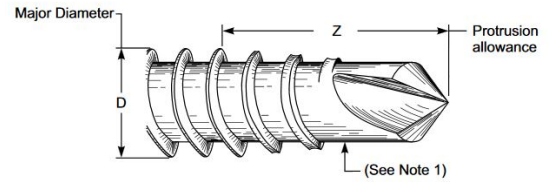
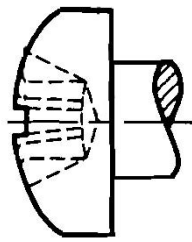
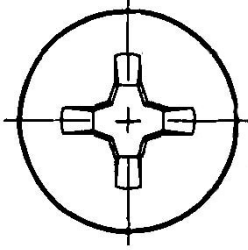


# Pan Head - Type I (Phillips) - Self-drilling Screw - Type BSD, Style 2 Point



Typical Self-Drilling Tapping Screw Point

THREAD DATA		
Size: #6	Threads per in.: 20	Thread Class or Type: BSD
Major Diameter: 0.1390 - 0.1320	Standard: ASME B18.6.3-2013	
DIMENSIONAL DATA		
Type: Pan Head - Type I (Phillips) - Self-drilling Screw - Type BSD, Style 2 Point	Standard: IFI - 113	Nominal Diameter: 0.138
A - Head Diameter: 0.270 - 0.256	H - Head Height: 0.097 - 0.087	Driver Size: 2
Penetration Depth: 0.080 - 0.055	Wobble: 12°	M - Ref. Recess Dim.: 0.159
Z - Min. Point Protrusion: 0.190	L - Minimum Practical Length: 5/16	L - Length: 1/2
Length Tolerance: ± 0.03		
PHYSICAL REQUIREMENTS		
Nominal: 0.138	Standard: IFI - 113/SAE J78 / ASTM C1513	Typical Materials: carbon steel: 1018-1022
Test Plate Thickness in.: 0.060 - 0.064	Torsional Strength, Min. (in.lbf): 24	Core Hardness: HRC 32 - 40
Case Hardness: HRC 52 - 58	Case Depth (in.): .007-.002	Ductility Test Angle: 5°
Axial Test Load +/- 5% (0.0003 in. max. finish): 30	Axial Test Load +/- 5% (over 0.0003 in. finish): 35	Max. time to drill & form thread (seconds): 2.5
Test Drill Speed (RPM): 1800 - 2500	Straightness Factor: N/A	
FINISH DATA		
Finish: Zinc & Clear, non-hexavalent/Cr(VI) free - .0001" / 3µm	K factor (ref. DIN 946): 0.22	Standard: ASTM F1941/F1941M-2016, Fe/Zn 3AN

<sup>1</sup> These torque values are based on K factors determined using DIN 946, tightening tension of 75% of the yield strength, and the calculation formula T=KDP. These values are advisory only. The torque for assembling critical joints should be determined and/or verified through actual experimentation by the user. The IFI is not responsible for any losses or claims resulting from the use of these values.<sup>2</sup> Calculated Pretension is equal to 75% of the bolt's yield strength achieved when using the indicated Tightening Torque.

