

# TAP DRILL SIZES FOR METRICS

Nominal Size mm	Pitch mm	Basic Major Dia. Inches	Tap Drill Size	Decimal Equiv. of Tap Drill Inches	Theo. % of Thread	Probable Oversize (Mean) Inches	Probable Hole Size Inches	Probable % of Thread
1.6	0.35	.0630	1.20mm	.0472	88	.0014	.0486	80
			1.25mm	.0492	77	.0014	.0506	69
2	0.4	.0787	1/16	.0625	79	.0015	.0640	72
			1.60mm	.0630	77	.0017	.0647	69
			#52	.0635	74	.0017	.0652	66
2.5	0.45	.0984	2.05mm	.0807	77	.0019	.0826	69
			#46	.0810	76	.0019	.0829	67
			#45	.0820	71	.0019	.0839	63
3	0.5	.1181	#40	.0980	79	.0023	.1003	70
			2.5mm	.0984	77	.0023	.1007	68
			#39	.0995	73	.0023	.1018	64
3.5	0.6	.1378	#33	.1130	81	.0026	.1156	72
			2.9mm	.1142	77	.0026	.1168	68
			#32	.1160	71	.0026	.1186	63
4	0.7	.1574	3.2mm	.1280	82	.0029	.1309	74
			#30	.1285	81	.0029	.1314	73
			3.3mm	.1299	77	.0029	.1328	69
4.5	0.75	.1772	3.7mm	.1457	82	.0032	.1489	74
			#26	.1470	79	.0032	.1502	70
			#25	.1495	72	.0032	.1527	64
5	.08	.1968	4.2mm	.1654	77	.0032	.1686	69
			#19	.1660	75	.0032	.1692	68
6	1	.2362	#10	.1935	84	.0038	.1973	76
			#9	.1960	79	.0038	.1998	71
			5mm	.1968	77	.0038	.2006	70
			#8	.1990	73	.0038	.2028	65

Continued on page 194.

## METRIC THREAD FORMULA

$$\text{Basic Major Diameter (mm)} - \frac{\% \text{ of Thread} \times \text{Pitch (mm)}}{76.980} = \text{Drilled Hole Size (mm)}$$

$$\frac{76.980}{\text{Pitch (mm)}} \times [\text{Basic Major Diameter (mm)} - \text{Drilled Hole Size}] = \% \text{ of Thread}$$

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7	1	.2756	A	.2340	81	.0038	.2378	74
			6mm	.2362	77	.0038	.2400	70
			B	.2380	74	.0838	.2418	66
8	1.25	.3150	6.7mm	.2638	80	.0041	.2679	74
			17/64	.2656	77	.0041	.2697	71
			H	.2660	77	.0041	.2701	70
			6.8mm	.2677	74	.0041	.2718	68
10	1.5	.3937	8.4mm	.3307	82	.0044	.3351	76
			Q	.3320	80	.0044	.3364	75
			8.5mm	.3346	77	.0044	.3390	71
12	1.75	.4724	10.25mm*	.2035	77	.0047	.4082	72
			Y	.4040	76	.0047	.4087	71
			13/32	.4062	74	.0047	.4109	69
14	2	.5512	15/32	.4688	81	.0048	.4736	76
			12mm	.4724	77	.0048	.4772	72
16	2	.6299	35/64	.5469	81	.0049	.5518	76
			14mm*	.5512	77	.0049	.5561	72
20	2.5	.7874	11/16	.6875	78	.0050	.6925	74
			17.5mm*	.6890	77	.0052	.6942	73
			13/16	.8125	86	.0052	.8177	82
24	3	.9449	21mm*	.8268	77	.0059	.8327	73
			53/64	.8281	76	.0059	.8340	72
			1-1/32	1.0312	83	.0071	1.0383	80
30	3.5	1.1811	26.5mm*	1.0433	77	.0071	1.0504	73
			1-3/64	1.0469	75	.0072	1.0541	70
36	4	1.4173	1-17/64	1.2656	74	Reaming Recommended		

**Note:** Sizes with asterisk (\*) are not standard drills.

## METRIC THREAD FORMULA

$$\text{Basic Major Diameter (mm)} - \frac{\% \text{ of Thread} \times \text{Pitch (mm)}}{76.980} = \text{Drilled Hole Size (mm)}$$

$$\frac{76.980}{\text{Pitch (mm)}} \times [\text{Basic Major Diameter (mm)} - \text{Drilled Hole Size}] = \% \text{ of Thread}$$

# Met-Flo™ Tap Drill Sizes

Tap Size	T.P.I. NC NF	75% Thread			65% Thread			55% Thread		
		Theo. Hole Size	Nearest Drill Size	Decimal Equiv.	Theo. Hole Size	Nearest Drill Size	Decimal Equiv.	Theo. Hole Size	Nearest Drill Size	Decimal Equiv.
0	•	•	•	•	•	•	•	•	•	•
	80	.0536	1.35mm	.0531	.0545	54	.0550	.0553	54	.0500
1	64	.0650	1.65mm	.0650	.0661	1.65mm	.0650	.0672	51	.0670
	72	.0659	1.65mm	.0650	.0669	1.7mm	.0669	.0678	51	.0670
2	56	.0769	1.95mm	.0768	.0781	5/64	.0781	.0793	2mm	.0787
	64	.0780	5/64	.0781	.0791	2mm	.0787	.0802	2.05mm	.0807
3	48	.0884	2.25mm	.0886	.0898	43	.0890	.0912	2.3mm	.0906
	56	.0899	43	.0890	.0911	2.3mm	.0906	.0923	2.35mm	.0925
4	40	.0992	39	.0995	.1009	39	.0995	.1026	2.6mm	.1024
	48	.1014	38	.1015	.1028	2.6mm	.1024	.1042	28	.1045
5	40	.1122	34	.1100	.1139	33	.1130	.1156	32	.1160
	44	.1134	33	.1130	.1150	2.9mm	.1142	.1165	32	.1160
6	32	.1221	3.10mm	.1220	.1242	1/8	.1250	.1263	3.2mm	.1260
	40	.1252	1/8	.1250	.1269	3.2mm	.1260	.1288	30	.1285
8	32	.1481	3.75mm	.1476	.1502	3.8mm	.1496	.1523	24	.1520
	36	.1498	25	.1495	.1517	24	.1520	.1536	3.9mm	.1535
10	24	.1687	4.3mm	.1693	.1716	11/64	.1719	.1744	17	.1730
	32	.1741	4.4mm	.1732	.1762	16	.1770	.1783	15	.1800
12	24	.1947	10	.1935	.1976	5mm	.1968	.2004	5.1mm	.2008
	28	.1978	5mm	.1968	.2002	8	.1990	.2026	13/64	.2031
1/4	20	.2245	5.7mm	.2244	.2279	1	.2280	.2313	5.9mm	.2323
	28	.2318	5.8mm	.2323	.2342	A	.2340	.2366	6mm	.2362
5/16	18	.2842	7.2mm	.2835	.2879	7.3mm	.2874	.2917	7.4mm	.2913
	24	.2912	7.4mm	.2913	.2941	M	.2950	.2969	19/64	.2969
3/8	16	.3431	8.7mm	.3425	.3474	S	.3480	.3516	8.9mm	.3504
	24	.3537	9mm	.3543	.3566	9mm	.3543	.3594	23/64	.3594
7/16	14	.4011	X	.3970	.4059	Y	.4040	.4108	13/32	.4062
	20	.4120	Z	.4130	.4154	10.5mm	.4134	.4188	•	•
1/2	13	.4608	•	•	.4660	•	•	.4712	15/32	.4688
	20	.4745	12mm	.4724	.4779	•	•	.4813	•	•
9/16	12	.5200	33/64	.5156	.5257	•	•	.5313	17/32	.5312
	18	.5342	13.5mm	.5315	.5379	•	•	.5417	•	•
5/8	11	.5786	37/64	.5781	.5848	•	•	.5910	15mm	.5906
	18	.5967	19/32	.5938	.6004	•	•	.6042	•	•
3/4	10	.6990	•	•	.7058	45/64	.7031	.7126	•	•
	16	.7181	23/32	.7188	.7224	•	•	.7266	•	•