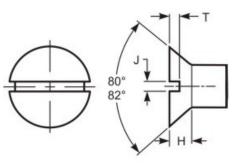
## 80°/82° - Flat Head - Sltd





## GRADE MARK

| THREAD DATA   |   |   |
|---|---|---|
| <b>Size:</b> #10  | Threads per in.: 24                                       | Series Designation: UNC                                       |
| Thread Class or Type: 2A  | Major Diameter: 0.1890 - 0.1818                           | Pitch and Functional Dia.: 0.1619 - 0.1586                    |
| Tensile Stress Area: 0.0175                                     | Standard: ASME B1.1 - 2003 (R2008)                        | Length: 3/8   |
| Length Tolerance: -0.02   |   |   |
| DIMENSIONAL DATA  |   |   |
| Type: 80°/82° - Flat Head - Sltd                                | Standard: ASME B18.6.3 - 2013                             | Nominal Diameter: 0.19  |
| A - Head Diameter: 0.362 - 0.333                                | H - Head Height: 0.116 ref                                | J - Slot Width: 0.060 - 0.050                                 |
| T - Slot Depth: 0.053 - 0.034                                   | F - Protrusion Height: 0.042 - 0.025                      | G - Gage Diameter: 0.313                                      |
| PHYSICAL REQUIREMENTS   |   |   |
| Nominal: 0.19   | Standard: ASME B18.6.3-2013, Machine Screw (carbon steel) | <b>Typical Materials:</b> low carbon steel, 1010 through 1022 |
| Hardness: HRB 100 - 70  | Tensile Load, Min. (Ibf): 1,050                           | Yield PSI, 2% Offset, Machined Specimen: 36,000               |
| Tensile Strength, Min. (psi): 60,000                            | Calculated Shear Load-BODY (ref.)(lbf): 630               | Calculated Shear Load-THREADS (ref.)(lbf): 525                |
| Straightness Factor: N/A  | Calculated Pretension <sup>2</sup> (lbf) : 473            | Tightening Torque <sup>1</sup> : 2 ft.lbf, 20 in.lbf, 2.2 Nm  |
| FINISH DATA   |   |   |
| Finish: Zinc & Clear, non-hexavalent/Cr(VI) free0001"/ $3\mu m$ | K factor (ref. DIN 946): 0.22                             | <b>Standard:</b> ASTM F1941/F1941M-2016, Fe/Zn<br>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.



