

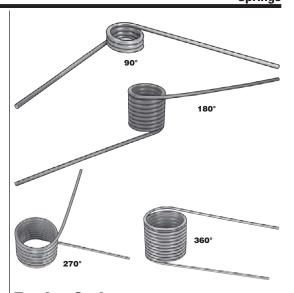
Precision Compression Springs

Manufactured to tighter load and dimensional tolerances.

Note: Additional sizes are available; on Grainger.com, search for "precision compression springs."

Type 302 Stainless Steel—Springs offer better corrosion resistance and perform well at up to 500°F. Meet ASTM A313 standards.

Overall Outside Length Dia. Wire Dia. Length Close Length Close Clos	perform well at up to 500 1. Meet Activities Standards.													
Length Dia. Wire Dia. Length (lb.) No. Oty.	Overall	Ontoida		Compressor	hen I I	Itom	Pkn	Overal	Ahietu∩I		Compressor	henll	Itom	Pkn
302 Statiolless Steel								Lonath	n Dia	Wire Dia	Length			
Value 0.12 in 0.016 in 0.114 in 2 1NCG4 5 1.87 in 0.12 in 0.016 in 0.111 in 2 1NCG5 5 1.87 in 0.12 in 0.016 in 0.205 in 1.56 1NCG5 5 1.87 in 0.12 in 0.016 in 0.105 in 1.57 1NCG6 5 1.87 in 0.30 in 0.022 in 0.106 in 1.57 1NCG6 5 1.57 in 0.30 in 0.022 in 0.106 in 1.57				Longin	(10.)	140.	Qty.					(10.)	140.	Qty.
3/5 in 0.24 in 0.022 in 0.111 in 2 1MCG4 5 0.12 in 0.018 in 0.22 in 0.24 in 0.22 in 0.26 in 0.25 in 1.56 1MCG5 5 0.12 in 0.022 in 0.205 in 0.25 in 0.25 in 0.25 in 0.25 in 0.25 in 0.25 in 0.15 in 0.25 in 0.25 in 0.18 in 0.032 in 0.14 in 1.57 1MCG5 5 0.48 in 0.045 in 0.192 in 7.58 1MCH1 5 0.48 in 0.045 in 0.192 in 7.58 1MCH1 5 0.48 in 0.045 in 0.26 in 0.144 in 1.93 1MCH3 5 0.48 in 0.026 in 0.26 in 0.27 in 0.26 in 0.27 in 0.26 in 0.27 in 0.26 in 0.28 in 0.24 in 0.25 in 0				0.114 in	16	1NCG3	5	iligii c				1.87	1NRV2	5
0.12 in 0.016 in 0.309 in 3.62 1NCG6 5 1/2 in 0.33 in 0.022 in 0.106 in 1.57 1NCG8 5 1/2 in 0.33 in 0.022 in 0.106 in 1.57 1NCG8 5 1/3 in 0.36 in 0.032 in 0.145 in 3.75 1NCG8 5 1/4 in 0.24 in 0.022 in 0.144 in 1.93 1NCH3 5 1/4 in 0.24 in 0.022 in 0.144 in 1.93 1NCH3 5 1/4 in 0.36 in 0.032 in 0.22 in 0.144 in 1.93 1NCH3 5 1/4 in 0.36 in 0.032 in 0.24 in 0.32 in 0.24 in 0.032 in 0.24 in 0.032 in 0.25 1NCH3 5 1/4 in 0.36 in 0.032 in 0.27 in 0.47 in 1.93 1NCH3 5 1/4 in 0.36 in 0.032 in 0.39 in					2	1NCC/	5							
12 in 0.022 in 0.309 in 3.62 1NC66 5 0.36 in 0.032 in 0.145 in 0.106 in 1.57 1NC69 5 0.48 in 0.045 in 0.192 in 0.145 in 0.192 in 7.58 1NCH 5 0.48 in 0.045 in 0.192 in 0.145 in 0.192 in 7.58 1NCH 5 0.48 in 0.024 in 0.026 in 0.144 in 1.93 1NCH 5 0.41 in 0.026 in 0.202 in 3.12 1NCH 5 0.41 in 0.026 in 0.24 in 4.93 1NCH 5 0.48 in 0.045 in 0.24 in 4.93 1NCH 5 0.48 in 0.045 in 0.39 in 0.24 10.026 10.026 10.026 10.026 10.026 10.026 10.026 10.026 10.026 10.026 10.026 10.027 10.026 10.026 10.026 10.026 10.026 10.026 10.027 10.026	_78 III			0.1111III	156	1NCG5	5							
Value		0.12 in	0.010 in							0.022 in				
0.36 in 0.032 in 0.145 in 3.75 1NC69 5 0.48 in 0.045 in 0.022 in 0.144 in 1.93 1NCH3 5 1/16 in 0.24 in 0.022 in 0.203 in 3.12 1NCH3 5 1/16 in 0.31 in 0.032 in 0.24 in 1.93 1NCH3 5 1/16 in 0.31 in 0.032 in 0.24 in 1.93 1NCH3 5 1/16 in 0.31 in 0.032 in 0.24 in 1.93 1NCH3 5 1/16 in 0.31 in 0.032 in 0.397 in 1.06 1NCJ1 5 1/16 in 0.36 in 0.026 in 0.138 in 2.1 1NCJ3 5 1/16 in 0.36 in 0.026 in 0.138 in 2.1 1NCJ3 5 1/16 in 0.36 in 0.026 in 0.397 in 2.20 1NCJ4 5 1/16 in 0.36 in 0.038 in 0.397 in 2.20 1NCJ4 5 1/16 in 0.36 in 0.038 in 0.24 in 1.93 1NCH3 5 1/16 in 0.36 in 0.038 in 0.24 in 1.93 1NCH3 5 1/16 in 0.36 in 0.038 in 0.284 in 1.93 1NCH3 5 1/16 in 0.36 in 0.038 in 0.284 in 1.93 1NCH3 5 1/16 in 0.36 in 0.038 in 0.397 in 2.20 1NCJ4 5 1/16 in 0.36 in 0.038 in 0.287 in 3.13 1NCK5 5 1/16 in 0.36 in 0.032 in 0.287 in 3.13 1NCK6 5 1.36 in 0.032 in 0.287 in 3.13 1NCK5 5 1.46 in 0.48 in 0.045 in 0.271 in 7.44 1NCL2 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.271 in 7.41 1NCL2 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.477 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777 in 1.897 1NCH3 5 1.46 in 0.36 in 0.032 in 0.38 in 0.777	1/6 in	0.12 III	0.022 in								0.143 in			5
0.48 in 0.045 in 0.145 in 1.93 1NCH3 5 9k in 0.24 in 0.022 in 0.144 in 1.93 1NCH3 5 9k in 0.24 in 0.032 in 0.243 in 1.93 1NCH3 5 9k in 0.24 in 0.032 in 0.243 in 1.05 1NCH3 5 1/k in 0.3 in 0.032 in 0.177 in 1.06 1NCJ3 5 0.24 in 0.038 in 0.39	/2 111	0.3 iii	0.022 in	0.100 iii	3.75	INCG	5		0.40 III	0.043 in	0.132 III	6.72	1NB72	5
Mykin 0.24 in 0.022 in 0.144 in 1.93 1 NCH3 5								70 111			0.270 III			
94 in 0.24 in 0.026 in 0.241 in 0.24 in 0.24 in 0.24 in 0.93 in 0.24 in 0.24 in 0.93 in 0.24 in 0.24 in 0.83 in 0.24 in 0.24 in 0.83 in 0.24 in 0.83 in 0.25 in 0.24 in 0.88 in 0.25	9/4c in										0.00 in			
1/16 in 0.30 in 0.032 in 0.77 in 1.06 1KCJ 5 0.72 in 0.063 in 0.284 in 1.55 11KCA 5 0.72 in 0.063 in 0.284 in 1.55 11KCA 5 0.72 in 0.063 in 0.284 in 1.55 11KCA 5 0.72 in 0.063 in 0.284 in 1.55 11KCA 5 0.72 in 0.065 in 0.287 in 1.292 11KCJ 5 0.72 in 0.065 in 0.287 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.284 in 1.292 11KCJ 5 0.72 in 0.065 in 0.045 in 0.287 in 3.13 11KCK 5 0.36 in 0.032 in 0.209 in 3.33 11KCK 5 0.36 in 0.032 in 0.209 in 3.33 11KCK 5 0.48 in 0.035 in 0.220 in 3.33 11KCK 5 0.48 in 0.035 in 0.221 in 0.645 in 0.72 in 0.72 in 0.060 in 0.72 in 0.72 in 0.72 in 0.72 in 0.72 in 0.74 in 0.72 in 0.74 in 0.								3/4 in	0.30 III					
0.18 in 0.016 in 0.39 in 8.81 1NCJ3 5 34 in 0.36 in 0.026 in 0.39 in 8.81 1NCJ3 5 0.6 in 0.027 in 0.39 in 22.09 1NCJ4 5 0.72 in 0.055 in 0.221 in 8.81 1NCJ3 5 0.72 in 0.055 in 0.221 in 8.81 1NCJ3 5 0.72 in 0.055 in 0.221 in 8.81 1NCJ5 5 0.72 in 0.055 in 0.221 in 8.81 1NCJ5 5 0.72 in 0.055 in 0.221 in 8.81 1NCJ5 5 0.72 in 0.055 in 0.24 in 12.92 1NCJ6 5 13/16 in 0.33 in 0.045 in 0.417 in 11.9 1NCK1 5 0.36 in 0.032 in 0.47 in 11.9 1NCK1 5 0.36 in 0.032 in 0.287 in 3.13 1NCK6 5 0.36 in 0.032 in 0.287 in 3.13 1NCK6 5 0.36 in 0.032 in 0.27 in 7.44 1NCL2 5 0.48 in 0.055 in 0.37 in 6.65 1NCL3 5 0.48 in 0.055 in 0.37 in 6.65 1NCL3 5 0.48 in 0.045 in 0.27 in 7.44 1NCL2 5 0.48 in 0.055 in 0.37 in 6.65 1NCL3 5 0.48 in 0.055 in 0.37 in 6.65 1NCL3 5 0.48 in 0.055 in 0.37 in 6.65 1NCL3 5 0.18 in 0.032 in 0.457 in 18.95 1NCL5 5 0.36 in 0.032 in 0.457 in 18.95 1NCL5 5 0.36 in 0.032 in 0.457 in 18.95 1NCL5 5 0.38 in 0.038 in 0.26 in 0.29 in 3.83 1NCL5 5 0.38 in 0.038 in 0.477 in 6.549 1NCN5 5 0.38 in 0.038 in 0.477 in 18.97 1NCN5 5 0.38 in 0.032 in 0.596 in 0.529 in 0.598 in 0.574 in 7.71 1NCL7 5 0.38 in 0.032 in 0.596 in 0.5549 1NCN5 5 0.38 in 0.032 in 0.477 in 18.97 1NCN5 5 0.38 in 0.032 in 0.477 in 18.		0.24 III	0.020 in		1 93	1NCH7	5	74 111	0.0 iii		0.007 III	10.52	1NCA2	
1	7 10 111													
34 in 0.36 in 0.026 in 0.138 in 2.1 1kCJ3 5 0.72 in 0.055 in 0.227 in 8.81 1kCJ3 5 0.72 in 0.055 in 0.228 in 3.97 in 1.93 1kCB1 5 0.72 in 0.053 in 0.47 in 1.19 1kCK1 5 0.72 in 0.053 in 0.47 in 1.19 1kCK1 5 0.36 in 0.033 in 0.47 in 0.11 1kCK2 5 0.31 in 0.045 in 0.287 in 3.13 1kCK6 5 0.31 in 0.022 in 0.66 in 0.18 in 0.033 in 0.22 in 0.33 in 0.25 in 0.33 in 0.25 in 0.33 in 0.25 in 0.37 in 0.27 in 0.74 1kCL1 5 0.48 in 0.055 in 0.032 in 0.032 in 0.055 in 0.27 in 0.74 1kCL1 5 0.48 in 0.055 in 0.27 in 0.74 1kCL2 5 0.48 in 0.055 in 0.37 in 0.45 in 0.4									0.0.	0.045				
0.5 0.02 in 0.055 0.221 in 8.81 1 NCJ5 5 0.72 in 0.055 in 0.228 in 12.92 1 NCJ5 5 0.72 in 0.055 in 0.335 in 0.47 in 11.9 1 NCK1 5 0.36 in 0.038 in 0.27 in 7.2 1 NCC2 5 0.72 in 0.072 in 0.361 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.022 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.022 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.032 in 0.381 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.032 in 0.381 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.032 in 0.381 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.032 in 0.38 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.032 in 0.38 in 0.287 in 3.13 1 NCK6 5 0.38 in 0.032 in 0.38 in 0.28 in 3.13 1 NCK6 5 0.38 in 0.032 in 0.38 in 0.28 in 0.38 in 0.27 in 0.74 in 12.5 1									0.0 iii	0.045 in				
0.72 in 0.055 in 0.281 in 1.292 1NCJS 5 0.72 in 0.063 in 0.284 in 1.292 1NCJS 5 13/6 in 0.33 in 0.045 in 0.287 in 1.19 1NCK1 5 0.24 in 0.026 in 0.028 in 0.287 in 3.13 1NCK6 5 0.36 in 0.032 in 0.208 in 3.31 31NCK6 5 0.36 in 0.032 in 0.209 in 3.83 1 NCK7 5 0.36 in 0.032 in 0.209 in 3.83 1 NCK7 5 0.48 in 0.047 in 0.21 in 4.64 1NCL1 5 0.48 in 0.045 in 0.27 in 4.64 1NCL1 5 0.48 in 0.045 in 0.27 in 4.64 1NCL1 5 0.48 in 0.045 in 0.27 in 4.64 1NCL1 5 0.48 in 0.045 in 0.27 in 4.64 1NCL1 5 0.48 in 0.045 in 0.27 in 7.44 1NCL2 5 0.48 in 0.045 in 0.27 in 7.44 1NCL2 5 0.48 in 0.045 in 0.25 in 0.45	3∕4 in								0.00 iii	0.045 in	0.000 iii			
0.72 in 0.063 in 0.428 in 12.92 1NCJ6 5 13/16 in 0.033 in 0.445 in 0.417 in 11.9 1NCK1 5 0.36 in 0.038 in 0.201 in 6.17 1NCK2 5 0.36 in 0.038 in 0.202 in 0.166 in 1.57 1NCK6 5 0.36 in 0.032 in 0.166 in 1.57 1NCK6 5 0.36 in 0.032 in 0.33 in 0.209 in 3.83 1NCK8 5 0.42 in 0.032 in 0.33 in 0.209 in 3.83 1NCK8 5 0.42 in 0.032 in 0.33 in 0.21 in 4.64 1NCL1 5 0.48 in 0.045 in 0.27 in 7.44 1NCL2 5 0.48 in 0.055 in 0.27 in 7.44 1NCL2 5 0.48 in 0.055 in 0.27 in 7.44 1NCL2 5 0.48 in 0.055 in 0.327 in 6.65 1NCL3 5 0.18 in 0.045 in 0.226 in 6 1NCL3 5 0.18 in 0.045 in 0.226 in 6 1NCL3 5 0.18 in 0.032 in 0.425 in 5.6 1NCL3 5 0.31 in 0.026 in 0.229 in 2.54 1NCL3 5 0.31 in 0.026 in 0.292 in 2.54 1NCL3 5 0.31 in 0.036 in 0.032 in 0.457 in 18.95 1NCL4 5 0.31 in 0.036 in 0.032 in 0.457 in 18.95 1NCL4 5 0.31 in 0.036 in 0.032 in 0.457 in 18.95 1NCL4 5 0.38 in 0.038 in 0.25 in 0.47 in 18.95 1NCL5 5 0.38 in 0.038 in 0.25 in 0.337 in 4.5 1NCN2 5 0.38 in 0.038 in 0.25 in 0.338 in 4.5 1NCN2 5 0.38 in 0.038 in 0.038 in 0.47 in 6.18 1NCN2 5 0.38 in 0.038 in 0.57 in 7.31 1NCN2 5 0.38 in 0.038 in 0.47 in 6.15 1NCP4 5 0.38 in 0.038 in 0.47 in 6.15 1NCP5 5 0.38 in 0.038 in 0.47 in 6.15 1NCP5 5 0.38 in 0.038 in 0.47 in 6.15 1NCP5 5 0.38 in 0.038 in 0.47 in 6.15 1NCP5 5 0.38 in 0.038 in 0.47 in 6.15 1NCP5 5 0.38 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.42 in 0.44 in 7.31 1NCN2 5 0.42 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.47 in 6.15 1NCP6 5 0.42 in 0.038 in 0.44 in 0.508 in 9.75 1NCP6 5 0.42 in 0.038 in 0.44 in 0.508 in 0.57 in 7.31 1NCP3 5 0.42 in 0.038 in 0.042 in 0.44 i		0.0 iii	0.072 III	0.337 III										
13/16 in														
0.38 in 0.038 in 0.28 in 0.38 in 0.287 in 3.13 NCK6 5		00.												
0.24 in 0.026 in 0.166 in 1.57 1NCK7 5 0.36 in 0.032 in 0.166 in 1.57 1NCK7 5 0.36 in 0.032 in 0.299 in 3.83 1NCK8 5 0.42 in 0.034 in 0.33 in 0.21 in 4.64 1NCL1 5 0.48 in 0.038 in 0.27 in 7.44 1NCL2 5 0.48 in 0.045 in 0.373 in 6.65 1NCL3 5 0.48 in 0.045 in 0.373 in 6.65 1NCL3 5 0.48 in 0.045 in 0.373 in 6.65 1NCL3 5 0.48 in 0.045 in 0.373 in 6.65 1NCL3 5 0.48 in 0.045 in 0.373 in 6.65 1NCL3 5 0.48 in 0.056 in 0.045 in 0.226 in 6.10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13/16 in	0.3 iii	0.043 in									22.56	1NCC3	-5
0.3 in 0.022 in 0.229 in 0.				0.201 in								12 18	1NCC4	5
0.36 in 0.032 in 0.32 in 0.33 in 0.35 in NCK8 5				0.207 III										
0.42 in 0.047 in 0.23 in 9.56 1 NC69 5									0.24 III	0.032 III				
7/8 in 0.48 in 0.038 in 0.21 in 4.64 INCL1 5 0.48 in 0.045 in 0.27 in 7.44 INCL2 5 0.48 in 0.055 in 0.27 in 7.44 INCL2 5 0.48 in 0.055 in 0.373 in 6.65 INCL3 5 0.6 in 0.045 in 0.226 in 6 INCL3 5 0.18 in 0.032 in 0.026 in 0.21 in 0.24 in 0.038 in 0.772 in 10.771 in 1.771 INCD3 5 0.18 in 0.032 in 0.45 in 5.66 INCL8 5 0.36 in 0.035 in 0.47 in 14.04 INCD3 5 0.3 in 0.026 in 0.229 in 2.54 INCL9 5 0.36 in 0.032 in 0.38 in 0.72 in 0.972 i									0.0 iii	0.026 in				
0.48 in 0.045 in 0.373 in 6.65 1NCL3 5 0.48 in 0.055 in 0.373 in 6.65 1NCL3 5 0.48 in 0.055 in 0.373 in 6.65 1NCL3 5 0.48 in 0.055 in 0.457 in 18.95 1NCL4 5 0.61 in 0.045 in 0.226 in 6 1NCL5 5 1 in 0.38 in 0.032 in 0.425 in 18.95 1NCL5 5 0.24 in 0.032 in 0.425 in 5.6 1NCL8 5 0.31 in 0.032 in 0.229 in 2.54 1NCL9 5 0.31 in 0.036 in 0.025 in 0.229 in 2.54 1NCL9 5 0.33 in 0.032 in 0.37 in 4.5 1NCN1 5 1 in 0.36 in 0.025 in 0.296 in 2.54 1NCL9 5 0.36 in 0.036 in 0.025 in 0.596 in 2.54 1NCN3 5 0.61 in 0.072 in 0.055 in 0.304 in 8.4 1NCN4 5 0.72 in 0.055 in 0.304 in 1.47 in 16.37 1NCE4 5 1 iv in 0.36 in 0.025 in 0.303 in 0.441 in 12.981 NCN5 5 0.36 in 0.042 in 0.038 in 0.471 in 18.971 NCN7 5 0.36 in 0.038 in 0.772 in 8.92 1NCN7 5 0.36 in 0.038 in 0.477 in 6.15 1NCP4 5 0.36 in 0.038 in 0.477 in 6.15 1NCP4 5 0.36 in 0.038 in 0.477 in 6.15 1NCP4 5 0.36 in 0.038 in 0.477 in 6.15 1NCP3 5 0.36 in 0.038 in 0.677 in 7.31 1NCP3 5 0.36 in 0.038 in 0.677 in 7.31 1NCP3 5 0.36 in 0.038 in 0.677 in 7.31 1NCP3 5 0.37 in 0.038 in 0.477 in 6.15 1NCP3 5 0.38 in 0.042 in 0.038 in 0.477 in 6.15 1NCP3 5 0.38 in 0.042 in 0.038 in 0.477 in 6.15 1NCP3 5 0.39 in 0.038 in 0.477 in 6.15 1NCP3 5 0.39 in 0.038 in 0.477 in 6.15 1NCP3 5 0.39 in 0.038 in 0.477 in 6.15 1NCP3 5 0.39 in 0.038 in 0.477 in 6.15 1NCP3 5 0.39 in	76 in													
0.48 in 0.055 in 0.457 in 18.95 1NCL3 5 0.48 in 0.063 in 0.457 in 18.95 1NCL3 5 0.66 in 0.045 in 0.457 in 18.95 1NCL5 5 0.18 in 0.032 in 0.601 in 7.01 1NCL7 5 0.18 in 0.032 in 0.452 in 56 1NCL5 5 0.38 in 0.032 in 0.452 in 56 1NCL5 5 0.38 in 0.032 in 0.032 in 0.455 in 0.45 in 0	/6 111							1 1/4 in						
0.48 in 0.063 in 0.425 in 18.95 1NCL4 5 0.6 in 0.045 in 0.226 in 6 1NCL5 5 0.18 in 0.032 in 0.226 in 6 1NCL5 5 0.36 in 0.032 in 0.228 in 0.254 1NCL9 5 0.36 in 0.032 in 0.229 in 0.254 1NCL9 5 0.36 in 0.032 in 0.229 in 0.254 1NCL9 5 0.36 in 0.032 in 0.332 in 0.337 in 4.5 1NCN1 5 0.36 in 0.032 in 0.332 in 0.337 in 4.5 1NCN1 5 0.36 in 0.032 in 0.332 in 0.19 in 2.13 1NCN2 5 0.6 in 0.072 in 0.55 in 0.041 in 0.72 in 0.596 in 25.49 1NCN3 5 0.72 in 0.055 in 0.047 in 12.98 1NCN5 5 0.72 in 0.033 in 0.038 in 0.771 in 0.47 in 18.97 1NCN5 5 0.72 in 0.033 in 0.038 in 0.772 in 0.47 in 18.97 1NCN5 5 0.36 in 0.032 in 0.338 in 0.772 in 0.047 in 0.47 in 18.97 1NCN5 5 0.36 in 0.032 in 0.338 in 0.772 in 0.047 in 0.47 in 18.97 1NCN5 5 0.36 in 0.032 in 0.338 in 0.772 in 0.047 in 0.772 in 0.047 in 18.97 1NCN5 5 0.36 in 0.032 in 0.338 in 0.772 in 0.047 in 0.772									0.72 in	0.000 in				
0.6 in 0.045 in 0.62 in 7.01 INCLT 5 tin 18 in 0.032 in 0.66 in 0.025 in 0.62 in 0.25 tin 18 tin 0.032 in 0.032 in 0.33 in 0.32 in 0.33 in 0.32 in 0.33 in 0.33 in 0.45 1NCLS 5 0.36 in 0.045 in 0.056 in 0.29 in 2.54 1NCLS 5 0.36 in 0.042 in 0.586 in 17.7 INCES 5 0.36 in 0.056 in 0.096 in 0.596 in 25.491 INCNS 5 1 1/4 in 0.36 in 0.055 in 0.304 in 0.441 in 12.981 INCNS 5 0.72 in 0.065 in 0.047 in 18.971 INCNS 5 0.34 in 0.032 in 0.338 in 0.772 in 18.971 INCNS 5 0.36 in 0.032 in 0.338 in 0.772 in 18.971 INCNS 5 0.36 in 0.032 in 0.338 in 0.772 in 18.971 INCNS 5 0.36 in 0.032 in 0.338 in 0.771 in 18.971 INCNS 5 0.36 in 0.032 in 0.338 in 0.771 in 18.971 INCNS 5 0.36 in 0.032 in 0.338 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.576 in 0.477 in 6.15 1NCPS 5 0.36 in 0.034 in 0.586 in 9.75 1NCPS 5 0.36 in 0.034 in 0.586 in 9.75 1NCPS 5 0.42 in 0.038 in 0.681 in 17.91 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 in 14.931 NCPS 5 0.72 in 0.083 in 0.661 i														
1 in				0.437 III					0.24 III	0.030 in	0.772 in			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$							5							
1														
0.31	1 in													
1½ in 0.36 in 0.026 in 0.72 in 0.596 in 25.491 kCN2 5							5							
$ \begin{array}{c} 1 4\mathrm{i} \mathrm{i} \mathrm{i} \mathrm{i} \mathrm{0.72in} 0.055 \mathrm{in} $	1 16 in	0.36 in	0.002 in						0.42 in	0.000 in				
$ \begin{array}{c} 1 4\mathrm{i} \mathrm{i} \mathrm{i} \mathrm{i} \mathrm{0.72in} 0.055 \mathrm{in} $	1 /0 111	0.50 m	0.020 in						0.42 in	0.042 in		17 92	1NCF6	
14 10 0.72 in 0.063 in 0.441 in 12.981 NCN5 5 0.24 in 0.038 in 0.772 in 8.92 1 NCN7 5 0.24 in 0.038 in 0.772 in 8.92 1 NCN7 5 0.6 in 0.045 in 0.693 in 0.694 in 0.22 2 1 NCF2 5 0.6 in 0.045 in 0.038 in 0.772 in 8.92 1 NCN7 5 0.6 in 0.045 in 0.058 in 0.338 in 0.377 in 7.31 1 NCN9 5 0.6 in 0.045 in 0.058 in 0.338 in 0.477 in 6.15 1 NCP4 5 0.6 in 0.058 in 0.042 in 0.586 in 9.75 1 NCP6 5 0.36 in 0.042 in 0.586 in 9.75 1 NCP6 5 0.42 in 0.038 in 0.381 in 5.31 1 NCP7 5 0.42 in 0.042 in 0.442 in 7 1 NCP8 5 0.42 in 0.042 in 0.661 in 0.661 in 0.661 in 0.052 in 0.686 in 0.263 1n 0.263	1 74 In	0.72 in							0.42 in	0.000 in				
0.72 in 0.072 in 0.47 in 18.971NCN6 5 0.24 in 0.038 in 0.772 in 8.92 1NCN7 5 0.36 in 0.038 in 0.772 in 8.92 1NCN7 5 0.36 in 0.038 in 0.372 in 0.372 in 0.382 in 0.382 in 0.382 in 0.382 in 0.477 in 6.15 1NCP3 5 0.36 in 0.032 in 0.477 in 6.15 1NCP3 5 0.36 in 0.042 in 0.522 in 8.99 1NCP5 5 0.36 in 0.042 in 0.586 in 9.75 1NCP6 5 0.42 in 0.038 in 0.381 in 5.31 1NCP7 5 0.42 in 0.038 in 0.381 in 5.31 1NCP7 5 0.42 in 0.042 in 0.472											0.404 III			
0.24 in 0.038 in 0.77 in 8.92 1NCN7 5 0.36 in 0.038 in 0.571 in 7.31 1NCN9 5 0.36 in 0.032 in 0.338 in 3.8 1NCP3 5 0.36 in 0.032 in 0.338 in 0.477 in 6.15 1NCP4 5 0.36 in 0.042 in 0.586 in 9.75 1NCP5 5 0.42 in 0.043 in 0.586 in 9.75 1NCP6 5 0.42 in 0.042 in 0.442 in 7 1NCP3 5 0.42 in 0.042 in 0.661 in 14.931NCP9 5 1½ in 0.42 in 0.055 in 0.661 in 14.931NCP9 5				0.441 III							0.505 III			
0.38 in 0.038 in 0.571 in 7.31 1NCN9 5 0.36 in 0.032 in 0.338 in 3.8 1NCP3 5 0.36 in 0.032 in 0.338 in 0.477 in 6.15 1NCP4 5 0.36 in 0.042 in 0.586 in 9.75 1NCP6 5 0.36 in 0.042 in 0.586 in 9.75 1NCP6 5 0.42 in 0.038 in 0.381 in 5.31 1NCP7 5 0.42 in 0.038 in 0.427 in 0.427 in 0.586 in 0.75 1NCP8 5 0.42 in 0.042 in 0.427 in 0.427 in 0.427 in 0.686 in 0.427 in 10.71 NCF8 5 0.72 in 0.055 in 0.421 in 10.71 NCF8 5 0.72 in 0.053 in 0.686 in 15.621 NCF9 5 0.72 in 0.057 in 0.686 in 0.26.61 NCG2 5		0.72 in	0.072 in								0.034 III			
0.36 in 0.032 in 0.47 in 6.15 1NCP3 5 0.36 in 0.042 in 0.47 in 6.15 1NCP4 5 0.36 in 0.042 in 0.527 in 8.09 1NCP5 5 0.42 in 0.045 in 0.586 in 9.75 1NCP6 5 0.42 in 0.042 in 0.42 in 0.442 in 7 1NCP8 5 0.42 in 0.042 in 0.442 in 7 1NCP8 5 1½ in 0.42 in 0.055 in 0.661 in 14.931NCP9 5					7 31	1 NCNC								
0.36 in 0.038 in 0.477 in 6.15 1MCP4 5 0.36 in 0.042 in 0.527 in 8.09 1MCP5 5 0.36 in 0.042 in 0.586 in 9.75 1MCP6 5 0.42 in 0.038 in 0.381 in 5.31 1MCP7 5 0.42 in 0.042 in 0.042 in 0.442 in 0.442 in 0.442 in 0.661 in 14.931MCP9 5 0.72 in 0.072 in 0.686 in 0.886 in 0.8866 in					3.8	1NCP3	5				0.427 III	18.48	1NCF5	-5
0.36 in 0.042 in 0.522 in 8.09 1NCP5 5 0.36 in 0.045 in 0.586 in 9.75 1NCP6 5 0.42 in 0.038 in 0.586 in 9.75 1NCP6 5 0.42 in 0.038 in 0.381 in 5.31 1NCP7 5 0.42 in 0.042 in 0.042 in 0.442 in 7 1NCP8 5 0.42 in 0.052 in 0.661 in 14.931NCP9 5												26.78	1NCF7	-5
0.36 in 0.045 in 0.586 in 9.75 1NCP6 5 0.42 in 0.038 in 0.381 in 5.31 1NCP7 5 0.42 in 0.042 in 0.042 in 0.442 in 7 1NCP8 5 1 ½ in 0.42 in 0.055 in 0.661 in 14.93 1NCP9 5					8 00	1NCPF	5				0.333 iii			
0.42 in 0.038 in 0.381 in 5.31 1MCP7 5 0.72 in 0.072 in 0.686 in 22.6 1MCG2 5 0.42 in 0.042 in 0.045 in 0.686 in 14.931MCP9 5		0.36 in	0.042 III					2 in						
0.42 in 0.042 in 0.442 in 7 1NCP8 5 1 ½ in 0.42 in 0.055 in 0.661 in 14.93 1NCP9 5					5.73	1NCP7	5							
1 ½ in 0.42 in 0.055 in 0.661 in 14.93 1NCP9 5					7	1NCP8	5		0.12 111	0.072 111	0.000 111	22.0	111002	
	1 1/2 in	0.42 in	0.042 III	0.442 III	14 93	1NCP	5							
	. /2 111			0.315 in										



Torsion Springs

With straight legs and ends.

Note: Additional sizes are available; on Grainger.com, search for "torsion springs."

Note. Auu	iliuiiai 5	izes are	avallable	, un uran	igei.co	III, Searc	11 101	101510115	prings.
					т.		3		ESS STEEL
			Max.	Spring	@	orque ½ Leg		RIGHT- HAND	LEFT- Hand
						ength		WOUND	WOUND
Outside	Wire	Leg	Outside	_ @	of	(in Pl	kg.	Item	Item
Dia. 90° Angl	Dia.	Length	Dia.	Torque C	coils	b.)* Q	ty.	No.	No.
		3 in	0.453 in	1.5 in .:	3 25	16.0	1	3HPR6	3HPP3
0.776 in 0.848 in	0.105 in	3 in 3.5 in	0.5 in	1.5 in 3 1.75 in 3	3.25 2	20.97	1	3HPR7	3HPP4
0.989 in	0.125 in	4 in	0.591 in	2 in 4	1.25		1	3HPR9	3HPP6
1.102 in			0.666 in	2 in 4	1.25	40.0	1	3HPT2	3HPP8
180° Ang 0.982 in				1.75 in	7.0	21.0	1	3HPT1	3HPP7
1.082 in	0.125 in	4 in	0.666 in	2 in	9.0		i i	3HPT3	3HPP9
1.082 in 1.189 in	0.135 in	4 in	0.735 in	2 in	9.0	40.0	1	3HPT4	3HPR1
1.356 in			0.885 in	2 in	7.0	32.0	1	3HPT5	3HPR2
360° Ang 0.798 in	JIE OT DI N 063 in	enection 2 in	n 0.516 in	1 in	10.5	5.15	1	3HPR8	3HPP5
1.755 in			1.188 in				il	3HPR5	3HPP2
								CARBO	N STEEL
						Torque			C WIRE
				Casina		@ 1/2		RIGHT-	LEFT-
			Max. Ro	Spring d Length		Leg Length		HAND WOUND	HAND WOUND
Outside	Wire	Leg	Outside		No. o	f (In	Pkg.	Item	Item
Dia.	Dia.	Length	Dia.	Torque	Coils	lb.)*	Qty.	No.	No.
90° Angl 0.16 in	e of Del 0.017 in	flection	0.093 in	0.25 in	3.25	0.125	6	3НРС3	3HPF8
0.10 III	0.017 iii 0.025 in	0.5 iii		0.25 iii		0.123	6	3HPC4	3HPF9
0.281 in	0.03 in	1 in	0.172 in	0.5 in	3.25	0.67	6	3HPC5	3HPG1
	0.032 in		0.172 in	0.5 in	3.25	0.879	6	3HPC6	3HPG2
0.309 in	0.04 in	1.25 in	0.187 in	0.625 ir	1 4.25	1.473	6	3HPC8	3HPG4
0.315 in 0.357 in	0.035 III 0.045 in	1.25 in 1.25 in	0.187 in 0.203 in	0.625 ir 0.625 ir	3.25 1 4.25	1.071 2.143	6	3HPC7 3HPC9	3HPG3 3HPG5
0.375 in	0.048 in	1.25 in	0.218 in	0.625 ir	1 4.25	2.679	6	3HPD1	3HPG6
0.408 in	0.051 in	2 in	0.234 in	1.0 in	4.25	3.107	6	3HPD2	
0.484 in			0.296 in		3.25	3.509	6	3HPD3	3HPG8
0.499 in 0.56 in	0.059 iii 0.063 in		0.296 in 0.343 in	1 in 1 in	4.25	4.5 5.518	6	3HPD4 3HPD5	3HPG9 3HPH1
0.678 in	0.003 in	2 in	0.406 in		4.25 4.25	10.446		3HPD6	3HPH2
0.776 in	0.095 in	3 in	0.453 in	1.5 in	3.25	17.14	1	3HPL9	3HPK6
0.848 in			0.5 in	1.75 in	3.25 4.25	22.47 34.29	_1_	3HPN1	3HPK7
0.989 in 1.102 in			0.591 in 0.666 in	2 in 2 in	4.25	42.86	1	3HPN3 3HPN5	3HPK9 3HPL2
180° And	ile of De	eflection		2 111	4.23	42.00		JIII NJ	JIII LZ
0.133 in	0.014 in	0.5 in	0.078 in			0.075	6	3HPD8	3HPH4
0.224 in			0.14 in	0.375 ir	7.0	0.402	6	3HPE3	3HPH8
0.249 in 0.404 in			0.14 in 0.25 in	0.5 in 0.625 ir	7.0 1 8.0	0.552 2.679	6	3HPE4 3HPE6	3HPH9 3HPJ2
0.767 in			0.5 in	1 in	6.0	5.518	6	3HPE8	3HPJ4
0.803 in	0.078 in	2 in	0.5 in	1 in	7.0	10.446	6	3HPE9	3HPJ5
0.982 in		3.5 in	0.609 in		7.0	22.5	_1_	3HPN4	3HPL1
1.082 in	0.125 in 0.125 in	4 in 4 in	0.666 in 0.735 in		9.0 9.0	34.28 42.86	1	3HPN6 3HPN7	3HPL3 3HPL4
1.189 in 1.356 in	0.135 iii 0.125 in	4 in	0.735 in		7.0	34.29	÷	3HPN8	3HPL5
270° Ang	gle of De	eflectio	n						
0.556 in		2 in	0.359 in		7.75	2.143	6	3HPF5	3HPK1
0.826 in 1.342 in	0.07 in	2 in 3.5 in	0.531 in 0.891 in		8.75 7.75	7.5 22.5	6	3HPF6 3HPN9	3HPK2 3HPL6
1.666 in			1.112 in		9.75	42.86	+	3HPL7	- JIII LU
360° Ang	gle of De	eflection	n						_
0.271 in	0.021 in	1 in	0.187 in		9.5	0.234	6	3HPF7	3HPK3
0.798 in 90° Angl	0.063 in	2 in	0.516 in	1 in	10.5	5.52	_1_	3HPN2	3HPK8
0.408 in			0.234 in	1 in	3.25	3.107	6		3HPG7
270° Ang	le of De	eflection	n						
1.666 in			1.112 in		9.75	42.86	1		3HPK4
* Torque	@ ½ Le	g Lengt	h is a refe	erence.					