



GRADE MARK

THREAD DATA		
Size: #6	Threads per in.: 32	Series Designation: UNC
Thread Class or Type: 2A	Major Diameter: 0.1372 - 0.1312	Pitch and Functional Dia.: 0.1169 - 0.1141
Tensile Stress Area: 0.0091	Standard: ASME B1.1 - 2003 (R2008)	Length: 1
Length Tolerance: -0.03		
DIMENSIONAL DATA		
Type: 80°/82° - Flat Head - Sltd	<b>Standard:</b> ASME B18.6.3 - 2013	Nominal Diameter: 0.138
A - Head Diameter: 0.262 - 0.238	H - Head Height: 0.083 ref	<b>J - Slot Width:</b> 0.048 - 0.039
T - Slot Depth: 0.038 - 0.024	F - Protrusion Height: 0.036 - 0.021	G - Gage Diameter: 0.220
PHYSICAL REQUIREMENTS		
Nominal: 0.138	Standard: ASME B18.6.3-2013, Machine Screw (carbon steel)	Typical Materials: low carbon steel, 1010 through 1022
Hardness: HRB 100 - 70	Tensile Load, Min. (lbf): 545	Yield PSI, 2% Offset, Machined Specimen: 36,000
Tensile Strength, Min. (psi): 60,000	Calculated Shear Load-BODY (ref.)(lbf): 327	Calculated Shear Load-THREADS (ref.)(lbf): 273
Straightness Factor: N/A	Calculated Pretension <sup>2</sup> (lbf): 246	Tightening Torque 1: 1 ft.lbf, 7 in.lbf, 0.8 Nm
FINISH DATA		
Finish: Zinc & Clear, non-hexavalent/Cr(VI) free0001"/ 3µm	K factor (ref. DIN 946): 0.22	<b>Standard:</b> ASTM F1941/F1941M-2016, Fe/Zn 3AN

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. Calculated Pretension is equal to 75% of the bolt's yield strength achieved when using the indicated Tightening Torque.



