Dimensional tolerances for cold drawn leaded commercial bronze

Alloys C31400, C31600

Manufactured to:



Designation: B140/B140M-12(2017)

Standard Specification for Copper-Zinc-Lead (Red Brass or Hardware Bronze) Rod, Bar, and Shapes

Tolerances to:



Designation: B249/B249M-23

Standard Specification for General Requirements for Extruded and Drawn Copper and Copper-Alloy Rod, Bar, Shapes and Forgings

Diameter tolerance

	Round	Hexagon & octagon
Up to 0.500" inclusive	+/- 0.0015"	+/- 0.003"
Over 0.500" to 1.00" inclusive	+/- 0.002"	+/- 0.004"
Over 1.00" to 2.00" inclusive	+/- 0.0025"	+/- 0.005"
Over 2.00"	0.15% of the diameter	0.30% of the flat to flat

Example of the over 2" diameter tolerance:

2.5" diameter x 0.0015 (0.15%) = 0.00375" round to 0.004". Therefore, the tolerance would be +/-0.004"

2.5" hexagon x 0.003 (0.30%) = 0.0075" round to 0.008". Therefore, the tolerance would be +/-0.008"