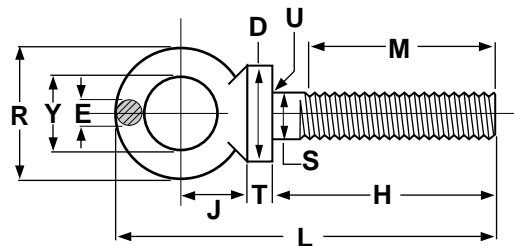


PLAIN PATTERN



SHOULDER PATTERN

FORGED EYEBOLTS, PLAIN PATTERN

ANSI/ASME B18.15

| Nominal Size | S | H | | Y | R | E | L | M | | Thread Size UNC-2A |
|--------------|--------------|--------------|--------------|--------------|-------------|--------------|----------------|------------------------|------|--------------------------|
| | | Shank Length | | | | | | Min Length Full Thread | | |
| | | Shank Dia. | Long Length | Short Length | Long Length | Short Length | | | | |
| 1/4 | 0.25 0.28 | 1.00 1.06 | 1.00 1.06 | 0.69 0.81 | 1.19 | 0.19 0.25 | 2.06 2.38 | 0.75 | 0.75 | 1/4-20 or .250-20 |
| 5/16 | 0.31 0.34 | 1.12 1.19 | 1.06 1.13 | 0.81 0.94 | 1.44 | 0.25 0.31 | 2.44 2.75 | 0.81 | 0.75 | 5/16-18 or .3125-18 |
| 3/8 | 0.38 0.41 | 1.25 1.38 | 1.12 1.25 | 0.94 1.06 | 1.69 | 0.31 0.38 | 2.81 3.19 | 0.88 | 0.75 | 3/8-16 or .375-16 |
| 7/16 | 0.44 0.47 | 1.38 1.50 | 1.13 1.25 | 1.00 1.12 | 1.81 | 0.34 0.41 | 3.06 3.44 | 1.00 | 0.75 | 7/16-14 or .4375-14 |
| 1/2 | 0.50 0.53 | 1.50 1.62 | 1.13 1.25 | 1.12 1.25 | 2.12 | 0.44 0.50 | 3.50 3.88 | 1.12 | 0.75 | 1/2-13 or .500-13 |
| 9/16 | 0.56 0.59 | 1.62 1.75 | 1.21 1.34 | 1.19 1.31 | 2.25 | 0.47 0.53 | 3.75 4.12 | 1.25 | 0.84 | 9/16-12 or .5625-12 |
| 5/8 | 0.62 0.66 | 1.75 1.88 | 1.31 1.44 | 1.31 1.44 | 2.56 | 0.56 0.62 | 4.19 4.56 | 1.38 | 0.94 | 5/8-11 or .625-11 |
| 3/4 | 0.75 0.78 | 2.00 2.12 | 1.50 1.62 | 1.44 1.56 | 2.81 | 0.62 0.69 | 4.69 5.06 | 1.62 | 1.13 | 3/4-10 or .750-10 |
| 7/8 | 0.88 0.91 | 2.25 2.38 | 1.75 1.88 | 1.56 1.69 | 3.19 | 0.75 0.81 | 5.31 5.69 | 1.81 | 1.31 | 7/8-9 or .875-9 |
| 1 | 1.00 1.06 | 2.50 2.62 | 1.94 2.06 | 1.69 1.81 | 3.56 | 0.88 0.94 | 5.94 6.31 | 2.06 | 1.50 | 1-8 or 1.000-8 |
| 1-1/8 | 1.12 1.19 | 2.75 2.88 | 2.13 2.26 | 1.94 2.06 | 4.06 | 1.00 1.06 | 6.69 7.06 | 2.31 | 1.69 | 1-1/8-7 or 1.125-7 |
| 1-1/4 | 1.25 1.34 | 3.00 3.12 | 2.38 2.50 | 2.12 2.25 | 4.44 | 1.09 1.16 | 7.31 7.69 | 2.50 | 1.88 | 1-1/4-7 or 1.250-7 |
| 1-1/2 | 1.50 1.59 | 3.50 3.62 | 2.75 2.87 | 2.44 2.56 | 5.19 | 1.31 1.38 | 8.56 8.94 | 3.00 | 2.25 | 1-1/2-6 or 1.500-6 |
| 1-3/4 | 1.75 1.84 | 3.75 3.88 | 3.18 3.31 | 2.75 3.00 | 6.00 | 1.50 1.62 | 9.50 10.12 | 3.19 | 2.62 | 1-3/4-5 or 1.750-5 |
| 2 | 2.00 2.09 | 4.00 4.25 | 3.62 3.87 | 3.06 3.44 | 6.88 | 1.75 1.88 | 10.56 11.44 | 3.38 | 3.00 | 2-4-1/2 or 2.000-4.50 |
| 2-1/2 | 2.50 2.62 | 5.00 5.25 | 4.50 4.75 | 3.81 4.19 | 8.50 | 2.19 2.31 | 13.19 14.06 | 4.25 | 3.75 | 2-1/2-4 or 2.500-4 |

| FORGED EYEBOLTS, SHOULDER PATTERN | | | | | | | | | | | | | ANSI/ASME B18.15 | | | |
|-----------------------------------|------|---------------------|-------------------|-----------------|----------------|--------------------------------|----------------------------|------------------------|--------------------------------|-----------------|--------------------------|---|------------------------|-------------------------|----------------------------------|-----|
| Nominal Size | | S Shank Diam. | H Shank Length | | Y Eye ID | R Nomi- nal Eye OD | E Eye Sect. Diam. | L Overall Length | M Min Length Full Thread | | Thread Size UNC-2A | J Center line Eye To Shoulder | D Shoulder Diam. | T Shoulder Height | U Radius Under Shoulder | |
| | | | Long Length | Short Length | | | | | Long Length | Short Length | | | | | | |
| | | | | | | | | | | | | | | | | 1/4 |
| 5/16 | 0.31 | 0.31 0.34 | 1.12 1.19 | 1.06 1.13 | 0.81 0.94 | 1.44 | 0.25 0.31 | 2.66 2.97 | 0.81 | 0.75 | 5/16-18 or .3125-18 | 0.88 1.00 | 0.56 0.62 | 0.12 0.19 | 0.015 0.025 | |
| 3/8 | 0.38 | 0.38 0.41 | 1.25 1.38 | 1.12 1.25 | 0.94 1.06 | 1.69 | 0.31 0.38 | 3.09 3.47 | 0.88 | 0.75 | 3/8-16 or .375-16 | 1.06 1.19 | 0.62 0.69 | 0.12 0.19 | 0.015 0.025 | |
| 7/16 | 0.44 | 0.44 0.47 | 1.38 1.50 | 1.13 1.25 | 1.00 1.12 | 1.81 | 0.34 0.41 | 3.41 3.78 | 1.00 | 0.75 | 7/16-14 or .4375-14 | 1.19 1.31 | 0.75 0.81 | 0.19 0.25 | 0.015 0.025 | |
| 1/2 | 0.50 | 0.50 0.53 | 1.50 1.62 | 1.13 1.25 | 1.12 1.25 | 2.12 | 0.44 0.50 | 3.81 4.19 | 1.12 | 0.75 | 1/2-13 or .500-13 | 1.31 1.44 | 0.88 0.94 | 0.19 0.25 | 0.015 0.025 | |
| 9/16 | 0.56 | 0.56 0.59 | 1.62 1.75 | 1.21 1.34 | 1.19 1.31 | 2.25 | 0.47 0.53 | 4.19 4.56 | 1.25 | 0.84 | 9/16-12 or .5625-12 | 1.50 1.62 | 0.94 1.00 | 0.22 0.28 | 0.020 0.045 | |
| 5/8 | 0.62 | 0.62 0.66 | 1.75 1.88 | 1.31 1.44 | 1.31 1.44 | 2.56 | 0.56 0.62 | 4.56 4.94 | 1.38 | 0.94 | 5/8-11 or .625-11 | 1.59 1.72 | 1.00 1.06 | 0.25 0.31 | 0.020 0.045 | |
| 3/4 | 0.75 | 0.75 0.78 | 2.00 2.12 | 1.50 1.62 | 1.44 1.56 | 2.81 | 0.62 0.69 | 5.06 5.50 | 1.62 | 1.12 | 3/4-10 or .750-10 | 1.72 1.91 | 1.12 1.25 | 0.25 0.31 | 0.020 0.045 | |
| 7/8 | 0.88 | 0.88 0.91 | 2.25 2.38 | 1.75 1.88 | 1.56 1.69 | 3.19 | 0.75 0.81 | 5.75 6.19 | 1.81 | 1.31 | 7/8-9 or .875-9 | 2.03 2.22 | 1.31 1.44 | 0.31 0.38 | 0.040 0.065 | |
| 1 | 1.00 | 1.00 1.06 | 2.50 2.62 | 1.94 2.06 | 1.69 1.81 | 3.56 | 0.88 0.94 | 6.44 6.88 | 2.06 | 1.50 | 1-8 or 1.000-8 | 2.22 2.41 | 1.50 1.62 | 0.38 0.44 | 0.060 0.095 | |
| 1-1/8 | 1.12 | 1.12 1.19 | 2.75 2.88 | 2.13 2.26 | 1.94 2.06 | 4.06 | 1.00 1.06 | 7.31 7.75 | 2.31 | 1.69 | 1-1/8-7 or 1.125-7 | 2.59 2.78 | 1.69 1.81 | 0.44 0.50 | 0.060 0.095 | |
| 1-1/4 | 1.25 | 1.25 1.34 | 3.00 3.12 | 2.38 2.50 | 2.12 2.25 | 4.44 | 1.09 1.16 | 8.00 8.44 | 2.50 | 1.88 | 1-1/4-7 or 1.250-7 | 2.84 3.03 | 1.88 2.00 | 0.50 0.56 | 0.060 0.095 | |
| 1-1/2 | 1.50 | 1.50 1.59 | 3.50 3.62 | 2.75 2.87 | 2.44 2.56 | 5.19 | 1.31 1.38 | 9.22 9.72 | 3.00 | 2.25 | 1-1/2-6 or 1.500-6 | 3.19 3.44 | 2.12 2.25 | 0.50 0.62 | 0.060 0.095 | |
| 1-3/4 | 1.75 | 1.75 1.84 | 3.75 3.88 | 3.18 3.31 | 2.75 3.00 | 6.00 | 1.50 1.62 | 10.50 11.12 | 3.19 | 2.62 | 1-3/4-5 or 1.750-5 | 3.88 4.12 | 2.50 2.62 | 0.50 0.62 | 0.060 0.095 | |
| 2 | 2.00 | 2.00 2.09 | 4.00 4.12 | 3.62 3.79 | 3.06 3.44 | 6.88 | 1.75 1.88 | 11.53 12.22 | 3.38 | 3.00 | 2-4-1/2 or 2.000-4.50 | 4.25 4.50 | 2.88 3.00 | 0.62 0.75 | 0.060 0.095 | |

| | |
|-------------------------------------|--|
| Description | A forged bolt without welds, with a head in the form of an open or closed anchor ring. Bolt shall have a unified thread pitch. Shoulder pattern eyebolts shall have an unthreaded shoulder below the anchor ring which is greater in diameter than the threaded shank. |
| Applications/ Advantages | Used in applications where a forged shank is required, ie. in a rigging when mounted atop a uniformly distributed weight. |
| Material | Eyebolts shall be made from a carbon steel which conforms to the following chemical composition requirements-- <i>Carbon</i> : 0.48% maximum; <i>Manganese</i> : 1.00% maximum; <i>Phosphorus</i> : 0.040% maximum; <i>Sulfur</i> : 0.050 maximum; <i>Silicon</i> : 0.15-0.35% |
| Heat Treatment | Bolts shall be liquid quenched and tempered before machining the threaded end. |
| Grain Size | ASTM No. 5 or finer |
| Tensile Strength | 65,000 - 85,000 psi. |
| Yield Strength | 30,000 psi. minimum |
| Elongation in 2 in. | 30% minimum |
| Reduction of Area | 60% minimum |
| Plating | See Appendix-A for plating information. www.mutualscrew.com |