.939	49.25	0.207	5.26	5.750	146.05	2.865	72.77	2.473	62.82	156.25	695.05	54.16	9.48
C1939-207-6000-M	1.939	49.25	0.207	5.26	6.000	152.40	2.980	75.68	2.569	65.25	156.25	695.05	51.73	9.05
C1939-207-6250-M	1.939	49.25	0.207	5.26	6.250	158.75	3.094	78.60	2.664	67.68	156.25	695.05	49.52	8.67
C1939-207-6500-M	1.939	49.25	0.207	5.26	6.500	165.10	3.209	81.51	2.760	70.10	156.25	695.05	47.48	8.31
C1939-207-6750-M	1.939	49.25	0.207	5.26	6.750	171.45	3.324	84.43	2.855	72.53	156.25	695.05	45.61	7.98
C1939-207-7000-M	1.939	49.25	0.207	5.26	7.000	177.80	3.439	87.35	2.951	74.96	156.25	695.05	43.88	7.68
C1939-207-7500-M*	1.939	49.25	0.207	5.26	7.500	190.50	3.780	96.02	3.280	83.32	156.25	695.05	42.01	7.35
C1939-207-8000-M*	1.939	49.25	0.207	5.26	8.000	203.20	4.010	101.86	3.471	88.17	156.25	695.05	39.16	6.85
C1939-207-8500-M*	1.939	49.25	0.207	5.26	8.500	215.90	4.240	107.69	3.662	93.02	156.25	695.05	36.68	6.42
C1939-207-9000-M*	1.939	49.25	0.207	5.26	9.000	228.60	4.469	113.52	3.853	97.88	156.25	695.05	34.49	6.04
C1939-207-9500-M*	1.939	49.25	0.207	5.26	9.500	241.30	4.699	119.36	4.044	102.73	156.25	695.05	32.55	5.70
C1939-225-2625-M	1.939	49.25	0.225	5.72	2.625	66.68	1.545	39.23	1.422	36.11	196.77	875.26	182.12	31.87
C1939-225-2750-M	1.939	49.25	0.225	5.72	2.750	69.85	1.607	40.83	1.476	37.49	196.77	875.26	172.22	30.14
C1939-225-2875-M	1.939	49.25	0.225	5.72	2.875	73.03	1.670	42.43	1.531	38.88	196.77	875.26	163.35	28.59
C1939-225-3000-M	1.939	49.25	0.225	5.72	3.000	76.20	1.733	44.03	1.585	40.27	196.77	875.26	155.34	27.18
C1939-225-3250-M	1.939	49.25	0.225	5.72	3.250	82.55	1.859	47.22	1.694	43.04	196.77	875.26	141.47	24.76
C1939-225-3500-M	1.939	49.25	0.225	5.72	3.500	88.90	1.985	50.42	1.803	45.81	196.77	875.26	129.87	22.73
C1939-225-3750-M	1.939	49.25	0.225	5.72	3.750	95.25	2.111	53.61	1.913	48.58	196.77	875.26	120.03	21.01
C1939-225-4000-M	1.939	49.25	0.225	5.72	4.000	101.60	2.237	56.81	2.022	51.35	196.77	875.26	111.58	19.53
C1939-225-4250-M	1.939	49.25	0.225	5.72	4.250	107.95	2.362	60.00	2.131	54.12	196.77	875.26	104.24	18.24
C1939-225-4500-M	1.939	49.25	0.225	5.72	4.500	114.30	2.488	63.20	2.240	56.89	196.77	875.26	97.81	17.12
C1939-225-4750-M	1.939	49.25	0.225	5.72	4.750	120.65	2.614	66.40	2.349	59.66	196.77	875.26	92.12	16.12
C1939-225-5000-M	1.939	49.25	0.225	5.72	5.000	127.00	2.740	69.59	2.458	62.43	196.77	875.26	87.06	15.24
C1939-225-5250-M	1.939	49.25	0.225	5.72	5.250	133.35	2.866	72.79	2.567	65.20	196.77	875.26	82.52	14.44
C1939-225-5500-M	1.939	49.25	0.225	5.72	5.500	139.70	2.991	75.98	2.676	67.98	196.77	875.26	78.44	13.73
C1939-225-5750-M	1.939	49.25	0.225	5.72	5.750	146.05	3.117	79.18	2.785	70.75	196.77	875.26	74.74	13.08
C1939-225-6000-M	1.939	49.25	0.225	5.72	6.000	152.40	3.243	82.37	2.894	73.52	196.77	875.26	71.37	12.49
C1939-225-6250-M	1.939	49.25	0.225	5.72	6.250	158.75	3.369	85.57	3.003	76.29	196.77	875.26	68.30	11.95
C1939-225-6500-M	1.939	49.25	0.225	5.72	6.500	165.10	3.495	88.77	3.113	79.06	196.77	875.26	65.47	11.46
C1939-225-6750-M	1.939	49.25	0.225	5.72	6.750	171.45	3.621	91.96	3.222	81.83	196.77	875.26	62.88	11.00
C1939-225-7000-M	1.939	49.25	0.225	5.72	7.000	177.80	3.746	95.16	3.331	84.60	196.77	875.26	60.48	10.58
C1939-225-7500-M	1.939	49.25	0.225	5.72	7.500	190.50	3.998	101.55	3.549	90.14	196.77	875.26	56.19	9.83
C1939-225-8000-M	1.939	49.25	0.225	5.72	8.000	203.20	4.250	107.94	3.767	95.68	196.77	875.26	52.47	9.18
C1939-225-8500-M	1.939	49.25	0.225	5.72	8.500	215.90	4.501	114.33	3.985	101.23	196.77	875.26	49.21	8.61
C1939-225-9000-M	1.939	49.25	0.225	5.72	9.000	228.60	4.753	120.72	4.203	106.77	196.77	875.26	46.33	8.11
C1939-225-9500-M	1.939	49.25	0.225	5.72	9.500	241.30	5.004	127.11	4.422	112.31	196.77	875.26	43.77	7.66
C1939-250-2625-M	1.939	49.25	0.250	6.35	2.625	66.68	1.695	43.04	1.607	40.82	263.06	1170.16	282.75	49.48
C1939-250-2750-M	1.939	49.25	0.250	6.35	2.750	69.85	1.765	44.83	1.671	42.43	263.06	1170.16	267.04	46.73
C1939-250-2875-M	1.939	49.25	0.250	6.35	2.875	73.03	1.835	46.61	1.734	44.05	263.06	1170.16	252.98	44.27
C1939-250-3000-M	1.939	49.25	0.250	6.35	3.000	76.20	1.905	48.40	1.798	45.67	263.06	1170.16	240.34	42.06
C1939-250-3250-M	1.939	49.25	0.250	6.35	3.250	82.55	2.046	51.97	1.925	48.90	263.06	1170.16	218.49	38.24
C1939-250-3500-M	1.939	49.25	0.250	6.35	3.500	88.90	2.187	55.54	2.052	52.13	263.06	1170.16	200.28	35.05
C1939-250-3750-M	1.939	49.25	0.250	6.35	3.750	95.25	2.327	59.11	2.180	55.37	263.06	1170.16	184.87	32.35
C1939-250-4000-M	1.939	49.25	0.250	6.35	4.000	101.60	2.468	62.68	2.307	58.60	263.06	1170.16	171.67	30.04
C1939-250-4250-M	1.939	49.25	0.250	6.35	4.250	107.95	2.608	66.25	2.434	61.83	263.06	1170.16	160.22	28.04
C1939-250-4500-M	1.939	49.25	0.250	6.35	4.500	114.30	2.749	69.82	2.562	65.07	263.06	1170.16	150.21	26.29
C1939-250-4750-M	1.939	49.25	0.250	6.35	4.750	120.65	2.889	73.39	2.689	68.30	263.06	1170.16	141.37	24.74
C1939-250-5000-M	1.939	49.25	0.250	6.35	5.000	127.00	3.030	76.96	2.816	71.53	263.06	1170.16	133.52	23.37
C1939-250-5250-M	1.939	49.25	0.250	6.35	5.250	133.35	3.170	80.53	2.943	74.76	263.06	1170.16	126.49	22.14
C1939-250-5500-M	1.939	49.25	0.250	6.35	5.500	139.70	3.311	84.10	3.071	78.00	263.06	1170.16	120.17	21.03
C1939-250-5750-M	1.939	49.25	0.250	6.35	5.750	146.05	3.451	87.67	3.198	81.23	263.06	1170.16	114.45	20.03
C1939-250-6000-M	1.939	49.25	0.250	6.35	6.000	152.40	3.592	91.24	3.325	84.46	263.06	1170.16	109.24	19.12
C1939-250-6250-M	1.939	49.25	0.250	6.35	6.250	158.75	3.733	94.81	3.453	87.70	263.06	1170.16	104.49	18.29
C1939-250-6500-M	1.939	49.25	0.250	6.35	6.500	165.10	3.873	98.38	3.580	90.93	263.06	1170.16	100.14	17.52
C1939-250-6750-M	1.939	49.25	0.250	6.35	6.750	171.45	4.014	101.95	3.707	94.16	263.06	1170.16	96.13	16.82

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1939-207-3500-S	2.124	53.94	112.08	498.57	81.43	14.25
C1939-207-3750-S	2.262	57.46	112.08	498.57	75.33	13.18
C1939-207-4000-S	2.401	60.97	112.08	498.57	70.07	12.26
C1939-207-4250-S	2.539	64.49	112.08	498.57	65.51	11.46
C1939-207-4500-S	2.677	68.01	112.08	498.57	61.50	10.76
C1939-207-4750-S	2.816	71.53	112.08	498.57	57.95	10.14
C1939-207-5000-S	2.954	75.04	112.08	498.57	54.79	9.59
C1939-207-5250-S	3.093	78.56	112.08	498.57	51.96	9.09
C1939-207-5500-S	3.231	82.08	112.08	498.57	49.41	8.65
C1939-207-5750-S	3.370	85.60	112.08	498.57	47.09	8.24
C1939-207-6000-S	3.508	89.11	112.08	498.57	44.99	7.87
C1939-207-6250-S	3.647	92.63	112.08	498.57	43.06	7.54
C1939-207-6500-S	3.785	96.15	112.08	498.57	41.29	7.23
C1939-207-6750-S	3.924	99.67	112.08	498.57	39.66	6.94
C1939-207-7000-S	4.062	103.19	112.08	498.57	38.16	6.68
C1939-207-7500-S*	4.432	112.57	112.08	498.57	36.53	6.39
C1939-207-8000-S*	4.709	119.60	112.08	498.57	34.05	5.96
C1939-207-8500-S*	4.986	126.64	112.08	498.57	31.89	5.58
C1939-207-9000-S*	5.263	133.67	112.08	498.57	29.99	5.25
C1939-207-9500-S*	5.540	140.71	112.08	498.57	28.30	4.95
C1939-225-2625-S	1.746	44.34	139.24	619.39	158.37	27.71
C1939-225-2750-S	1.820	46.23	139.24	619.39	149.76	26.21
C1939-225-2875-S	1.895	48.12	139.24	619.39	142.04	24.86
C1939-225-3000-S	1.969	50.02	139.24	619.39	135.08	23.64
C1939-225-3250-S	2.118	53.80	139.24	619.39	123.02	21.53
C1939-225-3500-S	2.267	57.58	139.24	619.39	112.93	19.76
C1939-225-3750-S	2.416	61.37	139.24	619.39	104.38	18.27
C1939-225-4000-S	2.565	65.15	139.24	619.39	97.03	16.98
C1939-225-4250-S	2.714	68.93	139.24	619.39	90.64	15.86
C1939-225-4500-S	2.863	72.71	139.24	619.39	85.05	14.88
C1939-225-4750-S	3.012	76.50	139.24	619.39	80.10	14.02
C1939-225-5000-S	3.161	80.28	139.24	619.39	75.70	13.25
C1939-225-5250-S	3.310	84.06	139.24	619.39	71.76	12.56
C1939-225-5500-S	3.459	87.85	139.24	619.39	68.21	11.94
C1939-225-5750-S	3.607	91.63	139.24	619.39	64.99	11.37
C1939-225-6000-S	3.756	95.41	139.24	619.39	62.06	10.86
C1939-225-6250-S	3.905	99.20	139.24	619.39	59.39	10.39
C1939-225-6500-S	4.054	102.98	139.24	619.39	56.93	9.96
C1939-225-6750-S	4.203	106.76	139.24	619.39	54.67	9.57
C1939-225-7000-S	4.352	110.54	139.24	619.39	52.59	9.20
C1939-225-7500-S	4.650	118.11	139.24	619.39	48.86	8.55
C1939-225-8000-S	4.948	125.68	139.24	619.39	45.62	7.98
C1939-225-8500-S	5.246	133.24	139.24	619.39	42.79	7.49
C1939-225-9000-S	5.544	140.81	139.24	619.39	40.29	7.05
C1939-225-9500-S	5.841	148.37	139.24	619.39	38.06	6.66
C1939-250-2625-S	1.882	47.80	182.75	812.90	245.87	43.03
C1939-250-2750-S	1.963	49.86	182.75	812.90	232.21	40.64
C1939-250-2875-S	2.044	51.92	182.75	812.90	219.99	38.50
C1939-250-3000-S	2.126	53.99	182.75	812.90	208.99	36.57
C1939-250-3250-S	2.288	58.12	182.75	812.90	189.99	33.25
C1939-250-3500-S	2.451	62.25	182.75	812.90	174.16	30.48
C1939-250-3750-S	2.613	66.38	182.75	812.90	160.76	28.13
C1939-250-4000-S	2.776	70.50	182.75	812.90	149.28	26.12
C1939-250-4250-S	2.938	74.63	182.75	812.90	139.33	24.38
C1939-250-4500-S	3.101	78.76	182.75	812.90	130.62	22.86
C1939-250-4750-S	3.263	82.89	182.75	812.90	122.93	21.51
C1939-250-5000-S	3.426	87.02	182.75	812.90	116.10	20.32
C1939-250-5250-S	3.589	91.15	182.75	812.90	109.99	19.25
C1939-250-5500-S	3.751	95.28	182.75	812.90	104.49	18.29
C1939-250-5750-S	3.914	99.41	182.75	812.90	99.52	17.42
C1939-250-6000-S	4.076	103.54	182.75	812.90	94.99	16.62
C1939-250-6250-S	4.239	107.67	182.75	812.90	90.86	15.90
C1939-250-6500-S	4.401	111.79	182.75	812.90	87.08	15.24
C1939-250-6750-S	4.564	115.92	182.75	812.90	83.60	14.63

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1939-250-7000-M	1.939	49.25	0.250	6.35	7.000	177.80	4.154	105.52	3.835	97.40	263.06	1170.16	92.44	16.18
C1939-250-7500-M	1.939	49.25	0.250	6.35	7.500	190.50	4.435	112.65	4.089	103.86	263.06	1170.16	85.83	15.02
C1939-250-8000-M	1.939	49.25	0.250	6.35	8.000	203.20	4.716	119.79	4.344	110.33	263.06	1170.16	80.11	14.02
C1939-250-8500-M	1.939	49.25	0.250	6.35	8.500	215.90	4.997	126.93	4.598	116.80	263.06	1170.16	75.11	13.14
C1939-250-9000-M	1.939	49.25	0.250	6.35	9.000	228.60	5.278	134.07	4.853	123.26	263.06	1170.16	70.69	12.37
C1939-250-9500-M	1.939	49.25	0.250	6.35	9.500	241.30	5.560	141.21	5.107	129.73	263.06	1170.16	66.76	11.68
C1998-162-3250-M	1.998	50.75	0.162	4.12	3.250	82.55	1.317	33.45	1.025	26.02	76.87	341.94	39.77	6.96
C1998-162-3500-M	1.998	50.75	0.162	4.12	3.500	88.90	1.402	35.60	1.083	27.51	76.87	341.94	36.64	6.41
C1998-162-3750-M	1.998	50.75	0.162	4.12	3.750	95.25	1.487	37.76	1.141	28.99	76.87	341.94	33.96	5.94
C1998-162-4000-M	1.998	50.75	0.162	4.12	4.000	101.60	1.571	39.91	1.200	30.48	76.87	341.94	31.65	5.54
C1998-162-4250-M	1.998	50.75	0.162	4.12	4.250	107.95	1.656	42.07	1.258	31.96	76.87	341.94	29.64	5.19
C1998-162-4500-M	1.998	50.75	0.162	4.12	4.500	114.30	1.741	44.22	1.317	33.45	76.87	341.94	27.86	4.88
C1998-162-4750-M	1.998	50.75	0.162	4.12	4.750	120.65	1.826	46.38	1.375	34.93	76.87	341.94	26.29	4.60
C1998-162-5000-M	1.998	50.75	0.162	4.12	5.000	127.00	1.911	48.53	1.434	36.42	76.87	341.94	24.88	4.35
C1998-162-5250-M	1.998	50.75	0.162	4.12	5.250	133.35	1.996	50.69	1.492	37.90	76.87	341.94	23.62	4.13
C1998-162-5500-M	1.998	50.75	0.162	4.12	5.500	139.70	2.080	52.84	1.551	39.39	76.87	341.94	22.48	3.93
C1998-162-5750-M	1.998	50.75	0.162	4.12	5.750	146.05	2.165	55.00	1.609	40.87	76.87	341.94	21.44	3.75
C1998-162-6000-M	1.998	50.75	0.162	4.12	6.000	152.40	2.250	57.15	1.668	42.36	76.87	341.94	20.50	3.59
C1998-162-6250-M	1.998	50.75	0.162	4.12	6.250	158.75	2.335	59.30	1.726	43.84	76.87	341.94	19.63	3.44
C1998-162-6500-M	1.998	50.75	0.162	4.12	6.500	165.10	2.420	61.46	1.785	45.33	76.87	341.94	18.84	3.30
C1998-162-6750-M	1.998	50.75	0.162	4.12	6.750	171.45	2.504	63.61	1.843	46.81	76.87	341.94	18.11	3.17
C1998-162-7000-M	1.998	50.75	0.162	4.12	7.000	177.80	2.589	65.77	1.902	48.30	76.87	341.94	17.43	3.05
C1998-162-7500-M	1.998	50.75	0.162	4.12	7.500	190.50	2.759	70.08	2.018	51.27	76.87	341.94	16.21	2.84
C1998-162-8000-M	1.998	50.75	0.162	4.12	8.000	203.20	2.929	74.39	2.135	54.24	76.87	341.94	15.16	2.65
C1998-162-8500-M	1.998	50.75	0.162	4.12	8.500	215.90	3.098	78.70	2.252	57.21	76.87	341.94	14.23	2.49
C1998-162-9000-M	1.998	50.75	0.162	4.12	9.000	228.60	3.268	83.01	2.369	60.18	76.87	341.94	13.41	2.35
C1998-162-9500-M	1.998	50.75	0.162	4.12	9.500	241.30	3.438	87.32	2.486	63.15	76.87	341.94	12.68	2.22
C1998-177-3250-M	1.998	50.75	0.177	4.50	3.250	82.55	1.437	36.49	1.172	29.78	98.36	437.52	54.24	9.49
C1998-177-3500-M	1.998	50.75	0.177	4.50	3.500	88.90	1.530	38.86	1.241	31.53	98.36	437.52	49.93	8.74
C1998-177-3750-M	1.998	50.75	0.177	4.50	3.750	95.25	1.623	41.24	1.311	33.29	98.36	437.52	46.25	8.09
C1998-177-4000-M	1.998	50.75	0.177	4.50	4.000	101.60	1.717	43.61	1.380	35.04	98.36	437.52	43.08	7.54
C1998-177-4250-M	1.998	50.75	0.177	4.50	4.250	107.95	1.810	45.98	1.449	36.80	98.36	437.52	40.32	7.06
C1998-177-4500-M	1.998	50.75	0.177	4.50	4.500	114.30	1.904	48.36	1.518	38.55	98.36	437.52	37.89	6.63
C1998-177-4750-M	1.998	50.75	0.177	4.50	4.750	120.65	1.997	50.73	1.587	40.31	98.36	437.52	35.73	6.25
C1998-177-5000-M	1.998	50.75	0.177	4.50	5.000	127.00	2.091	53.10	1.656	42.07	98.36	437.52	33.81	5.92
C1998-177-5250-M	1.998	50.75	0.177	4.50	5.250	133.35	2.184	55.48	1.725	43.82	98.36	437.52	32.08	5.61
C1998-177-5500-M	1.998	50.75	0.177	4.50	5.500	139.70	2.278	57.85	1.794	45.58	98.36	437.52	30.52	5.34
C1998-177-5750-M	1.998	50.75	0.177	4.50	5.750	146.05	2.371	60.22	1.863	47.33	98.36	437.52	29.11	5.09
C1998-177-6000-M	1.998	50.75	0.177	4.50	6.000	152.40	2.464	62.60	1.933	49.09	98.36	437.52	27.82	4.87
C1998-177-6250-M	1.998	50.75	0.177	4.50	6.250	158.75	2.558	64.97	2.002	50.84	98.36	437.52	26.64	4.66
C1998-177-6500-M	1.998	50.75	0.177	4.50	6.500	165.10	2.651	67.35	2.071	52.60	98.36	437.52	25.56	4.47
C1998-177-6750-M	1.998	50.75	0.177	4.50	6.750	171.45	2.745	69.72	2.140	54.35	98.36	437.52	24.56	4.30
C1998-177-7000-M	1.998	50.75	0.177	4.50	7.000	177.80	2.838	72.09	2.209	56.11	98.36	437.52	23.63	4.14
C1998-177-7500-M	1.998	50.75	0.177	4.50	7.500	190.50	3.025	76.84	2.347	59.62	98.36	437.52	21.98	3.85
C1998-177-8000-M*	1.998	50.75	0.177	4.50	8.000	203.20	3.323	84.40	2.622	66.61	98.36	437.52	21.03	3.68
C1998-177-8500-M*	1.998	50.75	0.177	4.50	8.500	215.90	3.510	89.15	2.761	70.12	98.36	437.52	19.71	3.45
C1998-177-9000-M*	1.998	50.75	0.177	4.50	9.000	228.60	3.697	93.90	2.899	73.63	98.36	437.52	18.55	3.25
C1998-177-9500-M*	1.998	50.75	0.177	4.50	9.500	241.30	3.884	98.64	3.037	77.14	98.36	437.52	17.51	3.06
C1998-192-3000-M	1.998	50.75	0.192	4.88	3.000	76.20	1.455	36.95	1.241	31.52	123.30	548.48	79.79	13.96
C1998-192-3250-M	1.998	50.75	0.192	4.88	3.250	82.55	1.557	39.55	1.321	33.56	123.30	548.48	72.83	12.75
C1998-192-3500-M	1.998	50.75	0.192	4.88	3.500	88.90	1.659	42.15	1.401	35.59	123.30	548.48	66.99	11.72
C1998-192-3750-M	1.998	50.75	0.192	4.88	3.750	95.25	1.762	44.75	1.481	37.63	123.30	548.48	62.01	10.85
C1998-192-4000-M	1.998	50.75	0.192	4.88	4.000	101.60	1.864	47.35	1.561	39.66	123.30	548.48	57.73	10.10
C1998-192-4250-M	1.998	50.75	0.192	4.88	4.250	107.95	1.966	49.94	1.641	41.69	123.30	548.48	53.99	9.45
C1998-192-4500-M	1.998	50.75	0.192	4.88	4.500	114.30	2.069	52.54	1.722	43.73	123.30	548.48	50.71	8.87
C1998-192-4750-M	1.998	50.75	0.192	4.88	4.750	120.65	2.171	55.14	1.802	45.76	123.30	548.48	47.81	8.37
C1998-192-5000-M	1.998	50.75	0.192	4.88	5.000	127.00	2.273	57.74	1.882	47.79	123.30	548.48	45.22	7.91
C1998-192-5250-M	1.998	50.75	0.192	4.88	5.250	133.35	2.376	60.34	1.962	49.83	123.30	548.48	42.90	7.51
C1998-192-5500-M	1.998	50.75	0.192	4.88	5.500	139.70	2.478	62.94	2.042	51.86	123.30	548.48	40.80	7.14
C1998-192-5750-M	1.998	50.75	0.192	4.88	5.750	146.05	2.580	65.54	2.122	53.90	123.30	548.48	38.90	6.81
C1998-192-6000-M	1.998	50.75	0.192	4.88	6.000	152.40	2.683	68.14	2.202	55.93	123.30	548.48	37.17	6.50
C1998-192-6250-M	1.998	50.75	0.192	4.88	6.250	158.75	2.785	70.74	2.282	57.96	123.30	548.48	35.58	6.23
C1998-192-6500-M	1.998	50.75	0.192	4.88	6.500	165.10	2.887	73.34	2.362	60.00	123.30	548.48	34.13	5.97
C1998-192-6750-M*	1.998	50.75	0.192	4.88	6.750	171.45	3.103	78.81	2.582	65.59	123.30	548.48	33.81	5.92

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1939-250-7000-S	4.726	120.05	182.75	812.90	80.38	14.07
C1939-250-7500-S	5.052	128.31	182.75	812.90	74.64	13.06
C1939-250-8000-S	5.377	136.57	182.75	812.90	69.66	12.19
C1939-250-8500-S	5.702	144.83	182.75	812.90	65.31	11.43
C1939-250-9000-S	6.027	153.08	182.75	812.90	61.47	10.76
C1939-250-9500-S	6.352	161.34	182.75	812.90	58.05	10.16
C1998-162-3250-S	1.599	40.63	57.07	253.88	34.58	6.05
C1998-162-3500-S	1.708	43.39	57.07	253.88	31.86	5.57
C1998-162-3750-S	1.817	46.16	57.07	253.88	29.53	5.17
C1998-162-4000-S	1.926	48.93	57.07	253.88	27.52	4.82
C1998-162-4250-S	2.035	51.70	57.07	253.88	25.77	4.51
C1998-162-4500-S	2.144	54.46	57.07	253.88	24.23	4.24
C1998-162-4750-S	2.253	57.23	57.07	253.88	22.86	4.00
C1998-162-5000-S	2.362	60.00	57.07	253.88	21.64	3.79
C1998-162-5250-S	2.471	62.77	57.07	253.88	20.54	3.59
C1998-162-5500-S	2.580	65.54	57.07	253.88	19.55	3.42
C1998-162-5750-S	2.689	68.30	57.07	253.88	18.65	3.26
C1998-162-6000-S	2.798	71.07	57.07	253.88	17.83	3.12
C1998-162-6250-S	2.907	73.84	57.07	253.88	17.07	2.99
C1998-162-6500-S	3.016	76.61	57.07	253.88	16.38	2.87
C1998-162-6750-S	3.125	79.38	57.07	253.88	15.75	2.76
C1998-162-7000-S	3.234	82.14	57.07	253.88	15.16	2.65
C1998-162-7500-S	3.452	87.68	57.07	253.88	14.10	2.47
C1998-162-8000-S	3.670	93.22	57.07	253.88	13.18	2.31
C1998-162-8500-S	3.888	98.75	57.07	253.88	12.38	2.17
C1998-162-9000-S	4.106	104.29	57.07	253.88	11.66	2.04
C1998-162-9500-S	4.324	109.82	57.07	253.88	11.03	1.93
C1998-177-3250-S	1.719	43.67	72.19	321.12	47.16	8.25
C1998-177-3500-S	1.837	46.67	72.19	321.12	43.42	7.60
C1998-177-3750-S	1.955	49.66	72.19	321.12	40.22	7.04
C1998-177-4000-S	2.073	52.65	72.19	321.12	37.46	6.56
C1998-177-4250-S	2.191	55.65	72.19	321.12	35.06	6.14
C1998-177-4500-S	2.309	58.64	72.19	321.12	32.94	5.77
C1998-177-4750-S	2.427	61.63	72.19	321.12	31.07	5.44
C1998-177-5000-S	2.544	64.63	72.19	321.12	29.40	5.14
C1998-177-5250-S	2.662	67.62	72.19	321.12	27.90	4.88
C1998-177-5500-S	2.780	70.62	72.19	321.12	26.54	4.64
C1998-177-5750-S	2.898	73.61	72.19	321.12	25.31	4.43
C1998-177-6000-S	3.016	76.60	72.19	321.12	24.19	4.23
C1998-177-6250-S	3.134	79.60	72.19	321.12	23.17	4.05
C1998-177-6500-S	3.252	82.59	72.19	321.12	22.22	3.89
C1998-177-6750-S	3.369	85.58	72.19	321.12	21.36	3.74
C1998-177-7000-S	3.487	88.58	72.19	321.12	20.55	3.60
C1998-177-7500-S	3.723	94.57	72.19	321.12	19.11	3.34
C1998-177-8000-S*	4.052	102.93	72.19	321.12	18.29	3.20
C1998-177-8500-S*	4.288	108.92	72.19	321.12	17.14	3.00
C1998-177-9000-S*	4.524	114.91	72.19	321.12	16.13	2.82
C1998-177-9500-S*	4.760	120.89	72.19	321.12	15.23	2.66
C1998-192-3000-S	1.711	43.45	89.46	397.95	69.38	12.14
C1998-192-3250-S	1.837	46.67	89.46	397.95	63.33	11.08
C1998-192-3500-S	1.964	49.89	89.46	397.95	58.25	10.19
C1998-192-3750-S	2.091	53.11	89.46	397.95	53.92	9.44
C1998-192-4000-S	2.218	56.33	89.46	397.95	50.20	8.78
C1998-192-4250-S	2.345	59.55	89.46	397.95	46.95	8.22
C1998-192-4500-S	2.471	62.77	89.46	397.95	44.10	7.72
C1998-192-4750-S	2.598	65.99	89.46	397.95	41.57	7.28
C1998-192-5000-S	2.725	69.21	89.46	397.95	39.32	6.88
C1998-192-5250-S	2.852	72.43	89.46	397.95	37.30	6.53
C1998-192-5500-S	2.978	75.65	89.46	397.95	35.48	6.21
C1998-192-5750-S	3.105	78.87	89.46	397.95	33.83	5.92
C1998-192-6000-S	3.232	82.09	89.46	397.95	32.32	5.66
C1998-192-6250-S	3.359	85.31	89.46	397.95	30.94	5.42
C1998-192-6500-S	3.486	88.53	89.46	397.95	29.68	5.19
C1998-192-6750-S*	3.707	94.16	89.46	397.95	29.40	5.14

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1998-192-7000-M*	1.998	50.75	0.192	4.88	7.000	177.80	3.205	81.41	2.662	67.62	123.30	548.48	32.49	5.69
C1998-192-7500-M*	1.998	50.75	0.192	4.88	7.500	190.50	3.410	86.61	2.823	71.69	123.30	548.48	30.15	5.28
C1998-192-8000-M*	1.998	50.75	0.192	4.88	8.000	203.20	3.615	91.81	2.983	75.76	123.30	548.48	28.12	4.92
C1998-192-8500-M*	1.998	50.75	0.192	4.88	8.500	215.90	3.819	97.01	3.143	79.83	123.30	548.48	26.34	4.61
C1998-192-9000-M*	1.998	50.75	0.192	4.88	9.000	228.60	4.024	102.21	3.303	83.90	123.30	548.48	24.78	4.34
C1998-192-9500-M*	1.998	50.75	0.192	4.88	9.500	241.30	4.228	107.40	3.463	87.96	123.30	548.48	23.39	4.09
C1998-207-2875-M	1.998	50.75	0.207	5.26	2.875	73.03	1.510	38.35	1.332	33.84	151.91	675.73	111.26	19.47
C1998-207-3000-M	1.998	50.75	0.207	5.26	3.000	76.20	1.565	39.76	1.378	34.99	151.91	675.73	105.88	18.53
C1998-207-3250-M	1.998	50.75	0.207	5.26	3.250	82.55	1.677	42.59	1.469	37.31	151.91	675.73	96.55	16.90
C1998-207-3500-M	1.998	50.75	0.207	5.26	3.500	88.90	1.788	45.41	1.560	39.63	151.91	675.73	88.73	15.53
C1998-207-3750-M	1.998	50.75	0.207	5.26	3.750	95.25	1.899	48.24	1.651	41.94	151.91	675.73	82.08	14.36
C1998-207-4000-M	1.998	50.75	0.207	5.26	4.000	101.60	2.011	51.07	1.742	44.26	151.91	675.73	76.36	13.36
C1998-207-4250-M	1.998	50.75	0.207	5.26	4.250	107.95	2.122	53.89	1.834	46.57	151.91	675.73	71.38	12.49
C1998-207-4500-M	1.998	50.75	0.207	5.26	4.500	114.30	2.233	56.72	1.925	48.89	151.91	675.73	67.01	11.73
C1998-207-4750-M	1.998	50.75	0.207	5.26	4.750	120.65	2.344	59.55	2.016	51.20	151.91	675.73	63.15	11.05
C1998-207-5000-M	1.998	50.75	0.207	5.26	5.000	127.00	2.456	62.38	2.107	53.52	151.91	675.73	59.71	10.45
C1998-207-5250-M	1.998	50.75	0.207	5.26	5.250	133.35	2.567	65.20	2.198	55.84	151.91	675.73	56.62	9.91
C1998-207-5500-M	1.998	50.75	0.207	5.26	5.500	139.70	2.678	68.03	2.289	58.15	151.91	675.73	53.84	9.42
C1998-207-5750-M	1.998	50.75	0.207	5.26	5.750	146.05	2.790	70.86	2.381	60.47	151.91	675.73	51.32	8.98
C1998-207-6000-M	1.998	50.75	0.207	5.26	6.000	152.40	2.901	73.68	2.472	62.78	151.91	675.73	49.02	8.58
C1998-207-6250-M	1.998	50.75	0.207	5.26	6.250	158.75	3.012	76.51	2.563	65.10	151.91	675.73	46.92	8.21
C1998-207-6500-M	1.998	50.75	0.207	5.26	6.500	165.10	3.124	79.34	2.654	67.41	151.91	675.73	44.99	7.87
C1998-207-6750-M	1.998	50.75	0.207	5.26	6.750	171.45	3.235	82.17	2.745	69.73	151.91	675.73	43.22	7.56
C1998-207-7000-M*	1.998	50.75	0.207	5.26	7.000	177.80	3.461	87.91	2.978	75.65	151.91	675.73	42.92	7.51
C1998-207-7500-M*	1.998	50.75	0.207	5.26	7.500	190.50	3.684	93.56	3.161	80.28	151.91	675.73	39.81	6.97
C1998-207-8000-M*	1.998	50.75	0.207	5.26	8.000	203.20	3.906	99.22	3.343	84.91	151.91	675.73	37.11	6.49
C1998-207-8500-M*	1.998	50.75	0.207	5.26	8.500	215.90	4.129	104.87	3.525	89.54	151.91	675.73	34.75	6.08
C1998-207-9000-M*	1.998	50.75	0.207	5.26	9.000	228.60	4.351	110.53	3.708	94.17	151.91	675.73	32.68	5.72
C1998-207-9500-M*	1.998	50.75	0.207	5.26	9.500	241.30	4.574	116.18	3.890	98.81	151.91	675.73	30.84	5.40
C1998-225-2750-M	1.998	50.75	0.225	5.72	2.750	69.85	1.573	39.95	1.433	36.41	191.34	851.13	162.54	28.44
C1998-225-2875-M	1.998	50.75	0.225	5.72	2.875	73.03	1.634	41.50	1.486	37.73	191.34	851.13	154.16	26.98
C1998-225-3000-M	1.998	50.75	0.225	5.72	3.000	76.20	1.695	43.05	1.538	39.06	191.34	851.13	146.60	25.66
C1998-225-3250-M	1.998	50.75	0.225	5.72	3.250	82.55	1.817	46.15	1.642	41.71	191.34	851.13	133.51	23.36
C1998-225-3500-M	1.998	50.75	0.225	5.72	3.500	88.90	1.939	49.25	1.747	44.36	191.34	851.13	122.57	21.45
C1998-225-3750-M	1.998	50.75	0.225	5.72	3.750	95.25	2.061	52.35	1.851	47.02	191.34	851.13	113.28	19.82
C1998-225-4000-M	1.998	50.75	0.225	5.72	4.000	101.60	2.183	55.45	1.955	49.67	191.34	851.13	105.31	18.43
C1998-225-4250-M	1.998	50.75	0.225	5.72	4.250	107.95	2.305	58.55	2.060	52.32	191.34	851.13	98.38	17.22
C1998-225-4500-M	1.998	50.75	0.225	5.72	4.500	114.30	2.427	61.65	2.164	54.97	191.34	851.13	92.31	16.15
C1998-225-4750-M	1.998	50.75	0.225	5.72	4.750	120.65	2.549	64.75	2.269	57.63	191.34	851.13	86.94	15.21
C1998-225-5000-M	1.998	50.75	0.225	5.72	5.000	127.00	2.671	67.85	2.373	60.28	191.34	851.13	82.16	14.38
C1998-225-5250-M	1.998	50.75	0.225	5.72	5.250	133.35	2.793	70.95	2.478	62.93	191.34	851.13	77.88	13.63
C1998-225-5500-M	1.998	50.75	0.225	5.72	5.500	139.70	2.915	74.05	2.582	65.58	191.34	851.13	74.03	12.95
C1998-225-5750-M	1.998	50.75	0.225	5.72	5.750	146.05	3.037	77.15	2.686	68.24	191.34	851.13	70.54	12.34
C1998-225-6000-M	1.998	50.75	0.225	5.72	6.000	152.40	3.159	80.25	2.791	70.89	191.34	851.13	67.36	11.79
C1998-225-6250-M	1.998	50.75	0.225	5.72	6.250	158.75	3.281	83.35	2.895	73.54	191.34	851.13	64.46	11.28
C1998-225-6500-M	1.998	50.75	0.225	5.72	6.500	165.10	3.403	86.45	3.000	76.19	191.34	851.13	61.79	10.81
C1998-225-6750-M	1.998	50.75	0.225	5.72	6.750	171.45	3.525	89.55	3.104	78.85	191.34	851.13	59.34	10.38
C1998-225-7000-M	1.998	50.75	0.225	5.72	7.000	177.80	3.647	92.65	3.209	81.50	191.34	851.13	57.07	9.99
C1998-225-7500-M	1.998	50.75	0.225	5.72	7.500	190.50	3.892	98.85	3.418	86.81	191.34	851.13	53.03	9.28
C1998-225-8000-M	1.998	50.75	0.225	5.72	8.000	203.20	4.136	105.05	3.626	92.11	191.34	851.13	49.52	8.67
C1998-225-8500-M*	1.998	50.75	0.225	5.72	8.500	215.90	4.495	114.17	3.978	101.03	191.34	851.13	47.78	8.36
C1998-225-9000-M*	1.998	50.75	0.225	5.72	9.000	228.60	4.739	120.37	4.186	106.33	191.34	851.13	44.91	7.86
C1998-225-9500-M*	1.998	50.75	0.225	5.72	9.500	241.30	4.983	126.57	4.395	111.64	191.34	851.13	42.36	7.41
C1998-250-2750-M	1.998	50.75	0.250	6.35	2.750	69.85	1.729	43.91	1.626	41.30	255.90	1138.31	250.62	43.86
C1998-250-2875-M	1.998	50.75	0.250	6.35	2.875	73.03	1.797	45.65	1.687	42.86	255.90	1138.31	237.43	41.55
C1998-250-3000-M	1.998	50.75	0.250	6.35	3.000	76.20	1.865	47.38	1.749	44.41	255.90	1138.31	225.56	39.47
C1998-250-3250-M	1.998	50.75	0.250	6.35	3.250	82.55	2.002	50.85	1.871	47.52	255.90	1138.31	205.05	35.88
C1998-250-3500-M	1.998	50.75	0.250	6.35	3.500	88.90	2.139	54.32	1.993	50.63	255.90	1138.31	187.97	32.89
C1998-250-3750-M	1.998	50.75	0.250	6.35	3.750	95.25	2.275	57.79	2.116	53.74	255.90	1138.31	173.51	30.36
C1998-250-4000-M	1.998	50.75	0.250	6.35	4.000	101.60	2.412	61.26	2.238	56.84	255.90	1138.31	161.11	28.19
C1998-250-4250-M	1.998	50.75	0.250	6.35	4.250	107.95	2.548	64.72	2.360	59.95	255.90	1138.31	150.37	26.32
C1998-250-4500-M	1.998	50.75	0.250	6.35	4.500	114.30	2.685	68.19	2.483	63.06	255.90	1138.31	140.97	24.67
C1998-250-4750-M	1.998	50.75	0.250	6.35	4.750	120.65	2.821	71.66	2.605	66.17	255.90	1138.31	132.68	23.22
C1998-250-5000-M	1.998	50.75	0.250	6.35	5.000	127.00	2.958	75.13	2.727	69.27	255.90	1138.31	125.31	21.93

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1998-192-7000-S*	3.834	97.38	89.46	397.95	28.26	4.94
C1998-192-7500-S*	4.087	103.82	89.46	397.95	26.22	4.59
C1998-192-8000-S*	4.341	110.26	89.46	397.95	24.45	4.28
C1998-192-8500-S*	4.594	116.70	89.46	397.95	22.91	4.01
C1998-192-9000-S*	4.848	123.14	89.46	397.95	21.55	3.77
C1998-192-9500-S*	5.102	129.58	89.46	397.95	20.34	3.56
C1998-207-2875-S	1.749	44.42	108.97	484.71	96.75	16.93
C1998-207-3000-S	1.817	46.14	108.97	484.71	92.07	16.11
C1998-207-3250-S	1.952	49.58	108.97	484.71	83.96	14.69
C1998-207-3500-S	2.088	53.03	108.97	484.71	77.16	13.50
C1998-207-3750-S	2.223	56.47	108.97	484.71	71.37	12.49
C1998-207-4000-S	2.359	59.92	108.97	484.71	66.40	11.62
C1998-207-4250-S	2.494	63.36	108.97	484.71	62.07	10.86
C1998-207-4500-S	2.630	66.80	108.97	484.71	58.27	10.20
C1998-207-4750-S	2.766	70.25	108.97	484.71	54.91	9.61
C1998-207-5000-S	2.901	73.69	108.97	484.71	51.92	9.09
C1998-207-5250-S	3.037	77.13	108.97	484.71	49.24	8.62
C1998-207-5500-S	3.172	80.58	108.97	484.71	46.82	8.19
C1998-207-5750-S	3.308	84.02	108.97	484.71	44.62	7.81
C1998-207-6000-S	3.444	87.47	108.97	484.71	42.62	7.46
C1998-207-6250-S	3.579	90.91	108.97	484.71	40.80	7.14
C1998-207-6500-S	3.715	94.35	108.97	484.71	39.12	6.85
C1998-207-6750-S	3.850	97.80	108.97	484.71	37.58	6.58
C1998-207-7000-S*	4.081	103.65	108.97	484.71	37.33	6.53
C1998-207-7500-S*	4.352	110.54	108.97	484.71	34.61	6.06
C1998-207-8000-S*	4.623	117.42	108.97	484.71	32.27	5.65
C1998-207-8500-S*	4.894	124.31	108.97	484.71	30.22	5.29
C1998-207-9000-S*	5.165	131.20	108.97	484.71	28.42	4.97
C1998-207-9500-S*	5.437	138.09	108.97	484.71	26.82	4.69
C1998-225-2750-S	1.792	45.52	135.40	602.31	141.34	24.73
C1998-225-2875-S	1.865	47.37	135.40	602.31	134.05	23.46
C1998-225-3000-S	1.938	49.22	135.40	602.31	127.48	22.31
C1998-225-3250-S	2.084	52.93	135.40	602.31	116.10	20.32
C1998-225-3500-S	2.230	56.63	135.40	602.31	106.58	18.65
C1998-225-3750-S	2.375	60.34	135.40	602.31	98.51	17.24
C1998-225-4000-S	2.521	64.04	135.40	602.31	91.57	16.02
C1998-225-4250-S	2.667	67.75	135.40	602.31	85.55	14.97
C1998-225-4500-S	2.813	71.45	135.40	602.31	80.27	14.05
C1998-225-4750-S	2.959	75.16	135.40	602.31	75.60	13.23
C1998-225-5000-S	3.105	78.86	135.40	602.31	71.45	12.50
C1998-225-5250-S	3.251	82.57	135.40	602.31	67.72	11.85
C1998-225-5500-S	3.397	86.27	135.40	602.31	64.37	11.26
C1998-225-5750-S	3.542	89.98	135.40	602.31	61.34	10.73
C1998-225-6000-S	3.688	93.68	135.40	602.31	58.57	10.25
C1998-225-6250-S	3.834	97.39	135.40	602.31	56.05	9.81
C1998-225-6500-S	3.980	101.09	135.40	602.31	53.73	9.40
C1998-225-6750-S	4.126	104.80	135.40	602.31	51.60	9.03
C1998-225-7000-S	4.272	108.50	135.40	602.31	49.63	8.69
C1998-225-7500-S	4.563	115.91	135.40	602.31	46.11	8.07
C1998-225-8000-S	4.855	123.32	135.40	602.31	43.06	7.53
C1998-225-8500-S*	5.241	133.11	135.40	602.31	41.54	7.27
C1998-225-9000-S*	5.532	140.52	135.40	602.31	39.05	6.83
C1998-225-9500-S*	5.824	147.93	135.40	602.31	36.84	6.45
C1998-250-2750-S	1.934	49.13	177.77	790.77	217.93	38.14
C1998-250-2875-S	2.014	51.15	177.77	790.77	206.46	36.13
C1998-250-3000-S	2.094	53.18	177.77	790.77	196.14	34.32
C1998-250-3250-S	2.253	57.23	177.77	790.77	178.31	31.20
C1998-250-3500-S	2.412	61.27	177.77	790.77	163.45	28.60
C1998-250-3750-S	2.572	65.32	177.77	790.77	150.88	26.40
C1998-250-4000-S	2.731	69.37	177.77	790.77	140.10	24.52
C1998-250-4250-S	2.890	73.42	177.77	790.77	130.76	22.88
C1998-250-4500-S	3.050	77.47	177.77	790.77	122.59	21.45
C1998-250-4750-S	3.209	81.51	177.77	790.77	115.38	20.19
C1998-250-5000-S	3.369	85.56	177.77	790.77	108.97	19.07

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1998-250-5250-M	1.998	50.75	0.250	6.35	5.250	133.35	3.094	78.60	2.850	72.38	255.90	1138.31	118.72	20.78
C1998-250-5500-M	1.998	50.75	0.250	6.35	5.500	139.70	3.231	82.07	2.972	75.49	255.90	1138.31	112.78	19.74
C1998-250-5750-M	1.998	50.75	0.250	6.35	5.750	146.05	3.367	85.53	3.094	78.60	255.90	1138.31	107.41	18.80
C1998-250-6000-M	1.998	50.75	0.250	6.35	6.000	152.40	3.504	89.00	3.217	81.71	255.90	1138.31	102.53	17.94
C1998-250-6250-M	1.998	50.75	0.250	6.35	6.250	158.75	3.641	92.47	3.339	84.81	255.90	1138.31	98.07	17.16
C1998-250-6500-M	1.998	50.75	0.250	6.35	6.500	165.10	3.777	95.94	3.461	87.92	255.90	1138.31	93.98	16.45
C1998-250-6750-M	1.998	50.75	0.250	6.35	6.750	171.45	3.914	99.41	3.584	91.03	255.90	1138.31	90.22	15.79
C1998-250-7000-M	1.998	50.75	0.250	6.35	7.000	177.80	4.050	102.88	3.706	94.14	255.90	1138.31	86.75	15.18
C1998-250-7500-M	1.998	50.75	0.250	6.35	7.500	190.50	4.323	109.81	3.951	100.35	255.90	1138.31	80.56	14.10
C1998-250-8000-M	1.998	50.75	0.250	6.35	8.000	203.20	4.596	116.75	4.196	106.57	255.90	1138.31	75.19	13.16
C1998-250-8500-M	1.998	50.75	0.250	6.35	8.500	215.90	4.870	123.69	4.440	112.78	255.90	1138.31	70.49	12.34
C1998-250-9000-M	1.998	50.75	0.250	6.35	9.000	228.60	5.143	130.62	4.685	119.00	255.90	1138.31	66.34	11.61
C1998-250-9500-M	1.998	50.75	0.250	6.35	9.500	241.30	5.416	137.56	4.930	125.21	255.90	1138.31	62.66	10.96
C2056-162-3500-M	2.056	52.22	0.162	4.12	3.500	88.90	1.371	34.84	1.046	26.56	74.79	332.68	35.14	6.15
C2056-162-3750-M	2.056	52.22	0.162	4.12	3.750	95.25	1.454	36.93	1.101	27.97	74.79	332.68	32.57	5.70
C2056-162-4000-M	2.056	52.22	0.162	4.12	4.000	101.60	1.536	39.02	1.157	29.38	74.79	332.68	30.36	5.31
C2056-162-4250-M	2.056	52.22	0.162	4.12	4.250	107.95	1.619	41.12	1.212	30.79	74.79	332.68	28.42	4.97
C2056-162-4500-M	2.056	52.22	0.162	4.12	4.500	114.30	1.701	43.21	1.268	32.20	74.79	332.68	26.72	4.68
C2056-162-4750-M	2.056	52.22	0.162	4.12	4.750	120.65	1.784	45.31	1.323	33.61	74.79	332.68	25.21	4.41
C2056-162-5000-M	2.056	52.22	0.162	4.12	5.000	127.00	1.866	47.40	1.379	35.02	74.79	332.68	23.87	4.18
C2056-162-5250-M	2.056	52.22	0.162	4.12	5.250	133.35	1.949	49.50	1.434	36.43	74.79	332.68	22.65	3.96
C2056-162-5500-M	2.056	52.22	0.162	4.12	5.500	139.70	2.031	51.59	1.490	37.84	74.79	332.68	21.56	3.77
C2056-162-5750-M	2.056	52.22	0.162	4.12	5.750	146.05	2.114	53.68	1.545	39.25	74.79	332.68	20.57	3.60
C2056-162-6000-M	2.056	52.22	0.162	4.12	6.000	152.40	2.196	55.78	1.601	40.66	74.79	332.68	19.66	3.44
C2056-162-6250-M	2.056	52.22	0.162	4.12	6.250	158.75	2.278	57.87	1.656	42.07	74.79	332.68	18.83	3.30
C2056-162-6500-M	2.056	52.22	0.162	4.12	6.500	165.10	2.361	59.97	1.712	43.49	74.79	332.68	18.07	3.16
C2056-162-6750-M	2.056	52.22	0.162	4.12	6.750	171.45	2.443	62.06	1.768	44.90	74.79	332.68	17.37	3.04
C2056-162-7000-M	2.056	52.22	0.162	4.12	7.000	177.80	2.526	64.16	1.823	46.31	74.79	332.68	16.72	2.93
C2056-162-7500-M	2.056	52.22	0.162	4.12	7.500	190.50	2.691	68.34	1.934	49.13	74.79	332.68	15.55	2.72
C2056-162-8000-M	2.056	52.22	0.162	4.12	8.000	203.20	2.856	72.53	2.045	51.95	74.79	332.68	14.54	2.54
C2056-162-8500-M	2.056	52.22	0.162	4.12	8.500	215.90	3.021	76.72	2.156	54.77	74.79	332.68	13.65	2.39
C2056-162-9000-M	2.056	52.22	0.162	4.12	9.000	228.60	3.185	80.91	2.267	57.59	74.79	332.68	12.86	2.25
C2056-162-9500-M	2.056	52.22	0.162	4.12	9.500	241.30	3.350	85.10	2.378	60.41	74.79	332.68	12.16	2.13
C2056-177-3250-M	2.056	52.22	0.177	4.50	3.250	82.55	1.405	35.69	1.134	28.79	95.71	425.73	51.88	9.08
C2056-177-3500-M	2.056	52.22	0.177	4.50	3.500	88.90	1.496	38.00	1.199	30.46	95.71	425.73	47.76	8.36
C2056-177-3750-M	2.056	52.22	0.177	4.50	3.750	95.25	1.587	40.30	1.265	32.13	95.71	425.73	44.24	7.74
C2056-177-4000-M	2.056	52.22	0.177	4.50	4.000	101.60	1.677	42.61	1.331	33.80	95.71	425.73	41.21	7.21
C2056-177-4250-M	2.056	52.22	0.177	4.50	4.250	107.95	1.768	44.91	1.397	35.48	95.71	425.73	38.56	6.75
C2056-177-4500-M	2.056	52.22	0.177	4.50	4.500	114.30	1.859	47.22	1.462	37.15	95.71	425.73	36.24	6.34
C2056-177-4750-M	2.056	52.22	0.177	4.50	4.750	120.65	1.950	49.52	1.528	38.82	95.71	425.73	34.18	5.98
C2056-177-5000-M	2.056	52.22	0.177	4.50	5.000	127.00	2.040	51.83	1.594	40.49	95.71	425.73	32.34	5.66
C2056-177-5250-M	2.056	52.22	0.177	4.50	5.250	133.35	2.131	54.13	1.660	42.16	95.71	425.73	30.69	5.37
C2056-177-5500-M	2.056	52.22	0.177	4.50	5.500	139.70	2.222	56.44	1.726	43.83	95.71	425.73	29.20	5.11
C2056-177-5750-M	2.056	52.22	0.177	4.50	5.750	146.05	2.313	58.74	1.791	45.50	95.71	425.73	27.84	4.87
C2056-177-6000-M	2.056	52.22	0.177	4.50	6.000	152.40	2.403	61.04	1.857	47.17	95.71	425.73	26.61	4.66
C2056-177-6250-M	2.056	52.22	0.177	4.50	6.250	158.75	2.494	63.35	1.923	48.84	95.71	425.73	25.48	4.46
C2056-177-6500-M	2.056	52.22	0.177	4.50	6.500	165.10	2.585	65.65	1.989	50.51	95.71	425.73	24.45	4.28
C2056-177-6750-M	2.056	52.22	0.177	4.50	6.750	171.45	2.676	67.96	2.054	52.18	95.71	425.73	23.49	4.11
C2056-177-7000-M	2.056	52.22	0.177	4.50	7.000	177.80	2.766	70.26	2.120	53.85	95.71	425.73	22.61	3.96
C2056-177-7500-M	2.056	52.22	0.177	4.50	7.500	190.50	2.948	74.87	2.252	57.19	95.71	425.73	21.02	3.68
C2056-177-8000-M	2.056	52.22	0.177	4.50	8.000	203.20	3.129	79.48	2.383	60.53	95.71	425.73	19.65	3.44
C2056-177-8500-M*	2.056	52.22	0.177	4.50	8.500	215.90	3.424	86.96	2.654	67.41	95.71	425.73	18.85	3.30
C2056-177-9000-M*	2.056	52.22	0.177	4.50	9.000	228.60	3.605	91.57	2.786	70.75	95.71	425.73	17.74	3.10
C2056-177-9500-M*	2.056	52.22	0.177	4.50	9.500	241.30	3.787	96.18	2.917	74.10	95.71	425.73	16.75	2.93
C2056-192-3250-M	2.056	52.22	0.192	4.88	3.250	82.55	1.523	38.67	1.279	32.48	120.00	533.78	69.47	12.16
C2056-192-3500-M	2.056	52.22	0.192	4.88	3.500	88.90	1.622	41.20	1.355	34.42	120.00	533.78	63.89	11.18
C2056-192-3750-M	2.056	52.22	0.192	4.88	3.750	95.25	1.721	43.72	1.431	36.35	120.00	533.78	59.15	10.35
C2056-192-4000-M	2.056	52.22	0.192	4.88	4.000	101.60	1.820	46.24	1.508	38.29	120.00	533.78	55.06	9.64
C2056-192-4250-M	2.056	52.22	0.192	4.88	4.250	107.95	1.920	48.76	1.584	40.23	120.00	533.78	51.50	9.01
C2056-192-4500-M	2.056	52.22	0.192	4.88	4.500	114.30	2.019	51.29	1.660	42.17	120.00	533.78	48.37	8.46
C2056-192-4750-M	2.056	52.22	0.192	4.88	4.750	120.65	2.118	53.81	1.737	44.11	120.00	533.78	45.60	7.98
C2056-192-5000-M	2.056	52.22	0.192	4.88	5.000	127.00	2.218	56.33	1.813	46.05	120.00	533.78	43.13	7.55
C2056-192-5250-M	2.056	52.22	0.192	4.88	5.250	133.35	2.317	58.85	1.889	47.99	120.00	533.78	40.91	7.16
C2056-192-5500-M	2.056	52.22	0.192	4.88	5.500	139.70	2.416	61.38	1.966	49.93	120.00	533.78	38.92	6.81

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C1998-250-5250-S	3.528	89.61	177.77	790.77	103.23	18.07
C1998-250-5500-S	3.687	93.66	177.77	790.77	98.07	17.16
C1998-250-5750-S	3.847	97.70	177.77	790.77	93.40	16.34
C1998-250-6000-S	4.006	101.75	177.77	790.77	89.15	15.60
C1998-250-6250-S	4.165	105.80	177.77	790.77	85.28	14.92
C1998-250-6500-S	4.325	109.85	177.77	790.77	81.72	14.30
C1998-250-6750-S	4.484	113.90	177.77	790.77	78.46	13.73
C1998-250-7000-S	4.643	117.94	177.77	790.77	75.44	13.20
C1998-250-7500-S	4.962	126.04	177.77	790.77	70.05	12.26
C1998-250-8000-S	5.281	134.13	177.77	790.77	65.38	11.44
C1998-250-8500-S	5.600	142.23	177.77	790.77	61.29	10.73
C1998-250-9000-S	5.918	150.33	177.77	790.77	57.69	10.10
C1998-250-9500-S	6.237	158.42	177.77	790.77	54.48	9.53
C2056-162-3500-S	1.683	42.74	55.53	247.00	30.55	5.35
C2056-162-3750-S	1.790	45.45	55.53	247.00	28.32	4.96
C2056-162-4000-S	1.896	48.17	55.53	247.00	26.40	4.62
C2056-162-4250-S	2.003	50.89	55.53	247.00	24.72	4.33
C2056-162-4500-S	2.110	53.60	55.53	247.00	23.24	4.07
C2056-162-4750-S	2.217	56.32	55.53	247.00	21.93	3.84
C2056-162-5000-S	2.324	59.04	55.53	247.00	20.75	3.63
C2056-162-5250-S	2.431	61.75	55.53	247.00	19.70	3.45
C2056-162-5500-S	2.538	64.47	55.53	247.00	18.75	3.28
C2056-162-5750-S	2.645	67.18	55.53	247.00	17.88	3.13
C2056-162-6000-S	2.752	69.90	55.53	247.00	17.10	2.99
C2056-162-6250-S	2.859	72.62	55.53	247.00	16.38	2.87
C2056-162-6500-S	2.966	75.33	55.53	247.00	15.71	2.75
C2056-162-6750-S	3.073	78.05	55.53	247.00	15.10	2.64
C2056-162-7000-S	3.180	80.77	55.53	247.00	14.54	2.54
C2056-162-7500-S	3.394	86.20	55.53	247.00	13.52	2.37
C2056-162-8000-S	3.608	91.63	55.53	247.00	12.64	2.21
C2056-162-8500-S	3.821	97.06	55.53	247.00	11.87	2.08
C2056-162-9000-S	4.035	102.50	55.53	247.00	11.19	1.96
C2056-162-9500-S	4.249	107.93	55.53	247.00	10.58	1.85
C2056-177-3250-S	1.693	43.00	70.24	312.46	45.11	7.89
C2056-177-3500-S	1.808	45.94	70.24	312.46	41.53	7.27
C2056-177-3750-S	1.924	48.87	70.24	312.46	38.47	6.73
C2056-177-4000-S	2.040	51.81	70.24	312.46	35.83	6.27
C2056-177-4250-S	2.155	54.74	70.24	312.46	33.53	5.87
C2056-177-4500-S	2.271	57.68	70.24	312.46	31.51	5.51
C2056-177-4750-S	2.386	60.61	70.24	312.46	29.72	5.20
C2056-177-5000-S	2.502	63.55	70.24	312.46	28.12	4.92
C2056-177-5250-S	2.618	66.49	70.24	312.46	26.68	4.67
C2056-177-5500-S	2.733	69.42	70.24	312.46	25.39	4.44
C2056-177-5750-S	2.849	72.36	70.24	312.46	24.21	4.24
C2056-177-6000-S	2.964	75.29	70.24	312.46	23.14	4.05
C2056-177-6250-S	3.080	78.23	70.24	312.46	22.16	3.88
C2056-177-6500-S	3.195	81.16	70.24	312.46	21.26	3.72
C2056-177-6750-S	3.311	84.10	70.24	312.46	20.43	3.57
C2056-177-7000-S	3.427	87.04	70.24	312.46	19.66	3.44
C2056-177-7500-S	3.658	92.91	70.24	312.46	18.28	3.20
C2056-177-8000-S	3.889	98.78	70.24	312.46	17.09	2.99
C2056-177-8500-S*	4.215	107.07	70.24	312.46	16.39	2.87
C2056-177-9000-S*	4.446	112.94	70.24	312.46	15.43	2.70
C2056-177-9500-S*	4.678	118.81	70.24	312.46	14.57	2.55
C2056-192-3250-S	1.809	45.94	87.07	387.29	60.41	10.57
C2056-192-3500-S	1.933	49.10	87.07	387.29	55.56	9.72
C2056-192-3750-S	2.057	52.25	87.07	387.29	51.43	9.00
C2056-192-4000-S	2.181	55.41	87.07	387.29	47.88	8.38
C2056-192-4250-S	2.306	58.56	87.07	387.29	44.78	7.84
C2056-192-4500-S	2.430	61.72	87.07	387.29	42.06	7.36
C2056-192-4750-S	2.554	64.88	87.07	387.29	39.65	6.94
C2056-192-5000-S	2.679	68.03	87.07	387.29	37.50	6.56
C2056-192-5250-S	2.803	71.19	87.07	387.29	35.58	6.23
C2056-192-5500-S	2.927	74.35	87.07	387.29	33.84	5.92

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2056-192-5750-M	2.056	52.22	0.192	4.88	5.750	146.05	2.516	63.90	2.042	51.87	120.00	533.78	37.10	6.49
C2056-192-6000-M	2.056	52.22	0.192	4.88	6.000	152.40	2.615	66.42	2.119	53.81	120.00	533.78	35.45	6.20
C2056-192-6250-M	2.056	52.22	0.192	4.88	6.250	158.75	2.714	68.94	2.195	55.75	120.00	533.78	33.94	5.94
C2056-192-6500-M	2.056	52.22	0.192	4.88	6.500	165.10	2.814	71.47	2.271	57.69	120.00	533.78	32.55	5.70
C2056-192-6750-M	2.056	52.22	0.192	4.88	6.750	171.45	2.913	73.99	2.348	59.63	120.00	533.78	31.27	5.47
C2056-192-7000-M*	2.056	52.22	0.192	4.88	7.000	177.80	3.128	79.45	2.567	65.20	120.00	533.78	30.99	5.42
C2056-192-7500-M*	2.056	52.22	0.192	4.88	7.500	190.50	3.327	84.50	2.720	69.08	120.00	533.78	28.75	5.03
C2056-192-8000-M*	2.056	52.22	0.192	4.88	8.000	203.20	3.525	89.54	2.872	72.96	120.00	533.78	26.82	4.69
C2056-192-8500-M*	2.056	52.22	0.192	4.88	8.500	215.90	3.724	94.59	3.025	76.84	120.00	533.78	25.13	4.40
C2056-192-9000-M*	2.056	52.22	0.192	4.88	9.000	228.60	3.922	99.63	3.178	80.72	120.00	533.78	23.63	4.14
C2056-192-9500-M*	2.056	52.22	0.192	4.88	9.500	241.30	4.121	104.68	3.331	84.59	120.00	533.78	22.31	3.90
C2056-207-3000-M	2.056	52.22	0.207	5.26	3.000	76.20	1.531	38.90	1.336	33.93	147.86	657.73	100.69	17.62
C2056-207-3250-M	2.056	52.22	0.207	5.26	3.250	82.55	1.640	41.64	1.423	36.15	147.86	657.73	91.81	16.07
C2056-207-3500-M	2.056	52.22	0.207	5.26	3.500	88.90	1.748	44.39	1.510	38.36	147.86	657.73	84.38	14.77
C2056-207-3750-M	2.056	52.22	0.207	5.26	3.750	95.25	1.856	47.13	1.597	40.57	147.86	657.73	78.05	13.66
C2056-207-4000-M	2.056	52.22	0.207	5.26	4.000	101.60	1.964	49.88	1.684	42.79	147.86	657.73	72.61	12.71
C2056-207-4250-M	2.056	52.22	0.207	5.26	4.250	107.95	2.072	52.62	1.772	45.00	147.86	657.73	67.88	11.88
C2056-207-4500-M	2.056	52.22	0.207	5.26	4.500	114.30	2.180	55.36	1.859	47.21	147.86	657.73	63.73	11.15
C2056-207-4750-M	2.056	52.22	0.207	5.26	4.750	120.65	2.288	58.11	1.946	49.42	147.86	657.73	60.05	10.51
C2056-207-5000-M	2.056	52.22	0.207	5.26	5.000	127.00	2.396	60.85	2.033	51.64	147.86	657.73	56.78	9.94
C2056-207-5250-M	2.056	52.22	0.207	5.26	5.250	133.35	2.504	63.60	2.120	53.85	147.86	657.73	53.84	9.42
C2056-207-5500-M	2.056	52.22	0.207	5.26	5.500	139.70	2.612	66.34	2.207	56.06	147.86	657.73	51.20	8.96
C2056-207-5750-M	2.056	52.22	0.207	5.26	5.750	146.05	2.720	69.08	2.294	58.28	147.86	657.73	48.80	8.54
C2056-207-6000-M	2.056	52.22	0.207	5.26	6.000	152.40	2.828	71.83	2.382	60.49	147.86	657.73	46.61	8.16
C2056-207-6250-M	2.056	52.22	0.207	5.26	6.250	158.75	2.936	74.57	2.469	62.70	147.86	657.73	44.62	7.81
C2056-207-6500-M	2.056	52.22	0.207	5.26	6.500	165.10	3.044	77.32	2.556	64.92	147.86	657.73	42.78	7.49
C2056-207-6750-M*	2.056	52.22	0.207	5.26	6.750	171.45	3.270	83.05	2.788	70.82	147.86	657.73	42.48	7.43
C2056-207-7000-M*	2.056	52.22	0.207	5.26	7.000	177.80	3.378	85.79	2.875	73.03	147.86	657.73	40.82	7.14
C2056-207-7500-M*	2.056	52.22	0.207	5.26	7.500	190.50	3.594	91.28	3.049	77.46	147.86	657.73	37.85	6.62
C2056-207-8000-M*	2.056	52.22	0.207	5.26	8.000	203.20	3.810	96.77	3.224	81.88	147.86	657.73	35.29	6.18
C2056-207-8500-M*	2.056	52.22	0.207	5.26	8.500	215.90	4.026	102.25	3.398	86.31	147.86	657.73	33.05	5.78
C2056-207-9000-M*	2.056	52.22	0.207	5.26	9.000	228.60	4.242	107.74	3.572	90.74	147.86	657.73	31.08	5.44
C2056-207-9500-M*	2.056	52.22	0.207	5.26	9.500	241.30	4.458	113.23	3.747	95.16	147.86	657.73	29.33	5.13
C2056-225-2875-M	2.056	52.22	0.225	5.72	2.875	73.03	1.600	40.63	1.443	36.66	186.29	828.64	146.06	25.56
C2056-225-3000-M	2.056	52.22	0.225	5.72	3.000	76.20	1.659	42.13	1.493	37.93	186.29	828.64	138.90	24.31
C2056-225-3250-M	2.056	52.22	0.225	5.72	3.250	82.55	1.777	45.15	1.593	40.47	186.29	828.64	126.50	22.14
C2056-225-3500-M	2.056	52.22	0.225	5.72	3.500	88.90	1.896	48.16	1.693	43.01	186.29	828.64	116.13	20.32
C2056-225-3750-M	2.056	52.22	0.225	5.72	3.750	95.25	2.014	51.17	1.794	45.56	186.29	828.64	107.33	18.78
C2056-225-4000-M	2.056	52.22	0.225	5.72	4.000	101.60	2.133	54.18	1.894	48.10	186.29	828.64	99.77	17.46
C2056-225-4250-M	2.056	52.22	0.225	5.72	4.250	107.95	2.251	57.19	1.994	50.64	186.29	828.64	93.21	16.31
C2056-225-4500-M	2.056	52.22	0.225	5.72	4.500	114.30	2.370	60.20	2.094	53.18	186.29	828.64	87.46	15.30
C2056-225-4750-M	2.056	52.22	0.225	5.72	4.750	120.65	2.488	63.21	2.194	55.72	186.29	828.64	82.37	14.42
C2056-225-5000-M	2.056	52.22	0.225	5.72	5.000	127.00	2.607	66.22	2.294	58.27	186.29	828.64	77.85	13.62
C2056-225-5250-M	2.056	52.22	0.225	5.72	5.250	133.35	2.725	69.23	2.394	60.81	186.29	828.64	73.79	12.91
C2056-225-5500-M	2.056	52.22	0.225	5.72	5.500	139.70	2.844	72.24	2.494	63.35	186.29	828.64	70.14	12.27
C2056-225-5750-M	2.056	52.22	0.225	5.72	5.750	146.05	2.963	75.25	2.594	65.89	186.29	828.64	66.83	11.70
C2056-225-6000-M	2.056	52.22	0.225	5.72	6.000	152.40	3.081	78.26	2.694	68.43	186.29	828.64	63.82	11.17
C2056-225-6250-M	2.056	52.22	0.225	5.72	6.250	158.75	3.200	81.27	2.794	70.98	186.29	828.64	61.07	10.69
C2056-225-6500-M	2.056	52.22	0.225	5.72	6.500	165.10	3.318	84.28	2.894	73.52	186.29	828.64	58.55	10.25
C2056-225-6750-M	2.056	52.22	0.225	5.72	6.750	171.45	3.437	87.29	2.994	76.06	186.29	828.64	56.22	9.84
C2056-225-7000-M	2.056	52.22	0.225	5.72	7.000	177.80	3.555	90.30	3.095	78.60	186.29	828.64	54.08	9.46
C2056-225-7500-M*	2.056	52.22	0.225	5.72	7.500	190.50	3.910	99.33	3.441	87.40	186.29	828.64	51.90	9.08
C2056-225-8000-M*	2.056	52.22	0.225	5.72	8.000	203.20	4.148	105.35	3.641	92.48	186.29	828.64	48.36	8.46
C2056-225-8500-M*	2.056	52.22	0.225	5.72	8.500	215.90	4.385	111.37	3.841	97.57	186.29	828.64	45.27	7.92
C2056-225-9000-M*	2.056	52.22	0.225	5.72	9.000	228.60	4.622	117.39	4.041	102.65	186.29	828.64	42.55	7.45
C2056-225-9500-M*	2.056	52.22	0.225	5.72	9.500	241.30	4.859	123.41	4.241	107.73	186.29	828.64	40.14	7.02
C2056-250-2750-M	2.056	52.22	0.250	6.35	2.750	69.85	1.695	43.05	1.584	40.24	249.22	1108.59	236.23	41.34
C2056-250-2875-M	2.056	52.22	0.250	6.35	2.875	73.03	1.761	44.74	1.643	41.74	249.22	1108.59	223.80	39.16
C2056-250-3000-M	2.056	52.22	0.250	6.35	3.000	76.20	1.828	46.43	1.702	43.23	249.22	1108.59	212.61	37.21
C2056-250-3250-M	2.056	52.22	0.250	6.35	3.250	82.55	1.961	49.80	1.820	46.22	249.22	1108.59	193.28	33.82
C2056-250-3500-M	2.056	52.22	0.250	6.35	3.500	88.90	2.093	53.17	1.937	49.21	249.22	1108.59	177.17	31.01
C2056-250-3750-M	2.056	52.22	0.250	6.35	3.750	95.25	2.226	56.54	2.055	52.20	249.22	1108.59	163.54	28.62
C2056-250-4000-M	2.056	52.22	0.250	6.35	4.000	101.60	2.359	59.92	2.173	55.19	249.22	1108.59	151.86	26.58
C2056-250-4250-M	2.056	52.22	0.250	6.35	4.250	107.95	2.492	63.29	2.290	58.18	249.22	1108.59	141.74	24.80

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2056-192-5750-S	3.051	77.50	87.07	387.29	32.26	5.65
C2056-192-6000-S	3.176	80.66	87.07	387.29	30.83	5.39
C2056-192-6250-S	3.300	83.82	87.07	387.29	29.51	5.16
C2056-192-6500-S	3.424	86.97	87.07	387.29	28.31	4.95
C2056-192-6750-S	3.548	90.13	87.07	387.29	27.20	4.76
C2056-192-7000-S*	3.769	95.74	87.07	387.29	26.95	4.72
C2056-192-7500-S*	4.018	102.05	87.07	387.29	25.00	4.38
C2056-192-8000-S*	4.266	108.36	87.07	387.29	23.32	4.08
C2056-192-8500-S*	4.515	114.68	87.07	387.29	21.85	3.82
C2056-192-9000-S*	4.763	120.99	87.07	387.29	20.55	3.60
C2056-192-9500-S*	5.012	127.30	87.07	387.29	19.40	3.39
C2056-207-3000-S	1.789	45.43	106.07	471.80	87.56	15.32
C2056-207-3250-S	1.922	48.81	106.07	471.80	79.84	13.97
C2056-207-3500-S	2.054	52.18	106.07	471.80	73.37	12.84
C2056-207-3750-S	2.187	55.56	106.07	471.80	67.87	11.88
C2056-207-4000-S	2.320	58.93	106.07	471.80	63.14	11.05
C2056-207-4250-S	2.453	62.31	106.07	471.80	59.03	10.33
C2056-207-4500-S	2.586	65.68	106.07	471.80	55.41	9.70
C2056-207-4750-S	2.719	69.06	106.07	471.80	52.22	9.14
C2056-207-5000-S	2.852	72.43	106.07	471.80	49.37	8.64
C2056-207-5250-S	2.985	75.81	106.07	471.80	46.82	8.19
C2056-207-5500-S	3.118	79.18	106.07	471.80	44.52	7.79
C2056-207-5750-S	3.250	82.56	106.07	471.80	42.43	7.43
C2056-207-6000-S	3.383	85.94	106.07	471.80	40.53	7.09
C2056-207-6250-S	3.516	89.31	106.07	471.80	38.80	6.79
C2056-207-6500-S	3.649	92.69	106.07	471.80	37.20	6.51
C2056-207-6750-S*	3.879	98.52	106.07	471.80	36.94	6.47
C2056-207-7000-S*	4.012	101.90	106.07	471.80	35.50	6.21
C2056-207-7500-S*	4.278	108.65	106.07	471.80	32.92	5.76
C2056-207-8000-S*	4.543	115.40	106.07	471.80	30.69	5.37
C2056-207-8500-S*	4.809	122.15	106.07	471.80	28.74	5.03
C2056-207-9000-S*	5.075	128.90	106.07	471.80	27.02	4.73
C2056-207-9500-S*	5.341	135.65	106.07	471.80	25.50	4.46
C2056-225-2875-S	1.837	46.66	131.83	586.40	127.01	22.23
C2056-225-3000-S	1.909	48.48	131.83	586.40	120.78	21.14
C2056-225-3250-S	2.052	52.11	131.83	586.40	110.00	19.25
C2056-225-3500-S	2.195	55.74	131.83	586.40	100.98	17.67
C2056-225-3750-S	2.338	59.37	131.83	586.40	93.33	16.33
C2056-225-4000-S	2.481	63.01	131.83	586.40	86.76	15.18
C2056-225-4250-S	2.624	66.64	131.83	586.40	81.05	14.18
C2056-225-4500-S	2.767	70.27	131.83	586.40	76.05	13.31
C2056-225-4750-S	2.910	73.90	131.83	586.40	71.63	12.53
C2056-225-5000-S	3.053	77.53	131.83	586.40	67.69	11.85
C2056-225-5250-S	3.196	81.17	131.83	586.40	64.17	11.23
C2056-225-5500-S	3.339	84.80	131.83	586.40	60.99	10.67
C2056-225-5750-S	3.482	88.43	131.83	586.40	58.11	10.17
C2056-225-6000-S	3.625	92.06	131.83	586.40	55.50	9.71
C2056-225-6250-S	3.768	95.70	131.83	586.40	53.10	9.29
C2056-225-6500-S	3.911	99.33	131.83	586.40	50.91	8.91
C2056-225-6750-S	4.054	102.96	131.83	586.40	48.89	8.56
C2056-225-7000-S	4.197	106.59	131.83	586.40	47.02	8.23
C2056-225-7500-S*	4.579	116.30	131.83	586.40	45.13	7.90
C2056-225-8000-S*	4.865	123.57	131.83	586.40	42.05	7.36
C2056-225-8500-S*	5.151	130.83	131.83	586.40	39.36	6.89
C2056-225-9000-S*	5.437	138.09	131.83	586.40	37.00	6.47
C2056-225-9500-S*	5.723	145.36	131.83	586.40	34.90	6.11
C2056-250-2750-S	1.907	48.44	173.13	770.13	205.42	35.95
C2056-250-2875-S	1.985	50.43	173.13	770.13	194.61	34.06
C2056-250-3000-S	2.064	52.41	173.13	770.13	184.88	32.35
C2056-250-3250-S	2.220	56.38	173.13	770.13	168.07	29.41
C2056-250-3500-S	2.376	60.36	173.13	770.13	154.06	26.96
C2056-250-3750-S	2.533	64.33	173.13	770.13	142.21	24.89
C2056-250-4000-S	2.689	68.30	173.13	770.13	132.05	23.11
C2056-250-4250-S	2.845	72.27	173.13	770.13	123.25	21.57

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2056-250-4500-M	2.056	52.22	0.250	6.35	4.500	114.30	2.624	66.66	2.408	61.17	249.22	1108.59	132.88	23.25
C2056-250-4750-M	2.056	52.22	0.250	6.35	4.750	120.65	2.757	70.03	2.526	64.16	249.22	1108.59	125.06	21.89
C2056-250-5000-M	2.056	52.22	0.250	6.35	5.000	127.00	2.890	73.41	2.644	67.15	249.22	1108.59	118.12	20.67
C2056-250-5250-M	2.056	52.22	0.250	6.35	5.250	133.35	3.023	76.78	2.761	70.14	249.22	1108.59	111.90	19.58
C2056-250-5500-M	2.056	52.22	0.250	6.35	5.500	139.70	3.156	80.15	2.879	73.13	249.22	1108.59	106.30	18.60
C2056-250-5750-M	2.056	52.22	0.250	6.35	5.750	146.05	3.288	83.52	2.997	76.11	249.22	1108.59	101.24	17.72
C2056-250-6000-M	2.056	52.22	0.250	6.35	6.000	152.40	3.421	86.90	3.114	79.10	249.22	1108.59	96.64	16.91
C2056-250-6250-M	2.056	52.22	0.250	6.35	6.250	158.75	3.554	90.27	3.232	82.09	249.22	1108.59	92.44	16.18
C2056-250-6500-M	2.056	52.22	0.250	6.35	6.500	165.10	3.687	93.64	3.350	85.08	249.22	1108.59	88.59	15.50
C2056-250-6750-M	2.056	52.22	0.250	6.35	6.750	171.45	3.819	97.01	3.467	88.07	249.22	1108.59	85.04	14.88
C2056-250-7000-M	2.056	52.22	0.250	6.35	7.000	177.80	3.952	100.39	3.585	91.06	249.22	1108.59	81.77	14.31
C2056-250-7500-M	2.056	52.22	0.250	6.35	7.500	190.50	4.218	107.13	3.821	97.04	249.22	1108.59	75.93	13.29
C2056-250-8000-M	2.056	52.22	0.250	6.35	8.000	203.20	4.483	113.88	4.056	103.02	249.22	1108.59	70.87	12.40
C2056-250-8500-M	2.056	52.22	0.250	6.35	8.500	215.90	4.749	120.62	4.291	109.00	249.22	1108.59	66.44	11.63
C2056-250-9000-M	2.056	52.22	0.250	6.35	9.000	228.60	5.014	127.37	4.527	114.98	249.22	1108.59	62.53	10.94
C2056-250-9500-M	2.056	52.22	0.250	6.35	9.500	241.30	5.280	134.11	4.762	120.96	249.22	1108.59	59.06	10.34
C2115-177-3500-M	2.115	53.72	0.177	4.50	3.500	88.90	1.463	37.17	1.159	29.45	93.15	414.36	45.74	8.00
C2115-177-3750-M	2.115	53.72	0.177	4.50	3.750	95.25	1.552	39.41	1.222	31.04	93.15	414.36	42.37	7.42
C2115-177-4000-M	2.115	53.72	0.177	4.50	4.000	101.60	1.640	41.65	1.284	32.63	93.15	414.36	39.47	6.91
C2115-177-4250-M	2.115	53.72	0.177	4.50	4.250	107.95	1.728	43.89	1.347	34.21	93.15	414.36	36.94	6.46
C2115-177-4500-M	2.115	53.72	0.177	4.50	4.500	114.30	1.816	46.13	1.410	35.80	93.15	414.36	34.71	6.07
C2115-177-4750-M	2.115	53.72	0.177	4.50	4.750	120.65	1.904	48.37	1.472	37.39	93.15	414.36	32.74	5.73
C2115-177-5000-M	2.115	53.72	0.177	4.50	5.000	127.00	1.992	50.61	1.535	38.98	93.15	414.36	30.97	5.42
C2115-177-5250-M	2.115	53.72	0.177	4.50	5.250	133.35	2.081	52.85	1.597	40.57	93.15	414.36	29.39	5.14
C2115-177-5500-M	2.115	53.72	0.177	4.50	5.500	139.70	2.169	55.09	1.660	42.16	93.15	414.36	27.96	4.89
C2115-177-5750-M	2.115	53.72	0.177	4.50	5.750	146.05	2.257	57.33	1.723	43.75	93.15	414.36	26.67	4.67
C2115-177-6000-M	2.115	53.72	0.177	4.50	6.000	152.40	2.345	59.57	1.785	45.34	93.15	414.36	25.49	4.46
C2115-177-6250-M	2.115	53.72	0.177	4.50	6.250	158.75	2.433	61.81	1.848	46.93	93.15	414.36	24.41	4.27
C2115-177-6500-M	2.115	53.72	0.177	4.50	6.500	165.10	2.521	64.04	1.910	48.52	93.15	414.36	23.41	4.10
C2115-177-6750-M	2.115	53.72	0.177	4.50	6.750	171.45	2.610	66.28	1.973	50.11	93.15	414.36	22.50	3.94
C2115-177-7000-M	2.115	53.72	0.177	4.50	7.000	177.80	2.698	68.52	2.035	51.70	93.15	414.36	21.65	3.79
C2115-177-7500-M	2.115	53.72	0.177	4.50	7.500	190.50	2.874	73.00	2.161	54.88	93.15	414.36	20.14	3.52
C2115-177-8000-M	2.115	53.72	0.177	4.50	8.000	203.20	3.050	77.48	2.286	58.06	93.15	414.36	18.82	3.29
C2115-177-8500-M	2.115	53.72	0.177	4.50	8.500	215.90	3.227	81.96	2.411	61.24	93.15	414.36	17.67	3.09
C2115-177-9000-M	2.115	53.72	0.177	4.50	9.000	228.60	3.403	86.44	2.536	64.42	93.15	414.36	16.64	2.91
C2115-177-9500-M*	2.115	53.72	0.177	4.50	9.500	241.30	3.694	93.83	2.803	71.19	93.15	414.36	16.04	2.81
C2115-192-3250-M	2.115	53.72	0.192	4.88	3.250	82.55	1.490	37.83	1.238	31.44	116.81	519.61	66.35	11.61
C2115-192-3500-M	2.115	53.72	0.192	4.88	3.500	88.90	1.586	40.28	1.311	33.29	116.81	519.61	61.03	10.68
C2115-192-3750-M	2.115	53.72	0.192	4.88	3.750	95.25	1.682	42.73	1.383	35.14	116.81	519.61	56.50	9.89
C2115-192-4000-M	2.115	53.72	0.192	4.88	4.000	101.60	1.779	45.18	1.456	36.99	116.81	519.61	52.59	9.20
C2115-192-4250-M	2.115	53.72	0.192	4.88	4.250	107.95	1.875	47.63	1.529	38.84	116.81	519.61	49.19	8.61
C2115-192-4500-M	2.115	53.72	0.192	4.88	4.500	114.30	1.972	50.08	1.602	40.69	116.81	519.61	46.20	8.09
C2115-192-4750-M	2.115	53.72	0.192	4.88	4.750	120.65	2.068	52.53	1.675	42.54	116.81	519.61	43.56	7.62
C2115-192-5000-M	2.115	53.72	0.192	4.88	5.000	127.00	2.165	54.98	1.747	44.39	116.81	519.61	41.20	7.21
C2115-192-5250-M	2.115	53.72	0.192	4.88	5.250	133.35	2.261	57.43	1.820	46.23	116.81	519.61	39.08	6.84
C2115-192-5500-M	2.115	53.72	0.192	4.88	5.500	139.70	2.357	59.88	1.893	48.08	116.81	519.61	37.17	6.51
C2115-192-5750-M	2.115	53.72	0.192	4.88	5.750	146.05	2.454	62.33	1.966	49.93	116.81	519.61	35.44	6.20
C2115-192-6000-M	2.115	53.72	0.192	4.88	6.000	152.40	2.550	64.78	2.039	51.78	116.81	519.61	33.86	5.93
C2115-192-6250-M	2.115	53.72	0.192	4.88	6.250	158.75	2.647	67.23	2.111	53.63	116.81	519.61	32.42	5.67
C2115-192-6500-M	2.115	53.72	0.192	4.88	6.500	165.10	2.743	69.68	2.184	55.48	116.81	519.61	31.09	5.44
C2115-192-6750-M	2.115	53.72	0.192	4.88	6.750	171.45	2.840	72.13	2.257	57.33	116.81	519.61	29.87	5.23
C2115-192-7000-M	2.115	53.72	0.192	4.88	7.000	177.80	2.936	74.58	2.330	59.18	116.81	519.61	28.74	5.03
C2115-192-7500-M*	2.115	53.72	0.192	4.88	7.500	190.50	3.247	82.47	2.621	66.58	116.81	519.61	27.47	4.81
C2115-192-8000-M*	2.115	53.72	0.192	4.88	8.000	203.20	3.440	87.37	2.767	70.28	116.81	519.61	25.62	4.48
C2115-192-8500-M*	2.115	53.72	0.192	4.88	8.500	215.90	3.633	92.27	2.912	73.98	116.81	519.61	24.00	4.20
C2115-192-9000-M*	2.115	53.72	0.192	4.88	9.000	228.60	3.826	97.17	3.058	77.67	116.81	519.61	22.58	3.95
C2115-192-9500-M*	2.115	53.72	0.192	4.88	9.500	241.30	4.018	102.07	3.204	81.37	116.81	519.61	21.31	3.73
C2115-207-3250-M	2.115	53.72	0.207	5.26	3.250	82.55	1.604	40.74	1.379	35.03	143.96	640.37	87.45	15.30
C2115-207-3500-M	2.115	53.72	0.207	5.26	3.500	88.90	1.709	43.40	1.462	37.14	143.96	640.37	80.37	14.06
C2115-207-3750-M	2.115	53.72	0.207	5.26	3.750	95.25	1.814	46.07	1.546	39.26	143.96	640.37	74.35	13.01
C2115-207-4000-M	2.115	53.72	0.207	5.26	4.000	101.60	1.919	48.73	1.629	41.37	143.96	640.37	69.16	12.10
C2115-207-4250-M	2.115	53.72	0.207	5.26	4.250	107.95	2.023	51.40	1.712	43.49	143.96	640.37	64.66	11.31
C2115-207-4500-M	2.115	53.72	0.207	5.26	4.500	114.30	2.128	54.06	1.795	45.60	143.96	640.37	60.70	10.62
C2115-207-4750-M	2.115	53.72	0.207	5.26	4.750	120.65	2.233	56.72	1.879	47.71	143.96	640.37	57.20	10.01

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2056-250-4500-S	3.002	76.24	173.13	770.13	115.55	20.22
C2056-250-4750-S	3.158	80.21	173.13	770.13	108.75	19.03
C2056-250-5000-S	3.314	84.18	173.13	770.13	102.71	17.97
C2056-250-5250-S	3.471	88.16	173.13	770.13	97.30	17.03
C2056-250-5500-S	3.627	92.13	173.13	770.13	92.44	16.18
C2056-250-5750-S	3.783	96.10	173.13	770.13	88.04	15.41
C2056-250-6000-S	3.940	100.07	173.13	770.13	84.04	14.71
C2056-250-6250-S	4.096	104.04	173.13	770.13	80.38	14.07
C2056-250-6500-S	4.252	108.01	173.13	770.13	77.03	13.48
C2056-250-6750-S	4.409	111.98	173.13	770.13	73.95	12.94
C2056-250-7000-S	4.565	115.95	173.13	770.13	71.11	12.44
C2056-250-7500-S	4.878	123.90	173.13	770.13	66.03	11.55
C2056-250-8000-S	5.191	131.84	173.13	770.13	61.63	10.78
C2056-250-8500-S	5.503	139.78	173.13	770.13	57.77	10.11
C2056-250-9000-S	5.816	147.73	173.13	770.13	54.38	9.52
C2056-250-9500-S	6.129	155.67	173.13	770.13	51.36	8.99
C2115-177-3500-S	1.781	45.24	68.37	304.12	39.78	6.96
C2115-177-3750-S	1.894	48.12	68.37	304.12	36.85	6.45
C2115-177-4000-S	2.008	51.00	68.37	304.12	34.32	6.01
C2115-177-4250-S	2.121	53.88	68.37	304.12	32.12	5.62
C2115-177-4500-S	2.235	56.76	68.37	304.12	30.18	5.28
C2115-177-4750-S	2.348	59.64	68.37	304.12	28.47	4.98
C2115-177-5000-S	2.462	62.52	68.37	304.12	26.93	4.71
C2115-177-5250-S	2.575	65.40	68.37	304.12	25.56	4.47
C2115-177-5500-S	2.688	68.28	68.37	304.12	24.32	4.26
C2115-177-5750-S	2.802	71.16	68.37	304.12	23.19	4.06
C2115-177-6000-S	2.915	74.04	68.37	304.12	22.16	3.88
C2115-177-6250-S	3.029	76.92	68.37	304.12	21.22	3.71
C2115-177-6500-S	3.142	79.81	68.37	304.12	20.36	3.56
C2115-177-6750-S	3.255	82.69	68.37	304.12	19.56	3.42
C2115-177-7000-S	3.369	85.57	68.37	304.12	18.83	3.29
C2115-177-7500-S	3.596	91.33	68.37	304.12	17.51	3.06
C2115-177-8000-S	3.822	97.09	68.37	304.12	16.37	2.86
C2115-177-8500-S	4.049	102.85	68.37	304.12	15.36	2.69
C2115-177-9000-S	4.276	108.61	68.37	304.12	14.47	2.53
C2115-177-9500-S*	4.600	116.83	68.37	304.12	13.95	2.44
C2115-192-3250-S	1.781	45.24	84.75	377.01	57.70	10.10
C2115-192-3500-S	1.903	48.34	84.75	377.01	53.07	9.29
C2115-192-3750-S	2.025	51.43	84.75	377.01	49.13	8.60
C2115-192-4000-S	2.147	54.53	84.75	377.01	45.73	8.00
C2115-192-4250-S	2.269	57.62	84.75	377.01	42.78	7.49
C2115-192-4500-S	2.390	60.72	84.75	377.01	40.18	7.03
C2115-192-4750-S	2.512	63.81	84.75	377.01	37.88	6.63
C2115-192-5000-S	2.634	66.91	84.75	377.01	35.83	6.27
C2115-192-5250-S	2.756	70.00	84.75	377.01	33.98	5.95
C2115-192-5500-S	2.878	73.10	84.75	377.01	32.32	5.66
C2115-192-5750-S	3.000	76.19	84.75	377.01	30.82	5.39
C2115-192-6000-S	3.122	79.29	84.75	377.01	29.45	5.15
C2115-192-6250-S	3.244	82.39	84.75	377.01	28.19	4.93
C2115-192-6500-S	3.365	85.48	84.75	377.01	27.04	4.73
C2115-192-6750-S	3.487	88.58	84.75	377.01	25.98	4.55
C2115-192-7000-S	3.609	91.67	84.75	377.01	25.00	4.37
C2115-192-7500-S*	3.951	100.36	84.75	377.01	23.88	4.18
C2115-192-8000-S*	4.195	106.55	84.75	377.01	22.28	3.90
C2115-192-8500-S*	4.439	112.74	84.75	377.01	20.87	3.65
C2115-192-9000-S*	4.683	118.94	84.75	377.01	19.63	3.44
C2115-192-9500-S*	4.926	125.13	84.75	377.01	18.53	3.24
C2115-207-3250-S	1.892	48.06	103.27	459.35	76.05	13.31
C2115-207-3500-S	2.022	51.37	103.27	459.35	69.89	12.23
C2115-207-3750-S	2.153	54.68	103.27	459.35	64.65	11.31
C2115-207-4000-S	2.283	57.99	103.27	459.35	60.14	10.52
C2115-207-4250-S	2.413	61.30	103.27	459.35	56.22	9.84
C2115-207-4500-S	2.544	64.61	103.27	459.35	52.78	9.24
C2115-207-4750-S	2.674	67.92	103.27	459.35	49.74	8.70

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2115-207-5000-M	**2.115**	**53.72**	**0.207**	**5.26**	**5.000**	**127.00**	**2.338**	**59.39**	**1.962**	**49.83**	**143.96**	**640.37**	**54.08**	**9.46**
C2115-207-5250-M	**2.115**	**53.72**	**0.207**	**5.26**	**5.250**	**133.35**	**2.443**	**62.05**	**2.045**	**51.94**	**143.96**	**640.37**	**51.29**	**8.98**
C2115-207-5500-M	**2.115**	**53.72**	**0.207**	**5.26**	**5.500**	**139.70**	**2.548**	**64.72**	**2.128**	**54.06**	**143.96**	**640.37**	**48.77**	**8.53**
C2115-207-5750-M	**2.115**	**53.72**	**0.207**	**5.26**	**5.750**	**146.05**	**2.653**	**67.38**	**2.212**	**56.17**	**143.96**	**640.37**	**46.48**	**8.13**
C2115-207-6000-M	**2.115**	**53.72**	**0.207**	**5.26**	**6.000**	**152.40**	**2.758**	**70.04**	**2.295**	**58.29**	**143.96**	**640.37**	**44.40**	**7.77**
C2115-207-6250-M	**2.115**	**53.72**	**0.207**	**5.26**	**6.250**	**158.75**	**2.863**	**72.71**	**2.378**	**60.40**	**143.96**	**640.37**	**42.50**	**7.44**
C2115-207-6500-M	**2.115**	**53.72**	**0.207**	**5.26**	**6.500**	**165.10**	**2.967**	**75.37**	**2.461**	**62.52**	**143.96**	**640.37**	**40.75**	**7.13**
C2115-207-6750-M*	**2.115**	**53.72**	**0.207**	**5.26**	**6.750**	**171.45**	**3.192**	**81.09**	**2.693**	**68.40**	**143.96**	**640.37**	**40.47**	**7.08**
C2115-207-7000-M*	**2.115**	**53.72**	**0.207**	**5.26**	**7.000**	**177.80**	**3.297**	**83.75**	**2.776**	**70.51**	**143.96**	**640.37**	**38.88**	**6.80**
C2115-207-7500-M*	**2.115**	**53.72**	**0.207**	**5.26**	**7.500**	**190.50**	**3.507**	**89.08**	**2.943**	**74.74**	**143.96**	**640.37**	**36.06**	**6.31**
C2115-207-8000-M*	**2.115**	**53.72**	**0.207**	**5.26**	**8.000**	**203.20**	**3.717**	**94.41**	**3.109**	**78.97**	**143.96**	**640.37**	**33.61**	**5.88**
C2115-207-8500-M*	**2.115**	**53.72**	**0.207**	**5.26**	**8.500**	**215.90**	**3.927**	**99.74**	**3.276**	**83.20**	**143.96**	**640.37**	**31.48**	**5.51**
C2115-207-9000-M*	**2.115**	**53.72**	**0.207**	**5.26**	**9.000**	**228.60**	**4.136**	**105.07**	**3.442**	**87.43**	**143.96**	**640.37**	**29.60**	**5.18**
C2115-207-9500-M*	**2.115**	**53.72**	**0.207**	**5.26**	**9.500**	**241.30**	**4.346**	**110.40**	**3.609**	**91.66**	**143.96**	**640.37**	**27.93**	**4.89**
C2115-225-3000-M	**2.115**	**53.72**	**0.225**	**5.72**	**3.000**	**76.20**	**1.624**	**41.25**	**1.450**	**36.84**	**181.41**	**806.93**	**131.84**	**23.07**
C2115-225-3250-M	**2.115**	**53.72**	**0.225**	**5.72**	**3.250**	**82.55**	**1.739**	**44.18**	**1.546**	**39.27**	**181.41**	**806.93**	**120.07**	**21.01**
C2115-225-3500-M	**2.115**	**53.72**	**0.225**	**5.72**	**3.500**	**88.90**	**1.854**	**47.10**	**1.642**	**41.71**	**181.41**	**806.93**	**110.23**	**19.29**
C2115-225-3750-M	**2.115**	**53.72**	**0.225**	**5.72**	**3.750**	**95.25**	**1.969**	**50.02**	**1.738**	**44.14**	**181.41**	**806.93**	**101.88**	**17.83**
C2115-225-4000-M	**2.115**	**53.72**	**0.225**	**5.72**	**4.000**	**101.60**	**2.085**	**52.95**	**1.834**	**46.58**	**181.41**	**806.93**	**94.70**	**16.57**
C2115-225-4250-M	**2.115**	**53.72**	**0.225**	**5.72**	**4.250**	**107.95**	**2.200**	**55.87**	**1.930**	**49.01**	**181.41**	**806.93**	**88.47**	**15.48**
C2115-225-4500-M	**2.115**	**53.72**	**0.225**	**5.72**	**4.500**	**114.30**	**2.315**	**58.79**	**2.026**	**51.45**	**181.41**	**806.93**	**83.01**	**14.53**
C2115-225-4750-M	**2.115**	**53.72**	**0.225**	**5.72**	**4.750**	**120.65**	**2.430**	**61.72**	**2.121**	**53.88**	**181.41**	**806.93**	**78.19**	**13.68**
C2115-225-5000-M	**2.115**	**53.72**	**0.225**	**5.72**	**5.000**	**127.00**	**2.545**	**64.64**	**2.217**	**56.32**	**181.41**	**806.93**	**73.89**	**12.93**
C2115-225-5250-M	**2.115**	**53.72**	**0.225**	**5.72**	**5.250**	**133.35**	**2.660**	**67.56**	**2.313**	**58.75**	**181.41**	**806.93**	**70.04**	**12.26**
C2115-225-5500-M	**2.115**	**53.72**	**0.225**	**5.72**	**5.500**	**139.70**	**2.775**	**70.49**	**2.409**	**61.19**	**181.41**	**806.93**	**66.57**	**11.65**
C2115-225-5750-M	**2.115**	**53.72**	**0.225**	**5.72**	**5.750**	**146.05**	**2.890**	**73.41**	**2.505**	**63.62**	**181.41**	**806.93**	**63.43**	**11.10**
C2115-225-6000-M	**2.115**	**53.72**	**0.225**	**5.72**	**6.000**	**152.40**	**3.005**	**76.34**	**2.601**	**66.06**	**181.41**	**806.93**	**60.58**	**10.60**
C2115-225-6250-M	**2.115**	**53.72**	**0.225**	**5.72**	**6.250**	**158.75**	**3.120**	**79.26**	**2.697**	**68.49**	**181.41**	**806.93**	**57.97**	**10.14**
C2115-225-6500-M	**2.115**	**53.72**	**0.225**	**5.72**	**6.500**	**165.10**	**3.236**	**82.18**	**2.792**	**70.93**	**181.41**	**806.93**	**55.57**	**9.72**
C2115-225-6750-M	**2.115**	**53.72**	**0.225**	**5.72**	**6.750**	**171.45**	**3.351**	**85.11**	**2.888**	**73.36**	**181.41**	**806.93**	**53.37**	**9.34**
C2115-225-7000-M	**2.115**	**53.72**	**0.225**	**5.72**	**7.000**	**177.80**	**3.466**	**88.03**	**2.984**	**75.80**	**181.41**	**806.93**	**51.33**	**8.98**
C2115-225-7500-M*	**2.115**	**53.72**	**0.225**	**5.72**	**7.500**	**190.50**	**3.817**	**96.96**	**3.326**	**84.48**	**181.41**	**806.93**	**49.26**	**8.62**
C2115-225-8000-M*	**2.115**	**53.72**	**0.225**	**5.72**	**8.000**	**203.20**	**4.048**	**102.81**	**3.518**	**89.35**	**181.41**	**806.93**	**45.90**	**8.03**
C2115-225-8500-M*	**2.115**	**53.72**	**0.225**	**5.72**	**8.500**	**215.90**	**4.278**	**108.66**	**3.709**	**94.22**	**181.41**	**806.93**	**42.97**	**7.52**
C2115-225-9000-M*	**2.115**	**53.72**	**0.225**	**5.72**	**9.000**	**228.60**	**4.508**	**114.50**	**3.901**	**99.09**	**181.41**	**806.93**	**40.38**	**7.07**
C2115-225-9500-M*	**2.115**	**53.72**	**0.225**	**5.72**	**9.500**	**241.30**	**4.738**	**120.35**	**4.093**	**103.96**	**181.41**	**806.93**	**38.10**	**6.67**
C2115-250-2875-M	**2.115**	**53.72**	**0.250**	**6.35**	**2.875**	**73.03**	**1.726**	**43.85**	**1.600**	**40.64**	**242.77**	**1079.88**	**211.38**	**36.99**
C2115-250-3000-M	**2.115**	**53.72**	**0.250**	**6.35**	**3.000**	**76.20**	**1.791**	**45.49**	**1.657**	**42.08**	**242.77**	**1079.88**	**200.81**	**35.14**
C2115-250-3250-M	**2.115**	**53.72**	**0.250**	**6.35**	**3.250**	**82.55**	**1.920**	**48.77**	**1.770**	**44.95**	**242.77**	**1079.88**	**182.55**	**31.95**
C2115-250-3500-M	**2.115**	**53.72**	**0.250**	**6.35**	**3.500**	**88.90**	**2.049**	**52.05**	**1.883**	**47.83**	**242.77**	**1079.88**	**167.34**	**29.28**
C2115-250-3750-M	**2.115**	**53.72**	**0.250**	**6.35**	**3.750**	**95.25**	**2.178**	**55.33**	**1.996**	**50.70**	**242.77**	**1079.88**	**154.47**	**27.03**
C2115-250-4000-M	**2.115**	**53.72**	**0.250**	**6.35**	**4.000**	**101.60**	**2.307**	**58.61**	**2.109**	**53.57**	**242.77**	**1079.88**	**143.43**	**25.10**
C2115-250-4250-M	**2.115**	**53.72**	**0.250**	**6.35**	**4.250**	**107.95**	**2.437**	**61.89**	**2.222**	**56.45**	**242.77**	**1079.88**	**133.87**	**23.43**
C2115-250-4500-M	**2.115**	**53.72**	**0.250**	**6.35**	**4.500**	**114.30**	**2.566**	**65.17**	**2.336**	**59.32**	**242.77**	**1079.88**	**125.50**	**21.96**
C2115-250-4750-M	**2.115**	**53.72**	**0.250**	**6.35**	**4.750**	**120.65**	**2.695**	**68.45**	**2.449**	**62.20**	**242.77**	**1079.88**	**118.12**	**20.67**
C2115-250-5000-M	**2.115**	**53.72**	**0.250**	**6.35**	**5.000**	**127.00**	**2.824**	**71.73**	**2.562**	**65.07**	**242.77**	**1079.88**	**111.56**	**19.52**
C2115-250-5250-M	**2.115**	**53.72**	**0.250**	**6.35**	**5.250**	**133.35**	**2.953**	**75.01**	**2.675**	**67.94**	**242.77**	**1079.88**	**105.69**	**18.50**
C2115-250-5500-M	**2.115**	**53.72**	**0.250**	**6.35**	**5.500**	**139.70**	**3.082**	**78.28**	**2.788**	**70.82**	**242.77**	**1079.88**	**100.40**	**17.57**
C2115-250-5750-M	**2.115**	**53.72**	**0.250**	**6.35**	**5.750**	**146.05**	**3.211**	**81.56**	**2.901**	**73.69**	**242.77**	**1079.88**	**95.62**	**16.73**
C2115-250-6000-M	**2.115**	**53.72**	**0.250**	**6.35**	**6.000**	**152.40**	**3.340**	**84.84**	**3.014**	**76.57**	**242.77**	**1079.88**	**91.28**	**15.97**
C2115-250-6250-M	**2.115**	**53.72**	**0.250**	**6.35**	**6.250**	**158.75**	**3.469**	**88.12**	**3.128**	**79.44**	**242.77**	**1079.88**	**87.31**	**15.28**
C2115-250-6500-M	**2.115**	**53.72**	**0.250**	**6.35**	**6.500**	**165.10**	**3.598**	**91.40**	**3.241**	**82.32**	**242.77**	**1079.88**	**83.67**	**14.64**
C2115-250-6750-M	**2.115**	**53.72**	**0.250**	**6.35**	**6.750**	**171.45**	**3.728**	**94.68**	**3.354**	**85.19**	**242.77**	**1079.88**	**80.32**	**14.06**
C2115-250-7000-M	**2.115**	**53.72**	**0.250**	**6.35**	**7.000**	**177.80**	**3.857**	**97.96**	**3.467**	**88.06**	**242.77**	**1079.88**	**77.23**	**13.52**
C2115-250-7500-M	**2.115**	**53.72**	**0.250**	**6.35**	**7.500**	**190.50**	**4.115**	**104.52**	**3.693**	**93.81**	**242.77**	**1079.88**	**71.72**	**12.55**
C2115-250-8000-M	**2.115**	**53.72**	**0.250**	**6.35**	**8.000**	**203.20**	**4.373**	**111.08**	**3.920**	**99.56**	**242.77**	**1079.88**	**66.94**	**11.71**
C2115-250-8500-M	**2.115**	**53.72**	**0.250**	**6.35**	**8.500**	**215.90**	**4.631**	**117.64**	**4.146**	**105.31**	**242.77**	**1079.88**	**62.75**	**10.98**
C2115-250-9000-M	**2.115**	**53.72**	**0.250**	**6.35**	**9.000**	**228.60**	**4.890**	**124.19**	**4.372**	**111.06**	**242.77**	**1079.88**	**59.06**	**10.34**
C2115-250-9500-M	**2.115**	**53.72**	**0.250**	**6.35**	**9.500**	**241.30**	**5.148**	**130.75**	**4.599**	**116.81**	**242.77**	**1079.88**	**55.78**	**9.76**
D13730	2.126	54.00	0.157	4.00	3.898	99.00	1.079	27.40	0.866	22.00	95.90	426.59	34.00	5.95
D13740	2.126	54.00	0.157	4.00	5.906	150.00	1.520	38.60	1.181	30.00	95.90	426.59	21.66	3.79
D13750	2.126	54.00	0.157	4.00	9.055	230.00	2.181	55.40	1.654	42.00	95.90	426.59	14.00	2.45
D13760	2.126	54.00	0.157	4.00	13.189	335.00	3.063	77.80	2.283	58.00	95.90	426.59	9.54	1.67
D13770	2.126	54.00	0.157	4.00	19.291	490.00	4.370	111.00	3.228	82.00	95.90	426.59	6.46	1.13

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2115-207-5000-S	**2.804**	**71.23**	**103.27**	**459.35**	**47.03**	**8.23**
C2115-207-5250-S	**2.934**	**74.54**	**103.27**	**459.35**	**44.60**	**7.80**
C2115-207-5500-S	**3.065**	**77.85**	**103.27**	**459.35**	**42.41**	**7.42**
C2115-207-5750-S	**3.195**	**81.15**	**103.27**	**459.35**	**40.42**	**7.07**
C2115-207-6000-S	**3.325**	**84.46**	**103.27**	**459.35**	**38.61**	**6.76**
C2115-207-6250-S	**3.456**	**87.77**	**103.27**	**459.35**	**36.96**	**6.47**
C2115-207-6500-S	**3.586**	**91.08**	**103.27**	**459.35**	**35.44**	**6.20**
C2115-207-6750-S*	**3.815**	**96.91**	**103.27**	**459.35**	**35.19**	**6.16**
C2115-207-7000-S*	**3.946**	**100.22**	**103.27**	**459.35**	**33.81**	**5.92**
C2115-207-7500-S*	**4.206**	**106.84**	**103.27**	**459.35**	**31.35**	**5.49**
C2115-207-8000-S*	**4.467**	**113.46**	**103.27**	**459.35**	**29.23**	**5.11**
C2115-207-8500-S*	**4.727**	**120.08**	**103.27**	**459.35**	**27.37**	**4.79**
C2115-207-9000-S*	**4.988**	**126.70**	**103.27**	**459.35**	**25.74**	**4.50**
C2115-207-9500-S*	**5.249**	**133.32**	**103.27**	**459.35**	**24.29**	**4.25**
C2115-225-3000-S	**1.880**	**47.76**	**128.37**	**571.03**	**114.65**	**20.06**
C2115-225-3250-S	**2.020**	**51.32**	**128.37**	**571.03**	**104.41**	**18.27**
C2115-225-3500-S	**2.161**	**54.88**	**128.37**	**571.03**	**95.85**	**16.77**
C2115-225-3750-S	**2.301**	**58.44**	**128.37**	**571.03**	**88.59**	**15.50**
C2115-225-4000-S	**2.441**	**62.01**	**128.37**	**571.03**	**82.35**	**14.41**
C2115-225-4250-S	**2.581**	**65.57**	**128.37**	**571.03**	**76.93**	**13.46**
C2115-225-4500-S	**2.722**	**69.13**	**128.37**	**571.03**	**72.19**	**12.63**
C2115-225-4750-S	**2.862**	**72.69**	**128.37**	**571.03**	**67.99**	**11.90**
C2115-225-5000-S	**3.002**	**76.25**	**128.37**	**571.03**	**64.25**	**11.24**
C2115-225-5250-S	**3.142**	**79.81**	**128.37**	**571.03**	**60.91**	**10.66**
C2115-225-5500-S	**3.282**	**83.38**	**128.37**	**571.03**	**57.89**	**10.13**
C2115-225-5750-S	**3.423**	**86.94**	**128.37**	**571.03**	**55.16**	**9.65**
C2115-225-6000-S	**3.563**	**90.50**	**128.37**	**571.03**	**52.68**	**9.22**
C2115-225-6250-S	**3.703**	**94.06**	**128.37**	**571.03**	**50.41**	**8.82**
C2115-225-6500-S	**3.843**	**97.62**	**128.37**	**571.03**	**48.32**	**8.46**
C2115-225-6750-S	**3.984**	**101.18**	**128.37**	**571.03**	**46.41**	**8.12**
C2115-225-7000-S	**4.124**	**104.75**	**128.37**	**571.03**	**44.63**	**7.81**
C2115-225-7500-S*	**4.503**	**114.38**	**128.37**	**571.03**	**42.84**	**7.50**
C2115-225-8000-S*	**4.784**	**121.50**	**128.37**	**571.03**	**39.91**	**6.98**
C2115-225-8500-S*	**5.064**	**128.62**	**128.37**	**571.03**	**37.36**	**6.54**
C2115-225-9000-S*	**5.344**	**135.75**	**128.37**	**571.03**	**35.12**	**6.15**
C2115-225-9500-S*	**5.625**	**142.87**	**128.37**	**571.03**	**33.13**	**5.80**
C2115-250-2875-S	**1.957**	**49.72**	**168.65**	**750.18**	**183.80**	**32.17**
C2115-250-3000-S	**2.034**	**51.67**	**168.65**	**750.18**	**174.61**	**30.56**
C2115-250-3250-S	**2.188**	**55.56**	**168.65**	**750.18**	**158.74**	**27.78**
C2115-250-3500-S	**2.341**	**59.46**	**168.65**	**750.18**	**145.51**	**25.46**
C2115-250-3750-S	**2.494**	**63.36**	**168.65**	**750.18**	**134.32**	**23.51**
C2115-250-4000-S	**2.648**	**67.25**	**168.65**	**750.18**	**124.72**	**21.83**
C2115-250-4250-S	**2.801**	**71.15**	**168.65**	**750.18**	**116.41**	**20.37**
C2115-250-4500-S	**2.955**	**75.05**	**168.65**	**750.18**	**109.13**	**19.10**
C2115-250-4750-S	**3.108**	**78.95**	**168.65**	**750.18**	**102.71**	**17.97**
C2115-250-5000-S	**3.261**	**82.84**	**168.65**	**750.18**	**97.01**	**16.98**
C2115-250-5250-S	**3.415**	**86.74**	**168.65**	**750.18**	**91.90**	**16.08**
C2115-250-5500-S	**3.568**	**90.64**	**168.65**	**750.18**	**87.31**	**15.28**
C2115-250-5750-S	**3.722**	**94.53**	**168.65**	**750.18**	**83.15**	**14.55**
C2115-250-6000-S	**3.875**	**98.43**	**168.65**	**750.18**	**79.37**	**13.89**
C2115-250-6250-S	**4.029**	**102.33**	**168.65**	**750.18**	**75.92**	**13.29**
C2115-250-6500-S	**4.182**	**106.22**	**168.65**	**750.18**	**72.76**	**12.73**
C2115-250-6750-S	**4.335**	**110.12**	**168.65**	**750.18**	**69.85**	**12.22**
C2115-250-7000-S	**4.489**	**114.02**	**168.65**	**750.18**	**67.16**	**11.75**
C2115-250-7500-S	**4.796**	**121.81**	**168.65**	**750.18**	**62.36**	**10.91**
C2115-250-8000-S	**5.102**	**129.60**	**168.65**	**750.18**	**58.21**	**10.19**
C2115-250-8500-S	**5.409**	**137.40**	**168.65**	**750.18**	**54.57**	**9.55**
C2115-250-9000-S	**5.716**	**145.19**	**168.65**	**750.18**	**51.36**	**8.99**
C2115-250-9500-S	**6.023**	**152.98**	**168.65**	**750.18**	**48.50**	**8.49**
D23730	1.079	27.40	79.92	355.49	28.34	4.96
D23740	1.520	38.60	79.92	355.49	18.06	3.16
D23750	2.181	55.40	79.92	355.49	11.66	2.04
D23760	3.063	77.80	79.92	355.49	7.94	1.39
D23770	4.370	111.00	79.92	355.49	5.37	0.94

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D13930	2.165	55.00	0.197	5.00	3.346	85.00	1.217	30.90	1.083	27.50	176.37	784.53	82.91	14.51
D13940	2.165	55.00	0.197	5.00	5.118	130.00	1.701	43.20	1.476	37.50	176.37	784.53	52.86	9.25
D13950	2.165	55.00	0.197	5.00	7.677	195.00	2.425	61.60	2.067	52.50	176.37	784.53	34.17	5.98
D13960	2.165	55.00	0.197	5.00	11.024	280.00	3.390	86.10	2.854	72.50	176.37	784.53	23.26	4.07
D13970	2.165	55.00	0.197	5.00	16.142	410.00	4.843	123.00	4.035	102.50	176.37	784.53	15.71	2.75
C2174-177-3500-M	**2.174**	**55.22**	**0.177**	**4.50**	**3.500**	**88.90**	**1.433**	**36.40**	**1.122**	**28.49**	**90.73**	**403.59**	**43.90**	**7.68**
C2174-177-3750-M	**2.174**	**55.22**	**0.177**	**4.50**	**3.750**	**95.25**	**1.519**	**38.58**	**1.181**	**30.01**	**90.73**	**403.59**	**40.67**	**7.12**
C2174-177-4000-M	**2.174**	**55.22**	**0.177**	**4.50**	**4.000**	**101.60**	**1.605**	**40.76**	**1.241**	**31.52**	**90.73**	**403.59**	**37.88**	**6.63**
C2174-177-4250-M	**2.174**	**55.22**	**0.177**	**4.50**	**4.250**	**107.95**	**1.690**	**42.93**	**1.301**	**33.03**	**90.73**	**403.59**	**35.45**	**6.20**
C2174-177-4500-M	**2.174**	**55.22**	**0.177**	**4.50**	**4.500**	**114.30**	**1.776**	**45.11**	**1.360**	**34.55**	**90.73**	**403.59**	**33.31**	**5.83**
C2174-177-4750-M	**2.174**	**55.22**	**0.177**	**4.50**	**4.750**	**120.65**	**1.862**	**47.29**	**1.420**	**36.06**	**90.73**	**403.59**	**31.42**	**5.50**
C2174-177-5000-M	**2.174**	**55.22**	**0.177**	**4.50**	**5.000**	**127.00**	**1.948**	**49.47**	**1.479**	**37.58**	**90.73**	**403.59**	**29.72**	**5.20**
C2174-177-5250-M	**2.174**	**55.22**	**0.177**	**4.50**	**5.250**	**133.35**	**2.033**	**51.65**	**1.539**	**39.09**	**90.73**	**403.59**	**28.21**	**4.94**
C2174-177-5500-M	**2.174**	**55.22**	**0.177**	**4.50**	**5.500**	**139.70**	**2.119**	**53.83**	**1.599**	**40.60**	**90.73**	**403.59**	**26.84**	**4.70**
C2174-177-5750-M	**2.174**	**55.22**	**0.177**	**4.50**	**5.750**	**146.05**	**2.205**	**56.00**	**1.658**	**42.12**	**90.73**	**403.59**	**25.59**	**4.48**
C2174-177-6000-M	**2.174**	**55.22**	**0.177**	**4.50**	**6.000**	**152.40**	**2.291**	**58.18**	**1.718**	**43.63**	**90.73**	**403.59**	**24.46**	**4.28**
C2174-177-6250-M	**2.174**	**55.22**	**0.177**	**4.50**	**6.250**	**158.75**	**2.376**	**60.36**	**1.777**	**45.15**	**90.73**	**403.59**	**23.42**	**4.10**
C2174-177-6500-M	**2.174**	**55.22**	**0.177**	**4.50**	**6.500**	**165.10**	**2.462**	**62.54**	**1.837**	**46.66**	**90.73**	**403.59**	**22.47**	**3.93**
C2174-177-6750-M	**2.174**	**55.22**	**0.177**	**4.50**	**6.750**	**171.45**	**2.548**	**64.72**	**1.897**	**48.17**	**90.73**	**403.59**	**21.59**	**3.78**
C2174-177-7000-M	**2.174**	**55.22**	**0.177**	**4.50**	**7.000**	**177.80**	**2.634**	**66.89**	**1.956**	**49.69**	**90.73**	**403.59**	**20.78**	**3.64**
C2174-177-7500-M	**2.174**	**55.22**	**0.177**	**4.50**	**7.500**	**190.50**	**2.805**	**71.25**	**2.075**	**52.72**	**90.73**	**403.59**	**19.33**	**3.38**
C2174-177-8000-M	**2.174**	**55.22**	**0.177**	**4.50**	**8.000**	**203.20**	**2.977**	**75.61**	**2.195**	**55.74**	**90.73**	**403.59**	**18.06**	**3.16**
C2174-177-8500-M	**2.174**	**55.22**	**0.177**	**4.50**	**8.500**	**215.90**	**3.148**	**79.96**	**2.314**	**58.77**	**90.73**	**403.59**	**16.95**	**2.97**
C2174-177-9000-M	**2.174**	**55.22**	**0.177**	**4.50**	**9.000**	**228.60**	**3.320**	**84.32**	**2.433**	**61.80**	**90.73**	**403.59**	**15.97**	**2.80**
C2174-177-9500-M	**2.174**	**55.22**	**0.177**	**4.50**	**9.500**	**241.30**	**3.491**	**88.67**	**2.552**	**64.83**	**90.73**	**403.59**	**15.10**	**2.64**
C2174-192-3500-M	**2.174**	**55.22**	**0.192**	**4.88**	**3.500**	**88.90**	**1.552**	**39.43**	**1.269**	**32.23**	**113.79**	**506.16**	**58.42**	**10.22**
C2174-192-3750-M	**2.174**	**55.22**	**0.192**	**4.88**	**3.750**	**95.25**	**1.646**	**41.81**	**1.338**	**34.00**	**113.79**	**506.16**	**54.08**	**9.46**
C2174-192-4000-M	**2.174**	**55.22**	**0.192**	**4.88**	**4.000**	**101.60**	**1.740**	**44.19**	**1.408**	**35.76**	**113.79**	**506.16**	**50.34**	**8.81**
C2174-192-4250-M	**2.174**	**55.22**	**0.192**	**4.88**	**4.250**	**107.95**	**1.833**	**46.57**	**1.477**	**37.53**	**113.79**	**506.16**	**47.09**	**8.24**
C2174-192-4500-M	**2.174**	**55.22**	**0.192**	**4.88**	**4.500**	**114.30**	**1.927**	**48.95**	**1.547**	**39.29**	**113.79**	**506.16**	**44.23**	**7.74**
C2174-192-4750-M	**2.174**	**55.22**	**0.192**	**4.88**	**4.750**	**120.65**	**2.021**	**51.33**	**1.616**	**41.05**	**113.79**	**506.16**	**41.70**	**7.30**
C2174-192-5000-M	**2.174**	**55.22**	**0.192**	**4.88**	**5.000**	**127.00**	**2.115**	**53.71**	**1.686**	**42.82**	**113.79**	**506.16**	**39.44**	**6.90**
C2174-192-5250-M	**2.174**	**55.22**	**0.192**	**4.88**	**5.250**	**133.35**	**2.208**	**56.09**	**1.755**	**44.58**	**113.79**	**506.16**	**37.41**	**6.55**
C2174-192-5500-M	**2.174**	**55.22**	**0.192**	**4.88**	**5.500**	**139.70**	**2.302**	**58.47**	**1.825**	**46.35**	**113.79**	**506.16**	**35.58**	**6.23**
C2174-192-5750-M	**2.174**	**55.22**	**0.192**	**4.88**	**5.750**	**146.05**	**2.396**	**60.86**	**1.894**	**48.11**	**113.79**	**506.16**	**33.93**	**5.94**
C2174-192-6000-M	**2.174**	**55.22**	**0.192**	**4.88**	**6.000**	**152.40**	**2.490**	**63.24**	**1.964**	**49.88**	**113.79**	**506.16**	**32.42**	**5.67**
C2174-192-6250-M	**2.174**	**55.22**	**0.192**	**4.88**	**6.250**	**158.75**	**2.583**	**65.62**	**2.033**	**51.64**	**113.79**	**506.16**	**31.03**	**5.43**
C2174-192-6500-M	**2.174**	**55.22**	**0.192**	**4.88**	**6.500**	**165.10**	**2.677**	**68.00**	**2.103**	**53.40**	**113.79**	**506.16**	**29.77**	**5.21**
C2174-192-6750-M	**2.174**	**55.22**	**0.192**	**4.88**	**6.750**	**171.45**	**2.771**	**70.38**	**2.172**	**55.17**	**113.79**	**506.16**	**28.60**	**5.00**
C2174-192-7000-M	**2.174**	**55.22**	**0.192**	**4.88**	**7.000**	**177.80**	**2.865**	**72.76**	**2.241**	**56.93**	**113.79**	**506.16**	**27.52**	**4.82**
C2174-192-7500-M	**2.174**	**55.22**	**0.192**	**4.88**	**7.500**	**190.50**	**3.052**	**77.52**	**2.380**	**60.46**	**113.79**	**506.16**	**25.58**	**4.48**
C2174-192-8000-M*	**2.174**	**55.22**	**0.192**	**4.88**	**8.000**	**203.20**	**3.359**	**85.33**	**2.668**	**67.76**	**113.79**	**506.16**	**24.52**	**4.29**
C2174-192-8500-M*	**2.174**	**55.22**	**0.192**	**4.88**	**8.500**	**215.90**	**3.547**	**90.09**	**2.807**	**71.29**	**113.79**	**506.16**	**22.97**	**4.02**
C2174-192-9000-M*	**2.174**	**55.22**	**0.192**	**4.88**	**9.000**	**228.60**	**3.734**	**94.85**	**2.945**	**74.81**	**113.79**	**506.16**	**21.61**	**3.78**
C2174-192-9500-M*	**2.174**	**55.22**	**0.192**	**4.88**	**9.500**	**241.30**	**3.922**	**99.62**	**3.084**	**78.34**	**113.79**	**506.16**	**20.40**	**3.57**
C2174-207-3250-M	**2.174**	**55.22**	**0.207**	**5.26**	**3.250**	**82.55**	**1.570**	**39.88**	**1.337**	**33.97**	**140.26**	**623.89**	**83.50**	**14.61**
C2174-207-3500-M	**2.174**	**55.22**	**0.207**	**5.26**	**3.500**	**88.90**	**1.672**	**42.47**	**1.417**	**35.99**	**140.26**	**623.89**	**76.73**	**13.43**
C2174-207-3750-M	**2.174**	**55.22**	**0.207**	**5.26**	**3.750**	**95.25**	**1.774**	**45.06**	**1.497**	**38.01**	**140.26**	**623.89**	**70.98**	**12.42**
C2174-207-4000-M	**2.174**	**55.22**	**0.207**	**5.26**	**4.000**	**101.60**	**1.876**	**47.65**	**1.576**	**40.04**	**140.26**	**623.89**	**66.03**	**11.56**
C2174-207-4250-M	**2.174**	**55.22**	**0.207**	**5.26**	**4.250**	**107.95**	**1.978**	**50.24**	**1.656**	**42.06**	**140.26**	**623.89**	**61.73**	**10.80**
C2174-207-4500-M	**2.174**	**55.22**	**0.207**	**5.26**	**4.500**	**114.30**	**2.080**	**52.83**	**1.735**	**44.08**	**140.26**	**623.89**	**57.95**	**10.14**
C2174-207-4750-M	**2.174**	**55.22**	**0.207**	**5.26**	**4.750**	**120.65**	**2.182**	**55.42**	**1.815**	**46.10**	**140.26**	**623.89**	**54.61**	**9.56**
C2174-207-5000-M	**2.174**	**55.22**	**0.207**	**5.26**	**5.000**	**127.00**	**2.284**	**58.00**	**1.895**	**48.12**	**140.26**	**623.89**	**51.63**	**9.04**
C2174-207-5250-M	**2.174**	**55.22**	**0.207**	**5.26**	**5.250**	**133.35**	**2.386**	**60.59**	**1.974**	**50.14**	**140.26**	**623.89**	**48.97**	**8.57**
C2174-207-5500-M	**2.174**	**55.22**	**0.207**	**5.26**	**5.500**	**139.70**	**2.488**	**63.18**	**2.054**	**52.16**	**140.26**	**623.89**	**46.56**	**8.15**
C2174-207-5750-M	**2.174**	**55.22**	**0.207**	**5.26**	**5.750**	**146.05**	**2.589**	**65.77**	**2.133**	**54.18**	**140.26**	**623.89**	**44.38**	**7.77**
C2174-207-6000-M	**2.174**	**55.22**	**0.207**	**5.26**	**6.000**	**152.40**	**2.691**	**68.36**	**2.213**	**56.21**	**140.26**	**623.89**	**42.39**	**7.42**
C2174-207-6250-M	**2.174**	**55.22**	**0.207**	**5.26**	**6.250**	**158.75**	**2.793**	**70.95**	**2.292**	**58.23**	**140.26**	**623.89**	**40.58**	**7.10**
C2174-207-6500-M	**2.174**	**55.22**	**0.207**	**5.26**	**6.500**	**165.10**	**2.895**	**73.54**	**2.372**	**60.25**	**140.26**	**623.89**	**38.91**	**6.81**
C2174-207-6750-M	**2.174**	**55.22**	**0.207**	**5.26**	**6.750**	**171.45**	**2.997**	**76.13**	**2.452**	**62.27**	**140.26**	**623.89**	**37.37**	**6.54**
C2174-207-7000-M*	**2.174**	**55.22**	**0.207**	**5.26**	**7.000**	**177.80**	**3.222**	**81.83**	**2.683**	**68.14**	**140.26**	**623.89**	**37.12**	**6.50**
C2174-207-7500-M*	**2.174**	**55.22**	**0.207**	**5.26**	**7.500**	**190.50**	**3.425**	**87.01**	**2.842**	**72.18**	**140.26**	**623.89**	**34.42**	**6.02**
C2174-207-8000-M*	**2.174**	**55.22**	**0.207**	**5.26**	**8.000**	**203.20**	**3.629**	**92.19**	**3.001**	**76.22**	**140.26**	**623.89**	**32.09**	**5.62**
C2174-207-8500-M*	**2.174**	**55.22**	**0.207**	**5.26**	**8.500**	**215.90**	**3.833**	**97.36**	**3.160**	**80.27**	**140.26**	**623.89**	**30.05**	**5.26**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D23930	1.217	30.90	146.97	653.78	69.09	12.09
D23940	1.701	43.20	146.97	653.78	44.06	7.71
D23950	2.425	61.60	146.97	653.78	28.46	4.98
D23960	3.390	86.10	146.97	653.78	19.37	3.39
D23970	4.843	123.00	146.97	653.78	13.09	2.29
C2174-177-3500-S	**1.755**	**44.59**	**66.59**	**296.21**	**38.17**	**6.68**
C2174-177-3750-S	**1.867**	**47.42**	**66.59**	**296.21**	**35.36**	**6.19**
C2174-177-4000-S	**1.978**	**50.25**	**66.59**	**296.21**	**32.94**	**5.76**
C2174-177-4250-S	**2.090**	**53.07**	**66.59**	**296.21**	**30.82**	**5.39**
C2174-177-4500-S	**2.201**	**55.90**	**66.59**	**296.21**	**28.96**	**5.07**
C2174-177-4750-S	**2.312**	**58.73**	**66.59**	**296.21**	**27.32**	**4.78**
C2174-177-5000-S	**2.424**	**61.56**	**66.59**	**296.21**	**25.85**	**4.52**
C2174-177-5250-S	**2.535**	**64.39**	**66.59**	**296.21**	**24.53**	**4.29**
C2174-177-5500-S	**2.646**	**67.22**	**66.59**	**296.21**	**23.34**	**4.08**
C2174-177-5750-S	**2.758**	**70.05**	**66.59**	**296.21**	**22.26**	**3.89**
C2174-177-6000-S	**2.869**	**72.88**	**66.59**	**296.21**	**21.27**	**3.72**
C2174-177-6250-S	**2.980**	**75.70**	**66.59**	**296.21**	**20.37**	**3.56**
C2174-177-6500-S	**3.092**	**78.53**	**66.59**	**296.21**	**19.54**	**3.42**
C2174-177-6750-S	**3.203**	**81.36**	**66.59**	**296.21**	**18.78**	**3.29**
C2174-177-7000-S	**3.315**	**84.19**	**66.59**	**296.21**	**18.07**	**3.16**
C2174-177-7500-S	**3.537**	**89.85**	**66.59**	**296.21**	**16.81**	**2.94**
C2174-177-8000-S	**3.760**	**95.51**	**66.59**	**296.21**	**15.71**	**2.75**
C2174-177-8500-S	**3.983**	**101.16**	**66.59**	**296.21**	**14.74**	**2.58**
C2174-177-9000-S	**4.206**	**106.82**	**66.59**	**296.21**	**13.89**	**2.43**
C2174-177-9500-S	**4.428**	**112.48**	**66.59**	**296.21**	**13.13**	**2.30**
C2174-192-3500-S	**1.875**	**47.62**	**82.56**	**367.25**	**50.80**	**8.89**
C2174-192-3750-S	**1.994**	**50.66**	**82.56**	**367.25**	**47.03**	**8.23**
C2174-192-4000-S	**2.114**	**53.70**	**82.56**	**367.25**	**43.78**	**7.66**
C2174-192-4250-S	**2.234**	**56.74**	**82.56**	**367.25**	**40.95**	**7.17**
C2174-192-4500-S	**2.353**	**59.77**	**82.56**	**367.25**	**38.46**	**6.73**
C2174-192-4750-S	**2.473**	**62.81**	**82.56**	**367.25**	**36.26**	**6.34**
C2174-192-5000-S	**2.593**	**65.85**	**82.56**	**367.25**	**34.29**	**6.00**
C2174-192-5250-S	**2.712**	**68.89**	**82.56**	**367.25**	**32.53**	**5.69**
C2174-192-5500-S	**2.832**	**71.93**	**82.56**	**367.25**	**30.94**	**5.41**
C2174-192-5750-S	**2.951**	**74.96**	**82.56**	**367.25**	**29.50**	**5.16**
C2174-192-6000-S	**3.071**	**78.00**	**82.56**	**367.25**	**28.19**	**4.93**
C2174-192-6250-S	**3.191**	**81.04**	**82.56**	**367.25**	**26.99**	**4.72**
C2174-192-6500-S	**3.310**	**84.08**	**82.56**	**367.25**	**25.88**	**4.53**
C2174-192-6750-S	**3.430**	**87.12**	**82.56**	**367.25**	**24.87**	**4.35**
C2174-192-7000-S	**3.549**	**90.16**	**82.56**	**367.25**	**23.93**	**4.19**
C2174-192-7500-S	**3.789**	**96.23**	**82.56**	**367.25**	**22.25**	**3.89**
C2174-192-8000-S*	**4.128**	**104.85**	**82.56**	**367.25**	**21.32**	**3.73**
C2174-192-8500-S*	**4.367**	**110.93**	**82.56**	**367.25**	**19.98**	**3.50**
C2174-192-9000-S*	**4.606**	**117.00**	**82.56**	**367.25**	**18.79**	**3.29**
C2174-192-9500-S*	**4.846**	**123.08**	**82.56**	**367.25**	**17.74**	**3.10**
C2174-207-3250-S	**1.864**	**47.35**	**100.61**	**447.52**	**72.61**	**12.71**
C2174-207-3500-S	**1.992**	**50.60**	**100.61**	**447.52**	**66.72**	**11.68**
C2174-207-3750-S	**2.120**	**53.85**	**100.61**	**447.52**	**61.72**	**10.80**
C2174-207-4000-S	**2.248**	**57.10**	**100.61**	**447.52**	**57.42**	**10.05**
C2174-207-4250-S	**2.376**	**60.34**	**100.61**	**447.52**	**53.68**	**9.39**
C2174-207-4500-S	**2.504**	**63.59**	**100.61**	**447.52**	**50.39**	**8.82**
C2174-207-4750-S	**2.631**	**66.84**	**100.61**	**447.52**	**47.49**	**8.31**
C2174-207-5000-S	**2.759**	**70.09**	**100.61**	**447.52**	**44.90**	**7.86**
C2174-207-5250-S	**2.887**	**73.33**	**100.61**	**447.52**	**42.58**	**7.45**
C2174-207-5500-S	**3.015**	**76.58**	**100.61**	**447.52**	**40.49**	**7.08**
C2174-207-5750-S	**3.143**	**79.83**	**100.61**	**447.52**	**38.59**	**6.75**
C2174-207-6000-S	**3.271**	**83.07**	**100.61**	**447.52**	**36.86**	**6.45**
C2174-207-6250-S	**3.399**	**86.32**	**100.61**	**447.52**	**35.28**	**6.17**
C2174-207-6500-S	**3.526**	**89.57**	**100.61**	**447.52**	**33.83**	**5.92**
C2174-207-6750-S	**3.654**	**92.82**	**100.61**	**447.52**	**32.50**	**5.69**
C2174-207-7000-S*	**3.883**	**98.63**	**100.61**	**447.52**	**32.28**	**5.65**
C2174-207-7500-S*	**4.139**	**105.13**	**100.61**	**447.52**	**29.93**	**5.24**
C2174-207-8000-S*	**4.395**	**111.62**	**100.61**	**447.52**	**27.91**	**4.88**
C2174-207-8500-S*	**4.650**	**118.12**	**100.61**	**447.52**	**26.13**	**4.57**

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2174-207-9000-M*	2.174	55.22	0.207	5.26	9.000	228.60	4.037	102.54	3.319	84.31	140.26	623.89	28.26	4.95
C2174-207-9500-M*	2.174	55.22	0.207	5.26	9.500	241.30	4.241	107.72	3.478	88.35	140.26	623.89	26.67	4.67
C2174-225-3250-M	2.174	55.22	0.225	5.72	3.250	82.55	1.703	43.25	1.501	38.14	176.77	786.31	114.26	20.00
C2174-225-3500-M	2.174	55.22	0.225	5.72	3.500	88.90	1.815	46.10	1.593	40.47	176.77	786.31	104.90	18.36
C2174-225-3750-M	2.174	55.22	0.225	5.72	3.750	95.25	1.927	48.94	1.685	42.80	176.77	786.31	96.95	16.97
C2174-225-4000-M	2.174	55.22	0.225	5.72	4.000	101.60	2.039	51.78	1.777	45.14	176.77	786.31	90.12	15.77
C2174-225-4250-M	2.174	55.22	0.225	5.72	4.250	107.95	2.150	54.62	1.869	47.47	176.77	786.31	84.19	14.73
C2174-225-4500-M	2.174	55.22	0.225	5.72	4.500	114.30	2.262	57.46	1.961	49.80	176.77	786.31	79.00	13.82
C2174-225-4750-M	2.174	55.22	0.225	5.72	4.750	120.65	2.374	60.30	2.053	52.14	176.77	786.31	74.40	13.02
C2174-225-5000-M	2.174	55.22	0.225	5.72	5.000	127.00	2.486	63.14	2.144	54.47	176.77	786.31	70.31	12.30
C2174-225-5250-M	2.174	55.22	0.225	5.72	5.250	133.35	2.598	65.99	2.236	56.80	176.77	786.31	66.65	11.66
C2174-225-5500-M	2.174	55.22	0.225	5.72	5.500	139.70	2.710	68.83	2.328	59.14	176.77	786.31	63.35	11.09
C2174-225-5750-M	2.174	55.22	0.225	5.72	5.750	146.05	2.822	71.67	2.420	61.47	176.77	786.31	60.36	10.56
C2174-225-6000-M	2.174	55.22	0.225	5.72	6.000	152.40	2.933	74.51	2.512	63.80	176.77	786.31	57.65	10.09
C2174-225-6250-M	2.174	55.22	0.225	5.72	6.250	158.75	3.045	77.35	2.604	66.14	176.77	786.31	55.16	9.65
C2174-225-6500-M	2.174	55.22	0.225	5.72	6.500	165.10	3.157	80.19	2.696	68.47	176.77	786.31	52.88	9.25
C2174-225-6750-M	2.174	55.22	0.225	5.72	6.750	171.45	3.269	83.03	2.788	70.80	176.77	786.31	50.78	8.89
C2174-225-7000-M*	2.174	55.22	0.225	5.72	7.000	177.80	3.505	89.03	3.033	77.04	176.77	786.31	50.58	8.85
C2174-225-7500-M*	2.174	55.22	0.225	5.72	7.500	190.50	3.729	94.72	3.217	81.70	176.77	786.31	46.88	8.20
C2174-225-8000-M*	2.174	55.22	0.225	5.72	8.000	203.20	3.953	100.40	3.400	86.37	176.77	786.31	43.68	7.64
C2174-225-8500-M*	2.174	55.22	0.225	5.72	8.500	215.90	4.176	106.08	3.584	91.04	176.77	786.31	40.89	7.16
C2174-225-9000-M*	2.174	55.22	0.225	5.72	9.000	228.60	4.400	111.77	3.768	95.71	176.77	786.31	38.43	6.73
C2174-225-9500-M*	2.174	55.22	0.225	5.72	9.500	241.30	4.624	117.45	3.952	100.37	176.77	786.31	36.25	6.34
C2174-250-3000-M	2.174	55.22	0.250	6.35	3.000	76.20	1.756	44.60	1.613	40.97	236.63	1052.58	190.20	33.28
C2174-250-3250-M	2.174	55.22	0.250	6.35	3.250	82.55	1.881	47.79	1.722	43.74	236.63	1052.58	172.91	30.26
C2174-250-3500-M	2.174	55.22	0.250	6.35	3.500	88.90	2.007	50.98	1.831	46.50	236.63	1052.58	158.50	27.74
C2174-250-3750-M	2.174	55.22	0.250	6.35	3.750	95.25	2.133	54.17	1.940	49.27	236.63	1052.58	146.31	25.60
C2174-250-4000-M	2.174	55.22	0.250	6.35	4.000	101.60	2.258	57.36	2.048	52.03	236.63	1052.58	135.85	23.77
C2174-250-4250-M	2.174	55.22	0.250	6.35	4.250	107.95	2.384	60.55	2.157	54.79	236.63	1052.58	126.80	22.19
C2174-250-4500-M	2.174	55.22	0.250	6.35	4.500	114.30	2.509	63.74	2.266	57.56	236.63	1052.58	118.87	20.80
C2174-250-4750-M	2.174	55.22	0.250	6.35	4.750	120.65	2.635	66.93	2.375	60.32	236.63	1052.58	111.88	19.58
C2174-250-5000-M	2.174	55.22	0.250	6.35	5.000	127.00	2.761	70.12	2.484	63.08	236.63	1052.58	105.66	18.49
C2174-250-5250-M	2.174	55.22	0.250	6.35	5.250	133.35	2.886	73.31	2.592	65.85	236.63	1052.58	100.10	17.52
C2174-250-5500-M	2.174	55.22	0.250	6.35	5.500	139.70	3.012	76.50	2.701	68.61	236.63	1052.58	95.10	16.64
C2174-250-5750-M	2.174	55.22	0.250	6.35	5.750	146.05	3.137	79.69	2.810	71.38	236.63	1052.58	90.57	15.85
C2174-250-6000-M	2.174	55.22	0.250	6.35	6.000	152.40	3.263	82.88	2.919	74.14	236.63	1052.58	86.45	15.13
C2174-250-6250-M	2.174	55.22	0.250	6.35	6.250	158.75	3.388	86.07	3.028	76.90	236.63	1052.58	82.69	14.47
C2174-250-6500-M	2.174	55.22	0.250	6.35	6.500	165.10	3.514	89.26	3.137	79.67	236.63	1052.58	79.25	13.87
C2174-250-6750-M	2.174	55.22	0.250	6.35	6.750	171.45	3.640	92.45	3.245	82.43	236.63	1052.58	76.08	13.31
C2174-250-7000-M	2.174	55.22	0.250	6.35	7.000	177.80	3.765	95.64	3.354	85.20	236.63	1052.58	73.15	12.80
C2174-250-7500-M	2.174	55.22	0.250	6.35	7.500	190.50	4.016	102.02	3.572	90.72	236.63	1052.58	67.93	11.89
C2174-250-8000-M	2.174	55.22	0.250	6.35	8.000	203.20	4.268	108.40	3.789	96.25	236.63	1052.58	63.40	11.09
C2174-250-8500-M	2.174	55.22	0.250	6.35	8.500	215.90	4.519	114.78	4.007	101.78	236.63	1052.58	59.44	10.40
C2174-250-9000-M*	2.174	55.22	0.250	6.35	9.000	228.60	4.894	124.32	4.378	111.21	236.63	1052.58	57.64	10.09
C2174-250-9500-M*	2.174	55.22	0.250	6.35	9.500	241.30	5.146	130.70	4.596	116.74	236.63	1052.58	54.34	9.51
C2233-177-3750-M	2.233	56.72	0.177	4.50	3.750	95.25	1.488	37.80	1.143	29.04	88.43	393.35	39.10	6.84
C2233-177-4000-M	2.233	56.72	0.177	4.50	4.000	101.60	1.572	39.92	1.200	30.49	88.43	393.35	36.42	6.37
C2233-177-4250-M	2.233	56.72	0.177	4.50	4.250	107.95	1.655	42.04	1.257	31.93	88.43	393.35	34.08	5.96
C2233-177-4500-M	2.233	56.72	0.177	4.50	4.500	114.30	1.739	44.16	1.314	33.37	88.43	393.35	32.02	5.60
C2233-177-4750-M	2.233	56.72	0.177	4.50	4.750	120.65	1.822	46.28	1.371	34.82	88.43	393.35	30.20	5.29
C2233-177-5000-M	2.233	56.72	0.177	4.50	5.000	127.00	1.906	48.40	1.427	36.26	88.43	393.35	28.58	5.00
C2233-177-5250-M	2.233	56.72	0.177	4.50	5.250	133.35	1.989	50.52	1.484	37.70	88.43	393.35	27.12	4.75
C2233-177-5500-M	2.233	56.72	0.177	4.50	5.500	139.70	2.073	52.64	1.541	39.14	88.43	393.35	25.80	4.52
C2233-177-5750-M	2.233	56.72	0.177	4.50	5.750	146.05	2.156	54.76	1.598	40.59	88.43	393.35	24.61	4.31
C2233-177-6000-M	2.233	56.72	0.177	4.50	6.000	152.40	2.240	56.88	1.655	42.03	88.43	393.35	23.52	4.12
C2233-177-6250-M	2.233	56.72	0.177	4.50	6.250	158.75	2.323	59.01	1.712	43.47	88.43	393.35	22.52	3.94
C2233-177-6500-M	2.233	56.72	0.177	4.50	6.500	165.10	2.407	61.13	1.768	44.92	88.43	393.35	21.60	3.78
C2233-177-6750-M	2.233	56.72	0.177	4.50	6.750	171.45	2.490	63.25	1.825	46.36	88.43	393.35	20.76	3.63
C2233-177-7000-M	2.233	56.72	0.177	4.50	7.000	177.80	2.574	65.37	1.882	47.80	88.43	393.35	19.98	3.50
C2233-177-7500-M	2.233	56.72	0.177	4.50	7.500	190.50	2.740	69.61	1.996	50.69	88.43	393.35	18.58	3.25
C2233-177-8000-M	2.233	56.72	0.177	4.50	8.000	203.20	2.907	73.85	2.109	53.57	88.43	393.35	17.36	3.04
C2233-177-8500-M	2.233	56.72	0.177	4.50	8.500	215.90	3.074	78.09	2.223	56.46	88.43	393.35	16.30	2.85
C2233-177-9000-M	2.233	56.72	0.177	4.50	9.000	228.60	3.241	82.33	2.336	59.35	88.43	393.35	15.36	2.69
C2233-177-9500-M	2.233	56.72	0.177	4.50	9.500	241.30	3.408	86.57	2.450	62.23	88.43	393.35	14.52	2.54

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2174-207-9000-S*	4.906	124.61	100.61	447.52	24.57	4.30
C2174-207-9500-S*	5.162	131.11	100.61	447.52	23.19	4.06
C2174-225-3250-S	1.991	50.57	125.09	556.44	99.36	17.39
C2174-225-3500-S	2.129	54.07	125.09	556.44	91.21	15.96
C2174-225-3750-S	2.266	57.56	125.09	556.44	84.30	14.75
C2174-225-4000-S	2.404	61.06	125.09	556.44	78.37	13.71
C2174-225-4250-S	2.541	64.55	125.09	556.44	73.21	12.81
C2174-225-4500-S	2.679	68.04	125.09	556.44	68.69	12.02
C2174-225-4750-S	2.817	71.54	125.09	556.44	64.70	11.32
C2174-225-5000-S	2.954	75.03	125.09	556.44	61.14	10.70
C2174-225-5250-S	3.092	78.53	125.09	556.44	57.96	10.14
C2174-225-5500-S	3.229	82.02	125.09	556.44	55.09	9.64
C2174-225-5750-S	3.367	85.52	125.09	556.44	52.49	9.19
C2174-225-6000-S	3.504	89.01	125.09	556.44	50.13	8.77
C2174-225-6250-S	3.642	92.51	125.09	556.44	47.97	8.39
C2174-225-6500-S	3.780	96.00	125.09	556.44	45.98	8.05
C2174-225-6750-S	3.917	99.50	125.09	556.44	44.16	7.73
C2174-225-7000-S*	4.156	105.56	125.09	556.44	43.98	7.70
C2174-225-7500-S*	4.431	112.55	125.09	556.44	40.76	7.13
C2174-225-8000-S*	4.706	119.54	125.09	556.44	37.98	6.65
C2174-225-8500-S*	4.981	126.53	125.09	556.44	35.55	6.22
C2174-225-9000-S*	5.257	133.52	125.09	556.44	33.42	5.85
C2174-225-9500-S*	5.532	140.51	125.09	556.44	31.52	5.52
C2174-250-3000-S	2.006	50.95	164.38	731.22	165.39	28.94
C2174-250-3250-S	2.157	54.78	164.38	731.22	150.35	26.31
C2174-250-3500-S	2.307	58.60	164.38	731.22	137.82	24.12
C2174-250-3750-S	2.458	62.43	164.38	731.22	127.22	22.26
C2174-250-4000-S	2.608	66.26	164.38	731.22	118.13	20.67
C2174-250-4250-S	2.759	70.08	164.38	731.22	110.26	19.30
C2174-250-4500-S	2.910	73.91	164.38	731.22	103.37	18.09
C2174-250-4750-S	3.060	77.73	164.38	731.22	97.29	17.03
C2174-250-5000-S	3.211	81.56	164.38	731.22	91.88	16.08
C2174-250-5250-S	3.362	85.38	164.38	731.22	87.05	15.23
C2174-250-5500-S	3.512	89.21	164.38	731.22	82.69	14.47
C2174-250-5750-S	3.663	93.03	164.38	731.22	78.76	13.78
C2174-250-6000-S	3.813	96.86	164.38	731.22	75.18	13.16
C2174-250-6250-S	3.964	100.68	164.38	731.22	71.91	12.58
C2174-250-6500-S	4.115	104.51	164.38	731.22	68.91	12.06
C2174-250-6750-S	4.265	108.34	164.38	731.22	66.16	11.58
C2174-250-7000-S	4.416	112.16	164.38	731.22	63.61	11.13
C2174-250-7500-S	4.717	119.81	164.38	731.22	59.07	10.34
C2174-250-8000-S	5.018	127.46	164.38	731.22	55.13	9.65
C2174-250-8500-S	5.319	135.11	164.38	731.22	51.68	9.04
C2174-250-9000-S*	5.720	145.29	164.38	731.22	50.12	8.77
C2174-250-9500-S*	6.021	152.94	164.38	731.22	47.25	8.27
C2233-177-3750-S	1.841	46.76	64.90	288.70	34.00	5.95
C2233-177-4000-S	1.950	49.54	64.90	288.70	31.67	5.54
C2233-177-4250-S	2.060	52.32	64.90	288.70	29.63	5.19
C2233-177-4500-S	2.169	55.10	64.90	288.70	27.85	4.87
C2233-177-4750-S	2.279	57.88	64.90	288.70	26.26	4.60
C2233-177-5000-S	2.388	60.66	64.90	288.70	24.85	4.35
C2233-177-5250-S	2.498	63.44	64.90	288.70	23.58	4.13
C2233-177-5500-S	2.607	66.22	64.90	288.70	22.44	3.93
C2233-177-5750-S	2.717	69.00	64.90	288.70	21.40	3.74
C2233-177-6000-S	2.826	71.78	64.90	288.70	20.45	3.58
C2233-177-6250-S	2.935	74.56	64.90	288.70	19.58	3.43
C2233-177-6500-S	3.045	77.34	64.90	288.70	18.79	3.29
C2233-177-6750-S	3.154	80.12	64.90	288.70	18.05	3.16
C2233-177-7000-S	3.264	82.90	64.90	288.70	17.37	3.04
C2233-177-7500-S	3.483	88.46	64.90	288.70	16.16	2.83
C2233-177-8000-S	3.702	94.02	64.90	288.70	15.10	2.64
C2233-177-8500-S	3.921	99.58	64.90	288.70	14.17	2.48
C2233-177-9000-S	4.140	105.14	64.90	288.70	13.35	2.34
C2233-177-9500-S	4.358	110.70	64.90	288.70	12.62	2.21

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2233-192-3500-M	2.233	56.72	0.192	4.88	3.500	88.90	1.521	38.62	1.230	31.24	110.92	493.39	56.04	9.81
C2233-192-3750-M	2.233	56.72	0.192	4.88	3.750	95.25	1.612	40.94	1.296	32.92	110.92	493.39	51.87	9.08
C2233-192-4000-M	2.233	56.72	0.192	4.88	4.000	101.60	1.703	43.25	1.362	34.61	110.92	493.39	48.29	8.45
C2233-192-4250-M	2.233	56.72	0.192	4.88	4.250	107.95	1.794	45.57	1.429	36.29	110.92	493.39	45.17	7.90
C2233-192-4500-M	2.233	56.72	0.192	4.88	4.500	114.30	1.885	47.89	1.495	37.98	110.92	493.39	42.42	7.42
C2233-192-4750-M	2.233	56.72	0.192	4.88	4.750	120.65	1.977	50.20	1.561	39.66	110.92	493.39	39.99	7.00
C2233-192-5000-M	2.233	56.72	0.192	4.88	5.000	127.00	2.068	52.52	1.628	41.34	110.92	493.39	37.83	6.62
C2233-192-5250-M	2.233	56.72	0.192	4.88	5.250	133.35	2.159	54.84	1.694	43.03	110.92	493.39	35.88	6.28
C2233-192-5500-M	2.233	56.72	0.192	4.88	5.500	139.70	2.250	57.15	1.760	44.71	110.92	493.39	34.13	5.97
C2233-192-5750-M	2.233	56.72	0.192	4.88	5.750	146.05	2.341	59.47	1.827	46.40	110.92	493.39	32.54	5.69
C2233-192-6000-M	2.233	56.72	0.192	4.88	6.000	152.40	2.432	61.78	1.893	48.08	110.92	493.39	31.09	5.44
C2233-192-6250-M	2.233	56.72	0.192	4.88	6.250	158.75	2.524	64.10	1.959	49.77	110.92	493.39	29.77	5.21
C2233-192-6500-M	2.233	56.72	0.192	4.88	6.500	165.10	2.615	66.42	2.026	51.45	110.92	493.39	28.55	5.00
C2233-192-6750-M	2.233	56.72	0.192	4.88	6.750	171.45	2.706	68.73	2.092	53.14	110.92	493.39	27.43	4.80
C2233-192-7000-M	2.233	56.72	0.192	4.88	7.000	177.80	2.797	71.05	2.158	54.82	110.92	493.39	26.39	4.62
C2233-192-7500-M	2.233	56.72	0.192	4.88	7.500	190.50	2.980	75.68	2.291	58.19	110.92	493.39	24.54	4.29
C2233-192-8000-M	2.233	56.72	0.192	4.88	8.000	203.20	3.162	80.31	2.424	61.56	110.92	493.39	22.93	4.01
C2233-192-8500-M	2.233	56.72	0.192	4.88	8.500	215.90	3.344	84.95	2.556	64.93	110.92	493.39	21.51	3.76
C2233-192-9000-M*	2.233	56.72	0.192	4.88	9.000	228.60	3.649	92.68	2.840	72.12	110.92	493.39	20.73	3.63
C2233-192-9500-M*	2.233	56.72	0.192	4.88	9.500	241.30	3.831	97.31	2.972	75.49	110.92	493.39	19.57	3.42
C2233-207-3500-M	2.233	56.72	0.207	5.26	3.500	88.90	1.638	41.59	1.374	34.91	136.73	608.22	73.42	12.85
C2233-207-3750-M	2.233	56.72	0.207	5.26	3.750	95.25	1.737	44.11	1.450	36.84	136.73	608.22	67.91	11.88
C2233-207-4000-M	2.233	56.72	0.207	5.26	4.000	101.60	1.836	46.63	1.527	38.77	136.73	608.22	63.18	11.06
C2233-207-4250-M	2.233	56.72	0.207	5.26	4.250	107.95	1.935	49.15	1.603	40.71	136.73	608.22	59.06	10.34
C2233-207-4500-M	2.233	56.72	0.207	5.26	4.500	114.30	2.034	51.66	1.679	42.64	136.73	608.22	55.45	9.70
C2233-207-4750-M	2.233	56.72	0.207	5.26	4.750	120.65	2.133	54.18	1.755	44.57	136.73	608.22	52.25	9.14
C2233-207-5000-M	2.233	56.72	0.207	5.26	5.000	127.00	2.232	56.70	1.831	46.51	136.73	608.22	49.40	8.65
C2233-207-5250-M	2.233	56.72	0.207	5.26	5.250	133.35	2.331	59.22	1.907	48.44	136.73	608.22	46.85	8.20
C2233-207-5500-M	2.233	56.72	0.207	5.26	5.500	139.70	2.430	61.73	1.983	50.37	136.73	608.22	44.55	7.80
C2233-207-5750-M	2.233	56.72	0.207	5.26	5.750	146.05	2.530	64.25	2.059	52.31	136.73	608.22	42.46	7.43
C2233-207-6000-M	2.233	56.72	0.207	5.26	6.000	152.40	2.629	66.77	2.135	54.24	136.73	608.22	40.56	7.10
C2233-207-6250-M	2.233	56.72	0.207	5.26	6.250	158.75	2.728	69.29	2.212	56.17	136.73	608.22	38.82	6.79
C2233-207-6500-M	2.233	56.72	0.207	5.26	6.500	165.10	2.827	71.80	2.288	58.11	136.73	608.22	37.23	6.51
C2233-207-6750-M	2.233	56.72	0.207	5.26	6.750	171.45	2.926	74.32	2.364	60.04	136.73	608.22	35.76	6.26
C2233-207-7000-M	2.233	56.72	0.207	5.26	7.000	177.80	3.025	76.84	2.440	61.97	136.73	608.22	34.40	6.02
C2233-207-7500-M*	2.233	56.72	0.207	5.26	7.500	190.50	3.348	85.05	2.747	69.76	136.73	608.22	32.94	5.76
C2233-207-8000-M*	2.233	56.72	0.207	5.26	8.000	203.20	3.547	90.08	2.899	73.63	136.73	608.22	30.70	5.37
C2233-207-8500-M*	2.233	56.72	0.207	5.26	8.500	215.90	3.745	95.12	3.051	77.49	136.73	608.22	28.76	5.03
C2233-207-9000-M*	2.233	56.72	0.207	5.26	9.000	228.60	3.943	100.15	3.203	81.36	136.73	608.22	27.04	4.73
C2233-207-9500-M*	2.233	56.72	0.207	5.26	9.500	241.30	4.141	105.19	3.355	85.23	136.73	608.22	25.52	4.47
C2233-225-3250-M	2.233	56.72	0.225	5.72	3.250	82.55	1.669	42.38	1.459	37.06	172.36	766.70	108.99	19.07
C2233-225-3500-M	2.233	56.72	0.225	5.72	3.500	88.90	1.777	45.14	1.547	39.29	172.36	766.70	100.05	17.51
C2233-225-3750-M	2.233	56.72	0.225	5.72	3.750	95.25	1.886	47.91	1.635	41.53	172.36	766.70	92.47	16.18
C2233-225-4000-M	2.233	56.72	0.225	5.72	4.000	101.60	1.995	50.67	1.723	43.77	172.36	766.70	85.96	15.04
C2233-225-4250-M	2.233	56.72	0.225	5.72	4.250	107.95	2.104	53.43	1.811	46.00	172.36	766.70	80.31	14.05
C2233-225-4500-M	2.233	56.72	0.225	5.72	4.500	114.30	2.212	56.20	1.899	48.24	172.36	766.70	75.35	13.19
C2233-225-4750-M	2.233	56.72	0.225	5.72	4.750	120.65	2.321	58.96	1.987	50.48	172.36	766.70	70.97	12.42
C2233-225-5000-M	2.233	56.72	0.225	5.72	5.000	127.00	2.430	61.72	2.075	52.71	172.36	766.70	67.07	11.74
C2233-225-5250-M	2.233	56.72	0.225	5.72	5.250	133.35	2.539	64.49	2.163	54.95	172.36	766.70	63.58	11.13
C2233-225-5500-M	2.233	56.72	0.225	5.72	5.500	139.70	2.648	67.25	2.252	57.19	172.36	766.70	60.43	10.57
C2233-225-5750-M	2.233	56.72	0.225	5.72	5.750	146.05	2.756	70.01	2.340	59.43	172.36	766.70	57.58	10.08
C2233-225-6000-M	2.233	56.72	0.225	5.72	6.000	152.40	2.865	72.78	2.428	61.66	172.36	766.70	54.98	9.62
C2233-225-6250-M	2.233	56.72	0.225	5.72	6.250	158.75	2.974	75.54	2.516	63.90	172.36	766.70	52.61	9.21
C2233-225-6500-M	2.233	56.72	0.225	5.72	6.500	165.10	3.083	78.30	2.604	66.14	172.36	766.70	50.44	8.83
C2233-225-6750-M*	2.233	56.72	0.225	5.72	6.750	171.45	3.319	84.30	2.849	72.36	172.36	766.70	50.23	8.79
C2233-225-7000-M*	2.233	56.72	0.225	5.72	7.000	177.80	3.428	87.06	2.937	74.60	172.36	766.70	48.25	8.44
C2233-225-7500-M*	2.233	56.72	0.225	5.72	7.500	190.50	3.645	92.59	3.113	79.07	172.36	766.70	44.71	7.82
C2233-225-8000-M*	2.233	56.72	0.225	5.72	8.000	203.20	3.863	98.11	3.289	83.55	172.36	766.70	41.66	7.29
C2233-225-8500-M*	2.233	56.72	0.225	5.72	8.500	215.90	4.080	103.64	3.465	88.02	172.36	766.70	39.00	6.82
C2233-225-9000-M*	2.233	56.72	0.225	5.72	9.000	228.60	4.298	109.17	3.641	92.49	172.36	766.70	36.66	6.41
C2233-225-9500-M*	2.233	56.72	0.225	5.72	9.500	241.30	4.515	114.69	3.818	96.97	172.36	766.70	34.58	6.05
C2233-250-3250-M	2.233	56.72	0.250	6.35	3.250	82.55	1.844	46.85	1.676	42.58	230.79	1026.59	164.20	28.73
C2233-250-3500-M	2.233	56.72	0.250	6.35	3.500	88.90	1.967	49.95	1.781	45.23	230.79	1026.59	150.51	26.34
C2233-250-3750-M	2.233	56.72	0.250	6.35	3.750	95.25	2.089	53.06	1.886	47.89	230.79	1026.59	138.94	24.31

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2233-192-3500-S	1.848	46.95	80.48	357.98	48.73	8.53
C2233-192-3750-S	1.966	49.93	80.48	357.98	45.11	7.89
C2233-192-4000-S	2.083	52.92	80.48	357.98	41.99	7.35
C2233-192-4250-S	2.201	55.90	80.48	357.98	39.27	6.87
C2233-192-4500-S	2.318	58.89	80.48	357.98	36.89	6.46
C2233-192-4750-S	2.436	61.87	80.48	357.98	34.78	6.09
C2233-192-5000-S	2.553	64.85	80.48	357.98	32.89	5.76
C2233-192-5250-S	2.671	67.84	80.48	357.98	31.20	5.46
C2233-192-5500-S	2.788	70.82	80.48	357.98	29.68	5.19
C2233-192-5750-S	2.906	73.81	80.48	357.98	28.30	4.95
C2233-192-6000-S	3.023	76.79	80.48	357.98	27.04	4.73
C2233-192-6250-S	3.141	79.78	80.48	357.98	25.88	4.53
C2233-192-6500-S	3.258	82.76	80.48	357.98	24.83	4.34
C2233-192-6750-S	3.376	85.74	80.48	357.98	23.85	4.17
C2233-192-7000-S	3.493	88.73	80.48	357.98	22.95	4.02
C2233-192-7500-S	3.728	94.70	80.48	357.98	21.34	3.73
C2233-192-8000-S	3.963	100.67	80.48	357.98	19.94	3.49
C2233-192-8500-S	4.198	106.63	80.48	357.98	18.71	3.27
C2233-192-9000-S*	4.535	115.19	80.48	357.98	18.02	3.15
C2233-192-9500-S*	4.770	121.16	80.48	357.98	17.01	2.98
C2233-207-3500-S	1.964	49.88	98.08	436.29	63.84	11.17
C2233-207-3750-S	2.089	53.06	98.08	436.29	59.06	10.33
C2233-207-4000-S	2.215	56.25	98.08	436.29	54.94	9.61
C2233-207-4250-S	2.340	59.44	98.08	436.29	51.36	8.99
C2233-207-4500-S	2.466	62.63	98.08	436.29	48.22	8.44
C2233-207-4750-S	2.591	65.82	98.08	436.29	45.44	7.95
C2233-207-5000-S	2.717	69.01	98.08	436.29	42.96	7.52
C2233-207-5250-S	2.842	72.20	98.08	436.29	40.74	7.13
C2233-207-5500-S	2.968	75.39	98.08	436.29	38.74	6.78
C2233-207-5750-S	3.093	78.57	98.08	436.29	36.92	6.46
C2233-207-6000-S	3.219	81.76	98.08	436.29	35.27	6.17
C2233-207-6250-S	3.345	84.95	98.08	436.29	33.76	5.91
C2233-207-6500-S	3.470	88.14	98.08	436.29	32.37	5.66
C2233-207-6750-S	3.596	91.33	98.08	436.29	31.09	5.44
C2233-207-7000-S	3.721	94.52	98.08	436.29	29.91	5.23
C2233-207-7500-S*	4.075	103.51	98.08	436.29	28.64	5.01
C2233-207-8000-S*	4.326	109.89	98.08	436.29	26.70	4.67
C2233-207-8500-S*	4.577	116.27	98.08	436.29	25.00	4.38
C2233-207-9000-S*	4.828	122.64	98.08	436.29	23.51	4.11
C2233-207-9500-S*	5.080	129.02	98.08	436.29	22.19	3.88
C2233-225-3250-S	1.963	49.86	121.97	542.56	94.77	16.58
C2233-225-3500-S	2.098	53.29	121.97	542.56	87.00	15.23
C2233-225-3750-S	2.233	56.72	121.97	542.56	80.41	14.07
C2233-225-4000-S	2.368	60.15	121.97	542.56	74.75	13.08
C2233-225-4250-S	2.503	63.58	121.97	542.56	69.83	12.22
C2233-225-4500-S	2.638	67.02	121.97	542.56	65.52	11.47
C2233-225-4750-S	2.773	70.45	121.97	542.56	61.71	10.80
C2233-225-5000-S	2.909	73.88	121.97	542.56	58.32	10.21
C2233-225-5250-S	3.044	77.31	121.97	542.56	55.28	9.67
C2233-225-5500-S	3.179	80.74	121.97	542.56	52.55	9.20
C2233-225-5750-S	3.314	84.17	121.97	542.56	50.07	8.76
C2233-225-6000-S	3.449	87.60	121.97	542.56	47.81	8.37
C2233-225-6250-S	3.584	91.03	121.97	542.56	45.75	8.01
C2233-225-6500-S	3.719	94.46	121.97	542.56	43.86	7.68
C2233-225-6750-S*	3.958	100.52	121.97	542.56	43.68	7.64
C2233-225-7000-S*	4.093	103.95	121.97	542.56	41.95	7.34
C2233-225-7500-S*	4.363	110.82	121.97	542.56	38.88	6.80
C2233-225-8000-S*	4.633	117.68	121.97	542.56	36.23	6.34
C2233-225-8500-S*	4.903	124.54	121.97	542.56	33.91	5.93
C2233-225-9000-S*	5.173	131.40	121.97	542.56	31.88	5.58
C2233-225-9500-S*	5.444	138.27	121.97	542.56	30.07	5.26
C2233-250-3250-S	2.127	54.03	160.33	713.17	142.78	24.99
C2233-250-3500-S	2.275	57.79	160.33	713.17	130.88	22.90
C2233-250-3750-S	2.423	61.54	160.33	713.17	120.81	21.14

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE															STAINLESS STEEL							
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)		Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm		in	mm	lb	N	lb/in	N/mm
C2233-250-4000-M	2.233	56.72	0.250	6.35	4.000	101.60	2.211	56.16	1.990	50.55	230.79	1026.59	129.01	22.58	**C2233-250-4000-S**	2.571	65.30	160.33	713.17	112.18	19.63
C2233-250-4250-M	2.233	56.72	0.250	6.35	4.250	107.95	2.333	59.27	2.095	53.21	230.79	1026.59	120.41	21.07	**C2233-250-4250-S**	2.719	69.06	160.33	713.17	104.71	18.32
C2233-250-4500-M	2.233	56.72	0.250	6.35	4.500	114.30	2.456	62.37	2.200	55.87	230.79	1026.59	112.89	19.76	**C2233-250-4500-S**	2.867	72.81	160.33	713.17	98.16	17.18
C2233-250-4750-M	2.233	56.72	0.250	6.35	4.750	120.65	2.578	65.48	2.304	58.53	230.79	1026.59	106.25	18.59	**C2233-250-4750-S**	3.015	76.57	160.33	713.17	92.39	16.17
C2233-250-5000-M	2.233	56.72	0.250	6.35	5.000	127.00	2.700	68.58	2.409	61.18	230.79	1026.59	100.34	17.56	**C2233-250-5000-S**	3.163	80.33	160.33	713.17	87.26	15.27
C2233-250-5250-M	2.233	56.72	0.250	6.35	5.250	133.35	2.822	71.68	2.513	63.84	230.79	1026.59	95.06	16.64	**C2233-250-5250-S**	3.310	84.09	160.33	713.17	82.66	14.47
C2233-250-5500-M	2.233	56.72	0.250	6.35	5.500	139.70	2.944	74.79	2.618	66.50	230.79	1026.59	90.31	15.80	**C2233-250-5500-S**	3.458	87.84	160.33	713.17	78.53	13.74
C2233-250-5750-M	2.233	56.72	0.250	6.35	5.750	146.05	3.067	77.89	2.723	69.16	230.79	1026.59	86.01	15.05	**C2233-250-5750-S**	3.606	91.60	160.33	713.17	74.79	13.09
C2233-250-6000-M	2.233	56.72	0.250	6.35	6.000	152.40	3.189	81.00	2.827	71.82	230.79	1026.59	82.10	14.37	**C2233-250-6000-S**	3.754	95.36	160.33	713.17	71.39	12.49
C2233-250-6250-M	2.233	56.72	0.250	6.35	6.250	158.75	3.311	84.10	2.932	74.48	230.79	1026.59	78.53	13.74	**C2233-250-6250-S**	3.902	99.11	160.33	713.17	68.29	11.95
C2233-250-6500-M	2.233	56.72	0.250	6.35	6.500	165.10	3.433	87.21	3.037	77.13	230.79	1026.59	75.26	13.17	**C2233-250-6500-S**	4.050	102.87	160.33	713.17	65.44	11.45
C2233-250-6750-M	2.233	56.72	0.250	6.35	6.750	171.45	3.556	90.31	3.141	79.79	230.79	1026.59	72.25	12.64	**C2233-250-6750-S**	4.198	106.63	160.33	713.17	62.82	10.99
C2233-250-7000-M	2.233	56.72	0.250	6.35	7.000	177.80	3.678	93.42	3.246	82.45	230.79	1026.59	69.47	12.16	**C2233-250-7000-S**	4.346	110.39	160.33	713.17	60.41	10.57
C2233-250-7500-M	2.233	56.72	0.250	6.35	7.500	190.50	3.922	99.62	3.455	87.77	230.79	1026.59	64.51	11.29	**C2233-250-7500-S**	4.642	117.90	160.33	713.17	56.09	9.82
C2233-250-8000-M	2.233	56.72	0.250	6.35	8.000	203.20	4.167	105.83	3.665	93.08	230.79	1026.59	60.21	10.54	**C2233-250-8000-S**	4.938	125.41	160.33	713.17	52.35	9.16
C2233-250-8500-M*	2.233	56.72	0.250	6.35	8.500	215.90	4.539	115.29	4.032	102.41	230.79	1026.59	58.26	10.20	**C2233-250-8500-S***	5.335	135.52	160.33	713.17	50.66	8.87
C2233-250-9000-M*	2.233	56.72	0.250	6.35	9.000	228.60	4.783	121.50	4.241	107.73	230.79	1026.59	54.73	9.58	**C2233-250-9000-S***	5.631	143.04	160.33	713.17	47.59	8.33
C2233-250-9500-M*	2.233	56.72	0.250	6.35	9.500	241.30	5.028	127.71	4.451	113.04	230.79	1026.59	51.61	9.03	**C2233-250-9500-S***	5.927	150.55	160.33	713.17	44.87	7.85
C2291-177-4000-M	2.291	58.19	0.177	4.50	4.000	101.60	1.541	39.15	1.163	29.53	86.28	383.78	35.09	6.14	**C2291-177-4000-S**	1.925	48.89	63.32	281.67	30.51	5.34
C2291-177-4250-M	2.291	58.19	0.177	4.50	4.250	107.95	1.623	41.21	1.217	30.91	86.28	383.78	32.84	5.75	**C2291-177-4250-S**	2.032	51.62	63.32	281.67	28.55	5.00
C2291-177-4500-M	2.291	58.19	0.177	4.50	4.500	114.30	1.704	43.28	1.271	32.29	86.28	383.78	30.86	5.40	**C2291-177-4500-S**	2.140	54.36	63.32	281.67	26.83	4.70
C2291-177-4750-M	2.291	58.19	0.177	4.50	4.750	120.65	1.785	45.35	1.325	33.67	86.28	383.78	29.10	5.09	**C2291-177-4750-S**	2.248	57.09	63.32	281.67	25.31	4.43
C2291-177-5000-M	2.291	58.19	0.177	4.50	5.000	127.00	1.867	47.42	1.380	35.04	86.28	383.78	27.54	4.82	**C2291-177-5000-S**	2.355	59.83	63.32	281.67	23.95	4.19
C2291-177-5250-M	2.291	58.19	0.177	4.50	5.250	133.35	1.948	49.49	1.434	36.42	86.28	383.78	26.13	4.57	**C2291-177-5250-S**	2.463	62.57	63.32	281.67	22.72	3.98
C2291-177-5500-M	2.291	58.19	0.177	4.50	5.500	139.70	2.030	51.55	1.488	37.80	86.28	383.78	24.86	4.35	**C2291-177-5500-S**	2.571	65.30	63.32	281.67	21.62	3.78
C2291-177-5750-M	2.291	58.19	0.177	4.50	5.750	146.05	2.111	53.62	1.542	39.18	86.28	383.78	23.71	4.15	**C2291-177-5750-S**	2.679	68.04	63.32	281.67	20.62	3.61
C2291-177-6000-M	2.291	58.19	0.177	4.50	6.000	152.40	2.192	55.69	1.597	40.55	86.28	383.78	22.66	3.97	**C2291-177-6000-S**	2.786	70.77	63.32	281.67	19.70	3.45
C2291-177-6250-M	2.291	58.19	0.177	4.50	6.250	158.75	2.274	57.76	1.651	41.93	86.28	383.78	21.70	3.80	**C2291-177-6250-S**	2.894	73.51	63.32	281.67	18.87	3.30
C2291-177-6500-M	2.291	58.19	0.177	4.50	6.500	165.10	2.355	59.82	1.705	43.31	86.28	383.78	20.82	3.64	**C2291-177-6500-S**	3.002	76.24	63.32	281.67	18.10	3.17
C2291-177-6750-M	2.291	58.19	0.177	4.50	6.750	171.45	2.437	61.89	1.759	44.69	86.28	383.78	20.00	3.50	**C2291-177-6750-S**	3.109	78.98	63.32	281.67	17.39	3.04
C2291-177-7000-M	2.291	58.19	0.177	4.50	7.000	177.80	2.518	63.96	1.814	46.06	86.28	383.78	19.25	3.37	**C2291-177-7000-S**	3.217	81.71	63.32	281.67	16.74	2.93
C2291-177-7500-M	2.291	58.19	0.177	4.50	7.500	190.50	2.681	68.10	1.922	48.82	86.28	383.78	17.90	3.13	**C2291-177-7500-S**	3.433	87.19	63.32	281.67	15.57	2.72
C2291-177-8000-M	2.291	58.19	0.177	4.50	8.000	203.20	2.844	72.23	2.030	51.57	86.28	383.78	16.73	2.93	**C2291-177-8000-S**	3.648	92.66	63.32	281.67	14.55	2.55
C2291-177-8500-M	2.291	58.19	0.177	4.50	8.500	215.90	3.007	76.37	2.139	54.33	86.28	383.78	15.71	2.75	**C2291-177-8500-S**	3.863	98.13	63.32	281.67	13.66	2.39
C2291-177-9000-M	2.291	58.19	0.177	4.50	9.000	228.60	3.169	80.50	2.247	57.09	86.28	383.78	14.80	2.59	**C2291-177-9000-S**	4.079	103.60	63.32	281.67	12.87	2.25
C2291-177-9500-M	2.291	58.19	0.177	4.50	9.500	241.30	3.332	84.64	2.356	59.84	86.28	383.78	13.99	2.45	**C2291-177-9500-S**	4.294	109.07	63.32	281.67	12.16	2.13
C2291-192-3750-M	2.291	58.19	0.192	4.88	3.750	95.25	1.580	40.13	1.257	31.93	108.23	481.44	49.88	8.73	**C2291-192-3750-S**	1.939	49.26	78.53	349.31	43.37	7.59
C2291-192-4000-M	2.291	58.19	0.192	4.88	4.000	101.60	1.669	42.39	1.320	33.54	108.23	481.44	46.43	8.13	**C2291-192-4000-S**	2.055	52.20	78.53	349.31	40.37	7.07
C2291-192-4250-M	2.291	58.19	0.192	4.88	4.250	107.95	1.758	44.65	1.384	35.15	108.23	481.44	43.43	7.60	**C2291-192-4250-S**	2.170	55.13	78.53	349.31	37.76	6.61
C2291-192-4500-M	2.291	58.19	0.192	4.88	4.500	114.30	1.847	46.90	1.447	36.76	108.23	481.44	40.79	7.14	**C2291-192-4500-S**	2.286	58.06	78.53	349.31	35.47	6.21
C2291-192-4750-M	2.291	58.19	0.192	4.88	4.750	120.65	1.935	49.16	1.511	38.37	108.23	481.44	38.45	6.73	**C2291-192-4750-S**	2.402	61.00	78.53	349.31	33.44	5.85
C2291-192-5000-M	2.291	58.19	0.192	4.88	5.000	127.00	2.024	51.42	1.574	39.98	108.23	481.44	36.37	6.36	**C2291-192-5000-S**	2.517	63.93	78.53	349.31	31.63	5.53
C2291-192-5250-M	2.291	58.19	0.192	4.88	5.250	133.35	2.113	53.67	1.637	41.59	108.23	481.44	34.50	6.04	**C2291-192-5250-S**	2.633	66.87	78.53	349.31	30.00	5.25
C2291-192-5500-M	2.291	58.19	0.192	4.88	5.500	139.70	2.202	55.93	1.701	43.20	108.23	481.44	32.82	5.74	**C2291-192-5500-S**	2.748	69.80	78.53	349.31	28.54	4.99
C2291-192-5750-M	2.291	58.19	0.192	4.88	5.750	146.05	2.291	58.19	1.764	44.81	108.23	481.44	31.29	5.48	**C2291-192-5750-S**	2.864	72.74	78.53	349.31	27.21	4.76
C2291-192-6000-M	2.291	58.19	0.192	4.88	6.000	152.40	2.380	60.44	1.828	46.42	108.23	481.44	29.90	5.23	**C2291-192-6000-S**	2.979	75.67	78.53	349.31	26.00	4.55
C2291-192-6250-M	2.291	58.19	0.192	4.88	6.250	158.75	2.468	62.70	1.891	48.03	108.23	481.44	28.62	5.01	**C2291-192-6250-S**	3.095	78.61	78.53	349.31	24.89	4.36
C2291-192-6500-M	2.291	58.19	0.192	4.88	6.500	165.10	2.557	64.95	1.955	49.65	108.23	481.44	27.45	4.80	**C2291-192-6500-S**	3.210	81.54	78.53	349.31	23.87	4.18
C2291-192-6750-M	2.291	58.19	0.192	4.88	6.750	171.45	2.646	67.21	2.018	51.26	108.23	481.44	26.37	4.62	**C2291-192-6750-S**	3.326	84.47	78.53	349.31	22.93	4.01
C2291-192-7000-M	2.291	58.19	0.192	4.88	7.000	177.80	2.735	69.47	2.081	52.87	108.23	481.44	25.38	4.44	**C2291-192-7000-S**	3.441	87.41	78.53	349.31	22.07	3.86
C2291-192-7500-M	2.291	58.19	0.192	4.88	7.500	190.50	2.913	73.98	2.208	56.09	108.23	481.44	23.59	4.13	**C2291-192-7500-S**	3.672	93.28	78.53	349.31	20.52	3.59
C2291-192-8000-M	2.291	58.19	0.192	4.88	8.000	203.20	3.090	78.49	2.335	59.31	108.23	481.44	22.04	3.86	**C2291-192-8000-S**	3.903	99.15	78.53	349.31	19.17	3.35
C2291-192-8500-M	2.291	58.19	0.192	4.88	8.500	215.90	3.268	83.01	2.462	62.53	108.23	481.44	20.69	3.62	**C2291-192-8500-S**	4.134	105.01	78.53	349.31	17.99	3.15
C2291-192-9000-M	2.291	58.19	0.192	4.88	9.000	228.60	3.446	87.52	2.589	65.75	108.23	481.44	19.49	3.41	**C2291-192-9000-S**	4.365	110.88	78.53	349.31	16.94	2.97
C2291-192-9500-M*	2.291	58.19	0.192	4.88	9.500	241.30	3.747	95.18	2.868	72.86	108.23	481.44	18.81	3.29	**C2291-192-9500-S***	4.700	119.38	78.53	349.31	16.36	2.86
C2291-207-3500-M	2.291	58.19	0.207	5.26	3.500	88.90	1.605	40.78	1.335	33.90	133.44	593.56	70.43	12.33	**C2291-207-3500-S**	1.937	49.20	95.72	425.77	61.24	10.72
C2291-207-3750-M	2.291	58.19	0.207	5.26	3.750	95.25	1.702	43.23	1.408	35.75	133.44	593.56	65.15	11.40	**C2291-207-3750-S**	2.061	52.34	95.72	425.77	56.65	9.91
C2291-207-4000-M	2.291	58.19	0.207	5.26	4.000	101.60	1.798	45.68	1.480	37.60	133.44	593.56	60.61	10.61	**C2291-207-4000-S**	2.184	55.47	95.72	425.77	52.71	9.22
C2291-207-4250-M	2.291	58.19	0.207	5.26	4.250	107.95	1.895	48.13	1.553	39.45	133.44	593.56	56.66	9.92	**C2291-207-4250-S**	2.307	58.60	95.72	425.77	49.27	8.62
C2291-207-4500-M	2.291	58.19	0.207	5.26	4.500	114.30	1.991	50.58	1.626	41.31	133.44	593.56	53.19	9.31	**C2291-207-4500-S**	2.431	61.74	95.72	425.77	46.26	8.09
C2291-207-4750-M	2.291	58.19	0.207	5.26	4.750	120.65	2.088	53.03	1.699	43.16	133.44	593.56	50.13	8.77	**C2291-207-4750-S**	2.554	64.87	95.72	425.77	43.59	7.63
C2291-207-5000-M	2.291	58.19	0.207	5.26	5.000	127.00	2.184	55.49	1.772	45.01	133.44	593.56	47.39	8.29	**C2291-207-5000-S**	2.677	68.01	95.72	425.77	41.21	7.21
C2291-207-5250-M	2.291	58.19	0.207	5.26	5.250	133.35	2.281	57.94	1.845	46.86	133.44	593.56	44.94	7.87	**C2291-207-5250-S**	2.801	71.14	95.72	425.77	39.08	6.84
C2291-207-5500-M	2.291	58.19	0.207	5.26	5.500	139.70	2.378	60.39	1.918	48.71	133.44	593.56	42.74	7.48	**C2291-207-5500-S**	2.924	74.28	95.72	425.77	37.16	6.50

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2291-207-5750-M	2.291	58.19	0.207	5.26	5.750	146.05	2.474	62.84	1.991	50.56	133.44	593.56	40.73	7.13
C2291-207-6000-M	2.291	58.19	0.207	5.26	6.000	152.40	2.571	65.29	2.064	52.42	133.44	593.56	38.91	6.81
C2291-207-6250-M	2.291	58.19	0.207	5.26	6.250	158.75	2.667	67.74	2.137	54.27	133.44	593.56	37.24	6.52
C2291-207-6500-M	2.291	58.19	0.207	5.26	6.500	165.10	2.764	70.19	2.209	56.12	133.44	593.56	35.71	6.25
C2291-207-6750-M	2.291	58.19	0.207	5.26	6.750	171.45	2.860	72.65	2.282	57.97	133.44	593.56	34.30	6.00
C2291-207-7000-M	2.291	58.19	0.207	5.26	7.000	177.80	2.957	75.10	2.355	59.82	133.44	593.56	33.00	5.78
C2291-207-7500-M*	2.291	58.19	0.207	5.26	7.500	190.50	3.277	83.23	2.658	67.51	133.44	593.56	31.60	5.53
C2291-207-8000-M*	2.291	58.19	0.207	5.26	8.000	203.20	3.470	88.13	2.804	71.22	133.44	593.56	29.46	5.15
C2291-207-8500-M*	2.291	58.19	0.207	5.26	8.500	215.90	3.663	93.03	2.950	74.92	133.44	593.56	27.59	4.83
C2291-207-9000-M*	2.291	58.19	0.207	5.26	9.000	228.60	3.856	97.94	3.095	78.62	133.44	593.56	25.94	4.54
C2291-207-9500-M*	2.291	58.19	0.207	5.26	9.500	241.30	4.049	102.84	3.241	82.33	133.44	593.56	24.48	4.28
C2291-225-3250-M	2.291	58.19	0.225	5.72	3.250	82.55	1.636	41.56	1.419	36.05	168.23	748.34	104.26	18.25
C2291-225-3500-M	2.291	58.19	0.225	5.72	3.500	88.90	1.742	44.25	1.504	38.19	168.23	748.34	95.71	16.75
C2291-225-3750-M	2.291	58.19	0.225	5.72	3.750	95.25	1.848	46.94	1.588	40.34	168.23	748.34	88.46	15.48
C2291-225-4000-M	2.291	58.19	0.225	5.72	4.000	101.60	1.954	49.64	1.673	42.49	168.23	748.34	82.23	14.39
C2291-225-4250-M	2.291	58.19	0.225	5.72	4.250	107.95	2.060	52.33	1.757	44.64	168.23	748.34	76.82	13.44
C2291-225-4500-M	2.291	58.19	0.225	5.72	4.500	114.30	2.166	55.02	1.842	46.78	168.23	748.34	72.08	12.61
C2291-225-4750-M	2.291	58.19	0.225	5.72	4.750	120.65	2.272	57.71	1.926	48.93	168.23	748.34	67.89	11.88
C2291-225-5000-M	2.291	58.19	0.225	5.72	5.000	127.00	2.378	60.40	2.011	51.08	168.23	748.34	64.16	11.23
C2291-225-5250-M	2.291	58.19	0.225	5.72	5.250	133.35	2.484	63.09	2.095	53.22	168.23	748.34	60.82	10.64
C2291-225-5500-M	2.291	58.19	0.225	5.72	5.500	139.70	2.590	65.78	2.180	55.37	168.23	748.34	57.81	10.12
C2291-225-5750-M	2.291	58.19	0.225	5.72	5.750	146.05	2.696	68.47	2.264	57.52	168.23	748.34	55.08	9.64
C2291-225-6000-M	2.291	58.19	0.225	5.72	6.000	152.40	2.802	71.16	2.349	59.66	168.23	748.34	52.60	9.20
C2291-225-6250-M	2.291	58.19	0.225	5.72	6.250	158.75	2.907	73.85	2.434	61.81	168.23	748.34	50.33	8.81
C2291-225-6500-M	2.291	58.19	0.225	5.72	6.500	165.10	3.013	76.54	2.518	63.96	168.23	748.34	48.25	8.44
C2291-225-6750-M	2.291	58.19	0.225	5.72	6.750	171.45	3.119	79.23	2.603	66.11	168.23	748.34	46.34	8.11
C2291-225-7000-M*	2.291	58.19	0.225	5.72	7.000	177.80	3.355	85.22	2.847	72.32	168.23	748.34	46.15	8.08
C2291-225-7500-M*	2.291	58.19	0.225	5.72	7.500	190.50	3.567	90.60	3.016	76.61	168.23	748.34	42.77	7.49
C2291-225-8000-M*	2.291	58.19	0.225	5.72	8.000	203.20	3.779	95.98	3.185	80.91	168.23	748.34	39.85	6.97
C2291-225-8500-M*	2.291	58.19	0.225	5.72	8.500	215.90	3.990	101.36	3.354	85.20	168.23	748.34	37.31	6.53
C2291-225-9000-M*	2.291	58.19	0.225	5.72	9.000	228.60	4.202	106.74	3.523	89.50	168.23	748.34	35.07	6.14
C2291-225-9500-M*	2.291	58.19	0.225	5.72	9.500	241.30	4.414	112.12	3.693	93.79	168.23	748.34	33.08	5.79
C2291-250-3250-M	2.291	58.19	0.250	6.35	3.250	82.55	1.810	45.97	1.633	41.48	225.31	1002.24	156.43	27.38
C2291-250-3500-M	2.291	58.19	0.250	6.35	3.500	88.90	1.929	48.99	1.734	44.04	225.31	1002.24	143.40	25.09
C2291-250-3750-M	2.291	58.19	0.250	6.35	3.750	95.25	2.048	52.01	1.835	46.60	225.31	1002.24	132.37	23.16
C2291-250-4000-M	2.291	58.19	0.250	6.35	4.000	101.60	2.167	55.04	1.936	49.16	225.31	1002.24	122.91	21.51
C2291-250-4250-M	2.291	58.19	0.250	6.35	4.250	107.95	2.286	58.06	2.036	51.72	225.31	1002.24	114.72	20.08
C2291-250-4500-M	2.291	58.19	0.250	6.35	4.500	114.30	2.405	61.09	2.137	54.28	225.31	1002.24	107.55	18.82
C2291-250-4750-M	2.291	58.19	0.250	6.35	4.750	120.65	2.524	64.11	2.238	56.84	225.31	1002.24	101.22	17.71
C2291-250-5000-M	2.291	58.19	0.250	6.35	5.000	127.00	2.643	67.13	2.339	59.40	225.31	1002.24	95.60	16.73
C2291-250-5250-M	2.291	58.19	0.250	6.35	5.250	133.35	2.762	70.16	2.439	61.96	225.31	1002.24	90.57	15.85
C2291-250-5500-M	2.291	58.19	0.250	6.35	5.500	139.70	2.881	73.18	2.540	64.52	225.31	1002.24	86.04	15.06
C2291-250-5750-M	2.291	58.19	0.250	6.35	5.750	146.05	3.000	76.21	2.641	67.08	225.31	1002.24	81.94	14.34
C2291-250-6000-M	2.291	58.19	0.250	6.35	6.000	152.40	3.119	79.23	2.742	69.63	225.31	1002.24	78.22	13.69
C2291-250-6250-M	2.291	58.19	0.250	6.35	6.250	158.75	3.238	82.26	2.842	72.19	225.31	1002.24	74.82	13.09
C2291-250-6500-M	2.291	58.19	0.250	6.35	6.500	165.10	3.357	85.28	2.943	74.75	225.31	1002.24	71.70	12.55
C2291-250-6750-M	2.291	58.19	0.250	6.35	6.750	171.45	3.477	88.30	3.044	77.31	225.31	1002.24	68.83	12.05
C2291-250-7000-M	2.291	58.19	0.250	6.35	7.000	177.80	3.596	91.33	3.145	79.87	225.31	1002.24	66.18	11.58
C2291-250-7500-M*	2.291	58.19	0.250	6.35	7.500	190.50	3.965	100.70	3.508	89.10	225.31	1002.24	63.73	11.15
C2291-250-8000-M*	2.291	58.19	0.250	6.35	8.000	203.20	4.203	106.75	3.709	94.22	225.31	1002.24	59.34	10.38
C2291-250-8500-M*	2.291	58.19	0.250	6.35	8.500	215.90	4.441	112.80	3.911	99.33	225.31	1002.24	55.51	9.71
C2291-250-9000-M*	2.291	58.19	0.250	6.35	9.000	228.60	4.679	118.85	4.112	104.45	225.31	1002.24	52.14	9.13
C2291-250-9500-M*	2.291	58.19	0.250	6.35	9.500	241.30	4.917	124.89	4.314	109.57	225.31	1002.24	49.16	8.60
C2350-192-3750-M	2.350	59.69	0.192	4.88	3.750	95.25	1.550	39.36	1.220	30.98	105.63	469.85	48.01	8.40
C2350-192-4000-M	2.350	59.69	0.192	4.88	4.000	101.60	1.636	41.56	1.280	32.52	105.63	469.85	44.69	7.82
C2350-192-4250-M	2.350	59.69	0.192	4.88	4.250	107.95	1.723	43.76	1.341	34.06	105.63	469.85	41.80	7.31
C2350-192-4500-M	2.350	59.69	0.192	4.88	4.500	114.30	1.809	45.96	1.401	35.60	105.63	469.85	39.26	6.87
C2350-192-4750-M	2.350	59.69	0.192	4.88	4.750	120.65	1.896	48.16	1.462	37.14	105.63	469.85	37.01	6.48
C2350-192-5000-M	2.350	59.69	0.192	4.88	5.000	127.00	1.983	50.36	1.523	38.68	105.63	469.85	35.01	6.13
C2350-192-5250-M	2.350	59.69	0.192	4.88	5.250	133.35	2.069	52.56	1.583	40.22	105.63	469.85	33.21	5.81
C2350-192-5500-M	2.350	59.69	0.192	4.88	5.500	139.70	2.156	54.76	1.644	41.76	105.63	469.85	31.59	5.53
C2350-192-5750-M	2.350	59.69	0.192	4.88	5.750	146.05	2.242	56.96	1.705	43.30	105.63	469.85	30.11	5.27
C2350-192-6000-M	2.350	59.69	0.192	4.88	6.000	152.40	2.329	59.16	1.765	44.84	105.63	469.85	28.77	5.04
C2350-192-6250-M	2.350	59.69	0.192	4.88	6.250	158.75	2.416	61.35	1.826	46.38	105.63	469.85	27.55	4.82

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2291-207-5750-S	3.048	77.41	95.72	425.77	35.42	6.20
C2291-207-6000-S	3.171	80.54	95.72	425.77	33.83	5.92
C2291-207-6250-S	3.294	83.68	95.72	425.77	32.39	5.67
C2291-207-6500-S	3.418	86.81	95.72	425.77	31.06	5.43
C2291-207-6750-S	3.541	89.95	95.72	425.77	29.83	5.22
C2291-207-7000-S	3.665	93.08	95.72	425.77	28.70	5.02
C2291-207-7500-S*	4.016	102.01	95.72	425.77	27.48	4.81
C2291-207-8000-S*	4.263	108.28	95.72	425.77	25.61	4.48
C2291-207-8500-S*	4.510	114.55	95.72	425.77	23.99	4.20
C2291-207-9000-S*	4.757	120.82	95.72	425.77	22.56	3.95
C2291-207-9500-S*	5.003	127.08	95.72	425.77	21.29	3.73
C2291-225-3250-S	1.937	49.20	119.05	529.57	90.66	15.87
C2291-225-3500-S	2.070	52.57	119.05	529.57	83.23	14.56
C2291-225-3750-S	2.202	55.94	119.05	529.57	76.92	13.46
C2291-225-4000-S	2.335	59.31	119.05	529.57	71.51	12.51
C2291-225-4250-S	2.468	62.68	119.05	529.57	66.80	11.69
C2291-225-4500-S	2.601	66.05	119.05	529.57	62.68	10.97
C2291-225-4750-S	2.733	69.43	119.05	529.57	59.03	10.33
C2291-225-5000-S	2.866	72.80	119.05	529.57	55.79	9.76
C2291-225-5250-S	2.999	76.17	119.05	529.57	52.88	9.25
C2291-225-5500-S	3.132	79.54	119.05	529.57	50.27	8.80
C2291-225-5750-S	3.264	82.91	119.05	529.57	47.90	8.38
C2291-225-6000-S	3.397	86.29	119.05	529.57	45.74	8.00
C2291-225-6250-S	3.530	89.66	119.05	529.57	43.77	7.66
C2291-225-6500-S	3.663	93.03	119.05	529.57	41.96	7.34
C2291-225-6750-S	3.795	96.40	119.05	529.57	40.29	7.05
C2291-225-7000-S*	4.034	102.45	119.05	529.57	40.13	7.02
C2291-225-7500-S*	4.299	109.20	119.05	529.57	37.19	6.51
C2291-225-8000-S*	4.565	115.94	119.05	529.57	34.66	6.06
C2291-225-8500-S*	4.830	122.69	119.05	529.57	32.44	5.68
C2291-225-9000-S*	5.096	129.43	119.05	529.57	30.49	5.34
C2291-225-9500-S*	5.361	136.17	119.05	529.57	28.76	5.03
C2291-250-3250-S	2.099	53.32	156.52	696.25	136.03	23.80
C2291-250-3500-S	2.245	57.02	156.52	696.25	124.69	21.82
C2291-250-3750-S	2.390	60.71	156.52	696.25	115.10	20.14
C2291-250-4000-S	2.536	64.40	156.52	696.25	106.88	18.70
C2291-250-4250-S	2.681	68.09	156.52	696.25	99.75	17.46
C2291-250-4500-S	2.826	71.79	156.52	696.25	93.52	16.37
C2291-250-4750-S	2.972	75.48	156.52	696.25	88.02	15.40
C2291-250-5000-S	3.117	79.17	156.52	696.25	83.13	14.55
C2291-250-5250-S	3.262	82.87	156.52	696.25	78.75	13.78
C2291-250-5500-S	3.408	86.56	156.52	696.25	74.82	13.09
C2291-250-5750-S	3.553	90.25	156.52	696.25	71.25	12.47
C2291-250-6000-S	3.699	93.95	156.52	696.25	68.01	11.90
C2291-250-6250-S	3.844	97.64	156.52	696.25	65.06	11.38
C2291-250-6500-S	3.989	101.33	156.52	696.25	62.35	10.91
C2291-250-6750-S	4.135	105.02	156.52	696.25	59.85	10.47
C2291-250-7000-S	4.280	108.72	156.52	696.25	57.55	10.07
C2291-250-7500-S*	4.676	118.76	156.52	696.25	55.42	9.70
C2291-250-8000-S*	4.966	126.15	156.52	696.25	51.60	9.03
C2291-250-8500-S*	5.257	133.53	156.52	696.25	48.27	8.45
C2291-250-9000-S*	5.548	140.92	156.52	696.25	45.34	7.93
C2291-250-9500-S*	5.839	148.30	156.52	696.25	42.75	7.48
C2350-192-3750-S	1.914	48.62	76.64	340.90	41.75	7.31
C2350-192-4000-S	2.028	51.51	76.64	340.90	38.86	6.80
C2350-192-4250-S	2.141	54.39	76.64	340.90	36.35	6.36
C2350-192-4500-S	2.255	57.28	76.64	340.90	34.14	5.97
C2350-192-4750-S	2.369	60.16	76.64	340.90	32.18	5.63
C2350-192-5000-S	2.482	63.05	76.64	340.90	30.44	5.33
C2350-192-5250-S	2.596	65.94	76.64	340.90	28.88	5.05
C2350-192-5500-S	2.710	68.82	76.64	340.90	27.47	4.81
C2350-192-5750-S	2.823	71.71	76.64	340.90	26.19	4.58
C2350-192-6000-S	2.937	74.60	76.64	340.90	25.02	4.38
C2350-192-6250-S	3.051	77.48	76.64	340.90	23.95	4.19

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2350-192-6500-M	2.350	59.69	0.192	4.88	6.500	165.10	2.502	63.55	1.886	47.91	105.63	469.85	26.42	4.62
C2350-192-6750-M	2.350	59.69	0.192	4.88	6.750	171.45	2.589	65.75	1.947	49.45	105.63	469.85	25.38	4.44
C2350-192-7000-M	2.350	59.69	0.192	4.88	7.000	177.80	2.675	67.95	2.008	50.99	105.63	469.85	24.42	4.27
C2350-192-7500-M	2.350	59.69	0.192	4.88	7.500	190.50	2.848	72.35	2.129	54.07	105.63	469.85	22.71	3.97
C2350-192-8000-M	2.350	59.69	0.192	4.88	8.000	203.20	3.022	76.75	2.250	57.15	105.63	469.85	21.22	3.71
C2350-192-8500-M	2.350	59.69	0.192	4.88	8.500	215.90	3.195	81.15	2.371	60.23	105.63	469.85	19.91	3.48
C2350-192-9000-M	2.350	59.69	0.192	4.88	9.000	228.60	3.368	85.54	2.493	63.31	105.63	469.85	18.76	3.28
C2350-192-9500-M	2.350	59.69	0.192	4.88	9.500	241.30	3.541	89.94	2.614	66.39	105.63	469.85	17.73	3.10
C2350-207-3750-M	2.350	59.69	0.207	5.26	3.750	95.25	1.669	42.38	1.366	34.70	130.24	579.35	62.57	10.95
C2350-207-4000-M	2.350	59.69	0.207	5.26	4.000	101.60	1.763	44.77	1.436	36.48	130.24	579.35	58.21	10.19
C2350-207-4250-M	2.350	59.69	0.207	5.26	4.250	107.95	1.857	47.16	1.506	38.25	130.24	579.35	54.42	9.52
C2350-207-4500-M	2.350	59.69	0.207	5.26	4.500	114.30	1.951	49.54	1.576	40.02	130.24	579.35	51.09	8.94
C2350-207-4750-M	2.350	59.69	0.207	5.26	4.750	120.65	2.045	51.93	1.645	41.80	130.24	579.35	48.14	8.42
C2350-207-5000-M	2.350	59.69	0.207	5.26	5.000	127.00	2.139	54.32	1.715	43.57	130.24	579.35	45.52	7.97
C2350-207-5250-M	2.350	59.69	0.207	5.26	5.250	133.35	2.233	56.71	1.785	45.34	130.24	579.35	43.16	7.55
C2350-207-5500-M	2.350	59.69	0.207	5.26	5.500	139.70	2.327	59.10	1.855	47.11	130.24	579.35	41.04	7.18
C2350-207-5750-M	2.350	59.69	0.207	5.26	5.750	146.05	2.421	61.48	1.925	48.89	130.24	579.35	39.12	6.85
C2350-207-6000-M	2.350	59.69	0.207	5.26	6.000	152.40	2.515	63.87	1.995	50.66	130.24	579.35	37.37	6.54
C2350-207-6250-M	2.350	59.69	0.207	5.26	6.250	158.75	2.609	66.26	2.064	52.43	130.24	579.35	35.77	6.26
C2350-207-6500-M	2.350	59.69	0.207	5.26	6.500	165.10	2.703	68.65	2.134	54.21	130.24	579.35	34.30	6.00
C2350-207-6750-M	2.350	59.69	0.207	5.26	6.750	171.45	2.797	71.04	2.204	55.98	130.24	579.35	32.95	5.77
C2350-207-7000-M	2.350	59.69	0.207	5.26	7.000	177.80	2.891	73.42	2.274	57.75	130.24	579.35	31.70	5.55
C2350-207-7500-M	2.350	59.69	0.207	5.26	7.500	190.50	3.079	78.20	2.413	61.30	130.24	579.35	29.46	5.16
C2350-207-8000-M*	2.350	59.69	0.207	5.26	8.000	203.20	3.396	86.26	2.713	68.90	130.24	579.35	28.29	4.95
C2350-207-8500-M*	2.350	59.69	0.207	5.26	8.500	215.90	3.584	91.03	2.852	72.45	130.24	579.35	26.49	4.64
C2350-207-9000-M*	2.350	59.69	0.207	5.26	9.000	228.60	3.772	95.81	2.992	75.99	130.24	579.35	24.91	4.36
C2350-207-9500-M*	2.350	59.69	0.207	5.26	9.500	241.30	3.960	100.58	3.131	79.54	130.24	579.35	23.51	4.11
C2350-225-3500-M	2.350	59.69	0.225	5.72	3.500	88.90	1.708	43.40	1.462	37.13	164.23	730.53	91.67	16.04
C2350-225-3750-M	2.350	59.69	0.225	5.72	3.750	95.25	1.812	46.02	1.543	39.19	164.23	730.53	84.73	14.83
C2350-225-4000-M	2.350	59.69	0.225	5.72	4.000	101.60	1.915	48.64	1.624	41.25	164.23	730.53	78.76	13.78
C2350-225-4250-M	2.350	59.69	0.225	5.72	4.250	107.95	2.018	51.26	1.705	43.31	164.23	730.53	73.58	12.88
C2350-225-4500-M	2.350	59.69	0.225	5.72	4.500	114.30	2.121	53.88	1.786	45.37	164.23	730.53	69.04	12.08
C2350-225-4750-M	2.350	59.69	0.225	5.72	4.750	120.65	2.224	56.50	1.867	47.43	164.23	730.53	65.02	11.38
C2350-225-5000-M	2.350	59.69	0.225	5.72	5.000	127.00	2.327	59.12	1.949	49.49	164.23	730.53	61.45	10.75
C2350-225-5250-M	2.350	59.69	0.225	5.72	5.250	133.35	2.431	61.74	2.030	51.55	164.23	730.53	58.25	10.19
C2350-225-5500-M	2.350	59.69	0.225	5.72	5.500	139.70	2.534	64.36	2.111	53.61	164.23	730.53	55.37	9.69
C2350-225-5750-M	2.350	59.69	0.225	5.72	5.750	146.05	2.637	66.98	2.192	55.67	164.23	730.53	52.75	9.23
C2350-225-6000-M	2.350	59.69	0.225	5.72	6.000	152.40	2.740	69.60	2.273	57.73	164.23	730.53	50.38	8.82
C2350-225-6250-M	2.350	59.69	0.225	5.72	6.250	158.75	2.843	72.22	2.354	59.79	164.23	730.53	48.21	8.44
C2350-225-6500-M	2.350	59.69	0.225	5.72	6.500	165.10	2.946	74.84	2.435	61.85	164.23	730.53	46.21	8.09
C2350-225-6750-M	2.350	59.69	0.225	5.72	6.750	171.45	3.050	77.46	2.516	63.91	164.23	730.53	44.38	7.77
C2350-225-7000-M*	2.350	59.69	0.225	5.72	7.000	177.80	3.285	83.43	2.761	70.12	164.23	730.53	44.21	7.74
C2350-225-7500-M*	2.350	59.69	0.225	5.72	7.500	190.50	3.491	88.67	2.923	74.24	164.23	730.53	40.97	7.17
C2350-225-8000-M*	2.350	59.69	0.225	5.72	8.000	203.20	3.697	93.92	3.085	78.36	164.23	730.53	38.17	6.68
C2350-225-8500-M*	2.350	59.69	0.225	5.72	8.500	215.90	3.904	99.16	3.247	82.48	164.23	730.53	35.73	6.25
C2350-225-9000-M*	2.350	59.69	0.225	5.72	9.000	228.60	4.110	104.40	3.410	86.60	164.23	730.53	33.59	5.88
C2350-225-9500-M*	2.350	59.69	0.225	5.72	9.500	241.30	4.316	109.64	3.572	90.72	164.23	730.53	31.68	5.54
C2350-250-3250-M	2.350	59.69	0.250	6.35	3.250	82.55	1.776	45.11	1.591	40.42	220.00	978.61	149.24	26.12
C2350-250-3500-M	2.350	59.69	0.250	6.35	3.500	88.90	1.892	48.05	1.688	42.89	220.00	978.61	136.80	23.94
C2350-250-3750-M	2.350	59.69	0.250	6.35	3.750	95.25	2.008	51.00	1.785	45.35	220.00	978.61	126.28	22.10
C2350-250-4000-M	2.350	59.69	0.250	6.35	4.000	101.60	2.124	53.94	1.882	47.81	220.00	978.61	117.26	20.52
C2350-250-4250-M	2.350	59.69	0.250	6.35	4.250	107.95	2.240	56.89	1.979	50.27	220.00	978.61	109.44	19.15
C2350-250-4500-M	2.350	59.69	0.250	6.35	4.500	114.30	2.356	59.84	2.076	52.74	220.00	978.61	102.60	17.96
C2350-250-4750-M	2.350	59.69	0.250	6.35	4.750	120.65	2.472	62.78	2.173	55.20	220.00	978.61	96.57	16.90
C2350-250-5000-M	2.350	59.69	0.250	6.35	5.000	127.00	2.588	65.73	2.270	57.66	220.00	978.61	91.20	15.96
C2350-250-5250-M	2.350	59.69	0.250	6.35	5.250	133.35	2.704	68.68	2.367	60.12	220.00	978.61	86.40	15.12
C2350-250-5500-M	2.350	59.69	0.250	6.35	5.500	139.70	2.820	71.62	2.464	62.59	220.00	978.61	82.08	14.36
C2350-250-5750-M	2.350	59.69	0.250	6.35	5.750	146.05	2.936	74.57	2.561	65.05	220.00	978.61	78.17	13.68
C2350-250-6000-M	2.350	59.69	0.250	6.35	6.000	152.40	3.052	77.51	2.658	67.51	220.00	978.61	74.62	13.06
C2350-250-6250-M	2.350	59.69	0.250	6.35	6.250	158.75	3.168	80.46	2.755	69.98	220.00	978.61	71.38	12.49
C2350-250-6500-M	2.350	59.69	0.250	6.35	6.500	165.10	3.284	83.41	2.852	72.44	220.00	978.61	68.40	11.97
C2350-250-6750-M	2.350	59.69	0.250	6.35	6.750	171.45	3.400	86.35	2.949	74.90	220.00	978.61	65.67	11.49
C2350-250-7000-M	2.350	59.69	0.250	6.35	7.000	177.80	3.516	89.30	3.046	77.36	220.00	978.61	63.14	11.05
C2350-250-7500-M*	2.350	59.69	0.250	6.35	7.500	190.50	3.882	98.59	3.405	86.49	220.00	978.61	60.80	10.64

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2350-192-6500-S	3.164	80.37	76.64	340.90	22.98	4.02
C2350-192-6750-S	3.278	83.26	76.64	340.90	22.07	3.86
C2350-192-7000-S	3.391	86.14	76.64	340.90	21.24	3.72
C2350-192-7500-S	3.619	91.92	76.64	340.90	19.75	3.46
C2350-192-8000-S	3.846	97.69	76.64	340.90	18.45	3.23
C2350-192-8500-S	4.073	103.46	76.64	340.90	17.31	3.03
C2350-192-9000-S	4.301	109.24	76.64	340.90	16.31	2.85
C2350-192-9500-S	4.528	115.01	76.64	340.90	15.41	2.70
C2350-207-3750-S	2.033	51.64	93.43	415.58	54.41	9.52
C2350-207-4000-S	2.154	54.72	93.43	415.58	50.62	8.86
C2350-207-4250-S	2.276	57.80	93.43	415.58	47.32	8.28
C2350-207-4500-S	2.397	60.88	93.43	415.58	44.42	7.77
C2350-207-4750-S	2.518	63.96	93.43	415.58	41.86	7.33
C2350-207-5000-S	2.640	67.05	93.43	415.58	39.58	6.93
C2350-207-5250-S	2.761	70.13	93.43	415.58	37.53	6.57
C2350-207-5500-S	2.882	73.21	93.43	415.58	35.69	6.25
C2350-207-5750-S	3.004	76.29	93.43	415.58	34.02	5.95
C2350-207-6000-S	3.125	79.37	93.43	415.58	32.49	5.69
C2350-207-6250-S	3.246	82.45	93.43	415.58	31.10	5.44
C2350-207-6500-S	3.368	85.53	93.43	415.58	29.83	5.22
C2350-207-6750-S	3.489	88.62	93.43	415.58	28.65	5.01
C2350-207-7000-S	3.610	91.70	93.43	415.58	27.56	4.82
C2350-207-7500-S	3.853	97.86	93.43	415.58	25.62	4.48
C2350-207-8000-S*	4.202	106.73	93.43	415.58	24.60	4.30
C2350-207-8500-S*	4.445	112.89	93.43	415.58	23.04	4.03
C2350-207-9000-S*	4.687	119.06	93.43	415.58	21.66	3.79
C2350-207-9500-S*	4.930	125.22	93.43	415.58	20.44	3.58
C2350-225-3500-S	2.042	51.87	116.22	516.96	79.71	13.95
C2350-225-3750-S	2.173	55.18	116.22	516.96	73.68	12.89
C2350-225-4000-S	2.303	58.50	116.22	516.96	68.49	11.99
C2350-225-4250-S	2.434	61.81	116.22	516.96	63.98	11.20
C2350-225-4500-S	2.564	65.13	116.22	516.96	60.03	10.51
C2350-225-4750-S	2.695	68.44	116.22	516.96	56.54	9.89
C2350-225-5000-S	2.825	71.76	116.22	516.96	53.44	9.35
C2350-225-5250-S	2.956	75.07	116.22	516.96	50.65	8.86
C2350-225-5500-S	3.086	78.39	116.22	516.96	48.14	8.43
C2350-225-5750-S	3.217	81.70	116.22	516.96	45.87	8.03
C2350-225-6000-S	3.347	85.01	116.22	516.96	43.81	7.67
C2350-225-6250-S	3.478	88.33	116.22	516.96	41.92	7.34
C2350-225-6500-S	3.608	91.64	116.22	516.96	40.19	7.03
C2350-225-6750-S	3.739	94.96	116.22	516.96	38.59	6.75
C2350-225-7000-S*	3.977	101.00	116.22	516.96	38.44	6.73
C2350-225-7500-S*	4.238	107.63	116.22	516.96	35.62	6.23
C2350-225-8000-S*	4.499	114.26	116.22	516.96	33.19	5.81
C2350-225-8500-S*	4.760	120.89	116.22	516.96	31.07	5.44
C2350-225-9000-S*	5.021	127.52	116.22	516.96	29.21	5.11
C2350-225-9500-S*	5.282	134.15	116.22	516.96	27.55	4.82
C2350-250-3250-S	2.072	52.64	152.83	679.83	129.77	22.71
C2350-250-3500-S	2.215	56.27	152.83	679.83	118.96	20.82
C2350-250-3750-S	2.358	59.90	152.83	679.83	109.81	19.22
C2350-250-4000-S	2.501	63.53	152.83	679.83	101.96	17.84
C2350-250-4250-S	2.644	67.16	152.83	679.83	95.17	16.65
C2350-250-4500-S	2.787	70.79	152.83	679.83	89.22	15.61
C2350-250-4750-S	2.930	74.42	152.83	679.83	83.97	14.69
C2350-250-5000-S	3.073	78.05	152.83	679.83	79.31	13.88
C2350-250-5250-S	3.216	81.68	152.83	679.83	75.13	13.15
C2350-250-5500-S	3.359	85.31	152.83	679.83	71.38	12.49
C2350-250-5750-S	3.502	88.94	152.83	679.83	67.98	11.90
C2350-250-6000-S	3.645	92.57	152.83	679.83	64.89	11.36
C2350-250-6250-S	3.788	96.20	152.83	679.83	62.07	10.86
C2350-250-6500-S	3.930	99.83	152.83	679.83	59.48	10.41
C2350-250-6750-S	4.073	103.46	152.83	679.83	57.10	9.99
C2350-250-7000-S	4.216	107.10	152.83	679.83	54.90	9.61
C2350-250-7500-S*	4.609	117.08	152.83	679.83	52.87	9.25

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2350-250-8000-M*	2.350	59.69	0.250	6.35	8.000	203.20	4.114	104.49	3.599	91.42	220.00	978.61	56.61	9.91
C2350-250-8500-M*	2.350	59.69	0.250	6.35	8.500	215.90	4.346	110.38	3.793	96.34	220.00	978.61	52.96	9.27
C2350-250-9000-M*	2.350	59.69	0.250	6.35	9.000	228.60	4.578	116.27	3.987	101.27	220.00	978.61	49.75	8.71
C2350-250-9500-M*	2.350	59.69	0.250	6.35	9.500	241.30	4.810	122.16	4.181	106.19	220.00	978.61	46.90	8.21
C2409-192-4000-M	2.409	61.19	0.192	4.88	4.000	101.60	1.606	40.78	1.242	31.55	103.14	458.81	43.08	7.54
C2409-192-4250-M	2.409	61.19	0.192	4.88	4.250	107.95	1.690	42.93	1.300	33.03	103.14	458.81	40.29	7.05
C2409-192-4500-M	2.409	61.19	0.192	4.88	4.500	114.30	1.774	45.07	1.358	34.50	103.14	458.81	37.84	6.62
C2409-192-4750-M	2.409	61.19	0.192	4.88	4.750	120.65	1.859	47.22	1.416	35.97	103.14	458.81	35.68	6.24
C2409-192-5000-M	2.409	61.19	0.192	4.88	5.000	127.00	1.943	49.36	1.474	37.45	103.14	458.81	33.75	5.91
C2409-192-5250-M	2.409	61.19	0.192	4.88	5.250	133.35	2.028	51.51	1.532	38.92	103.14	458.81	32.01	5.60
C2409-192-5500-M	2.409	61.19	0.192	4.88	5.500	139.70	2.112	53.65	1.590	40.39	103.14	458.81	30.45	5.33
C2409-192-5750-M	2.409	61.19	0.192	4.88	5.750	146.05	2.197	55.80	1.648	41.87	103.14	458.81	29.03	5.08
C2409-192-6000-M	2.409	61.19	0.192	4.88	6.000	152.40	2.281	57.94	1.706	43.34	103.14	458.81	27.74	4.85
C2409-192-6250-M	2.409	61.19	0.192	4.88	6.250	158.75	2.366	60.09	1.764	44.81	103.14	458.81	26.55	4.65
C2409-192-6500-M	2.409	61.19	0.192	4.88	6.500	165.10	2.450	62.23	1.822	46.29	103.14	458.81	25.47	4.46
C2409-192-6750-M	2.409	61.19	0.192	4.88	6.750	171.45	2.535	64.38	1.880	47.76	103.14	458.81	24.47	4.28
C2409-192-7000-M	2.409	61.19	0.192	4.88	7.000	177.80	2.619	66.52	1.938	49.23	103.14	458.81	23.54	4.12
C2409-192-7500-M	2.409	61.19	0.192	4.88	7.500	190.50	2.788	70.81	2.054	52.18	103.14	458.81	21.89	3.83
C2409-192-8000-M	2.409	61.19	0.192	4.88	8.000	203.20	2.957	75.11	2.170	55.13	103.14	458.81	20.45	3.58
C2409-192-8500-M	2.409	61.19	0.192	4.88	8.500	215.90	3.126	79.40	2.286	58.07	103.14	458.81	19.19	3.36
C2409-192-9000-M	2.409	61.19	0.192	4.88	9.000	228.60	3.295	83.69	2.402	61.02	103.14	458.81	18.08	3.16
C2409-192-9500-M	2.409	61.19	0.192	4.88	9.500	241.30	3.464	87.98	2.518	63.97	103.14	458.81	17.09	2.99
C2409-207-3750-M	2.409	61.19	0.207	5.26	3.750	95.25	1.637	41.58	1.327	33.71	127.20	565.80	60.20	10.53
C2409-207-4000-M	2.409	61.19	0.207	5.26	4.000	101.60	1.729	43.91	1.394	35.41	127.20	565.80	56.00	9.80
C2409-207-4250-M	2.409	61.19	0.207	5.26	4.250	107.95	1.820	46.23	1.461	37.11	127.20	565.80	52.35	9.16
C2409-207-4500-M	2.409	61.19	0.207	5.26	4.500	114.30	1.912	48.56	1.528	38.81	127.20	565.80	49.15	8.60
C2409-207-4750-M	2.409	61.19	0.207	5.26	4.750	120.65	2.004	50.89	1.595	40.51	127.20	565.80	46.31	8.10
C2409-207-5000-M	2.409	61.19	0.207	5.26	5.000	127.00	2.095	53.22	1.662	42.21	127.20	565.80	43.79	7.66
C2409-207-5250-M	2.409	61.19	0.207	5.26	5.250	133.35	2.187	55.55	1.729	43.91	127.20	565.80	41.52	7.27
C2409-207-5500-M	2.409	61.19	0.207	5.26	5.500	139.70	2.278	57.87	1.795	45.60	127.20	565.80	39.48	6.91
C2409-207-5750-M	2.409	61.19	0.207	5.26	5.750	146.05	2.370	60.20	1.862	47.30	127.20	565.80	37.63	6.59
C2409-207-6000-M	2.409	61.19	0.207	5.26	6.000	152.40	2.462	62.53	1.929	49.00	127.20	565.80	35.95	6.29
C2409-207-6250-M	2.409	61.19	0.207	5.26	6.250	158.75	2.553	64.86	1.996	50.70	127.20	565.80	34.41	6.02
C2409-207-6500-M	2.409	61.19	0.207	5.26	6.500	165.10	2.645	67.18	2.063	52.40	127.20	565.80	33.00	5.77
C2409-207-6750-M	2.409	61.19	0.207	5.26	6.750	171.45	2.737	69.51	2.130	54.10	127.20	565.80	31.69	5.55
C2409-207-7000-M	2.409	61.19	0.207	5.26	7.000	177.80	2.828	71.84	2.197	55.80	127.20	565.80	30.49	5.34
C2409-207-7500-M	2.409	61.19	0.207	5.26	7.500	190.50	3.012	76.50	2.331	59.20	127.20	565.80	28.34	4.96
C2409-207-8000-M	2.409	61.19	0.207	5.26	8.000	203.20	3.195	81.15	2.464	62.59	127.20	565.80	26.47	4.63
C2409-207-8500-M	2.409	61.19	0.207	5.26	8.500	215.90	3.378	85.81	2.598	65.99	127.20	565.80	24.83	4.35
C2409-207-9000-M*	2.409	61.19	0.207	5.26	9.000	228.60	3.693	93.79	2.894	73.50	127.20	565.80	23.97	4.19
C2409-207-9500-M*	2.409	61.19	0.207	5.26	9.500	241.30	3.876	98.45	3.028	76.90	127.20	565.80	22.62	3.96
C2409-225-3500-M	2.409	61.19	0.225	5.72	3.500	88.90	1.676	42.58	1.422	36.13	160.41	713.54	87.96	15.39
C2409-225-3750-M	2.409	61.19	0.225	5.72	3.750	95.25	1.777	45.13	1.500	38.10	160.41	713.54	81.30	14.23
C2409-225-4000-M	2.409	61.19	0.225	5.72	4.000	101.60	1.877	47.69	1.578	40.08	160.41	713.54	75.57	13.23
C2409-225-4250-M	2.409	61.19	0.225	5.72	4.250	107.95	1.978	50.24	1.656	42.06	160.41	713.54	70.60	12.36
C2409-225-4500-M	2.409	61.19	0.225	5.72	4.500	114.30	2.079	52.79	1.734	44.04	160.41	713.54	66.24	11.59
C2409-225-4750-M	2.409	61.19	0.225	5.72	4.750	120.65	2.179	55.35	1.812	46.01	160.41	713.54	62.39	10.92
C2409-225-5000-M	2.409	61.19	0.225	5.72	5.000	127.00	2.280	57.90	1.889	47.99	160.41	713.54	58.97	10.32
C2409-225-5250-M	2.409	61.19	0.225	5.72	5.250	133.35	2.380	60.45	1.967	49.97	160.41	713.54	55.89	9.78
C2409-225-5500-M	2.409	61.19	0.225	5.72	5.500	139.70	2.481	63.01	2.045	51.95	160.41	713.54	53.13	9.30
C2409-225-5750-M	2.409	61.19	0.225	5.72	5.750	146.05	2.581	65.56	2.123	53.93	160.41	713.54	50.62	8.86
C2409-225-6000-M	2.409	61.19	0.225	5.72	6.000	152.40	2.682	68.11	2.201	55.90	160.41	713.54	48.34	8.46
C2409-225-6250-M	2.409	61.19	0.225	5.72	6.250	158.75	2.782	70.67	2.279	57.88	160.41	713.54	46.26	8.09
C2409-225-6500-M	2.409	61.19	0.225	5.72	6.500	165.10	2.883	73.22	2.357	59.86	160.41	713.54	44.35	7.76
C2409-225-6750-M	2.409	61.19	0.225	5.72	6.750	171.45	2.983	75.77	2.434	61.84	160.41	713.54	42.59	7.45
C2409-225-7000-M	2.409	61.19	0.225	5.72	7.000	177.80	3.084	78.33	2.512	63.81	160.41	713.54	40.96	7.17
C2409-225-7500-M*	2.409	61.19	0.225	5.72	7.500	190.50	3.419	86.85	2.834	71.99	160.41	713.54	39.31	6.88
C2409-225-8000-M*	2.409	61.19	0.225	5.72	8.000	203.20	3.620	91.96	2.990	75.94	160.41	713.54	36.63	6.41
C2409-225-8500-M*	2.409	61.19	0.225	5.72	8.500	215.90	3.821	97.07	3.146	79.90	160.41	713.54	34.29	6.00
C2409-225-9000-M*	2.409	61.19	0.225	5.72	9.000	228.60	4.023	102.17	3.301	83.85	160.41	713.54	32.23	5.64
C2409-225-9500-M*	2.409	61.19	0.225	5.72	9.500	241.30	4.224	107.28	3.457	87.81	160.41	713.54	30.40	5.32
C2409-250-3500-M	2.409	61.19	0.250	6.35	3.500	88.90	1.857	47.16	1.645	41.78	214.93	956.05	130.78	22.89
C2409-250-3750-M	2.409	61.19	0.250	6.35	3.750	95.25	1.970	50.03	1.738	44.15	214.93	956.05	120.72	21.13
C2409-250-4000-M	2.409	61.19	0.250	6.35	4.000	101.60	2.083	52.90	1.832	46.52	214.93	956.05	112.10	19.62

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2350-250-8000-S*	4.895	124.34	152.83	679.83	49.22	8.61
C2350-250-8500-S*	5.181	131.60	152.83	679.83	46.05	8.06
C2350-250-9000-S*	5.467	138.86	152.83	679.83	43.26	7.57
C2350-250-9500-S*	5.753	146.12	152.83	679.83	40.79	7.14
C2409-192-4000-S	2.002	50.85	74.84	332.89	37.46	6.56
C2409-192-4250-S	2.114	53.70	74.84	332.89	35.04	6.13
C2409-192-4500-S	2.226	56.54	74.84	332.89	32.91	5.76
C2409-192-4750-S	2.338	59.38	74.84	332.89	31.02	5.43
C2409-192-5000-S	2.450	62.22	74.84	332.89	29.34	5.14
C2409-192-5250-S	2.561	65.06	74.84	332.89	27.84	4.87
C2409-192-5500-S	2.673	67.90	74.84	332.89	26.48	4.63
C2409-192-5750-S	2.785	70.75	74.84	332.89	25.24	4.42
C2409-192-6000-S	2.897	73.59	74.84	332.89	24.12	4.22
C2409-192-6250-S	3.009	76.43	74.84	332.89	23.09	4.04
C2409-192-6500-S	3.121	79.27	74.84	332.89	22.15	3.88
C2409-192-6750-S	3.233	82.11	74.84	332.89	21.28	3.72
C2409-192-7000-S	3.345	84.95	74.84	332.89	20.47	3.58
C2409-192-7500-S	3.568	90.64	74.84	332.89	19.04	3.33
C2409-192-8000-S	3.792	96.32	74.84	332.89	17.79	3.11
C2409-192-8500-S	4.016	102.00	74.84	332.89	16.69	2.92
C2409-192-9000-S	4.240	107.69	74.84	332.89	15.72	2.75
C2409-192-9500-S	4.463	113.37	74.84	332.89	14.86	2.60
C2409-207-3750-S	2.007	50.98	91.24	405.85	52.34	9.16
C2409-207-4000-S	2.126	54.01	91.24	405.85	48.70	8.52
C2409-207-4250-S	2.246	57.04	91.24	405.85	45.52	7.97
C2409-207-4500-S	2.365	60.07	91.24	405.85	42.74	7.48
C2409-207-4750-S	2.484	63.10	91.24	405.85	40.27	7.05
C2409-207-5000-S	2.604	66.14	91.24	405.85	38.08	6.66
C2409-207-5250-S	2.723	69.17	91.24	405.85	36.11	6.32
C2409-207-5500-S	2.843	72.20	91.24	405.85	34.33	6.01
C2409-207-5750-S	2.962	75.23	91.24	405.85	32.73	5.73
C2409-207-6000-S	3.081	78.26	91.24	405.85	31.26	5.47
C2409-207-6250-S	3.201	81.30	91.24	405.85	29.92	5.24
C2409-207-6500-S	3.320	84.33	91.24	405.85	28.69	5.02
C2409-207-6750-S	3.439	87.36	91.24	405.85	27.56	4.82
C2409-207-7000-S	3.559	90.39	91.24	405.85	26.51	4.64
C2409-207-7500-S	3.798	96.46	91.24	405.85	24.64	4.31
C2409-207-8000-S	4.036	102.52	91.24	405.85	23.02	4.03
C2409-207-8500-S	4.275	108.59	91.24	405.85	21.60	3.78
C2409-207-9000-S*	4.622	117.40	91.24	405.85	20.84	3.65
C2409-207-9500-S*	4.861	123.46	91.24	405.85	19.67	3.44
C2409-225-3500-S	2.016	51.21	113.51	504.94	76.49	13.39
C2409-225-3750-S	2.144	54.47	113.51	504.94	70.70	12.37
C2409-225-4000-S	2.273	57.73	113.51	504.94	65.72	11.50
C2409-225-4250-S	2.401	60.99	113.51	504.94	61.39	10.74
C2409-225-4500-S	2.529	64.25	113.51	504.94	57.60	10.08
C2409-225-4750-S	2.658	67.51	113.51	504.94	54.26	9.49
C2409-225-5000-S	2.786	70.77	113.51	504.94	51.27	8.97
C2409-225-5250-S	2.914	74.03	113.51	504.94	48.60	8.51
C2409-225-5500-S	3.043	77.29	113.51	504.94	46.20	8.08
C2409-225-5750-S	3.171	80.55	113.51	504.94	44.02	7.70
C2409-225-6000-S	3.300	83.81	113.51	504.94	42.04	7.36
C2409-225-6250-S	3.428	87.07	113.51	504.94	40.22	7.04
C2409-225-6500-S	3.556	90.33	113.51	504.94	38.56	6.75
C2409-225-6750-S	3.685	93.59	113.51	504.94	37.03	6.48
C2409-225-7000-S	3.813	96.85	113.51	504.94	35.62	6.23
C2409-225-7500-S*	4.179	106.15	113.51	504.94	34.18	5.98
C2409-225-8000-S*	4.436	112.67	113.51	504.94	31.85	5.57
C2409-225-8500-S*	4.693	119.19	113.51	504.94	29.81	5.22
C2409-225-9000-S*	4.949	125.71	113.51	504.94	28.02	4.90
C2409-225-9500-S*	5.206	132.23	113.51	504.94	26.44	4.63
C2409-250-3500-S	2.187	55.55	149.31	664.16	113.72	19.90
C2409-250-3750-S	2.328	59.12	149.31	664.16	104.98	18.37
C2409-250-4000-S	2.468	62.69	149.31	664.16	97.48	17.06

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2409-250-4250-M	2.409	61.19	0.250	6.35	4.250	107.95	2.196	55.77	1.925	48.89	214.93	956.05	104.63	18.31
C2409-250-4500-M	2.409	61.19	0.250	6.35	4.500	114.30	2.309	58.64	2.018	51.26	214.93	956.05	98.09	17.17
C2409-250-4750-M	2.409	61.19	0.250	6.35	4.750	120.65	2.422	61.52	2.112	53.63	214.93	956.05	92.32	16.16
C2409-250-5000-M	2.409	61.19	0.250	6.35	5.000	127.00	2.535	64.39	2.205	56.00	214.93	956.05	87.19	15.26
C2409-250-5250-M	2.409	61.19	0.250	6.35	5.250	133.35	2.648	67.26	2.298	58.37	214.93	956.05	82.60	14.46
C2409-250-5500-M	2.409	61.19	0.250	6.35	5.500	139.70	2.761	70.13	2.392	60.75	214.93	956.05	78.47	13.73
C2409-250-5750-M	2.409	61.19	0.250	6.35	5.750	146.05	2.874	73.00	2.485	63.12	214.93	956.05	74.73	13.08
C2409-250-6000-M	2.409	61.19	0.250	6.35	6.000	152.40	2.987	75.87	2.578	65.49	214.93	956.05	71.34	12.48
C2409-250-6250-M	2.409	61.19	0.250	6.35	6.250	158.75	3.100	78.74	2.672	67.86	214.93	956.05	68.23	11.94
C2409-250-6500-M	2.409	61.19	0.250	6.35	6.500	165.10	3.213	81.62	2.765	70.23	214.93	956.05	65.39	11.44
C2409-250-6750-M	2.409	61.19	0.250	6.35	6.750	171.45	3.326	84.49	2.858	72.60	214.93	956.05	62.78	10.99
C2409-250-7000-M*	2.409	61.19	0.250	6.35	7.000	177.80	3.576	90.84	3.121	79.27	214.93	956.05	62.78	10.99
C2409-250-7500-M*	2.409	61.19	0.250	6.35	7.500	190.50	3.802	96.58	3.307	84.01	214.93	956.05	58.13	10.17
C2409-250-8000-M*	2.409	61.19	0.250	6.35	8.000	203.20	4.028	102.32	3.494	88.75	214.93	956.05	54.12	9.47
C2409-250-8500-M*	2.409	61.19	0.250	6.35	8.500	215.90	4.255	108.07	3.681	93.49	214.93	956.05	50.63	8.86
C2409-250-9000-M*	2.409	61.19	0.250	6.35	9.000	228.60	4.481	113.81	3.867	98.23	214.93	956.05	47.56	8.32
C2409-250-9500-M*	2.409	61.19	0.250	6.35	9.500	241.30	4.707	119.55	4.054	102.97	214.93	956.05	44.84	7.85
C2468-192-4250-M	2.468	62.69	0.192	4.88	4.250	107.95	1.659	42.14	1.262	32.05	100.78	448.27	38.90	6.81
C2468-192-4500-M	2.468	62.69	0.192	4.88	4.500	114.30	1.742	44.24	1.318	33.46	100.78	448.27	36.53	6.39
C2468-192-4750-M	2.468	62.69	0.192	4.88	4.750	120.65	1.824	46.33	1.373	34.88	100.78	448.27	34.44	6.03
C2468-192-5000-M	2.468	62.69	0.192	4.88	5.000	127.00	1.906	48.42	1.429	36.29	100.78	448.27	32.58	5.70
C2468-192-5250-M	2.468	62.69	0.192	4.88	5.250	133.35	1.989	50.52	1.484	37.70	100.78	448.27	30.90	5.41
C2468-192-5500-M	2.468	62.69	0.192	4.88	5.500	139.70	2.071	52.61	1.540	39.11	100.78	448.27	29.39	5.14
C2468-192-5750-M	2.468	62.69	0.192	4.88	5.750	146.05	2.154	54.71	1.595	40.52	100.78	448.27	28.02	4.90
C2468-192-6000-M	2.468	62.69	0.192	4.88	6.000	152.40	2.236	56.80	1.651	41.93	100.78	448.27	26.78	4.69
C2468-192-6250-M	2.468	62.69	0.192	4.88	6.250	158.75	2.319	58.90	1.706	43.34	100.78	448.27	25.63	4.49
C2468-192-6500-M	2.468	62.69	0.192	4.88	6.500	165.10	2.401	60.99	1.762	44.75	100.78	448.27	24.59	4.30
C2468-192-6750-M	2.468	62.69	0.192	4.88	6.750	171.45	2.484	63.09	1.817	46.16	100.78	448.27	23.62	4.13
C2468-192-7000-M	2.468	62.69	0.192	4.88	7.000	177.80	2.566	65.18	1.873	47.57	100.78	448.27	22.73	3.98
C2468-192-7500-M	2.468	62.69	0.192	4.88	7.500	190.50	2.731	69.37	1.984	50.39	100.78	448.27	21.13	3.70
C2468-192-8000-M	2.468	62.69	0.192	4.88	8.000	203.20	2.896	73.56	2.095	53.21	100.78	448.27	19.74	3.46
C2468-192-8500-M	2.468	62.69	0.192	4.88	8.500	215.90	3.061	77.75	2.206	56.03	100.78	448.27	18.53	3.24
C2468-192-9000-M	2.468	62.69	0.192	4.88	9.000	228.60	3.226	81.93	2.317	58.86	100.78	448.27	17.45	3.05
C2468-192-9500-M	2.468	62.69	0.192	4.88	9.500	241.30	3.391	86.12	2.428	61.68	100.78	448.27	16.50	2.89
C2468-207-4000-M	2.468	62.69	0.207	5.26	4.000	101.60	1.697	43.09	1.355	34.41	124.29	552.85	53.96	9.44
C2468-207-4250-M	2.468	62.69	0.207	5.26	4.250	107.95	1.786	45.36	1.419	36.03	124.29	552.85	50.44	8.83
C2468-207-4500-M	2.468	62.69	0.207	5.26	4.500	114.30	1.875	47.63	1.483	37.66	124.29	552.85	47.35	8.29
C2468-207-4750-M	2.468	62.69	0.207	5.26	4.750	120.65	1.965	49.90	1.547	39.29	124.29	552.85	44.62	7.81
C2468-207-5000-M	2.468	62.69	0.207	5.26	5.000	127.00	2.054	52.18	1.611	40.92	124.29	552.85	42.19	7.38
C2468-207-5250-M	2.468	62.69	0.207	5.26	5.250	133.35	2.144	54.45	1.675	42.55	124.29	552.85	40.01	7.00
C2468-207-5500-M	2.468	62.69	0.207	5.26	5.500	139.70	2.233	56.72	1.739	44.18	124.29	552.85	38.04	6.66
C2468-207-5750-M	2.468	62.69	0.207	5.26	5.750	146.05	2.322	58.99	1.803	45.81	124.29	552.85	36.26	6.35
C2468-207-6000-M	2.468	62.69	0.207	5.26	6.000	152.40	2.412	61.26	1.868	47.44	124.29	552.85	34.64	6.06
C2468-207-6250-M	2.468	62.69	0.207	5.26	6.250	158.75	2.501	63.53	1.932	49.06	124.29	552.85	33.15	5.80
C2468-207-6500-M	2.468	62.69	0.207	5.26	6.500	165.10	2.591	65.80	1.996	50.69	124.29	552.85	31.79	5.56
C2468-207-6750-M	2.468	62.69	0.207	5.26	6.750	171.45	2.680	68.07	2.060	52.32	124.29	552.85	30.54	5.34
C2468-207-7000-M	2.468	62.69	0.207	5.26	7.000	177.80	2.769	70.34	2.124	53.95	124.29	552.85	29.38	5.14
C2468-207-7500-M	2.468	62.69	0.207	5.26	7.500	190.50	2.948	74.89	2.252	57.21	124.29	552.85	27.31	4.78
C2468-207-8000-M	2.468	62.69	0.207	5.26	8.000	203.20	3.127	79.43	2.381	60.47	124.29	552.85	25.51	4.46
C2468-207-8500-M	2.468	62.69	0.207	5.26	8.500	215.90	3.306	83.97	2.509	63.72	124.29	552.85	23.93	4.19
C2468-207-9000-M	2.468	62.69	0.207	5.26	9.000	228.60	3.485	88.51	2.637	66.98	124.29	552.85	22.54	3.94
C2468-207-9500-M*	2.468	62.69	0.207	5.26	9.500	241.30	3.797	96.43	2.930	74.41	124.29	552.85	21.79	3.81
C2468-225-3750-M	2.468	62.69	0.225	5.72	3.750	95.25	1.744	44.30	1.459	37.07	156.76	697.31	78.15	13.68
C2468-225-4000-M	2.468	62.69	0.225	5.72	4.000	101.60	1.842	46.79	1.534	38.97	156.76	697.31	72.64	12.71
C2468-225-4250-M	2.468	62.69	0.225	5.72	4.250	107.95	1.940	49.28	1.609	40.87	156.76	697.31	67.86	11.88
C2468-225-4500-M	2.468	62.69	0.225	5.72	4.500	114.30	2.038	51.77	1.684	42.77	156.76	697.31	63.67	11.14
C2468-225-4750-M	2.468	62.69	0.225	5.72	4.750	120.65	2.136	54.26	1.759	44.67	156.76	697.31	59.97	10.50
C2468-225-5000-M	2.468	62.69	0.225	5.72	5.000	127.00	2.234	56.75	1.833	46.57	156.76	697.31	56.68	9.92
C2468-225-5250-M	2.468	62.69	0.225	5.72	5.250	133.35	2.332	59.24	1.908	48.47	156.76	697.31	53.73	9.40
C2468-225-5500-M	2.468	62.69	0.225	5.72	5.500	139.70	2.430	61.73	1.983	50.37	156.76	697.31	51.07	8.94
C2468-225-5750-M	2.468	62.69	0.225	5.72	5.750	146.05	2.528	64.22	2.058	52.27	156.76	697.31	48.66	8.51
C2468-225-6000-M	2.468	62.69	0.225	5.72	6.000	152.40	2.626	66.71	2.132	54.16	156.76	697.31	46.47	8.13
C2468-225-6250-M	2.468	62.69	0.225	5.72	6.250	158.75	2.724	69.20	2.207	56.06	156.76	697.31	44.46	7.78
C2468-225-6500-M	2.468	62.69	0.225	5.72	6.500	165.10	2.822	71.69	2.282	57.96	156.76	697.31	42.63	7.46

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2409-250-4250-S	2.609	66.27	149.31	664.16	90.98	15.92
C2409-250-4500-S	2.749	69.84	149.31	664.16	85.29	14.93
C2409-250-4750-S	2.890	73.41	149.31	664.16	80.28	14.05
C2409-250-5000-S	3.031	76.98	149.31	664.16	75.82	13.27
C2409-250-5250-S	3.171	80.55	149.31	664.16	71.83	12.57
C2409-250-5500-S	3.312	84.12	149.31	664.16	68.23	11.94
C2409-250-5750-S	3.452	87.69	149.31	664.16	64.99	11.37
C2409-250-6000-S	3.593	91.26	149.31	664.16	62.03	10.86
C2409-250-6250-S	3.734	94.83	149.31	664.16	59.33	10.38
C2409-250-6500-S	3.874	98.40	149.31	664.16	56.86	9.95
C2409-250-6750-S	4.015	101.98	149.31	664.16	54.59	9.55
C2409-250-7000-S*	4.265	108.33	149.31	664.16	54.59	9.55
C2409-250-7500-S*	4.546	115.47	149.31	664.16	50.54	8.85
C2409-250-8000-S*	4.827	122.61	149.31	664.16	47.06	8.24
C2409-250-8500-S*	5.108	129.75	149.31	664.16	44.02	7.70
C2409-250-9000-S*	5.390	136.89	149.31	664.16	41.35	7.24
C2409-250-9500-S*	5.671	144.04	149.31	664.16	38.99	6.82
C2468-192-4250-S	2.088	53.04	73.12	325.24	33.82	5.92
C2468-192-4500-S	2.198	55.84	73.12	325.24	31.77	5.56
C2468-192-4750-S	2.309	58.64	73.12	325.24	29.95	5.24
C2468-192-5000-S	2.419	61.44	73.12	325.24	28.33	4.96
C2468-192-5250-S	2.529	64.24	73.12	325.24	26.87	4.70
C2468-192-5500-S	2.639	67.04	73.12	325.24	25.56	4.47
C2468-192-5750-S	2.749	69.84	73.12	325.24	24.37	4.26
C2468-192-6000-S	2.860	72.63	73.12	325.24	23.28	4.07
C2468-192-6250-S	2.970	75.43	73.12	325.24	22.29	3.90
C2468-192-6500-S	3.080	78.23	73.12	325.24	21.38	3.74
C2468-192-6750-S	3.190	81.03	73.12	325.24	20.54	3.59
C2468-192-7000-S	3.300	83.83	73.12	325.24	19.76	3.46
C2468-192-7500-S	3.521	89.43	73.12	325.24	18.38	3.22
C2468-192-8000-S	3.741	95.03	73.12	325.24	17.17	3.00
C2468-192-8500-S	3.962	100.63	73.12	325.24	16.11	2.82
C2468-192-9000-S	4.182	106.22	73.12	325.24	15.18	2.66
C2468-192-9500-S	4.402	111.82	73.12	325.24	14.34	2.51
C2468-207-4000-S	2.100	53.34	89.15	396.57	46.92	8.21
C2468-207-4250-S	2.217	56.32	89.15	396.57	43.86	7.68
C2468-207-4500-S	2.335	59.31	89.15	396.57	41.18	7.21
C2468-207-4750-S	2.452	62.29	89.15	396.57	38.80	6.79
C2468-207-5000-S	2.570	65.28	89.15	396.57	36.69	6.42
C2468-207-5250-S	2.687	68.26	89.15	396.57	34.79	6.09
C2468-207-5500-S	2.805	71.25	89.15	396.57	33.08	5.79
C2468-207-5750-S	2.923	74.23	89.15	396.57	31.53	5.52
C2468-207-6000-S	3.040	77.22	89.15	396.57	30.12	5.27
C2468-207-6250-S	3.158	80.20	89.15	396.57	28.83	5.05
C2468-207-6500-S	3.275	83.19	89.15	396.57	27.65	4.84
C2468-207-6750-S	3.393	86.17	89.15	396.57	26.55	4.65
C2468-207-7000-S	3.510	89.16	89.15	396.57	25.55	4.47
C2468-207-7500-S	3.745	95.13	89.15	396.57	23.74	4.16
C2468-207-8000-S	3.980	101.10	89.15	396.57	22.18	3.88
C2468-207-8500-S	4.215	107.07	89.15	396.57	20.81	3.64
C2468-207-9000-S	4.450	113.04	89.15	396.57	19.60	3.43
C2468-207-9500-S*	4.795	121.80	89.15	396.57	18.95	3.32
C2468-225-3750-S	2.118	53.78	110.93	493.45	67.95	11.89
C2468-225-4000-S	2.244	56.99	110.93	493.45	63.17	11.05
C2468-225-4250-S	2.370	60.20	110.93	493.45	59.01	10.33
C2468-225-4500-S	2.496	63.41	110.93	493.45	55.37	9.69
C2468-225-4750-S	2.623	66.62	110.93	493.45	52.15	9.13
C2468-225-5000-S	2.749	69.83	110.93	493.45	49.28	8.62
C2468-225-5250-S	2.875	73.04	110.93	493.45	46.72	8.18
C2468-225-5500-S	3.002	76.25	110.93	493.45	44.41	7.77
C2468-225-5750-S	3.128	79.45	110.93	493.45	42.31	7.40
C2468-225-6000-S	3.254	82.66	110.93	493.45	40.40	7.07
C2468-225-6250-S	3.381	85.87	110.93	493.45	38.66	6.77
C2468-225-6500-S	3.507	89.08	110.93	493.45	37.07	6.49

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2468-225-6750-M	2.468	62.69	0.225	5.72	6.750	171.45	2.920	74.18	2.357	59.86	156.76	697.31	40.93	7.16
C2468-225-7000-M	2.468	62.69	0.225	5.72	7.000	177.80	3.018	76.67	2.432	61.76	156.76	697.31	39.37	6.89
C2468-225-7500-M*	2.468	62.69	0.225	5.72	7.500	190.50	3.351	85.12	2.750	69.85	156.76	697.31	37.79	6.61
C2468-225-8000-M*	2.468	62.69	0.225	5.72	8.000	203.20	3.547	90.10	2.900	73.65	156.76	697.31	35.21	6.16
C2468-225-8500-M*	2.468	62.69	0.225	5.72	8.500	215.90	3.743	95.08	3.049	77.45	156.76	697.31	32.96	5.77
C2468-225-9000-M*	2.468	62.69	0.225	5.72	9.000	228.60	3.939	100.06	3.199	81.25	156.76	697.31	30.98	5.42
C2468-225-9500-M*	2.468	62.69	0.225	5.72	9.500	241.30	4.135	105.04	3.348	85.04	156.76	697.31	29.22	5.11
C2468-250-3500-M	2.468	62.69	0.250	6.35	3.500	88.90	1.823	46.30	1.603	40.73	210.08	934.48	125.27	21.92
C2468-250-3750-M	2.468	62.69	0.250	6.35	3.750	95.25	1.933	49.10	1.693	43.01	210.08	934.48	115.63	20.24
C2468-250-4000-M	2.468	62.69	0.250	6.35	4.000	101.60	2.043	51.90	1.783	45.29	210.08	934.48	107.37	18.79
C2468-250-4250-M	2.468	62.69	0.250	6.35	4.250	107.95	2.154	54.70	1.873	47.57	210.08	934.48	100.22	17.54
C2468-250-4500-M	2.468	62.69	0.250	6.35	4.500	114.30	2.264	57.50	1.963	49.86	210.08	934.48	93.95	16.44
C2468-250-4750-M	2.468	62.69	0.250	6.35	4.750	120.65	2.374	60.30	2.053	52.14	210.08	934.48	88.43	15.47
C2468-250-5000-M	2.468	62.69	0.250	6.35	5.000	127.00	2.484	63.11	2.143	54.42	210.08	934.48	83.51	14.61
C2468-250-5250-M	2.468	62.69	0.250	6.35	5.250	133.35	2.595	65.91	2.232	56.70	210.08	934.48	79.12	13.85
C2468-250-5500-M	2.468	62.69	0.250	6.35	5.500	139.70	2.705	68.71	2.322	58.99	210.08	934.48	75.16	13.15
C2468-250-5750-M	2.468	62.69	0.250	6.35	5.750	146.05	2.815	71.51	2.412	61.27	210.08	934.48	71.58	12.53
C2468-250-6000-M	2.468	62.69	0.250	6.35	6.000	152.40	2.925	74.31	2.502	63.55	210.08	934.48	68.33	11.96
C2468-250-6250-M	2.468	62.69	0.250	6.35	6.250	158.75	3.036	77.11	2.592	65.83	210.08	934.48	65.36	11.44
C2468-250-6500-M	2.468	62.69	0.250	6.35	6.500	165.10	3.146	79.91	2.682	68.12	210.08	934.48	62.63	10.96
C2468-250-6750-M	2.468	62.69	0.250	6.35	6.750	171.45	3.256	82.71	2.772	70.40	210.08	934.48	60.13	10.52
C2468-250-7000-M*	2.468	62.69	0.250	6.35	7.000	177.80	3.506	89.06	3.034	77.07	210.08	934.48	60.13	10.52
C2468-250-7500-M*	2.468	62.69	0.250	6.35	7.500	190.50	3.727	94.66	3.214	81.63	210.08	934.48	55.68	9.74
C2468-250-8000-M*	2.468	62.69	0.250	6.35	8.000	203.20	3.947	100.26	3.394	86.20	210.08	934.48	51.84	9.07
C2468-250-8500-M*	2.468	62.69	0.250	6.35	8.500	215.90	4.168	105.86	3.573	90.76	210.08	934.48	48.49	8.49
C2468-250-9000-M*	2.468	62.69	0.250	6.35	9.000	228.60	4.388	111.46	3.753	95.33	210.08	934.48	45.55	7.97
C2468-250-9500-M*	2.468	62.69	0.250	6.35	9.500	241.30	4.609	117.06	3.933	99.89	210.08	934.48	42.95	7.52
C2526-207-4000-M	2.526	64.16	0.207	5.26	4.000	101.60	1.667	42.33	1.318	33.47	121.55	540.69	52.10	9.12
C2526-207-4250-M	2.526	64.16	0.207	5.26	4.250	107.95	1.754	44.55	1.379	35.03	121.55	540.69	48.70	8.52
C2526-207-4500-M	2.526	64.16	0.207	5.26	4.500	114.30	1.841	46.77	1.441	36.60	121.55	540.69	45.72	8.00
C2526-207-4750-M	2.526	64.16	0.207	5.26	4.750	120.65	1.929	48.99	1.502	38.16	121.55	540.69	43.08	7.54
C2526-207-5000-M	2.526	64.16	0.207	5.26	5.000	127.00	2.016	51.21	1.564	39.72	121.55	540.69	40.74	7.13
C2526-207-5250-M	2.526	64.16	0.207	5.26	5.250	133.35	2.103	53.43	1.625	41.29	121.55	540.69	38.63	6.76
C2526-207-5500-M	2.526	64.16	0.207	5.26	5.500	139.70	2.191	55.64	1.687	42.85	121.55	540.69	36.73	6.43
C2526-207-5750-M	2.526	64.16	0.207	5.26	5.750	146.05	2.278	57.86	1.749	44.41	121.55	540.69	35.01	6.13
C2526-207-6000-M	2.526	64.16	0.207	5.26	6.000	152.40	2.365	60.08	1.810	45.98	121.55	540.69	33.44	5.85
C2526-207-6250-M	2.526	64.16	0.207	5.26	6.250	158.75	2.453	62.30	1.872	47.54	121.55	540.69	32.01	5.60
C2526-207-6500-M	2.526	64.16	0.207	5.26	6.500	165.10	2.540	64.52	1.933	49.10	121.55	540.69	30.70	5.37
C2526-207-6750-M	2.526	64.16	0.207	5.26	6.750	171.45	2.627	66.73	1.995	50.67	121.55	540.69	29.48	5.16
C2526-207-7000-M	2.526	64.16	0.207	5.26	7.000	177.80	2.715	68.95	2.056	52.23	121.55	540.69	28.37	4.96
C2526-207-7500-M	2.526	64.16	0.207	5.26	7.500	190.50	2.889	73.39	2.179	55.36	121.55	540.69	26.36	4.61
C2526-207-8000-M	2.526	64.16	0.207	5.26	8.000	203.20	3.064	77.83	2.303	58.49	121.55	540.69	24.63	4.31
C2526-207-8500-M	2.526	64.16	0.207	5.26	8.500	215.90	3.239	82.26	2.426	61.61	121.55	540.69	23.10	4.04
C2526-207-9000-M	2.526	64.16	0.207	5.26	9.000	228.60	3.413	86.70	2.549	64.74	121.55	540.69	21.76	3.81
C2526-207-9500-M	2.526	64.16	0.207	5.26	9.500	241.30	3.588	91.14	2.672	67.87	121.55	540.69	20.56	3.60
C2526-225-3750-M	2.526	64.16	0.225	5.72	3.750	95.25	1.713	43.52	1.422	36.11	153.33	682.05	75.28	13.17
C2526-225-4000-M	2.526	64.16	0.225	5.72	4.000	101.60	1.809	45.95	1.493	37.93	153.33	682.05	69.98	12.25
C2526-225-4250-M	2.526	64.16	0.225	5.72	4.250	107.95	1.905	48.38	1.565	39.76	153.33	682.05	65.38	11.44
C2526-225-4500-M	2.526	64.16	0.225	5.72	4.500	114.30	2.000	50.81	1.637	41.58	153.33	682.05	61.34	10.73
C2526-225-4750-M	2.526	64.16	0.225	5.72	4.750	120.65	2.096	53.24	1.709	43.41	153.33	682.05	57.77	10.11
C2526-225-5000-M	2.526	64.16	0.225	5.72	5.000	127.00	2.192	55.67	1.781	45.24	153.33	682.05	54.60	9.56
C2526-225-5250-M	2.526	64.16	0.225	5.72	5.250	133.35	2.287	58.10	1.853	47.06	153.33	682.05	51.76	9.06
C2526-225-5500-M	2.526	64.16	0.225	5.72	5.500	139.70	2.383	60.53	1.925	48.89	153.33	682.05	49.19	8.61
C2526-225-5750-M	2.526	64.16	0.225	5.72	5.750	146.05	2.479	62.96	1.997	50.72	153.33	682.05	46.87	8.20
C2526-225-6000-M	2.526	64.16	0.225	5.72	6.000	152.40	2.575	65.39	2.069	52.54	153.33	682.05	44.76	7.83
C2526-225-6250-M	2.526	64.16	0.225	5.72	6.250	158.75	2.670	67.82	2.140	54.37	153.33	682.05	42.83	7.50
C2526-225-6500-M	2.526	64.16	0.225	5.72	6.500	165.10	2.766	70.26	2.212	56.19	153.33	682.05	41.06	7.19
C2526-225-6750-M	2.526	64.16	0.225	5.72	6.750	171.45	2.862	72.69	2.284	58.02	153.33	682.05	39.43	6.90
C2526-225-7000-M	2.526	64.16	0.225	5.72	7.000	177.80	2.957	75.12	2.356	59.85	153.33	682.05	37.93	6.64
C2526-225-7500-M	2.526	64.16	0.225	5.72	7.500	190.50	3.149	79.98	2.500	63.50	153.33	682.05	35.24	6.17
C2526-225-8000-M*	2.526	64.16	0.225	5.72	8.000	203.20	3.479	88.37	2.815	71.51	153.33	682.05	33.92	5.94
C2526-225-8500-M*	2.526	64.16	0.225	5.72	8.500	215.90	3.670	93.23	2.959	75.16	153.33	682.05	31.75	5.56
C2526-225-9000-M*	2.526	64.16	0.225	5.72	9.000	228.60	3.862	98.09	3.103	78.81	153.33	682.05	29.84	5.22
C2526-225-9500-M*	2.526	64.16	0.225	5.72	9.500	241.30	4.053	102.95	3.247	82.46	153.33	682.05	28.15	4.93

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2468-225-6750-S	3.633	92.29	110.93	493.45	35.59	6.23
C2468-225-7000-S	3.760	95.50	110.93	493.45	34.24	5.99
C2468-225-7500-S*	4.124	104.74	110.93	493.45	32.86	5.75
C2468-225-8000-S*	4.376	111.16	110.93	493.45	30.61	5.36
C2468-225-8500-S*	4.629	117.58	110.93	493.45	28.66	5.01
C2468-225-9000-S*	4.882	123.99	110.93	493.45	26.94	4.71
C2468-225-9500-S*	5.134	130.41	110.93	493.45	25.41	4.45
C2468-250-3500-S	2.160	54.87	145.94	649.18	108.93	19.06
C2468-250-3750-S	2.299	58.38	145.94	649.18	100.55	17.60
C2468-250-4000-S	2.437	61.90	145.94	649.18	93.37	16.34
C2468-250-4250-S	2.575	65.41	145.94	649.18	87.14	15.25
C2468-250-4500-S	2.714	68.93	145.94	649.18	81.70	14.30
C2468-250-4750-S	2.852	72.44	145.94	649.18	76.89	13.46
C2468-250-5000-S	2.990	75.95	145.94	649.18	72.62	12.71
C2468-250-5250-S	3.129	79.47	145.94	649.18	68.80	12.04
C2468-250-5500-S	3.267	82.98	145.94	649.18	65.36	11.44
C2468-250-5750-S	3.405	86.50	145.94	649.18	62.25	10.89
C2468-250-6000-S	3.544	90.01	145.94	649.18	59.42	10.40
C2468-250-6250-S	3.682	93.53	145.94	649.18	56.83	9.95
C2468-250-6500-S	3.820	97.04	145.94	649.18	54.47	9.53
C2468-250-6750-S	3.959	100.55	145.94	649.18	52.29	9.15
C2468-250-7000-S*	4.209	106.90	145.94	649.18	52.29	9.15
C2468-250-7500-S*	4.486	113.93	145.94	649.18	48.41	8.47
C2468-250-8000-S*	4.762	120.96	145.94	649.18	45.07	7.89
C2468-250-8500-S*	5.039	127.99	145.94	649.18	42.17	7.38
C2468-250-9000-S*	5.316	135.02	145.94	649.18	39.61	6.93
C2468-250-9500-S*	5.592	142.05	145.94	649.18	37.35	6.54
C2526-207-4000-S	2.075	52.71	87.19	387.85	45.30	7.93
C2526-207-4250-S	2.191	55.65	87.19	387.85	42.35	7.41
C2526-207-4500-S	2.307	58.59	87.19	387.85	39.76	6.96
C2526-207-4750-S	2.423	61.54	87.19	387.85	37.46	6.56
C2526-207-5000-S	2.538	64.48	87.19	387.85	35.42	6.20
C2526-207-5250-S	2.654	67.42	87.19	387.85	33.59	5.88
C2526-207-5500-S	2.770	70.36	87.19	387.85	31.94	5.59
C2526-207-5750-S	2.886	73.30	87.19	387.85	30.44	5.33
C2526-207-6000-S	3.002	76.24	87.19	387.85	29.08	5.09
C2526-207-6250-S	3.118	79.19	87.19	387.85	27.84	4.87
C2526-207-6500-S	3.233	82.13	87.19	387.85	26.69	4.67
C2526-207-6750-S	3.349	85.07	87.19	387.85	25.64	4.49
C2526-207-7000-S	3.465	88.01	87.19	387.85	24.67	4.32
C2526-207-7500-S	3.697	93.89	87.19	387.85	22.93	4.01
C2526-207-8000-S	3.928	99.78	87.19	387.85	21.41	3.75
C2526-207-8500-S	4.160	105.66	87.19	387.85	20.09	3.52
C2526-207-9000-S	4.392	111.54	87.19	387.85	18.92	3.31
C2526-207-9500-S	4.623	117.43	87.19	387.85	17.88	3.13
C2526-225-3750-S	2.092	53.15	108.51	482.66	65.46	11.46
C2526-225-4000-S	2.217	56.31	108.51	482.66	60.85	10.65
C2526-225-4250-S	2.341	59.47	108.51	482.66	56.85	9.95
C2526-225-4500-S	2.466	62.63	108.51	482.66	53.34	9.33
C2526-225-4750-S	2.590	65.79	108.51	482.66	50.24	8.79
C2526-225-5000-S	2.715	68.95	108.51	482.66	47.48	8.31
C2526-225-5250-S	2.839	72.11	108.51	482.66	45.01	7.88
C2526-225-5500-S	2.963	75.27	108.51	482.66	42.78	7.49
C2526-225-5750-S	3.088	78.43	108.51	482.66	40.76	7.13
C2526-225-6000-S	3.212	81.59	108.51	482.66	38.92	6.81
C2526-225-6250-S	3.337	84.75	108.51	482.66	37.25	6.52
C2526-225-6500-S	3.461	87.91	108.51	482.66	35.71	6.25
C2526-225-6750-S	3.586	91.08	108.51	482.66	34.29	6.00
C2526-225-7000-S	3.710	94.24	108.51	482.66	32.98	5.77
C2526-225-7500-S	3.959	100.56	108.51	482.66	30.64	5.36
C2526-225-8000-S*	4.321	109.75	108.51	482.66	29.49	5.16
C2526-225-8500-S*	4.570	116.07	108.51	482.66	27.61	4.83
C2526-225-9000-S*	4.819	122.39	108.51	482.66	25.95	4.54
C2526-225-9500-S*	5.067	128.71	108.51	482.66	24.48	4.28

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2526-250-3750-M	2.526	64.16	0.250	6.35	3.750	95.25	1.899	48.23	1.651	41.93	205.52	914.19	111.03	19.43
C2526-250-4000-M	2.526	64.16	0.250	6.35	4.000	101.60	2.007	50.97	1.738	44.13	205.52	914.19	103.10	18.04
C2526-250-4250-M	2.526	64.16	0.250	6.35	4.250	107.95	2.114	53.70	1.824	46.33	205.52	914.19	96.23	16.84
C2526-250-4500-M	2.526	64.16	0.250	6.35	4.500	114.30	2.222	56.44	1.911	48.53	205.52	914.19	90.21	15.79
C2526-250-4750-M	2.526	64.16	0.250	6.35	4.750	120.65	2.329	59.17	1.997	50.73	205.52	914.19	84.91	14.86
C2526-250-5000-M	2.526	64.16	0.250	6.35	5.000	127.00	2.437	61.90	2.084	52.93	205.52	914.19	80.19	14.03
C2526-250-5250-M	2.526	64.16	0.250	6.35	5.250	133.35	2.545	64.64	2.171	55.13	205.52	914.19	75.97	13.29
C2526-250-5500-M	2.526	64.16	0.250	6.35	5.500	139.70	2.652	67.37	2.257	57.33	205.52	914.19	72.17	12.63
C2526-250-5750-M	2.526	64.16	0.250	6.35	5.750	146.05	2.760	70.10	2.344	59.53	205.52	914.19	68.73	12.03
C2526-250-6000-M	2.526	64.16	0.250	6.35	6.000	152.40	2.868	72.84	2.431	61.73	205.52	914.19	65.61	11.48
C2526-250-6250-M	2.526	64.16	0.250	6.35	6.250	158.75	2.975	75.57	2.517	63.93	205.52	914.19	62.76	10.98
C2526-250-6500-M	2.526	64.16	0.250	6.35	6.500	165.10	3.083	78.30	2.604	66.13	205.52	914.19	60.14	10.52
C2526-250-6750-M	2.526	64.16	0.250	6.35	6.750	171.45	3.190	81.04	2.690	68.33	205.52	914.19	57.74	10.10
C2526-250-7000-M*	2.526	64.16	0.250	6.35	7.000	177.80	3.440	87.39	2.953	75.00	205.52	914.19	57.74	10.10
C2526-250-7500-M*	2.526	64.16	0.250	6.35	7.500	190.50	3.656	92.85	3.126	79.40	205.52	914.19	53.46	9.36
C2526-250-8000-M*	2.526	64.16	0.250	6.35	8.000	203.20	3.871	98.32	3.299	83.80	205.52	914.19	49.77	8.71
C2526-250-8500-M*	2.526	64.16	0.250	6.35	8.500	215.90	4.086	103.79	3.473	88.20	205.52	914.19	46.56	8.15
C2526-250-9000-M*	2.526	64.16	0.250	6.35	9.000	228.60	4.301	109.25	3.646	92.60	205.52	914.19	43.74	7.65
C2526-250-9500-M*	2.526	64.16	0.250	6.35	9.500	241.30	4.517	114.72	3.819	97.00	205.52	914.19	41.24	7.22
C2585-207-4250-M	2.585	65.66	0.207	5.26	4.250	107.95	1.723	43.77	1.341	34.07	118.89	528.85	47.05	8.23
C2585-207-4500-M	2.585	65.66	0.207	5.26	4.500	114.30	1.809	45.94	1.400	35.57	118.89	528.85	44.18	7.73
C2585-207-4750-M	2.585	65.66	0.207	5.26	4.750	120.65	1.894	48.11	1.459	37.07	118.89	528.85	41.63	7.28
C2585-207-5000-M	2.585	65.66	0.207	5.26	5.000	127.00	1.979	50.27	1.519	38.57	118.89	528.85	39.36	6.89
C2585-207-5250-M	2.585	65.66	0.207	5.26	5.250	133.35	2.065	52.44	1.578	40.07	118.89	528.85	37.32	6.53
C2585-207-5500-M	2.585	65.66	0.207	5.26	5.500	139.70	2.150	54.61	1.637	41.57	118.89	528.85	35.49	6.21
C2585-207-5750-M	2.585	65.66	0.207	5.26	5.750	146.05	2.235	56.78	1.696	43.07	118.89	528.85	33.83	5.92
C2585-207-6000-M	2.585	65.66	0.207	5.26	6.000	152.40	2.321	58.94	1.755	44.57	118.89	528.85	32.31	5.65
C2585-207-6250-M	2.585	65.66	0.207	5.26	6.250	158.75	2.406	61.11	1.814	46.08	118.89	528.85	30.93	5.41
C2585-207-6500-M	2.585	65.66	0.207	5.26	6.500	165.10	2.491	63.28	1.873	47.58	118.89	528.85	29.66	5.19
C2585-207-6750-M	2.585	65.66	0.207	5.26	6.750	171.45	2.577	65.45	1.932	49.08	118.89	528.85	28.49	4.99
C2585-207-7000-M	2.585	65.66	0.207	5.26	7.000	177.80	2.662	67.61	1.991	50.58	118.89	528.85	27.41	4.80
C2585-207-7500-M	2.585	65.66	0.207	5.26	7.500	190.50	2.833	71.95	2.109	53.58	118.89	528.85	25.47	4.46
C2585-207-8000-M	2.585	65.66	0.207	5.26	8.000	203.20	3.003	76.28	2.228	56.58	118.89	528.85	23.79	4.16
C2585-207-8500-M	2.585	65.66	0.207	5.26	8.500	215.90	3.174	80.62	2.346	59.58	118.89	528.85	22.32	3.91
C2585-207-9000-M	2.585	65.66	0.207	5.26	9.000	228.60	3.345	84.95	2.464	62.58	118.89	528.85	21.02	3.68
C2585-207-9500-M	2.585	65.66	0.207	5.26	9.500	241.30	3.515	89.29	2.582	65.59	118.89	528.85	19.87	3.48
C2585-225-4000-M	2.585	65.66	0.225	5.72	4.000	101.60	1.777	45.14	1.454	36.93	149.99	667.19	67.47	11.81
C2585-225-4250-M	2.585	65.66	0.225	5.72	4.250	107.95	1.870	47.51	1.523	38.69	149.99	667.19	63.03	11.03
C2585-225-4500-M	2.585	65.66	0.225	5.72	4.500	114.30	1.964	49.88	1.592	40.44	149.99	667.19	59.14	10.35
C2585-225-4750-M	2.585	65.66	0.225	5.72	4.750	120.65	2.057	52.26	1.661	42.20	149.99	667.19	55.70	9.75
C2585-225-5000-M	2.585	65.66	0.225	5.72	5.000	127.00	2.151	54.63	1.730	43.95	149.99	667.19	52.64	9.21
C2585-225-5250-M	2.585	65.66	0.225	5.72	5.250	133.35	2.244	57.00	1.799	45.71	149.99	667.19	49.90	8.73
C2585-225-5500-M	2.585	65.66	0.225	5.72	5.500	139.70	2.338	59.38	1.869	47.46	149.99	667.19	47.43	8.30
C2585-225-5750-M	2.585	65.66	0.225	5.72	5.750	146.05	2.431	61.75	1.938	49.22	149.99	667.19	45.19	7.91
C2585-225-6000-M	2.585	65.66	0.225	5.72	6.000	152.40	2.525	64.12	2.007	50.97	149.99	667.19	43.16	7.55
C2585-225-6250-M	2.585	65.66	0.225	5.72	6.250	158.75	2.618	66.50	2.076	52.73	149.99	667.19	41.30	7.23
C2585-225-6500-M	2.585	65.66	0.225	5.72	6.500	165.10	2.711	68.87	2.145	54.48	149.99	667.19	39.59	6.93
C2585-225-6750-M	2.585	65.66	0.225	5.72	6.750	171.45	2.805	71.25	2.214	56.24	149.99	667.19	38.02	6.65
C2585-225-7000-M	2.585	65.66	0.225	5.72	7.000	177.80	2.898	73.62	2.283	58.00	149.99	667.19	36.57	6.40
C2585-225-7500-M	2.585	65.66	0.225	5.72	7.500	190.50	3.085	78.37	2.422	61.51	149.99	667.19	33.98	5.95
C2585-225-8000-M	2.585	65.66	0.225	5.72	8.000	203.20	3.272	83.11	2.560	65.02	149.99	667.19	31.73	5.55
C2585-225-8500-M*	2.585	65.66	0.225	5.72	8.500	215.90	3.600	91.44	2.872	72.95	149.99	667.19	30.61	5.36
C2585-225-9000-M*	2.585	65.66	0.225	5.72	9.000	228.60	3.787	96.19	3.010	76.46	149.99	667.19	28.77	5.04
C2585-225-9500-M*	2.585	65.66	0.225	5.72	9.500	241.30	3.974	100.93	3.148	79.97	149.99	667.19	27.14	4.75
C2585-250-3750-M	2.585	65.66	0.250	6.35	3.750	95.25	1.866	47.39	1.610	40.89	201.08	894.43	106.72	18.68
C2585-250-4000-M	2.585	65.66	0.250	6.35	4.000	101.60	1.971	50.06	1.693	43.01	201.08	894.43	99.09	17.34
C2585-250-4250-M	2.585	65.66	0.250	6.35	4.250	107.95	2.076	52.73	1.777	45.13	201.08	894.43	92.49	16.19
C2585-250-4500-M	2.585	65.66	0.250	6.35	4.500	114.30	2.181	55.40	1.860	47.25	201.08	894.43	86.71	15.17
C2585-250-4750-M	2.585	65.66	0.250	6.35	4.750	120.65	2.286	58.07	1.944	49.37	201.08	894.43	81.61	14.28
C2585-250-5000-M	2.585	65.66	0.250	6.35	5.000	127.00	2.391	60.73	2.027	51.49	201.08	894.43	77.07	13.49
C2585-250-5250-M	2.585	65.66	0.250	6.35	5.250	133.35	2.496	63.40	2.111	53.61	201.08	894.43	73.02	12.78
C2585-250-5500-M	2.585	65.66	0.250	6.35	5.500	139.70	2.601	66.07	2.194	55.73	201.08	894.43	69.37	12.14
C2585-250-5750-M	2.585	65.66	0.250	6.35	5.750	146.05	2.706	68.74	2.278	57.85	201.08	894.43	66.06	11.56
C2585-250-6000-M	2.585	65.66	0.250	6.35	6.000	152.40	2.811	71.41	2.361	59.97	201.08	894.43	63.06	11.04

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2526-250-3750-S	2.271	57.69	142.77	635.08	96.55	16.90
C2526-250-4000-S	2.407	61.15	142.77	635.08	89.65	15.69
C2526-250-4250-S	2.544	64.61	142.77	635.08	83.68	14.64
C2526-250-4500-S	2.680	68.07	142.77	635.08	78.45	13.73
C2526-250-4750-S	2.816	71.53	142.77	635.08	73.83	12.92
C2526-250-5000-S	2.952	74.99	142.77	635.08	69.73	12.20
C2526-250-5250-S	3.089	78.45	142.77	635.08	66.06	11.56
C2526-250-5500-S	3.225	81.91	142.77	635.08	62.76	10.98
C2526-250-5750-S	3.361	85.38	142.77	635.08	59.77	10.46
C2526-250-6000-S	3.497	88.84	142.77	635.08	57.05	9.98
C2526-250-6250-S	3.634	92.30	142.77	635.08	54.57	9.55
C2526-250-6500-S	3.770	95.76	142.77	635.08	52.30	9.15
C2526-250-6750-S	3.906	99.22	142.77	635.08	50.21	8.79
C2526-250-7000-S*	4.156	105.57	142.77	635.08	50.21	8.79
C2526-250-7500-S*	4.429	112.49	142.77	635.08	46.49	8.14
C2526-250-8000-S*	4.701	119.41	142.77	635.08	43.28	7.57
C2526-250-8500-S*	4.974	126.33	142.77	635.08	40.49	7.09
C2526-250-9000-S*	5.246	133.25	142.77	635.08	38.04	6.66
C2526-250-9500-S*	5.519	140.18	142.77	635.08	35.86	6.28
C2585-207-4250-S	2.166	55.01	85.28	379.35	40.92	7.16
C2585-207-4500-S	2.280	57.91	85.28	379.35	38.41	6.72
C2585-207-4750-S	2.394	60.81	85.28	379.35	36.20	6.33
C2585-207-5000-S	2.508	63.71	85.28	379.35	34.23	5.99
C2585-207-5250-S	2.622	66.61	85.28	379.35	32.46	5.68
C2585-207-5500-S	2.737	69.51	85.28	379.35	30.86	5.40
C2585-207-5750-S	2.851	72.41	85.28	379.35	29.41	5.15
C2585-207-6000-S	2.965	75.31	85.28	379.35	28.10	4.92
C2585-207-6250-S	3.079	78.21	85.28	379.35	26.89	4.71
C2585-207-6500-S	3.193	81.11	85.28	379.35	25.79	4.51
C2585-207-6750-S	3.307	84.01	85.28	379.35	24.77	4.34
C2585-207-7000-S	3.421	86.91	85.28	379.35	23.83	4.17
C2585-207-7500-S	3.650	92.71	85.28	379.35	22.15	3.88
C2585-207-8000-S	3.878	98.50	85.28	379.35	20.69	3.62
C2585-207-8500-S	4.106	104.30	85.28	379.35	19.41	3.40
C2585-207-9000-S	4.335	110.10	85.28	379.35	18.28	3.20
C2585-207-9500-S	4.563	115.90	85.28	379.35	17.27	3.02
C2585-225-4000-S	2.191	55.65	106.14	472.14	58.67	10.27
C2585-225-4250-S	2.313	58.76	106.14	472.14	54.81	9.59
C2585-225-4500-S	2.436	61.88	106.14	472.14	51.43	9.00
C2585-225-4750-S	2.559	64.99	106.14	472.14	48.44	8.48
C2585-225-5000-S	2.681	68.10	106.14	472.14	45.78	8.01
C2585-225-5250-S	2.804	71.22	106.14	472.14	43.39	7.59
C2585-225-5500-S	2.926	74.33	106.14	472.14	41.24	7.22
C2585-225-5750-S	3.049	77.45	106.14	472.14	39.30	6.88
C2585-225-6000-S	3.172	80.56	106.14	472.14	37.53	6.57
C2585-225-6250-S	3.294	83.67	106.14	472.14	35.91	6.28
C2585-225-6500-S	3.417	86.79	106.14	472.14	34.43	6.02
C2585-225-6750-S	3.539	89.90	106.14	472.14	33.06	5.79
C2585-225-7000-S	3.662	93.02	106.14	472.14	31.80	5.56
C2585-225-7500-S	3.907	99.24	106.14	472.14	29.54	5.17
C2585-225-8000-S	4.152	105.47	106.14	472.14	27.59	4.83
C2585-225-8500-S*	4.512	114.61	106.14	472.14	26.62	4.66
C2585-225-9000-S*	4.758	120.84	106.14	472.14	25.02	4.38
C2585-225-9500-S*	5.003	127.07	106.14	472.14	23.60	4.13
C2585-250-3750-S	2.245	57.02	139.69	621.35	92.80	16.24
C2585-250-4000-S	2.379	60.42	139.69	621.35	86.17	15.08
C2585-250-4250-S	2.513	63.83	139.69	621.35	80.42	14.07
C2585-250-4500-S	2.647	67.24	139.69	621.35	75.40	13.19
C2585-250-4750-S	2.782	70.65	139.69	621.35	70.96	12.42
C2585-250-5000-S	2.916	74.06	139.69	621.35	67.02	11.73
C2585-250-5250-S	3.050	77.47	139.69	621.35	63.49	11.11
C2585-250-5500-S	3.184	80.88	139.69	621.35	60.32	10.56
C2585-250-5750-S	3.318	84.29	139.69	621.35	57.45	10.05
C2585-250-6000-S	3.453	87.70	139.69	621.35	54.83	9.60

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2585-250-6250-M	**2.585**	**65.66**	**0.250**	**6.35**	**6.250**	**158.75**	**2.916**	**74.08**	**2.445**	**62.09**	**201.08**	**894.43**	**60.32**	**10.56**
C2585-250-6500-M	**2.585**	**65.66**	**0.250**	**6.35**	**6.500**	**165.10**	**3.021**	**76.74**	**2.528**	**64.21**	**201.08**	**894.43**	**57.81**	**10.12**
C2585-250-6750-M	**2.585**	**65.66**	**0.250**	**6.35**	**6.750**	**171.45**	**3.127**	**79.41**	**2.611**	**66.33**	**201.08**	**894.43**	**55.49**	**9.71**
C2585-250-7000-M*	**2.585**	**65.66**	**0.250**	**6.35**	**7.000**	**177.80**	**3.377**	**85.76**	**2.874**	**73.00**	**201.08**	**894.43**	**55.49**	**9.71**
C2585-250-7500-M*	**2.585**	**65.66**	**0.250**	**6.35**	**7.500**	**190.50**	**3.587**	**91.10**	**3.041**	**77.24**	**201.08**	**894.43**	**51.38**	**8.99**
C2585-250-8000-M*	**2.585**	**65.66**	**0.250**	**6.35**	**8.000**	**203.20**	**3.797**	**96.44**	**3.208**	**81.48**	**201.08**	**894.43**	**47.84**	**8.37**
C2585-250-8500-M*	**2.585**	**65.66**	**0.250**	**6.35**	**8.500**	**215.90**	**4.007**	**101.77**	**3.375**	**85.72**	**201.08**	**894.43**	**44.75**	**7.83**
C2585-250-9000-M*	**2.585**	**65.66**	**0.250**	**6.35**	**9.000**	**228.60**	**4.217**	**107.11**	**3.542**	**89.96**	**201.08**	**894.43**	**42.04**	**7.36**
C2585-250-9500-M*	**2.585**	**65.66**	**0.250**	**6.35**	**9.500**	**241.30**	**4.427**	**112.45**	**3.708**	**94.20**	**201.08**	**894.43**	**39.64**	**6.94**
C2644-207-4250-M	**2.644**	**67.16**	**0.207**	**5.26**	**4.250**	**107.95**	**1.694**	**43.03**	**1.305**	**33.16**	**116.34**	**517.51**	**45.52**	**7.97**
C2644-207-4500-M	**2.644**	**67.16**	**0.207**	**5.26**	**4.500**	**114.30**	**1.778**	**45.15**	**1.362**	**34.60**	**116.34**	**517.51**	**42.74**	**7.48**
C2644-207-4750-M	**2.644**	**67.16**	**0.207**	**5.26**	**4.750**	**120.65**	**1.861**	**47.27**	**1.419**	**36.04**	**116.34**	**517.51**	**40.27**	**7.05**
C2644-207-5000-M	**2.644**	**67.16**	**0.207**	**5.26**	**5.000**	**127.00**	**1.945**	**49.39**	**1.476**	**37.48**	**116.34**	**517.51**	**38.08**	**6.66**
C2644-207-5250-M	**2.644**	**67.16**	**0.207**	**5.26**	**5.250**	**133.35**	**2.028**	**51.51**	**1.532**	**38.92**	**116.34**	**517.51**	**36.11**	**6.32**
C2644-207-5500-M	**2.644**	**67.16**	**0.207**	**5.26**	**5.500**	**139.70**	**2.111**	**53.63**	**1.589**	**40.36**	**116.34**	**517.51**	**34.33**	**6.01**
C2644-207-5750-M	**2.644**	**67.16**	**0.207**	**5.26**	**5.750**	**146.05**	**2.195**	**55.75**	**1.646**	**41.80**	**116.34**	**517.51**	**32.73**	**5.73**
C2644-207-6000-M	**2.644**	**67.16**	**0.207**	**5.26**	**6.000**	**152.40**	**2.278**	**57.87**	**1.703**	**43.25**	**116.34**	**517.51**	**31.26**	**5.47**
C2644-207-6250-M	**2.644**	**67.16**	**0.207**	**5.26**	**6.250**	**158.75**	**2.362**	**59.99**	**1.759**	**44.69**	**116.34**	**517.51**	**29.92**	**5.24**
C2644-207-6500-M	**2.644**	**67.16**	**0.207**	**5.26**	**6.500**	**165.10**	**2.445**	**62.11**	**1.816**	**46.13**	**116.34**	**517.51**	**28.69**	**5.02**
C2644-207-6750-M	**2.644**	**67.16**	**0.207**	**5.26**	**6.750**	**171.45**	**2.529**	**64.23**	**1.873**	**47.57**	**116.34**	**517.51**	**27.56**	**4.82**
C2644-207-7000-M	**2.644**	**67.16**	**0.207**	**5.26**	**7.000**	**177.80**	**2.612**	**66.35**	**1.930**	**49.01**	**116.34**	**517.51**	**26.51**	**4.64**
C2644-207-7500-M	**2.644**	**67.16**	**0.207**	**5.26**	**7.500**	**190.50**	**2.779**	**70.58**	**2.043**	**51.89**	**116.34**	**517.51**	**24.64**	**4.31**
C2644-207-8000-M	**2.644**	**67.16**	**0.207**	**5.26**	**8.000**	**203.20**	**2.946**	**74.82**	**2.157**	**54.78**	**116.34**	**517.51**	**23.02**	**4.03**
C2644-207-8500-M	**2.644**	**67.16**	**0.207**	**5.26**	**8.500**	**215.90**	**3.113**	**79.06**	**2.270**	**57.66**	**116.34**	**517.51**	**21.60**	**3.78**
C2644-207-9000-M	**2.644**	**67.16**	**0.207**	**5.26**	**9.000**	**228.60**	**3.280**	**83.30**	**2.384**	**60.54**	**116.34**	**517.51**	**20.34**	**3.56**
C2644-207-9500-M	**2.644**	**67.16**	**0.207**	**5.26**	**9.500**	**241.30**	**3.446**	**87.54**	**2.497**	**63.42**	**116.34**	**517.51**	**19.22**	**3.36**
C2644-225-4250-M	**2.644**	**67.16**	**0.225**	**5.72**	**4.250**	**107.95**	**1.838**	**46.68**	**1.483**	**37.67**	**146.79**	**652.95**	**60.86**	**10.65**
C2644-225-4500-M	**2.644**	**67.16**	**0.225**	**5.72**	**4.500**	**114.30**	**1.929**	**49.00**	**1.549**	**39.35**	**146.79**	**652.95**	**57.10**	**9.99**
C2644-225-4750-M	**2.644**	**67.16**	**0.225**	**5.72**	**4.750**	**120.65**	**2.021**	**51.32**	**1.616**	**41.04**	**146.79**	**652.95**	**53.78**	**9.41**
C2644-225-5000-M	**2.644**	**67.16**	**0.225**	**5.72**	**5.000**	**127.00**	**2.112**	**53.64**	**1.682**	**42.73**	**146.79**	**652.95**	**50.83**	**8.89**
C2644-225-5250-M	**2.644**	**67.16**	**0.225**	**5.72**	**5.250**	**133.35**	**2.203**	**55.96**	**1.749**	**44.42**	**146.79**	**652.95**	**48.18**	**8.43**
C2644-225-5500-M	**2.644**	**67.16**	**0.225**	**5.72**	**5.500**	**139.70**	**2.295**	**58.28**	**1.815**	**46.11**	**146.79**	**652.95**	**45.79**	**8.01**
C2644-225-5750-M	**2.644**	**67.16**	**0.225**	**5.72**	**5.750**	**146.05**	**2.386**	**60.60**	**1.882**	**47.80**	**146.79**	**652.95**	**43.63**	**7.64**
C2644-225-6000-M	**2.644**	**67.16**	**0.225**	**5.72**	**6.000**	**152.40**	**2.477**	**62.92**	**1.948**	**49.48**	**146.79**	**652.95**	**41.67**	**7.29**
C2644-225-6250-M	**2.644**	**67.16**	**0.225**	**5.72**	**6.250**	**158.75**	**2.568**	**65.24**	**2.015**	**51.17**	**146.79**	**652.95**	**39.87**	**6.98**
C2644-225-6500-M	**2.644**	**67.16**	**0.225**	**5.72**	**6.500**	**165.10**	**2.660**	**67.56**	**2.081**	**52.86**	**146.79**	**652.95**	**38.22**	**6.69**
C2644-225-6750-M	**2.644**	**67.16**	**0.225**	**5.72**	**6.750**	**171.45**	**2.751**	**69.88**	**2.148**	**54.55**	**146.79**	**652.95**	**36.71**	**6.42**
C2644-225-7000-M	**2.644**	**67.16**	**0.225**	**5.72**	**7.000**	**177.80**	**2.842**	**72.20**	**2.214**	**56.24**	**146.79**	**652.95**	**35.31**	**6.18**
C2644-225-7500-M	**2.644**	**67.16**	**0.225**	**5.72**	**7.500**	**190.50**	**3.025**	**76.83**	**2.347**	**59.62**	**146.79**	**652.95**	**32.80**	**5.74**
C2644-225-8000-M	**2.644**	**67.16**	**0.225**	**5.72**	**8.000**	**203.20**	**3.208**	**81.47**	**2.480**	**62.99**	**146.79**	**652.95**	**30.63**	**5.36**
C2644-225-8500-M	**2.644**	**67.16**	**0.225**	**5.72**	**8.500**	**215.90**	**3.390**	**86.11**	**2.613**	**66.37**	**146.79**	**652.95**	**28.73**	**5.03**
C2644-225-9000-M*	**2.644**	**67.16**	**0.225**	**5.72**	**9.000**	**228.60**	**3.716**	**94.38**	**2.922**	**74.23**	**146.79**	**652.95**	**27.78**	**4.86**
C2644-225-9500-M*	**2.644**	**67.16**	**0.225**	**5.72**	**9.500**	**241.30**	**3.898**	**99.02**	**3.055**	**77.60**	**146.79**	**652.95**	**26.21**	**4.59**
C2644-250-4000-M	**2.644**	**67.16**	**0.250**	**6.35**	**4.000**	**101.60**	**1.937**	**49.19**	**1.651**	**41.94**	**196.82**	**875.49**	**95.39**	**16.69**
C2644-250-4250-M	**2.644**	**67.16**	**0.250**	**6.35**	**4.250**	**107.95**	**2.039**	**51.80**	**1.732**	**43.98**	**196.82**	**875.49**	**89.03**	**15.58**
C2644-250-4500-M	**2.644**	**67.16**	**0.250**	**6.35**	**4.500**	**114.30**	**2.142**	**54.41**	**1.812**	**46.03**	**196.82**	**875.49**	**83.47**	**14.61**
C2644-250-4750-M	**2.644**	**67.16**	**0.250**	**6.35**	**4.750**	**120.65**	**2.245**	**57.01**	**1.893**	**48.07**	**196.82**	**875.49**	**78.56**	**13.75**
C2644-250-5000-M	**2.644**	**67.16**	**0.250**	**6.35**	**5.000**	**127.00**	**2.347**	**59.62**	**1.973**	**50.11**	**196.82**	**875.49**	**74.19**	**12.98**
C2644-250-5250-M	**2.644**	**67.16**	**0.250**	**6.35**	**5.250**	**133.35**	**2.450**	**62.23**	**2.053**	**52.16**	**196.82**	**875.49**	**70.29**	**12.30**
C2644-250-5500-M	**2.644**	**67.16**	**0.250**	**6.35**	**5.500**	**139.70**	**2.552**	**64.83**	**2.134**	**54.20**	**196.82**	**875.49**	**66.77**	**11.69**
C2644-250-5750-M	**2.644**	**67.16**	**0.250**	**6.35**	**5.750**	**146.05**	**2.655**	**67.44**	**2.214**	**56.24**	**196.82**	**875.49**	**63.59**	**11.13**
C2644-250-6000-M	**2.644**	**67.16**	**0.250**	**6.35**	**6.000**	**152.40**	**2.758**	**70.04**	**2.295**	**58.29**	**196.82**	**875.49**	**60.70**	**10.62**
C2644-250-6250-M	**2.644**	**67.16**	**0.250**	**6.35**	**6.250**	**158.75**	**2.860**	**72.65**	**2.375**	**60.33**	**196.82**	**875.49**	**58.06**	**10.16**
C2644-250-6500-M	**2.644**	**67.16**	**0.250**	**6.35**	**6.500**	**165.10**	**2.963**	**75.26**	**2.456**	**62.37**	**196.82**	**875.49**	**55.64**	**9.74**
C2644-250-6750-M	**2.644**	**67.16**	**0.250**	**6.35**	**6.750**	**171.45**	**3.066**	**77.86**	**2.536**	**64.42**	**196.82**	**875.49**	**53.42**	**9.35**
C2644-250-7000-M	**2.644**	**67.16**	**0.250**	**6.35**	**7.000**	**177.80**	**3.168**	**80.47**	**2.617**	**66.46**	**196.82**	**875.49**	**51.36**	**8.99**
C2644-250-7500-M*	**2.644**	**67.16**	**0.250**	**6.35**	**7.500**	**190.50**	**3.521**	**89.43**	**2.959**	**75.17**	**196.82**	**875.49**	**49.46**	**8.66**
C2644-250-8000-M*	**2.644**	**67.16**	**0.250**	**6.35**	**8.000**	**203.20**	**3.726**	**94.64**	**3.120**	**79.26**	**196.82**	**875.49**	**46.05**	**8.06**
C2644-250-8500-M*	**2.644**	**67.16**	**0.250**	**6.35**	**8.500**	**215.90**	**3.931**	**99.85**	**3.281**	**83.34**	**196.82**	**875.49**	**43.08**	**7.54**
C2644-250-9000-M*	**2.644**	**67.16**	**0.250**	**6.35**	**9.000**	**228.60**	**4.137**	**105.07**	**3.442**	**87.43**	**196.82**	**875.49**	**40.47**	**7.08**
C2644-250-9500-M*	**2.644**	**67.16**	**0.250**	**6.35**	**9.500**	**241.30**	**4.342**	**110.28**	**3.603**	**91.52**	**196.82**	**875.49**	**38.16**	**6.68**
D13980	2.677	68.00	0.197	5.00	4.724	120.00	1.272	32.30	1.083	27.50	139.99	622.72	41.54	7.27
D13990	2.677	68.00	0.197	5.00	7.087	180.00	1.783	45.30	1.476	37.50	139.99	622.72	26.46	4.63
D14000	2.677	68.00	0.197	5.00	10.827	275.00	2.551	64.80	2.067	52.50	139.99	622.72	17.09	2.99

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2585-250-6250-S	**3.587**	**91.10**	**139.69**	**621.35**	**52.45**	**9.18**
C2585-250-6500-S	**3.721**	**94.51**	**139.69**	**621.35**	**50.27**	**8.80**
C2585-250-6750-S	**3.855**	**97.92**	**139.69**	**621.35**	**48.25**	**8.44**
C2585-250-7000-S*	**4.105**	**104.27**	**139.69**	**621.35**	**48.25**	**8.44**
C2585-250-7500-S*	**4.374**	**111.09**	**139.69**	**621.35**	**44.68**	**7.82**
C2585-250-8000-S*	**4.642**	**117.91**	**139.69**	**621.35**	**41.60**	**7.28**
C2585-250-8500-S*	**4.910**	**124.73**	**139.69**	**621.35**	**38.92**	**6.81**
C2585-250-9000-S*	**5.179**	**131.54**	**139.69**	**621.35**	**36.56**	**6.40**
C2585-250-9500-S*	**5.447**	**138.36**	**139.69**	**621.35**	**34.47**	**6.03**
C2644-207-4250-S	**2.142**	**54.40**	**83.45**	**371.22**	**39.58**	**6.93**
C2644-207-4500-S	**2.254**	**57.26**	**83.45**	**371.22**	**37.16**	**6.50**
C2644-207-4750-S	**2.367**	**60.12**	**83.45**	**371.22**	**35.02**	**6.13**
C2644-207-5000-S	**2.480**	**62.98**	**83.45**	**371.22**	**33.11**	**5.79**
C2644-207-5250-S	**2.592**	**65.84**	**83.45**	**371.22**	**31.40**	**5.49**
C2644-207-5500-S	**2.705**	**68.70**	**83.45**	**371.22**	**29.86**	**5.22**
C2644-207-5750-S	**2.817**	**71.56**	**83.45**	**371.22**	**28.46**	**4.98**
C2644-207-6000-S	**2.930**	**74.42**	**83.45**	**371.22**	**27.18**	**4.76**
C2644-207-6250-S	**3.043**	**77.28**	**83.45**	**371.22**	**26.02**	**4.55**
C2644-207-6500-S	**3.155**	**80.14**	**83.45**	**371.22**	**24.95**	**4.37**
C2644-207-6750-S	**3.268**	**83.00**	**83.45**	**371.22**	**23.97**	**4.19**
C2644-207-7000-S	**3.380**	**85.86**	**83.45**	**371.22**	**23.06**	**4.03**
C2644-207-7500-S	**3.606**	**91.58**	**83.45**	**371.22**	**21.43**	**3.75**
C2644-207-8000-S	**3.831**	**97.30**	**83.45**	**371.22**	**20.02**	**3.50**
C2644-207-8500-S	**4.056**	**103.02**	**83.45**	**371.22**	**18.78**	**3.29**
C2644-207-9000-S	**4.281**	**108.74**	**83.45**	**371.22**	**17.69**	**3.09**
C2644-207-9500-S	**4.506**	**114.46**	**83.45**	**371.22**	**16.71**	**2.92**
C2644-225-4250-S	**2.287**	**58.09**	**103.88**	**462.07**	**52.92**	**9.26**
C2644-225-4500-S	**2.408**	**61.16**	**103.88**	**462.07**	**49.65**	**8.69**
C2644-225-4750-S	**2.529**	**64.23**	**103.88**	**462.07**	**46.77**	**8.18**
C2644-225-5000-S	**2.650**	**67.30**	**103.88**	**462.07**	**44.20**	**7.73**
C2644-225-5250-S	**2.770**	**70.37**	**103.88**	**462.07**	**41.89**	**7.33**
C2644-225-5500-S	**2.891**	**73.44**	**103.88**	**462.07**	**39.82**	**6.97**
C2644-225-5750-S	**3.012**	**76.51**	**103.88**	**462.07**	**37.94**	**6.64**
C2644-225-6000-S	**3.133**	**79.58**	**103.88**	**462.07**	**36.23**	**6.34**
C2644-225-6250-S	**3.254**	**82.65**	**103.88**	**462.07**	**34.67**	**6.07**
C2644-225-6500-S	**3.375**	**85.72**	**103.88**	**462.07**	**33.24**	**5.82**
C2644-225-6750-S	**3.496**	**88.79**	**103.88**	**462.07**	**31.92**	**5.59**
C2644-225-7000-S	**3.616**	**91.86**	**103.88**	**462.07**	**30.70**	**5.37**
C2644-225-7500-S	**3.858**	**98.00**	**103.88**	**462.07**	**28.52**	**4.99**
C2644-225-8000-S	**4.100**	**104.14**	**103.88**	**462.07**	**26.64**	**4.66**
C2644-225-8500-S	**4.342**	**110.28**	**103.88**	**462.07**	**24.98**	**4.37**
C2644-225-9000-S*	**4.700**	**119.37**	**103.88**	**462.07**	**24.16**	**4.23**
C2644-225-9500-S*	**4.941**	**125.51**	**103.88**	**462.07**	**22.79**	**3.99**
C2644-250-4000-S	**2.352**	**59.73**	**136.73**	**608.20**	**82.95**	**14.52**
C2644-250-4250-S	**2.484**	**63.09**	**136.73**	**608.20**	**77.42**	**13.55**
C2644-250-4500-S	**2.616**	**66.45**	**136.73**	**608.20**	**72.58**	**12.70**
C2644-250-4750-S	**2.748**	**69.81**	**136.73**	**608.20**	**68.31**	**11.95**
C2644-250-5000-S	**2.881**	**73.17**	**136.73**	**608.20**	**64.52**	**11.29**
C2644-250-5250-S	**3.013**	**76.53**	**136.73**	**608.20**	**61.12**	**10.70**
C2644-250-5500-S	**3.145**	**79.89**	**136.73**	**608.20**	**58.06**	**10.16**
C2644-250-5750-S	**3.277**	**83.25**	**136.73**	**608.20**	**55.30**	**9.68**
C2644-250-6000-S	**3.410**	**86.61**	**136.73**	**608.20**	**52.79**	**9.24**
C2644-250-6250-S	**3.542**	**89.97**	**136.73**	**608.20**	**50.49**	**8.84**
C2644-250-6500-S	**3.674**	**93.33**	**136.73**	**608.20**	**48.39**	**8.47**
C2644-250-6750-S	**3.806**	**96.68**	**136.73**	**608.20**	**46.45**	**8.13**
C2644-250-7000-S	**3.939**	**100.04**	**136.73**	**608.20**	**44.66**	**7.82**
C2644-250-7500-S*	**4.321**	**109.75**	**136.73**	**608.20**	**43.01**	**7.53**
C2644-250-8000-S*	**4.586**	**116.47**	**136.73**	**608.20**	**40.04**	**7.01**
C2644-250-8500-S*	**4.850**	**123.19**	**136.73**	**608.20**	**37.46**	**6.56**
C2644-250-9000-S*	**5.115**	**129.91**	**136.73**	**608.20**	**35.19**	**6.16**
C2644-250-9500-S*	**5.379**	**136.63**	**136.73**	**608.20**	**33.18**	**5.81**
D23980	1.272	32.30	116.66	518.93	34.63	6.06
D23990	1.783	45.30	116.66	518.93	22.06	3.86
D24000	2.551	64.80	116.66	518.93	14.23	2.49

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE														
Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D14010	2.677	68.00	0.197	5.00	15.551	395.00	3.575	90.80	2.854	72.50	139.99	622.72	11.60	2.03
D14020	2.677	68.00	0.197	5.00	23.031	585.00	5.118	130.00	4.035	102.50	139.99	622.72	7.83	1.37
C2703-225-4250-M	**2.703**	**68.66**	**0.225**	**5.72**	**4.250**	**107.95**	**1.807**	**45.90**	**1.445**	**36.70**	**143.72**	**639.31**	**58.83**	**10.30**
C2703-225-4500-M	**2.703**	**68.66**	**0.225**	**5.72**	**4.500**	**114.30**	**1.896**	**48.17**	**1.509**	**38.32**	**143.72**	**639.31**	**55.20**	**9.66**
C2703-225-4750-M	**2.703**	**68.66**	**0.225**	**5.72**	**4.750**	**120.65**	**1.986**	**50.44**	**1.573**	**39.95**	**143.72**	**639.31**	**51.99**	**9.10**
C2703-225-5000-M	**2.703**	**68.66**	**0.225**	**5.72**	**5.000**	**127.00**	**2.075**	**52.70**	**1.637**	**41.57**	**143.72**	**639.31**	**49.14**	**8.60**
C2703-225-5250-M	**2.703**	**68.66**	**0.225**	**5.72**	**5.250**	**133.35**	**2.164**	**54.97**	**1.701**	**43.20**	**143.72**	**639.31**	**46.58**	**8.15**
C2703-225-5500-M	**2.703**	**68.66**	**0.225**	**5.72**	**5.500**	**139.70**	**2.253**	**57.24**	**1.765**	**44.82**	**143.72**	**639.31**	**44.27**	**7.75**
C2703-225-5750-M	**2.703**	**68.66**	**0.225**	**5.72**	**5.750**	**146.05**	**2.343**	**59.51**	**1.829**	**46.45**	**143.72**	**639.31**	**42.18**	**7.38**
C2703-225-6000-M	**2.703**	**68.66**	**0.225**	**5.72**	**6.000**	**152.40**	**2.432**	**61.77**	**1.893**	**48.07**	**143.72**	**639.31**	**40.28**	**7.05**
C2703-225-6250-M	**2.703**	**68.66**	**0.225**	**5.72**	**6.250**	**158.75**	**2.521**	**64.04**	**1.956**	**49.70**	**143.72**	**639.31**	**38.55**	**6.75**
C2703-225-6500-M	**2.703**	**68.66**	**0.225**	**5.72**	**6.500**	**165.10**	**2.611**	**66.31**	**2.020**	**51.32**	**143.72**	**639.31**	**36.95**	**6.47**
C2703-225-6750-M	**2.703**	**68.66**	**0.225**	**5.72**	**6.750**	**171.45**	**2.700**	**68.58**	**2.084**	**52.94**	**143.72**	**639.31**	**35.49**	**6.21**
C2703-225-7000-M	**2.703**	**68.66**	**0.225**	**5.72**	**7.000**	**177.80**	**2.789**	**70.85**	**2.148**	**54.57**	**143.72**	**639.31**	**34.13**	**5.97**
C2703-225-7500-M	**2.703**	**68.66**	**0.225**	**5.72**	**7.500**	**190.50**	**2.968**	**75.38**	**2.276**	**57.82**	**143.72**	**639.31**	**31.71**	**5.55**
C2703-225-8000-M	**2.703**	**68.66**	**0.225**	**5.72**	**8.000**	**203.20**	**3.146**	**79.92**	**2.404**	**61.07**	**143.72**	**639.31**	**29.61**	**5.18**
C2703-225-8500-M	**2.703**	**68.66**	**0.225**	**5.72**	**8.500**	**215.90**	**3.325**	**84.45**	**2.532**	**64.32**	**143.72**	**639.31**	**27.77**	**4.86**
C2703-225-9000-M	**2.703**	**68.66**	**0.225**	**5.72**	**9.000**	**228.60**	**3.503**	**88.99**	**2.660**	**67.57**	**143.72**	**639.31**	**26.15**	**4.58**
C2703-225-9500-M	**2.703**	**68.66**	**0.225**	**5.72**	**9.500**	**241.30**	**3.682**	**93.52**	**2.788**	**70.82**	**143.72**	**639.31**	**24.70**	**4.32**
C2703-250-4000-M	**2.703**	**68.66**	**0.250**	**6.35**	**4.000**	**101.60**	**1.904**	**48.36**	**1.611**	**40.92**	**192.73**	**857.33**	**91.96**	**16.09**
C2703-250-4250-M	**2.703**	**68.66**	**0.250**	**6.35**	**4.250**	**107.95**	**2.004**	**50.91**	**1.689**	**42.89**	**192.73**	**857.33**	**85.83**	**15.02**
C2703-250-4500-M	**2.703**	**68.66**	**0.250**	**6.35**	**4.500**	**114.30**	**2.105**	**53.46**	**1.766**	**44.86**	**192.73**	**857.33**	**80.46**	**14.08**
C2703-250-4750-M	**2.703**	**68.66**	**0.250**	**6.35**	**4.750**	**120.65**	**2.205**	**56.01**	**1.844**	**46.83**	**192.73**	**857.33**	**75.73**	**13.25**
C2703-250-5000-M	**2.703**	**68.66**	**0.250**	**6.35**	**5.000**	**127.00**	**2.305**	**58.55**	**1.921**	**48.80**	**192.73**	**857.33**	**71.52**	**12.52**
C2703-250-5250-M	**2.703**	**68.66**	**0.250**	**6.35**	**5.250**	**133.35**	**2.406**	**61.10**	**1.999**	**50.77**	**192.73**	**857.33**	**67.76**	**11.86**
C2703-250-5500-M	**2.703**	**68.66**	**0.250**	**6.35**	**5.500**	**139.70**	**2.506**	**63.65**	**2.076**	**52.74**	**192.73**	**857.33**	**64.37**	**11.26**
C2703-250-5750-M	**2.703**	**68.66**	**0.250**	**6.35**	**5.750**	**146.05**	**2.606**	**66.20**	**2.154**	**54.71**	**192.73**	**857.33**	**61.31**	**10.73**
C2703-250-6000-M	**2.703**	**68.66**	**0.250**	**6.35**	**6.000**	**152.40**	**2.706**	**68.74**	**2.232**	**56.68**	**192.73**	**857.33**	**58.52**	**10.24**
C2703-250-6250-M	**2.703**	**68.66**	**0.250**	**6.35**	**6.250**	**158.75**	**2.807**	**71.29**	**2.309**	**58.65**	**192.73**	**857.33**	**55.98**	**9.80**
C2703-250-6500-M	**2.703**	**68.66**	**0.250**	**6.35**	**6.500**	**165.10**	**2.907**	**73.84**	**2.387**	**60.62**	**192.73**	**857.33**	**53.64**	**9.39**
C2703-250-6750-M	**2.703**	**68.66**	**0.250**	**6.35**	**6.750**	**171.45**	**3.007**	**76.39**	**2.464**	**62.59**	**192.73**	**857.33**	**51.50**	**9.01**
C2703-250-7000-M	**2.703**	**68.66**	**0.250**	**6.35**	**7.000**	**177.80**	**3.108**	**78.93**	**2.542**	**64.56**	**192.73**	**857.33**	**49.52**	**8.67**
C2703-250-7500-M*	**2.703**	**68.66**	**0.250**	**6.35**	**7.500**	**190.50**	**3.458**	**87.83**	**2.882**	**73.20**	**192.73**	**857.33**	**47.68**	**8.34**
C2703-250-8000-M*	**2.703**	**68.66**	**0.250**	**6.35**	**8.000**	**203.20**	**3.659**	**92.93**	**3.037**	**77.14**	**192.73**	**857.33**	**44.39**	**7.77**
C2703-250-8500-M*	**2.703**	**68.66**	**0.250**	**6.35**	**8.500**	**215.90**	**3.859**	**98.02**	**3.192**	**81.08**	**192.73**	**857.33**	**41.53**	**7.27**
C2703-250-9000-M*	**2.703**	**68.66**	**0.250**	**6.35**	**9.000**	**228.60**	**4.060**	**103.12**	**3.347**	**85.02**	**192.73**	**857.33**	**39.01**	**6.83**
C2703-250-9500-M*	**2.703**	**68.66**	**0.250**	**6.35**	**9.500**	**241.30**	**4.260**	**108.21**	**3.502**	**88.96**	**192.73**	**857.33**	**36.78**	**6.44**
C2761-225-4500-M	**2.761**	**70.13**	**0.225**	**5.72**	**4.500**	**114.30**	**1.866**	**47.39**	**1.471**	**37.36**	**140.83**	**626.44**	**53.46**	**9.36**
C2761-225-4750-M	**2.761**	**70.13**	**0.225**	**5.72**	**4.750**	**120.65**	**1.953**	**49.61**	**1.532**	**38.92**	**140.83**	**626.44**	**50.35**	**8.81**
C2761-225-5000-M	**2.761**	**70.13**	**0.225**	**5.72**	**5.000**	**127.00**	**2.040**	**51.83**	**1.594**	**40.49**	**140.83**	**626.44**	**47.58**	**8.33**
C2761-225-5250-M	**2.761**	**70.13**	**0.225**	**5.72**	**5.250**	**133.35**	**2.128**	**54.05**	**1.656**	**42.05**	**140.83**	**626.44**	**45.11**	**7.89**
C2761-225-5500-M	**2.761**	**70.13**	**0.225**	**5.72**	**5.500**	**139.70**	**2.215**	**56.27**	**1.717**	**43.62**	**140.83**	**626.44**	**42.87**	**7.50**
C2761-225-5750-M	**2.761**	**70.13**	**0.225**	**5.72**	**5.750**	**146.05**	**2.303**	**58.48**	**1.779**	**45.18**	**140.83**	**626.44**	**40.85**	**7.15**
C2761-225-6000-M	**2.761**	**70.13**	**0.225**	**5.72**	**6.000**	**152.40**	**2.390**	**60.70**	**1.840**	**46.75**	**140.83**	**626.44**	**39.01**	**6.83**
C2761-225-6250-M	**2.761**	**70.13**	**0.225**	**5.72**	**6.250**	**158.75**	**2.477**	**62.92**	**1.902**	**48.31**	**140.83**	**626.44**	**37.33**	**6.53**
C2761-225-6500-M	**2.761**	**70.13**	**0.225**	**5.72**	**6.500**	**165.10**	**2.565**	**65.14**	**1.964**	**49.88**	**140.83**	**626.44**	**35.79**	**6.26**
C2761-225-6750-M	**2.761**	**70.13**	**0.225**	**5.72**	**6.750**	**171.45**	**2.652**	**67.36**	**2.025**	**51.44**	**140.83**	**626.44**	**34.37**	**6.01**
C2761-225-7000-M	**2.761**	**70.13**	**0.225**	**5.72**	**7.000**	**177.80**	**2.739**	**69.58**	**2.087**	**53.01**	**140.83**	**626.44**	**33.05**	**5.78**
C2761-225-7500-M	**2.761**	**70.13**	**0.225**	**5.72**	**7.500**	**190.50**	**2.914**	**74.02**	**2.210**	**56.14**	**140.83**	**626.44**	**30.71**	**5.37**
C2761-225-8000-M	**2.761**	**70.13**	**0.225**	**5.72**	**8.000**	**203.20**	**3.089**	**78.46**	**2.333**	**59.27**	**140.83**	**626.44**	**28.68**	**5.02**
C2761-225-8500-M	**2.761**	**70.13**	**0.225**	**5.72**	**8.500**	**215.90**	**3.264**	**82.90**	**2.457**	**62.40**	**140.83**	**626.44**	**26.90**	**4.71**
C2761-225-9000-M	**2.761**	**70.13**	**0.225**	**5.72**	**9.000**	**228.60**	**3.439**	**87.34**	**2.580**	**65.53**	**140.83**	**626.44**	**25.32**	**4.43**
C2761-225-9500-M	**2.761**	**70.13**	**0.225**	**5.72**	**9.500**	**241.30**	**3.613**	**91.78**	**2.703**	**68.66**	**140.83**	**626.44**	**23.92**	**4.19**
C2761-250-4250-M	**2.761**	**70.13**	**0.250**	**6.35**	**4.250**	**107.95**	**1.972**	**50.08**	**1.648**	**41.86**	**188.88**	**840.18**	**82.90**	**14.51**
C2761-250-4500-M	**2.761**	**70.13**	**0.250**	**6.35**	**4.500**	**114.30**	**2.070**	**52.57**	**1.723**	**43.76**	**188.88**	**840.18**	**77.72**	**13.60**
C2761-250-4750-M	**2.761**	**70.13**	**0.250**	**6.35**	**4.750**	**120.65**	**2.168**	**55.06**	**1.798**	**45.66**	**188.88**	**840.18**	**73.15**	**12.80**
C2761-250-5000-M	**2.761**	**70.13**	**0.250**	**6.35**	**5.000**	**127.00**	**2.266**	**57.56**	**1.873**	**47.57**	**188.88**	**840.18**	**69.09**	**12.09**
C2761-250-5250-M	**2.761**	**70.13**	**0.250**	**6.35**	**5.250**	**133.35**	**2.364**	**60.05**	**1.948**	**49.47**	**188.88**	**840.18**	**65.45**	**11.45**
C2761-250-5500-M	**2.761**	**70.13**	**0.250**	**6.35**	**5.500**	**139.70**	**2.462**	**62.54**	**2.022**	**51.37**	**188.88**	**840.18**	**62.18**	**10.88**
C2761-250-5750-M	**2.761**	**70.13**	**0.250**	**6.35**	**5.750**	**146.05**	**2.560**	**65.03**	**2.097**	**53.27**	**188.88**	**840.18**	**59.22**	**10.36**
C2761-250-6000-M	**2.761**	**70.13**	**0.250**	**6.35**	**6.000**	**152.40**	**2.658**	**67.52**	**2.172**	**55.17**	**188.88**	**840.18**	**56.52**	**9.89**
C2761-250-6250-M	**2.761**	**70.13**	**0.250**	**6.35**	**6.250**	**158.75**	**2.756**	**70.01**	**2.247**	**57.07**	**188.88**	**840.18**	**54.07**	**9.46**
C2761-250-6500-M	**2.761**	**70.13**	**0.250**	**6.35**	**6.500**	**165.10**	**2.855**	**72.51**	**2.322**	**58.98**	**188.88**	**840.18**	**51.81**	**9.07**
C2761-250-6750-M	**2.761**	**70.13**	**0.250**	**6.35**	**6.750**	**171.45**	**2.953**	**75.00**	**2.397**	**60.88**	**188.88**	**840.18**	**49.74**	**8.70**

STAINLESS STEEL						
Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
D24010	3.575	90.80	116.66	518.93	9.66	1.69
D24020	5.118	130.00	116.66	518.93	6.51	1.14
C2703-225-4250-S	**2.262**	**57.45**	**101.71**	**452.41**	**51.16**	**8.95**
C2703-225-4500-S	**2.381**	**60.48**	**101.71**	**452.41**	**48.00**	**8.40**
C2703-225-4750-S	**2.500**	**63.51**	**101.71**	**452.41**	**45.21**	**7.91**
C2703-225-5000-S	**2.620**	**66.54**	**101.71**	**452.41**	**42.73**	**7.48**
C2703-225-5250-S	**2.739**	**69.56**	**101.71**	**452.41**	**40.50**	**7.09**
C2703-225-5500-S	**2.858**	**72.59**	**101.71**	**452.41**	**38.50**	**6.74**
C2703-225-5750-S	**2.977**	**75.62**	**101.71**	**452.41**	**36.68**	**6.42**
C2703-225-6000-S	**3.096**	**78.65**	**101.71**	**452.41**	**35.03**	**6.13**
C2703-225-6250-S	**3.216**	**81.68**	**101.71**	**452.41**	**33.52**	**5.87**
C2703-225-6500-S	**3.335**	**84.70**	**101.71**	**452.41**	**32.13**	**5.62**
C2703-225-6750-S	**3.454**	**87.73**	**101.71**	**452.41**	**30.86**	**5.40**
C2703-225-7000-S	**3.573**	**90.76**	**101.71**	**452.41**	**29.68**	**5.19**
C2703-225-7500-S	**3.812**	**96.82**	**101.71**	**452.41**	**27.58**	**4.83**
C2703-225-8000-S	**4.050**	**102.87**	**101.71**	**452.41**	**25.75**	**4.51**
C2703-225-8500-S	**4.288**	**108.93**	**101.71**	**452.41**	**24.15**	**4.23**
C2703-225-9000-S	**4.527**	**114.98**	**101.71**	**452.41**	**22.74**	**3.98**
C2703-225-9500-S	**4.765**	**121.04**	**101.71**	**452.41**	**21.48**	**3.76**
C2703-250-4000-S	**2.326**	**59.07**	**133.89**	**595.58**	**79.96**	**13.99**
C2703-250-4250-S	**2.456**	**62.38**	**133.89**	**595.58**	**74.63**	**13.06**
C2703-250-4500-S	**2.586**	**65.69**	**133.89**	**595.58**	**69.97**	**12.24**
C2703-250-4750-S	**2.717**	**69.01**	**133.89**	**595.58**	**65.85**	**11.52**
C2703-250-5000-S	**2.847**	**72.32**	**133.89**	**595.58**	**62.19**	**10.88**
C2703-250-5250-S	**2.978**	**75.63**	**133.89**	**595.58**	**58.92**	**10.31**
C2703-250-5500-S	**3.108**	**78.94**	**133.89**	**595.58**	**55.98**	**9.80**
C2703-250-5750-S	**3.238**	**82.26**	**133.89**	**595.58**	**53.31**	**9.33**
C2703-250-6000-S	**3.369**	**85.57**	**133.89**	**595.58**	**50.89**	**8.91**
C2703-250-6250-S	**3.499**	**88.88**	**133.89**	**595.58**	**48.67**	**8.52**
C2703-250-6500-S	**3.630**	**92.19**	**133.89**	**595.58**	**46.65**	**8.16**
C2703-250-6750-S	**3.760**	**95.50**	**133.89**	**595.58**	**44.78**	**7.84**
C2703-250-7000-S	**3.890**	**98.82**	**133.89**	**595.58**	**43.06**	**7.53**
C2703-250-7500-S*	**4.271**	**108.48**	**133.89**	**595.58**	**41.46**	**7.26**
C2703-250-8000-S*	**4.532**	**115.10**	**133.89**	**595.58**	**38.60**	**6.76**
C2703-250-8500-S*	**4.792**	**121.73**	**133.89**	**595.58**	**36.11**	**6.32**
C2703-250-9000-S*	**5.053**	**128.35**	**133.89**	**595.58**	**33.92**	**5.94**
C2703-250-9500-S*	**5.314**	**134.98**	**133.89**	**595.58**	**31.99**	**5.60**
C2761-225-4500-S	**2.356**	**59.85**	**99.66**	**443.30**	**46.49**	**8.13**
C2761-225-4750-S	**2.474**	**62.83**	**99.66**	**443.30**	**43.78**	**7.66**
C2761-225-5000-S	**2.591**	**65.82**	**99.66**	**443.30**	**41.38**	**7.24**
C2761-225-5250-S	**2.709**	**68.81**	**99.66**	**443.30**	**39.22**	**6.86**
C2761-225-5500-S	**2.827**	**71.80**	**99.66**	**443.30**	**37.28**	**6.52**
C2761-225-5750-S	**2.944**	**74.79**	**99.66**	**443.30**	**35.52**	**6.22**
C2761-225-6000-S	**3.062**	**77.78**	**99.66**	**443.30**	**33.92**	**5.94**
C2761-225-6250-S	**3.180**	**80.77**	**99.66**	**443.30**	**32.46**	**5.68**
C2761-225-6500-S	**3.297**	**83.75**	**99.66**	**443.30**	**31.12**	**5.45**
C2761-225-6750-S	**3.415**	**86.74**	**99.66**	**443.30**	**29.88**	**5.23**
C2761-225-7000-S	**3.533**	**89.73**	**99.66**	**443.30**	**28.74**	**5.03**
C2761-225-7500-S	**3.768**	**95.71**	**99.66**	**443.30**	**26.70**	**4.67**
C2761-225-8000-S	**4.003**	**101.69**	**99.66**	**443.30**	**24.94**	**4.36**
C2761-225-8500-S	**4.239**	**107.66**	**99.66**	**443.30**	**23.39**	**4.09**
C2761-225-9000-S	**4.474**	**113.64**	**99.66**	**443.30**	**22.02**	**3.85**
C2761-225-9500-S	**4.709**	**119.62**	**99.66**	**443.30**	**20.80**	**3.64**
C2761-250-4250-S	**2.430**	**61.72**	**131.21**	**583.67**	**72.09**	**12.62**
C2761-250-4500-S	**2.558**	**64.99**	**131.21**	**583.67**	**67.58**	**11.83**
C2761-250-4750-S	**2.687**	**68.25**	**131.21**	**583.67**	**63.61**	**11.13**
C2761-250-5000-S	**2.816**	**71.52**	**131.21**	**583.67**	**60.07**	**10.51**
C2761-250-5250-S	**2.944**	**74.79**	**131.21**	**583.67**	**56.91**	**9.96**
C2761-250-5500-S	**3.073**	**78.06**	**131.21**	**583.67**	**54.07**	**9.46**
C2761-250-5750-S	**3.202**	**81.32**	**131.21**	**583.67**	**51.49**	**9.01**
C2761-250-6000-S	**3.330**	**84.59**	**131.21**	**583.67**	**49.15**	**8.60**
C2761-250-6250-S	**3.459**	**87.86**	**131.21**	**583.67**	**47.01**	**8.23**
C2761-250-6500-S	**3.588**	**91.13**	**131.21**	**583.67**	**45.06**	**7.88**
C2761-250-6750-S	**3.716**	**94.40**	**131.21**	**583.67**	**43.25**	**7.57**

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

MUSIC WIRE

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C2761-250-7000-M	2.761	70.13	0.250	6.35	7.000	177.80	3.051	77.49	2.472	62.78	188.88	840.18	47.83	8.37
C2761-250-7500-M	2.761	70.13	0.250	6.35	7.500	190.50	3.247	82.47	2.621	66.58	188.88	840.18	44.41	7.77
C2761-250-8000-M*	2.761	70.13	0.250	6.35	8.000	203.20	3.595	91.32	2.959	75.15	188.88	840.18	42.88	7.50
C2761-250-8500-M*	2.761	70.13	0.250	6.35	8.500	215.90	3.791	96.30	3.108	78.95	188.88	840.18	40.11	7.02
C2761-250-9000-M*	2.761	70.13	0.250	6.35	9.000	228.60	3.988	101.28	3.258	82.76	188.88	840.18	37.68	6.59
C2761-250-9500-M*	2.761	70.13	0.250	6.35	9.500	241.30	4.184	106.27	3.408	86.56	188.88	840.18	35.53	6.22
C2820-225-4500-M	2.820	71.63	0.225	5.72	4.500	114.30	1.836	46.63	1.434	36.42	138.00	613.86	51.80	9.07
C2820-225-4750-M	2.820	71.63	0.225	5.72	4.750	120.65	1.921	48.80	1.493	37.93	138.00	613.86	48.79	8.54
C2820-225-5000-M	2.820	71.63	0.225	5.72	5.000	127.00	2.007	50.98	1.553	39.44	138.00	613.86	46.11	8.07
C2820-225-5250-M	2.820	71.63	0.225	5.72	5.250	133.35	2.093	53.15	1.612	40.95	138.00	613.86	43.71	7.65
C2820-225-5500-M	2.820	71.63	0.225	5.72	5.500	139.70	2.178	55.32	1.671	42.45	138.00	613.86	41.54	7.27
C2820-225-5750-M	2.820	71.63	0.225	5.72	5.750	146.05	2.264	57.50	1.731	43.96	138.00	613.86	39.58	6.93
C2820-225-6000-M	2.820	71.63	0.225	5.72	6.000	152.40	2.349	59.67	1.790	45.47	138.00	613.86	37.80	6.62
C2820-225-6250-M	2.820	71.63	0.225	5.72	6.250	158.75	2.435	61.84	1.850	46.98	138.00	613.86	36.17	6.33
C2820-225-6500-M	2.820	71.63	0.225	5.72	6.500	165.10	2.520	64.02	1.909	48.49	138.00	613.86	34.68	6.07
C2820-225-6750-M	2.820	71.63	0.225	5.72	6.750	171.45	2.606	66.19	1.968	49.99	138.00	613.86	33.30	5.83
C2820-225-7000-M	2.820	71.63	0.225	5.72	7.000	177.80	2.691	68.36	2.028	51.50	138.00	613.86	32.03	5.61
C2820-225-7500-M	2.820	71.63	0.225	5.72	7.500	190.50	2.862	72.71	2.146	54.52	138.00	613.86	29.76	5.21
C2820-225-8000-M	2.820	71.63	0.225	5.72	8.000	203.20	3.034	77.05	2.265	57.53	138.00	613.86	27.79	4.86
C2820-225-8500-M	2.820	71.63	0.225	5.72	8.500	215.90	3.205	81.40	2.384	60.55	138.00	613.86	26.06	4.56
C2820-225-9000-M	2.820	71.63	0.225	5.72	9.000	228.60	3.376	85.74	2.502	63.56	138.00	613.86	24.54	4.29
C2820-225-9500-M	2.820	71.63	0.225	5.72	9.500	241.30	3.547	90.09	2.621	66.58	138.00	613.86	23.18	4.06
C2820-250-4250-M	2.820	71.63	0.250	6.35	4.250	107.95	1.940	49.27	1.609	40.86	185.11	823.42	80.13	14.02
C2820-250-4500-M	2.820	71.63	0.250	6.35	4.500	114.30	2.036	51.71	1.681	42.70	185.11	823.42	75.12	13.15
C2820-250-4750-M	2.820	71.63	0.250	6.35	4.750	120.65	2.132	54.15	1.753	44.53	185.11	823.42	70.70	12.37
C2820-250-5000-M	2.820	71.63	0.250	6.35	5.000	127.00	2.228	56.58	1.825	46.37	185.11	823.42	66.77	11.69
C2820-250-5250-M	2.820	71.63	0.250	6.35	5.250	133.35	2.324	59.02	1.898	48.20	185.11	823.42	63.26	11.07
C2820-250-5500-M	2.820	71.63	0.250	6.35	5.500	139.70	2.420	61.46	1.970	50.04	185.11	823.42	60.10	10.52
C2820-250-5750-M	2.820	71.63	0.250	6.35	5.750	146.05	2.516	63.90	2.042	51.87	185.11	823.42	57.23	10.02
C2820-250-6000-M	2.820	71.63	0.250	6.35	6.000	152.40	2.612	66.34	2.114	53.71	185.11	823.42	54.63	9.56
C2820-250-6250-M	2.820	71.63	0.250	6.35	6.250	158.75	2.708	68.77	2.187	55.54	185.11	823.42	52.26	9.14
C2820-250-6500-M	2.820	71.63	0.250	6.35	6.500	165.10	2.804	71.21	2.259	57.38	185.11	823.42	50.08	8.76
C2820-250-6750-M	2.820	71.63	0.250	6.35	6.750	171.45	2.900	73.65	2.331	59.21	185.11	823.42	48.08	8.41
C2820-250-7000-M	2.820	71.63	0.250	6.35	7.000	177.80	2.996	76.09	2.403	61.05	185.11	823.42	46.23	8.09
C2820-250-7500-M	2.820	71.63	0.250	6.35	7.500	190.50	3.188	80.97	2.548	64.72	185.11	823.42	42.93	7.51
C2820-250-8000-M	2.820	71.63	0.250	6.35	8.000	203.20	3.380	85.84	2.692	68.39	185.11	823.42	40.06	7.01
C2820-250-8500-M*	2.820	71.63	0.250	6.35	8.500	215.90	3.726	94.63	3.027	76.89	185.11	823.42	38.77	6.79
C2820-250-9000-M*	2.820	71.63	0.250	6.35	9.000	228.60	3.918	99.51	3.172	80.56	185.11	823.42	36.42	6.37
C2820-250-9500-M*	2.820	71.63	0.250	6.35	9.500	241.30	4.110	104.38	3.316	84.23	185.11	823.42	34.34	6.01

STAINLESS STEEL

Catalog #	Load Length (L_1)		Load (P) at L_1		Spring Rate (R)	
	in	mm	lb	N	lb/in	N/mm
C2761-250-7000-S	3.845	97.66	131.21	583.67	41.59	7.28
C2761-250-7500-S	4.102	104.20	131.21	583.67	38.62	6.76
C2761-250-8000-S*	4.481	113.82	131.21	583.67	37.29	6.53
C2761-250-8500-S*	4.738	120.35	131.21	583.67	34.88	6.10
C2761-250-9000-S*	4.996	126.89	131.21	583.67	32.77	5.73
C2761-250-9500-S*	5.253	133.42	131.21	583.67	30.90	5.41
C2820-225-4500-S	2.332	59.23	97.66	434.40	45.04	7.88
C2820-225-4750-S	2.448	62.18	97.66	434.40	42.43	7.42
C2820-225-5000-S	2.564	65.13	97.66	434.40	40.09	7.02
C2820-225-5250-S	2.680	68.08	97.66	434.40	38.01	6.65
C2820-225-5500-S	2.797	71.03	97.66	434.40	36.12	6.32
C2820-225-5750-S	2.913	73.98	97.66	434.40	34.42	6.02
C2820-225-6000-S	3.029	76.94	97.66	434.40	32.87	5.75
C2820-225-6250-S	3.145	79.89	97.66	434.40	31.45	5.50
C2820-225-6500-S	3.261	82.84	97.66	434.40	30.15	5.28
C2820-225-6750-S	3.377	85.79	97.66	434.40	28.96	5.07
C2820-225-7000-S	3.494	88.74	97.66	434.40	27.85	4.87
C2820-225-7500-S	3.726	94.64	97.66	434.40	25.88	4.53
C2820-225-8000-S	3.958	100.54	97.66	434.40	24.16	4.23
C2820-225-8500-S	4.191	106.44	97.66	434.40	22.66	3.97
C2820-225-9000-S	4.423	112.34	97.66	434.40	21.34	3.73
C2820-225-9500-S	4.655	118.24	97.66	434.40	20.16	3.53
C2820-250-4250-S	2.404	61.07	128.60	572.03	69.68	12.19
C2820-250-4500-S	2.531	64.30	128.60	572.03	65.32	11.43
C2820-250-4750-S	2.658	67.52	128.60	572.03	61.48	10.76
C2820-250-5000-S	2.785	70.75	128.60	572.03	58.06	10.16
C2820-250-5250-S	2.912	73.97	128.60	572.03	55.01	9.63
C2820-250-5500-S	3.039	77.19	128.60	572.03	52.26	9.14
C2820-250-5750-S	3.166	80.42	128.60	572.03	49.77	8.71
C2820-250-6000-S	3.293	83.64	128.60	572.03	47.51	8.31
C2820-250-6250-S	3.420	86.87	128.60	572.03	45.44	7.95
C2820-250-6500-S	3.547	90.09	128.60	572.03	43.55	7.62
C2820-250-6750-S	3.674	93.32	128.60	572.03	41.81	7.32
C2820-250-7000-S	3.801	96.54	128.60	572.03	40.20	7.03
C2820-250-7500-S	4.055	102.99	128.60	572.03	37.33	6.53
C2820-250-8000-S	4.309	109.44	128.60	572.03	34.84	6.10
C2820-250-8500-S*	4.686	119.02	128.60	572.03	33.72	5.90
C2820-250-9000-S*	4.940	125.47	128.60	572.03	31.67	5.54
C2820-250-9500-S*	5.194	131.92	128.60	572.03	29.86	5.23

Part Numbers with an "*" are squared and not ground. **Part Numbers in bold** represent the newly expanded Associated Spring Raymond compression spring offering.

COMPRESSION SPRINGS – 316 STAINLESS STEEL

Stock sizes in 316 Stainless Steel
Associated Spring Raymond now offers a complete line of 316 Stainless Steel compression springs. 316 Stainless Steel provides superior temperature and corrosion resistance, which makes it particularly suitable for:

- Medical, surgical, veterinary and pharmaceutical applications
- Food and food preparation machinery and equipment
- Marine, aircraft and aerospace uses
- Harsh environment projects

Material
Stainless steel: Type 316 per ASTM A313 (Chemical and Physical only).

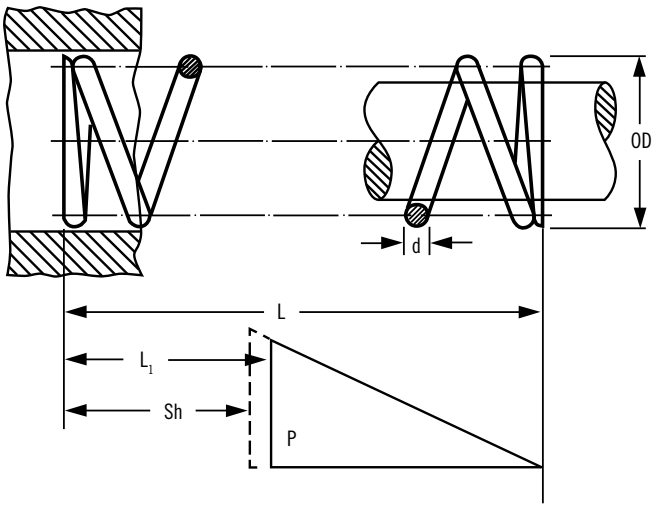
Stainless steel is not recommended above 300 degrees C. (570 degrees F.).

Stainless Steel 316 is **slightly magnetic** due to cold working during manufacturing. Stainless steel springs may have a slight residue of nickel on the surface of the wire. This is normal and will not affect the function of the part.

Wire diameter is prior to forming.

No charge for certificate of compliance when requested; certificate of chemical analysis also available (an additional charge applies).

Coil Direction (helix)
Right hand. Coil count is for reference only.



OD= Outside diameter
d = Wire diameter
Sh = Approx Solid Height
L = Free length (reference use only)
L_1 = Loaded length (minimum working length)
P = Load at L_1

Free Length
Free length is reference only.

Ends
Parts are squared and ground unless denoted with an *.
Parts ending with an * are squared and not ground.
However, springs with wire diameter ≤ 0.020" (.5mm) may be squared, not ground.

Tolerances

O.D. (English)	O.D. (Metric)
0.057 to 0.119" +/- 0.003"	1.45 to 3.02 mm +/- 0.08 mm
0.120 to 0.240" +/- 0.005"	3.05 to 6.10 mm +/- 0.13 mm
0.241 to 0.500" +/- 0.008"	6.12 to 12.70 mm +/- 0.20 mm
0.501 to 1.000" +/- 0.015"	12.73 to 25.40 mm +/- 0.38 mm
1.001 to 1.225" +/- 0.020"	25.43 to 31.12 mm +/- 0.51 mm
1.226 to 1.460" +/- 0.030"	31.14 to 37.08 mm +/- 0.76 mm
1.461 to 2.000" +/- 0.040"	37.11 to 50.80 mm +/- 1.02 mm

Loads & Spring Rate
Load P at L_1 and spring rate R are +/- 10.0% – load at any other point is for reference only.

For normal service, springs should not be compressed below L_1 (may take set beyond L_1). Load values at lengths other than L_1, can be approximated by multiplying the proposed deflection by the rate R. P = (L – Lx) x R where Lx is the new load height. Load at Lx should be reference only. Contact our engineering department if more stringent requirements are needed.

Surface Finish
Plain wire, passivated per ASTM A967.
Special finishes available upon request. See page 311 for alternative finishes.

Packaging
Parts are bulk-packed. Due to physical characteristics, tangling can occur during transit on wire sizes under .035" (.89mm). Please inquire about ultrasonic cleaning and special packaging when ordering.

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D20100X*	0.047	1.20	0.008	0.20	0.079	2.00	0.067	1.70	0.051	1.30	5.38	1.21	23.35	4.09
D20110X*	0.047	1.20	0.008	0.20	0.106	2.70	0.088	2.23	0.067	1.70	5.38	1.21	14.85	2.60
D20120X*	0.047	1.20	0.008	0.20	0.154	3.90	0.125	3.18	0.091	2.30	5.38	1.21	9.65	1.69
D20130X*	0.047	1.20	0.008	0.20	0.217	5.50	0.175	4.45	0.122	3.10	5.38	1.21	6.57	1.15
D20140X*	0.047	1.20	0.008	0.20	0.307	7.80	0.245	6.23	0.169	4.30	5.38	1.21	4.40	0.77
D20150X*	0.055	1.40	0.008	0.20	0.091	2.30	0.073	1.85	0.051	1.30	4.72	1.06	13.48	2.36
D20160X*	0.055	1.40	0.008	0.20	0.126	3.20	0.098	2.50	0.067	1.70	4.72	1.06	8.62	1.51
D20170X*	0.055	1.40	0.008	0.20	0.181	4.60	0.138	3.51	0.091	2.30	4.72	1.06	5.54	0.97
D20180X*	0.055	1.40	0.008	0.20	0.256	6.50	0.194	4.92	0.122	3.10	4.72	1.06	3.83	0.67
D20190X*	0.055	1.40	0.008	0.20	0.366	9.30	0.273	6.94	0.169	4.30	4.72	1.06	2.57	0.45
C0057-006-0120-X*	0.057	1.45	0.006	0.15	0.120	3.05	0.082	2.07	0.044	1.12	0.12	0.53	3.17	0.56
C0057-006-0190-X*	0.057	1.45	0.006	0.15	0.190	4.83	0.124	3.14	0.060	1.52	0.12	0.53	1.83	0.32
C0057-006-0250-X*	0.057	1.45	0.006	0.15	0.250	6.35	0.159	4.03	0.075	1.91	0.12	0.53	1.33	0.23
C0057-006-0310-X*	0.057	1.45	0.006	0.15	0.310	7.87	0.197	5.02	0.088	2.24	0.12	0.53	1.08	0.19
C0057-006-0380-X*	0.057	1.45	0.006	0.15	0.380	9.65	0.247	6.27	0.100	2.54	0.12	0.53	0.92	0.16
C0057-006-0440-X*	0.057	1.45	0.006	0.15	0.440	11.18	0.277	7.05	0.118	3.00	0.12	0.53	0.75	0.14
C0057-006-0500-X*	0.057	1.45	0.006	0.15	0.500	12.70	0.317	8.06	0.130	3.30	0.12	0.53	0.67	0.12
C0057-006-0560-X*	0.057	1.45	0.006	0.15	0.560	14.22	0.377	9.58	0.129	3.28	0.12	0.53	0.67	0.12
C0057-006-0620-X*	0.057	1.45	0.006	0.15	0.620	15.75	0.411	10.44	0.142	3.61	0.12	0.53	0.58	0.11
C0057-007-0120-X*	0.057	1.45	0.007	0.18	0.120	3.05	0.087	2.21	0.053	1.35	0.19	0.85	5.83	1.02
C0057-007-0190-X*	0.057	1.45	0.007	0.18	0.190	4.83	0.133	3.37	0.074	1.88	0.19	0.85	3.33	0.58
C0057-007-0250-X*	0.057	1.45	0.007	0.18	0.250	6.35	0.176	4.47	0.089	2.26	0.19	0.85	2.58	0.46
C0057-007-0310-X*	0.057	1.45	0.007	0.18	0.310	7.87	0.214	5.44	0.108	2.74	0.19	0.85	2.00	0.35
C0057-007-0380-X*	0.057	1.45	0.007	0.18	0.380	9.65	0.259	6.58	0.130	3.30	0.19	0.85	1.58	0.28
C0057-007-0440-X*	0.057	1.45	0.007	0.18	0.440	11.18	0.305	7.74	0.143	3.63	0.19	0.85	1.42	0.25
C0057-007-0500-X*	0.057	1.45	0.007	0.18	0.500	12.70	0.347	8.81	0.158	4.01	0.19	0.85	1.25	0.23
C0057-007-0560-X*	0.057	1.45	0.007	0.18	0.560	14.22	0.383	9.73	0.179	4.55	0.19	0.85	1.08	0.19
C0057-007-0620-X*	0.057	1.45	0.007	0.18	0.620	15.75	0.428	10.88	0.188	4.78	0.19	0.85	1.00	0.18
C0057-008-0120-X*	0.057	1.45	0.008	0.20	0.120	3.05	0.093	2.36	0.061	1.55	0.28	1.25	10.41	1.82
C0057-008-0190-X*	0.057	1.45	0.008	0.20	0.190	4.83	0.143	3.63	0.086	2.18	0.28	1.25	6.00	1.05
C0057-008-0250-X*	0.057	1.45	0.008	0.20	0.250	6.35	0.186	4.72	0.106	2.69	0.28	1.25	4.41	0.77
C0057-008-0310-X*	0.057	1.45	0.008	0.20	0.310	7.87	0.229	5.82	0.127	3.23	0.28	1.25	3.50	0.61
C0057-008-0380-X*	0.057	1.45	0.008	0.20	0.380	9.65	0.280	7.12	0.150	3.81	0.28	1.25	2.83	0.49
C0057-008-0440-X*	0.057	1.45	0.008	0.20	0.440	11.18	0.323	8.20	0.172	4.37	0.28	1.25	2.42	0.42
C0057-008-0500-X*	0.057	1.45	0.008	0.20	0.500	12.70	0.364	9.25	0.195	4.95	0.28	1.25	2.08	0.37
C0057-008-0560-X*	0.057	1.45	0.008	0.20	0.560	14.22	0.406	10.31	0.217	5.51	0.28	1.25	1.83	0.32
C0057-008-0620-X*	0.057	1.45	0.008	0.20	0.620	15.75	0.450	11.44	0.224	5.69	0.28	1.25	1.67	0.30
D20350X*	0.057	1.45	0.010	0.25	0.094	2.40	0.081	2.06	0.064	1.63	8.67	1.95	33.06	5.79
D20360X*	0.057	1.45	0.010	0.25	0.130	3.30	0.109	2.77	0.084	2.13	8.67	1.95	21.01	3.68
D20370X*	0.057	1.45	0.010	0.25	0.185	4.70	0.153	3.88	0.113	2.88	8.67	1.95	13.59	2.38
D20380X*	0.057	1.45	0.010	0.25	0.260	6.60	0.213	5.40	0.153	3.88	8.67	1.95	9.25	1.62
D20390X*	0.057	1.45	0.010	0.25	0.370	9.40	0.300	7.63	0.212	5.38	8.67	1.95	6.28	1.10
D20200X*	0.071	1.80	0.008	0.20	0.118	3.00	0.085	2.16	0.051	1.30	3.74	0.84	5.71	1.00
D20210X*	0.071	1.80	0.008	0.20	0.173	4.40	0.122	3.09	0.067	1.70	3.74	0.84	3.65	0.64
D20220X*	0.071	1.80	0.008	0.20	0.252	6.40	0.171	4.35	0.091	2.30	3.74	0.84	2.34	0.41
D20230X*	0.071	1.80	0.008	0.20	0.362	9.20	0.244	6.20	0.122	3.10	3.74	0.84	1.60	0.28
D20240X*	0.071	1.80	0.008	0.20	0.524	13.30	0.350	8.88	0.169	4.30	3.74	0.84	1.08	0.19
D20400X*	0.073	1.85	0.010	0.25	0.118	3.00	0.093	2.36	0.064	1.63	6.98	1.57	13.93	2.44
D20410X*	0.073	1.85	0.010	0.25	0.169	4.30	0.130	3.29	0.084	2.13	6.98	1.57	8.85	1.55
D20420X*	0.073	1.85	0.010	0.25	0.244	6.20	0.182	4.63	0.113	2.88	6.98	1.57	5.71	1.00
D20430X*	0.073	1.85	0.010	0.25	0.343	8.70	0.253	6.42	0.153	3.88	6.98	1.57	3.94	0.69
D20440X*	0.073	1.85	0.010	0.25	0.492	12.50	0.358	9.09	0.212	5.38	6.98	1.57	2.63	0.46
D20600X*	0.076	1.92	0.013	0.32	0.122	3.10	0.104	2.63	0.082	2.08	13.74	3.09	37.40	6.55
D20610X*	0.076	1.92	0.013	0.32	0.173	4.40	0.144	3.66	0.107	2.72	13.74	3.09	23.81	4.17
D20620X*	0.076	1.92	0.013	0.32	0.248	6.30	0.203	5.16	0.145	3.68	13.74	3.09	15.42	2.70
D20630X*	0.076	1.92	0.013	0.32	0.343	8.70	0.276	7.01	0.195	4.96	13.74	3.09	10.45	1.83
D20640X*	0.076	1.92	0.013	0.32	0.492	12.50	0.394	10.01	0.271	6.88	13.74	3.09	7.08	1.24
D20250X*	0.087	2.20	0.008	0.20	0.157	4.00	0.104	2.65	0.051	1.30	3.07	0.69	2.91	0.51
D20260X*	0.087	2.20	0.008	0.20	0.232	5.90	0.147	3.74	0.067	1.70	3.07	0.69	1.83	0.32
D20270X*	0.087	2.20	0.008	0.20	0.343	8.70	0.213	5.41	0.091	2.30	3.07	0.69	1.20	0.21
D20280X*	0.087	2.20	0.008	0.20	0.496	12.60	0.315	8.00	0.122	3.10	3.07	0.69	0.86	0.15
D20290X*	0.087	2.20	0.008	0.20	0.720	18.30	0.449	11.40	0.169	4.30	3.07	0.69	0.57	0.10
C0088-008-0120-X*	0.088	2.24	0.008	0.20	0.120	3.05	0.084	2.14	0.043	1.09	0.19	0.85	5.25	0.93
C0088-008-0190-X*	0.088	2.24	0.008	0.20	0.190	4.83	0.125	3.18	0.055	1.40	0.19	0.85	2.92	0.51

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0088-008-0250-X*	0.088	2.24	0.008	0.20	0.250	6.35	0.163	4.14	0.064	1.63	0.19	0.85	2.17	0.39
C0088-008-0310-X*	0.088	2.24	0.008	0.20	0.310	7.87	0.202	5.14	0.073	1.85	0.19	0.85	1.75	0.32
C0088-008-0380-X*	0.088	2.24	0.008	0.20	0.380	9.65	0.247	6.27	0.084	2.13	0.19	0.85	1.42	0.25
C0088-008-0440-X*	0.088	2.24	0.008	0.20	0.440	11.18	0.289	7.34	0.092	2.34	0.19	0.85	1.25	0.23
C0088-008-0500-X*	0.088	2.24	0.008	0.20	0.500	12.70	0.326	8.28	0.101	2.57	0.19	0.85	1.08	0.19
C0088-008-0560-X*	0.088	2.24	0.008	0.20	0.560	14.22	0.354	9.00	0.115	2.92	0.19	0.85	0.92	0.16
C0088-008-0620-X*	0.088	2.24	0.008	0.20	0.620	15.75	0.394	10.00	0.119	3.02	0.19	0.85	0.83	0.14
C0088-010-0120-X*	0.088	2.24	0.010	0.25	0.120	3.05	0.085	2.16	0.060	1.52	0.36	1.60	10.25	1.80
C0088-010-0190-X*	0.088	2.24	0.010	0.25	0.190	4.83	0.127	3.23	0.081	2.06	0.36	1.60	5.66	1.00
C0088-010-0250-X*	0.088	2.24	0.010	0.25	0.250	6.35	0.164	4.18	0.098	2.49	0.36	1.60	4.17	0.74
C0088-010-0310-X*	0.088	2.24	0.010	0.25	0.310	7.87	0.197	5.02	0.118	3.00	0.36	1.60	3.17	0.56
C0088-010-0380-X*	0.088	2.24	0.010	0.25	0.380	9.65	0.250	6.36	0.130	3.30	0.36	1.60	2.75	0.49
C0088-010-0440-X*	0.088	2.24	0.010	0.25	0.440	11.18	0.287	7.30	0.147	3.73	0.36	1.60	2.33	0.40
C0088-010-0500-X*	0.088	2.24	0.010	0.25	0.500	12.70	0.314	7.98	0.172	4.37	0.36	1.60	1.92	0.33
C0088-010-0560-X*	0.088	2.24	0.010	0.25	0.560	14.22	0.356	9.05	0.185	4.70	0.36	1.60	1.75	0.32
C0088-010-0620-X*	0.088	2.24	0.010	0.25	0.620	15.75	0.395	10.03	0.201	5.11	0.36	1.60	1.58	0.28
C0088-010-0690-X*	0.088	2.24	0.010	0.25	0.690	17.53	0.438	11.14	0.213	5.41	0.36	1.60	1.42	0.25
C0088-010-0750-X*	0.088	2.24	0.010	0.25	0.750	19.05	0.483	12.26	0.228	5.79	0.36	1.60	1.33	0.23
C0088-012-0120-X*	0.088	2.24	0.012	0.30	0.120	3.05	0.090	2.30	0.075	1.91	0.61	2.71	20.49	3.59
C0088-012-0190-X*	0.088	2.24	0.012	0.30	0.190	4.83	0.140	3.55	0.100	2.54	0.61	2.71	12.08	2.12
C0088-012-0250-X*	0.088	2.24	0.012	0.30	0.250	6.35	0.181	4.59	0.123	3.12	0.61	2.71	8.75	1.54
C0088-012-0310-X*	0.088	2.24	0.012	0.30	0.310	7.87	0.219	5.56	0.148	3.76	0.61	2.71	6.66	1.17
C0088-012-0380-X*	0.088	2.24	0.012	0.30	0.380	9.65	0.268	6.80	0.172	4.37	0.61	2.71	5.41	0.95
C0088-012-0440-X*	0.088	2.24	0.012	0.30	0.440	11.18	0.312	7.93	0.191	4.85	0.61	2.71	4.75	0.84
C0088-012-0500-X*	0.088	2.24	0.012	0.30	0.500	12.70	0.351	8.92	0.215	5.46	0.61	2.71	4.08	0.72
C0088-012-0560-X*	0.088	2.24	0.012	0.30	0.560	14.22	0.394	10.02	0.235	5.97	0.61	2.71	3.67	0.65
C0088-012-0620-X*	0.088	2.24	0.012	0.30	0.620	15.75	0.428	10.88	0.265	6.73	0.61	2.71	3.17	0.56
C0088-012-0690-X*	0.088	2.24	0.012	0.30	0.690	17.53	0.482	12.24	0.266	6.76	0.61	2.71	2.92	0.51
C0088-012-0750-X*	0.088	2.24	0.012	0.30	0.750	19.05	0.522	13.27	0.293	7.44	0.61	2.71	2.67	0.47
D20450X*	0.089	2.25	0.010	0.25	0.146	3.70	0.104	2.65	0.064	1.63	5.83	1.31	7.14	1.25
D20460X*	0.089	2.25	0.010	0.25	0.217	5.50	0.151	3.84	0.084	2.13	5.83	1.31	4.51	0.79
D20470X*	0.089	2.25	0.010	0.25	0.315	8.00	0.214	5.43	0.113	2.88	5.83	1.31	2.91	0.51
D20480X*	0.089	2.25	0.010	0.25	0.449	11.40	0.302	7.66	0.153	3.88	5.83	1.31	2.00	0.35
D20490X*	0.089	2.25	0.010	0.25	0.654	16.60	0.439	11.14	0.212	5.38	5.83	1.31	1.37	0.24
D20650X*	0.091	2.32	0.013	0.32	0.146	3.70	0.115	2.92	0.082	2.08	11.61	2.61	19.13	3.35
D20660X*	0.091	2.32	0.013	0.32	0.209	5.30	0.161	4.08	0.107	2.72	11.61	2.61	12.22	2.14
D20670X*	0.091	2.32	0.013	0.32	0.303	7.70	0.229	5.81	0.145	3.68	11.61	2.61	7.88	1.38
D20680X*	0.091	2.32	0.013	0.32	0.429	10.90	0.320	8.12	0.195	4.96	11.61	2.61	5.37	0.94
D20690X*	0.091	2.32	0.013	0.32	0.614	15.60	0.454	11.52	0.271	6.88	11.61	2.61	3.65	0.64
D20850X*	0.094	2.40	0.016	0.40	0.138	3.50	0.113	2.88	0.102	2.60	21.31	4.79	44.31	7.76
D20860X*	0.094	2.40	0.016	0.40	0.197	5.00	0.158	4.02	0.134	3.40	21.31	4.79	27.98	4.90
D20870X*	0.094	2.40	0.016	0.40	0.276	7.00	0.217	5.50	0.181	4.60	21.31	4.79	18.22	3.19
D20880X*	0.094	2.40	0.016	0.40	0.394	10.00	0.307	7.79	0.244	6.20	21.31	4.79	12.39	2.17
D20890X*	0.094	2.40	0.016	0.40	0.551	14.00	0.423	10.74	0.339	8.60	21.31	4.79	8.39	1.47
D20300X*	0.106	2.70	0.008	0.20	0.213	5.40	0.126	3.21	0.051	1.30	2.54	0.57	1.48	0.26
D20310X*	0.106	2.70	0.008	0.20	0.323	8.20	0.191	4.85	0.067	1.70	2.54	0.57	0.97	0.17
D20320X*	0.106	2.70	0.008	0.20	0.488	12.40	0.284	7.22	0.091	2.30	2.54	0.57	0.63	0.11
D20330X*	0.106	2.70	0.008	0.20	0.705	17.90	0.384	9.76	0.122	3.10	2.54	0.57	0.40	0.07
D20340X*	0.106	2.70	0.008	0.20	1.031	26.20	0.583	14.80	0.169	4.30	2.54	0.57	0.29	0.05
D20500X*	0.108	2.75	0.010	0.25	0.193	4.90	0.126	3.21	0.064	1.63	4.80	1.08	3.65	0.64
D20510X*	0.108	2.75	0.010	0.25	0.287	7.30	0.184	4.67	0.084	2.13	4.80	1.08	2.34	0.41
D20520X*	0.108	2.75	0.010	0.25	0.429	10.90	0.266	6.75	0.113	2.88	4.80	1.08	1.48	0.26
D20530X*	0.108	2.75	0.010	0.25	0.618	15.70	0.382	9.70	0.153	3.88	4.80	1.08	1.03	0.18
D20540X*	0.108	2.75	0.010	0.25	0.902	22.90	0.547	13.90	0.212	5.38	4.80	1.08	0.69	0.12
D20700X*	0.111	2.82	0.013	0.32	0.185	4.70	0.135	3.43	0.082	2.08	9.70	2.18	9.82	1.72
D20710X*	0.111	2.82	0.013	0.32	0.268	6.80	0.189	4.80	0.107	2.72	9.70	2.18	6.22	1.09
D20720X*	0.111	2.82	0.013	0.32	0.394	10.00	0.273	6.93	0.145	3.68	9.70	2.18	4.05	0.71
D20730X*	0.111	2.82	0.013	0.32	0.559	14.20	0.380	9.66	0.195	4.96	9.70	2.18	2.74	0.48
D20740X*	0.111	2.82	0.013	0.32	0.811	20.60	0.543	13.79	0.271	6.88	9.70	2.18	1.83	0.32
D20900X*	0.114	2.90	0.016	0.40	0.169	4.30	0.129	3.28	0.102	2.60	18.02	4.05	22.67	3.97
D20910X*	0.114	2.90	0.016	0.40	0.248	6.30	0.185	4.70	0.134	3.40	18.02	4.05	14.45	2.53
D20920X*	0.114	2.90	0.016	0.40	0.358	9.10	0.261	6.62	0.181	4.60	18.02	4.05	9.31	1.63
D20930X*	0.114	2.90	0.016	0.40	0.512	13.00	0.368	9.35	0.244	6.20	18.02	4.05	6.34	1.11
D20940X*	0.114	2.90	0.016	0.40	0.728	18.50	0.516	13.10	0.339	8.60	18.02	4.05	4.28	0.75

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D21100X*	0.118	3.00	0.020	0.50	0.173	4.40	0.143	3.63	0.128	3.25	33.05	7.43	55.10	9.65
D21110X*	0.118	3.00	0.020	0.50	0.240	6.10	0.193	4.90	0.167	4.25	33.05	7.43	35.29	6.18
D21120X*	0.118	3.00	0.020	0.50	0.343	8.70	0.269	6.84	0.226	5.75	33.05	7.43	22.84	4.00
D21130X*	0.118	3.00	0.020	0.50	0.472	12.00	0.365	9.27	0.305	7.75	33.05	7.43	15.53	2.72
D21140X*	0.118	3.00	0.020	0.50	0.689	17.50	0.530	13.46	0.423	10.75	33.05	7.43	10.51	1.84
C0120-010-0250-X*	0.120	3.05	0.010	0.25	0.250	6.35	0.150	3.82	0.064	1.63	0.27	1.20	2.67	0.47
C0120-010-0310-X*	0.120	3.05	0.010	0.25	0.310	7.87	0.182	4.63	0.073	1.85	0.27	1.20	2.08	0.37
C0120-010-0380-X*	0.120	3.05	0.010	0.25	0.380	9.65	0.221	5.60	0.083	2.11	0.27	1.20	1.67	0.30
C0120-010-0440-X*	0.120	3.05	0.010	0.25	0.440	11.18	0.252	6.41	0.092	2.34	0.27	1.20	1.42	0.25
C0120-010-0500-X*	0.120	3.05	0.010	0.25	0.500	12.70	0.287	7.30	0.101	2.57	0.27	1.20	1.25	0.23
C0120-010-0560-X*	0.120	3.05	0.010	0.25	0.560	14.22	0.332	8.44	0.109	2.77	0.27	1.20	1.17	0.21
C0120-010-0620-X*	0.120	3.05	0.010	0.25	0.620	15.75	0.354	9.00	0.118	3.00	0.27	1.20	1.00	0.18
C0120-010-0690-X*	0.120	3.05	0.010	0.25	0.690	17.53	0.400	10.16	0.129	3.28	0.27	1.20	0.92	0.16
C0120-010-0750-X*	0.120	3.05	0.010	0.25	0.750	19.05	0.431	10.95	0.137	3.48	0.27	1.20	0.83	0.14
C0120-010-0810-X*	0.120	3.05	0.010	0.25	0.810	20.57	0.456	11.58	0.146	3.71	0.27	1.20	0.75	0.14
C0120-010-0880-X*	0.120	3.05	0.010	0.25	0.880	22.35	0.526	13.35	0.156	3.96	0.27	1.20	0.75	0.14
C0120-010-0940-X*	0.120	3.05	0.010	0.25	0.940	23.88	0.541	13.75	0.165	4.19	0.27	1.20	0.67	0.12
C0120-010-1000-X*	0.120	3.05	0.010	0.25	1.000	25.40	0.545	13.83	0.174	4.42	0.27	1.20	0.58	0.11
C0120-010-1120-X*	0.120	3.05	0.010	0.25	1.120	28.45	0.665	16.88	0.192	4.88	0.27	1.20	0.58	0.11
C0120-010-1250-X*	0.120	3.05	0.010	0.25	1.250	31.75	0.719	18.25	0.211	5.36	0.27	1.20	0.50	0.09
C0120-010-1500-X*	0.120	3.05	0.010	0.25	1.500	38.10	0.862	21.90	0.248	6.30	0.27	1.20	0.42	0.07
C0120-012-0250-X*	0.120	3.05	0.012	0.30	0.250	6.35	0.163	4.15	0.081	2.06	0.45	2.00	5.25	0.93
C0120-012-0310-X*	0.120	3.05	0.012	0.30	0.310	7.87	0.201	5.10	0.093	2.36	0.45	2.00	4.17	0.74
C0120-012-0380-X*	0.120	3.05	0.012	0.30	0.380	9.65	0.243	6.18	0.107	2.72	0.45	2.00	3.33	0.58
C0120-012-0440-X*	0.120	3.05	0.012	0.30	0.440	11.18	0.279	7.10	0.119	3.02	0.45	2.00	2.83	0.49
C0120-012-0500-X*	0.120	3.05	0.012	0.30	0.500	12.70	0.318	8.08	0.131	3.33	0.45	2.00	2.50	0.44
C0120-012-0560-X*	0.120	3.05	0.012	0.30	0.560	14.22	0.350	8.89	0.143	3.63	0.45	2.00	2.17	0.39
C0120-012-0620-X*	0.120	3.05	0.012	0.30	0.620	15.75	0.392	9.97	0.155	3.94	0.45	2.00	2.00	0.35
C0120-012-0690-X*	0.120	3.05	0.012	0.30	0.690	17.53	0.430	10.92	0.169	4.29	0.45	2.00	1.75	0.32
C0120-012-0750-X*	0.120	3.05	0.012	0.30	0.750	19.05	0.477	12.11	0.181	4.60	0.45	2.00	1.67	0.30
C0120-012-0810-X*	0.120	3.05	0.012	0.30	0.810	20.57	0.507	12.87	0.193	4.90	0.45	2.00	1.50	0.26
C0120-012-0880-X*	0.120	3.05	0.012	0.30	0.880	22.35	0.559	14.19	0.207	5.26	0.45	2.00	1.42	0.25
C0120-012-0940-X*	0.120	3.05	0.012	0.30	0.940	23.88	0.576	14.63	0.219	5.56	0.45	2.00	1.25	0.23
C0120-012-1000-X*	0.120	3.05	0.012	0.30	1.000	25.40	0.636	16.15	0.231	5.87	0.45	2.00	1.25	0.23
C0120-012-1120-X*	0.120	3.05	0.012	0.30	1.120	28.45	0.700	17.78	0.255	6.48	0.45	2.00	1.08	0.19
C0120-012-1250-X*	0.120	3.05	0.012	0.30	1.250	31.75	0.795	20.19	0.281	7.14	0.45	2.00	1.00	0.18
C0120-012-1500-X*	0.120	3.05	0.012	0.30	1.500	38.10	0.954	24.23	0.331	8.41	0.45	2.00	0.83	0.14
C0120-014-0250-X*	0.120	3.05	0.014	0.36	0.250	6.35	0.172	4.37	0.101	2.57	0.72	3.20	9.16	1.61
C0120-014-0310-X*	0.120	3.05	0.014	0.36	0.310	7.87	0.210	5.34	0.117	2.97	0.72	3.20	7.16	1.26
C0120-014-0380-X*	0.120	3.05	0.014	0.36	0.380	9.65	0.256	6.49	0.136	3.45	0.72	3.20	5.75	1.02
C0120-014-0440-X*	0.120	3.05	0.014	0.36	0.440	11.18	0.294	7.48	0.152	3.86	0.72	3.20	4.91	0.86
C0120-014-0500-X*	0.120	3.05	0.014	0.36	0.500	12.70	0.335	8.50	0.168	4.27	0.72	3.20	4.33	0.75
C0120-014-0560-X*	0.120	3.05	0.014	0.36	0.560	14.22	0.373	9.48	0.184	4.67	0.72	3.20	3.83	0.67
C0120-014-0620-X*	0.120	3.05	0.014	0.36	0.620	15.75	0.411	10.43	0.200	5.08	0.72	3.20	3.42	0.60
C0120-014-0690-X*	0.120	3.05	0.014	0.36	0.690	17.53	0.458	11.63	0.219	5.56	0.72	3.20	3.08	0.54
C0120-014-0750-X*	0.120	3.05	0.014	0.36	0.750	19.05	0.497	12.63	0.235	5.97	0.72	3.20	2.83	0.49
C0120-014-0810-X*	0.120	3.05	0.014	0.36	0.810	20.57	0.533	13.54	0.251	6.38	0.72	3.20	2.58	0.46
C0120-014-0880-X*	0.120	3.05	0.014	0.36	0.880	22.35	0.584	14.83	0.269	6.83	0.72	3.20	2.42	0.42
C0120-014-0940-X*	0.120	3.05	0.014	0.36	0.940	23.88	0.622	15.80	0.285	7.24	0.72	3.20	2.25	0.40
C0120-014-1000-X*	0.120	3.05	0.014	0.36	1.000	25.40	0.656	16.67	0.301	7.65	0.72	3.20	2.08	0.37
C0120-014-1120-X*	0.120	3.05	0.014	0.36	1.120	28.45	0.730	18.53	0.333	8.46	0.72	3.20	1.83	0.32
C0120-014-1250-X*	0.120	3.05	0.014	0.36	1.250	31.75	0.821	20.84	0.368	9.35	0.72	3.20	1.67	0.30
C0120-014-1500-X*	0.120	3.05	0.014	0.36	1.500	38.10	0.995	25.27	0.434	11.02	0.72	3.20	1.42	0.25
C0120-016-0190-X*	0.120	3.05	0.016	0.41	0.190	4.83	0.141	3.59	0.101	2.57	1.04	4.63	21.32	3.73
C0120-016-0250-X*	0.120	3.05	0.016	0.41	0.250	6.35	0.179	4.55	0.119	3.02	1.04	4.63	14.58	2.56
C0120-016-0310-X*	0.120	3.05	0.016	0.41	0.310	7.87	0.221	5.62	0.139	3.53	1.04	4.63	11.66	2.05
C0120-016-0380-X*	0.120	3.05	0.016	0.41	0.380	9.65	0.270	6.86	0.163	4.14	1.04	4.63	9.41	1.65
C0120-016-0440-X*	0.120	3.05	0.016	0.41	0.440	11.18	0.309	7.85	0.187	4.75	1.04	4.63	7.91	1.38
C0120-016-0500-X*	0.120	3.05	0.016	0.41	0.500	12.70	0.350	8.90	0.208	5.28	1.04	4.63	6.91	1.21
C0120-016-0560-X*	0.120	3.05	0.016	0.41	0.560	14.22	0.390	9.90	0.231	5.87	1.04	4.63	6.08	1.07
C0120-016-0620-X*	0.120	3.05	0.016	0.41	0.620	15.75	0.432	10.97	0.251	6.38	1.04	4.63	5.50	0.96
C0120-016-0690-X*	0.120	3.05	0.016	0.41	0.690	17.53	0.476	12.08	0.281	7.14	1.04	4.63	4.83	0.84
C0120-016-0750-X*	0.120	3.05	0.016	0.41	0.750	19.05	0.516	13.10	0.303	7.70	1.04	4.63	4.41	0.77
C0120-016-1000-X*	0.120	3.05	0.016	0.41	1.000	25.40	0.697	17.70	0.378	9.60	1.04	4.63	3.42	0.60

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0120-016-1120-X*	0.120	3.05	0.016	0.41	1.120	28.45	0.775	19.68	0.419	10.64	1.04	4.63	3.00	0.53
C0120-016-1250-X*	0.120	3.05	0.016	0.41	1.250	31.75	0.862	21.89	0.463	11.76	1.04	4.63	2.67	0.47
C0120-016-1500-X*	0.120	3.05	0.016	0.41	1.500	38.10	1.056	26.83	0.544	13.82	1.04	4.63	2.33	0.40
C0120-018-0190-X*	0.120	3.05	0.018	0.46	0.190	4.83	0.148	3.75	0.117	2.97	1.46	6.49	34.40	6.02
C0120-018-0250-X*	0.120	3.05	0.018	0.46	0.250	6.35	0.188	4.77	0.139	3.53	1.46	6.49	23.49	4.12
C0120-018-0310-X*	0.120	3.05	0.018	0.46	0.310	7.87	0.230	5.84	0.166	4.22	1.46	6.49	18.24	3.19
C0120-018-0380-X*	0.120	3.05	0.018	0.46	0.380	9.65	0.282	7.17	0.194	4.93	1.46	6.49	14.91	2.61
C0120-018-0440-X*	0.120	3.05	0.018	0.46	0.440	11.18	0.325	8.25	0.220	5.59	1.46	6.49	12.66	2.22
C0120-018-0500-X*	0.120	3.05	0.018	0.46	0.500	12.70	0.366	9.31	0.248	6.30	1.46	6.49	10.91	1.91
C0120-018-0560-X*	0.120	3.05	0.018	0.46	0.560	14.22	0.407	10.33	0.279	7.09	1.46	6.49	9.50	1.66
C0120-018-0620-X*	0.120	3.05	0.018	0.46	0.620	15.75	0.455	11.56	0.297	7.54	1.46	6.49	8.83	1.54
C0120-018-0690-X*	0.120	3.05	0.018	0.46	0.690	17.53	0.502	12.75	0.332	8.43	1.46	6.49	7.75	1.37
C0120-018-0750-X*	0.120	3.05	0.018	0.46	0.750	19.05	0.544	13.82	0.359	9.12	1.46	6.49	7.08	1.24
C0120-018-1000-X*	0.120	3.05	0.018	0.46	1.000	25.40	0.727	18.46	0.455	11.56	1.46	6.49	5.33	0.93
C0120-018-1120-X*	0.120	3.05	0.018	0.46	1.120	28.45	0.813	20.65	0.505	12.83	1.46	6.49	4.75	0.84
C0120-018-1250-X*	0.120	3.05	0.018	0.46	1.250	31.75	0.907	23.04	0.559	14.20	1.46	6.49	4.25	0.75
C0120-018-1500-X*	0.120	3.05	0.018	0.46	1.500	38.10	1.083	27.52	0.663	16.84	1.46	6.49	3.50	0.61
C0120-020-0250-X*	0.120	3.05	0.020	0.51	0.250	6.35	0.197	5.01	0.163	4.14	1.97	8.76	37.32	6.53
C0120-020-0310-X*	0.120	3.05	0.020	0.51	0.310	7.87	0.242	6.14	0.192	4.88	1.97	8.76	28.99	5.08
C0120-020-0380-X*	0.120	3.05	0.020	0.51	0.380	9.65	0.294	7.48	0.226	5.74	1.97	8.76	23.07	4.05
C0120-020-0440-X*	0.120	3.05	0.020	0.51	0.440	11.18	0.339	8.61	0.256	6.50	1.97	8.76	19.58	3.43
C0120-020-0500-X*	0.120	3.05	0.020	0.51	0.500	12.70	0.384	9.75	0.285	7.24	1.97	8.76	16.99	2.98
C0120-020-0560-X*	0.120	3.05	0.020	0.51	0.560	14.22	0.429	10.90	0.314	7.98	1.97	8.76	15.08	2.64
C0120-020-0620-X*	0.120	3.05	0.020	0.51	0.620	15.75	0.474	12.03	0.344	8.74	1.97	8.76	13.49	2.36
C0120-020-0690-X*	0.120	3.05	0.020	0.51	0.690	17.53	0.527	13.37	0.378	9.60	1.97	8.76	12.08	2.12
C0120-020-0750-X*	0.120	3.05	0.020	0.51	0.750	19.05	0.570	14.49	0.407	10.34	1.97	8.76	11.00	1.93
C0120-020-0810-X*	0.120	3.05	0.020	0.51	0.810	20.57	0.616	15.64	0.437	11.10	1.97	8.76	10.16	1.79
C0120-020-0880-X*	0.120	3.05	0.020	0.51	0.880	22.35	0.668	16.98	0.471	11.96	1.97	8.76	9.33	1.63
C0120-020-0940-X*	0.120	3.05	0.020	0.51	0.940	23.88	0.712	18.09	0.500	12.70	1.97	8.76	8.66	1.52
C0120-020-1000-X*	0.120	3.05	0.020	0.51	1.000	25.40	0.758	19.26	0.530	13.46	1.97	8.76	8.16	1.44
C0120-020-1120-X*	0.120	3.05	0.020	0.51	1.120	28.45	0.848	21.53	0.588	14.94	1.97	8.76	7.25	1.28
C0120-020-1250-X*	0.120	3.05	0.020	0.51	1.250	31.75	0.946	24.03	0.652	16.56	1.97	8.76	6.50	1.14
C0120-020-1500-X*	0.120	3.05	0.020	0.51	1.500	38.10	1.130	28.69	0.774	19.66	1.97	8.76	5.33	0.93
C0120-022-0250-X	0.120	3.05	0.022	0.56	0.250	6.35	0.206	5.23	0.171	4.34	2.59	11.52	58.81	10.30
C0120-022-0310-X	0.120	3.05	0.022	0.56	0.310	7.87	0.252	6.39	0.209	5.31	2.59	11.52	44.40	7.78
C0120-022-0380-X	0.120	3.05	0.022	0.56	0.380	9.65	0.305	7.75	0.252	6.40	2.59	11.52	34.57	6.06
C0120-022-0440-X	0.120	3.05	0.022	0.56	0.440	11.18	0.354	9.00	0.280	7.11	2.59	11.52	30.32	5.31
C0120-022-0500-X	0.120	3.05	0.022	0.56	0.500	12.70	0.400	10.16	0.319	8.10	2.59	11.52	25.91	4.54
C0120-022-0560-X	0.120	3.05	0.022	0.56	0.560	14.22	0.450	11.42	0.346	8.79	2.59	11.52	23.49	4.12
C0120-022-0620-X	0.120	3.05	0.022	0.56	0.620	15.75	0.495	12.57	0.384	9.75	2.59	11.52	20.74	3.63
C0120-022-0690-X	0.120	3.05	0.022	0.56	0.690	17.53	0.543	13.80	0.442	11.23	2.59	11.52	17.66	3.10
C0120-022-0750-X	0.120	3.05	0.022	0.56	0.750	19.05	0.596	15.13	0.461	11.71	2.59	11.52	16.83	2.94
C0120-022-0810-X	0.120	3.05	0.022	0.56	0.810	20.57	0.643	16.34	0.494	12.55	2.59	11.52	15.58	2.73
C0120-022-0940-X	0.120	3.05	0.022	0.56	0.940	23.88	0.742	18.84	0.566	14.38	2.59	11.52	13.08	2.29
C0120-022-1000-X	0.120	3.05	0.022	0.56	1.000	25.40	0.788	20.02	0.600	15.24	2.59	11.52	12.25	2.15
C0120-022-1120-X	0.120	3.05	0.022	0.56	1.120	28.45	0.893	22.68	0.667	16.94	2.59	11.52	11.41	2.00
C0120-022-1250-X	0.120	3.05	0.022	0.56	1.250	31.75	0.984	24.99	0.739	18.77	2.59	11.52	9.75	1.72
C0120-022-1500-X	0.120	3.05	0.022	0.56	1.500	38.10	1.179	29.95	0.879	22.33	2.59	11.52	8.08	1.42
C0120-024-0310-X	0.120	3.05	0.024	0.61	0.310	7.87	0.262	6.64	0.229	5.82	3.32	14.77	68.56	12.01
C0120-024-0380-X	0.120	3.05	0.024	0.61	0.380	9.65	0.319	8.09	0.271	6.88	3.32	14.77	54.06	9.47
C0120-024-0440-X	0.120	3.05	0.024	0.61	0.440	11.18	0.368	9.34	0.307	7.80	3.32	14.77	45.82	8.02
C0120-024-0500-X	0.120	3.05	0.024	0.61	0.500	12.70	0.416	10.58	0.343	8.71	3.32	14.77	39.73	6.95
C0120-024-0560-X	0.120	3.05	0.024	0.61	0.560	14.22	0.465	11.82	0.379	9.63	3.32	14.77	35.07	6.15
C0120-024-0620-X	0.120	3.05	0.024	0.61	0.620	15.75	0.514	13.06	0.415	10.54	3.32	14.77	31.40	5.50
C0120-024-0690-X	0.120	3.05	0.024	0.61	0.690	17.53	0.571	14.51	0.457	11.61	3.32	14.77	27.99	4.90
C0120-024-0750-X	0.120	3.05	0.024	0.61	0.750	19.05	0.620	15.75	0.493	12.52	3.32	14.77	25.57	4.48
C0120-024-0810-X	0.120	3.05	0.024	0.61	0.810	20.57	0.669	17.00	0.529	13.44	3.32	14.77	23.57	4.13
C0120-024-0880-X	0.120	3.05	0.024	0.61	0.880	22.35	0.726	18.45	0.571	14.50	3.32	14.77	21.57	3.78
C0120-024-0940-X	0.120	3.05	0.024	0.61	0.940	23.88	0.775	19.69	0.607	15.42	3.32	14.77	20.16	3.54
C0120-024-1000-X	0.120	3.05	0.024	0.61	1.000	25.40	0.824	20.92	0.643	16.33	3.32	14.77	18.83	3.29
C0120-024-1120-X	0.120	3.05	0.024	0.61	1.120	28.45	0.922	23.41	0.715	18.16	3.32	14.77	16.74	2.92
C0120-024-1250-X	0.120	3.05	0.024	0.61	1.250	31.75	1.027	26.10	0.793	20.14	3.32	14.77	14.91	2.61
C0120-024-1500-X	0.120	3.05	0.024	0.61	1.500	38.10	1.233	31.31	0.943	23.95	3.32	14.77	12.41	2.17
D20550X*	0.136	3.45	0.010	0.25	0.280	7.10	0.165	4.20	0.064	1.63	3.87	0.87	1.71	0.30

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D20560X*	0.136	3.45	0.010	0.25	0.421	10.70	0.250	6.35	0.084	2.13	3.87	0.87	1.14	0.20
D20570X*	0.136	3.45	0.010	0.25	0.634	16.10	0.370	9.41	0.113	2.88	3.87	0.87	0.74	0.13
D20580X*	0.136	3.45	0.010	0.25	0.917	23.30	0.537	13.63	0.153	3.88	3.87	0.87	0.51	0.09
D20590X*	0.136	3.45	0.010	0.25	1.343	34.10	0.772	19.60	0.212	5.38	3.87	0.87	0.34	0.06
D20750X*	0.139	3.52	0.013	0.32	0.248	6.30	0.163	4.13	0.082	2.08	7.83	1.76	4.63	0.81
D20760X*	0.139	3.52	0.013	0.32	0.370	9.40	0.237	6.02	0.107	2.72	7.83	1.76	2.97	0.52
D20770X*	0.139	3.52	0.013	0.32	0.551	14.00	0.341	8.67	0.145	3.68	7.83	1.76	1.88	0.33
D20780X*	0.139	3.52	0.013	0.32	0.791	20.10	0.490	12.45	0.195	4.96	7.83	1.76	1.31	0.23
D20790X*	0.139	3.52	0.013	0.32	1.154	29.30	0.720	18.30	0.271	6.88	7.83	1.76	0.91	0.16
D20950X*	0.142	3.60	0.016	0.40	0.220	5.60	0.152	3.86	0.102	2.60	14.72	3.31	10.85	1.90
D20960X*	0.142	3.60	0.016	0.40	0.327	8.30	0.219	5.56	0.134	3.40	14.72	3.31	6.91	1.21
D20970X*	0.142	3.60	0.016	0.40	0.472	12.00	0.306	7.76	0.181	4.60	14.72	3.31	4.45	0.78
D20980X*	0.142	3.60	0.016	0.40	0.689	17.50	0.443	11.25	0.244	6.20	14.72	3.31	3.03	0.53
D20990X*	0.142	3.60	0.016	0.40	1.004	25.50	0.642	16.31	0.339	8.60	14.72	3.31	2.06	0.36
D21150X*	0.146	3.70	0.020	0.50	0.217	5.50	0.164	4.17	0.128	3.25	27.40	6.16	26.50	4.64
D21160X*	0.146	3.70	0.020	0.50	0.311	7.90	0.228	5.80	0.167	4.25	27.40	6.16	16.79	2.94
D21170X*	0.146	3.70	0.020	0.50	0.453	11.50	0.325	8.26	0.226	5.75	27.40	6.16	10.85	1.90
D21180X*	0.146	3.70	0.020	0.50	0.630	16.00	0.443	11.26	0.305	7.75	27.40	6.16	7.42	1.30
D21190X*	0.146	3.70	0.020	0.50	0.925	23.50	0.646	16.42	0.423	10.75	27.40	6.16	4.97	0.87
C0148-021-0250-X	0.148	3.76	0.021	0.53	0.250	6.35	0.187	4.74	0.143	3.63	1.89	8.41	29.74	5.20
C0148-021-0310-X	0.148	3.76	0.021	0.53	0.310	7.87	0.228	5.80	0.166	4.22	1.89	8.41	23.07	4.05
C0148-021-0380-X	0.148	3.76	0.021	0.53	0.380	9.65	0.277	7.04	0.193	4.90	1.89	8.41	18.33	3.20
C0148-021-0440-X	0.148	3.76	0.021	0.53	0.440	11.18	0.319	8.10	0.217	5.51	1.89	8.41	15.58	2.73
C0148-021-0500-X	0.148	3.76	0.021	0.53	0.500	12.70	0.360	9.15	0.240	6.10	1.89	8.41	13.49	2.36
C0148-021-0560-X	0.148	3.76	0.021	0.53	0.560	14.22	0.402	10.20	0.263	6.68	1.89	8.41	11.91	2.08
C0148-021-0620-X	0.148	3.76	0.021	0.53	0.620	15.75	0.443	11.25	0.286	7.26	1.89	8.41	10.66	1.87
C0148-021-0690-X	0.148	3.76	0.021	0.53	0.690	17.53	0.493	12.52	0.313	7.95	1.89	8.41	9.58	1.68
C0148-021-0750-X	0.148	3.76	0.021	0.53	0.750	19.05	0.534	13.57	0.336	8.53	1.89	8.41	8.75	1.54
C0148-021-0810-X	0.148	3.76	0.021	0.53	0.810	20.57	0.576	14.64	0.359	9.12	1.89	8.41	8.08	1.42
C0148-021-0880-X	0.148	3.76	0.021	0.53	0.880	22.35	0.626	15.89	0.386	9.80	1.89	8.41	7.41	1.30
C0148-021-0940-X	0.148	3.76	0.021	0.53	0.940	23.88	0.667	16.94	0.410	10.41	1.89	8.41	6.91	1.21
C0148-021-1000-X	0.148	3.76	0.021	0.53	1.000	25.40	0.710	18.02	0.433	11.00	1.89	8.41	6.50	1.14
C0148-021-1250-X	0.148	3.76	0.021	0.53	1.250	31.75	0.879	22.32	0.529	13.44	1.89	8.41	5.08	0.89
C0148-021-1500-X	0.148	3.76	0.021	0.53	1.500	38.10	1.056	26.82	0.626	15.90	1.89	8.41	4.25	0.75
C0148-023-0250-X	0.148	3.76	0.023	0.58	0.250	6.35	0.193	4.91	0.160	4.06	2.46	10.94	43.32	7.58
C0148-023-0310-X	0.148	3.76	0.023	0.58	0.310	7.87	0.236	6.01	0.187	4.75	2.46	10.94	33.40	5.85
C0148-023-0380-X	0.148	3.76	0.023	0.58	0.380	9.65	0.287	7.29	0.218	5.54	2.46	10.94	26.41	4.62
C0148-023-0440-X	0.148	3.76	0.023	0.58	0.440	11.18	0.330	8.39	0.245	6.22	2.46	10.94	22.41	3.92
C0148-023-0500-X	0.148	3.76	0.023	0.58	0.500	12.70	0.373	9.49	0.272	6.91	2.46	10.94	19.41	3.40
C0148-023-0560-X	0.148	3.76	0.023	0.58	0.560	14.22	0.417	10.59	0.299	7.59	2.46	10.94	17.16	3.01
C0148-023-0620-X	0.148	3.76	0.023	0.58	0.620	15.75	0.461	11.70	0.326	8.28	2.46	10.94	15.41	2.70
C0148-023-0690-X	0.148	3.76	0.023	0.58	0.690	17.53	0.511	12.99	0.357	9.07	2.46	10.94	13.74	2.40
C0148-023-0750-X	0.148	3.76	0.023	0.58	0.750	19.05	0.555	14.09	0.384	9.75	2.46	10.94	12.58	2.21
C0148-023-0810-X	0.148	3.76	0.023	0.58	0.810	20.57	0.598	15.19	0.410	10.41	2.46	10.94	11.58	2.03
C0148-023-0880-X	0.148	3.76	0.023	0.58	0.880	22.35	0.648	16.46	0.442	11.23	2.46	10.94	10.58	1.86
C0148-023-0940-X	0.148	3.76	0.023	0.58	0.940	23.88	0.692	17.58	0.469	11.91	2.46	10.94	9.91	1.73
C0148-023-1000-X	0.148	3.76	0.023	0.58	1.000	25.40	0.734	18.65	0.495	12.57	2.46	10.94	9.25	1.63
C0148-023-1250-X	0.148	3.76	0.023	0.58	1.250	31.75	0.915	23.24	0.607	15.42	2.46	10.94	7.33	1.28
C0148-023-1500-X	0.148	3.76	0.023	0.58	1.500	38.10	1.096	27.84	0.719	18.26	2.46	10.94	6.08	1.07
D21350X*	0.151	3.83	0.025	0.63	0.217	5.50	0.178	4.51	0.161	4.10	51.33	11.54	66.69	11.68
D21360X*	0.151	3.83	0.025	0.63	0.307	7.80	0.246	6.24	0.211	5.36	51.33	11.54	42.31	7.41
D21370X*	0.151	3.83	0.025	0.63	0.433	11.00	0.339	8.60	0.285	7.25	51.33	11.54	27.47	4.81
D21380X*	0.151	3.83	0.025	0.63	0.610	15.50	0.471	11.97	0.385	9.77	51.33	11.54	18.67	3.27
D21390X*	0.151	3.83	0.025	0.63	0.886	22.50	0.680	17.28	0.533	13.55	51.33	11.54	12.62	2.21
D20800X*	0.170	4.32	0.013	0.32	0.343	8.70	0.207	5.25	0.082	2.08	6.45	1.45	2.40	0.42
D20810X*	0.170	4.32	0.013	0.32	0.516	13.10	0.296	7.52	0.107	2.72	6.45	1.45	1.48	0.26
D20820X*	0.170	4.32	0.013	0.32	0.780	19.80	0.462	11.74	0.145	3.68	6.45	1.45	1.03	0.18
D20830X*	0.170	4.32	0.013	0.32	1.126	28.60	0.650	16.52	0.195	4.96	6.45	1.45	0.69	0.12
D20840X*	0.170	4.32	0.013	0.32	1.650	41.90	0.936	23.78	0.271	6.88	6.45	1.45	0.46	0.08
D21000X*	0.173	4.40	0.016	0.40	0.295	7.50	0.184	4.68	0.102	2.60	12.19	2.74	5.54	0.97
D21010X*	0.173	4.40	0.016	0.40	0.433	11.00	0.259	6.58	0.134	3.40	12.19	2.74	3.54	0.62
D21020X*	0.173	4.40	0.016	0.40	0.650	16.50	0.380	9.65	0.181	4.60	12.19	2.74	2.28	0.40
D21030X*	0.173	4.40	0.016	0.40	0.945	24.00	0.545	13.85	0.244	6.20	12.19	2.74	1.54	0.27
D21040X*	0.173	4.40	0.016	0.40	1.398	35.50	0.798	20.28	0.339	8.60	12.19	2.74	1.03	0.18

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D21200X*	0.177	4.50	0.020	0.50	0.276	7.00	0.190	4.82	0.128	3.25	22.86	5.14	13.48	2.36
D21210X*	0.177	4.50	0.020	0.50	0.394	10.00	0.260	6.60	0.167	4.25	22.86	5.14	8.62	1.51
D21220X*	0.177	4.50	0.020	0.50	0.591	15.00	0.382	9.70	0.226	5.75	22.86	5.14	5.54	0.97
D21230X*	0.177	4.50	0.020	0.50	0.846	21.50	0.540	13.71	0.305	7.75	22.86	5.14	3.77	0.66
D21240X*	0.177	4.50	0.020	0.50	1.220	31.00	0.771	19.58	0.423	10.75	22.86	5.14	2.57	0.45
C0180-012-0250-X*	0.180	4.57	0.012	0.30	0.250	6.35	0.147	3.74	0.057	1.45	0.31	1.38	3.00	0.53
C0180-012-0310-X*	0.180	4.57	0.012	0.30	0.310	7.87	0.182	4.63	0.062	1.57	0.31	1.38	2.42	0.42
C0180-012-0380-X*	0.180	4.57	0.012	0.30	0.380	9.65	0.219	5.56	0.069	1.75	0.31	1.38	1.92	0.33
C0180-012-0440-X*	0.180	4.57	0.012	0.30	0.440	11.18	0.255	6.47	0.074	1.88	0.31	1.38	1.67	0.30
C0180-012-0500-X*	0.180	4.57	0.012	0.30	0.500	12.70	0.282	7.17	0.080	2.03	0.31	1.38	1.42	0.25
C0180-012-0560-X*	0.180	4.57	0.012	0.30	0.560	14.22	0.313	7.95	0.085	2.16	0.31	1.38	1.25	0.23
C0180-012-0620-X*	0.180	4.57	0.012	0.30	0.620	15.75	0.355	9.03	0.091	2.31	0.31	1.38	1.17	0.21
C0180-012-0690-X*	0.180	4.57	0.012	0.30	0.690	17.53	0.381	9.69	0.097	2.46	0.31	1.38	1.00	0.18
C0180-012-0750-X*	0.180	4.57	0.012	0.30	0.750	19.05	0.413	10.50	0.103	2.62	0.31	1.38	0.92	0.16
C0180-012-0810-X*	0.180	4.57	0.012	0.30	0.810	20.57	0.440	11.17	0.109	2.77	0.31	1.38	0.83	0.14
C0180-012-0880-X*	0.180	4.57	0.012	0.30	0.880	22.35	0.510	12.95	0.115	2.92	0.31	1.38	0.83	0.14
C0180-012-0940-X*	0.180	4.57	0.012	0.30	0.940	23.88	0.529	13.42	0.121	3.07	0.31	1.38	0.75	0.14
C0180-012-1000-X*	0.180	4.57	0.012	0.30	1.000	25.40	0.537	13.64	0.126	3.20	0.31	1.38	0.67	0.12
C0180-012-1250-X*	0.180	4.57	0.012	0.30	1.250	31.75	0.721	18.31	0.149	3.78	0.31	1.38	0.58	0.11
C0180-012-1500-X*	0.180	4.57	0.012	0.30	1.500	38.10	0.883	22.42	0.172	4.37	0.31	1.38	0.50	0.09
C0180-014-0250-X*	0.180	4.57	0.014	0.36	0.250	6.35	0.156	3.95	0.069	1.75	0.49	2.18	5.16	0.91
C0180-014-0310-X*	0.180	4.57	0.014	0.36	0.310	7.87	0.191	4.84	0.076	1.93	0.49	2.18	4.08	0.72
C0180-014-0380-X*	0.180	4.57	0.014	0.36	0.380	9.65	0.230	5.84	0.085	2.16	0.49	2.18	3.25	0.58
C0180-014-0440-X*	0.180	4.57	0.014	0.36	0.440	11.18	0.268	6.81	0.092	2.34	0.49	2.18	2.83	0.49
C0180-014-0500-X*	0.180	4.57	0.014	0.36	0.500	12.70	0.298	7.58	0.100	2.54	0.49	2.18	2.42	0.42
C0180-014-0560-X*	0.180	4.57	0.014	0.36	0.560	14.22	0.335	8.51	0.107	2.72	0.49	2.18	2.17	0.39
C0180-014-0620-X*	0.180	4.57	0.014	0.36	0.620	15.75	0.366	9.29	0.114	2.90	0.49	2.18	1.92	0.33
C0180-014-0690-X*	0.180	4.57	0.014	0.36	0.690	17.53	0.411	10.45	0.123	3.12	0.49	2.18	1.75	0.32
C0180-014-0750-X*	0.180	4.57	0.014	0.36	0.750	19.05	0.442	11.23	0.130	3.30	0.49	2.18	1.58	0.28
C0180-014-0880-X*	0.180	4.57	0.014	0.36	0.880	22.35	0.514	13.07	0.146	3.71	0.49	2.18	1.33	0.23
C0180-014-1000-X*	0.180	4.57	0.014	0.36	1.000	25.40	0.582	14.79	0.161	4.09	0.49	2.18	1.17	0.21
C0180-014-1250-X*	0.180	4.57	0.014	0.36	1.250	31.75	0.718	18.24	0.191	4.85	0.49	2.18	0.92	0.16
C0180-014-1380-X*	0.180	4.57	0.014	0.36	1.380	35.05	0.795	20.20	0.207	5.26	0.49	2.18	0.83	0.14
C0180-014-1500-X*	0.180	4.57	0.014	0.36	1.500	38.10	0.850	21.59	0.222	5.64	0.49	2.18	0.75	0.14
C0180-016-0250-X*	0.180	4.57	0.016	0.41	0.250	6.35	0.154	3.92	0.080	2.03	0.71	3.16	7.41	1.30
C0180-016-0310-X*	0.180	4.57	0.016	0.41	0.310	7.87	0.197	5.00	0.087	2.21	0.71	3.16	6.25	1.10
C0180-016-0380-X*	0.180	4.57	0.016	0.41	0.380	9.65	0.236	5.99	0.100	2.54	0.71	3.16	4.91	0.86
C0180-016-0440-X*	0.180	4.57	0.016	0.41	0.440	11.18	0.267	6.77	0.112	2.84	0.71	3.16	4.08	0.72
C0180-016-0500-X*	0.180	4.57	0.016	0.41	0.500	12.70	0.298	7.56	0.124	3.15	0.71	3.16	3.50	0.61
C0180-016-0560-X*	0.180	4.57	0.016	0.41	0.560	14.22	0.330	8.39	0.136	3.45	0.71	3.16	3.08	0.54
C0180-016-0620-X*	0.180	4.57	0.016	0.41	0.620	15.75	0.370	9.40	0.144	3.66	0.71	3.16	2.83	0.49
C0180-016-0690-X*	0.180	4.57	0.016	0.41	0.690	17.53	0.416	10.56	0.155	3.94	0.71	3.16	2.58	0.46
C0180-016-0750-X*	0.180	4.57	0.016	0.41	0.750	19.05	0.446	11.34	0.167	4.24	0.71	3.16	2.33	0.40
C0180-016-0880-X*	0.180	4.57	0.016	0.41	0.880	22.35	0.540	13.72	0.185	4.70	0.71	3.16	2.08	0.37
C0180-016-1000-X*	0.180	4.57	0.016	0.41	1.000	25.40	0.614	15.59	0.204	5.18	0.71	3.16	1.83	0.32
C0180-016-1250-X*	0.180	4.57	0.016	0.41	1.250	31.75	0.750	19.05	0.245	6.22	0.71	3.16	1.42	0.25
C0180-016-1380-X*	0.180	4.57	0.016	0.41	1.380	35.05	0.849	21.56	0.266	6.76	0.71	3.16	1.33	0.23
C0180-016-1500-X*	0.180	4.57	0.016	0.41	1.500	38.10	0.893	22.68	0.285	7.24	0.71	3.16	1.17	0.21
C0180-016-1750-X*	0.180	4.57	0.016	0.41	1.750	44.45	1.042	26.46	0.326	8.28	0.71	3.16	1.00	0.18
C0180-018-0250-X*	0.180	4.57	0.018	0.46	0.250	6.35	0.161	4.09	0.094	2.39	1.00	4.45	11.25	1.98
C0180-018-0310-X*	0.180	4.57	0.018	0.46	0.310	7.87	0.204	5.19	0.103	2.62	1.00	4.45	9.50	1.66
C0180-018-0380-X*	0.180	4.57	0.018	0.46	0.380	9.65	0.251	6.37	0.116	2.95	1.00	4.45	7.75	1.37
C0180-018-0440-X*	0.180	4.57	0.018	0.46	0.440	11.18	0.286	7.26	0.130	3.30	1.00	4.45	6.50	1.14
C0180-018-0500-X*	0.180	4.57	0.018	0.46	0.500	12.70	0.320	8.14	0.144	3.66	1.00	4.45	5.58	0.98
C0180-018-0560-X*	0.180	4.57	0.018	0.46	0.560	14.22	0.349	8.86	0.162	4.11	1.00	4.45	4.75	0.84
C0180-018-0620-X*	0.180	4.57	0.018	0.46	0.620	15.75	0.384	9.76	0.175	4.45	1.00	4.45	4.25	0.75
C0180-018-0690-X*	0.180	4.57	0.018	0.46	0.690	17.53	0.428	10.88	0.189	4.80	1.00	4.45	3.83	0.67
C0180-018-0750-X*	0.180	4.57	0.018	0.46	0.750	19.05	0.457	11.60	0.207	5.26	1.00	4.45	3.42	0.60
C0180-018-0880-X*	0.180	4.57	0.018	0.46	0.880	22.35	0.555	14.09	0.227	5.77	1.00	4.45	3.08	0.54
C0180-018-1000-X*	0.180	4.57	0.018	0.46	1.000	25.40	0.624	15.85	0.252	6.40	1.00	4.45	2.67	0.47
C0180-018-1250-X*	0.180	4.57	0.018	0.46	1.250	31.75	0.787	20.00	0.303	7.70	1.00	4.45	2.17	0.39
C0180-018-1380-X*	0.180	4.57	0.018	0.46	1.380	35.05	0.857	21.77	0.330	8.38	1.00	4.45	1.92	0.33
C0180-018-1500-X*	0.180	4.57	0.018	0.46	1.500	38.10	0.927	23.55	0.355	9.02	1.00	4.45	1.75	0.32
C0180-018-1750-X*	0.180	4.57	0.018	0.46	1.750	44.45	1.082	27.47	0.406	10.31	1.00	4.45	1.50	0.26

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0180-020-0250-X*	0.180	4.57	0.020	0.51	0.250	6.35	0.173	4.39	0.113	2.87	1.37	6.09	17.66	3.10
C0180-020-0310-X*	0.180	4.57	0.020	0.51	0.310	7.87	0.211	5.35	0.128	3.25	1.37	6.09	13.74	2.40
C0180-020-0380-X*	0.180	4.57	0.020	0.51	0.380	9.65	0.255	6.47	0.146	3.71	1.37	6.09	10.91	1.91
C0180-020-0440-X*	0.180	4.57	0.020	0.51	0.440	11.18	0.292	7.42	0.161	4.09	1.37	6.09	9.25	1.63
C0180-020-0500-X*	0.180	4.57	0.020	0.51	0.500	12.70	0.331	8.41	0.176	4.47	1.37	6.09	8.08	1.42
C0180-020-0560-X*	0.180	4.57	0.020	0.51	0.560	14.22	0.369	9.38	0.191	4.85	1.37	6.09	7.16	1.26
C0180-020-0620-X*	0.180	4.57	0.020	0.51	0.620	15.75	0.407	10.34	0.207	5.26	1.37	6.09	6.41	1.12
C0180-020-0690-X*	0.180	4.57	0.020	0.51	0.690	17.53	0.449	11.40	0.224	5.69	1.37	6.09	5.66	1.00
C0180-020-0750-X*	0.180	4.57	0.020	0.51	0.750	19.05	0.490	12.44	0.239	6.07	1.37	6.09	5.25	0.93
C0180-020-0880-X*	0.180	4.57	0.020	0.51	0.880	22.35	0.571	14.49	0.272	6.91	1.37	6.09	4.41	0.77
C0180-020-1000-X*	0.180	4.57	0.020	0.51	1.000	25.40	0.643	16.34	0.302	7.67	1.37	6.09	3.83	0.67
C0180-020-1250-X*	0.180	4.57	0.020	0.51	1.250	31.75	0.807	20.49	0.366	9.30	1.37	6.09	3.08	0.54
C0180-020-1380-X*	0.180	4.57	0.020	0.51	1.380	35.05	0.883	22.43	0.398	10.11	1.37	6.09	2.75	0.49
C0180-020-1500-X*	0.180	4.57	0.020	0.51	1.500	38.10	0.953	24.21	0.429	10.90	1.37	6.09	2.50	0.44
C0180-020-1750-X*	0.180	4.57	0.020	0.51	1.750	44.45	1.119	28.43	0.492	12.50	1.37	6.09	2.17	0.39
C0180-022-0250-X	0.180	4.57	0.022	0.56	0.250	6.35	0.177	4.49	0.121	3.07	1.81	8.05	24.66	4.33
C0180-022-0310-X	0.180	4.57	0.022	0.56	0.310	7.87	0.219	5.55	0.137	3.48	1.81	8.05	19.74	3.45
C0180-022-0380-X	0.180	4.57	0.022	0.56	0.380	9.65	0.270	6.87	0.154	3.91	1.81	8.05	16.49	2.89
C0180-022-0440-X	0.180	4.57	0.022	0.56	0.440	11.18	0.312	7.92	0.170	4.32	1.81	8.05	14.08	2.47
C0180-022-0500-X	0.180	4.57	0.022	0.56	0.500	12.70	0.347	8.82	0.192	4.88	1.81	8.05	11.83	2.07
C0180-022-0560-X	0.180	4.57	0.022	0.56	0.560	14.22	0.378	9.60	0.219	5.56	1.81	8.05	9.91	1.73
C0180-022-0620-X	0.180	4.57	0.022	0.56	0.620	15.75	0.413	10.50	0.241	6.12	1.81	8.05	8.75	1.54
C0180-022-0690-X	0.180	4.57	0.022	0.56	0.690	17.53	0.464	11.79	0.259	6.58	1.81	8.05	8.00	1.40
C0180-022-0750-X	0.180	4.57	0.022	0.56	0.750	19.05	0.501	12.72	0.280	7.11	1.81	8.05	7.25	1.28
C0180-022-0810-X	0.180	4.57	0.022	0.56	0.810	20.57	0.528	13.42	0.309	7.85	1.81	8.05	6.41	1.12
C0180-022-0940-X	0.180	4.57	0.022	0.56	0.940	23.88	0.626	15.89	0.337	8.56	1.81	8.05	5.75	1.02
C0180-022-1000-X	0.180	4.57	0.022	0.56	1.000	25.40	0.666	16.93	0.355	9.02	1.81	8.05	5.41	0.95
C0180-022-1120-X	0.180	4.57	0.022	0.56	1.120	28.45	0.746	18.95	0.391	9.93	1.81	8.05	4.83	0.84
C0180-022-1250-X	0.180	4.57	0.022	0.56	1.250	31.75	0.833	21.16	0.430	10.92	1.81	8.05	4.33	0.75
C0180-022-1500-X	0.180	4.57	0.022	0.56	1.500	38.10	0.996	25.29	0.506	12.85	1.81	8.05	3.58	0.63
C0180-022-1750-X	0.180	4.57	0.022	0.56	1.750	44.45	1.179	29.96	0.550	13.97	1.81	8.05	3.17	0.56
C0180-024-0250-X	0.180	4.57	0.024	0.61	0.250	6.35	0.184	4.67	0.143	3.63	2.33	10.36	35.24	6.16
C0180-024-0310-X	0.180	4.57	0.024	0.61	0.310	7.87	0.224	5.70	0.164	4.17	2.33	10.36	27.16	4.76
C0180-024-0380-X	0.180	4.57	0.024	0.61	0.380	9.65	0.271	6.89	0.189	4.80	2.33	10.36	21.41	3.75
C0180-024-0440-X	0.180	4.57	0.024	0.61	0.440	11.18	0.312	7.92	0.210	5.33	2.33	10.36	18.16	3.19
C0180-024-0500-X	0.180	4.57	0.024	0.61	0.500	12.70	0.352	8.94	0.232	5.89	2.33	10.36	15.74	2.75
C0180-024-0560-X	0.180	4.57	0.024	0.61	0.560	14.22	0.393	9.97	0.253	6.43	2.33	10.36	13.91	2.43
C0180-024-0620-X	0.180	4.57	0.024	0.61	0.620	15.75	0.432	10.98	0.274	6.96	2.33	10.36	12.41	2.17
C0180-024-0750-X	0.180	4.57	0.024	0.61	0.750	19.05	0.521	13.23	0.320	8.13	2.33	10.36	10.16	1.79
C0180-024-0880-X	0.180	4.57	0.024	0.61	0.880	22.35	0.609	15.46	0.366	9.30	2.33	10.36	8.58	1.51
C0180-024-1000-X	0.180	4.57	0.024	0.61	1.000	25.40	0.689	17.51	0.408	10.36	2.33	10.36	7.50	1.31
C0180-024-1120-X	0.180	4.57	0.024	0.61	1.120	28.45	0.771	19.57	0.450	11.43	2.33	10.36	6.66	1.17
C0180-024-1250-X	0.180	4.57	0.024	0.61	1.250	31.75	0.856	21.75	0.496	12.60	2.33	10.36	5.91	1.03
C0180-024-1500-X	0.180	4.57	0.024	0.61	1.500	38.10	1.026	26.06	0.585	14.86	2.33	10.36	4.91	0.86
C0180-024-1750-X	0.180	4.57	0.024	0.61	1.750	44.45	1.191	30.25	0.673	17.09	2.33	10.36	4.17	0.74
C0180-024-2000-X	0.180	4.57	0.024	0.61	2.000	50.80	1.365	34.66	0.761	19.33	2.33	10.36	3.67	0.65
C0180-026-0250-X	0.180	4.57	0.026	0.66	0.250	6.35	0.189	4.80	0.149	3.78	2.94	13.08	48.15	8.44
C0180-026-0310-X	0.180	4.57	0.026	0.66	0.310	7.87	0.235	5.97	0.168	4.27	2.94	13.08	39.15	6.86
C0180-026-0380-X	0.180	4.57	0.026	0.66	0.380	9.65	0.286	7.26	0.195	4.95	2.94	13.08	31.24	5.46
C0180-026-0440-X	0.180	4.57	0.026	0.66	0.440	11.18	0.327	8.30	0.221	5.61	2.94	13.08	25.99	4.55
C0180-026-0500-X	0.180	4.57	0.026	0.66	0.500	12.70	0.368	9.36	0.247	6.27	2.94	13.08	22.32	3.91
C0180-026-0560-X	0.180	4.57	0.026	0.66	0.560	14.22	0.410	10.41	0.272	6.91	2.94	13.08	19.58	3.43
C0180-026-0620-X	0.180	4.57	0.026	0.66	0.620	15.75	0.451	11.46	0.298	7.57	2.94	13.08	17.41	3.05
C0180-026-0690-X	0.180	4.57	0.026	0.66	0.690	17.53	0.502	12.76	0.324	8.23	2.94	13.08	15.66	2.75
C0180-026-0750-X	0.180	4.57	0.026	0.66	0.750	19.05	0.542	13.78	0.352	8.94	2.94	13.08	14.16	2.49
C0180-026-0810-X	0.180	4.57	0.026	0.66	0.810	20.57	0.584	14.83	0.377	9.58	2.94	13.08	12.99	2.28
C0180-026-0880-X	0.180	4.57	0.026	0.66	0.880	22.35	0.635	16.13	0.403	10.24	2.94	13.08	12.00	2.10
C0180-026-1000-X	0.180	4.57	0.026	0.66	1.000	25.40	0.711	18.05	0.461	11.71	2.94	13.08	10.16	1.79
C0180-026-1120-X	0.180	4.57	0.026	0.66	1.120	28.45	0.793	20.15	0.509	12.93	2.94	13.08	9.00	1.58
C0180-026-1250-X	0.180	4.57	0.026	0.66	1.250	31.75	0.886	22.51	0.562	14.27	2.94	13.08	8.08	1.42
C0180-026-1500-X	0.180	4.57	0.026	0.66	1.500	38.10	1.059	26.90	0.663	16.84	2.94	13.08	6.66	1.17
C0180-026-1750-X	0.180	4.57	0.026	0.66	1.750	44.45	1.231	31.27	0.764	19.41	2.94	13.08	5.66	1.00
C0180-026-2000-X	0.180	4.57	0.026	0.66	2.000	50.80	1.402	35.61	0.865	21.97	2.94	13.08	4.91	0.86
C0180-029-0250-X	0.180	4.57	0.029	0.74	0.250	6.35	0.198	5.03	0.172	4.37	4.03	17.93	77.55	13.59

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0180-029-0310-X	0.180	4.57	0.029	0.74	0.310	7.87	0.242	6.14	0.208	5.28	4.03	17.93	59.14	10.35
C0180-029-0380-X	0.180	4.57	0.029	0.74	0.380	9.65	0.293	7.44	0.241	6.12	4.03	17.93	46.23	8.09
C0180-029-0440-X	0.180	4.57	0.029	0.74	0.440	11.18	0.337	8.55	0.270	6.86	4.03	17.93	38.98	6.83
C0180-029-0500-X	0.180	4.57	0.029	0.74	0.500	12.70	0.381	9.67	0.299	7.59	4.03	17.93	33.74	5.90
C0180-029-0560-X	0.180	4.57	0.029	0.74	0.560	14.22	0.424	10.77	0.327	8.31	4.03	17.93	29.65	5.20
C0180-029-0620-X	0.180	4.57	0.029	0.74	0.620	15.75	0.468	11.88	0.356	9.04	4.03	17.93	26.49	4.64
C0180-029-0690-X	0.180	4.57	0.029	0.74	0.690	17.53	0.519	13.18	0.390	9.91	4.03	17.93	23.57	4.13
C0180-029-0750-X	0.180	4.57	0.029	0.74	0.750	19.05	0.562	14.29	0.418	10.62	4.03	17.93	21.49	3.77
C0180-029-0810-X	0.180	4.57	0.029	0.74	0.810	20.57	0.607	15.41	0.447	11.35	4.03	17.93	19.83	3.47
C0180-029-0880-X	0.180	4.57	0.029	0.74	0.880	22.35	0.658	16.71	0.481	12.22	4.03	17.93	18.16	3.19
C0180-029-0940-X	0.180	4.57	0.029	0.74	0.940	23.88	0.702	17.82	0.509	12.93	4.03	17.93	16.91	2.96
C0180-029-1000-X	0.180	4.57	0.029	0.74	1.000	25.40	0.745	18.93	0.538	13.67	4.03	17.93	15.83	2.77
C0180-029-1120-X	0.180	4.57	0.029	0.74	1.120	28.45	0.832	21.13	0.596	15.14	4.03	17.93	13.99	2.45
C0180-029-1250-X	0.180	4.57	0.029	0.74	1.250	31.75	0.927	23.56	0.658	16.71	4.03	17.93	12.50	2.19
C0180-029-1380-X	0.180	4.57	0.029	0.74	1.380	35.05	1.022	25.95	0.720	18.29	4.03	17.93	11.25	1.98
C0180-029-1500-X	0.180	4.57	0.029	0.74	1.500	38.10	1.110	28.19	0.778	19.76	4.03	17.93	10.33	1.80
C0180-029-1750-X	0.180	4.57	0.029	0.74	1.750	44.45	1.294	32.86	0.897	22.78	4.03	17.93	8.83	1.54
C0180-029-2000-X	0.180	4.57	0.029	0.74	2.000	50.80	1.474	37.44	1.017	25.83	4.03	17.93	7.66	1.35
C0180-032-0310-X	0.180	4.57	0.032	0.81	0.310	7.87	0.258	6.55	0.206	5.23	5.35	23.80	102.21	17.90
C0180-032-0380-X	0.180	4.57	0.032	0.81	0.380	9.65	0.314	7.97	0.240	6.10	5.35	23.80	80.80	14.15
C0180-032-0440-X	0.180	4.57	0.032	0.81	0.440	11.18	0.357	9.07	0.280	7.11	5.35	23.80	64.56	11.31
C0180-032-0500-X	0.180	4.57	0.032	0.81	0.500	12.70	0.401	10.19	0.319	8.10	5.35	23.80	54.06	9.47
C0180-032-0560-X	0.180	4.57	0.032	0.81	0.560	14.22	0.451	11.46	0.343	8.71	5.35	23.80	49.06	8.60
C0180-032-0620-X	0.180	4.57	0.032	0.81	0.620	15.75	0.495	12.57	0.382	9.70	5.35	23.80	42.73	7.48
C0180-032-0690-X	0.180	4.57	0.032	0.81	0.690	17.53	0.555	14.09	0.406	10.31	5.35	23.80	39.57	6.94
C0180-032-0750-X	0.180	4.57	0.032	0.81	0.750	19.05	0.595	15.10	0.456	11.58	5.35	23.80	34.40	6.02
C0180-032-0810-X	0.180	4.57	0.032	0.81	0.810	20.57	0.638	16.20	0.496	12.60	5.35	23.80	31.07	5.45
C0180-032-0880-X	0.180	4.57	0.032	0.81	0.880	22.35	0.688	17.49	0.543	13.79	5.35	23.80	27.91	4.89
C0180-032-0940-X	0.180	4.57	0.032	0.81	0.940	23.88	0.735	18.67	0.576	14.63	5.35	23.80	26.07	4.57
C0180-032-1000-X	0.180	4.57	0.032	0.81	1.000	25.40	0.782	19.86	0.608	15.44	5.35	23.80	24.49	4.29
C0180-032-1120-X	0.180	4.57	0.032	0.81	1.120	28.45	0.869	22.08	0.677	17.20	5.35	23.80	21.32	3.73
C0180-032-1250-X	0.180	4.57	0.032	0.81	1.250	31.75	0.969	24.60	0.748	19.00	5.35	23.80	18.99	3.33
C0180-032-1380-X	0.180	4.57	0.032	0.81	1.380	35.05	1.068	27.14	0.819	20.80	5.35	23.80	17.16	3.01
C0180-032-1500-X	0.180	4.57	0.032	0.81	1.500	38.10	1.159	29.43	0.885	22.48	5.35	23.80	15.66	2.75
C0180-032-1750-X	0.180	4.57	0.032	0.81	1.750	44.45	1.351	34.33	1.023	25.98	5.35	23.80	13.41	2.35
C0180-032-2000-X	0.180	4.57	0.032	0.81	2.000	50.80	1.542	39.16	1.160	29.46	5.35	23.80	11.66	2.05
C0180-035-0380-X	0.180	4.57	0.035	0.89	0.380	9.65	0.320	8.12	0.286	7.26	6.90	30.69	114.12	19.98
C0180-035-0440-X	0.180	4.57	0.035	0.89	0.440	11.18	0.368	9.34	0.321	8.15	6.90	30.69	95.55	16.74
C0180-035-0500-X	0.180	4.57	0.035	0.89	0.500	12.70	0.416	10.57	0.356	9.04	6.90	30.69	82.22	14.40
C0180-035-0560-X	0.180	4.57	0.035	0.89	0.560	14.22	0.464	11.80	0.391	9.93	6.90	30.69	72.14	12.63
C0180-035-0620-X	0.180	4.57	0.035	0.89	0.620	15.75	0.513	13.02	0.426	10.82	6.90	30.69	64.31	11.26
C0180-035-0690-X	0.180	4.57	0.035	0.89	0.690	17.53	0.569	14.46	0.467	11.86	6.90	30.69	57.06	10.00
C0180-035-0750-X	0.180	4.57	0.035	0.89	0.750	19.05	0.617	15.68	0.502	12.75	6.90	30.69	51.98	9.11
C0180-035-0810-X	0.180	4.57	0.035	0.89	0.810	20.57	0.666	16.91	0.537	13.64	6.90	30.69	47.81	8.37
C0180-035-0880-X	0.180	4.57	0.035	0.89	0.880	22.35	0.722	18.34	0.578	14.68	6.90	30.69	43.65	7.65
C0180-035-0940-X	0.180	4.57	0.035	0.89	0.940	23.88	0.770	19.57	0.613	15.57	6.90	30.69	40.65	7.13
C0180-035-1000-X	0.180	4.57	0.035	0.89	1.000	25.40	0.819	20.80	0.648	16.46	6.90	30.69	38.07	6.67
C0180-035-1120-X	0.180	4.57	0.035	0.89	1.120	28.45	0.915	23.24	0.718	18.24	6.90	30.69	33.65	5.90
C0180-035-1250-X	0.180	4.57	0.035	0.89	1.250	31.75	1.020	25.91	0.793	20.14	6.90	30.69	29.99	5.25
C0180-035-1500-X	0.180	4.57	0.035	0.89	1.500	38.10	1.221	31.02	0.939	23.85	6.90	30.69	24.74	4.33
C0180-035-1750-X	0.180	4.57	0.035	0.89	1.750	44.45	1.423	36.14	1.085	27.56	6.90	30.69	21.07	3.70
C0180-035-2000-X	0.180	4.57	0.035	0.89	2.000	50.80	1.624	41.24	1.231	31.27	6.90	30.69	18.33	3.20
D21400X*	0.182	4.63	0.025	0.63	0.264	6.70	0.200	5.07	0.161	4.10	43.33	9.74	34.03	5.96
D21410X*	0.182	4.63	0.025	0.63	0.378	9.60	0.277	7.03	0.211	5.36	43.33	9.74	21.64	3.79
D21420X*	0.182	4.63	0.025	0.63	0.551	14.00	0.394	10.02	0.285	7.25	43.33	9.74	13.99	2.45
D21430X*	0.182	4.63	0.025	0.63	0.787	20.00	0.558	14.17	0.385	9.77	43.33	9.74	9.54	1.67
D21440X*	0.182	4.63	0.025	0.63	1.142	29.00	0.799	20.30	0.533	13.55	43.33	9.74	6.40	1.12
D21600X*	0.189	4.80	0.031	0.80	0.272	6.90	0.224	5.70	0.205	5.20	82.60	18.57	88.16	15.44
D21610X*	0.189	4.80	0.031	0.80	0.382	9.70	0.308	7.82	0.268	6.80	82.60	18.57	56.47	9.89
D21620X*	0.189	4.80	0.031	0.80	0.551	14.00	0.437	11.09	0.362	9.20	82.60	18.57	36.49	6.39
D21630X*	0.189	4.80	0.031	0.80	0.768	19.50	0.600	15.23	0.488	12.40	82.60	18.57	24.84	4.35
D21640X*	0.189	4.80	0.031	0.80	1.102	28.00	0.853	21.66	0.677	17.20	82.60	18.57	16.73	2.93
C0210-018-0250-X*	0.210	5.33	0.018	0.46	0.250	6.35	0.156	3.95	0.089	2.26	0.87	3.87	9.16	1.61
C0210-018-0310-X*	0.210	5.33	0.018	0.46	0.310	7.87	0.189	4.81	0.099	2.51	0.87	3.87	7.16	1.26

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0210-018-0380-X*	0.210	5.33	0.018	0.46	0.380	9.65	0.227	5.77	0.110	2.79	0.87	3.87	5.66	1.00
C0210-018-0440-X*	0.210	5.33	0.018	0.46	0.440	11.18	0.261	6.63	0.120	3.05	0.87	3.87	4.83	0.84
C0210-018-0500-X*	0.210	5.33	0.018	0.46	0.500	12.70	0.296	7.52	0.130	3.30	0.87	3.87	4.25	0.75
C0210-018-0560-X*	0.210	5.33	0.018	0.46	0.560	14.22	0.329	8.36	0.140	3.56	0.87	3.87	3.75	0.67
C0210-018-0620-X*	0.210	5.33	0.018	0.46	0.620	15.75	0.360	9.15	0.150	3.81	0.87	3.87	3.33	0.58
C0210-018-0690-X*	0.210	5.33	0.018	0.46	0.690	17.53	0.401	10.19	0.161	4.09	0.87	3.87	3.00	0.53
C0210-018-0750-X*	0.210	5.33	0.018	0.46	0.750	19.05	0.435	11.05	0.171	4.34	0.87	3.87	2.75	0.49
C0210-018-0810-X*	0.210	5.33	0.018	0.46	0.810	20.57	0.464	11.78	0.181	4.60	0.87	3.87	2.50	0.44
C0210-018-0880-X*	0.210	5.33	0.018	0.46	0.880	22.35	0.509	12.93	0.192	4.88	0.87	3.87	2.33	0.40
C0210-018-1000-X*	0.210	5.33	0.018	0.46	1.000	25.40	0.567	14.40	0.212	5.38	0.87	3.87	2.00	0.35
C0210-018-1250-X*	0.210	5.33	0.018	0.46	1.250	31.75	0.703	17.86	0.253	6.43	0.87	3.87	1.58	0.28
C0210-018-1500-X*	0.210	5.33	0.018	0.46	1.500	38.10	0.851	21.60	0.294	7.47	0.87	3.87	1.33	0.23
C0210-018-1750-X*	0.210	5.33	0.018	0.46	1.750	44.45	1.008	25.60	0.334	8.48	0.87	3.87	1.17	0.21
C0210-018-2000-X*	0.210	5.33	0.018	0.46	2.000	50.80	1.134	28.81	0.375	9.53	0.87	3.87	1.00	0.18
C0210-022-0250-X	0.210	5.33	0.022	0.56	0.250	6.35	0.170	4.33	0.113	2.87	1.56	6.94	19.66	3.45
C0210-022-0310-X	0.210	5.33	0.022	0.56	0.310	7.87	0.207	5.27	0.127	3.23	1.56	6.94	15.24	2.66
C0210-022-0380-X	0.210	5.33	0.022	0.56	0.380	9.65	0.250	6.36	0.143	3.63	1.56	6.94	12.08	2.12
C0210-022-0440-X	0.210	5.33	0.022	0.56	0.440	11.18	0.287	7.30	0.157	3.99	1.56	6.94	10.25	1.80
C0210-022-0500-X	0.210	5.33	0.022	0.56	0.500	12.70	0.325	8.24	0.170	4.32	1.56	6.94	8.91	1.56
C0210-022-0560-X	0.210	5.33	0.022	0.56	0.560	14.22	0.360	9.15	0.184	4.67	1.56	6.94	7.83	1.37
C0210-022-0620-X	0.210	5.33	0.022	0.56	0.620	15.75	0.399	10.14	0.198	5.03	1.56	6.94	7.08	1.24
C0210-022-0690-X	0.210	5.33	0.022	0.56	0.690	17.53	0.440	11.17	0.214	5.44	1.56	6.94	6.25	1.10
C0210-022-0750-X	0.210	5.33	0.022	0.56	0.750	19.05	0.478	12.14	0.228	5.79	1.56	6.94	5.75	1.02
C0210-022-0810-X	0.210	5.33	0.022	0.56	0.810	20.57	0.517	13.12	0.241	6.12	1.56	6.94	5.33	0.93
C0210-022-0880-X	0.210	5.33	0.022	0.56	0.880	22.35	0.556	14.13	0.257	6.53	1.56	6.94	4.83	0.84
C0210-022-1000-X	0.210	5.33	0.022	0.56	1.000	25.40	0.632	16.05	0.285	7.24	1.56	6.94	4.25	0.75
C0210-022-1250-X	0.210	5.33	0.022	0.56	1.250	31.75	0.781	19.83	0.342	8.69	1.56	6.94	3.33	0.58
C0210-022-1500-X	0.210	5.33	0.022	0.56	1.500	38.10	0.931	23.65	0.399	10.13	1.56	6.94	2.75	0.49
C0210-022-1750-X	0.210	5.33	0.022	0.56	1.750	44.45	1.102	28.00	0.456	11.58	1.56	6.94	2.42	0.42
C0210-022-2000-X	0.210	5.33	0.022	0.56	2.000	50.80	1.249	31.72	0.514	13.06	1.56	6.94	2.08	0.37
C0210-026-0250-X	0.210	5.33	0.026	0.66	0.250	6.35	0.180	4.58	0.140	3.56	2.55	11.34	36.74	6.43
C0210-026-0310-X	0.210	5.33	0.026	0.66	0.310	7.87	0.220	5.58	0.159	4.04	2.55	11.34	28.24	4.94
C0210-026-0380-X	0.210	5.33	0.026	0.66	0.380	9.65	0.265	6.73	0.181	4.60	2.55	11.34	22.16	3.89
C0210-026-0440-X	0.210	5.33	0.026	0.66	0.440	11.18	0.304	7.72	0.200	5.08	2.55	11.34	18.74	3.27
C0210-026-0500-X	0.210	5.33	0.026	0.66	0.500	12.70	0.343	8.71	0.219	5.56	2.55	11.34	16.24	2.84
C0210-026-0560-X	0.210	5.33	0.026	0.66	0.560	14.22	0.382	9.70	0.237	6.02	2.55	11.34	14.33	2.50
C0210-026-0620-X	0.210	5.33	0.026	0.66	0.620	15.75	0.421	10.69	0.256	6.50	2.55	11.34	12.83	2.24
C0210-026-0690-X	0.210	5.33	0.026	0.66	0.690	17.53	0.466	11.84	0.278	7.06	2.55	11.34	11.41	2.00
C0210-026-0750-X	0.210	5.33	0.026	0.66	0.750	19.05	0.505	12.82	0.297	7.54	2.55	11.34	10.41	1.82
C0210-026-0810-X	0.210	5.33	0.026	0.66	0.810	20.57	0.543	13.80	0.316	8.03	2.55	11.34	9.58	1.68
C0210-026-0880-X	0.210	5.33	0.026	0.66	0.880	22.35	0.588	14.94	0.338	8.59	2.55	11.34	8.75	1.54
C0210-026-1000-X	0.210	5.33	0.026	0.66	1.000	25.40	0.667	16.94	0.376	9.55	2.55	11.34	7.66	1.35
C0210-026-1250-X	0.210	5.33	0.026	0.66	1.250	31.75	0.830	21.09	0.454	11.53	2.55	11.34	6.08	1.07
C0210-026-1500-X	0.210	5.33	0.026	0.66	1.500	38.10	0.989	25.12	0.533	13.54	2.55	11.34	5.00	0.88
C0210-026-1750-X	0.210	5.33	0.026	0.66	1.750	44.45	1.149	29.19	0.611	15.52	2.55	11.34	4.25	0.75
C0210-026-2000-X	0.210	5.33	0.026	0.66	2.000	50.80	1.319	33.50	0.689	17.50	2.55	11.34	3.75	0.67
D21050X*	0.213	5.40	0.016	0.40	0.413	10.50	0.236	6.00	0.102	2.60	10.01	2.25	2.86	0.50
D21060X*	0.213	5.40	0.016	0.40	0.630	16.00	0.353	8.97	0.134	3.40	10.01	2.25	1.83	0.32
D21070X*	0.213	5.40	0.016	0.40	0.945	24.00	0.523	13.29	0.181	4.60	10.01	2.25	1.20	0.21
D21080X*	0.213	5.40	0.016	0.40	1.378	35.00	0.745	18.93	0.244	6.20	10.01	2.25	0.80	0.14
D21090X*	0.213	5.40	0.016	0.40	2.087	53.00	1.102	28.00	0.339	8.60	10.01	2.25	0.51	0.09
D21250X*	0.217	5.50	0.020	0.50	0.370	9.40	0.233	5.92	0.128	3.25	18.90	4.25	6.97	1.22
D21260X*	0.217	5.50	0.020	0.50	0.551	14.00	0.334	8.48	0.167	4.25	18.90	4.25	4.40	0.77
D21270X*	0.217	5.50	0.020	0.50	0.807	20.50	0.479	12.17	0.226	5.75	18.90	4.25	2.91	0.51
D21280X*	0.217	5.50	0.020	0.50	1.181	30.00	0.689	17.50	0.305	7.75	18.90	4.25	1.94	0.34
D21290X*	0.217	5.50	0.020	0.50	1.752	44.50	0.991	25.18	0.423	10.75	18.90	4.25	1.26	0.22
D21450X*	0.222	5.63	0.025	0.63	0.335	8.50	0.230	5.85	0.161	4.10	36.16	8.13	17.53	3.07
D21460X*	0.222	5.63	0.025	0.63	0.492	12.50	0.329	8.35	0.211	5.36	36.16	8.13	11.19	1.96
D21470X*	0.222	5.63	0.025	0.63	0.728	18.50	0.480	12.20	0.285	7.25	36.16	8.13	7.37	1.29
D21480X*	0.222	5.63	0.025	0.63	1.024	26.00	0.652	16.55	0.385	9.77	36.16	8.13	4.91	0.86
D21490X*	0.222	5.63	0.025	0.63	1.516	38.50	0.964	24.48	0.533	13.55	36.16	8.13	3.31	0.58
D21650X*	0.228	5.80	0.031	0.80	0.327	8.30	0.249	6.33	0.205	5.20	69.75	15.68	45.34	7.94
D21660X*	0.228	5.80	0.031	0.80	0.472	12.00	0.350	8.90	0.268	6.80	69.75	15.68	28.89	5.06
D21670X*	0.228	5.80	0.031	0.80	0.689	17.50	0.500	12.70	0.362	9.20	69.75	15.68	18.67	3.27

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D21680X*	0.228	5.80	0.031	0.80	0.965	24.50	0.687	17.44	0.488	12.40	69.75	15.68	12.68	2.22
D21690X*	0.228	5.80	0.031	0.80	1.417	36.00	1.006	25.55	0.677	17.20	69.75	15.68	8.57	1.50
D21850X	0.236	6.00	0.039	1.00	0.335	8.50	0.277	7.03	0.217	5.50	126.91	28.53	110.55	19.36
D21860X	0.236	6.00	0.039	1.00	0.472	12.00	0.381	9.69	0.295	7.50	126.91	28.53	70.46	12.34
D21870X	0.236	6.00	0.039	1.00	0.669	17.00	0.528	13.42	0.413	10.50	126.91	28.53	45.51	7.97
D21880X	0.236	6.00	0.039	1.00	0.945	24.00	0.738	18.74	0.571	14.50	126.91	28.53	30.95	5.42
D21890X	0.236	6.00	0.039	1.00	1.358	34.50	1.052	26.73	0.807	20.50	126.91	28.53	20.96	3.67
C0240-016-0250-X*	0.240	6.10	0.016	0.41	0.250	6.35	0.146	3.71	0.070	1.78	0.54	2.40	5.16	0.91
C0240-016-0310-X*	0.240	6.10	0.016	0.41	0.310	7.87	0.176	4.46	0.076	1.93	0.54	2.40	4.00	0.70
C0240-016-0380-X*	0.240	6.10	0.016	0.41	0.380	9.65	0.215	5.45	0.083	2.11	0.54	2.40	3.25	0.58
C0240-016-0440-X*	0.240	6.10	0.016	0.41	0.440	11.18	0.245	6.21	0.089	2.26	0.54	2.40	2.75	0.49
C0240-016-0500-X*	0.240	6.10	0.016	0.41	0.500	12.70	0.278	7.05	0.095	2.41	0.54	2.40	2.42	0.42
C0240-016-0560-X*	0.240	6.10	0.016	0.41	0.560	14.22	0.302	7.67	0.101	2.57	0.54	2.40	2.08	0.37
C0240-016-0620-X*	0.240	6.10	0.016	0.41	0.620	15.75	0.340	8.63	0.107	2.72	0.54	2.40	1.92	0.33
C0240-016-0690-X*	0.240	6.10	0.016	0.41	0.690	17.53	0.368	9.34	0.114	2.90	0.54	2.40	1.67	0.30
C0240-016-0750-X*	0.240	6.10	0.016	0.41	0.750	19.05	0.411	10.43	0.120	3.05	0.54	2.40	1.58	0.28
C0240-016-0810-X*	0.240	6.10	0.016	0.41	0.810	20.57	0.431	10.94	0.126	3.20	0.54	2.40	1.42	0.25
C0240-016-0880-X*	0.240	6.10	0.016	0.41	0.880	22.35	0.477	12.12	0.133	3.38	0.54	2.40	1.33	0.23
C0240-016-1000-X*	0.240	6.10	0.016	0.41	1.000	25.40	0.540	13.70	0.145	3.68	0.54	2.40	1.17	0.21
C0240-016-1250-X*	0.240	6.10	0.016	0.41	1.250	31.75	0.664	16.86	0.170	4.32	0.54	2.40	0.92	0.16
C0240-016-1500-X*	0.240	6.10	0.016	0.41	1.500	38.10	0.784	19.91	0.195	4.95	0.54	2.40	0.75	0.14
C0240-016-1750-X*	0.240	6.10	0.016	0.41	1.750	44.45	0.944	23.98	0.220	5.59	0.54	2.40	0.67	0.12
C0240-016-2000-X*	0.240	6.10	0.016	0.41	2.000	50.80	1.079	27.41	0.245	6.22	0.54	2.40	0.58	0.11
C0240-018-0250-X*	0.240	6.10	0.018	0.46	0.250	6.35	0.154	3.91	0.080	2.03	0.76	3.38	7.91	1.38
C0240-018-0310-X*	0.240	6.10	0.018	0.46	0.310	7.87	0.186	4.74	0.088	2.24	0.76	3.38	6.16	1.09
C0240-018-0380-X*	0.240	6.10	0.018	0.46	0.380	9.65	0.225	5.72	0.096	2.44	0.76	3.38	4.91	0.86
C0240-018-0440-X*	0.240	6.10	0.018	0.46	0.440	11.18	0.257	6.53	0.103	2.62	0.76	3.38	4.17	0.74
C0240-018-0500-X*	0.240	6.10	0.018	0.46	0.500	12.70	0.292	7.42	0.111	2.82	0.76	3.38	3.67	0.65
C0240-018-0560-X*	0.240	6.10	0.018	0.46	0.560	14.22	0.326	8.27	0.118	3.00	0.76	3.38	3.25	0.58
C0240-018-0620-X*	0.240	6.10	0.018	0.46	0.620	15.75	0.359	9.11	0.126	3.20	0.76	3.38	2.92	0.51
C0240-018-0690-X*	0.240	6.10	0.018	0.46	0.690	17.53	0.395	10.04	0.134	3.40	0.76	3.38	2.58	0.46
C0240-018-0750-X*	0.240	6.10	0.018	0.46	0.750	19.05	0.424	10.76	0.141	3.58	0.76	3.38	2.33	0.40
C0240-018-0810-X*	0.240	6.10	0.018	0.46	0.810	20.57	0.458	11.64	0.149	3.78	0.76	3.38	2.17	0.39
C0240-018-0880-X*	0.240	6.10	0.018	0.46	0.880	22.35	0.499	12.68	0.157	3.99	0.76	3.38	2.00	0.35
C0240-018-1000-X*	0.240	6.10	0.018	0.46	1.000	25.40	0.565	14.34	0.172	4.37	0.76	3.38	1.75	0.32
C0240-018-1250-X*	0.240	6.10	0.018	0.46	1.250	31.75	0.712	18.09	0.203	5.16	0.76	3.38	1.42	0.25
C0240-018-1500-X*	0.240	6.10	0.018	0.46	1.500	38.10	0.847	21.51	0.233	5.92	0.76	3.38	1.17	0.21
C0240-018-1750-X*	0.240	6.10	0.018	0.46	1.750	44.45	0.988	25.10	0.264	6.71	0.76	3.38	1.00	0.18
C0240-018-2000-X*	0.240	6.10	0.018	0.46	2.000	50.80	1.086	27.58	0.294	7.47	0.76	3.38	0.83	0.14
C0240-020-0250-X*	0.240	6.10	0.020	0.51	0.250	6.35	0.161	4.10	0.091	2.31	1.04	4.63	11.75	2.07
C0240-020-0310-X*	0.240	6.10	0.020	0.51	0.310	7.87	0.196	4.99	0.099	2.51	1.04	4.63	9.16	1.61
C0240-020-0380-X*	0.240	6.10	0.020	0.51	0.380	9.65	0.236	6.01	0.110	2.79	1.04	4.63	7.25	1.28
C0240-020-0440-X*	0.240	6.10	0.020	0.51	0.440	11.18	0.271	6.89	0.118	3.00	1.04	4.63	6.16	1.09
C0240-020-0500-X*	0.240	6.10	0.020	0.51	0.500	12.70	0.305	7.74	0.127	3.23	1.04	4.63	5.33	0.93
C0240-020-0560-X*	0.240	6.10	0.020	0.51	0.560	14.22	0.341	8.66	0.136	3.45	1.04	4.63	4.75	0.84
C0240-020-0620-X*	0.240	6.10	0.020	0.51	0.620	15.75	0.375	9.53	0.145	3.68	1.04	4.63	4.25	0.75
C0240-020-0690-X*	0.240	6.10	0.020	0.51	0.690	17.53	0.419	10.63	0.155	3.94	1.04	4.63	3.83	0.67
C0240-020-0750-X*	0.240	6.10	0.020	0.51	0.750	19.05	0.453	11.50	0.164	4.17	1.04	4.63	3.50	0.61
C0240-020-0810-X*	0.240	6.10	0.020	0.51	0.810	20.57	0.481	12.23	0.172	4.37	1.04	4.63	3.17	0.56
C0240-020-0880-X*	0.240	6.10	0.020	0.51	0.880	22.35	0.523	13.29	0.182	4.62	1.04	4.63	2.92	0.51
C0240-020-1000-X*	0.240	6.10	0.020	0.51	1.000	25.40	0.597	15.17	0.200	5.08	1.04	4.63	2.58	0.46
C0240-020-1250-X*	0.240	6.10	0.020	0.51	1.250	31.75	0.730	18.53	0.236	5.99	1.04	4.63	2.00	0.35
C0240-020-1500-X*	0.240	6.10	0.020	0.51	1.500	38.10	0.876	22.24	0.273	6.93	1.04	4.63	1.67	0.30
C0240-020-1750-X*	0.240	6.10	0.020	0.51	1.750	44.45	1.015	25.79	0.309	7.85	1.04	4.63	1.42	0.25
C0240-020-2000-X*	0.240	6.10	0.020	0.51	2.000	50.80	1.168	29.65	0.346	8.79	1.04	4.63	1.25	0.23
C0240-022-0250-X	0.240	6.10	0.022	0.56	0.250	6.35	0.165	4.19	0.103	2.62	1.38	6.14	16.24	2.84
C0240-022-0310-X	0.240	6.10	0.022	0.56	0.310	7.87	0.200	5.09	0.113	2.87	1.38	6.14	12.58	2.21
C0240-022-0380-X	0.240	6.10	0.022	0.56	0.380	9.65	0.245	6.23	0.115	2.92	1.38	6.14	10.25	1.80
C0240-022-0440-X	0.240	6.10	0.022	0.56	0.440	11.18	0.269	6.84	0.131	3.33	1.38	6.14	8.08	1.42
C0240-022-0500-X	0.240	6.10	0.022	0.56	0.500	12.70	0.305	7.75	0.142	3.61	1.38	6.14	7.08	1.24
C0240-022-0560-X	0.240	6.10	0.022	0.56	0.560	14.22	0.339	8.62	0.154	3.91	1.38	6.14	6.25	1.10
C0240-022-0620-X	0.240	6.10	0.022	0.56	0.620	15.75	0.377	9.57	0.164	4.17	1.38	6.14	5.66	1.00
C0240-022-0690-X	0.240	6.10	0.022	0.56	0.690	17.53	0.423	10.75	0.175	4.45	1.38	6.14	5.16	0.91
C0240-022-0750-X	0.240	6.10	0.022	0.56	0.750	19.05	0.454	11.54	0.188	4.78	1.38	6.14	4.66	0.82

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0240-022-0810-X	0.240	6.10	0.022	0.56	0.810	20.57	0.492	12.49	0.198	5.03	1.38	6.14	4.33	0.75
C0240-022-1000-X	0.240	6.10	0.022	0.56	1.000	25.40	0.606	15.39	0.236	5.99	1.38	6.14	3.50	0.61
C0240-022-1250-X	0.240	6.10	0.022	0.56	1.250	31.75	0.749	19.01	0.280	7.11	1.38	6.14	2.75	0.49
C0240-022-1500-X	0.240	6.10	0.022	0.56	1.500	38.10	0.909	23.09	0.325	8.26	1.38	6.14	2.33	0.40
C0240-022-1750-X	0.240	6.10	0.022	0.56	1.750	44.45	1.060	26.94	0.369	9.37	1.38	6.14	2.00	0.35
C0240-022-2000-X	0.240	6.10	0.022	0.56	2.000	50.80	1.212	30.78	0.413	10.49	1.38	6.14	1.75	0.32
C0240-024-0380-X	0.240	6.10	0.024	0.61	0.380	9.65	0.248	6.30	0.142	3.61	1.78	7.92	13.49	2.36
C0240-024-0440-X	0.240	6.10	0.024	0.61	0.440	11.18	0.284	7.21	0.155	3.94	1.78	7.92	11.41	2.00
C0240-024-0500-X	0.240	6.10	0.024	0.61	0.500	12.70	0.320	8.13	0.168	4.27	1.78	7.92	9.91	1.73
C0240-024-0560-X	0.240	6.10	0.024	0.61	0.560	14.22	0.356	9.05	0.180	4.57	1.78	7.92	8.75	1.54
C0240-024-0620-X	0.240	6.10	0.024	0.61	0.620	15.75	0.392	9.97	0.193	4.90	1.78	7.92	7.83	1.37
C0240-024-0690-X	0.240	6.10	0.024	0.61	0.690	17.53	0.435	11.06	0.208	5.28	1.78	7.92	7.00	1.23
C0240-024-0750-X	0.240	6.10	0.024	0.61	0.750	19.05	0.469	11.90	0.221	5.61	1.78	7.92	6.33	1.10
C0240-024-0810-X	0.240	6.10	0.024	0.61	0.810	20.57	0.504	12.81	0.233	5.92	1.78	7.92	5.83	1.02
C0240-024-0880-X	0.240	6.10	0.024	0.61	0.880	22.35	0.546	13.86	0.248	6.30	1.78	7.92	5.33	0.93
C0240-024-1000-X	0.240	6.10	0.024	0.61	1.000	25.40	0.618	15.70	0.274	6.96	1.78	7.92	4.66	0.82
C0240-024-1250-X	0.240	6.10	0.024	0.61	1.250	31.75	0.775	19.68	0.327	8.31	1.78	7.92	3.75	0.67
C0240-024-1500-X	0.240	6.10	0.024	0.61	1.500	38.10	0.922	23.42	0.379	9.63	1.78	7.92	3.08	0.54
C0240-024-1750-X	0.240	6.10	0.024	0.61	1.750	44.45	1.082	27.47	0.432	10.97	1.78	7.92	2.67	0.47
C0240-024-2000-X	0.240	6.10	0.024	0.61	2.000	50.80	1.208	30.68	0.485	12.32	1.78	7.92	2.25	0.40
C0240-026-0310-X	0.240	6.10	0.026	0.66	0.310	7.87	0.216	5.48	0.138	3.51	2.25	10.01	23.91	4.19
C0240-026-0380-X	0.240	6.10	0.026	0.66	0.380	9.65	0.264	6.70	0.143	3.63	2.25	10.01	19.41	3.40
C0240-026-0440-X	0.240	6.10	0.026	0.66	0.440	11.18	0.304	7.72	0.156	3.96	2.25	10.01	16.58	2.91
C0240-026-0500-X	0.240	6.10	0.026	0.66	0.500	12.70	0.344	8.75	0.169	4.29	2.25	10.01	14.49	2.54
C0240-026-0560-X	0.240	6.10	0.026	0.66	0.560	14.22	0.376	9.55	0.188	4.78	2.25	10.01	12.25	2.15
C0240-026-0620-X	0.240	6.10	0.026	0.66	0.620	15.75	0.407	10.33	0.208	5.28	2.25	10.01	10.58	1.86
C0240-026-0690-X	0.240	6.10	0.026	0.66	0.690	17.53	0.446	11.33	0.228	5.79	2.25	10.01	9.25	1.63
C0240-026-0750-X	0.240	6.10	0.026	0.66	0.750	19.05	0.479	12.18	0.246	6.25	2.25	10.01	8.33	1.45
C0240-026-0810-X	0.240	6.10	0.026	0.66	0.810	20.57	0.519	13.18	0.260	6.60	2.25	10.01	7.75	1.37
C0240-026-0880-X	0.240	6.10	0.026	0.66	0.880	22.35	0.558	14.17	0.281	7.14	2.25	10.01	7.00	1.23
C0240-026-1000-X	0.240	6.10	0.026	0.66	1.000	25.40	0.634	16.11	0.313	7.95	2.25	10.01	6.16	1.09
C0240-026-1250-X	0.240	6.10	0.026	0.66	1.250	31.75	0.791	20.10	0.375	9.53	2.25	10.01	4.91	0.86
C0240-026-1500-X	0.240	6.10	0.026	0.66	1.500	38.10	0.948	24.07	0.437	11.10	2.25	10.01	4.08	0.72
C0240-026-1750-X	0.240	6.10	0.026	0.66	1.750	44.45	1.090	27.68	0.499	12.67	2.25	10.01	3.42	0.60
C0240-026-2000-X	0.240	6.10	0.026	0.66	2.000	50.80	1.248	31.70	0.561	14.25	2.25	10.01	3.00	0.53
C0240-029-0380-X	0.240	6.10	0.029	0.74	0.380	9.65	0.263	6.69	0.185	4.70	3.11	13.83	26.66	4.68
C0240-029-0440-X	0.240	6.10	0.029	0.74	0.440	11.18	0.302	7.67	0.203	5.16	3.11	13.83	22.49	3.94
C0240-029-0500-X	0.240	6.10	0.029	0.74	0.500	12.70	0.340	8.64	0.221	5.61	3.11	13.83	19.41	3.40
C0240-029-0560-X	0.240	6.10	0.029	0.74	0.560	14.22	0.379	9.63	0.240	6.10	3.11	13.83	17.16	3.01
C0240-029-0620-X	0.240	6.10	0.029	0.74	0.620	15.75	0.417	10.60	0.258	6.55	3.11	13.83	15.33	2.68
C0240-029-0690-X	0.240	6.10	0.029	0.74	0.690	17.53	0.461	11.72	0.279	7.09	3.11	13.83	13.58	2.38
C0240-029-0750-X	0.240	6.10	0.029	0.74	0.750	19.05	0.500	12.69	0.298	7.57	3.11	13.83	12.41	2.17
C0240-029-0810-X	0.240	6.10	0.029	0.74	0.810	20.57	0.538	13.66	0.316	8.03	3.11	13.83	11.41	2.00
C0240-029-0880-X	0.240	6.10	0.029	0.74	0.880	22.35	0.584	14.84	0.337	8.56	3.11	13.83	10.50	1.84
C0240-029-0940-X	0.240	6.10	0.029	0.74	0.940	23.88	0.621	15.78	0.355	9.02	3.11	13.83	9.75	1.72
C0240-029-1000-X	0.240	6.10	0.029	0.74	1.000	25.40	0.661	16.79	0.374	9.50	3.11	13.83	9.16	1.61
C0240-029-1120-X	0.240	6.10	0.029	0.74	1.120	28.45	0.736	18.69	0.410	10.41	3.11	13.83	8.08	1.42
C0240-029-1250-X	0.240	6.10	0.029	0.74	1.250	31.75	0.821	20.87	0.450	11.43	3.11	13.83	7.25	1.28
C0240-029-1380-X	0.240	6.10	0.029	0.74	1.380	35.05	0.902	22.91	0.489	12.42	3.11	13.83	6.50	1.14
C0240-029-1500-X	0.240	6.10	0.029	0.74	1.500	38.10	0.982	24.95	0.526	13.36	3.11	13.83	6.00	1.05
C0240-029-1750-X	0.240	6.10	0.029	0.74	1.750	44.45	1.139	28.93	0.602	15.29	3.11	13.83	5.08	0.89
C0240-029-2000-X	0.240	6.10	0.029	0.74	2.000	50.80	1.297	32.93	0.678	17.22	3.11	13.83	4.41	0.77
C0240-032-0310-X	0.240	6.10	0.032	0.81	0.310	7.87	0.232	5.90	0.167	4.24	4.14	18.42	53.15	9.32
C0240-032-0380-X	0.240	6.10	0.032	0.81	0.380	9.65	0.288	7.31	0.184	4.67	4.14	18.42	44.82	7.85
C0240-032-0440-X	0.240	6.10	0.032	0.81	0.440	11.18	0.325	8.25	0.209	5.31	4.14	18.42	35.99	6.30
C0240-032-0500-X	0.240	6.10	0.032	0.81	0.500	12.70	0.365	9.27	0.232	5.89	4.14	18.42	30.65	5.38
C0240-032-0560-X	0.240	6.10	0.032	0.81	0.560	14.22	0.404	10.27	0.255	6.48	4.14	18.42	26.57	4.66
C0240-032-0620-X	0.240	6.10	0.032	0.81	0.620	15.75	0.442	11.24	0.279	7.09	4.14	18.42	23.32	4.08
C0240-032-0690-X	0.240	6.10	0.032	0.81	0.690	17.53	0.491	12.48	0.303	7.70	4.14	18.42	20.83	3.64
C0240-032-0750-X	0.240	6.10	0.032	0.81	0.750	19.05	0.523	13.29	0.335	8.51	4.14	18.42	18.24	3.19
C0240-032-0810-X	0.240	6.10	0.032	0.81	0.810	20.57	0.561	14.26	0.359	9.12	4.14	18.42	16.66	2.92
C0240-032-0880-X	0.240	6.10	0.032	0.81	0.880	22.35	0.610	15.49	0.384	9.75	4.14	18.42	15.33	2.68
C0240-032-0940-X	0.240	6.10	0.032	0.81	0.940	23.88	0.649	16.49	0.407	10.34	4.14	18.42	14.24	2.49
C0240-032-1000-X	0.240	6.10	0.032	0.81	1.000	25.40	0.687	17.46	0.431	10.95	4.14	18.42	13.24	2.31

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0240-032-1250-X	0.240	6.10	0.032	0.81	1.250	31.75	0.852	21.65	0.526	13.36	4.14	18.42	10.41	1.82
C0240-032-1380-X	0.240	6.10	0.032	0.81	1.380	35.05	0.936	23.78	0.573	14.55	4.14	18.42	9.33	1.63
C0240-032-1500-X	0.240	6.10	0.032	0.81	1.500	38.10	1.017	25.84	0.616	15.65	4.14	18.42	8.58	1.51
C0240-032-1750-X	0.240	6.10	0.032	0.81	1.750	44.45	1.185	30.10	0.707	17.96	4.14	18.42	7.33	1.28
C0240-032-2000-X	0.240	6.10	0.032	0.81	2.000	50.80	1.346	34.19	0.797	20.24	4.14	18.42	6.33	1.10
C0240-035-0310-X	0.240	6.10	0.035	0.89	0.310	7.87	0.236	5.99	0.206	5.23	5.37	23.89	72.39	12.68
C0240-035-0380-X	0.240	6.10	0.035	0.89	0.380	9.65	0.284	7.22	0.235	5.97	5.37	23.89	56.06	9.82
C0240-035-0440-X	0.240	6.10	0.035	0.89	0.440	11.18	0.326	8.27	0.260	6.60	5.37	23.89	46.98	8.23
C0240-035-0500-X	0.240	6.10	0.035	0.89	0.500	12.70	0.367	9.32	0.286	7.26	5.37	23.89	40.40	7.08
C0240-035-0560-X	0.240	6.10	0.035	0.89	0.560	14.22	0.409	10.38	0.311	7.90	5.37	23.89	35.49	6.22
C0240-035-0620-X	0.240	6.10	0.035	0.89	0.620	15.75	0.450	11.43	0.336	8.53	5.37	23.89	31.57	5.53
C0240-035-0690-X	0.240	6.10	0.035	0.89	0.690	17.53	0.498	12.65	0.366	9.30	5.37	23.89	27.99	4.90
C0240-035-0750-X	0.240	6.10	0.035	0.89	0.750	19.05	0.540	13.71	0.391	9.93	5.37	23.89	25.57	4.48
C0240-035-0810-X	0.240	6.10	0.035	0.89	0.810	20.57	0.581	14.77	0.416	10.57	5.37	23.89	23.49	4.12
C0240-035-0880-X	0.240	6.10	0.035	0.89	0.880	22.35	0.629	15.98	0.445	11.30	5.37	23.89	21.41	3.75
C0240-035-0940-X	0.240	6.10	0.035	0.89	0.940	23.88	0.671	17.05	0.471	11.96	5.37	23.89	19.99	3.50
C0240-035-1000-X	0.240	6.10	0.035	0.89	1.000	25.40	0.712	18.09	0.496	12.60	5.37	23.89	18.66	3.27
C0240-035-1250-X	0.240	6.10	0.035	0.89	1.250	31.75	0.886	22.50	0.601	15.27	5.37	23.89	14.74	2.57
C0240-035-1380-X	0.240	6.10	0.035	0.89	1.380	35.05	0.974	24.75	0.656	16.66	5.37	23.89	13.24	2.31
C0240-035-1500-X	0.240	6.10	0.035	0.89	1.500	38.10	1.058	26.88	0.706	17.93	5.37	23.89	12.16	2.14
C0240-035-1750-X	0.240	6.10	0.035	0.89	1.750	44.45	1.230	31.24	0.811	20.60	5.37	23.89	10.33	1.80
C0240-035-2000-X	0.240	6.10	0.035	0.89	2.000	50.80	1.403	35.63	0.916	23.27	5.37	23.89	9.00	1.58
C0240-035-2250-X	0.240	6.10	0.035	0.89	2.250	57.15	1.578	40.09	1.021	25.93	5.37	23.89	8.00	1.40
C0240-035-2500-X	0.240	6.10	0.035	0.89	2.500	63.50	1.750	44.45	1.126	28.60	5.37	23.89	7.16	1.26
C0240-038-0310-X	0.240	6.10	0.038	0.97	0.310	7.87	0.246	6.24	0.208	5.28	6.81	30.29	105.87	18.55
C0240-038-0380-X	0.240	6.10	0.038	0.97	0.380	9.65	0.299	7.60	0.237	6.02	6.81	30.29	84.55	14.82
C0240-038-0440-X	0.240	6.10	0.038	0.97	0.440	11.18	0.343	8.71	0.265	6.73	6.81	30.29	70.31	12.31
C0240-038-0500-X	0.240	6.10	0.038	0.97	0.500	12.70	0.387	9.83	0.294	7.47	6.81	30.29	60.23	10.54
C0240-038-0560-X	0.240	6.10	0.038	0.97	0.560	14.22	0.431	10.94	0.323	8.20	6.81	30.29	52.65	9.23
C0240-038-0620-X	0.240	6.10	0.038	0.97	0.620	15.75	0.475	12.06	0.350	8.89	6.81	30.29	46.98	8.23
C0240-038-0690-X	0.240	6.10	0.038	0.97	0.690	17.53	0.529	13.43	0.379	9.63	6.81	30.29	42.23	7.39
C0240-038-0750-X	0.240	6.10	0.038	0.97	0.750	19.05	0.573	14.54	0.407	10.34	6.81	30.29	38.40	6.72
C0240-038-0810-X	0.240	6.10	0.038	0.97	0.810	20.57	0.616	15.65	0.436	11.07	6.81	30.29	35.15	6.16
C0240-038-0880-X	0.240	6.10	0.038	0.97	0.880	22.35	0.665	16.88	0.474	12.04	6.81	30.29	31.65	5.55
C0240-038-0940-X	0.240	6.10	0.038	0.97	0.940	23.88	0.704	17.87	0.511	12.98	6.81	30.29	28.82	5.04
C0240-038-1000-X	0.240	6.10	0.038	0.97	1.000	25.40	0.747	18.97	0.541	13.74	6.81	30.29	26.91	4.71
C0240-038-1120-X	0.240	6.10	0.038	0.97	1.120	28.45	0.835	21.21	0.597	15.16	6.81	30.29	23.91	4.19
C0240-038-1250-X	0.240	6.10	0.038	0.97	1.250	31.75	0.933	23.70	0.653	16.59	6.81	30.29	21.49	3.77
C0240-038-1380-X	0.240	6.10	0.038	0.97	1.380	35.05	1.030	26.17	0.711	18.06	6.81	30.29	19.49	3.41
C0240-038-1500-X	0.240	6.10	0.038	0.97	1.500	38.10	1.118	28.39	0.768	19.51	6.81	30.29	17.83	3.12
C0240-038-1750-X	0.240	6.10	0.038	0.97	1.750	44.45	1.277	32.44	0.912	23.16	6.81	30.29	14.41	2.52
C0240-038-2000-X	0.240	6.10	0.038	0.97	2.000	50.80	1.458	37.04	1.032	26.21	6.81	30.29	12.58	2.21
C0240-038-2250-X	0.240	6.10	0.038	0.97	2.250	57.15	1.635	41.53	1.151	29.24	6.81	30.29	11.08	1.94
C0240-038-2500-X	0.240	6.10	0.038	0.97	2.500	63.50	1.818	46.18	1.270	32.26	6.81	30.29	10.00	1.75
C0240-040-0310-X	0.240	6.10	0.040	1.02	0.310	7.87	0.249	6.33	0.220	5.59	7.90	35.14	129.78	22.73
C0240-040-0380-X	0.240	6.10	0.040	1.02	0.380	9.65	0.301	7.63	0.274	6.96	7.90	35.14	99.46	17.43
C0240-040-0440-X	0.240	6.10	0.040	1.02	0.440	11.18	0.345	8.76	0.305	7.75	7.90	35.14	82.88	14.52
C0240-040-0500-X	0.240	6.10	0.040	1.02	0.500	12.70	0.389	9.88	0.336	8.53	7.90	35.14	71.05	12.45
C0240-040-0560-X	0.240	6.10	0.040	1.02	0.560	14.22	0.433	11.00	0.366	9.30	7.90	35.14	62.23	10.89
C0240-040-0620-X	0.240	6.10	0.040	1.02	0.620	15.75	0.477	12.12	0.397	10.08	7.90	35.14	55.31	9.68
C0240-040-0690-X	0.240	6.10	0.040	1.02	0.690	17.53	0.528	13.42	0.433	11.00	7.90	35.14	48.90	8.56
C0240-040-0750-X	0.240	6.10	0.040	1.02	0.750	19.05	0.573	14.55	0.464	11.79	7.90	35.14	44.57	7.81
C0240-040-0810-X	0.240	6.10	0.040	1.02	0.810	20.57	0.617	15.67	0.495	12.57	7.90	35.14	40.90	7.16
C0240-040-0880-X	0.240	6.10	0.040	1.02	0.880	22.35	0.668	16.98	0.531	13.49	7.90	35.14	37.32	6.53
C0240-040-0940-X	0.240	6.10	0.040	1.02	0.940	23.88	0.713	18.10	0.562	14.27	7.90	35.14	34.74	6.08
C0240-040-1000-X	0.240	6.10	0.040	1.02	1.000	25.40	0.757	19.22	0.592	15.04	7.90	35.14	32.49	5.69
C0240-040-1120-X	0.240	6.10	0.040	1.02	1.120	28.45	0.845	21.47	0.654	16.61	7.90	35.14	28.74	5.03
C0240-040-1250-X	0.240	6.10	0.040	1.02	1.250	31.75	0.940	23.88	0.721	18.31	7.90	35.14	25.49	4.47
C0240-040-1380-X	0.240	6.10	0.040	1.02	1.380	35.05	1.036	26.32	0.788	20.02	7.90	35.14	22.99	4.03
C0240-040-1500-X	0.240	6.10	0.040	1.02	1.500	38.10	1.124	28.54	0.849	21.56	7.90	35.14	20.99	3.68
C0240-040-1750-X	0.240	6.10	0.040	1.02	1.750	44.45	1.309	33.25	0.977	24.82	7.90	35.14	17.91	3.13
C0240-040-2000-X	0.240	6.10	0.040	1.02	2.000	50.80	1.493	37.92	1.106	28.09	7.90	35.14	15.58	2.73
C0240-040-2250-X	0.240	6.10	0.040	1.02	2.250	57.15	1.675	42.55	1.417	35.99	7.90	35.14	13.74	2.40
C0240-040-2500-X	0.240	6.10	0.040	1.02	2.500	63.50	1.859	47.23	1.363	34.62	7.90	35.14	12.33	2.15

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0240-042-0380-X	0.240	6.10	0.042	1.07	0.380	9.65	0.309	7.86	0.272	6.91	8.89	39.54	125.78	22.03
C0240-042-0440-X	0.240	6.10	0.042	1.07	0.440	11.18	0.353	8.97	0.310	7.87	8.89	39.54	102.46	17.95
C0240-042-0500-X	0.240	6.10	0.042	1.07	0.500	12.70	0.399	10.14	0.343	8.71	8.89	39.54	88.30	15.46
C0240-042-0560-X	0.240	6.10	0.042	1.07	0.560	14.22	0.446	11.34	0.373	9.47	8.89	39.54	78.30	13.71
C0240-042-0620-X	0.240	6.10	0.042	1.07	0.620	15.75	0.494	12.56	0.401	10.19	8.89	39.54	70.81	12.40
C0240-042-0690-X	0.240	6.10	0.042	1.07	0.690	17.53	0.548	13.91	0.441	11.20	8.89	39.54	62.48	10.95
C0240-042-0750-X	0.240	6.10	0.042	1.07	0.750	19.05	0.583	14.81	0.499	12.67	8.89	39.54	53.31	9.33
C0240-042-0810-X	0.240	6.10	0.042	1.07	0.810	20.57	0.632	16.06	0.525	13.34	8.89	39.54	49.98	8.76
C0240-042-0880-X	0.240	6.10	0.042	1.07	0.880	22.35	0.689	17.51	0.556	14.12	8.89	39.54	46.65	8.18
C0240-042-0940-X	0.240	6.10	0.042	1.07	0.940	23.88	0.731	18.56	0.600	15.24	8.89	39.54	42.48	7.44
C0240-042-1000-X	0.240	6.10	0.042	1.07	1.000	25.40	0.778	19.75	0.631	16.03	8.89	39.54	39.98	7.01
C0240-042-1120-X	0.240	6.10	0.042	1.07	1.120	28.45	0.869	22.07	0.699	17.75	8.89	39.54	35.40	6.20
C0240-042-1250-X	0.240	6.10	0.042	1.07	1.250	31.75	0.965	24.52	0.778	19.76	8.89	39.54	31.24	5.46
C0240-042-1380-X	0.240	6.10	0.042	1.07	1.380	35.05	1.066	27.08	0.847	21.51	8.89	39.54	28.32	4.96
C0240-042-1500-X	0.240	6.10	0.042	1.07	1.500	38.10	1.150	29.21	0.933	23.70	8.89	39.54	25.41	4.45
C0240-042-1750-X	0.240	6.10	0.042	1.07	1.750	44.45	1.347	34.22	1.040	26.42	8.89	39.54	22.07	3.87
C0240-042-2000-X	0.240	6.10	0.042	1.07	2.000	50.80	1.536	39.01	1.177	29.90	8.89	39.54	19.16	3.36
C0240-042-2250-X	0.240	6.10	0.042	1.07	2.250	57.15	1.727	43.86	1.314	33.38	8.89	39.54	16.99	2.98
C0240-042-2500-X	0.240	6.10	0.042	1.07	2.500	63.50	1.917	48.68	1.452	36.88	8.89	39.54	15.24	2.66
C0240-045-0440-X	0.240	6.10	0.045	1.14	0.440	11.18	0.366	9.29	0.326	8.28	10.82	48.13	145.69	25.52
C0240-045-0500-X	0.240	6.10	0.045	1.14	0.500	12.70	0.413	10.49	0.361	9.17	10.82	48.13	124.37	21.79
C0240-045-0560-X	0.240	6.10	0.045	1.14	0.560	14.22	0.460	11.69	0.396	10.06	10.82	48.13	108.46	19.00
C0240-045-0620-X	0.240	6.10	0.045	1.14	0.620	15.75	0.507	12.89	0.436	11.07	10.82	48.13	96.21	16.85
C0240-045-0690-X	0.240	6.10	0.045	1.14	0.690	17.53	0.563	14.29	0.477	12.12	10.82	48.13	84.97	14.89
C0240-045-0750-X	0.240	6.10	0.045	1.14	0.750	19.05	0.610	15.49	0.516	13.11	10.82	48.13	77.22	13.52
C0240-045-0810-X	0.240	6.10	0.045	1.14	0.810	20.57	0.657	16.69	0.551	14.00	10.82	48.13	70.81	12.40
C0240-045-0880-X	0.240	6.10	0.045	1.14	0.880	22.35	0.712	18.09	0.594	15.09	10.82	48.13	64.56	11.31
C0240-045-1000-X	0.240	6.10	0.045	1.14	1.000	25.40	0.807	20.50	0.667	16.94	10.82	48.13	56.06	9.82
C0240-045-1250-X	0.240	6.10	0.045	1.14	1.250	31.75	1.004	25.50	0.813	20.65	10.82	48.13	43.98	7.71
C0240-045-1500-X	0.240	6.10	0.045	1.14	1.500	38.10	1.201	30.50	0.959	24.36	10.82	48.13	36.15	6.34
C0240-045-1750-X	0.240	6.10	0.045	1.14	1.750	44.45	1.398	35.51	1.105	28.07	10.82	48.13	30.74	5.38
C0240-045-2000-X	0.240	6.10	0.045	1.14	2.000	50.80	1.594	40.49	1.251	31.78	10.82	48.13	26.66	4.68
C0240-045-2250-X	0.240	6.10	0.045	1.14	2.250	57.15	1.791	45.49	1.397	35.48	10.82	48.13	23.57	4.13
C0240-045-2500-X	0.240	6.10	0.045	1.14	2.500	63.50	1.988	50.51	1.543	39.19	10.82	48.13	21.16	3.71
D21300X*	0.268	6.80	0.020	0.50	0.531	13.50	0.307	7.81	0.128	3.25	15.44	3.47	3.48	0.61
D21310X*	0.268	6.80	0.020	0.50	0.787	20.00	0.428	10.87	0.167	4.25	15.44	3.47	2.17	0.38
D21320X*	0.268	6.80	0.020	0.50	1.181	30.00	0.635	16.12	0.226	5.75	15.44	3.47	1.43	0.25
D21330X*	0.268	6.80	0.020	0.50	1.732	44.00	0.929	23.59	0.305	7.75	15.44	3.47	0.97	0.17
D21340X*	0.268	6.80	0.020	0.50	2.559	65.00	1.420	36.08	0.423	10.75	15.44	3.47	0.69	0.12
D21500X*	0.273	6.93	0.025	0.63	0.453	11.50	0.280	7.11	0.161	4.10	29.71	6.68	8.68	1.52
D21510X*	0.273	6.93	0.025	0.63	0.669	17.00	0.398	10.11	0.211	5.36	29.71	6.68	5.54	0.97
D21520X*	0.273	6.93	0.025	0.63	1.004	25.50	0.587	14.90	0.285	7.25	29.71	6.68	3.60	0.63
D21530X*	0.273	6.93	0.025	0.63	1.437	36.50	0.811	20.60	0.385	9.77	29.71	6.68	2.40	0.42
D21540X*	0.273	6.93	0.025	0.63	2.126	54.00	1.187	30.14	0.533	13.55	29.71	6.68	1.60	0.28
D21700X*	0.280	7.10	0.031	0.80	0.413	10.50	0.284	7.22	0.205	5.20	57.87	13.01	22.67	3.97
D21710X*	0.280	7.10	0.031	0.80	0.610	15.50	0.407	10.34	0.268	6.80	57.87	13.01	14.39	2.52
D21720X*	0.280	7.10	0.031	0.80	0.906	23.00	0.591	15.02	0.362	9.20	57.87	13.01	9.31	1.63
D21730X*	0.280	7.10	0.031	0.80	1.299	33.00	0.838	21.28	0.488	12.40	57.87	13.01	6.34	1.11
D21740X*	0.280	7.10	0.031	0.80	1.890	48.00	1.207	30.65	0.677	17.20	57.87	13.01	4.28	0.75
D21900X	0.287	7.30	0.039	1.00	0.394	10.00	0.296	7.52	0.217	5.50	106.49	23.94	55.05	9.64
D21910X	0.287	7.30	0.039	1.00	0.571	14.50	0.418	10.61	0.295	7.50	106.49	23.94	35.17	6.16
D21920X	0.287	7.30	0.039	1.00	0.846	21.50	0.610	15.50	0.413	10.50	106.49	23.94	22.78	3.99
D21930X	0.287	7.30	0.039	1.00	1.201	30.50	0.854	21.70	0.571	14.50	106.49	23.94	15.53	2.72
D21940X	0.287	7.30	0.039	1.00	1.713	43.50	1.198	30.42	0.807	20.50	106.49	23.94	10.45	1.83
D22100X	0.297	7.55	0.049	1.25	0.472	12.00	0.402	10.21	0.271	6.88	193.05	43.40	138.07	24.18
D22110X	0.297	7.55	0.049	1.25	0.669	17.00	0.556	14.11	0.369	9.38	193.05	43.40	85.82	15.03
D22120X	0.297	7.55	0.049	1.25	0.984	25.00	0.810	20.57	0.517	13.13	193.05	43.40	55.96	9.80
D22130X	0.297	7.55	0.049	1.25	1.398	35.50	1.144	29.06	0.714	18.13	193.05	43.40	38.49	6.74
D22140X	0.297	7.55	0.049	1.25	2.028	51.50	1.647	41.83	1.009	25.63	193.05	43.40	25.64	4.49
C0300-022-0380-X	0.300	7.62	0.022	0.56	0.380	9.65	0.232	5.88	0.100	2.54	1.11	4.94	7.50	1.31
C0300-022-0440-X	0.300	7.62	0.022	0.56	0.440	11.18	0.264	6.71	0.106	2.69	1.11	4.94	6.33	1.10
C0300-022-0500-X	0.300	7.62	0.022	0.56	0.500	12.70	0.298	7.56	0.109	2.77	1.11	4.94	5.50	0.96
C0300-022-0560-X	0.300	7.62	0.022	0.56	0.560	14.22	0.334	8.47	0.115	2.92	1.11	4.94	4.91	0.86
C0300-022-0620-X	0.300	7.62	0.022	0.56	0.620	15.75	0.353	8.96	0.126	3.20	1.11	4.94	4.17	0.74

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0300-022-0690-X	0.300	7.62	0.022	0.56	0.690	17.53	0.406	10.30	0.131	3.33	1.11	4.94	3.92	0.68
C0300-022-0750-X	0.300	7.62	0.022	0.56	0.750	19.05	0.424	10.77	0.142	3.61	1.11	4.94	3.42	0.60
C0300-022-0810-X	0.300	7.62	0.022	0.56	0.810	20.57	0.458	11.64	0.149	3.78	1.11	4.94	3.17	0.56
C0300-022-0880-X	0.300	7.62	0.022	0.56	0.880	22.35	0.509	12.92	0.154	3.91	1.11	4.94	3.00	0.53
C0300-022-1000-X	0.300	7.62	0.022	0.56	1.000	25.40	0.582	14.79	0.175	4.45	1.11	4.94	2.67	0.47
C0300-022-1250-X	0.300	7.62	0.022	0.56	1.250	31.75	0.715	18.17	0.204	5.18	1.11	4.94	2.08	0.37
C0300-022-1500-X	0.300	7.62	0.022	0.56	1.500	38.10	0.864	21.94	0.232	5.89	1.11	4.94	1.75	0.32
C0300-022-1750-X	0.300	7.62	0.022	0.56	1.750	44.45	1.008	25.59	0.261	6.63	1.11	4.94	1.50	0.26
C0300-022-2000-X	0.300	7.62	0.022	0.56	2.000	50.80	1.109	28.17	0.289	7.34	1.11	4.94	1.25	0.23
C0300-022-2250-X	0.300	7.62	0.022	0.56	2.250	57.15	1.295	32.91	0.308	7.82	1.11	4.94	1.17	0.21
C0300-022-2500-X	0.300	7.62	0.022	0.56	2.500	63.50	1.472	37.39	0.334	8.48	1.11	4.94	1.08	0.19
C0300-026-0440-X	0.300	7.62	0.026	0.66	0.440	11.18	0.275	6.99	0.130	3.30	1.83	8.14	11.08	1.94
C0300-026-0500-X	0.300	7.62	0.026	0.66	0.500	12.70	0.303	7.69	0.143	3.63	1.83	8.14	9.25	1.63
C0300-026-0560-X	0.300	7.62	0.026	0.66	0.560	14.22	0.347	8.82	0.148	3.76	1.83	8.14	8.58	1.51
C0300-026-0620-X	0.300	7.62	0.026	0.66	0.620	15.75	0.374	9.50	0.162	4.11	1.83	8.14	7.41	1.30
C0300-026-0690-X	0.300	7.62	0.026	0.66	0.690	17.53	0.409	10.39	0.176	4.47	1.83	8.14	6.50	1.14
C0300-026-0750-X	0.300	7.62	0.026	0.66	0.750	19.05	0.454	11.53	0.182	4.62	1.83	8.14	6.16	1.09
C0300-026-0810-X	0.300	7.62	0.026	0.66	0.810	20.57	0.483	12.27	0.194	4.93	1.83	8.14	5.58	0.98
C0300-026-0880-X	0.300	7.62	0.026	0.66	0.880	22.35	0.521	13.23	0.206	5.23	1.83	8.14	5.08	0.89
C0300-026-0940-X	0.300	7.62	0.026	0.66	0.940	23.88	0.542	13.76	0.222	5.64	1.83	8.14	4.58	0.81
C0300-026-1000-X	0.300	7.62	0.026	0.66	1.000	25.40	0.570	14.49	0.234	5.94	1.83	8.14	4.25	0.75
C0300-026-1250-X	0.300	7.62	0.026	0.66	1.250	31.75	0.740	18.81	0.272	6.91	1.83	8.14	3.58	0.63
C0300-026-1500-X	0.300	7.62	0.026	0.66	1.500	38.10	0.874	22.20	0.313	7.95	1.83	8.14	2.92	0.51
C0300-026-1750-X	0.300	7.62	0.026	0.66	1.750	44.45	1.020	25.90	0.354	8.99	1.83	8.14	2.50	0.44
C0300-026-2000-X	0.300	7.62	0.026	0.66	2.000	50.80	1.157	29.40	0.394	10.01	1.83	8.14	2.17	0.39
C0300-026-2250-X	0.300	7.62	0.026	0.66	2.250	57.15	1.374	34.89	0.416	10.57	1.83	8.14	2.08	0.37
C0300-026-2500-X	0.300	7.62	0.026	0.66	2.500	63.50	1.504	38.20	0.455	11.56	1.83	8.14	1.83	0.32
C0300-030-0440-X	0.300	7.62	0.030	0.76	0.440	11.18	0.285	7.23	0.172	4.37	2.78	12.37	17.91	3.13
C0300-030-0500-X	0.300	7.62	0.030	0.76	0.500	12.70	0.320	8.14	0.185	4.70	2.78	12.37	15.49	2.71
C0300-030-0560-X	0.300	7.62	0.030	0.76	0.560	14.22	0.356	9.05	0.198	5.03	2.78	12.37	13.66	2.40
C0300-030-0620-X	0.300	7.62	0.030	0.76	0.620	15.75	0.391	9.93	0.212	5.38	2.78	12.37	12.16	2.14
C0300-030-0690-X	0.300	7.62	0.030	0.76	0.690	17.53	0.433	11.00	0.227	5.77	2.78	12.37	10.83	1.89
C0300-030-0750-X	0.300	7.62	0.030	0.76	0.750	19.05	0.469	11.92	0.240	6.10	2.78	12.37	9.91	1.73
C0300-030-0810-X	0.300	7.62	0.030	0.76	0.810	20.57	0.503	12.79	0.253	6.43	2.78	12.37	9.08	1.59
C0300-030-0880-X	0.300	7.62	0.030	0.76	0.880	22.35	0.546	13.86	0.268	6.81	2.78	12.37	8.33	1.45
C0300-030-0940-X	0.300	7.62	0.030	0.76	0.940	23.88	0.581	14.75	0.281	7.14	2.78	12.37	7.75	1.37
C0300-030-1000-X	0.300	7.62	0.030	0.76	1.000	25.40	0.616	15.64	0.294	7.47	2.78	12.37	7.25	1.28
C0300-030-1250-X	0.300	7.62	0.030	0.76	1.250	31.75	0.766	19.45	0.348	8.84	2.78	12.37	5.75	1.02
C0300-030-1500-X	0.300	7.62	0.030	0.76	1.500	38.10	0.914	23.21	0.402	10.21	2.78	12.37	4.75	0.84
C0300-030-1750-X	0.300	7.62	0.030	0.76	1.750	44.45	1.054	26.77	0.457	11.61	2.78	12.37	4.00	0.70
C0300-030-2000-X	0.300	7.62	0.030	0.76	2.000	50.80	1.204	30.59	0.511	12.98	2.78	12.37	3.50	0.61
C0300-030-2250-X	0.300	7.62	0.030	0.76	2.250	57.15	1.347	34.21	0.565	14.35	2.78	12.37	3.08	0.54
C0300-030-2500-X	0.300	7.62	0.030	0.76	2.500	63.50	1.517	38.53	0.619	15.72	2.78	12.37	2.83	0.49
C0300-032-0440-X	0.300	7.62	0.032	0.81	0.440	11.18	0.292	7.42	0.175	4.45	3.37	14.99	22.74	3.98
C0300-032-0500-X	0.300	7.62	0.032	0.81	0.500	12.70	0.329	8.35	0.190	4.83	3.37	14.99	19.66	3.45
C0300-032-0560-X	0.300	7.62	0.032	0.81	0.560	14.22	0.362	9.19	0.208	5.28	3.37	14.99	16.99	2.98
C0300-032-0620-X	0.300	7.62	0.032	0.81	0.620	15.75	0.398	10.11	0.223	5.66	3.37	14.99	15.16	2.66
C0300-032-0690-X	0.300	7.62	0.032	0.81	0.690	17.53	0.442	11.23	0.240	6.10	3.37	14.99	13.58	2.38
C0300-032-0750-X	0.300	7.62	0.032	0.81	0.750	19.05	0.479	12.16	0.255	6.48	3.37	14.99	12.41	2.17
C0300-032-0810-X	0.300	7.62	0.032	0.81	0.810	20.57	0.513	13.03	0.272	6.91	3.37	14.99	11.33	1.98
C0300-032-0880-X	0.300	7.62	0.032	0.81	0.880	22.35	0.559	14.21	0.287	7.29	3.37	14.99	10.50	1.84
C0300-032-0940-X	0.300	7.62	0.032	0.81	0.940	23.88	0.582	14.79	0.311	7.90	3.37	14.99	9.41	1.65
C0300-032-1000-X	0.300	7.62	0.032	0.81	1.000	25.40	0.619	15.72	0.326	8.28	3.37	14.99	8.83	1.54
C0300-032-1250-X	0.300	7.62	0.032	0.81	1.250	31.75	0.780	19.82	0.388	9.86	3.37	14.99	7.16	1.26
C0300-032-1500-X	0.300	7.62	0.032	0.81	1.500	38.10	0.931	23.64	0.450	11.43	3.37	14.99	5.91	1.03
C0300-032-1750-X	0.300	7.62	0.032	0.81	1.750	44.45	1.077	27.34	0.511	12.98	3.37	14.99	5.00	0.88
C0300-032-2000-X	0.300	7.62	0.032	0.81	2.000	50.80	1.238	31.44	0.573	14.55	3.37	14.99	4.41	0.77
C0300-032-2250-X	0.300	7.62	0.032	0.81	2.250	57.15	1.425	36.20	0.608	15.44	3.37	14.99	4.08	0.72
C0300-032-2500-X	0.300	7.62	0.032	0.81	2.500	63.50	1.582	40.17	0.656	16.66	3.37	14.99	3.67	0.65
C0300-035-0380-X	0.300	7.62	0.035	0.89	0.380	9.65	0.266	6.75	0.193	4.90	4.38	19.48	38.32	6.71
C0300-035-0440-X	0.300	7.62	0.035	0.89	0.440	11.18	0.303	7.71	0.210	5.33	4.38	19.48	32.07	5.62
C0300-035-0500-X	0.300	7.62	0.035	0.89	0.500	12.70	0.342	8.68	0.227	5.77	4.38	19.48	27.66	4.85
C0300-035-0560-X	0.300	7.62	0.035	0.89	0.560	14.22	0.379	9.64	0.244	6.20	4.38	19.48	24.24	4.24
C0300-035-0620-X	0.300	7.62	0.035	0.89	0.620	15.75	0.417	10.59	0.262	6.65	4.38	19.48	21.57	3.78

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0300-035-0690-X	0.300	7.62	0.035	0.89	0.690	17.53	0.461	11.72	0.281	7.14	4.38	19.48	19.16	3.36
C0300-035-0750-X	0.300	7.62	0.035	0.89	0.750	19.05	0.500	12.69	0.298	7.57	4.38	19.48	17.49	3.06
C0300-035-0810-X	0.300	7.62	0.035	0.89	0.810	20.57	0.538	13.66	0.316	8.03	4.38	19.48	16.08	2.82
C0300-035-0880-X	0.300	7.62	0.035	0.89	0.880	22.35	0.581	14.77	0.335	8.51	4.38	19.48	14.66	2.57
C0300-035-0940-X	0.300	7.62	0.035	0.89	0.940	23.88	0.619	15.73	0.353	8.97	4.38	19.48	13.66	2.40
C0300-035-1000-X	0.300	7.62	0.035	0.89	1.000	25.40	0.656	16.67	0.370	9.40	4.38	19.48	12.74	2.22
C0300-035-1120-X	0.300	7.62	0.035	0.89	1.120	28.45	0.733	18.63	0.404	10.26	4.38	19.48	11.33	1.98
C0300-035-1250-X	0.300	7.62	0.035	0.89	1.250	31.75	0.816	20.72	0.441	11.20	4.38	19.48	10.08	1.77
C0300-035-1380-X	0.300	7.62	0.035	0.89	1.380	35.05	0.898	22.80	0.478	12.14	4.38	19.48	9.08	1.59
C0300-035-1500-X	0.300	7.62	0.035	0.89	1.500	38.10	0.974	24.75	0.512	13.00	4.38	19.48	8.33	1.45
C0300-035-1750-X	0.300	7.62	0.035	0.89	1.750	44.45	1.132	28.74	0.583	14.81	4.38	19.48	7.08	1.24
C0300-035-2000-X	0.300	7.62	0.035	0.89	2.000	50.80	1.290	32.76	0.654	16.61	4.38	19.48	6.16	1.09
C0300-035-2250-X	0.300	7.62	0.035	0.89	2.250	57.15	1.441	36.61	0.725	18.42	4.38	19.48	5.41	0.95
C0300-035-2500-X	0.300	7.62	0.035	0.89	2.500	63.50	1.609	40.87	0.796	20.22	4.38	19.48	4.91	0.86
C0300-038-0380-X	0.300	7.62	0.038	0.97	0.380	9.65	0.276	7.02	0.197	5.00	5.57	24.78	53.73	9.40
C0300-038-0440-X	0.300	7.62	0.038	0.97	0.440	11.18	0.315	8.00	0.218	5.54	5.57	24.78	44.57	7.81
C0300-038-0500-X	0.300	7.62	0.038	0.97	0.500	12.70	0.356	9.04	0.237	6.02	5.57	24.78	38.65	6.78
C0300-038-0560-X	0.300	7.62	0.038	0.97	0.560	14.22	0.388	9.85	0.265	6.73	5.57	24.78	32.32	5.66
C0300-038-0620-X	0.300	7.62	0.038	0.97	0.620	15.75	0.428	10.88	0.284	7.21	5.57	24.78	29.07	5.10
C0300-038-0690-X	0.300	7.62	0.038	0.97	0.690	17.53	0.469	11.92	0.313	7.95	5.57	24.78	25.24	4.41
C0300-038-0750-X	0.300	7.62	0.038	0.97	0.750	19.05	0.510	12.96	0.331	8.41	5.57	24.78	23.24	4.06
C0300-038-0810-X	0.300	7.62	0.038	0.97	0.810	20.57	0.551	13.99	0.351	8.92	5.57	24.78	21.49	3.77
C0300-038-0880-X	0.300	7.62	0.038	0.97	0.880	22.35	0.592	15.03	0.379	9.63	5.57	24.78	19.33	3.38
C0300-038-0940-X	0.300	7.62	0.038	0.97	0.940	23.88	0.633	16.09	0.398	10.11	5.57	24.78	18.16	3.19
C0300-038-1000-X	0.300	7.62	0.038	0.97	1.000	25.40	0.674	17.12	0.417	10.59	5.57	24.78	17.08	2.99
C0300-038-1120-X	0.300	7.62	0.038	0.97	1.120	28.45	0.755	19.17	0.456	11.58	5.57	24.78	15.24	2.66
C0300-038-1250-X	0.300	7.62	0.038	0.97	1.250	31.75	0.847	21.52	0.493	12.52	5.57	24.78	13.83	2.42
C0300-038-1380-X	0.300	7.62	0.038	0.97	1.380	35.05	0.937	23.80	0.532	13.51	5.57	24.78	12.58	2.21
C0300-038-1500-X	0.300	7.62	0.038	0.97	1.500	38.10	1.019	25.88	0.570	14.48	5.57	24.78	11.58	2.03
C0300-038-1750-X	0.300	7.62	0.038	0.97	1.750	44.45	1.153	29.29	0.680	17.27	5.57	24.78	9.33	1.63
C0300-038-2000-X	0.300	7.62	0.038	0.97	2.000	50.80	1.311	33.29	0.765	19.43	5.57	24.78	8.08	1.42
C0300-038-2250-X	0.300	7.62	0.038	0.97	2.250	57.15	1.507	38.28	0.806	20.47	5.57	24.78	7.50	1.31
C0300-038-2500-X	0.300	7.62	0.038	0.97	2.500	63.50	1.685	42.79	0.874	22.20	5.57	24.78	6.83	1.19
C0300-040-0380-X	0.300	7.62	0.040	1.02	0.380	9.65	0.277	7.04	0.231	5.87	6.47	28.78	62.89	11.02
C0300-040-0440-X	0.300	7.62	0.040	1.02	0.440	11.18	0.317	8.04	0.253	6.43	6.47	28.78	52.40	9.18
C0300-040-0500-X	0.300	7.62	0.040	1.02	0.500	12.70	0.356	9.04	0.275	6.99	6.47	28.78	44.90	7.86
C0300-040-0560-X	0.300	7.62	0.040	1.02	0.560	14.22	0.395	10.04	0.297	7.54	6.47	28.78	39.32	6.88
C0300-040-0620-X	0.300	7.62	0.040	1.02	0.620	15.75	0.435	11.04	0.320	8.13	6.47	28.78	34.90	6.11
C0300-040-0690-X	0.300	7.62	0.040	1.02	0.690	17.53	0.481	12.21	0.346	8.79	6.47	28.78	30.90	5.41
C0300-040-0750-X	0.300	7.62	0.040	1.02	0.750	19.05	0.520	13.21	0.368	9.35	6.47	28.78	28.16	4.94
C0300-040-0810-X	0.300	7.62	0.040	1.02	0.810	20.57	0.559	14.21	0.390	9.91	6.47	28.78	25.82	4.52
C0300-040-0880-X	0.300	7.62	0.040	1.02	0.880	22.35	0.606	15.38	0.416	10.57	6.47	28.78	23.57	4.13
C0300-040-0940-X	0.300	7.62	0.040	1.02	0.940	23.88	0.645	16.38	0.438	11.13	6.47	28.78	21.91	3.84
C0300-040-1000-X	0.300	7.62	0.040	1.02	1.000	25.40	0.684	17.38	0.460	11.68	6.47	28.78	20.49	3.59
C0300-040-1120-X	0.300	7.62	0.040	1.02	1.120	28.45	0.764	19.40	0.505	12.83	6.47	28.78	18.16	3.19
C0300-040-1250-X	0.300	7.62	0.040	1.02	1.250	31.75	0.850	21.58	0.553	14.05	6.47	28.78	16.16	2.84
C0300-040-1380-X	0.300	7.62	0.040	1.02	1.380	35.05	0.934	23.72	0.601	15.27	6.47	28.78	14.49	2.54
C0300-040-1500-X	0.300	7.62	0.040	1.02	1.500	38.10	1.015	25.77	0.645	16.38	6.47	28.78	13.33	2.33
C0300-040-1750-X	0.300	7.62	0.040	1.02	1.750	44.45	1.179	29.95	0.737	18.72	6.47	28.78	11.33	1.98
C0300-040-2000-X	0.300	7.62	0.040	1.02	2.000	50.80	1.342	34.08	0.830	21.08	6.47	28.78	9.83	1.72
C0300-040-2250-X	0.300	7.62	0.040	1.02	2.250	57.15	1.503	38.18	0.922	23.42	6.47	28.78	8.66	1.52
C0300-040-2500-X	0.300	7.62	0.040	1.02	2.500	63.50	1.674	42.52	1.015	25.78	6.47	28.78	7.83	1.37
C0300-042-0380-X	0.300	7.62	0.042	1.07	0.380	9.65	0.299	7.60	0.210	5.33	7.30	32.47	90.21	15.80
C0300-042-0440-X	0.300	7.62	0.042	1.07	0.440	11.18	0.344	8.73	0.230	5.84	7.30	32.47	75.64	13.24
C0300-042-0500-X	0.300	7.62	0.042	1.07	0.500	12.70	0.376	9.55	0.266	6.76	7.30	32.47	58.89	10.31
C0300-042-0560-X	0.300	7.62	0.042	1.07	0.560	14.22	0.414	10.53	0.294	7.47	7.30	32.47	50.15	8.79
C0300-042-0620-X	0.300	7.62	0.042	1.07	0.620	15.75	0.450	11.44	0.325	8.26	7.30	32.47	42.98	7.53
C0300-042-0690-X	0.300	7.62	0.042	1.07	0.690	17.53	0.496	12.59	0.357	9.07	7.30	32.47	37.57	6.58
C0300-042-0750-X	0.300	7.62	0.042	1.07	0.750	19.05	0.540	13.71	0.378	9.60	7.30	32.47	34.74	6.08
C0300-042-0810-X	0.300	7.62	0.042	1.07	0.810	20.57	0.576	14.62	0.409	10.39	7.30	32.47	31.15	5.46
C0300-042-0880-X	0.300	7.62	0.042	1.07	0.880	22.35	0.621	15.77	0.442	11.23	7.30	32.47	28.16	4.94
C0300-042-0940-X	0.300	7.62	0.042	1.07	0.940	23.88	0.665	16.90	0.462	11.73	7.30	32.47	26.57	4.66
C0300-042-1000-X	0.300	7.62	0.042	1.07	1.000	25.40	0.709	18.01	0.484	12.29	7.30	32.47	25.07	4.40
C0300-042-1120-X	0.300	7.62	0.042	1.07	1.120	28.45	0.797	20.24	0.526	13.36	7.30	32.47	22.57	3.96

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0300-042-1250-X	0.300	7.62	0.042	1.07	1.250	31.75	0.887	22.52	0.578	14.68	7.30	32.47	20.08	3.52
C0300-042-1380-X	0.300	7.62	0.042	1.07	1.380	35.05	0.976	24.80	0.630	16.00	7.30	32.47	18.08	3.17
C0300-042-1500-X	0.300	7.62	0.042	1.07	1.500	38.10	1.055	26.81	0.684	17.37	7.30	32.47	16.41	2.87
C0300-042-1750-X	0.300	7.62	0.042	1.07	1.750	44.45	1.216	30.88	0.794	20.17	7.30	32.47	13.66	2.40
C0300-042-2000-X	0.300	7.62	0.042	1.07	2.000	50.80	1.383	35.13	0.894	22.71	7.30	32.47	11.83	2.07
C0300-042-2250-X	0.300	7.62	0.042	1.07	2.250	57.15	1.555	39.49	0.995	25.27	7.30	32.47	10.50	1.84
C0300-042-2500-X	0.300	7.62	0.042	1.07	2.500	63.50	1.758	44.64	1.050	26.67	7.30	32.47	9.83	1.72
C0300-045-0380-X	0.300	7.62	0.045	1.14	0.380	9.65	0.293	7.45	0.247	6.27	8.91	39.63	102.88	18.02
C0300-045-0440-X	0.300	7.62	0.045	1.14	0.440	11.18	0.339	8.61	0.269	6.83	8.91	39.63	88.38	15.48
C0300-045-0500-X	0.300	7.62	0.045	1.14	0.500	12.70	0.384	9.76	0.292	7.42	8.91	39.63	77.14	13.50
C0300-045-0560-X	0.300	7.62	0.045	1.14	0.560	14.22	0.423	10.75	0.325	8.26	8.91	39.63	65.22	11.42
C0300-045-0620-X	0.300	7.62	0.045	1.14	0.620	15.75	0.462	11.73	0.359	9.12	8.91	39.63	56.31	9.86
C0300-045-0690-X	0.300	7.62	0.045	1.14	0.690	17.53	0.517	13.14	0.381	9.68	8.91	39.63	51.65	9.05
C0300-045-0750-X	0.300	7.62	0.045	1.14	0.750	19.05	0.555	14.11	0.415	10.54	8.91	39.63	45.82	8.02
C0300-045-0810-X	0.300	7.62	0.045	1.14	0.810	20.57	0.601	15.28	0.437	11.10	8.91	39.63	42.73	7.48
C0300-045-0880-X	0.300	7.62	0.045	1.14	0.880	22.35	0.649	16.49	0.472	11.99	8.91	39.63	38.65	6.78
C0300-045-0940-X	0.300	7.62	0.045	1.14	0.940	23.88	0.688	17.47	0.506	12.85	8.91	39.63	35.32	6.18
C0300-045-1000-X	0.300	7.62	0.045	1.14	1.000	25.40	0.734	18.64	0.527	13.39	8.91	39.63	33.49	5.87
C0300-045-1120-X	0.300	7.62	0.045	1.14	1.120	28.45	0.824	20.94	0.573	14.55	8.91	39.63	30.15	5.29
C0300-045-1250-X	0.300	7.62	0.045	1.14	1.250	31.75	0.919	23.33	0.629	15.98	8.91	39.63	26.91	4.71
C0300-045-1380-X	0.300	7.62	0.045	1.14	1.380	35.05	1.012	25.71	0.686	17.42	8.91	39.63	24.24	4.24
C0300-045-1500-X	0.300	7.62	0.045	1.14	1.500	38.10	1.096	27.84	0.742	18.85	8.91	39.63	22.07	3.87
C0300-045-1750-X	0.300	7.62	0.045	1.14	1.750	44.45	1.252	31.81	0.878	22.30	8.91	39.63	17.91	3.13
C0300-045-2000-X	0.300	7.62	0.045	1.14	2.000	50.80	1.428	36.26	0.990	25.15	8.91	39.63	15.58	2.73
C0300-045-2250-X	0.300	7.62	0.045	1.14	2.250	57.15	1.605	40.78	1.102	27.99	8.91	39.63	13.83	2.42
C0300-045-2500-X	0.300	7.62	0.045	1.14	2.500	63.50	1.814	46.08	1.170	29.72	8.91	39.63	12.99	2.28
C0300-047-0380-X	0.300	7.62	0.047	1.19	0.380	9.65	0.304	7.71	0.250	6.35	10.11	44.97	132.45	23.20
C0300-047-0440-X	0.300	7.62	0.047	1.19	0.440	11.18	0.348	8.83	0.279	7.09	10.11	44.97	109.46	19.18
C0300-047-0500-X	0.300	7.62	0.047	1.19	0.500	12.70	0.392	9.95	0.311	7.90	10.11	44.97	93.30	16.34
C0300-047-0560-X	0.300	7.62	0.047	1.19	0.560	14.22	0.436	11.07	0.343	8.71	10.11	44.97	81.30	14.24
C0300-047-0620-X	0.300	7.62	0.047	1.19	0.620	15.75	0.480	12.18	0.374	9.50	10.11	44.97	72.05	12.63
C0300-047-0690-X	0.300	7.62	0.047	1.19	0.690	17.53	0.531	13.49	0.408	10.36	10.11	44.97	63.56	11.14
C0300-047-0750-X	0.300	7.62	0.047	1.19	0.750	19.05	0.575	14.60	0.435	11.05	10.11	44.97	57.73	10.10
C0300-047-0810-X	0.300	7.62	0.047	1.19	0.810	20.57	0.619	15.72	0.461	11.71	10.11	44.97	52.90	9.26
C0300-047-0880-X	0.300	7.62	0.047	1.19	0.880	22.35	0.670	17.03	0.493	12.52	10.11	44.97	48.23	8.44
C0300-047-0940-X	0.300	7.62	0.047	1.19	0.940	23.88	0.714	18.15	0.520	13.21	10.11	44.97	44.82	7.85
C0300-047-1000-X	0.300	7.62	0.047	1.19	1.000	25.40	0.758	19.26	0.547	13.89	10.11	44.97	41.82	7.32
C0300-047-1120-X	0.300	7.62	0.047	1.19	1.120	28.45	0.846	21.49	0.600	15.24	10.11	44.97	36.90	6.46
C0300-047-1250-X	0.300	7.62	0.047	1.19	1.250	31.75	0.941	23.91	0.658	16.71	10.11	44.97	32.74	5.73
C0300-047-1380-X	0.300	7.62	0.047	1.19	1.380	35.05	1.037	26.35	0.717	18.21	10.11	44.97	29.49	5.17
C0300-047-1500-X	0.300	7.62	0.047	1.19	1.500	38.10	1.124	28.56	0.770	19.56	10.11	44.97	26.91	4.71
C0300-047-1750-X	0.300	7.62	0.047	1.19	1.750	44.45	1.309	33.24	0.882	22.40	10.11	44.97	22.91	4.01
C0300-047-2000-X	0.300	7.62	0.047	1.19	2.000	50.80	1.492	37.90	0.994	25.25	10.11	44.97	19.91	3.49
C0300-047-2250-X	0.300	7.62	0.047	1.19	2.250	57.15	1.675	42.54	1.106	28.09	10.11	44.97	17.58	3.08
C0300-047-2500-X	0.300	7.62	0.047	1.19	2.500	63.50	1.858	47.19	1.218	30.94	10.11	44.97	15.74	2.75
C0300-047-2750-X	0.300	7.62	0.047	1.19	2.750	69.85	2.040	51.83	1.330	33.78	10.11	44.97	14.24	2.49
C0300-047-3000-X	0.300	7.62	0.047	1.19	3.000	76.20	2.227	56.57	1.442	36.63	10.11	44.97	13.08	2.29
C0300-049-0380-X	0.300	7.62	0.049	1.24	0.380	9.65	0.309	7.86	0.263	6.68	11.15	49.60	157.85	27.65
C0300-049-0440-X	0.300	7.62	0.049	1.24	0.440	11.18	0.354	9.00	0.294	7.47	11.15	49.60	130.20	22.80
C0300-049-0500-X	0.300	7.62	0.049	1.24	0.500	12.70	0.399	10.14	0.328	8.33	11.15	49.60	110.79	19.40
C0300-049-0560-X	0.300	7.62	0.049	1.24	0.560	14.22	0.444	11.29	0.362	9.19	11.15	49.60	96.38	16.88
C0300-049-0620-X	0.300	7.62	0.049	1.24	0.620	15.75	0.489	12.43	0.395	10.03	11.15	49.60	85.30	14.94
C0300-049-0690-X	0.300	7.62	0.049	1.24	0.690	17.53	0.542	13.76	0.431	10.95	11.15	49.60	75.22	13.17
C0300-049-0750-X	0.300	7.62	0.049	1.24	0.750	19.05	0.587	14.90	0.460	11.68	11.15	49.60	68.31	11.96
C0300-049-0810-X	0.300	7.62	0.049	1.24	0.810	20.57	0.632	16.05	0.489	12.42	11.15	49.60	62.56	10.96
C0300-049-0880-X	0.300	7.62	0.049	1.24	0.880	22.35	0.684	17.38	0.523	13.28	11.15	49.60	56.98	9.98
C0300-049-0940-X	0.300	7.62	0.049	1.24	0.940	23.88	0.729	18.52	0.551	14.00	11.15	49.60	52.90	9.26
C0300-049-1000-X	0.300	7.62	0.049	1.24	1.000	25.40	0.774	19.67	0.580	14.73	11.15	49.60	49.40	8.65
C0300-049-1120-X	0.300	7.62	0.049	1.24	1.120	28.45	0.864	21.95	0.638	16.21	11.15	49.60	43.57	7.64
C0300-049-1250-X	0.300	7.62	0.049	1.24	1.250	31.75	0.962	24.42	0.700	17.78	11.15	49.60	38.65	6.78
C0300-049-1380-X	0.300	7.62	0.049	1.24	1.380	35.05	1.059	26.90	0.763	19.38	11.15	49.60	34.74	6.08
C0300-049-1500-X	0.300	7.62	0.049	1.24	1.500	38.10	1.149	29.18	0.821	20.85	11.15	49.60	31.74	5.55
C0300-049-1750-X	0.300	7.62	0.049	1.24	1.750	44.45	1.337	33.96	0.941	23.90	11.15	49.60	26.99	4.73
C0300-049-2000-X	0.300	7.62	0.049	1.24	2.000	50.80	1.524	38.70	1.061	26.95	11.15	49.60	23.41	4.10

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0300-049-2250-X	0.300	7.62	0.049	1.24	2.250	57.15	1.710	43.44	1.181	30.00	11.15	49.60	20.66	3.63
C0300-049-2500-X	0.300	7.62	0.049	1.24	2.500	63.50	1.900	48.25	1.301	33.05	11.15	49.60	18.58	3.26
C0300-049-2750-X	0.300	7.62	0.049	1.24	2.750	69.85	2.087	53.02	1.421	36.09	11.15	49.60	16.83	2.94
C0300-049-3000-X	0.300	7.62	0.049	1.24	3.000	76.20	2.273	57.72	1.541	39.14	11.15	49.60	15.33	2.68
C0300-051-0380-X	0.300	7.62	0.051	1.30	0.380	9.65	0.314	7.97	0.274	6.96	12.51	55.65	188.76	33.06
C0300-051-0440-X	0.300	7.62	0.051	1.30	0.440	11.18	0.359	9.13	0.308	7.82	12.51	55.65	155.27	27.20
C0300-051-0500-X	0.300	7.62	0.051	1.30	0.500	12.70	0.405	10.29	0.343	8.71	12.51	55.65	131.86	23.10
C0300-051-0560-X	0.300	7.62	0.051	1.30	0.560	14.22	0.451	11.45	0.379	9.63	12.51	55.65	114.54	20.05
C0300-051-0620-X	0.300	7.62	0.051	1.30	0.620	15.75	0.497	12.61	0.415	10.54	12.51	55.65	101.29	17.74
C0300-051-0690-X	0.300	7.62	0.051	1.30	0.690	17.53	0.550	13.96	0.453	11.51	12.51	55.65	89.21	15.62
C0300-051-0750-X	0.300	7.62	0.051	1.30	0.750	19.05	0.596	15.13	0.483	12.27	12.51	55.65	80.97	14.19
C0300-051-0810-X	0.300	7.62	0.051	1.30	0.810	20.57	0.641	16.29	0.514	13.06	12.51	55.65	74.14	12.98
C0300-051-0880-X	0.300	7.62	0.051	1.30	0.880	22.35	0.695	17.64	0.550	13.97	12.51	55.65	67.47	11.82
C0300-051-0940-X	0.300	7.62	0.051	1.30	0.940	23.88	0.740	18.80	0.580	14.73	12.51	55.65	62.64	10.96
C0300-051-1000-X	0.300	7.62	0.051	1.30	1.000	25.40	0.786	19.96	0.611	15.52	12.51	55.65	58.39	10.23
C0300-051-1120-X	0.300	7.62	0.051	1.30	1.120	28.45	0.877	22.29	0.672	17.07	12.51	55.65	51.56	9.04
C0300-051-1250-X	0.300	7.62	0.051	1.30	1.250	31.75	0.976	24.80	0.738	18.75	12.51	55.65	45.73	8.00
C0300-051-1380-X	0.300	7.62	0.051	1.30	1.380	35.05	1.075	27.32	0.805	20.45	12.51	55.65	41.07	7.20
C0300-051-1500-X	0.300	7.62	0.051	1.30	1.500	38.10	1.167	29.64	0.866	22.00	12.51	55.65	37.57	6.58
C0300-051-1750-X	0.300	7.62	0.051	1.30	1.750	44.45	1.357	34.47	0.993	25.22	12.51	55.65	31.82	5.57
C0300-051-2000-X	0.300	7.62	0.051	1.30	2.000	50.80	1.548	39.31	1.121	28.47	12.51	55.65	27.66	4.85
C0300-051-2250-X	0.300	7.62	0.051	1.30	2.250	57.15	1.737	44.13	1.248	31.70	12.51	55.65	24.41	4.27
C0300-051-2500-X	0.300	7.62	0.051	1.30	2.500	63.50	1.929	49.00	1.376	34.95	12.51	55.65	21.91	3.84
C0300-051-2750-X	0.300	7.62	0.051	1.30	2.750	69.85	2.119	53.82	1.503	38.18	12.51	55.65	19.83	3.47
C0300-051-3000-X	0.300	7.62	0.051	1.30	3.000	76.20	2.308	58.62	1.631	41.43	12.51	55.65	18.08	3.17
D21550X*	0.340	8.63	0.025	0.63	0.630	16.00	0.342	8.69	0.161	4.10	24.06	5.41	4.23	0.74
D21560X*	0.340	8.63	0.025	0.63	0.965	24.50	0.511	12.99	0.211	5.36	24.06	5.41	2.68	0.47
D21570X*	0.340	8.63	0.025	0.63	1.457	37.00	0.770	19.55	0.285	7.25	24.06	5.41	1.77	0.31
D21580X*	0.340	8.63	0.025	0.63	2.165	55.00	1.151	29.24	0.385	9.77	24.06	5.41	1.20	0.21
D21590X*	0.340	8.63	0.025	0.63	3.169	80.50	1.668	42.36	0.533	13.55	23.75	5.34	0.80	0.14
D21750X*	0.346	8.80	0.031	0.80	0.571	14.50	0.354	9.00	0.205	5.20	47.24	10.62	11.02	1.93
D21760X*	0.346	8.80	0.031	0.80	0.846	21.50	0.507	12.87	0.268	6.80	47.24	10.62	7.02	1.23
D21770X*	0.346	8.80	0.031	0.80	1.260	32.00	0.737	18.73	0.362	9.20	47.24	10.62	4.57	0.80
D21780X*	0.346	8.80	0.031	0.80	1.850	47.00	1.076	27.33	0.488	12.40	47.24	10.62	3.08	0.54
D21790X*	0.346	8.80	0.031	0.80	2.677	68.00	1.547	39.30	0.677	17.20	47.24	10.62	2.11	0.37
D21950X	0.354	9.00	0.039	1.00	0.512	13.00	0.348	8.83	0.217	5.50	87.76	19.73	27.01	4.73
D21960X	0.354	9.00	0.039	1.00	0.748	19.00	0.490	12.45	0.295	7.50	87.76	19.73	17.19	3.01
D21970X	0.354	9.00	0.039	1.00	1.122	28.50	0.722	18.33	0.413	10.50	87.76	19.73	11.08	1.94
D21980X	0.354	9.00	0.039	1.00	1.594	40.50	1.006	25.55	0.571	14.50	87.76	19.73	7.54	1.32
D21990X	0.354	9.00	0.039	1.00	2.323	59.00	1.460	37.08	0.807	20.50	87.76	19.73	5.14	0.90
C0360-026-0500-X	0.360	9.14	0.026	0.66	0.500	12.70	0.300	7.62	0.117	2.97	1.53	6.81	7.66	1.35
C0360-026-0560-X	0.360	9.14	0.026	0.66	0.560	14.22	0.336	8.53	0.123	3.12	1.53	6.81	6.83	1.19
C0360-026-0620-X	0.360	9.14	0.026	0.66	0.620	15.75	0.371	9.44	0.129	3.28	1.53	6.81	6.16	1.09
C0360-026-0690-X	0.360	9.14	0.026	0.66	0.690	17.53	0.416	10.55	0.136	3.45	1.53	6.81	5.58	0.98
C0360-026-0750-X	0.360	9.14	0.026	0.66	0.750	19.05	0.449	11.39	0.143	3.63	1.53	6.81	5.08	0.89
C0360-026-0810-X	0.360	9.14	0.026	0.66	0.810	20.57	0.487	12.38	0.148	3.76	1.53	6.81	4.75	0.84
C0360-026-0880-X	0.360	9.14	0.026	0.66	0.880	22.35	0.505	12.82	0.162	4.11	1.53	6.81	4.08	0.72
C0360-026-0940-X	0.360	9.14	0.026	0.66	0.940	23.88	0.540	13.72	0.169	4.29	1.53	6.81	3.83	0.67
C0360-026-1000-X	0.360	9.14	0.026	0.66	1.000	25.40	0.551	14.01	0.181	4.60	1.53	6.81	3.42	0.60
C0360-026-1120-X	0.360	9.14	0.026	0.66	1.120	28.45	0.648	16.47	0.187	4.75	1.53	6.81	3.25	0.58
C0360-026-1250-X	0.360	9.14	0.026	0.66	1.250	31.75	0.709	18.01	0.213	5.41	1.53	6.81	2.83	0.49
C0360-026-1500-X	0.360	9.14	0.026	0.66	1.500	38.10	0.843	21.42	0.242	6.15	1.53	6.81	2.33	0.40
C0360-026-1750-X	0.360	9.14	0.026	0.66	1.750	44.45	0.984	24.99	0.270	6.86	1.53	6.81	2.00	0.35
C0360-026-2000-X	0.360	9.14	0.026	0.66	2.000	50.80	1.124	28.56	0.298	7.57	1.53	6.81	1.75	0.32
C0360-029-0500-X	0.360	9.14	0.029	0.74	0.500	12.70	0.303	7.70	0.150	3.81	2.12	9.43	10.75	1.89
C0360-029-0560-X	0.360	9.14	0.029	0.74	0.560	14.22	0.337	8.56	0.159	4.04	2.12	9.43	9.50	1.66
C0360-029-0620-X	0.360	9.14	0.029	0.74	0.620	15.75	0.371	9.42	0.167	4.24	2.12	9.43	8.50	1.49
C0360-029-0690-X	0.360	9.14	0.029	0.74	0.690	17.53	0.408	10.35	0.177	4.50	2.12	9.43	7.50	1.31
C0360-029-0750-X	0.360	9.14	0.029	0.74	0.750	19.05	0.440	11.18	0.186	4.72	2.12	9.43	6.83	1.19
C0360-029-0810-X	0.360	9.14	0.029	0.74	0.810	20.57	0.476	12.08	0.194	4.93	2.12	9.43	6.33	1.10
C0360-029-0880-X	0.360	9.14	0.029	0.74	0.880	22.35	0.512	13.00	0.204	5.18	2.12	9.43	5.75	1.02
C0360-029-0940-X	0.360	9.14	0.029	0.74	0.940	23.88	0.549	13.94	0.213	5.41	2.12	9.43	5.41	0.95
C0360-029-1000-X	0.360	9.14	0.029	0.74	1.000	25.40	0.583	14.82	0.221	5.61	2.12	9.43	5.08	0.89
C0360-029-1120-X	0.360	9.14	0.029	0.74	1.120	28.45	0.649	16.49	0.238	6.05	2.12	9.43	4.50	0.79

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-029-1250-X	0.360	9.14	0.029	0.74	1.250	31.75	0.721	18.30	0.257	6.53	2.12	9.43	4.00	0.70
C0360-029-1380-X	0.360	9.14	0.029	0.74	1.380	35.05	0.789	20.04	0.275	6.99	2.12	9.43	3.58	0.63
C0360-029-1500-X	0.360	9.14	0.029	0.74	1.500	38.10	0.865	21.96	0.292	7.42	2.12	9.43	3.33	0.58
C0360-029-1750-X	0.360	9.14	0.029	0.74	1.750	44.45	1.002	25.46	0.328	8.33	2.12	9.43	2.83	0.49
C0360-029-2000-X	0.360	9.14	0.029	0.74	2.000	50.80	1.124	28.54	0.364	9.25	2.12	9.43	2.42	0.42
C0360-032-0380-X	0.360	9.14	0.032	0.81	0.380	9.65	0.243	6.17	0.151	3.84	2.83	12.59	20.66	3.63
C0360-032-0440-X	0.360	9.14	0.032	0.81	0.440	11.18	0.277	7.02	0.162	4.11	2.83	12.59	17.33	3.03
C0360-032-0500-X	0.360	9.14	0.032	0.81	0.500	12.70	0.310	7.88	0.159	4.04	2.83	12.59	14.91	2.61
C0360-032-0560-X	0.360	9.14	0.032	0.81	0.560	14.22	0.351	8.93	0.167	4.24	2.83	12.59	13.58	2.38
C0360-032-0620-X	0.360	9.14	0.032	0.81	0.620	15.75	0.392	9.95	0.175	4.45	2.83	12.59	12.41	2.17
C0360-032-0690-X	0.360	9.14	0.032	0.81	0.690	17.53	0.424	10.78	0.191	4.85	2.83	12.59	10.66	1.87
C0360-032-0750-X	0.360	9.14	0.032	0.81	0.750	19.05	0.464	11.79	0.199	5.05	2.83	12.59	9.91	1.73
C0360-032-0810-X	0.360	9.14	0.032	0.81	0.810	20.57	0.506	12.86	0.207	5.26	2.83	12.59	9.33	1.63
C0360-032-0880-X	0.360	9.14	0.032	0.81	0.880	22.35	0.537	13.63	0.224	5.69	2.83	12.59	8.25	1.45
C0360-032-0940-X	0.360	9.14	0.032	0.81	0.940	23.88	0.578	14.69	0.231	5.87	2.83	12.59	7.83	1.37
C0360-032-1000-X	0.360	9.14	0.032	0.81	1.000	25.40	0.600	15.24	0.247	6.27	2.83	12.59	7.08	1.24
C0360-032-1120-X	0.360	9.14	0.032	0.81	1.120	28.45	0.667	16.93	0.270	6.86	2.83	12.59	6.25	1.10
C0360-032-1250-X	0.360	9.14	0.032	0.81	1.250	31.75	0.735	18.66	0.303	7.70	2.83	12.59	5.50	0.96
C0360-032-1380-X	0.360	9.14	0.032	0.81	1.380	35.05	0.813	20.66	0.317	8.05	2.83	12.59	5.00	0.88
C0360-032-1500-X	0.360	9.14	0.032	0.81	1.500	38.10	0.870	22.11	0.344	8.74	2.83	12.59	4.50	0.79
C0360-032-1750-X	0.360	9.14	0.032	0.81	1.750	44.45	1.011	25.68	0.391	9.93	2.83	12.59	3.83	0.67
C0360-032-2000-X	0.360	9.14	0.032	0.81	2.000	50.80	1.150	29.21	0.434	11.02	2.83	12.59	3.33	0.58
C0360-032-2250-X	0.360	9.14	0.032	0.81	2.250	57.15	1.355	34.42	0.464	11.79	2.83	12.59	3.17	0.56
C0360-032-2500-X	0.360	9.14	0.032	0.81	2.500	63.50	1.500	38.10	0.498	12.65	2.83	12.59	2.83	0.49
C0360-035-0440-X	0.360	9.14	0.035	0.89	0.440	11.18	0.284	7.21	0.182	4.62	3.69	16.41	23.66	4.15
C0360-035-0500-X	0.360	9.14	0.035	0.89	0.500	12.70	0.318	8.09	0.195	4.95	3.69	16.41	20.33	3.56
C0360-035-0560-X	0.360	9.14	0.035	0.89	0.560	14.22	0.353	8.97	0.208	5.28	3.69	16.41	17.83	3.12
C0360-035-0620-X	0.360	9.14	0.035	0.89	0.620	15.75	0.388	9.86	0.220	5.59	3.69	16.41	15.91	2.78
C0360-035-0690-X	0.360	9.14	0.035	0.89	0.690	17.53	0.428	10.87	0.235	5.97	3.69	16.41	14.08	2.47
C0360-035-0750-X	0.360	9.14	0.035	0.89	0.750	19.05	0.462	11.74	0.247	6.27	3.69	16.41	12.83	2.24
C0360-035-0810-X	0.360	9.14	0.035	0.89	0.810	20.57	0.498	12.65	0.260	6.60	3.69	16.41	11.83	2.07
C0360-035-0880-X	0.360	9.14	0.035	0.89	0.880	22.35	0.539	13.70	0.275	6.99	3.69	16.41	10.83	1.89
C0360-035-0940-X	0.360	9.14	0.035	0.89	0.940	23.88	0.574	14.58	0.287	7.29	3.69	16.41	10.08	1.77
C0360-035-1000-X	0.360	9.14	0.035	0.89	1.000	25.40	0.608	15.44	0.300	7.62	3.69	16.41	9.41	1.65
C0360-035-1120-X	0.360	9.14	0.035	0.89	1.120	28.45	0.677	17.20	0.325	8.26	3.69	16.41	8.33	1.45
C0360-035-1250-X	0.360	9.14	0.035	0.89	1.250	31.75	0.752	19.11	0.352	8.94	3.69	16.41	7.41	1.30
C0360-035-1380-X	0.360	9.14	0.035	0.89	1.380	35.05	0.826	20.99	0.379	9.63	3.69	16.41	6.66	1.17
C0360-035-1500-X	0.360	9.14	0.035	0.89	1.500	38.10	0.893	22.69	0.404	10.26	3.69	16.41	6.08	1.07
C0360-035-1750-X	0.360	9.14	0.035	0.89	1.750	44.45	1.047	26.59	0.457	11.61	3.69	16.41	5.25	0.93
C0360-035-2000-X	0.360	9.14	0.035	0.89	2.000	50.80	1.180	29.97	0.509	12.93	3.69	16.41	4.50	0.79
C0360-035-2250-X	0.360	9.14	0.035	0.89	2.250	57.15	1.327	33.71	0.562	14.27	3.69	16.41	4.00	0.70
C0360-035-2500-X	0.360	9.14	0.035	0.89	2.500	63.50	1.470	37.34	0.614	15.60	3.69	16.41	3.58	0.63
C0360-038-0440-X	0.360	9.14	0.038	0.97	0.440	11.18	0.289	7.34	0.190	4.83	4.70	20.91	31.15	5.46
C0360-038-0500-X	0.360	9.14	0.038	0.97	0.500	12.70	0.335	8.50	0.199	5.05	4.70	20.91	28.41	4.97
C0360-038-0560-X	0.360	9.14	0.038	0.97	0.560	14.22	0.364	9.25	0.218	5.54	4.70	20.91	23.99	4.20
C0360-038-0620-X	0.360	9.14	0.038	0.97	0.620	15.75	0.393	9.99	0.237	6.02	4.70	20.91	20.74	3.63
C0360-038-0690-X	0.360	9.14	0.038	0.97	0.690	17.53	0.435	11.04	0.256	6.50	4.70	20.91	18.41	3.22
C0360-038-0750-X	0.360	9.14	0.038	0.97	0.750	19.05	0.479	12.16	0.266	6.76	4.70	20.91	17.33	3.03
C0360-038-0810-X	0.360	9.14	0.038	0.97	0.810	20.57	0.508	12.91	0.285	7.24	4.70	20.91	15.58	2.73
C0360-038-0880-X	0.360	9.14	0.038	0.97	0.880	22.35	0.548	13.92	0.304	7.72	4.70	20.91	14.16	2.49
C0360-038-0940-X	0.360	9.14	0.038	0.97	0.940	23.88	0.578	14.69	0.323	8.20	4.70	20.91	12.99	2.28
C0360-038-1000-X	0.360	9.14	0.038	0.97	1.000	25.40	0.624	15.85	0.332	8.43	4.70	20.91	12.50	2.19
C0360-038-1120-X	0.360	9.14	0.038	0.97	1.120	28.45	0.683	17.34	0.370	9.40	4.70	20.91	10.75	1.89
C0360-038-1250-X	0.360	9.14	0.038	0.97	1.250	31.75	0.768	19.50	0.399	10.13	4.70	20.91	9.75	1.72
C0360-038-1380-X	0.360	9.14	0.038	0.97	1.380	35.05	0.837	21.27	0.437	11.10	4.70	20.91	8.66	1.52
C0360-038-1500-X	0.360	9.14	0.038	0.97	1.500	38.10	0.912	23.17	0.465	11.81	4.70	20.91	8.00	1.40
C0360-038-1750-X	0.360	9.14	0.038	0.97	1.750	44.45	1.070	27.18	0.526	13.36	4.70	20.91	6.91	1.21
C0360-038-2000-X	0.360	9.14	0.038	0.97	2.000	50.80	1.216	30.90	0.587	14.91	4.70	20.91	6.00	1.05
C0360-038-2250-X	0.360	9.14	0.038	0.97	2.250	57.15	1.368	34.76	0.649	16.48	4.70	20.91	5.33	0.93
C0360-038-2500-X	0.360	9.14	0.038	0.97	2.500	63.50	1.510	38.36	0.711	18.06	4.70	20.91	4.75	0.84
C0360-040-0440-X	0.360	9.14	0.040	1.02	0.440	11.18	0.297	7.55	0.218	5.54	5.46	24.29	38.32	6.71
C0360-040-0500-X	0.360	9.14	0.040	1.02	0.500	12.70	0.334	8.47	0.234	5.94	5.46	24.29	32.82	5.74
C0360-040-0560-X	0.360	9.14	0.040	1.02	0.560	14.22	0.370	9.39	0.250	6.35	5.46	24.29	28.74	5.03
C0360-040-0620-X	0.360	9.14	0.040	1.02	0.620	15.75	0.406	10.32	0.267	6.78	5.46	24.29	25.57	4.48

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-040-0690-X	0.360	9.14	0.040	1.02	0.690	17.53	0.448	11.38	0.286	7.26	5.46	24.29	22.57	3.96
C0360-040-0750-X	0.360	9.14	0.040	1.02	0.750	19.05	0.484	12.30	0.302	7.67	5.46	24.29	20.58	3.61
C0360-040-0810-X	0.360	9.14	0.040	1.02	0.810	20.57	0.521	13.23	0.318	8.08	5.46	24.29	18.91	3.31
C0360-040-0880-X	0.360	9.14	0.040	1.02	0.880	22.35	0.563	14.30	0.337	8.56	5.46	24.29	17.24	3.01
C0360-040-0940-X	0.360	9.14	0.040	1.02	0.940	23.88	0.598	15.20	0.353	8.97	5.46	24.29	15.99	2.80
C0360-040-1000-X	0.360	9.14	0.040	1.02	1.000	25.40	0.636	16.14	0.370	9.40	5.46	24.29	14.99	2.63
C0360-040-1120-X	0.360	9.14	0.040	1.02	1.120	28.45	0.707	17.97	0.402	10.21	5.46	24.29	13.24	2.31
C0360-040-1250-X	0.360	9.14	0.040	1.02	1.250	31.75	0.785	19.93	0.438	11.13	5.46	24.29	11.75	2.07
C0360-040-1380-X	0.360	9.14	0.040	1.02	1.380	35.05	0.863	21.93	0.473	12.01	5.46	24.29	10.58	1.86
C0360-040-1500-X	0.360	9.14	0.040	1.02	1.500	38.10	0.939	23.86	0.505	12.83	5.46	24.29	9.75	1.72
C0360-040-1750-X	0.360	9.14	0.040	1.02	1.750	44.45	1.087	27.62	0.573	14.55	5.46	24.29	8.25	1.45
C0360-040-2000-X	0.360	9.14	0.040	1.02	2.000	50.80	1.237	31.43	0.641	16.28	5.46	24.29	7.16	1.26
C0360-040-2250-X	0.360	9.14	0.040	1.02	2.250	57.15	1.387	35.23	0.709	18.01	5.46	24.29	6.33	1.10
C0360-040-2500-X	0.360	9.14	0.040	1.02	2.500	63.50	1.535	39.00	0.777	19.74	5.46	24.29	5.66	1.00
C0360-042-0440-X	0.360	9.14	0.042	1.07	0.440	11.18	0.312	7.94	0.209	5.31	6.17	27.45	48.40	8.48
C0360-042-0500-X	0.360	9.14	0.042	1.07	0.500	12.70	0.347	8.80	0.231	5.87	6.17	27.45	40.23	7.04
C0360-042-0560-X	0.360	9.14	0.042	1.07	0.560	14.22	0.381	9.67	0.252	6.40	6.17	27.45	34.40	6.02
C0360-042-0620-X	0.360	9.14	0.042	1.07	0.620	15.75	0.428	10.87	0.262	6.65	6.17	27.45	32.15	5.64
C0360-042-0690-X	0.360	9.14	0.042	1.07	0.690	17.53	0.472	11.99	0.284	7.21	6.17	27.45	28.32	4.96
C0360-042-0750-X	0.360	9.14	0.042	1.07	0.750	19.05	0.510	12.96	0.301	7.65	6.17	27.45	25.74	4.50
C0360-042-0810-X	0.360	9.14	0.042	1.07	0.810	20.57	0.541	13.73	0.326	8.28	6.17	27.45	22.91	4.01
C0360-042-0880-X	0.360	9.14	0.042	1.07	0.880	22.35	0.586	14.89	0.346	8.79	6.17	27.45	20.99	3.68
C0360-042-0940-X	0.360	9.14	0.042	1.07	0.940	23.88	0.619	15.73	0.368	9.35	6.17	27.45	19.24	3.36
C0360-042-1000-X	0.360	9.14	0.042	1.07	1.000	25.40	0.655	16.65	0.388	9.86	6.17	27.45	17.91	3.13
C0360-042-1120-X	0.360	9.14	0.042	1.07	1.120	28.45	0.724	18.39	0.430	10.92	6.17	27.45	15.58	2.73
C0360-042-1250-X	0.360	9.14	0.042	1.07	1.250	31.75	0.814	20.68	0.463	11.76	6.17	27.45	14.16	2.49
C0360-042-1380-X	0.360	9.14	0.042	1.07	1.380	35.05	0.905	22.99	0.495	12.57	6.17	27.45	12.99	2.28
C0360-042-1500-X	0.360	9.14	0.042	1.07	1.500	38.10	0.989	25.12	0.525	13.34	6.17	27.45	12.08	2.12
C0360-042-1750-X	0.360	9.14	0.042	1.07	1.750	44.45	1.122	28.50	0.621	15.77	6.17	27.45	9.83	1.72
C0360-042-2000-X	0.360	9.14	0.042	1.07	2.000	50.80	1.281	32.53	0.695	17.65	6.17	27.45	8.58	1.51
C0360-042-2250-X	0.360	9.14	0.042	1.07	2.250	57.15	1.436	36.47	0.770	19.56	6.17	27.45	7.58	1.33
C0360-042-2500-X	0.360	9.14	0.042	1.07	2.500	63.50	1.585	40.27	0.844	21.44	6.17	27.45	6.75	1.19
C0360-045-0440-X	0.360	9.14	0.045	1.14	0.440	11.18	0.325	8.26	0.224	5.69	7.55	33.58	65.81	11.52
C0360-045-0500-X	0.360	9.14	0.045	1.14	0.500	12.70	0.362	9.20	0.247	6.27	7.55	33.58	54.73	9.58
C0360-045-0560-X	0.360	9.14	0.045	1.14	0.560	14.22	0.399	10.13	0.270	6.86	7.55	33.58	46.81	8.20
C0360-045-0620-X	0.360	9.14	0.045	1.14	0.620	15.75	0.435	11.06	0.292	7.42	7.55	33.58	40.90	7.16
C0360-045-0690-X	0.360	9.14	0.045	1.14	0.690	17.53	0.483	12.27	0.314	7.98	7.55	33.58	36.49	6.39
C0360-045-0750-X	0.360	9.14	0.045	1.14	0.750	19.05	0.520	13.21	0.337	8.56	7.55	33.58	32.82	5.74
C0360-045-0810-X	0.360	9.14	0.045	1.14	0.810	20.57	0.557	14.14	0.359	9.12	7.55	33.58	29.82	5.22
C0360-045-0880-X	0.360	9.14	0.045	1.14	0.880	22.35	0.604	15.33	0.382	9.70	7.55	33.58	27.32	4.78
C0360-045-0940-X	0.360	9.14	0.045	1.14	0.940	23.88	0.641	16.28	0.404	10.26	7.55	33.58	25.24	4.41
C0360-045-1000-X	0.360	9.14	0.045	1.14	1.000	25.40	0.677	17.21	0.427	10.85	7.55	33.58	23.41	4.10
C0360-045-1120-X	0.360	9.14	0.045	1.14	1.120	28.45	0.751	19.09	0.472	11.99	7.55	33.58	20.49	3.59
C0360-045-1250-X	0.360	9.14	0.045	1.14	1.250	31.75	0.836	21.24	0.516	13.11	7.55	33.58	18.24	3.19
C0360-045-1380-X	0.360	9.14	0.045	1.14	1.380	35.05	0.920	23.36	0.562	14.27	7.55	33.58	16.41	2.87
C0360-045-1500-X	0.360	9.14	0.045	1.14	1.500	38.10	0.994	25.24	0.607	15.42	7.55	33.58	14.91	2.61
C0360-045-1750-X	0.360	9.14	0.045	1.14	1.750	44.45	1.154	29.30	0.694	17.63	7.55	33.58	12.66	2.22
C0360-045-2000-X	0.360	9.14	0.045	1.14	2.000	50.80	1.313	33.36	0.778	19.76	7.55	33.58	11.00	1.93
C0360-045-2250-X	0.360	9.14	0.045	1.14	2.250	57.15	1.475	37.47	0.862	21.89	7.55	33.58	9.75	1.72
C0360-045-2500-X	0.360	9.14	0.045	1.14	2.500	63.50	1.637	41.57	0.946	24.03	7.55	33.58	8.75	1.54
C0360-045-2750-X	0.360	9.14	0.045	1.14	2.750	69.85	1.834	46.59	0.990	25.15	7.55	33.58	8.25	1.45
C0360-047-0440-X	0.360	9.14	0.047	1.19	0.440	11.18	0.329	8.35	0.257	6.53	8.57	38.12	77.14	13.50
C0360-047-0500-X	0.360	9.14	0.047	1.19	0.500	12.70	0.370	9.39	0.277	7.04	8.57	38.12	65.72	11.51
C0360-047-0560-X	0.360	9.14	0.047	1.19	0.560	14.22	0.410	10.42	0.297	7.54	8.57	38.12	57.23	10.02
C0360-047-0620-X	0.360	9.14	0.047	1.19	0.620	15.75	0.451	11.45	0.318	8.08	8.57	38.12	50.73	8.88
C0360-047-0690-X	0.360	9.14	0.047	1.19	0.690	17.53	0.498	12.66	0.341	8.66	8.57	38.12	44.73	7.83
C0360-047-0750-X	0.360	9.14	0.047	1.19	0.750	19.05	0.539	13.69	0.361	9.17	8.57	38.12	40.65	7.13
C0360-047-0810-X	0.360	9.14	0.047	1.19	0.810	20.57	0.580	14.73	0.381	9.68	8.57	38.12	37.24	6.51
C0360-047-0880-X	0.360	9.14	0.047	1.19	0.880	22.35	0.627	15.93	0.405	10.29	8.57	38.12	33.90	5.94
C0360-047-0940-X	0.360	9.14	0.047	1.19	0.940	23.88	0.668	16.98	0.425	10.80	8.57	38.12	31.57	5.53
C0360-047-1000-X	0.360	9.14	0.047	1.19	1.000	25.40	0.708	17.99	0.445	11.30	8.57	38.12	29.40	5.15
C0360-047-1120-X	0.360	9.14	0.047	1.19	1.120	28.45	0.790	20.07	0.485	12.32	8.57	38.12	25.99	4.55
C0360-047-1250-X	0.360	9.14	0.047	1.19	1.250	31.75	0.878	22.31	0.529	13.44	8.57	38.12	23.07	4.05
C0360-047-1380-X	0.360	9.14	0.047	1.19	1.380	35.05	0.967	24.55	0.573	14.55	8.57	38.12	20.74	3.63

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-047-1500-X	0.360	9.14	0.047	1.19	1.500	38.10	1.049	26.63	0.613	15.57	8.57	38.12	18.99	3.33
C0360-047-1750-X	0.360	9.14	0.047	1.19	1.750	44.45	1.217	30.90	0.697	17.70	8.57	38.12	16.08	2.82
C0360-047-2000-X	0.360	9.14	0.047	1.19	2.000	50.80	1.387	35.24	0.781	19.84	8.57	38.12	13.99	2.45
C0360-047-2250-X	0.360	9.14	0.047	1.19	2.250	57.15	1.559	39.60	0.865	21.97	8.57	38.12	12.41	2.17
C0360-047-2500-X	0.360	9.14	0.047	1.19	2.500	63.50	1.726	43.84	0.949	24.10	8.57	38.12	11.08	1.94
C0360-047-2750-X	0.360	9.14	0.047	1.19	2.750	69.85	1.899	48.24	1.033	26.24	8.57	38.12	10.08	1.77
C0360-047-3000-X	0.360	9.14	0.047	1.19	3.000	76.20	2.064	52.43	1.117	28.37	8.57	38.12	9.16	1.61
C0360-047-3250-X	0.360	9.14	0.047	1.19	3.250	82.55	2.231	56.66	1.201	30.51	8.57	38.12	8.41	1.47
C0360-047-3500-X	0.360	9.14	0.047	1.19	3.500	88.90	2.405	61.09	1.284	32.61	8.57	38.12	7.83	1.37
C0360-049-0440-X	0.360	9.14	0.049	1.24	0.440	11.18	0.335	8.52	0.271	6.88	9.47	42.12	90.55	15.87
C0360-049-0500-X	0.360	9.14	0.049	1.24	0.500	12.70	0.377	9.58	0.293	7.44	9.47	42.12	77.05	13.50
C0360-049-0560-X	0.360	9.14	0.049	1.24	0.560	14.22	0.419	10.64	0.315	8.00	9.47	42.12	67.06	11.75
C0360-049-0620-X	0.360	9.14	0.049	1.24	0.620	15.75	0.460	11.69	0.336	8.53	9.47	42.12	59.31	10.39
C0360-049-0690-X	0.360	9.14	0.049	1.24	0.690	17.53	0.509	12.93	0.362	9.19	9.47	42.12	52.31	9.16
C0360-049-0750-X	0.360	9.14	0.049	1.24	0.750	19.05	0.551	13.98	0.384	9.75	9.47	42.12	47.48	8.32
C0360-049-0810-X	0.360	9.14	0.049	1.24	0.810	20.57	0.592	15.04	0.405	10.29	9.47	42.12	43.48	7.62
C0360-049-0880-X	0.360	9.14	0.049	1.24	0.880	22.35	0.641	16.29	0.431	10.95	9.47	42.12	39.65	6.95
C0360-049-0940-X	0.360	9.14	0.049	1.24	0.940	23.88	0.683	17.34	0.453	11.51	9.47	42.12	36.82	6.44
C0360-049-1000-X	0.360	9.14	0.049	1.24	1.000	25.40	0.724	18.39	0.474	12.04	9.47	42.12	34.32	6.01
C0360-049-1120-X	0.360	9.14	0.049	1.24	1.120	28.45	0.808	20.51	0.518	13.16	9.47	42.12	30.32	5.31
C0360-049-1250-X	0.360	9.14	0.049	1.24	1.250	31.75	0.898	22.81	0.565	14.35	9.47	42.12	26.91	4.71
C0360-049-1380-X	0.360	9.14	0.049	1.24	1.380	35.05	0.988	25.09	0.612	15.54	9.47	42.12	24.16	4.24
C0360-049-1500-X	0.360	9.14	0.049	1.24	1.500	38.10	1.071	27.20	0.656	16.66	9.47	42.12	22.07	3.87
C0360-049-1750-X	0.360	9.14	0.049	1.24	1.750	44.45	1.245	31.62	0.747	18.97	9.47	42.12	18.74	3.27
C0360-049-2000-X	0.360	9.14	0.049	1.24	2.000	50.80	1.420	36.07	0.837	21.26	9.47	42.12	16.33	2.85
C0360-049-2250-X	0.360	9.14	0.049	1.24	2.250	57.15	1.593	40.46	0.928	23.57	9.47	42.12	14.41	2.52
C0360-049-2500-X	0.360	9.14	0.049	1.24	2.500	63.50	1.766	44.87	1.019	25.88	9.47	42.12	12.91	2.26
C0360-049-2750-X	0.360	9.14	0.049	1.24	2.750	69.85	1.938	49.22	1.110	28.19	9.47	42.12	11.66	2.05
C0360-049-3000-X	0.360	9.14	0.049	1.24	3.000	76.20	2.112	53.64	1.200	30.48	9.47	42.12	10.66	1.87
C0360-049-3250-X	0.360	9.14	0.049	1.24	3.250	82.55	2.286	58.08	1.291	32.79	9.47	42.12	9.83	1.72
C0360-049-3500-X	0.360	9.14	0.049	1.24	3.500	88.90	2.457	62.41	1.382	35.10	9.47	42.12	9.08	1.59
C0360-051-0440-X	0.360	9.14	0.051	1.30	0.440	11.18	0.339	8.62	0.286	7.26	10.64	47.33	105.62	18.49
C0360-051-0500-X	0.360	9.14	0.051	1.30	0.500	12.70	0.381	9.69	0.309	7.85	10.64	47.33	89.71	15.71
C0360-051-0560-X	0.360	9.14	0.051	1.30	0.560	14.22	0.424	10.76	0.333	8.46	10.64	47.33	77.97	13.66
C0360-051-0620-X	0.360	9.14	0.051	1.30	0.620	15.75	0.466	11.83	0.356	9.04	10.64	47.33	68.89	12.07
C0360-051-0690-X	0.360	9.14	0.051	1.30	0.690	17.53	0.515	13.08	0.384	9.75	10.64	47.33	60.73	10.63
C0360-051-0750-X	0.360	9.14	0.051	1.30	0.750	19.05	0.557	14.14	0.407	10.34	10.64	47.33	55.06	9.65
C0360-051-0810-X	0.360	9.14	0.051	1.30	0.810	20.57	0.599	15.21	0.431	10.95	10.64	47.33	50.40	8.83
C0360-051-0880-X	0.360	9.14	0.051	1.30	0.880	22.35	0.648	16.46	0.458	11.63	10.64	47.33	45.90	8.04
C0360-051-0940-X	0.360	9.14	0.051	1.30	0.940	23.88	0.690	17.53	0.482	12.24	10.64	47.33	42.57	7.46
C0360-051-1000-X	0.360	9.14	0.051	1.30	1.000	25.40	0.732	18.60	0.505	12.83	10.64	47.33	39.73	6.95
C0360-051-1120-X	0.360	9.14	0.051	1.30	1.120	28.45	0.817	20.74	0.552	14.02	10.64	47.33	35.07	6.15
C0360-051-1250-X	0.360	9.14	0.051	1.30	1.250	31.75	0.908	23.05	0.603	15.32	10.64	47.33	31.07	5.45
C0360-051-1380-X	0.360	9.14	0.051	1.30	1.380	35.05	0.999	25.37	0.654	16.61	10.64	47.33	27.91	4.89
C0360-051-1500-X	0.360	9.14	0.051	1.30	1.500	38.10	1.084	27.53	0.701	17.81	10.64	47.33	25.57	4.48
C0360-051-1750-X	0.360	9.14	0.051	1.30	1.750	44.45	1.259	31.97	0.800	20.32	10.64	47.33	21.66	3.80
C0360-051-2000-X	0.360	9.14	0.051	1.30	2.000	50.80	1.435	36.45	0.898	22.81	10.64	47.33	18.83	3.29
C0360-051-2250-X	0.360	9.14	0.051	1.30	2.250	57.15	1.608	40.85	0.996	25.30	10.64	47.33	16.58	2.91
C0360-051-2500-X	0.360	9.14	0.051	1.30	2.500	63.50	1.786	45.38	1.094	27.79	10.64	47.33	14.91	2.61
C0360-051-2750-X	0.360	9.14	0.051	1.30	2.750	69.85	1.962	49.82	1.192	30.28	10.64	47.33	13.49	2.36
C0360-051-3000-X	0.360	9.14	0.051	1.30	3.000	76.20	2.137	54.28	1.290	32.77	10.64	47.33	12.33	2.15
C0360-051-3250-X	0.360	9.14	0.051	1.30	3.250	82.55	2.311	58.70	1.388	35.26	10.64	47.33	11.33	1.98
C0360-051-3500-X	0.360	9.14	0.051	1.30	3.500	88.90	2.486	63.15	1.486	37.74	10.64	47.33	10.50	1.84
C0360-055-0440-X	0.360	9.14	0.055	1.40	0.440	11.18	0.351	8.93	0.310	7.87	12.95	57.60	146.27	25.62
C0360-055-0500-X	0.360	9.14	0.055	1.40	0.500	12.70	0.395	10.04	0.337	8.56	12.95	57.60	123.78	21.68
C0360-055-0560-X	0.360	9.14	0.055	1.40	0.560	14.22	0.439	11.16	0.363	9.22	12.95	57.60	107.29	18.79
C0360-055-0620-X	0.360	9.14	0.055	1.40	0.620	15.75	0.483	12.27	0.389	9.88	12.95	57.60	94.63	16.57
C0360-055-0690-X	0.360	9.14	0.055	1.40	0.690	17.53	0.534	13.57	0.420	10.67	12.95	57.60	83.22	14.57
C0360-055-0750-X	0.360	9.14	0.055	1.40	0.750	19.05	0.578	14.69	0.447	11.35	12.95	57.60	75.47	13.22
C0360-055-0810-X	0.360	9.14	0.055	1.40	0.810	20.57	0.622	15.81	0.473	12.01	12.95	57.60	68.97	12.08
C0360-055-0880-X	0.360	9.14	0.055	1.40	0.880	22.35	0.674	17.11	0.504	12.80	12.95	57.60	62.72	10.98
C0360-055-0940-X	0.360	9.14	0.055	1.40	0.940	23.88	0.717	18.22	0.530	13.46	12.95	57.60	58.14	10.17
C0360-055-1000-X	0.360	9.14	0.055	1.40	1.000	25.40	0.761	19.34	0.557	14.15	12.95	57.60	54.23	9.49
C0360-055-1120-X	0.360	9.14	0.055	1.40	1.120	28.45	0.849	21.57	0.609	15.47	12.95	57.60	47.81	8.37

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0360-055-1250-X	0.360	9.14	0.055	1.40	1.250	31.75	0.944	23.98	0.667	16.94	12.95	57.60	42.32	7.41
C0360-055-1380-X	0.360	9.14	0.055	1.40	1.380	35.05	1.039	26.39	0.724	18.39	12.95	57.60	37.98	6.65
C0360-055-1500-X	0.360	9.14	0.055	1.40	1.500	38.10	1.127	28.63	0.777	19.74	12.95	57.60	34.74	6.08
C0360-055-1750-X	0.360	9.14	0.055	1.40	1.750	44.45	1.310	33.27	0.887	22.53	12.95	57.60	29.40	5.15
C0360-055-2000-X	0.360	9.14	0.055	1.40	2.000	50.80	1.494	37.94	0.997	25.32	12.95	57.60	25.57	4.48
C0360-055-2250-X	0.360	9.14	0.055	1.40	2.250	57.15	1.676	42.58	1.107	28.12	12.95	57.60	22.57	3.96
C0360-055-2500-X	0.360	9.14	0.055	1.40	2.500	63.50	1.858	47.19	1.217	30.91	12.95	57.60	20.16	3.54
C0360-055-2750-X	0.360	9.14	0.055	1.40	2.750	69.85	2.043	51.90	1.327	33.71	12.95	57.60	18.33	3.20
C0360-055-3000-X	0.360	9.14	0.055	1.40	3.000	76.20	2.227	56.56	1.437	36.50	12.95	57.60	16.74	2.92
C0360-055-3250-X	0.360	9.14	0.055	1.40	3.250	82.55	2.410	61.21	1.547	39.29	12.95	57.60	15.41	2.70
C0360-055-3500-X	0.360	9.14	0.055	1.40	3.500	88.90	2.591	65.81	1.657	42.09	12.95	57.60	14.24	2.49
C0360-059-0440-X	0.360	9.14	0.059	1.50	0.440	11.18	0.360	9.14	0.321	8.15	15.85	70.50	198.25	34.73
C0360-059-0500-X	0.360	9.14	0.059	1.50	0.500	12.70	0.405	10.29	0.356	9.04	15.85	70.50	167.10	29.26
C0360-059-0560-X	0.360	9.14	0.059	1.50	0.560	14.22	0.450	11.44	0.388	9.86	15.85	70.50	144.44	25.29
C0360-059-0620-X	0.360	9.14	0.059	1.50	0.620	15.75	0.495	12.58	0.421	10.69	15.85	70.50	127.20	22.28
C0360-059-0690-X	0.360	9.14	0.059	1.50	0.690	17.53	0.548	13.92	0.458	11.63	15.85	70.50	111.62	19.54
C0360-059-0750-X	0.360	9.14	0.059	1.50	0.750	19.05	0.593	15.06	0.488	12.40	15.85	70.50	101.04	17.69
C0360-059-0810-X	0.360	9.14	0.059	1.50	0.810	20.57	0.638	16.21	0.517	13.13	15.85	70.50	92.30	16.16
C0360-059-0880-X	0.360	9.14	0.059	1.50	0.880	22.35	0.691	17.55	0.552	14.02	15.85	70.50	83.80	14.68
C0360-059-0940-X	0.360	9.14	0.059	1.50	0.940	23.88	0.736	18.69	0.581	14.76	15.85	70.50	77.64	13.59
C0360-059-1000-X	0.360	9.14	0.059	1.50	1.000	25.40	0.781	19.84	0.611	15.52	15.85	70.50	72.39	12.68
C0360-059-1120-X	0.360	9.14	0.059	1.50	1.120	28.45	0.871	22.13	0.670	17.02	15.85	70.50	63.72	11.16
C0360-059-1250-X	0.360	9.14	0.059	1.50	1.250	31.75	0.969	24.61	0.734	18.64	15.85	70.50	56.39	9.88
C0360-059-1380-X	0.360	9.14	0.059	1.50	1.380	35.05	1.066	27.09	0.797	20.24	15.85	70.50	50.56	8.86
C0360-059-1500-X	0.360	9.14	0.059	1.50	1.500	38.10	1.157	29.39	0.856	21.74	15.85	70.50	46.23	8.09
C0360-059-1750-X	0.360	9.14	0.059	1.50	1.750	44.45	1.345	34.16	0.979	24.87	15.85	70.50	39.15	6.86
C0360-059-2000-X	0.360	9.14	0.059	1.50	2.000	50.80	1.532	38.92	1.102	27.99	15.85	70.50	33.90	5.94
C0360-059-2250-X	0.360	9.14	0.059	1.50	2.250	57.15	1.721	43.72	1.225	31.12	15.85	70.50	29.99	5.25
C0360-059-2500-X	0.360	9.14	0.059	1.50	2.500	63.50	1.909	48.49	1.348	34.24	15.85	70.50	26.82	4.69
C0360-059-2750-X	0.360	9.14	0.059	1.50	2.750	69.85	2.096	53.24	1.471	37.36	15.85	70.50	24.24	4.24
C0360-059-3000-X	0.360	9.14	0.059	1.50	3.000	76.20	2.284	58.03	1.594	40.49	15.85	70.50	22.16	3.89
C0360-059-3250-X	0.360	9.14	0.059	1.50	3.250	82.55	2.473	62.82	1.717	43.61	15.85	70.50	20.41	3.57
C0360-059-3500-X	0.360	9.14	0.059	1.50	3.500	88.90	2.662	67.60	1.840	46.74	15.85	70.50	18.91	3.31
D22150X	0.364	9.25	0.049	1.25	0.591	15.00	0.471	11.97	0.271	6.88	160.98	36.19	68.12	11.93
D22160X	0.364	9.25	0.049	1.25	0.866	22.00	0.674	17.13	0.369	9.38	160.98	36.19	42.43	7.43
D22170X	0.364	9.25	0.049	1.25	1.299	33.00	1.006	25.55	0.517	13.13	160.98	36.19	27.75	4.86
D22180X	0.364	9.25	0.049	1.25	1.870	47.50	1.438	36.53	0.714	18.13	160.98	36.19	18.84	3.30
D22190X	0.364	9.25	0.049	1.25	2.717	69.00	2.080	52.84	1.009	25.63	160.98	36.19	12.79	2.24
D22350X	0.378	9.60	0.063	1.60	0.571	14.50	0.483	12.26	0.346	8.80	308.71	69.40	177.30	31.05
D22360X	0.378	9.60	0.063	1.60	0.846	21.50	0.708	17.99	0.472	12.00	308.71	69.40	112.89	19.77
D22370X	0.378	9.60	0.063	1.60	1.240	31.50	1.027	26.09	0.661	16.80	308.71	69.40	73.26	12.83
D22380X	0.378	9.60	0.063	1.60	1.772	45.00	1.456	36.99	0.913	23.20	308.71	69.40	49.45	8.66
D22390X	0.378	9.60	0.063	1.60	2.579	65.50	2.113	53.68	1.291	32.80	308.71	69.40	33.52	5.87
C0390-043-0500-X	0.390	9.91	0.043	1.09	0.500	12.70	0.337	8.57	0.241	6.12	6.14	27.31	37.73	6.60
C0390-043-0560-X	0.390	9.91	0.043	1.09	0.560	14.22	0.374	9.50	0.257	6.53	6.14	27.31	32.99	5.78
C0390-043-0620-X	0.390	9.91	0.043	1.09	0.620	15.75	0.410	10.42	0.273	6.93	6.14	27.31	29.24	5.11
C0390-043-0690-X	0.390	9.91	0.043	1.09	0.690	17.53	0.452	11.49	0.292	7.42	6.14	27.31	25.82	4.52
C0390-043-0750-X	0.390	9.91	0.043	1.09	0.750	19.05	0.489	12.42	0.308	7.82	6.14	27.31	23.49	4.12
C0390-043-0810-X	0.390	9.91	0.043	1.09	0.810	20.57	0.526	13.35	0.324	8.23	6.14	27.31	21.57	3.78
C0390-043-0880-X	0.390	9.91	0.043	1.09	0.880	22.35	0.568	14.42	0.343	8.71	6.14	27.31	19.66	3.45
C0390-043-0940-X	0.390	9.91	0.043	1.09	0.940	23.88	0.607	15.41	0.359	9.12	6.14	27.31	18.41	3.22
C0390-043-1000-X	0.390	9.91	0.043	1.09	1.000	25.40	0.641	16.27	0.376	9.55	6.14	27.31	17.08	2.99
C0390-043-1120-X	0.390	9.91	0.043	1.09	1.120	28.45	0.713	18.11	0.408	10.36	6.14	27.31	15.08	2.64
C0390-043-1250-X	0.390	9.91	0.043	1.09	1.250	31.75	0.792	20.13	0.443	11.25	6.14	27.31	13.41	2.35
C0390-043-1380-X	0.390	9.91	0.043	1.09	1.380	35.05	0.872	22.15	0.478	12.14	6.14	27.31	12.08	2.12
C0390-043-1500-X	0.390	9.91	0.043	1.09	1.500	38.10	0.946	24.03	0.510	12.95	6.14	27.31	11.08	1.94
C0390-043-1750-X	0.390	9.91	0.043	1.09	1.750	44.45	1.098	27.89	0.578	14.68	6.14	27.31	9.41	1.65
C0390-043-2000-X	0.390	9.91	0.043	1.09	2.000	50.80	1.248	31.71	0.645	16.38	6.14	27.31	8.16	1.44
C0390-047-0500-X	0.390	9.91	0.047	1.19	0.500	12.70	0.349	8.86	0.270	6.86	7.96	35.41	52.73	9.23
C0390-047-0560-X	0.390	9.91	0.047	1.19	0.560	14.22	0.387	9.82	0.289	7.34	7.96	35.41	45.98	8.06
C0390-047-0620-X	0.390	9.91	0.047	1.19	0.620	15.75	0.424	10.78	0.308	7.82	7.96	35.41	40.73	7.13
C0390-047-0690-X	0.390	9.91	0.047	1.19	0.690	17.53	0.468	11.89	0.330	8.38	7.96	35.41	35.90	6.29
C0390-047-0750-X	0.390	9.91	0.047	1.19	0.750	19.05	0.506	12.86	0.350	8.89	7.96	35.41	32.65	5.73
C0390-047-0810-X	0.390	9.91	0.047	1.19	0.810	20.57	0.544	13.81	0.369	9.37	7.96	35.41	29.90	5.24

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0390-047-0880-X	0.390	9.91	0.047	1.19	0.880	22.35	0.588	14.93	0.391	9.93	7.96	35.41	27.24	4.76
C0390-047-0940-X	0.390	9.91	0.047	1.19	0.940	23.88	0.626	15.89	0.410	10.41	7.96	35.41	25.32	4.43
C0390-047-1000-X	0.390	9.91	0.047	1.19	1.000	25.40	0.663	16.85	0.429	10.90	7.96	35.41	23.66	4.15
C0390-047-1120-X	0.390	9.91	0.047	1.19	1.120	28.45	0.739	18.77	0.467	11.86	7.96	35.41	20.91	3.66
C0390-047-1250-X	0.390	9.91	0.047	1.19	1.250	31.75	0.819	20.81	0.508	12.90	7.96	35.41	18.49	3.24
C0390-047-1380-X	0.390	9.91	0.047	1.19	1.380	35.05	0.902	22.91	0.550	13.97	7.96	35.41	16.66	2.92
C0390-047-1500-X	0.390	9.91	0.047	1.19	1.500	38.10	0.978	24.83	0.588	14.94	7.96	35.41	15.24	2.66
C0390-047-1750-X	0.390	9.91	0.047	1.19	1.750	44.45	1.133	28.78	0.667	16.94	7.96	35.41	12.91	2.26
C0390-047-2000-X	0.390	9.91	0.047	1.19	2.000	50.80	1.292	32.81	0.747	18.97	7.96	35.41	11.25	1.98
C0420-035-0500-X	0.420	10.67	0.035	0.89	0.500	12.70	0.306	7.77	0.172	4.37	3.19	14.19	16.41	2.87
C0420-035-0620-X	0.420	10.67	0.035	0.89	0.620	15.75	0.372	9.44	0.191	4.85	3.19	14.19	12.83	2.24
C0420-035-0750-X	0.420	10.67	0.035	0.89	0.750	19.05	0.444	11.28	0.211	5.36	3.19	14.19	10.41	1.82
C0420-035-0880-X	0.420	10.67	0.035	0.89	0.880	22.35	0.516	13.10	0.231	5.87	3.19	14.19	8.75	1.54
C0420-035-1000-X	0.420	10.67	0.035	0.89	1.000	25.40	0.580	14.73	0.250	6.35	3.19	14.19	7.58	1.33
C0420-035-1250-X	0.420	10.67	0.035	0.89	1.250	31.75	0.719	18.26	0.289	7.34	3.19	14.19	6.00	1.05
C0420-035-1500-X	0.420	10.67	0.035	0.89	1.500	38.10	0.852	21.64	0.328	8.33	3.19	14.19	4.91	0.86
C0420-035-1750-X	0.420	10.67	0.035	0.89	1.750	44.45	1.000	25.40	0.367	9.32	3.19	14.19	4.25	0.75
C0420-038-0500-X	0.420	10.67	0.038	0.97	0.500	12.70	0.278	7.07	0.172	4.37	4.06	18.06	18.33	3.20
C0420-038-0560-X	0.420	10.67	0.038	0.97	0.560	14.22	0.316	8.03	0.186	4.72	4.06	18.06	16.66	2.92
C0420-038-0625-X	0.420	10.67	0.038	0.97	0.620	15.75	0.349	8.87	0.194	4.93	4.06	18.06	14.99	2.63
C0420-038-0750-X	0.420	10.67	0.038	0.97	0.750	19.05	0.414	10.51	0.223	5.66	4.06	18.06	12.08	2.12
C0420-038-0880-X	0.420	10.67	0.038	0.97	0.880	22.35	0.490	12.44	0.246	6.25	4.06	18.06	10.41	1.82
C0420-038-1000-X	0.420	10.67	0.038	0.97	1.000	25.40	0.557	14.14	0.269	6.83	4.06	18.06	9.16	1.61
C0420-038-1250-X	0.420	10.67	0.038	0.97	1.250	31.75	0.676	17.18	0.326	8.28	4.06	18.06	7.08	1.24
C0420-038-1500-X	0.420	10.67	0.038	0.97	1.500	38.10	0.823	20.90	0.372	9.45	4.06	18.06	6.00	1.05
C0420-038-1750-X	0.420	10.67	0.038	0.97	1.750	44.45	1.011	25.68	0.423	10.74	4.06	18.06	5.50	0.96
C0420-038-2000-X	0.420	10.67	0.038	0.97	2.000	50.80	1.201	30.50	0.456	11.58	4.06	18.06	5.08	0.89
C0420-038-2250-X	0.420	10.67	0.038	0.97	2.250	57.15	1.347	34.21	0.494	12.55	4.06	18.06	4.50	0.79
C0420-038-2500-X	0.420	10.67	0.038	0.97	2.500	63.50	1.484	37.70	0.532	13.51	4.06	18.06	4.00	0.70
C0420-042-0500-X	0.420	10.67	0.042	1.07	0.500	12.70	0.311	7.91	0.190	4.83	5.34	23.75	28.32	4.96
C0420-042-0560-X	0.420	10.67	0.042	1.07	0.560	14.22	0.353	8.97	0.201	5.11	5.34	23.75	25.82	4.52
C0420-042-0625-X	0.420	10.67	0.042	1.07	0.620	15.75	0.391	9.93	0.213	5.41	5.34	23.75	23.32	4.08
C0420-042-0750-X	0.420	10.67	0.042	1.07	0.750	19.05	0.459	11.65	0.248	6.30	5.34	23.75	18.33	3.20
C0420-042-0880-X	0.420	10.67	0.042	1.07	0.880	22.35	0.533	13.55	0.280	7.11	5.34	23.75	15.41	2.70
C0420-042-1000-X	0.420	10.67	0.042	1.07	1.000	25.40	0.599	15.22	0.310	7.87	5.34	23.75	13.33	2.33
C0420-042-1250-X	0.420	10.67	0.042	1.07	1.250	31.75	0.757	19.22	0.363	9.22	5.34	23.75	10.83	1.89
C0420-042-1500-X	0.420	10.67	0.042	1.07	1.500	38.10	0.889	22.59	0.429	10.90	5.34	23.75	8.75	1.54
C0420-042-1750-X	0.420	10.67	0.042	1.07	1.750	44.45	1.061	26.94	0.501	12.73	5.34	23.75	7.75	1.37
C0420-042-2000-X	0.420	10.67	0.042	1.07	2.000	50.80	1.209	30.70	0.558	14.17	5.34	23.75	6.75	1.19
C0420-042-2250-X	0.420	10.67	0.042	1.07	2.250	57.15	1.417	36.00	0.592	15.04	5.34	23.75	6.41	1.12
C0420-042-2500-X	0.420	10.67	0.042	1.07	2.500	63.50	1.571	39.90	0.630	16.00	5.34	23.75	5.75	1.02
C0420-045-0500-X	0.420	10.67	0.045	1.14	0.500	12.70	0.313	7.95	0.214	5.44	6.54	29.09	34.99	6.13
C0420-045-0625-X	0.420	10.67	0.045	1.14	0.620	15.75	0.389	9.88	0.244	6.20	6.54	29.09	28.32	4.96
C0420-045-0750-X	0.420	10.67	0.045	1.14	0.750	19.05	0.459	11.66	0.284	7.21	6.54	29.09	22.49	3.94
C0420-045-0880-X	0.420	10.67	0.045	1.14	0.880	22.35	0.539	13.68	0.318	8.08	6.54	29.09	19.16	3.36
C0420-045-1000-X	0.420	10.67	0.045	1.14	1.000	25.40	0.607	15.43	0.352	8.94	6.54	29.09	16.66	2.92
C0420-045-1250-X	0.420	10.67	0.045	1.14	1.250	31.75	0.759	19.28	0.418	10.62	6.54	29.09	13.33	2.33
C0420-045-1500-X	0.420	10.67	0.045	1.14	1.500	38.10	0.896	22.76	0.493	12.52	6.54	29.09	10.83	1.89
C0420-045-1750-X	0.420	10.67	0.045	1.14	1.750	44.45	1.084	27.55	0.563	14.30	6.54	29.09	9.83	1.72
C0420-045-2000-X	0.420	10.67	0.045	1.14	2.000	50.80	1.230	31.24	0.627	15.93	6.54	29.09	8.50	1.49
C0420-045-2250-X	0.420	10.67	0.045	1.14	2.250	57.15	1.377	34.99	0.691	17.55	6.54	29.09	7.50	1.31
C0420-045-2500-X	0.420	10.67	0.045	1.14	2.500	63.50	1.530	38.87	0.756	19.20	6.54	29.09	6.75	1.19
C0420-048-0500-X	0.420	10.67	0.048	1.22	0.500	12.70	0.347	8.81	0.261	6.63	7.73	34.38	50.48	8.84
C0420-048-0750-X	0.420	10.67	0.048	1.22	0.750	19.05	0.502	12.74	0.334	8.48	7.73	34.38	31.15	5.46
C0420-048-1000-X	0.420	10.67	0.048	1.22	1.000	25.40	0.657	16.70	0.407	10.34	7.73	34.38	22.57	3.96
C0420-048-1250-X	0.420	10.67	0.048	1.22	1.250	31.75	0.812	20.62	0.480	12.19	7.73	34.38	17.66	3.10
C0420-048-1500-X	0.420	10.67	0.048	1.22	1.500	38.10	0.966	24.55	0.552	14.02	7.73	34.38	14.49	2.54
C0420-048-1750-X	0.420	10.67	0.048	1.22	1.750	44.45	1.123	28.51	0.625	15.88	7.73	34.38	12.33	2.15
C0420-048-2000-X	0.420	10.67	0.048	1.22	2.000	50.80	1.280	32.52	0.698	17.73	7.73	34.38	10.75	1.89
C0420-051-0500-X	0.420	10.67	0.051	1.30	0.500	12.70	0.355	9.01	0.282	7.16	9.24	41.10	63.64	11.14
C0420-051-0620-X	0.420	10.67	0.051	1.30	0.620	15.75	0.431	10.95	0.321	8.15	9.24	41.10	48.90	8.56
C0420-051-0750-X	0.420	10.67	0.051	1.30	0.750	19.05	0.514	13.04	0.363	9.22	9.24	41.10	39.07	6.85
C0420-051-0880-X	0.420	10.67	0.051	1.30	0.880	22.35	0.596	15.15	0.406	10.31	9.24	41.10	32.57	5.71
C0420-051-1000-X	0.420	10.67	0.051	1.30	1.000	25.40	0.673	17.09	0.445	11.30	9.24	41.10	28.24	4.94

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0420-051-1250-X	0.420	10.67	0.051	1.30	1.250	31.75	0.832	21.12	0.526	13.36	9.24	41.10	22.07	3.87
C0420-051-1500-X	0.420	10.67	0.051	1.30	1.500	38.10	0.989	25.12	0.607	15.42	9.24	41.10	18.08	3.17
C0420-051-1750-X	0.420	10.67	0.051	1.30	1.750	44.45	1.147	29.14	0.688	17.48	9.24	41.10	15.33	2.68
C0420-051-2000-X	0.420	10.67	0.051	1.30	2.000	50.80	1.307	33.19	0.769	19.53	9.24	41.10	13.33	2.33
C0420-051-2250-X	0.420	10.67	0.051	1.30	2.250	57.15	1.469	37.31	0.850	21.59	9.24	41.10	11.83	2.07
C0420-051-2500-X	0.420	10.67	0.051	1.30	2.500	63.50	1.627	41.32	0.932	23.67	9.24	41.10	10.58	1.86
C0420-055-0500-X	0.420	10.67	0.055	1.40	0.500	12.70	0.358	9.09	0.273	6.93	11.26	50.09	79.14	13.85
C0420-055-0625-X	0.420	10.67	0.055	1.40	0.620	15.75	0.440	11.17	0.316	8.03	11.26	50.09	62.48	10.95
C0420-055-0750-X	0.420	10.67	0.055	1.40	0.750	19.05	0.532	13.51	0.360	9.14	11.26	50.09	51.65	9.05
C0420-055-0880-X	0.420	10.67	0.055	1.40	0.880	22.35	0.620	15.75	0.408	10.36	11.26	50.09	43.32	7.58
C0420-055-1000-X	0.420	10.67	0.055	1.40	1.000	25.40	0.700	17.77	0.454	11.53	11.26	50.09	37.49	6.57
C0420-055-1250-X	0.420	10.67	0.055	1.40	1.250	31.75	0.864	21.94	0.553	14.05	11.26	50.09	29.16	5.11
C0420-055-1500-X	0.420	10.67	0.055	1.40	1.500	38.10	1.034	26.26	0.645	16.38	11.26	50.09	24.16	4.24
C0420-055-1750-X	0.420	10.67	0.055	1.40	1.750	44.45	1.198	30.43	0.772	19.61	11.26	50.09	20.41	3.57
C0420-055-2000-X	0.420	10.67	0.055	1.40	2.000	50.80	1.365	34.68	0.865	21.97	11.26	50.09	17.74	3.10
C0420-055-2250-X	0.420	10.67	0.055	1.40	2.250	57.15	1.531	38.88	0.957	24.31	11.26	50.09	15.66	2.75
C0420-055-2500-X	0.420	10.67	0.055	1.40	2.500	63.50	1.695	43.06	1.050	26.67	11.26	50.09	13.99	2.45
C0420-059-0500-X	0.420	10.67	0.059	1.50	0.500	12.70	0.379	9.62	0.322	8.18	13.82	61.47	113.87	19.95
C0420-059-0625-X	0.420	10.67	0.059	1.50	0.620	15.75	0.459	11.66	0.380	9.65	13.82	61.47	85.80	15.03
C0420-059-0750-X	0.420	10.67	0.059	1.50	0.750	19.05	0.549	13.95	0.439	11.15	13.82	61.47	68.81	12.05
C0420-059-0880-X	0.420	10.67	0.059	1.50	0.880	22.35	0.638	16.20	0.496	12.60	13.82	61.47	57.06	10.00
C0420-059-1000-X	0.420	10.67	0.059	1.50	1.000	25.40	0.720	18.28	0.546	13.87	13.82	61.47	49.31	8.63
C0420-059-1250-X	0.420	10.67	0.059	1.50	1.250	31.75	0.890	22.61	0.651	16.54	13.82	61.47	38.40	6.72
C0420-059-1500-X	0.420	10.67	0.059	1.50	1.500	38.10	1.061	26.95	0.755	19.18	13.82	61.47	31.49	5.52
C0420-059-1750-X	0.420	10.67	0.059	1.50	1.750	44.45	1.232	31.28	0.860	21.84	13.82	61.47	26.66	4.68
C0420-059-2000-X	0.420	10.67	0.059	1.50	2.000	50.80	1.401	35.59	0.965	24.51	13.82	61.47	23.07	4.05
C0420-059-2250-X	0.420	10.67	0.059	1.50	2.250	57.15	1.573	39.95	1.069	27.15	13.82	61.47	20.41	3.57
C0420-059-2500-X	0.420	10.67	0.059	1.50	2.500	63.50	1.743	44.26	1.174	29.82	13.82	61.47	18.24	3.19
C0420-063-0500-X	0.420	10.67	0.063	1.60	0.500	12.70	0.392	9.97	0.345	8.76	16.33	72.64	151.69	26.57
C0420-063-0620-X	0.420	10.67	0.063	1.60	0.620	15.75	0.478	12.14	0.416	10.57	16.33	72.64	114.87	20.12
C0420-063-0750-X	0.420	10.67	0.063	1.60	0.750	19.05	0.570	14.49	0.476	12.09	16.33	72.64	90.96	15.94
C0420-063-0880-X	0.420	10.67	0.063	1.60	0.880	22.35	0.663	16.84	0.536	13.61	16.33	72.64	75.22	13.17
C0420-063-1000-X	0.420	10.67	0.063	1.60	1.000	25.40	0.748	19.01	0.591	15.01	16.33	72.64	64.89	11.37
C0420-063-1250-X	0.420	10.67	0.063	1.60	1.250	31.75	0.926	23.53	0.706	17.93	16.33	72.64	50.48	8.84
C0420-063-1500-X	0.420	10.67	0.063	1.60	1.500	38.10	1.105	28.06	0.821	20.85	16.33	72.64	41.32	7.23
C0420-063-1750-X	0.420	10.67	0.063	1.60	1.750	44.45	1.282	32.56	0.937	23.80	16.33	72.64	34.90	6.11
C0420-063-2000-X	0.420	10.67	0.063	1.60	2.000	50.80	1.460	37.08	1.052	26.72	16.33	72.64	30.24	5.29
C0420-063-2250-X	0.420	10.67	0.063	1.60	2.250	57.15	1.639	41.64	1.167	29.64	16.33	72.64	26.74	4.68
C0420-063-2500-X	0.420	10.67	0.063	1.60	2.500	63.50	1.817	46.15	1.282	32.56	16.33	72.64	23.91	4.19
C0420-067-0750-X	0.420	10.67	0.067	1.70	0.750	19.05	0.588	14.93	0.507	12.88	19.51	86.78	120.20	21.05
C0420-067-1000-X	0.420	10.67	0.067	1.70	1.000	25.40	0.772	19.61	0.631	16.03	19.51	86.78	85.55	14.99
C0420-067-1250-X	0.420	10.67	0.067	1.70	1.250	31.75	0.956	24.29	0.755	19.18	19.51	86.78	66.39	11.63
C0420-067-1500-X	0.420	10.67	0.067	1.70	1.500	38.10	1.140	28.96	0.879	22.33	19.51	86.78	54.23	9.49
C0420-067-1750-X	0.420	10.67	0.067	1.70	1.750	44.45	1.324	33.63	1.003	25.48	19.51	86.78	45.82	8.02
C0420-067-2000-X	0.420	10.67	0.067	1.70	2.000	50.80	1.508	38.30	1.127	28.63	19.51	86.78	39.65	6.95
C0420-067-2250-X	0.420	10.67	0.067	1.70	2.250	57.15	1.692	42.98	1.251	31.78	19.51	86.78	34.99	6.13
C0420-067-2500-X	0.420	10.67	0.067	1.70	2.500	63.50	1.877	47.68	1.375	34.93	19.51	86.78	31.32	5.48
C0420-072-1000-X	0.420	10.67	0.072	1.83	1.000	25.40	0.798	20.27	0.690	17.53	23.44	104.27	115.95	20.31
C0420-072-1250-X	0.420	10.67	0.072	1.83	1.250	31.75	0.989	25.11	0.829	21.06	23.44	104.27	89.71	15.71
C0420-072-1500-X	0.420	10.67	0.072	1.83	1.500	38.10	1.180	29.97	0.967	24.56	23.44	104.27	73.22	12.82
C0420-072-1750-X	0.420	10.67	0.072	1.83	1.750	44.45	1.371	34.82	1.105	28.07	23.44	104.27	61.81	10.82
C0420-072-2000-X	0.420	10.67	0.072	1.83	2.000	50.80	1.562	39.67	1.244	31.60	23.44	104.27	53.48	9.37
C0420-072-2250-X	0.420	10.67	0.072	1.83	2.250	57.15	1.753	44.52	1.382	35.10	23.44	104.27	47.15	8.27
C0420-072-2500-X	0.420	10.67	0.072	1.83	2.500	63.50	1.944	49.38	1.521	38.63	23.44	104.27	42.15	7.39
D21800X*	0.425	10.80	0.031	0.80	0.787	20.00	0.444	11.27	0.205	5.20	38.83	8.73	5.71	1.00
D21810X*	0.425	10.80	0.031	0.80	1.181	30.00	0.635	16.14	0.268	6.80	38.83	8.73	3.60	0.63
D21820X*	0.425	10.80	0.031	0.80	1.791	45.50	0.953	24.21	0.362	9.20	38.83	8.73	2.34	0.41
D21830X*	0.425	10.80	0.031	0.80	2.598	66.00	1.326	33.67	0.488	12.40	38.83	8.73	1.54	0.27
D21840X*	0.425	10.80	0.031	0.80	3.799	96.50	1.990	50.55	0.677	17.20	38.83	8.73	1.08	0.19
D22000X	0.433	11.00	0.039	1.00	0.689	17.50	0.423	10.75	0.217	5.50	72.64	16.33	13.82	2.42
D22010X	0.433	11.00	0.039	1.00	1.024	26.00	0.606	15.40	0.295	7.50	72.64	16.33	8.79	1.54
D22020X	0.433	11.00	0.039	1.00	1.535	39.00	0.893	22.67	0.413	10.50	72.64	16.33	5.71	1.00
D22030X	0.433	11.00	0.039	1.00	2.205	56.00	1.245	31.63	0.571	14.50	72.64	16.33	3.83	0.67
D22040X	0.433	11.00	0.039	1.00	3.209	81.50	1.811	46.00	0.807	20.50	72.64	16.33	2.63	0.46

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D22850X	0.433	11.00	0.087	2.20	0.638	16.20	0.569	14.46	0.476	12.10	646.37	145.31	475.77	83.32
D22860X	0.433	11.00	0.087	2.20	0.906	23.00	0.798	20.26	0.650	16.50	646.37	145.31	302.30	52.94
D22870X	0.433	11.00	0.087	2.20	1.437	36.50	1.251	31.77	0.996	25.30	646.37	145.31	175.36	30.71
D22880X	0.433	11.00	0.087	2.20	2.236	56.80	1.932	49.07	1.516	38.50	646.37	145.31	107.29	18.79
D22200X	0.443	11.25	0.049	1.25	0.787	20.00	0.586	14.89	0.271	6.88	134.29	30.19	33.75	5.91
D22210X	0.443	11.25	0.049	1.25	1.161	29.50	0.845	21.47	0.369	9.38	134.29	30.19	21.47	3.76
D22220X	0.443	11.25	0.049	1.25	1.752	44.50	1.263	32.08	0.517	13.13	134.29	30.19	13.88	2.43
D22230X	0.443	11.25	0.049	1.25	2.520	64.00	1.804	45.81	0.714	18.13	134.29	30.19	9.48	1.66
D22240X	0.443	11.25	0.049	1.25	3.681	93.50	2.620	66.54	1.009	25.63	134.29	30.19	6.40	1.12
C0455-039-0500-X	0.455	11.56	0.039	0.99	0.500	12.70	0.309	7.86	0.187	4.75	4.06	18.06	21.32	3.73
C0455-039-0620-X	0.455	11.56	0.039	0.99	0.620	15.75	0.375	9.52	0.207	5.26	4.06	18.06	16.58	2.91
C0455-039-0750-X	0.455	11.56	0.039	0.99	0.750	19.05	0.447	11.35	0.229	5.82	4.06	18.06	13.41	2.35
C0455-039-0880-X	0.455	11.56	0.039	0.99	0.880	22.35	0.519	13.17	0.251	6.38	4.06	18.06	11.25	1.98
C0455-039-1000-X	0.455	11.56	0.039	0.99	1.000	25.40	0.583	14.81	0.271	6.88	4.06	18.06	9.75	1.72
C0455-039-1250-X	0.455	11.56	0.039	0.99	1.250	31.75	0.720	18.28	0.312	7.92	4.06	18.06	7.66	1.35
C0455-039-1500-X	0.455	11.56	0.039	0.99	1.500	38.10	0.858	21.80	0.354	8.99	4.06	18.06	6.33	1.10
C0455-039-1750-X	0.455	11.56	0.039	0.99	1.750	44.45	1.000	25.39	0.396	10.06	4.06	18.06	5.41	0.95
C0455-046-0500-X	0.455	11.56	0.046	1.17	0.500	12.70	0.330	8.37	0.233	5.92	6.47	28.78	37.98	6.65
C0455-046-0620-X	0.455	11.56	0.046	1.17	0.620	15.75	0.400	10.16	0.261	6.63	6.47	28.78	29.40	5.15
C0455-046-0750-X	0.455	11.56	0.046	1.17	0.750	19.05	0.475	12.08	0.291	7.39	6.47	28.78	23.57	4.13
C0455-046-0880-X	0.455	11.56	0.046	1.17	0.880	22.35	0.551	13.99	0.321	8.15	6.47	28.78	19.66	3.45
C0455-046-1000-X	0.455	11.56	0.046	1.17	1.000	25.40	0.621	15.77	0.349	8.86	6.47	28.78	17.08	2.99
C0455-046-1250-X	0.455	11.56	0.046	1.17	1.250	31.75	0.767	19.49	0.407	10.34	6.47	28.78	13.41	2.35
C0455-046-1500-X	0.455	11.56	0.046	1.17	1.500	38.10	0.911	23.15	0.465	11.81	6.47	28.78	11.00	1.93
C0455-046-1750-X	0.455	11.56	0.046	1.17	1.750	44.45	1.056	26.83	0.523	13.28	6.47	28.78	9.33	1.63
D22400X	0.457	11.60	0.063	1.60	0.728	18.50	0.583	14.82	0.346	8.80	260.75	58.62	90.96	15.93
D22410X	0.457	11.60	0.063	1.60	1.063	27.00	0.835	21.21	0.472	12.00	260.75	58.62	57.84	10.13
D22420X	0.457	11.60	0.063	1.60	1.594	40.50	1.243	31.56	0.661	16.80	260.75	58.62	37.46	6.56
D22430X	0.457	11.60	0.063	1.60	2.303	58.50	1.783	45.30	0.913	23.20	260.75	58.62	25.35	4.44
D22440X	0.457	11.60	0.063	1.60	3.346	85.00	2.580	65.52	1.291	32.80	260.75	58.62	17.19	3.01
D22600X	0.472	12.00	0.079	2.00	0.709	18.00	0.602	15.30	0.433	11.00	466.08	104.78	221.55	38.80
D22610X	0.472	12.00	0.079	2.00	1.043	26.50	0.877	22.27	0.591	15.00	466.08	104.78	141.33	24.75
D22620X	0.472	12.00	0.079	2.00	1.516	38.50	1.258	31.96	0.827	21.00	466.08	104.78	91.42	16.01
D22630X	0.472	12.00	0.079	2.00	2.165	55.00	1.785	45.35	1.142	29.00	466.08	104.78	62.01	10.86
D22640X	0.472	12.00	0.079	2.00	3.130	79.50	2.568	65.22	1.614	41.00	466.08	104.78	41.91	7.34
C0480-035-0500-X	0.480	12.19	0.035	0.89	0.500	12.70	0.286	7.26	0.160	4.06	2.80	12.46	13.08	2.29
C0480-035-0620-X	0.480	12.19	0.035	0.89	0.620	15.75	0.344	8.74	0.175	4.45	2.80	12.46	10.16	1.79
C0480-035-0750-X	0.480	12.19	0.035	0.89	0.750	19.05	0.410	10.42	0.192	4.88	2.80	12.46	8.25	1.45
C0480-035-0880-X	0.480	12.19	0.035	0.89	0.880	22.35	0.475	12.06	0.208	5.28	2.80	12.46	6.91	1.21
C0480-035-1000-X	0.480	12.19	0.035	0.89	1.000	25.40	0.533	13.53	0.223	5.66	2.80	12.46	6.00	1.05
C0480-035-1250-X	0.480	12.19	0.035	0.89	1.250	31.75	0.660	16.76	0.255	6.48	2.80	12.46	4.75	0.84
C0480-035-1500-X	0.480	12.19	0.035	0.89	1.500	38.10	0.784	19.92	0.287	7.29	2.80	12.46	3.92	0.68
C0480-035-1750-X	0.480	12.19	0.035	0.89	1.750	44.45	0.909	23.09	0.319	8.10	2.80	12.46	3.33	0.58
C0480-035-2000-X	0.480	12.19	0.035	0.89	2.000	50.80	1.039	26.39	0.351	8.92	2.80	12.46	2.92	0.51
C0480-035-2500-X	0.480	12.19	0.035	0.89	2.500	63.50	1.299	32.99	0.414	10.52	2.80	12.46	2.33	0.40
C0480-035-3000-X	0.480	12.19	0.035	0.89	3.000	76.20	1.538	39.05	0.478	12.14	2.80	12.46	1.92	0.33
C0480-038-0500-X	0.480	12.19	0.038	0.97	0.500	12.70	0.285	7.25	0.144	3.66	3.57	15.88	16.66	2.92
C0480-038-0625-X	0.480	12.19	0.038	0.97	0.620	15.75	0.334	8.48	0.167	4.24	3.57	15.88	12.50	2.19
C0480-038-0750-X	0.480	12.19	0.038	0.97	0.750	19.05	0.407	10.33	0.185	4.70	3.57	15.88	10.41	1.82
C0480-038-0880-X	0.480	12.19	0.038	0.97	0.880	22.35	0.471	11.97	0.207	5.26	3.57	15.88	8.75	1.54
C0480-038-1000-X	0.480	12.19	0.038	0.97	1.000	25.40	0.548	13.93	0.220	5.59	3.57	15.88	7.91	1.38
C0480-038-1250-X	0.480	12.19	0.038	0.97	1.250	31.75	0.678	17.22	0.259	6.58	3.57	15.88	6.25	1.10
C0480-038-1500-X	0.480	12.19	0.038	0.97	1.500	38.10	0.785	19.93	0.305	7.75	3.57	15.88	5.00	0.88
C0480-038-1750-X	0.480	12.19	0.038	0.97	1.750	44.45	0.970	24.63	0.352	8.94	3.57	15.88	4.58	0.81
C0480-038-2000-X	0.480	12.19	0.038	0.97	2.000	50.80	1.106	28.09	0.388	9.86	3.57	15.88	4.00	0.70
C0480-038-2250-X	0.480	12.19	0.038	0.97	2.250	57.15	1.337	33.96	0.397	10.08	3.57	15.88	3.92	0.68
C0480-038-2500-X	0.480	12.19	0.038	0.97	2.500	63.50	1.478	37.55	0.429	10.90	3.57	15.88	3.50	0.61
C0480-038-2750-X	0.480	12.19	0.038	0.97	2.750	69.85	1.621	41.16	0.462	11.73	3.57	15.88	3.17	0.56
C0480-038-3000-X	0.480	12.19	0.038	0.97	3.000	76.20	1.774	45.06	0.494	12.55	3.57	15.88	2.92	0.51
C0480-042-0500-X	0.480	12.19	0.042	1.07	0.500	12.70	0.298	7.58	0.167	4.24	4.70	20.91	23.32	4.08
C0480-042-0625-X	0.480	12.19	0.042	1.07	0.620	15.75	0.351	8.92	0.194	4.93	4.70	20.91	17.49	3.06
C0480-042-0750-X	0.480	12.19	0.042	1.07	0.750	19.05	0.436	11.08	0.213	5.41	4.70	20.91	14.99	2.63
C0480-042-0880-X	0.480	12.19	0.042	1.07	0.880	22.35	0.504	12.79	0.239	6.07	4.70	20.91	12.50	2.19
C0480-042-1000-X	0.480	12.19	0.042	1.07	1.000	25.40	0.566	14.37	0.263	6.68	4.70	20.91	10.83	1.89

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0480-042-1250-X	0.480	12.19	0.042	1.07	1.250	31.75	0.685	17.41	0.317	8.05	4.70	20.91	8.33	1.45
C0480-042-1500-X	0.480	12.19	0.042	1.07	1.500	38.10	0.836	21.23	0.358	9.09	4.70	20.91	7.08	1.24
C0480-042-1750-X	0.480	12.19	0.042	1.07	1.750	44.45	1.017	25.82	0.418	10.62	4.70	20.91	6.41	1.12
C0480-042-2000-X	0.480	12.19	0.042	1.07	2.000	50.80	1.157	29.39	0.462	11.73	4.70	20.91	5.58	0.98
C0480-042-2250-X	0.480	12.19	0.042	1.07	2.250	57.15	1.293	32.84	0.505	12.83	4.70	20.91	4.91	0.86
C0480-042-2500-X	0.480	12.19	0.042	1.07	2.500	63.50	1.509	38.34	0.520	13.21	4.70	20.91	4.75	0.84
C0480-042-2750-X	0.480	12.19	0.042	1.07	2.750	69.85	1.643	41.73	0.561	14.25	4.70	20.91	4.25	0.75
C0480-042-3000-X	0.480	12.19	0.042	1.07	3.000	76.20	1.798	45.68	0.602	15.29	4.70	20.91	3.92	0.68
C0480-045-0500-X	0.480	12.19	0.045	1.14	0.500	12.70	0.302	7.68	0.185	4.70	5.77	25.67	29.16	5.11
C0480-045-0625-X	0.480	12.19	0.045	1.14	0.620	15.75	0.373	9.47	0.209	5.31	5.77	25.67	23.32	4.08
C0480-045-0750-X	0.480	12.19	0.045	1.14	0.750	19.05	0.435	11.06	0.242	6.15	5.77	25.67	18.33	3.20
C0480-045-0880-X	0.480	12.19	0.045	1.14	0.880	22.35	0.516	13.10	0.266	6.76	5.77	25.67	15.83	2.77
C0480-045-1000-X	0.480	12.19	0.045	1.14	1.000	25.40	0.593	15.06	0.287	7.29	5.77	25.67	14.16	2.49
C0480-045-1250-X	0.480	12.19	0.045	1.14	1.250	31.75	0.717	18.22	0.348	8.84	5.77	25.67	10.83	1.89
C0480-045-1500-X	0.480	12.19	0.045	1.14	1.500	38.10	0.871	22.11	0.395	10.03	5.77	25.67	9.16	1.61
C0480-045-1750-X	0.480	12.19	0.045	1.14	1.750	44.45	1.029	26.13	0.469	11.91	5.77	25.67	8.00	1.40
C0480-045-2000-X	0.480	12.19	0.045	1.14	2.000	50.80	1.176	29.87	0.520	13.21	5.77	25.67	7.00	1.23
C0480-045-2250-X	0.480	12.19	0.045	1.14	2.250	57.15	1.314	33.39	0.570	14.48	5.77	25.67	6.16	1.09
C0480-045-2500-X	0.480	12.19	0.045	1.14	2.500	63.50	1.451	36.86	0.620	15.75	5.77	25.67	5.50	0.96
C0480-045-2750-X	0.480	12.19	0.045	1.14	2.750	69.85	1.596	40.54	0.671	17.04	5.77	25.67	5.00	0.88
C0480-045-3000-X	0.480	12.19	0.045	1.14	3.000	76.20	1.741	44.23	0.721	18.31	5.77	25.67	4.58	0.81
C0480-051-0500-X	0.480	12.19	0.051	1.30	0.500	12.70	0.340	8.64	0.255	6.48	8.16	36.30	51.06	8.95
C0480-051-0620-X	0.480	12.19	0.051	1.30	0.620	15.75	0.412	10.47	0.286	7.26	8.16	36.30	39.23	6.86
C0480-051-0750-X	0.480	12.19	0.051	1.30	0.750	19.05	0.490	12.45	0.320	8.13	8.16	36.30	31.40	5.50
C0480-051-0880-X	0.480	12.19	0.051	1.30	0.880	22.35	0.568	14.43	0.353	8.97	8.16	36.30	26.16	4.59
C0480-051-1000-X	0.480	12.19	0.051	1.30	1.000	25.40	0.640	16.26	0.384	9.75	8.16	36.30	22.66	3.98
C0480-051-1250-X	0.480	12.19	0.051	1.30	1.250	31.75	0.790	20.07	0.448	11.38	8.16	36.30	17.74	3.10
C0480-051-1500-X	0.480	12.19	0.051	1.30	1.500	38.10	0.941	23.89	0.513	13.03	8.16	36.30	14.58	2.56
C0480-051-1750-X	0.480	12.19	0.051	1.30	1.750	44.45	1.088	27.65	0.577	14.66	8.16	36.30	12.33	2.15
C0480-051-2000-X	0.480	12.19	0.051	1.30	2.000	50.80	1.241	31.52	0.641	16.28	8.16	36.30	10.75	1.89
C0480-051-2250-X	0.480	12.19	0.051	1.30	2.250	57.15	1.391	35.34	0.706	17.93	8.16	36.30	9.50	1.66
C0480-051-2500-X	0.480	12.19	0.051	1.30	2.500	63.50	1.540	39.12	0.770	19.56	8.16	36.30	8.50	1.49
C0480-051-2750-X	0.480	12.19	0.051	1.30	2.750	69.85	1.686	42.82	0.834	21.18	8.16	36.30	7.66	1.35
C0480-051-3000-X	0.480	12.19	0.051	1.30	3.000	76.20	1.834	46.59	0.899	22.83	8.16	36.30	7.00	1.23
C0480-055-0500-X	0.480	12.19	0.055	1.40	0.500	12.70	0.334	8.48	0.246	6.25	9.95	44.26	59.98	10.51
C0480-055-0625-X	0.480	12.19	0.055	1.40	0.620	15.75	0.407	10.33	0.285	7.24	9.95	44.26	46.65	8.18
C0480-055-0750-X	0.480	12.19	0.055	1.40	0.750	19.05	0.496	12.59	0.319	8.10	9.95	44.26	39.15	6.86
C0480-055-0880-X	0.480	12.19	0.055	1.40	0.880	22.35	0.566	14.36	0.368	9.35	9.95	44.26	31.65	5.55
C0480-055-1000-X	0.480	12.19	0.055	1.40	1.000	25.40	0.659	16.73	0.391	9.93	9.95	44.26	29.16	5.11
C0480-055-1250-X	0.480	12.19	0.055	1.40	1.250	31.75	0.807	20.51	0.474	12.04	9.95	44.26	22.49	3.94
C0480-055-1500-X	0.480	12.19	0.055	1.40	1.500	38.10	0.957	24.30	0.557	14.15	9.95	44.26	18.33	3.20
C0480-055-1750-X	0.480	12.19	0.055	1.40	1.750	44.45	1.134	28.80	0.651	16.54	9.95	44.26	16.16	2.84
C0480-055-2000-X	0.480	12.19	0.055	1.40	2.000	50.80	1.289	32.73	0.725	18.42	9.95	44.26	13.99	2.45
C0480-055-2250-X	0.480	12.19	0.055	1.40	2.250	57.15	1.448	36.78	0.799	20.29	9.95	44.26	12.41	2.17
C0480-055-2500-X	0.480	12.19	0.055	1.40	2.500	63.50	1.602	40.68	0.874	22.20	9.95	44.26	11.08	1.94
C0480-055-2750-X	0.480	12.19	0.055	1.40	2.750	69.85	1.802	45.76	0.911	23.14	9.95	44.26	10.50	1.84
C0480-055-3000-X	0.480	12.19	0.055	1.40	3.000	76.20	1.961	49.81	0.981	24.92	9.95	44.26	9.58	1.68
C0480-059-0500-X	0.480	12.19	0.059	1.50	0.500	12.70	0.363	9.22	0.305	7.75	12.23	54.40	89.30	15.64
C0480-059-0620-X	0.480	12.19	0.059	1.50	0.620	15.75	0.440	11.18	0.346	8.79	12.23	54.40	67.97	11.91
C0480-059-0750-X	0.480	12.19	0.059	1.50	0.750	19.05	0.524	13.30	0.390	9.91	12.23	54.40	53.98	9.46
C0480-059-1000-X	0.480	12.19	0.059	1.50	1.000	25.40	0.684	17.37	0.474	12.04	12.23	54.40	38.65	6.78
C0480-059-1250-X	0.480	12.19	0.059	1.50	1.250	31.75	0.845	21.45	0.558	14.17	12.23	54.40	30.15	5.29
C0480-059-1500-X	0.480	12.19	0.059	1.50	1.500	38.10	1.004	25.51	0.642	16.31	12.23	54.40	24.66	4.33
C0480-059-1750-X	0.480	12.19	0.059	1.50	1.750	44.45	1.165	29.60	0.726	18.44	12.23	54.40	20.91	3.66
C0480-059-2000-X	0.480	12.19	0.059	1.50	2.000	50.80	1.327	33.70	0.810	20.57	12.23	54.40	18.16	3.19
C0480-059-2250-X	0.480	12.19	0.059	1.50	2.250	57.15	1.486	37.73	0.894	22.71	12.23	54.40	15.99	2.80
C0480-059-2500-X	0.480	12.19	0.059	1.50	2.500	63.50	1.647	41.83	0.978	24.84	12.23	54.40	14.33	2.50
C0480-059-2750-X	0.480	12.19	0.059	1.50	2.750	69.85	1.809	45.95	1.062	26.97	12.23	54.40	12.99	2.28
C0480-059-3000-X	0.480	12.19	0.059	1.50	3.000	76.20	1.966	49.95	1.146	29.11	12.23	54.40	11.83	2.07
C0480-063-0500-X	0.480	12.19	0.063	1.60	0.500	12.70	0.355	9.02	0.296	7.52	14.47	64.37	99.96	17.51
C0480-063-0625-X	0.480	12.19	0.063	1.60	0.620	15.75	0.437	11.10	0.342	8.69	14.47	64.37	79.14	13.85
C0480-063-0750-X	0.480	12.19	0.063	1.60	0.750	19.05	0.527	13.39	0.388	9.86	14.47	64.37	64.97	11.38
C0480-063-0880-X	0.480	12.19	0.063	1.60	0.880	22.35	0.617	15.67	0.436	11.07	14.47	64.37	54.98	9.63
C0480-063-1000-X	0.480	12.19	0.063	1.60	1.000	25.40	0.695	17.66	0.485	12.32	14.47	64.37	47.48	8.32

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0480-063-1250-X	0.480	12.19	0.063	1.60	1.250	31.75	0.864	21.94	0.582	14.78	14.47	64.37	37.49	6.57
C0480-063-1380-X	0.480	12.19	0.063	1.60	1.380	35.05	0.973	24.72	0.655	16.64	14.47	64.37	35.57	6.23
C0480-063-1500-X	0.480	12.19	0.063	1.60	1.500	38.10	1.043	26.49	0.665	16.89	14.47	64.37	31.65	5.55
C0480-063-1750-X	0.480	12.19	0.063	1.60	1.750	44.45	1.210	30.75	0.801	20.35	14.47	64.37	26.82	4.69
C0480-063-2000-X	0.480	12.19	0.063	1.60	2.000	50.80	1.377	34.98	0.895	22.73	14.47	64.37	23.24	4.06
C0480-063-2250-X	0.480	12.19	0.063	1.60	2.250	57.15	1.544	39.21	0.989	25.12	14.47	64.37	20.49	3.59
C0480-063-2500-X	0.480	12.19	0.063	1.60	2.500	63.50	1.710	43.44	1.083	27.51	14.47	64.37	18.33	3.20
C0480-063-2750-X	0.480	12.19	0.063	1.60	2.750	69.85	1.877	47.68	1.177	29.90	14.47	64.37	16.58	2.91
C0480-063-3000-X	0.480	12.19	0.063	1.60	3.000	76.20	2.045	51.96	1.271	32.28	14.47	64.37	15.16	2.66
C0480-067-0500-X	0.480	12.19	0.067	1.70	0.500	12.70	0.385	9.78	0.336	8.53	17.31	77.00	150.52	26.36
C0480-067-0620-X	0.480	12.19	0.067	1.70	0.620	15.75	0.467	11.87	0.403	10.24	17.31	77.00	113.37	19.86
C0480-067-0750-X	0.480	12.19	0.067	1.70	0.750	19.05	0.556	14.13	0.458	11.63	17.31	77.00	89.46	15.67
C0480-067-0880-X	0.480	12.19	0.067	1.70	0.880	22.35	0.646	16.40	0.512	13.00	17.31	77.00	73.89	12.94
C0480-067-1000-X	0.480	12.19	0.067	1.70	1.000	25.40	0.728	18.49	0.562	14.27	17.31	77.00	63.64	11.14
C0480-067-1250-X	0.480	12.19	0.067	1.70	1.250	31.75	0.900	22.85	0.666	16.92	17.31	77.00	49.40	8.65
C0480-067-1500-X	0.480	12.19	0.067	1.70	1.500	38.10	1.071	27.19	0.770	19.56	17.31	77.00	40.32	7.06
C0480-067-1750-X	0.480	12.19	0.067	1.70	1.750	44.45	1.242	31.54	0.874	22.20	17.31	77.00	34.07	5.97
C0480-067-2000-X	0.480	12.19	0.067	1.70	2.000	50.80	1.413	35.89	0.978	24.84	17.31	77.00	29.49	5.17
C0480-067-2250-X	0.480	12.19	0.067	1.70	2.250	57.15	1.586	40.28	1.082	27.48	17.31	77.00	26.07	4.57
C0480-067-2500-X	0.480	12.19	0.067	1.70	2.500	63.50	1.758	44.65	1.187	30.15	17.31	77.00	23.32	4.08
C0480-067-2750-X	0.480	12.19	0.067	1.70	2.750	69.85	1.929	48.99	1.291	32.79	17.31	77.00	21.07	3.70
C0480-067-3000-X	0.480	12.19	0.067	1.70	3.000	76.20	2.100	53.35	1.395	35.43	17.31	77.00	19.24	3.36
C0480-072-0500-X	0.480	12.19	0.072	1.83	0.500	12.70	0.402	10.21	0.358	9.09	20.84	92.70	212.91	37.28
C0480-072-0620-X	0.480	12.19	0.072	1.83	0.620	15.75	0.489	12.43	0.419	10.64	20.84	92.70	159.27	27.90
C0480-072-0750-X	0.480	12.19	0.072	1.83	0.750	19.05	0.583	14.82	0.485	12.32	20.84	92.70	125.12	21.91
C0480-072-0880-X	0.480	12.19	0.072	1.83	0.880	22.35	0.678	17.22	0.547	13.89	20.84	92.70	103.04	18.04
C0480-072-1000-X	0.480	12.19	0.072	1.83	1.000	25.40	0.765	19.42	0.601	15.27	20.84	92.70	88.55	15.52
C0480-072-1250-X	0.480	12.19	0.072	1.83	1.250	31.75	0.946	24.03	0.714	18.14	20.84	92.70	68.56	12.01
C0480-072-1500-X	0.480	12.19	0.072	1.83	1.500	38.10	1.127	28.63	0.826	20.98	20.84	92.70	55.89	9.79
C0480-072-1750-X	0.480	12.19	0.072	1.83	1.750	44.45	1.309	33.24	0.939	23.85	20.84	92.70	47.23	8.27
C0480-072-2000-X	0.480	12.19	0.072	1.83	2.000	50.80	1.490	37.83	1.051	26.70	20.84	92.70	40.82	7.15
C0480-072-2250-X	0.480	12.19	0.072	1.83	2.250	57.15	1.671	42.44	1.164	29.57	20.84	92.70	35.99	6.30
C0480-072-2500-X	0.480	12.19	0.072	1.83	2.500	63.50	1.852	47.04	1.276	32.41	20.84	92.70	32.15	5.64
C0480-072-2750-X	0.480	12.19	0.072	1.83	2.750	69.85	2.033	51.65	1.389	35.28	20.84	92.70	29.07	5.10
C0480-072-3000-X	0.480	12.19	0.072	1.83	3.000	76.20	2.216	56.28	1.501	38.13	20.84	92.70	26.57	4.66
C0480-072-3250-X	0.480	12.19	0.072	1.83	3.250	82.55	2.396	60.87	1.614	41.00	20.84	92.70	24.41	4.27
C0480-072-3500-X	0.480	12.19	0.072	1.83	3.500	88.90	2.577	65.46	1.726	43.84	20.84	92.70	22.57	3.96
C0480-074-0500-X	0.480	12.19	0.074	1.88	0.500	12.70	0.406	10.32	0.350	8.89	22.55	100.31	240.82	42.17
C0480-074-0620-X	0.480	12.19	0.074	1.88	0.620	15.75	0.494	12.56	0.421	10.69	22.55	100.31	179.59	31.45
C0480-074-0750-X	0.480	12.19	0.074	1.88	0.750	19.05	0.590	14.98	0.482	12.24	22.55	100.31	140.86	24.68
C0480-074-0880-X	0.480	12.19	0.074	1.88	0.880	22.35	0.685	17.40	0.546	13.87	22.55	100.31	115.79	20.28
C0480-074-1000-X	0.480	12.19	0.074	1.88	1.000	25.40	0.773	19.64	0.610	15.49	22.55	100.31	99.46	17.43
C0480-074-1250-X	0.480	12.19	0.074	1.88	1.250	31.75	0.957	24.30	0.734	18.64	22.55	100.31	76.89	13.47
C0480-074-1500-X	0.480	12.19	0.074	1.88	1.500	38.10	1.140	28.97	0.855	21.72	22.55	100.31	62.72	10.98
C0480-074-1750-X	0.480	12.19	0.074	1.88	1.750	44.45	1.324	33.62	0.972	24.69	22.55	100.31	52.90	9.26
C0480-074-2000-X	0.480	12.19	0.074	1.88	2.000	50.80	1.508	38.30	1.089	27.66	22.55	100.31	45.82	8.02
C0480-074-2250-X	0.480	12.19	0.074	1.88	2.250	57.15	1.691	42.94	1.206	30.63	22.55	100.31	40.32	7.06
C0480-074-2500-X	0.480	12.19	0.074	1.88	2.500	63.50	1.875	47.62	1.324	33.63	22.55	100.31	36.07	6.32
C0480-074-2750-X	0.480	12.19	0.074	1.88	2.750	69.85	2.058	52.26	1.441	36.60	22.55	100.31	32.57	5.71
C0480-074-3000-X	0.480	12.19	0.074	1.88	3.000	76.20	2.242	56.94	1.558	39.57	22.55	100.31	29.74	5.20
C0480-074-3250-X	0.480	12.19	0.074	1.88	3.250	82.55	2.425	61.58	1.675	42.55	22.55	100.31	27.32	4.78
C0480-074-3500-X	0.480	12.19	0.074	1.88	3.500	88.90	2.609	66.28	1.792	45.52	22.55	100.31	25.32	4.43
C0480-081-0500-X	0.480	12.19	0.081	2.06	0.500	12.70	0.423	10.75	0.379	9.63	28.56	127.04	372.10	65.16
C0480-081-0620-X	0.480	12.19	0.081	2.06	0.620	15.75	0.516	13.11	0.458	11.63	28.56	127.04	274.64	48.09
C0480-081-0750-X	0.480	12.19	0.081	2.06	0.750	19.05	0.616	15.66	0.526	13.36	28.56	127.04	213.91	37.46
C0480-081-0880-X	0.480	12.19	0.081	2.06	0.880	22.35	0.717	18.21	0.598	15.19	28.56	127.04	175.18	30.68
C0480-081-1000-X	0.480	12.19	0.081	2.06	1.000	25.40	0.810	20.57	0.669	16.99	28.56	127.04	150.11	26.29
C0480-081-1250-X	0.480	12.19	0.081	2.06	1.250	31.75	1.003	25.47	0.808	20.52	28.56	127.04	115.62	20.24
C0480-081-1500-X	0.480	12.19	0.081	2.06	1.500	38.10	1.196	30.39	0.942	23.93	28.56	127.04	94.05	16.48
C0480-081-1750-X	0.480	12.19	0.081	2.06	1.750	44.45	1.389	35.29	1.073	27.25	28.56	127.04	79.22	13.87
C0480-081-2000-X	0.480	12.19	0.081	2.06	2.000	50.80	1.583	40.20	1.204	30.58	28.56	127.04	68.47	12.00
C0480-081-2250-X	0.480	12.19	0.081	2.06	2.250	57.15	1.776	45.10	1.334	33.88	28.56	127.04	60.23	10.54
C0480-081-2500-X	0.480	12.19	0.081	2.06	2.500	63.50	1.969	50.02	1.465	37.21	28.56	127.04	53.81	9.42
C0480-081-2750-X	0.480	12.19	0.081	2.06	2.750	69.85	2.162	54.91	1.595	40.51	28.56	127.04	48.56	8.51

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0480-081-3000-X	0.480	12.19	0.081	2.06	3.000	76.20	2.355	59.83	1.726	43.84	28.56	127.04	44.32	7.76
C0480-081-3250-X	0.480	12.19	0.081	2.06	3.250	82.55	2.549	64.74	1.857	47.17	28.56	127.04	40.73	7.13
C0480-081-3500-X	0.480	12.19	0.081	2.06	3.500	88.90	2.741	69.63	1.987	50.47	28.56	127.04	37.65	6.60
D22050X	0.531	13.50	0.039	1.00	0.945	24.00	0.519	13.18	0.217	5.50	59.70	13.42	7.08	1.24
D22060X	0.531	13.50	0.039	1.00	1.437	36.50	0.768	19.51	0.295	7.50	59.70	13.42	4.51	0.79
D22070X	0.531	13.50	0.039	1.00	2.185	55.50	1.149	29.19	0.413	10.50	59.70	13.42	2.91	0.51
D22080X	0.531	13.50	0.039	1.00	3.169	80.50	1.615	41.03	0.571	14.50	59.70	13.42	1.94	0.34
D22090X	0.531	13.50	0.039	1.00	4.528	115.00	2.230	56.65	0.807	20.50	59.70	13.42	1.31	0.23
D22250X	0.541	13.75	0.049	1.25	1.063	27.00	0.737	18.73	0.271	6.88	111.12	24.98	17.24	3.02
D22260X	0.541	13.75	0.049	1.25	1.634	41.50	1.122	28.49	0.369	9.38	111.12	24.98	10.96	1.92
D22270X	0.541	13.75	0.049	1.25	2.461	62.50	1.667	42.35	0.517	13.13	111.12	24.98	7.08	1.24
D22280X	0.541	13.75	0.049	1.25	3.563	90.50	2.406	61.11	0.714	18.13	111.12	24.98	4.85	0.85
D22290X	0.541	13.75	0.049	1.25	5.118	130.00	3.393	86.18	1.009	25.63	111.12	24.98	3.25	0.57
D23190X	0.551	14.00	0.110	2.80	0.807	20.50	0.724	18.40	0.606	15.40	992.89	223.21	606.42	106.20
D23200X	0.551	14.00	0.110	2.80	1.142	29.00	0.974	24.74	0.827	21.00	992.89	223.21	298.98	52.36
D23210X	0.551	14.00	0.110	2.80	1.807	45.90	1.582	40.18	1.268	32.20	992.89	223.21	222.98	39.05
D23220X	0.551	14.00	0.110	2.80	2.811	71.40	2.444	62.07	1.929	49.00	992.89	223.21	136.64	23.93
D22450X	0.555	14.10	0.063	1.60	0.945	24.00	0.708	17.98	0.346	8.80	217.78	48.96	46.42	8.13
D22460X	0.555	14.10	0.063	1.60	1.417	36.00	1.046	26.57	0.472	12.00	217.78	48.96	29.64	5.19
D22470X	0.555	14.10	0.063	1.60	2.106	53.50	1.534	38.97	0.661	16.80	217.78	48.96	19.24	3.37
D22480X	0.555	14.10	0.063	1.60	3.071	78.00	2.222	56.43	0.913	23.20	217.78	48.96	12.96	2.27
D22490X	0.555	14.10	0.063	1.60	4.528	115.00	3.268	83.00	1.291	32.80	217.78	48.96	8.74	1.53
D22650X	0.571	14.50	0.079	2.00	0.886	22.50	0.711	18.06	0.433	11.00	393.67	88.50	113.80	19.93
D22660X	0.571	14.50	0.079	2.00	1.299	33.00	1.024	26.01	0.591	15.00	393.67	88.50	72.29	12.66
D22670X	0.571	14.50	0.079	2.00	1.949	49.50	1.522	38.67	0.827	21.00	393.67	88.50	46.65	8.17
D22680X	0.571	14.50	0.079	2.00	2.795	71.00	2.170	55.11	1.142	29.00	393.67	88.50	31.81	5.57
D22690X	0.571	14.50	0.079	2.00	4.134	105.00	3.210	81.53	1.614	41.00	393.67	88.50	21.53	3.77
D22890X	0.591	15.00	0.087	2.20	0.787	20.00	0.626	15.89	0.476	12.10	494.55	111.18	154.40	27.04
D22900X	0.591	15.00	0.087	2.20	1.189	30.20	0.935	23.75	0.650	16.50	494.55	111.18	98.39	17.23
D22910X	0.591	15.00	0.087	2.20	1.925	48.90	1.486	37.74	0.996	25.30	494.55	111.18	56.87	9.96
D22940X	0.591	15.00	0.098	2.50	0.866	22.00	0.739	18.78	0.541	13.75	696.77	156.64	277.57	48.61
D22950X	0.591	15.00	0.098	2.50	1.260	32.00	1.061	26.94	0.738	18.75	696.77	156.64	176.79	30.96
D22960X	0.591	15.00	0.098	2.50	1.870	47.50	1.562	39.68	1.033	26.25	696.77	156.64	114.32	20.02
D22970X	0.591	15.00	0.098	2.50	2.657	67.50	2.203	55.95	1.427	36.25	696.77	156.64	77.43	13.56
D22980X	0.591	15.00	0.098	2.50	3.858	98.00	3.184	80.88	2.018	51.25	696.77	156.64	52.25	9.15
C0600-045-0500-X	0.600	15.24	0.045	1.14	0.500	12.70	0.274	6.95	0.153	3.89	4.66	20.73	20.58	3.61
C0600-045-0625-X	0.600	15.24	0.045	1.14	0.620	15.75	0.309	7.86	0.179	4.55	4.66	20.73	14.99	2.63
C0600-045-0750-X	0.600	15.24	0.045	1.14	0.750	19.05	0.351	8.90	0.205	5.21	4.66	20.73	11.66	2.05
C0600-045-0880-X	0.600	15.24	0.045	1.14	0.880	22.35	0.414	10.52	0.224	5.69	4.66	20.73	10.00	1.75
C0600-045-1000-X	0.600	15.24	0.045	1.14	1.000	25.40	0.441	11.20	0.251	6.38	4.66	20.73	8.33	1.45
C0600-045-1250-X	0.600	15.24	0.045	1.14	1.250	31.75	0.551	14.00	0.292	7.42	4.66	20.73	6.66	1.17
C0600-045-1380-X	0.600	15.24	0.045	1.14	1.380	35.05	0.592	15.05	0.306	7.77	4.66	20.73	5.91	1.03
C0600-045-1500-X	0.600	15.24	0.045	1.14	1.500	38.10	0.640	16.25	0.338	8.59	4.66	20.73	5.41	0.95
C0600-045-1750-X	0.600	15.24	0.045	1.14	1.750	44.45	0.915	23.25	0.366	9.30	4.66	20.73	5.58	0.98
C0600-045-2000-X	0.600	15.24	0.045	1.14	2.000	50.80	1.036	26.31	0.401	10.19	4.66	20.73	4.83	0.84
C0600-045-2250-X	0.600	15.24	0.045	1.14	2.250	57.15	1.175	29.84	0.436	11.07	4.66	20.73	4.33	0.75
C0600-045-2500-X	0.600	15.24	0.045	1.14	2.500	63.50	1.284	32.62	0.471	11.96	4.66	20.73	3.83	0.67
C0600-045-2750-X	0.600	15.24	0.045	1.14	2.750	69.85	1.278	32.47	0.540	13.72	4.66	20.73	3.17	0.56
C0600-045-3000-X	0.600	15.24	0.045	1.14	3.000	76.20	1.402	35.62	0.585	14.86	4.66	20.73	2.92	0.51
C0600-045-3500-X	0.600	15.24	0.045	1.14	3.500	88.90	1.636	41.56	0.659	16.74	4.66	20.73	2.50	0.44
C0600-049-0620-X	0.600	15.24	0.049	1.24	0.620	15.75	0.369	9.36	0.234	5.94	5.86	26.07	23.32	4.08
C0600-049-0750-X	0.600	15.24	0.049	1.24	0.750	19.05	0.436	11.07	0.255	6.48	5.86	26.07	18.66	3.27
C0600-049-1000-X	0.600	15.24	0.049	1.24	1.000	25.40	0.565	14.36	0.297	7.54	5.86	26.07	13.49	2.36
C0600-049-1250-X	0.600	15.24	0.049	1.24	1.250	31.75	0.696	17.67	0.338	8.59	5.86	26.07	10.58	1.86
C0600-049-1500-X	0.600	15.24	0.049	1.24	1.500	38.10	0.823	20.91	0.380	9.65	5.86	26.07	8.66	1.52
C0600-049-1750-X	0.600	15.24	0.049	1.24	1.750	44.45	0.950	24.13	0.422	10.72	5.86	26.07	7.33	1.28
C0600-049-2000-X	0.600	15.24	0.049	1.24	2.000	50.80	1.086	27.58	0.463	11.76	5.86	26.07	6.41	1.12
C0600-049-2250-X	0.600	15.24	0.049	1.24	2.250	57.15	1.215	30.86	0.505	12.83	5.86	26.07	5.66	1.00
C0600-049-2500-X	0.600	15.24	0.049	1.24	2.500	63.50	1.346	34.19	0.546	13.87	5.86	26.07	5.08	0.89
C0600-049-2750-X	0.600	15.24	0.049	1.24	2.750	69.85	1.470	37.34	0.588	14.94	5.86	26.07	4.58	0.81
C0600-049-3000-X	0.600	15.24	0.049	1.24	3.000	76.20	1.592	40.44	0.629	15.98	5.86	26.07	4.17	0.74
C0600-055-0625-X	0.600	15.24	0.055	1.40	0.620	15.75	0.378	9.60	0.226	5.74	8.07	35.90	33.32	5.83
C0600-055-0750-X	0.600	15.24	0.055	1.40	0.750	19.05	0.457	11.60	0.251	6.38	8.07	35.90	27.49	4.82
C0600-055-0880-X	0.600	15.24	0.055	1.40	0.880	22.35	0.534	13.57	0.276	7.01	8.07	35.90	23.32	4.08

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0600-055-1000-X	0.600	15.24	0.055	1.40	1.000	25.40	0.597	15.15	0.304	7.72	8.07	35.90	19.99	3.50
C0600-055-1250-X	0.600	15.24	0.055	1.40	1.250	31.75	0.712	18.09	0.369	9.37	8.07	35.90	14.99	2.63
C0600-055-1500-X	0.600	15.24	0.055	1.40	1.500	38.10	0.854	21.70	0.420	10.67	8.07	35.90	12.50	2.19
C0600-055-1750-X	0.600	15.24	0.055	1.40	1.750	44.45	1.005	25.53	0.509	12.93	8.07	35.90	10.83	1.89
C0600-055-2000-X	0.600	15.24	0.055	1.40	2.000	50.80	1.143	29.04	0.562	14.27	8.07	35.90	9.41	1.65
C0600-055-2250-X	0.600	15.24	0.055	1.40	2.250	57.15	1.282	32.56	0.614	15.60	8.07	35.90	8.33	1.45
C0600-055-2500-X	0.600	15.24	0.055	1.40	2.500	63.50	1.412	35.87	0.667	16.94	8.07	35.90	7.41	1.30
C0600-055-2750-X	0.600	15.24	0.055	1.40	2.750	69.85	1.583	40.22	0.701	17.81	8.07	35.90	6.91	1.21
C0600-055-3000-X	0.600	15.24	0.055	1.40	3.000	76.20	1.726	43.84	0.752	19.10	8.07	35.90	6.33	1.10
C0600-059-0620-X	0.600	15.24	0.059	1.50	0.620	15.75	0.398	10.11	0.298	7.57	9.92	44.13	44.73	7.83
C0600-059-0750-X	0.600	15.24	0.059	1.50	0.750	19.05	0.471	11.97	0.329	8.36	9.92	44.13	35.57	6.23
C0600-059-0880-X	0.600	15.24	0.059	1.50	0.880	22.35	0.544	13.81	0.360	9.14	9.92	44.13	29.49	5.17
C0600-059-1000-X	0.600	15.24	0.059	1.50	1.000	25.40	0.611	15.51	0.389	9.88	9.92	44.13	25.49	4.47
C0600-059-1250-X	0.600	15.24	0.059	1.50	1.250	31.75	0.750	19.04	0.449	11.40	9.92	44.13	19.83	3.47
C0600-059-1500-X	0.600	15.24	0.059	1.50	1.500	38.10	0.889	22.59	0.510	12.95	9.92	44.13	16.24	2.84
C0600-059-1750-X	0.600	15.24	0.059	1.50	1.750	44.45	1.028	26.12	0.570	14.48	9.92	44.13	13.74	2.40
C0600-059-2000-X	0.600	15.24	0.059	1.50	2.000	50.80	1.167	29.65	0.630	16.00	9.92	44.13	11.91	2.08
C0600-059-2250-X	0.600	15.24	0.059	1.50	2.250	57.15	1.305	33.14	0.690	17.53	9.92	44.13	10.50	1.84
C0600-059-2500-X	0.600	15.24	0.059	1.50	2.500	63.50	1.446	36.73	0.750	19.05	9.92	44.13	9.41	1.65
C0600-059-2750-X	0.600	15.24	0.059	1.50	2.750	69.85	1.582	40.19	0.811	20.60	9.92	44.13	8.50	1.49
C0600-059-3000-X	0.600	15.24	0.059	1.50	3.000	76.20	1.733	44.02	0.871	22.12	9.92	44.13	7.83	1.37
C0600-063-0625-X	0.600	15.24	0.063	1.60	0.620	15.75	0.392	9.96	0.280	7.11	11.76	52.31	51.65	9.05
C0600-063-0750-X	0.600	15.24	0.063	1.60	0.750	19.05	0.473	12.02	0.314	7.98	11.76	52.31	42.48	7.44
C0600-063-0880-X	0.600	15.24	0.063	1.60	0.880	22.35	0.559	14.20	0.343	8.71	11.76	52.31	36.65	6.43
C0600-063-1000-X	0.600	15.24	0.063	1.60	1.000	25.40	0.628	15.96	0.378	9.60	11.76	52.31	31.65	5.55
C0600-063-1250-X	0.600	15.24	0.063	1.60	1.250	31.75	0.795	20.18	0.435	11.05	11.76	52.31	25.82	4.52
C0600-063-1500-X	0.600	15.24	0.063	1.60	1.500	38.10	0.912	23.16	0.526	13.36	11.76	52.31	19.99	3.50
C0600-063-1750-X	0.600	15.24	0.063	1.60	1.750	44.45	1.071	27.21	0.632	16.05	11.76	52.31	17.33	3.03
C0600-063-2000-X	0.600	15.24	0.063	1.60	2.000	50.80	1.216	30.88	0.700	17.78	11.76	52.31	14.99	2.63
C0600-063-2250-X	0.600	15.24	0.063	1.60	2.250	57.15	1.362	34.60	0.768	19.51	11.76	52.31	13.24	2.31
C0600-063-2500-X	0.600	15.24	0.063	1.60	2.500	63.50	1.506	38.25	0.836	21.23	11.76	52.31	11.83	2.07
C0600-063-2750-X	0.600	15.24	0.063	1.60	2.750	69.85	1.719	43.67	0.863	21.92	11.76	52.31	11.41	2.00
C0600-063-3000-X	0.600	15.24	0.063	1.60	3.000	76.20	1.871	47.51	0.927	23.55	11.76	52.31	10.41	1.82
C0600-063-3500-X	0.600	15.24	0.063	1.60	3.500	88.90	2.168	55.07	1.055	26.80	11.76	52.31	8.83	1.54
C0600-067-0625-X	0.600	15.24	0.067	1.70	0.620	15.75	0.409	10.38	0.300	7.62	14.09	62.68	66.64	11.66
C0600-067-0750-X	0.600	15.24	0.067	1.70	0.750	19.05	0.494	12.54	0.336	8.53	14.09	62.68	54.98	9.63
C0600-067-0880-X	0.600	15.24	0.067	1.70	0.880	22.35	0.542	13.76	0.401	10.19	14.09	62.68	41.65	7.30
C0600-067-1000-X	0.600	15.24	0.067	1.70	1.000	25.40	0.624	15.85	0.430	10.92	14.09	62.68	37.49	6.57
C0600-067-1250-X	0.600	15.24	0.067	1.70	1.250	31.75	0.780	19.81	0.505	12.83	14.09	62.68	29.99	5.25
C0600-067-1500-X	0.600	15.24	0.067	1.70	1.500	38.10	0.917	23.28	0.594	15.09	14.09	62.68	24.16	4.24
C0600-067-1750-X	0.600	15.24	0.067	1.70	1.750	44.45	1.014	25.77	0.715	18.16	14.09	62.68	19.16	3.36
C0600-067-2000-X	0.600	15.24	0.067	1.70	2.000	50.80	1.248	31.70	0.771	19.58	14.09	62.68	18.74	3.27
C0600-067-2250-X	0.600	15.24	0.067	1.70	2.250	57.15	1.396	35.45	0.847	21.51	14.09	62.68	16.49	2.89
C0600-067-2500-X	0.600	15.24	0.067	1.70	2.500	63.50	1.544	39.22	0.923	23.44	14.09	62.68	14.74	2.57
C0600-067-2750-X	0.600	15.24	0.067	1.70	2.750	69.85	1.737	44.12	0.966	24.54	14.09	62.68	13.91	2.43
C0600-067-3000-X	0.600	15.24	0.067	1.70	3.000	76.20	1.894	48.12	1.040	26.42	14.09	62.68	12.74	2.22
C0600-072-0620-X	0.600	15.24	0.072	1.83	0.620	15.75	0.442	11.22	0.381	9.68	17.00	75.62	95.38	16.71
C0600-072-0750-X	0.600	15.24	0.072	1.83	0.750	19.05	0.488	12.41	0.396	10.06	17.00	75.62	64.97	11.38
C0600-072-0880-X	0.600	15.24	0.072	1.83	0.880	22.35	0.580	14.73	0.433	11.00	17.00	75.62	56.64	9.91
C0600-072-1000-X	0.600	15.24	0.072	1.83	1.000	25.40	0.629	15.98	0.502	12.75	17.00	75.62	45.82	8.02
C0600-072-1250-X	0.600	15.24	0.072	1.83	1.250	31.75	0.797	20.23	0.581	14.76	17.00	75.62	37.49	6.57
C0600-072-1500-X	0.600	15.24	0.072	1.83	1.500	38.10	0.933	23.70	0.691	17.55	17.00	75.62	29.99	5.25
C0600-072-1750-X	0.600	15.24	0.072	1.83	1.750	44.45	1.070	27.17	0.801	20.35	17.00	75.62	24.99	4.38
C0600-072-2000-X	0.600	15.24	0.072	1.83	2.000	50.80	1.271	32.29	0.848	21.54	17.00	75.62	23.32	4.08
C0600-072-2250-X	0.600	15.24	0.072	1.83	2.250	57.15	1.462	37.14	0.946	24.03	17.00	75.62	21.57	3.78
C0600-072-2500-X	0.600	15.24	0.072	1.83	2.500	63.50	1.617	41.06	1.033	26.24	17.00	75.62	19.24	3.36
C0600-072-2750-X	0.600	15.24	0.072	1.83	2.750	69.85	1.774	45.05	1.119	28.42	17.00	75.62	17.41	3.05
C0600-072-3000-X	0.600	15.24	0.072	1.83	3.000	76.20	1.932	49.06	1.206	30.63	17.00	75.62	15.91	2.78
C0600-081-0620-X	0.600	15.24	0.081	2.06	0.620	15.75	0.488	12.39	0.412	10.46	23.40	104.09	177.10	31.01
C0600-081-0750-X	0.600	15.24	0.081	2.06	0.750	19.05	0.580	14.74	0.459	11.66	23.40	104.09	137.94	24.15
C0600-081-0880-X	0.600	15.24	0.081	2.06	0.880	22.35	0.673	17.09	0.507	12.88	23.40	104.09	112.95	19.79
C0600-081-1000-X	0.600	15.24	0.081	2.06	1.000	25.40	0.758	19.26	0.552	14.02	23.40	104.09	96.79	16.95
C0600-081-1250-X	0.600	15.24	0.081	2.06	1.250	31.75	0.936	23.78	0.644	16.36	23.40	104.09	74.55	13.06
C0600-081-1500-X	0.600	15.24	0.081	2.06	1.500	38.10	1.114	28.30	0.736	18.69	23.40	104.09	60.64	10.61

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0600-081-1750-X	0.600	15.24	0.081	2.06	1.750	44.45	1.292	32.81	0.828	21.03	23.40	104.09	51.06	8.95
C0600-081-2000-X	0.600	15.24	0.081	2.06	2.000	50.80	1.470	37.34	0.920	23.37	23.40	104.09	44.15	7.74
C0600-081-2250-X	0.600	15.24	0.081	2.06	2.250	57.15	1.647	41.84	1.012	25.70	23.40	104.09	38.82	6.79
C0600-081-2500-X	0.600	15.24	0.081	2.06	2.500	63.50	1.826	46.39	1.104	28.04	23.40	104.09	34.74	6.08
C0600-081-2750-X	0.600	15.24	0.081	2.06	2.750	69.85	2.003	50.87	1.196	30.38	23.40	104.09	31.32	5.48
C0600-081-3000-X	0.600	15.24	0.081	2.06	3.000	76.20	2.181	55.39	1.288	32.72	23.40	104.09	28.57	5.01
C0600-081-3250-X	0.600	15.24	0.081	2.06	3.250	82.55	2.358	59.89	1.380	35.05	23.40	104.09	26.24	4.59
C0600-081-3500-X	0.600	15.24	0.081	2.06	3.500	88.90	2.538	64.46	1.472	37.39	23.40	104.09	24.32	4.26
C0600-081-3750-X	0.600	15.24	0.081	2.06	3.750	95.25	2.713	68.92	1.564	39.73	23.40	104.09	22.57	3.96
C0600-081-4000-X	0.600	15.24	0.081	2.06	4.000	101.60	2.894	73.50	1.656	42.06	23.40	104.09	21.16	3.71
C0600-085-0620-X	0.600	15.24	0.085	2.16	0.620	15.75	0.497	12.62	0.433	11.00	26.93	119.79	218.66	38.30
C0600-085-0750-X	0.600	15.24	0.085	2.16	0.750	19.05	0.591	15.02	0.484	12.29	26.93	119.79	169.60	29.70
C0600-085-0880-X	0.600	15.24	0.085	2.16	0.880	22.35	0.686	17.42	0.536	13.61	26.93	119.79	138.61	24.27
C0600-085-1000-X	0.600	15.24	0.085	2.16	1.000	25.40	0.773	19.63	0.583	14.81	26.93	119.79	118.54	20.75
C0600-085-1250-X	0.600	15.24	0.085	2.16	1.250	31.75	0.955	24.24	0.682	17.32	26.93	119.79	91.13	15.95
C0600-085-1500-X	0.600	15.24	0.085	2.16	1.500	38.10	1.136	28.85	0.781	19.84	26.93	119.79	73.97	12.96
C0600-085-1750-X	0.600	15.24	0.085	2.16	1.750	44.45	1.318	33.47	0.880	22.35	26.93	119.79	62.31	10.91
C0600-085-2000-X	0.600	15.24	0.085	2.16	2.000	50.80	1.499	38.07	0.978	24.84	26.93	119.79	53.73	9.40
C0600-085-2250-X	0.600	15.24	0.085	2.16	2.250	57.15	1.681	42.69	1.077	27.36	26.93	119.79	47.31	8.28
C0600-085-2500-X	0.600	15.24	0.085	2.16	2.500	63.50	1.862	47.31	1.176	29.87	26.93	119.79	42.23	7.39
C0600-085-2750-X	0.600	15.24	0.085	2.16	2.750	69.85	2.044	51.92	1.275	32.39	26.93	119.79	38.15	6.69
C0600-085-3000-X	0.600	15.24	0.085	2.16	3.000	76.20	2.225	56.51	1.374	34.90	26.93	119.79	34.74	6.08
C0600-085-3250-X	0.600	15.24	0.085	2.16	3.250	82.55	2.406	61.11	1.473	37.41	26.93	119.79	31.90	5.59
C0600-085-3500-X	0.600	15.24	0.085	2.16	3.500	88.90	2.589	65.77	1.572	39.93	26.93	119.79	29.57	5.18
C0600-085-3750-X	0.600	15.24	0.085	2.16	3.750	95.25	2.770	70.37	1.670	42.42	26.93	119.79	27.49	4.82
C0600-085-4000-X	0.600	15.24	0.085	2.16	4.000	101.60	2.950	74.94	1.769	44.93	26.93	119.79	25.66	4.50
C0600-092-0750-X	0.600	15.24	0.092	2.34	0.750	19.05	0.611	15.51	0.524	13.31	33.87	150.66	242.82	42.52
C0600-092-0880-X	0.600	15.24	0.092	2.34	0.880	22.35	0.708	17.99	0.581	14.76	33.87	150.66	197.42	34.57
C0600-092-1000-X	0.600	15.24	0.092	2.34	1.000	25.40	0.799	20.29	0.633	16.08	33.87	150.66	168.43	29.49
C0600-092-1250-X	0.600	15.24	0.092	2.34	1.250	31.75	0.987	25.07	0.743	18.87	33.87	150.66	128.87	22.57
C0600-092-1500-X	0.600	15.24	0.092	2.34	1.500	38.10	1.176	29.86	0.853	21.67	33.87	150.66	104.46	18.30
C0600-092-1750-X	0.600	15.24	0.092	2.34	1.750	44.45	1.364	34.64	0.962	24.43	33.87	150.66	87.71	15.36
C0600-092-2000-X	0.600	15.24	0.092	2.34	2.000	50.80	1.552	39.43	1.072	27.23	33.87	150.66	75.64	13.24
C0600-092-2250-X	0.600	15.24	0.092	2.34	2.250	57.15	1.741	44.21	1.181	30.00	33.87	150.66	66.47	11.65
C0600-092-2500-X	0.600	15.24	0.092	2.34	2.500	63.50	1.929	49.00	1.291	32.79	33.87	150.66	59.31	10.39
C0600-092-2750-X	0.600	15.24	0.092	2.34	2.750	69.85	2.118	53.79	1.400	35.56	33.87	150.66	53.56	9.39
C0600-092-3000-X	0.600	15.24	0.092	2.34	3.000	76.20	2.306	58.58	1.510	38.35	33.87	150.66	48.81	8.55
C0600-092-3250-X	0.600	15.24	0.092	2.34	3.250	82.55	2.494	63.35	1.619	41.12	33.87	150.66	44.82	7.85
C0600-092-3500-X	0.600	15.24	0.092	2.34	3.500	88.90	2.682	68.12	1.729	43.92	33.87	150.66	41.40	7.25
C0600-092-3750-X	0.600	15.24	0.092	2.34	3.750	95.25	2.872	72.95	1.838	46.69	33.87	150.66	38.57	6.76
C0600-092-4000-X	0.600	15.24	0.092	2.34	4.000	101.60	3.059	77.69	1.948	49.48	33.87	150.66	35.99	6.30
C0600-098-0750-X	0.600	15.24	0.098	2.49	0.750	19.05	0.627	15.93	0.559	14.20	39.65	176.37	323.04	56.57
C0600-098-0880-X	0.600	15.24	0.098	2.49	0.880	22.35	0.728	18.50	0.621	15.77	39.65	176.37	261.65	45.83
C0600-098-1000-X	0.600	15.24	0.098	2.49	1.000	25.40	0.822	20.88	0.678	17.22	39.65	176.37	222.58	38.98
C0600-098-1250-X	0.600	15.24	0.098	2.49	1.250	31.75	1.017	25.82	0.798	20.27	39.65	176.37	169.85	29.75
C0600-098-1500-X	0.600	15.24	0.098	2.49	1.500	38.10	1.211	30.76	0.917	23.29	39.65	176.37	137.28	24.04
C0600-098-1750-X	0.600	15.24	0.098	2.49	1.750	44.45	1.406	35.71	1.037	26.34	39.65	176.37	115.20	20.17
C0600-098-2000-X	0.600	15.24	0.098	2.49	2.000	50.80	1.600	40.65	1.156	29.36	39.65	176.37	99.21	17.37
C0600-098-2250-X	0.600	15.24	0.098	2.49	2.250	57.15	1.795	45.59	1.276	32.41	39.65	176.37	87.13	15.25
C0600-098-2500-X	0.600	15.24	0.098	2.49	2.500	63.50	1.990	50.54	1.395	35.43	39.65	176.37	77.72	13.61
C0600-098-2750-X	0.600	15.24	0.098	2.49	2.750	69.85	2.184	55.48	1.515	38.48	39.65	176.37	70.06	12.28
C0600-098-3000-X	0.600	15.24	0.098	2.49	3.000	76.20	2.379	60.42	1.634	41.50	39.65	176.37	63.81	11.17
C0600-098-3250-X	0.600	15.24	0.098	2.49	3.250	82.55	2.574	65.38	1.754	44.55	39.65	176.37	58.64	10.26
C0600-098-3500-X	0.600	15.24	0.098	2.49	3.500	88.90	2.768	70.30	1.873	47.57	39.65	176.37	54.15	9.49
C0600-098-3750-X	0.600	15.24	0.098	2.49	3.750	95.25	2.963	75.27	1.993	50.62	39.65	176.37	50.40	8.83
C0600-098-4000-X	0.600	15.24	0.098	2.49	4.000	101.60	3.158	80.20	2.112	53.64	39.65	176.37	47.06	8.25
D22300X	0.679	17.25	0.049	1.25	1.594	40.50	1.045	26.54	0.271	6.88	89.41	20.10	8.22	1.44
D22310X	0.679	17.25	0.049	1.25	2.441	62.00	1.581	40.15	0.369	9.38	89.41	20.10	5.25	0.92
D22320X	0.679	17.25	0.049	1.25	3.701	94.00	2.382	60.50	0.517	13.13	89.41	20.10	3.43	0.60
D22330X	0.679	17.25	0.049	1.25	5.512	140.00	3.533	89.75	0.714	18.13	89.41	20.10	2.28	0.40
D22340X	0.679	17.25	0.049	1.25	8.071	205.00	5.140	130.56	1.009	25.63	89.41	20.10	1.54	0.27
D22500X	0.693	17.60	0.063	1.60	1.339	34.00	0.935	23.74	0.346	8.80	176.68	39.72	22.10	3.87
D22510X	0.693	17.60	0.063	1.60	2.028	51.50	1.394	35.42	0.472	12.00	176.68	39.72	14.10	2.47
D22520X	0.693	17.60	0.063	1.60	3.051	77.50	2.074	52.68	0.661	16.80	176.68	39.72	9.14	1.60

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D22530X	0.693	17.60	0.063	1.60	4.331	110.00	2.883	73.22	0.913	23.20	176.68	39.72	6.17	1.08
D22540X	0.693	17.60	0.063	1.60	6.496	165.00	4.354	110.59	1.291	32.80	176.68	39.72	4.17	0.73
D22700X	0.709	18.00	0.079	2.00	1.181	30.00	0.880	22.35	0.433	11.00	322.41	72.48	54.13	9.48
D22710X	0.709	18.00	0.079	2.00	1.772	45.00	1.298	32.98	0.591	15.00	322.41	72.48	34.43	6.03
D22720X	0.709	18.00	0.079	2.00	2.677	68.00	1.947	49.46	0.827	21.00	322.41	72.48	22.33	3.91
D22730X	0.709	18.00	0.079	2.00	3.858	98.00	2.785	70.75	1.142	29.00	322.41	72.48	15.19	2.66
D22740X	0.709	18.00	0.079	2.00	5.709	145.00	4.123	104.73	1.614	41.00	322.41	72.48	10.28	1.80
C0720-055-0620-X	0.720	18.29	0.055	1.40	0.620	15.75	0.370	9.39	0.241	6.12	6.77	30.11	27.07	4.75
C0720-055-0750-X	0.720	18.29	0.055	1.40	0.750	19.05	0.396	10.07	0.221	5.61	6.77	30.11	19.16	3.36
C0720-055-0880-X	0.720	18.29	0.055	1.40	0.880	22.35	0.473	12.02	0.238	6.05	6.77	30.11	16.66	2.92
C0720-055-1000-X	0.720	18.29	0.055	1.40	1.000	25.40	0.560	14.23	0.248	6.30	6.77	30.11	15.41	2.70
C0720-055-1250-X	0.720	18.29	0.055	1.40	1.250	31.75	0.708	17.98	0.281	7.14	6.77	30.11	12.50	2.19
C0720-055-1500-X	0.720	18.29	0.055	1.40	1.500	38.10	0.793	20.14	0.333	8.46	6.77	30.11	9.58	1.68
C0720-055-1750-X	0.720	18.29	0.055	1.40	1.750	44.45	0.866	22.00	0.388	9.86	6.77	30.11	7.66	1.35
C0720-055-2000-X	0.720	18.29	0.055	1.40	2.000	50.80	1.043	26.50	0.411	10.44	6.77	30.11	7.08	1.24
C0720-055-2250-X	0.720	18.29	0.055	1.40	2.250	57.15	1.207	30.67	0.482	12.24	6.77	30.11	6.50	1.14
C0720-055-2500-X	0.720	18.29	0.055	1.40	2.500	63.50	1.321	33.56	0.519	13.18	6.77	30.11	5.75	1.02
C0720-055-2750-X	0.720	18.29	0.055	1.40	2.750	69.85	1.459	37.06	0.556	14.12	6.77	30.11	5.25	0.93
C0720-055-3000-X	0.720	18.29	0.055	1.40	3.000	76.20	1.573	39.96	0.593	15.06	6.77	30.11	4.75	0.84
C0720-059-0750-X	0.720	18.29	0.059	1.50	0.750	19.05	0.446	11.32	0.285	7.24	8.34	37.10	27.41	4.80
C0720-059-0880-X	0.720	18.29	0.059	1.50	0.880	22.35	0.513	13.04	0.308	7.82	8.34	37.10	22.74	3.98
C0720-059-1000-X	0.720	18.29	0.059	1.50	1.000	25.40	0.574	14.58	0.328	8.33	8.34	37.10	19.58	3.43
C0720-059-1250-X	0.720	18.29	0.059	1.50	1.250	31.75	0.703	17.86	0.371	9.42	8.34	37.10	15.24	2.66
C0720-059-1500-X	0.720	18.29	0.059	1.50	1.500	38.10	0.833	21.15	0.414	10.52	8.34	37.10	12.50	2.19
C0720-059-1750-X	0.720	18.29	0.059	1.50	1.750	44.45	0.962	24.43	0.457	11.61	8.34	37.10	10.58	1.86
C0720-059-2000-X	0.720	18.29	0.059	1.50	2.000	50.80	1.090	27.68	0.499	12.67	8.34	37.10	9.16	1.61
C0720-059-2250-X	0.720	18.29	0.059	1.50	2.250	57.15	1.218	30.94	0.542	13.77	8.34	37.10	8.08	1.42
C0720-059-2500-X	0.720	18.29	0.059	1.50	2.500	63.50	1.349	34.27	0.585	14.86	8.34	37.10	7.25	1.28
C0720-063-0620-X	0.720	18.29	0.063	1.60	0.620	15.75	0.392	9.95	0.286	7.26	9.89	43.99	43.32	7.58
C0720-063-0750-X	0.720	18.29	0.063	1.60	0.750	19.05	0.390	9.91	0.284	7.21	9.89	43.99	27.49	4.82
C0720-063-0880-X	0.720	18.29	0.063	1.60	0.880	22.35	0.456	11.58	0.313	7.95	9.89	43.99	23.32	4.08
C0720-063-1000-X	0.720	18.29	0.063	1.60	1.000	25.40	0.505	12.83	0.344	8.74	9.89	43.99	19.99	3.50
C0720-063-1250-X	0.720	18.29	0.063	1.60	1.250	31.75	0.608	15.44	0.409	10.39	9.89	43.99	15.41	2.70
C0720-063-1500-X	0.720	18.29	0.063	1.60	1.500	38.10	0.708	17.99	0.475	12.07	9.89	43.99	12.50	2.19
C0720-063-1750-X	0.720	18.29	0.063	1.60	1.750	44.45	0.836	21.24	0.529	13.44	9.89	43.99	10.83	1.89
C0720-063-2000-X	0.720	18.29	0.063	1.60	2.000	50.80	0.920	23.37	0.602	15.29	9.89	43.99	9.16	1.61
C0720-063-2250-X	0.720	18.29	0.063	1.60	2.250	57.15	1.268	32.22	0.605	15.37	9.89	43.99	10.08	1.77
C0720-063-2500-X	0.720	18.29	0.063	1.60	2.500	63.50	1.400	35.57	0.654	16.61	9.89	43.99	9.00	1.58
C0720-063-2750-X	0.720	18.29	0.063	1.60	2.750	69.85	1.538	39.07	0.702	17.83	9.89	43.99	8.16	1.44
C0720-063-3000-X	0.720	18.29	0.063	1.60	3.000	76.20	1.665	42.30	0.751	19.08	9.89	43.99	7.41	1.30
C0720-065-0750-X	0.720	18.29	0.065	1.65	0.750	19.05	0.467	11.86	0.324	8.23	10.85	48.26	38.32	6.71
C0720-065-0880-X	0.720	18.29	0.065	1.65	0.880	22.35	0.537	13.65	0.351	8.92	10.85	48.26	31.65	5.55
C0720-065-1000-X	0.720	18.29	0.065	1.65	1.000	25.40	0.603	15.31	0.376	9.55	10.85	48.26	27.32	4.78
C0720-065-1250-X	0.720	18.29	0.065	1.65	1.250	31.75	0.737	18.72	0.428	10.87	10.85	48.26	21.16	3.71
C0720-065-1500-X	0.720	18.29	0.065	1.65	1.500	38.10	0.874	22.19	0.480	12.19	10.85	48.26	17.33	3.03
C0720-065-1750-X	0.720	18.29	0.065	1.65	1.750	44.45	1.010	25.65	0.532	13.51	10.85	48.26	14.66	2.57
C0720-065-2000-X	0.720	18.29	0.065	1.65	2.000	50.80	1.143	29.03	0.584	14.83	10.85	48.26	12.66	2.22
C0720-065-2250-X	0.720	18.29	0.065	1.65	2.250	57.15	1.278	32.46	0.636	16.15	10.85	48.26	11.16	1.96
C0720-065-2500-X	0.720	18.29	0.065	1.65	2.500	63.50	1.415	35.93	0.689	17.50	10.85	48.26	10.00	1.75
C0720-065-2750-X	0.720	18.29	0.065	1.65	2.750	69.85	1.555	39.50	0.714	18.14	10.85	48.26	9.08	1.59
C0720-065-3000-X	0.720	18.29	0.065	1.65	3.000	76.20	1.684	42.78	0.793	20.14	10.85	48.26	8.25	1.45
C0720-067-0750-X	0.720	18.29	0.067	1.70	0.750	19.05	0.465	11.81	0.279	7.09	11.87	52.80	41.65	7.30
C0720-067-0880-X	0.720	18.29	0.067	1.70	0.880	22.35	0.524	13.31	0.315	8.00	11.87	52.80	33.32	5.83
C0720-067-1000-X	0.720	18.29	0.067	1.70	1.000	25.40	0.568	14.44	0.354	8.99	11.87	52.80	27.49	4.82
C0720-067-1250-X	0.720	18.29	0.067	1.70	1.250	31.75	0.722	18.35	0.403	10.24	11.87	52.80	22.49	3.94
C0720-067-1500-X	0.720	18.29	0.067	1.70	1.500	38.10	0.853	21.65	0.464	11.79	11.87	52.80	18.33	3.20
C0720-067-1750-X	0.720	18.29	0.067	1.70	1.750	44.45	0.959	24.35	0.538	13.67	11.87	52.80	14.99	2.63
C0720-067-2000-X	0.720	18.29	0.067	1.70	2.000	50.80	1.081	27.46	0.603	15.32	11.87	52.80	12.91	2.26
C0720-067-2250-X	0.720	18.29	0.067	1.70	2.250	57.15	1.294	32.87	0.669	16.99	11.87	52.80	12.41	2.17
C0720-067-2500-X	0.720	18.29	0.067	1.70	2.500	63.50	1.429	36.30	0.724	18.39	11.87	52.80	11.08	1.94
C0720-067-3000-X	0.720	18.29	0.067	1.70	3.000	76.20	1.705	43.31	0.835	21.21	11.87	52.80	9.16	1.61
C0720-067-3250-X	0.720	18.29	0.067	1.70	3.250	82.55	1.919	48.74	0.850	21.59	11.87	52.80	8.91	1.56
C0720-067-3500-X	0.720	18.29	0.067	1.70	3.500	88.90	2.076	52.72	0.902	22.91	11.87	52.80	8.33	1.45
C0720-072-0750-X	0.720	18.29	0.072	1.83	0.750	19.05	0.494	12.56	0.368	9.35	14.33	63.74	56.06	9.82

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0720-072-0880-X	0.720	18.29	0.072	1.83	0.880	22.35	0.522	13.25	0.365	9.27	14.33	63.74	39.98	7.01
C0720-072-1000-X	0.720	18.29	0.072	1.83	1.000	25.40	0.590	15.00	0.397	10.08	14.33	63.74	34.99	6.13
C0720-072-1250-X	0.720	18.29	0.072	1.83	1.250	31.75	0.759	19.27	0.448	11.38	14.33	63.74	29.16	5.11
C0720-072-1500-X	0.720	18.29	0.072	1.83	1.500	38.10	0.838	21.30	0.554	14.07	14.33	63.74	21.66	3.80
C0720-072-1750-X	0.720	18.29	0.072	1.83	1.750	44.45	0.968	24.59	0.628	15.95	14.33	63.74	18.33	3.20
C0720-072-2000-X	0.720	18.29	0.072	1.83	2.000	50.80	1.140	28.95	0.677	17.20	14.33	63.74	16.66	2.92
C0720-072-2250-X	0.720	18.29	0.072	1.83	2.250	57.15	1.349	34.27	0.751	19.08	14.33	63.74	15.91	2.78
C0720-072-2500-X	0.720	18.29	0.072	1.83	2.500	63.50	1.494	37.95	0.815	20.70	14.33	63.74	14.24	2.49
C0720-072-2750-X	0.720	18.29	0.072	1.83	2.750	69.85	1.633	41.48	0.878	22.30	14.33	63.74	12.83	2.24
C0720-072-3000-X	0.720	18.29	0.072	1.83	3.000	76.20	1.780	45.21	0.942	23.93	14.33	63.74	11.75	2.07
C0720-072-3250-X	0.720	18.29	0.072	1.83	3.250	82.55	1.927	48.94	1.005	25.53	14.33	63.74	10.83	1.89
C0720-072-3500-X	0.720	18.29	0.072	1.83	3.500	88.90	2.067	52.49	1.069	27.15	14.33	63.74	10.00	1.75
C0720-072-4000-X	0.720	18.29	0.072	1.83	4.000	101.60	2.377	60.38	1.182	30.02	14.33	63.74	8.83	1.54
C0720-081-0750-X	0.720	18.29	0.081	2.06	0.750	19.05	0.521	13.22	0.429	10.90	19.78	87.99	86.22	15.10
C0720-081-0880-X	0.720	18.29	0.081	2.06	0.880	22.35	0.600	15.23	0.470	11.94	19.78	87.99	70.56	12.36
C0720-081-1000-X	0.720	18.29	0.081	2.06	1.000	25.40	0.673	17.09	0.508	12.90	19.78	87.99	60.48	10.60
C0720-081-1250-X	0.720	18.29	0.081	2.06	1.250	31.75	0.825	20.96	0.587	14.91	19.78	87.99	46.56	8.16
C0720-081-1500-X	0.720	18.29	0.081	2.06	1.500	38.10	0.978	24.85	0.665	16.89	19.78	87.99	37.90	6.64
C0720-081-1750-X	0.720	18.29	0.081	2.06	1.750	44.45	1.130	28.71	0.744	18.90	19.78	87.99	31.90	5.59
C0720-081-2000-X	0.720	18.29	0.081	2.06	2.000	50.80	1.283	32.58	0.823	20.90	19.78	87.99	27.57	4.83
C0720-081-2250-X	0.720	18.29	0.081	2.06	2.250	57.15	1.434	36.43	0.902	22.91	19.78	87.99	24.24	4.24
C0720-081-2500-X	0.720	18.29	0.081	2.06	2.500	63.50	1.587	40.31	0.981	24.92	19.78	87.99	21.66	3.80
C0720-081-2750-X	0.720	18.29	0.081	2.06	2.750	69.85	1.740	44.19	1.060	26.92	19.78	87.99	19.58	3.43
C0720-081-3000-X	0.720	18.29	0.081	2.06	3.000	76.20	1.891	48.02	1.139	28.93	19.78	87.99	17.83	3.12
C0720-081-3500-X	0.720	18.29	0.081	2.06	3.500	88.90	2.196	55.77	1.297	32.94	19.78	87.99	15.16	2.66
C0720-081-4000-X	0.720	18.29	0.081	2.06	4.000	101.60	2.507	63.68	1.455	36.96	19.78	87.99	13.24	2.31
C0720-085-0750-X	0.720	18.29	0.085	2.16	0.750	19.05	0.553	14.05	0.434	11.02	22.78	101.33	115.79	20.28
C0720-085-0880-X	0.720	18.29	0.085	2.16	0.880	22.35	0.639	16.23	0.474	12.04	22.78	101.33	94.55	16.57
C0720-085-1000-X	0.720	18.29	0.085	2.16	1.000	25.40	0.718	18.25	0.512	13.00	22.78	101.33	80.88	14.17
C0720-085-1250-X	0.720	18.29	0.085	2.16	1.250	31.75	0.883	22.44	0.589	14.96	22.78	101.33	62.14	10.88
C0720-085-1500-X	0.720	18.29	0.085	2.16	1.500	38.10	1.049	26.64	0.666	16.92	22.78	101.33	50.48	8.84
C0720-085-1750-X	0.720	18.29	0.085	2.16	1.750	44.45	1.214	30.83	0.743	18.87	22.78	101.33	42.48	7.44
C0720-085-2000-X	0.720	18.29	0.085	2.16	2.000	50.80	1.379	35.02	0.821	20.85	22.78	101.33	36.65	6.43
C0720-085-2250-X	0.720	18.29	0.085	2.16	2.250	57.15	1.543	39.20	0.898	22.81	22.78	101.33	32.24	5.64
C0720-085-2500-X	0.720	18.29	0.085	2.16	2.500	63.50	1.710	43.43	0.975	24.77	22.78	101.33	28.82	5.04
C0720-085-2750-X	0.720	18.29	0.085	2.16	2.750	69.85	1.874	47.59	1.052	26.72	22.78	101.33	25.99	4.55
C0720-085-3000-X	0.720	18.29	0.085	2.16	3.000	76.20	2.041	51.83	1.130	28.70	22.78	101.33	23.74	4.15
C0720-085-3500-X	0.720	18.29	0.085	2.16	3.500	88.90	2.370	60.20	1.284	32.61	22.78	101.33	20.16	3.54
C0720-085-4000-X	0.720	18.29	0.085	2.16	4.000	101.60	2.698	68.53	1.439	36.55	22.78	101.33	17.49	3.06
C0720-096-0750-X	0.720	18.29	0.096	2.44	0.750	19.05	0.590	15.00	0.490	12.45	31.71	141.05	198.75	34.82
C0720-096-0880-X	0.720	18.29	0.096	2.44	0.880	22.35	0.683	17.36	0.537	13.64	31.71	141.05	161.27	28.25
C0720-096-1000-X	0.720	18.29	0.096	2.44	1.000	25.40	0.769	19.53	0.581	14.76	31.71	141.05	137.28	24.04
C0720-096-1250-X	0.720	18.29	0.096	2.44	1.250	31.75	0.948	24.07	0.671	17.04	31.71	141.05	104.87	18.37
C0720-096-1500-X	0.720	18.29	0.096	2.44	1.500	38.10	1.126	28.60	0.762	19.35	31.71	141.05	84.80	14.85
C0720-096-1750-X	0.720	18.29	0.096	2.44	1.750	44.45	1.305	33.14	0.852	21.64	31.71	141.05	71.22	12.47
C0720-096-2000-X	0.720	18.29	0.096	2.44	2.000	50.80	1.483	37.68	0.943	23.95	31.71	141.05	61.39	10.75
C0720-096-2250-X	0.720	18.29	0.096	2.44	2.250	57.15	1.662	42.20	1.034	26.26	31.71	141.05	53.90	9.44
C0720-096-2500-X	0.720	18.29	0.096	2.44	2.500	63.50	1.840	46.74	1.124	28.55	31.71	141.05	48.06	8.42
C0720-096-2750-X	0.720	18.29	0.096	2.44	2.750	69.85	2.019	51.29	1.215	30.86	31.71	141.05	43.40	7.60
C0720-096-3000-X	0.720	18.29	0.096	2.44	3.000	76.20	2.197	55.80	1.305	33.15	31.71	141.05	39.48	6.92
C0720-096-3500-X	0.720	18.29	0.096	2.44	3.500	88.90	2.555	64.91	1.486	37.74	31.71	141.05	33.57	5.88
C0720-096-4000-X	0.720	18.29	0.096	2.44	4.000	101.60	2.912	73.97	1.668	42.37	31.71	141.05	29.16	5.11
C0720-105-0750-X	0.720	18.29	0.105	2.67	0.750	19.05	0.611	15.51	0.537	13.64	41.15	183.04	295.47	51.75
C0720-105-0880-X	0.720	18.29	0.105	2.67	0.880	22.35	0.707	17.96	0.591	15.01	41.15	183.04	238.15	41.72
C0720-105-1000-X	0.720	18.29	0.105	2.67	1.000	25.40	0.796	20.23	0.640	16.26	41.15	183.04	202.00	35.38
C0720-105-1250-X	0.720	18.29	0.105	2.67	1.250	31.75	0.982	24.94	0.743	18.87	41.15	183.04	153.44	26.86
C0720-105-1500-X	0.720	18.29	0.105	2.67	1.500	38.10	1.167	29.65	0.846	21.49	41.15	183.04	123.70	21.66
C0720-105-1750-X	0.720	18.29	0.105	2.67	1.750	44.45	1.353	34.36	0.949	24.10	41.15	183.04	103.63	18.14
C0720-105-2000-X	0.720	18.29	0.105	2.67	2.000	50.80	1.538	39.07	1.052	26.72	41.15	183.04	89.13	15.60
C0720-105-2250-X	0.720	18.29	0.105	2.67	2.250	57.15	1.724	43.79	1.155	29.34	41.15	183.04	78.22	13.69
C0720-105-2500-X	0.720	18.29	0.105	2.67	2.500	63.50	1.909	48.49	1.258	31.95	41.15	183.04	69.64	12.19
C0720-105-2750-X	0.720	18.29	0.105	2.67	2.750	69.85	2.095	53.21	1.361	34.57	41.15	183.04	62.81	11.00
C0720-105-3000-X	0.720	18.29	0.105	2.67	3.000	76.20	2.281	57.94	1.464	37.19	41.15	183.04	57.23	10.02
C0720-105-3500-X	0.720	18.29	0.105	2.67	3.500	88.90	2.651	67.34	1.670	42.42	41.15	183.04	48.48	8.49

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0720-105-4000-X	0.720	18.29	0.105	2.67	4.000	101.60	3.022	76.75	1.876	47.65	41.15	183.04	42.07	7.37
C0720-112-0750-X	0.720	18.29	0.112	2.84	0.750	19.05	0.626	15.90	0.576	14.63	48.36	215.12	390.51	68.39
C0720-112-0880-X	0.720	18.29	0.112	2.84	0.880	22.35	0.726	18.43	0.636	16.15	48.36	215.12	313.12	54.83
C0720-112-1000-X	0.720	18.29	0.112	2.84	1.000	25.40	0.817	20.76	0.691	17.55	48.36	215.12	264.64	46.34
C0720-112-1250-X	0.720	18.29	0.112	2.84	1.250	31.75	1.008	25.61	0.805	20.45	48.36	215.12	200.17	35.06
C0720-112-1500-X	0.720	18.29	0.112	2.84	1.500	38.10	1.200	30.47	0.919	23.34	48.36	215.12	160.94	28.18
C0720-112-1750-X	0.720	18.29	0.112	2.84	1.750	44.45	1.391	35.33	1.034	26.26	48.36	215.12	134.61	23.57
C0720-112-2000-X	0.720	18.29	0.112	2.84	2.000	50.80	1.582	40.18	1.148	29.16	48.36	215.12	115.62	20.24
C0720-112-2250-X	0.720	18.29	0.112	2.84	2.250	57.15	1.773	45.03	1.262	32.05	48.36	215.12	101.38	17.76
C0720-112-2500-X	0.720	18.29	0.112	2.84	2.500	63.50	1.964	49.88	1.376	34.95	48.36	215.12	90.21	15.80
C0720-112-2750-X	0.720	18.29	0.112	2.84	2.750	69.85	2.155	54.74	1.491	37.87	48.36	215.12	81.30	14.24
C0720-112-3000-X	0.720	18.29	0.112	2.84	3.000	76.20	2.346	59.59	1.605	40.77	48.36	215.12	73.97	12.96
C0720-112-3500-X	0.720	18.29	0.112	2.84	3.500	88.90	2.729	69.32	1.834	46.58	48.36	215.12	62.72	10.98
C0720-112-4000-X	0.720	18.29	0.112	2.84	4.000	101.60	3.111	79.02	2.062	52.37	48.36	215.12	54.39	9.53
D22990X	0.728	18.50	0.098	2.50	1.083	27.50	0.861	21.88	0.541	13.75	577.65	129.86	132.02	23.12
D23000X	0.728	18.50	0.098	2.50	1.614	41.00	1.267	32.17	0.738	18.75	577.65	129.86	83.94	14.70
D23010X	0.728	18.50	0.098	2.50	2.402	61.00	1.866	47.40	1.033	26.25	577.65	129.86	54.53	9.55
D23020X	0.728	18.50	0.098	2.50	3.465	88.00	2.676	67.96	1.427	36.25	577.65	129.86	37.00	6.48
D23030X	0.728	18.50	0.098	2.50	5.118	130.00	3.948	100.28	2.018	51.25	577.65	129.86	24.95	4.37
D23280X	0.756	19.20	0.126	3.20	1.083	27.50	0.930	23.61	0.693	17.60	1071.98	240.99	353.57	61.92
D23290X	0.756	19.20	0.126	3.20	1.575	40.00	1.334	33.89	0.945	24.00	1071.98	240.99	225.32	39.46
D23300X	0.756	19.20	0.126	3.20	2.323	59.00	1.952	49.57	1.323	33.60	1071.98	240.99	145.95	25.56
D23310X	0.756	19.20	0.126	3.20	3.287	83.50	2.740	69.59	1.827	46.40	1071.98	240.99	98.90	17.32
D23320X	0.756	19.20	0.126	3.20	4.724	120.00	3.918	99.51	2.583	65.60	1071.98	240.99	67.15	11.76
D23230X	0.787	20.00	0.110	2.80	1.071	27.20	0.850	21.60	0.606	15.40	728.40	163.75	167.02	29.25
D23240X	0.787	20.00	0.110	2.80	1.555	39.50	1.209	30.71	0.827	21.00	728.40	163.75	106.38	18.63
D23250X	0.787	20.00	0.110	2.80	2.528	64.20	1.930	49.01	1.268	32.20	728.40	163.75	61.56	10.78
C0850-068-0750-X	0.850	21.59	0.068	1.73	0.750	19.05	0.396	10.06	0.292	7.42	10.58	47.06	29.90	5.24
C0850-068-0875-X	0.850	21.59	0.068	1.73	0.880	22.35	0.454	11.53	0.317	8.05	10.58	47.06	24.82	4.34
C0850-068-1000-X	0.850	21.59	0.068	1.73	1.000	25.40	0.502	12.75	0.342	8.69	10.58	47.06	21.24	3.71
C0850-068-1250-X	0.850	21.59	0.068	1.73	1.250	31.75	0.609	15.46	0.391	9.93	10.58	47.06	16.49	2.89
C0850-068-1500-X	0.850	21.59	0.068	1.73	1.500	38.10	0.711	18.06	0.441	11.20	10.58	47.06	13.41	2.35
C0850-068-1750-X	0.850	21.59	0.068	1.73	1.750	44.45	0.816	20.73	0.490	12.45	10.58	47.06	11.33	1.98
C0850-068-2000-X	0.850	21.59	0.068	1.73	2.000	50.80	0.924	23.46	0.540	13.72	10.58	47.06	9.83	1.72
C0850-068-2250-X	0.850	21.59	0.068	1.73	2.250	57.15	1.029	26.13	0.590	14.99	10.58	47.06	8.66	1.52
C0850-068-2500-X	0.850	21.59	0.068	1.73	2.500	63.50	1.134	28.81	0.639	16.23	10.58	47.06	7.75	1.37
C0850-068-3000-X	0.850	21.59	0.068	1.73	3.000	76.20	1.351	34.31	0.739	18.77	10.58	47.06	6.41	1.12
C0850-068-3500-X	0.850	21.59	0.068	1.73	3.500	88.90	1.546	39.27	0.838	21.29	10.58	47.06	5.41	0.95
C0850-068-4000-X	0.850	21.59	0.068	1.73	4.000	101.60	1.772	45.01	0.937	23.80	10.58	47.06	4.75	0.84
C0850-074-0875-X	0.850	21.59	0.074	1.88	0.880	22.35	0.483	12.26	0.355	9.02	13.27	59.03	33.40	5.85
C0850-074-1000-X	0.850	21.59	0.074	1.88	1.000	25.40	0.534	13.57	0.384	9.75	13.27	59.03	28.49	4.99
C0850-074-1250-X	0.850	21.59	0.074	1.88	1.250	31.75	0.649	16.48	0.443	11.25	13.27	59.03	22.07	3.87
C0850-074-1500-X	0.850	21.59	0.074	1.88	1.500	38.10	0.763	19.37	0.501	12.73	13.27	59.03	17.99	3.15
C0850-074-2000-X	0.850	21.59	0.074	1.88	2.000	50.80	0.992	25.19	0.618	15.70	13.27	59.03	13.16	2.31
C0850-074-2500-X	0.850	21.59	0.074	1.88	2.500	63.50	1.215	30.87	0.735	18.67	13.27	59.03	10.33	1.80
C0850-074-3000-X	0.850	21.59	0.074	1.88	3.000	76.20	1.438	36.53	0.852	21.64	13.27	59.03	8.50	1.49
C0850-074-3500-X	0.850	21.59	0.074	1.88	3.500	88.90	1.669	42.40	0.969	24.61	13.27	59.03	7.25	1.28
C0850-081-0750-X	0.850	21.59	0.081	2.06	0.750	19.05	0.450	11.43	0.365	9.27	16.91	75.22	56.39	9.88
C0850-081-0875-X	0.850	21.59	0.081	2.06	0.880	22.35	0.516	13.11	0.400	10.16	16.91	75.22	46.48	8.14
C0850-081-1000-X	0.850	21.59	0.081	2.06	1.000	25.40	0.573	14.54	0.435	11.05	16.91	75.22	39.57	6.94
C0850-081-1250-X	0.850	21.59	0.081	2.06	1.250	31.75	0.695	17.66	0.504	12.80	16.91	75.22	30.49	5.34
C0850-081-1500-X	0.850	21.59	0.081	2.06	1.500	38.10	0.816	20.74	0.573	14.55	16.91	75.22	24.74	4.33
C0850-081-1750-X	0.850	21.59	0.081	2.06	1.750	44.45	0.941	23.90	0.642	16.31	16.91	75.22	20.91	3.66
C0850-081-2000-X	0.850	21.59	0.081	2.06	2.000	50.80	1.060	26.92	0.712	18.08	16.91	75.22	17.99	3.15
C0850-081-2250-X	0.850	21.59	0.081	2.06	2.250	57.15	1.187	30.15	0.781	19.84	16.91	75.22	15.91	2.78
C0850-081-2500-X	0.850	21.59	0.081	2.06	2.500	63.50	1.306	33.16	0.850	21.59	16.91	75.22	14.16	2.49
C0850-081-2750-X	0.850	21.59	0.081	2.06	2.750	69.85	1.432	36.36	0.920	23.37	16.91	75.22	12.83	2.24
C0850-081-3000-X	0.850	21.59	0.081	2.06	3.000	76.20	1.550	39.36	0.989	25.12	16.91	75.22	11.66	2.05
C0850-081-3500-X	0.850	21.59	0.081	2.06	3.500	88.90	1.794	45.56	1.127	28.63	16.91	75.22	9.91	1.73
C0850-085-0750-X	0.850	21.59	0.085	2.16	0.750	19.05	0.462	11.74	0.388	9.86	19.49	86.70	67.72	11.86
C0850-085-0875-X	0.850	21.59	0.085	2.16	0.880	22.35	0.530	13.47	0.426	10.82	19.49	86.70	55.73	9.75
C0850-085-1000-X	0.850	21.59	0.085	2.16	1.000	25.40	0.588	14.93	0.463	11.76	19.49	86.70	47.31	8.28
C0850-085-1250-X	0.850	21.59	0.085	2.16	1.250	31.75	0.713	18.12	0.539	13.69	19.49	86.70	36.32	6.36
C0850-085-1500-X	0.850	21.59	0.085	2.16	1.500	38.10	0.839	21.31	0.615	15.62	19.49	86.70	29.49	5.17

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0850-085-1750-X	0.850	21.59	0.085	2.16	1.750	44.45	0.965	24.50	0.690	17.53	19.49	86.70	24.82	4.34
C0850-085-2000-X	0.850	21.59	0.085	2.16	2.000	50.80	1.093	27.76	0.766	19.46	19.49	86.70	21.49	3.77
C0850-085-2250-X	0.850	21.59	0.085	2.16	2.250	57.15	1.219	30.96	0.841	21.36	19.49	86.70	18.91	3.31
C0850-085-2500-X	0.850	21.59	0.085	2.16	2.500	63.50	1.341	34.07	0.917	23.29	19.49	86.70	16.83	2.94
C0850-085-2750-X	0.850	21.59	0.085	2.16	2.750	69.85	1.471	37.37	0.992	25.20	19.49	86.70	15.24	2.66
C0850-085-3000-X	0.850	21.59	0.085	2.16	3.000	76.20	1.599	40.60	1.068	27.13	19.49	86.70	13.91	2.43
C0850-085-3250-X	0.850	21.59	0.085	2.16	3.250	82.55	1.720	43.70	1.144	29.06	19.49	86.70	12.74	2.22
C0850-085-3500-X	0.850	21.59	0.085	2.16	3.500	88.90	1.852	47.04	1.219	30.96	19.49	86.70	11.83	2.07
C0850-085-4000-X	0.850	21.59	0.085	2.16	4.000	101.60	2.097	53.27	1.370	34.80	19.49	86.70	10.25	1.80
C0850-092-0880-X	0.850	21.59	0.092	2.34	0.880	22.35	0.552	14.03	0.471	11.96	24.60	109.43	75.05	13.15
C0850-092-1000-X	0.850	21.59	0.092	2.34	1.000	25.40	0.616	15.64	0.513	13.03	24.60	109.43	64.06	11.23
C0850-092-1250-X	0.850	21.59	0.092	2.34	1.250	31.75	0.748	18.99	0.600	15.24	24.60	109.43	48.98	8.58
C0850-092-1500-X	0.850	21.59	0.092	2.34	1.500	38.10	0.881	22.37	0.686	17.42	24.60	109.43	39.73	6.95
C0850-092-1750-X	0.850	21.59	0.092	2.34	1.750	44.45	1.012	25.69	0.773	19.63	24.60	109.43	33.32	5.83
C0850-092-2000-X	0.850	21.59	0.092	2.34	2.000	50.80	1.144	29.05	0.860	21.84	24.60	109.43	28.74	5.03
C0850-092-2250-X	0.850	21.59	0.092	2.34	2.250	57.15	1.278	32.47	0.947	24.05	24.60	109.43	25.32	4.43
C0850-092-2500-X	0.850	21.59	0.092	2.34	2.500	63.50	1.410	35.82	1.033	26.24	24.60	109.43	22.57	3.96
C0850-092-2750-X	0.850	21.59	0.092	2.34	2.750	69.85	1.539	39.10	1.120	28.45	24.60	109.43	20.33	3.56
C0850-092-3000-X	0.850	21.59	0.092	2.34	3.000	76.20	1.675	42.56	1.207	30.66	24.60	109.43	18.58	3.26
C0850-092-3500-X	0.850	21.59	0.092	2.34	3.500	88.90	1.937	49.20	1.380	35.05	24.60	109.43	15.74	2.75
C0850-098-1000-X	0.850	21.59	0.098	2.49	1.000	25.40	0.649	16.47	0.555	14.10	28.90	128.55	82.22	14.40
C0850-098-1250-X	0.850	21.59	0.098	2.49	1.250	31.75	0.789	20.05	0.651	16.54	28.90	128.55	62.72	10.98
C0850-098-1500-X	0.850	21.59	0.098	2.49	1.500	38.10	0.929	23.61	0.747	18.97	28.90	128.55	50.65	8.88
C0850-098-1750-X	0.850	21.59	0.098	2.49	1.750	44.45	1.071	27.21	0.843	21.41	28.90	128.55	42.57	7.46
C0850-098-2000-X	0.850	21.59	0.098	2.49	2.000	50.80	1.212	30.78	0.940	23.88	28.90	128.55	36.65	6.43
C0850-098-2250-X	0.850	21.59	0.098	2.49	2.250	57.15	1.351	34.32	1.036	26.31	28.90	128.55	32.15	5.64
C0850-098-2500-X	0.850	21.59	0.098	2.49	2.500	63.50	1.492	37.89	1.132	28.75	28.90	128.55	28.66	5.03
C0850-098-2750-X	0.850	21.59	0.098	2.49	2.750	69.85	1.635	41.52	1.229	31.22	28.90	128.55	25.91	4.54
C0850-098-3000-X	0.850	21.59	0.098	2.49	3.000	76.20	1.774	45.07	1.325	33.66	28.90	128.55	23.57	4.13
C0850-098-3500-X	0.850	21.59	0.098	2.49	3.500	88.90	2.055	52.19	1.517	38.53	28.90	128.55	19.99	3.50
D22550X	0.850	21.60	0.063	1.60	1.890	48.00	1.241	31.52	0.346	8.80	145.19	32.64	11.31	1.98
D22560X	0.850	21.60	0.063	1.60	2.894	73.50	1.882	47.80	0.472	12.00	145.19	32.64	7.25	1.27
D22570X	0.850	21.60	0.063	1.60	4.331	110.00	2.764	70.20	0.661	16.80	145.19	32.64	4.68	0.82
D22580X	0.850	21.60	0.063	1.60	6.496	165.00	4.201	106.71	0.913	23.20	145.19	32.64	3.20	0.56
D22590X	0.850	21.60	0.063	1.60	9.449	240.00	5.976	151.78	1.291	32.80	145.19	32.64	2.11	0.37
D22750X	0.866	22.00	0.079	2.00	1.614	41.00	1.128	28.66	0.433	11.00	266.76	59.97	27.75	4.86
D22760X	0.866	22.00	0.079	2.00	2.441	62.00	1.677	42.59	0.591	15.00	266.76	59.97	17.64	3.09
D22770X	0.866	22.00	0.079	2.00	3.701	94.00	2.514	63.86	0.827	21.00	266.76	59.97	11.36	1.99
D22780X	0.866	22.00	0.079	2.00	5.315	135.00	3.579	90.90	1.142	29.00	266.76	59.97	7.77	1.36
D22790X	0.866	22.00	0.079	2.00	7.874	200.00	5.308	134.82	1.614	41.00	266.76	59.97	5.25	0.92
D23040X	0.886	22.50	0.098	2.50	1.417	36.00	1.057	26.86	0.541	13.75	482.01	108.36	67.67	11.85
D23050X	0.886	22.50	0.098	2.50	2.126	54.00	1.560	39.63	0.738	18.75	482.01	108.36	43.05	7.54
D23060X	0.886	22.50	0.098	2.50	3.209	81.50	2.333	59.25	1.033	26.25	482.01	108.36	27.81	4.87
D23070X	0.886	22.50	0.098	2.50	4.724	120.00	3.439	87.36	1.427	36.25	482.01	108.36	18.96	3.32
D23080X	0.886	22.50	0.098	2.50	6.890	175.00	4.985	126.63	2.018	51.25	482.01	108.36	12.79	2.24
D23330X	0.913	23.20	0.126	3.20	1.319	33.50	1.067	27.10	0.693	17.60	905.44	203.55	181.47	31.78
D23340X	0.913	23.20	0.126	3.20	1.949	49.50	1.552	39.41	0.945	24.00	905.44	203.55	115.23	20.18
D23350X	0.913	23.20	0.126	3.20	2.913	74.00	2.300	58.43	1.323	33.60	905.44	203.55	74.63	13.07
D23360X	0.913	23.20	0.126	3.20	4.134	105.00	3.233	82.13	1.827	46.40	905.44	203.55	50.82	8.90
D23370X	0.913	23.20	0.126	3.20	6.102	155.00	3.440	87.38	2.583	65.60	905.44	203.55	17.19	3.01
D22920X	0.945	24.00	0.087	2.20	1.543	39.20	1.026	26.07	0.476	12.10	319.52	71.83	31.23	5.47
D22930X	0.945	24.00	0.087	2.20	2.327	59.10	1.517	38.52	0.650	16.50	319.52	71.83	19.93	3.49
D23530X	0.945	24.00	0.157	4.00	1.319	33.50	1.141	28.99	0.866	22.00	1555.99	349.80	442.71	77.53
D23540X	0.945	24.00	0.157	4.00	1.929	49.00	1.650	41.91	1.181	30.00	1555.99	349.80	281.74	49.34
D23550X	0.945	24.00	0.157	4.00	2.835	72.00	2.404	61.05	1.654	42.00	1555.99	349.80	182.38	31.94
D23560X	0.945	24.00	0.157	4.00	4.134	105.00	3.500	88.90	2.283	58.00	1555.99	349.80	124.08	21.73
D23570X	0.945	24.00	0.157	4.00	5.906	150.00	4.963	126.07	3.228	82.00	1555.99	349.80	83.48	14.62
C0975-074-0750-X	0.975	24.77	0.074	1.88	0.750	19.05	0.399	10.14	0.295	7.49	11.63	51.73	33.15	5.81
C0975-074-0875-X	0.975	24.77	0.074	1.88	0.880	22.35	0.457	11.60	0.317	8.05	11.63	51.73	27.49	4.82
C0975-074-1000-X	0.975	24.77	0.074	1.88	1.000	25.40	0.503	12.78	0.340	8.64	11.63	51.73	23.41	4.10
C0975-074-1250-X	0.975	24.77	0.074	1.88	1.250	31.75	0.606	15.40	0.386	9.80	11.63	51.73	18.08	3.17
C0975-074-1500-X	0.975	24.77	0.074	1.88	1.500	38.10	0.711	18.06	0.431	10.95	11.63	51.73	14.74	2.57
C0975-074-2000-X	0.975	24.77	0.074	1.88	2.000	50.80	0.917	23.30	0.522	13.26	11.63	51.73	10.75	1.89
C0975-074-2500-X	0.975	24.77	0.074	1.88	2.500	63.50	1.131	28.72	0.613	15.57	11.63	51.73	8.50	1.49

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0975-074-3000-X	0.975	24.77	0.074	1.88	3.000	76.20	1.337	33.97	0.704	17.88	11.63	51.73	7.00	1.23
C0975-074-3500-X	0.975	24.77	0.074	1.88	3.500	88.90	1.533	38.94	0.795	20.19	11.63	51.73	5.91	1.03
C0975-074-4000-X	0.975	24.77	0.074	1.88	4.000	101.60	1.748	44.39	0.886	22.50	11.63	51.73	5.16	0.91
C0975-085-0875-X	0.975	24.77	0.085	2.16	0.880	22.35	0.498	12.65	0.381	9.68	17.11	76.11	44.82	7.85
C0975-085-1000-X	0.975	24.77	0.085	2.16	1.000	25.40	0.550	13.98	0.411	10.44	17.11	76.11	38.07	6.67
C0975-085-1250-X	0.975	24.77	0.085	2.16	1.250	31.75	0.665	16.88	0.470	11.94	17.11	76.11	29.24	5.11
C0975-085-1500-X	0.975	24.77	0.085	2.16	1.500	38.10	0.779	19.79	0.530	13.46	17.11	76.11	23.74	4.15
C0975-085-2000-X	0.975	24.77	0.085	2.16	2.000	50.80	1.008	25.59	0.649	16.48	17.11	76.11	17.24	3.01
C0975-085-2500-X	0.975	24.77	0.085	2.16	2.500	63.50	1.240	31.49	0.769	19.53	17.11	76.11	13.58	2.38
C0975-085-3000-X	0.975	24.77	0.085	2.16	3.000	76.20	1.467	37.26	0.888	22.56	17.11	76.11	11.16	1.96
C0975-085-3500-X	0.975	24.77	0.085	2.16	3.500	88.90	1.698	43.13	1.007	25.58	17.11	76.11	9.50	1.66
C0975-092-0875-X	0.975	24.77	0.092	2.34	0.880	22.35	0.520	13.20	0.421	10.69	21.62	96.17	59.98	10.51
C0975-092-1000-X	0.975	24.77	0.092	2.34	1.000	25.40	0.575	14.59	0.456	11.58	21.62	96.17	50.81	8.90
C0975-092-1250-X	0.975	24.77	0.092	2.34	1.250	31.75	0.694	17.64	0.525	13.34	21.62	96.17	38.90	6.81
C0975-092-1500-X	0.975	24.77	0.092	2.34	1.500	38.10	0.814	20.66	0.594	15.09	21.62	96.17	31.49	5.52
C0975-092-2000-X	0.975	24.77	0.092	2.34	2.000	50.80	1.053	26.74	0.732	18.59	21.62	96.17	22.82	3.99
C0975-092-2500-X	0.975	24.77	0.092	2.34	2.500	63.50	1.293	32.84	0.871	22.12	21.62	96.17	17.91	3.13
C0975-092-3000-X	0.975	24.77	0.092	2.34	3.000	76.20	1.534	38.96	1.009	25.63	21.62	96.17	14.74	2.57
C0975-092-3500-X	0.975	24.77	0.092	2.34	3.500	88.90	1.770	44.96	1.147	29.13	21.62	96.17	12.50	2.19
C0975-092-4000-X	0.975	24.77	0.092	2.34	4.000	101.60	2.004	50.90	1.286	32.66	21.62	96.17	10.83	1.89
C0975-096-0875-X	0.975	24.77	0.096	2.44	0.880	22.35	0.541	13.74	0.444	11.28	23.91	106.36	70.47	12.35
C0975-096-1000-X	0.975	24.77	0.096	2.44	1.000	25.40	0.599	15.20	0.481	12.22	23.91	106.36	59.56	10.44
C0975-096-1250-X	0.975	24.77	0.096	2.44	1.250	31.75	0.724	18.40	0.556	14.12	23.91	106.36	45.48	7.97
C0975-096-1500-X	0.975	24.77	0.096	2.44	1.500	38.10	0.851	21.61	0.631	16.03	23.91	106.36	36.82	6.44
C0975-096-2000-X	0.975	24.77	0.096	2.44	2.000	50.80	1.100	27.95	0.780	19.81	23.91	106.36	26.57	4.66
C0975-096-2500-X	0.975	24.77	0.096	2.44	2.500	63.50	1.352	34.34	0.930	23.62	23.91	106.36	20.83	3.64
C0975-096-3000-X	0.975	24.77	0.096	2.44	3.000	76.20	1.607	40.81	1.079	27.41	23.91	106.36	17.16	3.01
C0975-096-3500-X	0.975	24.77	0.096	2.44	3.500	88.90	1.860	47.24	1.228	31.19	23.91	106.36	14.58	2.56
C0975-105-0880-X	0.975	24.77	0.105	2.67	0.880	22.35	0.566	14.38	0.496	12.60	31.12	138.43	99.21	17.37
C0975-105-1000-X	0.975	24.77	0.105	2.67	1.000	25.40	0.630	16.00	0.538	13.67	31.12	138.43	84.13	14.73
C0975-105-1250-X	0.975	24.77	0.105	2.67	1.250	31.75	0.763	19.38	0.626	15.90	31.12	138.43	63.89	11.19
C0975-105-1500-X	0.975	24.77	0.105	2.67	1.500	38.10	0.895	22.75	0.713	18.11	31.12	138.43	51.48	9.02
C0975-105-1750-X	0.975	24.77	0.105	2.67	1.750	44.45	1.029	26.13	0.800	20.32	31.12	138.43	43.15	7.57
C0975-105-2000-X	0.975	24.77	0.105	2.67	2.000	50.80	1.162	29.52	0.888	22.56	31.12	138.43	37.15	6.51
C0975-105-2250-X	0.975	24.77	0.105	2.67	2.250	57.15	1.295	32.88	0.975	24.77	31.12	138.43	32.57	5.71
C0975-105-2500-X	0.975	24.77	0.105	2.67	2.500	63.50	1.426	36.23	1.062	26.97	31.12	138.43	28.99	5.08
C0975-105-2750-X	0.975	24.77	0.105	2.67	2.750	69.85	1.560	39.63	1.149	29.18	31.12	138.43	26.16	4.59
C0975-105-3000-X	0.975	24.77	0.105	2.67	3.000	76.20	1.694	43.02	1.237	31.42	31.12	138.43	23.82	4.17
C0975-105-3500-X	0.975	24.77	0.105	2.67	3.500	88.90	1.963	49.85	1.411	35.84	31.12	138.43	20.24	3.54
C0975-105-4000-X	0.975	24.77	0.105	2.67	4.000	101.60	2.229	56.63	1.586	40.28	31.12	138.43	17.58	3.08
C0975-112-0880-X	0.975	24.77	0.112	2.84	0.880	22.35	0.595	15.12	0.535	13.59	36.67	163.12	128.87	22.57
C0975-112-1000-X	0.975	24.77	0.112	2.84	1.000	25.40	0.663	16.85	0.581	14.76	36.67	163.12	108.96	19.09
C0975-112-1250-X	0.975	24.77	0.112	2.84	1.250	31.75	0.805	20.44	0.679	17.25	36.67	163.12	82.38	14.43
C0975-112-1500-X	0.975	24.77	0.112	2.84	1.500	38.10	0.946	24.03	0.776	19.71	36.67	163.12	66.22	11.59
C0975-112-2000-X	0.975	24.77	0.112	2.84	2.000	50.80	1.229	31.22	0.970	24.64	36.67	163.12	47.56	8.34
C0975-112-2500-X	0.975	24.77	0.112	2.84	2.500	63.50	1.513	38.43	1.164	29.57	36.67	163.12	37.15	6.51
C0975-112-3000-X	0.975	24.77	0.112	2.84	3.000	76.20	1.797	45.65	1.358	34.49	36.67	163.12	30.49	5.34
C0975-112-3500-X	0.975	24.77	0.112	2.84	3.500	88.90	2.080	52.83	1.553	39.45	36.67	163.12	25.82	4.52
C0975-125-0880-X	0.975	24.77	0.125	3.18	0.880	22.35	0.646	16.42	0.602	15.29	47.98	213.43	205.42	35.97
C0975-125-1000-X	0.975	24.77	0.125	3.18	1.000	25.40	0.722	18.34	0.657	16.69	47.98	213.43	172.60	30.23
C0975-125-1250-X	0.975	24.77	0.125	3.18	1.250	31.75	0.879	22.34	0.772	19.61	47.98	213.43	129.45	22.68
C0975-125-1500-X	0.975	24.77	0.125	3.18	1.500	38.10	1.037	26.33	0.887	22.53	47.98	213.43	103.54	18.13
C0975-125-1750-X	0.975	24.77	0.125	3.18	1.750	44.45	1.194	30.33	1.002	25.45	47.98	213.43	86.30	15.11
C0975-125-2000-X	0.975	24.77	0.125	3.18	2.000	50.80	1.351	34.33	1.117	28.37	47.98	213.43	73.97	12.96
C0975-125-2250-X	0.975	24.77	0.125	3.18	2.250	57.15	1.509	38.32	1.232	31.29	47.98	213.43	64.72	11.33
C0975-125-2500-X	0.975	24.77	0.125	3.18	2.500	63.50	1.667	42.33	1.347	34.21	47.98	213.43	57.56	10.09
C0975-125-2750-X	0.975	24.77	0.125	3.18	2.750	69.85	1.824	46.33	1.462	37.13	47.98	213.43	51.81	9.07
C0975-125-3000-X	0.975	24.77	0.125	3.18	3.000	76.20	1.981	50.31	1.577	40.06	47.98	213.43	47.06	8.25
C0975-125-3500-X	0.975	24.77	0.125	3.18	3.500	88.90	2.295	58.30	1.807	45.90	47.98	213.43	39.82	6.97
C0975-125-4000-X	0.975	24.77	0.125	3.18	4.000	101.60	2.609	66.26	2.037	51.74	47.98	213.43	34.49	6.04
C0975-135-0880-X	0.975	24.77	0.135	3.43	0.880	22.35	0.678	17.22	0.643	16.33	60.04	267.07	297.05	52.03
C0975-135-1000-X	0.975	24.77	0.135	3.43	1.000	25.40	0.758	19.26	0.703	17.86	60.04	267.07	248.23	43.47
C0975-135-1500-X	0.975	24.77	0.135	3.43	1.500	38.10	1.092	27.75	0.953	24.21	60.04	267.07	147.27	25.80
C0975-135-2000-X	0.975	24.77	0.135	3.43	2.000	50.80	1.427	36.24	1.203	30.56	60.04	267.07	104.71	18.34

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C0975-135-2500-X	0.975	24.77	0.135	3.43	2.500	63.50	1.761	44.72	1.453	36.91	60.04	267.07	81.22	14.22
C0975-135-3000-X	0.975	24.77	0.135	3.43	3.000	76.20	2.096	53.23	1.703	43.26	60.04	267.07	66.39	11.63
C0975-135-3500-X	0.975	24.77	0.135	3.43	3.500	88.90	2.429	61.70	1.953	49.61	60.04	267.07	56.06	9.82
C0975-135-4000-X	0.975	24.77	0.135	3.43	4.000	101.60	2.764	70.20	2.203	55.96	60.04	267.07	48.56	8.51
C0975-148-1000-X	0.975	24.77	0.148	3.76	1.000	25.40	0.795	20.19	0.763	19.38	78.39	348.70	382.35	66.97
C0975-148-1500-X	0.975	24.77	0.148	3.76	1.500	38.10	1.149	29.19	1.042	26.47	78.39	348.70	223.58	39.16
C0975-148-2000-X	0.975	24.77	0.148	3.76	2.000	50.80	1.504	38.19	1.322	33.58	78.39	348.70	157.94	27.65
C0975-148-2500-X	0.975	24.77	0.148	3.76	2.500	63.50	1.858	47.20	1.601	40.67	78.39	348.70	122.12	21.38
C0975-148-3000-X	0.975	24.77	0.148	3.76	3.000	76.20	2.213	56.20	1.880	47.75	78.39	348.70	99.54	17.43
C0975-148-3500-X	0.975	24.77	0.148	3.76	3.500	88.90	2.567	65.21	2.159	54.84	78.39	348.70	84.05	14.73
C0975-148-4000-X	0.975	24.77	0.148	3.76	4.000	101.60	2.921	74.19	2.439	61.95	78.39	348.70	72.64	12.71
C0975-162-1500-X	0.975	24.77	0.162	4.11	1.500	38.10	1.214	30.83	1.124	28.55	98.98	440.28	345.86	60.58
C0975-162-2000-X	0.975	24.77	0.162	4.11	2.000	50.80	1.592	40.44	1.430	36.32	98.98	440.28	242.65	42.50
C0975-162-2500-X	0.975	24.77	0.162	4.11	2.500	63.50	1.971	50.05	1.735	44.07	98.98	440.28	186.93	32.73
C0975-162-3000-X	0.975	24.77	0.162	4.11	3.000	76.20	2.349	59.66	2.041	51.84	98.98	440.28	152.02	26.62
C0975-162-3500-X	0.975	24.77	0.162	4.11	3.500	88.90	2.727	69.26	2.347	59.61	98.98	440.28	128.03	22.42
C0975-162-4000-X	0.975	24.77	0.162	4.11	4.000	101.60	3.105	78.87	2.652	67.36	98.98	440.28	110.62	19.37
D22800X	1.063	27.00	0.079	2.00	2.283	58.00	1.501	38.13	0.433	11.00	219.21	49.28	14.16	2.48
D22810X	1.063	27.00	0.079	2.00	3.484	88.50	2.256	57.31	0.591	15.00	219.21	49.28	9.02	1.58
D22820X	1.063	27.00	0.079	2.00	5.315	135.00	3.413	86.69	0.827	21.00	219.21	49.28	5.82	1.02
D22830X	1.063	27.00	0.079	2.00	7.677	195.00	4.865	123.58	1.142	29.00	219.21	49.28	3.94	0.69
D22840X	1.063	27.00	0.079	2.00	11.417	290.00	7.289	185.15	1.614	41.00	219.21	49.28	2.68	0.47
D23090X	1.083	27.50	0.098	2.50	1.929	49.00	1.348	34.23	0.541	13.75	398.78	89.65	34.66	6.07
D23100X	1.083	27.50	0.098	2.50	2.933	74.50	2.021	51.33	0.738	18.75	398.78	89.65	22.10	3.87
D23110X	1.083	27.50	0.098	2.50	4.528	115.00	3.116	79.14	1.033	26.25	398.78	89.65	14.28	2.50
D23120X	1.083	27.50	0.098	2.50	6.496	165.00	4.420	112.26	1.427	36.25	398.78	89.65	9.71	1.70
D23130X	1.083	27.50	0.098	2.50	9.449	240.00	6.380	162.04	2.018	51.25	398.78	89.65	6.57	1.15
C1100-085-0875-X	1.100	27.94	0.085	2.16	0.880	22.35	0.474	12.05	0.348	8.84	15.24	67.79	37.57	6.58
C1100-085-1000-X	1.100	27.94	0.085	2.16	1.000	25.40	0.522	13.26	0.372	9.45	15.24	67.79	31.90	5.59
C1100-085-1250-X	1.100	27.94	0.085	2.16	1.250	31.75	0.630	15.99	0.420	10.67	15.24	67.79	24.57	4.31
C1100-085-1500-X	1.100	27.94	0.085	2.16	1.500	38.10	0.734	18.65	0.467	11.86	15.24	67.79	19.91	3.49
C1100-085-2000-X	1.100	27.94	0.085	2.16	2.000	50.80	0.948	24.09	0.563	14.30	15.24	67.79	14.49	2.54
C1100-085-2500-X	1.100	27.94	0.085	2.16	2.500	63.50	1.164	29.57	0.659	16.74	15.24	67.79	11.41	2.00
C1100-085-3000-X	1.100	27.94	0.085	2.16	3.000	76.20	1.366	34.70	0.755	19.18	15.24	67.79	9.33	1.63
C1100-085-3500-X	1.100	27.94	0.085	2.16	3.500	88.90	1.594	40.48	0.851	21.62	15.24	67.79	8.00	1.40
C1100-085-4000-X	1.100	27.94	0.085	2.16	4.000	101.60	1.795	45.60	0.947	24.05	15.24	67.79	6.91	1.21
C1100-085-4500-X	1.100	27.94	0.085	2.16	4.500	114.30	1.993	50.62	1.043	26.49	15.24	67.79	6.08	1.07
C1100-085-5000-X	1.100	27.94	0.085	2.16	5.000	127.00	2.227	56.57	1.139	28.93	15.24	67.79	5.50	0.96
C1100-096-0875-X	1.100	27.94	0.096	2.44	0.880	22.35	0.513	13.04	0.406	10.31	21.32	94.84	58.14	10.17
C1100-096-1000-X	1.100	27.94	0.096	2.44	1.000	25.40	0.566	14.38	0.436	11.07	21.32	94.84	49.15	8.62
C1100-096-1250-X	1.100	27.94	0.096	2.44	1.250	31.75	0.683	17.34	0.497	12.62	21.32	94.84	37.57	6.58
C1100-096-1500-X	1.100	27.94	0.096	2.44	1.500	38.10	0.799	20.29	0.558	14.17	21.32	94.84	30.40	5.32
C1100-096-2000-X	1.100	27.94	0.096	2.44	2.000	50.80	1.031	26.18	0.679	17.25	21.32	94.84	21.99	3.85
C1100-096-2500-X	1.100	27.94	0.096	2.44	2.500	63.50	1.264	32.10	0.800	20.32	21.32	94.84	17.24	3.01
C1100-096-3000-X	1.100	27.94	0.096	2.44	3.000	76.20	1.495	37.96	0.922	23.42	21.32	94.84	14.16	2.49
C1100-096-3500-X	1.100	27.94	0.096	2.44	3.500	88.90	1.723	43.76	1.043	26.49	21.32	94.84	12.00	2.10
C1100-096-4000-X	1.100	27.94	0.096	2.44	4.000	101.60	1.953	49.60	1.165	29.59	21.32	94.84	10.41	1.82
C1100-096-4500-X	1.100	27.94	0.096	2.44	4.500	114.30	2.194	55.74	1.286	32.66	21.32	94.84	9.25	1.63
C1100-105-0875-X	1.100	27.94	0.105	2.67	0.880	22.35	0.539	13.68	0.453	11.51	27.77	123.53	81.38	14.26
C1100-105-1000-X	1.100	27.94	0.105	2.67	1.000	25.40	0.594	15.10	0.489	12.42	27.77	123.53	68.47	12.00
C1100-105-1250-X	1.100	27.94	0.105	2.67	1.250	31.75	0.717	18.20	0.561	14.25	27.77	123.53	52.06	9.12
C1100-105-1500-X	1.100	27.94	0.105	2.67	1.500	38.10	0.838	21.30	0.632	16.05	27.77	123.53	41.98	7.36
C1100-105-2000-X	1.100	27.94	0.105	2.67	2.000	50.80	1.082	27.47	0.776	19.71	27.77	123.53	30.24	5.29
C1100-105-2500-X	1.100	27.94	0.105	2.67	2.500	63.50	1.326	33.68	0.919	23.34	27.77	123.53	23.66	4.15
C1100-105-3000-X	1.100	27.94	0.105	2.67	3.000	76.20	1.569	39.86	1.062	26.97	27.77	123.53	19.41	3.40
C1100-105-3500-X	1.100	27.94	0.105	2.67	3.500	88.90	1.808	45.91	1.206	30.63	27.77	123.53	16.41	2.87
C1100-112-0875-X	1.100	27.94	0.112	2.84	0.880	22.35	0.567	14.40	0.489	12.42	32.75	145.68	104.54	18.30
C1100-112-1000-X	1.100	27.94	0.112	2.84	1.000	25.40	0.627	15.92	0.530	13.46	32.75	145.68	87.71	15.36
C1100-112-1250-X	1.100	27.94	0.112	2.84	1.250	31.75	0.756	19.21	0.610	15.49	32.75	145.68	66.31	11.61
C1100-112-1500-X	1.100	27.94	0.112	2.84	1.500	38.10	0.886	22.50	0.690	17.53	32.75	145.68	53.31	9.33
C1100-112-1750-X	1.100	27.94	0.112	2.84	1.750	44.45	1.015	25.79	0.771	19.58	32.75	145.68	44.57	7.81
C1100-112-2000-X	1.100	27.94	0.112	2.84	2.000	50.80	1.145	29.09	0.851	21.62	32.75	145.68	38.32	6.71
C1100-112-2250-X	1.100	27.94	0.112	2.84	2.250	57.15	1.274	32.37	0.932	23.67	32.75	145.68	33.57	5.88
C1100-112-2500-X	1.100	27.94	0.112	2.84	2.500	63.50	1.405	35.68	1.012	25.70	32.75	145.68	29.90	5.24

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1100-112-3000-X	1.100	27.94	0.112	2.84	3.000	76.20	1.663	42.24	1.173	29.79	32.75	145.68	24.49	4.29
C1100-112-3500-X	1.100	27.94	0.112	2.84	3.500	88.90	1.921	48.80	1.333	33.86	32.75	145.68	20.74	3.63
C1100-112-4000-X	1.100	27.94	0.112	2.84	4.000	101.60	2.180	55.37	1.494	37.95	32.75	145.68	17.99	3.15
C1100-112-4500-X	1.100	27.94	0.112	2.84	4.500	114.30	2.442	62.02	1.655	42.04	32.75	145.68	15.91	2.78
C1100-125-0880-X	1.100	27.94	0.125	3.18	0.880	22.35	0.615	15.62	0.556	14.12	42.90	190.83	161.85	28.35
C1100-125-1000-X	1.100	27.94	0.125	3.18	1.000	25.40	0.684	17.38	0.603	15.32	42.90	190.83	135.95	23.82
C1100-125-1250-X	1.100	27.94	0.125	3.18	1.250	31.75	0.829	21.06	0.699	17.75	42.90	190.83	101.96	17.86
C1100-125-1500-X	1.100	27.94	0.125	3.18	1.500	38.10	0.974	24.74	0.796	20.22	42.90	190.83	81.55	14.29
C1100-125-1750-X	1.100	27.94	0.125	3.18	1.750	44.45	1.119	28.42	0.893	22.68	42.90	190.83	67.97	11.91
C1100-125-2000-X	1.100	27.94	0.125	3.18	2.000	50.80	1.263	32.09	0.989	25.12	42.90	190.83	58.23	10.19
C1100-125-2250-X	1.100	27.94	0.125	3.18	2.250	57.15	1.408	35.77	1.086	27.58	42.90	190.83	50.98	8.93
C1100-125-2500-X	1.100	27.94	0.125	3.18	2.500	63.50	1.553	39.45	1.183	30.05	42.90	190.83	45.32	7.93
C1100-125-3000-X	1.100	27.94	0.125	3.18	3.000	76.20	1.843	46.80	1.376	34.95	42.90	190.83	37.07	6.50
C1100-125-3500-X	1.100	27.94	0.125	3.18	3.500	88.90	2.134	54.20	1.569	39.85	42.90	190.83	31.40	5.50
C1100-125-4000-X	1.100	27.94	0.125	3.18	4.000	101.60	2.420	61.47	1.763	44.78	42.90	190.83	27.16	4.76
C1100-125-4500-X	1.100	27.94	0.125	3.18	4.500	114.30	2.712	68.88	1.956	49.68	42.90	190.83	23.99	4.20
C1100-135-1500-X	1.100	27.94	0.135	3.43	1.500	38.10	1.017	25.84	0.874	22.20	53.75	239.09	111.37	19.51
C1100-135-2000-X	1.100	27.94	0.135	3.43	2.000	50.80	1.321	33.57	1.092	27.74	53.75	239.09	79.22	13.87
C1100-135-2500-X	1.100	27.94	0.135	3.43	2.500	63.50	1.626	41.29	1.310	33.27	53.75	239.09	61.48	10.77
C1100-135-3000-X	1.100	27.94	0.135	3.43	3.000	76.20	1.930	49.02	1.528	38.81	53.75	239.09	50.23	8.79
C1100-135-3500-X	1.100	27.94	0.135	3.43	3.500	88.90	2.232	56.70	1.746	44.35	53.75	239.09	42.40	7.43
C1100-135-4000-X	1.100	27.94	0.135	3.43	4.000	101.60	2.537	64.44	1.964	49.89	53.75	239.09	36.74	6.43
C1100-135-4500-X	1.100	27.94	0.135	3.43	4.500	114.30	2.841	72.17	2.182	55.42	53.75	239.09	32.40	5.67
C1100-135-5000-X	1.100	27.94	0.135	3.43	5.000	127.00	3.146	79.90	2.400	60.96	53.75	239.09	28.99	5.08
D23380X	1.110	28.20	0.126	3.20	1.673	42.50	1.259	31.99	0.693	17.60	756.29	170.02	92.39	16.18
D23390X	1.110	28.20	0.126	3.20	2.500	63.50	1.850	46.99	0.945	24.00	756.29	170.02	58.81	10.30
D23400X	1.110	28.20	0.126	3.20	3.720	94.50	2.719	69.05	1.323	33.60	756.29	170.02	38.14	6.68
D23410X	1.110	28.20	0.126	3.20	5.315	135.00	3.841	97.55	1.827	46.40	756.29	170.02	25.92	4.54
D23420X	1.110	28.20	0.126	3.20	7.874	200.00	5.694	144.62	2.583	65.60	756.29	170.02	17.53	3.07
D23580X	1.142	29.00	0.157	4.00	1.614	41.00	1.321	33.56	0.866	22.00	1314.23	295.45	226.69	39.70
D23590X	1.142	29.00	0.157	4.00	2.382	60.50	1.921	48.79	1.181	30.00	1314.23	295.45	144.12	25.24
D23600X	1.142	29.00	0.157	4.00	3.524	89.50	2.812	71.42	1.654	42.00	1314.23	295.45	93.30	16.34
D23610X	1.142	29.00	0.157	4.00	5.118	130.00	4.071	103.41	2.283	58.00	1314.23	295.45	63.44	11.11
D23620X	1.142	29.00	0.157	4.00	7.283	185.00	5.735	145.66	3.228	82.00	1314.23	295.45	42.88	7.51
D23260X	1.181	30.00	0.110	2.80	1.850	47.00	1.253	31.83	0.606	15.40	499.31	112.25	42.26	7.40
D23270X	1.181	30.00	0.110	2.80	2.783	70.70	1.845	46.87	0.827	21.00	499.31	112.25	26.89	4.71
D23780X	1.181	30.00	0.197	5.00	1.614	41.00	1.413	35.89	1.083	27.50	2209.30	496.67	555.08	97.21
D23790X	1.181	30.00	0.197	5.00	2.362	60.00	2.045	51.95	1.476	37.50	2209.30	496.67	352.20	61.68
D23800X	1.181	30.00	0.197	5.00	3.445	87.50	2.954	75.04	2.067	52.50	2209.30	496.67	227.66	39.87
D23810X	1.181	30.00	0.197	5.00	4.921	125.00	4.201	106.71	2.854	72.50	2209.30	496.67	155.03	27.15
D23820X	1.181	30.00	0.197	5.00	7.087	180.00	6.018	152.86	4.035	102.50	2209.30	496.67	104.50	18.30
C1225-085-0875-X	1.225	31.12	0.085	2.16	0.880	22.35	0.429	10.90	0.330	8.38	13.74	61.12	30.49	5.34
C1225-085-1000-X	1.225	31.12	0.085	2.16	1.000	25.40	0.470	11.93	0.351	8.92	13.74	61.12	25.91	4.54
C1225-085-1500-X	1.225	31.12	0.085	2.16	1.500	38.10	0.650	16.50	0.434	11.02	13.74	61.12	16.16	2.84
C1225-085-2000-X	1.225	31.12	0.085	2.16	2.000	50.80	0.830	21.08	0.518	13.16	13.74	61.12	11.75	2.07
C1225-085-2500-X	1.225	31.12	0.085	2.16	2.500	63.50	1.014	25.75	0.601	15.27	13.74	61.12	9.25	1.63
C1225-085-3000-X	1.225	31.12	0.085	2.16	3.000	76.20	1.187	30.15	0.684	17.37	13.74	61.12	7.58	1.33
C1225-085-3500-X	1.225	31.12	0.085	2.16	3.500	88.90	1.385	35.18	0.768	19.51	13.74	61.12	6.50	1.14
C1225-085-4000-X	1.225	31.12	0.085	2.16	4.000	101.60	1.538	39.06	0.851	21.62	13.74	61.12	5.58	0.98
C1225-085-4500-X	1.225	31.12	0.085	2.16	4.500	114.30	1.751	44.46	0.934	23.72	13.74	61.12	5.00	0.88
C1225-085-5000-X	1.225	31.12	0.085	2.16	5.000	127.00	1.887	47.94	1.018	25.86	13.74	61.12	4.41	0.77
C1225-096-0875-X	1.225	31.12	0.096	2.44	0.880	22.35	0.493	12.51	0.377	9.58	19.23	85.54	49.65	8.70
C1225-096-1000-X	1.225	31.12	0.096	2.44	1.000	25.40	0.542	13.77	0.402	10.21	19.23	85.54	41.98	7.36
C1225-096-1250-X	1.225	31.12	0.096	2.44	1.250	31.75	0.650	16.52	0.452	11.48	19.23	85.54	32.07	5.62
C1225-096-1500-X	1.225	31.12	0.096	2.44	1.500	38.10	0.758	19.25	0.502	12.75	19.23	85.54	25.91	4.54
C1225-096-1750-X	1.225	31.12	0.096	2.44	1.750	44.45	0.866	21.98	0.552	14.02	19.23	85.54	21.74	3.80
C1225-096-2000-X	1.225	31.12	0.096	2.44	2.000	50.80	0.974	24.74	0.602	15.29	19.23	85.54	18.74	3.27
C1225-096-2250-X	1.225	31.12	0.096	2.44	2.250	57.15	1.084	27.54	0.652	16.56	19.23	85.54	16.49	2.89
C1225-096-2500-X	1.225	31.12	0.096	2.44	2.500	63.50	1.188	30.18	0.702	17.83	19.23	85.54	14.66	2.57
C1225-096-2750-X	1.225	31.12	0.096	2.44	2.750	69.85	1.298	32.97	0.752	19.10	19.23	85.54	13.24	2.31
C1225-096-3000-X	1.225	31.12	0.096	2.44	3.000	76.20	1.408	35.76	0.802	20.37	19.23	85.54	12.08	2.12
C1225-096-3500-X	1.225	31.12	0.096	2.44	3.500	88.90	1.623	41.23	0.902	22.91	19.23	85.54	10.25	1.80
C1225-096-4000-X	1.225	31.12	0.096	2.44	4.000	101.60	1.843	46.80	1.002	25.45	19.23	85.54	8.91	1.56
C1225-096-4500-X	1.225	31.12	0.096	2.44	4.500	114.30	2.070	52.58	1.102	27.99	19.23	85.54	7.91	1.38

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1225-096-5000-X	1.225	31.12	0.096	2.44	5.000	127.00	2.284	58.02	1.202	30.53	19.23	85.54	7.08	1.24
C1225-105-0875-X	1.225	31.12	0.105	2.67	0.880	22.35	0.515	13.09	0.421	10.69	25.07	111.52	68.72	12.03
C1225-105-1000-X	1.225	31.12	0.105	2.67	1.000	25.40	0.567	14.40	0.450	11.43	25.07	111.52	57.89	10.14
C1225-105-1250-X	1.225	31.12	0.105	2.67	1.250	31.75	0.680	17.27	0.510	12.95	25.07	111.52	43.98	7.71
C1225-105-1500-X	1.225	31.12	0.105	2.67	1.500	38.10	0.792	20.12	0.569	14.45	25.07	111.52	35.40	6.20
C1225-105-2000-X	1.225	31.12	0.105	2.67	2.000	50.80	1.020	25.90	0.688	17.48	25.07	111.52	25.57	4.48
C1225-105-2500-X	1.225	31.12	0.105	2.67	2.500	63.50	1.246	31.65	0.807	20.50	25.07	111.52	19.99	3.50
C1225-105-3000-X	1.225	31.12	0.105	2.67	3.000	76.20	1.472	37.40	0.926	23.52	25.07	111.52	16.41	2.87
C1225-105-3500-X	1.225	31.12	0.105	2.67	3.500	88.90	1.698	43.13	1.045	26.54	25.07	111.52	13.91	2.43
C1225-105-4000-X	1.225	31.12	0.105	2.67	4.000	101.60	1.925	48.89	1.164	29.57	25.07	111.52	12.08	2.12
C1225-105-4500-X	1.225	31.12	0.105	2.67	4.500	114.30	2.149	54.59	1.283	32.59	25.07	111.52	10.66	1.87
C1225-105-5000-X	1.225	31.12	0.105	2.67	5.000	127.00	2.383	60.54	1.402	35.61	25.07	111.52	9.58	1.68
C1225-112-0875-X	1.225	31.12	0.112	2.84	0.880	22.35	0.542	13.77	0.455	11.56	29.57	131.53	87.55	15.34
C1225-112-1000-X	1.225	31.12	0.112	2.84	1.000	25.40	0.597	15.18	0.488	12.40	29.57	131.53	73.47	12.87
C1225-112-1250-X	1.225	31.12	0.112	2.84	1.250	31.75	0.718	18.23	0.556	14.12	29.57	131.53	55.56	9.74
C1225-112-1500-X	1.225	31.12	0.112	2.84	1.500	38.10	0.838	21.28	0.623	15.82	29.57	131.53	44.65	7.83
C1225-112-2000-X	1.225	31.12	0.112	2.84	2.000	50.80	1.078	27.38	0.757	19.23	29.57	131.53	32.07	5.62
C1225-112-2500-X	1.225	31.12	0.112	2.84	2.500	63.50	1.321	33.54	0.891	22.63	29.57	131.53	25.07	4.40
C1225-112-3000-X	1.225	31.12	0.112	2.84	3.000	76.20	1.557	39.54	1.026	26.06	29.57	131.53	20.49	3.59
C1225-112-3500-X	1.225	31.12	0.112	2.84	3.500	88.90	1.801	45.75	1.160	29.46	29.57	131.53	17.41	3.05
C1225-112-4000-X	1.225	31.12	0.112	2.84	4.000	101.60	2.039	51.78	1.294	32.87	29.57	131.53	15.08	2.64
C1225-125-0875-X	1.225	31.12	0.125	3.18	0.880	22.35	0.591	15.02	0.517	13.13	38.78	172.50	134.36	23.54
C1225-125-1000-X	1.225	31.12	0.125	3.18	1.000	25.40	0.654	16.60	0.558	14.17	38.78	172.50	111.96	19.61
C1225-125-1250-X	1.225	31.12	0.125	3.18	1.250	31.75	0.788	20.02	0.639	16.23	38.78	172.50	83.97	14.71
C1225-125-1500-X	1.225	31.12	0.125	3.18	1.500	38.10	0.922	23.43	0.721	18.31	38.78	172.50	67.14	11.75
C1225-125-1750-X	1.225	31.12	0.125	3.18	1.750	44.45	1.057	26.85	0.803	20.40	38.78	172.50	55.98	9.81
C1225-125-2000-X	1.225	31.12	0.125	3.18	2.000	50.80	1.192	30.27	0.885	22.48	38.78	172.50	47.98	8.41
C1225-125-2250-X	1.225	31.12	0.125	3.18	2.250	57.15	1.326	33.69	0.966	24.54	38.78	172.50	41.98	7.36
C1225-125-2500-X	1.225	31.12	0.125	3.18	2.500	63.50	1.461	37.11	1.048	26.62	38.78	172.50	37.32	6.53
C1225-125-2750-X	1.225	31.12	0.125	3.18	2.750	69.85	1.595	40.51	1.130	28.70	38.78	172.50	33.57	5.88
C1225-125-3000-X	1.225	31.12	0.125	3.18	3.000	76.20	1.732	43.98	1.212	30.78	38.78	172.50	30.57	5.36
C1225-125-3500-X	1.225	31.12	0.125	3.18	3.500	88.90	1.998	50.76	1.375	34.93	38.78	172.50	25.82	4.52
C1225-125-4000-X	1.225	31.12	0.125	3.18	4.000	101.60	2.269	57.64	1.539	39.09	38.78	172.50	22.41	3.92
C1225-125-4500-X	1.225	31.12	0.125	3.18	4.500	114.30	2.536	64.41	1.702	43.23	38.78	172.50	19.74	3.45
C1225-125-5000-X	1.225	31.12	0.125	3.18	5.000	127.00	2.804	71.22	1.865	47.37	38.78	172.50	17.66	3.10
C1225-135-0880-X	1.225	31.12	0.135	3.43	0.880	22.35	0.614	15.59	0.565	14.35	48.63	216.32	182.59	31.98
C1225-135-1000-X	1.225	31.12	0.135	3.43	1.000	25.40	0.681	17.30	0.609	15.47	48.63	216.32	152.52	26.71
C1225-135-1250-X	1.225	31.12	0.135	3.43	1.250	31.75	0.822	20.88	0.702	17.83	48.63	216.32	113.62	19.89
C1225-135-1500-X	1.225	31.12	0.135	3.43	1.500	38.10	0.963	24.46	0.795	20.19	48.63	216.32	90.55	15.87
C1225-135-2000-X	1.225	31.12	0.135	3.43	2.000	50.80	1.245	31.62	0.982	24.94	48.63	216.32	64.39	11.28
C1225-135-2500-X	1.225	31.12	0.135	3.43	2.500	63.50	1.527	38.79	1.168	29.67	48.63	216.32	49.98	8.76
C1225-135-3000-X	1.225	31.12	0.135	3.43	3.000	76.20	1.809	45.94	1.354	34.39	48.63	216.32	40.82	7.15
C1225-135-3500-X	1.225	31.12	0.135	3.43	3.500	88.90	2.090	53.09	1.540	39.12	48.63	216.32	34.49	6.04
C1225-148-0880-X	1.225	31.12	0.148	3.76	0.880	22.35	0.645	16.38	0.621	15.77	63.67	283.22	270.73	47.41
C1225-148-1000-X	1.225	31.12	0.148	3.76	1.000	25.40	0.716	18.20	0.673	17.09	63.67	283.22	224.58	39.33
C1225-148-1250-X	1.225	31.12	0.148	3.76	1.250	31.75	0.866	21.99	0.781	19.84	63.67	283.22	165.68	29.02
C1225-148-1500-X	1.225	31.12	0.148	3.76	1.500	38.10	1.015	25.78	0.888	22.56	63.67	283.22	131.28	22.99
C1225-148-2000-X	1.225	31.12	0.148	3.76	2.000	50.80	1.314	33.37	1.104	28.04	63.67	283.22	92.80	16.25
C1225-148-2500-X	1.225	31.12	0.148	3.76	2.500	63.50	1.612	40.95	1.319	33.50	63.67	283.22	71.72	12.56
C1225-148-3000-X	1.225	31.12	0.148	3.76	3.000	76.20	1.911	48.55	1.534	38.96	63.67	283.22	58.48	10.24
C1225-148-3500-X	1.225	31.12	0.148	3.76	3.500	88.90	2.209	56.11	1.749	44.42	63.67	283.22	49.31	8.63
C1225-148-4000-X	1.225	31.12	0.148	3.76	4.000	101.60	2.507	63.68	1.965	49.91	63.67	283.22	42.65	7.48
C1225-148-4500-X	1.225	31.12	0.148	3.76	4.500	114.30	2.805	71.25	2.180	55.37	63.67	283.22	37.57	6.58
C1225-148-5000-X	1.225	31.12	0.148	3.76	5.000	127.00	3.103	78.83	2.395	60.83	63.67	283.22	33.57	5.88
C1225-162-1000-X	1.225	31.12	0.162	4.11	1.000	25.40	0.766	19.47	0.727	18.47	80.67	358.84	345.36	60.49
C1225-162-1500-X	1.225	31.12	0.162	4.11	1.500	38.10	1.094	27.78	0.965	24.51	80.67	358.84	198.50	34.76
C1225-162-2000-X	1.225	31.12	0.162	4.11	2.000	50.80	1.421	36.09	1.204	30.58	80.67	358.84	139.28	24.40
C1225-162-2500-X	1.225	31.12	0.162	4.11	2.500	63.50	1.748	44.40	1.442	36.63	80.67	358.84	107.29	18.79
C1225-162-3000-X	1.225	31.12	0.162	4.11	3.000	76.20	2.075	52.71	1.680	42.67	80.67	358.84	87.22	15.27
C1225-162-3500-X	1.225	31.12	0.162	4.11	3.500	88.90	2.402	61.01	1.918	48.72	80.67	358.84	73.47	12.87
C1225-162-4000-X	1.225	31.12	0.162	4.11	4.000	101.60	2.729	69.32	2.157	54.79	80.67	358.84	63.47	11.12
C1225-162-4500-X	1.225	31.12	0.162	4.11	4.500	114.30	3.057	77.64	2.395	60.83	80.67	358.84	55.89	9.79
C1225-162-5000-X	1.225	31.12	0.162	4.11	5.000	127.00	3.383	85.94	2.633	66.88	80.67	358.84	49.90	8.74
C1225-177-1500-X	1.225	31.12	0.177	4.50	1.500	38.10	1.165	29.59	1.057	26.85	98.57	438.46	294.05	51.50

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1225-177-2000-X	1.225	31.12	0.177	4.50	2.000	50.80	1.519	38.57	1.325	33.66	98.57	438.46	204.75	35.87
C1225-177-2500-X	1.225	31.12	0.177	4.50	2.500	63.50	1.872	47.56	1.594	40.49	98.57	438.46	157.02	27.49
C1225-177-3000-X	1.225	31.12	0.177	4.50	3.000	76.20	2.226	56.54	1.862	47.29	98.57	438.46	127.37	22.31
C1225-177-3500-X	1.225	31.12	0.177	4.50	3.500	88.90	2.580	65.53	2.130	54.10	98.57	438.46	107.12	18.76
C1225-177-4000-X	1.225	31.12	0.177	4.50	4.000	101.60	2.933	74.50	2.398	60.91	98.57	438.46	92.38	16.18
C1225-177-4500-X	1.225	31.12	0.177	4.50	4.500	114.30	3.288	83.51	2.666	67.72	98.57	438.46	81.30	14.24
C1225-177-5000-X	1.225	31.12	0.177	4.50	5.000	127.00	3.641	92.49	2.934	74.52	98.57	438.46	72.55	12.71
C1225-192-1500-X	1.225	31.12	0.192	4.88	1.500	38.10	1.227	31.16	1.139	28.93	117.39	522.18	429.91	75.29
C1225-192-2000-X	1.225	31.12	0.192	4.88	2.000	50.80	1.605	40.76	1.435	36.45	117.39	522.18	296.88	52.00
C1225-192-2500-X	1.225	31.12	0.192	4.88	2.500	63.50	1.982	50.35	1.730	43.94	117.39	522.18	226.74	39.70
C1225-192-3000-X	1.225	31.12	0.192	4.88	3.000	76.20	2.360	59.94	2.025	51.44	117.39	522.18	183.43	32.12
C1225-192-3500-X	1.225	31.12	0.192	4.88	3.500	88.90	2.737	69.53	2.321	58.95	117.39	522.18	153.94	26.95
C1225-192-4000-X	1.225	31.12	0.192	4.88	4.000	101.60	3.115	79.13	2.616	66.45	117.39	522.18	132.70	23.24
C1225-192-4500-X	1.225	31.12	0.192	4.88	4.500	114.30	3.493	88.71	2.912	73.96	117.39	522.18	116.54	20.40
C1225-192-5000-X	1.225	31.12	0.192	4.88	5.000	127.00	3.871	98.32	3.207	81.46	117.39	522.18	103.96	18.21
C1225-207-2000-X	1.225	31.12	0.207	5.26	2.000	50.80	1.653	41.99	1.543	39.19	145.77	648.42	420.50	73.64
C1225-207-2500-X	1.225	31.12	0.207	5.26	2.500	63.50	2.044	51.92	1.867	47.42	145.77	648.42	319.71	55.99
C1225-207-3000-X	1.225	31.12	0.207	5.26	3.000	76.20	2.435	61.84	2.190	55.63	145.77	648.42	257.90	45.17
C1225-207-3500-X	1.225	31.12	0.207	5.26	3.500	88.90	2.825	71.76	2.514	63.86	145.77	648.42	216.08	37.84
C1225-207-4000-X	1.225	31.12	0.207	5.26	4.000	101.60	3.216	81.69	2.837	72.06	145.77	648.42	185.93	32.56
C1225-207-4500-X	1.225	31.12	0.207	5.26	4.500	114.30	3.607	91.61	3.161	80.29	145.77	648.42	163.18	28.58
C1225-207-5000-X	1.225	31.12	0.207	5.26	5.000	127.00	3.998	101.54	3.484	88.49	145.77	648.42	145.44	25.46
D23140X	1.358	34.50	0.098	2.50	2.815	71.50	1.836	46.63	0.541	13.75	320.85	72.13	16.56	2.90
D23150X	1.358	34.50	0.098	2.50	4.331	110.00	2.796	71.01	0.738	18.75	320.85	72.13	10.56	1.85
D23160X	1.358	34.50	0.098	2.50	6.693	170.00	4.307	109.39	1.033	26.25	320.85	72.13	6.80	1.19
D23170X	1.358	34.50	0.098	2.50	9.646	245.00	6.140	155.95	1.427	36.25	320.85	72.13	4.63	0.81
D23180X	1.358	34.50	0.098	2.50	14.173	360.00	9.010	228.85	2.018	51.25	320.85	72.13	3.14	0.55
D23430X	1.386	35.20	0.126	3.20	2.303	58.50	1.604	40.73	0.693	17.60	613.54	137.93	44.31	7.76
D23440X	1.386	35.20	0.126	3.20	3.484	88.50	2.383	60.52	0.945	24.00	613.54	137.93	28.15	4.93
D23450X	1.386	35.20	0.126	3.20	5.315	135.00	3.607	91.63	1.323	33.60	613.54	137.93	18.16	3.18
D23460X	1.386	35.20	0.126	3.20	7.480	190.00	4.978	126.44	1.827	46.40	613.54	137.93	12.39	2.17
D23470X	1.386	35.20	0.126	3.20	11.024	280.00	7.330	186.17	2.583	65.60	613.54	137.93	8.39	1.47
D23630X	1.417	36.00	0.157	4.00	2.106	53.50	1.604	40.73	0.866	22.00	1076.38	241.98	108.21	18.95
D23640X	1.417	36.00	0.157	4.00	3.130	79.50	2.337	59.35	1.181	30.00	1076.38	241.98	68.58	12.01
D23650X	1.417	36.00	0.157	4.00	4.724	120.00	3.502	88.94	1.654	42.00	1076.38	241.98	44.48	7.79
D23660X	1.417	36.00	0.157	4.00	6.693	170.00	4.892	124.26	2.283	58.00	1076.38	241.98	30.21	5.29
D23670X	1.417	36.00	0.157	4.00	9.843	250.00	7.181	182.41	3.228	82.00	1076.38	241.98	20.44	3.58
D23830X	1.457	37.00	0.197	5.00	2.008	51.00	1.657	42.08	1.083	27.50	1831.55	411.75	263.58	46.16
D23840X	1.457	37.00	0.197	5.00	2.953	75.00	2.401	60.99	1.476	37.50	1831.55	411.75	167.88	29.40
D23850X	1.457	37.00	0.197	5.00	4.331	110.00	3.479	88.36	2.067	52.50	1831.55	411.75	108.66	19.03
D23860X	1.457	37.00	0.197	5.00	6.299	160.00	5.043	128.08	2.854	72.50	1831.55	411.75	73.66	12.90
D23870X	1.457	37.00	0.197	5.00	9.055	230.00	7.200	182.89	4.035	102.50	1831.55	411.75	49.91	8.74
C1460-112-1500-X	1.460	37.08	0.112	2.84	1.500	38.10	0.773	19.64	0.531	13.49	25.00	111.21	34.40	6.02
C1460-112-2000-X	1.460	37.08	0.112	2.84	2.000	50.80	0.986	25.05	0.629	15.98	25.00	111.21	24.66	4.33
C1460-112-2500-X	1.460	37.08	0.112	2.84	2.500	63.50	1.201	30.50	0.727	18.47	25.00	111.21	19.24	3.36
C1460-112-3000-X	1.460	37.08	0.112	2.84	3.000	76.20	1.420	36.08	0.825	20.96	25.00	111.21	15.83	2.77
C1460-112-3500-X	1.460	37.08	0.112	2.84	3.500	88.90	1.636	41.55	0.924	23.47	25.00	111.21	13.41	2.35
C1460-112-4000-X	1.460	37.08	0.112	2.84	4.000	101.60	1.841	46.76	1.022	25.96	25.00	111.21	11.58	2.03
C1460-125-1500-X	1.460	37.08	0.125	3.18	1.500	38.10	0.851	21.61	0.616	15.65	32.83	146.04	50.56	8.86
C1460-125-2000-X	1.460	37.08	0.125	3.18	2.000	50.80	1.092	27.74	0.738	18.75	32.83	146.04	36.15	6.34
C1460-125-2500-X	1.460	37.08	0.125	3.18	2.500	63.50	1.331	33.80	0.859	21.82	32.83	146.04	28.07	4.92
C1460-125-3000-X	1.460	37.08	0.125	3.18	3.000	76.20	1.572	39.94	0.981	24.92	32.83	146.04	22.99	4.03
C1460-125-3500-X	1.460	37.08	0.125	3.18	3.500	88.90	1.809	45.94	1.102	27.99	32.83	146.04	19.41	3.40
C1460-125-4000-X	1.460	37.08	0.125	3.18	4.000	101.60	2.049	52.05	1.224	31.09	32.83	146.04	16.83	2.94
C1460-135-1500-X	1.460	37.08	0.135	3.43	1.500	38.10	0.884	22.45	0.682	17.32	41.20	183.27	66.89	11.72
C1460-135-2000-X	1.460	37.08	0.135	3.43	2.000	50.80	1.134	28.80	0.823	20.90	41.20	183.27	47.56	8.34
C1460-135-2500-X	1.460	37.08	0.135	3.43	2.500	63.50	1.383	35.14	0.963	24.46	41.20	183.27	36.90	6.46
C1460-135-3000-X	1.460	37.08	0.135	3.43	3.000	76.20	1.634	41.49	1.103	28.02	41.20	183.27	30.15	5.29
C1460-135-3500-X	1.460	37.08	0.135	3.43	3.500	88.90	1.884	47.84	1.243	31.57	41.20	183.27	25.49	4.47
C1460-135-4000-X	1.460	37.08	0.135	3.43	4.000	101.60	2.134	54.19	1.393	35.38	41.20	183.27	22.07	3.87
C1460-148-1500-X	1.460	37.08	0.148	3.76	1.500	38.10	0.930	23.61	0.768	19.51	54.03	240.34	94.71	16.58
C1460-148-2000-X	1.460	37.08	0.148	3.76	2.000	50.80	1.192	30.28	0.933	23.70	54.03	240.34	66.89	11.72
C1460-148-2500-X	1.460	37.08	0.148	3.76	2.500	63.50	1.456	36.97	1.098	27.89	54.03	240.34	51.73	9.05
C1460-148-3000-X	1.460	37.08	0.148	3.76	3.000	76.20	1.718	43.64	1.263	32.08	54.03	240.34	42.15	7.39

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
C1460-148-3500-X	1.460	37.08	0.148	3.76	3.500	88.90	1.981	50.32	1.428	36.27	54.03	240.34	35.57	6.23
C1460-148-4000-X	1.460	37.08	0.148	3.76	4.000	101.60	2.247	57.08	1.593	40.46	54.03	240.34	30.82	5.39
C1460-162-1500-X	1.460	37.08	0.162	4.11	1.500	38.10	0.993	25.23	0.857	21.77	68.57	305.01	135.28	23.69
C1460-162-2000-X	1.460	37.08	0.162	4.11	2.000	50.80	1.278	32.46	1.049	26.64	68.57	305.01	94.96	16.64
C1460-162-2500-X	1.460	37.08	0.162	4.11	2.500	63.50	1.563	39.69	1.241	31.52	68.57	305.01	73.14	12.80
C1460-162-3000-X	1.460	37.08	0.162	4.11	3.000	76.20	1.847	46.92	1.433	36.40	68.57	305.01	59.48	10.42
C1460-162-3500-X	1.460	37.08	0.162	4.11	3.500	88.90	2.130	54.11	1.625	41.28	68.57	305.01	50.06	8.77
C1460-162-4000-X	1.460	37.08	0.162	4.11	4.000	101.60	2.417	61.39	1.817	46.15	68.57	305.01	43.32	7.58
C1460-162-4500-X	1.460	37.08	0.162	4.11	4.500	114.30	2.699	68.55	2.009	51.03	68.57	305.01	38.07	6.67
C1460-162-5000-X	1.460	37.08	0.162	4.11	5.000	127.00	2.983	75.76	2.201	55.91	68.57	305.01	33.99	5.95
C1687-135-1500-X	1.687	42.85	0.135	3.43	1.500	38.10	0.831	21.11	0.605	15.37	35.89	159.65	53.65	9.40
C1687-135-2000-X	1.687	42.85	0.135	3.43	2.000	50.80	1.059	26.91	0.714	18.14	35.89	159.65	38.15	6.69
C1687-135-2500-X	1.687	42.85	0.135	3.43	2.500	63.50	1.286	32.67	0.823	20.90	35.89	159.65	29.57	5.18
C1687-135-3000-X	1.687	42.85	0.135	3.43	3.000	76.20	1.514	38.46	0.932	23.67	35.89	159.65	24.16	4.24
C1687-135-3500-X	1.687	42.85	0.135	3.43	3.500	88.90	1.741	44.23	1.041	26.44	35.89	159.65	20.41	3.57
C1687-135-4000-X	1.687	42.85	0.135	3.43	4.000	101.60	1.968	49.98	1.150	29.21	35.89	159.65	17.66	3.10
C1687-135-4500-X	1.687	42.85	0.135	3.43	4.500	114.30	2.196	55.78	1.259	31.98	35.89	159.65	15.58	2.73
C1687-135-5000-X	1.687	42.85	0.135	3.43	5.000	127.00	2.420	61.47	1.368	34.75	35.89	159.65	13.91	2.43
C1687-148-1500-X	1.687	42.85	0.148	3.76	1.500	38.10	0.870	22.09	0.682	17.32	47.10	209.51	74.72	13.08
C1687-148-2000-X	1.687	42.85	0.148	3.76	2.000	50.80	1.108	28.15	0.812	20.62	47.10	209.51	52.81	9.25
C1687-148-2500-X	1.687	42.85	0.148	3.76	2.500	63.50	1.346	34.19	0.942	23.93	47.10	209.51	40.82	7.15
C1687-148-3000-X	1.687	42.85	0.148	3.76	3.000	76.20	1.583	40.21	1.071	27.20	47.10	209.51	33.24	5.81
C1687-148-3500-X	1.687	42.85	0.148	3.76	3.500	88.90	1.822	46.28	1.201	30.51	47.10	209.51	28.07	4.92
C1687-148-4000-X	1.687	42.85	0.148	3.76	4.000	101.60	2.057	52.25	1.331	33.81	47.10	209.51	24.24	4.24
C1687-148-4500-X	1.687	42.85	0.148	3.76	4.500	114.30	2.300	58.42	1.461	37.11	47.10	209.51	21.41	3.75
C1687-148-5000-X	1.687	42.85	0.148	3.76	5.000	127.00	2.531	64.28	1.590	40.39	47.10	209.51	19.08	3.34
C1687-162-1500-X	1.687	42.85	0.162	4.11	1.500	38.10	0.929	23.60	0.765	19.43	59.84	266.18	104.79	18.35
C1687-162-2000-X	1.687	42.85	0.162	4.11	2.000	50.80	1.186	30.11	0.918	23.32	59.84	266.18	73.47	12.87
C1687-162-2500-X	1.687	42.85	0.162	4.11	2.500	63.50	1.444	36.67	1.070	27.18	59.84	266.18	56.64	9.91
C1687-162-3000-X	1.687	42.85	0.162	4.11	3.000	76.20	1.701	43.21	1.223	31.06	59.84	266.18	46.06	8.07
C1687-162-3500-X	1.687	42.85	0.162	4.11	3.500	88.90	1.959	49.75	1.376	34.95	59.84	266.18	38.82	6.79
C1687-162-4000-X	1.687	42.85	0.162	4.11	4.000	101.60	2.213	56.21	1.529	38.84	59.84	266.18	33.49	5.87
C1687-162-4500-X	1.687	42.85	0.162	4.11	4.500	114.30	2.471	62.76	1.682	42.72	59.84	266.18	29.49	5.17
C1687-162-5000-X	1.687	42.85	0.162	4.11	5.000	127.00	2.727	69.26	1.835	46.61	59.84	266.18	26.32	4.61
C1687-177-1500-X	1.687	42.85	0.177	4.50	1.500	38.10	1.004	25.51	0.851	21.62	73.35	326.28	148.02	25.92
C1687-177-2000-X	1.687	42.85	0.177	4.50	2.000	50.80	1.288	32.72	1.029	26.14	73.35	326.28	103.04	18.04
C1687-177-2500-X	1.687	42.85	0.177	4.50	2.500	63.50	1.572	39.93	1.207	30.66	73.35	326.28	79.05	13.85
C1687-177-3000-X	1.687	42.85	0.177	4.50	3.000	76.20	1.855	47.12	1.385	35.18	73.35	326.28	64.06	11.23
C1687-177-3500-X	1.687	42.85	0.177	4.50	3.500	88.90	2.139	54.33	1.563	39.70	73.35	326.28	53.90	9.44
C1687-177-4000-X	1.687	42.85	0.177	4.50	4.000	101.60	2.422	61.52	1.741	44.22	73.35	326.28	46.48	8.14
C1687-177-4500-X	1.687	42.85	0.177	4.50	4.500	114.30	2.707	68.75	1.920	48.77	73.35	326.28	40.90	7.16
C1687-177-5000-X	1.687	42.85	0.177	4.50	5.000	127.00	2.990	75.94	2.098	53.29	73.35	326.28	36.49	6.39
C1687-192-1500-X	1.687	42.85	0.192	4.88	1.500	38.10	1.075	27.30	0.934	23.72	87.66	389.93	206.08	36.09
C1687-192-2000-X	1.687	42.85	0.192	4.88	2.000	50.80	1.384	35.16	1.137	28.88	87.66	389.93	142.36	24.94
C1687-192-2500-X	1.687	42.85	0.192	4.88	2.500	63.50	1.694	43.02	1.340	34.04	87.66	389.93	108.71	19.04
C1687-192-3000-X	1.687	42.85	0.192	4.88	3.000	76.20	2.003	50.89	1.543	39.19	87.66	389.93	87.96	15.41
C1687-192-3500-X	1.687	42.85	0.192	4.88	3.500	88.90	2.312	58.73	1.747	44.37	87.66	389.93	73.80	12.92
C1687-192-4000-X	1.687	42.85	0.192	4.88	4.000	101.60	2.623	66.61	1.950	49.53	87.66	389.93	63.64	11.14
C1687-192-4500-X	1.687	42.85	0.192	4.88	4.500	114.30	2.932	74.46	2.153	54.69	87.66	389.93	55.89	9.79
C1687-192-5000-X	1.687	42.85	0.192	4.88	5.000	127.00	3.240	82.30	2.356	59.84	87.66	389.93	49.81	8.72
D23480X	1.701	43.20	0.126	3.20	3.228	82.00	2.104	53.45	0.693	17.60	504.25	113.36	22.67	3.97
D23490X	1.701	43.20	0.126	3.20	4.921	125.00	3.150	80.02	0.945	24.00	504.25	113.36	14.39	2.52
D23500X	1.701	43.20	0.126	3.20	7.480	190.00	4.742	120.45	1.323	33.60	504.25	113.36	9.31	1.63
D23510X	1.701	43.20	0.126	3.20	10.827	275.00	6.806	172.87	1.827	46.40	504.25	113.36	6.34	1.11
D23520X	1.701	43.20	0.126	3.20	15.945	405.00	9.994	253.85	2.583	65.60	504.25	113.36	4.28	0.75
D23680X	1.732	44.00	0.157	4.00	2.795	71.00	1.984	50.40	0.866	22.00	890.58	200.21	55.50	9.72
D23690X	1.732	44.00	0.157	4.00	4.134	105.00	2.854	72.50	1.181	30.00	890.58	200.21	35.17	6.16
D23700X	1.732	44.00	0.157	4.00	6.299	160.00	4.324	109.82	1.654	42.00	890.58	200.21	22.78	3.99
D23710X	1.732	44.00	0.157	4.00	9.252	235.00	6.354	161.39	2.283	58.00	890.58	200.21	15.53	2.72
D23720X	1.732	44.00	0.157	4.00	13.386	340.00	9.079	230.60	3.228	82.00	890.58	200.21	10.45	1.83
D23880X	1.772	45.00	0.197	5.00	2.520	64.00	1.947	49.45	1.083	27.50	1528.32	343.58	134.82	23.61
D23890X	1.772	45.00	0.197	5.00	3.760	95.50	2.860	72.64	1.476	37.50	1528.32	343.58	85.82	15.03
D23900X	1.772	45.00	0.197	5.00	5.512	140.00	4.120	104.65	2.067	52.50	1528.32	343.58	55.50	9.72
D23910X	1.772	45.00	0.197	5.00	8.071	205.00	6.024	153.02	2.854	72.50	1528.32	343.58	37.74	6.61

Part Numbers with an "*" are squared and not ground.

316 STAINLESS STEEL

Catalog #	Outside Diameter (OD)		Wire Diameter (d)		Free Length (L) Approx		Load Length (L_1)		Solid Height (Sh) Approx		Load (P) at L_1		Spring Rate (R)	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
D23920X	1.772	45.00	0.197	5.00	11.811	300.00	8.778	222.96	4.035	102.50	1528.32	343.58	25.47	4.46
C1937-148-2000-X	1.937	49.20	0.148	3.76	2.000	50.80	1.040	26.42	0.716	18.19	41.26	183.53	42.98	7.53
C1937-148-2500-X	1.937	49.20	0.148	3.76	2.500	63.50	1.259	31.97	0.817	20.75	41.26	183.53	33.24	5.81
C1937-148-3000-X	1.937	49.20	0.148	3.76	3.000	76.20	1.476	37.49	0.919	23.34	41.26	183.53	27.07	4.75
C1937-148-3500-X	1.937	49.20	0.148	3.76	3.500	88.90	1.692	42.99	1.020	25.91	41.26	183.53	22.82	3.99
C1937-148-4000-X	1.937	49.20	0.148	3.76	4.000	101.60	1.910	48.52	1.122	28.50	41.26	183.53	19.74	3.45
C1937-148-4500-X	1.937	49.20	0.148	3.76	4.500	114.30	2.130	54.11	1.223	31.06	41.26	183.53	17.41	3.05
C1937-148-5000-X	1.937	49.20	0.148	3.76	5.000	127.00	2.351	59.72	1.324	33.63	41.26	183.53	15.58	2.73
C1937-148-5500-X	1.937	49.20	0.148	3.76	5.500	139.70	2.569	65.26	1.426	36.22	41.26	183.53	14.08	2.47
C1937-162-2000-X	1.937	49.20	0.162	4.11	2.000	50.80	1.111	28.21	0.810	20.57	52.46	233.35	58.98	10.33
C1937-162-2500-X	1.937	49.20	0.162	4.11	2.500	63.50	1.345	34.15	0.931	23.65	52.46	233.35	45.40	7.95
C1937-162-3000-X	1.937	49.20	0.162	4.11	3.000	76.20	1.579	40.09	1.052	26.72	52.46	233.35	36.90	6.46
C1937-162-3500-X	1.937	49.20	0.162	4.11	3.500	88.90	1.816	46.13	1.173	29.79	52.46	233.35	31.15	5.46
C1937-162-4000-X	1.937	49.20	0.162	4.11	4.000	101.60	2.050	52.08	1.293	32.84	52.46	233.35	26.91	4.71
C1937-162-4500-X	1.937	49.20	0.162	4.11	4.500	114.30	2.283	57.98	1.414	35.92	52.46	233.35	23.66	4.15
C1937-162-5000-X	1.937	49.20	0.162	4.11	5.000	127.00	2.521	64.03	1.535	38.99	52.46	233.35	21.16	3.71
C1937-162-5500-X	1.937	49.20	0.162	4.11	5.500	139.70	2.750	69.85	1.656	42.06	52.46	233.35	19.08	3.34
C1937-177-2500-X	1.937	49.20	0.177	4.50	2.500	63.50	1.469	37.30	1.054	26.77	64.36	286.29	62.39	10.93
C1937-177-3000-X	1.937	49.20	0.177	4.50	3.000	76.20	1.729	43.92	1.196	30.38	64.36	286.29	50.65	8.88
C1937-177-3500-X	1.937	49.20	0.177	4.50	3.500	88.90	1.988	50.50	1.339	34.01	64.36	286.29	42.57	7.46
C1937-177-4000-X	1.937	49.20	0.177	4.50	4.000	101.60	2.248	57.10	1.481	37.62	64.36	286.29	36.74	6.43
C1937-177-4500-X	1.937	49.20	0.177	4.50	4.500	114.30	2.509	63.72	1.624	41.25	64.36	286.29	32.32	5.66
C1937-177-5000-X	1.937	49.20	0.177	4.50	5.000	127.00	2.767	70.28	1.766	44.86	64.36	286.29	28.82	5.04
C1937-177-5500-X	1.937	49.20	0.177	4.50	5.500	139.70	3.024	76.80	1.908	48.46	64.36	286.29	25.99	4.55
C1937-177-6000-X	1.937	49.20	0.177	4.50	6.000	152.40	3.289	83.55	2.051	52.10	64.36	286.29	23.74	4.15
C1937-192-2500-X	1.937	49.20	0.192	4.88	2.500	63.50	1.589	40.35	1.176	29.87	76.99	342.47	84.47	14.80
C1937-192-3000-X	1.937	49.20	0.192	4.88	3.000	76.20	1.873	47.57	1.341	34.06	76.99	342.47	68.31	11.96
C1937-192-3500-X	1.937	49.20	0.192	4.88	3.500	88.90	2.157	54.78	1.505	38.23	76.99	342.47	57.31	10.03
C1937-192-4000-X	1.937	49.20	0.192	4.88	4.000	101.60	2.441	62.01	1.670	42.42	76.99	342.47	49.40	8.65
C1937-192-4500-X	1.937	49.20	0.192	4.88	4.500	114.30	2.726	69.24	1.834	46.58	76.99	342.47	43.40	7.60
C1937-192-5000-X	1.937	49.20	0.192	4.88	5.000	127.00	3.012	76.51	1.999	50.77	76.99	342.47	38.73	6.78
C1937-192-5500-X	1.937	49.20	0.192	4.88	5.500	139.70	3.294	83.67	2.164	54.97	76.99	342.47	34.90	6.11
C1937-192-6000-X	1.937	49.20	0.192	4.88	6.000	152.40	3.581	90.95	2.328	59.13	76.99	342.47	31.82	5.57
C1937-207-2500-X	1.937	49.20	0.207	5.26	2.500	63.50	1.648	41.87	1.297	32.94	96.06	427.30	112.79	19.75
C1937-207-3000-X	1.937	49.20	0.207	5.26	3.000	76.20	1.944	49.38	1.483	37.67	96.06	427.30	90.96	15.94
C1937-207-3500-X	1.937	49.20	0.207	5.26	3.500	88.90	2.240	56.89	1.670	42.42	96.06	427.30	76.22	13.34
C1937-207-4000-X	1.937	49.20	0.207	5.26	4.000	101.60	2.537	64.43	1.857	47.17	96.06	427.30	65.64	11.49
C1937-207-4500-X	1.937	49.20	0.207	5.26	4.500	114.30	2.831	71.91	2.044	51.92	96.06	427.30	57.56	10.09
C1937-207-5000-X	1.937	49.20	0.207	5.26	5.000	127.00	3.128	79.45	2.230	56.64	96.06	427.30	51.31	8.98
C1937-207-5500-X	1.937	49.20	0.207	5.26	5.500	139.70	3.422	86.92	2.417	61.39	96.06	427.30	46.23	8.09
C1937-207-6000-X	1.937	49.20	0.207	5.26	6.000	152.40	3.721	94.51	2.604	66.14	96.06	427.30	42.15	7.39
D23730X	2.126	54.00	0.157	4.00	3.898	99.00	2.592	65.83	0.866	22.00	731.91	164.54	28.32	4.96
D23740X	2.126	54.00	0.157	4.00	5.906	150.00	3.856	97.93	1.181	30.00	731.91	164.54	18.04	3.16
D23750X	2.126	54.00	0.157	4.00	9.055	230.00	5.880	149.34	1.654	42.00	731.91	164.54	11.65	2.04
D23760X	2.126	54.00	0.157	4.00	13.189	335.00	8.529	216.63	2.283	58.00	731.91	164.54	7.94	1.39
D23770X	2.126	54.00	0.157	4.00	19.291	490.00	12.400	314.96	3.228	82.00	731.91	164.54	5.37	0.94
D23930X	2.165	55.00	0.197	5.00	3.346	85.00	2.421	61.49	1.083	27.50	1264.50	284.27	69.04	12.09
D23940X	2.165	55.00	0.197	5.00	5.118	130.00	3.667	93.13	1.476	37.50	1264.50	284.27	44.03	7.71
D23950X	2.165	55.00	0.197	5.00	7.677	195.00	5.430	137.92	2.067	52.50	1264.50	284.27	28.44	4.98
D23960X	2.165	55.00	0.197	5.00	11.024	280.00	7.722	196.14	2.854	72.50	1264.50	284.27	19.36	3.39
D23970X	2.165	55.00	0.197	5.00	16.142	410.00	11.254	285.86	4.035	102.50	1264.50	284.27	13.08	2.29
D23980X	2.677	68.00	0.197	5.00	4.724	120.00	3.217	81.72	1.083	27.50	1031.85	231.97	34.60	6.06
D23990X	2.677	68.00	0.197	5.00	7.087	180.00	4.720	119.90	1.476	37.50	1031.85	231.97	22.04	3.86
D24000X	2.677	68.00	0.197	5.00	10.827	275.00	7.159	181.84	2.067	52.50	1031.85	231.97	14.22	2.49
D24010X	2.677	68.00	0.197	5.00	15.551	395.00	10.147	257.74	2.854	72.50	1031.85	231.97	9.65	1.69
D24020X	2.677	68.00	0.197	5.00	23.031	585.00	15.020	381.52	4.035	102.50	1031.85	231.97	6.51	1.14

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

HEAVY DUTY COMPRESSION SPRINGS

Stock sizes in chrome alloy steel
The use of high-quality chrome alloy steel combines maximum load with long life.

Designed to work in pocket or over shaft, our SPEC heavy-duty springs are ideally suited for applications where high loads are needed, and limited space is available.

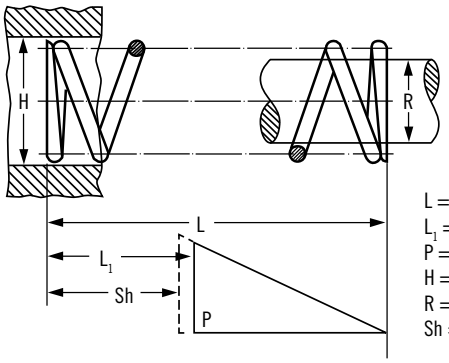
Material
Chrome Silicon per Associated Spring SV 9254 - rectangular wire with rounded corners.

Direction of Helix
Right hand.

Ends
Squared and ground.

Finish
Standard finish is that of the normal wire. Due to residual stresses induced during the manufacturing process, electroplating is not recommended. Other finishes available on request. See page 311 for alternative finishes.

Tolerances
Free length is for reference only. O.D. and I.D. are designed to fit in hole or over rod as specified in the table below. Outside diameters are dimensioned to allow a minimum of .020" (.51mm) clearance in the specified hole diameter when the spring is in the free state.



L = Free Length
L_1 = Load Length
P = Load at L_1
H = Hole Diameter
R = Rod Diameter
Sh = Solid Height (Approx.)

(OD) 0.375 - 0.500

STOCK HEAVY DUTY COMPRESSION SPRINGS

Catalog #	Fits in Hole (H)		Fits over Shaft (R)		Wire Size		Free Length (L)		Load @ Load Length (P) Reference		Load Length (L_1)		Solid Height (Sh) Approx		Spring Rate +/-15%	
	in	mm	in	mm	in	mm	in	mm	lb	N	in	mm	in	mm	lb/in	N/mm
CV0375-1000-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	1.00	25.40	15.00	66.72	0.75	19.05	0.50	12.70	60.00	10.51
CV0375-1250-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	1.25	31.75	15.60	69.39	0.94	23.83	0.63	16.00	50.00	8.76
CV0375-1500-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	1.50	38.10	15.80	70.28	1.13	28.58	0.75	19.05	42.00	7.36
CV0375-1750-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	1.75	44.45	16.20	72.06	1.31	33.35	0.88	22.35	37.00	6.48
CV0375-2000-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	2.00	50.80	15.50	68.95	1.50	38.10	1.00	25.40	31.00	5.43
CV0375-2500-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	2.50	63.50	16.30	72.51	1.88	47.63	1.25	31.75	26.00	4.55
CV0375-3000-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	3.00	76.20	15.80	70.28	2.25	57.15	1.50	38.10	21.00	3.68
CV0375-12000-039	0.375	9.53	0.188	4.78	0.039 X 0.07	0.99 X 1.78	12.00	304.80	18.00	80.07	9.00	228.60	6.00	152.40	6.00	1.05
CV0375-1000-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	1.00	25.40	21.00	93.41	0.75	19.05	0.63	16.00	84.00	14.71
CV0375-1250-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	1.25	31.75	22.80	101.42	0.94	23.83	0.79	20.07	73.00	12.78
CV0375-1500-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	1.50	38.10	25.10	111.65	1.13	28.58	0.95	24.13	67.00	11.73
CV0375-1750-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	1.75	44.45	25.30	112.54	1.31	33.35	1.10	27.94	58.00	10.16
CV0375-2000-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	2.00	50.80	25.00	111.21	1.50	38.10	1.26	32.00	50.00	8.76
CV0375-2500-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	2.50	63.50	23.10	102.75	1.88	47.63	1.58	40.13	37.00	6.48
CV0375-3000-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	3.00	76.20	22.50	100.08	2.25	57.15	1.89	48.01	30.00	5.25
CV0375-12000-046	0.375	9.53	0.188	4.78	0.046 X 0.073	1.17 X 1.85	12.00	304.80	24.00	106.76	9.00	228.60	7.56	192.02	8.00	1.40
CV0375-1000-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	1.00	25.40	17.40	77.40	0.85	21.59	0.70	17.78	116.00	20.31
CV0375-1250-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	1.25	31.75	18.30	81.40	1.06	27.00	0.88	22.35	98.00	17.16
CV0375-1500-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	1.50	38.10	18.00	80.07	1.28	32.39	1.05	26.67	80.00	14.01
CV0375-1750-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	1.75	44.45	19.70	87.63	1.49	37.80	1.23	31.24	75.00	13.13
CV0375-2000-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	2.00	50.80	18.60	82.74	1.70	43.18	1.40	35.56	62.00	10.86
CV0375-2500-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	2.50	63.50	18.80	83.63	2.13	53.98	1.75	44.45	50.00	8.76
CV0375-3000-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	3.00	76.20	18.50	82.29	2.55	64.77	2.10	53.34	41.00	7.18
CV0375-12000-054	0.375	9.53	0.188	4.78	0.054 X 0.072	1.37 X 1.83	12.00	304.80	19.80	88.07	10.20	259.08	8.40	213.36	11.00	1.93
CV0375-1000-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	1.00	25.40	31.50	140.12	0.85	21.59	0.75	19.05	210.00	36.78
CV0375-1250-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	1.25	31.75	27.30	121.44	1.06	27.00	0.94	23.88	146.00	25.57
CV0375-1500-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	1.50	38.10	28.10	124.99	1.28	32.39	1.13	28.70	125.00	21.89
CV0375-1750-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	1.75	44.45	27.50	122.33	1.49	37.80	1.31	33.27	105.00	18.39
CV0375-2000-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	2.00	50.80	27.00	120.10	1.70	43.18	1.50	38.10	90.00	15.76
CV0375-2500-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	2.50	63.50	28.10	124.99	2.13	53.98	1.88	47.75	75.00	13.13
CV0375-3000-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	3.00	76.20	28.40	126.33	2.55	64.77	2.25	57.15	63.00	11.03
CV0375-12000-059	0.375	9.53	0.188	4.78	0.059 X 0.08	1.5 X 2.03	12.00	304.80	27.00	120.10	10.20	259.08	9.00	228.60	15.00	2.63
CV0500-1000-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	1.00	25.40	27.50	122.33	0.75	19.05	0.50	12.70	110.00	19.26
CV0500-1250-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	1.25	31.75	25.60	113.87	0.94	23.83	0.63	16.00	82.00	14.36
CV0500-1500-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	1.50	38.10	25.50	113.43	1.13	28.58	0.75	19.05	68.00	11.91
CV0500-1750-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	1.75	44.45	26.20	116.54	1.31	33.35	0.88	22.35	60.00	10.51

STOCK HEAVY DUTY COMPRESSION SPRINGS

Catalog #	Fits in Hole (H)		Fits over Shaft (R)		Wire Size		Free Length (L)		Load @ Load Length (P) Reference		Load Length (L_1)		Solid Height (Sh) Approx		Spring Rate +/-15%	
	in	mm	in	mm	in	mm	in	mm	lb	N	in	mm	in	mm	lb/in	N/mm
CV0500-2000-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	2.00	50.80	27.50	122.33	1.50	38.10	1.00	25.40	55.00	9.63
CV0500-2500-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	2.50	63.50	28.10	124.99	1.88	47.63	1.25	31.75	45.00	7.88
CV0500-3000-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	3.00	76.20	26.30	116.99	2.25	57.15	1.50	38.10	35.00	6.13
CV0500-3500-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	3.50	88.90	26.30	116.99	2.63	66.68	1.75	44.45	30.00	5.25
CV0500-4500-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	4.50	114.30	25.90	115.21	3.38	85.73	2.25	57.15	23.00	4.03
CV0500-5500-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	5.50	139.70	27.50	122.33	4.13	104.78	2.75	69.85	20.00	3.50
CV0500-6500-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	6.50	165.10	22.80	101.42	4.88	123.83	3.25	82.55	14.00	2.45
CV0500-7500-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	7.50	190.50	22.50	100.08	5.63	142.88	3.75	95.25	12.00	2.10
CV0500-12000-052	0.500	12.70	0.281	7.14	0.052 X 0.093	1.32 X 2.36	12.00	304.80	21.00	93.41	9.00	228.60	6.00	152.40	7.00	1.23
CV0500-1000-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	1.00	25.40	38.80	172.59	0.75	19.05	0.63	16.00	155.00	27.14
CV0500-1250-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	1.25	31.75	38.10	169.48	0.94	23.83	0.79	20.07	122.00	21.37
CV0500-1500-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	1.50	38.10	36.80	163.69	1.13	28.58	0.95	24.13	98.00	17.16
CV0500-1750-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	1.75	44.45	37.10	165.03	1.31	33.35	1.10	27.94	85.00	14.89
CV0500-2000-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	2.00	50.80	37.50	166.81	1.50	38.10	1.26	32.00	75.00	13.13
CV0500-2500-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	2.50	63.50	37.50	166.81	1.88	47.63	1.58	40.13	60.00	10.51
CV0500-3000-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	3.00	76.20	38.30	170.37	2.25	57.15	1.89	48.01	51.00	8.93
CV0500-3500-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	3.50	88.90	35.00	155.69	2.63	66.68	2.21	56.13	40.00	7.01
CV0500-12000-061	0.500	12.70	0.281	7.14	0.061 X 0.094	1.55 X 2.39	12.00	304.80	33.00	146.79	9.00	228.60	7.56	192.02	11.00	1.93
CV0500-1000-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	1.00	25.40	33.80	150.35	0.85	21.59	0.70	17.78	225.00	39.40
CV0500-1250-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	1.25	31.75	34.20	152.13	1.06	26.97	0.88	22.35	182.00	31.87
CV0500-1500-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	1.50	38.10	33.30	148.13	1.28	32.39	1.05	26.67	148.00	25.92
CV0500-1750-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	1.75	44.45	33.10	147.24	1.49	37.77	1.23	31.24	126.00	22.07
CV0500-2000-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	2.00	50.80	33.00	146.79	1.70	43.18	1.40	35.56	110.00	19.26
CV0500-2500-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	2.50	63.50	32.30	143.68	2.13	53.98	1.75	44.45	86.00	15.06
CV0500-3000-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	3.00	76.20	33.30	148.13	2.55	64.77	2.10	53.34	74.00	12.96
CV0500-3500-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	3.50	88.90	31.50	140.12	2.98	75.57	2.45	62.23	60.00	10.51
CV0500-12000-072	0.500	12.70	0.281	7.14	0.072 X 0.095	1.83 X 2.41	12.00	304.80	30.60	136.12	10.20	259.08	8.40	213.36	17.00	2.98
CV0500-1000-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	1.00	25.40	46.50	206.84	0.85	21.59	0.75	19.05	310.00	54.29
CV0500-1250-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	1.25	31.75	45.10	200.61	1.06	26.97	0.94	23.88	240.00	42.03
CV0500-1500-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	1.50	38.10	43.20	192.16	1.28	32.39	1.13	28.70	192.00	33.62
CV0500-1750-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	1.75	44.45	44.70	198.84	1.49	37.77	1.31	33.27	170.00	29.77
CV0500-2000-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	2.00	50.80	42.00	186.83	1.70	43.18	1.50	38.10	140.00	24.52
CV0500-2500-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	2.50	63.50	43.10	191.72	2.13	53.98	1.88	47.75	115.00	20.14
CV0500-3000-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	3.00	76.20	42.30	188.16	2.55	64.77	2.25	57.15	94.00	16.46
CV0500-3500-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	3.50	88.90	42.00	186.83	2.98	75.57	2.63	66.80	80.00	14.01
CV0500-12000-084	0.500	12.70	0.281	7.14	0.084 X 0.097	2.13 X 2.46	12.00	304.80	43.20	192.16	10.20	259.08	9.00	228.60	24.00	4.20
CV0625-1000-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	1.00	25.40	41.00	182.38	0.75	19.05	0.53	13.46	164.00	28.72
CV0625-1250-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	1.25	31.75	38.80	172.59	0.94	23.80	0.68	17.27	124.00	21.72
CV0625-1500-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	1.50	38.10	40.50	180.15	1.13	28.58	0.75	19.05	108.00	18.91
CV0625-1750-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	1.75	44.45	42.00	186.83	1.31	33.32	0.88	22.35	96.00	16.81
CV0625-2000-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	2.00	50.80	43.00	191.27	1.50	38.10	1.00	25.40	86.00	15.06
CV0625-2500-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	2.50	63.50	40.60	180.60	1.88	47.63	1.25	31.75	65.00	11.38
CV0625-3000-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	3.00	76.20	43.50	193.50	2.25	57.15	1.50	38.10	58.00	10.16
CV0625-3500-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	3.50	88.90	43.80	194.83	2.63	66.68	1.75	44.45	50.00	8.76
CV0625-4000-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	4.00	101.60	44.00	195.72	3.00	76.20	2.00	50.80	44.00	7.71
CV0625-12000-069	0.625	15.88	0.344	8.74	0.069 X 0.109	1.75 X 2.77	12.00	304.80	45.00	200.17	9.00	228.60	6.00	152.40	15.00	2.63
CV0625-1000-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	1.00	25.40	75.00	333.62	0.75	19.05	0.63	16.00	300.00	52.54
CV0625-1250-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	1.25	31.75	67.30	299.37	0.94	23.80	0.79	20.07	215.00	37.65
CV0625-1500-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	1.50	38.10	71.30	317.16	1.13	28.58	0.95	24.13	190.00	33.27
CV0625-1750-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	1.75	44.45	73.60	327.39	1.31	33.32	1.10	27.94	168.00	29.42
CV0625-2000-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	2.00	50.80	77.50	344.74	1.50	38.10	1.26	32.00	155.00	27.14
CV0625-2500-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	2.50	63.50	71.90	319.83	1.88	47.63	1.58	40.13	115.00	20.14
CV0625-3000-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	3.00	76.20	75.00	333.62	2.25	57.15	1.89	48.01	100.00	17.51
CV0625-3500-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	3.50	88.90	74.40	330.95	2.63	66.68	2.21	56.13	85.00	14.89
CV0625-4000-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	4.00	101.60	76.00	338.06	3.00	76.20	2.52	64.01	76.00	13.31
CV0625-12000-081	0.625	15.88	0.344	8.74	0.081 X 0.123	2.06 X 3.12	12.00	304.80	78.00	346.96	9.00	228.60	7.56	192.02	26.00	4.55
CV0625-1000-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	1.00	25.40	63.60	282.91	0.85	21.59	0.70	17.78	424.00	74.25
CV0625-1250-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	1.25	31.75	61.10	271.79	1.06	26.97	0.88	22.35	325.00	56.92
CV0625-1500-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	1.50	38.10	63.00	280.24	1.28	32.39	1.05	26.67	280.00	49.04
CV0625-1750-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	1.75	44.45	63.10	280.68	1.49	37.77	1.23	31.24	240.00	42.03
CV0625-2000-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	2.00	50.80	62.40	277.57	1.70	43.18	1.40	35.56	208.00	36.43
CV0625-2500-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	2.50	63.50	63.80	283.80	2.13	53.98	1.75	44.45	170.00	29.77
CV0625-3000-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	3.00	76.20	63.00	280.24	2.55	64.77	2.10	53.34	140.00	24.52
CV0625-3500-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	3.50	88.90	64.10	285.13	2.98	75.57	2.45	62.23	122.00	21.37

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

STOCK HEAVY DUTY COMPRESSION SPRINGS

Catalog #	Fits in Hole (H)		Fits over Shaft (R)		Wire Size		Free Length (L)		Load @ Load Length (P) Reference		Load Length (L_i)		Solid Height (Sh) Approx		Spring Rate +/-15%	
	in	mm	in	mm	in	mm	in	mm	lb	N	in	mm	in	mm	lb/in	N/mm
CV0625-4000-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	4.00	101.60	64.80	288.24	3.40	86.36	2.80	71.12	108.00	18.91
CV0625-12000-093	0.625	15.88	0.344	8.74	0.093 X 0.125	2.36 X 3.18	12.00	304.80	54.00	240.20	10.20	259.08	8.40	213.36	30.00	5.25
CV0625-1000-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	1.00	25.40	94.50	420.36	0.85	21.59	0.75	19.05	630.00	110.33
CV0625-1250-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	1.25	31.75	82.30	366.09	1.06	26.97	0.94	23.88	438.00	76.71
CV0625-1500-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	1.50	38.10	83.30	370.54	1.28	32.39	1.13	28.70	370.00	64.80
CV0625-1750-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	1.75	44.45	81.50	362.53	1.49	37.77	1.31	33.27	310.00	54.29
CV0625-2000-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	2.00	50.80	84.00	373.65	1.70	43.18	1.50	38.10	280.00	49.04
CV0625-2500-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	2.50	63.50	82.50	366.98	2.13	53.98	1.88	47.75	220.00	38.53
CV0625-3000-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	3.00	76.20	85.50	380.32	2.55	64.77	2.25	57.15	190.00	33.27
CV0625-3500-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	3.50	88.90	80.90	359.86	2.98	75.57	2.63	66.80	154.00	26.97
CV0625-4000-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	4.00	101.60	81.00	360.31	3.40	86.36	3.00	76.20	135.00	23.64
CV0625-12000-110	0.625	15.88	0.344	8.74	0.11 X 0.126	2.79 X 3.2	12.00	304.80	81.00	360.31	10.20	259.08	9.00	228.60	45.00	7.88
CV0750-1000-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	1.00	25.40	80.00	355.86	0.75	19.05	0.50	12.70	320.00	56.04
CV0750-1250-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	1.25	31.75	80.10	356.30	0.94	23.80	0.65	16.51	256.00	44.83
CV0750-1500-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	1.50	38.10	75.00	333.62	1.13	28.58	0.78	19.81	200.00	35.03
CV0750-1750-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	1.75	44.45	77.10	342.96	1.31	33.32	0.88	22.35	176.00	30.82
CV0750-2000-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	2.00	50.80	75.00	333.62	1.50	38.10	1.00	25.40	150.00	26.27
CV0750-2500-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	2.50	63.50	75.00	333.62	1.88	47.63	1.25	31.75	120.00	21.02
CV0750-3000-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	3.00	76.20	75.80	337.18	2.25	57.15	1.50	38.10	101.00	17.69
CV0750-3500-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	3.50	88.90	72.60	322.94	2.63	66.68	1.75	44.45	83.00	14.54
CV0750-4000-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	4.00	101.60	75.00	333.62	3.00	76.20	2.00	50.80	75.00	13.13
CV0750-4500-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	4.50	114.30	72.00	320.27	3.38	85.73	2.25	57.15	64.00	11.21
CV0750-5000-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	5.00	127.00	75.00	333.62	3.75	95.25	2.50	63.50	60.00	10.51
CV0750-5500-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	5.50	139.70	75.60	336.29	4.13	104.78	2.75	69.85	55.00	9.63
CV0750-6000-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	6.00	152.40	75.00	333.62	4.50	114.30	3.00	76.20	50.00	8.76
CV0750-6500-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	6.50	165.10	76.40	339.84	4.88	123.83	3.25	82.55	47.00	8.23
CV0750-7500-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	7.50	190.50	71.30	317.16	5.63	142.88	3.75	95.25	38.00	6.65
CV0750-12000-075	0.750	19.05	0.375	9.53	0.075 X 0.165	1.91 X 4.19	12.00	304.80	72.00	320.27	9.00	228.60	6.00	152.40	24.00	4.20
CV0750-1000-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	1.00	25.40	125.00	556.03	0.75	19.05	0.63	16.00	500.00	87.56
CV0750-1250-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	1.25	31.75	118.90	528.89	0.94	23.80	0.79	20.07	380.00	66.55
CV0750-1500-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	1.50	38.10	116.30	517.33	1.13	28.58	0.95	24.13	310.00	54.29
CV0750-1750-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	1.75	44.45	118.30	526.22	1.31	33.32	1.10	27.94	270.00	47.28
CV0750-2000-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	2.00	50.80	120.00	533.79	1.50	38.10	1.26	32.00	240.00	42.03
CV0750-2500-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	2.50	63.50	117.50	522.67	1.88	47.63	1.58	40.13	188.00	32.92
CV0750-3000-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	3.00	76.20	111.80	497.31	2.25	57.15	1.89	48.01	149.00	26.09
CV0750-3500-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	3.50	88.90	112.00	498.20	2.63	66.68	2.21	56.13	128.00	22.42
CV0750-4000-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	4.00	101.60	110.00	489.30	3.00	76.20	2.52	64.01	110.00	19.26
CV0750-4500-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	4.50	114.30	112.50	500.42	3.38	85.73	2.84	72.14	100.00	17.51
CV0750-5000-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	5.00	127.00	112.50	500.42	3.75	95.25	3.15	80.01	90.00	15.76
CV0750-5500-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	5.50	139.70	110.00	489.30	4.13	104.78	3.47	88.14	80.00	14.01
CV0750-6000-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	6.00	152.40	112.50	500.42	4.50	114.30	3.78	96.01	75.00	13.13
CV0750-12000-093	0.750	19.05	0.375	9.53	0.093 X 0.156	2.36 X 3.96	12.00	304.80	105.00	467.06	9.00	228.60	7.56	192.02	35.00	6.13
CV0750-1000-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	1.00	25.40	162.00	720.61	0.85	21.59	0.73	18.54	1080.00	189.14
CV0750-1250-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	1.25	31.75	165.40	735.74	1.06	26.97	0.90	22.86	880.00	154.11
CV0750-1500-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	1.50	38.10	155.30	690.81	1.28	32.39	1.05	26.67	690.00	120.84
CV0750-1750-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	1.75	44.45	157.80	701.93	1.49	37.77	1.23	31.24	600.00	105.08
CV0750-2000-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	2.00	50.80	154.50	687.25	1.70	43.18	1.40	35.56	515.00	90.19
CV0750-2500-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	2.50	63.50	150.00	667.23	2.13	53.98	1.75	44.45	400.00	70.05
CV0750-3000-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	3.00	76.20	148.50	660.56	2.55	64.77	2.10	53.34	330.00	57.79
CV0750-3500-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	3.50	88.90	152.30	677.46	2.98	75.57	2.45	62.23	290.00	50.79
CV0750-4000-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	4.00	101.60	150.00	667.23	3.40	86.36	2.80	71.12	250.00	43.78
CV0750-4500-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	4.50	114.30	148.50	660.56	3.83	97.16	3.15	80.01	220.00	38.53
CV0750-5000-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	5.00	127.00	146.30	650.77	4.25	107.95	3.50	88.90	195.00	34.15
CV0750-5500-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	5.50	139.70	146.90	653.44	4.68	118.75	3.85	97.79	178.00	31.17
CV0750-6000-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	6.00	152.40	144.00	640.54	5.10	129.54	4.20	106.68	160.00	28.02
CV0750-12000-125	0.750	19.05	0.375	9.53	0.125 X 0.165	3.18 X 4.19	12.00	304.80	144.00	640.54	10.20	259.08	8.40	213.36	80.00	14.01
CV0750-1000-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	1.00	25.40	210.00	934.13	0.85	21.59	0.75	19.05	1400.00	245.18
CV0750-1250-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	1.25	31.75	206.80	919.89	1.06	26.97	0.94	23.88	1100.00	192.64
CV0750-1500-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	1.50	38.10	200.30	890.98	1.28	32.39	1.13	28.70	890.00	155.86
CV0750-1750-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	1.75	44.45	197.30	877.63	1.49	37.77	1.31	33.27	750.00	131.35
CV0750-2000-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	2.00	50.80	198.00	880.75	1.70	43.18	1.50	38.10	660.00	115.58
CV0750-2500-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	2.50	63.50	187.50	834.04	2.13	53.98	1.88	47.75	500.00	87.56
CV0750-3000-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	3.00	76.20	182.30	810.91	2.55	64.77	2.25	57.15	405.00	70.93
CV0750-3500-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	3.50	88.90	181.10	805.57	2.98	75.57	2.63	66.80	345.00	60.42

STOCK HEAVY DUTY COMPRESSION SPRINGS

Catalog #	Fits in Hole (H)		Fits over Shaft (R)		Wire Size		Free Length (L)		Load @ Load Length (P) Reference		Load Length (L_1)		Solid Height (Sh) Approx		Spring Rate +/-15%	
	in	mm	in	mm	in	mm	in	mm	lb	N	in	mm	in	mm	lb/in	N/mm
CV0750-4000-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	4.00	101.60	180.00	800.68	3.40	86.36	3.00	76.20	300.00	52.54
CV0750-4500-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	4.50	114.30	178.90	795.79	3.83	97.16	3.38	85.85	265.00	46.41
CV0750-5000-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	5.00	127.00	176.30	784.22	4.25	107.95	3.75	95.25	235.00	41.15
CV0750-5500-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	5.50	139.70	177.40	789.11	4.68	118.75	4.13	104.90	215.00	37.65
CV0750-6000-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	6.00	152.40	175.50	780.66	5.10	129.54	4.50	114.30	195.00	34.15
CV0750-12000-135	0.750	19.05	0.375	9.53	0.135 X 0.165	3.43 X 4.19	12.00	304.80	171.00	760.65	10.20	259.08	9.00	228.60	95.00	16.64
CV1000-1000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	1.00	25.40	137.50	611.63	0.75	19.05	0.60	15.24	550.00	96.32
CV1000-1250-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	1.25	31.75	140.90	626.75	0.94	23.80	0.70	17.78	450.00	78.81
CV1000-1500-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	1.50	38.10	139.90	622.31	1.13	28.58	0.80	20.32	373.00	65.32
CV1000-1750-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	1.75	44.45	140.20	623.64	1.31	33.32	0.88	22.35	320.00	56.04
CV1000-2000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	2.00	50.80	134.00	596.06	1.50	38.10	1.00	25.40	268.00	46.93
CV1000-2500-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	2.50	63.50	130.60	580.94	1.88	47.63	1.25	31.75	209.00	36.60
CV1000-3000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	3.00	76.20	128.30	570.71	2.25	57.15	1.50	38.10	171.00	29.95
CV1000-3500-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	3.50	88.90	126.90	564.48	2.63	66.68	1.75	44.45	145.00	25.39
CV1000-4000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	4.00	101.60	125.00	556.03	3.00	76.20	2.00	50.80	125.00	21.89
CV1000-4500-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	4.50	114.30	124.90	555.58	3.38	85.73	2.25	57.15	111.00	19.44
CV1000-5000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	5.00	127.00	120.00	533.79	3.75	95.25	2.50	63.50	96.00	16.81
CV1000-5500-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	5.50	139.70	121.00	538.23	4.13	104.78	2.75	69.85	88.00	15.41
CV1000-6000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	6.00	152.40	120.00	533.79	4.50	114.30	3.00	76.20	80.00	14.01
CV1000-7000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	7.00	177.80	126.00	560.48	5.25	133.35	3.50	88.90	72.00	12.61
CV1000-8000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	8.00	203.20	120.00	533.79	6.00	152.40	4.00	101.60	60.00	10.51
CV1000-12000-100	1.000	25.40	0.500	12.70	0.1 X 0.215	2.54 X 5.46	12.00	304.80	120.00	533.79	9.00	228.60	6.00	152.40	40.00	7.01
CV1000-1000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	1.00	25.40	206.80	919.89	0.75	19.05	0.68	17.27	827.00	144.83
CV1000-1250-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	1.25	31.75	204.40	909.22	0.94	23.80	0.79	20.07	653.00	114.36
CV1000-1500-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	1.50	38.10	201.80	897.65	1.13	28.58	0.95	24.13	538.00	94.22
CV1000-1750-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	1.75	44.45	201.90	898.10	1.31	33.32	1.10	27.94	461.00	80.73
CV1000-2000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	2.00	50.80	200.00	889.64	1.50	38.10	1.26	32.00	400.00	70.05
CV1000-2500-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	2.50	63.50	201.30	895.43	1.88	47.63	1.58	40.13	322.00	56.39
CV1000-3000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	3.00	76.20	200.30	890.98	2.25	57.15	1.89	48.01	267.00	46.76
CV1000-3500-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	3.50	88.90	200.40	891.42	2.63	66.68	2.21	56.13	229.00	40.10
CV1000-4000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	4.00	101.60	202.00	898.54	3.00	76.20	2.52	64.01	202.00	35.38
CV1000-4500-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	4.50	114.30	200.30	890.98	3.38	85.73	2.84	72.14	178.00	31.17
CV1000-5000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	5.00	127.00	196.30	873.19	3.75	95.25	3.15	80.01	157.00	27.49
CV1000-5500-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	5.50	139.70	188.40	838.04	4.13	104.78	3.47	88.14	137.00	23.99
CV1000-6000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	6.00	152.40	187.50	834.04	4.50	114.30	3.78	96.01	125.00	21.89
CV1000-7000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	7.00	177.80	190.80	848.72	5.25	133.35	4.41	112.01	109.00	19.09
CV1000-8000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	8.00	203.20	192.00	854.06	6.00	152.40	5.04	128.02	96.00	16.81
CV1000-12000-115	1.000	25.40	0.500	12.70	0.115 X 0.218	2.92 X 5.54	12.00	304.80	195.00	867.40	9.00	228.60	7.56	192.02	65.00	11.38
CV1000-1000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	1.00	25.40	289.80	1289.09	0.85	21.59	0.73	18.54	1932.00	338.34
CV1000-1250-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	1.25	31.75	275.40	1225.04	1.06	26.97	0.88	22.35	1465.00	256.56
CV1000-1500-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	1.50	38.10	270.00	1201.02	1.28	32.39	1.05	26.67	1200.00	210.15
CV1000-1750-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	1.75	44.45	273.50	1216.59	1.49	37.77	1.23	31.24	1040.00	182.13
CV1000-2000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	2.00	50.80	261.60	1163.65	1.70	43.18	1.40	35.56	872.00	152.71
CV1000-2500-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	2.50	63.50	249.40	1109.39	2.13	53.98	1.75	44.45	665.00	116.46
CV1000-3000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	3.00	76.20	244.80	1088.92	2.55	64.77	2.10	53.34	544.00	95.27
CV1000-3500-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	3.50	88.90	239.40	1064.90	2.98	75.57	2.45	62.23	456.00	79.86
CV1000-4000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	4.00	101.60	240.00	1067.57	3.40	86.36	2.80	71.12	400.00	70.05
CV1000-4500-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	4.50	114.30	237.60	1056.90	3.83	97.16	3.15	80.01	352.00	61.64
CV1000-5000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	5.00	127.00	234.00	1040.88	4.25	107.95	3.50	88.90	312.00	54.64
CV1000-5500-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	5.50	139.70	237.60	1056.90	4.68	118.75	3.85	97.79	288.00	50.44
CV1000-6000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	6.00	152.40	230.40	1024.87	5.10	129.54	4.20	106.68	256.00	44.83
CV1000-7000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	7.00	177.80	235.20	1046.22	5.95	151.13	4.90	124.46	224.00	39.23
CV1000-8000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	8.00	203.20	230.40	1024.87	6.80	172.72	5.60	142.24	192.00	33.62
CV1000-12000-158	1.000	25.40	0.500	12.70	0.158 X 0.221	4.01 X 5.61	12.00	304.80	230.40	1024.87	10.20	259.08	8.40	213.36	128.00	22.42
CV1000-1500-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	1.50	38.10	360.00	1601.36	1.28	32.39	1.13	28.70	1600.00	280.20
CV1000-2000-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	2.00	50.80	348.00	1547.98	1.70	43.18	1.50	38.10	1160.00	203.15
CV1000-2500-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	2.50	63.50	336.00	1494.60	2.13	53.98	1.88	47.75	896.00	156.91
CV1000-3000-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	3.00	76.20	331.20	1473.25	2.55	64.77	2.25	57.15	736.00	128.89
CV1000-3500-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	3.50	88.90	327.60	1457.24	2.98	75.57	2.63	66.80	624.00	109.28
CV1000-4000-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	4.00	101.60	331.20	1473.25	3.40	86.36	3.00	76.20	552.00	96.67
CV1000-4500-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	4.50	114.30	329.40	1465.24	3.83	97.16	3.38	85.85	488.00	85.46
CV1000-5000-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	5.00	127.00	324.00	1441.22	4.25	107.95	3.75	95.25	432.00	75.65
CV1000-6000-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	6.00	152.40	324.00	1441.22	5.10	129.54	4.50	114.30	360.00	63.05
CV1000-12000-188	1.000	25.40	0.500	12.70	0.188 X 0.221	4.78 X 5.61	12.00	304.80	316.80	1409.20	10.20	259.08	9.00	228.60	176.00	30.82

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

STOCK HEAVY DUTY COMPRESSION SPRINGS

Catalog #	Fits in Hole (H)		Fits over Shaft (R)		Wire Size		Free Length (L)		Load @ Load Length (P) Reference		Load Length (L_i)		Solid Height (Sh) Approx		Spring Rate +/-15%	
	in	mm	in	mm	in	mm	in	mm	lb	N	in	mm	in	mm	lb/in	N/mm
CV1250-1500-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	1.50	38.10	186.00	827.37	1.13	28.58	0.83	21.08	496.00	86.86
CV1250-1750-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	1.75	44.45	177.80	790.89	1.31	33.32	0.90	22.86	406.00	71.10
CV1250-2000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	2.00	50.80	188.00	836.27	1.50	38.10	1.00	25.40	376.00	65.85
CV1250-2500-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	2.50	63.50	180.00	800.68	1.88	47.63	1.25	31.75	288.00	50.44
CV1250-3000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	3.00	76.20	180.00	800.68	2.25	57.15	1.50	38.10	240.00	42.03
CV1250-3500-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	3.50	88.90	175.00	778.44	2.63	66.68	1.75	44.45	200.00	35.03
CV1250-4000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	4.00	101.60	176.00	782.89	3.00	76.20	2.00	50.80	176.00	30.82
CV1250-4500-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	4.50	114.30	180.00	800.68	3.38	85.73	2.25	57.15	160.00	28.02
CV1250-5000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	5.00	127.00	178.80	795.34	3.75	95.25	2.50	63.50	143.00	25.04
CV1250-5500-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	5.50	139.70	176.00	782.89	4.13	104.78	2.75	69.85	128.00	22.42
CV1250-6000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	6.00	152.40	180.00	800.68	4.50	114.30	3.00	76.20	120.00	21.02
CV1250-7000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	7.00	177.80	182.00	809.58	5.25	133.35	3.50	88.90	104.00	18.21
CV1250-8000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	8.00	203.20	176.00	782.89	6.00	152.40	4.00	101.60	88.00	15.41
CV1250-10000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	10.00	254.00	180.00	800.68	7.50	190.50	5.00	127.00	72.00	12.61
CV1250-12000-115	1.250	31.75	0.625	15.88	0.115 X 0.285	2.92 X 7.24	12.00	304.80	180.00	800.68	9.00	228.60	6.00	152.40	60.00	10.51
CV1250-1500-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	1.50	38.10	429.00	1908.29	1.13	28.58	0.98	24.89	1144.00	200.35
CV1250-1750-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	1.75	44.45	441.50	1963.89	1.31	33.32	1.10	27.94	1008.00	176.53
CV1250-2000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	2.00	50.80	419.00	1863.80	1.50	38.10	1.26	32.00	838.00	146.76
CV1250-2500-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	2.50	63.50	390.00	1734.81	1.88	47.63	1.58	40.13	624.00	109.28
CV1250-3000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	3.00	76.20	384.00	1708.12	2.25	57.15	1.89	48.01	512.00	89.66
CV1250-3500-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	3.50	88.90	385.00	1712.56	2.63	66.68	2.21	56.13	440.00	77.06
CV1250-4000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	4.00	101.60	381.00	1694.77	3.00	76.20	2.52	64.01	381.00	66.72
CV1250-4500-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	4.50	114.30	370.10	1646.29	3.38	85.73	2.84	72.14	329.00	57.62
CV1250-5000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	5.00	127.00	375.00	1668.08	3.75	95.25	3.15	80.01	300.00	52.54
CV1250-5500-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	5.50	139.70	363.00	1614.70	4.13	104.78	3.47	88.14	264.00	46.23
CV1250-6000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	6.00	152.40	375.00	1668.08	4.50	114.30	3.78	96.01	250.00	43.78
CV1250-7000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	7.00	177.80	367.50	1634.72	5.25	133.35	4.41	112.01	210.00	36.78
CV1250-8000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	8.00	203.20	368.00	1636.94	6.00	152.40	5.04	128.02	184.00	32.22
CV1250-10000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	10.00	254.00	362.50	1612.48	7.50	190.50	6.30	160.02	145.00	25.39
CV1250-12000-156	1.250	31.75	0.625	15.88	0.156 X 0.281	3.96 X 7.14	12.00	304.80	372.00	1654.74	9.00	228.60	7.56	192.02	124.00	21.72
CV1250-1500-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	1.50	38.10	495.00	2201.87	1.28	32.39	1.05	26.67	2200.00	385.28
CV1250-1750-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	1.75	44.45	477.60	2124.47	1.49	37.77	1.23	31.24	1816.00	318.03
CV1250-2000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	2.00	50.80	448.80	1996.36	1.70	43.18	1.43	36.32	1496.00	261.99
CV1250-2500-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	2.50	63.50	441.00	1961.67	2.13	53.98	1.75	44.45	1176.00	205.95
CV1250-3000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	3.00	76.20	428.40	1905.62	2.55	64.77	2.10	53.34	952.00	166.72
CV1250-3500-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	3.50	88.90	409.50	1821.55	2.98	75.57	2.45	62.23	780.00	136.60
CV1250-4000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	4.00	101.60	398.40	1772.17	3.40	86.36	2.80	71.12	664.00	116.28
CV1250-4500-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	4.50	114.30	394.20	1753.49	3.83	97.16	3.15	80.01	584.00	102.27
CV1250-5000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	5.00	127.00	397.50	1768.17	4.25	107.95	3.50	88.90	530.00	92.82
CV1250-5500-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	5.50	139.70	389.40	1732.14	4.68	118.75	3.85	97.79	472.00	82.66
CV1250-6000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	6.00	152.40	405.00	1801.53	5.10	129.54	4.20	106.68	450.00	78.81
CV1250-7000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	7.00	177.80	386.40	1718.79	5.95	151.13	4.90	124.46	368.00	64.45
CV1250-8000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	8.00	203.20	393.60	1750.82	6.80	172.72	5.60	142.24	328.00	57.44
CV1250-10000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	10.00	254.00	384.00	1708.12	8.50	215.90	7.00	177.80	256.00	44.83
CV1250-12000-200	1.250	31.75	0.625	15.88	0.2 X 0.286	5.08 X 7.26	12.00	304.80	396.00	1761.50	10.20	259.08	8.40	213.36	220.00	38.53
CV1250-2000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	2.00	50.80	615.00	2735.66	1.70	43.18	1.50	38.10	2050.00	359.01
CV1250-2500-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	2.50	63.50	571.90	2543.94	2.13	53.98	1.88	47.75	1525.00	267.07
CV1250-3000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	3.00	76.20	549.00	2442.07	2.55	64.77	2.25	57.15	1220.00	213.65
CV1250-3500-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	3.50	88.90	569.60	2533.71	2.98	75.57	2.63	66.80	1085.00	190.01
CV1250-4000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	4.00	101.60	534.00	2375.35	3.40	86.36	3.00	76.20	890.00	155.86
CV1250-4500-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	4.50	114.30	563.60	2507.02	3.83	97.16	3.38	85.85	835.00	146.23
CV1250-5000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	5.00	127.00	525.00	2335.32	4.25	107.95	3.75	95.25	700.00	122.59
CV1250-6000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	6.00	152.40	517.50	2301.95	5.10	129.54	4.50	114.30	575.00	100.70
CV1250-8000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	8.00	203.20	552.00	2455.42	6.80	172.72	6.00	152.40	460.00	80.56
CV1250-10000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	10.00	254.00	517.20	2300.62	8.50	215.90	7.50	190.50	345.00	60.42
CV1250-12000-225	1.250	31.75	0.625	15.88	0.225 X 0.284	5.72 X 7.21	12.00	304.80	486.00	2161.83	10.20	259.08	9.00	228.60	270.00	47.28
CV1500-2000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	2.00	50.80	265.00	1178.78	1.50	38.10	1.08	27.43	530.00	92.82
CV1500-2500-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	2.50	63.50	266.90	1187.23	1.88	47.63	1.25	31.75	427.00	74.78
CV1500-3000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	3.00	76.20	270.00	1201.02	2.25	57.15	1.50	38.10	360.00	63.05
CV1500-3500-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	3.50	88.90	262.50	1167.66	2.63	66.68	1.75	44.45	300.00	52.54
CV1500-4000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	4.00	101.60	249.00	1107.61	3.00	76.20	2.00	50.80	249.00	43.61
CV1500-4500-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	4.50	114.30	258.80	1151.20	3.38	85.73	2.25	57.15	230.00	40.28
CV1500-5000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	5.00	127.00	262.50	1167.66	3.75	95.25	2.50	63.50	210.00	36.78
CV1500-5500-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	5.50	139.70	254.40	1131.63	4.13	104.78	2.75	69.85	185.00	32.40

STOCK HEAVY DUTY COMPRESSION SPRINGS

Catalog #	Fits in Hole (H)		Fits over Shaft (R)		Wire Size		Free Length (L)		Load @ Load Length (P) Reference		Load Length (L_1)		Solid Height (Sh) Approx		Spring Rate +/-15%	
	in	mm	in	mm	in	mm	in	mm	lb	N	in	mm	in	mm	lb/in	N/mm
CV1500-6000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	6.00	152.40	255.00	1134.30	4.50	114.30	3.00	76.20	170.00	29.77
CV1500-7000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	7.00	177.80	267.80	1191.23	5.25	133.35	3.50	88.90	153.00	26.79
CV1500-8000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	8.00	203.20	264.00	1174.33	6.00	152.40	4.00	101.60	132.00	23.12
CV1500-10000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	10.00	254.00	265.00	1178.78	7.50	190.50	5.00	127.00	106.00	18.56
CV1500-12000-135	1.500	38.10	0.750	19.05	0.135 X 0.345	3.43 X 8.76	12.00	304.80	255.00	1134.30	9.00	228.60	6.00	152.40	85.00	14.89
CV1500-2000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	2.00	50.80	515.00	2290.83	1.50	38.10	1.26	32.00	1030.00	180.38
CV1500-2500-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	2.50	63.50	507.50	2257.47	1.88	47.63	1.58	40.13	812.00	142.20
CV1500-3000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	3.00	76.20	468.00	2081.77	2.25	57.15	1.89	48.01	624.00	109.28
CV1500-3500-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	3.50	88.90	472.50	2101.78	2.63	66.68	2.21	56.13	540.00	94.57
CV1500-4000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	4.00	101.60	465.00	2068.42	3.00	76.20	2.52	64.01	465.00	81.43
CV1500-4500-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	4.50	114.30	461.30	2051.96	3.38	85.73	2.84	72.14	410.00	71.80
CV1500-5000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	5.00	127.00	460.00	2046.18	3.75	95.25	3.15	80.01	368.00	64.45
CV1500-5500-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	5.50	139.70	453.80	2018.60	4.13	104.78	3.47	88.14	330.00	57.79
CV1500-6000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	6.00	152.40	442.50	1968.34	4.50	114.30	3.78	96.01	295.00	51.66
CV1500-7000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	7.00	177.80	446.30	1985.24	5.25	133.35	4.41	112.01	255.00	44.66
CV1500-8000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	8.00	203.20	440.00	1957.22	6.00	152.40	5.04	128.02	220.00	38.53
CV1500-10000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	10.00	254.00	440.00	1957.22	7.50	190.50	6.30	160.02	176.00	30.82
CV1500-12000-187	1.500	38.10	0.750	19.05	0.187 X 0.312	4.75 X 7.92	12.00	304.80	432.00	1921.63	9.00	228.60	7.56	192.02	144.00	25.22
CV1500-2000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	2.00	50.80	594.00	2642.24	1.70	43.18	1.40	35.56	1980.00	346.75
CV1500-2500-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	2.50	63.50	581.30	2585.75	2.13	53.98	1.75	44.45	1550.00	271.45
CV1500-3000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	3.00	76.20	585.00	2602.21	2.55	64.77	2.10	53.34	1300.00	227.66
CV1500-3500-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	3.50	88.90	558.60	2484.78	2.98	75.57	2.45	62.23	1064.00	186.33
CV1500-4000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	4.00	101.60	547.20	2434.07	3.40	86.36	2.80	71.12	912.00	159.72
CV1500-4500-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	4.50	114.30	550.80	2450.08	3.83	97.16	3.15	80.01	816.00	142.90
CV1500-5000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	5.00	127.00	547.50	2435.40	4.25	107.95	3.50	88.90	730.00	127.84
CV1500-5500-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	5.50	139.70	552.80	2458.98	4.68	118.75	3.85	97.79	670.00	117.33
CV1500-6000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	6.00	152.40	525.60	2337.98	5.10	129.54	4.20	106.68	584.00	102.27
CV1500-7000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	7.00	177.80	520.80	2316.63	5.95	151.13	4.90	124.46	496.00	86.86
CV1500-8000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	8.00	203.20	518.40	2305.96	6.80	172.72	5.60	142.24	432.00	75.65
CV1500-10000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	10.00	254.00	543.00	2415.38	8.50	215.90	7.00	177.80	362.00	63.40
CV1500-12000-225	1.500	38.10	0.750	19.05	0.225 X 0.337	5.72 X 8.56	12.00	304.80	540.00	2402.04	10.20	259.08	8.40	213.36	300.00	52.54
CV1500-2000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	2.00	50.80	1225.50	5451.29	1.70	43.18	1.55	39.37	4085.00	715.39
CV1500-2500-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	2.50	63.50	1231.90	5479.76	2.13	53.98	1.88	47.75	3285.00	575.29
CV1500-3000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	3.00	76.20	1147.50	5104.33	2.55	64.77	2.25	57.15	2550.00	446.57
CV1500-3500-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	3.50	88.90	1120.90	4986.01	2.98	75.57	2.63	66.80	2135.00	373.90
CV1500-4000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	4.00	101.60	1107.00	4924.18	3.40	86.36	3.00	76.20	1845.00	323.11
CV1500-4500-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	4.50	114.30	1096.90	4879.25	3.83	97.16	3.38	85.85	1625.00	284.58
CV1500-5000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	5.00	127.00	1087.50	4837.44	4.25	107.95	3.75	95.25	1450.00	253.93
CV1500-6000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	6.00	152.40	1084.50	4824.09	5.10	129.54	4.50	114.30	1205.00	211.03
CV1500-8000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	8.00	203.20	1086.00	4830.77	6.80	172.72	6.00	152.40	905.00	158.49
CV1500-10000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	10.00	254.00	1065.00	4737.35	8.50	215.90	7.50	190.50	710.00	124.34
CV1500-12000-300	1.500	38.10	0.750	19.05	0.3 X 0.346	7.62 X 8.79	12.00	304.80	999.00	4443.77	10.20	259.08	9.00	228.60	550.00	96.32
CV2000-2500-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	2.50	63.50	625.00	2780.14	1.88	47.63	1.40	35.56	1000.00	175.13
CV2000-3000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	3.00	76.20	622.50	2769.02	2.25	57.15	1.60	40.64	830.00	145.36
CV2000-3500-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	3.50	88.90	592.40	2635.13	2.63	66.68	1.83	46.48	677.00	118.56
CV2000-4000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	4.00	101.60	600.00	2668.93	3.00	76.20	2.05	52.07	600.00	105.08
CV2000-4500-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	4.50	114.30	596.30	2652.47	3.38	85.73	2.35	59.69	530.00	92.82
CV2000-5000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	5.00	127.00	587.50	2613.33	3.75	95.25	2.55	64.77	470.00	82.31
CV2000-5500-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	5.50	139.70	556.90	2477.21	4.13	104.78	2.75	69.85	405.00	70.93
CV2000-6000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	6.00	152.40	585.00	2602.21	4.50	114.30	3.00	76.20	390.00	68.30
CV2000-7000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	7.00	177.80	546.00	2428.73	5.25	133.35	3.50	88.90	312.00	54.64
CV2000-8000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	8.00	203.20	570.00	2535.49	6.00	152.40	4.00	101.60	285.00	49.91
CV2000-10000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	10.00	254.00	540.00	2402.04	7.50	190.50	5.00	127.00	216.00	37.83
CV2000-12000-195	2.000	50.80	1.000	25.40	0.195 X 0.468	4.95 X 11.89	12.00	304.80	555.00	2468.76	9.00	228.60	6.00	152.40	185.00	32.40
CV2000-2500-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	2.50	63.50	740.00	3291.68	1.88	47.63	1.58	40.13	1184.00	207.35
CV2000-3000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	3.00	76.20	697.50	3102.63	2.25	57.15	1.89	48.01	930.00	162.87
CV2000-3500-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	3.50	88.90	684.30	3043.92	2.63	66.68	2.21	56.13	782.00	136.95
CV2000-4000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	4.00	101.60	664.00	2953.62	3.00	76.20	2.52	64.01	664.00	116.28
CV2000-4500-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	4.50	114.30	675.00	3002.55	3.38	85.73	2.84	72.14	600.00	105.08
CV2000-5000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	5.00	127.00	667.50	2969.19	3.75	95.25	3.15	80.01	534.00	93.52
CV2000-5500-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	5.50	139.70	673.80	2997.21	4.13	104.78	3.47	88.14	490.00	85.81
CV2000-6000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	6.00	152.40	675.00	3002.55	4.50	114.30	3.78	96.01	450.00	78.81
CV2000-7000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	7.00	177.80	654.50	2911.36	5.25	133.35	4.41	112.01	374.00	65.50
CV2000-8000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	8.00	203.20	660.00	2935.83	6.00	152.40	5.04	128.02	330.00	57.79

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

STOCK HEAVY DUTY COMPRESSION SPRINGS

Catalog #	Fits in Hole (H)		Fits over Shaft (R)		Wire Size		Free Length (L)		Load @ Load Length (P) Reference		Load Length (L_i)		Solid Height (Sh) Approx		Spring Rate +/-15%	
	in	mm	in	mm	in	mm	in	mm	lb	N	in	mm	in	mm	lb/in	N/mm
CV2000-10000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	10.00	254.00	650.00	2891.34	7.50	190.50	6.30	160.02	260.00	45.53
CV2000-12000-225	2.000	50.80	1.000	25.40	0.225 X 0.437	5.72 X 11.1	12.00	304.80	645.00	2869.10	9.00	228.60	7.56	192.02	215.00	37.65
CV2000-2500-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	2.50	63.50	942.00	4190.22	2.13	53.98	1.75	44.45	2512.00	439.92
CV2000-3000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	3.00	76.20	927.00	4123.50	2.55	64.77	2.10	53.34	2060.00	360.76
CV2000-3500-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	3.50	88.90	892.50	3970.04	2.98	75.57	2.45	62.23	1700.00	297.72
CV2000-4000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	4.00	101.60	900.00	4003.40	3.40	86.36	2.80	71.12	1500.00	262.69
CV2000-4500-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	4.50	114.30	858.60	3819.24	3.83	97.16	3.15	80.01	1272.00	222.76
CV2000-5000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	5.00	127.00	889.50	3956.69	4.25	107.95	3.50	88.90	1186.00	207.70
CV2000-5500-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	5.50	139.70	888.50	3952.24	4.68	118.75	3.85	97.79	1077.00	188.61
CV2000-6000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	6.00	152.40	879.30	3911.32	5.10	129.54	4.20	106.68	977.00	171.10
CV2000-7000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	7.00	177.80	861.00	3829.92	5.95	151.13	4.90	124.46	820.00	143.60
CV2000-8000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	8.00	203.20	876.00	3896.64	6.80	172.72	5.60	142.24	730.00	127.84
CV2000-10000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	10.00	254.00	858.00	3816.57	8.50	215.90	7.00	177.80	572.00	100.17
CV2000-12000-280	2.000	50.80	1.000	25.40	0.28 X 0.47	7.11 X 11.94	12.00	304.80	858.60	3819.24	10.20	259.08	8.40	213.36	477.00	83.54
CV2000-2500-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	2.50	63.50	1541.30	6856.04	2.13	53.98	1.90	48.26	4110.00	719.77
CV2000-3000-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	3.00	76.20	1435.50	6385.42	2.55	64.77	2.30	58.42	3190.00	558.65
CV2000-3500-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	3.50	88.90	1451.10	6454.81	2.98	75.57	2.63	66.80	2764.00	484.05
CV2000-4000-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	4.00	101.60	1386.60	6167.90	3.40	86.36	3.03	76.96	2311.00	404.72
CV2000-4500-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	4.50	114.30	1274.40	5668.81	3.83	97.16	3.38	85.85	1888.00	330.64
CV2000-5000-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	5.00	127.00	1353.00	6018.44	4.25	107.95	3.75	95.25	1804.00	315.93
CV2000-6000-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	6.00	152.40	1325.70	5897.01	5.10	129.54	4.50	114.30	1473.00	257.96
CV2000-8000-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	8.00	203.20	1339.20	5957.06	6.80	172.72	6.00	152.40	1116.00	195.44
CV2000-10000-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	10.00	254.00	1326.00	5898.34	8.50	215.90	7.50	190.50	884.00	154.81
CV2000-12000-365	2.000	50.80	1.000	25.40	0.365 X 0.46	9.27 X 11.68	12.00	304.80	1281.60	5700.84	10.20	259.08	9.00	228.60	712.00	124.69

CONICAL COMPRESSION SPRINGS

Stock sizes in stainless steel
SPEC conical springs are cone-shaped compression springs designed to provide a near constant spring rate and a solid height lower than a normal spring. Each spring features a variable pitch to achieve the constant spring rate and coils which nest during deflection to provide a solid height approximately equal to two wire diameters.

All springs are manufactured from stainless steel for use in a multitude of environments.

Material
Stainless Type 302 per ASTM A313 or AMS 5688 spring temper. (Chemical and physical only.)

Stainless steel springs are not recommended for applications where the temperature exceeds 500˚F (260˚C).

Certificate of chemical analysis available at additional charge.

Finish
Plain wire passivated. See page 311 for alternative finishes.

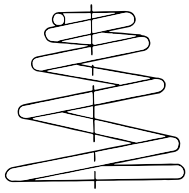
Direction of Helix
Right hand.

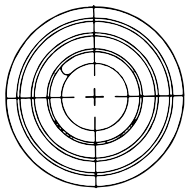
Ends
Squared ends, not ground.

Spring Rate
The spring rate is linear due to the variable pitch.

Coils
Springs are designed to permit active coils to nest within each other. This provides a solid height of approximately two wire diameters.

Solid Height
Due to coil nesting, the solid height is approximately equal to two wire diameters.


SIDE VIEW


TOP VIEW

(OD) 0.360 - 0.600

CONICAL COMPRESSION SPRINGS

Catalog #	Outside Diameter Large End		Outside Diameter Small End		Wire Diameter		Free Height Approx		Load @ 50% of Free Length		Load @ Solid Approx		Spring Rate	
	in	mm	in	mm	in	mm	in	mm	lb	N	lb	N	lb/in	N/mm
A0360-029-0250-S*	0.360	9.14	0.125	3.18	0.029	0.74	0.250	6.35	3.450	15.35	5.29	23.53	27.58	4.83
A0420-029-0375-S*	0.420	10.67	0.156	3.96	0.029	0.74	0.375	9.53	2.500	11.12	4.23	18.82	13.35	2.34
A0420-029-0312-S*	0.420	10.67	0.187	4.75	0.029	0.74	0.312	7.92	2.260	10.05	3.68	16.37	14.48	2.54
A0420-029-0250-S*	0.420	10.67	0.218	5.54	0.029	0.74	0.250	6.35	2.040	9.07	3.14	13.97	16.38	2.87
A0420-032-0312-S*	0.420	10.67	0.156	3.96	0.032	0.81	0.312	7.92	3.630	16.15	5.77	25.67	23.25	4.07
A0420-032-0250-S*	0.420	10.67	0.187	4.75	0.032	0.81	0.250	6.35	3.190	14.19	4.74	21.08	25.49	4.46
A0420-035-0250-S*	0.420	10.67	0.187	4.75	0.035	0.89	0.250	6.35	5.090	22.64	7.33	32.61	40.80	7.15
A0480-029-0625-S*	0.480	12.19	0.187	4.75	0.029	0.74	0.625	15.88	2.150	9.56	3.90	17.35	6.88	1.2
A0480-029-0500-S*	0.480	12.19	0.218	5.54	0.029	0.74	0.500	12.7	1.930	8.59	3.40	15.12	7.70	1.35
A0480-029-0375-S*	0.480	12.19	0.25	6.35	0.029	0.74	0.375	9.53	1.590	7.07	2.70	12.01	8.50	1.49
A0480-029-0312-S*	0.480	12.19	0.281	7.14	0.029	0.74	0.312	7.92	1.530	6.81	2.49	11.08	9.79	1.71
A0480-032-0625-S*	0.480	12.19	0.156	3.96	0.032	0.81	0.625	15.88	3.420	15.21	6.13	27.27	10.93	1.91
A0480-032-0500-S*	0.480	12.19	0.187	4.75	0.032	0.81	0.500	12.7	2.880	12.81	5.02	22.33	11.51	2.02
A0480-032-0375-S*	0.480	12.19	0.218	5.54	0.032	0.81	0.375	9.53	2.560	11.39	4.24	18.86	13.63	2.39
A0480-032-0312-S*	0.480	12.19	0.25	6.35	0.032	0.81	0.312	7.92	2.370	10.54	3.78	16.81	15.21	2.66
A0480-035-0375-S*	0.480	12.19	0.187	4.75	0.035	0.89	0.375	9.53	3.920	17.44	6.37	28.34	20.91	3.66
A0480-035-0312-S*	0.480	12.19	0.218	5.54	0.035	0.89	0.312	7.92	3.480	15.48	5.39	23.98	22.26	3.9
A0480-038-0312-S*	0.480	12.19	0.187	4.75	0.038	0.97	0.312	7.92	5.020	22.33	7.60	33.81	32.13	5.63
A0480-038-0250-S*	0.480	12.19	0.218	5.54	0.038	0.97	0.250	6.35	4.750	21.13	6.61	29.4	38.02	6.66
A0600-026-1250-S*	0.600	15.24	0.312	7.92	0.026	0.66	1.250	31.75	1.000	4.45	1.92	8.54	1.61	0.28
A0600-026-1000-S*	0.600	15.24	0.343	8.71	0.026	0.66	1.000	25.4	0.840	3.74	1.58	7.03	1.67	0.29
A0600-026-0750-S*	0.600	15.24	0.375	9.53	0.026	0.66	0.750	19.05	0.730	3.25	1.36	6.05	1.94	0.34
A0600-029-1250-S*	0.600	15.24	0.25	6.35	0.029	0.74	1.250	31.75	1.560	6.94	2.97	13.21	2.49	0.44
A0600-029-1000-S*	0.600	15.24	0.281	7.14	0.029	0.74	1.000	25.4	1.390	6.18	2.61	11.61	2.77	0.49
A0600-029-0750-S*	0.600	15.24	0.343	8.71	0.029	0.74	0.750	19.05	1.180	5.25	2.19	9.74	3.16	0.55
A0600-029-0625-S*	0.600	15.24	0.375	9.53	0.029	0.74	0.625	15.88	1.120	4.98	2.03	9.03	3.57	0.63
A0600-032-0750-S*	0.600	15.24	0.281	7.14	0.032	0.81	0.750	19.05	1.800	8.01	3.30	14.68	4.81	0.84
A0600-032-0625-S*	0.600	15.24	0.343	8.71	0.032	0.81	0.625	15.88	1.640	7.3	2.95	13.12	5.25	0.92
A0600-032-0500-S*	0.600	15.24	0.375	9.53	0.032	0.81	0.500	12.7	1.530	6.81	2.67	11.88	6.13	1.07
A0600-035-0750-S*	0.600	15.24	0.218	5.54	0.035	0.89	0.750	19.05	2.720	12.1	4.93	21.93	7.25	1.27
A0600-035-0625-S*	0.600	15.24	0.281	7.14	0.035	0.89	0.625	15.88	2.410	10.72	4.28	19.04	7.70	1.35
A0600-035-0500-S*	0.600	15.24	0.312	7.92	0.035	0.89	0.500	12.7	2.160	9.61	3.72	16.55	8.64	1.51
A0600-038-0625-S*	0.600	15.24	0.25	6.35	0.038	0.97	0.625	15.88	3.570	15.88	6.27	27.89	11.42	2
A0600-038-0500-S*	0.600	15.24	0.281	7.14	0.038	0.97	0.500	12.7	3.220	14.32	5.45	24.24	12.88	2.26
A0600-038-0375-S*	0.600	15.24	0.312	7.92	0.038	0.97	0.375	9.53	2.620	11.65	4.18	18.59	13.99	2.45
A0600-040-0625-S*	0.600	15.24	0.218	5.54	0.04	1.02	0.625	15.88	4.560	20.28	7.95	35.36	14.59	2.56

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

Part Numbers with an "*" are squared and not ground.

CONICAL COMPRESSION SPRINGS

Catalog #	Outside Diameter Large End		Outside Diameter Small End		Wire Diameter		Free Height Approx		Load @ 50% of Free Length		Load @ Solid Approx		Spring Rate	
	in	mm	in	mm	in	mm	in	mm	lb	N	lb	N	lb/in	N/mm
A0600-040-0500-S*	0.600	15.24	0.25	6.35	0.04	1.02	0.500	12.7	4.070	18.1	6.83	30.38	16.28	2.85
A0600-040-0375-S*	0.600	15.24	0.312	7.92	0.04	1.02	0.375	9.53	3.560	15.84	5.61	24.95	18.98	3.32
A0600-042-0500-S*	0.600	15.24	0.218	5.54	0.042	1.07	0.500	12.7	5.130	22.82	8.53	37.94	20.49	3.59
A0600-042-0375-S*	0.600	15.24	0.281	7.14	0.042	1.07	0.375	9.53	4.350	19.35	6.75	30.03	23.19	4.06
A0600-045-0375-S*	0.600	15.24	0.25	6.35	0.045	1.14	0.375	9.53	6.090	27.09	9.25	41.15	32.49	5.69
A0720-035-1250-S*	0.720	18.29	0.343	8.71	0.035	0.89	1.250	31.75	2.040	9.07	3.86	17.17	3.27	0.57
A0720-035-1000-S*	0.720	18.29	0.375	9.53	0.035	0.89	1.000	25.4	1.800	8.01	3.34	14.86	3.59	0.63
A0720-035-0750-S*	0.720	18.29	0.438	11.13	0.035	0.89	0.750	19.05	1.620	7.21	2.94	13.08	4.33	0.76
A0720-038-1250-S*	0.720	18.29	0.281	7.14	0.038	0.97	1.250	31.75	2.990	13.3	5.61	24.95	4.78	0.84
A0720-038-1000-S*	0.720	18.29	0.343	8.71	0.038	0.97	1.000	25.4	2.640	11.74	4.88	21.71	5.29	0.93
A0720-038-0750-S*	0.720	18.29	0.375	9.53	0.038	0.97	0.750	19.05	2.190	9.74	3.94	17.53	5.84	1.02
A0720-038-0625-S*	0.720	18.29	0.438	11.13	0.038	0.97	0.625	15.88	2.100	9.34	3.69	16.41	6.72	1.18
A0720-040-1000-S*	0.720	18.29	0.281	7.14	0.04	1.02	1.000	25.4	3.310	14.72	6.08	27.05	6.61	1.16
A0720-040-0750-S*	0.720	18.29	0.343	8.71	0.04	1.02	0.750	19.05	2.760	12.28	4.92	21.89	7.35	1.29
A0720-040-0625-S*	0.720	18.29	0.375	9.53	0.04	1.02	0.625	15.88	2.450	10.9	4.27	18.99	7.84	1.37
A0720-040-0500-S*	0.720	18.29	0.438	11.13	0.04	1.02	0.500	12.7	2.370	10.54	3.98	17.7	9.47	1.66
A0720-042-1000-S*	0.720	18.29	0.281	7.14	0.042	1.07	1.000	25.4	4.190	18.64	7.67	34.12	8.37	1.47
A0720-042-0750-S*	0.720	18.29	0.343	8.71	0.042	1.07	0.750	19.05	3.440	15.3	6.11	27.18	9.17	1.61
A0720-042-0625-S*	0.720	18.29	0.375	9.53	0.042	1.07	0.625	15.88	3.250	14.46	5.62	25	10.39	1.82
A0720-045-0750-S*	0.720	18.29	0.281	7.14	0.045	1.14	0.750	19.05	4.830	21.48	8.49	37.77	12.87	2.25
A0720-045-0625-S*	0.720	18.29	0.343	8.71	0.045	1.14	0.625	15.88	4.350	19.35	7.44	33.09	13.91	2.44
A0720-045-0500-S*	0.720	18.29	0.375	9.53	0.045	1.14	0.500	12.7	3.890	17.3	6.37	28.34	15.55	2.72
A0720-049-0625-S*	0.720	18.29	0.281	7.14	0.049	1.24	0.625	15.88	6.460	28.74	10.90	48.49	20.67	3.62
A0720-049-0500-S*	0.720	18.29	0.343	8.71	0.049	1.24	0.500	12.7	5.730	25.49	9.21	40.97	22.92	4.01
A0720-049-0375-S*	0.720	18.29	0.375	9.53	0.049	1.24	0.375	9.53	4.840	21.53	7.15	31.8	25.82	4.52
A0720-055-0500-S*	0.720	18.29	0.281	7.14	0.055	1.4	0.500	12.7	10.120	45.02	15.78	70.19	40.50	7.09
A0720-055-0375-S*	0.720	18.29	0.312	7.92	0.055	1.4	0.375	9.53	8.340	37.1	11.78	52.4	44.49	7.79
A0850-042-1500-S*	0.850	21.59	0.343	8.71	0.042	1.07	1.500	38.1	3.080	13.7	5.82	25.89	4.11	0.72
A0850-042-1250-S*	0.850	21.59	0.375	9.53	0.042	1.07	1.250	31.75	2.700	12.01	5.04	22.42	4.32	0.76
A0850-042-1000-S*	0.850	21.59	0.438	11.13	0.042	1.07	1.000	25.4	2.350	10.45	4.31	19.17	4.71	0.82
A0850-042-0750-S*	0.850	21.59	0.56	14.22	0.042	1.07	0.750	19.05	2.360	10.5	4.19	18.64	6.28	1.1
A0850-045-1500-S*	0.850	21.59	0.343	8.71	0.045	1.14	1.500	38.1	4.190	18.64	7.88	35.05	5.59	0.98
A0850-045-1250-S*	0.850	21.59	0.375	9.53	0.045	1.14	1.250	31.75	3.750	16.68	6.96	30.96	6.00	1.05
A0850-045-1000-S*	0.850	21.59	0.438	11.13	0.045	1.14	1.000	25.4	3.280	14.59	5.97	26.56	6.56	1.15
A0850-045-0750-S*	0.850	21.59	0.5	12.7	0.045	1.14	0.750	19.05	3.000	13.34	5.27	23.44	7.99	1.4
A0850-049-1250-S*	0.850	21.59	0.312	7.92	0.049	1.24	1.250	31.75	5.680	25.27	10.47	46.57	9.09	1.59
A0850-049-0750-S*	0.850	21.59	0.438	11.13	0.049	1.24	0.750	19.05	4.260	18.95	7.40	32.92	11.35	1.99
A0850-049-0625-S*	0.850	21.59	0.5	12.7	0.049	1.24	0.625	15.88	4.040	17.97	6.82	30.34	12.93	2.26
A0850-055-1000-S*	0.850	21.59	0.281	7.14	0.055	1.4	1.000	25.4	8.500	37.81	15.14	67.35	17.01	2.98
A0850-055-0750-S*	0.850	21.59	0.343	8.71	0.055	1.4	0.750	19.05	7.180	31.94	12.25	54.49	19.14	3.35
A0850-055-0625-S*	0.850	21.59	0.438	11.13	0.055	1.4	0.625	15.88	6.580	29.27	10.84	48.22	21.05	3.69
A0850-059-0750-S*	0.850	21.59	0.312	7.92	0.059	1.5	0.750	19.05	10.000	44.48	16.85	74.95	26.67	4.67
A0850-059-0625-S*	0.850	21.59	0.375	9.53	0.059	1.5	0.625	15.88	8.860	39.41	14.37	63.92	28.36	4.97
A0850-063-0625-S*	0.850	21.59	0.312	7.92	0.063	1.6	0.625	15.88	12.220	54.36	19.51	86.78	39.07	6.84
A0850-063-0500-S*	0.850	21.59	0.375	9.53	0.063	1.6	0.500	12.7	11.090	49.33	16.60	73.84	44.33	7.76
A0850-067-0500-S*	0.850	21.59	0.375	9.53	0.067	1.7	0.500	12.7	14.850	66.06	21.74	96.7	59.45	10.41
A0975-049-1500-S*	0.975	24.77	0.438	11.13	0.049	1.24	1.500	38.1	3.880	17.26	7.26	32.29	5.18	0.91
A0975-049-1250-S*	0.975	24.77	0.5	12.7	0.049	1.24	1.250	31.75	3.560	15.84	6.56	29.18	5.69	1
A0975-049-1000-S*	0.975	24.77	0.56	14.22	0.049	1.24	1.000	25.4	3.290	14.63	5.93	26.38	6.58	1.15
A0975-049-0750-S*	0.975	24.77	0.625	15.88	0.049	1.24	0.750	19.05	2.930	13.03	5.09	22.64	7.81	1.37
A0975-055-1500-S*	0.975	24.77	0.375	9.53	0.055	1.4	1.500	38.1	6.880	30.6	12.76	56.76	9.18	1.61
A0975-055-1250-S*	0.975	24.77	0.438	11.13	0.055	1.4	1.250	31.75	6.090	27.09	11.10	49.38	9.74	1.71
A0975-055-1000-S*	0.975	24.77	0.5	12.7	0.055	1.4	1.000	25.4	5.400	24.02	9.61	42.75	10.79	1.89
A0975-055-0750-S*	0.975	24.77	0.56	14.22	0.055	1.4	0.750	19.05	4.830	21.48	8.24	36.65	12.87	2.25
A0975-059-1250-S*	0.975	24.77	0.343	8.71	0.059	1.5	1.250	31.75	8.470	37.68	15.34	68.24	13.55	2.37
A0975-059-1000-S*	0.975	24.77	0.438	11.13	0.059	1.5	1.000	25.4	7.400	32.92	13.06	58.09	14.81	2.59
A0975-059-0750-S*	0.975	24.77	0.5	12.7	0.059	1.5	0.750	19.05	6.440	28.65	10.85	48.26	17.18	3.01
A0975-063-1000-S*	0.975	24.77	0.343	8.71	0.063	1.6	1.000	25.4	10.020	44.57	17.51	77.89	20.03	3.51
A0975-063-0750-S*	0.975	24.77	0.438	11.13	0.063	1.6	0.750	19.05	8.590	38.21	14.29	63.57	22.92	4.01
A0975-067-0750-S*	0.975	24.77	0.375	9.53	0.067	1.7	0.750	19.05	11.440	50.89	18.78	83.54	30.51	5.34
A0975-067-0625-S*	0.975	24.77	0.438	11.13	0.067	1.7	0.625	15.88	10.270	45.68	16.14	71.79	32.85	5.75
A0975-072-0750-S*	0.975	24.77	0.375	9.53	0.072	1.83	0.750	19.05	16.110	71.66	26.03	115.79	42.98	7.53
A0975-072-0625-S*	0.975	24.77	0.438	11.13	0.072	1.83	0.625	15.88	14.850	66.06	22.85	101.64	47.49	8.32
A0975-074-0625-S*	0.975	24.77	0.438	11.13	0.074	1.88	0.625	15.88	16.850	74.95	25.71	114.36	53.94	9.45

Part Numbers with an "*" are squared and not ground.

MULTIWAVE COMPRESSION SPRINGS

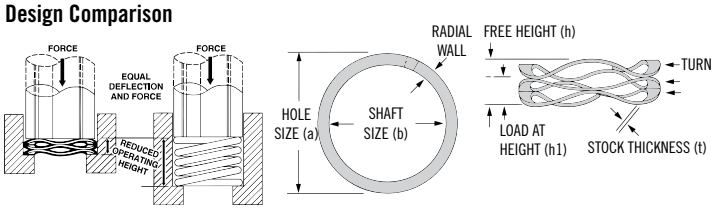
Stock and custom sizes in stainless steel
Multiwave springs replace conventional round wire springs when space is critical; they will occupy only 1/3 to 1/2 of the compressed height space of a traditional round wire spring, while providing more deflection with the same load specifications.

SPEC Multiwave springs should be used for all applications requiring tight load deflection specifications where axial space is critical.

Material and Finish
Stainless steel commercial type 17-7 PH (slightly magnetic).
Maximum application temperature is 650°F (340°C).
Certificate of compliance available upon request.
Plain finish is standard. See page 311 for alternative finishes.

Unique manufacturing
A single filament of round-edged, pre-tempered flat wire is used to form the springs from a continuous coil. This results in uniform diameters and wave heights.

Design Comparison



MULTIWAVE COMPRESSION SPRINGS

Catalog #	Fits in Hole Size (a)		Shaft (b)		Stock Thickness (t)		Free Height (h) Approx		Load Height (h1)		Nominal Load at Height		Spring Rate	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
MW0375-0150-04S	0.375	9.5	0.250	6.4	0.008	0.2	0.150	3.8	0.062	1.575	4	17.8	45	7.9
MW0375-0250-04S	0.375	9.5	0.250	6.4	0.008	0.2	0.250	6.4	0.108	2.743	4	17.8	28	4.9
MW0375-0350-04S	0.375	9.5	0.250	6.4	0.008	0.2	0.350	8.9	0.150	3.810	4	17.8	20	3.5
MW0375-0450-04S	0.375	9.5	0.250	6.4	0.008	0.2	0.450	11.4	0.195	4.953	4	17.8	16	2.8
MW0375-0150-07S	0.375	9.5	0.250	6.4	0.011	0.3	0.150	3.8	0.081	2.057	7	31.1	101	17.7
MW0375-0250-07S	0.375	9.5	0.250	6.4	0.011	0.3	0.250	6.4	0.145	3.683	7	31.1	67	11.7
MW0375-0350-07S	0.375	9.5	0.250	6.4	0.011	0.3	0.350	8.9	0.202	5.131	7	31.1	47	8.2
MW0375-0450-07S	0.375	9.5	0.250	6.4	0.011	0.3	0.450	11.4	0.262	6.655	7	31.1	37	6.5
MW0437-0165-04S	0.437	11.1	0.281	7.1	0.008	0.2	0.165	4.2	0.063	1.600	4	17.8	39	6.8
MW0437-0275-04S	0.437	11.1	0.281	7.1	0.008	0.2	0.275	7	0.109	2.769	4	17.8	24	4.2
MW0437-0385-04S	0.437	11.1	0.281	7.1	0.008	0.2	0.385	9.8	0.160	4.064	4	17.8	18	3.2
MW0437-0165-08S	0.437	11.1	0.281	7.1	0.011	0.3	0.165	4.2	0.082	2.083	8	35.6	96	16.8
MW0437-0275-08S	0.437	11.1	0.281	7.1	0.011	0.3	0.275	7	0.142	3.607	8	35.6	60	10.5
MW0437-0385-08S	0.437	11.1	0.281	7.1	0.011	0.3	0.385	9.8	0.198	5.029	8	35.6	43	7.5
MW0500-0180-05S	0.500	12.7	0.312	7.9	0.008	0.2	0.180	4.6	0.062	1.575	5	22.2	42	7.4
MW0500-0300-05S	0.500	12.7	0.312	7.9	0.008	0.2	0.300	7.6	0.107	2.718	5	22.2	26	4.6
MW0500-0420-05S	0.500	12.7	0.312	7.9	0.008	0.2	0.420	10.7	0.150	3.810	5	22.2	19	3.3
MW0500-0180-10S	0.500	12.7	0.312	7.9	0.010	0.3	0.180	4.6	0.065	1.651	10	44.5	87	15.2
MW0500-0300-10S	0.500	12.7	0.312	7.9	0.010	0.3	0.300	7.6	0.114	2.896	10	44.5	54	9.5
MW0500-0420-10S	0.500	12.7	0.312	7.9	0.010	0.3	0.420	10.7	0.162	4.115	10	44.5	39	6.8
MW0562-0195-05S	0.562	14.3	0.375	9.5	0.009	0.2	0.195	5	0.080	2.032	5	22.2	43	7.5
MW0562-0325-05S	0.562	14.3	0.375	9.5	0.009	0.2	0.325	8.3	0.135	3.429	5	22.2	26	4.6
MW0562-0455-05S	0.562	14.3	0.375	9.5	0.009	0.2	0.455	11.6	0.190	4.826	5	22.2	19	3.3
MW0562-0195-11S	0.562	14.3	0.375	9.5	0.012	0.3	0.195	5	0.086	2.184	11	48.9	101	17.7
MW0562-0325-11S	0.562	14.3	0.375	9.5	0.012	0.3	0.325	8.3	0.145	3.683	11	48.9	61	10.7
MW0562-0455-11S	0.562	14.3	0.375	9.5	0.012	0.3	0.455	11.6	0.209	5.309	11	48.9	45	7.9
MW0625-0180-06S	0.625	15.9	0.450	11.4	0.010	0.3	0.180	4.6	0.055	1.397	6	26.7	48	8.4
MW0625-0300-06S	0.625	15.9	0.450	11.4	0.010	0.3	0.300	7.6	0.085	2.159	6	26.7	28	4.9
MW0625-0420-06S	0.625	15.9	0.450	11.4	0.010	0.3	0.420	10.7	0.128	3.251	6	26.7	21	3.7
MW0625-0780-06S	0.625	15.9	0.450	11.4	0.010	0.3	0.780	19.8	0.238	6.045	6	26.7	11	1.9
MW0625-0180-12S	0.625	15.9	0.450	11.4	0.010	0.3	0.180	4.6	0.104	2.642	12	53.4	158	27.7
MW0625-0300-12S	0.625	15.9	0.450	11.4	0.010	0.3	0.300	7.6	0.175	4.445	12	53.4	96	16.8
MW0625-0420-12S	0.625	15.9	0.450	11.4	0.010	0.3	0.420	10.7	0.246	6.248	12	53.4	69	12.1
MW0625-0780-12S	0.625	15.9	0.450	11.4	0.010	0.3	0.780	19.8	0.454	11.532	12	53.4	37	6.5
MW0750-0250-07S	0.750	19.1	0.550	14	0.008	0.2	0.250	6.4	0.142	3.607	8	34.3	65	11.4
MW0750-0417-07S	0.750	19.1	0.550	14	0.008	0.2	0.417	10.6	0.246	6.248	8	34.3	41	7.2
MW0750-0250-13S	0.750	19.1	0.550	14	0.010	0.3	0.250	6.4	0.159	4.039	13	57.8	143	25.0
MW0750-0417-13S	0.750	19.1	0.550	14	0.010	0.3	0.417	10.6	0.270	6.858	13	57.8	88	15.4
MW0750-0250-22S	0.750	19.1	0.550	14	0.013	0.3	0.250	6.4	0.169	4.293	22	97.9	272	47.6
MW0750-0417-22S	0.750	19.1	0.550	14	0.013	0.3	0.417	10.6	0.291	7.391	22	97.9	175	30.6
MW0875-0250-12S	0.875	22.2	0.600	15.2	0.010	0.3	0.250	6.4	0.117	2.972	12	53.4	90	15.8
MW0875-0417-12S	0.875	22.2	0.600	15.2	0.010	0.3	0.417	10.6	0.207	5.258	12	53.4	57	10.0
MW0875-0250-18S	0.875	22.2	0.600	15.2	0.012	0.3	0.250	6.4	0.124	3.150	18	80.1	143	25.0
MW0875-0417-18S	0.875	22.2	0.600	15.2	0.012	0.3	0.417	10.6	0.214	5.436	18	80.1	89	15.6
MW0875-0250-25S	0.875	22.2	0.600	15.2	0.015	0.4	0.250	6.4	0.166	4.216	25	111.2	298	52.2
MW0875-0417-25S	0.875	22.2	0.600	15.2	0.015	0.4	0.417	10.6	0.278	7.061	25	111.2	180	31.5

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

MULTIWAVE COMPRESSION SPRINGS

Catalog #	Fits in Hole Size (a)		Shaft (b)		Stock Thickness (t)		Free Height (h) Approx		Load Height (h1)		Nominal Load at Height		Spring Rate	
	in	mm	in	mm	in	mm	in	mm	in	mm	lb	N	lb/in	N/mm
MW0875-0583-25S	0.875	22.2	0.600	15.2	0.015	0.4	0.583	14.8	0.395	10.033	25	111.2	133	23.3
MW1000-0250-12S	1.000	25.4	0.730	18.5	0.010	0.3	0.250	6.4	0.084	2.134	12	53.4	72	12.6
MW1000-0417-12S	1.000	25.4	0.730	18.5	0.010	0.3	0.417	10.6	0.145	3.683	12	53.4	44	7.7
MW1000-0583-12S	1.000	25.4	0.730	18.5	0.010	0.3	0.583	14.8	0.201	5.105	12	53.4	31	5.4
MW1000-0250-18S	1.000	25.4	0.730	18.5	0.012	0.3	0.250	6.4	0.087	2.210	18	80.1	110	19.3
MW1000-0417-18S	1.000	25.4	0.730	18.5	0.012	0.3	0.417	10.6	0.148	3.759	18	80.1	67	11.7
MW1000-0583-18S	1.000	25.4	0.730	18.5	0.012	0.3	0.583	14.8	0.212	5.385	18	80.1	49	8.6
MW1000-0250-25S	1.000	25.4	0.730	18.5	0.015	0.4	0.250	6.4	0.131	3.327	25	111.2	210	36.8
MW1000-0417-25S	1.000	25.4	0.730	18.5	0.015	0.4	0.417	10.6	0.227	5.766	25	111.2	132	23.1
MW1000-0583-25S	1.000	25.4	0.730	18.5	0.015	0.4	0.583	14.8	0.319	8.103	25	111.2	95	16.6
MW1125-0300-12S	1.125	28.6	0.850	21.6	0.012	0.3	0.300	7.6	0.146	3.708	12	53.4	78	13.7
MW1125-0500-12S	1.125	28.6	0.850	21.6	0.012	0.3	0.500	12.7	0.250	6.350	12	53.4	48	8.4
MW1125-0700-12S	1.125	28.6	0.850	21.6	0.012	0.3	0.700	17.8	0.344	8.738	12	53.4	34	6.0
MW1125-0300-20S	1.125	28.6	0.850	21.6	0.015	0.4	0.300	7.6	0.160	4.064	20	89.0	143	25.0
MW1125-0500-20S	1.125	28.6	0.850	21.6	0.015	0.4	0.500	12.7	0.270	6.858	20	89.0	87	15.2
MW1125-0700-20S	1.125	28.6	0.850	21.6	0.015	0.4	0.700	17.8	0.381	9.677	20	89.0	63	11.0
MW1125-0300-30S	1.125	28.6	0.850	21.6	0.018	0.5	0.300	7.6	0.178	4.521	30	133.4	246	43.1
MW1125-0500-30S	1.125	28.6	0.850	21.6	0.018	0.5	0.500	12.7	0.303	7.696	30	133.4	152	26.6
MW1125-0700-30S	1.125	28.6	0.850	21.6	0.018	0.5	0.700	17.8	0.421	10.693	30	133.4	108	18.9
MW1250-0300-12S	1.250	31.8	1.000	25.4	0.012	0.3	0.300	7.6	0.084	2.134	12	53.4	56	9.8
MW1250-0500-12S	1.250	31.8	1.000	25.4	0.012	0.3	0.500	12.7	0.149	3.785	12	53.4	34	6.0
MW1250-0700-12S	1.250	31.8	1.000	25.4	0.012	0.3	0.700	17.8	0.207	5.258	12	53.4	24	4.2
MW1250-0300-20S	1.250	31.8	1.000	25.4	0.015	0.4	0.300	7.6	0.124	3.150	20	89.0	114	20.0
MW1250-0500-20S	1.250	31.8	1.000	25.4	0.015	0.4	0.500	12.7	0.215	5.461	20	89.0	70	12.3
MW1250-0700-20S	1.250	31.8	1.000	25.4	0.015	0.4	0.700	17.8	0.303	7.696	20	89.0	50	8.8
MW1250-0300-30S	1.250	31.8	1.000	25.4	0.019	0.5	0.300	7.6	0.158	4.013	30	133.4	210	36.8
MW1250-0500-30S	1.250	31.8	1.000	25.4	0.019	0.5	0.500	12.7	0.272	6.909	30	133.4	132	23.1
MW1250-0700-30S	1.250	31.8	1.000	25.4	0.019	0.5	0.700	17.8	0.384	9.754	30	133.4	95	16.6
MW1375-0300-15S	1.375	34.9	1.030	26.2	0.012	0.3	0.300	7.6	0.075	1.905	15	66.7	67	11.7
MW1375-0500-15S	1.375	34.9	1.030	26.2	0.012	0.3	0.500	12.7	0.129	3.277	15	66.7	40	7.0
MW1375-0700-15S	1.375	34.9	1.030	26.2	0.012	0.3	0.700	17.8	0.179	4.547	15	66.7	29	5.1
MW1375-0300-25S	1.375	34.9	1.030	26.2	0.016	0.4	0.300	7.6	0.142	3.607	25	111.2	158	27.7
MW1375-0500-25S	1.375	34.9	1.030	26.2	0.016	0.4	0.500	12.7	0.240	6.096	25	111.2	96	16.8
MW1375-0700-25S	1.375	34.9	1.030	26.2	0.016	0.4	0.700	17.8	0.340	8.636	25	111.2	69	12.1
MW1375-0300-35S	1.375	34.9	1.030	26.2	0.018	0.5	0.300	7.6	0.149	3.785	35	155.7	232	40.6
MW1375-0500-35S	1.375	34.9	1.030	26.2	0.018	0.5	0.500	12.7	0.247	6.274	35	155.7	138	24.2
MW1375-0700-35S	1.375	34.9	1.030	26.2	0.018	0.5	0.700	17.8	0.343	8.712	35	155.7	98	17.2
MW1500-0300-20S	1.500	38.1	1.140	29	0.016	0.4	0.300	7.6	0.129	3.277	20	89.0	117	20.5
MW1500-0500-20S	1.500	38.1	1.140	29	0.016	0.4	0.500	12.7	0.213	5.410	20	89.0	70	12.3
MW1500-0700-20S	1.500	38.1	1.140	29	0.016	0.4	0.700	17.8	0.301	7.645	20	89.0	50	8.8
MW1500-0300-35S	1.500	38.1	1.140	29	0.018	0.5	0.300	7.6	0.122	3.099	35	155.7	197	34.5
MW1500-0500-35S	1.500	38.1	1.140	29	0.018	0.5	0.500	12.7	0.206	5.232	35	155.7	119	20.8
MW1500-0700-35S	1.500	38.1	1.140	29	0.018	0.5	0.700	17.8	0.291	7.391	35	155.7	86	15.1
MW1500-0300-60S	1.500	38.1	1.140	29	0.018	0.5	0.300	7.6	0.166	4.216	60	266.9	448	78.5
MW1500-0500-60S	1.500	38.1	1.140	29	0.018	0.5	0.500	12.7	0.278	7.061	60	266.9	270	47.3
MW1500-0700-60S	1.500	38.1	1.140	29	0.018	0.5	0.700	17.8	0.390	9.906	60	266.9	194	34.0
MW1750-0375-25S	1.750	44.5	1.340	34	0.018	0.5	0.375	9.5	0.155	3.937	25	111.2	114	20.0
MW1750-0625-25S	1.750	44.5	1.340	34	0.018	0.5	0.625	15.9	0.265	6.731	25	111.2	69	12.1
MW1750-0870-25S	1.750	44.5	1.340	34	0.018	0.5	0.870	22.1	0.367	9.322	25	111.2	50	8.8
MW1750-0375-50S	1.750	44.5	1.340	34	0.018	0.5	0.375	9.5	0.188	4.775	50	222.4	267	46.8
MW1750-0625-50S	1.750	44.5	1.340	34	0.018	0.5	0.625	15.9	0.315	8.001	50	222.4	161	28.2
MW1750-0870-50S	1.750	44.5	1.340	34	0.018	0.5	0.870	22.1	0.452	11.481	50	222.4	120	21.0
MW1750-0375-90S	1.750	44.5	1.340	34	0.024	0.6	0.375	9.5	0.232	5.893	90	400.3	629	110.2
MW1750-0625-90S	1.750	44.5	1.340	34	0.024	0.6	0.625	15.9	0.409	10.389	90	400.3	417	73.0
MW1750-0870-90S	1.750	44.5	1.340	34	0.024	0.6	0.870	22.1	0.577	14.656	90	400.3	307	53.8
MW2000-0375-25S	2.000	50.8	1.600	40.6	0.018	0.5	0.375	9.5	0.094	2.388	25	111.2	89	15.6
MW2000-0625-25S	2.000	50.8	1.600	40.6	0.018	0.5	0.625	15.9	0.158	4.013	25	111.2	54	9.5
MW2000-0870-25S	2.000	50.8	1.600	40.6	0.018	0.5	0.870	22.1	0.217	5.512	25	111.2	38	6.7
MW2000-0375-50S	2.000	50.8	1.600	40.6	0.018	0.5	0.375	9.5	0.140	3.556	50	222.4	213	37.3
MW2000-0625-50S	2.000	50.8	1.600	40.6	0.018	0.5	0.625	15.9	0.245	6.223	50	222.4	132	23.1
MW2000-0870-50S	2.000	50.8	1.600	40.6	0.018	0.5	0.870	22.1	0.345	8.763	50	222.4	95	16.6
MW2000-0375-90S	2.000	50.8	1.600	40.6	0.024	0.6	0.375	9.5	0.197	5.004	90	400.3	506	88.6
MW2000-0625-90S	2.000	50.8	1.600	40.6	0.024	0.6	0.625	15.9	0.332	8.433	90	400.3	307	53.8
MW2000-0870-90S	2.000	50.8	1.600	40.6	0.024	0.6	0.870	22.1	0.465	11.811	90	400.3	222	38.9

ALTERNATIVE FINISHES

Associated Spring Raymond - SPEC has the largest line of high-quality, precision-engineered stock springs and washers on the market today. They are all immediately available per the specifications indicated in these catalog pages. But our commitment to you does not stop here. We recognize that your application might include a special plating or even a secondary color coating – all available from Associated Spring Raymond SPEC as well. We offer a variety of specific processes and treatments that we have summarized in the following tables.

FINISH	SUB-FINISH	CODE	NOTES
Electrodeposited Zinc	As Plated	01	Not recommended for: Heavy Duty Compression Springs, Belleville Spring Washers, Metric Disc Springs, Curved Spring Washers, Larger Wave Spring Washers (W3118-035 & up), MultiWave Washers, and Finger Washers
	w/ Clear Chromate	02	
	w/ Yellow Chromate	03	
Electrodeposited Cad	As Plated	04	
	w/ Clear Chromate	05	
	w/ Yellow Chromate	06	
Electrodeposited Nickel	As Plated	07	
Electroless Nickel	As Plated	08	
Electrodeposited Tin	As Plated	09	
Electrodeposited Zinc-Nickel	w/ Clear Chromate	10	
	w/ Yellow Chromate	11	
Mechanical Zinc	As Plated	12	Not recommended for: MultiWave Washers or Finger Washers
	w/ Clear Chromate	13	
	w/ Yellow Chromate	14	
Mechanical Tin	As Plated	15	
	w/ Yellow Chromate	16	
Mechanical Zinc-Nickel	As Plated	17	
Vacuum Cad	As Plated	18	
	w/ Yellow Chromate	19	
Zinc Phosphate and Oil	As Plated	20	Not recommended for: Belleville Spring Washers, Metric Disc Springs, Curved Spring Washers, and Stainless MultiWave Washers
Black Oxide and Oil	As Plated	21	
Dacromet 320®	As Plated	22	Not recommended for: MultiWave Washers
Passivation		23	Not recommended for: Steel Parts (of all types), and MultiWave Washers
Dacromet 320® with Plus Coating		25	Not recommended for: Continuous length extension springs, Fasteners, MultiWave Washers
Thermadep® Paint		26	Not recommended for: Continuous length extension springs, Fasteners
Painted Finish for Color Coating		27	
Electrodeposited Cadmium Plate	(QQ-P-416)	28	Not recommended for: Heavy Duty Compression Springs, Belleville Spring Washers, Metric Disc Springs, Curved Spring Washers, Larger Wave Spring Washers (W3118-035 & up), MultiWave Washers, and Finger Washers
	With Yellow Chromate, supplementary Coating (QQ-P-416)	29	
Tacky Board		30	Not recommended for: Heavy Duty Compression Springs, Continuous Springs, and Fasteners
RoHs Electrodeposited Zinc Plate	As Plated	31	Not recommended for: Heavy Duty Compression Springs, Belleville Spring Washers, Metric Disc Springs, Curved Spring Washers, Larger Wave Spring Washers (W3118-035 & up), MultiWave Washers, and Finger Washers
	With Clear Chromate Supplementary Coating	32	
	With Yellow Chromate Supplementary Coating	33	
RoHs Electrodeposited Nickel	As Plated	34	
RoHs Passivation		35	Not recommended for: Steel Parts (of all types)
Dip and Spin Painting		36	
Passivation	ASTM A967-Citric	37	Not recommended for: Steel Parts (of all types)
RoHs Mechanical Zinc Plate	With Yellow Chromate Supplementary Coating	38	Not recommended for: Heavy Duty Compression Springs, MultiWave Washers, and Finger Washers
Geomet® Coating		39	Not recommended for: MultiWave Washers
RoHs Mechanical Zinc Plate	With Clear Chromate Supplementary Coating	40	Not recommended for: Heavy Duty Compression Springs, MultiWave Washers, and Finger Washers
Temperature Indicating Coating		41	Not recommended for: MultiWave Washers, and Retaining Rings
High Performance Teflon Coating		42	Not recommended for: Fasteners

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

SPECIAL SPRINGS

Company:	
Address:	
City:	
State:	
Attn:	
Phone:	Fax:
Email:	

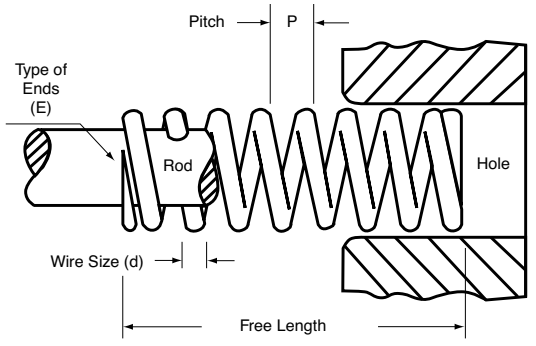
In Office Use Only
Date Received:
Date Quoted:
Quoted By:

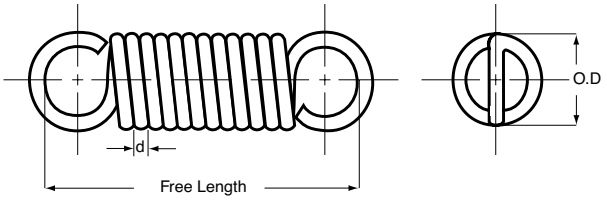
Compression

Quantity Required
Wire Size
Type of Wire
Outside Diameter
Inside Diameter
Free Length
Hole Size
Rod Size
No. of Coils
Pitch
Rate
Solid Height
Direction of Coils
Type of Ends
Test Loads
Print Available?
Finish
Comments

Extension

Quantity Required
Wire Size
Type of Wire
Outside Diameter
Inside Diameter
Free Length
Initial Tension
No. of Coils
Pitch
Rate
Maximum Extension
Direction of Coils
Type of Loops
Test Loads
Print Available?
Finish
Comments





CUSTOM-ENGINEERED PARTS AND SPECIAL ORDERS

If you are looking for a special spring, spring washer, assembly or engineered component and cannot find it in this catalog, let us know, and we will design it for you, to your specifications. Our unique technical capabilities and resources allow us to provide custom-engineered parts and components to a multitude of industries and applications, ranging from aerospace to medical devices to food service.

Your special order is very important to us: When you deal with Associated Spring Raymond, you can be certain that we will assist you with high quality custom-engineered parts, from design right into production – at the right price and to your delivery requirements.

Give us a call at (800) 872-7732, and let our expertise work for you.

Below is a snapshot of our various capabilities:

Compression Springs
- Resists applied push forces
- Cylindrical, conical, and barrel-shaped
- Wire diameter: .004" to 3"
- Typical applications include transportation and medical equipment

Extension Springs
- Resists applied pull forces
- Various end types available
- Wire diameter: .004" to .625"
- Typical applications include dental furniture, attic door hatches, and playground equipment

Torsion Springs
- Resists applied torque
- Single or double wound
- Open or closed wound
- Various end types available
- Wire diameter: .005" to .625"
- Typical applications include truck doors, ATM machines and printers

Die Springs
- Resists applied compression forces
- Hole diameter: .375" to 4"
- Wire shapes: D, Square, Round, Rectangular
- Typical applications include stamping and molding dies

Constant Force Springs
- Used as counterbalance
- Inside diameter mounted on drum – self-contained outer diameter
- Typical applications include window shades and display racks

Power Springs
- Resists applied torque
- Contained by arbor and case
- Coils contact each other
- Typical applications include motors and retractor mechanisms

Spiral Torsion Springs
- Resists applied torque
- Self contained
- Coils do not contact each other
- Typical applications include motors and timing mechanisms

Garter Springs
- Garter springs are extension springs with ends connected
- Exerts radial forces
- Outside coil diameter: .039" to .250"
- Wire diameter: .006" to .034"
- Primary application is oil seals

Belleville Washers
- High forces in small deflections
- Also known as conical or disc washers
- OD up to 24"
- Linear and non-linear force/deflection curves
- Made to fit specified rod and/or hole fit
- Assembled in parallel or series to modify force and deflection
- Typical applications include stamping dies and clutches

Curved Washers
- Exert light thrust loads
- Made to fit specified rod and/or hole fit
- Often used to absorb axial end play

Wave Washers
- Exert moderate thrust loads
- Made to fit specified rod and/or hole fit
- Often used for bearing preload

Wire Forms
- Non-traditional force applications
- Wire diameter: .004" to .625"
- Typical applications include nozzles and clamps

Stampings
- Per customer specification
- Material thickness: .010" to .375"

Materials:
- Carbon steels: Music wire, hard drawn, oil tempered
- Pre plated music wire: Tin and Zinc
- Alloy steels: Chrome silicon – commercial and valve quality
- Stainless Steels: 302, 316, 17-7
- Exotic: Inconel® 600, 718, and X750, Hastelloy®, Beryllium Copper, titanium, etc……
- Round, rectangular, and square wire available

Special Processing (see more information on page 313):
- Passivation
- Zinc, cadmium, nickel, tin plating and black oxide
- Dacromet®, Dacroseal, Geomet®, Dip and Spin
- Enamel, epoxy and temperature-indicator paint
- Shot peening
- Liquid penetrant and magnetic particle inspection
- Special packaging available (including tacky board)
- Mechanical Zinc Plate*

* Standard finish for high carbon steel is plain finish. Stainless steel is supplied in plain finish. On special order, high carbon steel washers may be mechanically plated, a process which substantially reduces the possibility of hydrogen embrittlement. Recommendations for specific applications will be made on request. See page 311 for alternative finishes.

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TERMS OF SALE

1. With respect to goods purchased by Buyer from Seller ("Goods"), no contract exists until Buyer places order for delivery and such order is accepted by Seller's acknowledging receipt of the order, by Seller's commencement of work on the Goods ordered, or by Seller's shipment of the Goods, whichever occurs first. Any acceptance will be limited to the express terms contained on the face hereof. Additional or different terms in Buyer's form or any attempt by Buyer to vary in any degree any of the terms of this of this quotation shall be deemed material and are objected to and rejected, but this shall not prevent the formation of a contract between Buyer and Seller unless such variances are in the terms of the description, quantity, price or delivery schedule of the goods, and the order shall be deemed accepted by Seller without said additional or different terms.

2. All agreements are contingent upon strikes, accidents and other reasons for delay beyond Seller's control.

3. Where a separate charge is made for specially designed tools and dies, Seller will maintain such tools and dies without further cost to Buyer for the life of such tool or die so long as the part remains active and the design is not changed and Seller will not use such tools and dies for others without Buyer's permission, but Buyer acquires no right to remove any such tools or dies from Seller's factory.

4. Seller warrants to Buyer that the Goods purchased by Buyer from Seller shall be free from defects in material and workmanship. This warranty is the only warranty applicable to the Goods. THERE ARE NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE WHICH ARE HEREBY DISCLAIMED.

5. All Goods shall be inspected by Buyer when received and Seller shall not be liable for any defect unless notified in writing within 60 days after delivery.

6. Seller's liability for breach of warranty shall be limited solely and exclusively to repairing or replacing, at Seller's option, the defective Goods. In no event shall the liability of Seller for breach of any contractual provision relating to the Goods exceed the purchase price of the Goods quoted herein. In no event shall Seller be liable for any special, incidental or consequential damages arising out of Buyer's use or sale of the Goods or Seller's breach of any contractual provisions relating to the Goods, including but not limited to any loss of profits or production by Buyer. Any action resulting from any breach by Seller must be commenced within one year after the cause of action accrued.

7. Except to the extent caused by Seller's breach of warranty, Buyer shall indemnify and hold harmless Seller, its employees, officers and directors, and their respective successors and assigns, (collectively, "Indemnities") from and against any and all liability, damages, claims, causes of action, losses, costs and expenses (including attorneys' fees) of any kind (collectively, "Damages") arising out of injuries to any person (including death) or damage to any property caused by or related to the Goods or any negligent act or omission of Buyer, its employees or agents. Buyer shall indemnify and hold harmless each of the Indemnities from and against any and all Damages, royalties and license fees arising from or for infringement of any patent by reason of any sale or use of the Goods or the manufacture of the Goods to Buyer's specifications or sample. Upon the tendering of any of the foregoing suits or claims to Buyer, Buyer shall defend the same at Buyer's expense. The foregoing obligations of Buyer shall apply whether Seller or Buyer defends such suits or claim.

8. Seller reserves the right to over and under ship by not more than 10% of specified quantity.

9. Small quantities are considered prototype quantities and cannot be returned since the cost of re-inspecting and handling them is generally higher than the value of the parts. Larger quantities may not be returnable depending on the ability to re-sell these parts within a reasonable time period. Special runs are not returnable. All returns must be authorized and an Authorization Number is required. Please contact our Customer Service at springsales@asraymond.com or by phone at 419-891-9292. Unauthorized returns will be returned at customer's expense. All authorized returns must be in their original packaging and labeling to insure lot control integrity. Parts cannot be altered or used in any fashion. Parts from separate lots cannot be mixed. A restocking fee will be charged to authorized returns. Additional charges may be required for re-inspection, cleaning and repackaging. Credit for damaged parts will not be issued. All returns will be shipped to the authorized return center pre-paid by sender. Actual credit issued will be for the quantity of acceptable parts at the original piece price, less the restocking charge, less the original freight and any other charges that are necessary to return the parts to a saleable condition.

10. Please note that all indicated prices on our web site are in US$, and are for standard product shipped within the continental USA, including Alaska. For Canada orders, please call 1-800-263-4256 - Fax (419) 891-5979. For all other countries, please contact our Customer Service Department as indicated above or our International Distributors listed on page 319.

The product data reported in this catalog represents typical values and is not intended to duplicate any specific customers test results. For product-specific AQL's, contact your ASR sales representative, as indicated tolerances may not apply. The catalog data presented is intended to be used as a guide only. It is not intended to be used to determine the suitability of the product for any specific customer application. AS Raymond strongly suggests that each customer thoroughly test the AS Raymond product to determine the actual suitability of the AS Raymond product in their specific application. The customer is responsible for determining the suitability of AS Raymond products in their applications. For more detailed information about these catalog products please contact your AS Raymond sales representative.

FOR ADDITIONAL INFORMATION ON ASSOCIATED SPRING RAYMOND POLICIES, VISIT **WWW.ASRAYMOND.COM/FAQ**

ASSOCIATED SPRING RAYMOND, A WORLD CLASS SUPPLIER

Our International Locations. Associated Spring Raymond products are distributed throughout the world. To locate our local distributor, see the listing below.

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United States
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370 W. Dussel Dr. - Suite A
Maumee, OH 43537
Phone: 419-891-9292
Fax: 419-891-9192
E-mail: springsales@asraymond.com
www.asraymond.com

Mexico
Raymond Distribution - Mexico SA de CV
Av. Concordia No. 4601-A
Col. Apodaca Centro
Apodaca, N.L. Mexico 66600
Phone: +52-81-81450680
Fax: +52-81-81450679
E-mail: ventas@asraymond.com
www.asraymond.com.mx

Canada
Producto
349 Bowes Rd. Unit 21
Vaughan, ON L4L-8A3
Phone: 905-856-9990
Fax: 905-856-9887
Email: sales@productodiemakers.com
www.productodiemakers.com

United States
DIECO
30600 Aurora Rd Ste 160
Solon, OH 44139
Phone: 1-800-237-1440
Fax: 1-440-542-0250
www.dieco.us

D-M-E
29111 Stephenson Hwy.
Madison Heights
MI 48071 USA
Phone: +248.398.6000
Fax: +248.398.6174
na.dmecompany.com

Fastenal
Phone: 877-507-7555
www.fastenal.com

W.W. Grainger, Inc.
Phone: 1-800-472-4643
www.grainger.com

Marathon Sales, Inc.
17599 Paxton Ave
Lansing, IL 60438
Phone: 1-800-221-7317
Fax : 1-800-726-3078
www.marathonsalesinc.com

MSC Industrial Supply Co.
Phone: 1-800-645-7270
www.mscdirect.com

Superior Die Set Corp.
900 W Drexel Ave,
Oak Creek, WI 53154
Phone (414) 764-4900
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www.supdie.com

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www.meconet.net

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Fax: (49) 2353 4301
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www.febrotec.de

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Bokenyfoldi UT 104 Hungary
Phone: (36) 1 434 2900
Fax: (36) 1 260 8635
Email: biotek@biotek.hu

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New Industrial Zone
South Netaneya 42504
Phone: (972) 1 599 500 557
Fax: (972) 9 865 8492
E-mail: natasha@delta-elkon.co.il
www.delta-elkon.co.il

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13891 Camburzano (BI)
P.IVA C.F. 02132550027
Phone: (39) 015 23581
Fax: (39) 015 23646
E-mail: meter@meterspec.it
www.meterspec.it

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77-100 Bytów
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www.fcpk.com.pl

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Fax: (46) 370 86249
E-mail: info@ewes.se
www.ewes.se

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1225 Chêne-Bourg
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Fax: (91) 7104 237628
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www.starcirclips.com

ASR LOCATIONS

ASR DISTRIBUTORS

FOR INFORMATION ON ALTERNATIVE FINISHES, SEE PAGE 311

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The Largest Selection of Engineered Spring Solutions in the World!

Associated Spring RAYMOND utilizes 135 years of spring design expertise to provide its customers with a solution for their industrial spring needs. With the largest and most comprehensive selection of catalog products ranging from mechanical wire springs and spring washers to mechanical die springs, gas springs and mechanical struts, Associated Spring RAYMOND can reduce the cost and lead time compared to custom designs. This allows customers to rapidly prototype their innovation or keep their operation lines in motion to better serve their customers and gain a competitive edge in their respective markets.

Raymond® m-Struts® UNMATCHED PERFORMANCE SPEC® Stock Precision Engineered Components n-Struts® FLUID PERFORMANCE EVERYTIME SPD CloverDome®

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