

The tapping drills given in the following pages include millimetre sizes for the convenience of those who are working in or intend to work predominantly in metric units.

Drills have been selected from standard sizes which, when used with reasonable care, will produce holes within the minor diameter limits shown.

From those drills the larger sizes are recommended to facilitate ease of tapping.

As a guide to relative clearances, index figures adjacent to the drill size show the difference between the nominal drill and minimum minor diameters.

Table 62 ISO Metric Coarse Pitch Series

Thread Size and Pitch		Minor Diameter of nut thread ^(A)		Tapping Drill Sizes for Commercial Tapping		
		Maximum	Minimum	Recommended		Alternatives
mm		mm	mm	mm	Inch	mm
M1.6	x 0.35	1.321	1.221	1.30 ³	3/64 ⁰	1.25 ¹
M2	x 0.4	1.679	1.567	1.65 ⁴	1/16 ¹	1.60 ¹
M2.5	x 0.45	2.138	2.013	2.10 ³	No. 46 ⁹	2.05 ¹
M3	x 0.5	2.599	2.459	2.55 ³	No. 41 ⁰	2.50 ¹
M4	x 0.7	3.422	3.242	3.40 ⁶	No. 30 ¹	3.30 ²
M5	x 0.8	4.334	4.134	4.30 ⁶	No. 19 ³	4.20 ²
M6	x 1.00	5.133	4.917	5.10 ⁷	No. 9 ²	5.00 ³
M8	x 1.25	6.912	6.647	6.90 ¹⁰	17/64 ⁴	6.80 ⁶
M10	x 1.5	8.676	8.376	8.60 ⁹	Q ²	8.50 ⁵
M12	x 1.75	10.441	10.105	10.40 ¹¹	13/32 ⁸	10.20 ⁴
M16	x 2.00	14.210	13.835	14.00 ⁶	35/64 ²	–
M20	x 2.5	17.744	17.294	17.50 ⁸	11/16 ⁷	–
M24	x 3.0	21.252	20.752	21.00 ¹⁰	53/64 ¹¹	–
M30	x 3.5	26.771	26.211	26.50 ¹¹	13/64 ¹⁵	–
M36	x 4.0	32.270	31.670	32.00 ¹³	117/64 ¹⁹	–

(A) From AS 1275 for Class 6H

The small index figures show the theoretical clearance in **thousandths of an inch** above the minimum minor diameter of the nut thread.

Letter and wire gauge drills are obsolescent and are being replaced by metric sizes.

Table 63 British Standard Whitworth – BSW

Thread Size and Threads per inch	Minor Diameter of nut thread (A)		Tapping Drill Sizes for Commercial Tapping		
	Maximum	Minimum	Recommended		Alternatives
	Inch	Inch	Inch	mm	Inch
1/8 – 40	0.1020	0.0930	39 ⁷	2.55 ⁷	40 ⁵
3/16 – 24	0.1474	0.1341	27 ¹⁰	3.70 ¹²	28 ⁶
1/4 – 20	0.2030	0.1860	9 ¹⁰	5.00 ¹¹	10 ⁷ 12 ³
5/16 – 18	0.2594	0.2413	1/4 ⁹	6.40 ¹¹	D ⁵ C ¹
3/8 – 16	0.3145	0.2950	N ⁷	7.70 ⁸	19/64 ² S ²
7/16 – 14	0.3674	0.3461	T ¹²	9.10 ¹²	Y ¹¹ X ⁴
1/2 – 12	0.4169	0.3932	13/32 ¹³	10.40 ¹³	
9/16 – 12	0.4794	0.4557	15/32 ¹³	12.00 ⁷	
5/8 – 11	0.5338	0.5086	17/32 ²³	13.50 ²³	33/64 ⁷
3/4 – 10	0.6490	0.6220	41/64 ¹⁹	16.25 ¹⁷	5/8 ³
7/8 – 9	0.7620	0.7328	3/4 ¹⁷	19.00 ¹⁵	47/64 ²
1 – 8	0.8720	0.8400	55/64 ¹⁹	22.00 ²⁶	27/32 ¹
1 1/8 – 7	0.9776	0.9420	31/32 ¹⁷	24.50 ²²	61/64 ¹¹
1 1/4 – 7	1.1026	1.0670	13/32 ²⁷	27.50 ¹⁶	15/64 ¹¹
1 1/2 – 6	1.3269	1.2866	15/16 ²⁶	33.00 ¹²	1 ¹⁹ /64 ¹¹
1 3/4 – 5	1.5408	1.4938	1 ¹⁷ /32 ³⁷	38.50 ²²	1 ³³ /64 ²⁰
2 – 4.5	1.7668	1.7154	1 ³ /4 ³⁵	44.50 ³⁷	1 ⁴⁷ /64 ²⁰

(A) From AS B47 – normal and medium classes.

The small index figures show the theoretical clearance in thousandths of an inch above the minimum minor diameter of the nut thread.

Letter and wire gauge drills are obsolescent and are being replaced by metric sizes.