



Drill Size Chart for Cutting Threads

When compared to a standard thread form, Spirallock threads (taps) have a larger pitch diameter. For improved tool life and increased thread quality, WE RECOMMEND A LARGER DRILL HOLE SIZE. Please consult the following Drill Size Chart for the proper drill size prior to tapping your Spirallock Internal Thread Form.

English Size	Hole Minor Diameter ¹ (Min.-Max.)	Drill Size ² (Dia.)	English Size	Hole Minor Diameter ¹ (Min.-Max.)	Drill Size ² (Dia.)
2-56	.074-.077	#48	7/16-20	.395-.405	"X"
3-48	.085-.088	#44	1/2-13	.435-.450	7/16
3-56	.087-.090	#43	1/2-20	.458-.468	11.75mm
4-40	.096-.099	#41	9/16-12	.492-.508	1/2
4-48	.098-.101	#40	9-16-18	.516-.526	33/64
5-40	.109-.112	7/64	5/8-11	.548-.566	14 mm
5-44	.110-.113	#35	5/8-18	.578-.589	37/64
6-32	.112-.118	#33	3/4-10	.666-.685	43/64
6-40	.122-.125	1/8	3/4-16	.697-.709	45/64
8-32	.138-.144	#28	7/8-9	.781-.803	25/32
8-36	.146-.150	#26	7/8-14	.815-.829	21mm
10-24	.155-.163	#21	1-8	.894-.919	29/32
10-32	.164-.170	#19	1-12	.930-.946	15/16
12-24	.181-.189	#13	1-14	.940-.954	24mm
12-28	.186-.193	#12	1 1/8-7	1.004-1.032	1-1/64
1/4-20	.208-.218	#4	1 1/8-12	1.055-1.071	1-1/16
1/4-28	.220-.227	#2	1 1/4-7	1.129-1.157	1-9/64
5/16-18	.266-.276	"H"	1 1/4-12	1.180-1.196	1-3/16
5/16-24	.277-.285	"J"	1 3/8-6	1.234-1.267	1-1/4
3/8-16	.322-.334	"P"	1 3/8-12	1.305-1.321	1-5/16
3/8-24	.340-.348	11/32	1 1/2-6	1.359-1.392	1-3/8
7/16-14	.377-.391	"V"	1 1/2-12	1.430-1.446	1-7/16

Metric Size	Hole Minor Diameter ¹ (Min.-Max.)	Drill Size ² (Dia.)	Metric Size	Hole Minor Diameter ¹ (Min.-Max.)	Drill Size ² (Dia.)
M2.5 x 0.45	.087-.089	#43	M14 x 2	.485-.500	31/64
M3 x 0.5	.105-.108	#36	M16 x 1.5	.580-.592	15 mm
M3.5 x 0.6	.122-.126	1/8	M16 x 2	.563-.579	9/16
M4 x 0.7	.140-.143	#28	M18 x 1.5	.659-.670	17 mm
M4.5 x 0.75	.158-.162	#21	M18 x 2.5	.625-.645	5/8
M5 x 0.8	.170-.176	11/64	M20 x 1.5	.738-.749	19 mm
M6 x 1	.203-.211	#5	M20 x 2.5	.704-.723	23/32
M7 x 1	.242-.250	"C"	M22 x 1.5	.816-.828	21 mm
M8 x 1	.282-.289	9/32	M22 x 2.5	.783-.802	20 mm
M8 x 1.25	.273-.283	"J"	M24 x 3	.845-.868	55/64
M9 x 1.25	.313-.322	8 mm	M27 x 3	.963-.986	31/32
M10 x 1.25	.352-.362	"T"	M28 x 1.5	1.053-1.064	1-1/16
M10 x 1.5	.344-.355	"S"	M30 x 2	1.115-1.130	28.5 mm
M11 x 1.5	.383-.395	"W"	M30 x 3.5	1.065-1.092	1-5/64
M12 x 1.25	.431-.440	11 mm	M33 x 2	1.233-1.248	1-15/64
M12 x 1.75	.414-.428	27/64	M33 x 3.5	1.183-1.210	1-3/16
M14 x 1.25	.510-.519	33/64	M36 x 4	1.284-1.315	1-5/16
M14 x 1.5	.501-.513	13 mm	M39 x 4	1.402-1.433	1-13/32

NOTES:

1. For aluminum or softer materials, we recommend a Minor hole diameter on the low side of suggested range. For harder materials, Minor diameter on the high side of suggested range is preferred. Contact Detroit Tool Industries for special applications.

2. These recommendations are for regular Spirallock Cutting Taps. When Cold Forming internal threads, please contact Detroit Tool Industries for the recommended Minor diameter.