



Tap/Drill Recommendations

Note: Drill size recommendations are for approximately 70-75% thread height. Drills produce a hole slightly larger than their nominal size. Size obtained will depend on drill style, machine, drilling conditions, fixturing and coating selected.



MACHINE SCREW, FRACTIONAL AND METRIC SIZES

Inch Tap Size & Pitch	Metric Tap Size & Pitch	Cutting Taps		Forming Taps	
		Drill Size	Dec. Equiv.	Drill Size	Dec. Equiv.
0-80		3/64	.0469	54	.0550
	M1.6 x 0.35	1.25	.0492	1.45	.0571
	M1.8 x 0.35	1.45	.0571	1.65	.0650
1-64		53	.0595	51	.0670
1-72		53	.0595	51	.0670
	M2 x 0.40	1.60	.0630	1.80	.0709
2-56		50	.0700	5/64	.0781
2-64		50	.0700	47	.0785
	M2.2 x 0.45	1.75	.0689	2.00	.0787
	M2.5 x 0.45	2.05	.0807	2.30	.0906
3-48		47	.0785	43	.0890
3-56		46	.0810	2.30	.0905
4-40		43	.0890	38	.1015
4-48		42	.0935	2.60	.1024
	M3 x 0.50	2.50	.0984	7/64	.1094
5-40		38	.1015	33	.1130
5-44		37	.1040	2.90	.1142
	M3.5 x 0.60	2.90	.1142	3.20	.1260
6-32		36	.1065	1/8	.1250
6-40		33	.1130	3.25	.1280
	M4 x 0.70	3.30	.1299	3.70	.1476
8-32		29	.1360	25	.1495
8-36		29	.1360	24	.1520
	M4.5 x 0.75	3.70	.1476	4.10	.1614
10-24		26	.1470	11/64	.1719
10-32		21	.1590	16	.1770
	M5 x 0.80	4.20	.1654	14	.1820
12-24		16	.1770	8	.1990
12-28		15	.1800	7	.2010
	M6 x 1.00	5.00	.1969	7/32	.2188
1/4-20		7	.2010	1	.2280
1/4-28		3	.2130	15/64	.2340
	M7 x 1.00	6.00	.2362	F	.2570
5/16-18		F	.2570	L	.2900
5/16-24		I	.2720	M	.2950
	M8 x 1.25	6.70	.2638	7.40	.2913
	M8 x 1.00	7.00	.2756	19/64	.2969
3/8-16		5/16	.3125	S	.3480
3/8-24		Q	.3320	T	.3580
	M10 x 1.50	8.50	.3346	U	.3680
	M10 x 1.25	8.70	.3425	9.40	.3701
7/16-14		U	.3680	Y	.4040
7/16-20		25/64	.3906	Z	.4130
	M12 x 1.75	10.20	.4016	11.20	.4409
	M12 x 1.25	10.80	.4252	11.50	.4528
1/2-13		27/64	.4219	15/32	.4682
1/2-20		29/64	.4531	12.25	.4823
	M14 x 2.00	12.00	.4224	33/64	.5156
9/16-12		31/64	.4844	17/32	.5312
9/16-18		33/64	.5156	13.50	.5315

Inch Tap Size & Pitch	Metric Tap Size & Pitch	Cutting Taps		Forming Taps	
		Drill Size	Dec. Equiv.	Drill Size	Dec. Equiv.
5/8-11		17/32	.5312	14.75	.5807
5/8-18		37/64	.5781	15.25	.6004
	M16 x 2.00	14.00	.5512	19/32	.5938
	M16 x 1.50	14.50	.5209	15.25	.6004
	M18 x 2.50	15.50	.6102	39/64	.6094
	M18 x 1.50	16.50	.6496	17.25	.6791
3/4-10		21/32	.6562	45/64	.7031
3/4-16		11/16	.6875	23/32	.7188
	M20 x 2.50	17.50	.6890		
	M20 x 1.50	18.50	.7283		
	M22 x 2.50	19.50	.7677		
	M22 x 1.50	20.50	.8071		
7/8-9		49/64	.7656		
7/8-14		13/16	.8125		
	M24 x 3.00	21.00	.8268		
	M24 x 2.00	22.00	.8661		
1-8		7/8	.8750		
1-12		59/64	.9219		
	M27 x 3.00	24.00	.9449		
	M27 x 2.00	25.00	.9843		
1-1/8-7		63/64	.9844		
1-1/8-12		1-3/64	1.0469		
	M30 x 3.50	26.50	1.0433		
	M30 x 2.00	28.00	1.1024		
1-1/4-7		1-7/64	1.1094		
1-1/4-12		1-11/64	1.1719		
	M33 x 3.50	29.50	1.1614		
	M33 x 2.00	31.00	1.2205		
1-3/8-6		1-7/32	1.2188		
1-3/8-12		1-19/64	1.2969		
	M36 x 4.00	32.00	1.2598		
	M36 x 3.00	33.00	1.2992		
1-1/2-6		1-11/32	1.3438		
1-1/2-12		1-27/64	1.4219		
	M39 x 4.00	35.00	1.3780		
	M39 x 3.00	36.00	1.4173		



FORM TAPS NOT AVAILABLE IN THESE SIZES

PIPE TAPS — NPT, NPTF, NPSM, NPSC, NPSF

Nominal Pipe Tap Size	NPT & NPTF		NPSM	NPSC	NPSF
	W/O Reamer	W/Reamer			
1/16-27	C (.242)	A (.234)	—	—	D (.246)
1/8-27	Q (.332)	21/64	T (.358)	T (.358)	R (.339)
1/4-18	7/16	27/64	15/32	15/32	7/16
3/8-18	9/16	9/16	.603*	.577*	37/64
1/2-14	45/64	11/16	19.0mm	19.0mm	.714*
3/4-14	29/32	57/64	61/64	61/64	59/64
1-11-1/2	1-9/64	1-1/8	1-13/64	1-13/64	1-5/32
1-1/4-11-1/2	1-31/64	1-15/32	1.546*	1.506*	—
1-1/2-11-1/2	1-23/32	1-45/64	1-25/32	1-25/32	—
2-11-1/2	2-3/16	2-11/64	2-1/4	2-1/4	—

METRIC - GREEN FRACTIONAL - RED WIRE GAGE - PURPLE LETTER SIZE - BLUE

*special