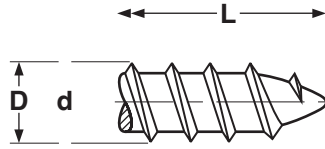


THREAD FORMING

TYPE A



THREADS FOR SELF-TAPPING SCREWS TYPE A ASME B18.6.3-2013

Nominal Size or Basic Screw Diameter		Threads Per Inch	D		d		L		Minimum Torsional Strength, lb.-in. (STEEL SCREWS ONLY)
			Major Diameter		Minor Diameter		These Lengths or Shorter Have AB Threads		
			Max	Min	Max	Min	90° Heads	Csk Heads	
5	0.125	20	0.130	0.126	0.095	0.090	3/16	1/4	18
6	0.138	18	0.141	0.136	0.102	0.096	1/4	5/16	24
7	0.151	16	0.158	0.152	0.114	0.108	5/16	3/8	30
8	0.164	15	0.168	0.162	0.123	0.116	3/8	7/16	39
• 9	0.177	14	0.181	0.170	0.130	0.120	-	-	47
10	0.190	12	0.194	0.188	0.133	0.126	3/8	1/2	48
12	0.216	11	0.221	0.215	0.162	0.155	7/16	9/16	83
14	0.242	10	0.254	0.248	0.185	0.178	1/2	5/8	125
20	0.320	9	0.333	0.327	0.234	0.226	11/16	13/16	250
24	0.372	9	0.390	0.383	0.291	0.282	3/4	1	492
• 1/2"	0.500	6	0.515	0.482	0.374	0.354	-	-	-
Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05		

• Dimensions for #9 and 1/2" nominal diameter are independent of the ASME B18.6.3 standard.

Description	A thread forming tapping screw with wider spaced threads than a Type-AB and a gimlet point.		
Applications/Advantages	For self starting in thin (.015-.050 thick) metal or resin-filled plywood.	For self starting in thin stainless sheet when corrosion resistance is required.	For self-starting in thin stainless sheet when a harder material is preferred.
Material	Steel	18-8 Stainless	410 Stainless
	AISI 1016 - 1024 or equivalent steel	Parts shall conform to the following chemical composition: Carbon: 0.08-0.12%; Manganese: 2.0% max; Phosphorus: .045% max; Sulfur: 0.03% max; Chromium: 15-19%; Nickel: 8-13%	Parts shall conform to the following chemical composition: Carbon: 0.15% max; Manganese: 1.0% max; Phosphorus: .040% max; Sulfur: 0.030% max; Chromium: 11.5-13.5%
Heat Treatment	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.	-	Shall be annealed by heating to 1900 ± 50°F to obtain maximum corrosion resistance and minimum permeability. Screws are held for a sufficient time at temperature, then cooled at a rate sufficient to prevent precipitation of the carbide.
Surface Hardness	Steel: Rockwell C45 minimum	-	-
Case Depth (Steel only)	No. 4 thru 6 diameter: .002 - .007 No. 8 thru 12 diameter: .004 - .009 1/4" and larger: .005 - .011	-	-
Hardness	Steel: Core: Rockwell C28 - 38 (after tempering)	Rockwell B90 - C20 (approx.)	Rockwell C36 - 43
Plating	See Appendix-A for plating information.		