



## GRADE GT FLANGE STYLE LOCK NUTS

RB&W Corp.

| Nominal Size<br>in Inches | F                  |        |       | B                  | H                 |       | A          | K                   |
|---------------------------|--------------------|--------|-------|--------------------|-------------------|-------|------------|---------------------|
|                           | Width Across Flats |        |       | Flange<br>Diameter | Overall Thickness |       | Hex Height | Flange<br>Thickness |
|                           | Nom                | Max    | Min   | Max                | Max               | Min   | Min        | Min                 |
| 1/4                       | 7/16               | 0.4385 | 0.428 | 0.560              | 0.300             | 0.265 | 0.140      | 0.040               |
| 5/16                      | 1/2                | 0.5020 | 0.489 | 0.680              | 0.365             | 0.320 | 0.170      | 0.050               |
| 3/8                       | 9/16               | 0.5645 | 0.551 | 0.810              | 0.425             | 0.404 | 0.200      | 0.060               |
| 7/16                      | 11/16              | 0.6895 | 0.675 | 0.930              | 0.495             | 0.457 | 0.230      | 0.070               |
| 1/2                       | 3/4                | 0.7520 | 0.736 | 1.070              | 0.555             | 0.528 | 0.260      | 0.080               |
| 5/8                       | 15/16              | 0.9395 | 0.922 | 1.330              | 0.690             | 0.646 | 0.320      | 0.100               |
| 3/4                       | 1-1/8              | 1.1270 | 1.088 | 1.585              | 0.825             | 0.742 | 0.380      | 0.110               |

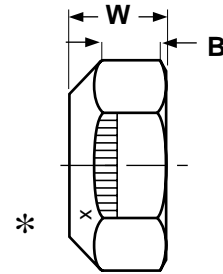
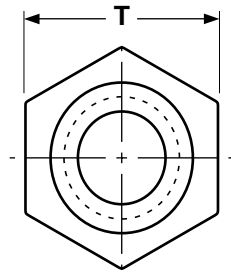
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|-------------------------------------|---|
| <b>Description</b>                  | <p><b>Grade-C Automation Lock Nut:</b> An all-metal, one-piece hex nut which derives its prevailing torque characteristics from controlled distortion of its top threads from their normal helical form to a more elliptical shape.</p> <p><b>Grade-GT Flange Style Automation Lock Nut:</b> Similar to Grade-C but with a flange on the bottom side of the nut.</p>  |
| <b>Applications/<br/>Advantages</b> | <p><b>Grade-C:</b> These nuts are reusable and can withstand temperatures of up to 450°F. Can withstand severe vibration and shock loads. Frequently used in farm machinery, plus the automotive and related metalworking industries.</p> <p><b>Grade-GT:</b> Has a lower, more uniform bearing stress to clamp force ratio. This style reduces inventory (by eliminating a washer) and in-place cost. It is designed to be used specifically but not exclusively with grade-8 frame bolts.</p> |
| <b>Material</b>                     | C1022 - 1045 steel.   |
| <b>Heat Treatment</b>               | Nuts are heat treated to the austenitizing temperature of the material of which the nut is made, quenched in a proper medium to obtain a predominately martensitic microstructure, and tempered to the specified hardness.  |
| <b>Hardness</b>                     | <p>1/4 through 5/8 in.: Rockwell C24 - C32</p> <p>3/4 through 1 in.: Rockwell C26 - C34</p> <p>1-1/8 through 2 in.: Rockwell C26 - C36</p>  |
| <b>Proof Load</b>                   | 150,000 psi.  |
| <b>Plating</b>                      | See Appendix-A for plating information.   |

\*Product standards require all grade-marked nuts 1/4" diameter and larger to have a raised or depressed insignia identifying its manufacturer. "X" represents one location such an insignia may appear.

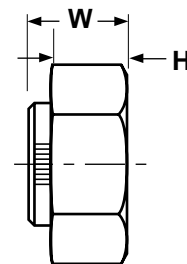
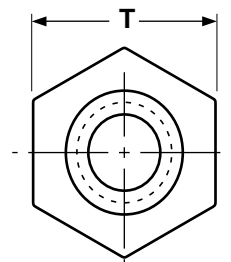
Grade-C

# Automation Hex Lock

Nuts



| GRADE C AUTOMATION STYLE LOCK NUTS |                    |        |        |                   |       | RB&W Corp. |
|------------------------------------|--------------------|--------|--------|-------------------|-------|------------|
| Nominal Size in Inches             | T                  |        |        | W                 |       | B          |
|                                    | Width Across Flats |        |        | Overall Thickness |       | Hex Height |
|                                    | Nom                | Max    | Min    | Max               | Min   | Min        |
| 1/4                                | 7/16               | 0.4385 | 0.428  | 0.226             | 0.212 | 0.145      |
| 5/16                               | 1/2                | 0.5020 | 0.489  | 0.273             | 0.258 | 0.166      |
| 3/8                                | 9/16               | 0.5645 | 0.551  | 0.337             | 0.320 | 0.198      |
| 7/16                               | 11/16              | 0.6895 | 0.675  | 0.385             | 0.365 | 0.223      |
| 1/2                                | 3/4                | 0.7520 | 0.736  | 0.448             | 0.427 | 0.262      |
| 9/16                               | 7/8                | 0.8770 | 0.861  | 0.496             | 0.473 | 0.286      |
| 5/8                                | 15/16              | 0.9395 | 0.922  | 0.559             | 0.535 | 0.329      |
| 3/4                                | 1-1/8              | 1.1270 | 1.088  | 0.665             | 0.617 | 0.382      |
| 7/8                                | 1-5/16             | 1.3145 | 1.2690 | 0.776             | 0.724 | 0.450      |
| 1                                  | 1-1/2              | 1.5020 | 1.4500 | 0.887             | 0.831 | 0.513      |



| GRADE C HEX COLLAR LOCK NUTS |                    |       |                   |       |            | RB&W Corp. |
|------------------------------|--------------------|-------|-------------------|-------|------------|------------|
| Nominal Size in Inches       | T                  |       | W                 |       | H          |            |
|                              | Width Across Flats |       | Overall Thickness |       | Hex Height |            |
|                              | Max                | Min   | Max               | Min   | Max        | Min        |
| 1-1/8                        | 1.688              | 1.631 | 0.999             | 0.939 | 0.657      | 0.636      |
| 1-1/4                        | 1.875              | 1.812 | 1.094             | 1.030 | 0.719      | 0.698      |
| 1-3/8                        | 2.062              | 1.994 | 1.206             | 1.138 | 0.793      | 0.771      |
| 1-1/2                        | 2.250              | 2.175 | 1.317             | 1.245 | 0.865      | 0.843      |
| 1-3/4                        | 2.625              | 2.538 | 1.540             | 1.460 | 1.012      | 0.989      |
| 2                            | 3.000              | 2.900 | 1.763             | 1.675 | 1.158      | 1.134      |

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