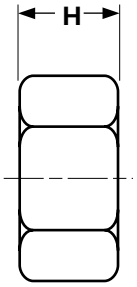
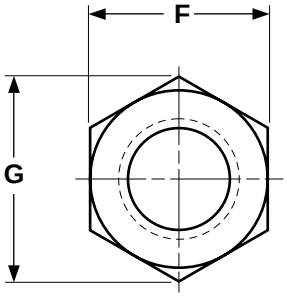
FINISHED HEX NUTS



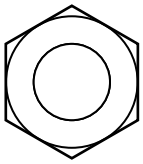


FINISHED HEX NUTS

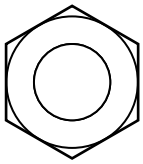
ANSI/ASME B18.2.2

Nominal or Basic Major Diameter of Thread		F			G		H		
		Width Across Flats			Width Across Corners		Thickness of Hex Nuts		
		Basic	Max	Min	Max	Min	Basic	Max	Min
1/4	0.2500	7/16	0.438	0.428	0.505	0.488	7/32	0.226	0.212
5/16	0.3125	1/2	0.500	0.489	0.577	0.557	17/64	0.273	0.258
3/8	0.3750	9/16	0.562	0.551	0.650	0.628	21/64	0.337	0.320
7/16	0.4375	11/16	0.688	0.675	0.794	0.768	3/8	0.385	0.365
1/2	0.5000	3/4	0.750	0.736	0.866	0.840	7/16	0.448	0.427
9/16	0.5625	7/8	0.875	0.861	1.010	0.982	31/64	0.496	0.473
5/8	0.6250	15/16	0.938	0.922	1.083	1.051	35/64	0.559	0.535
3/4	0.7500	1-1/8	1.125	1.088	1.299	1.240	41/64	0.665	0.617
7/8	0.8750	1-5/16	1.312	1.269	1.516	1.447	3/4	0.776	0.724
1	1.0000	1-1/2	1.500	1.450	1.732	1.653	55/64	0.887	0.831
1-1/8	1.1250	1-11/16	1.688	1.631	1.949	1.859	31/32	0.999	0.939
1-1/4	1.2500	1-7/8	1.875	1.812	2.165	2.066	1-1/16	1.094	1.030
1-3/8	1.3750	2-1/16	2.062	1.994	2.382	2.273	1-11/64	1.206	1.138
1-1/2	1.5000	2-1/4	2.250	2.175	2.598	2.480	1-9/32	1.317	1.245
1-5/8	1.6250	2-7/16	2.438	2.356	2.815	2.686	1-25/64	1.429	1.353
1-3/4	1.7500	2-5/8	2.625	2.538	3.031	2.893	1-1/2	1.540	1.460
2	2.0000	3	3.000	2.900	3.464	3.306	1-23/32	1.763	1.675
2-1/4	2.2500	3-3/8	3.375	3.263	3.897	3.719	1-15/16	1.986	1.890
2-1/2	2.5000	3-3/4	3.750	3.625	4.330	4.133	2-5/32	2.209	2.105
2-3/4	2.7500	4-1/8	4.125	3.988	4.763	4.546	2-3/8	2.431	2.319
3	3.0000	4-1/2	4.500	4.350	5.196	4.959	2-19/32	2.654	2.534

FINISHED HEX NUTS



GRADE-2



Description	A six-sided internally threaded fastener whose thickness is .875 D where D is the nominal nut size and 1.5D is their width across the flats, made from low carbon steel.
Applications/ Advantages	The most versatile and widely used nut design. Grade-2 nuts are for use with any low carbon bolt or screw that is not heat-treated, with a specified minimum tensile strength of 74,000 psi or less.
Material	Grade-2 nuts shall be made from a low carbon steel which conforms to the following chemical composition requirements-- *Carbon:* 0.47% maximum; *Phosphorus:* 0.12% maximum; *Sulfur:* 0.23% maximum.
Hardness	Rockwell B68 - C32
Proof Load	Coarse thread: 90,000 psi.; Fine thread: 80,000 psi.
Plating	See Appendix-A for information on the plating of steel finished hex nuts.

STEEL HOT-DIP GALVANIZED

Description	A six-sided internally threaded fastener whose thickness is .875 D where D is the nominal nut size and 1.5D is their width across the flats, made from low carbon steel with a galvanic zinc coating.
Applications/ Advantages	Designed for use with low carbon bolts and screws with a specified minimum tensile strength of 74,000 psi or less, which are subjected to moisture, salt and other such corrosive conditions.
Material	Nuts shall be made from a low carbon steel which conforms to the following chemical composition requirements-- *Carbon:* 0.47% maximum; *Phosphorus:* 0.12% maximum; *Sulfur:* 0.23% maximum.
Hardness	Rockwell B68 - C32
Proof Load	Coarse thread: 68,000 psi.; Fine thread: 60,000 psi.
Plating	See Appendix-A for information on the plating of steel finished hex nuts.

STAINLESS STEEL, 18-8 & 316

Description	Six-sided internally threaded fasteners whose thickness is .875 D where D is the nominal nut size and 1.5D is their width across the flats, made from austenitic alloys as described below.
Applications/ Advantages	Designed for use with stainless steel bolts and screws with a specified minimum tensile strength equal to or less than the specified proof stress of the mating nut. Both types of stainless are corrosion resistant with 316 stainless having greater such resistance as well as superior strength at raised temperatures.
Material	**18-8:** Nuts shall be made from one of the following austenitic alloys: 303, 303Se, 304, XM7, all of which are characterized as having a chromium content of 18% and nickel content of 8-10%. **316:** Nuts shall be made from 316 stainless steel, an austenitic alloy which differs from 18-8 by its molybdenum content (2-3%) and a higher nickel content (10-14%).
Heat Treatment	The austenitic alloys develop their strength through work hardening during the fastener manufacturing process, as seen from the hardness properties below. The only heat treatment normally available on austenitic stainless alloys is annealing, which is done at approximately 1900^0F to a dead soft condition and is not normally thermally reversible.
Hardness	1/4 through 5/8": Rockwell B95 - C32; 3/4 through 1": Rockwell B80 - C32
Proof Load	1/4 through 5/8": 100,000 psi.; Fine thread: 85,000 psi.