



### ASME B18.2.2 Hex Nut

Leader-Fastener is a manufacturer and distributor of **ASME B18.2.2 Hex Nut**. We have a complete line of service from having invested in production plants, export department and to having a quality control team and center to meet your requirements. We regard quality as the life of the company. We persist in good quality as the first policy and have established a set of quality control and inspection system according to the international standard. We have carried out ISO9001 Quality Guarantee System in every course of production, transportation and selling. We do hope we could be your partner in business by topping quality,

knight service and competitive price in the near future and be your friends as well.

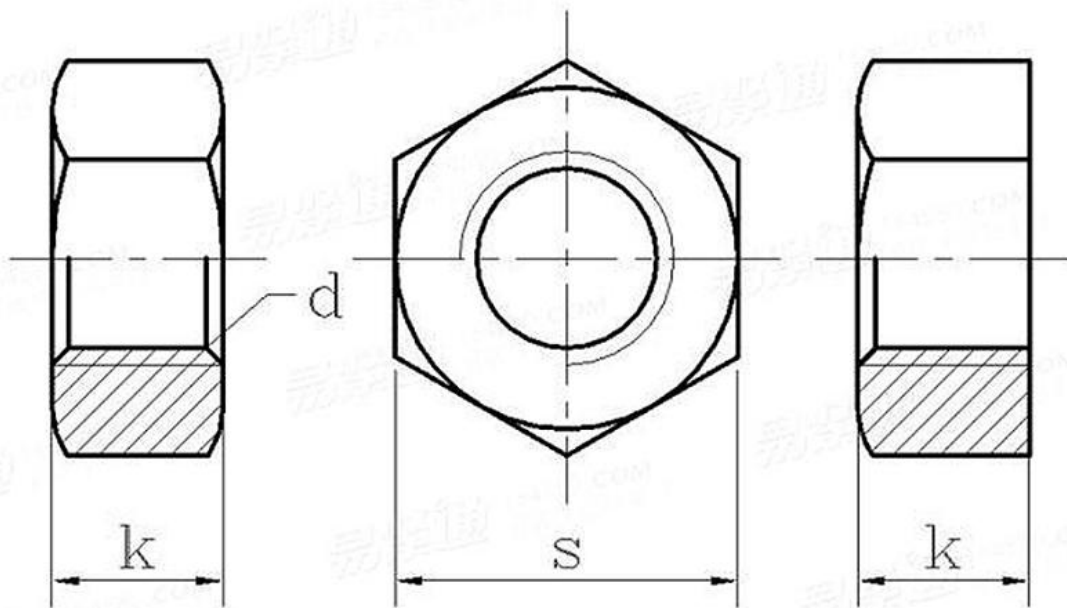
We offer **ASME B18.2.2 Hex Nut** American specification fasteners including Hex Jam Nuts, Metric Flange Nuts, Metric Heavy Hex Nuts, Metric Slotted Hex Nuts, Acorn Nuts and Spring Nuts. For custom **ASME B18.2.4.1M Metric Hex Nuts**, we strictly follow the client's specification and critical parameter. We satisfied our customer with our services and high-quality product.

### Product Specification of ASME B18.2.2 Hex Nut

Material : Carbon steel, Stainless steel, Alloy Steel, Brass.

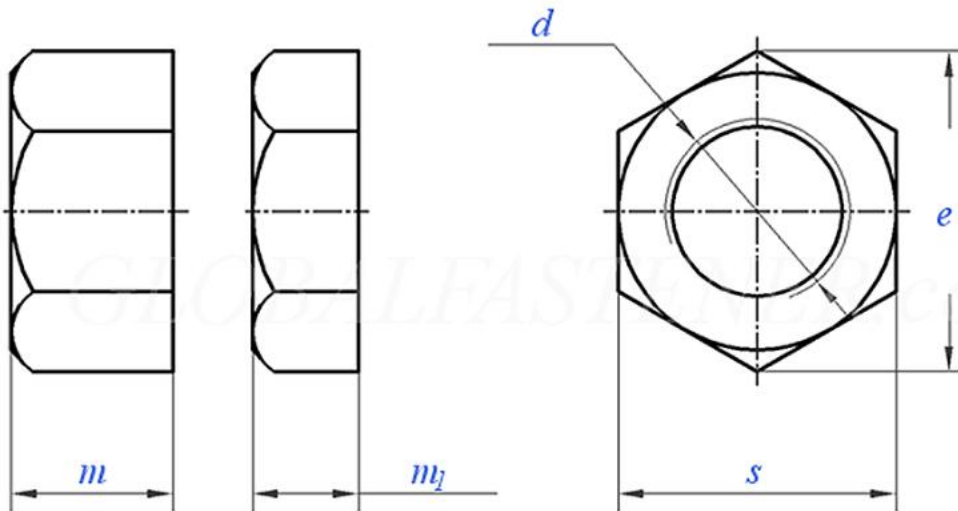
Finishment: Black, Zinc Plated, Zinc Yellow, HDG, Phosphate, DACROMET, Geomet, Magin, Ruspert, Teflon, etc.

### ASME B 18.2.2 - 2022 Hex Machine Screw Nuts [Table 1] (ASTM A563 / F594 / F467)



| Screw Thread | 0#    | 1#    | 2#    | 3#    | 4#    | 5#    | 6#    | 8#    | 10#   | 12#   | 1/4   | 5/16  | 3/8   |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| d            | 0.060 | 0.073 | 0.086 | 0.099 | 0.112 | 0.125 | 0.138 | 0.164 | 0.190 | 0.216 | 0.250 | 0.312 | 0.375 |
| P            | 80    | 64    | 56    | 48    | 40    | 40    | 32    | 32    | 24    | 24    | 20    | 18    | 16    |
| s            | max   | 0.156 | 0.156 | 0.188 | 0.188 | 0.25  | 0.312 | 0.312 | 0.344 | 0.375 | 0.438 | 0.438 | 0.562 |
|              | min   | 0.15  | 0.15  | 0.18  | 0.18  | 0.241 | 0.302 | 0.302 | 0.332 | 0.362 | 0.423 | 0.423 | 0.545 |
| k            | max   | 0.05  | 0.05  | 0.066 | 0.066 | 0.098 | 0.114 | 0.114 | 0.13  | 0.13  | 0.161 | 0.193 | 0.225 |
|              | min   | 0.043 | 0.043 | 0.057 | 0.057 | 0.087 | 0.102 | 0.102 | 0.117 | 0.117 | 0.148 | 0.178 | 0.208 |

**ASME B 18.2.2 - 2022 Hex Flat Nuts and Hex Flat Jam Nuts [Table4] (ASTM A563 / F594 / F467)**



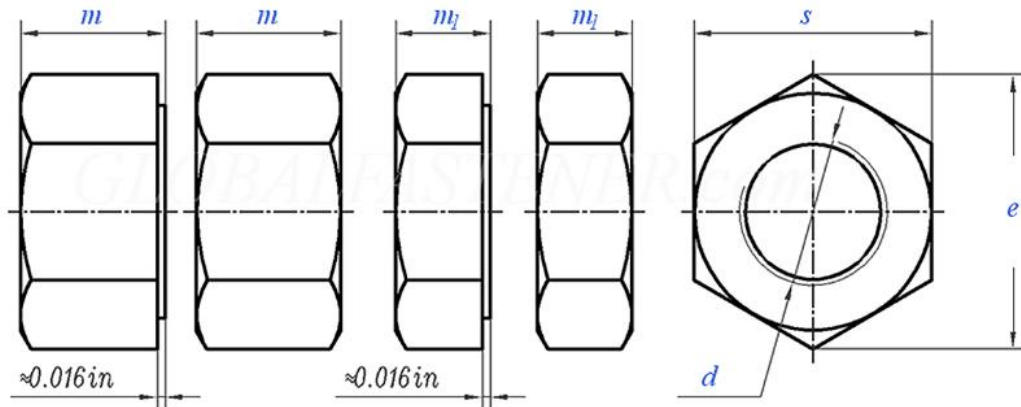
| Screw Thread |              | 1-1/8   | 1-1/4  | 1-3/8  | 1-1/2  |
|--------------|--------------|---------|--------|--------|--------|
| d            |              | 1.1250  | 1.2500 | 1.3750 | 1.5000 |
| PP           | UNC          | 7       | 7      | 6      | 6      |
|              | UNF          | 12      | 12     | 12     | 12     |
|              | 8-UN         | 8       | 8      | 8      | 8      |
| s            | Nominal Size | 1-11/16 | 1-7/8  | 2-1/16 | 2-1/4  |
|              | min          | 1.631   | 1.812  | 1.994  | 2.175  |
|              | max          | 1.688   | 1.875  | 2.062  | 2.250  |
| e            | min          | 1.859   | 2.066  | 2.273  | 2.480  |
|              | max          | 1.949   | 2.165  | 2.382  | 2.598  |

|    |              |       |        |         |        |
|----|--------------|-------|--------|---------|--------|
| m  | Nominal Size | 1     | 1-3/32 | 1-13/64 | 1-5/16 |
|    | min          | 0.970 | 1.062  | 1.169   | 1.276  |
|    | max          | 1.030 | 1.126  | 1.237   | 1.348  |
| m1 | Nominal Size | 5/8   | 3/4    | 13/16   | 7/8    |
|    | min          | 0.595 | 0.718  | 0.778   | 0.839  |
|    | max          | 0.655 | 0.782  | 0.846   | 0.911  |

①,Threads shall meet the requirements of ASME B.1

②,If electroplated finishes are required,reference ASTM F1941.Other finishes may be specified as indicated in the applicable mechanical and performance standards.

### ASME B 18.2.2 - 2022 Hex Nuts and Hex Jam Nuts [Table 5] (ASTM A563 / F594 / F467)



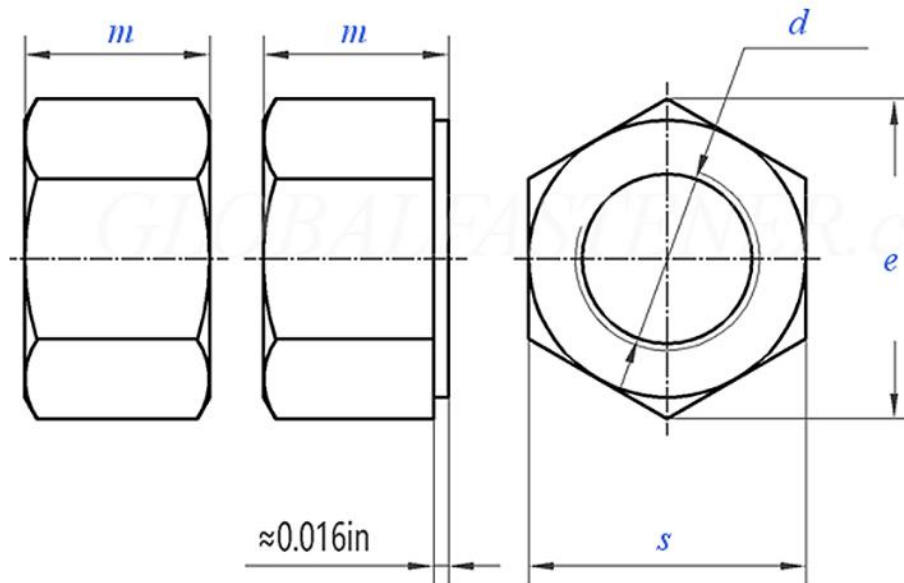
| Screw Thread | 1/4        | 5/16       | 3/8        | 7/16       | 1/2        | 9/16       | 5/8        | 3/4        | 7/8        | 1          | 1-1/8      | 1-1/4      | 1-3/8      |
|--------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| d            | 0.250<br>0 | 0.312<br>5 | 0.375<br>0 | 0.437<br>5 | 0.500<br>0 | 0.562<br>5 | 0.625<br>0 | 0.750<br>0 | 0.875<br>0 | 1.000<br>0 | 1.125<br>0 | 1.250<br>0 | 1.375<br>0 |
| PP           | UNC        | 20         | 18         | 16         | 14         | 13         | 12         | 11         | 10         | 9          | 8          | 7          | 7          |
|              | UNF        | 28         | 24         | 24         | 20         | 20         | 18         | 18         | 16         | 14         | 12         | 12         | 12         |
|              | 8-U<br>N   | -          | -          | -          | -          | -          | -          | -          | -          | -          | -          | 8          | 8          |
| s            | min        | 0.428      | 0.489      | 0.551      | 0.675      | 0.736      | 0.861      | 0.922      | 1.088      | 1.269      | 1.450      | 1.631      | 1.812      |
|              | max        | 0.438      | 0.500      | 0.563      | 0.688      | 0.750      | 0.875      | 0.938      | 1.125      | 1.312      | 1.500      | 1.688      | 1.875      |
| e            | min        | 0.488      | 0.557      | 0.628      | 0.768      | 0.840      | 0.982      | 1.051      | 1.240      | 1.447      | 1.653      | 1.859      | 2.066      |
|              | max        | 0.505      | 0.577      | 0.650      | 0.794      | 0.866      | 1.010      | 1.083      | 1.299      | 1.516      | 1.732      | 1.949      | 2.165      |
| m            | min        | 0.212      | 0.258      | 0.320      | 0.365      | 0.427      | 0.473      | 0.535      | 0.617      | 0.724      | 0.831      | 0.939      | 1.030      |
|              | max        | 0.226      | 0.273      | 0.337      | 0.385      | 0.448      | 0.496      | 0.559      | 0.665      | 0.776      | 0.887      | 0.999      | 1.094      |

|              |     |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| m<br>1       | min | 0.150 | 0.180 | 0.210 | 0.240 | 0.302 | 0.301 | 0.363 | 0.398 | 0.458 | 0.519 | 0.579 | 0.687 | 0.747 |
|              | max | 0.163 | 0.195 | 0.227 | 0.260 | 0.323 | 0.324 | 0.387 | 0.446 | 0.510 | 0.575 | 0.639 | 0.751 | 0.815 |
| Screw Thread |     | 1-1/2 | 1-5/8 | 1-3/4 | 1-7/8 | 2     | 2-1/4 | 2-1/2 | 2-3/4 | 3     | 3-1/4 | 3-1/2 | 3-3/4 | 4     |

|        |      |        |        |        |        |        |        |        |        |        |        |       |        |        |
|--------|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| d      |      | 1.5000 | 1.6250 | 1.7500 | 1.8750 | 2.0000 | 2.2500 | 2.5000 | 2.7500 | 3.0000 | 3.2500 | 3.500 | 3.7500 | 4.0000 |
| PP     | UNC  | 6      | -      | 5      | -      | 4-1/2  | 4-1/2  | 4      | 4      | 4      | 4      | 4     | 4      | 4      |
|        | UNF  | 12     | -      | -      | -      | -      | -      | -      | -      | -      | -      | -     | -      | -      |
|        | 8-UN | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8     | 8      | 8      |
| s      | min  | 2.175  | 2.350  | 2.538  | 2.722  | 2.900  | 3.263  | 3.625  | 3.988  | 4.350  | 4.713  | 5.075 | 5.438  | 5.800  |
|        | max  | 2.250  | 2.430  | 2.625  | 2.813  | 3.000  | 3.375  | 3.750  | 4.125  | 4.500  | 4.875  | 5.250 | 5.625  | 6.000  |
| e      | min  | 2.480  | 2.679  | 2.893  | 3.103  | 3.306  | 3.719  | 4.133  | 4.546  | 4.959  | 5.373  | 5.786 | 6.199  | 6.612  |
|        | max  | 2.598  | 2.805  | 3.031  | 3.247  | 3.464  | 3.897  | 4.330  | 4.763  | 5.196  | 5.629  | 6.062 | 6.495  | 6.928  |
| m      | min  | 1.245  | 1.364  | 1.460  | 1.567  | 1.675  | 1.890  | 2.105  | 2.319  | 2.534  | 2.749  | 2.964 | 3.178  | 3.393  |
|        | max  | 1.317  | 1.416  | 1.540  | 1.651  | 1.763  | 1.986  | 2.209  | 2.431  | 2.654  | 2.877  | 3.011 | 3.322  | 3.545  |
| m<br>1 | min  | 0.808  | 0.868  | 0.929  | 0.989  | 1.050  | 1.155  | 1.401  | 1.522  | 1.643  | 1.748  | 1.870 | 1.990  | 2.112  |
|        | max  | 0.880  | 0.944  | 1.009  | 1.073  | 1.138  | 1.267  | 1.427  | 1.556  | 1.685  | 1.814  | 1.943 | 2.072  | 2.201  |

①,Threads shall meet the requirements of ASME B.1

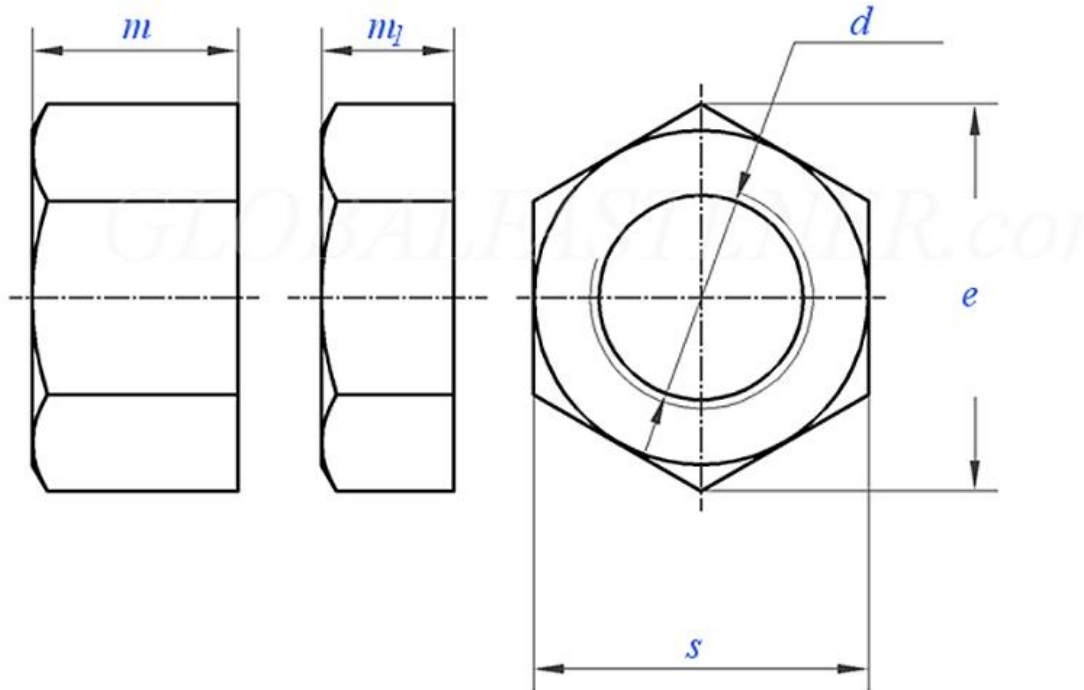
②,If electroplated finishes are required,reference ASTM F1941.Other finishes may be specified as indicated in the applicable mechanical and performance standards.

**ASME B 18.2.2 - 2022 Hex Thick Nuts [Table7] (ASTM A563 / F594 / F467)**


| Screw Thread | 1/4          | 5/16   | 3/8   | 7/16   | 1/2   | 9/16   | 5/8   | 3/4   | 7/8   | 1      | 1-1/8 | 1-1/4   | 1-3/8 | 1-1/2  |       |
|--------------|--------------|--------|-------|--------|-------|--------|-------|-------|-------|--------|-------|---------|-------|--------|-------|
| $d$          | 0.250        | 0.3125 | 0.375 | 0.4375 | 0.500 | 0.5625 | 0.625 | 0.750 | 0.875 | 1.000  | 1.125 | 1.250   | 1.375 | 1.500  |       |
| P<br>P       | UNC          | 20     | 18    | 16     | 14    | 13     | 12    | 11    | 10    | 9      | 8     | 7       | 7     | 6      | 6     |
|              | UNF          | 28     | 24    | 24     | 20    | 20     | 18    | 18    | 16    | 14     | 12    | 12      | 12    | 12     | 12    |
|              | 8-UN         | -      | -     | -      | -     | -      | -     | -     | -     | -      | -     | 8       | 8     | 8      | 8     |
| $s$          | Nominal Size | 7/16   | 1/2   | 9/16   | 11/16 | 3/4    | 7/8   | 15/16 | 1-1/8 | 1-5/16 | 1-1/2 | 1-11/16 | 1-7/8 | 2-1/16 | 2-1/4 |
|              | min          | 0.428  | 0.489 | 0.551  | 0.675 | 0.736  | 0.861 | 0.922 | 1.088 | 1.269  | 1.450 | 1.631   | 1.812 | 1.994  | 2.175 |
|              | max          | 0.438  | 0.500 | 0.562  | 0.688 | 0.750  | 0.875 | 0.938 | 1.125 | 1.312  | 1.500 | 1.688   | 1.875 | 2.062  | 2.250 |
| $e$          | min          | 0.488  | 0.557 | 0.628  | 0.768 | 0.840  | 0.892 | 1.051 | 1.240 | 1.447  | 1.653 | 1.859   | 2.066 | 2.273  | 2.480 |
|              | max          | 0.505  | 0.577 | 0.650  | 0.794 | 0.866  | 1.010 | 1.083 | 1.299 | 1.516  | 1.732 | 1.949   | 2.165 | 2.382  | 2.598 |
| $m$          | Nominal Size | 9/32   | 21/64 | 13/32  | 29/64 | 9/16   | 39/64 | 23/32 | 13/16 | 29/32  | 1     | 1-5/32  | 1-1/4 | 1-3/8  | 1-1/2 |
|              | min          | 0.274  | 0.320 | 0.398  | 0.444 | 0.552  | 0.598 | 0.706 | 0.798 | 0.890  | 0.982 | 1.136   | 1.228 | 1.351  | 1.474 |
|              | max          | 0.28   | 0.336 | 0.41   | 0.463 | 0.57   | 0.621 | 0.73  | 0.82  | 0.922  | 1.01  | 1.176   | 1.27  | 1.399  | 1.52  |

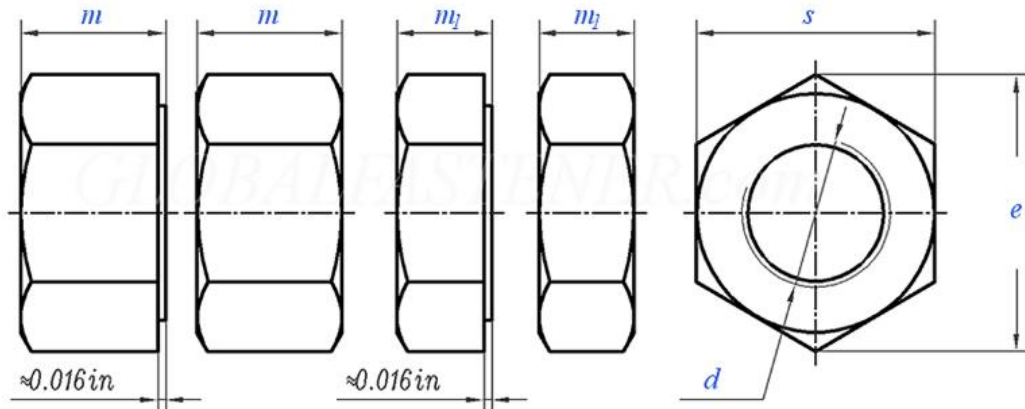
|  |   |  |   |  |   |  |   |   |  |   |  |   |  |   |
|--|---|--|---|--|---|--|---|---|--|---|--|---|--|---|
|  | 8 |  | 5 |  | 3 |  | 1 | 7 |  | 8 |  | 2 |  | 6 |
|--|---|--|---|--|---|--|---|---|--|---|--|---|--|---|

**ASME B 18.2.2 - 2022 Heavy Hex Flat Nuts and Heavy Hex Flat Jam Nuts [Table 10] (ASTM A563 / F594 / F467)**



| Screw Thread | 1-1/8        | 1-1/4   | 1-3/8  | 1-1/2  | 1-3/4  | 2      | 2-1/4  | 2-1/2  | 2-3/4  | 3      | 3-1/4  | 3-1/2  | 3-3/4  | 4      |       |
|--------------|--------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| d            | 1.1250       | 1.2500  | 1.3750 | 1.5000 | 1.7500 | 2.0000 | 2.2500 | 2.5000 | 2.7500 | 3.0000 | 3.2500 | 3.5000 | 3.7500 | 4.0000 |       |
| P            | UNC          | 7       | 7      | 6      | 6      | 5      | 4-1/2  | 4-1/2  | 4      | 4      | 4      | 4      | 4      | 4      |       |
|              | UNF          | 12      | 12     | 12     | 12     | -      | -      | -      | -      | -      | -      | -      | -      | -      |       |
|              | 8-UN         | 8       | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      | 8      |       |
| s            | Nominal Size | 1-13/16 | 2      | 2-3/16 | 2-3/8  | 2-3/4  | 3-1/8  | 3-1/2  | 3-7/8  | 4-1/4  | 4-5/8  | 5      | 5-3/8  | 5-3/4  | 6-1/8 |
|              | min          | 1.756   | 1.938  | 2.119  | 2.300  | 2.662  | 3.025  | 3.388  | 3.750  | 4.112  | 4.475  | 4.838  | 5.200  | 5.562  | 5.925 |
|              | max          | 1.812   | 2.000  | 2.188  | 2.375  | 2.750  | 3.125  | 3.500  | 3.875  | 4.250  | 4.625  | 5      | 5.375  | 5.750  | 6.125 |
| e            | min          | 2.002   | 2.209  | 2.416  | 2.622  | 3.035  | 3.449  | 3.862  | 4.275  | 4.688  | 5.102  | 5.515  | 5.928  | 6.341  | 6.755 |
|              | max          | 2.093   | 2.309  | 2.526  | 2.742  | 3.175  | 3.608  | 4.041  | 4.474  | 4.907  | 5.340  | 5.774  | 6.207  | 6.640  | 7.073 |
| m            | Nominal Size | 1-1/8   | 1-1/4  | 1-3/8  | 1-1/2  | 1-3/4  | 2      | 2-1/4  | 2-1/2  | 2-3/4  | 3      | 3-1/4  | 3-1/2  | 3-3/4  | 4     |
|              | min          | 1.079   | 1.187  | 1.310  | 1.433  | 1.679  | 1.925  | 2.155  | 2.401  | 2.647  | 2.893  | 3.124  | 3.370  | 3.616  | 3.862 |

|   |              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|   | max          | 1.155 | 1.282 | 1.409 | 1.536 | 1.790 | 2.044 | 2.298 | 2.552 | 2.806 | 3.060 | 3.314 | 3.568 | 3.822 | 4.076 |
| 1 | Nominal Size | 5/8   | 3/4   | 13/16 | 7/8   | 1     | 1-1/8 | 1-1/4 | 1-1/2 | 1-5/8 | 1-3/4 | 1-7/8 | 2     | 2-1/8 | 2-1/4 |
|   | min          | 0.579 | 0.687 | 0.747 | 0.808 | 0.929 | 1.050 | 1.155 | 1.401 | 1.522 | 1.643 | 1.748 | 1.870 | 1.990 | 2.112 |
|   | max          | 0.655 | 0.782 | 0.846 | 0.911 | 1.040 | 1.169 | 1.298 | 1.552 | 1.681 | 1.810 | 1.939 | 2.068 | 2.197 | 2.326 |

**ASME B 18.2.2 - 2022 Heavy Hex Nuts and Heavy Hex Jam Nuts [Table 11]**


|              |              |        |        |        |        |        |        |        |        |        |        |         |        |
|--------------|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| Screw Thread | 1/4          | 5/16   | 3/8    | 7/16   | 1/2    | 9/16   | 5/8    | 3/4    | 7/8    | 1      | 1-1/8  | 1-1/4   | 1-3/8  |
| d            | 0.2500       | 0.3125 | 0.3750 | 0.4375 | 0.5000 | 0.5625 | 0.6250 | 0.7500 | 0.8750 | 1.0000 | 1.1250 | 1.2500  | 1.3750 |
| P<br>P       | UNC          | 20     | 18     | 16     | 14     | 13     | 12     | 11     | 10     | 9      | 8      | 7       | 6      |
|              | UNF          | 28     | 24     | 24     | 20     | 20     | 18     | 18     | 16     | 14     | 12     | 12      | 12     |
|              | 8-UN         | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | 8       | 8      |
| s            | Nominal Size | 1/2    | 9/16   | 11/16  | 3/4    | 7/8    | 15/16  | 1-1/16 | 1-1/4  | 1-7/16 | 1-5/8  | 1-13/16 | 2-3/16 |
|              | min          | 0.488  | 0.546  | 0.669  | 0.728  | 0.850  | 0.909  | 1.031  | 1.212  | 1.394  | 1.575  | 1.756   | 1.938  |
|              | max          | 0.500  | 0.562  | 0.688  | 0.750  | 0.875  | 0.938  | 1.062  | 1.250  | 1.438  | 1.625  | 1.812   | 2.000  |
| e            | min          | 0.556  | 0.622  | 0.763  | 0.830  | 0.969  | 1.037  | 1.175  | 1.382  | 1.589  | 1.796  | 2.002   | 2.209  |
|              | max          | 0.577  | 0.650  | 0.794  | 0.866  | 1.010  | 1.083  | 1.227  | 1.443  | 1.660  | 1.876  | 2.093   | 2.309  |
| m            | Nominal Size | 15/64  | 19/64  | 23/64  | 27/64  | 31/64  | 35/64  | 39/64  | 47/64  | 55/64  | 63/64  | 1-7/64  | 1-7/32 |
|              | min          | 0.218  | 0.280  | 0.341  | 0.403  | 0.464  | 0.526  | 0.587  | 0.710  | 0.833  | 0.956  | 1.079   | 1.187  |
|              | max          | 0.250  | 0.314  | 0.377  | 0.441  | 0.504  | 0.568  | 0.631  | 0.758  | 0.885  | 1.012  | 1.139   | 1.251  |
| 1            | Nominal Size | 11/64  | 13/64  | 15/64  | 17/64  | 19/64  | 21/64  | 23/64  | 27/64  | 31/64  | 35/64  | 39/64   | 23/32  |

|              |     |       |       |       |       |       |       |       |       |       |       |       |       |       |
|--------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|              | min | 0.156 | 0.186 | 0.216 | 0.247 | 0.277 | 0.307 | 0.337 | 0.398 | 0.458 | 0.519 | 0.579 | 0.687 | 0.747 |
|              | max | 0.188 | 0.220 | 0.252 | 0.285 | 0.317 | 0.349 | 0.381 | 0.446 | 0.510 | 0.575 | 0.639 | 0.751 | 0.815 |
| Screw Thread |     | 1-1/2 | 1-5/8 | 1-3/4 | 1-7/8 | 2     | 2-1/4 | 2-1/2 | 2-3/4 | 3     | 3-1/4 | 3-1/2 | 3-3/4 | 4     |

|             |              |         |         |         |         |         |         |         |         |         |         |         |         |         |
|-------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| d           |              | 1.500   | 1.625   | 1.750   | 1.875   | 2       | 2.250   | 2.500   | 2.750   | 3.000   | 3.250   | 3.500   | 3.750   | 4.000   |
|             |              | 0       | 0       | 0       | 0       | 2       | 0       | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| P<br>P<br>P | UNC          | 6       | -       | 5       | -       | 4-1/2   | 4-1/2   | 4       | 4       | 4       | 4       | 4       | 4       | 4       |
|             | UNF          | 12      | -       | -       | -       | -       | -       | -       | -       | -       | -       | -       | -       | -       |
|             | 8-UN         | 8       | 8       | 8       | 8       | 8       | 8       | 8       | 8       | 8       | 8       | 8       | 8       | 8       |
| s           | Nominal Size | 2-3/8   | 2-9/16  | 2-3/4   | 2-15/16 | 3-1/8   | 3-1/2   | 3-7/8   | 4-1/4   | 4-5/8   | 5       | 5/3-8   | 5-3/4   | 6-1/8   |
|             | min          | 2.300   | 2.481   | 2.662   | 2.844   | 3.025   | 3.388   | 3.750   | 4.112   | 4.475   | 4.838   | 5.200   | 5.562   | 5.925   |
|             | max          | 2.375   | 2.562   | 2.750   | 2.938   | 3.125   | 3.500   | 3.875   | 4.250   | 4.625   | 5.000   | 5.375   | 5.750   | 6.125   |
| e           | min          | 2.622   | 2.828   | 3.035   | 3.242   | 3.449   | 3.862   | 4.275   | 4.688   | 5.102   | 5.515   | 5.928   | 6.341   | 6.755   |
|             | max          | 2.742   | 2.959   | 3.175   | 3.392   | 3.608   | 4.041   | 4.474   | 4.907   | 5.340   | 5.774   | 6.207   | 6.640   | 7.073   |
| m           | Nominal Size | 1-15/32 | 1-19/32 | 1-23/32 | 1-27/32 | 1-31/32 | 2-13/64 | 2-29/64 | 2-45/64 | 2-61/64 | 3-3/16  | 3-7/16  | 3-11/16 | 3-15/16 |
|             | min          | 1.433   | 1.556   | 1.679   | 1.802   | 1.925   | 2.155   | 2.401   | 2.647   | 2.893   | 3.124   | 3.370   | 3.616   | 3.862   |
|             | max          | 1.505   | 1.632   | 1.759   | 1.886   | 2.013   | 2.251   | 2.505   | 2.759   | 3.013   | 3.252   | 3.506   | 3.760   | 4.014   |
| m<br>1      | Nominal Size | 27/32   | 29/32   | 31/32   | 1-1/32  | 1-3/32  | 1-13/64 | 1-29/64 | 1-37/64 | 1-45/64 | 1-13/16 | 1-15/16 | 2-1/16  | 2-3/16  |
|             | min          | 0.808   | 0.868   | 0.929   | 0.989   | 1.050   | 1.155   | 1.401   | 1.522   | 1.643   | 1.748   | 1.870   | 1.990   | 2.112   |
|             | max          | 0.880   | 0.944   | 1.009   | 1.073   | 1.138   | 1.251   | 1.505   | 1.634   | 1.763   | 1.876   | 2.006   | 2.134   | 2.264   |