

Outline

Coiled Spring Pin

Spring Pins made of steel strip coiled 2 and 1/4 turns in a spiral shape. Compared to slotted spring pins, automation is easier because Coiled Spring Pins can withstand loads from any direction and there is no docking between the pins. Compared to parallel pins, Coiled Spring Pins themselves have elasticity, making them more resistant to vibration and shock, and they also have the advantages of "low precision required for the pilot hole" and "light weight". They are mainly used in the automotive industry.

Features

Comparison with slotted spring pin

- No directions in shear strength
- No docking between the pins

Comparison with parallel pins

- High elasticity to resist vibration and shock
- Low precision required for the pilot hole
- Light weight

Type

Standard Duty type	Light Duty type	Heavy Duty type	Materials and Surface Treatment
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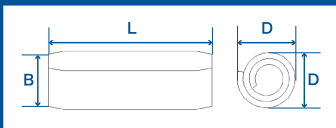
Coiled Spring Pin is highly versatile. It can be used for press fitting into holes in base materials such as soft iron, cast iron, brass, and aluminum. Cross-sectional area is approximately 60% that of parallel pins.

For press fitting into holes in soft or brittle base materials such as plastic. Cross-sectional area is approximately 45% that of a parallel pin.

For press fitting when the shear strength is insufficient for general type and the base material is hard. Cross-sectional area is about 70% that of parallel pins.

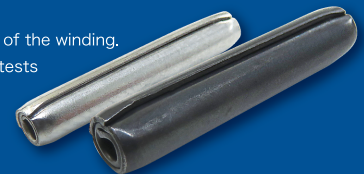
carbon steel ... Made of SAE 1070. Temper hardening is applied after molding. Surface treatment is temper color treatment. (Φ2 or larger)
stainless steel ... Made of SUS304.

Size	φ0.8~φ7.0
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Caution

- [1] When measuring the D dimension with a micrometer, avoid the taper at the end of the winding.
- [2] Double shear strengths are values obtained under conditions in independent tests and are not guaranteed.
- [3] Applicable hole sizes are provided for reference only and should be set by the customer according to the intended use.



Standard Coiled Spring Pin Dimensions

Dimension	Standard Duty type						Light Duty type					Heavy Duty type					B	Recommended hole size	
	D			Double shear strength (N)			D			Double shear strength (N)		D			Double shear strength (N)			diameter	tolerance
	max.	min.	board thickness	SUS304	carbon steel	max.	min.	board thickness	SUS304	carbon steel	max.	min.	board thickness	SUS304	carbon steel				
0.8	0.90	0.85	0.07	294	300												0.75	0.8	+0.030
1.0	1.14	1.06	0.08	441	460												0.95	1.0	+0.040
1.2	1.36	1.28	0.10	637	660												1.15	1.2	+0.050
1.4	1.62	1.49	0.12	882	950												1.33	1.4	+0.060
1.6	1.83	1.70	0.13	1127	1180	1.85	1.70	0.09	637	710	1.78	1.68	0.18	1470	1790	1.53	1.6	+0.070	
2.0	2.24	2.11	0.16	1740	1780	2.26	2.11	0.10	950	980	2.19	2.09	0.20	2280	2350	1.94	2.0	+0.080	
2.5	2.78	2.62	0.20	2590	2670	2.80	2.62	0.13	1421	1640	2.73	2.60	0.30	3675	4800	2.44	2.5	+0.090	
3.0	3.31	3.13	0.25	3969	4140	3.33	3.13	0.16	2180	2250	3.26	3.11	0.35	5292	6890	2.90	3.0	+0.100	
4.0	4.35	4.15	0.35	7056	7690	4.37	4.15	0.20	3720	3830	4.30	4.12	0.45	9408	10100	3.90	4.0	+0.110	
5.0	5.40	5.17	0.40	10280	10600	5.44	5.17	0.25	5840	6020	5.33	5.13	0.55	14700	18280	4.87	5.0	+0.120	
6.0	6.53	6.23	0.50	15876	17060	6.53	6.23	0.35	8820	10570	6.42	6.17	0.70	21168	27400	5.82	6.0	+0.130	
7.0	7.56	7.26	0.60	21560	24040	7.56	7.26	0.40	12054	13810	7.46	7.21	0.80	28812	38000	6.82	7.0	+0.140	

Standard Coiled Spring Pin L Dimensions

Dimension	Lengths	
	unit:mm	unit:mm
0.8	4 ~ 10	
1.0	4 ~ 12	
1.2	4 ~ 12	
1.4	4 ~ 14	
1.6	4 ~ 16	
2.0	4 ~ 20	
2.5	5 ~ 25	
3.0	6 ~ 32	
4.0	8 ~ 36	
5.0	10 ~ 36	
6.0	12 ~ 36	
7.0	14 ~ 36	

Application

<p>Gear shift lever parts</p>	<p>Door handle</p>	<p>Drawer rollers</p>	<p>Bearing outer ring</p>
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