12-32 Tap Drill Chart

Unified National Extra Fine (UNEF) · 32 threads per inch · ASME B1.1

TAP DRILL (76% THREAD)

#13 = 0.1850 in = 4.70 mm

Drills for 12-32 (50–85% thread)

DRILL	INCH	MM	% THREAD	
#10	0.1935	4.91	55%	
#11	0.1910	4.85	62%	
#12	0.1890	4.80	67%	
3/16"	0.1875	4.76	70%	
#13	0.1850	4.70	76%	Recommended
#14	0.1820	4.62	84%	

Clearance hole (bolt passes through)

FIT	DRILL	INCH	MM
Close	A	0.2340	5.94
Normal	B	0.2380	6.05
Loose	F	0.2570	6.53

Thread dimensions (basic)

DIMENSION	INCH	MM
Major diameter (basic)	0.2160	5.49
Pitch diameter (basic)	0.1957	4.97
Minor diameter, internal (basic)	0.1822	4.63
Pitch (1/32 in)	0.0313	0.79

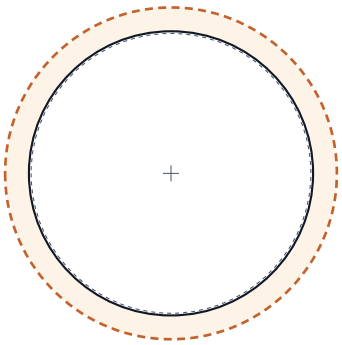
Actual size

Print at 100% scale ("Actual size", not "Fit to page"). Check with the rulers below.

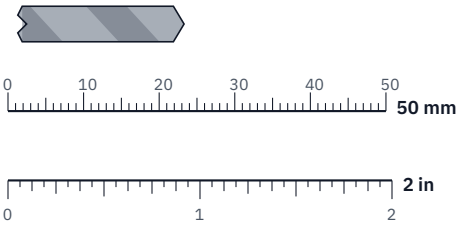


Dashed copper circle: thread major diameter; solid: tap drill hole; dotted: basic minor diameter.

Enlarged 8x:



Tap drill, actual size (4.70 mm):



Scan for the interactive version:

whatsizeis.com/tap-drill/12-32/

Values from the ASME B1.1, ISO 261/68-1 and ASME B1.20.1 thread formulas; drill sizes per ASME B94.11M; clearance holes per ISO 273. Method: whatsizeis.com/how-we-calculate/