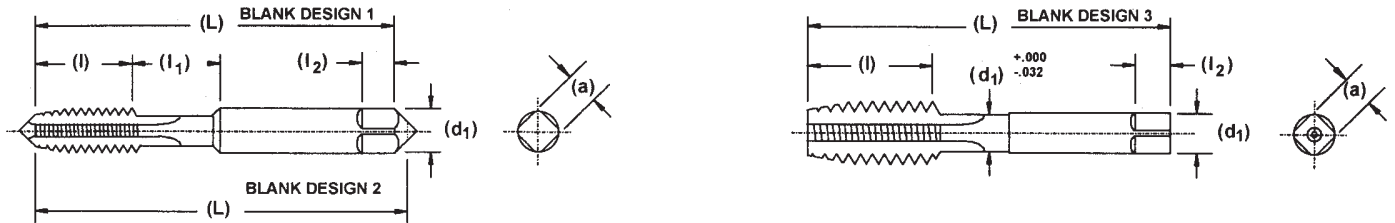


# SPECIAL TAPS ENGINEERING DATA

## OPTIONAL NECK AND OPTIONAL SHORTENED THREAD LENGTH TAP DIMENSIONS, GROUND THREAD

(Ref. USCTI Table 302-A)



### General Dimensions

Nominal Diameter Range-Inches		Machine Screw Size No.	Nominal Fractional Diameter Inches	Nominal Metric Diameter Millimeters, (Inches)	Blank Design No.	Tap Dimensions----Inches					
						Overall Length L	Thread Length l	Neck Length l1	Square Length l2	Shank Diameter d1	Size of Square a
.104	.117	4 (.1120)			1	1.88	.31	.25	.19	.1410	.110
.117	.130	5 (.1250)		M3 (.1181)	1	1.94	.31	.31	.19	.1410	.110
.130	.145	6 (.1380)		M3.5 (.1378)	1	2.00	.38	.31	.19	.1410	.110
.145	.171	8 (.1640)		M4 (.1575)	1	2.13	.38	.38	.25	.1680	.131
.171	.197	10 (.1900)		M4.5 (.1772), M5 (.1969)	1	2.38	.50	.38	.25	.1940	.152
.197	.223	12 (.2160)			1	2.38	.50	.44	.28	.2200	.165
.223	.260		1/4 (.2500)	M6 (.2362)	2	2.50	.63	.38	.31	.2550	.191
.260	.323		5/16 (.3125)	M7 (.2756), M8 (.3150)	2	2.72	.69	.44	.38	.3180	.238
.323	.395		3/8 (.3750)	M10 (.3937)	2	2.94	.75	.50	.44	.3810	.286
.395	.448		7/16 (.4375)		3	3.16	.88	-	.41	.3230	.242
.448	.510		1/2 (.5000)	M12 (.4724)	3	3.38	.94	-	.44	.3670	.275
.510	.573		9/16 (.5625)	M14 (.5512)	3	3.59	1.00	-	.50	.4290	.322
.573	.635		5/8 (.6250)	M16 (.6299)	3	3.81	1.09	-	.56	.4800	.360
.635	.709		11/16 (.6875)	M18 (.7087)	3	4.03	1.09	-	.63	.5420	.406
.709	.760		3/4 (.7500)		3	4.25	1.22	-	.69	.5900	.442
.760	.823		13/16 (.8125)	M20 (.7874)	3	4.47	1.22	-	.69	.6520	.489
.823	.885		7/8 (.8750)	M22 (.8661)	3	4.69	1.34	-	.75	.6970	.523
.885	.948		15/16 (.9375)	M24 (.9449)	3	4.91	1.34	-	.75	.7600	.570
.948	1.010		1 (1.0000)	M25 (.9843)	3	5.13	1.50	-	.81	.8000	.600

#### NOTES

- 1.) Thread Length "l" is based on a length of 12 pitches of the UNC thread series.
- 2.) Thread Length "l" is a minimum value and has no tolerance.
- 3.) When Thread Length "l" is added to Neck Length "l<sub>1</sub>" the total shall be no less than the minimum Table 302 Thread Length "l".
- 4.) Unless otherwise specified, all tolerances are in accordance with Table 302.
- 5.) For eccentricity tolerances, see Table 317.