THREAD FORMING

Type AB



THREADS FOR SELF-TAPPING SCREWS TYPE AB ASME B18.6.3-2013										
Nominal Size or Basic Screw Diameter		Threads Per Inch	D Major Diameter		d Minor Diameter		L Minimum Practical Screw Length		Minimum Torsional Strength, Ib in. (STEEL	
										Max
			2	.0860	32	.088	.082	.064	.060	3/16
3	.0990	28	.101	.095	.075	.071	3/16	1/4	9	
4	.1120	24	.114	.108	.086	.082	7/32	9/32	13	
5	.1250	20	.130	.123	.094	.090	1/4	5/16	18	
6	.1380	20	.139	.132	.104	.099	9/32	11/32	24	
7	.1510	19	.154	.147	.115	.109	5/16	3/8	30	
8	.1640	18	.166	.159	.122	.116	5/16	3/8	39	
10	.1900	16	.189	.182	.141	.135	3/8	7/16	56	
12	.2160	14	.215	.208	.164	.157	7/16	21/32	88	
1/4	.2500	14	.246	.237	.192	.185	1/2	19/32	142	
5/16	.3125	12	.315	.306	.244	.236	5/8	3/4	290	
3/8	.3750	12	.380	.371	.309	.299	3/4	29/32	590	
	Tolerance on Length				Up to 1" Incl.: ±0.03			Over 1": ±0.05		

Description	A thread forming tapping screw with spaced threads and a gimlet point.						
Applications/ Advantages	For self starting in thin (.015050 thick) metal or resin-filled plywood. Recommended over a Type-A, particularly in brittle materials.	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: AISI 1016 - 1024 or equivalent steel	18-8 Stainless: Austenitic 18-8 stainless steel	410 Stainless: Martensitic 410 stainless steel				
Heat Treatment	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.	<u>-</u>	410 Stainless: Screws shall be annealed by heating to 1850-1950°F, held at least for 1/2 hour and rapid air- or oil-quenched then reheating to 525°F minimum for at least 1 hour and air cooled to provide the required tensile, yield and hardness properties.				
Surface Hardness	Steel: Rockwell C45 minimum						
Case Depth (Steel only)	No. 4 thru 6 diameter: .002007 No. 8 thru 12 diameter: .004009 1/4" and larger: .005011						
Core Hardness (after tempering)	Steel: Rockwell C28 - 38		410 Stainless: Rockwell C38 - 42				
Plating	See Appendix-A for plating information.						