

### Stainless Steel Hex Flange Head Bolt

**Standard:** DIN EN 1662, DIN EN 1665, GB/T 5787, GB/T 5789, GB/T 16674, GB/T 5790-86, GB/T 16674.1; JIS B 1189; IFI-111.

**Material:** SUS301, 304, 316, 18/8, 0Cr18Ni9, X5CrNi1810, X10Cr13, 410S21, if you need to use other stainless steel, please let us know.

**Heat Treatment:** None for normal, If you have special hardness requirement, please let us know.

**Surface Hardness:** 220HV is Normal, 750HV max after Quench with SUS410

**Finish:** None.

**Head:** Hex Flange

**Thread Direction:** Normal is right hand/dextrorotation, if you want left hand, please let us know.

**Tensile strength:** 700N/mm<sup>2</sup>

**Stainless Steel Hex Flange Head Bolt** is a flange hex bolt is a bolt that has a washer-like flange cast into the hexagonal head of the bolt. Designed to be used without the aid of a flat or locking-style washer, the flange hex bolt is manufactured to properly displace the torque and clamping force of the bolt over a wider area than that of a typical hex head bolt. Used a great deal in the automobile industry, the flange hex bolt allows assembly line workers to install the fasteners much faster than a comparable bolt and washer.

One advantage the flange hex bolt has over a comparably-sized non-flanged bolt is its ability to displace the clamping force of the fastener over a greater range. On soft, aluminum automobile engine components, the use of a standard hex head bolt could potentially crack and damage the area surrounding the bolt head. With a flange hex bolt, the clamping force is displaced onto a greater area underneath the bolt head, thus saving the aluminum components. Valve covers, intake manifolds and water pumps are some of the aluminum components that often employ a flanged bolt head as a fastener. Other components of the automobile that benefit from the use of the flange hex bolt are the steering box, steering column and transmission.

"18-8" - 300 series stainless steel having approximately (not exactly) 18% chromium and 8% nickel. The term "18-8" is used interchangeably to characterize fasteners made of 302, 302HQ, 303, 304, 384, XM7, and other variables of these grades with close chemical compositions. There is little overall difference in corrosion resistance among the 18-8 types, but slight differences in chemical composition do make certain grades more resistant than others against particular chemicals or atmospheres.

Austenitic - Refers to 300 series stainless, the most popular of the stainless alloys accounting for 85%-90% of stainless fasteners sold Named for sir Robert Williams Austen, an English metallurgist, austenitic stainless is a crystal structure formed by heating steel, chromium, and nickel to a high temperature where it forms the characteristics of 300 series stainless steel.

The typical **Stainless Steel Hex Flange Head Bolt** as below

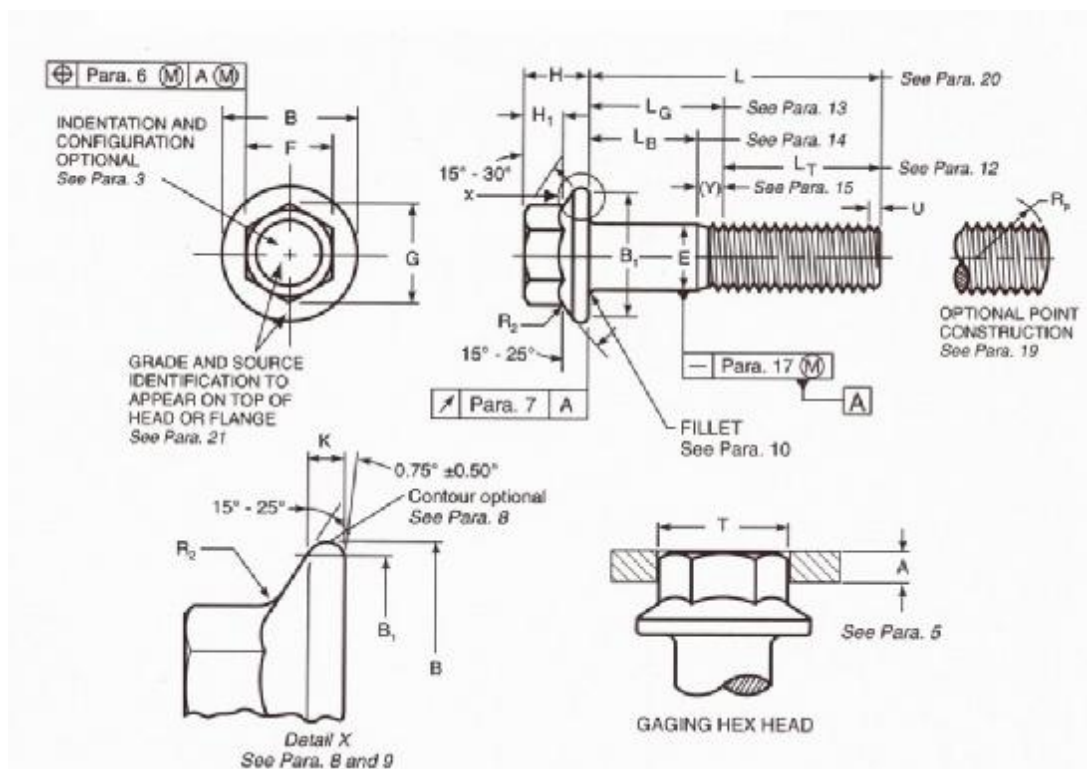




Competitive Advantages:

- 1). Top Quality control
- 2). Competitive Price
- 3). Several of Design
- 4). OEM Accepted
- 5). Customer's Design and Logo are Welcome

And below is the common drawing for this kind:



Dimension of Screw		E		F			G	
		杆部直径		对边宽度			对角宽度	
		Max	Min	基本	Max	Min	Max	Min
1/4	0.2500	0.2500	0.2450	3/8	0.3750	0.367	0.433	0.409
5/16	0.3125	0.3125	0.3065	1/2	0.5000	0.489	0.577	0.548
3/8	0.3750	0.3750	0.3690	9/16	0.5625	0.551	0.650	0.618
7/16	0.4375	0.4375	0.4305	5/8	0.6250	0.612	0.722	0.685
1/2	0.5000	0.5000	0.4930	3/4	0.7500	0.736	0.866	0.825
9/16	0.5625	0.5625	0.5545	13/16	0.8125	0.798	0.938	0.895
5/8	0.6250	0.6250	0.6170	15/16	0.9375	0.922	1.083	1.034
3/4	0.7500	0.7500	0.7410	1-1/8	1.1250	1.100	1.299	1.234

Dimension of Screw		B	K	H	H <sub>1</sub>	R <sub>2</sub>	A	
		法兰面直径	法兰面厚度	高度	六角高度	法兰面顶部半径	量规厚度	
		Max	Min	Max	Min	Max	Max	Min
1/4	0.2500	0.56	0.04	0.28	0.17	0.015	0.0514	0.0511
5/16	0.3125	0.68	0.05	0.32	0.21	0.019	0.0643	0.0640
3/8	0.3750	0.81	0.06	0.39	0.25	0.022	0.0771	0.0768
7/16	0.4375	0.93	0.07	0.46	0.30	0.026	0.0900	0.0897
1/2	0.5000	1.07	0.08	0.51	0.34	0.030	0.1029	0.1026
9/16	0.5625	1.19	0.09	0.57	0.38	0.034	0.1157	0.1154
5/8	0.6250	1.33	0.10	0.62	0.42	0.038	0.1286	0.1283
3/4	0.7500	1.59	0.11	0.73	0.51	0.045	0.1543	0.1540

Dimension of Screw		T		C		R	E <sub>a</sub>	
		量规内孔直径		支承面直径	支承面直径 FIM		园角半径	头下倒园直径
		Max	Min	Min	Max	Min	Max	Min
1/4	0.2500	0.4093	0.4090	0.48	0.010	0.015	0.300	0.280
5/16	0.3125	0.5483	0.5480	0.60	0.011	0.015	0.362	0.342
3/8	0.3750	0.6183	0.6180	0.73	0.012	0.015	0.425	0.405
7/16	0.4375	0.6853	0.6850	0.85	0.013	0.015	0.488	0.468
1/2	0.5000	0.8253	0.8250	0.98	0.014	0.015	0.550	0.530
9/16	0.5625	0.8953	0.8950	1.10	0.015	0.020	0.652	0.602
5/8	0.6250	1.0343	1.0340	1.23	0.017	0.020	0.715	0.665
3/4	0.7500	1.2343	1.2340	1.47	0.020	0.020	0.840	0.790

Dimension of Screw		L <sub>a</sub>		L <sub>T</sub>		Y	
		园角长度		螺纹长度		螺纹收尾	
				适用螺钉长度 L≤6 in.	适用螺钉长度 L>6 in.	适用螺钉长度 L≤6 in.	适用螺钉长度 L>6 in.
		Max	Min	基本		Max	Max
1/4	0.2500	0.087	0.043	0.750	1.000	0.400	0.650
5/16	0.3125	0.087	0.043	0.875	1.125	0.417	0.667
3/8	0.3750	0.087	0.043	1.000	1.250	0.438	0.688
7/16	0.4375	0.087	0.043	1.125	1.375	0.464	0.714
1/2	0.5000	0.087	0.043	1.250	1.500	0.481	0.731
9/16	0.5625	0.157	0.078	1.375	1.625	0.750	0.750
5/8	0.6250	0.157	0.078	1.500	1.750	0.773	0.773
3/4	0.7500	0.157	0.078	1.750	2.000	0.800	0.800