



MACHINERY EYE BOLTS

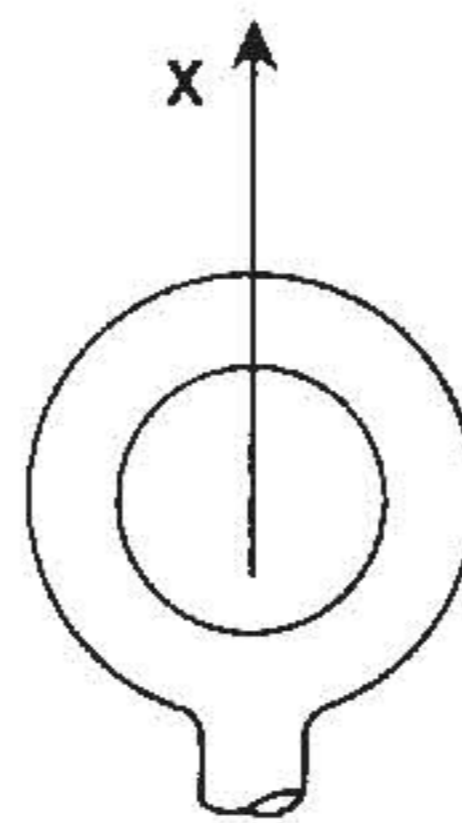
Maximum blank lengths, either pattern indicated in column (1). Vertical loads are based on a safety factor of 5 to 1. Variation in quantity: on special items we reserve the right to a maximum 10% variation for allowances in manufacture.

STANDARD SHANK LENGTHS – PLAIN & SHOULDER PATTERN

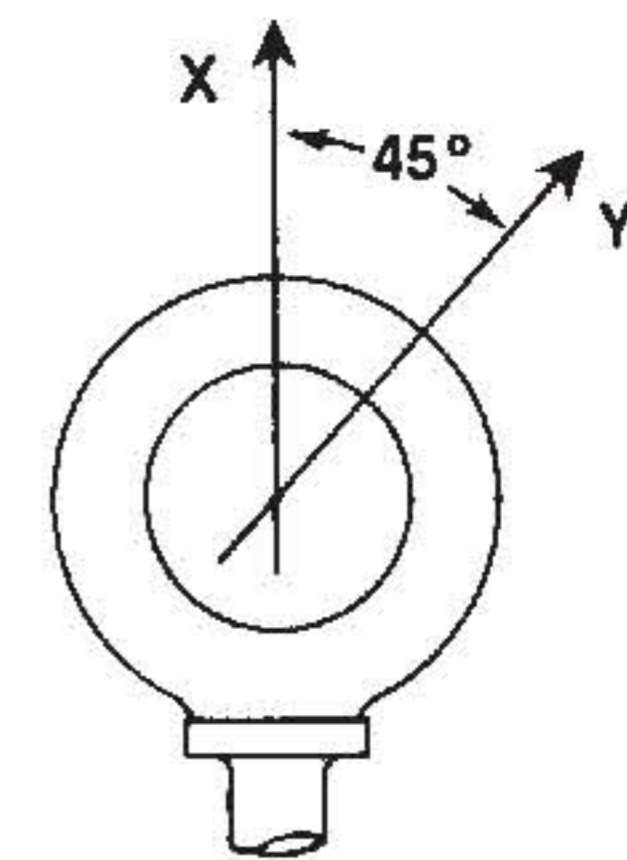
Stock Numbers		Dimensions – Inches						
Plain Pattern	Shoulder Pattern	Shank		Eye		Overall Length Plain	Overall Length Shoulder	Maximum Lengths (1)
		Dia. & Thread	Length	I.D.	O.D.			
1	21	1/4"-20	1"	3/4"	1-1/4"	2-1/4"	2-3/8"	3"
2	22	5/16"-18	1-1/8"	7/8"	1-1/2"	2-5/8"	2-3/4"	4"
3	23	3/8"-16	1-1/4"	1"	1-21/32"	2-29/32"	3-1/4"	4-1/2"
4	24	7/16"-14	1-3/8"	1-3/32"	1-27/32"	3-7/32"	3-5/8"	4-1/2"
5	25	1/2"-13	1-1/2"	1-3/16"	2-1/16"	3-9/16"	4"	4-1/2"
6	26	9/16"-12	1-5/8"	1-9/32"	2-9/32"	3-29/32"	4-1/2"	4-1/2"
7	27	5/8"-11	1-3/4"	1-3/8"	2-1/2"	4-1/4"	4-7/8"	4-1/2"
8	28	3/4"-10	2"	1-1/2"	2-13/16"	4-13/16"	5-1/4"	5"
9	29	7/8"-9	2-1/4"	1-11/16"	3-1/4"	5-1/2"	6"	5"
10	30	1"-8	2-1/2"	1-13/16"	3-9/16"	6-1/16"	7"	5"
11	31	1-1/8"-7	2-3/4"	2"	4"	6-3/4"	7-1/2"	2-3/4"
12	32	1-1/4"-7	3"	2-3/16"	4-7/16"	7-7/16"	8-1/2"	3"
14	34	1-1/2"-6	3-1/2"	2-1/2"	5-3/16"	8-11/16"	9-1/2"	3-1/2"

Working load limits for eye bolts are based on a straight vertical lift in a gradually increasing manner. Angular lifts will significantly lower working load limits (see Shoulder Pattern) and should be avoided whenever possible. If an angular lift is required, a properly seated Shoulder Pattern eye bolt must be used. Loads should always be applied to eye bolts in the plane of the eye, not at an angle to this plane. Angular lifts must never be more than a 45° pull. For angular lifting see page 23.

Diameter and Thread	Working Load Limit	
	Straight Pull (X)	45° Pull (Y) Shoulder Only
1/4"-20	500	125
5/16"-18	900	225
3/8"-16	1400	350
7/16"-14	2000	500
1/2"-13	2600	650
9/16"-12	3200	750
5/8"-11	4000	1000
3/4"-10	6000	1500
7/8"-9	7000	1750
1"-8	9000	2250
1-1/8"-7	12000	2500
1-1/4"-7	15000	3750
1-1/2"-6	21000	4900



Plain Pattern



Shoulder Pattern

ANGULAR LIFTS SHOULD BE AVOIDED WHENEVER POSSIBLE.



MACHINERY EYE BOLTS



Drop forged steel. Heat treated after forging. Self-colored, zinc plated, or hot galvanized. Plain or shoulder type, blank or threaded. Threaded will be supplied unless otherwise specified. See additional specifications and dimensions on page 18.

STANDARD SHANK LENGTHS

PLAIN PATTERN



Available in Zinc Plated and Hot Galvanized.

Some sizes available in Stainless Steel.

Available in Metric

PLAIN PATTERN			Threaded		Blank	
Plain Pattern No.	Bolt Diameter N.C.	Standard Shank Length	Part No.	Weight Per 100	Part No.	Weight Per 100
1	1/4"	1"	11605 3	5	11005 1	5.5
2	5/16"	1-1/8"	11625 1	10.5	11025 9	11.5
3	3/8"	1-1/4"	11645 9	15.5	11045 7	16.5
4	7/16"	1-3/8"	11665 7	20.5	11065 5	22
5	1/2"	1-1/2"	11685 5	33	11085 3	35
6	9/16"	1-5/8"	11705 0	44.5	11105 8	45
7	5/8"	1-3/4"	11725 8	64	11125 6	66
8	3/4"	2"	11748 7	90.5	11148 5	97
9	7/8"	2-1/4"	11768 5	135	11168 3	142
10	1"	2-1/2"	11788 3	190.5	11188 1	199
11	1-1/8"	2-3/4"	11808 8	299.5	11208 6	312
12	1-1/4"	3"	11831 6	399	11231 4	412
14	1-1/2"	3-1/2"	11851 4	662.5	11251 2	691



STANDARD SHANK LENGTHS

SHOULDER PATTERN



SHOULDER PATTERN			Threaded		Blank	
Shoulder Pattern No.	Bolt Diameter N.C.	Standard Shank Length	Part No.	Weight Per 100	Part No.	Weight Per 100
21	1/4"	1"	12805 6	6	12205 4	6
22	5/16"	1-1/8"	12825 4	10	12225 2	10.5
23	3/8"	1-1/4"	12845 2	16	12245 0	17
24	7/16"	1-3/8"	12865 0	26.5	12265 8	28
25	1/2"	1-1/2"	12885 8	38	12285 6	39
26	9/16"	1-5/8"	12905 3	49	12305 1	52.5
27	5/8"	1-3/4"	12925 1	73.5	12325 9	76.5
28	3/4"	2"	12948 0	99.5	12348 8	104
29	7/8"	2-1/4"	12968 8	172.5	12368 6	178
30	1"	2-1/2"	12988 6	235	12388 4	242
31	1-1/8"	2-3/4"	13008 0	342.5	12408 9	347
32	1-1/4"	3"	13031 8	462.5	12431 7	485
34	1-1/2"	3-1/2"	13051 6	752.5	12451 5	780





METRIC MACHINERY EYE BOLTS

Dimensions in Millimeters – Some Sizes Available
in Stainless Steel on a Special Basis.



FORGED • CARBON STEEL • SELF-COLORED • SHOULDER PATTERN

Part No.	Metric Size	Approx. Equivalent in Inches	A Thread Size	B Shank Length, mm	C I.D. Eye, mm	Approx. Wt. Per 100 Pcs. in Lbs.	Working Load Limit in Kgs.	Working Load Limit in Lbs.
13805 5	M6	1/4"	M6 x 1.0	25.4	19	6	210	462
13825 3	M7	5/16"	M7 x 1.0	28.5	22	10	370	814
13845 1	M8	3/8"	M8 x 1.25	31.7	25	16	450	992
13865 9	M10	7/16"	M10 x 1.5	35.0	28	21	740	1,628
13885 7	M12	1/2"	M12 x 1.75	38.0	30	38	1,030	2,266
13905 2	M14	9/16"	M14 x 2.0	44.5	35	73	1,600	3,520
13925 0	M16	5/8"	M16 x 2.0	44.5	35	73	1,600	3,520
13948 9	M18	3/4"	M18 x 2.5	51.0	38	104	2,140	4,708
13968 7	M20	7/8"	M20 x 2.5	57.0	43	161	2,860	6,292
13988 5	M24	1"	M24 x 3.0	63.5	46	231	3,850	8,470
14008 9	M27	1-1/8"	M27 x 3.0	70.0	51	335	5,200	11,440
14031 7	M30	1-1/4"	M30 x 3.5	76.0	55	439	6,400	14,080
14051 5	M36	1-1/2"	M36 x 4.0	89.0	63	731	8,970	19,734

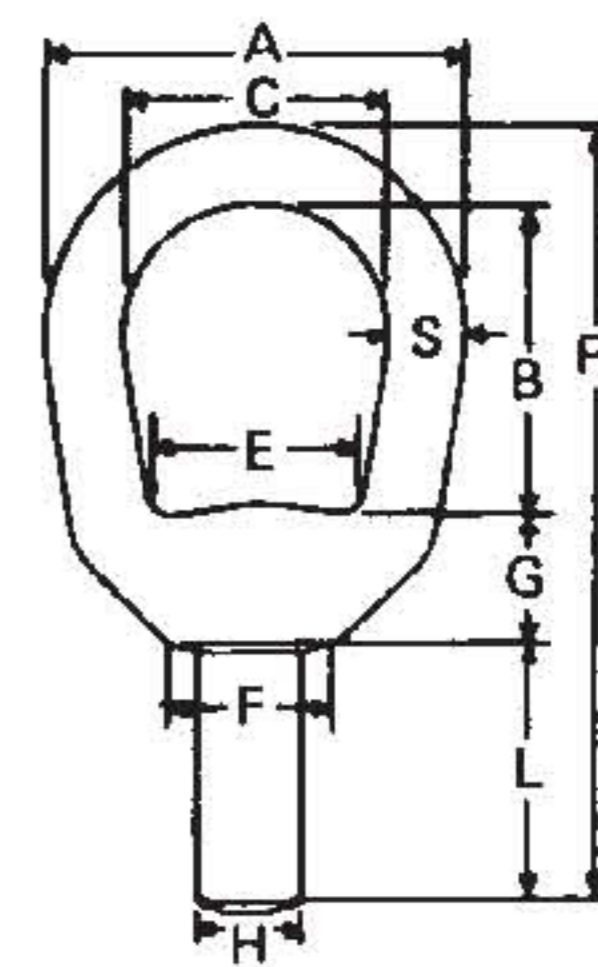
DROP FORGED LIFTING EYES

Drop forged from C-1035 steel, heat treated. Available blank or threaded. Self-colored finish is standard; hot galvanized or other finishes supplied on a special basis. Used in lifting applications where larger eyes are required. When ordering prefix stock number with letter "B" (blank) or "T" (threaded) as required. Loads are based on a safety factor of 5 to 1. Working loading limits for lifting eyes are based on a straight vertical lift in a gradually increasing manner, and should never be used for angular lifts.



LIFTING EYES – SELF-COLORED

Stock Number	Bail Size	Blank Part No.	Threaded Part No.	Threaded Working Load Limit
C-186	1/4"	15005 7	15505 2	860
C-187	5/16"	15010 1	15510 6	1260
C-185	3/8"	15015 6	15515 1	2200
C-181	1/2"	15020 0	15520 5	3600
C-184	5/8"	15025 5	15525 0	5200
C-188	3/4"	15030 9	15530 4	7000



Stock Number	Shank		Dimensions – Inches								Thread Length	Weight Per 100	
	H	L	A	C	B	E	F	G	S	R		Blank	Threaded
C-186	5/16"	1"	1-1/4"	3/4"	1-1/16"	19/32"	1/2"	3/8"	1/4"	2-11/16"	7/8"	12	11
C-187	3/8"	1-1/8"	1-5/8"	1"	1-1/4"	3/4"	9/16"	1/2"	5/16"	3-3/16"	1"	22	22
C-185	1/2"	1-1/4"	2"	1-1/4"	1-1/2"	1"	13/16"	5/8"	3/8"	3-3/4"	1-1/8"	41	38
C-181	5/8"	1-1/2"	2-1/2"	1-1/2"	2"	1-3/16"	1"	11/16"	1/2"	4-11/16"	1-3/8"	81	74
C-184	3/4"	1-7/8"	3"	1-3/4"	2-3/8"	1-3/8"	1-1/8"	7/8"	5/8"	5-3/4"	1-3/4"	139	129
C-188	7/8"	2"	3-1/2"	2"	2-5/8"	1-5/8"	1-5/16"	15/16"	3/4"	6-5/16"	1-7/8"	222	214