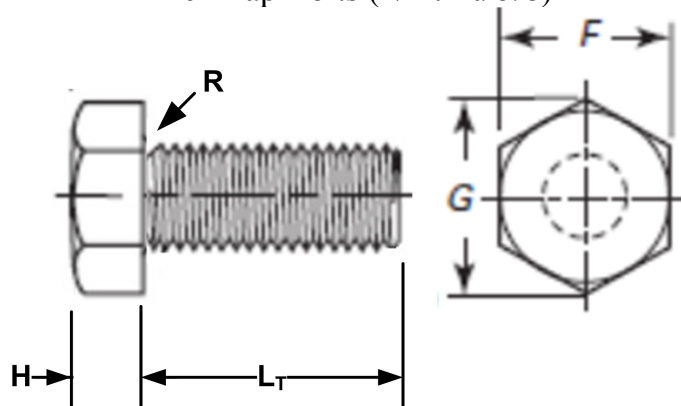


## Hex Tap Bolts (1/4 thru 5/8)



### 307A

GRADE MARK

THREAD DATA		
Size: 5/8	Threads per in.: 11	Series Designation: UNC
Thread Class or Type: 2A	Major Diameter: 0.6233 - 0.6112	Pitch and Functional Dia.: 0.5643 - 0.5588
Tensile Stress Area: 0.2260	Standard: ASME B1.1 - 2019	
DIMENSIONAL DATA		
Type: Hex Tap Bolts (1/4 thru 5/8)	Standard: IFI - 199-2014	Nominal Diameter: 0.625
F - Width Across Flats: 0.938 - 0.906	G - Width Across Corners: 1.083 - 1.033	R - Fillet Radius: 0.060 - 0.020
H - Head Height: 0.444 - 0.378	$L_T$ - Thread Length for Screw Length 6 in. or less: Fully Threaded	Point Type: Non-pointed
L - Length: 1-3/4	Length Tolerance: +0.06/-0.08	
PHYSICAL REQUIREMENTS		
Nominal: 0.625	Standard: ASTM A307A-2014e1	Typical Materials: low carbon steel, 1006 through 1022
Hardness: HRB 69 - 100	Tensile Load, Min. (lbf): 13,560	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): 8,136
Calculated Shear Load-THREADS (ref.)(lbf): 6,780	Straightness Factor: N/A	Calculated Pretension <sup>2</sup> (lbf) : 6,102
Tightening Torque <sup>1</sup> : 70 ft.lbf, 839 in.lbf, 94.8 Nm		
FINISH DATA		
Finish: Zinc & Clear, non-hexavalent/Cr(VI) free - .0001" / 3 $\mu$ m	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.

