



| HEX JAM NUTS | | | | | | | | | | ANSI/ASME B18.2.2-1987 |
|---|--------|--------------------|-------|-------|----------------------|-------|---------------------------|-------|-------|------------------------|
| Nominal or Basic Major Diameter of Thread | | F | | | G | | H1 | | | |
| | | Width Across Flats | | | Width Across Corners | | Thickness of Hex Jam Nuts | | | |
| | | Basic | Max | Min | Max | Min | Basic | Max | Min | |
| 1/4 | 0.2500 | 7/16 | 0.438 | 0.428 | 0.505 | 0.488 | 5/32 | 0.163 | 0.150 | |
| 5/16 | 0.3125 | 1/2 | 0.500 | 0.489 | 0.577 | 0.557 | 3/16 | 0.195 | 0.180 | |
| 3/8 | 0.3750 | 9/16 | 0.562 | 0.551 | 0.650 | 0.628 | 7/32 | 0.227 | 0.210 | |
| 7/16 | 0.4375 | 11/16 | 0.688 | 0.675 | 0.794 | 0.768 | 1/4 | 0.260 | 0.240 | |
| 1/2 | 0.5000 | 3/4 | 0.750 | 0.736 | 0.866 | 0.840 | 5/16 | 0.323 | 0.302 | |
| 9/16 | 0.5625 | 7/8 | 0.875 | 0.861 | 1.010 | 0.982 | 5/16 | 0.324 | 0.301 | |
| 5/8 | 0.6250 | 15/16 | 0.938 | 0.922 | 1.083 | 1.051 | 3/8 | 0.387 | 0.363 | |
| 3/4 | 0.7500 | 1-1/8 | 1.125 | 1.088 | 1.299 | 1.240 | 27/64 | 0.446 | 0.398 | |
| 7/8 | 0.8750 | 1-5/16 | 1.312 | 1.269 | 1.516 | 1.447 | 31/64 | 0.510 | 0.458 | |
| 1 | 1.0000 | 1-1/2 | 1.500 | 1.450 | 1.732 | 1.653 | 35/64 | 0.575 | 0.519 | |
| 1-1/8 | 1.1250 | 1-11/16 | 1.688 | 1.631 | 1.949 | 1.859 | 39/64 | 0.639 | 0.579 | |
| 1-1/4 | 1.2500 | 1-7/8 | 1.875 | 1.812 | 2.165 | 2.066 | 23/32 | 0.751 | 0.687 | |
| 1-3/8 | 1.3750 | 2-1/16 | 2.062 | 1.994 | 2.382 | 2.273 | 25/32 | 0.815 | 0.747 | |
| 1-1/2 | 1.5000 | 2-1/4 | 2.250 | 2.175 | 2.598 | 2.480 | 27/32 | 0.880 | 0.808 | |
| 1-3/4 | 1.7500 | 2-5/8 | 2.625 | 2.538 | 3.031 | 2.893 | 31/32 | 1.009 | 0.929 | |
| 2 | 2.0000 | 3 | 3.000 | 2.900 | 3.464 | 3.306 | 1-3/32 | 1.138 | 1.050 | |
| 2-1/4 | 2.2500 | 3-1/2 | 3.500 | 3.388 | 4.041 | 3.862 | 1-13/64 | 1.251 | 1.155 | |
| 2-1/2 | 2.5000 | 3-7/8 | 3.875 | 3.750 | 4.474 | 4.275 | 1-29/64 | 1.505 | 1.401 | |

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|--------------------------------|--|---|--|---|
| Description | A six-sided internally threaded fastener which is only 2/3 the thickness of a full form nut. | | | |
| Applications/Advantages | Jam nuts are tightened against the work surface and a finished or heavy hex nut is tightened against the jam nut to keep it from loosening. | | | |
| Material | Low Carbon 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. | Grade-5 Nuts shall be made from a medium carbon steel which conforms to the following chemical composition requirements-- Carbon: 0.55% maximum; Manganese: 0.30% minimum; Phosphorus: 0.05% maximum; Sulfur: 0.15% maximum. | Grade-8 Nuts shall be made from a high alloy steel which conforms to the following chemical composition requirements-- Carbon: 0.55% maximum; Manganese: 0.30% minimum; Phosphorus: 0.04% maximum; Sulfur: 0.05% maximum. | Stainless Nuts shall be made from one of the following austenitic alloys: 303, 303Se, 304, XM7, all of which have a chromium content of 18% and a nickel content of 8%. |
| Core Hardness | 1/4 thru 1-1/2": Rockwell C32 maximum | 1/4 thru 1-1/2": Rockwell C32 maximum | 1/4 thru 5/8": Rockwell C24-32 Over 5/8 thru 1": Rockwell C26-34 Over 1 thru 1-1/2": Rockwell C26-36 | Rockwell B95 - C32 |
| Proof Load | Coarse thread: 54,000 psi.; Fine thread: 48,000 psi. | Coarse, 1/4 thru 1": 72,000 psi. Coarse, over 1 thru 1-1/2": 63,000 psi. Fine, 1/4 thru 1": 65,000 psi. Fine, over 1 thru 1-1/2": 57,000 psi. | 90,000 psi. | 1/4 through 1/2"-- 60,000 psi. |
| Plating | See Appendix-A for information about the plating of steel jam nuts. | | | |