3/8-16 Tap Drill Chart

Unified National Coarse (UNC) · 16 threads per inch · ASME B1.1

TAP DRILL (77% THREAD)

5/16" = 0.3125 in = 7.94 mm

Drills for 3/8-16 (50–85% thread)

DRILL	INCH	MM	% THREAD	
Q	0.3320	8.43	53%	
21/64"	0.3281	8.33	58%	
P	0.3230	8.20	64%	
O	0.3160	8.03	73%	
5/16"	0.3125	7.94	77%	Recommended

Clearance hole (bolt passes through)

FIT	DRILL	INCH	MM
Close	X	0.3970	10.08
Normal	27/64"	0.4219	10.72
Loose	15/32"	0.4688	11.91

Thread dimensions (basic)

DIMENSION	INCH	MM
Major diameter (basic)	0.3750	9.53
Pitch diameter (basic)	0.3344	8.49
Minor diameter, internal (basic)	0.3073	7.81
Pitch (1/16 in)	0.0625	1.59

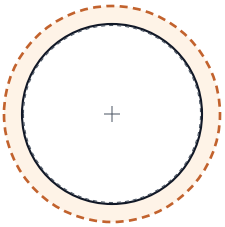
Actual size

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 3x:



Tap drill, actual size (7.94 mm):







Scan for the interactive version:

whatsizeis.com/tap-drill/3-8-16/

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/