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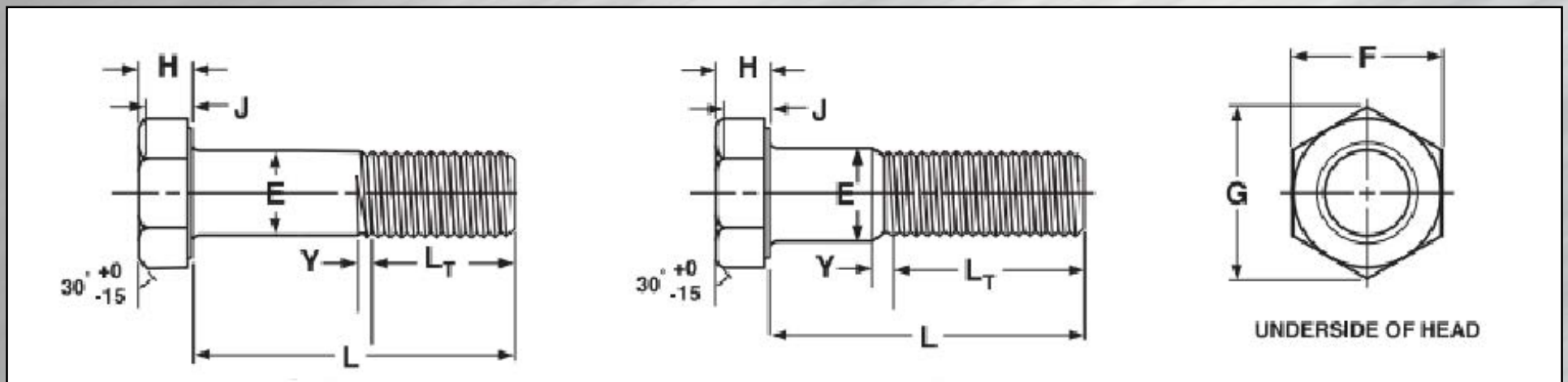
# HEAVY HEX BOLTS - ASTM A307 B

## ANSI / ASME B18.2.1

Nominal Size or Basic Product Dia.	E Body Diameter		F Width Across Flats			G Width Across Corners		H Head Height			R Radius of Fillet		L Thread Length for Bolt		
	Max	Min	Basic	Max	Min	Max	Min	Basic	Max	Min	Max	Min	6 in. & shorter	Over 6 in.	
													Basic	Basic	
1/2	0.5000	0.515	0.482	7/8	0.875	0.850	1.010	0.969	11/32	0.364	0.302	0.03	0.01	1.250	1.500
5/8	0.6250	0.642	0.605	1-1/16	1.062	1.031	1.227	1.175	27/64	0.444	0.378	0.06	0.02	1.500	1.750
3/4	0.7500	0.768	0.729	1-1/4	1.250	1.212	1.443	1.383	1/2	0.524	0.455	0.06	0.02	1.750	2.00
7/8	0.8750	0.895	0.852	1-7/16	1.438	1.394	1.660	1.589	37/64	0.604	0.531	0.06	0.02	2.000	2.250
1	1.000	1.022	0.976	1-5/8	1.625	1.575	1.876	1.796	43/64	0.700	0.591	0.09	0.03	2.250	2.500
1-1/8	1.1250	1.149	1.098	1-13/16	1.812	1.756	2.093	2.002	3/4	0.780	0.658	0.09	0.03	2.500	2.750
1-1/2	1.500	1.531	1.470	2-3/8	2.375	2.300	2.742	2.622	1	1.036	0.902	0.09	0.03	3.250	3.500
1-3/4	1.7500	1.785	1.716	2-3/4	2.750	2.662	3.175	3.035	1-5/32	1.196	1.054	0.12	0.04	3.750	4.000
2	2.000	2.039	1.964	3-1/8	3.125	3.025	3.608	3.499	1-11/32	1.388	1.175	0.012	0.04	4.250	4.50

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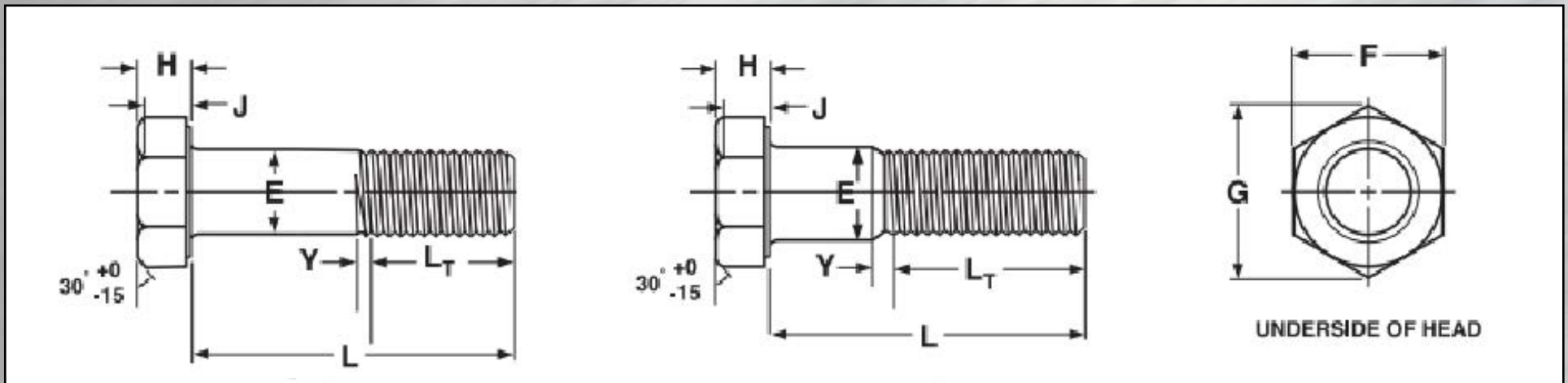
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	Nominal Screw Size	Nominal Screw Length									
		Up to 1 in., incl.		Over 1 in. to 2-1/2 in. incl.		Over 2-1/2 inc. to 4 in., incl.		Over 4 in. to 6 in., incl.		Longer than 6 inches	
Tolerance on Length	1/4 to 3/8	+0.02	-0.03	+0.02	-0.04	+0.04	-0.06	+0.06	-0.10	+0.10	-0.18
	7/16 & 1/2	+0.02	-0.03	+0.04	-0.06	+0.06	-0.08	+0.08	-0.10	+0.12	-0.18
	9/16 to 3/4	+0.02	-0.03	+0.06	-0.08	+0.08	-0.10	+0.10	-0.10	+0.14	-0.18
	7/8 & 1	-	-	+0.08	-0.10	+0.10	-0.14	+0.12	-0.16	+0.16	-0.20
	1-1/8 to 1-1/2	-	-	+0.12	-0.12	+0.16	-0.16	+0.18	-0.18	+0.22	-0.22
	Over 1-1/2	-	-	+0.18	-0.18	+0.20	-0.20	+0.22	-0.22	+0.24	-0.24

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<b>Description</b>	An externally threaded fastener with a six-sided head that is wider than that of a standar hex head.
<b>Applications / Advantages</b>	Offers greater wrenching area than standard hex machine bolts for use in heavy duty industrial work.
<b>Material</b>	Bolts shall be made from a carbon steel with conforms to the following chemical compositions: <b>Grade B:</b> Phosphorous 0.04% maximum, Sulfur 0.05%
<b>Hardness</b>	Bolts less than three time diameter in length: <b>Grade B</b> - Rockwell B69 - 95
<b>Tensile Strength</b>	<b>Grade B:</b> 60,000 - 100,000 psi.
<b>Elongation in 4D</b>	<b>Grade B:</b> 18% minimum