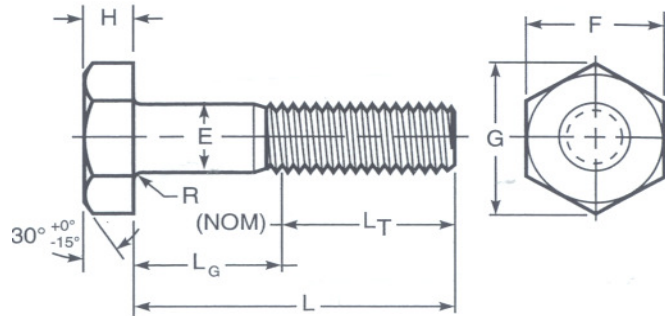


# Fastenal Product Standard: FNL.HB.GRA.P

## Hex Bolts, Grade A, Plain:

The information below lists the required dimensional, chemical and physical characteristics of the fasteners in this purchase order. If the order received does not meet these requirements, it may result in a supplier corrective action request, which could jeopardize your status as an approved vendor. Unless otherwise specified, all referenced consensus standards must be adhered to in their entirety.



Nominal Size (inch)	E		F			G		H			Thread Length For Bolt Lengths	
	Full Size Body Dia.		Width Across Flats			Width Across Corners		Head Height			6 in & Shorter	Over 6 in
	Max.	Min.	Basic	Max.	Min.	Max.	Min.	Basic	Max.	Min.	Nom.	Nom.
1/4	0.260	0.237	7/16	0.438	0.425	0.505	0.484	11/64	0.188	0.150	0.750	1.000
5/16	0.324	0.298	1/2	0.500	0.484	0.577	0.552	7/32	0.235	0.195	0.875	1.125
3/8	0.388	0.36	9/16	0.563	0.544	0.65	0.62	1/4	0.268	0.226	1.000	1.250
7/16	0.452	0.421	5/8	0.625	0.603	0.722	0.687	19/64	0.316	0.272	1.125	1.375
1/2	0.515	0.482	3/4	0.750	0.725	0.866	0.826	11/32	0.364	0.302	1.250	1.500
5/8	0.642	0.605	15/16	0.938	0.906	1.083	1.033	27/64	0.444	0.378	1.500	1.750
3/4	0.768	0.729	1 1/8	1.125	1.088	1.299	1.24	1/2	0.524	0.455	1.750	2.000
7/8	0.895	0.852	1 5/16	1.313	1.269	1.516	1.447	37/64	0.604	0.531	2.000	2.250
1	1.022	0.976	1 1/2	1.500	1.450	1.732	1.653	43/64	0.700	0.591	2.250	2.500
1 1/8	1.149	1.098	1 11/16	1.688	1.631	1.949	1.859	3/4	0.780	0.658	2.500	2.750
1 1/4	1.277	1.223	1 7/8	1.875	1.812	2.165	2.066	27/32	0.876	0.749	2.750	3.000
1 3/8	1.404	1.345	2 1/16	2.063	1.994	2.382	2.273	29/32	0.940	0.810	3.000	3.250
1 1/2	1.531	1.47	2 1/4	2.250	2.175	2.598	2.48	1	1.036	0.902	3.250	3.500
1 3/4	1.785	1.716	2 5/8	2.625	2.538	3.031	2.893	1 5/32	1.196	1.054	3.750	4.000
2	2.039	1.964	3	3.000	2.900	3.464	3.306	1 11/32	1.388	1.175	4.250	4.500
2 1/4	2.305	2.214	3 3/8	3.375	3.262	3.897	3.719	1 1/2	1.548	1.327	4.750	5.000
2 1/2	2.559	2.461	3 3/4	3.750	3.625	4.33	4.133	1 21/32	1.708	1.479	5.250	5.500
2 3/4	2.827	2.711	4 1/8	4.125	3.988	4.763	4.546	1 13/16	1.869	1.632	5.750	6.000
3	3.081	2.961	4 1/2	4.500	4.350	5.196	4.959	2	2.060	1.815	6.250	6.500

### Specification Requirements:

- Dimensions: ASME B18.2.1.
- Material & Mechanical Properties: Grade A per ASTM A307
- Thread requirements: ANSI B1.1 UNC & UNF Class 2A
- Head marking: Manufacturer ID and "307A"
- Coating: Light protective oil