# HEX NUTS METRIC 



| Nominal Size | Thread Pitch | F |  | G | H |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Width Across Flats |  | Width Across Corners Min | Thickness |  |
|  |  | Max | Min |  | Max | Min |
| M1.6 | 0.35 | 3.2 | 3.02 | 3.41 | 1.3 | 1.05 |
| M2 | 0.4 | 4 | 3.82 | 4.32 | 1.6 | 1.35 |
| M2.5 | 0.45 | 5 | 4.82 | 5.45 | 2 | 1.75 |
| M3 | 0.5 | 5.5 | 5.32 | 6.01 | 2.4 | 2.15 |
| M4 | 0.7 | 7 | 6.78 | 7.66 | 3.2 | 2.9 |
| M5 | 0.8 | 8 | 7.78 | 8.79 | 4.7 | 4.4 |
| M6 | 1 | 10 | 9.78 | 11.05 | 5.2 | 4.9 |
| M8 | 1.25 | 13 | 12.73 | 14.38 | 6.8 | 6.44 |
| M10 | 1.5 | 16 | 15.73 | 17.77 | 8.4 | 8.04 |
| M12 | 1.75 | 18 | 17.73 | 20.03 | 10.8 | 10.37 |
| M14 | 2 | 21 | 20.67 | 23.35 | 12.8 | 12.1 |
| M16 | 2 | 24 | 23.67 | 26.75 | 14.8 | 14.1 |
| M20 | 2.5 | 30 | 29.16 | 32.95 | 18 | 16.9 |
| M24 | 3 | 36 | 35 | 39.55 | 21.5 | 20.2 |
| M30 | 3.5 | 46 | 45 | 50.85 | 25.6 | 24.3 |
| M36 | 4 | 55 | 53.8 | 60.79 | 31 | 29.4 |
| M42 | 4.5 | 65 | 63.1 | 71.3 | 34 | 32.4 |
| M48 | 5 | 75 | 73.1 | 82.6 | 38 | 36.4 |
| M56 | 5.5 | 85 | 82.8 | 93.56 | 45 | 43.4 |
| M64 | 6 | 95 | 92.8 | 104.86 | 51 | 49.1 |


| Description | A six-sided internally threaded, non-heat treated fastener with a metric thread pitch. Nuts M16 and smaller are chamfered on the top and the bearing surface. Nuts M18 and larger may be either double chamfered, or have a washer face on one side and a chamfered surface on the opposite side. |
| :---: | :---: |
| Applications/ Advantages | Class 6 nuts are intended for use with screws and bolts of property class 6.8 or lower. They are the most popular nut for use with metric machine screws. |
| Material | Class 6 nuts shall be made of a steel which conforms to the following chemical composition-- <br> Carbon:0.50\% maximum; Phosphorus: $0.060 \%$ maximum; Sulfur: $0.150 \%$ maximum. Class 6 nuts may also be made from free cutting steel which conforms to the following chemical composition-- Carbon: $0.50 \%$ maximum; Sulfur $0.34 \%$ minimum; Phosphorus: $0.11 \%$ minimum; Lead: $0.35 \%$ minimum. |
| Hardness | Diam. thru M16: Vickers HV 150-302 (Rockwell B78.7-C30); Diam. M18 thru M39: Vickers HV 170-302 (Rockwell B85- |
| Proof Load | Diameters M1.6 through M4: 600 $\mathrm{N} / \mathrm{mm}^{2}$ Diameters M5 through M7: $670 \mathrm{~N} / \mathrm{mm}^{2}$ Diameters M8 through M10: $680 \mathrm{~N} / \mathrm{mm}^{2}$ Diameters M12 through M16: $700 \mathrm{~N} / \mathrm{mm}^{2}$ Diameters M18 through M36: $720 \mathrm{~N} / \mathrm{mm}^{2}$ |
| Plating | See Appendix-A for plating information |

