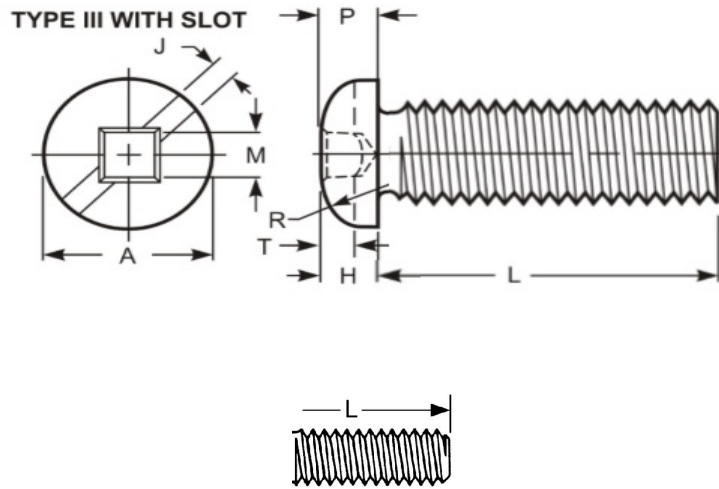


## Round Head- Type III/Sltd Combo (square socket/slot combo)



### GRADE MARK

THREAD DATA		
<b>Size: #8</b>	<b>Threads per in.: 32</b>	<b>Series Designation: UNC</b>
<b>Thread Class or Type: 2A</b>	<b>Major Diameter: 0.1631 - 0.1571</b>	<b>Pitch and Functional Dia.: 0.1428 - 0.1399</b>
<b>Tensile Stress Area: 0.0140</b>	<b>Standard: ASME B1.1 - 2003 (R2008)</b>	
DIMENSIONAL DATA		
<b>Type: Round Head- Type III/Sltd Combo (square socket/slot combo)</b>	<b>Standard: ASME B18.6.3 - 2013</b>	<b>Nominal Diameter: 0.164</b>
<b>A - Head Diameter: 0.309 - 0.287</b>	<b>H - Head Height: 0.120 - 0.107</b>	<b>J - Slot Width: 0.054 - 0.045</b>
<b>T - Slot Depth: 0.077 - 0.058</b>	<b>Driver Size: 2R</b>	<b>Penetration Depth: 0.075 - 0.060</b>
<b>M - Ref. Recess Dim.: 0.112</b>	<b>L - Length: 3/8</b>	<b>Length Tolerance: -0.02</b>
PHYSICAL REQUIREMENTS		
<b>Nominal: 0.164</b>	<b>Standard: ASME B18.6.3-2013, Machine Screw (carbon steel)</b>	<b>Typical Materials: low carbon steel, 1010 through 1022</b>
<b>Hardness: HRB 100 - 70</b>	<b>Tensile Load, Min. (lbf): 840</b>	<b>Yield PSI, 2% Offset, Machined Specimen: 36,000</b>
<b>Tensile Strength, Min. (psi): 60,000</b>	<b>Calculated Shear Load-BODY (ref.)(lbf): 504</b>	<b>Calculated Shear Load-THREADS (ref.)(lbf): 420</b>
<b>Straightness Factor: N/A</b>	<b>Calculated Pretension<sup>2</sup> (lbf) : 378</b>	<b>Tightening Torque<sup>1</sup>: 1 ft.lbf, 14 in.lbf, 1.5 Nm</b>
FINISH DATA		
<b>Finish: Zinc &amp; Clear, non-hexavalent/Cr(VI) free - .0001"/ 3µm</b>	<b>K factor (ref. DIN 946): 0.22</b>	<b>Standard: ASTM F1941/F1941M-2016, Fe/Zn 3AN</b>

<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.

