10-32 Tap Drill Chart

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

TAP DRILL (76% THREAD)

#21 = 0.1590 in = 4.04 mm

Drills for 10-32 (50–85% thread)

DRILL	INCH	MM	% THREAD	
#18	0.1695	4.31	50%	
#19	0.1660	4.22	59%	
#20	0.1610	4.09	71%	
#21	0.1590	4.04	76%	Recommended
#22	0.1570	3.99	81%	
5/32"	0.1563	3.97	83%	

Clearance hole (bolt passes through)

FIT	DRILL	INCH	MM
Close	13/64"	0.2031	5.16
Normal	#3	0.2130	5.41
Loose	#1	0.2280	5.79

Thread dimensions (basic)

DIMENSION	INCH	MM
Major diameter (basic)	0.1900	4.83
Pitch diameter (basic)	0.1697	4.31
Minor diameter, internal (basic)	0.1562	3.97
Pitch (1/32 in)	0.0313	0.79

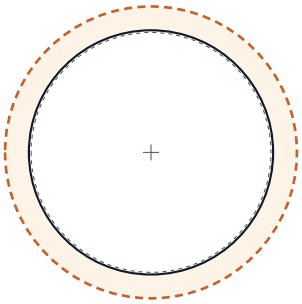
Actual size

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



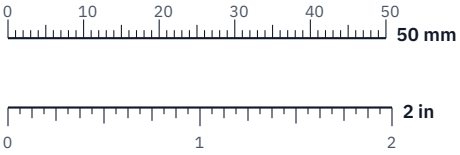
Dashed copper circle: thread major diameter; solid: tap drill hole; dotted: basic minor diameter.

Enlarged 8x:



Tap drill, actual size (4.04 mm):





Scan for the interactive version:

whatsizeis.com/tap-drill/10-32/

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/