



ELITE SPRINGS PTE LTD

PRODUCT CATALOGUE

Springs | Forming | Cutting



GREETINGS FROM ELITE SPRINGS

This catalogue describes Elite Springs complete service which is intended primarily for engineering design products that are involved in prototype and development work requiring close tolerance spring-type parts.

With more than 20 years of experience, be it designing, making and handling millions of spring parts over the years, this background gives us information about the many types of springs used in various industries, including their materials used, characteristics and usage rates. Hence, Elite Springs catalogue is produced.

Why Elite Springs

1) **Saves Time on Design work.**

You don't have to waste time designing a spring yourself, you only need to select the catalog number of the item you require.

2) **Saves Money.**

No tooling charge or setup cost.

3) **Consistency.**

What you purchase today will be of the same quality for your next order.

Elite Springs is able to handle your spring needs regardless of quantity. In addition, our spring design software allows us to offer design services to help you achieve the maximum lifespan for your springs. Elite Springs is not only a manufacturer but also a reliable business partner.



ROUND WIRE MOULD SPRINGS

(Compression Spring)

Round Wire Mould Compression Springs are used by engineering designers and maintenance personnel for prototypes.

Material Used

High Carbon Steel wire

Direction of Helix

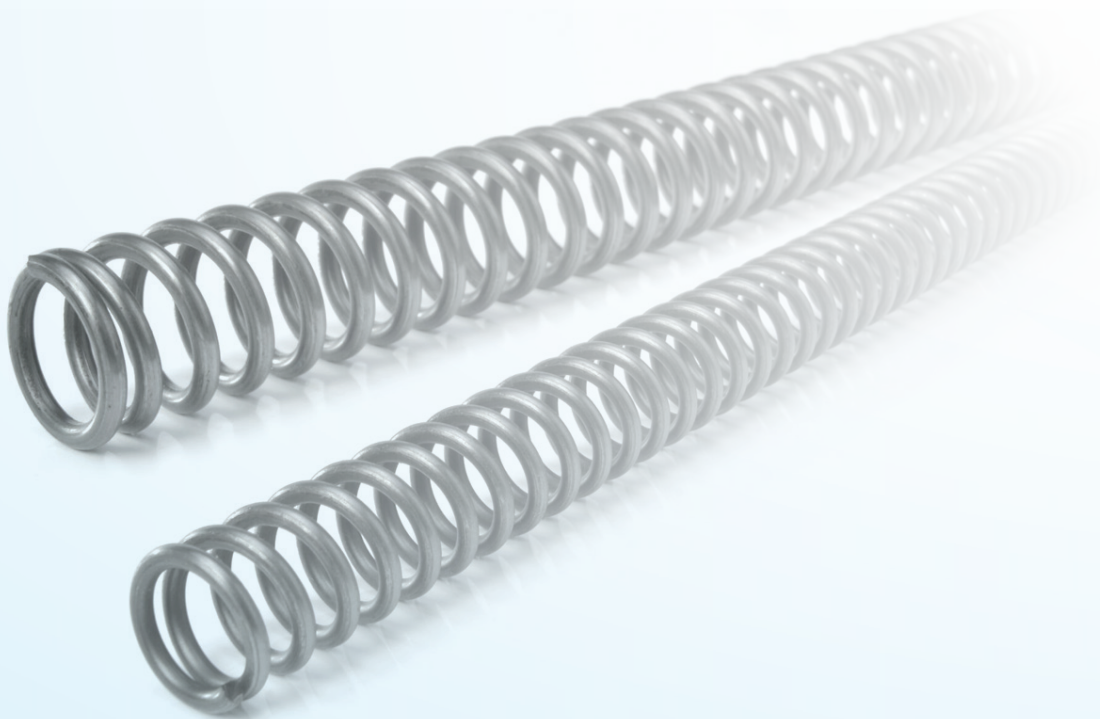
Right Hand (clockwise)

Surface Treatment

Springs manufactured from high carbon spring steel are slightly lubricated following thermal treatment.

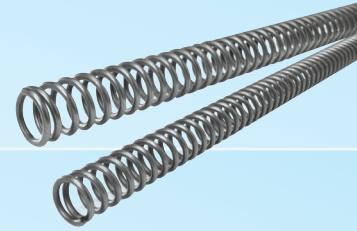
Finishing

All springs are thermally treated and stress relieved (spring rates are for reference)



ROUND WIRE MOULD SPRINGS

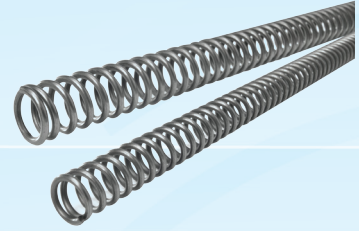
High Carbon Steel wire



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	PITCH MM	SPRING RATE PER 25MM KG/MM	FREE LENGTH
CS - 025 - 1	0.25	2.30	1.80	1.00	0.019	254MM
CS - 025 - 2		3.10	2.60	1.40	0.010	
CS - 025 - 3		3.80	3.30	1.50	0.005	
CS - 032 - 1	0.32	2.30	1.66	1.40	0.078	254MM
CS - 032 - 2		3.05	2.41	1.50	0.031	
CS - 032 - 3		4.00	3.36	1.60	0.014	
CS - 035 - 1	0.35	3.30	2.60	1.20	0.028	254MM
CS - 035 - 2		4.30	3.60	1.50	0.015	
CS - 035 - 3		5.00	4.30	2.00	0.112	
CS - 035 - 4		6.00	5.30	2.50	0.007	
CS - 035 - 5		7.00	6.30	3.00	0.005	
CS - 040 - 1	0.40	3.30	2.50	1.20	0.772	254MM
CS - 040 - 2		4.30	3.50	1.50	0.026	
CS - 040 - 3		5.00	4.20	2.00	0.019	
CS - 040 - 4		6.00	5.20	2.50	0.014	
CS - 040 - 5		7.00	6.20	3.00	0.009	
CS - 050 - 1	0.50	3.00	2.00	1.30	0.201	254MM
CS - 050 - 1A		3.60	2.60	1.50	0.170	
CS - 050 - 2		4.40	3.40	1.60	0.069	
CS - 050 - 3		5.20	4.20	2.00	0.045	
CS - 050 - 4		6.00	5.00	2.30	0.033	
CS - 050 - 5		6.50	5.50	2.60	0.029	
CS - 050 - 6		7.60	6.60	3.20	0.020	
CS - 050 - 7	8.20	7.20	4.00	0.019		
CS - 060 - 1	0.60	4.60	3.40	1.90	0.152	254MM
CS - 060 - 2		5.60	4.40	2.20	0.084	
CS - 060 - 3		6.60	5.40	2.50	0.057	
CS - 060 - 3A		7.00	5.80	2.80	0.061	
CS - 060 - 4		7.80	6.60	3.00	0.036	
CS - 060 - 5		8.60	7.40	3.20	0.031	
CS - 060 - 6	9.40	8.20	4.00	0.274		
CS - 070 - 1	0.70	5.00	3.60	1.90	0.212	254MM
CS - 070 - 2		6.00	4.60	2.30	0.142	
CS - 070 - 3		7.00	5.60	2.60	0.096	
CS - 070 - 4		8.00	6.60	3.20	0.072	
CS - 070 - 5		9.60	8.20	4.00	0.057	
CS - 080 - 0	0.80	4.00	2.40	1.60	0.881	254MM
CS - 080 - 1		4.80	3.20	1.90	0.466	
CS - 080 - 1A		5.80	4.20	2.30	0.346	
CS - 080 - 1B		6.00	4.40	2.40	0.308	
CS - 080 - 2		6.50	4.90	2.50	0.212	
CS - 080 - 3		7.30	5.70	3.00	0.157	
CS - 080 - 4		8.40	6.80	3.50	0.123	
CS - 080 - 5		9.80	8.20	4.00	0.084	
CS - 080 - 6	11.40	9.80	4.80	0.060		
CS - 080 - 7	12.00	10.40	5.20	0.521		
CS - 080 - 8	14.00	12.40	6.00	0.036		
CS - 090 - 1	0.90	6.00	4.20	2.00	0.402	254MM
CS - 090 - 2		6.70	4.90	2.50	0.323	
CS - 090 - 3		8.60	6.80	3.50	0.189	
CS - 090 - 4		10.30	8.50	4.00	0.119	
CS - 090 - 5		12.00	10.20	4.80	0.084	

ROUND WIRE MOULD SPRINGS

High Carbon Steel wire



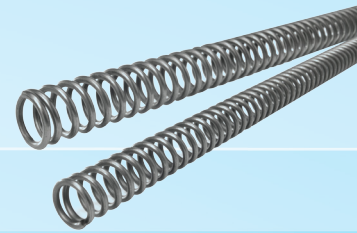
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	PITCH MM	SPRING RATE PER 25MM KG/MM	FREE LENGTH
CS - 10 - 0	1.00	5.30	3.30	2.00	1.040	305MM
CS - 10 - 1		6.20	4.20	2.20	0.654	
CS - 10 - 2		7.30	5.30	2.80	0.445	
CS - 10 - 3		8.30	6.30	3.20	0.339	
CS - 10 - 4		9.30	7.30	3.60	0.246	
CS - 10 - 5		10.00	8.00	3.80	0.200	
CS - 10 - 6		11.30	9.30	5.00	0.161	
CS - 10 - 7A		12.50	10.50	6.00	0.139	
CS - 10 - 7		14.50	12.50	7.00	0.107	
CS - 10 - 8		15.00	13.00	8.00	0.092	
CS - 10 - 9		16.00	14.00	8.00	0.089	
CS - 12 - 1	1.20	6.00	3.60	2.20	1.652	305MM
CS - 12 - 2		7.00	4.60	2.50	1.123	
CS - 12 - 3		8.00	5.60	3.00	0.774	
CS - 12 - 4		9.00	6.60	3.50	0.577	
CS - 12 - 5		10.00	7.60	4.00	0.459	
CS - 12 - 6		11.00	8.60	4.50	0.358	
CS - 12 - 7		12.00	9.60	4.80	0.290	
CS - 12 - 8		13.00	10.60	5.50	0.242	
CS - 12 - 9		15.50	13.50	6.50	0.187	
CS - 12 - 10		16.80	14.40	8.00	0.138	
CS - 14 - 1	1.40	8.30	5.50	3.20	1.413	305MM
CS - 14 - 2		9.60	6.80	3.60	0.095	
CS - 14 - 3		10.50	7.70	4.00	0.770	
CS - 14 - 4		11.50	8.70	4.30	0.584	
CS - 14 - 5		12.50	9.70	4.60	0.495	
CS - 14 - 6		13.50	10.70	5.00	0.398	
CS - 14 - 7		14.00	11.20	5.50	0.388	
CS - 14 - 8		15.80	13.00	7.00	0.294	
CS - 16 - 1	1.60	8.70	5.50	3.20	2.278	305MM
CS - 16 - 2		9.50	6.30	3.50	1.575	
CS - 16 - 3		10.50	7.30	3.80	1.310	
CS - 16 - 4		11.50	8.30	4.10	1.020	
CS - 16 - 5		12.50	9.30	4.40	0.823	
CS - 16 - 6		13.50	10.30	5.00	0.685	
CS - 16 - 7		14.50	11.30	5.40	0.587	
CS - 16 - 8		15.50	12.30	5.80	0.516	
CS - 16 - 9		16.80	13.60	6.30	0.415	
CS - 16 - 10		19.80	16.60	7.00	0.328	
CS - 16 - 11		21.50	18.30	8.00	0.210	
CS - 18 - 1	1.80	10.00	6.40	4.00	2.876	305MM
CS - 18 - 2		12.00	8.40	4.50	1.743	
CS - 18 - 3		14.00	10.40	5.20	1.097	
CS - 18 - 4		16.50	12.90	6.00	0.636	
CS - 18 - 5		18.00	14.40	7.00	0.554	
CS - 18 - 6		20.00	16.40	8.00	0.441	



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ROUND WIRE MOULD SPRINGS

High Carbon Steel wire



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	PITCH MM	SPRING RATE PER 25MM KG/MM	FREE LENGTH
CS - 20 - 1	2.00	12.50	8.50	5.00	2.248	305MM
CS - 20 - 2		13.50	9.50	5.00	1.934	
CS - 20 - 3		14.50	10.50	5.40	1.575	
CS - 20 - 4		15.50	11.50	5.60	1.310	
CS - 20 - 5		16.50	12.50	6.40	1.168	
CS - 20 - 6		17.50	13.50	7.00	1.009	
CS - 20 - 7		18.50	14.50	7.50	0.886	
CS - 20 - 8		20.50	16.50	8.00	0.668	
CS - 20 - 9		25.00	21.00	9.00	0.463	
CS - 20 - 10		29.40	25.40	10.00	0.232	
CS - 23 - 1	2.30	15.30	10.70	5.50	2.449	305MM
CS - 23 - 2		18.00	13.40	6.50	1.610	
CS - 23 - 3		20.00	15.40	7.50	1.225	
CS - 23 - 4		22.00	17.40	8.20	1.032	
CS - 23 - 5		25.00	20.40	9.50	0.722	
CS - 23 - 6		27.00	22.40	10.00	0.554	
CS - 25 - 1	2.50	16.00	11.00	6.00	3.358	305MM
CS - 25 - 2		18.50	13.50	7.00	2.241	
CS - 25 - 3		21.80	16.80	8.00	1.436	
CS - 25 - 4		25.40	20.40	9.50	0.982	
CS - 25 - 5		28.00	23.00	10.50	0.766	
CS - 25 - 6		30.40	25.40	11.50	0.594	
CS - 30 - 1	3.00	19.00	13.00	7.00	4.647	305MM
CS - 30 - 2		22.50	16.50	8.00	2.888	
CS - 30 - 3		26.50	20.50	9.00	1.760	
CS - 30 - 4		28.80	22.80	10.00	1.425	
CS - 30 - 5		32.00	26.00	11.50	1.170	
CS - 30 - 6		36.80	30.80	12.50	0.713	
CS - 32 - 1	3.20	23.00	16.60	8.00	3.809	305MM
CS - 32 - 2		27.00	20.60	10.00	2.350	
CS - 32 - 3		29.00	22.60	11.00	1.986	
CS - 32 - 4		32.50	26.10	12.00	1.469	
CS - 32 - 5		35.20	32.00	14.00	1.230	
CS - 32 - 6		43.20	40.00	20.00	1.155	

COMPRESSION SPRINGS

Compression Springs

A Compression Spring is an open-coiled helical spring that offers resistance to a compressive force applied with respect to a specific axis. Elite Springs offers a broad variety of helical compression springs. There are inexpensive and with consistent function.

Material Used

High carbon steel wire
SUS 304 WPB JIS 4314 Stainless steel spring wire

Direction of Helix

Right Hand (clockwise)

Surface Treatment

Springs manufactured from high carbon spring steel are slightly lubricated following thermal treatment. Springs manufactured from stainless steel wire are passivated.

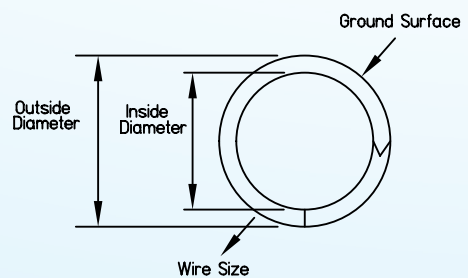
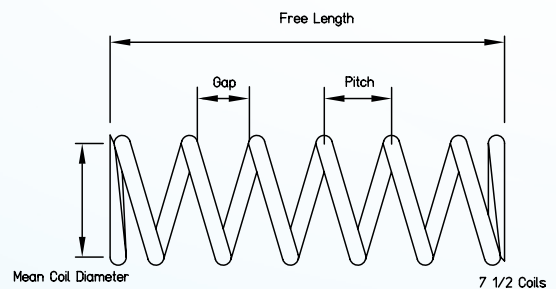
Finishing

All springs are thermally treated and stress relieved

Tolerances

Outside Diameter (mm)	Tolerances (mm)
1.45 – 3.00	± 0.07
3.01 – 6.00	± 0.12
6.01 – 13.00	± 0.20
13.01 – 25.50	± 0.35
25.51 – 31	± 0.50
31.01 – 37	± 0.75
37.01 – 50.80	± 1.00

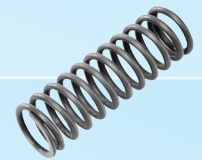
- End Tolerance : 3°
- Spring rate are for reference only



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 006A - 1	0.15	1.45	1.15	3.20	0.97	0.131	0.052
ESC - 006A - 2				4.80	1.27		0.036
ESC - 006A - 3				6.40	1.57		0.027
ESC - 006A - 4				8.00	1.87		0.022
ESC - 006A - 5				9.50	2.17		0.018
ESC - 006A - 6				11.20	2.40		0.016
ESC - 006A - 7				12.70	2.70		0.014
ESC - 006A - 8				14.30	3.15		0.012
ESC - 006A - 9				16.00	3.67		0.010
ESC - 007A - 1	0.18	1.45	1.09	3.20	1.26	0.218	0.103
ESC - 007A - 2				4.80	1.80		0.064
ESC - 007A - 3				6.40	2.16		0.051
ESC - 007A - 4				8.00	2.70		0.039
ESC - 007A - 5				9.50	3.06		0.034
ESC - 007A - 6				11.20	3.60		0.028
ESC - 007A - 7				12.70	3.96		0.025
ESC - 007A - 8				14.30	4.50		0.022
ESC - 007A - 9				16.00	5.04		0.019
ESC - 012 020 - 1	0.20	1.20	0.80	2.00	1.25	0.330	0.380
ESC - 012 020 - 2				2.70	1.62		0.265
ESC - 012 020 - 3				4.00	2.17		0.182
ESC - 012 020 - 4				5.50	2.90		0.129
ESC - 012 020 - 5				7.80	4.05		0.088
ESC - 008AB - 1	0.20	1.25	0.85	3.00	1.20	0.475	0.349
ESC - 008AB - 2				4.00	1.80		0.199
ESC - 008AB - 3				5.50	2.20		0.155
ESC - 008AB - 4				6.50	2.50		0.133
ESC - 008AB - 5				8.00	3.20		0.099
ESC - 008A - 1	0.20	1.45	1.05	3.20	1.30	0.300	0.183
ESC - 008A - 2				4.80	1.80		0.118
ESC - 008A - 3				6.40	2.40		0.082
ESC - 008A - 4				8.00	2.90		0.066
ESC - 008A - 5				9.50	3.60		0.051
ESC - 008A - 6				11.20	4.00		0.046
ESC - 008A - 7				12.70	5.00		0.036
ESC - 008A - 8				14.30	5.50		0.032
ESC - 008A - 9				16.00	6.30		0.028
ESC - 008BC - 1	0.20	1.60	1.20	3.20	1.20	0.264	0.147
ESC - 008BC - 2				4.80	1.70		0.090
ESC - 008BC - 3				6.40	2.20		0.065
ESC - 008BC - 4				8.00	2.60		0.053
ESC - 008BC - 5				9.50	3.20		0.042
ESC - 008BC - 6				11.20	3.60		0.036
ESC - 008BC - 7				12.70	4.00		0.032
ESC - 008BC - 8				14.30	4.40		0.029
ESC - 008BC - 9				16.00	4.80		0.026

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



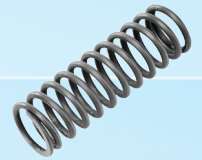
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 008BD - 1	0.20	1.80	1.40	4.50	1.40	0.241	0.078
ESC - 008BD - 2				6.50	1.80		0.056
ESC - 008BD - 3				8.00	2.20		0.043
ESC - 008BD - 4				9.50	2.70		0.034
ESC - 008BD - 5				13.00	4.00		0.021
ESC - 008BE - 1	0.20	2.00	1.60	3.20	1.10	0.165	0.079
ESC - 008BE - 2				4.80	1.50		0.050
ESC - 008BE - 3				6.40	1.90		0.037
ESC - 008BE - 4				8.00	2.05		0.033
ESC - 008BE - 5				9.50	2.70		0.024
ESC - 008BE - 6				11.20	3.00		0.021
ESC - 008BE - 7				12.70	3.40		0.018
ESC - 008BE - 8				14.30	3.80		0.016
ESC - 008BE - 9				16.00	4.20		0.014
ESC - 022 020 - 1	0.20	2.20	1.80	4.00	1.10	0.157	0.057
ESC - 022 020 - 2				5.90	1.50		0.036
ESC - 022 020 - 3				8.70	2.10		0.023
ESC - 022 020 - 4				12.60	2.90		0.016
ESC - 022 020 - 5				18.30	4.00		0.011
ESC - 008BF - 1	0.20	2.24	1.84	3.20	1.00	0.166	0.063
ESC - 008BF - 2				4.80	1.30		0.042
ESC - 008BF - 3				6.40	1.60		0.031
ESC - 008BF - 4				8.00	1.80		0.027
ESC - 008BF - 5				9.50	2.05		0.023
ESC - 008BF - 6				11.20	2.40		0.019
ESC - 008BF - 7				12.70	2.80		0.015
ESC - 008BF - 8				14.30	3.00		0.014
ESC - 008BF - 9				16.00	3.20		0.013
ESC - 008BF - 10				17.50	3.50		0.012
ESC - 008BF - 11				19.00	3.80		0.011
ESC - 025 020 - 1	0.20	2.50	2.10	5.00	1.30	0.109	0.029
ESC - 025 020 - 2				6.40	1.40		0.026
ESC - 025 020 - 3				8.00	1.90		0.017
ESC - 025 020 - 4				9.50	2.00		0.016
ESC - 025 020 - 5				10.00	2.20		0.014
ESC - 025 020 - 6				11.20	2.30		0.014
ESC - 025 020 - 7				12.70	2.40		0.013
ESC - 025 020 - 8				14.30	2.70		0.011
ESC - 025 020 - 9				15.00	3.00		0.010
ESC - 025 020 - 10				16.00	3.10		0.009
ESC - 025 020 - 11				20.00	3.90		0.007



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

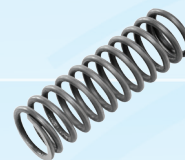


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 008BG - 1	0.20	2.70	2.30	5.50	1.20	0.092	0.025
ESC - 008BG - 2				6.40	1.40		0.020
ESC - 008BG - 3				8.00	1.70		0.015
ESC - 008BG - 4				9.50	1.90		0.013
ESC - 008BG - 5				11.20	2.20		0.011
ESC - 008BG - 6				12.00	2.40		0.010
ESC - 008BG - 7				14.30	2.80		0.008
ESC - 008BG - 8				16.00	3.00		0.008
ESC - 008BG - 9				18.00	3.40		0.006
ESC - 008BG - 10				20.00	3.80		0.006
ESC - 008BG - 11				22.00	4.30		0.005
ESC - 008BG - 12				26.00	5.00		0.004
ESC - 030 020 - 1	0.20	3.00	2.60	6.50	1.40	0.071	0.014
ESC - 030 020 - 2				8.00	1.60		0.012
ESC - 030 020 - 3				9.00	1.80		0.010
ESC - 030 020 - 4				10.00	2.00		0.009
ESC - 030 020 - 5				11.20	2.20		0.008
ESC - 030 020 - 6				12.70	2.50		0.007
ESC - 030 020 - 7				14.30	2.70		0.006
ESC - 030 020 - 8				16.00	2.90		0.005
ESC - 030 020 - 9				19.00	3.60		0.004
ESC - 030 020 - 10				22.00	4.00		0.004
ESC - 008BH - 1	0.20	3.60	3.20	6.40	1.20	0.053	0.010
ESC - 008BH - 2				8.00	1.40		0.008
ESC - 008BH - 3				9.50	1.60		0.006
ESC - 008BH - 4				11.20	1.80		0.005
ESC - 008BH - 5				12.70	2.00		0.005
ESC - 008BH - 6				14.30	2.20		0.004
ESC - 008BH - 7				16.00	2.40		0.004
ESC - 008BH - 8				17.50	2.60		0.003
ESC - 008BH - 9				19.00	2.80		0.003
ESC - 008BI - 1	0.20	4.00	3.60	6.00	1.00	0.045	0.009
ESC - 008BI - 2				8.00	1.20		0.007
ESC - 008BI - 3				10.00	1.30		0.006
ESC - 008BI - 4				12.70	1.60		0.004
ESC - 008BI - 5				15.00	2.00		0.003
ESC - 008BI - 6				20.00	2.50		0.002
ESC - 008BI - 7				25.00	3.10		0.002
ESC - 450 020 - 1	0.20	4.50	4.10	10.00	1.05	0.053	0.006
ESC - 450 020 - 2				15.00	1.40		0.004
ESC - 450 020 - 3				20.00	1.75		0.003
ESC - 450 020 - 4				25.00	2.10		0.002
ESC - 010BA - 1	0.25	1.45	0.95	2.40	1.25	0.798	0.761
ESC - 010BA - 2				3.30	1.62		0.509
ESC - 010BA - 3				4.70	2.25		0.326
ESC - 010BA - 4				6.60	3.00		0.228
ESC - 010BA - 5				8.00	3.50		0.190
ESC - 010BA - 6				9.40	4.12		0.157

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 160 025 - 1	0.25	1.60	1.10	3.20	1.12	0.872	0.646
ESC - 160 025 - 2				4.00	1.37		0.461
ESC - 160 025 - 3				5.00	1.75		0.320
ESC - 160 025 - 4				6.40	2.18		0.238
ESC - 160 025 - 5				8.00	2.75		0.178
ESC - 160 025 - 6				9.50	3.25		0.145
ESC - 160 025 - 7				11.20	3.87		0.119
ESC - 160 025 - 8				12.70	4.37		0.103
ESC - 160 025 - 9				14.30	4.87		0.091
ESC - 160 025 - 10				16.00	5.50		0.080
ESC - 160 025 - 11				17.50	6.00		0.072
ESC - 160 025 - 12				19.00	6.50		0.066
ESC - 010BC - 1	0.25	1.80	1.30	3.00	1.31	0.484	0.327
ESC - 010BC - 2				4.30	1.75		0.212
ESC - 010BC - 3				6.40	2.50		0.132
ESC - 010BC - 4				8.00	3.00		0.106
ESC - 010BC - 5				9.00	3.50		0.088
ESC - 010BC - 6				10.00	3.75		0.081
ESC - 010BC - 7				12.70	5.00		0.058
ESC - 010BC - 8				16.00	6.25		0.046
ESC - 020 025 - 1	0.25	2.00	1.50	3.20	1.62	0.333	0.164
ESC - 020 025 - 2				4.90	2.12		0.113
ESC - 020 025 - 3				7.20	2.87		0.077
ESC - 020 025 - 4				10.30	3.87		0.054
ESC - 020 025 - 5				15.00	5.37		0.037
ESC - 010BD - 1	0.25	2.10	1.60	4.00	1.50	0.410	0.155
ESC - 010BD - 2				5.00	1.75		0.124
ESC - 010BD - 3				6.40	2.12		0.096
ESC - 010BD - 4				8.00	2.50		0.077
ESC - 010BD - 5				9.50	3.00		0.062
ESC - 010BD - 6				11.20	3.37		0.054
ESC - 010BD - 7				12.70	3.75		0.048
ESC - 010BD - 8				14.30	4.25		0.041
ESC - 010BD - 9				16.00	4.75		0.036
ESC - 010BD - 10				17.50	5.25		0.032
ESC - 010BD - 11				19.00	5.50		0.031
ESC - 010B - 1	0.25	2.24	1.74	3.20	1.25	0.318	0.167
ESC - 010B - 2				4.80	1.75		0.100
ESC - 010B - 3				5.50	1.87		0.091
ESC - 010B - 4				6.40	2.00		0.083
ESC - 010B - 5				8.00	2.50		0.062
ESC - 010B - 6				9.50	2.87		0.052
ESC - 010B - 7				11.20	3.25		0.045
ESC - 010B - 8				12.70	3.62		0.040
ESC - 010B - 9				14.30	4.12		0.034
ESC - 010B - 10				16.00	4.75		0.029
ESC - 010B - 11				17.50	5.25		0.026
ESC - 010B - 12				19.00	5.62		0.024



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 010BE - 1	0.25	2.50	2.00	6.40	1.87	0.240	0.063
ESC - 010BE - 2				8.00	2.25		0.049
ESC - 010BE - 3				9.50	2.75		0.038
ESC - 010BE - 4				11.20	3.12		0.033
ESC - 010BE - 5				12.70	3.62		0.027
ESC - 010BE - 6				14.30	4.00		0.024
ESC - 010BE - 7				16.00	4.50		0.021
ESC - 010BE - 8				17.50	4.87		0.019
ESC - 010BE - 9				19.00	5.25		0.018
ESC - 010BE - 10				22.00	5.75		0.016
ESC - 010BE - 11				25.40	6.50		0.014
ESC - 010C - 1	0.25	2.59	2.09	6.40	2.00	0.230	0.051
ESC - 010C - 2				8.00	2.37		0.041
ESC - 010C - 3				9.50	2.75		0.034
ESC - 010C - 4				11.20	3.06		0.030
ESC - 010C - 5				12.70	3.50		0.025
ESC - 010C - 6				14.30	3.75		0.023
ESC - 010C - 7				16.00	4.12		0.021
ESC - 010C - 8				19.00	4.87		0.017
ESC - 010C - 9				22.30	5.50		0.015
ESC - 010C - 10				25.40	6.25		0.013
ESC - 010BF - 1	0.25	2.80	2.30	5.00	1.37	0.213	0.068
ESC - 010BF - 2				6.00	1.62		0.053
ESC - 010BF - 3				7.50	1.82		0.045
ESC - 010BF - 4				9.50	2.37		0.031
ESC - 010BF - 5				11.20	2.75		0.026
ESC - 010BF - 6				12.70	3.12		0.022
ESC - 010BF - 7				16.00	3.75		0.018
ESC - 010BF - 8				19.00	4.50		0.014
ESC - 010BF - 9				23.00	5.25		0.012
ESC - 010BG - 1	0.25	3.00	2.50	6.40	1.75	0.175	0.038
ESC - 010BG - 2				8.00	2.00		0.031
ESC - 010BG - 3				9.50	2.37		0.025
ESC - 010BG - 4				11.20	2.62		0.022
ESC - 010BG - 5				12.70	3.00		0.019
ESC - 010BG - 6				14.30	3.25		0.017
ESC - 010BG - 7				16.00	3.75		0.014
ESC - 010BG - 8				17.50	4.00		0.013
ESC - 010BG - 9				19.00	4.37		0.012
ESC - 010BG - 10				22.30	5.00		0.010
ESC - 010BG - 11				25.40	5.75		0.009

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



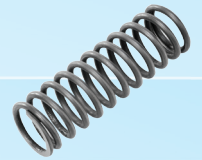
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 010BH - 1	0.25	3.50	3.00	7.10	1.50	0.140	0.028
ESC - 010BH - 2				8.00	1.62		0.025
ESC - 010BH - 3				9.50	2.00		0.019
ESC - 010BH - 4				11.00	2.25		0.016
ESC - 010BH - 5				12.70	2.56		0.014
ESC - 010BH - 6				14.30	2.87		0.012
ESC - 010BH - 7				16.00	3.25		0.010
ESC - 010BH - 8				19.00	3.75		0.008
ESC - 010BH - 9				23.00	4.50		0.007
ESC - 010BH - 10				25.40	5.00		0.006
ESC - 010BH - 11				30.00	5.75		0.005
ESC - 010BH - 12				34.00	6.50		0.004
ESC - 410 025 - 1	0.25	4.10	3.60	6.40	1.25	0.129	0.023
ESC - 410 025 - 2				8.00	1.43		0.018
ESC - 410 025 - 3				9.50	1.56		0.016
ESC - 410 025 - 4				11.20	1.75		0.013
ESC - 410 025 - 5				12.70	1.93		0.012
ESC - 410 025 - 6				14.30	2.12		0.010
ESC - 410 025 - 7				16.00	2.31		0.009
ESC - 410 025 - 8				17.50	2.43		0.009
ESC - 410 025 - 9				19.00	2.62		0.008
ESC - 410 025 - 10				22.30	3.00		0.006
ESC - 410 025 - 11				25.40	3.37		0.006
ESC - 410 025 - 12				30.00	3.87		0.005
ESC - 010BI - 1	0.25	4.50	4.00	6.40	1.25	0.073	0.017
ESC - 010BI - 2				8.00	1.50		0.012
ESC - 010BI - 3				9.50	1.75		0.010
ESC - 010BI - 4				11.20	2.00		0.008
ESC - 010BI - 5				12.70	2.25		0.007
ESC - 010BI - 6				14.30	2.50		0.006
ESC - 010BI - 7				16.00	2.75		0.005
ESC - 010BI - 8				17.50	3.00		0.005
ESC - 010BI - 9				19.00	3.25		0.004
ESC - 010BI - 10				22.30	3.75		0.004
ESC - 010BI - 11				25.40	4.25		0.003
ESC - 012A - 1	0.30	2.00	1.40	6.40	2.70	0.780	0.238
ESC - 012A - 2				8.00	3.15		0.196
ESC - 012A - 3				9.50	3.75		0.158
ESC - 012A - 4				11.20	4.20		0.138
ESC - 012A - 5				12.70	5.10		0.111
ESC - 012A - 6				14.30	5.70		0.098
ESC - 012A - 7				16.00	6.60		0.083
ESC - 012A - 8				20.00	8.10		0.066



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 012B - 1	0.30	2.24	1.64	3.20	1.65	0.557	0.320
ESC - 012B - 2				4.80	2.17		0.214
ESC - 012B - 3				6.40	2.55		0.172
ESC - 012B - 4				8.00	3.15		0.131
ESC - 012B - 5				9.50	3.75		0.106
ESC - 012B - 6				11.20	4.20		0.093
ESC - 012B - 7				12.70	4.80		0.080
ESC - 012B - 8				14.30	5.40		0.070
ESC - 012B - 9				16.00	6.00		0.062
ESC - 012B - 10				17.50	6.75		0.054
ESC - 012B - 11				19.00	7.50		0.048
ESC - 012B - 12				20.70	8.10		0.044
ESC - 012B - 13				22.30	8.70		0.041
ESC - 012B - 14				25.40	9.90		0.036
ESC - 025 030 - 1	0.30	2.50	1.90	2.80	1.20	0.328	0.384
ESC - 025 030 - 2				4.50	2.25		0.139
ESC - 025 030 - 3				6.80	3.15		0.090
ESC - 025 030 - 4				10.00	4.35		0.061
ESC - 025 030 - 5				14.80	6.45		0.039
ESC - 012C - 1	0.30	2.60	2.00	6.40	2.25	0.479	0.122
ESC - 012C - 2				8.00	2.70		0.096
ESC - 012C - 3				9.50	3.30		0.074
ESC - 012C - 4				11.20	3.75		0.064
ESC - 012C - 5				12.70	4.20		0.056
ESC - 012C - 6				14.30	4.65		0.049
ESC - 012C - 7				16.00	5.10		0.044
ESC - 012C - 8				19.00	6.00		0.037
ESC - 012C - 9				22.30	7.05		0.031
ESC - 012C - 10				25.40	7.80		0.028
ESC - 012AB - 1	0.30	2.80	2.20	4.80	1.65	0.402	0.149
ESC - 012AB - 2				6.40	2.10		0.104
ESC - 012AB - 3				8.00	2.40		0.087
ESC - 012AB - 4				9.50	2.77		0.072
ESC - 012AB - 5				11.20	3.07		0.063
ESC - 012AB - 6				12.70	3.75		0.049
ESC - 012AB - 7				14.30	3.97		0.046
ESC - 012AB - 8				16.00	4.35		0.041
ESC - 012AB - 9				17.50	4.80		0.037
ESC - 012AB - 10				19.00	5.25		0.033
ESC - 012AB - 11				20.70	5.55		0.031
ESC - 012AB - 12				22.30	6.60		0.026
ESC - 012AB - 13				23.80	7.05		0.024
ESC - 012AB - 14				25.40	7.50		0.022

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



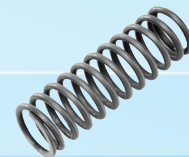
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 012AC - 1	0.30	3.05	2.45	6.40	1.95	0.361	0.087
ESC - 012AC - 2				8.00	2.40		0.065
ESC - 012AC - 3				9.50	2.70		0.056
ESC - 012AC - 4				11.20	3.07		0.047
ESC - 012AC - 5				12.70	3.75		0.037
ESC - 012AC - 6				14.30	3.90		0.035
ESC - 012AC - 7				16.00	4.35		0.031
ESC - 012AC - 8				17.50	4.72		0.028
ESC - 012AC - 9				19.00	5.10		0.026
ESC - 012AC - 10				20.70	5.55		0.023
ESC - 012AC - 11				22.30	6.00		0.021
ESC - 012AC - 12				25.40	7.05		0.018
ESC - 012AC - 13				30.00	8.10		0.015
ESC - 032 030 - 1	0.30	3.20	2.60	5.00	1.57	0.353	0.103
ESC - 032 030 - 2				7.71	2.17		0.064
ESC - 032 030 - 3				12.00	3.07		0.040
ESC - 032 030 - 4				17.50	4.20		0.028
ESC - 032 030 - 5				26.00	6.00		0.018
ESC - 012AD - 1	0.30	3.76	3.16	6.40	1.80	0.227	0.049
ESC - 012AD - 2				8.00	2.10		0.039
ESC - 012AD - 3				9.50	2.40		0.032
ESC - 012AD - 4				11.20	2.77		0.027
ESC - 012AD - 5				12.70	3.07		0.024
ESC - 012AD - 6				14.30	3.60		0.019
ESC - 012AD - 7				16.00	3.90		0.018
ESC - 012AD - 8				17.50	4.05		0.017
ESC - 012AD - 9				19.00	4.35		0.015
ESC - 012AD - 10				20.70	4.80		0.014
ESC - 012AD - 11				22.30	4.95		0.013
ESC - 012AD - 12				23.80	5.40		0.012
ESC - 012AD - 13				25.40	5.77		0.011
ESC - 012AE - 1	0.30	4.00	3.40	6.40	1.57	0.217	0.050
ESC - 012AE - 2				8.00	1.80		0.040
ESC - 012AE - 3				9.50	2.10		0.032
ESC - 012AE - 4				11.20	2.47		0.025
ESC - 012AE - 5				12.70	2.70		0.023
ESC - 012AE - 6				14.30	3.00		0.020
ESC - 012AE - 7				16.00	3.45		0.017
ESC - 012AE - 8				17.50	3.60		0.016
ESC - 012AE - 9				19.00	3.75		0.015
ESC - 012AE - 10				22.30	4.35		0.012
ESC - 012AE - 11				25.40	4.95		0.011
ESC - 012AE - 12				32.00	6.15		0.008
ESC - 012AE - 13				38.10	7.05		0.007



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 012AF - 1	0.30	4.50	3.90	6.40	1.50	0.169	0.036
ESC - 012AF - 2				8.00	1.80		0.027
ESC - 012AF - 3				9.50	2.10		0.022
ESC - 012AF - 4				11.20	2.25		0.020
ESC - 012AF - 5				12.70	2.55		0.017
ESC - 012AF - 6				14.30	2.85		0.014
ESC - 012AF - 7				16.00	3.00		0.013
ESC - 012AF - 8				17.50	3.30		0.012
ESC - 012AF - 9				19.00	3.60		0.011
ESC - 012AF - 10				20.70	3.75		0.010
ESC - 012AF - 11				22.30	3.95		0.009
ESC - 012AF - 12				25.40	4.80		0.007
ESC - 012AF - 13				28.50	4.95		0.007
ESC - 012AF - 14				32.00	5.40		0.006
ESC - 012AF - 15				35.00	6.00		0.006
ESC - 012AF - 16				38.10	6.30		0.005
ESC - 476 030 - 1	0.30	4.76	4.16	6.40	1.42	0.173	0.033
ESC - 476 030 - 2				8.00	1.65		0.026
ESC - 476 030 - 3				9.50	1.80		0.023
ESC - 476 030 - 4				11.20	2.02		0.019
ESC - 476 030 - 5				12.70	2.25		0.016
ESC - 476 030 - 6				14.30	2.40		0.015
ESC - 476 030 - 7				16.00	2.62		0.013
ESC - 476 030 - 8				17.50	2.85		0.012
ESC - 476 030 - 9				19.00	3.00		0.011
ESC - 476 030 - 10				22.30	3.45		0.009
ESC - 476 030 - 11				25.40	3.82		0.008
ESC - 476 030 - 12				30.00	4.42		0.007
ESC - 476 030 - 13				35.00	5.02		0.006
ESC - 476 030 - 14				38.00	5.40		0.005
ESC - 012AG - 1	0.30	5.00	4.40	8.00	1.57	0.126	0.024
ESC - 012AG - 2				9.50	1.95		0.017
ESC - 012AG - 3				11.20	2.25		0.014
ESC - 012AG - 4				12.70	2.40		0.013
ESC - 012AG - 5				14.30	2.55		0.012
ESC - 012AG - 6				16.00	2.85		0.010
ESC - 012AG - 7				17.50	3.00		0.009
ESC - 012AG - 8				19.00	3.45		0.008
ESC - 012AG - 9				22.30	3.75		0.007
ESC - 012AG - 10				25.40	4.20		0.006
ESC - 012AG - 11				30.00	4.80		0.005
ESC - 012AG - 12				35.00	5.40		0.004
ESC - 012AG - 13				38.10	6.00		0.004

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



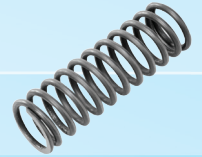
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 012AH - 1	0.30	5.50	4.90	8.00	1.35	0.134	0.023
ESC - 012AH - 2				9.50	1.65		0.016
ESC - 012AH - 3				11.20	1.80		0.014
ESC - 012AH - 4				12.70	1.95		0.012
ESC - 012AH - 5				14.30	2.10		0.011
ESC - 012AH - 6				16.00	2.25		0.010
ESC - 012AH - 7				17.50	2.40		0.009
ESC - 012AH - 8				19.00	2.70		0.008
ESC - 012AH - 9				22.30	3.07		0.007
ESC - 012AH - 10				25.40	3.60		0.005
ESC - 192 032 - 1	0.32	1.92	1.28	3.10	1.68	0.872	0.795
ESC - 192 032 - 2				4.40	2.32		0.492
ESC - 192 032 - 3				6.30	3.28		0.313
ESC - 192 032 - 4				8.70	4.56		0.211
ESC - 192 032 - 5				12.50	6.40		0.143
ESC - 232 032 - 1	0.32	2.32	1.68	3.70	1.76	0.671	0.378
ESC - 232 032 - 2				5.30	2.40		0.240
ESC - 232 032 - 3				7.70	3.36		0.155
ESC - 232 032 - 4				10.90	4.64		0.106
ESC - 232 032 - 5				15.60	6.40		0.073
ESC - 282 032 - 1	0.32	2.82	2.18	4.70	1.76	0.524	0.193
ESC - 282 032 - 2				6.80	2.40		0.123
ESC - 282 032 - 3				10.00	3.36		0.079
ESC - 282 032 - 4				14.20	4.64		0.054
ESC - 282 032 - 5				20.60	6.40		0.037
ESC - 352 032 - 1	0.32	3.52	2.88	6.30	1.76	0.412	0.092
ESC - 352 032 - 2				9.40	2.40		0.058
ESC - 352 032 - 3				14.00	3.36		0.038
ESC - 352 032 - 4				20.00	4.64		0.025
ESC - 352 032 - 5				29.30	6.40		0.018
ESC - 432 032 - 1	0.32	4.32	3.68	8.70	1.92	0.274	0.041
ESC - 432 032 - 2				13.10	2.56		0.027
ESC - 432 032 - 3				19.80	3.68		0.017
ESC - 432 032 - 4				28.60	5.12		0.011
ESC - 432 032 - 5				41.90	7.36		0.007
ESC - 014A - 1	0.35	3.05	2.35	6.40	2.45	0.654	0.154
ESC - 014A - 2				8.00	2.88		0.123
ESC - 014A - 3				9.50	3.32		0.103
ESC - 014A - 4				11.20	3.67		0.090
ESC - 014A - 5				12.70	4.20		0.077
ESC - 014A - 6				14.30	4.55		0.070
ESC - 014A - 7				16.00	5.07		0.061
ESC - 014A - 8				17.50	5.60		0.055
ESC - 014A - 9				19.00	5.95		0.051
ESC - 014A - 10				22.30	7.35		0.040
ESC - 014A - 11				25.40	8.05		0.036
ESC - 014A - 12				28.50	8.75		0.033
ESC - 014A - 13				32.00	9.80		0.029
ESC - 014A - 14				35.00	10.50		0.027
ESC - 014A - 15				38.10	11.55		0.024



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 014AB - 1	0.35	3.76	3.06	6.40	2.10	0.402	0.095
ESC - 014AB - 2				8.00	2.45		0.076
ESC - 014AB - 3				9.50	2.88		0.061
ESC - 014AB - 4				11.20	3.32		0.051
ESC - 014AB - 5				12.70	3.67		0.045
ESC - 014AB - 6				14.30	4.02		0.040
ESC - 014AB - 7				16.00	4.37		0.036
ESC - 014AB - 8				17.50	4.90		0.031
ESC - 014AB - 9				19.00	5.25		0.029
ESC - 014AB - 10				22.30	5.95		0.025
ESC - 014AB - 11				23.80	6.30		0.023
ESC - 014AB - 12				25.40	6.65		0.022
ESC - 014AB - 13				28.60	7.35		0.020
ESC - 014AB - 14				32.00	8.05		0.018
ESC - 014AB - 15				35.00	8.75		0.016
ESC - 014AB - 16				38.10	9.62		0.015
ESC - 014AB - 17				44.50	11.20		0.012
ESC - 014AB - 18				50.80	12.60		0.011
ESC - 014B - 1	0.35	4.57	3.87	6.40	1.66	0.370	0.073
ESC - 014B - 2				8.00	1.92		0.058
ESC - 014B - 3				9.50	2.10		0.050
ESC - 014B - 4				11.20	2.36		0.042
ESC - 014B - 5				12.70	2.62		0.036
ESC - 014B - 6				14.30	2.80		0.033
ESC - 014B - 7				16.00	3.15		0.028
ESC - 014B - 8				17.50	3.32		0.027
ESC - 014B - 9				19.00	3.58		0.024
ESC - 014B - 10				22.30	4.28		0.019
ESC - 014B - 11				25.40	4.90		0.016
ESC - 014B - 12				32.00	5.25		0.015
ESC - 014B - 13				35.00	5.60		0.014
ESC - 014B - 14				38.10	6.12		0.013
ESC - 014BB - 1	0.35	5.00	4.30	6.40	1.57	0.269	0.060
ESC - 014BB - 2				8.00	1.92		0.043
ESC - 014BB - 3				9.50	2.10		0.037
ESC - 014BB - 4				11.20	2.27		0.033
ESC - 014BB - 5				12.70	2.62		0.027
ESC - 014BB - 6				14.30	2.97		0.023
ESC - 014BB - 7				16.00	3.15		0.021
ESC - 014BB - 8				17.50	3.50		0.018
ESC - 014BB - 9				19.00	3.85		0.016
ESC - 014BB - 10				22.30	4.37		0.014
ESC - 014BB - 11				25.40	4.90		0.012
ESC - 014BB - 12				32.00	5.95		0.010
ESC - 014BB - 13				35.00	6.30		0.009
ESC - 014BB - 14				38.10	7.00		0.008
ESC - 014BB - 15				40.00	7.35		0.007
ESC - 014BB - 16				44.50	8.05		0.007
ESC - 014BB - 17				50.80	9.10		0.006

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



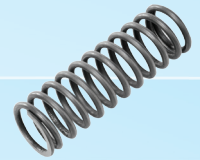
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 024 040 - 1	0.40	2.40	1.60	3.50	2.10	1.133	0.994
ESC - 024 040 - 2				5.00	2.90		0.615
ESC - 024 040 - 3				7.00	4.10		0.391
ESC - 024 040 - 4				10.00	5.70		0.264
ESC - 024 040 - 5				14.00	8.00		0.179
ESC - 029 040 - 1	0.40	2.90	2.10	4.30	2.20	0.966	0.473
ESC - 029 040 - 2				6.30	3.00		0.301
ESC - 029 040 - 3				9.10	4.00		0.206
ESC - 029 040 - 4				13.00	5.60		0.138
ESC - 029 040 - 5				18.50	8.00		0.092
ESC - 016A - 1	0.40	3.05	2.25	6.40	2.80	0.951	0.278
ESC - 016A - 2				8.00	3.20		0.231
ESC - 016A - 3				9.50	4.00		0.173
ESC - 016A - 4				11.20	4.40		0.154
ESC - 016A - 5				12.70	5.20		0.126
ESC - 016A - 6				14.30	5.80		0.111
ESC - 016A - 7				16.00	6.40		0.099
ESC - 016A - 8				17.50	7.00		0.089
ESC - 016A - 9				19.00	7.80		0.079
ESC - 016A - 10				22.30	8.80		0.069
ESC - 016A - 11				25.40	10.00		0.060
ESC - 016A - 12				28.60	11.20		0.053
ESC - 016A - 13				32.00	12.40		0.047
ESC - 016A - 14				35.00	13.60		0.043
ESC - 016A - 15				38.10	15.20		0.038
ESC - 036 040 - 1	0.40	3.60	2.80	5.60	2.20	0.752	0.225
ESC - 036 040 - 2				8.30	3.00		0.143
ESC - 036 040 - 3				12.00	4.20		0.092
ESC - 036 040 - 4				17.50	5.80		0.063
ESC - 036 040 - 5				25.50	8.00		0.043
ESC - 016AB - 1	0.40	3.76	2.96	6.40	2.40	0.697	0.170
ESC - 016AB - 2				8.00	2.80		0.136
ESC - 016AB - 3				9.50	3.40		0.104
ESC - 016AB - 4				11.20	3.60		0.097
ESC - 016AB - 5				12.70	4.20		0.080
ESC - 016AB - 6				14.30	4.80		0.068
ESC - 016AB - 7				16.00	5.20		0.062
ESC - 016AB - 8				17.50	5.60		0.056
ESC - 016AB - 9				19.00	6.00		0.052
ESC - 016AB - 10				22.30	6.60		0.047
ESC - 016AB - 11				23.80	7.20		0.042
ESC - 016AB - 12				25.40	8.00		0.037
ESC - 016AB - 13				28.60	8.40		0.035
ESC - 016AB - 14				32.00	9.20		0.032
ESC - 016AB - 15				35.00	10.00		0.029
ESC - 016AB - 16				38.10	10.90		0.027
ESC - 016AB - 17				44.50	12.80		0.022
ESC - 016AB - 18				50.80	14.40		0.020



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 016AC - 1	0.40	4.10	3.30	6.40	2.00	0.634	0.170
ESC - 016AC - 2				8.00	2.40		0.127
ESC - 016AC - 3				9.50	2.80		0.102
ESC - 016AC - 4				11.20	3.30		0.081
ESC - 016AC - 5				12.70	3.60		0.073
ESC - 016AC - 6				14.30	4.00		0.063
ESC - 016AC - 7				16.00	4.40		0.056
ESC - 016AC - 8				17.50	4.80		0.051
ESC - 016AC - 9				19.00	5.20		0.046
ESC - 016AC - 10				22.30	5.60		0.042
ESC - 016AC - 11				25.40	6.80		0.034
ESC - 016AC - 12				28.60	7.80		0.029
ESC - 016AC - 13				32.00	8.50		0.026
ESC - 016AC - 14				35.00	9.30		0.024
ESC - 016AC - 15				38.10	10.00		0.022
ESC - 044 040 - 1	0.40	4.40	3.60	7.50	2.20	0.518	0.115
ESC - 044 040 - 2				11.00	3.00		0.073
ESC - 044 040 - 3				16.50	4.20		0.047
ESC - 044 040 - 4				24.00	5.80		0.032
ESC - 044 040 - 5				35.50	8.00		0.022
ESC - 016B - 1	0.40	4.57	3.77	6.40	2.00	0.497	0.118
ESC - 016B - 2				8.00	2.40		0.089
ESC - 016B - 3				9.50	2.70		0.075
ESC - 016B - 4				11.20	2.80		0.071
ESC - 016B - 5				12.70	3.20		0.059
ESC - 016B - 6				14.30	3.60		0.051
ESC - 016B - 7				16.00	4.00		0.044
ESC - 016B - 8				17.50	4.40		0.039
ESC - 016B - 9				19.00	4.80		0.035
ESC - 016B - 10				22.30	5.60		0.029
ESC - 016B - 11				25.40	6.40		0.025
ESC - 016B - 12				28.60	7.20		0.022
ESC - 016B - 13				32.00	8.00		0.019
ESC - 016B - 14				35.00	8.40		0.018
ESC - 016B - 15				38.10	9.20		0.017
ESC - 016B - 16				44.50	10.80		0.014

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 016BB - 1	0.40	5.00	4.20	6.40	1.90	0.415	0.096
ESC - 016BB - 2				8.00	2.30		0.070
ESC - 016BB - 3				9.50	2.60		0.059
ESC - 016BB - 4				11.20	2.80		0.053
ESC - 016BB - 5				12.70	3.20		0.044
ESC - 016BB - 6				14.30	3.50		0.039
ESC - 016BB - 7				16.00	3.80		0.035
ESC - 016BB - 8				17.50	4.10		0.032
ESC - 016BB - 9				19.00	4.40		0.029
ESC - 016BB - 10				22.30	5.20		0.024
ESC - 016BB - 11				25.40	5.80		0.021
ESC - 016BB - 12				28.60	6.40		0.019
ESC - 016BB - 13				32.00	7.20		0.016
ESC - 016BB - 14				35.00	7.80		0.015
ESC - 016BB - 15				38.10	8.40		0.014
ESC - 016BB - 16				40.00	9.00		0.013
ESC - 016BB - 17				44.50	9.60		0.012
ESC - 016BB - 18				50.80	10.80		0.010
ESC - 016BC - 1	0.40	5.33	4.53	6.40	1.80	0.361	0.088
ESC - 016BC - 2				8.00	2.00		0.073
ESC - 016BC - 3				9.50	2.40		0.055
ESC - 016BC - 4				11.20	2.60		0.048
ESC - 016BC - 5				12.70	2.90		0.041
ESC - 016BC - 6				14.30	3.20		0.036
ESC - 016BC - 7				16.00	3.60		0.031
ESC - 016BC - 8				17.50	4.00		0.027
ESC - 016BC - 9				19.00	4.40		0.024
ESC - 016BC - 10				22.30	4.80		0.022
ESC - 016BC - 11				23.80	5.20		0.020
ESC - 016BC - 12				25.40	5.40		0.019
ESC - 016BC - 13				28.60	6.00		0.016
ESC - 016BC - 14				32.00	6.80		0.014
ESC - 016BC - 15				35.00	7.20		0.013
ESC - 016BC - 16				38.10	7.60		0.012
ESC - 016BC - 17				44.50	8.80		0.011
ESC - 054 040 - 1	0.40	5.40	4.60	10.50	2.20	0.489	0.059
ESC - 054 040 - 2				16.00	3.00		0.037
ESC - 054 040 - 3				24.00	4.20		0.024
ESC - 054 040 - 4				35.00	5.80		0.016
ESC - 054 040 - 5				53.00	8.00		0.011



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

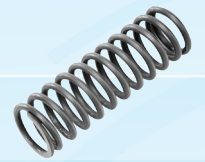
*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 016AD - 1	0.40	6.10	5.30	6.40	1.60	0.292	0.069
ESC - 016AD - 2				8.00	1.80		0.055
ESC - 016AD - 3				9.50	2.20		0.039
ESC - 016AD - 4				11.20	2.40		0.034
ESC - 016AD - 5				12.70	2.60		0.031
ESC - 016AD - 6				14.30	2.90		0.026
ESC - 016AD - 7				16.00	3.20		0.023
ESC - 016AD - 8				17.50	3.40		0.021
ESC - 016AD - 9				19.00	3.60		0.019
ESC - 016AD - 10				22.30	4.20		0.016
ESC - 016AD - 11				25.40	4.40		0.015
ESC - 016AD - 12				28.60	5.20		0.012
ESC - 016AD - 13				32.00	5.60		0.011
ESC - 016AD - 14				35.00	6.00		0.010
ESC - 016AD - 15				38.10	6.80		0.009
ESC - 016AD - 16				40.00	7.00		0.009
ESC - 016AD - 17				44.50	7.60		0.008
ESC - 018A - 1	0.45	3.05	2.15	6.40	3.37	1.372	0.430
ESC - 018A - 2				8.00	3.40		0.424
ESC - 018A - 3				9.50	4.50		0.294
ESC - 018A - 4				11.20	4.95		0.261
ESC - 018A - 5				12.70	5.40		0.235
ESC - 018A - 6				14.30	6.30		0.196
ESC - 018A - 7				16.00	6.95		0.175
ESC - 018A - 8				17.50	7.87		0.152
ESC - 018A - 9				19.00	8.55		0.138
ESC - 018A - 10				22.30	9.90		0.117
ESC - 018A - 11				25.40	11.25		0.102
ESC - 018A - 12				28.60	13.05		0.087
ESC - 018A - 13				32.00	14.40		0.078
ESC - 018A - 14				35.00	15.75		0.071
ESC - 018A - 15				38.10	17.10		0.065
ESC - 018B - 1	0.45	4.57	3.67	6.40	2.36	0.749	0.182
ESC - 018B - 2				8.00	2.81		0.139
ESC - 018B - 3				9.50	3.15		0.118
ESC - 018B - 4				11.20	3.60		0.098
ESC - 018B - 5				12.70	4.05		0.084
ESC - 018B - 6				14.30	4.27		0.079
ESC - 018B - 7				16.00	4.61		0.071
ESC - 018B - 8				17.50	4.95		0.065
ESC - 018B - 9				19.00	5.40		0.059
ESC - 018B - 10				22.30	6.30		0.049
ESC - 018B - 11				25.40	7.20		0.042
ESC - 018B - 12				28.60	7.87		0.038
ESC - 018B - 13				32.00	8.55		0.034
ESC - 018B - 14				35.00	9.45		0.031
ESC - 018B - 15				38.10	9.90		0.029
ESC - 018B - 16				44.50	11.25		0.025

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel



*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

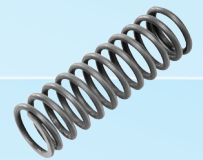
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 018BC - 1	0.45	5.33	4.43	6.40	1.80	0.785	0.178
ESC - 018BC - 2				8.00	2.13		0.130
ESC - 018BC - 3				9.50	2.36		0.110
ESC - 018BC - 4				11.20	2.58		0.095
ESC - 018BC - 5				12.70	2.92		0.079
ESC - 018BC - 6				14.30	3.15		0.071
ESC - 018BC - 7				16.00	3.37		0.065
ESC - 018BC - 8				17.50	3.71		0.057
ESC - 018BC - 9				19.00	3.93		0.053
ESC - 018BC - 10				20.70	4.27		0.047
ESC - 018BC - 11				22.30	4.50		0.044
ESC - 018BC - 12				25.40	5.06		0.038
ESC - 018BC - 13				32.00	6.07		0.031
ESC - 018BC - 14				38.10	7.20		0.025
ESC - 018C - 1	0.45	6.10	5.20	6.40	1.80	0.540	0.114
ESC - 018C - 2				8.00	2.02		0.092
ESC - 018C - 3				9.50	2.36		0.070
ESC - 018C - 4				11.20	2.47		0.066
ESC - 018C - 5				12.70	2.70		0.057
ESC - 018C - 6				14.30	3.15		0.045
ESC - 018C - 7				16.00	3.26		0.043
ESC - 018C - 8				17.50	3.60		0.038
ESC - 018C - 9				19.00	3.82		0.035
ESC - 018C - 10				20.70	4.05		0.032
ESC - 018C - 11				22.30	4.27		0.030
ESC - 018C - 12				23.80	4.50		0.028
ESC - 018C - 13				25.40	4.95		0.025
ESC - 018C - 14				28.60	5.85		0.020
ESC - 018C - 15				32.00	6.41		0.018
ESC - 018C - 16				35.00	6.75		0.017
ESC - 018C - 17				38.10	7.20		0.016
ESC - 018C - 18				44.50	8.10		0.014
ESC - 030 050 - 1	0.50	3.00	2.00	4.40	2.75	1.680	1.154
ESC - 030 050 - 2				6.10	3.75		0.734
ESC - 030 050 - 3				8.70	5.25		0.475
ESC - 030 050 - 4				12.00	7.25		0.323
ESC - 030 050 - 5				17.50	10.00		0.224



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 020A - 1	0.50	3.05	2.05	6.40	3.25	1.954	0.846
ESC - 020A - 2				8.00	4.00		0.643
ESC - 020A - 3				9.50	4.75		0.507
ESC - 020A - 4				11.20	5.25		0.448
ESC - 020A - 5				12.70	5.50		0.423
ESC - 020A - 6				14.30	6.50		0.346
ESC - 020A - 7				16.00	7.50		0.293
ESC - 020A - 8				17.50	8.50		0.253
ESC - 020A - 9				19.00	10.00		0.211
ESC - 020A - 10				20.70	10.75		0.195
ESC - 020A - 11				22.30	11.50		0.181
ESC - 020A - 12				23.80	12.25		0.169
ESC - 020A - 13				25.40	13.00		0.158
ESC - 020A - 14				28.60	13.50		0.152
ESC - 020A - 15				32.00	15.00		0.136
ESC - 020A - 16				35.00	16.50		0.122
ESC - 020A - 17				38.10	17.75		0.113
ESC - 035 050 - 1	0.50	3.50	2.50	6.00	2.75	1.993	0.668
ESC - 035 050 - 2				8.50	3.62		0.446
ESC - 035 050 - 3				13.50	5.62		0.253
ESC - 035 050 - 4				15.00	6.50		0.212
ESC - 035 050 - 5				20.70	8.50		0.155
ESC - 037 050 - 1	0.50	3.70	2.70	5.50	2.75	1.412	0.550
ESC - 037 050 - 2				7.90	3.75		0.350
ESC - 037 050 - 3				11.50	5.25		0.226
ESC - 037 050 - 4				16.00	7.25		0.154
ESC - 037 050 - 5				23.50	10.00		0.107
ESC - 020AB - 1	0.50	3.76	2.76	6.40	3.00	1.675	0.455
ESC - 020AB - 2				8.00	3.25		0.405
ESC - 020AB - 3				9.50	3.75		0.331
ESC - 020AB - 4				11.20	4.37		0.270
ESC - 020AB - 5				12.70	5.12		0.221
ESC - 020AB - 6				14.30	5.50		0.202
ESC - 020AB - 7				16.00	6.00		0.182
ESC - 020AB - 8				17.50	6.50		0.165
ESC - 020AB - 9				19.00	7.50		0.140
ESC - 020AB - 10				20.70	8.25		0.125
ESC - 020AB - 11				22.30	9.00		0.113
ESC - 020AB - 12				23.80	9.50		0.107
ESC - 020AB - 13				25.40	10.00		0.101
ESC - 020AB - 14				28.60	11.00		0.091
ESC - 020AB - 15				32.00	12.00		0.082
ESC - 020AB - 16				35.00	13.00		0.076
ESC - 020AB - 17				38.10	14.00		0.070

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



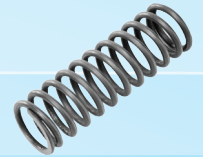
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 020AC - 1				6.40	2.75		0.386
ESC - 020AC - 2				8.00	3.25		0.300
ESC - 020AC - 3				9.50	3.75		0.246
ESC - 020AC - 4				11.20	4.50		0.193
ESC - 020AC - 5				12.70	5.00		0.169
ESC - 020AC - 6				14.30	5.50		0.150
ESC - 020AC - 7				16.00	6.00		0.135
ESC - 020AC - 8				17.50	6.50		0.123
ESC - 020AC - 9	0.50	4.10	3.10	19.00	7.00	1.301	0.112
ESC - 020AC - 10				20.70	7.50		0.104
ESC - 020AC - 11				22.30	8.00		0.096
ESC - 020AC - 12				25.40	9.25		0.082
ESC - 020AC - 13				28.60	10.50		0.071
ESC - 020AC - 14				32.00	11.75		0.063
ESC - 020AC - 15				35.00	13.00		0.056
ESC - 020AC - 16				38.10	14.25		0.051
ESC - 020AC - 17				44.50	15.00		0.048
ESC - 020AC - 18				50.80	16.50		0.043
ESC - 045 050 - 1				7.00	2.75		0.281
ESC - 045 050 - 2				10.00	3.75		0.179
ESC - 045 050 - 3	0.50	4.50	3.50	15.00	5.25	1.131	0.116
ESC - 045 050 - 4				21.50	7.25		0.078
ESC - 045 050 - 5				31.00	10.00		0.054
ESC - 020B - 1				6.40	2.50		0.312
ESC - 020B - 2				8.00	3.00		0.234
ESC - 020B - 3				9.50	3.25		0.208
ESC - 020B - 4				11.20	3.75		0.170
ESC - 020B - 5				12.70	4.25		0.144
ESC - 020B - 6				14.30	5.00		0.117
ESC - 020B - 7				16.00	5.50		0.104
ESC - 020B - 8				17.50	5.75		0.098
ESC - 020B - 9	0.50	4.57	3.57	19.00	6.50	1.136	0.085
ESC - 020B - 10				20.70	6.87		0.079
ESC - 020B - 11				22.30	7.25		0.074
ESC - 020B - 12				25.40	8.00		0.066
ESC - 020B - 13				28.60	9.00		0.058
ESC - 020B - 14				30.00	9.50		0.055
ESC - 020B - 15				32.00	10.00		0.052
ESC - 020B - 16				35.00	11.50		0.044
ESC - 020B - 17				40.00	12.50		0.040
ESC - 020B - 18				44.50	13.00		0.039
ESC - 020B - 19				50.80	15.00		0.033



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

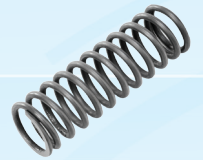


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 020BB - 1	0.50	5.00	4.00	6.40	2.50	0.945	0.231
ESC - 020BB - 2				8.00	2.75		0.198
ESC - 020BB - 3				9.50	3.00		0.173
ESC - 020BB - 4				11.20	3.50		0.138
ESC - 020BB - 5				12.70	3.75		0.126
ESC - 020BB - 6				14.30	4.25		0.106
ESC - 020BB - 7				16.00	5.00		0.086
ESC - 020BB - 8				17.50	5.25		0.081
ESC - 020BB - 9				19.00	5.75		0.073
ESC - 020BB - 10				22.30	6.50		0.063
ESC - 020BB - 11				25.40	7.50		0.053
ESC - 020BB - 12				28.60	8.50		0.046
ESC - 020BB - 13				30.00	9.00		0.043
ESC - 020BB - 14				32.00	9.50		0.040
ESC - 020BB - 15				35.00	10.25		0.037
ESC - 020BB - 16				38.10	11.25		0.033
ESC - 020BB - 17				40.00	11.75		0.032
ESC - 020BB - 18				44.50	13.50		0.027
ESC - 020BB - 19				50.80	15.00		0.024
ESC - 020BC - 1	0.50	5.33	4.33	6.40	2.50	0.809	0.186
ESC - 020BC - 2				8.00	2.75		0.160
ESC - 020BC - 3				9.50	3.25		0.124
ESC - 020BC - 4				11.20	3.62		0.107
ESC - 020BC - 5				12.70	4.00		0.093
ESC - 020BC - 6				14.30	4.50		0.080
ESC - 020BC - 7				16.00	4.75		0.074
ESC - 020BC - 8				17.50	5.25		0.065
ESC - 020BC - 9				19.00	5.50		0.062
ESC - 020BC - 10				22.30	6.25		0.053
ESC - 020BC - 11				23.80	6.75		0.048
ESC - 020BC - 12				25.40	7.00		0.046
ESC - 020BC - 13				28.60	7.75		0.041
ESC - 020BC - 14				32.00	8.50		0.037
ESC - 020BC - 15				35.00	9.00		0.035
ESC - 020BC - 16				38.10	10.00		0.031
ESC - 020BC - 17				44.50	11.50		0.026
ESC - 055 050 - 1	0.50	5.50	4.50	9.40	2.62	0.938	0.155
ESC - 055 050 - 2				14.00	3.62		0.096
ESC - 055 050 - 3				20.50	5.12		0.061
ESC - 055 050 - 4				30.00	7.12		0.041
ESC - 055 050 - 5				45.00	10.00		0.028

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



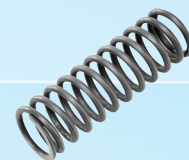
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 020AD - 1				6.40	2.12		0.189
ESC - 020AD - 2				8.00	2.50		0.141
ESC - 020AD - 3				9.50	2.75		0.121
ESC - 020AD - 4				11.20	3.12		0.100
ESC - 020AD - 5				12.70	3.50		0.084
ESC - 020AD - 6				14.30	3.75		0.077
ESC - 020AD - 7				16.00	4.25		0.065
ESC - 020AD - 8				17.50	4.62		0.058
ESC - 020AD - 9				19.00	4.75		0.056
ESC - 020AD - 10	0.50	5.80	4.80	20.70	5.12	0.751	0.051
ESC - 020AD - 11				22.30	5.50		0.047
ESC - 020AD - 12				23.80	5.75		0.044
ESC - 020AD - 13				25.40	6.25		0.040
ESC - 020AD - 14				28.60	7.00		0.035
ESC - 020AD - 15				32.00	7.75		0.031
ESC - 020AD - 16				35.00	8.50		0.028
ESC - 020AD - 17				38.10	9.00		0.026
ESC - 020AD - 18				44.50	10.00		0.023
ESC - 020AD - 19				50.80	11.00		0.021
ESC - 020C - 1				6.40	2.00		0.179
ESC - 020C - 2				8.00	2.50		0.119
ESC - 020C - 3				9.50	2.62		0.111
ESC - 020C - 4				11.20	3.00		0.089
ESC - 020C - 5				12.70	3.50		0.071
ESC - 020C - 6				14.30	3.75		0.065
ESC - 020C - 7				16.00	4.00		0.059
ESC - 020C - 8				17.50	4.50		0.051
ESC - 020C - 9				19.00	5.00		0.045
ESC - 020C - 10				20.70	5.25		0.042
ESC - 020C - 11	0.50	6.10	5.10	22.30	5.50	0.675	0.040
ESC - 020C - 12				23.80	5.75		0.037
ESC - 020C - 13				25.40	6.00		0.036
ESC - 020C - 14				28.60	6.50		0.032
ESC - 020C - 15				30.00	7.00		0.030
ESC - 020C - 16				32.00	7.50		0.027
ESC - 020C - 17				35.00	8.00		0.025
ESC - 020C - 18				38.10	8.50		0.024
ESC - 020C - 19				40.00	9.25		0.021
ESC - 020C - 20				44.50	10.25		0.019
ESC - 020C - 21				50.80	12.00		0.016



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 020AE - 1	0.50	6.50	5.50	8.00	2.25	0.600	0.117
ESC - 020AE - 2				9.50	2.75		0.083
ESC - 020AE - 3				11.20	2.87		0.078
ESC - 020AE - 4				12.70	3.25		0.065
ESC - 020AE - 5				14.30	3.50		0.058
ESC - 020AE - 6				16.00	4.00		0.048
ESC - 020AE - 7				17.50	4.25		0.045
ESC - 020AE - 8				19.00	4.50		0.041
ESC - 020AE - 9				22.30	5.25		0.034
ESC - 020AE - 10				25.40	6.00		0.029
ESC - 020AE - 11				28.60	6.50		0.026
ESC - 020AE - 12				30.00	6.75		0.025
ESC - 020AE - 13				32.00	7.00		0.024
ESC - 020AE - 14				35.00	7.75		0.021
ESC - 020AE - 15				38.10	8.50		0.019
ESC - 020AE - 16				40.00	9.00		0.018
ESC - 020AE - 17				44.50	10.00		0.016
ESC - 020CD - 1	0.50	6.80	5.80	8.00	2.50	0.536	0.084
ESC - 020CD - 2				9.50	2.75		0.072
ESC - 020CD - 3				11.20	3.12		0.059
ESC - 020CD - 4				12.70	3.37		0.053
ESC - 020CD - 5				14.30	3.62		0.048
ESC - 020CD - 6				16.00	4.00		0.042
ESC - 020CD - 7				17.50	4.25		0.038
ESC - 020CD - 8				19.00	4.50		0.036
ESC - 020CD - 9				22.30	5.00		0.031
ESC - 020CD - 10				25.40	5.50		0.028
ESC - 020CD - 11				28.60	6.00		0.025
ESC - 020CD - 12				32.00	6.50		0.023
ESC - 020CD - 13				35.00	7.12		0.020
ESC - 020CD - 14				38.10	8.00		0.018
ESC - 020CD - 15				44.50	9.25		0.015
ESC - 020CD - 16				50.80	10.00		0.014
ESC - 068 050 - 1	0.50	6.80	5.80	13.50	2.62	0.711	0.078
ESC - 068 050 - 2				20.00	3.62		0.048
ESC - 068 050 - 3				30.00	5.25		0.029
ESC - 068 050 - 4				44.00	7.25		0.020
ESC - 068 050 - 5				65.00	10.25		0.013
ESC - 720 050 - 1	0.50	7.20	6.20	9.50	2.12	0.646	0.093
ESC - 720 050 - 2				12.70	2.50		0.070
ESC - 720 050 - 3				16.00	3.00		0.052
ESC - 720 050 - 4				19.00	3.37		0.044
ESC - 720 050 - 5				20.70	3.62		0.040
ESC - 720 050 - 6				22.30	3.87		0.036
ESC - 720 050 - 7				25.40	4.25		0.032
ESC - 720 050 - 8				30.00	4.87		0.027
ESC - 720 050 - 9				35.00	5.62		0.022
ESC - 720 050 - 10				40.00	6.25		0.020
ESC - 720 050 - 11				45.00	7.00		0.017
ESC - 720 050 - 12				50.80	7.75		0.015

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



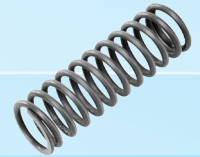
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 080 050 - 1	0.50	8.00	7.00	10.00	2.25	0.478	0.059
ESC - 080 050 - 2				15.00	2.87		0.040
ESC - 080 050 - 3				20.00	3.50		0.029
ESC - 080 050 - 4				25.00	4.00		0.025
ESC - 080 050 - 5				30.00	4.62		0.020
ESC - 080 050 - 6				40.00	6.00		0.015
ESC - 103 050 - 1	0.50	10.30	9.30	15.00	2.50	0.275	0.022
ESC - 103 050 - 2				20.00	3.00		0.016
ESC - 103 050 - 3				25.00	3.50		0.013
ESC - 103 050 - 4				30.00	4.00		0.011
ESC - 103 050 - 5				35.00	4.50		0.009
ESC - 103 050 - 6				40.00	5.00		0.008
ESC - 103 050 - 7				45.00	5.50		0.007
ESC - 103 050 - 8				50.00	6.00		0.006
ESC - 113 050 - 1	0.50	11.30	10.30	14.50	2.75	0.143	0.014
ESC - 113 050 - 2				22.50	3.75		0.009
ESC - 113 050 - 3				34.00	5.25		0.005
ESC - 113 050 - 4				50.00	7.25		0.004
ESC - 113 050 - 5				75.00	10.25		0.002
ESC - 120 050 - 1	0.50	12.00	11.00	15.00	2.25	0.218	0.016
ESC - 120 050 - 2				20.00	2.50		0.013
ESC - 120 050 - 3				25.00	2.87		0.011
ESC - 120 050 - 4				30.00	3.25		0.009
ESC - 120 050 - 5				35.00	3.75		0.007
ESC - 120 050 - 6				40.00	4.12		0.006
ESC - 120 050 - 7				45.00	4.50		0.005
ESC - 022A - 1	0.55	3.05	1.95	6.40	3.85	2.820	1.183
ESC - 022A - 2				8.00	4.40		0.986
ESC - 022A - 3				9.50	5.22		0.790
ESC - 022A - 4				11.20	6.32		0.623
ESC - 022A - 5				12.70	7.15		0.538
ESC - 022A - 6				14.30	7.70		0.493
ESC - 022A - 7				16.00	8.80		0.422
ESC - 022A - 8				17.50	9.62		0.382
ESC - 022A - 9				19.00	10.45		0.348
ESC - 022A - 10				20.70	11.55		0.311
ESC - 022A - 11				22.30	12.37		0.288
ESC - 022A - 12				23.80	13.47		0.263
ESC - 022A - 13				25.40	14.30		0.246
ESC - 022A - 14				28.60	16.22		0.215
ESC - 022A - 15				32.00	17.60		0.197
ESC - 022A - 16				35.00	19.25		0.179
ESC - 022A - 17				38.10	20.90		0.164



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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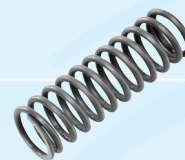


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 022AB - 1	0.55	3.76	2.66	6.40	3.57	2.133	0.622
ESC - 022AB - 2				8.00	4.12		0.509
ESC - 022AB - 3				9.50	4.67		0.430
ESC - 022AB - 4				11.20	5.50		0.349
ESC - 022AB - 5				12.70	6.05		0.310
ESC - 022AB - 6				14.30	6.60		0.279
ESC - 022AB - 7				16.00	7.28		0.248
ESC - 022AB - 8				17.50	7.97		0.223
ESC - 022AB - 9				19.00	8.52		0.207
ESC - 022AB - 10				20.70	9.07		0.192
ESC - 022AB - 11				22.30	10.17		0.169
ESC - 022AB - 12				23.80	10.72		0.159
ESC - 022AB - 13				25.40	11.27		0.151
ESC - 022AB - 14				28.60	12.65		0.133
ESC - 022AB - 15				32.00	13.75		0.121
ESC - 022AB - 16				35.00	15.40		0.107
ESC - 022AB - 17				38.10	16.50		0.099
ESC - 022B - 1	0.55	4.57	3.47	6.40	3.02	1.508	0.407
ESC - 022B - 2				8.00	3.57		0.317
ESC - 022B - 3				9.50	3.98		0.272
ESC - 022B - 4				11.20	4.40		0.237
ESC - 022B - 5				12.70	4.95		0.203
ESC - 022B - 6				14.30	5.63		0.172
ESC - 022B - 7				16.00	6.05		0.158
ESC - 022B - 8				17.50	6.60		0.142
ESC - 022B - 9				19.00	7.15		0.129
ESC - 022B - 10				20.70	7.70		0.118
ESC - 022B - 11				22.30	8.25		0.109
ESC - 022B - 12				23.80	8.80		0.101
ESC - 022B - 13				25.40	9.35		0.094
ESC - 022B - 14				28.60	10.45		0.083
ESC - 022B - 15				32.00	11.27		0.077
ESC - 022B - 16				35.00	12.10		0.071
ESC - 022B - 17				38.10	13.20		0.064
ESC - 022B - 18	44.50	15.40	0.054				
ESC - 022BC - 1	0.55	5.33	4.23	6.40	2.75	1.043	0.282
ESC - 022BC - 2				8.00	3.30		0.211
ESC - 022BC - 3				9.50	3.57		0.188
ESC - 022BC - 4				11.20	4.12		0.154
ESC - 022BC - 5				12.70	4.67		0.130
ESC - 022BC - 6				14.30	5.22		0.113
ESC - 022BC - 7				16.00	5.77		0.099
ESC - 022BC - 8				17.50	6.32		0.089
ESC - 022BC - 9				19.00	6.73		0.082
ESC - 022BC - 10				20.70	7.15		0.077
ESC - 022BC - 11				22.30	7.70		0.070
ESC - 022BC - 12				25.40	8.80		0.060
ESC - 022BC - 13				28.60	9.90		0.052
ESC - 022BC - 14				32.00	11.00		0.047
ESC - 022BC - 15				35.00	11.82		0.043
ESC - 022BC - 16				38.10	12.65		0.040
ESC - 022BC - 17				44.50	14.85		0.033
ESC - 022BC - 18				50.80	16.77		0.029

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



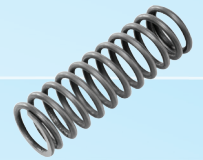
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 022C - 1	0.55	6.10	5.00	6.40	2.47	1.044	0.217
ESC - 022C - 2				8.00	2.75		0.180
ESC - 022C - 3				9.50	3.02		0.155
ESC - 022C - 4				11.20	3.43		0.127
ESC - 022C - 5				12.70	3.71		0.114
ESC - 022C - 6				14.30	3.98		0.103
ESC - 022C - 7				16.00	4.40		0.090
ESC - 022C - 8				17.50	4.67		0.083
ESC - 022C - 9				19.00	5.08		0.074
ESC - 022C - 10				22.30	5.77		0.063
ESC - 022C - 11				23.80	6.18		0.058
ESC - 022C - 12				25.40	6.60		0.054
ESC - 022C - 13				28.60	7.15		0.049
ESC - 022C - 14				32.00	7.97		0.043
ESC - 022C - 15				35.00	8.52		0.040
ESC - 022C - 16				38.10	9.35		0.036
ESC - 022C - 17				44.50	10.45		0.031
ESC - 022C - 18				50.80	11.55		0.028
ESC - 022D - 1	0.55	7.62	6.52	9.50	2.47	0.720	0.105
ESC - 022D - 2				11.20	2.75		0.087
ESC - 022D - 3				12.70	3.02		0.075
ESC - 022D - 4				14.30	3.30		0.065
ESC - 022D - 5				16.00	3.57		0.058
ESC - 022D - 6				17.50	3.85		0.052
ESC - 022D - 7				19.00	4.12		0.047
ESC - 022D - 8				20.70	4.40		0.043
ESC - 022D - 9				22.30	4.67		0.040
ESC - 022D - 10				25.40	5.08		0.036
ESC - 022D - 11				28.60	5.63		0.031
ESC - 022D - 12				32.00	6.05		0.029
ESC - 022D - 13				35.00	6.60		0.026
ESC - 022D - 14				38.10	7.15		0.023
ESC - 022D - 15				44.50	8.25		0.020
ESC - 022D - 16				50.80	9.35		0.017
ESC - 022D - 17				57.20	10.45		0.015
ESC - 022D - 18				63.50	11.55		0.013
ESC - 024A - 1	0.60	3.05	1.85	6.40	4.20	3.817	1.780
ESC - 024A - 2				8.00	5.10		1.370
ESC - 024A - 3				9.50	6.00		1.113
ESC - 024A - 4				11.20	6.90		0.937
ESC - 024A - 5				12.70	7.80		0.809
ESC - 024A - 6				14.30	8.70		0.712
ESC - 024A - 7				16.00	9.60		0.636
ESC - 024A - 8				17.50	10.80		0.556
ESC - 024A - 9				19.00	11.70		0.508
ESC - 024A - 10				20.70	12.60		0.468
ESC - 024A - 11				22.30	13.80		0.424
ESC - 024A - 12				23.80	14.40		0.404
ESC - 024A - 13				25.40	15.30		0.378
ESC - 024A - 14				28.60	17.10		0.336
ESC - 024A - 15				32.00	19.20		0.296
ESC - 024A - 16				35.00	21.00		0.269
ESC - 024A - 17				38.10	22.20		0.254



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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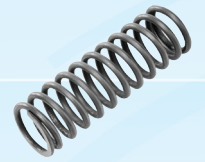


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 024AB - 1	0.60	3.76	2.56	6.40	3.60	2.903	1.037
ESC - 024AB - 2				8.00	4.20		0.830
ESC - 024AB - 3				9.50	4.80		0.691
ESC - 024AB - 4				11.20	5.70		0.553
ESC - 024AB - 5				12.70	6.60		0.461
ESC - 024AB - 6				14.30	7.20		0.415
ESC - 024AB - 7				16.00	7.80		0.377
ESC - 024AB - 8				17.50	8.70		0.332
ESC - 024AB - 9				19.00	9.30		0.307
ESC - 024AB - 10				20.70	10.20		0.276
ESC - 024AB - 11				22.30	10.80		0.259
ESC - 024AB - 12				23.80	11.40		0.244
ESC - 024AB - 13				25.40	12.30		0.224
ESC - 024AB - 14				28.60	13.50		0.202
ESC - 024AB - 15				32.00	15.00		0.180
ESC - 024AB - 16				35.00	16.20		0.166
ESC - 024AB - 17				38.10	17.70		0.150
ESC - 024AC - 1	0.60	4.10	2.90	6.40	3.30	2.639	0.872
ESC - 024AC - 2				8.00	3.75		0.718
ESC - 024AC - 3				9.50	4.20		0.610
ESC - 024AC - 4				11.20	5.10		0.469
ESC - 024AC - 5				12.70	5.70		0.407
ESC - 024AC - 6				14.30	6.15		0.370
ESC - 024AC - 7				16.00	7.20		0.305
ESC - 024AC - 8				17.50	8.10		0.265
ESC - 024AC - 9				19.00	8.40		0.254
ESC - 024AC - 10				22.30	9.60		0.218
ESC - 024AC - 11				25.40	11.40		0.179
ESC - 024AC - 12				28.60	12.60		0.160
ESC - 024AC - 13				32.00	13.80		0.145
ESC - 024AC - 14				35.00	15.00		0.132
ESC - 024AC - 15				38.10	16.50		0.119
ESC - 024B - 1	0.60	4.57	3.37	6.40	3.00	2.432	0.697
ESC - 024B - 2				8.00	3.60		0.523
ESC - 024B - 3				9.50	3.90		0.465
ESC - 024B - 4				11.20	4.50		0.380
ESC - 024B - 5				12.70	5.10		0.322
ESC - 024B - 6				14.30	5.70		0.279
ESC - 024B - 7				16.00	6.15		0.253
ESC - 024B - 8				17.50	6.60		0.232
ESC - 024B - 9				19.00	7.20		0.209
ESC - 024B - 10				20.70	8.10		0.182
ESC - 024B - 11				22.30	8.70		0.167
ESC - 024B - 12				25.40	9.60		0.149
ESC - 024B - 13				28.60	10.80		0.130
ESC - 024B - 14				32.00	12.00		0.116
ESC - 024B - 15				35.00	12.60		0.110
ESC - 024B - 16				38.10	13.80		0.099
ESC - 024B - 17				40.00	14.40		0.095
ESC - 024B - 18				44.50	16.80		0.080
ESC - 024B - 19				50.80	19.20		0.069

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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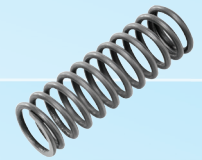
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 024BB - 1				6.40	2.70		0.614
ESC - 024BB - 2				8.00	3.30		0.439
ESC - 024BB - 3				9.50	3.75		0.361
ESC - 024BB - 4				11.20	4.20		0.307
ESC - 024BB - 5				12.70	4.80		0.256
ESC - 024BB - 6				14.30	5.40		0.219
ESC - 024BB - 7				16.00	6.00		0.192
ESC - 024BB - 8				17.50	6.45		0.175
ESC - 024BB - 9	0.60	5.00	3.80	19.00	6.90	2.022	0.161
ESC - 024BB - 10				22.30	8.10		0.133
ESC - 024BB - 11				25.40	9.00		0.118
ESC - 024BB - 12				28.60	10.20		0.102
ESC - 024BB - 13				32.00	11.40		0.090
ESC - 024BB - 14				35.00	12.00		0.085
ESC - 024BB - 15				38.10	13.20		0.076
ESC - 024BB - 16				41.30	14.40		0.069
ESC - 024BB - 17				44.50	15.60		0.064
ESC - 024BB - 18				50.80	17.40		0.056
ESC - 024AD - 1				8.00	3.00		0.371
ESC - 024AD - 2				9.50	3.30		0.318
ESC - 024AD - 3				11.20	3.60		0.278
ESC - 024AD - 4				12.70	4.20		0.222
ESC - 024AD - 5				14.30	4.80		0.185
ESC - 024AD - 6				16.00	5.40		0.159
ESC - 024AD - 7				17.50	5.70		0.148
ESC - 024AD - 8				19.00	6.30		0.130
ESC - 024AD - 9	0.60	5.50	4.30	22.30	7.20	1.746	0.111
ESC - 024AD - 10				25.40	8.40		0.092
ESC - 024AD - 11				28.60	9.00		0.085
ESC - 024AD - 12				32.00	9.90		0.076
ESC - 024AD - 13				35.00	10.80		0.069
ESC - 024AD - 14				38.10	12.00		0.061
ESC - 024AD - 15				40.00	12.30		0.060
ESC - 024AD - 16				44.50	13.20		0.055
ESC - 024AD - 17				50.80	15.00		0.048
ESC - 024C - 1				8.00	3.00		0.262
ESC - 024C - 2				9.50	3.30		0.224
ESC - 024C - 3				11.20	3.75		0.185
ESC - 024C - 4				12.70	4.20		0.157
ESC - 024C - 5				14.30	4.80		0.131
ESC - 024C - 6				16.00	5.10		0.121
ESC - 024C - 7				17.50	5.70		0.104
ESC - 024C - 8				19.00	6.15		0.095
ESC - 024C - 9				20.70	6.45		0.090
ESC - 024C - 10	0.60	6.10	4.90	22.30	6.90	1.249	0.082
ESC - 024C - 11				25.40	7.80		0.071
ESC - 024C - 12				28.60	8.40		0.065
ESC - 024C - 13				30.00	8.70		0.063
ESC - 024C - 14				32.00	9.30		0.058
ESC - 024C - 15				35.00	10.20		0.052
ESC - 024C - 16				38.10	10.80		0.049
ESC - 024C - 17				40.00	11.40		0.046
ESC - 024C - 18				44.50	12.60		0.041
ESC - 024C - 19				50.80	13.80		0.037



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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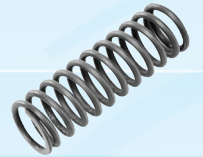


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 024CD - 1	0.60	6.80	5.60	8.00	2.70	1.100	0.219
ESC - 024CD - 2				9.50	3.15		0.169
ESC - 024CD - 3				11.20	3.60		0.137
ESC - 024CD - 4				12.70	3.90		0.122
ESC - 024CD - 5				14.30	4.20		0.109
ESC - 024CD - 6				16.00	4.50		0.099
ESC - 024CD - 7				17.50	4.95		0.087
ESC - 024CD - 8				19.00	5.40		0.078
ESC - 024CD - 9				22.30	6.00		0.068
ESC - 024CD - 10				25.40	6.90		0.057
ESC - 024CD - 11				28.60	7.50		0.052
ESC - 024CD - 12				32.00	8.10		0.047
ESC - 024CD - 13				35.00	9.00		0.042
ESC - 024CD - 14				38.10	9.60		0.039
ESC - 024CD - 15				44.50	10.80		0.034
ESC - 024CD - 16				50.80	12.00		0.030
ESC - 070 060 - 1	0.60	7.00	5.80	6.80	3.15	0.607	0.153
ESC - 070 060 - 2				10.50	4.35		0.095
ESC - 070 060 - 3				13.00	5.25		0.074
ESC - 070 060 - 4				16.20	6.15		0.060
ESC - 070 060 - 5				20.00	7.35		0.048
ESC - 070 060 - 6				24.00	8.40		0.041
ESC - 070 060 - 7				30.00	10.50		0.032
ESC - 070 060 - 8				35.50	12.00		0.027
ESC - 024CE - 1	0.60	7.62	6.42	8.00	2.55	0.860	0.168
ESC - 024CE - 2				9.50	2.85		0.137
ESC - 024CE - 3				11.20	3.15		0.116
ESC - 024CE - 4				12.70	3.45		0.100
ESC - 024CE - 5				14.30	3.90		0.084
ESC - 024CE - 6				16.00	4.20		0.075
ESC - 024CE - 7				17.40	4.50		0.068
ESC - 024CE - 8				19.00	4.80		0.063
ESC - 024CE - 9				22.00	5.70		0.050
ESC - 024CE - 10				25.40	6.30		0.044
ESC - 024CE - 11				28.60	6.90		0.039
ESC - 024CE - 12				32.00	7.50		0.036
ESC - 024CE - 13				35.00	8.10		0.032
ESC - 024CE - 14				38.10	8.70		0.030
ESC - 024CE - 15				40.00	9.30		0.028
ESC - 024CE - 16				45.00	10.20		0.025
ESC - 024CE - 17				50.80	11.40		0.022
ESC - 024CE - 18				57.20	12.90		0.019
ESC - 024CE - 19				63.50	14.40		0.017

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



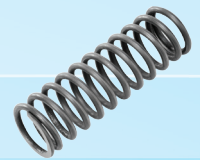
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 024DE - 1				8.00	2.55		0.143
ESC - 024DE - 2				9.50	2.70		0.129
ESC - 024DE - 3				11.20	3.00		0.107
ESC - 024DE - 4				12.70	3.30		0.092
ESC - 024DE - 5				14.30	3.60		0.080
ESC - 024DE - 6				16.00	3.90		0.071
ESC - 024DE - 7				17.50	4.20		0.064
ESC - 024DE - 8				19.00	4.50		0.058
ESC - 024DE - 9				20.70	4.80		0.053
ESC - 024DE - 10				22.30	5.10		0.049
ESC - 024DE - 11	0.60	8.00	6.80	25.40	5.70	0.819	0.043
ESC - 024DE - 12				28.60	6.30		0.038
ESC - 024DE - 13				30.00	6.60		0.035
ESC - 024DE - 14				32.00	7.20		0.032
ESC - 024DE - 15				35.00	7.80		0.029
ESC - 024DE - 16				38.10	8.40		0.026
ESC - 024DE - 17				40.00	8.70		0.025
ESC - 024DE - 18				44.50	9.60		0.023
ESC - 024DE - 19				50.80	10.80		0.020
ESC - 024DE - 20				57.20	12.00		0.018
ESC - 024DE - 21				63.50	13.20		0.016
ESC - 024DF - 1				12.70	3.75		0.060
ESC - 024DF - 2				16.00	4.35		0.048
ESC - 024DF - 3				19.00	4.80		0.042
ESC - 024DF - 4				22.30	5.40		0.036
ESC - 024DF - 5				25.40	6.00		0.032
ESC - 024DF - 6				32.00	7.05		0.026
ESC - 024DF - 7	0.60	8.60	7.40	35.00	7.65	0.620	0.023
ESC - 024DF - 8				38.10	8.25		0.021
ESC - 024DF - 9				44.50	9.30		0.019
ESC - 024DF - 10				50.80	10.35		0.016
ESC - 024DF - 11				57.20	11.55		0.014
ESC - 024DF - 12				63.50	12.75		0.013
ESC - 024DF - 13				83.00	15.60		0.010
ESC - 038 063 - 1				5.50	2.83		1.950
ESC - 038 063 - 2				7.80	3.78		1.214
ESC - 038 063 - 3	0.63	3.83	2.57	11.00	5.19	4.056	0.779
ESC - 038 063 - 4				15.50	7.24		0.511
ESC - 038 063 - 5				22.50	10.39		0.335
ESC - 046 063 - 1				6.70	2.83		0.998
ESC - 046 063 - 2				9.60	3.78		0.621
ESC - 046 063 - 3	0.63	4.63	3.37	14.00	5.19	2.986	0.339
ESC - 046 063 - 4				20.00	7.24		0.262
ESC - 046 063 - 5				29.00	10.39		0.171
ESC - 056 063 - 1				8.50	3.46		0.364
ESC - 056 063 - 2				12.50	4.72		0.231
ESC - 056 063 - 3	0.63	5.63	4.37	18.50	6.61	1.813	0.150
ESC - 056 063 - 4				26.00	8.82		0.106
ESC - 056 063 - 5				38.50	12.60		0.070



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

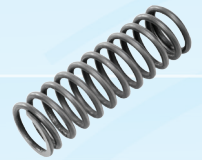


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 069 063 - 1	0.63	6.93	5.67	11.50	3.46	1.416	0.182
ESC - 069 063 - 2				17.00	4.72		0.116
ESC - 069 063 - 3				25.50	6.61		0.075
ESC - 069 063 - 4				36.50	8.82		0.053
ESC - 069 063 - 5				54.00	12.60		0.035
ESC - 086 063 - 1	0.63	8.63	7.37	16.00	3.78	0.912	0.077
ESC - 086 063 - 2				24.50	5.35		0.047
ESC - 086 063 - 3				37.00	7.56		0.031
ESC - 086 063 - 4				55.00	10.86		0.020
ESC - 086 063 - 5				80.50	15.75		0.013
ESC - 026B - 1	0.65	4.57	3.27	6.40	3.41	2.715	0.924
ESC - 026B - 2				8.00	3.90		0.748
ESC - 026B - 3				9.50	4.55		0.598
ESC - 026B - 4				11.20	5.36		0.479
ESC - 026B - 5				12.70	6.01		0.413
ESC - 026B - 6				14.30	6.82		0.352
ESC - 026B - 7				16.00	7.31		0.324
ESC - 026B - 8				17.50	8.12		0.285
ESC - 026B - 9				19.00	8.45		0.272
ESC - 026B - 10				20.70	9.10		0.249
ESC - 026B - 11				22.30	10.07		0.222
ESC - 026B - 12				23.80	10.56		0.210
ESC - 026B - 13				25.40	11.37		0.193
ESC - 026B - 14				28.60	12.67		0.171
ESC - 026B - 15				32.00	14.30		0.149
ESC - 026B - 16				35.00	15.11		0.141
ESC - 026B - 17				38.10	16.90		0.124
ESC - 026B - 18				44.50	19.50		0.106
ESC - 026B - 19				50.80	22.10		0.093
ESC - 026BC - 1	0.65	5.33	4.03	6.40	2.92	2.275	0.706
ESC - 026BC - 2				8.00	3.41		0.543
ESC - 026BC - 3				9.50	3.90		0.439
ESC - 026BC - 4				11.20	4.55		0.351
ESC - 026BC - 5				12.70	4.87		0.320
ESC - 026BC - 6				14.30	5.52		0.271
ESC - 026BC - 7				16.00	6.01		0.243
ESC - 026BC - 8				17.50	6.66		0.213
ESC - 026BC - 9				19.00	7.15		0.195
ESC - 026BC - 10				20.70	7.80		0.176
ESC - 026BC - 11				22.30	8.45		0.160
ESC - 026BC - 12				25.40	9.10		0.146
ESC - 026BC - 13				28.60	10.40		0.125
ESC - 026BC - 14				32.00	11.05		0.117
ESC - 026BC - 15				35.00	12.35		0.103
ESC - 026BC - 16				38.10	13.00		0.097
ESC - 026BC - 17				44.50	15.60		0.080
ESC - 026BC - 18				50.80	18.20		0.067

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



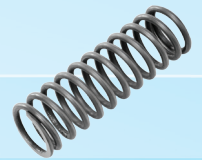
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 026BD - 1	0.65	5.80	4.50	8.00	3.57	1.793	0.378
ESC - 026BD - 2				9.50	4.22		0.294
ESC - 026BD - 3				11.20	4.71		0.252
ESC - 026BD - 4				12.70	5.20		0.220
ESC - 026BD - 5				14.30	5.52		0.203
ESC - 026BD - 6				16.00	6.17		0.176
ESC - 026BD - 7				17.50	6.82		0.155
ESC - 026BD - 8				19.00	7.15		0.146
ESC - 026BD - 9				20.70	7.80		0.132
ESC - 026BD - 10				22.30	8.45		0.120
ESC - 026BD - 11				25.40	9.10		0.110
ESC - 026BD - 12				28.60	10.07		0.097
ESC - 026BD - 13				32.00	11.05		0.088
ESC - 026BD - 14				35.00	11.70		0.082
ESC - 026BD - 15				38.10	12.35		0.077
ESC - 026BD - 16				44.50	14.62		0.064
ESC - 026BD - 17				50.80	16.57		0.056
ESC - 026C - 1	0.65	6.10	4.80	8.00	3.08	1.953	0.408
ESC - 026C - 2				9.50	3.57		0.319
ESC - 026C - 3				11.20	3.90		0.278
ESC - 026C - 4				12.70	4.38		0.235
ESC - 026C - 5				14.30	4.71		0.212
ESC - 026C - 6				16.00	5.20		0.185
ESC - 026C - 7				17.50	5.52		0.171
ESC - 026C - 8				19.00	6.17		0.148
ESC - 026C - 9				20.70	6.50		0.139
ESC - 026C - 10				22.30	7.15		0.123
ESC - 026C - 11				25.40	7.80		0.111
ESC - 026C - 12				28.60	8.77		0.097
ESC - 026C - 13				32.00	9.42		0.089
ESC - 026C - 14				35.00	10.56		0.078
ESC - 026C - 15				38.10	11.05		0.074
ESC - 026C - 16				40.00	11.70		0.069
ESC - 026C - 17				44.50	13.00		0.061
ESC - 026C - 18				50.80	14.30		0.055
ESC - 026D - 1	0.65	7.62	6.32	11.20	3.25	1.265	0.177
ESC - 026D - 2				12.70	3.57		0.152
ESC - 026D - 3				14.30	3.90		0.133
ESC - 026D - 4				16.00	4.22		0.118
ESC - 026D - 5				17.50	4.55		0.106
ESC - 026D - 6				19.00	4.87		0.097
ESC - 026D - 7				20.70	5.20		0.088
ESC - 026D - 8				22.30	5.52		0.082
ESC - 026D - 9				23.80	6.01		0.073
ESC - 026D - 10				25.40	6.50		0.066
ESC - 026D - 11				28.60	7.15		0.059
ESC - 026D - 12				32.00	7.80		0.053
ESC - 026D - 13				35.00	8.45		0.048
ESC - 026D - 14				38.10	9.10		0.044
ESC - 026D - 15				40.00	9.75		0.041
ESC - 026D - 16				44.50	10.40		0.038
ESC - 026D - 17				50.80	11.70		0.033
ESC - 026D - 18				57.20	13.00		0.029
ESC - 026D - 19				63.50	14.30		0.026



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 026E - 1	0.65	9.14	7.84	12.70	3.25	1.100	0.098
ESC - 026E - 2				14.30	3.41		0.091
ESC - 026E - 3				16.00	3.73		0.079
ESC - 026E - 4				17.50	3.90		0.073
ESC - 026E - 5				19.00	4.22		0.065
ESC - 026E - 6				20.70	4.55		0.059
ESC - 026E - 7				22.30	4.71		0.056
ESC - 026E - 8				23.80	5.03		0.051
ESC - 026E - 9				25.40	5.20		0.049
ESC - 026E - 10				28.60	5.52		0.045
ESC - 026E - 11				32.00	6.01		0.040
ESC - 026E - 12				35.00	6.33		0.038
ESC - 026E - 13				38.10	6.66		0.035
ESC - 026E - 14				44.50	7.31		0.031
ESC - 026E - 15				50.80	8.12		0.028
ESC - 026E - 16				57.20	9.10		0.024
ESC - 116 065 - 1	0.65	11.60	10.30	25.40	3.57	0.851	0.039
ESC - 116 065 - 2				40.00	4.87		0.025
ESC - 116 065 - 3				50.80	6.82		0.016
ESC - 116 065 - 4				63.50	8.12		0.013
ESC - 116 065 - 5				100.00	11.70		0.011
ESC - 028B - 1	0.70	4.57	3.17	8.00	4.20	4.557	1.046
ESC - 028B - 2				9.50	4.90		0.837
ESC - 028B - 3				11.20	5.60		0.697
ESC - 028B - 4				12.70	5.95		0.644
ESC - 028B - 5				14.30	6.30		0.598
ESC - 028B - 6				16.00	7.00		0.523
ESC - 028B - 7				17.50	7.70		0.465
ESC - 028B - 8				19.00	8.40		0.418
ESC - 028B - 9				20.70	9.10		0.380
ESC - 028B - 10				22.30	9.80		0.348
ESC - 028B - 11				25.40	10.50		0.322
ESC - 028B - 12				28.60	11.90		0.279
ESC - 028B - 13				32.00	13.30		0.246
ESC - 028B - 14				35.00	14.70		0.220
ESC - 028B - 15				38.10	16.10		0.199
ESC - 028B - 16				40.00	17.50		0.182
ESC - 028B - 17				44.50	18.55		0.170
ESC - 028B - 18				50.80	21.35		0.146

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



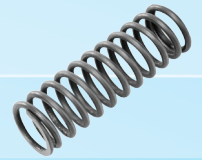
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 028BB - 1				6.40	3.15		1.220
ESC - 028BB - 2				8.00	3.67		0.941
ESC - 028BB - 3				9.50	4.55		0.678
ESC - 028BB - 4				11.20	5.25		0.554
ESC - 028BB - 5				12.70	5.95		0.469
ESC - 028BB - 6				14.30	6.65		0.406
ESC - 028BB - 7				16.00	7.00		0.381
ESC - 028BB - 8				17.50	7.70		0.339
ESC - 028BB - 9				19.00	8.40		0.305
ESC - 028BB - 10				20.70	9.10		0.277
ESC - 028BB - 11	0.70	5.00	3.60	22.30	9.80	3.165	0.254
ESC - 028BB - 12				23.80	10.50		0.234
ESC - 028BB - 13				25.40	11.20		0.218
ESC - 028BB - 14				28.60	11.90		0.203
ESC - 028BB - 15				30.00	12.60		0.190
ESC - 028BB - 16				32.00	14.00		0.169
ESC - 028BB - 17				35.00	15.40		0.152
ESC - 028BB - 18				38.10	16.10		0.145
ESC - 028BB - 19				40.00	17.50		0.132
ESC - 028BB - 20				44.50	18.90		0.122
ESC - 028BB - 21				50.80	21.00		0.109
ESC - 028BC - 1				6.40	3.15		0.877
ESC - 028BC - 2				8.00	3.50		0.731
ESC - 028BC - 3				9.50	4.20		0.548
ESC - 028BC - 4				11.20	4.55		0.487
ESC - 028BC - 5				12.70	5.25		0.398
ESC - 028BC - 6				14.30	5.95		0.337
ESC - 028BC - 7				16.00	6.30		0.313
ESC - 028BC - 8				17.50	7.00		0.274
ESC - 028BC - 9				19.00	7.70		0.243
ESC - 028BC - 10	0.70	5.50	4.10	22.30	8.40	2.761	0.219
ESC - 028BC - 11				25.40	9.97		0.179
ESC - 028BC - 12				28.60	10.50		0.168
ESC - 028BC - 13				30.00	11.20		0.156
ESC - 028BC - 14				32.00	11.90		0.146
ESC - 028BC - 15				35.00	13.30		0.129
ESC - 028BC - 16				38.10	14.70		0.115
ESC - 028BC - 17				40.00	15.40		0.109
ESC - 028BC - 18				44.50	16.80		0.099
ESC - 028BC - 19				50.80	18.90		0.087



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 028BD - 1	0.70	6.10	4.70	8.00	3.15	2.416	0.616
ESC - 028BD - 2				9.50	3.50		0.513
ESC - 028BD - 3				11.20	4.20		0.385
ESC - 028BD - 4				12.70	4.55		0.342
ESC - 028BD - 5				14.30	4.90		0.308
ESC - 028BD - 6				16.00	5.60		0.256
ESC - 028BD - 7				17.50	6.30		0.220
ESC - 028BD - 8				19.00	7.00		0.192
ESC - 028BD - 9				20.70	7.35		0.181
ESC - 028BD - 10				22.30	8.05		0.162
ESC - 028BD - 11				23.80	8.58		0.150
ESC - 028BD - 12				25.40	9.10		0.140
ESC - 028BD - 13				28.60	9.80		0.128
ESC - 028BD - 14				32.00	10.85		0.114
ESC - 028BD - 15				35.00	11.55		0.106
ESC - 028BD - 16				38.10	12.60		0.096
ESC - 028BD - 17				40.00	13.30		0.090
ESC - 028BD - 18				44.50	15.40		0.077
ESC - 028BD - 19				50.80	17.50		0.067
ESC - 660 070 - 1	0.70	6.60	5.20	9.50	3.67	2.096	0.364
ESC - 660 070 - 2				12.70	4.55		0.262
ESC - 660 070 - 3				16.00	5.42		0.205
ESC - 660 070 - 4				19.00	6.47		0.163
ESC - 660 070 - 5				22.00	7.35		0.139
ESC - 660 070 - 6				25.40	8.22		0.121
ESC - 660 070 - 7				30.00	9.45		0.102
ESC - 660 070 - 8				35.00	10.85		0.087
ESC - 660 070 - 9				40.00	12.25		0.076
ESC - 660 070 - 10				45.00	13.65		0.067
ESC - 660 070 - 11				50.80	15.22		0.059
ESC - 028CD - 1	0.70	6.80	5.40	8.00	3.15	2.141	0.427
ESC - 028CD - 2				9.50	3.50		0.356
ESC - 028CD - 3				11.20	3.85		0.305
ESC - 028CD - 4				12.70	4.20		0.267
ESC - 028CD - 5				14.30	4.55		0.237
ESC - 028CD - 6				16.00	5.25		0.194
ESC - 028CD - 7				17.50	5.60		0.178
ESC - 028CD - 8				19.00	5.95		0.164
ESC - 028CD - 9				22.30	6.30		0.152
ESC - 028CD - 10				25.40	7.35		0.125
ESC - 028CD - 11				28.60	8.40		0.106
ESC - 028CD - 12				32.00	9.10		0.097
ESC - 028CD - 13				35.00	10.15		0.085
ESC - 028CD - 14				38.10	10.85		0.079
ESC - 028CD - 15				40.00	11.55		0.073
ESC - 028CD - 16				44.50	12.60		0.066
ESC - 028CD - 17				50.80	14.00		0.059

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



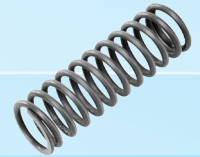
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 028BE - 1	0.70	7.62	6.22	9.50	3.15	1.674	0.292
ESC - 028BE - 2				11.20	3.50		0.244
ESC - 028BE - 3				12.70	3.85		0.209
ESC - 028BE - 4				14.30	4.55		0.162
ESC - 028BE - 5				16.00	4.90		0.146
ESC - 028BE - 6				17.50	5.25		0.133
ESC - 028BE - 7				19.00	5.77		0.117
ESC - 028BE - 8				22.30	6.30		0.104
ESC - 028BE - 9				25.40	7.00		0.091
ESC - 028BE - 10				28.60	7.70		0.081
ESC - 028BE - 11				32.00	8.40		0.073
ESC - 028BE - 12				35.00	9.10		0.066
ESC - 028BE - 13				38.10	9.80		0.061
ESC - 028BE - 14				41.30	11.55		0.050
ESC - 028BE - 15				44.50	12.60		0.045
ESC - 028BE - 16				50.80	14.00		0.040
ESC - 028BE - 17				57.20	15.40		0.036
ESC - 028BE - 18				63.50	17.15		0.032
ESC - 028DE - 1	0.70	8.00	6.60	11.20	3.50	1.424	0.207
ESC - 028DE - 2				12.70	3.85		0.178
ESC - 028DE - 3				14.30	4.20		0.155
ESC - 028DE - 4				16.00	4.55		0.138
ESC - 028DE - 5				17.50	5.07		0.119
ESC - 028DE - 6				19.00	5.60		0.103
ESC - 028DE - 7				22.30	6.30		0.089
ESC - 028DE - 8				25.40	7.00		0.078
ESC - 028DE - 9				28.60	7.70		0.069
ESC - 028DE - 10				32.00	8.40		0.062
ESC - 028DE - 11				35.00	9.10		0.056
ESC - 028DE - 12				38.10	9.80		0.052
ESC - 028DE - 13				40.00	10.50		0.048
ESC - 028DE - 14				44.50	11.55		0.043
ESC - 028DE - 15				50.80	12.60		0.039
ESC - 028DE - 16				57.20	14.35		0.033
ESC - 028DE - 17				63.50	16.10		0.029
ESC - 028DF - 1	0.70	8.60	7.20	12.70	3.25	1.223	0.186
ESC - 028DF - 2				14.30	4.02		0.131
ESC - 028DF - 3				16.00	4.55		0.109
ESC - 028DF - 4				17.50	4.90		0.098
ESC - 028DF - 5				19.00	5.25		0.089
ESC - 028DF - 6				22.30	5.95		0.075
ESC - 028DF - 7				25.40	6.65		0.065
ESC - 028DF - 8				28.60	7.35		0.057
ESC - 028DF - 9				32.00	8.05		0.051
ESC - 028DF - 10				35.00	8.57		0.048
ESC - 028DF - 11				38.10	9.10		0.044
ESC - 028DF - 12				40.00	9.80		0.041
ESC - 028DF - 13				44.50	11.20		0.035
ESC - 028DF - 14				50.80	12.25		0.031
ESC - 028DF - 15				57.20	13.30		0.029
ESC - 028DF - 16				63.50	14.70		0.025



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

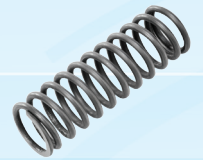


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 028BF - 1	0.70	9.14	7.74	11.20	3.50	1.010	0.134
ESC - 028BF - 2				12.70	3.85		0.115
ESC - 028BF - 3				14.30	4.20		0.100
ESC - 028BF - 4				16.00	4.55		0.089
ESC - 028BF - 5				17.50	4.90		0.080
ESC - 028BF - 6				19.00	5.25		0.073
ESC - 028BF - 7				22.30	5.60		0.067
ESC - 028BF - 8				25.40	6.30		0.057
ESC - 028BF - 9				28.60	7.17		0.049
ESC - 028BF - 10				32.00	7.70		0.044
ESC - 028BF - 11				35.00	8.40		0.040
ESC - 028BF - 12				40.00	9.45		0.035
ESC - 028BF - 13				44.50	10.85		0.029
ESC - 028BF - 14				50.80	11.55		0.027
ESC - 028BF - 15				57.20	12.60		0.025
ESC - 028BF - 16				63.50	14.00		0.022
ESC - 028EF - 1	0.70	9.90	8.50	12.70	3.50	0.928	0.103
ESC - 028EF - 2				16.00	4.37		0.073
ESC - 028EF - 3				19.00	4.90		0.062
ESC - 028EF - 4				22.30	5.60		0.051
ESC - 028EF - 5				28.60	6.65		0.041
ESC - 028EF - 6				32.00	7.35		0.036
ESC - 028EF - 7				35.00	7.70		0.034
ESC - 028EF - 8				40.00	8.40		0.031
ESC - 028EF - 9				44.50	9.45		0.027
ESC - 028EF - 10				50.80	10.50		0.024
ESC - 028EF - 11				63.50	12.60		0.019
ESC - 118 070 - 1	0.70	11.80	10.40	25.00	3.80	0.853	0.051
ESC - 118 070 - 2				35.00	5.25		0.032
ESC - 118 070 - 3				50.00	7.35		0.020
ESC - 118 070 - 4				70.00	9.80		0.014
ESC - 118 070 - 5				100.00	14.00		0.009
ESC - 029B - 1	0.74	4.57	3.09	6.40	4.44	3.879	1.348
ESC - 029B - 2				8.00	5.18		1.078
ESC - 029B - 3				9.50	5.92		0.898
ESC - 029B - 4				11.20	6.66		0.770
ESC - 029B - 5				12.70	7.40		0.674
ESC - 029B - 6				14.30	8.14		0.599
ESC - 029B - 7				16.00	8.88		0.539
ESC - 029B - 8				17.50	9.62		0.490
ESC - 029B - 9				19.00	10.36		0.449
ESC - 029B - 10				20.70	11.10		0.414
ESC - 029B - 11				22.30	11.84		0.385
ESC - 029B - 12				23.80	12.58		0.359
ESC - 029B - 13				25.40	13.69		0.326
ESC - 029B - 14				28.60	14.80		0.299
ESC - 029B - 15				32.00	16.65		0.263
ESC - 029B - 16				35.00	18.50		0.234
ESC - 029B - 17				38.10	19.98		0.215
ESC - 029B - 18				44.50	22.94		0.186
ESC - 029B - 19				50.80	25.90		0.163

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



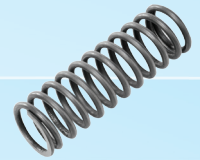
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 029BC - 1				6.40	3.33		1.253
ESC - 029BC - 2				8.00	4.07		0.895
ESC - 029BC - 3				9.50	4.62		0.739
ESC - 029BC - 4				11.20	5.18		0.626
ESC - 029BC - 5				12.70	5.73		0.545
ESC - 029BC - 6				14.30	6.66		0.447
ESC - 029BC - 7				16.00	7.21		0.404
ESC - 029BC - 8				17.50	7.77		0.368
ESC - 029BC - 9	0.74	5.33	3.85	19.00	8.51	3.667	0.329
ESC - 029BC - 10				22.30	9.62		0.284
ESC - 029BC - 11				25.40	10.73		0.250
ESC - 029BC - 12				28.60	11.84		0.223
ESC - 029BC - 13				32.00	13.32		0.195
ESC - 029BC - 14				35.00	14.80		0.174
ESC - 029BC - 15				38.10	16.28		0.156
ESC - 029BC - 16				41.30	17.39		0.145
ESC - 029BC - 17				44.50	18.87		0.133
ESC - 029BC - 18				50.80	20.72		0.120
ESC - 029C - 1				9.50	4.44		0.491
ESC - 029C - 2				11.20	5.18		0.393
ESC - 029C - 3				12.70	5.55		0.357
ESC - 029C - 4				14.30	6.10		0.315
ESC - 029C - 5				16.00	6.66		0.281
ESC - 029C - 6				17.50	7.03		0.262
ESC - 029C - 7				19.00	7.58		0.238
ESC - 029C - 8	0.74	6.10	4.62	20.70	8.14	2.805	0.218
ESC - 029C - 9				22.30	8.51		0.207
ESC - 029C - 10				25.40	9.62		0.178
ESC - 029C - 11				28.60	10.73		0.157
ESC - 029C - 12				32.00	11.47		0.145
ESC - 029C - 13				35.00	12.58		0.131
ESC - 029C - 14				38.10	13.69		0.119
ESC - 029C - 15				44.50	15.54		0.103
ESC - 029C - 16				50.80	17.39		0.091
ESC - 029D - 1				9.50	3.70		0.310
ESC - 029D - 2				11.20	4.07		0.265
ESC - 029D - 3				12.70	4.44		0.232
ESC - 029D - 4				14.30	4.81		0.206
ESC - 029D - 5				16.00	5.18		0.186
ESC - 029D - 6				17.50	5.55		0.169
ESC - 029D - 7				19.00	5.92		0.155
ESC - 029D - 8				20.70	6.29		0.143
ESC - 029D - 9	0.74	7.62	6.14	22.30	6.66	2.150	0.132
ESC - 029D - 10				23.80	7.03		0.124
ESC - 029D - 11				25.40	7.40		0.116
ESC - 029D - 12				28.60	8.14		0.103
ESC - 029D - 13				32.00	8.88		0.093
ESC - 029D - 14				35.00	9.62		0.084
ESC - 029D - 15				38.10	10.36		0.077
ESC - 029D - 16				44.50	11.47		0.068
ESC - 029D - 17				50.80	12.58		0.062
ESC - 029D - 18				57.20	14.06		0.054
ESC - 029D - 19				63.50	15.54		0.049



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

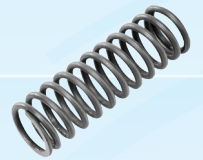


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 029E - 1	0.74	9.14	7.66	9.50	2.96	1.636	0.255
ESC - 029E - 2				11.20	3.33		0.204
ESC - 029E - 3				12.70	3.70		0.170
ESC - 029E - 4				14.30	3.88		0.157
ESC - 029E - 5				16.00	4.07		0.146
ESC - 029E - 6				17.50	4.44		0.127
ESC - 029E - 7				19.00	4.62		0.120
ESC - 029E - 8				20.70	4.81		0.113
ESC - 029E - 9				22.30	5.18		0.102
ESC - 029E - 10				23.80	5.36		0.097
ESC - 029E - 11				25.40	5.92		0.085
ESC - 029E - 12				28.60	6.66		0.073
ESC - 029E - 13				32.00	7.21		0.066
ESC - 029E - 14				35.00	7.58		0.062
ESC - 029E - 15				38.10	8.51		0.053
ESC - 029E - 16				44.50	9.62		0.046
ESC - 029E - 17				50.80	10.36		0.042
ESC - 031B - 1	0.80	4.57	2.97	8.00	4.80	6.079	1.931
ESC - 031B - 2				9.50	5.60		1.544
ESC - 031B - 3				11.20	6.40		1.287
ESC - 031B - 4				12.70	7.20		1.103
ESC - 031B - 5				14.30	8.00		0.965
ESC - 031B - 6				16.00	8.80		0.858
ESC - 031B - 7				17.50	9.60		0.772
ESC - 031B - 8				19.00	10.40		0.702
ESC - 031B - 9				20.70	11.20		0.643
ESC - 031B - 10				22.30	12.00		0.594
ESC - 031B - 11				23.80	12.80		0.551
ESC - 031B - 12				25.40	13.60		0.514
ESC - 031B - 13				32.00	16.80		0.406
ESC - 031B - 14				35.00	18.40		0.367
ESC - 031B - 15				38.10	20.00		0.335
ESC - 031B - 16				41.30	21.60		0.309
ESC - 031B - 17				44.50	23.20		0.286
ESC - 031B - 18				50.80	26.00		0.253
ESC - 048 080 - 1	0.80	4.80	3.20	6.90	3.60	7.710	2.586
ESC - 048 080 - 2				9.70	4.80		1.616
ESC - 048 080 - 3				14.00	6.40		1.077
ESC - 048 080 - 4				19.50	8.80		0.718
ESC - 048 080 - 5				28.00	12.20		0.488

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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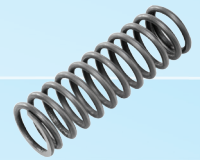
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 031BB - 1				6.40	3.60		2.234
ESC - 031BB - 2				8.00	4.00		1.862
ESC - 031BB - 3				9.50	4.80		1.396
ESC - 031BB - 4				11.20	5.60		1.117
ESC - 031BB - 5				12.70	6.40		0.931
ESC - 031BB - 6				14.30	7.20		0.798
ESC - 031BB - 7				16.00	8.00		0.698
ESC - 031BB - 8				17.50	8.40		0.657
ESC - 031BB - 9	0.80	5.00	3.40	19.00	8.80	5.584	0.620
ESC - 031BB - 10				22.30	10.40		0.507
ESC - 031BB - 11				25.40	12.00		0.429
ESC - 031BB - 12				28.60	12.80		0.399
ESC - 031BB - 13				30.00	13.60		0.372
ESC - 031BB - 14				32.00	15.20		0.328
ESC - 031BB - 15				35.00	16.80		0.294
ESC - 031BB - 16				38.10	17.60		0.279
ESC - 031BB - 17				41.30	20.00		0.242
ESC - 031BB - 18				44.50	21.60		0.223
ESC - 031BB - 19				50.80	24.00		0.199
ESC - 031BC - 1				8.00	4.00		1.328
ESC - 031BC - 2				9.50	4.80		0.996
ESC - 031BC - 3				11.20	5.40		0.839
ESC - 031BC - 4				12.70	6.00		0.724
ESC - 031BC - 5				14.30	6.40		0.664
ESC - 031BC - 6				16.00	7.20		0.569
ESC - 031BC - 7				17.50	8.00		0.498
ESC - 031BC - 8	0.80	5.50	3.90	19.00	8.40	4.661	0.469
ESC - 031BC - 9				22.30	10.00		0.379
ESC - 031BC - 10				25.40	11.20		0.332
ESC - 031BC - 11				28.60	12.80		0.284
ESC - 031BC - 12				32.00	13.60		0.265
ESC - 031BC - 13				35.00	15.20		0.234
ESC - 031BC - 14				38.10	16.00		0.221
ESC - 031BC - 15				40.00	16.80		0.209
ESC - 031BC - 16				44.50	18.40		0.189
ESC - 031BC - 17				50.80	21.60		0.159
ESC - 031BD - 1				6.40	3.60		1.324
ESC - 031BD - 2				8.00	4.20		1.018
ESC - 031BD - 3				9.50	4.80		0.827
ESC - 031BD - 4				11.20	5.60		0.662
ESC - 031BD - 5				12.70	6.00		0.602
ESC - 031BD - 6				14.30	6.80		0.509
ESC - 031BD - 7				16.00	7.40		0.456
ESC - 031BD - 8				17.50	8.20		0.401
ESC - 031BD - 9	0.80	5.80	4.20	19.00	8.80	3.743	0.367
ESC - 031BD - 10				22.30	10.00		0.315
ESC - 031BD - 11				25.40	11.20		0.275
ESC - 031BD - 12				28.60	12.40		0.245
ESC - 031BD - 13				32.00	14.00		0.213
ESC - 031BD - 14				36.00	16.00		0.183
ESC - 031BD - 15				38.10	16.80		0.174
ESC - 031BD - 16				41.30	18.00		0.161
ESC - 031BD - 17				44.50	19.40		0.148
ESC - 031BD - 18				50.80	22.40		0.127



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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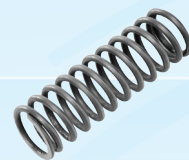


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 058 080 - 1	0.80	5.80	4.20	8.30	4.40	3.660	0.946
ESC - 058 080 - 2				12.00	6.00		0.602
ESC - 058 080 - 3				17.50	8.40		0.389
ESC - 058 080 - 4				24.50	11.60		0.264
ESC - 058 080 - 5				36.00	16.00		0.183
ESC - 031C - 1	0.80	6.10	4.50	8.00	4.00	4.022	0.926
ESC - 031C - 2				9.50	4.40		0.794
ESC - 031C - 3				11.20	4.80		0.695
ESC - 031C - 4				12.70	5.60		0.556
ESC - 031C - 5				14.30	6.00		0.505
ESC - 031C - 6				16.00	6.80		0.427
ESC - 031C - 7				17.50	7.20		0.397
ESC - 031C - 8				19.00	8.00		0.347
ESC - 031C - 9				20.70	8.40		0.327
ESC - 031C - 10				22.30	8.80		0.308
ESC - 031C - 11				23.80	9.60		0.278
ESC - 031C - 12				25.40	10.40		0.252
ESC - 031C - 13				28.60	11.60		0.222
ESC - 031C - 14				30.00	12.20		0.209
ESC - 031C - 15				32.00	12.80		0.198
ESC - 031C - 16				35.00	13.60		0.185
ESC - 031C - 17				38.10	14.80		0.168
ESC - 031C - 18				40.00	15.20		0.163
ESC - 031C - 19				44.50	17.60		0.139
ESC - 031C - 20	50.80	20.00	0.120				
ESC - 031CD - 1	0.80	6.80	5.20	9.50	4.00	3.187	0.638
ESC - 031CD - 2				11.20	4.40		0.547
ESC - 031CD - 3				12.70	5.20		0.425
ESC - 031CD - 4				14.30	5.80		0.365
ESC - 031CD - 5				16.00	6.40		0.319
ESC - 031CD - 6				17.50	6.60		0.306
ESC - 031CD - 7				19.00	6.80		0.294
ESC - 031CD - 8				22.30	8.00		0.239
ESC - 031CD - 9				25.40	9.60		0.191
ESC - 031CD - 10				28.60	10.40		0.174
ESC - 031CD - 11				32.00	11.60		0.153
ESC - 031CD - 12				35.00	12.40		0.141
ESC - 031CD - 13				38.10	14.00		0.123
ESC - 031CD - 14				40.00	14.40		0.119
ESC - 031CD - 15				44.50	16.00		0.106
ESC - 031CD - 16				50.80	17.60		0.095
ESC - 071 080 - 1	0.80	7.10	5.50	10.50	4.40	2.832	0.472
ESC - 071 080 - 2				15.50	6.00		0.300
ESC - 071 080 - 3				23.00	8.40		0.194
ESC - 071 080 - 4				33.00	11.60		0.132
ESC - 071 080 - 5				48.00	16.00		0.092

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 031D - 1				9.50	3.80		0.474
ESC - 031D - 2				11.20	4.40		0.372
ESC - 031D - 3				12.70	4.60		0.347
ESC - 031D - 4				14.30	5.00		0.307
ESC - 031D - 5				16.00	5.60		0.260
ESC - 031D - 6				17.50	6.00		0.237
ESC - 031D - 7				19.00	6.40		0.217
ESC - 031D - 8				20.70	6.80		0.200
ESC - 031D - 9				22.30	7.20		0.186
ESC - 031D - 10	0.80	7.62	6.02	23.80	7.60	2.704	0.174
ESC - 031D - 11				25.40	8.40		0.153
ESC - 031D - 12				28.60	9.20		0.137
ESC - 031D - 13				32.00	10.00		0.124
ESC - 031D - 14				35.00	11.20		0.108
ESC - 031D - 15				38.10	12.00		0.100
ESC - 031D - 16				40.00	12.80		0.093
ESC - 031D - 17				44.50	14.00		0.084
ESC - 031D - 18				50.80	15.20		0.076
ESC - 031D - 19				57.20	16.80		0.068
ESC - 031D - 20				63.50	18.40		0.062
ESC - 031DE - 1				11.20	3.80		0.403
ESC - 031DE - 2				12.70	4.20		0.341
ESC - 031DE - 3				14.30	5.00		0.260
ESC - 031DE - 4				16.00	5.60		0.221
ESC - 031DE - 5				17.50	5.80		0.211
ESC - 031DE - 6				19.00	6.00		0.201
ESC - 031DE - 7				22.30	6.80		0.170
ESC - 031DE - 8	0.80	8.00	6.40	25.40	8.00	2.460	0.138
ESC - 031DE - 9				28.60	8.80		0.123
ESC - 031DE - 10				32.00	9.60		0.110
ESC - 031DE - 11				35.00	10.40		0.100
ESC - 031DE - 12				38.10	11.20		0.092
ESC - 031DE - 13				41.30	12.00		0.085
ESC - 031DE - 14				45.00	13.60		0.073
ESC - 031DE - 15				50.80	15.20		0.065
ESC - 031DE - 16				57.20	16.40		0.059
ESC - 031DE - 17				63.50	18.00		0.054
ESC - 031DF - 1				11.20	4.00		0.290
ESC - 031DF - 2				12.70	4.20		0.268
ESC - 031DF - 3				14.30	4.80		0.218
ESC - 031DF - 4				16.00	5.20		0.193
ESC - 031DF - 5				17.50	5.60		0.174
ESC - 031DF - 6				19.00	6.00		0.158
ESC - 031DF - 7				22.30	6.80		0.134
ESC - 031DF - 8	0.80	8.60	7.00	25.40	8.00	2.060	0.109
ESC - 031DF - 9				28.60	8.40		0.102
ESC - 031DF - 10				32.00	9.00		0.094
ESC - 031DF - 11				35.00	10.40		0.079
ESC - 031DF - 12				38.10	11.20		0.072
ESC - 031DF - 13				45.00	12.80		0.062
ESC - 031DF - 14				47.00	13.20		0.060
ESC - 031DF - 15				50.80	14.40		0.054
ESC - 031DF - 16				57.20	16.00		0.048
ESC - 031DF - 17				63.50	17.60		0.043



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 088 080 - 1	0.80	8.80	7.20	14.50	4.40	2.242	0.231
ESC - 088 080 - 2				21.50	6.00		0.147
ESC - 088 080 - 3				32.00	8.40		0.095
ESC - 088 080 - 4				47.00	11.60		0.064
ESC - 088 080 - 5				68.00	16.00		0.044
ESC - 031E - 1	0.80	9.14	7.54	9.50	3.20	1.748	0.356
ESC - 031E - 2				11.20	3.60		0.285
ESC - 031E - 3				12.70	4.00		0.237
ESC - 031E - 4				14.30	4.40		0.203
ESC - 031E - 5				16.00	4.80		0.178
ESC - 031E - 6				17.50	5.20		0.158
ESC - 031E - 7				19.00	5.60		0.142
ESC - 031E - 8				20.70	6.00		0.129
ESC - 031E - 9				22.30	6.40		0.118
ESC - 031E - 10				23.80	6.80		0.109
ESC - 031E - 11				25.40	7.20		0.101
ESC - 031E - 12				28.60	8.20		0.086
ESC - 031E - 13				30.00	8.40		0.083
ESC - 031E - 14				32.00	8.80		0.079
ESC - 031E - 15				35.00	9.60		0.071
ESC - 031E - 16				38.10	10.40		0.064
ESC - 031E - 17				40.00	10.80		0.062
ESC - 031E - 18				44.50	12.40		0.052
ESC - 031E - 19				50.80	13.60		0.047
ESC - 031E - 20				57.20	15.60		0.040
ESC - 031E - 21				63.50	17.60		0.035
ESC - 031EF - 1	0.80	9.90	8.30	9.50	3.20	1.749	0.274
ESC - 031EF - 2				12.70	3.80		0.199
ESC - 031EF - 3				16.00	4.40		0.156
ESC - 031EF - 4				19.00	4.60		0.146
ESC - 031EF - 5				22.30	5.80		0.104
ESC - 031EF - 6				25.40	6.40		0.091
ESC - 031EF - 7				28.60	7.00		0.081
ESC - 031EF - 8				32.00	7.60		0.073
ESC - 031EF - 9				35.00	8.20		0.066
ESC - 031EF - 10				38.10	9.00		0.059
ESC - 031EF - 11				44.50	10.40		0.049
ESC - 031EF - 12				50.80	11.60		0.043
ESC - 031EF - 13				63.50	14.40		0.034
ESC - 031F - 1	0.80	10.70	9.10	12.70	3.80	1.231	0.155
ESC - 031F - 2				16.00	4.40		0.121
ESC - 031F - 3				19.00	5.20		0.094
ESC - 031F - 4				22.30	6.00		0.077
ESC - 031F - 5				25.40	6.60		0.068
ESC - 031F - 6				30.00	7.60		0.056
ESC - 031F - 7				35.00	8.80		0.047
ESC - 031F - 8				38.10	9.60		0.042
ESC - 031F - 9				41.30	10.40		0.038
ESC - 031F - 10				44.50	11.20		0.035
ESC - 031F - 11				50.80	12.40		0.031
ESC - 031F - 12				66.00	16.00		0.023
ESC - 031F - 13				80.00	18.80		0.019
ESC - 031F - 14				96.00	22.40		0.016

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



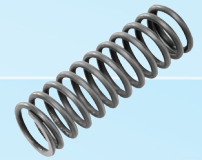
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 108 080 - 1	0.80	10.80	9.20	20.00	4.40	1.756	0.118
ESC - 108 080 - 2				30.00	6.00		0.075
ESC - 108 080 - 3				45.50	8.40		0.048
ESC - 108 080 - 4				66.00	11.60		0.033
ESC - 108 080 - 5				96.50	16.00		0.023
ESC - 031G - 1	0.80	12.20	10.60	12.70	3.20	1.177	0.139
ESC - 031G - 2				16.00	3.80		0.101
ESC - 031G - 3				19.00	4.20		0.086
ESC - 031G - 4				22.30	4.60		0.074
ESC - 031G - 5				25.40	5.20		0.062
ESC - 031G - 6				28.60	5.80		0.053
ESC - 031G - 7				32.00	6.40		0.046
ESC - 031G - 8				35.00	6.80		0.043
ESC - 031G - 9				40.00	7.60		0.037
ESC - 031G - 10				44.50	8.40		0.032
ESC - 031G - 11				50.80	9.20		0.029
ESC - 031G - 12				57.20	10.40		0.025
ESC - 031G - 13				63.50	11.40		0.022
ESC - 140 080 - 1	0.80	14.00	12.40	38.30	4.40	1.758	0.051
ESC - 140 080 - 2				58.50	6.00		0.032
ESC - 140 080 - 3				65.00	6.40		0.030
ESC - 140 080 - 4				100.00	9.60		0.018
ESC - 140 080 - 5				150.00	12.80		0.012
ESC - 035B - 1	0.89	4.57	2.79	9.50	6.67	6.892	2.317
ESC - 035B - 2				11.20	7.56		1.960
ESC - 035B - 3				12.70	8.67		1.643
ESC - 035B - 4				14.30	9.56		1.455
ESC - 035B - 5				16.00	10.68		1.272
ESC - 035B - 6				17.50	11.57		1.156
ESC - 035B - 7				19.00	12.46		1.060
ESC - 035B - 8				20.70	13.57		0.960
ESC - 035B - 9				22.30	14.68		0.877
ESC - 035B - 10				23.80	15.57		0.821
ESC - 035B - 11				25.40	16.46		0.771
ESC - 035B - 12				28.60	18.69		0.669
ESC - 035B - 13				32.00	20.47		0.605
ESC - 035B - 14				35.00	22.47		0.547
ESC - 035B - 15				38.10	24.47		0.499
ESC - 035B - 16				44.50	28.48		0.424
ESC - 035B - 17				50.80	32.48		0.368
ESC - 035B - 18				57.20	36.49		0.326



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 035C - 1				8.00	4.00		1.800
ESC - 035C - 2				9.50	4.89		1.284
ESC - 035C - 3				11.20	5.56		1.057
ESC - 035C - 4				12.70	6.00		0.945
ESC - 035C - 5				14.30	6.67		0.816
ESC - 035C - 6				16.00	7.34		0.718
ESC - 035C - 7				17.50	8.01		0.640
ESC - 035C - 8				19.00	8.90		0.560
ESC - 035C - 9				20.70	9.56		0.512
ESC - 035C - 10	0.89	6.10	4.32	22.30	10.23	5.414	0.472
ESC - 035C - 11				23.80	11.12		0.427
ESC - 035C - 12				25.40	11.57		0.407
ESC - 035C - 13				28.60	12.46		0.373
ESC - 035C - 14				32.00	13.79		0.332
ESC - 035C - 15				35.00	15.13		0.298
ESC - 035C - 16				38.10	16.46		0.271
ESC - 035C - 17				44.50	18.91		0.233
ESC - 035C - 18				50.80	21.36		0.203
ESC - 035C - 19				57.20	24.03		0.179
ESC - 035C - 20				63.50	25.81		0.166
ESC - 035D - 1				9.50	4.00		0.835
ESC - 035D - 2				11.20	4.45		0.693
ESC - 035D - 3				12.70	4.89		0.595
ESC - 035D - 4				14.30	5.78		0.463
ESC - 035D - 5				16.00	6.23		0.416
ESC - 035D - 6				17.50	6.67		0.378
ESC - 035D - 7				19.00	7.12		0.346
ESC - 035D - 8				20.70	7.56		0.320
ESC - 035D - 9				22.30	8.01		0.297
ESC - 035D - 10	0.89	7.62	5.84	23.80	8.45	4.102	0.277
ESC - 035D - 11				25.40	9.12		0.252
ESC - 035D - 12				28.60	10.23		0.219
ESC - 035D - 13				32.00	11.57		0.189
ESC - 035D - 14				35.00	12.46		0.173
ESC - 035D - 15				38.10	13.35		0.160
ESC - 035D - 16				40.00	14.24		0.148
ESC - 035D - 17				44.50	16.02		0.130
ESC - 035D - 18				50.80	17.80		0.115
ESC - 035D - 19				57.20	19.58		0.104
ESC - 035D - 20				63.50	21.36		0.094

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



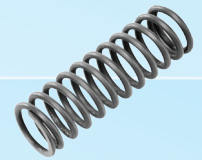
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 035DE - 1	0.89	8.00	6.20	9.50	4.27	3.551	0.632
ESC - 035DE - 2				12.70	4.95		0.495
ESC - 035DE - 3				14.30	5.40		0.434
ESC - 035DE - 4				16.00	5.85		0.386
ESC - 035DE - 5				17.40	6.30		0.347
ESC - 035DE - 6				19.00	6.75		0.316
ESC - 035DE - 7				22.30	8.10		0.248
ESC - 035DE - 8				25.40	8.55		0.232
ESC - 035DE - 9				28.60	9.45		0.204
ESC - 035DE - 10				32.00	10.80		0.174
ESC - 035DE - 11				35.00	12.15		0.151
ESC - 035DE - 12				38.10	12.60		0.145
ESC - 035DE - 13				40.00	13.50		0.134
ESC - 035DE - 14				44.50	14.85		0.120
ESC - 035DE - 15				50.80	16.65		0.105
ESC - 035DE - 16				57.20	18.45		0.094
ESC - 035DE - 17				63.50	20.70		0.083
ESC - 035E - 1	0.89	9.14	7.36	11.20	3.78	3.151	0.504
ESC - 035E - 2				12.70	4.45		0.376
ESC - 035E - 3				14.30	4.89		0.323
ESC - 035E - 4				16.00	5.34		0.282
ESC - 035E - 5				17.50	5.78		0.251
ESC - 035E - 6				19.00	6.32		0.221
ESC - 035E - 7				20.70	6.67		0.205
ESC - 035E - 8				22.30	7.12		0.188
ESC - 035E - 9				23.80	7.56		0.174
ESC - 035E - 10				25.40	8.01		0.161
ESC - 035E - 11				28.60	8.45		0.150
ESC - 035E - 12				32.00	9.12		0.137
ESC - 035E - 13				35.00	9.79		0.125
ESC - 035E - 14				38.10	10.68		0.112
ESC - 035E - 15				44.50	12.05		0.097
ESC - 035E - 16				50.80	13.35		0.086
ESC - 035E - 17				57.20	14.68		0.077
ESC - 035E - 18	63.50	16.46	0.068				
ESC - 100 090 - 1	0.89	10.00	8.20	20.00	4.95	3.536	0.235
ESC - 100 090 - 2				30.00	6.75		0.150
ESC - 100 090 - 3				48.00	9.22		0.100
ESC - 100 090 - 4				55.00	11.25		0.078
ESC - 100 090 - 5				76.20	15.75		0.053
ESC - 035F - 1	0.89	10.70	8.92	12.70	3.78	2.568	0.299
ESC - 035F - 2				16.00	4.67		0.207
ESC - 035F - 3				19.00	5.34		0.167
ESC - 035F - 4				22.30	5.78		0.149
ESC - 035F - 5				25.40	6.23		0.134
ESC - 035F - 6				32.00	7.34		0.107
ESC - 035F - 7				38.10	8.23		0.092
ESC - 035F - 8				44.50	9.34		0.079



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 035G - 1				12.70	3.56		0.219
ESC - 035G - 2				16.00	4.22		0.159
ESC - 035G - 3				19.00	4.67		0.135
ESC - 035G - 4				25.40	5.56		0.103
ESC - 035G - 5				28.60	6.23		0.087
ESC - 035G - 6				32.00	6.67		0.079
ESC - 035G - 7	0.89	12.20	10.42	35.00	7.56	1.946	0.067
ESC - 035G - 8				38.10	7.78		0.065
ESC - 035G - 9				41.30	8.01		0.062
ESC - 035G - 10				44.50	9.12		0.053
ESC - 035G - 11				50.80	10.68		0.043
ESC - 035G - 12				63.50	12.46		0.036
ESC - 035G - 13				76.20	13.57		0.033
ESC - 038C - 1				8.00	4.75		2.008
ESC - 038C - 2				9.50	5.46		1.611
ESC - 038C - 3				11.20	6.17		1.342
ESC - 038C - 4				12.70	7.12		1.097
ESC - 038C - 5				14.30	7.60		1.004
ESC - 038C - 6				16.00	8.31		0.894
ESC - 038C - 7				17.50	9.02		0.804
ESC - 038C - 8				19.05	9.73		0.731
ESC - 038C - 9				20.70	10.45		0.669
ESC - 038C - 10	0.95	6.10	4.20	22.30	11.40	6.263	0.602
ESC - 038C - 11				23.80	12.35		0.547
ESC - 038C - 12				25.40	13.06		0.513
ESC - 038C - 13				28.60	14.25		0.463
ESC - 038C - 14				32.00	15.67		0.415
ESC - 038C - 15				35.00	17.57		0.365
ESC - 038C - 16				38.10	19.00		0.334
ESC - 038C - 17				44.45	21.37		0.294
ESC - 038C - 18				50.80	24.22		0.256
ESC - 038C - 19				57.20	28.02		0.219
ESC - 038C - 20				63.50	30.40		0.200
ESC - 038D - 1				9.50	4.51		1.012
ESC - 038D - 2				11.20	4.98		0.856
ESC - 038D - 3				12.70	5.46		0.741
ESC - 038D - 4				14.30	6.17		0.617
ESC - 038D - 5				16.00	6.65		0.554
ESC - 038D - 6				17.50	7.36		0.483
ESC - 038D - 7				19.05	7.83		0.444
ESC - 038D - 8				20.70	8.31		0.411
ESC - 038D - 9	0.95	7.62	5.72	22.30	9.26	5.030	0.358
ESC - 038D - 10				23.80	9.50		0.346
ESC - 038D - 11				25.40	9.97		0.326
ESC - 038D - 12				28.60	10.45		0.308
ESC - 038D - 13				32.00	12.11		0.258
ESC - 038D - 14				35.00	13.06		0.236
ESC - 038D - 15				38.10	14.01		0.217
ESC - 038D - 16				44.45	16.15		0.184
ESC - 038D - 17				50.80	19.00		0.154
ESC - 038D - 18				57.20	20.90		0.138
ESC - 038D - 19				63.50	22.80		0.126

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



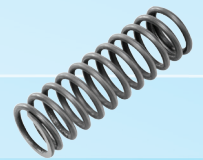
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 038E - 1				11.20	4.27		0.601
ESC - 038E - 2				12.70	4.75		0.499
ESC - 038E - 3				14.30	4.98		0.462
ESC - 038E - 4				16.00	5.46		0.400
ESC - 038E - 5				17.50	5.93		0.353
ESC - 038E - 6				19.05	6.17		0.333
ESC - 038E - 7				20.70	6.65		0.299
ESC - 038E - 8				22.30	7.12		0.272
ESC - 038E - 9	0.95	9.14	7.24	23.80	7.60	4.024	0.249
ESC - 038E - 10				25.40	8.07		0.230
ESC - 038E - 11				28.60	8.87		0.204
ESC - 038E - 12				32.00	9.50		0.187
ESC - 038E - 13				35.00	10.45		0.166
ESC - 038E - 14				38.10	11.40		0.149
ESC - 038E - 15				44.45	12.82		0.130
ESC - 038E - 16				50.80	14.25		0.115
ESC - 038E - 17				57.20	15.67		0.103
ESC - 038E - 18				63.50	17.57		0.090
ESC - 038F - 1				12.70	4.27		0.356
ESC - 038F - 2				16.00	4.98		0.274
ESC - 038F - 3				19.05	5.70		0.222
ESC - 038F - 4				22.30	6.41		0.187
ESC - 038F - 5				25.40	7.12		0.161
ESC - 038F - 6	0.95	10.70	8.80	32.00	8.55	3.076	0.126
ESC - 038F - 7				38.10	9.50		0.111
ESC - 038F - 8				44.45	10.92		0.093
ESC - 038F - 9				50.80	12.35		0.080
ESC - 038F - 10				57.20	13.77		0.071
ESC - 038F - 11				63.50	14.72		0.065
ESC - 038G - 1				12.70	3.56		0.332
ESC - 038G - 2				16.00	4.03		0.258
ESC - 038G - 3				19.05	4.75		0.192
ESC - 038G - 4				22.30	5.22		0.165
ESC - 038G - 5				25.40	5.70		0.144
ESC - 038G - 6				32.00	6.65		0.115
ESC - 038G - 7	0.95	12.20	10.30	38.10	7.83	2.784	0.092
ESC - 038G - 8				41.30	8.31		0.085
ESC - 038G - 9				44.45	9.02		0.077
ESC - 038G - 10				50.80	9.97		0.068
ESC - 038G - 11				57.20	11.40		0.057
ESC - 038G - 12				63.50	12.35		0.052
ESC - 038G - 13				69.85	13.30		0.048
ESC - 038G - 14				76.20	14.25		0.044



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 039BB - 1	1.00	5.00	3.00	7.60	5.50	11.424	4.510
ESC - 039BB - 2				10.80	7.00		3.157
ESC - 039BB - 3				16.00	9.00		2.255
ESC - 039BB - 4				17.40	11.00		1.754
ESC - 039BB - 5				27.00	16.50		1.088
ESC - 039BB - 6				33.00	21.00		0.831
ESC - 550 100 - 1	1.00	5.50	3.50	9.00	5.50	9.856	3.168
ESC - 550 100 - 2				12.50	7.50		2.016
ESC - 550 100 - 3				18.00	10.50		1.304
ESC - 550 100 - 4				26.00	14.50		0.887
ESC - 550 100 - 5				36.00	20.00		0.616
ESC - 060 100 - 1	1.00	6.00	4.00	8.50	5.50	6.510	2.309
ESC - 060 100 - 2				12.00	7.50		1.469
ESC - 060 100 - 3				17.00	10.50		0.951
ESC - 060 100 - 4				24.00	14.50		0.646
ESC - 060 100 - 5				34.50	20.00		0.449
ESC - 039C - 1	1.00	6.10	4.10	8.00	4.50	9.418	3.046
ESC - 039C - 2				9.50	5.25		2.343
ESC - 039C - 3				11.20	6.00		1.904
ESC - 039C - 4				12.70	6.50		1.692
ESC - 039C - 5				14.30	7.50		1.385
ESC - 039C - 6				16.00	8.00		1.269
ESC - 039C - 7				17.50	8.50		1.171
ESC - 039C - 8				19.00	9.50		1.015
ESC - 039C - 9				20.70	10.00		0.952
ESC - 039C - 10				22.30	11.00		0.846
ESC - 039C - 11				23.80	11.50		0.801
ESC - 039C - 12				25.40	12.00		0.761
ESC - 039C - 13				28.60	14.00		0.634
ESC - 039C - 14				32.00	16.00		0.544
ESC - 039C - 15				35.00	17.00		0.507
ESC - 039C - 16				38.10	18.50		0.461
ESC - 039C - 17				44.50	21.00		0.400
ESC - 039C - 18				50.80	24.00		0.346
ESC - 039CD - 1	1.00	6.80	4.80	11.20	6.00	6.703	1.294
ESC - 039CD - 2				12.70	6.50		1.150
ESC - 039CD - 3				16.00	8.00		0.863
ESC - 039CD - 4				19.00	9.50		0.690
ESC - 039CD - 5				23.80	11.50		0.545
ESC - 039CD - 6				25.40	12.50		0.493
ESC - 039CD - 7				28.60	13.50		0.450
ESC - 039CD - 8				32.00	15.00		0.398
ESC - 039CD - 9				35.00	16.50		0.357
ESC - 039CD - 10				38.10	17.75		0.328
ESC - 039CD - 11				44.50	20.50		0.279
ESC - 039CD - 12				50.80	22.25		0.255
ESC - 039CD - 13				57.20	25.00		0.225
ESC - 039CD - 14				63.50	29.00		0.191

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



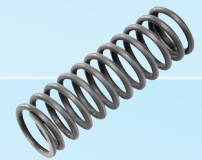
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 073 100 - 1	1.00	7.30	5.30	10.00	5.50	5.225	1.154
ESC - 073 100 - 2				14.50	7.50		0.734
ESC - 073 100 - 3				21.50	10.50		0.475
ESC - 073 100 - 4				30.50	14.50		0.323
ESC - 073 100 - 5				43.50	20.00		0.224
ESC - 039D - 1	1.00	7.62	5.62	9.50	4.50	5.939	1.393
ESC - 039D - 2				11.20	5.00		1.161
ESC - 039D - 3				12.70	5.50		0.995
ESC - 039D - 4				14.30	6.25		0.819
ESC - 039D - 5				16.00	6.75		0.733
ESC - 039D - 6				17.50	7.00		0.696
ESC - 039D - 7				19.00	8.00		0.580
ESC - 039D - 8				20.70	9.00		0.497
ESC - 039D - 9				22.30	9.50		0.464
ESC - 039D - 10				23.80	9.75		0.449
ESC - 039D - 11				25.40	10.25		0.422
ESC - 039D - 12				28.60	11.50		0.366
ESC - 039D - 13				32.00	13.00		0.316
ESC - 039D - 14				35.00	14.25		0.284
ESC - 039D - 15				38.10	15.50		0.258
ESC - 039D - 16				44.50	17.00		0.232
ESC - 039D - 17				50.80	20.00		0.193
ESC - 039D - 18				57.20	23.00		0.165
ESC - 039D - 19				63.50	25.00		0.151
ESC - 039DE - 1	1.00	8.00	6.00	9.50	4.50	5.735	1.178
ESC - 039DE - 2				11.20	5.00		0.982
ESC - 039DE - 3				12.70	5.50		0.841
ESC - 039DE - 4				14.30	6.25		0.693
ESC - 039DE - 5				16.00	6.75		0.620
ESC - 039DE - 6				17.50	7.25		0.561
ESC - 039DE - 7				19.00	8.00		0.491
ESC - 039DE - 8				22.30	9.00		0.420
ESC - 039DE - 9				25.40	10.00		0.368
ESC - 039DE - 10				28.60	11.00		0.327
ESC - 039DE - 11				30.00	11.50		0.310
ESC - 039DE - 12				32.00	12.00		0.294
ESC - 039DE - 13				35.00	13.00		0.267
ESC - 039DE - 14				38.10	14.00		0.245
ESC - 039DE - 15				40.00	15.00		0.226
ESC - 039DE - 16				44.50	16.50		0.203
ESC - 039DE - 17				50.80	18.00		0.184
ESC - 039DE - 18				57.20	22.00		0.147
ESC - 039DE - 19				63.50	24.00		0.133



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

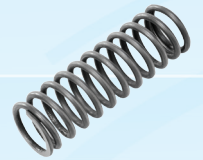


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 039DF - 1	1.00	8.60	6.60	11.20	5.00	4.690	0.767
ESC - 039DF - 2				12.70	5.50		0.657
ESC - 039DF - 3				14.30	6.00		0.575
ESC - 039DF - 4				16.00	6.50		0.511
ESC - 039DF - 5				17.50	7.00		0.460
ESC - 039DF - 6				19.00	8.00		0.383
ESC - 039DF - 7				22.30	9.00		0.328
ESC - 039DF - 8				25.40	10.00		0.287
ESC - 039DF - 9				28.60	11.00		0.255
ESC - 039DF - 10				32.00	12.00		0.230
ESC - 039DF - 11				35.00	13.00		0.209
ESC - 039DF - 12				38.10	14.00		0.191
ESC - 039DF - 13				40.00	14.50		0.184
ESC - 039DF - 14				44.50	16.00		0.164
ESC - 039DF - 15				50.80	18.00		0.143
ESC - 039DF - 16				57.20	20.50		0.124
ESC - 039DF - 17				63.50	23.00		0.109
ESC - 090 100 - 1	1.00	9.00	7.00	13.00	5.50	4.251	0.563
ESC - 090 100 - 2				19.00	7.50		0.358
ESC - 090 100 - 3				28.50	10.50		0.232
ESC - 090 100 - 4				40.50	14.50		0.157
ESC - 090 100 - 5				59.00	20.00		0.109
ESC - 039E - 1	1.00	9.14	7.14	11.20	4.50	4.406	0.749
ESC - 039E - 2				12.70	5.00		0.624
ESC - 039E - 3				14.30	5.50		0.535
ESC - 039E - 4				16.00	6.00		0.468
ESC - 039E - 5				17.50	6.50		0.416
ESC - 039E - 6				19.00	7.00		0.374
ESC - 039E - 7				20.70	7.50		0.340
ESC - 039E - 8				22.30	8.00		0.312
ESC - 039E - 9				23.80	8.50		0.288
ESC - 039E - 10				25.40	9.00		0.267
ESC - 039E - 11				28.60	10.00		0.234
ESC - 039E - 12				32.00	11.00		0.208
ESC - 039E - 13				35.00	12.00		0.187
ESC - 039E - 14				38.10	13.00		0.170
ESC - 039E - 15				40.00	13.50		0.162
ESC - 039E - 16				44.50	15.00		0.144
ESC - 039E - 17				50.80	16.00		0.133
ESC - 039E - 18				57.20	18.00		0.117
ESC - 039E - 19				63.50	20.00		0.104

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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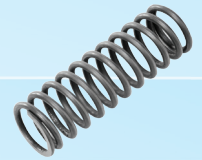
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 039EF - 1	1.00	9.90	7.90	12.70	4.50	4.095	0.573
ESC - 039EF - 2				14.30	5.00		0.477
ESC - 039EF - 3				16.00	5.25		0.441
ESC - 039EF - 4				17.50	5.75		0.382
ESC - 039EF - 5				19.00	6.00		0.358
ESC - 039EF - 6				20.70	6.50		0.318
ESC - 039EF - 7				22.30	7.00		0.286
ESC - 039EF - 8				23.80	7.50		0.260
ESC - 039EF - 9				25.40	8.00		0.238
ESC - 039EF - 10				28.60	8.50		0.220
ESC - 039EF - 11				32.00	10.00		0.179
ESC - 039EF - 12				35.00	10.50		0.168
ESC - 039EF - 13				38.10	11.50		0.150
ESC - 039EF - 14				41.30	12.00		0.143
ESC - 039EF - 15				44.50	13.00		0.130
ESC - 039EF - 16				50.80	14.25		0.117
ESC - 039F - 1	1.00	10.70	8.70	12.70	4.25	3.316	0.492
ESC - 039F - 2				16.00	5.00		0.369
ESC - 039F - 3				19.00	5.50		0.316
ESC - 039F - 4				22.30	6.25		0.260
ESC - 039F - 5				25.40	7.00		0.221
ESC - 039F - 6				32.00	8.50		0.170
ESC - 039F - 7				35.00	10.25		0.134
ESC - 039F - 8				38.10	11.00		0.123
ESC - 039F - 9				40.00	11.50		0.116
ESC - 039F - 10				44.50	13.00		0.100
ESC - 039F - 11				50.80	14.25		0.090
ESC - 039F - 12				57.20	16.00		0.079
ESC - 039F - 13				63.50	17.50		0.071
ESC - 110 100 - 1	1.00	11.00	9.00	17.50	5.50	3.294	0.288
ESC - 110 100 - 2				26.00	7.50		0.183
ESC - 110 100 - 3				39.00	10.50		0.118
ESC - 110 100 - 4				56.00	14.50		0.080
ESC - 110 100 - 5				81.50	20.50		0.054
ESC - 039FG - 1	1.00	11.60	9.60	12.70	4.25	2.978	0.377
ESC - 039FG - 2				16.00	5.00		0.282
ESC - 039FG - 3				19.00	6.00		0.212
ESC - 039FG - 4				22.30	6.50		0.188
ESC - 039FG - 5				25.40	7.00		0.169
ESC - 039FG - 6				32.00	8.50		0.130
ESC - 039FG - 7				38.10	10.00		0.106
ESC - 039FG - 8				44.50	11.50		0.089



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 039G - 1	1.00	12.20	10.20	12.70	4.00	3.346	0.359
ESC - 039G - 2				16.00	4.50		0.287
ESC - 039G - 3				19.00	5.00		0.239
ESC - 039G - 4				22.30	5.75		0.191
ESC - 039G - 5				25.40	6.25		0.169
ESC - 039G - 6				32.00	7.25		0.137
ESC - 039G - 7				38.10	8.00		0.119
ESC - 039G - 8				41.30	8.50		0.110
ESC - 039G - 9				44.50	9.00		0.102
ESC - 039G - 10				50.80	10.00		0.089
ESC - 039G - 11				57.20	11.00		0.079
ESC - 039G - 12				63.50	12.00		0.071
ESC - 039G - 13				70.00	13.00		0.065
ESC - 039G - 14				76.20	14.25		0.058
ESC - 125 100 - 1	1.00	12.50	10.50	21.00	5.50	2.925	0.189
ESC - 125 100 - 2				32.00	7.50		0.120
ESC - 125 100 - 3				48.00	10.50		0.078
ESC - 125 100 - 4				65.00	13.00		0.060
ESC - 125 100 - 5				77.00	15.50		0.049
ESC - 135 100 - 1	1.00	13.50	11.50	24.00	5.50	2.700	0.147
ESC - 135 100 - 2				36.50	7.50		0.094
ESC - 135 100 - 3				55.50	10.50		0.060
ESC - 135 100 - 4				80.50	14.50		0.041
ESC - 135 100 - 5				115.00	20.00		0.028
ESC - 039GH - 1	1.00	13.80	11.80	12.70	4.00	2.100	0.240
ESC - 039GH - 2				16.00	4.50		0.192
ESC - 039GH - 3				19.00	5.00		0.160
ESC - 039GH - 4				22.30	5.50		0.137
ESC - 039GH - 5				25.40	6.25		0.113
ESC - 039GH - 6				28.60	6.75		0.101
ESC - 039GH - 7				32.00	7.25		0.091
ESC - 039GH - 8				35.00	8.00		0.080
ESC - 039GH - 9				38.10	8.50		0.074
ESC - 039GH - 10				40.00	9.00		0.068
ESC - 039GH - 11				44.50	10.25		0.058
ESC - 039GH - 12				50.80	11.50		0.050
ESC - 039GH - 13				57.20	12.25		0.047
ESC - 039GH - 14				63.50	13.25		0.042
ESC - 039GH - 15				76.20	16.00		0.034
ESC - 150 100 - 1	1.00	15.00	13.00	25.00	6.50	1.551	0.081
ESC - 150 100 - 2				30.00	7.00		0.073
ESC - 150 100 - 3				40.00	9.00		0.052
ESC - 150 100 - 4				50.00	11.00		0.040
ESC - 150 100 - 5				60.00	13.00		0.033
ESC - 150 100 - 6				70.00	15.00		0.028
ESC - 150 100 - 7				100.00	17.50		0.023

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



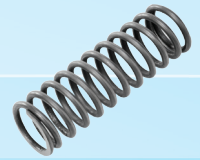
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 042C - 1				9.50	5.35		3.469
ESC - 042C - 2				11.20	7.22		2.195
ESC - 042C - 3				12.70	8.02		1.895
ESC - 042C - 4				14.30	8.82		1.667
ESC - 042C - 5				16.00	9.63		1.486
ESC - 042C - 6				17.50	10.70		1.300
ESC - 042C - 7				19.00	11.77		1.156
ESC - 042C - 8				20.70	12.57		1.068
ESC - 042C - 9				22.30	13.75		0.959
ESC - 042C - 10	1.07	6.10	3.96	23.80	14.44	8.700	0.905
ESC - 042C - 11				25.40	15.24		0.850
ESC - 042C - 12				28.60	17.12		0.743
ESC - 042C - 13				32.00	18.72		0.671
ESC - 042C - 14				35.00	20.33		0.612
ESC - 042C - 15				38.10	22.47		0.574
ESC - 042C - 16				44.50	25.68		0.473
ESC - 042C - 17				50.80	29.42		0.408
ESC - 042C - 18				57.20	32.63		0.365
ESC - 042C - 19				63.50	37.45		0.315
ESC - 042D - 1				9.50	4.81		1.892
ESC - 042D - 2				11.20	5.35		1.571
ESC - 042D - 3				12.70	6.15		1.260
ESC - 042D - 4				14.30	6.95		1.049
ESC - 042D - 5				16.00	7.75		0.899
ESC - 042D - 6				17.50	8.29		0.821
ESC - 042D - 7				19.00	8.82		0.755
ESC - 042D - 8				20.70	9.63		0.673
ESC - 042D - 9				22.30	10.70		0.589
ESC - 042D - 10	1.07	7.62	5.48	23.80	11.23	7.497	0.555
ESC - 042D - 11				25.40	11.77		0.523
ESC - 042D - 12				28.60	12.57		0.483
ESC - 042D - 13				32.00	13.91		0.428
ESC - 042D - 14				35.00	15.24		0.385
ESC - 042D - 15				38.10	16.31		0.356
ESC - 042D - 16				44.50	19.26		0.294
ESC - 042D - 17				50.80	21.66		0.258
ESC - 042D - 18				57.20	24.07		0.230
ESC - 042D - 19				63.50	26.75		0.204



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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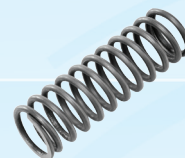


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 042E - 1	1.07	9.14	7.00	11.20	4.81	6.079	1.012
ESC - 042E - 2				12.70	5.35		0.840
ESC - 042E - 3				14.30	5.88		0.722
ESC - 042E - 4				16.00	6.42		0.630
ESC - 042E - 5				17.50	6.95		0.561
ESC - 042E - 6				19.00	7.49		0.504
ESC - 042E - 7				20.70	8.02		0.459
ESC - 042E - 8				22.30	9.63		0.360
ESC - 042E - 9				23.80	10.16		0.336
ESC - 042E - 10				25.40	10.43		0.325
ESC - 042E - 11				28.60	10.96		0.305
ESC - 042E - 12				32.00	11.50		0.288
ESC - 042E - 13				35.00	12.03		0.272
ESC - 042E - 14				38.10	12.84		0.252
ESC - 042E - 15				44.50	14.98		0.210
ESC - 042E - 16				50.80	16.58		0.186
ESC - 042E - 17				57.20	19.26		0.157
ESC - 042E - 18				63.50	20.86		0.144
ESC - 042F - 1	1.07	10.70	8.56	12.70	4.81	4.654	0.595
ESC - 042F - 2				16.00	5.88		0.425
ESC - 042F - 3				19.00	6.42		0.370
ESC - 042F - 4				22.30	6.95		0.330
ESC - 042F - 5				25.40	7.75		0.283
ESC - 042F - 6				32.00	9.09		0.228
ESC - 042F - 7				38.10	11.77		0.164
ESC - 042F - 8				44.50	12.84		0.148
ESC - 042F - 9				50.80	13.91		0.134
ESC - 042F - 10				57.20	15.51		0.118
ESC - 042F - 11				63.50	17.12		0.105
ESC - 042G - 1	1.07	12.20	10.06	12.70	4.00	4.230	0.555
ESC - 042G - 2				16.00	4.81		0.385
ESC - 042G - 3				19.00	5.35		0.320
ESC - 042G - 4				22.30	6.15		0.256
ESC - 042G - 5				25.40	6.68		0.226
ESC - 042G - 6				32.00	8.02		0.175
ESC - 042G - 7				38.10	9.09		0.148
ESC - 042G - 8				41.30	9.63		0.137
ESC - 042G - 9				44.50	10.70		0.120
ESC - 042G - 10				50.80	11.77		0.106
ESC - 042G - 11				57.20	12.84		0.096
ESC - 042G - 12				63.50	13.91		0.087
ESC - 042G - 13				70.00	14.98		0.080
ESC - 042G - 14				76.20	16.05		0.073

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



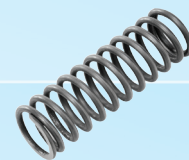
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 042GH - 1	1.07	13.80	11.66	12.70	4.01	3.206	0.369
ESC - 042GH - 2				16.00	4.81		0.257
ESC - 042GH - 3				19.00	5.08		0.234
ESC - 042GH - 4				22.30	5.61		0.198
ESC - 042GH - 5				25.40	6.15		0.171
ESC - 042GH - 6				32.00	7.22		0.135
ESC - 042GH - 7				38.10	8.56		0.107
ESC - 042GH - 8				41.30	9.36		0.095
ESC - 042GH - 9				44.50	10.70		0.080
ESC - 042GH - 10				50.80	11.77		0.071
ESC - 042GH - 11				57.20	12.84		0.064
ESC - 042GH - 12				63.50	13.91		0.058
ESC - 042GH - 13				76.20	14.98		0.053
ESC - 043EF - 1	1.10	9.90	7.70	12.70	5.77	4.566	0.670
ESC - 043EF - 2				14.30	6.32		0.580
ESC - 043EF - 3				16.00	6.87		0.512
ESC - 043EF - 4				17.50	7.42		0.458
ESC - 043EF - 5				19.00	7.97		0.414
ESC - 043EF - 6				20.70	8.52		0.378
ESC - 043EF - 7				22.30	9.07		0.347
ESC - 043EF - 8				23.80	9.62		0.322
ESC - 043EF - 9				25.40	10.17		0.299
ESC - 043EF - 10				28.60	11.27		0.263
ESC - 043EF - 11				32.00	12.37		0.234
ESC - 043EF - 12				35.00	13.20		0.217
ESC - 043EF - 13				38.10	14.30		0.197
ESC - 043EF - 14				44.50	16.50		0.167
ESC - 045C - 1	1.14	6.10	3.86	9.50	6.27	11.564	3.996
ESC - 045C - 2				11.20	7.41		3.108
ESC - 045C - 3				12.70	8.26		2.669
ESC - 045C - 4				14.30	9.40		2.241
ESC - 045C - 5				16.00	10.26		1.998
ESC - 045C - 6				17.50	11.11		1.807
ESC - 045C - 7				19.00	11.97		1.645
ESC - 045C - 8				20.70	12.82		1.513
ESC - 045C - 9				22.30	13.68		1.398
ESC - 045C - 10				23.80	14.53		1.302
ESC - 045C - 11				25.40	15.67		1.191
ESC - 045C - 12				28.60	17.38		1.056
ESC - 045C - 13				32.00	19.38		0.932
ESC - 045C - 14				38.10	22.80		0.777
ESC - 045C - 15				44.50	26.97		0.646
ESC - 045C - 16				50.80	30.21		0.570
ESC - 045C - 17				57.20	33.63		0.508
ESC - 045C - 18				63.50	37.62		0.451



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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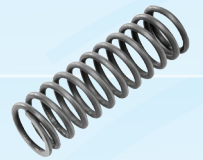


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 045D - 1	1.14	7.62	5.34	9.50	5.70	8.974	2.090
ESC - 045D - 2				11.20	6.27		1.792
ESC - 045D - 3				12.70	6.84		1.568
ESC - 045D - 4				14.30	7.41		1.393
ESC - 045D - 5				16.00	7.98		1.254
ESC - 045D - 6				17.50	8.83		1.092
ESC - 045D - 7				19.00	9.69		0.964
ESC - 045D - 8				20.70	10.26		0.896
ESC - 045D - 9				22.30	11.11		0.810
ESC - 045D - 10				23.80	11.97		0.737
ESC - 045D - 11				25.40	12.54		0.696
ESC - 045D - 12				28.60	13.39		0.643
ESC - 045D - 13				32.00	14.82		0.570
ESC - 045D - 14				35.00	16.24		0.512
ESC - 045D - 15				38.10	17.67		0.464
ESC - 045D - 16				44.50	20.52		0.392
ESC - 045D - 17				50.80	23.65		0.334
ESC - 045D - 18				57.20	25.93		0.302
ESC - 045D - 19				63.50	28.50		0.272
ESC - 045E - 1	1.14	9.14	6.86	11.20	5.13	7.644	1.333
ESC - 045E - 2				12.70	5.70		1.111
ESC - 045E - 3				14.30	6.27		0.952
ESC - 045E - 4				16.00	6.84		0.833
ESC - 045E - 5				17.50	7.41		0.740
ESC - 045E - 6				19.00	7.98		0.666
ESC - 045E - 7				20.70	8.26		0.636
ESC - 045E - 8				22.30	8.83		0.580
ESC - 045E - 9				23.80	9.40		0.534
ESC - 045E - 10				25.40	9.97		0.494
ESC - 045E - 11				28.60	10.83		0.444
ESC - 045E - 12				32.00	12.25		0.381
ESC - 045E - 13				35.00	13.11		0.350
ESC - 045E - 14				38.10	13.97		0.325
ESC - 045E - 15				44.50	15.96		0.277
ESC - 045E - 16				50.80	18.24		0.238
ESC - 045E - 17				57.20	20.52		0.208
ESC - 045E - 18				63.50	22.43		0.188
ESC - 045E - 19				70.00	25.08		0.166
ESC - 045F - 1	1.14	10.70	8.42	12.70	5.13	5.934	0.781
ESC - 045F - 2				16.00	5.98		0.602
ESC - 045F - 3				19.00	6.84		0.488
ESC - 045F - 4				22.30	7.69		0.412
ESC - 045F - 5				25.40	8.55		0.355
ESC - 045F - 6				32.00	10.26		0.279
ESC - 045F - 7				38.10	12.25		0.223
ESC - 045F - 8				44.50	13.96		0.190
ESC - 045F - 9				50.80	15.39		0.169
ESC - 045F - 10				57.20	17.38		0.147
ESC - 045F - 11				63.50	18.81		0.134

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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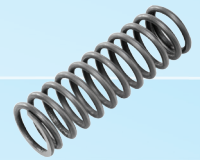
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 045FG - 1	1.14	11.70	9.32	12.70	4.84	4.818	0.647
ESC - 045FG - 2				16.00	5.70		0.483
ESC - 045FG - 3				19.00	6.55		0.387
ESC - 045FG - 4				22.30	7.41		0.322
ESC - 045FG - 5				25.40	8.26		0.276
ESC - 045FG - 6				32.00	9.69		0.223
ESC - 045FG - 7				38.10	11.40		0.181
ESC - 045FG - 8				44.50	12.82		0.156
ESC - 045G - 1	1.14	12.20	9.92	12.70	4.56	5.154	0.630
ESC - 045G - 2				16.00	5.13		0.504
ESC - 045G - 3				19.00	5.70		0.420
ESC - 045G - 4				22.30	6.55		0.337
ESC - 045G - 5				25.40	7.12		0.297
ESC - 045G - 6				32.00	8.49		0.231
ESC - 045G - 7				38.10	9.63		0.195
ESC - 045G - 8				41.30	10.54		0.174
ESC - 045G - 9				44.50	11.40		0.157
ESC - 045G - 10				50.80	12.82		0.136
ESC - 045G - 11				57.20	14.25		0.120
ESC - 045G - 12				63.50	15.39		0.109
ESC - 045G - 13				70.00	16.53		0.100
ESC - 045G - 14				76.20	18.24		0.090
ESC - 045GH - 1	1.14	13.80	11.52	12.70	4.27	4.500	0.483
ESC - 045GH - 2				16.00	4.56		0.420
ESC - 045GH - 3				19.00	5.13		0.336
ESC - 045GH - 4				22.30	5.70		0.280
ESC - 045GH - 5				25.40	6.27		0.240
ESC - 045GH - 6				32.00	7.12		0.198
ESC - 045GH - 7				38.10	8.26		0.160
ESC - 045GH - 8				41.30	9.12		0.140
ESC - 045GH - 9				44.50	10.54		0.116
ESC - 045GH - 10				50.80	11.40		0.105
ESC - 045GH - 11				57.20	12.54		0.093
ESC - 045GH - 12				63.50	13.68		0.084
ESC - 045GH - 13				76.20	14.82		0.076
ESC - 045H - 1	1.14	15.30	13.02	12.70	4.27	3.169	0.345
ESC - 045H - 2				16.00	4.56		0.300
ESC - 045H - 3				19.00	4.84		0.268
ESC - 045H - 4				22.30	5.41		0.219
ESC - 045H - 5				25.40	5.95		0.187
ESC - 045H - 6				32.00	7.12		0.141
ESC - 045H - 7				38.10	8.26		0.114
ESC - 045H - 8				41.30	9.12		0.100
ESC - 045H - 9				44.50	10.26		0.085
ESC - 045H - 10				50.80	11.40		0.075
ESC - 045H - 11				57.20	12.54		0.066
ESC - 045H - 12				63.50	13.68		0.060
ESC - 045H - 13				69.85	14.25		0.057
ESC - 045H - 14				76.20	14.82		0.054
ESC - 045H - 15				82.60	15.96		0.050
ESC - 045H - 16				88.90	17.10		0.046



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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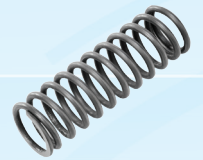


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 047C - 1				9.50	6.60		5.088
ESC - 047C - 2				11.20	7.50		4.190
ESC - 047C - 3				12.70	8.40		3.561
ESC - 047C - 4				14.30	9.00		3.238
ESC - 047C - 5				16.00	9.60		2.968
ESC - 047C - 6				17.50	10.80		2.544
ESC - 047C - 7				19.00	12.00		2.226
ESC - 047C - 8				20.70	12.60		2.095
ESC - 047C - 9				22.30	13.20		1.978
ESC - 047C - 10				23.80	13.80		1.874
ESC - 047C - 11	1.20	6.10	3.70	25.40	14.40	17.999	1.780
ESC - 047C - 12				28.60	16.20		1.548
ESC - 047C - 13				30.00	16.80		1.484
ESC - 047C - 14				32.00	18.60		1.319
ESC - 047C - 15				35.00	20.40		1.187
ESC - 047C - 16				38.10	21.60		1.113
ESC - 047C - 17				40.00	22.20		1.079
ESC - 047C - 18				44.50	25.80		0.913
ESC - 047C - 19				50.80	28.80		0.809
ESC - 047C - 20				57.20	33.60		0.685
ESC - 047C - 21				63.50	37.20		0.614
ESC - 047CD - 1				9.50	5.70		3.905
ESC - 047CD - 2				11.20	6.60		3.068
ESC - 047CD - 3				12.70	7.50		2.526
ESC - 047CD - 4				14.30	8.40		2.147
ESC - 047CD - 5				16.00	9.00		1.952
ESC - 047CD - 6				17.50	9.90		1.718
ESC - 047CD - 7				19.00	10.80		1.534
ESC - 047CD - 8				20.70	11.40		1.431
ESC - 047CD - 9				22.30	12.30		1.301
ESC - 047CD - 10	1.20	7.00	4.60	23.80	12.90	12.541	1.227
ESC - 047CD - 11				25.40	13.80		1.130
ESC - 047CD - 12				28.60	15.30		0.999
ESC - 047CD - 13				32.00	17.40		0.859
ESC - 047CD - 14				35.00	18.60		0.795
ESC - 047CD - 15				38.10	20.40		0.715
ESC - 047CD - 16				40.00	21.00		0.692
ESC - 047CD - 17				44.50	23.40		0.613
ESC - 047CD - 18				50.80	25.80		0.550
ESC - 047CD - 19				57.20	28.80		0.488
ESC - 047CD - 20				63.50	32.40		0.429

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



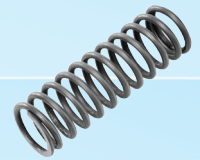
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 047D - 1				9.50	5.10		3.519
ESC - 047D - 2				11.20	6.00		2.639
ESC - 047D - 3				12.70	6.60		2.262
ESC - 047D - 4				14.30	7.50		1.863
ESC - 047D - 5				16.00	8.40		1.583
ESC - 047D - 6				17.50	9.00		1.439
ESC - 047D - 7				19.00	9.60		1.319
ESC - 047D - 8				20.70	9.90		1.266
ESC - 047D - 9				22.30	10.20		1.218
ESC - 047D - 10				23.80	11.10		1.092
ESC - 047D - 11	1.20	7.62	5.22	25.40	12.30	12.030	0.959
ESC - 047D - 12				28.60	13.80		0.833
ESC - 047D - 13				30.00	14.40		0.791
ESC - 047D - 14				32.00	15.60		0.719
ESC - 047D - 15				35.00	16.80		0.659
ESC - 047D - 16				38.10	18.00		0.609
ESC - 047D - 17				40.00	18.60		0.586
ESC - 047D - 18				44.50	21.60		0.494
ESC - 047D - 19				50.80	24.00		0.439
ESC - 047D - 20				57.20	26.40		0.395
ESC - 047D - 21				63.50	28.80		0.359
ESC - 047D - 22				70.00	30.60		0.337
ESC - 047DE - 1				9.50	5.10		2.961
ESC - 047DE - 2				11.20	6.00		2.221
ESC - 047DE - 3				12.70	6.60		1.903
ESC - 047DE - 4				14.30	7.20		1.665
ESC - 047DE - 5				16.00	8.10		1.402
ESC - 047DE - 6				17.50	8.70		1.269
ESC - 047DE - 7				19.00	9.60		1.110
ESC - 047DE - 8				22.30	10.80		0.951
ESC - 047DE - 9				25.40	12.00		0.833
ESC - 047DE - 10	1.20	8.00	5.60	28.60	13.20	11.162	0.740
ESC - 047DE - 11				32.00	14.40		0.666
ESC - 047DE - 12				35.00	15.60		0.605
ESC - 047DE - 13				38.10	16.80		0.555
ESC - 047DE - 14				40.00	17.40		0.533
ESC - 047DE - 15				44.50	19.20		0.476
ESC - 047DE - 16				50.80	21.60		0.416
ESC - 047DE - 17				57.20	25.80		0.341
ESC - 047DE - 18				63.50	28.50		0.306
ESC - 047DE - 19				76.20	32.40		0.266



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

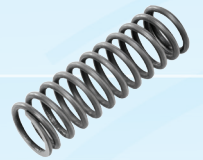


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 047DF - 1	1.20	8.60	6.20	12.70	6.30	9.335	1.591
ESC - 047DF - 2				14.30	7.20		1.292
ESC - 047DF - 3				16.00	7.80		1.149
ESC - 047DF - 4				17.50	8.40		1.034
ESC - 047DF - 5				19.00	9.00		0.940
ESC - 047DF - 6				22.30	10.20		0.795
ESC - 047DF - 7				25.40	11.40		0.689
ESC - 047DF - 8				28.60	12.60		0.608
ESC - 047DF - 9				32.00	14.40		0.517
ESC - 047DF - 10				35.00	15.60		0.470
ESC - 047DF - 11				38.10	16.80		0.430
ESC - 047DF - 12				40.00	17.40		0.413
ESC - 047DF - 13				44.50	19.20		0.369
ESC - 047DF - 14				50.80	21.00		0.333
ESC - 047DF - 15				57.20	24.00		0.287
ESC - 047DF - 16				63.50	26.40		0.258
ESC - 047E - 1	1.20	9.14	6.74	11.20	5.40	9.021	1.674
ESC - 047E - 2				12.70	6.00		1.395
ESC - 047E - 3				14.30	6.60		1.195
ESC - 047E - 4				16.00	7.20		1.046
ESC - 047E - 5				17.50	7.80		0.930
ESC - 047E - 6				19.00	8.40		0.837
ESC - 047E - 7				20.70	8.70		0.797
ESC - 047E - 8				22.30	9.60		0.697
ESC - 047E - 9				23.80	10.20		0.644
ESC - 047E - 10				25.40	10.80		0.598
ESC - 047E - 11				28.60	11.70		0.540
ESC - 047E - 12				32.00	13.20		0.465
ESC - 047E - 13				35.00	14.40		0.418
ESC - 047E - 14				38.10	15.60		0.380
ESC - 047E - 15				40.00	15.90		0.372
ESC - 047E - 16				44.50	17.10		0.341
ESC - 047E - 17				50.80	18.60		0.310
ESC - 047E - 18				57.20	21.60		0.261
ESC - 047E - 19				63.50	24.00		0.232
ESC - 047E - 20				70.00	26.40		0.209
ESC - 047E - 21				76.20	28.80		0.190
ESC - 047EE - 1	1.20	9.50	7.10	12.70	5.70	8.244	1.332
ESC - 047EE - 2				14.30	6.60		1.047
ESC - 047EE - 3				16.00	7.20		0.916
ESC - 047EE - 4				19.00	8.40		0.732
ESC - 047EE - 5				22.30	9.00		0.666
ESC - 047EE - 6				25.40	9.60		0.610
ESC - 047EE - 7				30.00	12.00		0.458
ESC - 047EE - 8				35.00	13.20		0.407
ESC - 047EE - 9				38.10	14.40		0.366
ESC - 047EE - 10				40.00	15.00		0.349
ESC - 047EE - 11				44.50	16.80		0.305
ESC - 047EE - 12				50.80	19.20		0.261

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



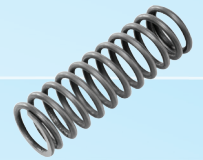
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 047EF - 1	1.20	9.90	7.50	12.70	6.00	6.731	1.060
ESC - 047EF - 2				14.30	6.60		0.909
ESC - 047EF - 3				16.00	7.20		0.795
ESC - 047EF - 4				17.50	7.80		0.707
ESC - 047EF - 5				19.00	8.40		0.636
ESC - 047EF - 6				20.70	9.00		0.578
ESC - 047EF - 7				22.30	9.60		0.530
ESC - 047EF - 8				23.80	10.20		0.489
ESC - 047EF - 9				25.40	10.80		0.454
ESC - 047EF - 10				28.60	12.00		0.397
ESC - 047EF - 11				32.00	12.60		0.374
ESC - 047EF - 12				35.00	13.20		0.353
ESC - 047EF - 13				38.10	15.00		0.303
ESC - 047EF - 14				44.50	17.10		0.259
ESC - 047EF - 15				50.80	19.20		0.227
ESC - 047F - 1	1.20	10.70	8.30	12.70	5.10	6.430	1.086
ESC - 047F - 2				14.30	5.70		0.888
ESC - 047F - 3				16.00	6.30		0.751
ESC - 047F - 4				17.50	6.90		0.651
ESC - 047F - 5				19.00	7.50		0.575
ESC - 047F - 6				22.30	8.40		0.488
ESC - 047F - 7				25.40	9.60		0.407
ESC - 047F - 8				28.60	10.20		0.376
ESC - 047F - 9				32.00	11.10		0.337
ESC - 047F - 10				35.00	12.00		0.305
ESC - 047F - 11				38.10	13.20		0.271
ESC - 047F - 12				40.00	14.40		0.244
ESC - 047F - 13				44.50	15.60		0.222
ESC - 047F - 14				50.80	17.10		0.199
ESC - 047FG - 1	1.20	11.60	9.20	12.70	5.10	6.001	0.827
ESC - 047FG - 2				16.00	6.00		0.620
ESC - 047FG - 3				19.00	6.90		0.496
ESC - 047FG - 4				22.30	7.80		0.413
ESC - 047FG - 5				25.40	8.40		0.372
ESC - 047FG - 6				32.00	10.20		0.286
ESC - 047FG - 7				38.10	12.00		0.232
ESC - 047FG - 8				44.50	13.50		0.201
ESC - 047FG - 9				50.80	15.00		0.177
ESC - 047FG - 10				63.50	18.00		0.143
ESC - 047FG - 11				76.20	20.40		0.124



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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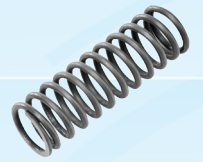


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 047G - 1				12.70	5.10		0.699
ESC - 047G - 2				16.00	6.00		0.524
ESC - 047G - 3				19.00	6.60		0.449
ESC - 047G - 4				22.30	7.20		0.393
ESC - 047G - 5				25.40	8.10		0.331
ESC - 047G - 6				32.00	9.60		0.262
ESC - 047G - 7				35.00	10.50		0.233
ESC - 047G - 8	1.20	12.20	9.80	38.10	11.40	5.567	0.209
ESC - 047G - 9				40.00	12.00		0.196
ESC - 047G - 10				44.50	13.20		0.174
ESC - 047G - 11				50.80	14.40		0.157
ESC - 047G - 12				57.20	15.60		0.143
ESC - 047G - 13				63.50	16.80		0.131
ESC - 047G - 14				70.00	18.60		0.116
ESC - 047G - 15				76.20	19.20		0.112
ESC - 127 120 - 1				12.70	4.80		0.688
ESC - 127 120 - 2				16.00	5.70		0.501
ESC - 127 120 - 3				20.00	6.60		0.393
ESC - 127 120 - 4				22.30	7.20		0.344
ESC - 127 120 - 5				25.40	7.80		0.306
ESC - 127 120 - 6				30.00	9.00		0.250
ESC - 127 120 - 7	1.20	12.70	10.30	35.00	10.20	5.212	0.211
ESC - 127 120 - 8				40.00	11.40		0.183
ESC - 127 120 - 9				45.00	12.60		0.162
ESC - 127 120 - 10				50.80	13.80		0.145
ESC - 127 120 - 11				60.00	16.20		0.119
ESC - 127 120 - 12				70.00	18.60		0.102
ESC - 127 120 - 13				76.20	19.80		0.095
ESC - 047GH - 1				12.70	4.50		0.598
ESC - 047GH - 2				16.00	5.10		0.465
ESC - 047GH - 3				19.00	6.00		0.349
ESC - 047GH - 4				22.30	6.60		0.299
ESC - 047GH - 5				25.40	7.20		0.261
ESC - 047GH - 6				32.00	8.40		0.209
ESC - 047GH - 7	1.20	13.80	11.40	35.00	9.00	4.698	0.190
ESC - 047GH - 8				38.10	9.60		0.174
ESC - 047GH - 9				40.00	10.20		0.161
ESC - 047GH - 10				44.50	11.40		0.139
ESC - 047GH - 11				50.80	12.60		0.123
ESC - 047GH - 12				57.20	13.80		0.110
ESC - 047GH - 13				63.50	15.00		0.099
ESC - 047GH - 14				76.20	17.40		0.083

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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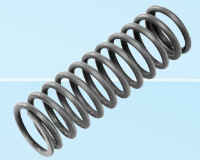
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 047H - 1	1.20	15.30	12.90	12.70	4.50	3.734	0.427
ESC - 047H - 2				16.00	4.80		0.373
ESC - 047H - 3				19.00	5.40		0.299
ESC - 047H - 4				22.30	6.00		0.249
ESC - 047H - 5				25.40	6.60		0.213
ESC - 047H - 6				32.00	8.40		0.149
ESC - 047H - 7				35.00	8.70		0.142
ESC - 047H - 8				38.10	9.00		0.135
ESC - 047H - 9				40.00	9.60		0.124
ESC - 047H - 10				44.50	10.80		0.106
ESC - 047H - 11				50.80	12.00		0.093
ESC - 047H - 12				57.20	13.20		0.083
ESC - 047H - 13				63.50	14.10		0.076
ESC - 047H - 14				76.20	15.60		0.068
ESC - 047H - 15				82.60	16.80		0.062
ESC - 047H - 16				88.90	18.00		0.057
ESC - 168 120 - 1	1.20	16.80	14.40	32.00	6.60	3.865	0.157
ESC - 168 120 - 2				48.00	9.00		0.100
ESC - 168 120 - 3				73.00	12.60		0.064
ESC - 168 120 - 4				89.50	15.00		0.052
ESC - 168 120 - 5				106.00	17.40		0.044
ESC - 076 125 - 1	1.25	7.55	5.05	12.00	6.87	13.800	2.826
ESC - 076 125 - 2				17.00	9.37		1.797
ESC - 076 125 - 3				25.00	13.12		1.162
ESC - 076 125 - 4				35.00	18.12		0.789
ESC - 076 125 - 5				51.50	25.00		0.548
ESC - 049D - 1	1.25	7.62	5.12	9.50	6.25	11.072	3.181
ESC - 049D - 2				11.20	6.87		2.734
ESC - 049D - 3				12.70	7.81		2.251
ESC - 049D - 4				14.30	8.75		1.908
ESC - 049D - 5				16.00	9.37		1.738
ESC - 049D - 6				17.50	10.31		1.529
ESC - 049D - 7				19.00	11.25		1.363
ESC - 049D - 8				20.70	11.87		1.274
ESC - 049D - 9				22.30	12.81		1.158
ESC - 049D - 10				23.80	13.75		1.060
ESC - 049D - 11				25.40	14.06		1.032
ESC - 049D - 12				28.60	16.25		0.867
ESC - 049D - 13				32.00	17.81		0.779
ESC - 049D - 14				35.00	19.37		0.707
ESC - 049D - 15				38.10	20.93		0.647
ESC - 049D - 16				44.50	24.37		0.545
ESC - 049D - 17				50.80	27.50		0.477
ESC - 049D - 18				57.20	30.93		0.419
ESC - 049D - 19				63.50	34.06		0.378



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 049DE - 1	1.25	8.00	5.50	12.70	6.87	13.397	2.298
ESC - 049DE - 2				17.50	8.75		1.604
ESC - 049DE - 3				25.40	12.18		1.036
ESC - 049DE - 4				28.60	13.75		0.891
ESC - 049DE - 5				35.00	17.18		0.683
ESC - 049DE - 6				44.50	20.31		0.563
ESC - 049DE - 7				50.80	23.12		0.486
ESC - 049DE - 8				63.50	28.75		0.382
ESC - 049E - 1	1.25	9.14	6.64	11.20	5.62	10.353	2.017
ESC - 049E - 2				12.70	6.25		1.674
ESC - 049E - 3				14.30	6.87		1.439
ESC - 049E - 4				16.00	7.50		1.255
ESC - 049E - 5				17.50	8.12		1.118
ESC - 049E - 6				19.00	8.75		1.004
ESC - 049E - 7				20.70	9.37		0.914
ESC - 049E - 8				22.30	10.00		0.837
ESC - 049E - 9				25.40	10.93		0.745
ESC - 049E - 10				28.60	12.50		0.627
ESC - 049E - 11				32.00	13.75		0.558
ESC - 049E - 12				35.00	15.00		0.502
ESC - 049E - 13				38.10	15.93		0.467
ESC - 049E - 14				44.50	18.12		0.402
ESC - 049E - 15				50.80	20.62		0.346
ESC - 049E - 16				57.20	23.12		0.304
ESC - 049E - 17				63.50	25.62		0.271
ESC - 049E - 18				70.00	27.81		0.248
ESC - 049E - 19				76.20	30.62		0.223
ESC - 093 125 - 1	1.25	9.25	6.75	15.00	6.87	11.271	1.380
ESC - 093 125 - 2				22.00	9.37		0.877
ESC - 093 125 - 3				33.00	13.12		0.567
ESC - 093 125 - 4				47.50	16.25		0.438
ESC - 093 125 - 5				69.00	23.75		0.283
ESC - 113 125 - 1	1.25	11.25	8.75	20.00	6.87	9.100	0.706
ESC - 113 125 - 2				29.50	9.37		0.449
ESC - 113 125 - 3				44.50	13.12		0.290
ESC - 113 125 - 4				64.00	18.12		0.197
ESC - 113 125 - 5				93.50	25.00		0.137
ESC - 049FG - 1	1.25	11.60	9.10	12.70	5.62	6.253	0.893
ESC - 049FG - 2				16.00	6.56		0.686
ESC - 049FG - 3				19.00	7.50		0.556
ESC - 049FG - 4				25.40	9.37		0.405
ESC - 049FG - 5				28.60	10.62		0.342
ESC - 049FG - 6				38.10	13.43		0.254
ESC - 049FG - 7				44.50	15.31		0.217
ESC - 049FG - 8				50.80	17.50		0.185
ESC - 049FG - 9				63.50	21.25		0.148
ESC - 049FG - 10				76.20	25.00		0.123
ESC - 049FG - 11				93.80	30.31		0.100

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



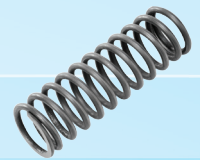
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 138 125 - 1	1.25	13.75	11.25	27.00	6.87	7.308	0.361
ESC - 138 125 - 2				41.50	9.37		0.230
ESC - 138 125 - 3				62.50	13.12		0.148
ESC - 138 125 - 4				90.50	18.12		0.101
ESC - 138 125 - 5				130.00	25.00		0.070
ESC - 049GH - 1	1.25	13.80	11.30	25.40	7.50	5.400	0.312
ESC - 049GH - 2				27.00	7.81		0.294
ESC - 049GH - 3				30.50	8.75		0.249
ESC - 049GH - 4				38.10	10.31		0.200
ESC - 049GH - 5				41.30	10.93		0.185
ESC - 049GH - 6				50.80	13.12		0.147
ESC - 049GH - 7				61.00	15.62		0.119
ESC - 049GH - 8				76.20	18.75		0.096
ESC - 049GH - 9				88.90	21.87		0.080
ESC - 049GH - 10				130.20	30.62		0.055
ESC - 049H - 1	1.25	15.30	12.80	16.00	5.00	4.895	0.444
ESC - 049H - 2				19.00	5.62		0.357
ESC - 049H - 3				22.30	6.25		0.296
ESC - 049H - 4				25.40	6.87		0.254
ESC - 049H - 5				32.00	7.60		0.218
ESC - 049H - 6				38.10	8.75		0.177
ESC - 049H - 7				44.50	10.00		0.148
ESC - 049H - 8				50.80	11.25		0.127
ESC - 049H - 9				57.20	12.50		0.111
ESC - 049H - 10				63.50	13.75		0.098
ESC - 049H - 11				70.00	15.00		0.089
ESC - 049H - 12				76.20	16.25		0.080
ESC - 049HJ - 1	1.25	16.80	14.30	16.00	5.00	3.904	0.328
ESC - 049HJ - 2				19.00	5.62		0.263
ESC - 049HJ - 3				22.30	6.25		0.218
ESC - 049HJ - 4				25.40	6.87		0.188
ESC - 049HJ - 5				32.00	7.60		0.160
ESC - 049HJ - 6				38.10	8.12		0.146
ESC - 049HJ - 7				44.50	8.75		0.131
ESC - 049HJ - 8				50.80	10.00		0.109
ESC - 049HJ - 9				57.20	11.25		0.093
ESC - 049HJ - 10				63.50	12.10		0.085
ESC - 049HJ - 11				70.00	13.12		0.077
ESC - 049HJ - 12				76.20	14.37		0.069
ESC - 173 125 - 1	1.25	17.25	14.75	40.50	6.87	5.661	0.172
ESC - 173 125 - 2				62.00	9.37		0.109
ESC - 173 125 - 3				94.00	13.12		0.070
ESC - 173 125 - 4				140.00	18.12		0.048
ESC - 173 125 - 5				205.00	25.00		0.033



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

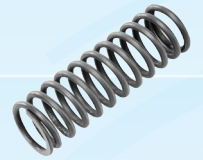


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 049K - 1	1.25	21.50	19.00	19.00	4.68	3.153	0.170
ESC - 049K - 2				22.30	5.00		0.148
ESC - 049K - 3				25.40	5.31		0.132
ESC - 049K - 4				32.00	5.62		0.119
ESC - 049K - 5				38.10	6.25		0.099
ESC - 049K - 6				50.80	7.60		0.072
ESC - 049K - 7				63.50	8.75		0.059
ESC - 049K - 8				76.20	10.00		0.049
ESC - 049K - 9				88.90	11.25		0.042
ESC - 049K - 10				101.60	12.50		0.037
ESC - 051D - 1	1.30	7.62	5.02	9.50	6.50	12.192	3.810
ESC - 051D - 2				11.20	7.48		3.048
ESC - 051D - 3				12.70	8.12		2.696
ESC - 051D - 4				14.30	9.10		2.286
ESC - 051D - 5				16.00	10.07		1.991
ESC - 051D - 6				17.50	10.72		1.832
ESC - 051D - 7				19.00	11.70		1.633
ESC - 051D - 8				20.70	12.35		1.524
ESC - 051D - 9				22.30	13.32		1.387
ESC - 051D - 10				23.80	13.97		1.308
ESC - 051D - 11				25.40	14.95		1.203
ESC - 051D - 12				28.60	16.57		1.064
ESC - 051D - 13				32.00	18.20		0.952
ESC - 051D - 14				35.00	20.15		0.846
ESC - 051D - 15				38.10	22.10		0.762
ESC - 051D - 16				44.50	25.02		0.663
ESC - 051D - 17				50.80	27.95		0.586
ESC - 051D - 18				57.20	31.85		0.508
ESC - 051D - 19				63.50	35.10		0.457
ESC - 051E - 1	1.30	9.14	6.54	11.30	6.17	10.824	2.185
ESC - 051E - 2				12.70	6.82		1.848
ESC - 051E - 3				14.30	7.47		1.601
ESC - 051E - 4				16.00	8.12		1.412
ESC - 051E - 5				17.50	8.77		1.263
ESC - 051E - 6				19.00	9.42		1.142
ESC - 051E - 7				20.70	10.00		1.052
ESC - 051E - 8				22.30	10.72		0.959
ESC - 051E - 9				25.40	12.00		0.828
ESC - 051E - 10				28.60	13.65		0.704
ESC - 051E - 11				32.00	14.90		0.633
ESC - 051E - 12				35.00	16.25		0.570
ESC - 051E - 13				38.10	17.55		0.520
ESC - 051E - 14				44.50	20.15		0.443
ESC - 051E - 15				50.80	22.75		0.386
ESC - 051E - 16				57.20	25.35		0.342
ESC - 051E - 17				63.50	28.27		0.303
ESC - 051E - 18				70.00	30.87		0.275
ESC - 051E - 19				76.20	33.47		0.252

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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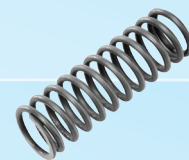
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 051F - 1				12.70	6.17		1.268
ESC - 051F - 2				16.00	7.15		0.992
ESC - 051F - 3				19.00	8.12		0.819
ESC - 051F - 4				22.30	9.42		0.663
ESC - 051F - 5				25.40	10.40		0.579
ESC - 051F - 6	1.30	10.70	8.10	32.00	12.35	8.449	0.463
ESC - 051F - 7				38.10	14.95		0.365
ESC - 051F - 8				44.50	17.22		0.309
ESC - 051F - 9				50.80	19.50		0.267
ESC - 051F - 10				57.20	21.77		0.235
ESC - 051F - 11				63.50	23.40		0.217
ESC - 051G - 1				12.70	5.85		0.891
ESC - 051G - 2				16.00	6.50		0.742
ESC - 051G - 3				19.00	7.15		0.636
ESC - 051G - 4				22.30	8.45		0.495
ESC - 051G - 5				25.40	9.42		0.425
ESC - 051G - 6				32.00	11.05		0.342
ESC - 051G - 7	1.30	12.20	9.60	38.10	12.67	6.791	0.287
ESC - 051G - 8				41.30	13.97		0.255
ESC - 051G - 9				44.50	14.62		0.241
ESC - 051G - 10				50.80	16.25		0.212
ESC - 051G - 11				57.20	18.20		0.185
ESC - 051G - 12				63.50	20.80		0.159
ESC - 051G - 13				70.00	22.75		0.143
ESC - 051G - 14				76.20	31.26		0.101
ESC - 055E - 1				11.20	6.65		3.044
ESC - 055E - 2				12.70	7.35		2.575
ESC - 055E - 3				14.30	8.05		2.232
ESC - 055E - 4				16.00	8.75		1.969
ESC - 055E - 5				17.50	9.45		1.762
ESC - 055E - 6				19.00	10.50		1.522
ESC - 055E - 7				20.70	11.20		1.395
ESC - 055E - 8				22.30	11.90		1.287
ESC - 055E - 9				25.40	13.30		1.116
ESC - 055E - 10	1.40	9.14	6.34	28.60	14.35	13.503	1.014
ESC - 055E - 11				32.00	16.10		0.881
ESC - 055E - 12				35.00	16.80		0.837
ESC - 055E - 13				38.10	18.90		0.728
ESC - 055E - 14				40.00	19.60		0.697
ESC - 055E - 15				44.50	21.70		0.620
ESC - 055E - 16				50.80	23.80		0.558
ESC - 055E - 17				57.20	27.30		0.478
ESC - 055E - 18				63.50	30.80		0.418
ESC - 055E - 19				70.00	33.60		0.380
ESC - 055E - 20				76.20	36.40		0.348



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

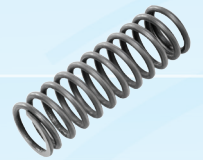


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 100 140 - 1	1.40	10.00	7.20	15.00	7.70	11.986	1.743
ESC - 100 140 - 2				21.00	10.50		1.109
ESC - 100 140 - 3				35.00	16.10		0.642
ESC - 100 140 - 4				45.00	20.30		0.488
ESC - 100 140 - 5				55.00	24.50		0.393
ESC - 055F - 1	1.40	10.70	7.90	12.70	7.00	9.955	1.608
ESC - 055F - 2				16.00	8.05		1.286
ESC - 055F - 3				19.00	9.45		1.016
ESC - 055F - 4				22.30	10.50		0.877
ESC - 055F - 5				25.40	11.90		0.742
ESC - 055F - 6				32.00	14.00		0.603
ESC - 055F - 7				38.10	16.80		0.482
ESC - 055F - 8				44.50	19.60		0.402
ESC - 055F - 9				50.80	21.70		0.357
ESC - 055F - 10				57.20	24.50		0.311
ESC - 055F - 11				63.50	27.30		0.275
ESC - 110 140 - 1	1.40	11.00	8.20	30.00	13.30	9.769	0.585
ESC - 110 140 - 2				35.00	16.10		0.461
ESC - 110 140 - 3				45.00	18.90		0.381
ESC - 110 140 - 4				55.00	23.10		0.302
ESC - 110 140 - 5				70.00	28.70		0.237
ESC - 055G - 1	1.40	12.20	9.40	12.70	5.95	8.897	1.369
ESC - 055G - 2				16.00	7.00		1.027
ESC - 055G - 3				19.00	8.40		0.770
ESC - 055G - 4				22.30	9.10		0.684
ESC - 055G - 5				25.40	9.80		0.616
ESC - 055G - 6				32.00	12.60		0.440
ESC - 055G - 7				35.00	13.30		0.410
ESC - 055G - 8				38.10	14.00		0.385
ESC - 055G - 9				41.30	15.40		0.342
ESC - 055G - 10				44.50	16.80		0.308
ESC - 055G - 11				50.80	18.20		0.280
ESC - 055G - 12				57.20	20.30		0.246
ESC - 055G - 13				63.50	22.40		0.220
ESC - 055G - 14				70.00	25.20		0.192
ESC - 055G - 15				76.20	28.00		0.171
ESC - 055GH - 1	1.40	13.80	11.00	12.70	5.60	6.919	1.018
ESC - 055GH - 2				14.30	5.95		0.904
ESC - 055GH - 3				16.00	6.65		0.740
ESC - 055GH - 4				19.00	7.35		0.626
ESC - 055GH - 5				22.30	8.40		0.509
ESC - 055GH - 6				25.40	8.75		0.479
ESC - 055GH - 7				28.60	10.15		0.387
ESC - 055GH - 8				32.00	11.20		0.339
ESC - 055GH - 9				35.00	12.60		0.290
ESC - 055GH - 10				38.10	13.30		0.271
ESC - 055GH - 11				41.30	14.00		0.254
ESC - 055GH - 12				44.50	15.40		0.226
ESC - 055GH - 13				50.80	17.50		0.193
ESC - 055GH - 14				57.20	19.60		0.169
ESC - 055GH - 15				63.50	21.00		0.156
ESC - 055GH - 16				76.20	25.20		0.127

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



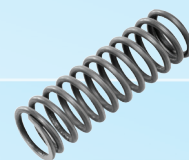
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 150 140 - 1	1.40	15.00	12.20	26.00	7.70	8.052	0.440
ESC - 150 140 - 2				40.00	10.50		0.280
ESC - 150 140 - 3				65.50	15.40		0.171
ESC - 150 140 - 4				80.00	19.60		0.128
ESC - 150 140 - 5				93.00	22.40		0.110
ESC - 150 140 - 6				105.00	23.80		0.102
ESC - 055H - 1	1.40	15.30	12.50	16.00	5.60	6.785	0.722
ESC - 055H - 2				19.00	6.30		0.578
ESC - 055H - 3				22.30	7.00		0.481
ESC - 055H - 4				25.40	7.70		0.413
ESC - 055H - 5				32.00	9.10		0.321
ESC - 055H - 6				35.00	9.80		0.289
ESC - 055H - 7				38.10	10.50		0.262
ESC - 055H - 8				40.00	10.85		0.251
ESC - 055H - 9				44.50	11.90		0.222
ESC - 055H - 10				50.80	14.00		0.180
ESC - 055H - 11				57.20	15.40		0.160
ESC - 055H - 12				63.50	16.80		0.144
ESC - 055H - 13				70.00	18.20		0.131
ESC - 055H - 14				76.20	19.20		0.123
ESC - 055HJ - 1	1.40	16.80	14.00	16.00	5.25	6.460	0.607
ESC - 055HJ - 2				19.00	5.95		0.472
ESC - 055HJ - 3				22.30	6.65		0.386
ESC - 055HJ - 4				25.40	7.00		0.354
ESC - 055HJ - 5				32.00	8.05		0.283
ESC - 055HJ - 6				38.10	9.10		0.236
ESC - 055HJ - 7				44.50	10.50		0.193
ESC - 055HJ - 8				50.80	11.90		0.163
ESC - 055HJ - 9				57.20	12.95		0.146
ESC - 055HJ - 10				63.50	14.35		0.128
ESC - 055HJ - 11				70.00	15.40		0.118
ESC - 055HJ - 12				76.20	16.45		0.109
ESC - 175 140 - 1	1.40	17.50	14.70	35.00	7.70	7.390	0.265
ESC - 175 140 - 2				55.00	10.50		0.169
ESC - 175 140 - 3				82.50	14.70		0.109
ESC - 175 140 - 4				120.00	20.30		0.074
ESC - 175 140 - 5				180.00	28.70		0.050
ESC - 055J - 1	1.40	18.30	15.50	16.00	5.25	4.934	0.459
ESC - 055J - 2				19.00	5.95		0.357
ESC - 055J - 3				22.30	6.65		0.292
ESC - 055J - 4				25.40	7.00		0.268
ESC - 055J - 5				32.00	8.05		0.214
ESC - 055J - 6				38.10	9.10		0.178
ESC - 055J - 7				44.50	10.15		0.153
ESC - 055J - 8				50.80	10.85		0.139
ESC - 055J - 9				57.20	11.90		0.123
ESC - 055J - 10				63.50	12.95		0.110
ESC - 055J - 11				70.00	19.20		0.068
ESC - 055J - 12				76.20	20.65		0.063



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

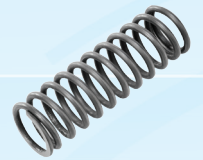


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 055K - 1	1.40	21.50	18.70	19.00	5.25	4.121	0.273
ESC - 055K - 2				22.30	5.60		0.239
ESC - 055K - 3				25.40	5.96		0.212
ESC - 055K - 4				32.00	6.65		0.173
ESC - 055K - 5				38.10	7.70		0.136
ESC - 055K - 6				50.80	9.10		0.106
ESC - 055K - 7				63.50	11.20		0.079
ESC - 055K - 8				76.20	13.30		0.063
ESC - 055K - 9				88.90	15.40		0.053
ESC - 055K - 10				101.60	17.50		0.045
ESC - 059E - 1	1.50	9.14	6.14	11.20	7.50	14.583	3.823
ESC - 059E - 2				12.70	8.25		3.277
ESC - 059E - 3				14.30	9.00		2.867
ESC - 059E - 4				16.00	9.75		2.549
ESC - 059E - 5				17.50	10.50		2.294
ESC - 059E - 6				19.00	11.62		1.998
ESC - 059E - 7				20.70	12.37		1.838
ESC - 059E - 8				22.30	13.50		1.638
ESC - 059E - 9				25.40	15.00		1.433
ESC - 059E - 10				28.60	16.87		1.241
ESC - 059E - 11				32.00	18.75		1.092
ESC - 059E - 12				35.00	20.25		0.997
ESC - 059E - 13				38.10	22.12		0.900
ESC - 059E - 14				44.50	25.50		0.764
ESC - 059E - 15				50.80	28.87		0.665
ESC - 059E - 16				57.20	32.25		0.588
ESC - 059E - 17				63.50	36.00		0.521
ESC - 059E - 18				70.00	39.00		0.478
ESC - 059E - 19				76.20	42.75		0.432
ESC - 100 150 - 1	1.50	10.00	7.00	14.00	8.25	13.673	2.379
ESC - 100 150 - 2				20.50	11.25		1.514
ESC - 100 150 - 3				25.00	13.50		1.189
ESC - 100 150 - 4				30.00	15.75		0.979
ESC - 100 150 - 5				40.00	18.75		0.793
ESC - 100 150 - 6				42.50	21.00		0.694
ESC - 100 150 - 7				48.00	24.00		0.595
ESC - 100 150 - 8				61.50	30.75		0.450
ESC - 100 150 - 9				68.00	33.75		0.406
ESC - 100 150 - 10				75.00	36.75		0.370
ESC - 059F - 1	1.50	10.70	7.70	12.70	7.12	12.843	2.397
ESC - 059F - 2				16.00	8.25		1.876
ESC - 059F - 3				19.00	9.75		1.459
ESC - 059F - 4				22.30	11.25		1.194
ESC - 059F - 5				25.40	12.75		1.010
ESC - 059F - 6				32.00	15.00		0.821
ESC - 059F - 7				38.10	18.00		0.656
ESC - 059F - 8				44.50	21.00		0.547
ESC - 059F - 9				50.80	23.25		0.486
ESC - 059F - 10				57.20	25.50		0.438
ESC - 059F - 11				63.50	29.25		0.375

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



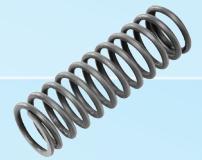
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 059G - 1	1.50	12.20	9.20	12.70	6.75	10.739	1.670
ESC - 059G - 2				16.00	7.87		1.288
ESC - 059G - 3				19.00	9.00		1.043
ESC - 059G - 4				22.30	10.50		0.835
ESC - 059G - 5				25.40	11.25		0.759
ESC - 059G - 6				32.00	13.50		0.596
ESC - 059G - 7				38.10	15.75		0.491
ESC - 059G - 8				41.30	16.87		0.451
ESC - 059G - 9				44.50	18.00		0.417
ESC - 059G - 10				50.80	20.25		0.363
ESC - 059G - 11				57.20	22.50		0.321
ESC - 059G - 12				63.50	24.75		0.288
ESC - 059G - 13				70.00	27.00		0.261
ESC - 059G - 14				76.20	29.25		0.238
ESC - 125 150 - 1	1.50	12.50	9.50	18.00	8.25	10.509	1.098
ESC - 125 150 - 2				26.00	11.25		0.698
ESC - 125 150 - 3				39.00	15.75		0.452
ESC - 125 150 - 4				56.00	21.75		0.307
ESC - 125 150 - 5				81.00	30.75		0.207
ESC - 059GH - 1	1.50	13.80	10.80	12.70	6.00	8.289	1.374
ESC - 059GH - 2				16.00	6.75		1.099
ESC - 059GH - 3				19.00	7.50		0.916
ESC - 059GH - 4				22.30	8.62		0.735
ESC - 059GH - 5				25.40	9.37		0.648
ESC - 059GH - 6				32.00	11.25		0.499
ESC - 059GH - 7				38.10	13.12		0.407
ESC - 059GH - 8				41.30	15.00		0.343
ESC - 059GH - 9				44.50	16.87		0.297
ESC - 059GH - 10				50.80	18.75		0.261
ESC - 059GH - 11				57.20	21.00		0.229
ESC - 059GH - 12				63.50	22.50		0.211
ESC - 059GH - 13				76.20	24.75		0.189
ESC - 140 150 - 1	1.50	14.00	11.00	20.50	8.25	9.161	0.748
ESC - 140 150 - 2				28.00	9.75		0.582
ESC - 140 150 - 3				30.50	11.25		0.476
ESC - 140 150 - 4				35.00	12.75		0.402
ESC - 140 150 - 5				40.50	14.25		0.349
ESC - 140 150 - 6				45.50	15.75		0.308
ESC - 140 150 - 7				62.00	17.25		0.275
ESC - 140 150 - 8				65.70	21.75		0.209
ESC - 140 150 - 9				95.80	30.75		0.141
ESC - 145 150 - 1	1.50	14.50	11.50	32.30	11.25	8.904	0.423
ESC - 145 150 - 2				50.00	15.75		0.273
ESC - 145 150 - 3				65.00	19.50		0.211
ESC - 145 150 - 4				73.50	21.75		0.186
ESC - 145 150 - 5				97.00	27.75		0.141



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

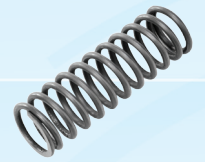


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 059H - 1	1.50	15.30	12.30	16.00	6.00	8.612	0.973
ESC - 059H - 2				19.00	7.12		0.710
ESC - 059H - 3				22.30	7.85		0.602
ESC - 059H - 4				25.40	8.62		0.520
ESC - 059H - 5				32.00	9.75		0.432
ESC - 059H - 6				38.10	11.62		0.339
ESC - 059H - 7				44.50	13.50		0.278
ESC - 059H - 8				50.80	14.62		0.251
ESC - 059H - 9				57.20	16.50		0.216
ESC - 059H - 10				63.50	18.00		0.194
ESC - 059H - 11				70.00	21.00		0.162
ESC - 059H - 12				76.20	22.50		0.149
ESC - 174 150 - 1	1.50	17.40	14.40	33.00	8.25	9.007	0.363
ESC - 174 150 - 2				50.80	11.25		0.231
ESC - 174 150 - 3				76.20	15.75		0.149
ESC - 174 150 - 4				110.00	21.75		0.101
ESC - 174 150 - 5				160.00	30.75		0.068
ESC - 220 150 - 1	1.50	22.00	19.00	33.40	8.25	4.171	0.169
ESC - 220 150 - 2				50.80	11.25		0.108
ESC - 220 150 - 3				76.20	15.75		0.069
ESC - 220 150 - 4				110.00	21.75		0.047
ESC - 220 150 - 5				162.00	30.75		0.032
ESC - 225 150 - 1	1.50	22.50	19.50	50.80	11.25	3.929	0.100
ESC - 225 150 - 2				63.50	13.50		0.078
ESC - 225 150 - 3				76.20	15.75		0.065
ESC - 225 150 - 4				88.90	18.00		0.055
ESC - 225 150 - 5				101.60	20.25		0.048
ESC - 090 160 - 1	1.60	9.00	5.80	25.40	16.00	19.194	2.042
ESC - 090 160 - 2				32.00	19.60		1.594
ESC - 090 160 - 3				38.10	22.80		1.334
ESC - 090 160 - 4				44.50	26.80		1.107
ESC - 090 160 - 5				51.80	29.60		0.990
ESC - 090 160 - 6				65.00	36.00		0.797
ESC - 090 160 - 7				76.20	45.20		0.622
ESC - 096 160 - 1	1.60	9.60	6.40	14.50	8.80	22.358	3.695
ESC - 096 160 - 2				21.50	12.00		2.351
ESC - 096 160 - 3				31.50	16.80		1.521
ESC - 096 160 - 4				45.00	23.20		1.034
ESC - 096 160 - 5				65.50	32.00		0.718
ESC - 063F - 1	1.60	10.70	7.50	12.70	8.00	13.805	2.929
ESC - 063F - 2				16.00	9.60		2.196
ESC - 063F - 3				19.00	11.20		1.757
ESC - 063F - 4				22.30	12.80		1.464
ESC - 063F - 5				25.40	14.40		1.255
ESC - 063F - 6				32.00	16.80		1.033
ESC - 063F - 7				38.10	20.00		0.836
ESC - 063F - 8				44.50	23.20		0.703
ESC - 063F - 9				50.80	25.60		0.627
ESC - 063F - 10				57.20	28.60		0.553
ESC - 063F - 11				63.50	32.00		0.488

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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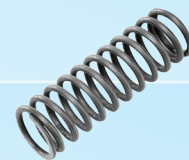
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 116 160 - 1	1.60	11.60	8.40	18.50	8.80	18.462	1.892
ESC - 116 160 - 2				27.00	12.00		1.204
ESC - 116 160 - 3				40.50	16.80		0.779
ESC - 116 160 - 4				58.50	23.20		0.529
ESC - 116 160 - 5				85.00	32.00		0.367
ESC - 063G - 1	1.60	12.20	9.00	12.70	8.00	11.968	1.853
ESC - 063G - 2				16.00	9.20		1.482
ESC - 063G - 3				19.00	10.40		1.235
ESC - 063G - 4				22.30	11.60		1.059
ESC - 063G - 5				25.40	12.40		0.967
ESC - 063G - 6				32.00	15.20		0.741
ESC - 063G - 7				38.10	17.60		0.617
ESC - 063G - 8				41.30	19.20		0.556
ESC - 063G - 9				44.50	20.80		0.505
ESC - 063G - 10				50.80	22.80		0.453
ESC - 063G - 11				57.20	25.60		0.397
ESC - 063G - 12				63.50	27.60		0.364
ESC - 063G - 13				76.20	33.60		0.292
ESC - 063GH - 1	1.60	13.80	10.60	12.70	6.40	10.544	1.823
ESC - 063GH - 2				16.00	7.20		1.458
ESC - 063GH - 3				19.00	8.00		1.215
ESC - 063GH - 4				22.30	9.20		0.972
ESC - 063GH - 5				25.40	10.00		0.858
ESC - 063GH - 6				32.00	12.00		0.663
ESC - 063GH - 7				38.10	14.00		0.540
ESC - 063GH - 8				41.30	16.00		0.455
ESC - 063GH - 9				44.50	18.00		0.394
ESC - 063GH - 10				50.80	20.00		0.347
ESC - 063GH - 11				57.20	22.40		0.303
ESC - 063GH - 12				63.50	24.00		0.280
ESC - 063GH - 13				76.20	26.40		0.251
ESC - 141 160 - 1	1.60	14.10	10.90	24.00	8.80	14.606	0.968
ESC - 141 160 - 2				36.00	12.00		0.616
ESC - 141 160 - 3				53.50	16.80		0.398
ESC - 141 160 - 4				78.00	23.20		0.271
ESC - 141 160 - 5				115.00	32.00		0.188
ESC - 063H - 1	1.60	15.30	12.10	16.00	6.80	9.766	1.144
ESC - 063H - 2				19.00	7.60		0.936
ESC - 063H - 3				22.30	8.40		0.792
ESC - 063H - 4				25.40	9.60		0.643
ESC - 063H - 5				32.00	11.60		0.490
ESC - 063H - 6				35.00	12.00		0.468
ESC - 063H - 7				38.10	12.80		0.429
ESC - 063H - 8				40.00	14.40		0.367
ESC - 063H - 9				44.50	16.00		0.321
ESC - 063H - 10				50.80	17.60		0.286
ESC - 063H - 11				57.20	19.20		0.257
ESC - 063H - 12				63.50	20.80		0.234
ESC - 063H - 13				70.00	23.20		0.206
ESC - 063H - 14				76.20	25.60		0.184
ESC - 063H - 15				82.60	27.20		0.171
ESC - 063H - 16				88.90	28.80		0.161



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 063HJ - 1	1.60	16.80	13.60	16.00	6.80	8.928	0.838
ESC - 063HJ - 2				19.00	7.60		0.685
ESC - 063HJ - 3				22.30	8.40		0.580
ESC - 063HJ - 4				25.40	9.20		0.502
ESC - 063HJ - 5				32.00	10.40		0.419
ESC - 063HJ - 6				38.10	12.00		0.342
ESC - 063HJ - 7				44.50	13.60		0.290
ESC - 063HJ - 8				50.80	15.20		0.251
ESC - 063HJ - 9				57.20	16.80		0.221
ESC - 063HJ - 10				63.50	18.40		0.198
ESC - 063HJ - 11				70.00	20.00		0.179
ESC - 063HJ - 12				76.20	21.60		0.164
ESC - 176 160 - 1	1.60	17.60	14.40	34.00	8.80	11.533	0.461
ESC - 176 160 - 2				51.50	12.00		0.293
ESC - 176 160 - 3				77.50	16.80		0.190
ESC - 176 160 - 4				110.00	23.20		0.129
ESC - 176 160 - 5				165.00	32.00		0.089
ESC - 063J - 1	1.60	18.30	15.10	16.00	6.80	6.338	0.631
ESC - 063J - 2				19.00	7.60		0.517
ESC - 063J - 3				22.30	8.40		0.437
ESC - 063J - 4				25.40	9.20		0.379
ESC - 063J - 5				32.00	10.80		0.299
ESC - 063J - 6				38.10	12.80		0.237
ESC - 063J - 7				44.50	14.00		0.210
ESC - 063J - 8				50.80	15.60		0.183
ESC - 063J - 9				57.20	17.20		0.162
ESC - 063J - 10				63.50	18.40		0.149
ESC - 063J - 11				70.00	20.00		0.135
ESC - 063J - 12				76.20	21.60		0.123
ESC - 200 160 - 1	1.60	20.00	16.80	38.10	8.80	6.191	0.303
ESC - 200 160 - 2				50.80	12.00		0.193
ESC - 200 160 - 3				63.50	15.20		0.141
ESC - 200 160 - 4				76.20	18.40		0.111
ESC - 200 160 - 5				88.90	21.60		0.092
ESC - 200 160 - 6				101.60	24.80		0.078
ESC - 200 160 - 7				114.30	28.00		0.068
ESC - 063K - 1	1.60	21.50	18.30	19.00	6.40	5.152	0.420
ESC - 063K - 2				22.30	7.20		0.336
ESC - 063K - 3				25.40	8.00		0.280
ESC - 063K - 4				32.00	9.20		0.224
ESC - 063K - 5				38.10	10.40		0.186
ESC - 063K - 6				50.80	12.40		0.146
ESC - 063K - 7				63.50	14.40		0.120
ESC - 063K - 8				76.20	16.80		0.098
ESC - 063K - 9				88.90	19.20		0.084
ESC - 063K - 10				101.60	21.20		0.074

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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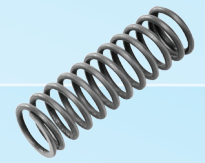
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 216 160 - 1	1.60	21.60	18.40	48.00	8.80	9.040	0.236
ESC - 216 160 - 2				73.50	12.00		0.150
ESC - 216 160 - 3				110.00	16.80		0.097
ESC - 216 160 - 4				165.00	23.20		0.066
ESC - 216 160 - 5				240.00	32.00		0.046
ESC - 063L - 1	1.60	24.60	21.40	19.00	6.00	5.289	0.311
ESC - 063L - 2				25.40	6.80		0.241
ESC - 063L - 3				32.00	7.60		0.197
ESC - 063L - 4				38.10	8.40		0.167
ESC - 063L - 5				44.50	9.20		0.145
ESC - 063L - 6				50.80	10.00		0.128
ESC - 063L - 7				57.20	10.80		0.114
ESC - 063L - 8				63.50	11.60		0.103
ESC - 063L - 9				70.00	12.40		0.094
ESC - 063L - 10				76.20	13.20		0.087
ESC - 063L - 11				88.90	14.80		0.075
ESC - 063L - 12				101.60	16.40		0.066
ESC - 292 160 - 1	1.60	29.20	26.00	50.00	8.80	3.341	0.090
ESC - 292 160 - 2				75.00	12.00		0.057
ESC - 292 160 - 3				90.00	13.60		0.048
ESC - 292 160 - 4				101.60	16.00		0.039
ESC - 292 160 - 5				127.00	19.20		0.031
ESC - 292 160 - 6				152.40	21.60		0.027
ESC - 292 160 - 7				203.20	28.80		0.019
ESC - 292 160 - 8				254.00	36.80		0.015
ESC - 067F - 1	1.70	10.70	7.30	19.00	11.90	16.900	2.315
ESC - 067F - 2				25.40	15.30		1.653
ESC - 067F - 3				32.00	18.70		1.286
ESC - 067F - 4				38.10	22.10		1.052
ESC - 067F - 5				44.50	25.50		0.890
ESC - 067F - 6				50.80	28.90		0.771
ESC - 067F - 7				57.20	32.30		0.681
ESC - 067F - 8				63.50	35.70		0.609
ESC - 067G - 1	1.70	12.20	8.80	12.70	7.65	15.714	2.916
ESC - 067G - 2				16.00	8.92		2.250
ESC - 067G - 3				19.00	10.20		1.822
ESC - 067G - 4				22.30	11.47		1.538
ESC - 067G - 5				25.40	13.17		1.270
ESC - 067G - 6				32.00	15.72		1.006
ESC - 067G - 7				38.10	18.70		0.810
ESC - 067G - 8				44.50	21.25		0.694
ESC - 067G - 9				50.80	23.80		0.607
ESC - 067G - 10				57.20	27.20		0.520
ESC - 067G - 11				63.50	29.75		0.470
ESC - 067G - 12				70.00	32.30		0.428
ESC - 067G - 13				76.20	35.27		0.389



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

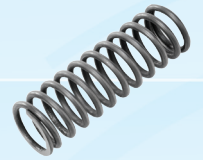


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 067GH - 1	1.70	13.80	10.40	12.70	7.22	13.076	2.126
ESC - 067GH - 2				16.00	8.50		1.587
ESC - 067GH - 3				19.00	9.35		1.361
ESC - 067GH - 4				22.30	10.62		1.123
ESC - 067GH - 5				25.40	11.90		0.952
ESC - 067GH - 6				32.00	14.02		0.763
ESC - 067GH - 7				38.10	16.15		0.635
ESC - 067GH - 8				44.50	19.12		0.515
ESC - 067GH - 9				50.80	21.25		0.453
ESC - 067GH - 10				57.20	23.80		0.397
ESC - 067GH - 11				63.50	26.35		0.352
ESC - 067GH - 12				70.00	28.90		0.317
ESC - 067GH - 13				76.20	31.02		0.293
ESC - 067H - 1	1.70	15.30	11.90	16.00	7.65	10.285	1.342
ESC - 067H - 2				19.00	8.92		1.035
ESC - 067H - 3				22.30	10.20		0.838
ESC - 067H - 4				25.40	11.05		0.745
ESC - 067H - 5				32.00	13.60		0.559
ESC - 067H - 6				38.00	15.30		0.479
ESC - 067H - 7				44.50	16.57		0.433
ESC - 067H - 8				50.80	20.82		0.327
ESC - 067H - 9				57.20	22.95		0.291
ESC - 067H - 10				63.50	26.77		0.244
ESC - 067H - 11				70.00	28.90		0.223
ESC - 067H - 12				76.20	31.45		0.203
ESC - 067HJ - 1	1.70	16.80	13.40	16.00	7.65	10.220	0.980
ESC - 067HJ - 2				19.00	8.50		0.817
ESC - 067HJ - 3				22.30	9.35		0.700
ESC - 067HJ - 4				25.40	10.20		0.612
ESC - 067HJ - 5				32.00	11.90		0.490
ESC - 067HJ - 6				38.10	13.60		0.408
ESC - 067HJ - 7				44.50	15.30		0.350
ESC - 067HJ - 8				50.80	17.00		0.306
ESC - 067HJ - 9				57.20	18.70		0.272
ESC - 067HJ - 10				63.50	20.40		0.245
ESC - 067HJ - 11				70.00	22.10		0.222
ESC - 067HJ - 12				76.20	23.80		0.204
ESC - 067J - 1	1.70	18.30	14.90	19.00	7.65	8.910	0.738
ESC - 067J - 2				22.30	8.92		0.569
ESC - 067J - 3				25.40	9.77		0.493
ESC - 067J - 4				32.00	11.05		0.410
ESC - 067J - 5				38.10	12.75		0.335
ESC - 067J - 6				44.50	14.02		0.295
ESC - 067J - 7				50.80	15.72		0.254
ESC - 067J - 8				57.20	17.00		0.230
ESC - 067J - 9				63.50	18.70		0.205
ESC - 067J - 10				76.20	22.10		0.167
ESC - 067J - 11				82.60	23.80		0.153
ESC - 067J - 12				88.90	25.50		0.141

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



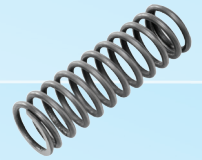
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 067K - 1	1.70	21.50	18.10	19.00	7.65	6.098	0.434
ESC - 067K - 2				22.30	8.50		0.362
ESC - 067K - 3				25.40	9.35		0.310
ESC - 067K - 4				32.00	10.20		0.271
ESC - 067K - 5				38.10	11.47		0.229
ESC - 067K - 6				50.80	13.60		0.181
ESC - 067K - 7				63.50	16.15		0.145
ESC - 067K - 8				76.20	18.70		0.120
ESC - 067K - 9				88.90	21.25		0.103
ESC - 067K - 10				101.60	23.80		0.090
ESC - 067L - 1	1.70	24.60	21.20	19.00	6.80	6.269	0.351
ESC - 067L - 2				25.40	7.65		0.281
ESC - 067L - 3				32.00	8.50		0.234
ESC - 067L - 4				38.10	9.35		0.200
ESC - 067L - 5				44.50	10.20		0.175
ESC - 067L - 6				50.80	11.05		0.156
ESC - 067L - 7				57.20	12.32		0.134
ESC - 067L - 8				63.50	13.17		0.122
ESC - 067L - 9				70.00	14.02		0.112
ESC - 067L - 10				76.20	14.87		0.104
ESC - 067L - 11				88.90	16.15		0.093
ESC - 067L - 12				101.60	17.85		0.082
ESC - 110 180 - 1	1.80	11.00	7.40	25.40	15.30	20.451	2.095
ESC - 110 180 - 2				32.00	19.80		1.513
ESC - 110 180 - 3				42.00	24.30		1.184
ESC - 110 180 - 4				55.00	31.50		0.878
ESC - 110 180 - 5				68.00	38.70		0.698
ESC - 071G - 1	1.80	12.20	8.60	12.70	8.10	18.082	3.771
ESC - 071G - 2				16.00	9.45		2.901
ESC - 071G - 3				17.50	10.35		2.514
ESC - 071G - 4				19.00	11.25		2.218
ESC - 071G - 5				22.30	12.60		1.886
ESC - 071G - 6				24.50	13.50		1.714
ESC - 071G - 7				25.40	14.40		1.571
ESC - 071G - 8				32.00	17.10		1.257
ESC - 071G - 9				38.10	20.25		1.019
ESC - 071G - 10				40.00	21.15		0.967
ESC - 071G - 11				44.50	23.40		0.857
ESC - 071G - 12				50.80	26.10		0.754
ESC - 071G - 13				57.20	29.25		0.661
ESC - 071G - 14				63.50	32.85		0.580
ESC - 071G - 15				70.00	36.00		0.523
ESC - 071G - 16				76.20	38.70		0.483



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 071GH - 1	1.80	13.80	10.20	12.70	8.10	11.773	2.455
ESC - 071GH - 2				16.00	9.90		1.753
ESC - 071GH - 3				19.00	11.25		1.444
ESC - 071GH - 4				22.30	12.60		1.227
ESC - 071GH - 5				25.40	13.95		1.067
ESC - 071GH - 6				32.00	17.10		0.818
ESC - 071GH - 7				38.10	19.80		0.682
ESC - 071GH - 8				41.30	21.60		0.613
ESC - 071GH - 9				44.50	23.40		0.558
ESC - 071GH - 10				50.80	25.65		0.501
ESC - 071GH - 11				57.20	28.80		0.438
ESC - 071GH - 12				63.50	31.50		0.396
ESC - 071GH - 13				76.20	36.90		0.331
ESC - 071H - 1	1.80	15.30	11.70	16.00	9.00	12.636	1.437
ESC - 071H - 2				19.00	10.35		1.149
ESC - 071H - 3				22.30	11.25		1.014
ESC - 071H - 4				25.40	12.15		0.907
ESC - 071H - 5				32.00	14.40		0.718
ESC - 071H - 6				38.10	16.65		0.594
ESC - 071H - 7				44.50	19.80		0.479
ESC - 071H - 8				50.80	21.60		0.431
ESC - 071H - 9				57.20	23.40		0.391
ESC - 071H - 10				63.50	25.65		0.351
ESC - 071H - 11				70.00	27.45		0.325
ESC - 071H - 12				76.20	30.60		0.287
ESC - 071HJ - 1	1.80	16.80	13.20	16.00	8.10	12.183	1.257
ESC - 071HJ - 2				19.00	9.00		1.047
ESC - 071HJ - 3				22.30	9.90		0.898
ESC - 071HJ - 4				25.40	10.80		0.785
ESC - 071HJ - 5				32.00	12.60		0.628
ESC - 071HJ - 6				38.10	14.40		0.523
ESC - 071HJ - 7				44.50	16.20		0.449
ESC - 071HJ - 8				50.80	18.00		0.392
ESC - 071HJ - 9				57.20	19.80		0.349
ESC - 071HJ - 10				63.50	21.60		0.314
ESC - 071HJ - 11				70.00	23.40		0.285
ESC - 071HJ - 12				76.20	25.20		0.261
ESC - 071J - 1	1.80	18.30	14.70	22.30	9.90	10.599	0.674
ESC - 071J - 2				25.40	10.35		0.629
ESC - 071J - 3				32.00	11.70		0.524
ESC - 071J - 4				38.10	13.50		0.429
ESC - 071J - 5				44.50	15.30		0.363
ESC - 071J - 6				50.80	17.10		0.314
ESC - 071J - 7				57.20	18.90		0.277
ESC - 071J - 8				63.50	20.70		0.248
ESC - 071J - 9				70.00	22.50		0.224
ESC - 071J - 10				76.20	24.30		0.205
ESC - 071J - 11				88.90	27.90		0.174
ESC - 071J - 12				101.60	31.50		0.152

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



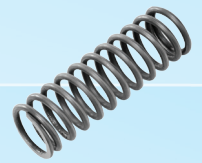
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 200 180 - 1	1.80	20.00	16.40	35.00	9.90	10.926	0.502
ESC - 200 180 - 2				51.50	13.50		0.319
ESC - 200 180 - 3				57.00	15.30		0.270
ESC - 200 180 - 4				70.00	18.90		0.207
ESC - 200 180 - 5				86.50	20.70		0.185
ESC - 200 180 - 6				100.00	26.10		0.140
ESC - 200 180 - 7				120.00	29.70		0.121
ESC - 200 180 - 8				140.00	31.50		0.113
ESC - 071K - 1	1.80	21.50	17.90	19.00	8.10	7.063	0.555
ESC - 071K - 2				22.30	9.00		0.462
ESC - 071K - 3				25.40	9.90		0.396
ESC - 071K - 4				32.00	11.25		0.326
ESC - 071K - 5				38.10	12.60		0.277
ESC - 071K - 6				50.80	14.40		0.231
ESC - 071K - 7				63.50	16.20		0.198
ESC - 071K - 8				76.20	18.00		0.173
ESC - 071K - 9				88.90	20.70		0.146
ESC - 071L - 1	1.80	24.60	21.00	19.00	7.20	7.515	0.447
ESC - 071L - 2				25.40	8.10		0.358
ESC - 071L - 3				32.00	9.00		0.298
ESC - 071L - 4				38.10	9.90		0.255
ESC - 071L - 5				44.50	10.80		0.223
ESC - 071L - 6				50.80	11.70		0.198
ESC - 071L - 7				57.20	12.60		0.179
ESC - 071L - 8				63.50	13.50		0.162
ESC - 071L - 9				70.00	14.40		0.149
ESC - 071L - 10				76.20	15.30		0.137
ESC - 071L - 11				88.90	17.55		0.115
ESC - 071L - 12				101.60	19.35		0.102
ESC - 120 200 - 1	2.00	12.00	8.00	18.00	11.00	33.285	4.619
ESC - 120 200 - 2				26.50	15.00		2.939
ESC - 120 200 - 3				38.50	21.00		1.902
ESC - 120 200 - 4				55.00	29.00		1.293
ESC - 120 200 - 5				79.50	40.00		0.898
ESC - 123 200 - 1	2.00	12.30	8.30	25.00	15.00	26.900	2.690
ESC - 123 200 - 2				32.00	19.00		1.972
ESC - 123 200 - 3				38.00	21.00		1.740
ESC - 123 200 - 4				44.00	25.00		1.409
ESC - 123 200 - 5				51.00	28.00		1.232
ESC - 123 200 - 6				65.00	35.00		0.954
ESC - 123 200 - 7				76.00	39.00		0.845
ESC - 130 200 - 1	2.00	13.00	9.00	38.10	19.00	29.295	1.619
ESC - 130 200 - 2				50.80	25.00		1.156
ESC - 130 200 - 3				68.00	33.00		0.837
ESC - 130 200 - 4				90.00	43.00		0.622
ESC - 130 200 - 5				108.00	51.00		0.516



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

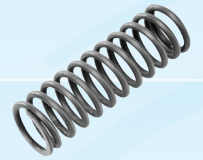


PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 140 200 - 1	2.00	14.00	10.00	20.00	11.00	22.987	2.673
ESC - 140 200 - 2				28.50	15.00		1.701
ESC - 140 200 - 3				40.00	21.00		1.100
ESC - 140 200 - 4				46.50	23.00		0.984
ESC - 140 200 - 5				50.80	25.00		0.891
ESC - 140 200 - 6				60.00	31.00		0.693
ESC - 140 200 - 7				75.00	35.00		0.603
ESC - 145 200 - 1	2.00	14.50	10.50	22.50	11.00	27.730	2.365
ESC - 145 200 - 2				33.00	15.00		1.505
ESC - 145 200 - 3				49.50	21.00		0.973
ESC - 145 200 - 4				71.00	29.00		0.662
ESC - 145 200 - 5				105.00	40.00		0.459
ESC - 168 200 - 1	2.00	16.80	12.80	25.40	11.00	21.115	1.424
ESC - 168 200 - 2				38.10	15.00		0.906
ESC - 168 200 - 3				50.80	19.00		0.664
ESC - 168 200 - 4				63.50	23.00		0.525
ESC - 168 200 - 5				76.20	27.00		0.433
ESC - 168 200 - 6				101.60	36.00		0.311
ESC - 180 200 - 1	2.00	18.00	14.00	30.00	11.00	21.413	1.127
ESC - 180 200 - 2				45.00	15.00		0.717
ESC - 180 200 - 3				57.00	20.00		0.493
ESC - 180 200 - 4				68.00	21.00		0.464
ESC - 180 200 - 5				98.00	29.00		0.315
ESC - 180 200 - 6				145.00	40.00		0.219
ESC - 180 200 - 7				178.00	50.00		0.171
ESC - 205 200 - 1	2.00	20.50	16.50	35.00	11.00	16.560	0.729
ESC - 205 200 - 2				50.80	15.00		0.464
ESC - 205 200 - 3				76.20	21.00		0.300
ESC - 205 200 - 4				101.60	28.00		0.212
ESC - 205 200 - 5				152.40	38.00		0.150
ESC - 220 200 - 1	2.00	22.00	18.00	41.00	11.00	17.310	0.577
ESC - 220 200 - 2				62.00	15.00		0.367
ESC - 220 200 - 3				94.00	21.00		0.237
ESC - 220 200 - 4				135.00	29.00		0.161
ESC - 220 200 - 5				200.00	40.00		0.112
ESC - 270 200 - 1	2.00	27.00	23.00	58.00	11.00	13.612	0.295
ESC - 270 200 - 2				88.50	15.00		0.188
ESC - 270 200 - 3				125.00	19.00		0.138
ESC - 270 200 - 4				135.00	21.00		0.121
ESC - 270 200 - 5				195.00	29.00		0.082
ESC - 270 200 - 6				290.00	40.00		0.057

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 080H - 1				16.00	10.00		2.290
ESC - 080H - 2				19.00	11.00		1.963
ESC - 080H - 3				22.30	12.00		1.718
ESC - 080H - 4				25.40	13.00		1.527
ESC - 080H - 5				32.00	16.00		1.145
ESC - 080H - 6	2.03	15.30	11.24	38.10	18.00	19.992	0.981
ESC - 080H - 7				44.50	20.50		0.833
ESC - 080H - 8				50.80	22.50		0.742
ESC - 080H - 9				57.20	25.00		0.654
ESC - 080H - 10				63.50	27.50		0.584
ESC - 080H - 11				70.00	30.00		0.528
ESC - 080H - 12				76.20	32.00		0.490
ESC - 080J - 1				22.30	11.00		1.066
ESC - 080J - 2				25.40	12.00		0.933
ESC - 080J - 3				32.00	14.00		0.746
ESC - 080J - 4				38.10	16.00		0.622
ESC - 080J - 5				44.50	18.00		0.533
ESC - 080J - 6	2.03	18.30	14.24	50.80	20.00	14.572	0.466
ESC - 080J - 7				57.20	22.00		0.414
ESC - 080J - 8				63.50	24.00		0.373
ESC - 080J - 9				70.00	26.00		0.339
ESC - 080J - 10				76.20	28.00		0.311
ESC - 080J - 11				88.90	32.00		0.266
ESC - 080J - 12				101.60	36.00		0.233
ESC - 080K - 1				22.30	10.00		0.726
ESC - 080K - 2				25.40	11.00		0.623
ESC - 080K - 3				32.00	12.50		0.513
ESC - 080K - 4				35.00	13.50		0.459
ESC - 080K - 5				38.10	14.00		0.436
ESC - 080K - 6	2.03	21.50	17.44	44.50	16.00	10.050	0.363
ESC - 080K - 7				50.80	17.50		0.323
ESC - 080K - 8				57.20	19.00		0.290
ESC - 080K - 9				63.50	21.00		0.256
ESC - 080K - 10				70.00	23.00		0.229
ESC - 080K - 11				76.20	25.00		0.207
ESC - 080K - 12				88.90	28.00		0.181
ESC - 080L - 1				19.00	8.50		0.622
ESC - 080L - 2				25.40	9.50		0.509
ESC - 080L - 3				32.00	10.50		0.430
ESC - 080L - 4				38.10	11.50		0.373
ESC - 080L - 5				44.50	13.00		0.311
ESC - 080L - 6	2.03	24.60	20.54	50.80	14.00	9.796	0.280
ESC - 080L - 7				57.20	15.00		0.254
ESC - 080L - 8				63.50	16.50		0.224
ESC - 080L - 9				70.00	17.50		0.207
ESC - 080L - 10				76.20	19.00		0.186
ESC - 080L - 11				88.90	21.00		0.164
ESC - 080L - 12				101.60	23.00		0.147



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 110 220 - 1	2.20	11.00	6.60	16.20	12.10	40.688	9.924
ESC - 110 220 - 2				23.00	16.50		6.315
ESC - 110 220 - 3				36.50	25.30		3.656
ESC - 110 220 - 4				56.80	39.60		2.170
ESC - 150 220 - 1	2.20	15.00	10.60	20.00	12.10	25.469	3.224
ESC - 150 220 - 2				30.20	16.50		2.052
ESC - 150 220 - 3				48.90	24.75		1.220
ESC - 190 220 - 1	2.20	19.00	14.60	57.00	23.10	19.720	0.587
ESC - 190 220 - 2				68.00	27.50		0.475
ESC - 190 220 - 3				80.00	31.90		0.399
ESC - 190 220 - 4				95.00	36.30		0.344
ESC - 190 220 - 5				106.00	40.70		0.302
ESC - 240 220 - 1	2.20	24.00	19.60	39.20	12.10	17.669	0.652
ESC - 240 220 - 2				59.10	16.50		0.415
ESC - 240 220 - 3				75.00	19.80		0.326
ESC - 240 220 - 4				99.00	25.30		0.240
ESC - 240 220 - 5				160.00	38.50		0.147
ESC - 091H - 1	2.30	15.30	10.70	16.00	9.77	35.191	5.745
ESC - 091H - 2				19.00	10.92		4.697
ESC - 091H - 3				22.30	12.07		3.972
ESC - 091H - 4				25.40	13.80		3.217
ESC - 091H - 5				32.00	16.67		2.456
ESC - 091H - 6				38.10	18.40		2.145
ESC - 091H - 7				44.50	21.85		1.716
ESC - 091H - 8				50.80	25.30		1.430
ESC - 091H - 9				57.20	28.75		1.225
ESC - 091H - 10				63.50	31.62		1.096
ESC - 091H - 11				69.80	34.50		0.990
ESC - 091H - 12				76.20	37.37		0.903
ESC - 091J - 1	2.30	18.30	13.70	22.30	10.35	32.815	2.761
ESC - 091J - 2				25.40	11.50		2.301
ESC - 091J - 3				32.00	13.22		1.845
ESC - 091J - 4				38.10	15.52		1.456
ESC - 091J - 5				44.50	17.25		1.255
ESC - 091J - 6				50.80	18.97		1.106
ESC - 091J - 7				57.20	21.27		0.953
ESC - 091J - 8				63.50	23.57		0.837
ESC - 091J - 9				69.80	25.87		0.747
ESC - 091J - 10				76.20	28.17		0.674
ESC - 091J - 11				88.90	32.20		0.575
ESC - 091J - 12				101.60	36.22		0.502

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



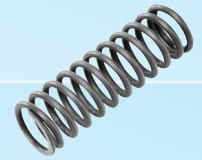
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 091K - 1	2.30	21.50	16.90	19.00	10.35	17.578	1.598
ESC - 091K - 2				25.40	11.50		1.331
ESC - 091K - 3				32.00	13.80		0.998
ESC - 091K - 4				35.00	14.95		0.887
ESC - 091K - 5				38.10	16.10		0.799
ESC - 091K - 6				44.50	18.40		0.665
ESC - 091K - 7				50.80	20.70		0.570
ESC - 091K - 8				57.20	23.00		0.499
ESC - 091K - 9				63.50	24.72		0.457
ESC - 091K - 10				69.90	27.02		0.410
ESC - 091K - 11				76.20	29.90		0.363
ESC - 091K - 12				89.00	34.50		0.307
ESC - 091K - 13				101.60	39.10		0.266
ESC - 091L - 1	2.30	24.60	20.00	25.40	9.20	20.638	1.274
ESC - 091L - 2				32.00	10.35		1.019
ESC - 091L - 3				38.10	12.07		0.787
ESC - 091L - 4				44.50	13.22		0.681
ESC - 091L - 5				50.80	14.37		0.601
ESC - 091L - 6				57.20	15.52		0.537
ESC - 091L - 7				63.50	16.67		0.486
ESC - 091L - 8				69.90	17.82		0.444
ESC - 091L - 9				76.20	18.90		0.410
ESC - 091L - 10				88.90	21.85		0.340
ESC - 091L - 11				101.60	24.15		0.300
ESC - 091M - 1	2.30	27.80	23.20	22.30	8.05	15.510	1.136
ESC - 091M - 2				25.40	9.20		0.852
ESC - 091M - 3				32.00	10.35		0.682
ESC - 091M - 4				38.10	11.50		0.568
ESC - 091M - 5				44.50	12.65		0.487
ESC - 091M - 6				50.80	13.80		0.426
ESC - 091M - 7				63.50	16.67		0.325
ESC - 091M - 8				79.20	18.97		0.273
ESC - 091M - 9				88.90	21.27		0.235
ESC - 091M - 10				101.60	24.15		0.200
ESC - 150 250 - 1	2.50	15.00	10.00	22.00	13.75	50.511	5.774
ESC - 150 250 - 2				32.00	18.75		3.674
ESC - 150 250 - 3				47.50	26.25		2.377
ESC - 150 250 - 4				67.50	36.25		1.616
ESC - 150 250 - 5				98.00	50.00		1.122
ESC - 185 250 - 1	2.50	18.50	13.50	27.50	13.75	37.853	2.753
ESC - 185 250 - 2				41.00	18.75		1.752
ESC - 185 250 - 3				61.00	26.25		1.133
ESC - 185 250 - 4				88.00	36.25		0.770
ESC - 185 250 - 5				130.00	50.00		0.535



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 098K - 1	2.50	21.50	16.50	25.40	13.12	21.023	1.776
ESC - 098K - 2				32.00	15.62		1.357
ESC - 098K - 3				38.10	18.12		1.098
ESC - 098K - 4				44.50	20.62		0.922
ESC - 098K - 5				50.80	23.12		0.794
ESC - 098K - 6				57.20	25.62		0.698
ESC - 098K - 7				63.50	28.75		0.605
ESC - 098K - 8				69.90	31.25		0.548
ESC - 098K - 9				76.20	33.75		0.500
ESC - 098K - 10				88.90	37.50		0.442
ESC -225 250 - 1	2.50	22.50	17.50	36.00	13.75	32.045	1.409
ESC -225 250 - 2				54.00	18.75		0.897
ESC -225 250 - 3				81.50	26.25		0.580
ESC -225 250 - 4				120.00	36.25		0.394
ESC -225 250 - 5				175.00	50.00		0.274
ESC - 098L - 1	2.50	24.60	19.60	25.40	11.25	22.563	1.462
ESC - 098L - 2				32.00	13.12		1.128
ESC - 098L - 3				38.10	14.37		0.977
ESC - 098L - 4				44.50	16.25		0.812
ESC - 098L - 5				50.80	18.12		0.697
ESC - 098L - 6				57.20	20.00		0.609
ESC - 098L - 7				63.50	21.87		0.542
ESC - 098L - 8				69.90	23.75		0.487
ESC - 098L - 9				76.20	25.62		0.443
ESC - 098L - 10				88.90	28.75		0.384
ESC - 098L - 11				101.60	32.50		0.332
ESC - 275 250 - 1	2.50	27.50	22.50	49.00	13.75	26.358	0.721
ESC - 275 250 - 2				74.50	18.75		0.459
ESC - 275 250 - 3				115.00	26.25		0.297
ESC - 275 250 - 4				165.00	36.25		0.202
ESC - 275 250 - 5				240.00	50.00		0.140
ESC - 200 280 - 1	2.80	20.00	14.40	27.20	15.40	41.088	3.487
ESC - 200 280 - 2				39.50	21.00		2.219
ESC - 200 280 - 3				64.20	32.20		1.284
ESC - 200 280 - 4				101.60	47.60		0.813
ESC - 110L - 1	2.80	24.60	19.00	32.00	14.70	27.557	1.844
ESC - 110L - 2				38.10	18.20		1.332
ESC - 110L - 3				44.50	21.00		1.090
ESC - 110L - 4				50.80	23.10		0.959
ESC - 110L - 5				57.20	25.20		0.856
ESC - 110L - 6				63.50	28.00		0.749
ESC - 110L - 7				69.90	30.10		0.685
ESC - 110L - 8				76.20	32.90		0.614
ESC - 110L - 9				88.90	37.10		0.532
ESC - 110L - 10				101.60	41.30		0.470

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



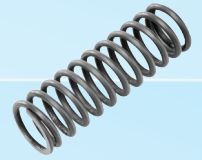
PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 110M - 1	2.80	27.80	22.20	25.40	11.20	30.104	1.987
ESC - 110M - 2				38.10	14.70		1.223
ESC - 110M - 3				44.50	16.10		1.060
ESC - 110M - 4				50.80	18.20		0.883
ESC - 110M - 5				57.20	19.60		0.795
ESC - 110M - 6				63.50	21.00		0.722
ESC - 110M - 7				76.20	24.50		0.588
ESC - 110M - 8				88.90	27.30		0.512
ESC - 110M - 9				101.60	30.10		0.454
ESC - 110M - 10				114.30	32.90		0.407
ESC - 110N - 1	2.80	31.00	25.40	38.10	14.00	21.071	0.923
ESC - 110N - 2				50.80	17.50		0.651
ESC - 110N - 3				63.50	21.00		0.503
ESC - 110N - 4				76.20	24.50		0.410
ESC - 110N - 5				88.90	28.00		0.346
ESC - 110N - 6				101.60	31.50		0.299
ESC - 118L - 1	3.00	24.60	18.60	38.10	19.50	31.599	1.804
ESC - 118L - 2				44.50	22.50		1.476
ESC - 118L - 3				50.80	25.50		1.249
ESC - 118L - 4				57.20	28.50		1.082
ESC - 118L - 5				63.50	31.50		0.955
ESC - 118L - 6				76.20	36.00		0.812
ESC - 118L - 7				88.90	42.00		0.676
ESC - 118L - 8				101.60	48.00		0.580
ESC - 118M - 1	3.00	27.80	21.80	25.40	12.00	34.105	2.683
ESC - 118M - 2				38.10	16.50		1.533
ESC - 118M - 3				44.50	18.00		1.341
ESC - 118M - 4				50.80	20.25		1.129
ESC - 118M - 5				57.20	21.75		1.022
ESC - 118M - 6				63.50	24.00		0.894
ESC - 118M - 7				76.20	28.50		0.715
ESC - 118M - 8				88.90	33.00		0.596
ESC - 118M - 9				101.60	37.50		0.511
ESC - 118M - 10				114.30	42.00		0.447
ESC - 125L - 1	3.18	24.64	18.28	38.10	19.08	45.182	2.613
ESC - 125L - 2				44.50	22.26		2.091
ESC - 125L - 3				50.80	25.44		1.742
ESC - 125L - 4				57.20	27.82		1.551
ESC - 125L - 5				63.50	30.21		1.394
ESC - 125L - 6				76.20	35.77		1.131
ESC - 125L - 7				88.90	41.34		0.950
ESC - 125L - 8				101.60	46.11		0.836



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	WIRE DIAMETER (WD) MM	OUTSIDE DIA (OD) MM	INSIDE DIA (ID) MM	FREE LENGTH (FL) MM	SOLID HGT (APPROX) (SH) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) KG/MM
ESC - 125M - 1	3.18	27.81	21.45	38.10	16.69	41.295	2.134
ESC - 125M - 2				44.50	19.08		1.728
ESC - 125M - 3				50.80	21.46		1.459
ESC - 125M - 4				57.20	23.85		1.257
ESC - 125M - 5				63.50	26.23		1.108
ESC - 125M - 6				76.20	30.21		0.922
ESC - 125M - 7				88.90	36.57		0.728
ESC - 125M - 8				101.60	39.75		0.658
ESC - 125M - 9				114.30	44.52		0.576
ESC - 125N - 1	3.18	30.94	24.58	38.10	16.69	30.638	1.490
ESC - 125N - 2				50.80	20.67		1.073
ESC - 125N - 3				63.50	25.44		0.805
ESC - 125N - 4				76.20	29.41		0.667
ESC - 125N - 5				88.90	33.39		0.568
ESC - 125N - 6				101.60	38.16		0.483
ESC - 192 320 - 1	3.20	19.20	12.80	27.50	17.60	77.292	7.390
ESC - 192 320 - 2				40.00	24.00		4.703
ESC - 192 320 - 3				59.00	33.60		3.043
ESC - 192 320 - 4				83.50	46.40		2.069
ESC - 192 320 - 5				120.00	64.00		1.437
ESC - 232 320 - 1	3.20	23.20	16.80	33.50	17.60	62.943	3.784
ESC - 232 320 - 2				49.50	24.00		2.408
ESC - 232 320 - 3				74.00	33.60		1.558
ESC - 232 320 - 4				105.00	46.40		1.059
ESC - 232 320 - 5				155.00	64.00		0.735
ESC - 282 320 - 1	3.20	28.20	21.80	42.50	17.60	48.537	1.937
ESC - 282 320 - 2				63.50	24.00		1.232
ESC - 282 320 - 3				94.50	33.60		0.797
ESC - 282 320 - 4				135.00	46.40		0.542
ESC - 282 320 - 5				200.00	64.00		0.376

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



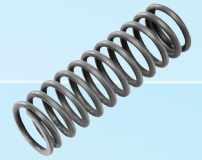
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CY 3 - 5	3.00	2.68	0.16	5.00	0.04	0.010	1.00
ESC - CY 3 - 10		2.60	0.20	10.00	0.08		2.00
ESC - CY 3 - 15		2.54	0.23	15.00	0.11		3.60
ESC - CY 3 - 20		2.54	0.23	20.00	0.16		3.60
ESC - CY 3 - 25		2.50	0.25	25.00	0.19		5.50
ESC - CY 3 - 30		2.48	0.26	30.00	0.23		6.50
ESC - CR 3 - 5	3.00	2.54	0.23	5.00	0.10	0.030	1.80
ESC - CR 3 - 10		2.50	0.25	10.00	0.23		2.30
ESC - CR 3 - 15		2.40	0.30	15.00	0.31		4.80
ESC - CR 3 - 20		2.40	0.30	20.00	0.46		4.80
ESC - CR 3 - 25		2.36	0.32	25.00	0.55		6.80
ESC - CR 3 - 30		2.36	0.32	30.00	0.70		6.80
ESC - CR 3 - 35		2.30	0.35	35.00	0.71		11.50
ESC - CR 3 - 40		2.30	0.35	40.00	0.86		11.50
ESC - CF 3 - 5	3.00	2.48	0.26	5.00	0.15	0.050	2.00
ESC - CF 3 - 10		2.36	0.32	10.00	0.25		5.00
ESC - CF 3 - 15		2.36	0.32	15.00	0.50		5.00
ESC - CF 3 - 20		2.30	0.35	20.00	0.65		7.00
ESC - CF 3 - 25		2.30	0.35	25.00	0.90		7.00
ESC - CF 3 - 30		2.20	0.40	30.00	0.84		13.20
ESC - CF 3 - 35		2.20	0.40	35.00	1.09		13.20
ESC - CF 3 - 40		2.20	0.40	40.00	1.34		13.20
ESC - CL 3 - 5	3.00	2.40	0.30	5.00	0.29	0.100	2.10
ESC - CL 3 - 10		2.30	0.35	10.00	0.61		3.90
ESC - CL 3 - 15		2.20	0.40	15.00	0.85		6.50
ESC - CL 3 - 20		2.20	0.40	20.00	1.35		6.50
ESC - CL 3 - 25		2.10	0.45	25.00	1.20		13.00
ESC - CL 3 - 30		2.10	0.45	30.00	1.70		13.00
ESC - CL 3 - 35		2.10	0.45	35.00	2.20		13.00
ESC - CL 3 - 40		2.00	0.50	40.00	1.90		21.00
ESC - CT 3 - 5	3.00	2.40	0.30	5.00	0.49	0.150	1.73
ESC - CT 3 - 10		2.20	0.40	10.00	0.75		5.00
ESC - CT 3 - 15		2.10	0.45	15.00	0.93		8.78
ESC - CT 3 - 20		2.10	0.45	20.00	1.68		8.78
ESC - CT 3 - 25		2.00	0.50	25.00	1.58		14.50
ESC - CM 3 - 5	3.00	2.30	0.35	5.00	0.47	0.190	2.50
ESC - CM 3 - 10		2.24	0.38	10.00	1.27		3.30
ESC - CM 3 - 15		2.10	0.45	15.00	1.52		7.00
ESC - CM 3 - 20		2.00	0.50	20.00	1.61		11.50
ESC - CM 3 - 25		2.00	0.50	25.00	2.56		11.50
ESC - CM 3 - 30		1.90	0.55	30.00	1.82		20.40



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (R) MM	SOLID HGT (APPROX) (SH) MM
ESC - CY 4 - 5	4.00	3.60	0.20	5.00	0.03	0.008	1.10
ESC - CY 4 - 10		3.54	0.23	10.00	0.06		1.90
ESC - CY 4 - 15		3.54	0.23	15.00	0.10		1.90
ESC - CY 4 - 20		3.50	0.25	20.00	0.13		2.70
ESC - CY 4 - 25		3.42	0.29	25.00	0.16		5.00
ESC - CY 4 - 30		3.42	0.29	30.00	0.20		5.00
ESC - CY 4 - 35		3.36	0.32	35.00	0.21		7.70
ESC - CY 4 - 40		3.36	0.32	40.00	0.25		7.70
ESC - CR 4 - 5	4.00	3.48	0.26	5.00	0.10	0.030	1.60
ESC - CR 4 - 10		3.42	0.29	10.00	0.23		2.20
ESC - CR 4 - 15		3.36	0.32	15.00	0.35		3.20
ESC - CR 4 - 20		3.24	0.38	20.00	0.41		6.50
ESC - CR 4 - 25		3.24	0.38	25.00	0.56		6.50
ESC - CR 4 - 30		3.20	0.40	30.00	0.65		8.40
ESC - CR 4 - 35		3.20	0.40	35.00	0.80		8.40
ESC - CR 4 - 40		3.10	0.45	40.00	0.75		15.00
ESC - CR 4 - 45		3.10	0.45	45.00	0.90		15.00
ESC - CR 4 - 50		3.10	0.45	50.00	1.05		15.00
ESC - CR 4 - 55		3.10	0.45	55.00	1.20		15.00
ESC - CR 4 - 60		3.00	0.50	60.00	1.10		23.50
ESC - CR 4 - 65		3.00	0.50	65.00	1.20		25.00
ESC - CR 4 - 70		3.00	0.50	70.00	1.35		25.00
ESC - CF 4 - 5	4.00	3.36	0.32	5.00	0.14	0.050	2.30
ESC - CF 4 - 10		3.30	0.35	10.00	0.35		3.10
ESC - CF 4 - 15		3.20	0.40	15.00	0.47		5.60
ESC - CF 4 - 20		3.20	0.40	20.00	0.72		5.60
ESC - CF 4 - 25		3.10	0.45	25.00	0.76		9.90
ESC - CF 4 - 30		3.10	0.45	30.00	1.01		9.90
ESC - CF 4 - 35		3.00	0.50	35.00	0.93		16.50
ESC - CF 4 - 40		3.00	0.50	40.00	1.18		16.50
ESC - CF 4 - 45		3.00	0.50	45.00	1.43		16.50
ESC - CF 4 - 50		3.00	0.50	50.00	1.68		16.50
ESC - CF 4 - 55		3.00	0.50	55.00	1.93		16.50
ESC - CF 4 - 60		3.00	0.50	60.00	2.18		16.50
ESC - CF 4 - 65		2.90	0.55	65.00	1.93		26.40
ESC - CF 4 - 70		2.90	0.55	70.00	2.18		26.40
ESC - CL 4 - 5	4.00	3.30	0.35	5.00	0.29	0.100	2.10
ESC - CL 4 - 10		3.10	0.45	10.00	0.50		5.00
ESC - CL 4 - 15		3.10	0.45	15.00	1.00		5.00
ESC - CL 4 - 20		3.00	0.50	20.00	1.10		9.00
ESC - CL 4 - 25		3.00	0.50	25.00	1.60		9.00
ESC - CL 4 - 30		2.90	0.55	30.00	1.61		13.90
ESC - CL 4 - 35		2.90	0.55	35.00	2.11		13.90
ESC - CL 4 - 40		2.80	0.60	40.00	1.84		21.60
ESC - CL 4 - 45		2.80	0.60	45.00	2.34		21.60
ESC - CL 4 - 50		2.80	0.60	50.00	2.84		21.60
ESC - CL 4 - 55		2.80	0.60	55.00	3.34		21.60
ESC - CL 4 - 60		2.70	0.65	60.00	2.70		33.00

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



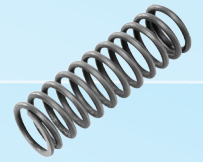
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CT 4 - 5	4.00	3.20	0.40	5.00	0.35	0.150	2.70
ESC - CT 4 - 10		3.20	0.40	10.00	1.10		2.70
ESC - CT 4 - 15		3.00	0.50	15.00	1.28		6.50
ESC - CT 4 - 20		2.90	0.55	20.00	1.56		9.63
ESC - CT 4 - 25		2.90	0.55	25.00	2.31		9.63
ESC - CT 4 - 30		2.80	0.60	30.00	2.25		15.00
ESC - CT 4 - 35		2.80	0.60	35.00	3.00		15.00
ESC - CT 4 - 40		2.70	0.65	40.00	2.69		22.10
ESC - CM 4 - 5	4.00	3.20	0.40	5.00	0.54	0.200	2.30
ESC - CM 4 - 10		3.10	0.45	10.00	1.32		3.40
ESC - CM 4 - 15		3.00	0.50	15.00	1.98		5.10
ESC - CM 4 - 20		2.90	0.55	20.00	2.46		7.70
ESC - CM 4 - 25		2.80	0.60	25.00	2.66		11.70
ESC - CM 4 - 30		2.80	0.60	30.00	3.66		11.70
ESC - CM 4 - 35		2.70	0.65	35.00	3.48		17.60
ESC - CM 4 - 40		2.70	0.65	40.00	4.48		17.60
ESC - CH 4 - 5	4.00	3.10	0.45	5.00	0.69	0.300	2.70
ESC - CH 4 - 10		3.10	0.45	10.00	2.19		2.70
ESC - CH 4 - 15		2.90	0.55	15.00	2.76		5.80
ESC - CH 4 - 20		2.80	0.60	20.00	3.48		8.40
ESC - CH 4 - 25		2.70	0.65	25.00	3.78		12.40
ESC - CH 4 - 30		2.70	0.65	30.00	5.28		12.40
ESC - CY 5 - 10	5.00	4.50	0.25	10.00	0.07	0.009	1.70
ESC - CY 5 - 15		4.50	0.25	15.00	0.11		1.70
ESC - CY 5 - 20		4.40	0.30	20.00	0.15		3.20
ESC - CY 5 - 25		4.40	0.30	25.00	0.19		3.20
ESC - CY 5 - 30		4.30	0.35	30.00	0.21		6.30
ESC - CY 5 - 35		4.30	0.35	35.00	0.25		6.30
ESC - CY 5 - 40		4.24	0.38	40.00	0.27		9.20
ESC - CY 5 - 45		4.24	0.38	45.00	0.32		9.20
ESC - CY 5 - 50		4.24	0.38	50.00	0.36		9.20
ESC - CR 5 - 5	5.00	4.40	0.30	5.00	0.10	0.030	1.60
ESC - CR 5 - 10		4.30	0.35	10.00	0.25		1.60
ESC - CR 5 - 15		4.30	0.35	15.00	0.37		2.80
ESC - CR 5 - 20		4.20	0.40	20.00	0.46		4.80
ESC - CR 5 - 25		4.10	0.45	25.00	0.51		8.00
ESC - CR 5 - 30		4.10	0.45	30.00	0.66		8.00
ESC - CR 5 - 35		4.00	0.50	35.00	0.68		12.50
ESC - CR 5 - 40		4.00	0.50	40.00	0.83		12.50
ESC - CR 5 - 45		3.90	0.55	45.00	0.75		20.00
ESC - CR 5 - 50		3.90	0.55	50.00	0.90		20.00
ESC - CR 5 - 55		3.90	0.55	55.00	1.05		20.00
ESC - CR 5 - 60		3.90	0.55	60.00	1.20		20.00
ESC - CR 5 - 65		3.90	0.55	65.00	1.32		20.90
ESC - CR 5 - 70		3.90	0.55	70.00	1.47		20.90



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CF 5 - 5	5.00	4.30	0.35	5.00	0.15	0.050	2.00
ESC - CF 5 - 10		4.24	0.38	10.00	0.36		2.80
ESC - CF 5 - 15		4.20	0.40	15.00	0.58		3.40
ESC - CF 5 - 20		4.10	0.45	20.00	0.73		5.40
ESC - CF 5 - 25		4.00	0.50	25.00	0.83		8.50
ESC - CF 5 - 30		3.90	0.55	30.00	0.84		13.20
ESC - CF 5 - 35		3.90	0.55	35.00	1.09		13.20
ESC - CF 5 - 40		3.90	0.55	40.00	0.98		20.40
ESC - CF 5 - 45		3.80	0.60	45.00	1.23		20.40
ESC - CF 5 - 50		3.80	0.60	50.00	1.48		20.40
ESC - CF 5 - 55		3.80	0.60	55.00	1.73		20.40
ESC - CF 5 - 60		3.80	0.60	60.00	1.98		20.40
ESC - CF 5 - 65		3.80	0.60	65.00	2.23		20.40
ESC - CF 5 - 70		3.80	0.60	70.00	2.48		20.40
ESC - CL 5 - 5	5.00	4.20	0.40	5.00	0.27	0.100	2.30
ESC - CL 5 - 10		4.10	0.45	10.00	0.66		3.40
ESC - CL 5 - 15		4.00	0.50	15.00	1.00		5.00
ESC - CL 5 - 20		3.90	0.55	20.00	1.23		7.70
ESC - CL 5 - 25		3.80	0.60	25.00	1.42		10.80
ESC - CL 5 - 30		3.80	0.60	30.00	1.92		10.80
ESC - CL 5 - 35		3.70	0.65	35.00	1.94		15.60
ESC - CL 5 - 40		3.70	0.65	40.00	2.44		15.60
ESC - CL 5 - 45		3.60	0.70	45.00	2.50		20.00
ESC - CL 5 - 50		3.60	0.70	50.00	3.00		20.00
ESC - CL 5 - 55		3.60	0.70	55.00	3.19		23.10
ESC - CL 5 - 60		3.50	0.75	60.00	2.70		33.00
ESC - CL 5 - 65		3.50	0.75	65.00	3.27		32.30
ESC - CL 5 - 70		3.50	0.75	70.00	3.77		32.30
ESC - CT 5 - 5	5.00	4.10	0.45	5.00	0.53	0.200	2.36
ESC - CT 5 - 10		4.00	0.50	10.00	1.35		3.25
ESC - CT 5 - 15		3.80	0.60	15.00	1.74		6.30
ESC - CT 5 - 20		3.80	0.60	20.00	2.74		6.30
ESC - CT 5 - 25		3.60	0.70	25.00	2.48		12.60
ESC - CT 5 - 30		3.60	0.70	30.00	3.48		12.60
ESC - CT 5 - 35		3.50	0.75	35.00	3.54		17.30
ESC - CT 5 - 40		3.50	0.75	40.00	4.54		17.30
ESC - CT 5 - 45		3.40	0.80	45.00	4.20		24.00
ESC - CT 5 - 50		3.40	0.80	50.00	5.20		24.00
ESC - CT 5 - 55		3.30	0.85	55.00	4.54		32.30
ESC - CT 5 - 60		3.30	0.85	60.00	5.54		32.30
ESC - CT 5 - 65		3.30	0.85	65.00	6.12		34.00
ESC - CT 5 - 70		3.20	0.90	70.00	5.08		44.60

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



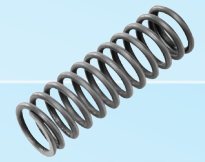
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CM 5 - 5	5.00	4.00	0.50	5.00	0.60	0.300	2.00
ESC - CM 5 - 10		3.80	0.60	10.00	1.74		4.20
ESC - CM 5 - 15		3.70	0.65	15.00	2.55		6.50
ESC - CM 5 - 20		3.70	0.65	20.00	4.05		6.50
ESC - CM 5 - 25		3.60	0.70	25.00	4.77		9.10
ESC - CM 5 - 30		3.50	0.75	30.00	5.19		12.70
ESC - CM 5 - 35		3.40	0.80	35.00	5.28		17.40
ESC - CM 5 - 40		3.30	0.85	40.00	4.86		23.80
ESC - CM 5 - 45		3.30	0.85	45.00	6.36		23.80
ESC - CM 5 - 50		3.30	0.85	50.00	7.86		23.80
ESC - CM 5 - 55		3.20	0.90	55.00	7.50		30.00
ESC - CM 5 - 60		3.20	0.90	60.00	9.00		30.00
ESC - CM 5 - 65		3.20	0.90	65.00	10.50		30.00
ESC - CM 5 - 70		3.20	0.90	70.00	12.00		30.00
ESC - CH 5 - 5	5.00	3.80	0.60	5.00	1.02	0.600	3.30
ESC - CH 5 - 10		3.60	0.70	10.00	2.70		5.50
ESC - CH 5 - 15		3.50	0.75	15.00	4.50		7.50
ESC - CH 5 - 20		3.50	0.75	20.00	7.50		7.50
ESC - CH 5 - 25		3.30	0.85	25.00	6.84		13.60
ESC - CH 5 - 30		3.30	0.85	30.00	9.84		13.60
ESC - CH 5 - 35		3.20	0.90	35.00	10.74		17.10
ESC - CH 5 - 40		3.20	0.90	40.00	13.74		17.10
ESC - CB 5 - 5	5.00	3.70	0.65	5.00	1.70	1.000	3.30
ESC - CB 5 - 10		3.40	0.80	10.00	3.00		7.00
ESC - CB 5 - 15		3.40	0.80	15.00	8.00		7.00
ESC - CB 5 - 20		3.20	0.90	20.00	7.00		13.00
ESC - CB 5 - 25		3.20	0.90	25.00	12.00		13.00
ESC - CB 5 - 30		3.00	1.00	30.00	12.50		21.00
ESC - CB 5 - 35		3.00	1.00	35.00	10.00		25.00
ESC - CB 5 - 40		3.00	1.00	40.00	15.00		25.00
ESC - CB 5 - 45		2.80	1.10	45.00	14.00		31.00
ESC - CB 5 - 50		2.80	1.10	50.00	16.00		34.00
ESC - CB 5 - 55		2.80	1.10	55.00	16.00		39.00
ESC - CB 5 - 60		2.80	1.10	60.00	17.00		43.00
ESC - CB 5 - 65		2.60	1.20	65.00	19.00		46.00
ESC - CB 5 - 70		2.60	1.20	70.00	10.00		60.00



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CY 6 - 10	6.00	5.40	0.30	10.00	0.07	0.009	2.10
ESC - CY 6 - 15		5.36	0.32	15.00	0.10		2.80
ESC - CY 6 - 20		5.36	0.32	20.00	0.15		2.80
ESC - CY 6 - 25		5.30	0.35	25.00	0.18		4.10
ESC - CY 6 - 30		5.24	0.38	30.00	0.21		5.60
ESC - CY 6 - 35		5.24	0.38	35.00	0.26		5.60
ESC - CY 6 - 40		5.20	0.40	40.00	0.29		7.20
ESC - CY 6 - 45		5.20	0.40	45.00	0.34		7.20
ESC - CY 6 - 50		5.20	0.40	50.00	0.38		7.20
ESC - CY 6 - 55		5.10	0.45	55.00	0.34		12.20
ESC - CY 6 - 60		5.10	0.45	60.00	0.43		12.20
ESC - CY 6 - 65		5.10	0.45	65.00	0.47		12.20
ESC - CY 6 - 70		5.10	0.45	70.00	0.52		12.20
ESC - CR 6 - 5	6.00	5.36	0.32	5.00	0.10	0.030	1.60
ESC - CR 6 - 10		5.20	0.40	10.00	0.20		3.20
ESC - CR 6 - 15		5.20	0.40	15.00	0.35		3.20
ESC - CR 6 - 20		5.00	0.50	20.00	0.38		7.50
ESC - CR 6 - 25		5.00	0.50	25.00	0.53		7.50
ESC - CR 6 - 30		5.00	0.50	30.00	0.68		7.50
ESC - CR 6 - 35		4.90	0.55	35.00	0.71		11.50
ESC - CR 6 - 40		4.90	0.55	40.00	0.86		11.50
ESC - CR 6 - 45		4.80	0.60	45.00	0.83		17.40
ESC - CR 6 - 50		4.80	0.60	50.00	0.98		17.40
ESC - CR 6 - 55		4.80	0.60	55.00	1.13		17.40
ESC - CR 6 - 60		4.80	0.60	60.00	1.28		17.40
ESC - CR 6 - 70		4.80	0.60	70.00	1.58		17.40
ESC - CR 6 - 75	4.80	0.60	75.00	1.73	17.40		
ESC - CR 6 - 80	4.70	0.65	80.00	1.58	27.30		
ESC - CF 6 - 5	6.00	5.20	0.40	5.00	0.14	0.050	2.30
ESC - CF 6 - 10		5.00	0.50	10.00	0.25		5.00
ESC - CF 6 - 15		4.90	0.55	15.00	0.35		8.00
ESC - CF 6 - 20		4.90	0.55	20.00	0.60		8.00
ESC - CF 6 - 25		4.80	0.60	25.00	0.65		12.00
ESC - CF 6 - 30		4.70	0.65	30.00	0.70		16.00
ESC - CF 6 - 35		4.70	0.65	35.00	0.90		17.00
ESC - CF 6 - 40		4.70	0.65	40.00	1.15		17.00
ESC - CF 6 - 45		4.70	0.65	45.00	1.40		17.00
ESC - CF 6 - 50		4.60	0.70	50.00	1.24		25.20
ESC - CF 6 - 55		4.60	0.70	55.00	1.49		25.20
ESC - CF 6 - 60		4.60	0.70	60.00	1.74		25.20
ESC - CF 6 - 65		4.60	0.70	65.00	1.99		25.20
ESC - CF 6 - 70	4.60	0.70	70.00	2.24	25.20		
ESC - CF 6 - 80	4.60	0.70	80.00	2.74	25.20		

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



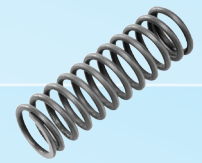
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CL 6 - 5	6.00	5.10	0.45	5.00	0.25	0.100	2.50
ESC - CL 6 - 10		4.90	0.55	10.00	0.53		4.70
ESC - CL 6 - 15		4.90	0.55	15.00	1.03		4.70
ESC - CL 6 - 20		4.70	0.65	20.00	1.10		9.00
ESC - CL 6 - 25		4.70	0.65	25.00	1.60		9.00
ESC - CL 6 - 30		4.60	0.70	30.00	1.63		13.70
ESC - CL 6 - 35		4.60	0.70	35.00	2.13		13.70
ESC - CL 6 - 40		4.60	0.70	40.00	2.63		13.70
ESC - CL 6 - 45		4.50	0.75	45.00	2.61		18.90
ESC - CL 6 - 50		4.50	0.75	50.00	3.11		18.90
ESC - CL 6 - 55		4.50	0.75	55.00	3.61		18.90
ESC - CL 6 - 60		4.40	0.80	60.00	3.36		26.40
ESC - CL 6 - 65		4.40	0.80	65.00	3.86		26.40
ESC - CL 6 - 70		4.30	0.85	70.00	3.94		30.60
ESC - CL 6 - 80		4.30	0.85	80.00	4.51		34.90
ESC - CT 6 - 5		6.00	5.00	0.50	5.00		0.52
ESC - CT 6 - 10	4.80		0.60	10.00	1.13	4.35	
ESC - CT 6 - 15	4.80		0.60	15.00	2.13	4.35	
ESC - CT 6 - 20	4.60		0.70	20.00	2.46	7.70	
ESC - CT 6 - 25	4.60		0.70	25.00	3.46	7.70	
ESC - CT 6 - 30	4.40		0.80	30.00	3.20	14.00	
ESC - CT 6 - 35	4.40		0.80	35.00	4.20	14.00	
ESC - CT 6 - 40	4.30		0.85	40.00	4.26	18.70	
ESC - CT 6 - 45	4.30		0.85	45.00	5.26	18.70	
ESC - CT 6 - 50	4.20		0.90	50.00	5.04	24.80	
ESC - CT 6 - 55	4.20		0.90	55.00	6.04	24.80	
ESC - CT 6 - 60	4.20		0.90	60.00	7.04	24.80	
ESC - CT 6 - 65	4.20		0.90	65.00	7.78	26.10	
ESC - CT 6 - 70	4.00		1.00	70.00	5.40	43.00	
ESC - CT 6 - 80	4.00		1.00	80.00	7.40	43.00	
ESC - CM 6 - 5	6.00		4.90	0.55	5.00	0.66	0.300
ESC - CM 6 - 10		4.70	0.65	10.00	1.59	4.70	
ESC - CM 6 - 15		4.50	0.75	15.00	2.10	8.00	
ESC - CM 6 - 20		4.50	0.75	20.00	3.60	8.00	
ESC - CM 6 - 25		4.30	0.85	25.00	3.42	13.60	
ESC - CM 6 - 30		4.30	0.85	30.00	4.92	13.60	
ESC - CM 6 - 35		4.20	0.90	35.00	5.10	18.00	
ESC - CM 6 - 40		4.20	0.90	40.00	6.60	18.00	
ESC - CM 6 - 45		4.20	0.90	45.00	8.10	18.00	
ESC - CM 6 - 50		4.20	0.90	50.00	9.60	18.00	
ESC - CM 6 - 55		4.00	1.00	55.00	7.20	31.00	
ESC - CM 6 - 60		4.00	1.00	60.00	8.70	31.00	
ESC - CM 6 - 65		4.00	1.00	65.00	10.20	31.00	
ESC - CM 6 - 70		3.80	1.10	70.00	6.81	47.30	
ESC - CM 6 - 80		3.80	1.10	80.00	9.48	48.40	



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CH 6 - 5	6.00	4.70	0.65	5.00	1.02	0.600	3.30
ESC - CH 6 - 10		4.50	0.75	10.00	2.88		5.20
ESC - CH 6 - 15		4.40	0.80	15.00	5.16		6.40
ESC - CH 6 - 20		4.20	0.90	20.00	6.06		9.90
ESC - CH 6 - 25		4.20	0.90	25.00	9.06		9.90
ESC - CH 6 - 30		4.00	1.00	30.00	8.40		16.00
ESC - CH 6 - 35		4.00	1.00	35.00	11.40		16.00
ESC - CH 6 - 40		3.80	1.10	40.00	9.00		25.00
ESC - CH 6 - 45		3.80	1.10	45.00	12.00		25.00
ESC - CH 6 - 50		3.60	1.20	50.00	6.24		39.60
ESC - CH 6 - 55		3.60	1.20	55.00	9.24		39.60
ESC - CH 6 - 60		3.60	1.20	60.00	12.24		39.60
ESC - CH 6 - 65		3.60	1.20	65.00	15.24		39.60
ESC - CH 6 - 70		3.60	1.20	70.00	18.24		39.60
ESC - CB 6 - 5	6.00	4.60	0.70	5.00	1.50	1.000	3.50
ESC - CB 6 - 10		4.40	0.80	10.00	3.00		7.00
ESC - CB 6 - 15		4.20	0.90	15.00	7.50		7.50
ESC - CB 6 - 20		4.00	1.00	20.00	8.50		11.50
ESC - CB 6 - 25		3.80	1.10	25.00	5.00		20.00
ESC - CB 6 - 30		3.80	1.10	30.00	10.00		20.00
ESC - CB 6 - 35		3.80	1.10	35.00	15.00		20.00
ESC - CB 6 - 40		3.60	1.20	40.00	8.00		32.00
ESC - CB 6 - 45		3.60	1.20	45.00	13.00		32.00
ESC - CB 6 - 50		3.60	1.20	50.00	18.00		32.00
ESC - CB 6 - 55		3.60	1.20	55.00	23.00		32.00
ESC - CB 6 - 60		3.40	1.30	60.00	10.00		50.00
ESC - CB 6 - 65		3.40	1.30	65.00	15.00		50.00
ESC - CB 6 - 70		3.40	1.30	70.00	20.00		50.00
ESC - CB 6 - 80	3.20	1.40	80.00	23.00	57.00		
ESC - CY 8 - 10	8.00	7.30	0.35	10.00	0.07	0.009	2.10
ESC - CY 8 - 15		7.24	0.38	15.00	0.10		3.00
ESC - CY 8 - 20		7.20	0.40	20.00	0.14		3.50
ESC - CY 8 - 25		7.20	0.40	25.00	0.19		3.50
ESC - CY 8 - 30		7.10	0.45	30.00	0.21		5.70
ESC - CY 8 - 35		7.10	0.45	35.00	0.26		5.70
ESC - CY 8 - 40		7.10	0.45	40.00	0.30		5.70
ESC - CY 8 - 45		7.10	0.45	45.00	0.35		5.70
ESC - CY 8 - 50		7.00	0.50	50.00	0.37		9.00
ESC - CY 8 - 55		7.00	0.50	55.00	0.41		9.00
ESC - CY 8 - 60		7.00	0.50	60.00	0.46		9.00
ESC - CY 8 - 65		7.00	0.50	65.00	0.50		9.00
ESC - CY 8 - 70		7.00	0.50	70.00	0.55		9.00

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



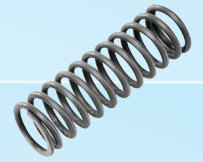
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CR 8 - 10	8.00	7.10	0.45	10.00	0.22	0.030	2.70
ESC - CR 8 - 15		7.00	0.50	15.00	0.33		4.00
ESC - CR 8 - 20		7.00	0.50	20.00	0.48		4.00
ESC - CR 8 - 25		6.90	0.55	25.00	0.58		5.80
ESC - CR 8 - 30		6.80	0.60	30.00	0.65		8.40
ESC - CR 8 - 35		6.80	0.60	35.00	0.80		8.40
ESC - CR 8 - 40		6.80	0.60	40.00	0.95		8.40
ESC - CR 8 - 45		6.60	0.70	45.00	0.87		16.00
ESC - CR 8 - 50		6.60	0.70	50.00	1.02		16.00
ESC - CR 8 - 55		6.60	0.70	55.00	1.17		16.00
ESC - CR 8 - 60		6.60	0.70	60.00	1.32		16.00
ESC - CR 8 - 65		6.60	0.70	65.00	1.47		16.00
ESC - CR 8 - 70		6.60	0.70	70.00	1.62		16.00
ESC - CR 8 - 80		6.50	0.75	80.00	1.71		22.90
ESC - CF 8 - 10	8.00	6.80	0.60	10.00	0.25	0.050	5.00
ESC - CF 8 - 15		6.70	0.65	15.00	0.38		7.50
ESC - CF 8 - 20		6.60	0.70	20.00	0.46		10.80
ESC - CF 8 - 25		6.60	0.70	25.00	0.71		10.80
ESC - CF 8 - 30		6.50	0.75	30.00	0.78		14.50
ESC - CF 8 - 35		6.50	0.75	35.00	1.03		14.50
ESC - CF 8 - 40		6.40	0.80	40.00	1.00		20.00
ESC - CF 8 - 45		6.40	0.80	45.00	1.25		20.00
ESC - CF 8 - 50		6.40	0.80	50.00	1.50		20.00
ESC - CF 8 - 55		6.40	0.80	55.00	1.75		20.00
ESC - CF 8 - 60		6.30	0.85	60.00	1.62		27.60
ESC - CF 8 - 65		6.30	0.85	65.00	1.87		27.60
ESC - CF 8 - 70		6.30	0.85	70.00	2.12		27.60
ESC - CF 8 - 80		6.30	0.85	80.00	2.60		28.10
ESC - CL 8 - 10	8.00	6.70	0.65	10.00	0.25	0.100	4.70
ESC - CL 8 - 15		6.50	0.75	15.00	0.38		8.50
ESC - CL 8 - 20		6.50	0.75	20.00	0.46		8.50
ESC - CL 8 - 25		6.50	0.75	25.00	0.71		8.50
ESC - CL 8 - 30		6.40	0.80	30.00	0.78		11.20
ESC - CL 8 - 35		6.40	0.80	35.00	1.03		11.20
ESC - CL 8 - 40		6.40	0.80	40.00	1.00		11.20
ESC - CL 8 - 45		6.30	0.85	45.00	1.25		15.30
ESC - CL 8 - 50		6.30	0.85	50.00	1.50		15.30
ESC - CL 8 - 55		6.30	0.85	55.00	1.75		15.30
ESC - CL 8 - 60		6.20	0.90	60.00	1.62		19.40
ESC - CL 8 - 65		6.20	0.90	65.00	1.87		19.40
ESC - CL 8 - 70		6.00	1.00	70.00	2.12		31.00
ESC - CL 8 - 80		6.00	1.00	80.00	4.90		31.00



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CT 8 - 10	8.00	6.60	0.70	10.00	1.12	0.200	4.38
ESC - CT 8 - 15		6.40	0.80	15.00	1.64		6.80
ESC - CT 8 - 20		6.40	0.80	20.00	2.64		6.80
ESC - CT 8 - 25		6.40	0.80	25.00	3.64		6.80
ESC - CT 8 - 30		6.20	0.90	30.00	6.84		10.80
ESC - CT 8 - 35		6.20	0.90	35.00	4.84		10.80
ESC - CT 8 - 40		6.00	1.00	40.00	4.50		17.50
ESC - CT 8 - 45		6.00	1.00	45.00	5.50		17.50
ESC - CT 8 - 50		6.00	1.00	50.00	6.50		17.50
ESC - CT 8 - 55		5.80	1.10	55.00	5.50		27.50
ESC - CT 8 - 60		5.80	1.10	60.00	6.50		27.50
ESC - CT 8 - 65		5.80	1.10	65.00	7.50		27.50
ESC - CT 8 - 70		5.80	1.10	70.00	8.50		27.50
ESC - CT 8 - 80		5.60	1.20	80.00	7.60		42.00
ESC - CM 8 - 10	8.00	6.50	0.75	10.00	1.74	0.300	4.20
ESC - CM 8 - 15		6.20	0.90	15.00	1.95		8.50
ESC - CM 8 - 20		6.20	0.90	20.00	3.45		8.50
ESC - CM 8 - 25		6.20	0.90	25.00	4.95		8.50
ESC - CM 8 - 30		6.20	0.90	30.00	6.45		8.50
ESC - CM 8 - 35		6.00	1.00	35.00	6.60		13.00
ESC - CM 8 - 40		6.00	1.00	40.00	8.10		13.00
ESC - CM 8 - 45		5.80	1.10	45.00	7.56		19.80
ESC - CM 8 - 50		5.80	1.10	50.00	9.06		19.80
ESC - CM 8 - 55		5.60	1.20	55.00	7.14		31.20
ESC - CM 8 - 60		5.60	1.20	60.00	8.64		31.20
ESC - CM 8 - 65		5.60	1.20	65.00	10.14		31.20
ESC - CM 8 - 70		5.60	1.20	70.00	11.64		31.20
ESC - CM 8 - 80		5.40	1.30	80.00	10.74		44.20
ESC - CH 8 - 10	8.00	6.20	0.90	10.00	2.76	0.600	5.40
ESC - CH 8 - 15		6.00	1.00	15.00	4.20		8.00
ESC - CH 8 - 20		5.80	1.10	20.00	5.10		11.50
ESC - CH 8 - 25		5.80	1.10	25.00	8.10		11.50
ESC - CH 8 - 30		5.60	1.20	30.00	7.92		16.80
ESC - CH 8 - 35		5.60	1.20	35.00	10.92		16.80
ESC - CH 8 - 40		5.60	1.20	40.00	13.92		16.80
ESC - CH 8 - 45		5.40	1.30	45.00	12.18		24.70
ESC - CH 8 - 50		5.40	1.30	50.00	15.18		24.70
ESC - CH 8 - 55		5.20	1.40	55.00	12.00		35.00
ESC - CH 8 - 60		5.20	1.40	60.00	15.00		35.00
ESC - CH 8 - 65		5.20	1.40	65.00	18.00		35.00
ESC - CH 8 - 70		5.20	1.40	70.00	21.00		35.00

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



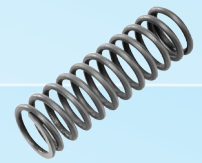
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CB 8 - 10	8.00	6.00	1.00	10.00	4.00	1.000	6.00
ESC - CB 8 - 15		5.60	1.20	15.00	4.20		10.80
ESC - CB 8 - 20		5.60	1.20	20.00	8.50		11.50
ESC - CB 8 - 25		5.40	1.30	25.00	8.00		17.00
ESC - CB 8 - 30		5.40	1.30	30.00	13.00		17.00
ESC - CB 8 - 35		5.20	1.40	35.00	10.50		24.50
ESC - CB 8 - 40		5.20	1.40	40.00	14.80		25.20
ESC - CB 8 - 45		5.00	1.50	45.00	13.00		32.00
ESC - CB 8 - 50		5.00	1.50	50.00	17.00		33.00
ESC - CB 8 - 55		5.00	1.50	55.00	18.50		36.50
ESC - CB 8 - 60		5.00	1.50	60.00	23.50		36.50
ESC - CB 8 - 65		4.80	1.60	65.00	17.00		48.00
ESC - CB 8 - 70		4.80	1.60	70.00	22.00		48.00
ESC - CB 8 - 80		4.80	1.60	80.00	25.00		55.00
ESC - CY 10 - 15	10.00	9.00	0.50	15.00	0.21	0.018	3.00
ESC - CY 10 - 20		8.90	0.55	20.00	0.27		4.60
ESC - CY 10 - 25		8.90	0.55	25.00	0.36		4.60
ESC - CY 10 - 30		8.80	0.60	30.00	0.42		6.60
ESC - CY 10 - 35		8.80	0.60	35.00	0.51		6.60
ESC - CY 10 - 40		8.70	0.65	40.00	0.55		9.10
ESC - CY 10 - 45		8.70	0.65	45.00	0.64		9.10
ESC - CY 10 - 50		8.70	0.65	50.00	0.73		9.10
ESC - CY 10 - 55		8.60	0.70	55.00	0.76		12.60
ESC - CY 10 - 60		8.60	0.70	60.00	0.85		12.60
ESC - CY 10 - 65		8.60	0.70	65.00	0.94		12.60
ESC - CY 10 - 70		8.60	0.70	70.00	1.03		12.60
ESC - CR 10 - 10	10.00	8.90	0.55	10.00	0.19	0.030	3.60
ESC - CR 10 - 15		8.80	0.60	15.00	0.31		4.80
ESC - CR 10 - 20		8.70	0.65	20.00	0.41		6.50
ESC - CR 10 - 25		8.70	0.65	25.00	0.56		6.50
ESC - CR 10 - 30		8.60	0.70	30.00	0.64		8.80
ESC - CR 10 - 35		8.60	0.70	35.00	0.79		8.80
ESC - CR 10 - 40		8.60	0.70	40.00	0.94		8.80
ESC - CR 10 - 45		8.40	0.80	45.00	0.87		16.00
ESC - CR 10 - 50		8.40	0.80	50.00	1.02		16.00
ESC - CR 10 - 55		8.40	0.80	55.00	1.17		16.00
ESC - CR 10 - 60		8.30	0.85	60.00	1.17		21.00
ESC - CR 10 - 65		8.30	0.85	65.00	1.32		21.00
ESC - CR 10 - 70		8.30	0.85	70.00	1.47		21.00
ESC - CR 10 - 80		8.20	0.90	80.00	1.53		28.80



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)

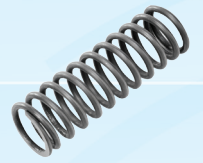


PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CF 10 - 10	10.00	8.70	0.65	10.00	0.25	0.050	5.00
ESC - CF 10 - 15		8.70	0.65	15.00	0.50		5.00
ESC - CF 10 - 20		8.40	0.80	20.00	0.48		10.40
ESC - CF 10 - 25		8.40	0.80	25.00	0.73		10.40
ESC - CF 10 - 30		8.30	0.85	30.00	0.80		14.00
ESC - CF 10 - 35		8.30	0.85	35.00	1.05		14.00
ESC - CF 10 - 40		8.20	0.90	40.00	1.13		17.50
ESC - CF 10 - 45		8.20	0.90	45.00	1.38		17.50
ESC - CF 10 - 50		8.20	0.90	50.00	1.63		17.50
ESC - CF 10 - 55		8.20	0.90	55.00	1.88		17.50
ESC - CF 10 - 60		8.00	1.00	60.00	1.45		31.00
ESC - CF 10 - 65		8.00	1.00	65.00	1.70		31.00
ESC - CF 10 - 70		8.00	1.00	70.00	1.95		31.00
ESC - CF 10 - 80		7.80	1.10	80.00	2.62		27.50
ESC - CL 10 - 10	10.00	8.50	0.75	10.00	0.47	0.100	5.30
ESC - CL 10 - 15		8.40	0.80	15.00	0.86		6.40
ESC - CL 10 - 20		8.40	0.80	20.00	1.36		6.40
ESC - CL 10 - 25		8.20	0.90	25.00	1.42		10.80
ESC - CL 10 - 30		8.20	0.90	30.00	1.92		10.80
ESC - CL 10 - 35		8.20	0.90	35.00	2.42		10.80
ESC - CL 10 - 40		8.20	0.90	40.00	2.92		10.80
ESC - CL 10 - 45		8.00	1.00	45.00	2.80		17.00
ESC - CL 10 - 50		8.00	1.00	50.00	3.30		17.00
ESC - CL 10 - 55		8.00	1.00	55.00	3.80		17.00
ESC - CL 10 - 60		8.00	1.00	60.00	4.30		17.00
ESC - CL 10 - 65		7.80	1.10	65.00	4.10		24.00
ESC - CL 10 - 70		7.80	1.10	70.00	4.60		24.00
ESC - CL 10 - 80		7.80	1.10	80.00	5.58		24.20
ESC - CT 10 - 10	10.00	8.30	0.85	10.00	0.89	0.200	5.53
ESC - CT 10 - 15		8.20	0.90	15.00	1.65		6.75
ESC - CT 10 - 20		8.20	0.90	20.00	2.65		6.75
ESC - CT 10 - 25		8.00	1.00	25.00	3.00		10.00
ESC - CT 10 - 30		8.00	1.00	30.00	4.00		10.00
ESC - CT 10 - 35		8.00	1.00	35.00	5.00		10.00
ESC - CT 10 - 40		8.00	1.00	40.00	6.00		10.00
ESC - CT 10 - 45		7.80	1.10	45.00	6.14		14.30
ESC - CT 10 - 50		7.80	1.10	50.00	7.14		14.30
ESC - CT 10 - 55		7.60	1.20	55.00	6.68		21.60
ESC - CT 10 - 60		7.60	1.20	60.00	7.68		21.60
ESC - CT 10 - 65		7.60	1.20	65.00	8.68		21.60
ESC - CT 10 - 70		7.40	1.30	70.00	7.50		32.50
ESC - CT 10 - 80		7.40	1.30	80.00	9.50		32.50

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



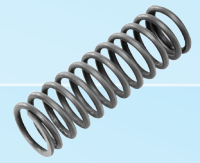
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (R) MM	SOLID HGT (APPROX) (SH) MM
ESC - CM 10 - 10	10.00	8.20	0.90	10.00	1.44	0.300	5.20
ESC - CM 10 - 15		8.00	1.00	15.00	2.19		7.70
ESC - CM 10 - 20		8.00	1.00	20.00	3.69		7.70
ESC - CM 10 - 25		7.80	1.10	25.00	4.20		11.00
ESC - CM 10 - 30		7.80	1.10	30.00	5.70		11.00
ESC - CM 10 - 35		7.60	1.20	35.00	5.64		16.20
ESC - CM 10 - 40		7.60	1.20	40.00	7.14		16.20
ESC - CM 10 - 45		7.40	1.30	45.00	6.87		22.10
ESC - CM 10 - 50		7.40	1.30	50.00	8.37		22.10
ESC - CM 10 - 55		7.40	1.30	55.00	9.87		22.10
ESC - CM 10 - 60		7.20	1.40	60.00	8.37		32.10
ESC - CM 10 - 65		7.20	1.40	65.00	9.87		32.10
ESC - CM 10 - 70		7.20	1.40	70.00	11.37		32.10
ESC - CM 10 - 80		7.20	1.40	80.00	14.34		32.20
ESC - CH 10 - 10		10.00	8.00	1.00	10.00		2.76
ESC - CH 10 - 15	7.80		1.10	15.00	4.80	7.00	
ESC - CH 10 - 20	7.60		1.20	20.00	6.24	9.60	
ESC - CH 10 - 25	7.60		1.20	25.00	9.24	9.60	
ESC - CH 10 - 30	7.40		1.30	30.00	9.66	13.90	
ESC - CH 10 - 35	7.20		1.40	35.00	10.20	18.00	
ESC - CH 10 - 40	7.20		1.40	40.00	13.20	18.00	
ESC - CH 10 - 45	7.00		1.50	45.00	12.00	25.00	
ESC - CH 10 - 50	7.00		1.50	50.00	15.00	25.00	
ESC - CH 10 - 55	7.00		1.50	55.00	18.00	25.00	
ESC - CH 10 - 60	7.00		1.50	60.00	21.00	25.00	
ESC - CH 10 - 65	6.80		1.60	65.00	18.00	35.00	
ESC - CH 10 - 70	6.80		1.60	70.00	21.00	35.00	
ESC - CH 10 - 80	6.60		1.70	80.00	20.40	45.90	
ESC - CB 10 - 10	10.00		7.60	1.20	10.00	4.00	1.000
ESC - CB 10 - 15		7.40	1.30	15.00	6.50	8.50	
ESC - CB 10 - 20		7.20	1.40	20.00	8.00	12.00	
ESC - CB 10 - 25		7.00	1.50	25.00	8.50	16.50	
ESC - CB 10 - 30		7.00	1.50	30.00	13.50	16.50	
ESC - CB 10 - 35		6.80	1.60	35.00	12.00	23.00	
ESC - CB 10 - 40		6.80	1.60	40.00	17.00	23.00	
ESC - CB 10 - 45		6.60	1.70	45.00	15.00	30.00	
ESC - CB 10 - 50		6.60	1.70	50.00	20.00	30.00	
ESC - CB 10 - 55		6.40	1.80	55.00	15.00	40.00	
ESC - CB 10 - 60		6.40	1.80	60.00	20.00	40.00	
ESC - CB 10 - 65		6.40	1.80	65.00	25.00	40.00	
ESC - CB 10 - 70		6.40	1.80	70.00	30.00	40.00	
ESC - CB 10 - 80		6.40	1.80	80.00	26.00	54.00	



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CR 12 - 10	12.00	10.80	0.60	10.00	0.19	0.030	3.60
ESC - CR 12 - 15		10.70	0.65	15.00	0.31		4.60
ESC - CR 12 - 20		10.70	0.65	20.00	0.46		4.60
ESC - CR 12 - 25		10.60	0.70	25.00	0.57		6.00
ESC - CR 12 - 30		10.60	0.70	30.00	0.72		6.00
ESC - CR 12 - 35		10.60	0.70	35.00	0.87		6.00
ESC - CR 12 - 40		10.40	0.80	40.00	0.89		10.40
ESC - CR 12 - 45		10.40	0.80	45.00	1.04		10.40
ESC - CR 12 - 50		10.20	0.90	50.00	0.99		17.10
ESC - CR 12 - 55		10.20	0.90	55.00	1.14		17.10
ESC - CR 12 - 60		10.20	0.90	60.00	1.29		17.10
ESC - CR 12 - 65		10.20	0.90	65.00	1.44		17.10
ESC - CR 12 - 70		10.20	0.90	70.00	1.59		17.10
ESC - CR 12 - 80		10.00	1.00	80.00	1.56		28.00
ESC - CF 12 - 10	12.00	10.60	0.70	10.00	0.27	0.050	4.60
ESC - CF 12 - 15		10.60	0.70	15.00	0.52		4.60
ESC - CF 12 - 20		10.40	0.80	20.00	0.64		7.20
ESC - CF 12 - 25		10.40	0.80	25.00	0.89		7.20
ESC - CF 12 - 30		10.20	0.90	30.00	0.94		11.30
ESC - CF 12 - 35		10.20	0.90	35.00	1.19		11.30
ESC - CF 12 - 40		10.20	0.90	40.00	1.44		11.30
ESC - CF 12 - 45		10.20	0.90	45.00	1.69		11.30
ESC - CF 12 - 50		10.00	1.00	50.00	1.60		18.00
ESC - CF 12 - 55		10.00	1.00	55.00	1.85		18.00
ESC - CF 12 - 60		10.00	1.00	60.00	2.10		18.00
ESC - CF 12 - 65		10.00	1.00	65.00	2.35		18.00
ESC - CF 12 - 70		9.80	1.10	70.00	2.13		27.50
ESC - CF 12 - 80		9.80	1.10	80.00	2.63		27.50
ESC - CL 12 - 10	12.00	10.40	0.80	10.00	0.52	0.100	4.80
ESC - CL 12 - 15		10.20	0.90	15.00	0.78		7.20
ESC - CL 12 - 20		10.20	0.90	20.00	1.28		7.20
ESC - CL 12 - 25		10.20	0.90	25.00	1.78		7.20
ESC - CL 12 - 30		10.00	1.00	30.00	1.95		10.50
ESC - CL 12 - 35		10.00	1.00	35.00	2.45		10.50
ESC - CL 12 - 40		10.00	1.00	40.00	2.95		10.50
ESC - CL 12 - 45		9.80	1.10	45.00	2.96		15.40
ESC - CL 12 - 50		9.80	1.10	50.00	3.46		15.40
ESC - CL 12 - 55		9.80	1.10	55.00	3.96		15.40
ESC - CL 12 - 60		9.60	1.20	60.00	3.72		22.80
ESC - CL 12 - 65		9.60	1.20	65.00	4.22		22.80
ESC - CL 12 - 70		9.60	1.20	70.00	4.72		22.80
ESC - CL 12 - 80		9.40	1.30	80.00	4.55		34.50

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



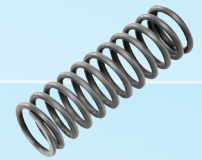
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE ((K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CM 12 - 10	12.00	10.00	1.00	10.00	1.35	0.300	5.50
ESC - CM 12 - 15		9.80	1.10	15.00	2.28		7.40
ESC - CM 12 - 20		9.80	1.10	20.00	3.78		7.40
ESC - CM 12 - 25		9.80	1.10	25.00	5.28		7.40
ESC - CM 12 - 30		9.60	1.20	30.00	5.94		10.20
ESC - CM 12 - 35		9.60	1.20	35.00	7.44		10.20
ESC - CM 12 - 40		9.40	1.30	40.00	7.71		14.30
ESC - CM 12 - 45		9.40	1.30	45.00	9.21		14.30
ESC - CM 12 - 50		9.40	1.30	50.00	10.71		14.30
ESC - CM 12 - 55		9.20	1.40	55.00	10.62		19.60
ESC - CM 12 - 60		9.20	1.40	60.00	12.12		19.60
ESC - CM 12 - 65		9.00	1.50	65.00	11.61		26.30
ESC - CM 12 - 70		9.00	1.50	70.00	13.11		26.30
ESC - CM 12 - 80		8.80	1.60	80.00	12.96		36.80
ESC - CH 12 - 10	12.00	9.60	1.20	10.00	1.86	0.600	6.90
ESC - CH 12 - 15		9.40	1.30	15.00	3.54		9.10
ESC - CH 12 - 20		9.40	1.30	20.00	6.54		9.10
ESC - CH 12 - 25		9.40	1.30	25.00	9.54		9.10
ESC - CH 12 - 30		9.20	1.40	30.00	10.86		11.90
ESC - CH 12 - 35		9.20	1.40	35.00	13.86		11.90
ESC - CH 12 - 40		9.00	1.50	40.00	14.76		15.40
ESC - CH 12 - 45		9.00	1.50	45.00	17.76		15.40
ESC - CH 12 - 50		8.80	1.60	50.00	17.76		20.40
ESC - CH 12 - 55		8.80	1.60	55.00	20.76		20.40
ESC - CH 12 - 60		8.60	1.70	60.00	19.92		26.80
ESC - CH 12 - 65		8.60	1.70	65.00	22.92		26.80
ESC - CH 12 - 70		8.40	1.80	70.00	20.94		35.10
ESC - CH 12 - 80		8.40	1.80	80.00	20.64		45.60
ESC - CY 13 - 20	13.00	11.80	0.60	20.00	0.28	0.018	3.90
ESC - CY 13 - 25		11.70	0.65	25.00	0.35		5.10
ESC - CY 13 - 30		11.70	0.65	30.00	0.44		5.10
ESC - CY 13 - 35		11.60	0.70	35.00	0.50		6.70
ESC - CY 13 - 40		11.50	0.75	40.00	0.56		8.70
ESC - CY 13 - 45		11.50	0.75	45.00	0.65		8.70
ESC - CY 13 - 50		11.40	0.80	50.00	0.69		11.60
ESC - CY 13 - 55		11.40	0.80	55.00	0.78		11.60
ESC - CY 13 - 60		11.40	0.80	60.00	0.87		11.60
ESC - CY 13 - 65		11.30	0.85	65.00	0.89		15.30
ESC - CY 13 - 70		11.30	0.85	70.00	0.98		15.30



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CR 13 - 10	13.00	11.80	0.60	10.00	0.20	0.030	3.20
ESC - CR 13 - 15		11.60	0.70	15.00	0.30		4.90
ESC - CR 13 - 20		11.60	0.70	20.00	0.45		4.90
ESC - CR 13 - 25		11.40	0.80	25.00	0.50		8.40
ESC - CR 13 - 30		11.40	0.80	30.00	0.65		8.40
ESC - CR 13 - 35		11.40	0.80	35.00	0.80		8.40
ESC - CR 13 - 40		11.20	0.90	40.00	0.80		13.50
ESC - CR 13 - 45		11.20	0.90	45.00	0.95		13.50
ESC - CR 13 - 50		11.20	0.90	50.00	1.10		13.50
ESC - CR 13 - 55		11.20	0.90	55.00	1.25		13.50
ESC - CR 13 - 60		11.00	1.00	60.00	1.14		22.00
ESC - CR 13 - 65		11.00	1.00	65.00	1.29		22.00
ESC - CR 13 - 70		11.00	1.00	70.00	1.44		22.00
ESC - CR 13 - 80		11.00	1.00	80.00	1.74		22.00
ESC - CR 13 - 90		11.00	1.00	90.00	2.04		22.00
ESC - CF 13 - 10	13.00	11.50	0.75	10.00	0.25	0.050	4.90
ESC - CF 13 - 15		11.40	0.80	15.00	0.45		6.00
ESC - CF 13 - 20		11.40	0.80	20.00	0.70		6.00
ESC - CF 13 - 25		11.30	0.85	25.00	0.89		7.20
ESC - CF 13 - 30		11.00	1.00	30.00	0.75		15.00
ESC - CF 13 - 35		11.00	1.00	35.00	1.00		15.00
ESC - CF 13 - 40		11.00	1.00	40.00	1.25		15.00
ESC - CF 13 - 45		11.00	1.00	45.00	1.50		15.00
ESC - CF 13 - 50		11.00	1.00	50.00	1.75		15.00
ESC - CF 13 - 55		10.80	1.10	55.00	1.65		22.00
ESC - CF 13 - 60		10.80	1.10	60.00	1.90		22.00
ESC - CF 13 - 65		10.80	1.10	65.00	2.15		22.00
ESC - CF 13 - 70		10.80	1.10	70.00	2.40		22.00
ESC - CF 13 - 80		10.80	1.10	80.00	2.90		22.00
ESC - CF 13 - 90		10.60	1.20	90.00	2.82		33.60
ESC - CL 13 - 10	13.00	11.30	0.85	10.00	0.49	0.100	5.10
ESC - CL 13 - 15		11.20	0.90	15.00	0.87		6.30
ESC - CL 13 - 20		11.00	1.00	20.00	1.13		8.70
ESC - CL 13 - 25		11.00	1.00	25.00	1.63		8.70
ESC - CL 13 - 30		10.80	1.10	30.00	1.68		13.20
ESC - CL 13 - 35		10.80	1.10	35.00	2.11		13.20
ESC - CL 13 - 40		10.80	1.10	40.00	2.68		13.20
ESC - CL 13 - 45		10.80	1.10	45.00	3.18		13.20
ESC - CL 13 - 50		10.80	1.10	50.00	3.68		13.20
ESC - CL 13 - 55		10.80	1.10	55.00	4.18		13.20
ESC - CL 13 - 60		10.80	1.10	60.00	4.68		13.20
ESC - CL 13 - 65		10.60	1.20	65.00	4.64		18.60
ESC - CL 13 - 70		10.60	1.20	70.00	5.14		18.60
ESC - CL 13 - 80		10.20	1.40	80.00	4.22		37.80
ESC - CL 13 - 90		10.20	1.40	90.00	5.22		37.80

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



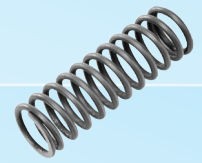
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CT 13 - 15	13.00	11.00	1.00	15.00	1.80	0.200	6.00
ESC - CT 13 - 20		10.80	1.10	20.00	2.35		8.25
ESC - CT 13 - 25		10.80	1.10	25.00	3.35		8.25
ESC - CT 13 - 30		10.60	1.20	30.00	3.78		11.10
ESC - CT 13 - 35		10.60	1.20	35.00	4.78		11.10
ESC - CT 13 - 40		10.60	1.20	40.00	5.78		11.10
ESC - CT 13 - 45		10.60	1.20	45.00	6.78		11.10
ESC - CT 13 - 50		10.40	1.30	50.00	6.88		15.60
ESC - CT 13 - 55		10.40	1.30	55.00	7.88		15.60
ESC - CT 13 - 60		10.40	1.30	60.00	8.88		15.60
ESC - CT 13 - 65		10.20	1.40	65.00	8.80		21.00
ESC - CT 13 - 70		10.20	1.40	70.00	9.80		21.00
ESC - CT 13 - 80		10.20	1.40	80.00	11.80		21.00
ESC - CM 13 - 10	13.00	11.00	1.00	10.00	1.50	0.300	5.00
ESC - CM 13 - 15		10.60	1.20	15.00	1.98		8.40
ESC - CM 13 - 20		10.40	1.30	20.00	2.49		11.70
ESC - CM 13 - 25		10.40	1.30	25.00	3.99		11.70
ESC - CM 13 - 30		10.20	1.40	30.00	4.65		14.50
ESC - CM 13 - 35		10.20	1.40	35.00	6.15		14.50
ESC - CM 13 - 40		10.20	1.40	40.00	7.65		14.50
ESC - CM 13 - 45		10.20	1.40	45.00	9.15		14.50
ESC - CM 13 - 50		10.20	1.40	50.00	10.65		14.50
ESC - CM 13 - 55		10.00	1.50	55.00	9.75		22.50
ESC - CM 13 - 60		10.00	1.50	60.00	11.25		22.50
ESC - CM 13 - 65		9.80	1.60	65.00	10.86		28.80
ESC - CM 13 - 70		9.80	1.60	70.00	12.36		28.80
ESC - CM 13 - 80		9.60	1.70	80.00	12.78		37.40
ESC - CM 13 - 90		9.60	1.70	90.00	15.78		37.40
ESC - CH 13 - 10	13.00	10.40	1.30	10.00	3.80	1.000	6.20
ESC - CH 13 - 15		10.00	1.50	15.00	5.70		9.30
ESC - CH 13 - 20		9.80	1.60	20.00	7.70		12.30
ESC - CH 13 - 25		9.80	1.60	25.00	12.70		12.30
ESC - CH 13 - 30		9.60	1.70	30.00	15.00		15.00
ESC - CH 13 - 35		9.60	1.70	35.00	20.00		15.00
ESC - CH 13 - 40		9.40	1.80	40.00	21.00		19.00
ESC - CH 13 - 45		9.20	1.90	45.00	20.00		25.00
ESC - CH 13 - 50		9.20	1.90	50.00	25.00		25.00
ESC - CH 13 - 55		9.00	2.00	55.00	25.00		30.00
ESC - CH 13 - 60		9.00	2.00	60.00	30.00		30.00
ESC - CH 13 - 65		8.80	2.10	65.00	26.00		39.00
ESC - CH 13 - 70		8.80	2.10	70.00	31.00		39.00
ESC - CH 13 - 80		8.80	2.10	80.00	41.00		39.00



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

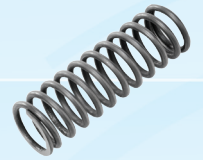


PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CB 13 - 10	13.00	9.80	1.60	10.00	7.20	2.000	6.40
ESC - CB 13 - 15		9.40	1.80	15.00	8.00		11.00
ESC - CB 13 - 20		9.40	1.80	20.00	18.00		11.00
ESC - CB 13 - 25		9.00	2.00	25.00	16.00		17.00
ESC - CB 13 - 30		9.00	2.00	30.00	24.00		18.00
ESC - CB 13 - 35		8.80	2.10	35.00	26.00		22.00
ESC - CB 13 - 40		8.80	2.10	40.00	36.00		22.00
ESC - CB 13 - 45		8.40	2.30	45.00	26.00		32.00
ESC - CB 13 - 50		8.40	2.30	50.00	36.00		32.00
ESC - CB 13 - 55		8.20	2.40	55.00	30.00		40.00
ESC - CB 13 - 60		8.20	2.40	60.00	36.00		42.00
ESC - CB 13 - 65		8.20	2.40	65.00	46.00		42.00
ESC - CB 13 - 70		8.00	2.50	70.00	40.00		50.00
ESC - CB 13 - 80		8.00	2.50	80.00	60.00		50.00
ESC - CR 14 - 15	14.00	12.60	0.70	15.00	0.31	0.030	4.60
ESC - CR 14 - 20		12.50	0.75	20.00	0.43		5.60
ESC - CR 14 - 25		12.40	0.80	25.00	0.53		7.20
ESC - CR 14 - 30		12.40	0.80	30.00	0.68		7.20
ESC - CR 14 - 35		12.40	0.80	35.00	0.83		7.20
ESC - CR 14 - 40		12.20	0.90	40.00	0.86		11.30
ESC - CR 14 - 45		12.20	0.90	45.00	1.01		11.30
ESC - CR 14 - 50		12.20	0.90	50.00	1.16		11.30
ESC - CR 14 - 55		12.00	1.00	55.00	1.11		18.00
ESC - CR 14 - 60		12.00	1.00	60.00	1.26		18.00
ESC - CR 14 - 65		12.00	1.00	65.00	1.41		18.00
ESC - CR 14 - 70		12.00	1.00	70.00	1.56		18.00
ESC - CR 14 - 80		11.80	1.10	80.00	1.54		28.60
ESC - CR 14 - 90		11.80	1.10	90.00	1.84		28.60
ESC - CF 14 - 15	14.00	12.40	0.80	15.00	0.49	0.050	5.20
ESC - CF 14 - 20		12.20	0.90	20.00	0.61		7.90
ESC - CF 14 - 25		12.20	0.90	25.00	0.86		7.90
ESC - CF 14 - 30		12.00	1.00	30.00	0.90		12.00
ESC - CF 14 - 35		12.00	1.00	35.00	1.15		12.00
ESC - CF 14 - 40		12.00	1.00	40.00	1.40		12.00
ESC - CF 14 - 45		12.00	1.00	45.00	1.65		12.00
ESC - CF 14 - 50		11.80	1.10	50.00	1.59		18.20
ESC - CF 14 - 55		11.80	1.10	55.00	1.84		18.20
ESC - CF 14 - 60		11.80	1.10	60.00	2.09		18.20
ESC - CF 14 - 65		11.60	1.20	65.00	1.87		27.60
ESC - CF 14 - 70		11.60	1.20	70.00	2.12		27.60
ESC - CF 14 - 80		11.60	1.20	80.00	2.62		27.60
ESC - CF 14 - 90		11.40	1.30	90.00	2.52		39.70

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



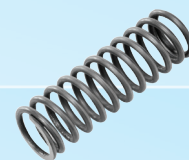
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CL 14 - 15	14.00	12.00	1.00	15.00	0.75	0.100	7.50
ESC - CL 14 - 20		12.00	1.00	20.00	1.25		7.50
ESC - CL 14 - 25		12.00	1.00	25.00	1.75		7.50
ESC - CL 14 - 30		11.80	1.10	30.00	1.90		11.00
ESC - CL 14 - 35		11.80	1.10	35.00	2.40		11.00
ESC - CL 14 - 40		11.80	1.10	40.00	2.90		11.00
ESC - CL 14 - 45		11.60	1.20	45.00	2.94		15.60
ESC - CL 14 - 50		11.60	1.20	50.00	3.44		15.60
ESC - CL 14 - 55		11.60	1.20	55.00	3.94		15.60
ESC - CL 14 - 60		11.60	1.20	60.00	4.44		15.60
ESC - CL 14 - 65		11.40	1.30	65.00	4.29		22.10
ESC - CL 14 - 70		11.40	1.30	70.00	4.79		22.10
ESC - CL 14 - 80		11.40	1.30	80.00	5.79		22.10
ESC - CL 14 - 90		11.40	1.30	90.00	4.65		43.50
ESC - CM 14 - 15	14.00	11.60	1.20	15.00	2.25	0.300	7.50
ESC - CM 14 - 20		11.40	1.30	20.00	3.06		9.80
ESC - CM 14 - 25		11.20	1.40	25.00	3.51		13.30
ESC - CM 14 - 30		11.20	1.40	30.00	5.01		13.30
ESC - CM 14 - 35		11.20	1.40	35.00	6.51		13.30
ESC - CM 14 - 40		11.20	1.40	40.00	8.01		13.30
ESC - CM 14 - 45		11.00	1.50	45.00	8.31		17.30
ESC - CM 14 - 50		11.00	1.50	50.00	9.81		17.30
ESC - CM 14 - 55		11.00	1.50	55.00	11.31		17.30
ESC - CM 14 - 60		10.80	1.60	60.00	11.04		23.20
ESC - CM 14 - 65		10.80	1.60	65.00	12.54		23.20
ESC - CM 14 - 70		10.60	1.70	70.00	11.82		30.60
ESC - CM 14 - 80		10.60	1.70	80.00	14.82		30.60
ESC - CM 14 - 90		10.40	1.80	90.00	15.12		39.60
ESC - CH 14 - 15	14.00	10.80	1.60	15.00	2.76	1.000	10.40
ESC - CH 14 - 20		10.80	1.60	20.00	5.76		10.40
ESC - CH 14 - 25		10.80	1.60	25.00	8.76		10.40
ESC - CH 14 - 30		10.60	1.70	30.00	10.32		12.80
ESC - CH 14 - 35		10.60	1.70	35.00	13.32		12.80
ESC - CH 14 - 40		10.20	1.90	40.00	12.00		20.00
ESC - CH 14 - 45		10.20	1.90	45.00	25.00		20.00
ESC - CH 14 - 50		9.80	2.10	50.00	11.70		30.50
ESC - CH 14 - 55		9.80	2.10	55.00	14.70		30.50
ESC - CH 14 - 60		9.80	2.10	60.00	17.70		30.50
ESC - CH 14 - 65		9.60	2.20	65.00	16.56		37.40
ESC - CH 14 - 70		9.60	2.20	70.00	19.56		37.40
ESC - CH 14 - 80		9.40	2.30	80.00	19.68		47.20



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CY 16 - 20	16.00	14.70	0.65	20.00	0.29	0.018	3.60
ESC - CY 16 - 25		14.60	0.70	25.00	0.36		4.60
ESC - CY 16 - 30		14.50	0.75	30.00	0.43		5.70
ESC - CY 16 - 35		14.40	0.80	35.00	0.50		7.00
ESC - CY 16 - 40		14.30	0.85	40.00	0.55		9.00
ESC - CY 16 - 45		14.30	0.85	45.00	0.64		9.00
ESC - CY 16 - 50		14.20	0.90	50.00	0.69		11.30
ESC - CY 16 - 55		14.20	0.90	55.00	0.78		11.30
ESC - CY 16 - 60		14.20	0.90	60.00	0.87		11.30
ESC - CY 16 - 65		14.20	0.90	65.00	0.96		11.30
ESC - CY 16 - 70	14.20	0.90	70.00	1.05	11.30		
ESC - CR 16 - 15	16.00	14.50	0.75	15.00	0.32	0.030	4.50
ESC - CR 16 - 20		14.40	0.80	20.00	0.43		5.60
ESC - CR 16 - 25		14.20	0.90	25.00	0.51		8.00
ESC - CR 16 - 30		14.20	0.90	30.00	0.66		8.00
ESC - CR 16 - 35		14.20	0.90	35.00	0.81		8.00
ESC - CR 16 - 40		14.00	1.00	40.00	0.81		13.00
ESC - CR 16 - 45		14.00	1.00	45.00	0.96		13.00
ESC - CR 16 - 50		14.00	1.00	50.00	1.11		13.00
ESC - CR 16 - 55		14.00	1.00	55.00	1.26		13.00
ESC - CR 16 - 60		13.80	1.10	60.00	1.20		20.00
ESC - CR 16 - 65		13.80	1.10	65.00	1.35		20.00
ESC - CR 16 - 70		13.80	1.10	70.00	1.50		20.00
ESC - CR 16 - 80		13.80	1.10	80.00	1.80		20.00
ESC - CR 16 - 90		13.60	1.20	90.00	1.83		28.80
ESC - CF 16 - 15	16.00	14.20	0.90	15.00	0.44	0.050	6.30
ESC - CF 16 - 20		14.00	1.00	20.00	0.57		8.70
ESC - CF 16 - 25		14.00	1.00	25.00	0.82		8.70
ESC - CF 16 - 30		13.80	1.10	30.00	0.86		12.80
ESC - CF 16 - 35		13.80	1.10	35.00	1.11		12.80
ESC - CF 16 - 40		13.60	1.20	40.00	1.07		18.60
ESC - CF 16 - 45		13.60	1.20	45.00	1.32		18.60
ESC - CF 16 - 50		13.60	1.20	50.00	1.57		18.60
ESC - CF 16 - 55		13.60	1.20	55.00	1.82		18.60
ESC - CF 16 - 60		13.40	1.30	60.00	1.66		26.80
ESC - CF 16 - 65		13.40	1.30	65.00	1.91		26.80
ESC - CF 16 - 70		13.40	1.30	70.00	2.16		26.80
ESC - CF 16 - 80		13.20	1.40	80.00	2.20		36.00
ESC - CF 16 - 90		13.20	1.40	90.00	2.68		36.40

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



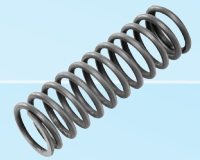
PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE ((K)) MM	SOLID HGT (APPROX) (SH) MM
ESC - CL 16 - 15	16.00	13.80	1.10	15.00	0.68	0.100	8.20
ESC - CL 16 - 20		13.80	1.10	20.00	1.18		8.20
ESC - CL 16 - 25		13.60	1.20	25.00	1.50		10.00
ESC - CL 16 - 30		13.60	1.20	30.00	2.00		10.00
ESC - CL 16 - 35		13.60	1.20	35.00	2.50		10.00
ESC - CL 16 - 40		13.60	1.20	40.00	3.00		10.00
ESC - CL 16 - 45		13.20	1.40	45.00	2.40		21.00
ESC - CL 16 - 50		13.20	1.40	50.00	2.90		21.00
ESC - CL 16 - 55		13.20	1.40	55.00	3.40		21.00
ESC - CL 16 - 60		13.20	1.40	60.00	3.90		21.00
ESC - CL 16 - 65		13.00	1.50	65.00	3.53		29.70
ESC - CL 16 - 70		13.00	1.50	70.00	4.03		29.70
ESC - CL 16 - 80		13.00	1.50	80.00	5.03		29.70
ESC - CL 16 - 90		12.80	1.60	90.00	5.00		40.00
ESC - CT 16 - 15	16.00	13.60	1.20	15.00	1.50	0.200	7.50
ESC - CT 16 - 20		13.40	1.30	20.00	2.11		9.43
ESC - CT 16 - 25		13.20	1.40	25.00	2.48		12.60
ESC - CT 16 - 30		13.20	1.40	30.00	3.48		12.60
ESC - CT 16 - 35		13.20	1.40	35.00	4.48		12.60
ESC - CT 16 - 40		13.20	1.40	40.00	5.48		12.60
ESC - CT 16 - 45		12.80	1.60	45.00	4.52		22.40
ESC - CT 16 - 50		12.80	1.60	50.00	5.52		22.40
ESC - CT 16 - 55		12.80	1.60	55.00	6.52		22.40
ESC - CT 16 - 60		12.60	1.70	60.00	6.22		28.90
ESC - CT 16 - 65		12.60	1.70	65.00	7.22		28.90
ESC - CT 16 - 70		12.60	1.70	70.00	8.22		28.90
ESC - CT 16 - 80		12.60	1.70	80.00	10.22		28.90
ESC - CM 16 - 15		16.00	13.40	1.30	15.00		2.16
ESC - CM 16 - 20	13.20		1.40	20.00	3.06	9.80	
ESC - CM 16 - 25	13.00		1.50	25.00	3.75	12.50	
ESC - CM 16 - 30	13.00		1.50	30.00	5.25	12.50	
ESC - CM 16 - 35	12.80		1.60	35.00	6.00	15.00	
ESC - CM 16 - 40	12.80		1.60	40.00	7.50	15.00	
ESC - CM 16 - 45	12.60		1.70	45.00	7.38	20.40	
ESC - CM 16 - 50	12.60		1.70	50.00	8.88	20.40	
ESC - CM 16 - 55	12.40		1.80	55.00	8.40	27.00	
ESC - CM 16 - 60	12.40		1.80	60.00	9.90	27.00	
ESC - CM 16 - 65	12.40		1.80	65.00	11.40	27.00	
ESC - CM 16 - 70	12.40		1.80	70.00	12.90	27.00	
ESC - CM 16 - 80	12.40		1.80	80.00	15.90	27.00	
ESC - CM 16 - 90	12.20		1.90	90.00	16.74	34.20	



COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

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When using stainless steel, multiply figures shown by 5/6 (0.833)

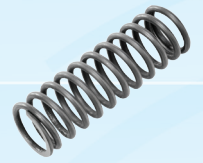


PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CH 16 - 15	16.00	12.60	1.70	15.00	4.80	1.000	10.20
ESC - CH 16 - 20		12.40	1.80	20.00	7.40		12.60
ESC - CH 16 - 25		12.20	1.90	25.00	10.50		14.50
ESC - CH 16 - 30		12.20	1.90	30.00	15.50		14.50
ESC - CH 16 - 35		12.00	2.00	35.00	17.00		18.00
ESC - CH 16 - 40		11.80	2.10	40.00	19.00		21.00
ESC - CH 16 - 45		11.60	2.20	45.00	19.00		26.00
ESC - CH 16 - 50		11.60	2.20	50.00	24.00		26.00
ESC - CH 16 - 55		11.60	2.20	55.00	29.00		26.00
ESC - CH 16 - 60		11.40	2.30	60.00	28.00		32.00
ESC - CH 16 - 65		11.40	2.30	65.00	33.00		32.00
ESC - CH 16 - 70		11.20	2.40	70.00	32.00		38.00
ESC - CH 16 - 80		11.00	2.50	80.00	32.50		47.50
ESC - CB 16 - 15	16.00	12.00	2.00	15.00	10.00	2.000	10.00
ESC - CB 16 - 20		11.80	2.10	20.00	15.00		12.50
ESC - CB 16 - 25		11.40	2.30	25.00	16.00		17.00
ESC - CB 16 - 30		11.40	2.30	30.00	23.00		18.50
ESC - CB 16 - 35		11.20	2.40	35.00	27.00		21.50
ESC - CB 16 - 40		11.20	2.40	40.00	37.00		21.50
ESC - CB 16 - 45		11.00	2.50	45.00	35.00		27.50
ESC - CB 16 - 50		11.00	2.50	50.00	45.00		27.50
ESC - CB 16 - 55		10.80	2.60	55.00	46.00		32.00
ESC - CB 16 - 60		10.80	2.60	60.00	56.00		32.00
ESC - CB 16 - 65		10.40	2.80	65.00	38.00		46.00
ESC - CB 16 - 70		10.40	2.80	70.00	48.00		46.00
ESC - CB 16 - 80		10.20	2.90	80.00	50.00		55.00
ESC - CR 18 - 20	18.00	16.00	1.00	20.00	0.65	0.050	7.00
ESC - CR 18 - 25		16.00	1.00	25.00	0.90		7.00
ESC - CR 18 - 30		15.80	1.10	30.00	1.01		9.90
ESC - CR 18 - 35		15.80	1.10	35.00	1.26		9.90
ESC - CR 18 - 40		15.60	1.20	40.00	1.28		14.40
ESC - CR 18 - 45		15.60	1.20	45.00	1.53		14.40
ESC - CR 18 - 50		15.60	1.20	50.00	1.78		14.40
ESC - CR 18 - 55		15.40	1.30	55.00	1.78		19.50
ESC - CR 18 - 60		15.40	1.30	60.00	2.03		19.50
ESC - CR 18 - 65		15.40	1.30	65.00	2.28		19.50
ESC - CR 18 - 70		15.40	1.30	70.00	2.53		19.50
ESC - CR 18 - 80		15.20	1.40	80.00	2.63		27.30

COMPRESSION SPRING

High Carbon Steel wire and Stainless Steel

*When ordering, please specify high carbon spring steel (M) or stainless steel (S) //
When using stainless steel, multiply figures shown by 5/6 (0.833)



PART NUMBER	OUTSIDE DIA (OD) MM	INSIDE DIA (OD) MM	WIRE DIA (WD) MM	FREE LENGTH (FL) MM	APPROX LOAD AT SOLID HGT KG	SPRING RATE (K) MM	SOLID HGT (APPROX) (SH) MM
ESC - CF 18 - 20	18.00	15.60	1.20	20.00	1.10	0.100	9.00
ESC - CF 18 - 25		15.40	1.30	25.00	1.26		12.40
ESC - CF 18 - 30		15.40	1.30	30.00	1.76		12.40
ESC - CF 18 - 35		15.20	1.40	35.00	1.89		16.10
ESC - CF 18 - 40		15.00	1.50	40.00	1.90		21.00
ESC - CF 18 - 45		15.00	1.50	45.00	2.40		21.00
ESC - CF 18 - 50		15.00	1.50	50.00	2.90		21.00
ESC - CF 18 - 55		14.80	1.60	55.00	2.62		28.80
ESC - CF 18 - 60		14.80	1.60	60.00	3.12		28.80
ESC - CF 18 - 65		14.80	1.60	65.00	3.62		28.80
ESC - CF 18 - 70		14.60	1.70	70.00	3.26		37.40
ESC - CF 18 - 80		14.60	1.70	80.00	4.26		37.40
ESC - CL 18 - 20	18.00	15.00	1.50	20.00	3.00	0.300	10.00
ESC - CL 18 - 25		14.80	1.60	25.00	3.90		12.00
ESC - CL 18 - 30		14.80	1.60	30.00	5.40		12.00
ESC - CL 18 - 35		14.60	1.70	35.00	5.64		16.20
ESC - CL 18 - 40		14.60	1.70	40.00	7.14		16.20
ESC - CL 18 - 45		14.40	1.80	45.00	7.56		19.80
ESC - CL 18 - 50		14.40	1.80	50.00	9.06		19.80
ESC - CL 18 - 55		14.40	1.80	55.00	10.56		19.80
ESC - CL 18 - 60		14.40	1.80	60.00	12.06		19.80
ESC - CL 18 - 65		14.00	2.00	65.00	9.90		32.00
ESC - CL 18 - 70		14.00	2.00	70.00	11.40		32.00
ESC - CL 18 - 80		14.00	2.00	80.00	14.40		32.00
ESC - CL 18 - 90	13.60	2.20	90.00	14.10	43.00		
ESC - CL 18 - 100	13.60	2.20	100.00	17.10	43.00		
ESC - CM 18 - 20	18.00	14.60	1.70	20.00	4.05	0.500	11.90
ESC - CM 18 - 25		14.40	1.80	25.00	5.30		14.40
ESC - CM 18 - 30		14.40	1.80	30.00	7.80		14.40
ESC - CM 18 - 35		14.40	1.80	35.00	10.30		14.40
ESC - CM 18 - 40		14.40	1.80	40.00	12.80		14.40
ESC - CM 18 - 45		14.00	2.00	45.00	11.50		22.00
ESC - CM 18 - 50		14.00	2.00	50.00	14.00		22.00
ESC - CM 18 - 55		14.00	2.00	55.00	16.50		22.00
ESC - CM 18 - 60		14.00	2.00	60.00	19.00		22.00
ESC - CM 18 - 65		13.60	2.20	65.00	15.45		34.10
ESC - CM 18 - 70		13.60	2.20	70.00	17.95		34.10
ESC - CM 18 - 80		13.60	2.20	80.00	22.95		34.10
ESC - CM 18 - 90		13.40	2.30	90.00	24.30		41.40
ESC - CM 18 - 100		13.40	2.30	100.00	29.30		41.40



GLOSSARY OF SPRING TERMINOLOGY

Active Coils	Coils that deflect under load.
Angular Relationship of Ends	Position of hooks or loops of an extension spring (or ends of a torsion spring) to each other.
Baking	Heating of electroplated springs to relieve hydrogen embrittlement.
Close Wound	Adjacent coils which are in contact.
Closed and Ground Ends	Same as Closed Ends, except the first and last coils are ground to provide a flat bearing surface.
Closed Ends	Compression spring ends with coil pitch angle reduced so they are level with the spring axis and touch the adjacent coils.
Deflection	Motion imparted to a spring by application or removal of an external load.
Elastic Limit	Maximum stress to which a material may be subjected without permanent set.
Endurance Limit	Maximum stress, at a given stress ratio, at which material will operate in a given environment for a stated number of cycles without failure.
Fixture Tempering	Restraining parts during tempering to improve dimensional control.
Free Angle	Angular relationship between arms of a helical torsion spring which is not under load.
Free Length	Overall length of a spring which is not under load.
Heat Setting	A process to pre-relax a spring in order to improve stress relaxation resistance in service.
Helical Springs	Springs made of bar stock or wire coiled into a helical form. This category includes compression, extension and torsion springs.
Hooks	Open loops or ends of extension springs that are generally longer than a standard loops.
Hysteresis	Mechanical energy loss occurred during loading and unloading of a spring within the elastic range. It is illustrated by the area between load-deflection curves.
Initial Tension	The force that tends to keep coils of a close wound extension spring closed and which must be overcome before the coils start to open.
Loops	Circular formed ends, with ends of extension springs that provide a means for attachment.
Mean Diameter	The average diameter of the mass of spring material, equal to one-half the sum of the outside and inside diameters. In a helical spring, this is the equivalent to the outside diameter minus one wire diameter.
Modulus in Shear or Torsion	The coefficient of stiffness used for compression and extension springs.
Modulus in Tension or Bending	(Young's Modulus) The coefficient of stiffness used for torsion or flat springs.
Moment	A product of the distance from the spring axis to the point of load application, and the force component normal to the distance line.
Natural Frequency	The lowest inherent rate of free vibration of a spring vibrating between its own ends.
Passivation	An acid treatment for stainless steel which removes iron deposits and improves corrosion resistance.
Patenting	The process of heating carbon steel above its critical temperature and cooling at a controlled rate to achieve a fine paralytic microstructure.
Pitch	Distance from center to center of wire in adjacent coils in an open-wound spring.
Plain Ends	End coils of a helical spring having a constant pitch and ends not squared.
Plain Ends, Ground	Same as Plain Ends, except wire ends are ground square with the axis.
Preset	See Set Removal
Rate	The change in load per unit of deflection. Generally expressed as Lbs/in or N/mm
Residual Stress	Stress mechanically induced by such means as set removal, shot-peening, cold working, or forming. It may be beneficial or not, depending on the spring application.
Set Permanent	Change of length, height or position after a spring is stressed beyond material's elastic limit.
Set Point	Stress at which some arbitrarily chosen amount of set (usually 2%) occurs. Set percentage is the set divided by the deflection which produced it.
Set Removal	An operation which causes a permanent loss of length or height due to spring deflection.
Shot-Peening	Blasting the surfaces of spring material with steel or glass pellets to induce compressive stresses that improve fatigue life.
Slenderness Ratio	Ratio of spring length to mean diameter L/D in helical springs.
Solid Height	Length of a compression spring when deflected under sufficient load to bring all adjacent coils into contact - no additional deflection is possible.
Spiral Springs	Springs formed from flat strip or wire wound in the form of a spiral, loaded by torque about an axis normal to the plane of the spiral.
Spring Index	Ratio of mean diameter to wire diameter.
Squared and Ground Ends	See Closed and Ground Ends.
Squared Ends	See Closed Ends.
Squareness	Angular deviation, between the axis of a compression spring in a free state and a line normal to the end planes. Squareness Under Load same as Squareness but measured while there is a load applied to the spring.
Stress Range	Difference in operating stresses at minimum and maximum loads.
Stress Ratio	Minimum stress divided by maximum stress.
Stress Relief	A low temperature heat treatment given springs to relieve residual stresses produced by prior cold forming.
Torque	A twisting action in torsion springs which produces rotation. Equal to the load multiplied by the distance (or moment arm) from the load to the axis of the spring. Generally expressed as in-lbs or N-mm. also see Moment
Total Number of Coils	The sum of the number of active and inactive coils in a spring body.



FAQ

1) Do you provide standard stock springs?

From Elite Springs Catalogue customers are able to find standard specifications that are conveniently available for clients through our office or official company website. Elite Springs catalogue is ideal for engineers and toolmakers to source for cost effective designed products and prototyping new assemblies.

2) What are the advantages of having stainless springs passivated?

For stainless steel springs to provide proper corrosion resistance, a process of acid treatment for stainless steel which remove iron deposit is done.

3) Why are Stainless Steel springs magnetic after production?

Stainless steel material become magnetic after a production working process.

4) Does it make a difference on a torsion spring whether its left or right hand wound ?

Yes. To reduce the likelihood of torsion springs taking a set, the spring should be coiled in the direction that result in increased coil count as load is applied. In other words, the spring should be coiled such that it "winds up" when load is applied. If the spring "unwinds" as load is applied, it should probably be coiled in the opposite direction.

5) If I stack two springs, would the rate stay the same ?

Stacking springs definitely changes the spring rate. The effective spring rate of the stack will be less than the softest spring in the stack.

6) If I cut a spring in half, would the rate stay the same ?

Cutting springs generally decreases the number of active coils. Therefore, there is an increase in spring rate.

7) How long will a compression spring last ?

The effective life of a compression spring depends primarily on the time cyclic. In cyclic applications, springs are generally designed for maximum lifespan; however, application nuances such as resonant vibration could highly reduce spring life.

8) Can Disc Springs be Stacked?

Yes. Belleville Disc Springs can be stacked in either a series or in parallel to sustain greater loads and/or deflections than when using a single spring.

9) How far can I safely compress a compression spring?

Compression force depends on the design and material of the part. While normal compression springs can safely be compressed to their usual rate without damage, it is not recommended for parts with relatively few coils. Material is also a factor.

10) What is your minimum order quantity ?

MOQ or minimum order quantity affect pricing.



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