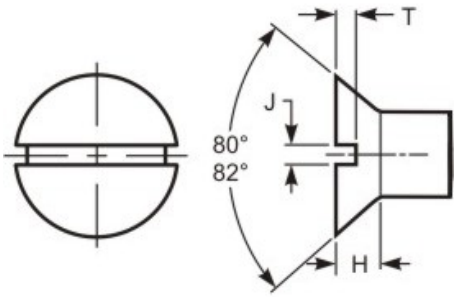
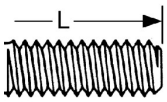
80º/82º - Flat Head - Sltd





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:** 1-1/2
Length Tolerance: -0.06		
DIMENSIONAL DATA		
Type: 80º/82º - 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: N/A	**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) free - .0001"/ 3µm	**K factor (ref. DIN 946):** 0.22	**Standard:** ASTM F1941/F1941M-2016, Fe/Zn 3AN

[1] 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.

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