

MACHINE SCREW, FRACTIONAL, AND METRIC SIZES

Inch	Metric Tap Size & Pitch	Cutting Taps		Forming Taps	
		Drill Size	Decimal Equivalent	Drill Size	Decimal Equivalent
0-80		3/64	.0469	54	.0050
0-80	M1.6 x 0.35	1.25	.0492	1.45	.0571
0-80	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	2.75	.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	2.60	.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
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		

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Inch	Metric Tap	Cutting Taps		Forming Taps	
		Drill Size	Decimal	Drill Size	Decimal
	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		
	M30 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		

ROLLFORM TAP & DRILL For 65% Thread

0-80	54
1-64	1.65 mm
1-72	1.7 mm
2-56	5/64
2-64	2 mm
3-48	43
3-56	2.3 mm
4-40	39
4-48	2.6 mm
5-40	33
5-44	2.9 mm
6-32	1/8
6-40	3.2 mm
8-32	25
8-36	24
10-24	11/64
10-32	16
12-24	5 mm
12-28	8
1/4-20	1
1/4-28	A
5/16-18	7.3 mm
5/16-24	M
3/8-16	S
3/8-24	T
7/16-14	13/32
7/16-20	10.5 mm
1/2-13	15/32
1/2-20	31/64
9/16-12	17/32
9/16-18	13.5 mm
5/8-11	15 mm
5/8-18	19/32
3/4-10	45/64
3/4-16	23/32
7/8-9	.823
7/8-14	27/32
1/8	15/16
1-12	.963

STANDARD TAP & DRILL Approx 75% Thread

0-80	3/64
1-64	53
1-72	53
2-56	50
2-64	50
3-48	47
3-56	46
4-40	43
4-48	42
5-40	39
5-44	38
6-32	36
6-40	33
8-32	29
8-36	29
10-24	25
10-32	21
12-24	17
12-28	15
1/4-20	7
1/4-28	3
5/16-18	F
5/16-24	I
3/8-16	5/16
3/8-24	Q
7/16-14	U
7/16-20	W
1/2-12	27/64
1/2-13	27/64
1/2-20	29/64
9/16-12	31/64
9/16-18	33/64
5/8-11	17/32
5/8-18	37/64
3/4-10	21/32
3/4-16	11/16
7/8-9	49/64
7/8-14	13/16
1/8	7/8
1-12	59/64
1-14	15/16



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)	-	-	C(.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	-

* denotes special
- denotes no value

METRIC ROLLFORM TAP & DRILL Approx. 65% Thread

M1.6 x .35	1.45mm
M2.0 x .40	1.85mm
M2.5 x .45	2.30mm
M3.0 x .50	35
M3.5 x 6.0	30
M4.0 x .70	3.7mm
M5.0 x .80	14
M6.0 x 1.0	5.5mm
M8.0 x 1.25	7.4mm
M10 x 1.50	9.3mm
M12 x 1.75	7/16
M14 x 2.0	13mm
M16 x 2.0	15mm
M20 x 2.5	18.75mm

METRIC TAP & DRILL Approx. 70-75% Thread

M1.6 x .35	1.25mm
M2.0 x .40	1.6mm
M2.5 x .45	2.05mm
M3.0 x .50	2.5
M3.5 x 6.0	2.9
M4.0 x .70	3.3mm
M4.5 x .75	3.75mm
M5.0 x .80	4.2mm
M6.0 x 1.0	5mm
M7.0 x 1.0	6mm
M8.0 x 1.25	6.75mm
M10 x 1.50	8.5mm
M12 x 1.75	Y
M14 x 2.0	12mm
M16 x 2.0	14mm
M19 x 2.5	15.5mm
M20 x 2.5	17.5mm

STRAIGHT PIPE TAP & DRILL NPS

1/16-27	1/4
1/8-27	11/32
1/4-18	7/16
3/8-18	37/64
1/2-14	23/32
3/4-14	59/64
1-11 1/2	15/32
1 1/4-11 1/2	11/2
1 1/2-11 1/2	13/4
2-11 1/2	2 7/32

TAPER PIPE TAP & DRILL NPS

1/16-27	D
1/8-27	R
1/4-18	7/16
3/8-18	37/64
1/2-14	45/64
3/4-14	59/64
1-11 1/2	15/32
1 1/4-11 1/2	11/2
1 1/2-11 1/2	147/64
2-11 1/2	2 7/32

HELICOIL TAP & DRILL (For Aluminum)

TAP	DRILL	TAP	DRILL	TAP	DRILL
2-56	3/32	8-32	17	5/16-24	21/64
3-48	36	8-36	17	3/8-16	X
3-56	37	10-24	13/64	3/8-24	25/64
4-40	31	10-32	7	7/16-14	29/64
4-48	3mm	12-24	1	7/16-20	29/64
5-40	3.4mm	1/4-20	H	1/2-13	33/64
6-32	26	1/4-28	G	1/2-20	33/64
6-40	26	5/16-18	Q		

