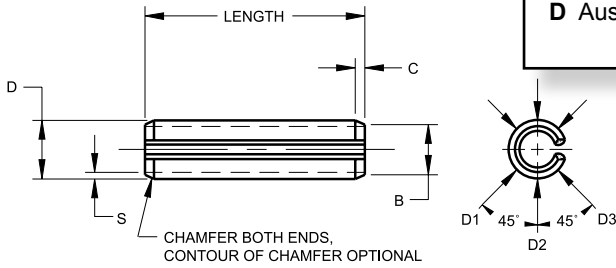


ASME B18.8.2

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 inches

Nominal Pin Diameter	Pin Diameter		Chamfer Diameter B	Chamfer Length C		Wall Thickness S	Recommended Hole Size		Minimum Double Shear Strength				
	D	D		Min.	Max.		Min.	Max.	Min.	Max.	Carbon & Martensitic S.S.		Austenitic S.S.
			Lbs.			kN					Lbs.	kN	
1/16	.062	.066	.069	.059	.007	.028	.012	.062	.065	430	2.00	250	1.10
5/64	.078	.083	.086	.075	.008	.032	.018	.078	.081	800	3.56	460	2.05
3/32	.094	.099	.103	.091	.008	.038	.022	.094	.097	1150	5.12	670	2.98
1/8	.125	.131	.135	.122	.008	.044	.028	.125	.129	1875	8.34	1090	4.85
5/32	.156	.162	.167	.151	.010	.048	.032	.156	.160	2750	12.23	1600	7.12
3/16	.187	.194	.199	.182	.011	.055	.040	.187	.192	4150	18.46	2425	10.79
7/32	.219	.226	.232	.214	.011	.065	.048	.219	.224	5850	26.02	3400	15.12
1/4	.250	.258	.264	.245	.012	.065	.048	.250	.256	7050	31.36	4100	18.24
5/16	.312	.321	.330	.306	.014	.080	.062	.312	.318	10800	48.04	6300	28.02
3/8	.375	.385	.395	.368	.016	.095	.077	.375	.382	16300	72.50	9500	42.25
7/16	.437	.448	.459	.430	.017	.095	.077	.437	.445	19800	88.08	11500	51.16
1/2	.500	.513	.524	.485	.025	.110	.094	.500	.510	27100	120.55	15800	70.28
5/8 ³	.625	.640	.653	.608	.030	.125	.118	.625	.637	42500	189.06	—	—
3/4 ³	.750	.768	.784	.730	.045	.150	.145	.750	.764	62500	278.02	—	—

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

STANDARD SIZES

Length	Nominal Diameter													
	1/16	5/64	3/32	1/8	5/32	3/16	7/32	1/4	5/16	3/8	7/16	1/2	5/8*	3/4*
3/16														
1/4														
5/16														
3/8														
7/16														
1/2														
9/16														
5/8														
11/16														
3/4														
13/16														
7/8														
15/16														
1														
1-1/8														
1-1/4														
1-3/8														
1-1/2														
1-5/8														
1-3/4														
1-7/8														
2														
2-1/4														
2-1/2														
2-3/4														
3														
3-1/4														
3-1/2														
3-3/4														
4														

Nominal Pin Length	Length Tolerance
Up to 1", incl.	±0.015
Over 1" to 2", incl.	±0.020
Over 2" to 3", incl.	±0.025
Over 3" to 4", incl.	±0.030
Over 4"	±0.035

* SPIROL standards.

SPIROL®

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!

SPIROL Application Engineers will review your application needs and work with your design team to recommend the best solution. One way to start the process is to select **Pinning Applications** or **Installation Systems** in our **Optimal Application Engineering** portal at www.SPIROL.com

U.S.A. **Spirol International Corporation**
30 Rock Avenue
Danielson, Connecticut 06239
Tel. +1 860.774.8571
Fax. +1 860.774.2048
(US Distributors: Fax. +1 860.774.0487)

**Spirol International Corporation
Shim Division**

321 Remington Road
Stow, Ohio 44224
Tel. +1 330.920.3655
Fax. +1 330.920.3659

Spirol West Inc.

1950 Compton Avenue, Unit 111
Corona, California 92881-6471
Tel. +1 951.273.5900
Fax. +1 951.273.5907

Canada **Spirol Industries, Ltd.**
3103 St. Etienne Boulevard
Windsor, Ontario
Canada N8W 5B1
Tel. +1 519.974.3334
Fax. +1 519.974.6550

Mexico **Spirol México, S.A. de C.V.**
Carretera a Laredo KM 16.5 Interior E
Col. Moisés Saenz
Apodaca, N.L. 66613 México
ó Apdo. Postal 151 de Apodaca, N.L.
Tel. +52 81 8385 4390
Fax. +52 81 8385 4391

Europe **Spirol Industries Ltd.**
17 Princewood Road
Corby, Northants
NN17 4ET United Kingdom
Tel. +44 1536 444800
Fax. +44 1536 203415
(UK Distributors: Tel. 0800 3890034)

Spirol SAS
Rue Henri Rol Tanguy
Z.A. Les Naux
51450 Bétheny - Reims
France
Tel. +33 3 26 36 31 42
Fax. +33 3 26 09 19 76

Spirol GmbH
Briener Strasse 9
80333 Munich
Germany
Tel. +49 931 454 670 74
Fax. +49 931 454 670 75

Spirol SAS en España
08940 Cornellà de Llobregat
Barcelona
Spain
Tel. +34 93 193 05 32
Fax. +34 93 193 25 43

Spirol S.A.S., organizační složka
Sokola Tůmy 743/16
Ostrava-Miriánské Hory 70900
Czech Republic
Tel/Fax. +420 417 537 979

Asia Pacific **Spirol International Engineered
Fastener Trading Co. Ltd.**
No. 11 Xi Ya Rd. North
Section A, 1F, Building 14
Wai Gao Qiao Free Trade Zone
Shanghai, China 200131
Tel. +86 21 5046-1451/1452
Fax. +86 21 5046-1540

e-mail: info@spirol.com

SPIROL.com

ISO/TS 16949:2009 Certified
ISO 9001:2008 Certified