



Screw Tap Drill Size Comparison Table

1.Metric Coarse Thread

Specification	Standard Diameter	Class 2 Tap Drill Size	
		Maximum	Minimum
M1.0x0.25	0.75	0.785	0.729
M1.1x0.25	0.85	0.885	0.829
M1.2x0.25	0.95	0.985	0.929
M1.4x0.3	1.10	1.142	1.075
M1.6x0.35	1.45	1.521	1.421
M2.0x0.4	1.60	1.679	1.567
M2.2x0.45	1.75	1.838	1.713
M2.3x0.4	1.90	1.979	1.867
M2.5x0.45	2.10	2.138	2.013
M2.6x0.45	2.20	2.238	2.113
M3.0x0.5	2.50	2.599	2.459
M3.5x0.6	2.90	3.010	2.850
M4.0x0.7	3.30	3.422	3.242
M4.5x0.75	3.80	3.878	3.688
M5.0x0.8	4.20	4.334	4.134
M6.0x1.0	5.00	5.153	4.917
M7.0x1.0	6.00	6.153	5.917
M8.0x1.25	6.80	6.912	6.647
M9.0x1.25	7.80	7.912	7.647
M10x1.5	8.50	8.676	8.376
M11x1.5	9.50	9.676	9.376
M12x1.75	10.30	10.441	10.106
M14x2.0	12.00	12.210	11.835
M16x2.0	14.00	14.210	13.835
M18x2.5	15.50	15.744	15.294
M20x2.5	17.50	17.744	17.294
M22x2.5	19.50	19.744	19.294
M24x3.0	21.00	21.252	20.752
M27x3.0	24.00	24.252	23.752
M30x3.5	26.50	26.771	26.211
M33x3.5	29.50	29.771	29.221
M36x4.0	32.00	32.270	31.670
M39x4.0	35.00	35.270	34.670



2.Metric Fine Thread

Specification	Standard Diameter	Class 2 Tap Drill Size	
		Maximum	Minimum
M1.0x0.2	0.80	0.821	0.783
M1.1x0.2	0.90	0.921	0.883
M1.2x0.2	1.00	1.021	0.983
M1.4x0.2	1.20	1.221	1.183
M1.6x0.2	1.40	1.421	1.383
M1.7x0.2	1.50	1.521	1.483
M1.8x0.2	1.60	1.621	1.583
M2.0x0.25	1.75	1.785	1.729
M2.2x0.25	1.95	1.985	1.929
M2.3x0.25	2.05	2.061	2.001
M2.5x0.35	2.20	2.221	2.121
M2.6x0.35	2.20	2.246	2.186
M3.0x0.35	2.70	2.721	2.621
M3.5x0.35	3.20	3.221	3.121
M4.0x0.5	3.50	3.599	3.459
M4.5x0.5	4.00	4.099	3.959
M5.0x0.5	4.50	4.599	4.459
M5.5x0.5	5.00	5.099	4.959
M6.0x0.75	5.30	5.378	5.188
M6.0x0.5	5.50	5.550	5.400
M7.0x0.75	6.30	6.378	6.188
M7.0x0.5	6.50	6.550	6.400
M8.0x1.0	7.00	7.153	6.917
M8.0x0.75	7.30	7.378	7.188
M8.0x0.5	7.50	7.520	7.400
M9.0x1.0	8.00	8.153	7.917
M9.0x0.75	8.30	8.378	8.188
M10x1.25	8.80	8.912	8.647
M10x1.0	9.00	9.153	8.917
M10x0.75	9.30	9.378	9.188
M10x0.5	9.50	9.520	9.400
M11x1.0	10.00	10.153	9.917
M11x0.75	10.30	10.378	10.188
M12x1.5	10.50	10.676	10.376
M12x1.25	10.80	10.912	10.647
M12x1.0	11.00	11.153	10.917
M12x0.5	11.50	11.520	11.400
M14x1.5	12.50	12.676	12.376



M14x1.0	13.00	13.153	12.917
M15x1.5	13.50	13.676	13.376
M15x1.0	14.00	14.153	13.917
M16x1.5	14.50	14.676	14.376
M16x1.0	15.00	15.153	14.917
M17x1.5	15.50	15.676	15.376
M17x1.0	16.00	16.153	15.917
M18x2.0	16.00	16.210	15.835
M18x1.5	16.50	16.676	16.376
M18x1.0	17.00	17.153	16.917
M20x2.0	18.00	18.210	17.835
M20x1.5	18.50	18.676	18.376
M20x1.0	19.00	19.153	18.917
M22x2.0	20.00	20.210	19.835
M22x1.5	20.50	20.676	20.376
M22x1.0	21.00	21.153	20.917
M24x2.0	22.00	22.210	21.835
M24x1.5	22.50	22.676	22.376
M24x1.0	23.00	23.153	22.917
M25x2.0	23.00	23.210	22.835
M25x1.5	23.50	23.676	23.376
M25x1.0	24.00	24.153	23.917
M26x1.5	24.50	24.676	24.376
M27x2.0	25.00	25.210	24.835
M27x1.5	25.50	25.676	25.376
M27x1.0	26.00	26.153	25.917
M28x2.0	26.00	26.210	25.835
M28x1.5	26.50	26.676	26.376
M28x1.0	27.00	27.153	26.917
M30x3.0	27.00	27.252	26.752
M30x2.0	28.00	28.210	27.835
M30x1.5	28.50	28.676	28.376
M30x1.0	29.00	29.153	28.917
M32x2.0	30.00	30.210	29.835
M32x1.5	30.50	30.676	30.376
M33x3.0	30.00	30.252	29.752
M33x2.0	31.00	31.210	30.835
M33x1.5	31.50	31.676	31.376
M35x1.5	33.50	33.676	33.376
M36x3.0	33.00	33.252	32.752
M36x2.0	34.00	34.210	33.835



M36x1.5	34.50	34.676	34.376
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3.Unified Fine Thread

Specification(UNF)	Standard Diameter	Class 2 Tap Drill Size	
		Maximum	Minimum
NO.0 -80(1524)	1.25	1.305	1.182
NO.1 -72(1.854)	1.55	1.612	1.474
NO.2 -64(2184)	1.85	1.912	1.756
NO.3 -56(2515)	2.10	2.197	2.025
NO.4 -48(2845)	2.40	2.458	2.271
NO.5 -44(3715)	2.70	2.740	2.551
NO.6 -40(3.505)	2.90	3.022	2.820
NO.8 -36(4.166)	3.50	3.606	3.404
NO.10 -32(4.826)	4.10	4.165	3.963
NO.12 -28(5.486)	4.60	4.724	4.496
1/4 -28	5.50	5.588	5.360
5/16 -24	6.90	7.035	6.782
3/8 -24	8.50	8.636	8.382
7/16 -20	9.90	10.033	9.729
1/2 -20	11.50	11.307	11.329
9/16 -18	12.90	13.081	12.751
5/8 -18	14.50	14.681	14.351
3/4 -16	17.50	17.678	17.323
7/8 -14	20.50	20.675	20.270
1 -12	23.30	23.571	23.114
1-1/8 -12	26.50	26.746	26.289
1-1/4 -12	29.60	29.921	29.464
1-3/8 -12	32.80	33.096	32.639
1-1/2 -12	36.00	36.271	35.814

4.Unified Coarse Thread

Specification(UNC)	Standard Diameter	Class 2 Tap Drill Size	
		Maximum	Minimum
NO.1 -64(1.854)	1.55	1.582	1.425
NO.2 -56(2.184)	1.80	1.871	1.695
NO.3 -48(2.515)	2.10	2.146	1.941



NO.4 -40(2.845)	2.30	2.385	2.157
NO.5 -40(3.175)	2.60	2.697	2.487
NO.6 -32(3.505)	2.80	2.895	2.642
NO.8 -32(4.166)	3.40	3.530	3.302
NO.10 -24(4.826)	3.90	3.962	3.683
NO.12 -24(5.486)	4.50	4.597	4.344
1/4 -20	5.10	5.257	4.979
5/16 -18	6.60	6.731	6.401
3/8 -16	8.00	8.153	7.798
7/16 -14	9.40	9.550	9.144
1/2 -13	10.90	11.023	10.592
9/16 -12	12.20	12.446	11.989
5/8 -11	13.60	13.868	13.386
3/4 -10	16.60	16.840	16.307
7/8 -9	19.60	19.761	19.177
1 -8	22.30	22.606	21.971
1-1/8 -7	25.00	25.349	24.638
1-1/4 -7	28.20	28.524	27.813
1-3/8 -6	30.80	31.115	30.353
1-1/2 -6	34.00	34.290	33.528
1-3/4 -5	39.50	39.827	38.964
2 -4-1/2	45.20	45.593	44.679

5.Unified Extra Fine Thread

Specification(UNEF)	Standard Diameter	Class 2 Tap Drill Size	
		Maximum	Minimum
NO.12 -32	4.70	4.826	4.623
1/4 -32	5.60	5.689	5.487
5/16 -32	7.10	7.264	7.087
3/8 -32	8.7	8.864	8.662
7/16 -28	10.20	10.337	10.135
1/2 -28	11.80	11.938	11.710
9/16 -24	13.20	13.385	13.132
5/18 -24	14.80	14.968	14.732
3/4 -20	17.80	17.957	17.679
7/8 -20	21.00	21.132	20.854
1 -20	24.10	24.307	24.029



6.Unified Pipe Thread

Specification	Drill Diameter		
	NPT		NPS
	When Using a Tap	Without Using a Tap	
1/16 -27	5.94	6.15	6.35
1/8 -27	8.33	8.43	8.74
1/4 -18	10.72	11.13	11.13
3/8 -18	14.27	14.27	14.68
1/2 -14	17.48	17.86	18.26
3/4 -14	22.63	23.01	23.42
1 -11-1/2	28.58	28.98	29.36
1-1/4 -11-12	37.31	37.69	38.10
1-1/2 -11-1/2	43.26	43.66	44.45
2 -11-1/2	55.17	55.58	58.36

7.American Forced Thread Tapping Drill Diameter

Specification	Precision	Maximum	Minimum
1 -64UNC	G5	1.76	1.68
2 -56	G4	2.04	1.96
3 -48	G4	2.35	2.25
4 -40	G5	2.64	2.54
5 -40	G5	2.97	2.87
6 -32	G5	3.22	3.11
8 -32	G6	3.89	3.78
10 -24	G6	4.44	4.30
12 -24	G6	5.07	4.96
1/4" -20	G7	5.86	5.73
5/16" -18	G7	7.38	7.23
3/8" -16	G7	8.89	8.72
7/16" -14	G8	10.40	10.02
1/2" -13	G8	11.92	11.70
0 -80UNF	G5	14.5	1.39
1 -72	G5	1.77	1.70
2 -64	G4	2.06	1.98
3 -56	G4	2.37	2.29
4 -48	G5	2.68	2.59



5 -44	G5	2.99	2.90
6 -40	G5	3.29	3.19
8 -36	G5	3.91	3.81
10 -32	G6	4.53	4.44
12 -20	G6	5.13	5.03
1/4" -28	G7	6.00	5.91
5/16" -24	G7	7.53	7.42
3/8" -24	G7	9.10	8.99
7/16" -20	G8	10.62	10.48
1/2" -20	G8	12.20	12.06

8.Metric Forced Thread Tapping Drill Diameter

Specification	Precision	Maximum	Minimum
M1.0x0.25	G4	0.92	0.89
M1.2 x0.25	G4	1.12	1.09
M1.4 x0.3	G4	1.30	1.26
M1.6 x0.35	G4	1.47	1.42
M1.7 x0.35	G4	1.57	1.52
M1.8 x0.35	G4	1.67	1.62
M2.0 x0.4	G4	1.84	1.79
M2.2 x0.45	G5	2.04	1.97
M2.3 x0.4	G4	2.14	2.09
M2.5 x0.45	G5	2.34	2.27
M2.6 x0.45	G5	2.44	2.37
M3.0x0.5	G5	2.82	2.75
M3.5x0.6	G5	3.27	3.19
M4.0 x0.7	G6	3.72	3.65
M5.0 x0.8	G6	4.67	4.59
M6.0x1.0	G7	5.59	5.49
M7.0x1.0	G7	6.59	6.49
M8.0x1.25	G7	7.49	7.36
M10x1.5	G7	9.34	9.22
M10 x1.25	G7	9.49	9.35
M12 X 1.75	G8	11.23	11.09
M12 X 1.25	G9	11.50	11.36



9. British Standard Thread

Specification	Drill Diameter	
	Hard Material	Soft Material
W1/8 -40	2.65	2.60
W5/32 -32	3.25	3.20
W3/16 -24	3.75	3.70
W1/4 -20	5.10	5.00
W5/16 -18	6.60	6.50
W3/8 -16	8.00	7.90
W7/16 -14	9.40	9.30
W1/2 -12	10.70	10.50
W9/16 -12	12.30	12.00
W5/8 -11	13.70	13.50
W3/4 -10	16.70	16.50
W7/8 -9	19.50	19.30
W1 -8	22.40	22.00
W1-1/8 -7	25.00	24.80
W1-1/4 -7	28.30	28.00

10. British Standard Electrical Thread

Specification	Drill Diameter
2BA	4.0-4.2
3BA	3.4-3.6
4BA	3.0-3.2
5BA	2.7-2.8
6BA	2.4-2.5

11. British Standard Pipe Thread

Specification (New Specification PR)	Standard Diameter	Maximum	Minimum
1/16 -28	6.5	6.632	6.490
1/8 -28	8.5	8.637	8.495
1/4 -19	11.4	11.549	11.341



3/8 -19	14.9	15.045	14.846
1/2 -14	18.6	18.773	18.489
3/4 -14	24.0	24.259	23.975
1 -11	30.2	30.47	30.110
1 1/4 -11	38.8	39.133	38.771
1 1/2 -11	44.7	45.026	44.664
2 -11	56.5	56.837	56.475

Specification (New Specification G)	Standard Diameter	Maximum	Minimum
1/16 -28	6.7	6.843	6.561
1/8 -28	8.7	8.848	8.566
1/4 -19	11.7	11.890	11.445
3/8 -19	15.2	15.395	14.950
1/2 -14	19.0	19.172	18.631
5/8 -14	21.0	21.128	20.587
3/4 -14	24.5	24.658	24.117
7/8 -14	28.2	28.418	27.877
1 -11	30.6	30.931	30.291
1 1/8 -11	35.2	35.579	34.939
1 1/4 -11	39.2	39.592	38.952
1 1/2 -11	45.0	45.485	44.845
1 3/4 -11	51.0	51.428	50.788
2 -11	57.0	57.296	56.656

PT Specification (New Specification RC)	Standard Diameter		Minimum Inside Diameter of Parent Thread in Minimum Effective Thread Length	Minimum Inside Diameter of Parent Thread in Standard Length
	When Using a Tap	Without Using a Tap		
1/16 -28	6.1	6.2	6.244	6.384
1/8 -28	8.1	8.2	8.249	8.388
1/4 -19	10.7	11.0	10.962	11.174
3/8 -19	14.2	14.5	14.448	14.658
1/2 -14	17.6	18.0	17.979	18.263
3/4 -14	23.0	23.5	23.378	23.663
1 -11	29.0	29.5	29.459	29.822
1 1/4 -11	37.5	38.0	37.976	38.339
1 1/2 -11	43.4	44.0	43.869	44.232
2 -11	54.9	55.5	55.412	55.844



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