Tap Drill Chart: Inch and Metric

All 47 threads in one printable chart: numbered screws, inch UNC, UNF and UNEF, and metric coarse. Each row shows the drill for aluminum, steel and stainless.

Thread	Series	Major diameter	Pitch	Aluminum, brass (75%)	Mild steel (60%)	Stainless, titanium (50%)
#0-80	UNF	0.0600 in (1.52 mm)	80 TPI (0.318 mm)	3/64 in 81%	3/64 in 81%	#55 49%, over 2B
#2-56	UNC	0.0860 in (2.18 mm)	56 TPI (0.454 mm)	#50 69%	#49 56%	#49 56%
#4-40	UNC	0.1120 in (2.84 mm)	40 TPI (0.635 mm)	#43 71%	#42 57%	#41 49%, over 2B
#5-40	UNC	0.1250 in (3.17 mm)	40 TPI (0.635 mm)	#38 72%	#37 65%	7/64 in 48%, over 2B
#6-32	UNC	0.1380 in (3.51 mm)	32 TPI (0.794 mm)	#36 78%	#33 62%	#32 54%, over 2B
#6-40	UNF	0.1380 in (3.51 mm)	40 TPI (0.635 mm)	#33 77%	#31 55%, over 2B	#31 55%, over 2B
#8-32	UNC	0.1640 in (4.17 mm)	32 TPI (0.794 mm)	#29 69%	#28 58%, over 2B	#27 49%, over 2B
#10-24	UNC	0.1900 in (4.83 mm)	24 TPI (1.058 mm)	#25 75%	#22 61%, over 2B	#20 54%, over 2B
#10-32	UNF	0.1900 in (4.83 mm)	32 TPI (0.794 mm)	#21 76%	#19 59%, over 2B	#18 50%, over 2B
#12-24	UNC	0.2160 in (5.49 mm)	24 TPI (1.058 mm)	#16 72%	#14 63%, over 2B	#12 50%, over 2B
1/4-20	UNC	0.2500 in (6.35 mm)	20 TPI (1.270 mm)	#7 75%	#4 63%, over 2B	7/32 in 48%, over 2B
5/16-18	UNC	0.3125 in (7.94 mm)	18 TPI (1.411 mm)	letter F 77%	letter H 64%, over 2B	letter J 49%, over 2B
3/8-16	UNC	0.3750 in (9.52 mm)	16 TPI (1.587 mm)	5/16 in 77%	letter P 64%, over 2B	letter Q 53%, over 2B
7/16-14	UNC	0.4375 in (11.11 mm)	14 TPI (1.814 mm)	letter U 75%	letter V 65%, over 2B	25/64 in 51%, over 2B
1/2-13	UNC	0.5000 in (12.70 mm)	13 TPI (1.954 mm)	27/64 in 78%	7/16 in 63%, over 2B	29/64 in 47%, over 2B
9/16-12	UNC	0.5625 in (14.29 mm)	12 TPI (2.117 mm)	31/64 in 72%	1/2 in 58%, over 2B	1/2 in 58%, over 2B
5/8-11	UNC	0.6250 in (15.88 mm)	11 TPI (2.309 mm)	17/32 in 79%	35/64 in 66%, over 2B	9/16 in 53%, over 2B
3/4-10	UNC	0.7500 in (19.05 mm)	10 TPI (2.540 mm)	21/32 in 72%	43/64 in 60%, over 2B	11/16 in 48%, over 2B
7/8-9	UNC	0.8750 in (22.22 mm)	9 TPI (2.822 mm)	49/64 in 76%	25/32 in 65%, over 2B	51/64 in 54%, over 2B
1/4-28	UNF	0.2500 in (6.35 mm)	28 TPI (0.907 mm)	#3 80%	#2 63%, over 2B	#1 47%, over 2B
5/16-24	UNF	0.3125 in (7.94 mm)	24 TPI (1.058 mm)	letter I 75%	letter K 58%, over 2B	9/32 in 58%, over 2B
3/8-24	UNF	0.3750 in (9.52 mm)	24 TPI (1.058 mm)	letter Q 79%	letter R 67%	letter S 50%, over 2B
7/16-20	UNF	0.4375 in (11.11 mm)	20 TPI (1.270 mm)	25/64 in 72%	letter X 62%, over 2B	13/32 in 48%, over 2B
1/2-20	UNF	0.5000 in (12.70 mm)	20 TPI (1.270 mm)	29/64 in 72%	29/64 in 72%	15/32 in 48%, over 2B
9/16-18	UNF	0.5625 in (14.29 mm)	18 TPI (1.411 mm)	33/64 in 65%, over 2B	33/64 in 65%, over 2B	33/64 in 65%, over 2B
5/8-18	UNF	0.6250 in (15.88 mm)	18 TPI (1.411 mm)	37/64 in 65%, over 2B	37/64 in 65%, over 2B	37/64 in 65%, over 2B

Thread	Series	Major diameter	Pitch	Aluminum, brass (75%)	Mild steel (60%)	Stainless, titanium (50%)
3/4-16	UNF	0.7500 in (19.05 mm)	16 TPI (1.587 mm)	11/16 in 77%	45/64 in 58%, over 2B	45/64 in 58%, over 2B
7/8-14	UNF	0.8750 in (22.22 mm)	14 TPI (1.814 mm)	13/16 in 67%	13/16 in 67%	53/64 in 51%, over 2B
1/2-28	UNEF	0.5000 in (12.70 mm)	28 TPI (0.907 mm)	15/32 in 67%	15/32 in 67%	15/32 in 67%
5/8-24	UNEF	0.6250 in (15.88 mm)	24 TPI (1.058 mm)	37/64 in 87%, under 2B	19/32 in 58%, over 2B	19/32 in 58%, over 2B
M2	Metric coarse	2.000 mm (0.0787 in)	0.40 mm	1.6 mm 77%	1.7 mm 58%, over 6H	1.7 mm 58%, over 6H
M2.5	Metric coarse	2.500 mm (0.0984 in)	0.45 mm	2.05 mm 77%	2.1 mm 68%	2.2 mm 51%, over 6H
M3	Metric coarse	3.000 mm (0.1181 in)	0.50 mm	2.5 mm 77%	2.6 mm 62%, over 6H	2.7 mm 46%, over 6H
M3.5	Metric coarse	3.500 mm (0.1378 in)	0.60 mm	2.9 mm 77%	3.0 mm 64%	3.1 mm 51%, over 6H
M4	Metric coarse	4.000 mm (0.1575 in)	0.70 mm	3.3 mm 77%	3.4 mm 66%	3.5 mm 55%, over 6H
M5	Metric coarse	5.000 mm (0.1969 in)	0.80 mm	4.2 mm 77%	4.4 mm 58%, over 6H	4.5 mm 48%, over 6H
M6	Metric coarse	6.000 mm (0.2362 in)	1.00 mm	5.0 mm 77%	5.2 mm 62%, over 6H	5.3 mm 54%, over 6H
M8	Metric coarse	8.000 mm (0.3150 in)	1.25 mm	6.8 mm 74%	7.0 mm 62%, over 6H	7.2 mm 49%, over 6H
M10	Metric coarse	10.000 mm (0.3937 in)	1.50 mm	8.5 mm 77%	8.8 mm 62%, over 6H	9.0 mm 51%, over 6H
M12	Metric coarse	12.000 mm (0.4724 in)	1.75 mm	10.2 mm 79%	10.6 mm 62%, over 6H	10.9 mm 48%, over 6H
M14	Metric coarse	14.000 mm (0.5512 in)	2.00 mm	12.0 mm 77%	12.4 mm 62%, over 6H	12.7 mm 50%, over 6H
M16	Metric coarse	16.000 mm (0.6299 in)	2.00 mm	14.0 mm 77%	14.4 mm 62%, over 6H	14.7 mm 50%, over 6H
M18	Metric coarse	18.000 mm (0.7087 in)	2.50 mm	15.5 mm 77%	16.1 mm 59%, over 6H	16.4 mm 49%, over 6H
M20	Metric coarse	20.000 mm (0.7874 in)	2.50 mm	17.5 mm 77%	18.1 mm 59%, over 6H	18.4 mm 49%, over 6H
M22	Metric coarse	22.000 mm (0.8661 in)	2.50 mm	19.5 mm 77%	20.1 mm 59%, over 6H	20.4 mm 49%, over 6H
M24	Metric coarse	24.000 mm (0.9449 in)	3.00 mm	21.0 mm 77%	21.7 mm 59%, over 6H	22.1 mm 49%, over 6H
M30	Metric coarse	30.000 mm (1.1811 in)	3.50 mm	26.5 mm 77%	27.3 mm 59%, over 6H	27.8 mm 48%, over 6H

Tap Drill Chart: Inch and Metric | tapdrillsize.com/tap-drill-chart/ | Last reviewed October 12, 2026 | Check your tap maker's chart before cutting.

Chart drills match the American Fastener tap and drill chart and the Fabworks tap drill chart. Thread percentages use the formula printed in the OSG tap drill chart, Vol 3 (2024). The American Fastener chart has no extra-fine (UNEF) rows, so those are checked against the Fabworks chart and the Microform Precision tap drill chart. Metric drills are major minus pitch, checked against the Fabworks chart where it lists the size. Last reviewed October 12, 2026. Method: how the numbers are calculated.