

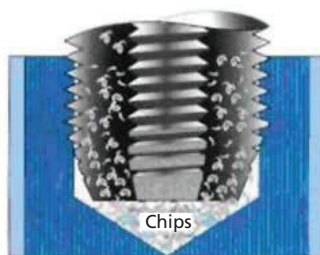
These charts are supplied as a recommendation only. Actual sizes may vary depending on application and the material being tapped.

Other thread and hole sizes are available upon request or on our website drill size calculator.

- For aluminum or other soft materials a hole minor diameter on the low side of the suggested range is recommended.
- For harder materials, a hole minor diameter near the high end of the suggested range is recommended.
- Spirallock threaded holes require the use a larger minor diameter than conventional threads.

Metric Thread Size	Hole Minor Diameter Min. (mm)	Hole Minor Diameter Max. (mm)	Suggested Drill Size*
M1.6 x 0.35	1.37	1.42	#54
M2.0 x 0.40	1.74	1.79	#50
M2.5 x 0.45	2.21	2.27	#43
M3.0 x 0.50	2.68	2.74	#36
M3.5 x 0.60	3.11	3.19	1/8
M4.0 x 0.70	3.55	3.64	#28
M4.5 x 0.75	4.01	4.11	#21
M5.0 x 0.80	4.32	4.48	11/64
M6.0 x 1.00	5.16	5.35	#5
M7.0 x 1.00	6.16	6.35	C
M8.0 x 1.00	7.16	7.35	9/32
M8.0 x 1.25	6.94	7.19	J
M9.0 x 1.25	7.94	8.19	8 mm
M10 x 1.25	8.94	9.19	T
M10 x 1.50	8.73	9.03	S
M11 x 1.50	9.73	10.03	W
M12 x 1.25	10.94	11.19	11 mm
M12 x 1.75	10.52	10.86	27/64
M14 x 1.25	12.94	13.19	33/64
M14 x 1.50	12.73	13.03	13 mm
M14 x 2.00	12.31	12.70	31/64
M16 x 1.50	14.73	15.03	15 mm
M16 x 2.00	14.31	14.70	9/16
M18 x 1.50	16.73	17.03	17 mm
M18 x 2.50	15.89	16.38	5/8
M20 x 1.50	18.73	19.03	19 mm
M20 x 2.50	17.89	18.38	23/32
M22 x 1.50	20.73	21.03	21 mm
M22 x 2.50	19.89	20.38	20 mm
M24 x 3.00	21.47	22.05	55/64

English/Fractional Thread Size	Hole Minor Diameter Min. (in)	Hole Minor Diameter Max. (in)	Suggested Drill Size*
0 – 80	0.052	0.054	#55
1 – 64	0.063	0.065	#52
1 – 72	0.064	0.066	#52
2 – 56	0.074	0.077	#48
2 – 64	0.076	0.078	1.95mm
3 – 48	0.086	0.088	#44
3 – 56	0.087	0.090	#43
4 – 40	0.096	0.099	#41
4 – 48	0.099	0.101	#40
5 – 40	0.109	0.112	7/64
5 – 44	0.110	0.113	#35
6 – 32	0.112	0.118	#33
6 – 40	0.122	0.125	1/8"
8 – 32	0.138	0.144	#28
8 – 36	0.146	0.150	#26
10 – 24	0.155	0.163	#21
10 – 32	0.164	0.170	#19
12 – 24	0.181	0.189	#13
12 – 28	0.186	0.193	#12
1/4 – 20	0.208	0.218	#4
1/4 – 28	0.220	0.227	#2
5/16 – 18	0.266	0.276	H
5/16 – 24	0.277	0.285	J
3/8 – 16	0.322	0.334	P
3/8 – 24	0.340	0.348	11/32
7/16 – 14	0.377	0.391	V
7/16 – 20	0.395	0.405	X
1/2 – 13	0.435	0.450	7/16
1/2 – 20	0.458	0.468	11.75mm
9/16 – 12	0.492	0.508	1/2
9/16 – 18	0.516	0.526	33/64
5/8 – 11	0.548	0.566	14 mm
5/8 – 18	0.578	0.589	37/64
3/4 – 10	0.666	0.685	43/64
3/4 – 16	0.697	0.709	45/64
7/8 – 9	0.781	0.803	25/32
7/8 – 14	0.815	0.829	21 mm
1" – 8	0.895	0.919	29/32
1" – 12	0.930	0.946	15/16
1" – 14	0.940	0.954	24 mm



Cutting tap

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*Drill size callouts were determined to best fit the hole minor diameter range

These charts are supplied as a recommendation only. Finding the correct drill size for a Spirallock tap may be a "Cut and Try" process:

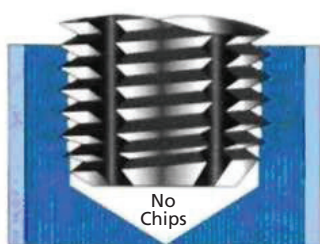
- Not all drills are alike - to get good results, verify the actual hole size being produced by the drill
- Thin wall parts may expand during tapping and produce oversize after-tap minor diameters

After tapping, the hole size should fall within the Spirallock recommended minor diameter range for cut threads.

- If the final minor diameter is below the range for a cut thread, use a larger drill. Do the opposite for a final minor diameter that is larger than the recommended range for cut taps.

Metric Thread Size	Minor Dia. Min. (mm)	Minor Dia. Max. (mm)
M1.6 x 0.35	1.483	1.506
M2.0 x 0.40	1.867	1.892
M2.5 x 0.45	2.352	2.380
M3.0 x 0.50	2.835	2.865
M3.5 x 0.60	3.302	3.335
M4.0 x 0.70	3.769	3.805
M4.5 x 0.75	4.257	4.308
M5.0 x 0.80	4.658	4.735
M6.0 x 1.00	5.578	5.679
M7.0 x 1.00	6.574	6.675
M8.0 x 1.00	7.582	7.671
M8.0 x 1.25	7.468	7.595
M9.0 x 1.25	8.478	8.590
M10 x 1.25	9.472	9.599
M10 x 1.50	9.370	9.510
M11 x 1.50	10.363	10.516
M12 x 1.25	11.474	11.588
M12 x 1.75	11.257	11.435
M14 x 1.25	13.477	13.592
M14 x 1.50	13.363	13.515
M14 x 2.00	13.160	13.350
M16 x 1.50	15.367	15.519
M16 x 2.00	15.151	15.354
M18 x 1.50	17.369	17.508
M18 x 2.50	16.937	17.191
M20 x 1.50	19.373	19.512
M20 x 2.50	18.857	18.908
M22 x 1.50	21.364	21.516
M22 x 2.50	20.945	21.186
M24 x 3.00	22.731	23.023

Fractional Thread Size	Minor Dia. Min. (in)	Minor Dia. Max. (in)
0 – 80	0.0559	0.0567
1 – 64	0.0678	0.0688
1 – 72	0.0684	0.0693
2 – 56	0.0801	0.0812
2 – 64	0.0808	0.0818
3 – 48	0.0921	0.0933
3 – 56	0.0931	0.0942
4 – 40	0.1038	0.1050
4 – 48	0.1051	0.1063
5 – 40	0.1168	0.1180
5 – 44	0.1175	0.1187
6 – 32	0.1248	0.1279
6 – 40	0.1298	0.1311
8 – 32	0.1508	0.1539
8 – 36	0.1548	0.1562
10 – 24	0.1724	0.1765
10 – 32	0.1768	0.1799
12 – 24	0.1984	0.2025
12 – 28	0.2009	0.2044
1/4 – 20	0.2289	0.2338
1/4 – 28	0.2349	0.2384
5/16 – 18	0.2890	0.2945
5/16 – 24	0.2949	0.2990
3/8 – 16	0.3486	0.3547
3/8 – 24	0.3574	0.3615
7/16 – 14	0.4073	0.4143
7/16 – 20	0.4164	0.4213
1/2 – 13	0.4675	0.4750
1/2 – 20	0.4789	0.4838
9/16 – 12	0.5273	0.5354
9/16 – 18	0.5390	0.5445
5/8 – 11	0.5866	0.5955
5/8 – 18	0.6015	0.6070
3/4 – 10	0.7078	0.7175
3/4 – 16	0.7236	0.7297
7/8 – 9	0.8281	0.8389
7/8 – 14	0.8448	0.8518
1" – 8	0.9472	0.9594
1" – 12	0.9648	0.9729
1" – 14	0.9698	0.9768



Forming tap with oil grooves

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