

Tap Drill Reference

Machine Screw Size		Number of Threads Per Inch	Minor Dia.	Tap Drills				Clearance Hole Drills			
				Aluminum, Brass & Plastics		Stainless Steel, Steels & Iron		All Materials			
				75% Thread		50% Thread		Close Fit		Free Fit	
No. or Dia.	Major Dia.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.	Drill Size	Decimal Equiv.		
0	.0600	80	0.0447	3/64	0.0469	55	0.0520	52	0.0635	50	0.0700
1	0.0730	64	0.0538	53	0.0595	1/16	0.0625	48	0.0760	46	0.0810
		72	0.0560	53	0.0595	52	0.0635				
2	0.0860	56	0.0641	50	0.0700	49	0.0730	43	0.0890	41	0.0960
		64	0.0668	50	0.0700	48	0.0760				
3	0.0990	48	0.0734	47	0.0785	44	0.0860	37	0.1040	35	0.1100
		56	0.0771	45	0.0820	43	0.0890				
4	0.1120	40	0.0813	43	0.0890	41	0.0960	32	0.1160	30	0.1285
		48	0.0864	42	0.0935	40	0.0980				
5	0.1250	40	0.0943	38	0.1015	7/64	0.1094	30	0.1285	29	0.1360
		44	0.0971	37	0.1040	35	0.1100				
6	0.1380	32	0.0997	36	0.1065	32	0.1160	27	0.1440	25	0.1495
		40	0.1073	33	0.1130	31	0.1200				
8	0.1640	32	0.1257	29	0.1360	27	0.1440	18	0.1695	16	0.1770
		36	0.1299	29	0.1360	26	0.1470				
10	0.1900	24	0.1389	25	0.1495	20	0.1610	9	0.1960	7	0.2010
		32	0.1517	21	0.1590	18	0.1695				
12	0.2160	24	0.1649	16	0.1770	12	0.1890	2	0.2210	1	0.2280
		28	0.1722	14	0.1820	10	0.1935				
		32	0.1777	13	0.1850	9	0.1960				
1/4	0.2500	20	0.1887	7	0.2010	7/32	0.2188	F	0.2570	H	0.2660
		28	0.2062	3	0.2130	1	0.2280				
		32	0.2117	7/32	0.2188	1	0.2280				
5/16	0.3125	18	0.2443	F	0.2570	J	0.2770	P	0.3230	Q	0.3320
		24	0.2614	I	0.2720	9/32	0.2812				
		32	0.2742	9/32	0.2812	L	0.2900				
3/8	0.3750	16	0.2983	5/16	0.3125	Q	0.3320	W	0.3860	X	0.3970
		24	0.3239	Q	0.3320	S	0.3480				
		32	0.3367	11/32	0.3438	T	0.3580				
7/16	0.4375	14	0.3499	U	0.3680	25/64	0.3906	29/64	0.4531	15/32	0.4687
		20	0.3762	25/64	0.3906	13/32	0.4062				
		28	0.3937	Y	0.4040	Z	0.4130				
1/2	0.5000	13	0.4056	27/64	0.4219	29/64	0.4531	33/64	0.5156	17/32	0.5312
		20	0.4387	29/64	0.4531	15/32	0.4688				
		28	0.4562	15/32	0.4688	15/32	0.4688				
9/16	0.5625	12	0.4603	31/64	0.4844	33/64	0.5156	37/64	0.5781	19/32	0.5938
		18	0.4943	33/64	0.5156	17/32	0.5312				
		24	0.5114	33/64	0.5156	17/32	0.5312				
5/8	0.6250	11	0.5135	17/32	0.5312	9/16	0.5625	41/64	0.6406	21/32	0.6562
		18	0.5568	37/64	0.5781	19/32	0.5938				
		24	0.5739	37/64	0.5781	19/32	0.5938				
11/16	0.6875	24	0.6364	41/64	0.6406	21/32	0.6562	45/64	0.7031	23/32	0.7188
3/4	0.7500	10	0.6273	21/32	0.6562	11/16	0.6875	49/64	0.7656	25/32	0.7812
		16	0.6733	11/16	0.6875	45/64	0.7031				
		20	0.6887	45/64	0.7031	23/32	0.7188				
13/16	0.8125	20	0.7512	49/64	0.7656	25/32	0.7812	53/64	0.8281	27/32	0.8438
7/8	0.8750	9	0.7387	49/64	0.7656	51/64	0.7969	57/64	0.8906	29/32	0.9062
		14	0.7874	13/16	0.8125	53/64	0.8281				
		20	0.8137	53/64	0.8281	27/32	0.8438				
15/16	0.9375	20	0.8762	57/64	0.8906	29/32	0.9062	61/64	0.9531	31/32	0.9688
1	1.0000	8	0.8466	7/8	0.8750	59/64	0.9219	1-1/64	1.0156	1-1/32	1.0313
		12	0.8978	15/16	0.9375	61/64	0.9531				
		20	0.9387	61/64	0.9531	31/32	0.9688				
1-1/16	1.0625	18	0.9943	1.000	1.000	1-1/64	1.0156	1-5/64	1.0781	1-3/32	1.0938
1-1/8	1.1250	7	0.9497	63/64	0.9844	1-1/32	1.0313	1-9/64	1.1406	1-5/32	1.1562
		12	1.0228	1-3/64	1.0469	1-5/64	1.0781				
		18	1.0568	1-1/16	1.0625	1-5/64	1.0781				
1-3/16	1.1875	18	1.1193	1-1/8	1.1250	1-9/64	1.1406	1-13/64	1.2031	1-7/32	1.2188
1-1/4	1.2500	7	1.0747	1-7/64	1.1094	1-5/32	1.1562	1-17/64	1.2656	1-9/32	1.2812
		12	1.1478	1-11/64	1.1719	1-13/64	1.2031				
		18	1.1818	1-3/16	1.1875	1-13/64	1.2031				
1-5/16	1.3125	18	1.2443	1-1/4	1.2500	1-17/64	1.2656	1-21/64	1.3281	1-11/32	1.3438
1-3/8	1.3750	6	1.1705	1-7/32	1.2187	1-17/64	1.2656	1-25/64	1.3906	1-13/32	1.4062
		12	1.2728	1-19/64	1.2969	1-21/64	1.3281				
		18	1.3068	1-5/16	1.3125	1-21/64	1.3281				
1-7/16	1.4375	18	1.3693	1-3/8	1.3750	1-25/64	1.3906	1-29/64	1.4531	1-15/32	1.4688
1-1/2	1.5000	6	1.2955	1-11/32	1.3437	1-25/64	1.3906	1-33/64	1.5156	1-17/32	1.5312
		12	1.3978	1-27/64	1.4219	1-7/16	1.4375				
		18	1.4318	1-7/16	1.4375	1-29/64	1.4531				
1-9/16	1.5625	18	1.4943	1-1/2	1.5000	1-33/64	1.5156	1-37/64	1.5781	1-19/32	1.5938
1-5/8	1.6250	18	1.5568	1-9/16	1.5625	1-37/64	1.5781	1-41/64	1.6406	1-21/32	1.6562
1-11/16	1.6875	18	1.6193	1-5/8	1.6250	1-41/64	1.6406	1-45/64	1.7031	1-23/32	1.7188
1-3/4	1.7500	5	1.5046	1-9/16	1.5625	1-5/8	1.6250	1-49/64	1.7659	1-25/32	1.7812

Metric Tap Drill Chart

Tap Size	Major Dia (mm)	Threads Per	Tap Drill (mm)	Tap Drill (inch)	Clearance (mm)	Clearance (inch)
M1.6 x 0.35	1.6	0.35	1.25	#55	1.8	#49
M2 x 0.4	2.0	0.40	1.60	#52	2.4	#41
M2.5 x 0.45	2.5	0.45	2.05	#46	2.9	#32
M3 x 0.5	3.0	0.50	2.50	#39	3.4	#29
M3.5 x 0.6	3.5	0.60	2.90	#32	3.9	#23
M4 x 0.7	4.0	0.70	3.30	#30	4.5	#16
M5 x 0.8	5.0	0.80	4.20	#19	5.5	7/32
M6 x 1	6.0	1.00	5.00	#8	6.6	G
M8 x 1.25	8.0	1.25	6.80	H	9.0	T
M8 x 1	8.0	1.00	7.00	J	9.0	T
M10 x 1.5	10.0	1.50	8.50	R	12.0	31/64
M10 x 1.25	10.0	1.25	8.80	11/32	12.0	31/64
M12 x 1.75	12.0	1.75	10.20	13/32	14.0	35/64
M12 x 1.25	12.0	1.25	10.80	27/64	14.0	35/64
M14 x 2	14.0	2.00	12.00	15/32	16.0	5/8
M14 x 1.5	14.0	1.50	12.50	1/2	16.0	5/8
M16 x 2	16.0	2.00	14.00	35/64	18.0	45/64
M16 x 1.5	16.0	1.50	14.50	37/64	18.0	45/64
M18 x 2.5	18.0	2.50	15.50	39/64	20.0	51/64
M18 x 1.5	18.0	1.50	16.50	21/32	20.0	51/64
M20 x 2.5	20.0	2.50	17.50	11/16	22.0	7/8
M20 x 1.5	20.0	1.50	18.50	47/64	22.0	7/8
M22 x 2.5	22.0	2.50	19.50	49/64	25.0	1
M22 x 1.5	22.0	1.50	20.50	13/16	25.0	1
M24 x 3	24.0	3.00	21.00	53/64	27.0	1-5/64
M24 x 2	24.0	2.00	22.00	7/8	27.0	1-5/64
M27 x 3	27.0	3.00	24.00	15/16	30.0	1-3/16
M27 x 2	27.0	2.00	25.00	1	30.0	1-3/16

Pipe Threads

Nominal OD	American Standard			British Standard	
	Threads Per Inch	NPT	NPS	Threads Per Inch	Drill Size
1/16	27	D	1/4	28	G
1/8	27	R	S	28	11/32
1/4	18	7/16	29/64	19	15/32
3/8	18	37/64	19/32	19	39/64
1/2	14	23/32	47/64	14	3/4
5/8	-	-	-	14	53/64
3/4	14	59/64	15/16	14	31/32
7/8	-	-	-	14	1-7/64
1	11.5	1-5/32	1-3/16	11	1-7/32



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