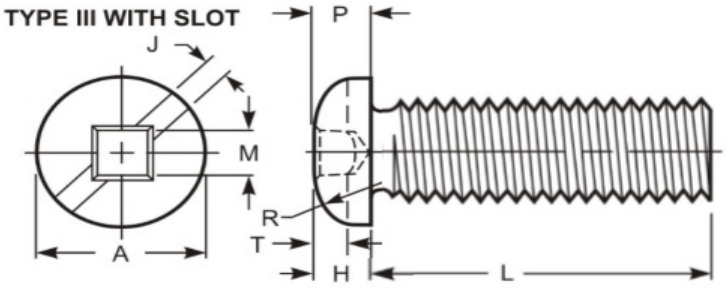
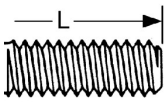
# Round Head- Type III/Sltd Combo (square socket/slot combo)




GRADE MARK

| | | |
|---|---|---|
| **THREAD DATA** | | |
| **Size:** #10 | **Threads per in.:** 32 | **Series Designation:** UNF |
| **Thread Class or Type:** 2A | **Major Diameter:** 0.1891 - 0.1831 | **Pitch and Functional Dia.:** 0.1688 - 0.1658 |
| **Tensile Stress Area:** 0.0200 | **Standard:** ASME B1.1 - 2003 (R2008) | |
| **DIMENSIONAL DATA** | | |
| **Type:** Round Head- Type III/Sltd Combo (square socket/slot combo) | **Standard:** ASME B18.6.3 - 2013 | **Nominal Diameter:** 0.19 |
| **A - Head Diameter:** 0.359 - 0.334 | **H - Head Height:** 0.137 - 0.123 | **J - Slot Width:** 0.060 - 0.050 |
| **T - Slot Depth:** 0.087 - 0.065 | **Driver Size:** 2R | **Penetration Depth:** 0.075 - 0.060 |
| **M – Ref. Recess Dim.:** 0.112 | **L - Length:** 1-1/4 | **Length Tolerance:** -0.06 |
| **PHYSICAL REQUIREMENTS** | | |
| **Nominal:** 0.19 | **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):** 1,200 | **Yield PSI, 2% Offset, Machined Specimen:** 36,000 |
| **Tensile Strength, Min. (psi):** 60,000 | **Calculated Shear Load-BODY (ref.)(lbf):** 720 | **Calculated Shear Load-THREADS (ref.)(lbf):** 600 |
| **Straightness Factor:** N/A | **Calculated Pretension[2] (lbf) :** 540 | **Tightening Torque [1]:** 2 ft.lbf, 23 in.lbf, 2.6 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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