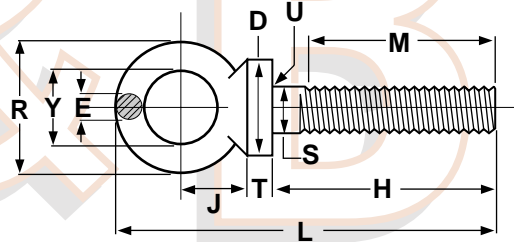


PLAIN PATTERN



SHOULDER PATTERN

FORGED EYEBOLTS, PLAIN PATTERN

ANSI/ASME B18.15

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

FORGED EYEBOLTS, SHOULDER PATTERN													ANSI/ASME B18.15			
Nominal Size		S Shank Diam.	H		Y Eye ID	R Nomi- nal Eye OD	E Eye Sect. Diam.	L Overall Length	M		Thread Size UNC-2A	J Center line Eye To Shoulder	D Shoulder Diam.	T Shoulder Height	U Radius Under Shoulder	
			Shank Length						Min Length Full Thread							
			Long Length	Short Length					Long Length	Short Length						
1/4	0.25	0.25	1.00	1.00	0.69	1.19	0.19	2.22	0.75	0.75	1/4-20 or .250-20	0.69	0.50	0.12	0.015	
		0.28	1.06	1.06	0.81	0.25	2.53	0.81			0.56	0.19	0.025			
5/16	0.31	0.31	1.12	1.06	0.81	1.44	0.25	2.66	0.81	0.75	5/16-18 or .3125-18	0.88	0.56	0.12	0.015	
		0.34	1.19	1.13	0.94	0.31	2.97	1.00			0.62	0.19	0.025			
3/8	0.38	0.38	1.25	1.12	0.94	1.69	0.31	3.09	0.88	0.75	3/8-16 or .375-16	1.06	0.62	0.12	0.015	
		0.41	1.38	1.25	1.06	0.38	3.47	1.19			0.69	0.19	0.025			
7/16	0.44	0.44	1.38	1.13	1.00	1.81	0.34	3.41	1.00	0.75	7/16-14 or .4375-14	1.19	0.75	0.19	0.015	
		0.47	1.50	1.25	1.12	0.41	3.78	1.31			0.81	0.25	0.025			
1/2	0.50	0.50	1.50	1.13	1.12	2.12	0.44	3.81	1.12	0.75	1/2-13 or .500-13	1.31	0.88	0.19	0.015	
		0.53	1.62	1.25	1.25	0.50	4.19	1.44			0.94	0.25	0.025			
9/16	0.56	0.56	1.62	1.21	1.19	2.25	0.47	4.19	1.25	0.84	9/16-12 or .5625-12	1.50	0.94	0.22	0.020	
		0.59	1.75	1.34	1.31	0.53	4.56	1.62			1.00	0.28	0.045			
5/8	0.62	0.62	1.75	1.31	1.31	2.56	0.56	4.56	1.38	0.94	5/8-11 or .625-11	1.59	1.00	0.25	0.020	
		0.66	1.88	1.44	1.44	0.62	4.94	1.72			1.06	0.31	0.045			
3/4	0.75	0.75	2.00	1.50	1.44	2.81	0.62	5.06	1.62	1.12	3/4-10 or .750-10	1.72	1.12	0.25	0.020	
		0.78	2.12	1.62	1.56	0.69	5.50	1.91			1.25	0.31	0.045			
7/8	0.88	0.88	2.25	1.75	1.56	3.19	0.75	5.75	1.81	1.31	7/8-9 or .875-9	2.03	1.31	0.31	0.040	
		0.91	2.38	1.88	1.69	0.81	6.19	2.22			1.44	0.38	0.065			
1	1.00	1.00	2.50	1.94	1.69	3.56	0.88	6.44	2.06	1.50	1-8 or 1.000-8	2.22	1.50	0.38	0.060	
		1.06	2.62	2.06	1.81	0.94	6.88	2.41			1.62	0.44	0.095			
1-1/8	1.12	1.12	2.75	2.13	1.94	4.06	1.00	7.31	2.31	1.69	1-1/8-7 or 1.125-7	2.59	1.69	0.44	0.060	
		1.19	2.88	2.26	2.06	1.06	7.75	2.78			1.81	0.50	0.095			
1-1/4	1.25	1.25	3.00	2.38	2.12	4.44	1.09	8.00	2.50	1.88	1-1/4-7 or 1.250-7	2.84	1.88	0.50	0.060	
		1.34	3.12	2.50	2.25	1.16	8.44	3.03			2.00	0.56	0.095			
1-1/2	1.50	1.50	3.50	2.75	2.44	5.19	1.31	9.22	3.00	2.25	1-1/2-6 or 1.500-6	3.19	2.12	0.50	0.060	
		1.59	3.62	2.87	2.56	1.38	9.72	3.44			2.25	0.62	0.095			
1-3/4	1.75	1.75	3.75	3.18	2.75	6.00	1.50	10.50	3.19	2.62	1-3/4-5 or 1.750-5	3.88	2.50	0.50	0.060	
		1.84	3.88	3.31	3.00	1.62	11.12	4.12			2.62	0.62	0.095			
2	2.00	2.00	4.00	3.62	3.06	6.88	1.75	11.53	3.38	3.00	2-4-1/2 or 2.000-4.50	4.25	2.88	0.62	0.060	
		2.09	4.12	3.79	3.44	1.88	12.22	4.50			3.00	0.75	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.