

TECHNICAL DATA

TAP DRILL SIZES FOR UNIVERSAL AND M-PROFILE SCREW THREADS

Tap Drill Sizes For Universal Screw Threads

Tap Size	Tap Drill Size	Decimal Equiv. of Tap Drill (Inches)	Theoretical Percent of Thread %	Probable Mean Oversize (Inches)	Probable Hole Size (Inches)	Probable Percent of Thread %
0-80	56	.0465	83	.0015	.0480	74
	3/64	.0469	81	.0015	.0484	71
	1.20mm	.0472	79	.0015	.0487	69
	1.25mm	.0492	67	.0015	.0507	57
1-64	54	.0550	89	.0015	.0565	81
	1.45mm	.0571	78	.0015	.0586	71
	53	.0595	67	.0015	.0610	59
1-72	1.5mm	.0591	77	.0015	.0606	68
	53	.0595	75	.0015	.0610	67
	1.55mm	.0610	67	.0015	.0606	68
2-56	51	.0670	82	.0017	.0687	74
	1.75mm	.0689	73	.0017	.0706	66
	50	.0700	69	.0017	.0717	62
	1.80mm	.0709	65	.0017	.0726	58
2-64	50	.0700	79	.0017	.0717	70
	1.80mm	.0709	74	.0017	.0726	66
	49	.0730	64	.0017	.0747	56
3-48	48	.0760	85	.0019	.0779	78
	5/64	.0781	77	.0019	.0800	70
	47	.0785	76	.0019	.0804	69
	2.00mm	.0787	75	.0019	.0806	68
	46	.0810	67	.0019	.0829	60
3-56	45	.0820	63	.0019	.0839	56
	46	.0810	78	.0019	.0829	69
	45	.0820	73	.0019	.0839	65
	2.10mm	.0827	70	.0019	.0846	62
4-40	2.15mm	.0846	62	.0019	.0865	54
	44	.0860	80	.0020	.0880	74
	2.20mm	.0866	78	.0020	.0886	72
4-48	43	.0890	71	.0020	.0910	65
	2.30mm	.0906	66	.0020	.0926	60
	2.35mm	.0925	72	.0020	.0926	72
5-40	42	.0935	68	.0020	.0955	61
	3/32	.0938	68	.0020	.0958	60
	2.40mm	.0945	65	.0020	.0965	57
	40	.0980	83	.0023	.1003	76
	39	.0995	79	.0023	.1018	71
	38	.1015	72	.0023	.1038	65
5-44	2.60mm	.1024	70	.0023	.1047	63
	38	.1015	79	.0023	.1038	72
	2.60mm	.1024	77	.0023	.1047	69
6-32	37	.1040	71	.0023	.1063	63
	36	.1065	78	.0023	.1088	72
	7/64	.1094	70	.0026	.1120	64
	35	.1100	69	.0026	.1126	63
	34	.1100	67	.0026	.1136	60
6-40	34	.1110	83	.0026	.1136	75
	33	.1130	77	.0026	.1156	69
	2.90mm	.1142	73	.0026	.1168	65
	32	.1160	68	.0026	.1186	60
8-32	3.40mm	.1339	74	.0029	.1368	67
	29	.1360	69	.0029	.1389	62

Tap Size	Tap Drill Size	Decimal Equiv. of Tap Drill (Inches)	Theoretical Percent of Thread %	Probable Mean Oversize (Inches)	Probable Hole Size (Inches)	Probable Percent of Thread %
8-36	29	.1360	78	.0029	.1389	70
	3.5mm	.1378	72	.0029	.1407	65
10-24	27	.1440	85	.0032	.1472	79
	3.70mm	.1457	82	.0032	.1489	76
	26	.1470	79	.0032	.1502	74
	25	.1495	75	.0032	.1527	69
10-32	24	.1520	70	.0032	.1552	64
	5/32	.1563	83	.0032	.1595	75
	22	.1570	81	.0032	.1602	73
	21	.1590	76	.0032	.1622	68
12-24	11/64	.1719	82	.0035	.1754	75
	17	.1730	79	.0035	.1765	73
	16	.1770	72	.0035	.1805	66
12-28	16	.1770	84	.0035	.1805	77
	15	.1800	78	.0035	.1835	70
	4.60mm	.1811	75	.0035	.1846	67
	14	.1820	73	.0035	.1855	66
1/4-20	9	.1960	83	.0038	.1998	77
	8	.1990	79	.0038	.2028	73
	7	.2010	75	.0038	.2048	70
	13/64	.2031	72	.0038	.2069	66
1/4-28	5.40mm	.2126	81	.0038	.2164	72
	3	.2130	80	.0038	.2168	72
	F	.2570	77	.0038	.2608	72
5/16-18	6.60mm	.2598	73	.0038	.2636	68
	G	.2610	71	.0041	.2651	66
	H	.2660	86	.0041	.2701	78
5/16-24	6.80mm	.2677	83	.0041	.2718	75
	I	.2720	75	.0041	.2761	67
	7.80mm	.3071	84	.0044	.3115	78
	7.90mm	.3110	79	.0044	.3154	73
3/8-16	5/16	.3125	77	.0044	.3169	72
	O	.3160	73	.0044	.3204	68
	21/64	.3281	87	.0044	.3325	79
3/8-24	8.40mm	.3307	82	.0044	.3351	74
	Q	.3320	79	.0044	.3364	71
	8.50mm	.3346	75	.0044	.3390	67
	T	.3580	86	.0046	.3626	81
7/16-14	23/64	.3594	84	.0046	.3640	79
	9.20mm	.3622	81	.0046	.3668	76
	9.30mm	.3661	77	.0046	.3707	72
	U	.3680	75	.0046	.3726	70
7/16-20	9.40mm	.3701	73	.0046	.3747	68
	W	.3860	79	.0046	.3906	72
	25/64	.3906	72	.0046	.3952	65
1/2-13	10.50mm	.4134	87	.0047	.4181	82
	27/64	.4219	78	.0047	.4266	73
1/2-20	29/64	.4531	72	.0047	.4578	65

Tap Drill Sizes For Metric M-Profile Screw Threads

Metric Tap Size	Tap Drill Size	Decimal Equiv. of Tap Drill (Inches)	Theoretical Percent of Thread %	Probable Mean Oversize (Inches)	Probable Hole Size (Inches)	Probable Percent of Thread %
M1.6 x 0.35	1.20mm	.0472	88	.0014	.0486	80
	1.25mm	.0492	77	.0014	.0506	69
M2 x 0.4	1/16	.0625	79	.0015	.0640	72
	1.60mm	.0630	77	.0017	.0647	69
	52	.0635	74	.0017	.0652	66
M2.5 x 0.45	2.05mm	.0807	77	.0019	.0826	69
	46	.0810	76	.0019	.0829	67
	45	.0820	71	.0019	.0839	63
M3 x 0.5	40	.0980	79	.0023	.1003	70
	2.5mm	.0984	77	.0023	.1007	68
	39	.0995	73	.0023	.1018	64
M3.5 x 0.6	33	.1130	81	.0026	.1156	72
	2.9mm	.1142	77	.0026	.1168	68
	32	.1160	71	.0026	.1186	63
M4 x 0.7	3.2mm	.1260	88	.0029	.1289	80
	30	.1285	81	.0029	.1314	73
	3.3mm	.1299	77	.0029	.1328	69
M4.5 x 0.75	3.7mm	.1457	82	.0032	.1489	74
	26	.1470	79	.0032	.1502	70
	25	.1495	72	.0032	.1527	64

Metric Tap Size	Tap Drill Size	Decimal Equiv. of Tap Drill (Inches)	Theoretical Percent of Thread %	Probable Mean Oversize (Inches)	Probable Hole Size (Inches)	Probable Percent of Thread %
M5 x 0.8	4.2mm	.1654	77	.0032	.1686	69
	19	.1660	75	.0032	.1692	68
M6 x 1	10	.1935	84	.0038	.1973	76
	9	.1960	79	.0038	.1998	71
	5mm	.1969	77	.0038	.2006	70
	8	.1990	73	.0038	.2028	65
M7 x 1	A	.2340	81	.0038	.2378	74
	6mm	.2362	77	.0038	.2400	70
	B	.2380	74	.0038	.2418	66
M8 x 1.25	6.7mm	.2638	80	.0041	.2679	74
	17/64	.2656	77	.0041	.2697	71
	H	.2660	77	.0041	.2701	70
M10 x 1.5	6.8mm	.2677	74	.0041	.2718	68
	8.4mm	.3307	82	.0044	.3351	76
	Q	.3320	80	.0044	.3364	75
M12 x 1.5	8.5mm	.3346	77	.0044	.3390	71
	10.4mm	.4094	81	.0047	.4141	75
	Z	.4130	77	.0047	.4177	71
M12 x 1.75	10.20mm	.4016	79	.0047	.4063	74
	Y	.4040	76	.0047	.4087	71
	13/32	.4062	74	.0047	.4109	69

1 Recommended sizes for cutting taps. Hole sizes shown may not suit UNJ and MJ hole requirements.

