1/4-28 Tap Drill Chart

Unified National Fine (UNF) · 28 threads per inch · ASME B1.1

TAP DRILL (80% THREAD)

#3 = 0.2130 in = 5.41 mm

Drills for 1/4-28 (50–85% thread)

DRILL	INCH	MM	% THREAD	
#2	0.2210	5.61	63%	
7/32"	0.2188	5.56	67%	
#3	0.2130	5.41	80%	Recommended

Clearance hole (bolt passes through)

FIT	DRILL	INCH	MM
Close	H	0.2660	6.76
Normal	J	0.2770	7.04
Loose	19/64"	0.2969	7.54

Thread dimensions (basic)

DIMENSION	INCH	MM
Major diameter (basic)	0.2500	6.35
Pitch diameter (basic)	0.2268	5.76
Minor diameter, internal (basic)	0.2113	5.37
Pitch (1/28 in)	0.0357	0.91

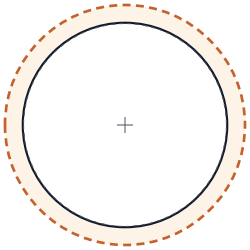
Actual size

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

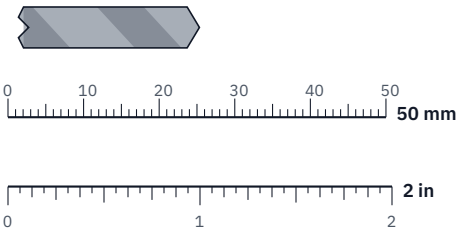


Dashed copper circle: thread major diameter; solid: tap drill hole; dotted: basic minor diameter.

Enlarged 5x:



Tap drill, actual size (5.41 mm):



Scan for the interactive version:

whatsizeis.com/tap-drill/1-4-28/

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/