



ASME B18.6.3-2013											
Nominal Screw Size	Number of Thread Starts	D		A		H		P		Recommended Hole Size	
		Outside Diameter		Head Diameter		Head Height		Pilot Diameter		Drill Size No.	Hole Diameter
		Max	Min	Max	Min	Max	Min	Max	Min		
00	6	.060	.057	.099	.090	.034	.026	.049	.046	55	.052
0	6	.075	.072	.127	.118	.049	.041	.063	.060	51	.067
2	8	.100	.097	.162	.146	.069	.059	.083	.080	44	.086
3 •	8	.108	.104	.187	.169	.078	.067	.090	.086	41	.096
4	7	.116	.112	.211	.193	.086	.075	.096	.092	37	.104
5 •	7	.128	.124	.236	.217	.095	.083	.106	.102	35	.110
6	7	.140	.136	.260	.240	.103	.091	.116	.112	31	.120
7	8	.154	.150	.285	.264	.111	.099	.126	.122	29	.136
8	8	.167	.162	.309	.287	.120	.107	.136	.132	27	.144
10	8	.182	.177	.359	.334	.137	.123	.150	.146	20	.161
12	8	.212	.206	.408	.382	.153	.139	.177	.173	11	.191
14	9	.242	.236	.457	.429	.170	.155	.202	.198	2	.221
5/16	11	.315	.309	.590	.557	.216	.198	.272	.267	M	.295
L	Nominal Screw Length	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	1" and over	
Tolerance on Length		±0.02	±0.02	±0.02	±0.02	±0.02	±0.02	±0.03	±0.03	±0.03	±0.03
S	Pilot Length (±0.015)	.047	.047	.047	.047	.062	.062	.078	.078	.125	

NOTE: Dimensions for #3 & #5 Drive screws are independent of the ASME B18.6.3 standard.

Description	Round head metallic drive screw having multiple start threads of large helix angle, with a pivot.		
Applications/ Advantages	For making permanent fastenings in metals and plastics, when forced into the work under pressure.		
Material	<i>Steel</i>	<i>Stainless</i>	
	AISI 1016 - 1024 or equivalent steel	18-8 Stainless Steel	316 Stainless Steel
Heat Treatment	Screws shall be quenched in liquid and then tempered by reheating to 650°F minimum.	-	-
Case Hardness	Rockwell C 45 minimum	Hardness: Rockwell B 85 - 95 (approximate)	Hardness: Rockwell B 85 - 95 (approximate)
Core Hardness	Rockwell C 28-38		
Case Depth	No. 2 through 6 diameter: .002 - .007 No. 7 through 12 diameter: .004 - .009 No. 14 diameter & larger: .005 - .011	-	-
For Use In	Drive screws shall produce mating threads without shearing of threads or fracture of the screw when driven into properly sized holes in test plates having a Rockwell hardness of B70 to B85.	Not recommended for use in materials of a hardness greater than Rockwell B 65.	Not recommended for use in materials of a hardness greater than Rockwell B 65.