

24. ねじ下穴径表ロールタップ(盛上げタップ)用

Recommended Hole Sizes for Thread Forming Taps

■メートルねじ用 / For Metric Threads

単位 / Unit : mm

呼び Nominal size	標準等級 Tolerance Class of Tap	推奨下穴径 Recommended Hole Size	
		Max.	Min.
M1 ×0.25	G4	0.92	0.89
M1.2×0.25	G4	1.12	1.09
M1.4×0.3	G4	1.30	1.26
M1.6×0.35	G4	1.47	1.42
M1.7×0.35	G4	1.57	1.52
M1.8×0.35	G4	1.67	1.62
M2 ×0.4	G4	1.84	1.79
M2 ×0.25	G4	1.92	1.89
M2.2×0.45	G5	2.04	1.97
M2.3×0.4	G4	2.14	2.09
M2.5×0.45	G5	2.34	2.27
M2.5×0.35	G5	2.38	2.34
M2.6×0.45	G5	2.44	2.37
M3 ×0.5	G5	2.82	2.75
M3 ×0.35	G5	2.88	2.84

呼び Nominal size	標準等級 Tolerance Class of Tap	推奨下穴径 Recommended Hole Size	
		Max.	Min.
M 3.5×0.6	G5	3.27	3.19
M 3.5×0.35	G5	3.38	3.34
M 4 ×0.7	G6	3.72	3.65
M 4 ×0.5	G6	3.83	3.76
M 5 ×0.8	G6	4.67	4.59
M 5 ×0.5	G6	4.83	4.76
M 6 ×1	G7	5.59	5.49
M 6 ×0.75	G6	5.69	5.61
M 7 ×1	G7	6.59	6.49
M 7 ×0.75	G7	6.70	6.62
M 8 ×1.25	G7	7.49	7.36
M 8 ×1	G7	7.59	7.49
M 8 ×0.75	G7	7.70	7.62
M10 ×1.5	G7	9.34	9.22
M10 ×1.25	G7	9.49	9.35

呼び Nominal size	標準等級 Tolerance Class of Tap	推奨下穴径 Recommended Hole Size	
		Max.	Min.
M10×1	G 7	9.59	9.49
M12×1.75	G 8	11.23	11.09
M12×1.5	G 8	11.34	11.22
M12×1.25	G 9	11.50	11.36
M12×1	G 7	11.59	11.49
M14×2	G10	13.14	12.98
M14×1.5	G 9	13.35	13.22
M14×1	G 8	13.60	13.50
M16×2	G10	15.14	14.98
M16×1.5	G 9	15.35	15.22
M16×1	G 8	15.60	15.50
M18×2.5	G11	16.93	16.73
M18×1.5	G10	17.36	17.24
M20×2.5	G11	18.93	18.73
M20×1.5	G10	19.36	19.24

・ロールタップの下穴径は、被加工材の材質、硬度、形状寸法などにより盛り上がり量が多少異なりますので上表を参考に若干プラス・マイナスの数値も試みてください。尚、上表の数値は、展延性の良い材料でねじ呼び径(D)に対し0.5D~2Dのねじ加工長さの場合です。

・According to the ductility, hardness and dimension of the workpiece to be tapped, the recommended hole sizes for thread forming tapping may have to be altered. The values listed above should only be used as an aid in selecting suitable drills when using thread forming taps, the correct hole sizes should be decided based on test result. Further, the values listed above are suitable for 0.5D~2D threading length in relatively ductile materials (D:thread major diameter).

■ユニファイねじ用 / For Unified Threads

単位 / Unit : mm

呼び Nominal size	標準等級 Tolerance Class of Tap	推奨下穴径 Recommended Hole Size	
		Max.	Min.
No.0 - 80UNF	G5	1.45	1.39
No.1 - 64UNC	G5	1.76	1.68
No.1 - 72UNF	G5	1.77	1.70
No.2 - 56UNC	G4	2.04	1.96
No.2 - 64UNF	G4	2.06	1.98
No.3 - 48UNC	G4	2.35	2.25
No.3 - 56UNF	G4	2.37	2.29
No.4 - 40UNC	G5	2.64	2.54
No.4 - 48UNF	G5	2.68	2.59
No.5 - 40UNC	G5	2.97	2.87

呼び Nominal size	標準等級 Tolerance Class of Tap	推奨下穴径 Recommended Hole Size	
		Max.	Min.
No. 5 - 44UNF	G5	2.99	2.90
No. 6 - 32UNC	G5	3.22	3.11
No. 6 - 40UNF	G5	3.29	3.19
No. 8 - 32UNC	G6	3.89	3.78
No. 8 - 36UNF	G5	3.91	3.81
No.10 - 24UNC	G6	4.44	4.30
No.10 - 32UNF	G6	4.53	4.44
No.12 - 24UNC	G6	5.07	4.96
No.12 - 28UNF	G6	5.13	5.03
1/4 - 20UNC	G7	5.86	5.73

呼び Nominal size	標準等級 Tolerance Class of Tap	推奨下穴径 Recommended Hole Size	
		Max.	Min.
1/4 - 28UNF	G7	6.00	5.91
5/16 - 18UNC	G7	7.38	7.23
5/16 - 24UNF	G7	7.53	7.42
3/8 - 16UNC	G7	8.89	8.72
3/8 - 24UNF	G7	9.10	8.99
7/16 - 14UNC	G8	10.40	10.20
7/16 - 20UNF	G8	10.62	10.48
1/2 - 13UNC	G8	11.92	11.70
1/2 - 20UNF	G8	12.20	12.06

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・According to the ductility, hardness and dimension of the workpiece to be tapped, the recommended hole sizes for thread forming tapping may have to be altered. The values listed above should only be used as an aid in selecting suitable drills when using thread forming taps, the correct hole sizes should be decided based on test result. Further, the values listed above are suitable for 0.5D~2D threading length in relatively ductile materials (D:thread major diameter).