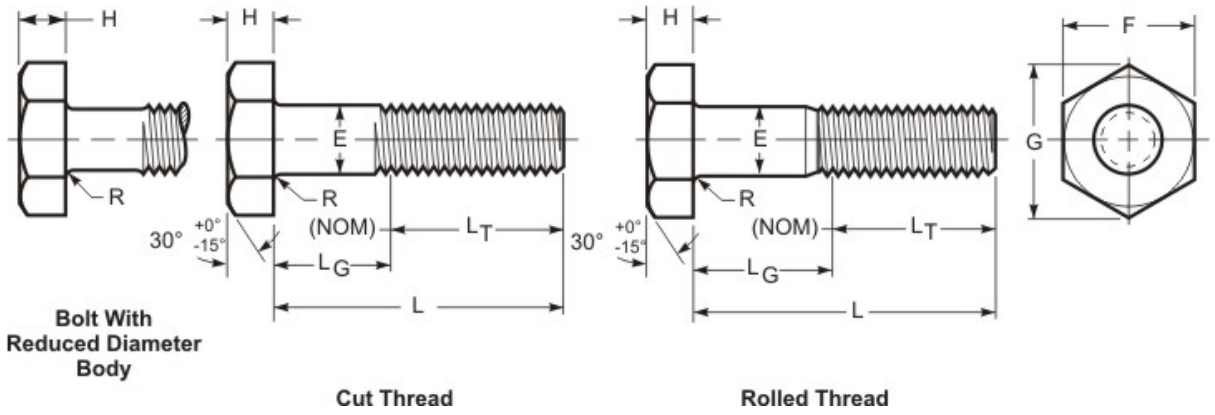
Hex Bolts



307A

GRADE MARK

THREAD DATA		
Size: 5/8	**Threads per in.:** 11	**Series Designation:** UNC
Thread Class or Type: 2A Plated (3A GO/ 2A NOGO)	**Major Diameter:** 0.6250 - 0.6112	**Pitch and Functional Dia.:** 0.5660 - 0.5588
Tensile Stress Area: 0.2260	**Standard:** ASME B1.1 - 2019	
DIMENSIONAL DATA		
Type: Hex Bolts	**Standard:** ASME B18.2.1-2012	**Nominal Diameter:** 0.625
E - Body Diameter : 0.642 - 0.605	**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:** 1.500
Point Type: Non-pointed	**LG max./LB min.:** 0.00/0.00 (Fully Threaded)	**L - Length:** 1-1/2
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[2] (lbf) :** 6,102
Tightening Torque [1]: 70 ft.lbf, 839 in.lbf, 94.8 Nm		
FINISH DATA		
Finish: Zinc & Clear, non-hexavalent/Cr(VI) free - .0001"/ 3Âµm	**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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