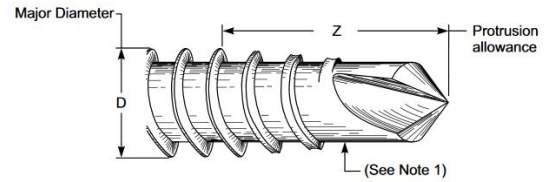
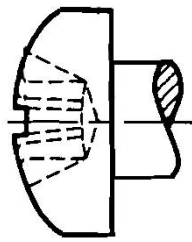
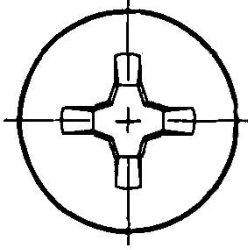


# Pan Head - Type I (Phillips) - Self-drilling Screw - Type BSD, Style 3 Point



Typical Self-Drilling Tapping Screw Point

| THREAD DATA  |   |   |
|--|---|---|
| Size: #10  | Threads per in.: 16                                 | Thread Class or Type: BSD                       |
| Major Diameter: 0.1890 - 0.1820  | Standard: ASME B18.6.3-2013                         |   |
| DIMENSIONAL DATA   |   |   |
| Type: Pan Head - Type I (Phillips) - Self-drilling Screw - Type BSD, Style 3 Point | Standard: IFI - 113                                 | Nominal Diameter: 0.19                          |
| A - Head Diameter: 0.373 - 0.357   | H - Head Height: 0.133 - 0.122                      | Driver Size: 2                                  |
| Penetration Depth: 0.113 - 0.089   | Wobble: 12°   | M - Ref. Recess Dim.: 0.192                     |
| Z - Min. Point Protusion: 0.300  | L - Minimum Practical Length: 1/2                   | L - Length: 1-1/2                               |
| Length Tolerance: ± 0.05   |   |   |
| PHYSICAL REQUIREMENTS  |   |   |
| Nominal: 0.19  | 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): 61               | Core Hardness: HRC 32 - 40                      |
| Case Hardness: HRC 52 - 58   | Case Depth (in.): .009-.004                         | Ductility Test Angle: 5°                        |
| Axial Test Load +/- 5% (0.0003 in. max. finish): 35                                | Axial Test Load +/- 5% (over 0.0003 in. finish): 40 | Max. time to drill & form thread (seconds): 3.5 |
| 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.

