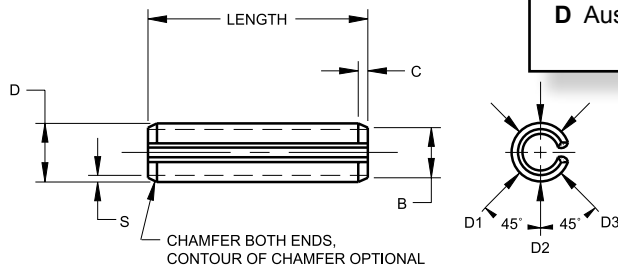


ASME B18.8.4M TYPE B

PIN MATERIALS AND HARDNESS

PIN FINISHES

B Carbon Steel	HV 458-560	K Plain*
C Martensitic Stainless Steel	HV 423-544	P Passivated
D Austenitic Stainless Steel	Work Hardened	T Mechanical Zinc Plated
		R Phosphated, Oiled



* Plain carbon steel pins have a protective oil finish.

SPECIFICATIONS in mm

Nominal Pin Diameter	Pin Diameter D		Chamfer Diameter B	Chamfer Length C		Wall Thickness S	Recommended Hole Size		Minimum Double Shear Strength	
	Min. ¹	Max. ²		Min.	Max.		Min.	Max.	Carbon & Martensitic S.S.	Austenitic S.S.
	kN									
1.5	1.58	1.66	1.4	0.15	0.7	0.35	1.5	1.56	1.8	1.0
2	2.10	2.19	1.9	0.2	0.8	0.45	2.0	2.07	3.5	2.0
2.5	2.62	2.72	2.4	0.2	0.9	0.55	2.5	2.58	5.5	3.2
3	3.14	3.25	2.9	0.2	1.0	0.65	3.0	3.10	7.8	4.5
4	4.16	4.30	3.9	0.3	1.2	0.8	4.0	4.12	12.3	7.2
5	5.17	5.33	4.8	0.3	1.4	1.0	5.0	5.12	19.6	11.4
6	6.18	6.36	5.8	0.4	1.6	1.2	6.0	6.12	28.5	16.6
8	8.22	8.45	7.8	0.4	2.0	1.6	8.0	8.15	48.8	28.4
10	10.25	10.51	9.7	0.5	2.4	2.0	10.0	10.15	79.1	46.1
12	12.28	12.55	11.7	0.6	2.8	2.5	12.0	12.18	111.6 ³	60.7
14†*	14.30	14.60	13.7	0.8	2.8	3.0	14.0	14.18	170.0 ⁴	—
16†	16.32	16.65	15.6	1.0	3.0	3.0	16.0	16.18	190.0 ⁴	—
18†*	18.35	18.71	17.6	1.2	3.2	3.5	18.0	18.18	250.0 ⁴	—
20†	20.40	20.80	19.5	1.4	3.4	4.0	20.0	20.21	320.0 ⁴	—

¹ Minimum diameter is the average of D1, D2, and D3. ² Maximum measured with go-ring gauge. ³ SPIROL standard. ⁴ Carbon Steel only.

STANDARD METRIC SIZES

Length	Nominal Diameter													
	1.5	2	2.5	3	4	5	6	8	10	12	14†*	16†	18†*	20†
4														
5														
6														
8														
10														
12														
14														
16														
18														
20														
22														
24														
26														
28														
30														
32														
35														
40														
45														
50														
55														
60	Nominal Pin Length		Length Tolerance											
65	Up to 24 mm, incl.		±0.40 mm											
70	Over 24 to 50 mm		±0.50 mm											
75	Over 50 to 75 mm		±0.60 mm											
80	Over 75 mm		±0.75 mm											
85														
90														
95														
100														

† In conformance with but not part of ASME 18.18.4M.

* Not generally a stocked diameter.

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Applications

SPIROL® slotted spring pins are used in many industries.

- Agriculture
- Automotive
- Construction
- Appliances
- Electronics
- Furniture
- Mining
- Plastics
- Railways
- Aerospace

Typical applications use spring pins as...

- Fasteners to secure handles and gears to shafts
- Retaining pins
- Axle shafts
- Stop pins
- Hinge and pivot applications
- Cross bars
- Tube reinforcing pins
- Locator pins



Challenge Us!

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