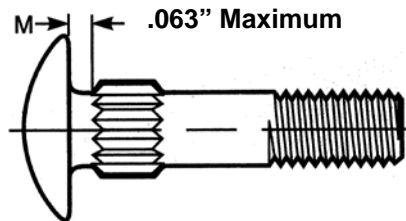




January 3, 2008

ASME B18.5 Round Head Ribbed Neck Bolt “M” Dimension Revision



On December 12, 2007 the American Society of Mechanical Engineers (ASME) sub-committee responsible for ASME B18.5 standard changed the “M” dimension to “0.063 inches Maximum” for all bolt lengths. The revised standard will be published in the second half of 2008.

The standard covering “Round Head Ribbed Neck Bolts” is ASME B18.5-1998. When this standard was previously approved the “M” dimension was established based on the assumption that the “ribs” would always be manufactured in a secondary operation.

Recent manufacturing technology developments enables sophisticated bolt manufacturers to make the ribs in the primary bolt making operation instead of in a secondary process. When using these advanced manufacturing techniques the “M” dimension is eliminated, meaning the ribs start immediately under the bearing surface of the bolt head.

This change to Round Head Ribbed Neck Bolt standard will not adversely affect the functioning of the ribs, which is to prevent rotation of the bolt during nut tightening.

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Director of Engineering Technology



Technical Bulletin

ASME approved new Table 4 in B18.5 as of December 12, 2007.

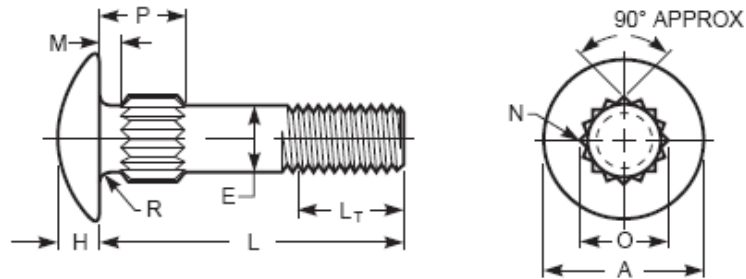


TABLE 4 DIMENSIONS OF ROUND HEAD RIBBED NECK BOLTS

| Nominal Size ¹ or Basic Bolt Diameter | E | | A | | H | | M | | N | O | P | | | R | |
|--|---------------|-------|---------------|-------|-------------|-------|-----------------|------------------|--------|---------|--------------------|------------------|------------------|-------|---------------|
| | Body Diameter | | Head Diameter | | Head Height | | Head to Ribs | | | | Diameter Over Ribs | Depth Over Ribs | | | |
| | Max | Min | Max | Min | Max | Min | For Lengths of | | Approx | Min | | For Lengths of | | | Fillet Radius |
| | | | | | | | 7/8 and Shorter | 1 in. and Longer | | | 7/8 and Shorter | 1 in. and 1-1/8 | 1-1/4 and Longer | | |
| | | | | | | Max | Max | | | ± 0.031 | | Max ² | | | |
| No. 10 | 0.1900 | 0.199 | 0.182 | 0.469 | 0.438 | 0.114 | 0.094 | 0.062 | 0.094 | 9 | 0.210 | 0.250 | 0.407 | 0.594 | 0.031 |
| 1/4 | 0.2500 | 0.280 | 0.237 | 0.594 | 0.563 | 0.145 | 0.125 | 0.062 | 0.094 | 10 | 0.274 | 0.250 | 0.407 | 0.594 | 0.031 |
| 5/16 | 0.3125 | 0.324 | 0.298 | 0.719 | 0.688 | 0.176 | 0.156 | 0.062 | 0.094 | 12 | 0.340 | 0.250 | 0.407 | 0.594 | 0.031 |
| 3/8 | 0.3750 | 0.388 | 0.360 | 0.844 | 0.782 | 0.208 | 0.188 | 0.062 | 0.094 | 12 | 0.405 | 0.250 | 0.407 | 0.594 | 0.031 |
| 7/16 | 0.4375 | 0.452 | 0.421 | 0.969 | 0.907 | 0.239 | 0.219 | 0.062 | 0.094 | 14 | 0.470 | 0.250 | 0.407 | 0.594 | 0.031 |
| 1/2 | 0.5000 | 0.515 | 0.483 | 1.094 | 1.032 | 0.270 | 0.250 | 0.062 | 0.094 | 16 | 0.534 | 0.250 | 0.407 | 0.594 | 0.031 |
| 5/8 | 0.6250 | 0.642 | 0.605 | 1.344 | 1.219 | 0.344 | 0.313 | 0.125 | 0.125 | 19 | 0.660 | 0.313 | 0.438 | 0.625 | 0.062 |
| 3/4 | 0.7500 | 0.768 | 0.729 | 1.594 | 1.469 | 0.406 | 0.375 | 0.125 | 0.125 | 22 | 0.785 | 0.313 | 0.438 | 0.625 | 0.062 |

GENERAL NOTE: For additional requirements refer to General Data.

NOTES:

- (1) Where specifying nominal size in decimals, zeros preceding decimal and in the fourth decimal place shall be omitted.
- (2) The minimum radius is one half of the value shown.

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