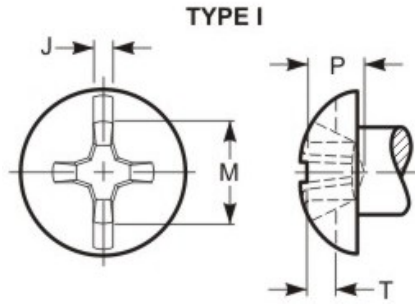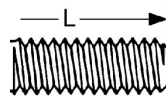# Round Head- Type I (Phillips) - Combination Sltd

TYPE I

This type of recess has a large center opening, tapered wings, and blunt bottom, with all edges relieved or rounded. A slot crosses the head aligned with one pair of wings.

GRADE MARK

THREAD DATA		
Size: #10	**Threads per in.:** 24	**Series Designation:** UNC
Thread Class or Type: 2A	**Major Diameter:** 0.1890 - 0.1818	**Pitch and Functional Dia.:** 0.1619 - 0.1586
Tensile Stress Area: 0.0175	**Standard:** ASME B1.1 - 2003 (R2008)	**Length:** 1/2
Length Tolerance: -0.02		

DIMENSIONAL DATA		
Type: Round Head- Type I (Phillips) - Combination Sltd	**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:** 2	**Penetration Depth:** 0.108 - 0.082
Wobble: 12º	**M – Ref. Recess Dim.:** 0.188	

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):** 1,050	**Yield PSI, 2% Offset, Machined Specimen:** 36,000
Tensile Strength, Min. (psi): 60,000	**Calculated Shear Load-BODY (ref.)(lbf):** 630	**Calculated Shear Load-THREADS (ref.)(lbf):** 525
Straightness Factor: N/A	**Calculated Pretension[2] (lbf) :** 473	**Tightening Torque [1]:** 2 ft.lbf, 20 in.lbf, 2.2 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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