6-40 Tap Drill Chart

Unified National Fine (UNF) · 40 threads per inch · ASME B1.1

TAP DRILL (77% THREAD)

#33 = 0.1130 in = 2.87 mm

Drills for 6-40 (50–85% thread)

DRILL	INCH	MM	% THREAD	
#31	0.1200	3.05	55%	
#32	0.1160	2.95	68%	
#33	0.1130	2.87	77%	Recommended
#34	0.1110	2.82	83%	

Clearance hole (bolt passes through)

FIT	DRILL	INCH	MM
Close	#26	0.1470	3.73
Normal	#23	0.1540	3.91
Loose	#19	0.1660	4.22

Thread dimensions (basic)

DIMENSION	INCH	MM
Major diameter (basic)	0.1380	3.51
Pitch diameter (basic)	0.1218	3.09
Minor diameter, internal (basic)	0.1109	2.82
Pitch (1/40 in)	0.0250	0.64

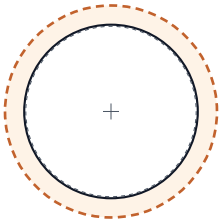
Actual size

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

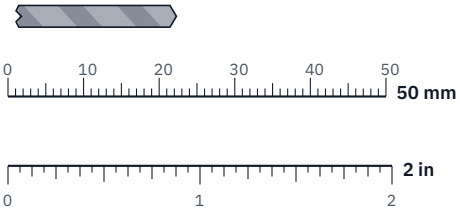


Dashed copper circle: thread major diameter; solid: tap drill hole; dotted: basic minor diameter.

Enlarged 8x:



Tap drill, actual size (2.87 mm):



Scan for the interactive version:

whatsizeis.com/tap-drill/6-40/

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/