



GRADE MARK

THREAD DATA		
Size: 3/8	Threads per in.: 16	Series Designation: UNC
Thread Class or Type: 2A	Major Diameter: 0.3737 - 0.3643	Pitch and Functional Dia.: 0.3331 - 0.3287
Tensile Stress Area: 0.0775	Standard: ASME B1.1 - 2003 (R2008)	Length: 3
Length Tolerance: -0.09		
DIMENSIONAL DATA		
Type: 80°/82° - Flat Head - Sltd	Standard: ASME B18.6.3 - 2013	Nominal Diameter: 0.375
A - Head Diameter: 0.717 - 0.670	H - Head Height: 0.230 ref	J - Slot Width: 0.094 - 0.081
T - Slot Depth: 0.106 - 0.070	F - Protrusion Height: 0.065 - 0.039	G - Gage Diameter: 0.653
PHYSICAL REQUIREMENTS		
Nominal: 0.375	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): 4,650	Yield PSI, 2% Offset, Machined Specimen: 36,000
Tensile Strength, Min. (psi): 60,000	Calculated Shear Load-BODY (ref.)(lbf): 2,790	Calculated Shear Load-THREADS (ref.)(lbf): 2,325
Straightness Factor: 0.018	Calculated Pretension ² (lbf): 2,093	Tightening Torque ¹: 14 ft.lbf, 173 in.lbf, 19.5 Nm
FINISH DATA		
Finish: Zinc & Clear, non-hexavalent/Cr(VI) free0001"/ 3μm	K factor (ref. DIN 946): 0.22	Standard: 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.² Calculated Pretension is equal to 75% of the bolt's yield strength achieved when using the indicated Tightening Torque.



