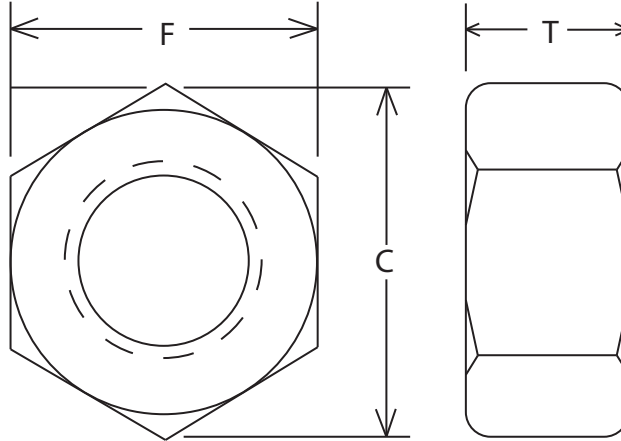


PRODUCT DATA SHEET

FINISHED HEX NUTS

1.0 DIMENSIONS: AS PER ASME B18.2.2.



| NOMINAL SIZE OR BASIC MAJOR DIAMETER OF THREAD | F | | C | | T | |
|--|--------------------------|--------|----------------------------|-------|-----------|-------|
| | WIDTH ACROSS FLATS | | WIDTH ACROSS CORNERS | | THICKNESS | |
| | MAX | MIN | MAX | MIN | MAX | MIN |
| 1/4 | 0.2500 | 0.2450 | 0.438 | 0.428 | 0.505 | 0.488 |
| 5/16 | 0.3125 | 0.3065 | 0.500 | 0.489 | 0.577 | 0.557 |
| 3/8 | 0.3750 | 0.3690 | 0.562 | 0.551 | 0.650 | 0.628 |
| 7/16 | 0.4375 | 0.4305 | 0.625 | 0.612 | 0.722 | 0.698 |
| 1/2 | 0.5000 | 0.4930 | 0.750 | 0.736 | 0.866 | 0.840 |
| 9/16 | 0.5625 | 0.5545 | 0.812 | 0.798 | 0.938 | 0.910 |
| 5/8 | 0.6250 | 0.6170 | 0.938 | 0.922 | 1.083 | 1.051 |
| 3/4 | 0.7500 | 0.7410 | 1.125 | 1.100 | 1.299 | 1.254 |
| 7/8 | 0.8750 | 0.8660 | 1.312 | 1.285 | 1.516 | 1.465 |
| 1 | 1.0000 | 0.9900 | 1.500 | 1.469 | 1.732 | 1.675 |
| 1-1/8 | 1.1250 | 1.1140 | 1.688 | 1.631 | 1.949 | 1.859 |
| 1-1/4 | 1.2500 | 1.2390 | 1.875 | 1.812 | 2.165 | 2.066 |
| 1-3/8 | 1.3750 | 1.3630 | 2.062 | 1.994 | 2.382 | 2.273 |
| 1-1/2 | 1.5000 | 1.4880 | 2.250 | 2.175 | 2.598 | 2.480 |
| 1-3/4 | 1.7500 | 1.7380 | 2.625 | 2.538 | 3.031 | 2.893 |
| 2 | 2.0000 | 1.9880 | 3.000 | 2.900 | 3.464 | 3.306 |
| 2-1/4 | 2.2500 | 2.2380 | 3.375 | 3.262 | 3.897 | 3.719 |
| 2-1/2 | 2.5000 | 2.4880 | 3.750 | 3.625 | 4.330 | 4.133 |

Notes: Thread Class of Fit: 2B

PRODUCT DATA SHEET

FINISHED HEX NUTS

2.0 MECHANICAL PROPERTIES:

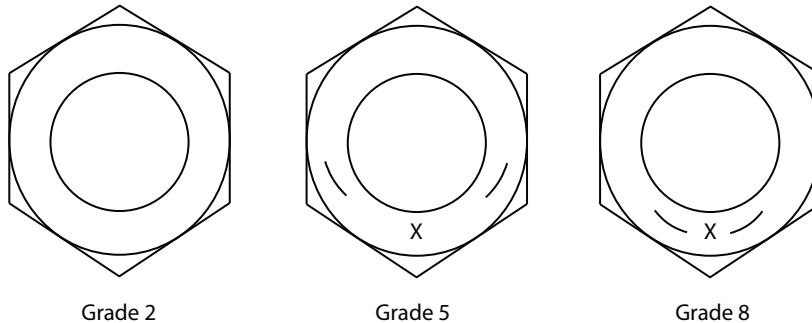
2.1 STEEL - SAE J995

| CLASSIFICATION | | HARDNESS | PROOF LOAD STRENGTH | |
|----------------|------------------|--------------------------------|--|-------------------|
| GRADE | NOMINAL SIZE | | | |
| 2 | 1/4" Thru 1-1/2" | 32 HRC MAXIMUM | UNC & 8UN | UNF, 12UN & Finer |
| | | | 90,000 PSI | 80,000 PSI |
| 5 | 1/4" Thru 1-1/2" | 32 HRC MAXIMUM | 1/4" Thru 1" | |
| | | | UNC & 8UN | UNF, 12UN & Finer |
| | | | 120,000 PSI | 109,000 PSI |
| | | | Over 1" Thru 1-1/2" | |
| | | | UNC & 8UN | UNF, 12UN & Finer |
| | | | 105,000 PSI | 94,000 PSI |
| 8 | 1/4" Thru 1-1/2" | 1/4" Thru 5/8": 24-32 HRC | ALL SIZES AND ALL THREAD PITCHES 150,000 PSI | |
| | | Over 5/8" Thru 1": 26-34 HRC | | |
| | | Over 1" Thru 1-1/2": 26-36 HRC | | |

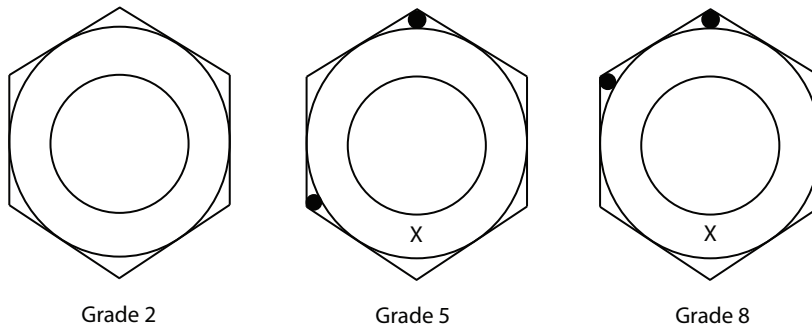
Notes: For sizes above 1-1/2" mechanical properties may be derived from SAE J995

2.2 Steel Grade Marking:

Style 1



Style 2



Notes: Marking can be Style 1 or 2. The nuts will also have manufacturer's marking on the head in addition to the grade marking as shown above. Grade 2 nuts will not have any markings (both grade and manufacturer's marking).

PRODUCT DATA SHEET

FINISHED HEX NUTS

2.3 STAINLESS STEEL - ASTM F594

| CLASSIFICATION | | CONDITION | PROOF LOAD STRENGTH KSI | ROCKWELL HARDNESS | GRADE MARKING |
|----------------|-------------------|-----------|-------------------------|-------------------|---------------|
| TYPE | NOMINAL SIZE | | | | |
| 304 (18-8) | 1/4 to 5/8 incl | CW1 | 100 MINIMUM | B95 to C35 | F594C |
| | 3/4 to 1-1/2 incl | CW2 | 85 MINIMUM | B80 to C35 | F594D |
| 316 | 1/4 to 5/8 incl | CW1 | 100 MINIMUM | B95 to C35 | F594G |
| | 3/4 to 1-1/2 incl | CW2 | 85 MINIMUM | B80 to C35 | F594H |

(1Ksi = 1000 PSI)

Notes: The nuts will also have manufacturer's marking on the head, in addition to the grade marking as mentioned in the table. Nuts will be Passivated.

3.0 SURFACE FINISH: PLAIN / ZINC. ZINC PLATING DETAILS GIVEN IN TABLE BELOW.

| PROPERTIES | ZINC | ZINC YELLOW | ZINC YELLOW |
|---------------------------|---|---|---|
| TYPE | TRIVALENT (Cr+3) | HEXAVALENT (Cr+6) | TRIVALENT (Cr+3) |
| COLOR | CLEAR | YELLOW | YELLOW |
| MINIMUM COATING THICKNESS | 0.0001" / 3 MICRONS OR 0.0002" / 5 MICRONS | 0.0001" / 3 MICRONS OR 0.0002" / 5 MICRONS | 0.0001" / 3 MICRONS OR 0.0002" / 5 MICRONS |
| SPECIFICATION | ASTM F1941 / F1941M Fe/Zn 3AN or Fe/Zn 5AN ASTM B633 SC1 Type III | ASTM F1941 / F1941M Fe/Zn 3C or Fe/Zn 5C | ASTM F1941 / F1941M Fe/Zn 3CN or Fe/Zn 5CN |