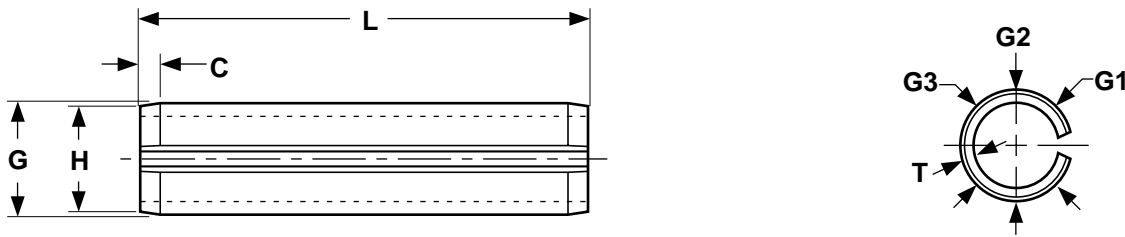


# Slotted Type

# Spring Pins

# Pins



**SPRING PINS, SLOTTED TYPE - CARBON STEEL**

ASME B18.8.2

Nominal Size or Basic Pin Diameter	G		H	C		T	Recommended Hole Size		Double Shear Load, Min, lbs.		
	Pin Diameter		Chamfer Diameter	Chamfer Length		Wall Thickness	Max	Min	SAE 1070-1095 steel & 420 Stainless	300 series Stainless	
	Max*	Min**	Max	Max	Min	Basic					
1/16	.062	0.069	0.066	0.059	0.028	0.007	0.012	0.065	0.062	430	250
5/64	.078	0.086	0.083	0.075	0.032	0.008	0.018	0.081	0.078	800	460
3/32	.094	0.103	0.099	0.091	0.038	0.008	0.022	0.097	0.094	1,150	670
1/8	.125	0.135	0.131	0.122	0.044	0.008	0.028	0.129	0.125	1,875	1,090
5/32	.156	0.167	0.162	0.151	0.048	0.010	0.032	0.160	0.156	2,750	1,600
3/16	.188	0.199	0.194	0.182	0.055	0.011	0.040	0.192	0.187	4,150	2,425
7/32	.219	0.232	0.226	0.214	0.065	0.011	0.048	0.224	0.219	5,850	3,400
1/4	.250	0.264	0.258	0.245	0.065	0.012	0.048	0.256	0.250	7,050	4,100
5/16	.312	0.330	0.321	0.306	0.080	0.014	0.062	0.318	0.312	10,800	6,300
3/8	.375	0.395	0.385	0.368	0.095	0.016	0.077	0.382	0.375	16,300	9,500
7/16	.438	0.459	0.448	0.430	0.095	0.017	0.077	0.445	0.437	19,800	11,500
1/2	.500	0.524	0.513	0.485	0.110	0.025	0.094	0.510	0.500	27,100	15,800

Tolerance on Length	Nominal Pin Length			
	Up to 1 in., Incl.	Over 1 to 2 in., Incl.	Over 2 to 3 in., Incl.	Over 3 to 4 in., Incl.
	±0.015	±0.020	±0.025	±0.030

\*Maximum diameter shall be checked using a "GO" ring gauge.

\*\*Minimum diameter shall be equal to average of three diameters measured at points as illustrated above:  $G_{min} = \frac{G1 + G2 + G3}{3}$

	Steel	Stainless <sup>5</sup>
<b>Description</b>	A hollow, headless pin, slit longitudinally, having controlled length with chamfered ends, formed to a diameter somewhat greater than that of the hole into which it is to be assembled.	
<b>Applications/ Advantages</b>	Will hold its position in an assembly by a predetermined spring tension. Spring pins are economical because they can simplify product design by replacing more expensive fasteners such as taper pins, set screws and straight pins.	Stainless spring pins are commonly used in electronics and food industries. Type 420 stainless is magnetic and is more corrosion resistant than steel spring pins, but will rust before non-magnetic type 300 stainless pins.
<b>Material</b>	SAE 1070 - 1095 carbon steel	Type 420 stainless steel (magnetic) Type 300 stainless steel (non-magnetic)
<b>Hardness</b>	1/16 diameter: Vickers 458 - 560 5/64 through 3/32 diameters: Rockwell 15N 83.5 - 86.9 1/8 through 1/4 diameters: Rockwell A 73.6 - 77.4 5/16 through 1/2 diameters: Rockwell C 46 - 53	<b>Type 420 Stainless:</b> 1/16 diameter: Vickers 423 - 544 5/64 through 3/32 diameters: Rockwell 15N 82.0 - 86.4 1/8 through 1/4 diameters: Rockwell A 72.0 - 76.8 5/16 through 1/2 diameters: Rockwell C 43 - 52 <b>Type 300 Stainless:</b> (work-hardened only)
<b>Shear Load</b>	Spring pins shall be capable of withstanding the minimum double shear loads specified in the above table.	
<b>Finish</b>	See Appendix-A for information about the coating of spring pins.	Stainless pins are usually supplied uncoated.