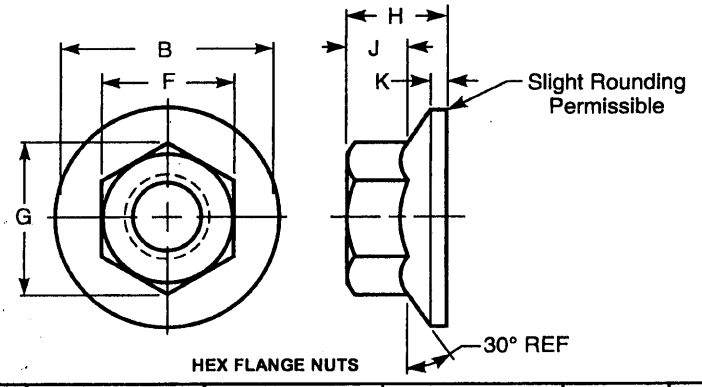
HEX FLANGE NUTS AND LARGE HEX FLANGE NUTS



HEX FLANGE NUTS

Nominal Size or Basic Major Dia of Thread		F		G		B		H		J	K	Angularity of Bearing Surface
		Width Across Flats		Width Across Corners		Flange Diameter		Nut Thickness		Wrenching Length	Flange Thickness	
		Max	Min	Max	Min	Max	Min	Max	Min	Min	Min	Max
No. 6	0.1380	0.312	0.302	0.361	0.342	0.422	0.406	0.171	0.156	0.10	0.02	0.014
8	0.1640	0.344	0.334	0.397	0.381	0.469	0.452	0.203	0.187	0.13	0.02	0.016
10	0.1900	0.375	0.365	0.433	0.416	0.500	0.480	0.219	0.203	0.13	0.03	0.017
12	0.2160	0.438	0.428	0.505	0.488	0.594	0.574	0.236	0.222	0.14	0.04	0.020
1/4	0.2500	0.438	0.428	0.505	0.488	0.594	0.574	0.236	0.222	0.14	0.04	0.020
5/16	0.3125	0.500	0.489	0.577	0.557	0.680	0.660	0.283	0.268	0.17	0.04	0.023
3/8	0.3750	0.562	0.551	0.650	0.628	0.750	0.728	0.347	0.330	0.23	0.04	0.025
7/16	0.4375	0.688	0.675	0.794	0.768	0.937	0.910	0.395	0.375	0.26	0.04	0.032
1/2	0.5000	0.750	0.736	0.866	0.840	1.031	1.000	0.458	0.437	0.31	0.05	0.035
9/16	0.5625	0.875	0.861	1.010	0.982	1.188	1.155	0.506	0.483	0.35	0.05	0.040
5/8	0.6250	0.938	0.922	1.083	1.051	1.281	1.248	0.569	0.545	0.40	0.05	0.044
3/4	0.7500	1.125	1.088	1.299	1.240	1.500	1.460	0.675	0.627	0.46	0.06	0.051

LARGE HEX FLANGE NUTS

Nominal Size or Basic Major Dia of Thread		F		G		B		H		J	K	Angularity of Bearing Surface
		Width Across Flats		Width Across Corners		Flange Diameter		Nut Thickness		Wrenching Length	Flange Thickness	
		Max	Min	Max	Min	Max	Min	Max	Min	Min	Min	Max
1/4	0.2500	0.438	0.428	0.505	0.488	0.728	0.700	0.312	0.281	0.15	0.04	0.024
5/16	0.3125	0.500	0.489	0.577	0.557	0.820	0.790	0.375	0.343	0.20	0.04	0.028
3/8	0.3750	0.562	0.551	0.650	0.628	0.915	0.885	0.406	0.390	0.24	0.04	0.031
7/16	0.4375	0.688	0.675	0.794	0.768	1.131	1.100	0.468	0.437	0.26	0.04	0.038
1/2	0.5000	0.750	0.736	0.866	0.840	1.205	1.175	0.515	0.485	0.29	0.06	0.041
9/16	0.5625	0.875	0.861	1.010	0.982	1.300	1.260	0.578	0.546	0.37	0.06	0.044
5/8	0.6250	0.938	0.922	1.083	1.051	1.360	1.280	0.640	0.600	0.42	0.06	0.045

NOTES:

1. **Tops of Nuts.** Tops of nuts shall be flat and chamfered, the length of chamfer at hex corners shall be from 5 to 15 percent of the basic thread size. The surface may be slightly convex or rounded.
2. **Bearing Surface.** Bearing surface shall be at right angle to axis of the threaded hole within a tolerance of 2 degrees; therefore, the maximum total angularity of bearing surface would equal the tangent of specified angle times the diameter of the flange. See table above for actual values.
3. **Concentricity of Tapped Hole.** Axis of tapped hole shall be concentric with axis of nut body within a tolerance equal to 3 percent (6 percent FIM) of the maximum width across flats.
4. **Countersink.** Tapped hole shall be countersunk on the bearing face and may be countersunk on the top. The maximum countersunk diameter shall be the thread basic (nominal) major diameter plus 0.030 in. for 3/8 in. nominal size nuts and smaller, and 1.08 times the basic major diameter for nuts larger than 3/8 in. No part of the threaded portion shall project beyond the bearing surface.
5. **Threads.** Threads shall be Unified coarse or fine thread series (UNC or UNF series), Class 2B, in accordance with ASME B1.1, page A–46.
6. **Material.** Unless otherwise specified, chemical and mechanical properties of steel nuts shall conform with ASTM A563, Grade A, page B–167, or SAE J995, Grade 2. Nuts of other materials such as corrosion resistant (stainless) steel, brass, bronze and aluminum alloys shall have properties as agreed between the manufacturer and purchaser. The properties for nuts of several grades of corrosion resistant steel alloys are covered in ASTM F594, page B–177, and of several nonferrous materials in ASTM F467, page B–184.
7. **Nominal Size.** Where specifying nominal size in decimals, zeros preceding the decimal and in the fourth decimal place shall be omitted.
8. For wrench openings, refer to Appendix III, ASME/ANSI B18.2.2, page D–22.