8-32 Tap Drill Chart

Unified National Coarse (UNC) · 32 threads per inch · ASME B1.1

TAP DRILL (69% THREAD)

#29 = 0.1360 in = 3.45 mm

Drills for 8-32 (50–85% thread)

DRILL	INCH	MM	% THREAD	
9/64"	0.1406	3.57	58%	
#28	0.1405	3.57	58%	
#29	0.1360	3.45	69%	Recommended

Clearance hole (bolt passes through)

FIT	DRILL	INCH	MM
Close	#16	0.1770	4.50
Normal	#13	0.1850	4.70
Loose	#9	0.1960	4.98

Thread dimensions (basic)

DIMENSION	INCH	MM
Major diameter (basic)	0.1640	4.17
Pitch diameter (basic)	0.1437	3.65
Minor diameter, internal (basic)	0.1302	3.31
Pitch (1/32 in)	0.0313	0.79

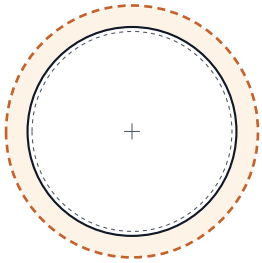
Actual size

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 (3.45 mm):







Scan for the interactive version:

whatsizeis.com/tap-drill/8-32/

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/