

Extruded Holes



Suggested extruded holes in light gauge steel for TAPTITE II® and DUO-TAPTITE® Screws and Bolts (Continued from page 11)

Approximate Material Thickness "T"

IN MM	.024 - .035 0.61 - 0.89		.042 - .048 1.07 - 1.22		0.060 1.52		0.09 2.29		0.106 2.69		0.122 3.10	
	H	R	H	R	H	R	H	R	H	R	H	R
IN. 0.081 - .100 MM 2.06 - 2.54	0.040 1.02	0.005 0.13	0.040 1.02	0.005 0.13	0.040 1.02	0.006 0.15	0.043 1.09	0.010 0.25				
IN. .101 - .130 MM 2.57 - 3.30	0.047 1.19	0.005 0.13	0.047 1.19	0.005 0.13	0.047 1.19	0.006 0.15	0.052 1.32	0.010 0.25	0.054 1.37	0.010 0.25		
IN. .131 - .150 MM 3.33 - 3.81	0.053 1.35	0.005 0.13	0.053 1.35	0.005 0.13	0.053 1.35	0.006 0.15	0.060 1.52	0.010 0.25	0.063 1.60	0.010 0.25	0.072 1.83	0.013 0.33
IN. .151 - .180 MM 3.84 - 4.57			0.060 1.52	0.005 0.13	0.081 1.55	0.006 0.15	0.070 1.78	0.010 0.25	0.075 1.91	0.010 0.25	0.087 2.21	0.013 0.33
IN. .181 - .220 MM 4.60 - 5.59			0.070 1.78	0.005 0.13	0.070 1.78	0.006 0.15	0.090 2.29	0.010 0.25	0.095 2.41	0.010 0.25	0.104 2.64	0.013 0.33
IN. .221 - .260 MM 5.61 - 6.60					0.075 1.91	0.006 0.15	0.100 2.54	0.010 0.25	0.105 2.67	0.010 0.25	0.120 3.05	0.013 0.33
IN. .261 - .300 MM 6.63 - 7.62					0.083 2.11	0.006 0.15	0.116 2.95	0.010 0.25	0.125 3.18	0.010 0.25	0.140 3.58	0.013 0.33
IN. .301 - .340 MM 7.65 - 8.64							0.130 3.30	0.010 0.25	0.140 3.56	0.010 0.25	0.164 3.91	0.013 0.33
IN. .341 - .380 MM 8.66 - 9.65							0.140 3.56	0.010 0.25	0.155 3.94	0.010 0.25	0.170 4.32	0.013 0.33
IN. .381 - .430 MM 9.68 - 10.92							0.150 3.81	0.010 0.25	0.170 4.32	0.010 0.25	0.184 4.67	0.013 0.33

The above hole sizes are suggested starting points to be confirmed by actual testing. Extrusion dimensions can vary due to tooling design and material being extruded.

Suggested hole sizes for Aluminum or Zinc die castings For TAPTITE® and DUO-TAPTITE® Screws & Bolts

Screw Size	Hole Diameter as Cast Std. Taper				F Hole Dia. as Drilled	L Length of Thread Engagement	H Boss Dia. Min.	J Distance to Edge for No Measurable Distortion-Min.
	Top A		Bottom B					
	Max.	Min.	Max.	Min.				
Metric Sizes (mm)								
M2 x 0.40	1.91	1.83	1.81	1.73	1.81	4.00	3.32	1.0
M2.5 x 0.45	2.39	2.31	2.28	2.20	2.28	5.00	4.15	1.2
M3 x 0.5	2.90	2.82	2.76	2.68	2.76	6.00	4.98	1.3
M3.5 x 0.6	3.31	3.23	3.21	3.13	3.21	7.00	5.81	1.6
M4 x 0.7	3.82	3.74	3.64	3.56	3.64	8.00	6.64	1.8
M4.5 x 0.75	4.31	4.23	4.11	4.03	4.11	9.00	7.47	2.0
M5 x 0.8	4.80	4.72	4.58	4.50	4.58	10.00	8.30	2.1
M6 x 1.0	5.74	5.66	5.48	5.40	5.48	12.00	9.96	2.6
M6.3 x 1.0	6.05	5.97	5.78	5.70	5.78	13.00	10.46	2.6
M7 x 1.0	6.78	6.70	6.48	6.40	6.48	14.00	11.62	2.6
M8 x 1.25	7.69	7.61	7.35	7.27	7.35	16.00	13.28	3.3
M10 x 1.5	9.64	9.56	9.22	9.14	9.22	20.00	16.60	3.9
M12 x 1.75	11.59	11.51	11.09	11.01	11.09	24.00	19.92	4.6
Inch Sizes (in)								
2-56	0.081	0.078	0.077	0.074	0.077	0.172	0.197	0.046
3-48	0.093	0.090	0.088	0.085	0.088	0.198	0.208	0.054
4-40	0.105	0.102	0.099	0.096	0.099	0.224	0.220	0.065
5-40	0.118	0.115	0.112	0.109	0.112	0.250	0.232	0.065
6-32	0.128	0.125	0.122	0.119	0.122	0.276	0.242	0.081
8-32	0.155	0.152	0.148	0.145	0.148	0.328	0.272	0.081
10-24	0.177	0.174	0.168	0.165	0.168	0.380	0.315	0.108
10-32	0.182	0.179	0.174	0.171	0.174	0.380	0.315	0.081
12-24	0.203	0.200	0.194	0.191	0.194	0.432	0.359	0.108
1/4-20	0.235	0.232	0.224	0.221	0.224	0.500	0.415	0.130
5/16-18	0.297	0.294	0.284	0.281	0.284	0.625	0.519	0.144
3/8-16	0.359	0.356	0.343	0.340	0.343	0.750	0.623	0.162
7/16-14	0.419	0.416	0.400	0.397	0.400	0.875	0.726	0.186
1/2-13	0.481	0.478	0.460	0.457	0.460	1.000	0.830	0.200

The minimum length of thread engagement should be equal to twice the diameter of the screw (to approach utilizing available screw strength). The hole diameter to ensure optimum performance should provide for 65% to 75% thread engagement.

