



| GRADE G FLANGE STYLE LOCK NUTS | | | | | | | | RB&W Corp |
|--------------------------------|--------------------|--------|-------|-----------------|-------------------|-------|------------|------------------|
| Nominal Size in Inches | F | | | B | H | | A | K |
| | Width Across Flats | | | Flange Diameter | Overall Thickness | | Hex Height | Flange 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 | 0.04 |
| 5/16 | 1/2 | 0.5020 | 0.489 | 0.680 | 0.365 | 0.320 | 0.170 | 0.05 |
| 3/8 | 9/16 | 0.5645 | 0.551 | 0.810 | 0.425 | 0.420 | 0.200 | 0.06 |
| 7/16 | 11/16 | 0.6895 | 0.675 | 0.930 | 0.495 | 0.482 | 0.230 | 0.07 |
| 1/2 | 3/4 | 0.7520 | 0.736 | 1.070 | 0.555 | 0.550 | 0.260 | 0.08 |
| 5/8 | 15/16 | 0.9395 | 0.922 | 1.330 | 0.690 | 0.685 | 0.320 | 0.10 |
| 3/4 | 1-1/8 | 1.1270 | 1.088 | 1.585 | 0.825 | 0.810 | 0.380 | 0.11 |

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| Description | <p><i>Grade-C Automation Lock Nut:</i> 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><i>Grade-G Flange Style Automation Lock Nut:</i> Similar to Grade-C but with a flange on the bottom side of the nut.</p> |
| Applications/ Advantages | <p><i>Grade-C:</i> 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><i>Grade-G:</i> 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> |
| Material | C1022 - 1045 steel. |
| Heat Treatment | 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. |
| Hardness | <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> |
| Proof Load | 150,000 psi. |
| Plating | 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 a marking may appear.