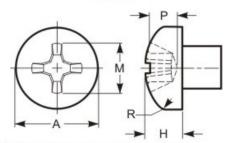
## Pan Head - Type I (Phillips)

## TYPE I



This type of recess has a large center opening, tapered wings, and blunt bottom, with all edges relieved or rounded.



## **GRADE MARK**

THREAD DATA		
Size: 1/4	Threads per in.: 20	Series Designation: UNC
Thread Class or Type: 2A	Major Diameter: 0.2489 - 0.2408	Pitch and Functional Dia.: 0.2164 - 0.2127
Tensile Stress Area: 0.0318	<b>Standard:</b> ASME B1.1 - 2003 (R2008)	Length: 1-1/4
Length Tolerance: -0.06		
DIMENSIONAL DATA		
Type: Pan Head - Type I (Phillips)	<b>Standard:</b> ASME B18.6.3 - 2013	Nominal Diameter: 0.25
<b>A - Head Diameter:</b> 0.492 - 0.473	H - Head Height: 0.175 - 0.162	Driver Size: 3
Penetration Depth: 0.144 - 0.118	Wobble: 10°	M – Ref. Recess Dim.: 0.274
PHYSICAL REQUIREMENTS		
Nominal: 0.25	Standard: ASME B18.6.3-2013, Machine Screw (Stainless Steel)	Typical Materials: 304 Stainless Steel
Hardness: HRB 90 ref.	Tensile Load, Min. (lbf): 1,908	Yield PSI, 2% Offset, Machined Specimen: 40,000
Tensile Strength, Min. (psi): 80,000	Calculated Shear Load-BODY (ref.)(lbf): 1,145	Calculated Shear Load-THREADS (ref.)(lbf): 954
Straightness Factor: N/A	Calculated Pretension <sup>2</sup> (lbf) : 954	Tightening Torque <sup>1</sup> : 4 ft.lbf, 43 in.lbf, 4.9 Nm
FINISH DATA		
Finish: As received steel (RoHS Compliant)	K factor (ref. DIN 946): 0.18	

<sup>&</sup>lt;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.



