

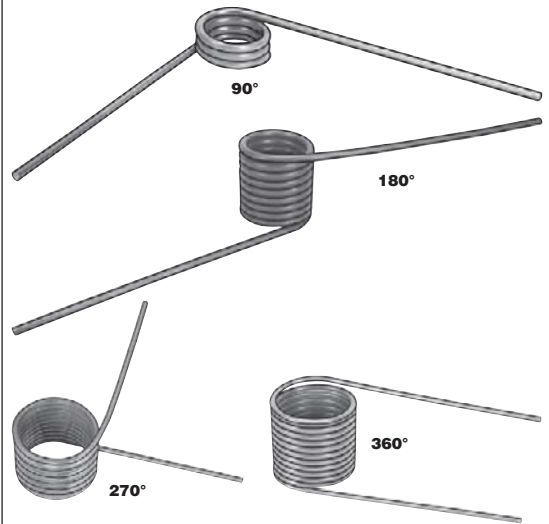
Precision Compression Springs

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					Compressed Load					Item Pkg.									
Length	Dia.	Wire Dia.	Length	(lb.)	No.	Qty.	Length	(lb.)	No.	Qty.	Length	(lb.)	No.	Qty.					
302 Stainless Steel																			
1/4 in	0.12 in	0.016 in	0.114 in	1.6	1NC63	5	0.12 in	0.016 in	0.205 in	1.87	1NB2	5	0.12 in	0.016 in	0.132 in	1.75	1NB4	5	
3/8 in	0.24 in	0.022 in	0.111 in	2	1NC64	5	0.18 in	0.018 in	0.132 in	1.75	1NB4	5	0.18 in	0.018 in	0.132 in	1.75	1NB4	5	
0.12 in	0.022 in	0.111 in	2	1NC64	5		0.36 in	0.032 in	0.145 in	4.5	1NB6	5	0.48 in	0.045 in	0.192 in	9.1	1NB7	5	
0.12 in	0.022 in	0.309 in	3.62	1NC66	5		0.24 in	0.032 in	0.273 in	6.72	1NB22	5	0.24 in	0.038 in	0.39 in	10.58	1NB28	5	
0.36 in	0.032 in	0.145 in	3.75	1NC69	5		0.36 in	0.026 in	0.138 in	2.52	1NB29	5	0.72 in	0.055 in	0.221 in	10.58	1NC22	5	
0.48 in	0.045 in	0.192 in	7.58	1NC81	5		0.6 in	0.072 in	0.397 in	26.52	1NC1A	5	0.72 in	0.063 in	0.284 in	15.51	1NC3A	5	
3/16 in	0.24 in	0.022 in	0.144 in	1.93	1NC83	5	1/2 in	0.3 in	0.022 in	0.106 in	1.89	1NB5	5	0.3 in	0.045 in	0.417 in	14.28	1NC7A	5
0.24 in	0.022 in	0.203 in	3.12	1NC84	5		0.48 in	0.055 in	0.373 in	15.58	1NC89	5	0.48 in	0.055 in	0.373 in	15.58	1NC89	5	
0.36 in	0.032 in	0.241 in	4.93	1NC87	5		0.48 in	0.063 in	0.457 in	22.75	1NC1C1	5	0.6 in	0.045 in	0.226 in	7.2	1NC2C	5	
0.48 in	0.045 in	0.177 in	1.06	1NCJ1	5		0.72 in	0.072 in	0.361 in	22.56	1NC3C	5	0.72 in	0.072 in	0.47 in	22.77	1NC3D	5	
0.24 in	0.038 in	0.39 in	8.81	1NCJ2	5		0.24 in	0.038 in	0.425 in	6.72	1NC5C	5	0.24 in	0.038 in	0.772 in	10.71	1NC8D	5	
0.36 in	0.026 in	0.138 in	2.1	1NCJ3	5		0.3 in	0.045 in	0.743 in	14.04	1NC8D	5	0.3 in	0.045 in	0.743 in	14.04	1NC8D	5	
0.6 in	0.072 in	0.397 in	22.09	1NCJ4	5		0.36 in	0.032 in	0.441 in	15.58	1NC2D	5	0.36 in	0.042 in	0.527 in	9.72	1NC2E	5	
0.72 in	0.055 in	0.221 in	8.81	1NCJ5	5		0.36 in	0.045 in	0.586 in	11.7	1NC3E	5	0.42 in	0.038 in	0.381 in	6.37	1NC4E	5	
0.72 in	0.063 in	0.284 in	12.92	1NCJ6	5		0.42 in	0.042 in	0.442 in	8.4	1NC5E	5	0.42 in	0.055 in	0.661 in	17.92	1NC6E	5	
1/16 in	0.3 in	0.032 in	0.241 in	4.93	1NC87	5	3/4 in	0.6 in	0.072 in	0.397 in	26.52	1NC1A	5	0.48 in	0.045 in	0.404 in	8.91	1NC9E	5
0.18 in	0.016 in	0.177 in	1.06	1NCJ1	5		1 1/8 in	0.36 in	0.026 in	0.138 in	2.52	1NB29	5	0.48 in	0.055 in	0.565 in	15.84	1NC1F	5
0.24 in	0.038 in	0.39 in	8.81	1NCJ2	5		1 1/4 in	0.72 in	0.072 in	0.47 in	22.77	1NC3D	5	0.48 in	0.063 in	0.694 in	22.94	1NC1F2	5
0.36 in	0.026 in	0.138 in	2.1	1NCJ3	5		0.24 in	0.038 in	0.772 in	10.71	1NC8D	5	0.6 in	0.045 in	0.35 in	7.22	1NC1F3	5	
0.6 in	0.072 in	0.397 in	22.09	1NCJ4	5		0.3 in	0.045 in	0.743 in	14.04	1NC8D	5	0.6 in	0.055 in	0.427 in	12.75	1NC1F4	5	
0.72 in	0.055 in	0.221 in	8.81	1NCJ5	5		0.36 in	0.045 in	0.586 in	11.7	1NC3E	5	0.6 in	0.063 in	0.552 in	18.48	1NC1F5	5	
0.72 in	0.063 in	0.284 in	12.92	1NCJ6	5		0.6 in	0.072 in	0.939 in	26.78	1NC1F7	5	0.6 in	0.072 in	0.939 in	26.78	1NC1F7	5	
1/8 in	0.3 in	0.032 in	0.241 in	4.93	1NC87	5	1 1/2 in	0.72 in	0.072 in	0.686 in	22.6	1NC2F	5	0.72 in	0.055 in	0.421 in	10.71	1NC1F8	5
0.48 in	0.055 in	0.373 in	6.65	1NC13	5		2 in	0.72 in	0.686 in	22.6	1NC2F	5	0.72 in	0.063 in	0.616 in	15.62	1NC1F9	5	
0.48 in	0.063 in	0.457 in	18.95	1NC14	5														
0.6 in	0.045 in	0.226 in	6	1NC15	5														
0.18 in	0.032 in	0.601 in	7.01	1NC17	5														
0.24 in	0.032 in	0.425 in	5.6	1NC18	5														
0.3 in	0.026 in	0.229 in	2.54	1NC19	5														
0.3 in	0.032 in	0.337 in	4.5	1NC21	5														
0.36 in	0.026 in	0.19 in	2.13	1NC22	5														
0.6 in	0.072 in	0.596 in	25.49	1NC23	5														
0.72 in	0.055 in	0.304 in	8.4	1NC24	5														
0.72 in	0.063 in	0.441 in	12.98	1NC25	5														
0.72 in	0.072 in	0.47 in	18.97	1NC26	5														
0.24 in	0.038 in	0.772 in	8.92	1NC27	5														
0.3 in	0.038 in	0.571 in	7.31	1NC29	5														
0.36 in	0.032 in	0.338 in	3.8	1NC3	5														
0.36 in	0.038 in	0.477 in	6.15	1NC34	5														
0.36 in	0.042 in	0.527 in	8.09	1NC35	5														
0.36 in	0.045 in	0.586 in	9.75	1NC36	5														
0.42 in	0.038 in	0.381 in	5.31	1NC37	5														
0.42 in	0.042 in	0.442 in	7	1NC38	5														
0.42 in	0.055 in	0.661 in	14.93	1NC39	5														
0.48 in	0.038 in	0.315 in	4.65	1NC41	5														
0.48 in	0.042 in	0.379 in	6.16	1NC42	5														
0.48 in	0.045 in	0.404 in	7.42	1NC43	5														
0.48 in	0.055 in	0.565 in	13.19	1NC44	5														
0.48 in	0.063 in	0.694 in	19.11	1NC45	5														
0.6 in	0.045 in	0.35 in	6.01	1NC46	5														
0.6 in	0.055 in	0.427 in	10.62	1NC47	5														
0.6 in	0.063 in	0.552 in	15.39	1NC48	5														
1 3/4 in	0.6 in	0.067 in	0.705 in	18.19	1NC49	5													
0.6 in	0.072 in	0.939 in	22.31	1NC11	5														
0.72 in	0.055 in	0.421 in	8.92	1NC12	5														
0.72 in	0.063 in	0.616 in	13.01	1NC13	5														
0.72 in	0.072 in	0.686 in	18.83	1NC15	5														



Torsion Springs

With straight legs and ends.

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

											302 STAINLESS STEEL	
											RIGHT-HAND WOUND	LEFT-HAND WOUND
Outside Dia.	Wire Dia.	Leg Length	Max. Rod Dia.	Spring Length @ Torque	No. of Coils	Torque @ 1/2 Leg Length (in.-lb.)*	Pkg. Qty.	Item No.	Item No.			
90° Angle of Deflection											3HPR6	3HPP3
0.776 in	0.095 in	3 in	0.453 in	1.5 in	3.25	16.0	1	3HPR6	3HPP3			
0.848 in	0.105 in	3.5 in	0.5 in	1.75 in	3.25	20.97	1	3HPR7	3HPP4			
0.989 in	0.125 in	4 in	0.591 in	2 in	4.25	32.0	1	3HPR9	3HPP6			
1.102 in	0.135 in	4 in	0.666 in	2 in	4.25	40.0	1	3HPT2	3HPP8			
180° Angle of Deflection											3HPT1	3HPP7
0.982 in	0.105 in	3.5 in	0.609 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	32.0	1	3HPT3	3HPP9			
1.189 in	0.135 in	4 in	0.735 in	2 in	9.0	40.0	1	3HPT4	3HPR1			
1.356 in	0.125 in	4 in	0.885 in	2 in	7.0	32.0	1	3HPT5	3HPR2			
360° Angle of Deflection											3HPR8	3HPP5
0.798 in	0.063 in	2 in	0.516 in	1 in	10.5	5.15	1	3HPR8	3HPP5			
1.755 in	0.135 in	4 in	1.188 in	2 in	12.5	40.0	1	3HPR5	3HPP2			
											CARBON STEEL	
											MUSIC WIRE	LEFT-HAND WOUND
Outside Dia.	Wire Dia.	Leg Length	Max. Rod Dia.	Spring Length @ Torque	No. of Coils	Torque @ 1/2 Leg Length (in.-lb.)*	Pkg. Qty.	Item No.	Item No.			
90° Angle of Deflection											3HPC3	3HPF8
0.16 in	0.017 in	0.5 in	0.093 in	0.25 in	3.25	0.125	6	3HPC3	3HPF8			
0.235 in	0.025 in	0.75 in	0.14 in	0.375 in	3.25	0.402	6	3HPC4	3HPF9			
0.281 in	0.03 in	1 in	0.172 in	0.5 in	3.25	0.67	6	3HPC5	3HPG1			
0.288 in	0.032 in	1 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 in	4.25	1.473	6	3HPC8	3HPG4			