



HG-223

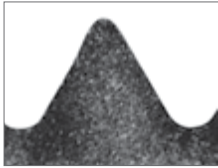
HOOK & HOOK

Meets the performance requirements of Federal Specifications FF-T-791b, Type 1, Form 1, Class 5, and ASTM F-1145, except for those provisions required of the contractor.

HG-226

EYE & EYE

Meets the performance requirements of Federal Specifications FF-T-791b, Type 1, Form 1, Class 4, and ASTM F-1145, except for those provisions required of the contractor.



Modified Thread:
Note stress relieving radii in this unretouched photo enlargement of the supabuckle.

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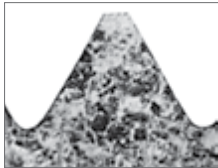
JAW & EYE

Meets the performance requirements of Federal Specifications FF-T-791b, Type 1, Form 1, Class 8, and ASTM F-1145, except for those provisions required of the contractor.

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JAW & JAW

Meets the performance requirements of Federal Specifications FF-T-791b, Type 1, Form 1, Class 7, and ASTM F-1145, except for those provisions required of the contractor.



Standard Thread:
Note stress building sharp “V” in this untouched photo enlargement.

Turnbuckle Information

- Turnbuckle assembly combinations include: eye & eye, hook & hook, jaw & jaw, and jaw & eye.
- End fittings are Quenched & Tempered or normalized, bodies heat treated by normalizing.
- Crosby’s Quenched & Tempered end fittings and normalized bodies have enhanced impact properties for greater toughness at all temperatures.
- Hot-dip galvanized.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Modified UNJ thread on end fittings for improved fatigue properties. Body has UNC threads.
- Turnbuckle eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckle sizes 6.35mm through 63.5mm, a shackle one size smaller can be reeved through eye.
- Forged jaw ends are fitted with bolts and nuts on size 6.35mm - 15.9mm, and pins and cotter on sizes 19.1mm through 70mm.
- Can be used in general service conditions down to temperatures of -40° F (-40° C) and up to 400° F (204° C). See page 3 for more details.
- **TURNBUCKLES RECOMMENDED FOR STRAIGHT OR IN-LINE PULL ONLY.**
- Lock nuts available for all sizes.
- Typical hardness levels, tensile strengths and ductility properties are available for all sizes.
- Meets or exceeds all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these turnbuckles meet other critical performance requirements, including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.

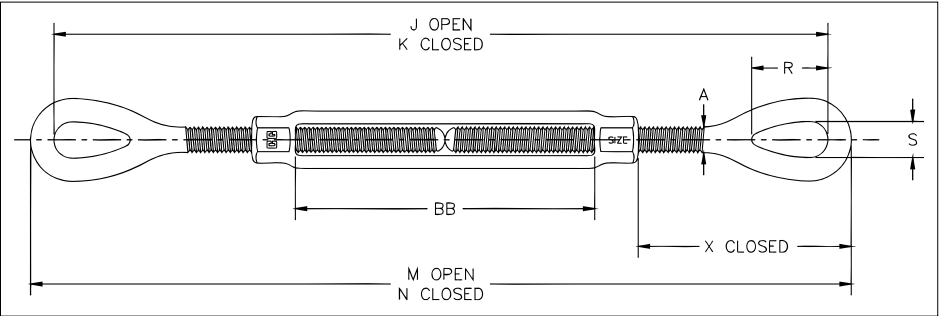


TURNBUCKLES



APPLICATION AND WARNING INFORMATION
SECTION 17

- End fittings are Quenched & Tempered or normalized, bodies heat-treated by normalizing.
- Hot-dip galvanized steel.
- Turnbuckle eyes are forged elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckle sizes 6 mm through 64 mm, a shackle one size smaller can be reeved through eye.
- Modified UNJ thread on end fittings for improved fatigue properties. Body has UNC threads.
- **TURNBUCKLES RECOMMENDED FOR STRAIGHT OR IN-LINE PULL ONLY.**
- Lock nuts available for all sizes.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these turnbuckles meet other critical performance requirements including fatigue life, impact properties, and material traceability, not addressed by ASME B30.26.
- Meets the performance requirements of Federal Specifications FF-T-791b, Type 1 Form 1 - CLASS 4, and ASTM F-1145, except for those provisions required of the contractor. For additional information, see the warnings and applications section.



HG-226 Eye & Eye

Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)								
				A	J Open	K Closed	M Open	N Closed	R	S	X Closed	BB
* 5/16 x 4-1/2	1031270	.36	.22	7.94	354	239	368	253	24.1	11.2	55.8	116
* 3/8 x 6	1031298	.54	.34	9.53	446	294	463	311	28.7	13.5	62.9	155
1/2 x 6	1031314	1.00	.78	12.7	506	354	529	376	35.8	18.0	90.4	153
1/2 x 12	1031350	1.00	1.19	12.7	819	514	841	536	35.8	18.0	89.9	314
5/8 x 6	1031378	1.59	1.25	15.9	552	399	577	425	45.7	22.4	110	153
5/8 x 12	1031412	1.59	1.87	15.9	865	560	891	586	45.7	22.4	110	315
3/4 x 6	1031430	2.36	1.91	19.1	590	438	622	470	53.1	25.4	130	156
3/4 x 12	1031476	2.36	2.78	19.1	905	600	937	632	53.1	25.4	129	320
3/4 x 18	1031494	2.36	3.55	19.1	1210	753	1242	785	53.1	25.4	130	471
7/8 x 12	1031519	3.27	4.01	22.2	932	627	970	665	60.5	31.8	147	309
7/8 x 18	1031537	3.27	5.22	22.2	1249	792	1287	830	60.5	31.8	147	473
1 x 6	1031555	4.54	4.36	25.4	666	514	711	559	76.2	36.3	165	157
1 x 12	1031573	4.54	5.88	25.4	971	666	1016	711	76.2	36.3	165	309
1 x 18	1031591	4.54	7.40	25.4	1276	819	1321	864	76.2	36.3	165	462
1 x 24	1031617	4.54	9.14	25.4	1596	987	1641	1031	76.2	36.3	164	631
1-1/4 x 12	1031635	6.89	9.01	31.8	1070	766	1127	822	91.2	46.2	216	306
1-1/4 x 18	1031653	6.89	10.8	31.8	1375	918	1432	975	91.2	46.2	216	459
1-1/4 x 24	1031671	6.89	12.6	31.8	1694	1085	1751	1141	91.2	46.2	216	625
1-1/2 x 12	1031699	9.71	13.0	38.1	1124	819	1187	882	104	53.8	240	313
1-1/2 x 18	1031715	9.71	15.4	38.1	1428	971	1492	1035	104	53.8	240	465
1-1/2 x 24	1031733	9.71	17.9	38.1	1749	1139	1813	1203	104	53.8	240	633
1-3/4 x 18	1031779	12.7	23.0	44.5	1457	1000	1534	1076	118	60.5	253	467
1-3/4 x 24	1031797	12.7	26.4	44.5	1762	1153	1838	1229	118	60.5	253	619
2 x 24	1031813	16.8	37.9	50.8	1922	1313	2011	1402	148	68.3	331	622
2-1/2 x 24	1031831	27.2	67.4	63.5	2011	1402	2113	1503	165	79.2	350	625
2-3/4 x 24	1031859	34.0	79.1	69.9	2066	1456	2180	1571	178	82.6	383	626

5:1 Design Factor. Proof Load is 2.5 times the Working Load Limit.*Mechanical galvanized