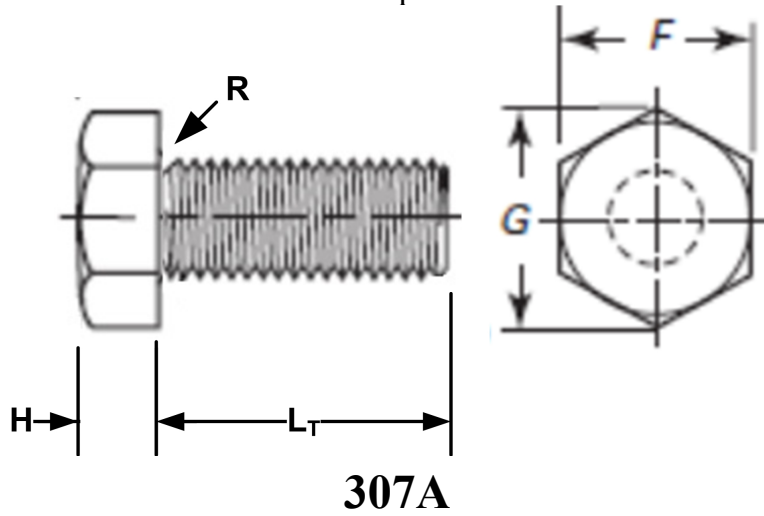


# Hex Tap Bolts



**307A**

GRADE MARK

THREAD DATA		
Size: 5/16	Threads per in.: 18	Series Designation: UNC
Thread Class or Type: 2A	Major Diameter: 0.3113 - 0.3026	Pitch and Functional Dia.: 0.2752 - 0.2712
Tensile Stress Area: 0.0524	Standard: ASME B1.1 - 2003 (R2008)	Length: 1/2
Length Tolerance: +0.02/-0.03		
DIMENSIONAL DATA		
Type: Hex Tap Bolts	Standard: IFI - 199	Nominal Diameter: 0.313
F - Width Across Flats: 0.500 - 0.484	G - Width Across Corners: 0.577 - 0.552	R - Fillet Radius: 0.030 - 0.010
H - Head Height: 0.235 - 0.195	Point Type: Non-pointed	
PHYSICAL REQUIREMENTS		
Nominal: 0.313	Standard: ASTM A307A-2014	Typical Materials: low carbon steel, 1006 through 1022
Hardness: HRB 69 - 100	Tensile Load, Min. (lbf): 3,144	Yield PSI, 2% Offset, Machined Specimen: 36,000
Elongation, min. %, Machined Specimen: 18	Tensile Strength, Min. (psi): 60,000	Calculated Shear Load-BODY (ref.)(lbf): 1,886
Calculated Shear Load-THREADS (ref.)(lbf): 1,572	Straightness Factor: N/A	Calculated Pretension <sup>2</sup> (lbf) : 1,415
Tightening Torque <sup>1</sup> : 8 ft.lbf, 97 in.lbf, 11.0 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

<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.

