

LIMITED WARRANTY & LIMITATIONS OF LIABILITY

“Crosby” as used in these terms related to Crosby’s Limited Warranty and Limitation of Liability means: the applicable product- or service-selling entity listed in the Order Acknowledgment issued to the Purchaser. For example, the product- or service-selling entity may be THE CROSBY GROUP LLC or a different product- or service-selling entity that is an affiliate of THE CROSBY GROUP LLC, including, without limitation, Gunnebo Industries; Speedbinders; The Crosby Group UK Limited; and Straightpoint UK Ltd. If there is any question as to the identity of “Crosby” or no Order Acknowledgment is issued, then THE CROSBY GROUP LLC (upon request) will specify the identity of “Crosby” as it relates to these terms.

Purchaser and Crosby expressly agree that Crosby’s warranty with respect to sale of its products is LIMITED solely to Crosby’s choice of repair, replacement or refund of the purchase price of any product or part thereof determined by Crosby to be defective within the first 12 months following the transfer of title of the product from Crosby to the purchaser. Installation or operation of the product in any manner other than as recommended by Crosby, shall void the warranty. No warranty is made for components and accessories made by others when such items are warranted by their respective manufacturer. Purchaser and Crosby expressly agree that upon termination of the aforementioned 12-month period, the purchased product carries no warranty whatsoever. Purchaser and Crosby expressly agree that the remedies provided in this section are the purchaser’s exclusive remedies in connection with the purchase or use of the product.

Neither Purchaser, user nor any third party shall be entitled to recover from Crosby (1) any consequential, incidental, punitive, special or indirect damages of any nature, including but not limited to, the cost of any labor expended by others in connection with the goods sold by reason of any alleged non-conformity or breach of warranty on the part of Crosby or costs of material on account thereof, (2) damages of any kind for loss of profits, revenue, data or data use, or (3) damages of any kind for business interruption whether determinable or speculative, loss of business information, goodwill, reputation or privacy, (4), for costs of procuring substitute goods, software or services, incurred by Purchaser, user or any third party, however, arising, whether in an action in contract, tort, under statute or otherwise, and whether or not the possibility or likelihood of such damages were reasonably foreseeable.

ALL OTHER WARRANTIES, INCLUDING EXPRESS WARRANTIES AND THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. ADDITIONALLY, CROSBY HEREBY DISCLAIMS ANY OF ITS OBLIGATIONS OR LIABILITIES ARISING FROM STATUTE, WARRANTY, CONTRACT, TORT OR NEGLIGENCE.

Complete Agreement: This Warranty between purchaser and Crosby is complete. All prior or contemporaneous discussions, representations and/or understandings are merged into this Warranty. All prior or contemporaneous agreements between the parties are superseded by this Warranty.

Choice of Law and Venue: If the applicable Crosby entity’s principal place of business is not in Europe, then Purchaser and Crosby expressly agree that any dispute arising out of these terms and all disputes concerning or relating to the purchase, use or operation of the goods shall be governed by the laws of the State of Oklahoma, USA, excluding any conflicts-of-law rules, and any lawsuit shall be filed in Tulsa, Oklahoma, USA. If the applicable Crosby entity’s principal place of business is in Europe, then Purchaser and Crosby expressly agree that any dispute arising out of these terms and all disputes concerning or relating to the purchase, use or operation of the goods shall be governed by the laws of England, excluding any conflicts-of-law rules, and any lawsuit shall be filed in London, England. If there is any question as to the location of Crosby’s principal place of business, then (upon request) Crosby shall provide specify the location of Crosby’s principal place of business.

SHACKLES

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COMPLETE WIND PROJECTS ON TIME & WITHIN BUDGET

Partner with the leading rigging provider with the most comprehensive product portfolio, training opportunities & local support

Keep your project on track through improved job site efficiency and safety with lifting and rigging hardware from The Crosby Group.

- Get the product you need, when you need it through a global network of 3,000+ authorized distributors with stock ready to ship.
- Ensure a well-trained workforce with access to extensive training curriculum and industry experience.
- Reduce time between lifts with quick-release shackle bolt securement and an adjustable, lightweight chain sling system.
- Prevent incidents through the use of top-quality hardware from a highly vertically integrated manufacturer.
- Create smarter lift plans with center of gravity calculations using wireless load cells.
- Obtain product authenticity certificates online at any time.



VISIT OUR NEW WIND WEBSITE

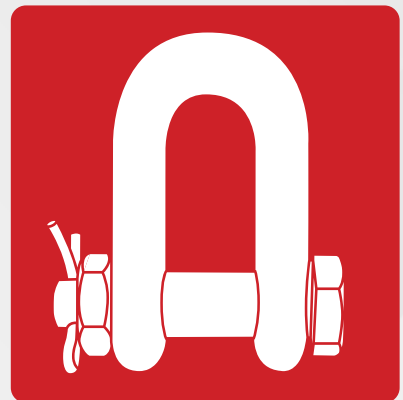
- On-demand wind webinars
- Wind training course details
- Product information

thecrosbygroup.com/wind

theCrosbygroup

SHACKLES

Forged, heat treated, and tested for unmatched strength and performance.



CROSBY VALUE ADDED

- **Charpy impact properties:** Crosby shackles are quenched and tempered and have enhanced impact properties for greater toughness at all temperatures. If requested at the time of order, Crosby can provide Charpy impact properties.
- **Fatigue properties:** Fatigue properties are available for 1/3 to 55 metric ton shackles. These Crosby shackles are fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- **Ductility properties:** Typical ductility properties are available for all sizes upon special request.
- **Hardness levels and material tensile strengths:** Typical values are available for all sizes of shackles, and actual values can be furnished if requested at the time of order.
- **Proof Testing:** If requested at the time of order, shackles can be proof tested with certificates.
- **Mag Certification:** If requested at the time of order, shackles can be magnetic particle inspected with certificates.
- **Certification:** Certification to world class standards is available upon special request at the time of order; American Bureau of Shipping, Lloyds Register of Shipping, Det Norske Veritas, American Petroleum Institute, RINA, Nuclear Regulatory Commission, and several other worldwide standards.
- **Applications:** **Round pin shackles** can be used in tie down, towing, suspension or lifting applications where the load is strictly applied in-line. **Screw pin shackles** can be used in any application where a round pin shackle is used. In addition, screw pin shackles can be used for applications involving side-loading circumstances. Reduced working load limits are required for side-loading applications. **Bolt type shackles** can be used in any application where round pin or screw pin shackles are used. In addition, they are recommended for permanent or long-term installations and where the load may slide on the shackle pin causing the pin to rotate.
- **Material analysis:** Crosby can provide certified material (mill) analysis for each production lot, traceable by the Product Identification Code (PIC). Crosby, through its own laboratory, verifies the analysis of each heat of steel. Crosby purchases only **special bar** forging quality steel with specific cleanliness requirements and guaranteed hardenability.
- **Field inspection:** Written instructions for visual, magnaflux, and dye penetrant inspection of shackles are available from Crosby. In addition, acceptance criteria and repair procedures for shackles are available.
- **QUIC-CHECK®:** Shackles incorporate two marking indicators forged into the shackle bow at 45° angles from vertical. These are utilized to quickly check the approximate angle of a two-legged hitch or check the angle of a single leg hitch. If the load is off vertical or side loaded a reduction in the Working Load Limit of the shackle is required.

G-213

Round pin anchor shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVA, Grade A, Class 1, except for those provisions required of the contractor.



G-209

Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVA, Grade A, Class 2, except for those provisions required of the contractor.



G-2130

Bolt type anchor shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVA, Grade A, Class 3, except for those provisions required of the contractor.



G-210

Screw pin chain shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVB, Grade A, Class 2, except for those provisions required of the contractor.



G-215

Round pin chain shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVB, Grade A, Class 1, except for those provisions required of the contractor.



G-2150

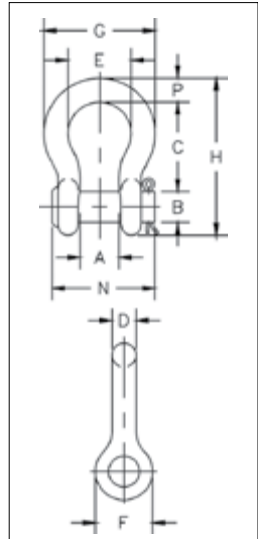
Bolt type chain shackles meet the performance requirements of Federal Specification RR-C-271G, Type IVB, Grade A, Class 3, except for those provisions required of the contractor.



G-213/S-213



- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification. Charges for proof testing and certification available when requested at the time of order.
- Shackles are Quenched & Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- G-213 Round pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade A, Class 1, except for those provisions required of the contractor.
- **DO NOT SIDE LOAD ROUND PIN SHACKLES.**
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-213 / S-213 Round Pin Anchor Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
		G-213	S-213		A	B	C	D	E	F	G	H	N	P	C	A
1/4	0.5	1018017	1018026	.06	11.9	7.85	28.7	6.35	19.8	15.5	32.5	46.7	34.0	6.35	1.50	1.50
5/16	0.75	1018035	1018044	.08	13.5	9.65	31.0	7.85	21.3	19.1	37.3	53.0	40.4	7.85	1.50	1.50
3/8	1	1018053	1018062	.13	16.8	11.2	36.6	9.65	26.2	23.1	45.2	63.0	47.2	9.65	3.30	1.50
7/16	1.5	1018071	1018080	.17	19.1	12.7	42.9	11.2	29.5	26.9	51.5	74.0	54.0	11.2	3.30	1.50
1/2	2	1018099	1018106	.32	20.6	16.0	47.8	12.7	33.3	30.2	58.5	83.5	60.5	12.7	3.30	1.50
5/8	3.25	1018115	1018124	.68	26.9	19.1	60.5	16.0	42.9	38.1	74.5	106	74.0	17.5	3.30	1.50
3/4	4.75	1018133	1018142	1.05	31.8	22.4	71.5	19.1	51.0	46.0	89.0	126	87.0	20.6	6.35	1.50
7/8	6.5	1018151	1018160	1.58	36.6	25.4	84.0	22.4	58.0	53.0	102	148	96.5	24.6	6.35	1.50
1	8.5	1018179	1018188	2.27	42.9	28.7	95.5	25.4	68.5	60.5	119	167	115	26.9	6.35	1.50
1-1/8	9.5	1018197	1018204	3.16	46.0	31.8	108	28.7	74.0	68.5	131	190	130	31.8	6.35	1.50
1-1/4	12	1018213	1018222	4.42	51.5	35.1	119	32.8	82.5	76.0	146	210	140	35.1	6.35	1.50
1-3/8	13.5	1018231	1018240	6.01	57.0	38.1	133	36.1	92.0	84.0	162	233	156	38.1	6.35	3.30
1-1/2	17	1018259	1018268	7.82	60.5	41.4	146	39.1	98.5	92.0	175	254	165	41.1	6.35	3.30
1-3/4	25	1018277	1018286	13.4	73.0	51.0	178	46.7	127	106	225	313	197	57.0	6.35	3.30
2	35	1018295	1018302	20.8	82.5	57.0	197	53.0	146	122	253	348	222	61.0	6.35	3.30

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.

Load Rated

Fatigue Rated

QUIC-CHECK®

QT &

MAX TOUGH®

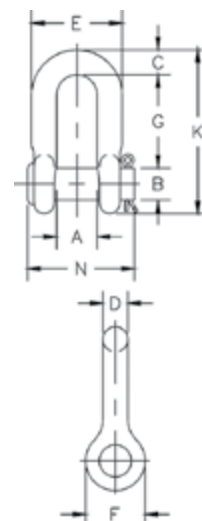
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SECTION 17

G-215/S-215



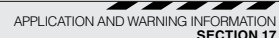
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification. Charges for proof testing and certification available when requested at the time of order.
- Shackles are Quenched and Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- G-215 Round pin chain shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVB, Grade A, Class 1, except for those provisions required of the contractor.
- DO NOT SIDE LOAD ROUND PIN SHACKLES.
- DO NOT SIDE LOAD ROUND PIN SHACKLES.



G-215 / S-215 Round Pin Chain Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
		G-215	S-215		A	B	C	D	E	F	G	K	N	G	A	
1/4	0.5	1018810	1018829	.05	11.9	7.85	6.35	6.35	24.6	15.5	22.4	40.4	34.0	1.50	1.50	
5/16	0.75	1018838	1018847	.08	13.5	9.65	7.85	7.85	29.5	19.1	26.2	48.5	40.4	1.50	1.50	
3/8	1	1018856	1018865	.11	16.8	11.2	9.65	9.65	35.8	23.1	31.8	58.5	47.2	3.30	1.50	
7/16	1.5	1018874	1018883	.18	19.1	12.7	11.2	11.2	41.4	26.9	36.6	67.5	54.0	3.30	1.50	
1/2	2	1018892	1018909	.23	20.6	16.0	12.7	12.7	46.0	30.2	41.4	77.0	60.5	3.30	1.50	
5/8	3.25	1018918	1018927	.55	26.9	19.1	15.7	16.0	58.5	38.1	51.0	95.5	74.0	3.30	1.50	
3/4	4.75	1018936	1018945	.91	31.8	22.4	20.6	19.1	70.0	46.0	60.5	115	87.0	6.35	1.50	
7/8	6.5	1018954	1018963	1.49	36.6	25.4	24.6	22.4	81.0	53.0	71.5	135	96.5	6.35	1.50	
1	8.5	1018972	1018981	2.15	42.9	28.7	25.4	25.4	93.5	60.5	81.0	151	115	6.35	1.50	
1-1/8	9.5	1018990	1019007	2.86	46.0	31.8	31.8	28.7	103	68.5	91.0	172	130	6.35	1.50	
1-1/4	12	1019016	1019025	4.08	51.5	35.1	35.1	31.8	115	76.0	100	191	140	6.35	3.30	
1-3/8	13.5	1019034	1019043	5.44	57.0	38.1	38.1	35.1	127	84.0	111	210	156	6.35	3.30	
1-1/2	17	1019052	1019061	7.33	60.5	41.4	41.1	38.1	137	92.0	122	230	165	6.35	3.30	
1-3/4	25	1019070	1019089	13.6	73.0	51.0	54.0	44.5	162	106	146	279	197	6.35	3.30	
2	35	1019098	1019105	19.6	82.5	57.0	51.0	53.3	184	122	172	312	222	6.35	3.30	

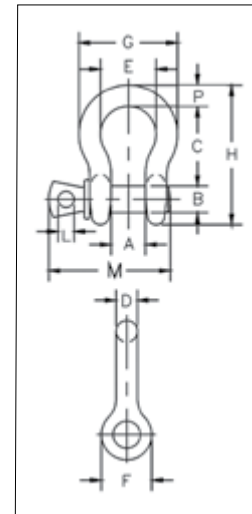
6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.



G-209/S-209



- Meets performance requirements of Grade 6 shackles.
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit and Grade 6 permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certifications. Proof testing and certification available when requested at the time of order, charges will apply.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- All 209 and 210 shackles can meet charpy requirements of 42 Joules (31 ft-lb) avg. at -20° C (-4° F) upon special request.
- Meets or exceeds all requirements of ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and ABS Guide for Certification of Lifting Appliances available. Certificates available when requested at time of order and may include additional charges.
- G-209 Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade A, Class 2, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-209 / S-209 Screw Pin Anchor Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)													Tolerance (+ / - mm)	
		G-209	S-209		A	B	C	D	E	F	G	H	L	M	P	C	A		
3/16	0.33	1018357	—	.03	9.7	6.4	22.4	4.8	15.2	14.2	24.9	37.3	4.1	29.0	4.8	1.50	1.50		
1/4	0.5	1018375	1018384	.05	11.9	7.9	28.7	6.4	19.8	15.7	32.5	46.7	4.8	36.3	6.4	1.50	1.50		
5/16	0.75	1018393	1018400	.09	13.5	9.7	30.7	7.9	21.3	19.1	37.1	53.1	5.6	43.4	7.9	3.30	1.50		
3/8	1	1018419	1018428	.14	16.8	11.2	36.8	9.7	26.2	23.4	45.5	63.5	6.4	52.3	9.7	3.30	1.50		
7/16	1.5	1018437	1018446	.17	19.1	12.7	42.9	11.2	29.5	26.9	51.8	73.9	7.9	60.2	11.2	3.30	1.50		
1/2	2	1018455	1018464	.33	20.6	15.7	47.8	12.7	33.3	30.0	58.7	83.3	9.7	68.3	12.7	3.30	1.50		
5/8	3.25	1018473	1018482	.62	26.9	19.1	60.5	15.7	42.9	38.1	74.4	106	11.2	84.8	17.5	6.35	1.50		
3/4	4.75	1018491	1018507	1.07	31.8	22.4	71.4	19.1	50.8	46.0	88.9	126	12.7	101	20.6	6.35	1.50		
7/8	6.5	1018516	1018525	1.64	36.6	25.4	84.1	22.4	57.9	53.3	103	148	12.7	114	24.6	6.35	1.50		
1	8.5	1018534	1018543	2.28	42.9	28.4	95.5	25.4	68.3	60.5	119	167	14.2	130	26.9	6.35	1.50		
1-1/8	9.5	1018552	1018561	3.36	46.0	31.8	108	29.5	73.9	68.1	131	190	16.0	152	31.8	6.35	1.50		
1-1/4	12	1018570	1018589	4.31	51.6	35.1	119	32.8	82.8	76.2	146	210	17.5	165	35.1	6.35	1.50		
1-3/8	13.5	1018598	1018605	6.14	57.2	38.9	133	36.1	91.9	84.1	162	233	19.1	176	38.1	6.35	3.30		
1-1/2	17	1018614	1018623	7.80	60.5	41.4	146	38.9	98.6	91.9	176	254	20.6	189	41.1	6.35	3.30		
1-3/4	25	1018632	1018641	12.6	73.2	50.8	178	46.7	127	106	224	313	25.4	233	57.2	6.35	3.30		
2	35	1018650	1018669	20.4	82.6	57.2	197	52.8	146	122	258	347	28.7	263	61.0	6.35	3.30		
2-1/2	55	1018678	1018687	38.9	105	69.9	267	69.1	184	148	324	455	35.1	335	79.5	6.35	6.35		

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.

Load Rated

Fatigue Rated

TA
TYPE APPROVED

QUICK-CHECK®

QT
QUENCHED & TEMPERED

MAXTOUGH®

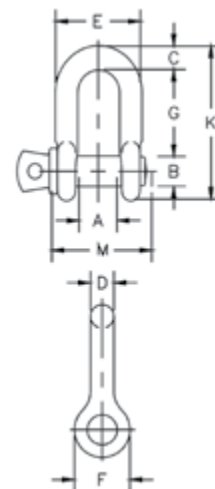
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G-210 / S-210



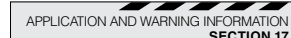
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit and Grade 6 permanently shown on every shackle.
- Hot-dip galvanized (G) or self colored (S).
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certifications. Proof testing and certification available when requested at the time of order, charges will apply.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- All 209 and 210 shackles can meet charpy requirements of 42 Joules (31 ft-lb) avg. at -20° C (-4° F) upon special request.
- Meets or exceeds all requirements of ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and ABS Guide for Certification of Lifting Appliances available. Certificates available when requested at time of order and may include additional charges.
- G-210 Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVB, Grade A, Class 2, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-210 / S-210 Screw Pin Chain Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.		Weight Each (kg)	Dimensions (mm)											Tolerance (+ / - mm)	
		G-210	S-210		A	B	C	D	E	F	G	K	L	M	G	A	
1/4	0.5	1019150	1019169	.05	11.9	7.85	6.35	6.35	24.6	15.5	22.4	40.4	4.85	35.1	1.50	1.50	
5/16	0.75	1019178	1019187	.08	13.5	9.65	7.85	7.85	29.5	19.1	26.2	48.5	5.60	42.2	1.50	1.50	
3/8	1	1019196	1019203	.13	16.8	11.2	9.65	9.65	35.8	23.1	31.8	58.5	6.35	51.5	3.30	1.50	
7/16	1.5	1019212	1019221	.20	19.1	12.7	11.2	11.2	41.4	26.9	36.6	67.5	7.85	60.5	3.30	1.50	
1/2	2	1019230	1019249	.27	20.6	16.0	12.7	12.7	46.0	30.2	41.4	77.0	9.65	68.5	3.30	1.50	
5/8	3.25	1019258	1019267	.57	26.9	19.1	15.7	16.0	58.5	38.1	51.0	95.5	11.2	85.0	3.30	1.50	
3/4	4.75	1019276	1019285	1.20	31.8	22.4	20.6	19.1	70.0	46.0	60.5	115	12.7	101	6.35	1.50	
7/8	6.5	1019294	1019301	1.43	36.6	25.4	24.6	22.4	81.0	53.0	71.5	135	12.7	114	6.35	1.50	
1	8.5	1019310	1019329	2.15	42.9	28.7	25.4	25.4	93.5	60.5	81.0	151	14.2	129	6.35	1.50	
1-1/8	9.5	1019338	1019347	3.06	46.0	31.8	31.8	28.7	103	68.5	91.0	172	16.0	142	6.35	1.50	
1-1/4	12	1019356	1019365	4.11	51.5	35.1	35.1	31.8	115	76.0	100	191	17.5	156	6.35	3.30	
1-3/8	13.5	1019374	1019383	5.28	57.0	38.1	38.1	35.1	127	84.0	111	210	19.1	174	6.35	3.30	
1-1/2	17	1019392	1019409	7.23	60.5	41.4	41.1	38.1	137	92.0	122	230	20.6	187	6.35	3.30	
1-3/4	25	1019418	1019427	12.1	73.0	51.0	54.0	44.5	162	106	146	279	25.4	231	6.35	3.30	
2	35	1019436	1019445	19.2	82.5	57.0	60.0	51.0	184	122	172	312	31.0	263	6.35	3.30	
2-1/2	55	1019454	1019463	32.5	105	70.0	66.5	66.5	238	145	203	377	35.1	330	6.35	6.35	

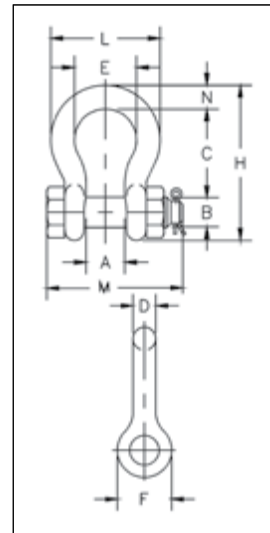
6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.



G-2130 / S-2130



- Working Load Limit and Grade 6 permanently shown on every shackle.
- Forged, Quenched & Tempered, with alloy bolts.
- Hot-dip galvanized (G) or self colored (S). 85, 120, and 150-metric ton shackles are all hot-dip galvanized bows and the bolts are Dimetcoated® and painted red.
- Sizes 3/8 and below are mechanically galvanized.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit (1/3t - 55t).
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Meets or exceeds all requirements of ASME B30.26.
- Shackles 85 metric tons and larger are individually proof tested to 2.0 times the working load limit.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules ABS Guide for Certification of Lifting Appliances available. Certificates available when requested at time of order and may include additional charges.
- 3.1 Certification as standard available for charpy and statistical proof test from 3.25t up to 25 tons to DNV 2.7-1 and EN13889.
- Crosby 3.25t through 25t G-2130OC anchor shackles are type approved to DNV Certification Notes 2.7-1-Offshore Containers. These Crosby shackles are statistical proof and impact tested to 42 Joules (31 ft-lb) min. avg. at -20° C (-4° F). The tests are conducted by Crosby and 3.1 test certification is available upon request.
- All other 2130 shackles can meet charpy requirements of 42 Joules (31 ft-lb) avg at -20° C (-4° F) when requested at time of order.
- Meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade A, Class 3, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.

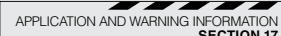


G-2130 / S-2130 Bolt Type Anchor Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.			Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
		G-2130	S-2130	G-2130OC		A	B	C	D	E	F	H	L	M	N	C	A
3/16	0.33 ‡	1019464	-	-	.03	9.7	6.4	22.4	4.9	15.2	14.2	37.3	24.9	32.8	4.85		1.50
1/4	0.5	1019466	-	-	.05	11.9	7.9	28.7	6.4	19.8	15.5	46.7	32.5	39.6	6.35	1.50	1.50
5/16	0.75	1019468	-	-	.10	13.5	9.7	31.0	7.9	21.3	19.1	53.0	37.3	46.2	7.85	1.50	1.50
3/8	1	1019470	-	-	.15	16.8	11.2	36.6	9.7	26.2	23.1	63.0	45.2	55.1	9.65	1.50	1.50
7/16	1.5	1019471	-	-	.22	19.1	12.7	42.9	11.2	29.5	26.9	74.0	51.5	63.8	11.2	3.30	1.50
1/2	2	1019472	1019481	-	.36	20.6	16.0	47.8	12.7	33.3	30.2	83.5	58.5	71.1	12.7	3.30	1.50
5/8	3.25	1019490	1019506	1262013	.62	26.9	19.1	60.5	16.0	42.9	38.1	106	74.5	90.4	17.5	3.30	1.50
3/4	4.75	1019515	1019524	1262022	1.23	31.8	22.4	71.5	19.1	51.0	46.0	126	89.0	105	20.6	3.30	1.50
7/8	6.5	1019533	1019542	1262031	1.79	36.6	25.4	84.0	22.4	58.0	53.0	148	102	122	24.6	6.35	1.50
1	8.5	1019551	1019560	1262040	2.28	42.9	28.7	95.5	25.4	68.5	60.5	167	119	137	26.9	6.35	1.50
1-1/8	9.5	1019579	1019588	1262059	3.75	46.0	31.8	108	28.7	74.0	68.5	190	131	150	31.8	6.35	1.50
1-1/4	12	1019597	1019604	1262068	5.31	51.5	35.1	119	31.8	82.5	76.0	210	146	170	35.1	6.35	1.50
1-3/8	13.5	1019613	1019622	1262077	7.18	57.0	38.1	133	35.1	92.0	84.0	233	162	183	38.1	6.35	3.30
1-1/2	17	1019631	1019640	1262086	8.62	60.5	41.4	146	38.1	98.5	92.0	254	175	196	41.1	6.35	3.30
1-3/4	25	1019659	1019668	1262095	15.4	73.0	51.0	178	44.5	127	106	313	225	246	57.0	6.35	3.30
2	35	1019677	1019686	-	23.7	82.5	57.0	197	51.0	146	122	348	253	275	61.0	6.35	3.30
2-1/2	55	1019695	1019702	-	44.6	105	70.0	267	66.5	184	145	453	327	345	79.5	6.35	6.35
3	† 85	1019711	-	-	70	127	82.5	330	76.0	200	165	546	365	384	92.0	6.35	6.35
3-1/2	† 120 ‡	1019739	-	-	120	133	95.5	372	92.0	229	203	626	419	432	105	6.35	6.35
4	† 150 ‡	1019757	-	-	153	140	108	368	104	254	229	653	468	451	116	6.35	6.35

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications..

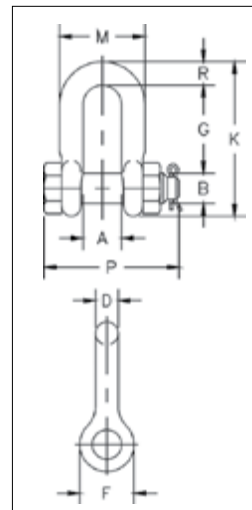
† Individually Proof Tested with certification. ‡ Furnished with eye bolts for handling.



G-2150 / S-2150



- Working Load Limit and Grade 6 permanently shown on every shackle.
- Forged, Quenched & Tempered, with alloy pins.
- Hot-dip galvanized (G) or self-colored (S). 85 ton shackles have hot-dip galvanized bows and the bolts are Dimetcoated® and painted red.
- Sizes 3/8 inch and below are mechanically galvanized.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit. (1/2t - 55t).
- Approved for use at -40° C (-40 degrees F) to 204° C (400° F).
- Meets or exceeds all requirements of ASME B30.26.
- Sizes 1/2 - 25t meet the performance requirements of EN13889:2003.
- Shackles 55 metric tons and smaller can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification when requested at time of order.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and 2016 ABS Guide for Certification of Lifting Appliance. Certificates available when requested at time of order and may include additional charges.
- Meets the performance requirements of Federal Specification RR-C-271H, Type IVB, Grade A, Class 3, except for those provisions required of the contractor.
- All 2150 shackles can meet charpy requirements of 42 Joules (31 ft-lb) avg at -20° C (-4° F) upon special request.
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-2150 / S-2150 Bolt Type Chain Shackles

Nominal Size (in)	Working Load Limit (t)*	Stock No.		Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
		G-2150	S-2150		A	B	D	F	G	K	M	P	R	G	A	
1/4	0.5	1019768	-	.06	11.9	7.9	6.4	15.5	19.1	40.4	24.6	39.6	6.35	1.50	1.50	
5/16	0.75	1019770	-	.10	13.5	9.7	7.9	19.1	25.4	48.5	29.5	46.2	7.85	1.50	1.50	
3/8	1	1019772	-	.15	16.8	11.2	9.7	23.1	31.0	58.5	35.8	55.0	9.65	3.30	1.50	
7/16	1.5	1019774	-	.22	19.1	12.7	11.2	26.9	36.1	67.5	41.1	63.5	11.2	3.30	1.50	
1/2	2	1019775	1019784	.34	20.6	16.0	12.7	30.2	41.4	77.0	46.0	71.0	12.7	3.30	1.50	
5/8	3.25	1019793	1019800	.67	26.9	19.1	16.0	38.1	51.0	95.5	58.5	89.5	16.0	3.30	1.50	
3/4	4.75	1019819	1019828	1.14	31.8	22.4	19.1	46.0	60.5	115	70.0	103	20.6	6.35	1.50	
7/8	6.5	1019837	1019846	1.74	36.6	25.4	22.4	53.0	71.5	135	81.0	120	24.6	6.35	1.50	
1	8.5	1019855	1019864	2.52	42.9	28.7	25.4	60.5	81.0	151	93.5	135	25.4	6.35	1.50	
1-1/8	9.5	1019873	1019882	3.45	46.0	31.8	28.7	68.5	91.0	172	103	150	31.8	6.35	1.50	
1-1/4	12	1019891	1019908	4.90	51.5	35.1	31.8	76.0	100	191	115	165	35.1	6.35	1.50	
1-3/8	13.5	1019917	1019926	6.24	57.0	38.1	35.1	84.0	111	210	127	183	38.1	6.35	3.30	
1-1/2	17	1019935	1019944	7.72	60.5	41.4	38.1	92.0	122	230	137	196	41.1	6.35	3.30	
1-3/4	25	1019953	1019962	14.2	73.0	51.0	44.5	106	146	279	162	230	54.0	6.35	3.30	
2	35	1019971	1019980	21.2	82.5	57.0	51.0	122	172	312	184	264	60.0	6.35	3.30	
2-1/2	55	1019999	1020004	38.6	105	70.0	66.5	145	203	377	238	344	66.5	6.35	6.35	
3	† 85	1020013	-	56	127	82.5	76.0	165	216	429	279	419	89.0	6.35	6.35	

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.

† Individually Proof Tested with certification.

Load Rated

Fatigue Rated

TA
TYPE APPROVED

QUIC-CHECK®

Q&T
QUENCHED & TEMPERED

MAXTOUGH®

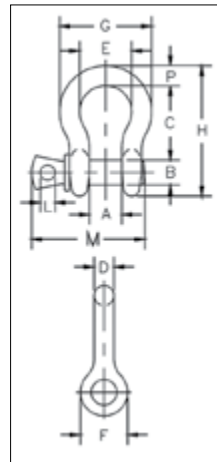
CE

APPLICATION AND WARNING INFORMATION
SECTION 17

G-209A
Grade 8



- Forged alloy steel, Quenched & Tempered, with alloy pins.
- Meets performance requirements of Grade 8 shackles.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized.
- Size 3/8 inch is mechanically galvanized.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification. Charges for proof testing and certification available when requested at the time of order.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these shackles meet other critical performance requirements including impact properties and material traceability, not addressed by ASME B30.26.
- G-209A Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 2, except for those provisions required of the contractor.



G-209A Alloy Screw Anchor Pin Shackles



APPLICATION AND WARNING INFORMATION
SECTION 17

Nominal Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)												Tolerance (+/- mm)	
				A	B	C	D	E	F	G	H	L	M	P	C	A	
3/8	2	1017450	.14	16.8	11.2	36.6	9.65	26.2	23.1	45.2	63.5	6.35	51.5	9.65	3.30	1.50	
7/16	2.67	1017472	.17	19.1	12.7	42.9	11.2	29.5	26.9	51.5	74.0	7.85	60.5	11.2	3.30	1.50	
1/2	3.33	1017494	.29	20.6	16.0	47.8	12.7	23.3	30.2	58.5	83.5	9.65	68.5	12.7	3.30	1.50	
5/8	5	1017516	.63	26.9	19.1	60.5	16.0	42.9	38.1	74.5	106	11.2	85.0	17.5	3.30	1.50	
3/4	7	1017538	1.02	31.8	22.4	71.5	19.1	51.0	46.0	89.0	126	12.7	101	20.6	6.35	1.50	
7/8	9.5	1017560	1.53	36.6	25.4	84.0	22.4	58.0	53.0	102	148	12.7	114	24.6	6.35	1.50	
1	12.5	1017582	2.41	42.9	28.7	95.5	25.4	68.5	60.5	119	167	14.2	129	26.9	6.35	1.50	
1-1/8	15	1017604	3.09	46.0	31.8	108	29.5	74.0	68.5	131	190	16.0	142	31.8	6.35	1.50	
1-1/4	18	1017626	4.31	51.5	35.1	119	32.8	82.5	76.0	146	210	17.5	156	35.1	6.35	1.50	
1-3/8	21	1017648	6.01	57.0	38.1	133	36.1	92.0	84.0	162	233	19.1	174	38.1	6.35	3.30	

4.5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit (metric tons) and 2.2 times the Working Load Limit (short tons). For Working Load Limit reduction due to side loading applications, see Warnings & Applications.

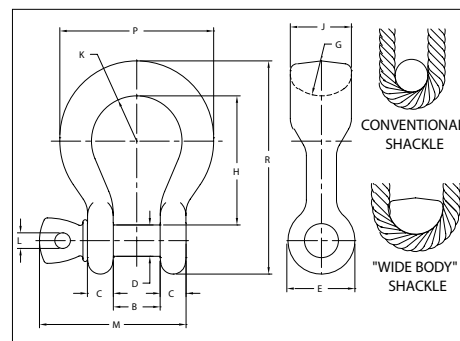
G-2169



S-2169



- Quenched & Tempered for maximum strength.
- Forged alloy steel.
- Available in galvanized (G) and self colored (S) finish.
- Can be individually proof tested and magnetic particle inspected upon request. Crosby certification available at time of order.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these shackles meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-2169 / S-2169 Alloy Screw Pin Wide Body Shackles



APPLICATION AND WARNING INFORMATION
SECTION 17

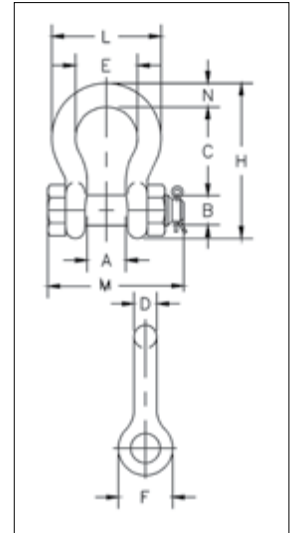
Working Load Limit (t)	G-2169 Stock No.	S-2169 Stock No.	Weight Each (kg)	Dimensions (mm)											
				B +/- .25	C	D +/- .02	E	G	H	J	K	L	M	P	R
7	1021655	1021664	1.6	31.8	17.5	22.4	46.2	31.8	90.4	40.6	31.8	12.7	101	104	149
12.5	1021673	1021682	4.0	42.9	23.4	28.7	60.5	34.8	118	54.1	41.4	14.2	130	140	194
18	1021691	1021699	5.9	51.6	29.5	35.1	68.3	38.1	148	63.5	50.8	17.5	159	172	238

5:1 Design Factor. Proof Load is 2 times the Working Load Limit.

G-2130A Grade 8



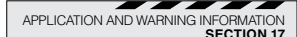
- Forged alloy steel, Quenched & Tempered, with bow and bolt.
- Meets or exceeds all requirements of Grade 8 shackles.
- Working Load Limit permanently shown on every shackle.
- Hot-dip galvanized.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, G-2130A meet other critical performance requirements, including impact properties, and material traceability not addressed by ASME B30.26.
- Shackles can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification when requested at time of order.
- Type Approval and certification in accordance with DNV 2.7-1 offshore containers.
- Shackles are Quenched & Tempered and meet DNV impact requirements of 42 Joules (31 ft-lb) at -40° C (-40° F).
- G-2130A Bolt Type Anchor shackles with thin head bolt – nut with cotter pin. Meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 3, except for those provisions required of the contractor.



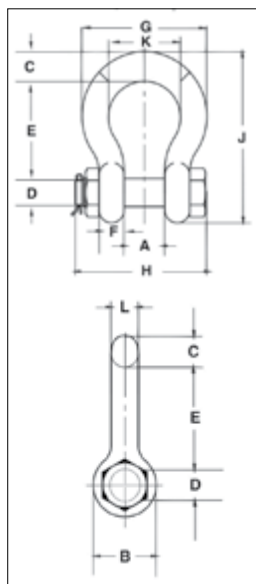
G-2130A Alloy Bolt Type Anchor Shackles Grade 8

Nominal Size (in)	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
				A	B	C	D	E	F	H	L	M	N	C	A
1/2	2	1219472	.36	20.6	16.0	47.8	12.7	33.3	30.2	83.5	58.5	71.1	12.7	3.30	1.50
5/8	3.25	1219491	.62	26.9	19.1	60.5	16.0	42.9	38.1	106	74.5	90.4	17.5	6.35	1.50
3/4	4.75	1219516	1.23	31.8	22.4	71.5	19.1	51.0	46.0	126	89.0	105	20.6	6.35	1.50
7/8	6.5	1219534	1.79	36.6	25.4	84.0	22.4	58.0	53.0	148	102	122	24.6	6.35	1.50
1	8.5	1219552	2.28	42.9	28.0	95.5	25.4	68.5	60.5	167	119	137	26.9	6.35	1.50
1-1/8	9.5	1219578	3.75	46.0	31.8	108	28.7	74.0	68.5	190	131	150	31.8	6.35	1.50
1-1/4	12	1219598	5.31	51.5	35.1	119	31.8	82.5	76.0	210	146	170	35.1	6.35	1.50
1-3/8	13.5	1219614	7.18	57.0	38.1	133	35.1	92.0	84.0	233	162	183	38.1	6.35	3.30
1-1/2	17	1219632	8.62	60.5	41.4	146	38.1	98.5	92.0	254	175	196	41.1	6.35	3.30

8:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications..



G-2140 / S-2140

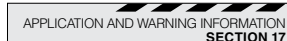


- Quenched & Tempered.
- Alloy bows, alloy bolts.
- Forged alloy steel 2 through 250 metric tons. Cast alloy steel 400 metric tons.
- Meets performance requirements of Grade 8 shackles.
- Working Load Limit is permanently shown on every shackle.
- 30, 40, 55, and 85 metric ton shackle bows are available galvanized (G) or self colored (S) with bolts that are galvanized and painted red.
- Size 3/8 inch is mechanically galvanized.
- 120, 150, 175 metric ton shackle bows are hot-dip galvanized; bolts are Dimetcoated and painted red.
- 200, 250, 300, 400 metric ton shackle bows are Dimetcoated; bolts are Dimetcoated and painted red.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Shackles are Quenched & Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- Crosby COLD TUFF® shackles that meet the additional requirements of DNV rules for certification of lifting applications - loose gear are available.
- Shackles 200 metric tons and larger are provided as follows:
 - Serialized bolt and bow
 - Material certification (chemical)
 - Magnetic particle inspected.
 - Certification must be requested at time of order.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. 2140 shackles meet other critical performance requirements including impact properties and material traceability, not addressed by ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and 2016 ABS Guide for Certification of Lifting Appliances. Certificates are available when requested at time of order and may include additional charges.
- G-2140 meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 3, except for those provisions required of the contractor. For additional information, see Warnings & Applications.
- Look for the Red Pin®... the mark of genuine Crosby quality.

G-2140 / S-2140 Alloy Bolt Tie Anchor Shackles

Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.			Weight Each (kg)	Dimensions (mm)														Tolerance (+ / - mm)		
		G-2140	S-2140	G-2140OC		A	B	C	D	E	F	G	H	J	K	L	M	N	A	D	E	
3/8	2	1021015	-	-	0.15	16.8	23.1	9.7	11.2	36.6	9.7	45.2	55.1	63.2	26.2	9.7	-	-	1.5	0.3	3.3	
7/16	2.67	1021020	-	-	0.22	19.1	26.9	11.2	12.7	42.9	10.4	51.6	63.8	73.9	29.5	11.2	-	-	1.5	0.3	3.3	
1/2	3.33	1021029	-	-	0.36	20.6	30.2	12.7	16.3	47.8	11.7	58.7	71.1	83.3	33.3	12.7	-	-	1.5	0.5	3.3	
5/8	5	1021038	-	-	0.76	26.9	38.1	17.5	19.6	60.5	14.7	74.7	90.4	106.4	42.9	16.0	-	-	1.5	0.5	3.3	
3/4	7	1021047	-	-	1.23	31.8	46.0	20.6	22.6	71.4	17.5	88.9	105.4	126.2	50.8	19.1	-	-	1.5	0.5	6.4	
7/8	9.5	1021056	-	-	1.79	36.6	53.1	24.6	25.9	84.1	20.6	102.4	122.4	148.1	57.9	22.4	-	-	1.5	0.5	6.4	
1	12.5	1021065	-	-	2.57	42.9	60.5	26.9	29.2	95.3	23.4	119.1	136.9	166.6	68.3	25.4	-	-	1.5	0.5	6.4	
1-1/8	15	1021074	-	-	3.75	46.0	68.3	31.8	31.8	108.0	26.4	131.1	149.9	189.7	73.9	28.7	-	-	1.5	0.5	6.4	
1-1/4	18	1021083	-	-	5.31	51.6	76.2	35.1	35.6	119.1	29.5	146.1	169.9	209.6	82.6	32.8	-	-	1.5	0.8	6.4	
1-3/8	21	1021092	-	-	7.18	57.2	84.1	38.1	38.9	133.4	32.5	162.1	183.1	232.7	92.2	36.1	-	-	3.3	0.8	6.4	
1-1/2	30	1021110	1021129	1262407	8.52	60.5	91.9	41.1	41.4	146	35.3	175	196	254	98.6	38.9	-	-	3.3	0.8	6.4	
1-3/4	40	1021138	1021147	1262416	15.4	73.2	106	57.2	50.8	178	44.5	224	237	313	127	46.7	-	-	3.3	0.8	6.4	
2	55	1021156	1021165	1262425	23.6	82.6	122	61.0	57.2	197	50.8	258	264	347	146	52.8	-	-	3.3	0.8	6.4	
2-1/2	85	1021174	1021183	1262434	43.5	105	148	79.2	69.9	267	66.5	324	345	455	184	68.8	-	-	6.4	0.8	6.4	
3	120	1021192	-	1262443	81	127	165	92.2	82.6	330	76.2	371	384	546	200	79.2	-	-	6.4	1.0	6.4	
3-1/2	† 150	1021218	-	1262452	120	133	203	111	95.3	372	95.3	432	448	632	229	91.9	102	46	6.4	0.3	6.4	
4	† 175	1021236	-	1262461	153	140	229	116	108	368	102	457	517	652	254	102	102	46	6.4	0.3	6.4	
4-3/4	† 200	1021234	-	-	209	184	267	127	121	386	116	529	611	706	279	121	102	46	6.4	0.3	6.4	
5	† 250	1021243	-	-	276	216	305	143	127	470	123	600	632	828	330	127	102	46	4.0	0.3	1.8	
6	† 300	1021252	-	-	362	213	330	154	152	475	124	629	666	871	330	149	102	46	4.0	0.3	1.8	
7*	† 400	1021478	-	-	500	210	356	184	178	572	165	660	728	1022	330	152	102	46	6.4	0.3	6.4	

4.5:1 Design Factor for sizes 2 through 21 metric tons, 5.4:1 Design Factor for sizes 30 through 175 metric tons, 4:1 Design Factor for 200 through 400 metric tons. Maximum Proof Load is 2 times the Working Load Limit. *Cast alloy steel. †Furnished with round head bolts with a handle. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.



G-2140E



- Quenched & Tempered.
- Alloy bows, alloy bolts.
- Meets performance requirements of Grade 8 shackles.
- Working Load Limit is permanently shown on every shackle.
- 200, 250, and 300 metric ton shackle bows are Dimetcoated®; Pins are Dimetcoated and painted red.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Shackles are Quenched & Tempered and can meet DNV impact requirements of 42 Joules (31 ft-lb) at -20° C (-4° F).
- All sizes are individually proof tested to 2.0 times the Working Load Limit.
- Shackles are provided as follows:
 - Serialized bolt and bow
 - Material certification (chemical)
 - Magnetic particle inspected
 - Certification must be requested at time of order
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these shackles meet other critical performance requirements including impact properties and material traceability, not addressed by ASME B30.26.
- Type Approval certification in accordance with ABS 2016 Steel Vessel Rules and 2016 ABS Guide for Certification of Lifting Appliances. Certificates available when requested at time of order and may include additional charges.
- G-2140E meets the performance requirements of Federal Specification RR-C-271H, Type IVA, Grade B, Class 3, except for those provisions required of the contractor.
- Look for the Red Pin®... the mark of genuine Crosby quality.

G-2140E Alloy Easy-Loc Shackles

Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)														Tolerance (+ / - mm)	
				A	B	C	D +/- .02	E	F	G	H	J	K	L	M	N	A	E	
4-3/4	200	1021475	208	184	267	127	121	386	116	529	587	706	279	121	101	45.7	6.4	6.4	
5	250	1021484	271	216	305	143	127	470	114	600	617	829	330	127	101	45.7	6.4	6.4	
6	300	1021493	359	213	330	154	152	475	124	629	646	871	330	149	101	45.7	6.4	6.4	

4:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.



Shackle Bolt Securement MADE EASY

The patented Easy-Loc V2™ shackle bolt securement system will change the way you make your critical lifts.



Open collar



Push collar onto bolt



Close collar

Wide opening ergonomic grip provides easy access for all hand sizes

316 stainless steel design resists corrosion

The new Easy-Loc V2™ can be retrofitted on all original Crosby Easy-Loc® Shackles

No cotter pin or tools required

- No cotter pins or tools required, reducing install/release time up to 90%.
- Meets all industry standards.
- Up to 60% lighter than conventional nut and cotter pin design.

Crosby®

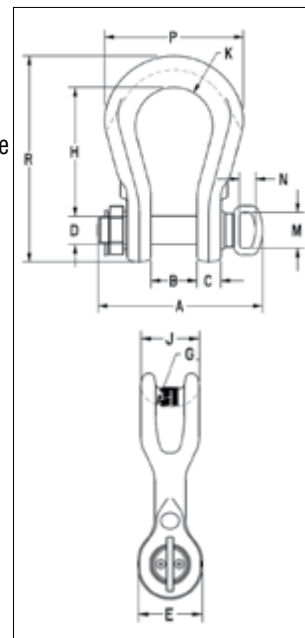


Watch video: [thecrosbygroup.com/easy-loc](https://www.thecrosbygroup.com/easy-loc)

G-2160 / S-2160



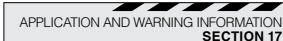
- Increase in shackle bow radius provides minimum 58% gain in sling bearing surface and eliminates need for a thimble.
- Increases usable sling strength a minimum of 15% and greatly improves life of wire rope slings.
- Can be used to connect synthetic web slings, synthetic round slings or wire rope slings.
- All sizes Quenched & Tempered for maximum strength.
- Forged alloy steel from 7 through 300 metric tons.
- Cast alloy steel from 400 through 1550 metric tons.
- Proof tested as follows:
 - 7 through 75 metric tons and 200 through 300 metric tons: 2 x WLL
 - 125 metric tons: 1.6 x WLL
 - 400 metric tons and higher: 1.33 x WLL
- All ratings are in metric tons, embossed on side of bow.
- G-2160, (7 through 55t), are hot-dip galvanized and pins are painted red.
- G-2160 (75t and larger), bows are furnished Dimetcoated; Pins are Dimetcoated, then painted red.
- S-2160 bows and pins are painted red.
- Approved for use at -40° C (-40° F) to 204° C (400° F).
- Bow and bolt are certified to meet Charpy impact testing of 42 Joules (31 ft-lb) min. avg. at -20° C (-4° F).
- All 2160 shackles are individually proof tested and magnetic particle inspected. Crosby certification available at time of order.
- Shackles requiring ABS, Lloyds and other certifications are available upon special request and must be specified at time of order.
- Type approved and certification to DNV Rules for Certification of Lifting Appliances, and are produced in accordance with DNV MSA requirements. Databook is provided that includes required documents.
 - Serialization / Identification
 - Material Testing (physical / chemical / Charpy)
 - Proof Testing
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-2160 / S-2160 Wide Body Shackles

Working Load Limit (t)*	Stock No.		Weight Each (kg)	Dimensions (mm)													Effective Body Diameter
	G-2160	S-2160		A	B +/- 6.35	C	D +/- .5	E	G	H	J	K	M	N	P	R	
7	1021256	1021548	1.81	105	31.8	17.5	22.4	46.2	31.8	90.4	40.6	31.8	-	-	104	149	53.3
12.5	1021265	1021557	4.54	137	42.9	23.4	28.7	60.5	34.8	118	54.1	41.4	-	-	140	194	61.0
18	1021274	1021566	6.8	170	51.6	29.5	35.1	68.3	38.1	148	63.5	50.8	-	-	172	238	71.1
30	1021283	1021575	11.34	195	60.2	35.1	41.4	88.9	63.5	176	79.5	63.5	-	-	216	289	104
40	1021285	1021584	20.9	236	73.2	42.9	50.8	102	44.4	205	95.3	76.2	-	-	270	346	91.4
55	1021287	1021593	32.21	263	82.6	50.8	57.2	118	66.8	238	114	88.9	-	-	311	397	109
75	1022101	-	51	382	105	60.7	69.9	136	95.3	293	127	92.5	102	45.7	321	474	160
125	1022110	-	87	465	130	78.7	80.0	165	95.3	365	150	110	102	45.7	393	584	173
200	1022118	-	191	491	150	86.1	105	214	133	480	217	138	102	45.7	515	773	241
300	1022127	-	365	574	187	109	133	267	156	600	264	160	102	45.7	608	957	290
400	1021334	-	518	772	220	131	160	320	203	575	320	185	102	45.7	690	985	363
500	1021343	-	653	849	250	146	180	340	205	630	340	225	102	45.7	790	1085	376
600	1021352	-	967	916	275	158	200	394	330	700	370	247	146	57.2	865	1200	516
700	1021361	-	1170	990	300	167	215	433	223	735	400	270	146	57.2	940	1275	422
800	1021254	-	1372	1059	325	185	230	449	248	750	420	277	146	57.2	975	1323	457
900	1021389	-	1712	1112	350	198	250	478	330	757	440	293	146	57.2	1025	1387	569
1000	1021370	-	1850	1169	380	212	270	508	261	760	460	308	146	57.2	1075	1405	490
1250	1021272	-	2588	1278	432	233	300	573	354	930	530	323	-	-	1175	1660	620
1550	1021281	-	3650	1588	465	282	320	616	318	1075	580	338	-	-	1316	1896	693

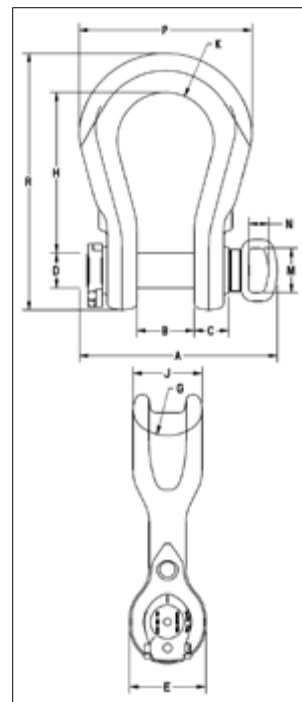
5:1 Design Factor on 75 through 300 metric tons. Maximum Proof Load is 2 times the Working Load Limit on 75 through 300 metric tons (except for 125 metric tons which is proof tested to 1.6 times the Working Load Limit). 4.5:1 Design Factor on 400 through 1550 metric tons. Maximum Proof Load is 1.33 times the Working Load Limit on 400 through 1550 metric tons.



G-2160E



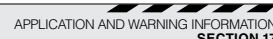
- Increase in shackle bow radius provides minimum 58% gain in sling bearing surface and eliminates need for a thimble.
- Increases usable sling strength a minimum of 15% and greatly improves life of wire rope slings.
- Can be used to connect synthetic web slings, synthetic round slings or wire rope slings.
- All sizes Quenched & Tempered for maximum strength.
- Forged alloy steel from 75 through 300 metric tons.
- Proof tested as follows:
 - 75 metric tons and 200-300 metric tons: 2 x WLL.
 - 125 metric tons: 1.6 x WLL.
- All ratings are in metric tons, embossed on side of bow.
- G-2160E, (75t and larger), bows are furnished Dimetcoated, and pins are Dimetcoated, then painted red.
- Approved for use at -40° C (-40° F) to 204 degrees C (400° F).
- Bow and bolt are certified to meet Charpy impact testing of 42 Joules (31 ft-lb) min. avg. at -20° C (-4 degrees F).
- All 2160E shackles are individually proof tested and magnetic particle inspected. Crosby certification available at time of order.
- Shackles requiring ABS, Lloyds and other certifications are available upon special request and must be specified at time of order.
- Shackles have DNV Type Approval to Rules for Certification of Lifting Appliances, and are produced in accordance with DNV MSA requirements. Databook is provided that includes required documents.
 - Serialization / Identification
 - Material Testing (physical / chemical / Charpy)
 - Proof Testing
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-2160E Easy-Loc Wide Body Shackles

Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)													
			A	B +/- 6.35	C	D +/- .5	E	G	H	J	K	M	N	P	R	Effective Body Diameter
75	1021500	49.9	382	105	60.7	69.9	136	95.3	293	127	92.5	102	45.7	321	474	160
125	1021509	86.2	450	130	78.7	80.0	165	95.3	365	150	110	102	45.7	393	584	173
200	1021518	185	491	150	86.1	105	214	133	480	219	138	102	45.7	515	773	241
300	1021527	357	574	187	109	133	267	156	600	264	160	102	45.7	608	953	290

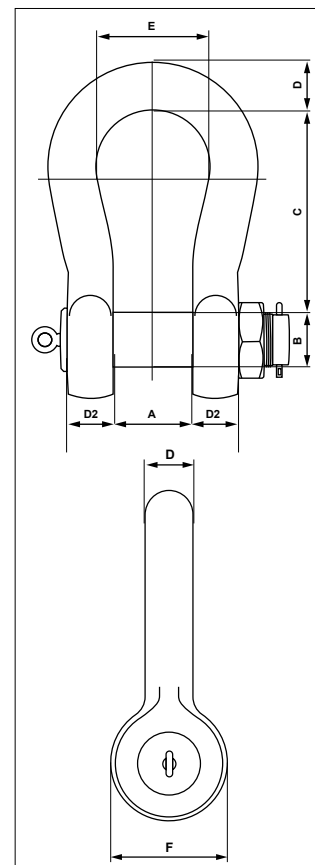
5:1 Design Factor on 75 through 300 metric tons. Maximum Proof Load is 2 times the Working Load Limit on 75 through 300 metric tons (except for 125 metric tons which is proof tested to 1.6 times the Working Load Limit).



S-2135 / S-2145



- Trusted Crosby quality.
- Embossed Angle Indicators included.
- Meets performance requirements of Grade 8 shackles.
- 5:1 Design Factor.
- Individually proof loaded to 2 times the Working Load Limit.
- S-2135 and S-2145 shackles are available with aluminum paint and are not galvanized.
- Operating temperature range -20° C (-4° F) to 200° C (392° F) for S-2135 and S-2145.
- Material inspection certificate Type 3.1 according to EN 10204.
- DNV type approved: DNVGL-ST-0377 and DNVGL-ST-0378.
- Meets performance requirements of federal specification RR-C-271H, except for those provisions required of the contractor.
- Meets or exceeds all requirements of ASME B30.26.
- S-2135CT COLD TUFF® available from 85t to 400t with an operating temperature range of -60°C (-76°F) up to +200°C (392°F).
- DNV witness proof testing available on request for all sizes and models.
- Magnetic Particle Inspection available on request for all sizes and models.
- Look for the Red Pin®... the mark of genuine Crosby quality.



S-2135 / S-2145 Bolt Type Anchor Shackles

Frame Size (in)	Working Load Limit (t)	Stock No	Weight (kg)	Dimensions (mm)							
				A	+/- 0	B	C	D	D2	E	F
S-2135											
3	85	1205009	78	127	+6 / -0	83	330	85	80	190	162
3 1/2	120	1205018	115	144	+6 / -0	95	380	95	89	238	200
4	150	1205027	162	165	+8 / -0	108	385	105	100	275	230
4 3/4	200	1205036	240	180	+8 / -0	125	450	120	110	280	270
5	250	1205045	306	205	+10 / -0	140	520	130	115	305	290
6	300	1205054	368	205	+10 / -0	150	530	140	120	305	315
7	400	1205063	602	230	+10 / -0	175	575	160	160	325	365
7 1/4	500	1205234	735	250	+12 / -0	185	650	180	160	350	385
8	600	1205243	969	275	+13 / -0	205	650	200	185	375	430
8 1/4	700	1205252	1091	300	+15 / -0	215	650	210	200	400	440
8 1/2	800	1205261	1106	300	+15 / -0	220	650	210	200	400	450
9 1/2	1000	1205270	1476	340	+17 / -0	240	700	240	240	420	500
10	1250	1205279	1955	360	+18 / -0	270	750	260	225	450	570
11	1500	1205288	2327	360	+18 / -0	290	800	280	225	450	610
S-2145											
3	120	1205072	78	127	+6 / -0	83	330	85	80	190	162
3 1/2	150	1205081	115	144	+6 / -0	95	380	95	89	238	200
4	175	1205090	162	165	+8 / -0	108	385	105	100	275	230

Maximum Proof Load is 2.0 times the Working Load Limit.

Load Rated

Fatigue Rated

TA
TYPE APPROVED

QUIC-CHECK®
✓

QT
QUALITY & TRUST

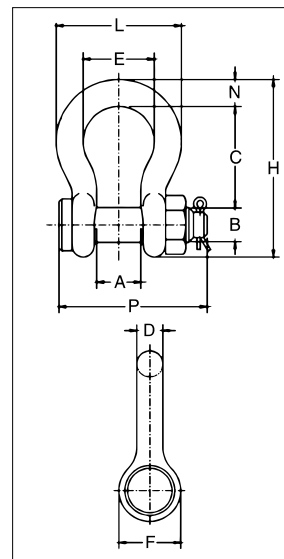
MAXTOUGH®

APPLICATION AND WARNING INFORMATION
SECTION 17

G-2130CT / G-2140CT



- Forged, Quenched & Tempered, with alloy bolt.
 - G-2130CT - carbon steel
 - G-2140CT - alloy steel
- Working Load Limit permanently shown on every shackle.
- Individually serialized with certification.
- Fatigue Rated (G-2130CT only).
- All sizes are individually proof tested to 2.0 times the Working Load Limit.
- Finish is inorganic zinc primer.
- Bow and bolt are certified to meet Charpy impact testing of 42 Joules (31 ft-lb) min. avg. at -20° C (-4° F).
- Individually magnetic particle inspected with certification.
- Type Approval and certification in accordance with DNV 2.7-1 Offshore Containers, and Rules for Certification of Lifting Appliances, DNV-OS-E101 and are produced in accordance with DNV MSA requirements, including required documents.
- DNV certified minimum design temperature -4° F. May be used at -50° F (-45° C) in non DNV applications.
- Meets the performance requirements of Federal Specification RR-C-271H Type IVA:
 - G-2130CT - Grade A, Class 3, except for those provisions required of the contractor.
 - G-2140CT - Grade B, Class 3, except for those provisions required of the contractor.



G-2130CT COLD TUFF® Bolt Type Anchor Shackles

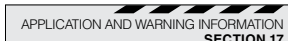
Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
				A	B	C	D	E	F	H	L	N	P	A	C
3/4	4.75	1260568	1.23	31.8	22.4	71.5	19.1	51.0	46.0	126	89.0	20.6	108	1.50	6.35
7/8	6.5	1260577	1.76	36.6	25.4	84.0	22.4	58.0	53.0	148	102	24.6	120	1.50	6.35
1	8.5	1260586	2.57	42.9	28.7	95.5	26.2	68.5	60.5	167	119	26.9	137	1.50	6.35
1-1/8	9.5	1260595	3.75	46.0	31.8	108	28.7	74.0	68.5	190	131	31.8	150	1.50	6.35
1-1/4	12	1260604	5.31	51.5	35.1	119	32.8	82.5	76.0	210	146	35.1	168	1.50	6.35
1-3/8	13.5	1260613	6.85	57.0	38.1	133	35.1	92.0	84.0	233	162	38.1	183	3.30	6.35
1-1/2	17	1260622	9.43	60.5	41.4	146	39.1	98.5	92.0	254	175	41.1	195	3.30	6.35
1-3/4	25	1260633	15.4	73.0	51.0	178	46.7	127	106	313	225	57.0	233	3.30	6.35

5.4:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see Warnings & Applications.

G-2140CT COLD TUFF® Alloy Bolt Type Anchor Shackles

Nominal Shackle Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)										Tolerance (+ / - mm)	
				A	B	C	D	E	F	H	L	N	P	A	C
1-1/2	30	1260801	9.43	60.5	41.4	146	38.9	98.6	91.9	254	175	41.1	196	3.3	6.4
1-3/4	40	1260812	15.4	73.2	50.8	178	46.7	127	106	313	224	57.2	237	3.3	6.4
2	55	1260823	23.6	82.6	57.2	197	52.8	146	122	347	258	61.0	264	3.3	6.4
2-1/2	85	1260834	43.5	105	69.9	267	68.8	184	148	455	324	79.2	345	6.4	6.4
3	120	1260843	81	127	82.6	330	79.2	200	165	546	371	92.2	384	6.4	6.4
3-1/2	† 150	1260852	120	133	95.3	372	91.9	229	203	632	432	111	448	6.4	6.4
4	† 175	1260861	153	140	108	368	102	254	229	652	457	116	517	6.4	6.4
4-3/4	† 200	1260870	204	184	121	397	114	279	267	743	533	152	539	6.4	6.4
5	† 250	1260889	272	216	127	508	114	330	305	889	622	165	576	6.4	6.4

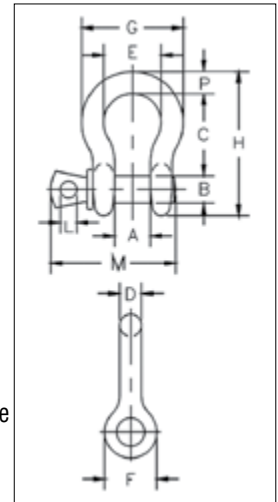
5.4:1 Design Factor on 30t through 175 metric tons. 4:1 Design Factor on 200 metric tons and larger. Maximum Proof Load is 2 times the Working Load Limit for all sizes.



S-209T



- Flat black baked on powder coat finish.
- Forged, Quenched & Tempered, with alloy pins.
- Working Load Limit and Grade 6 permanently shown on every shackle.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Industry leading 6 to 1 Design Factor.
- Screw pin anchor shackles meet the performance requirement of Federal Specification RR-C-271H, Type IVA, Grade A, Class 2, except for those provisions required of the contractor.
- Meets the performance requirements of EN 13889.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these shackles meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



S-209T Theatrical Shackles

Nominal Size (in)	Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)												Tolerance (+ / - mm)	
				A	B	C	D	E	F	G	H	L	M	P	C	A	
3/8	1	1018706	.14	16.8	11.2	36.6	9.65	26.2	23.1	45.2	63.0	6.35	51.5	9.65	3.30	1.50	
7/16	1.5	1018724	.17	19.1	12.7	42.9	11.2	29.9	26.9	51.5	74.0	7.85	60.5	11.2	3.30	1.50	
1/2	2	1018742	.33	20.6	16.0	47.8	12.7	33.3	30.2	58.5	83.5	9.65	68.5	12.7	3.30	1.50	
5/8	3.25	1018760	.62	26.9	19.1	60.5	16.0	42.9	38.1	74.5	106	11.2	85.0	17.5	6.35	1.50	
3/4	4.75	1018778	1.07	31.8	22.4	71.5	19.1	51.0	46.0	89.0	126	12.7	101	20.6	6.35	1.50	

Maximum Proof Load is 2.0 times the Working Load Limit.

Load Rated

Fatigue Rated

QUIC-CHECK®

QT & TEMPERED

MAX TOUGH®

APPLICATION AND WARNING INFORMATION
SECTION 17



QUIC-TAG™

Crosby®

THE NEWEST ADDITION TO CROSBY'S RFID TAG FAMILY

Industry standards require periodic performance inspections to make sure lifting equipment is performing to specified levels.

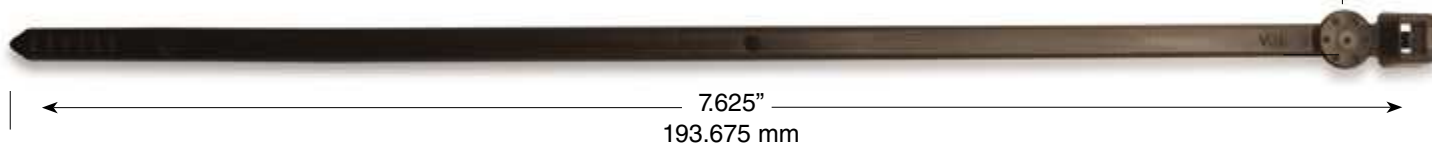
The Crosby QUIC-TAG™ makes the inspection process more efficient, and its unique design can be retrofitted on numerous products.

- Easy, fast, and secure attachment
- Engineered for extreme durability and strength with a low profile design
- Resistant to harsh environmental conditions including exposure to UV rays, water chemical exposure and temperatures up to 85°C (185°F)
- Compatible with the Crosby QUIC-CHECK® Inspection and Identification System
- 13.5 MHz operating frequency
- The most cost effective RFID tag offered by Crosby

QUIC-CHECK®



Shown actual size:



Feel confident in every situation

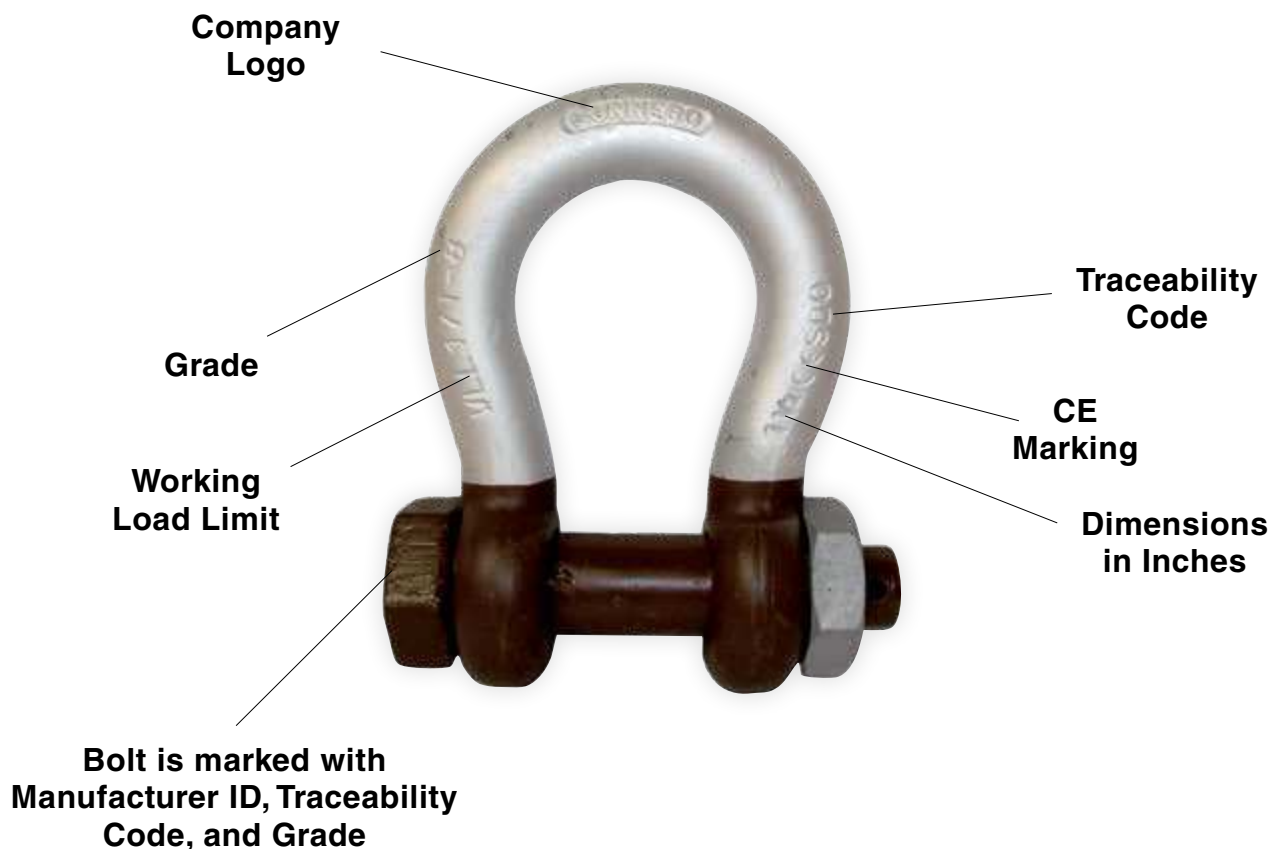
Gunnebo Industries shackles are made from a range of steel qualities, including acid proof stainless steel and high-grade alloy steel to comply with the most stringent specifications. Our factories comprise all facilities and systems for the manufacturing and control of a top-quality product. This includes tool design, an advanced tool shop, forging, heat treatment, machining, hot-dip galvanizing and quality control.

We offer a range of DNV 2.7-1 Type Approved lifting shackles for offshore containers, developed for the tough conditions of the offshore industry, where safety must be of the highest priority at all times. The heat treatment of these products ensures the proper ductility and strength to sustain shock loads which may be imposed when the container is lifted from the deck of a vessel.

Make sure you have the original

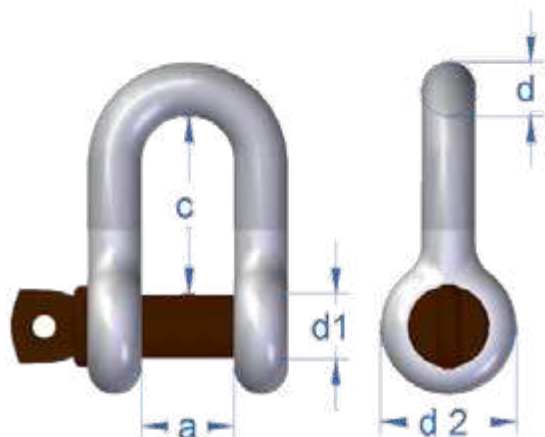
- High quality shackles acc. EN 13889 and US Fed. Spec RR-C. 271 (Grade A and Grade B)
- Consistent product quality
- Long experience of shackle production using modern manufacturing methods
- Local availability of expertise

To ensure you have a genuine Gunnebo Industries shackle, it should be marked as below:

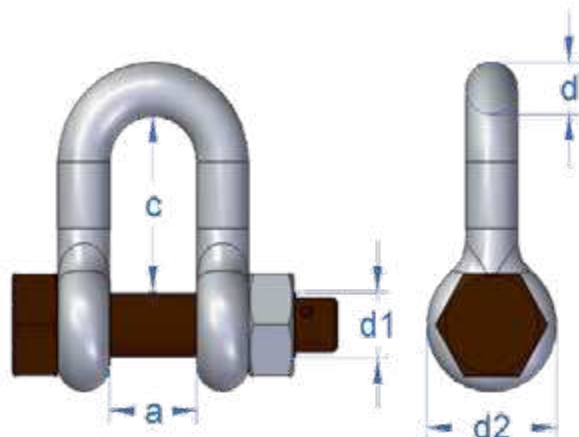


Dee Shackle No 834 and No 835

Standard:	DNV 2.7-1 Type Approved, EN 13889 and US Federal Spec. RR-C-271
Material:	High tensile carbon steel, Quenched & Tempered, Grade 6
Finish:	All parts hot-dip galvanized, pin brown painted on top of galvanized.
Design Factor:	6:1
Documentation:	Test certificate and traceable raw material / inspection certificate acc. EN 10204 - 3.1. DNVGL-ST-E271-2.7-1 and E273-2.7-3 Type Approval Certification.
Temperature:	- 40°C to 200°C



Shackle No 834 with screw pin



Shackle No 835 with safety bolt



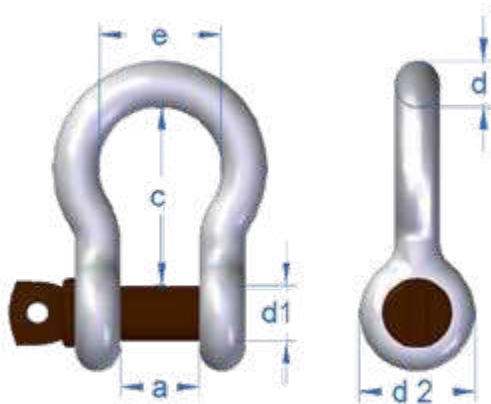
834 Screw Pin Stock No.	835 Safety Bolt Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d		Inner Width a* (mm)	Inner Length c* (mm)	Eye Outer d2 (mm)	834 Screw Pin Weight (kg)	835 Safety Bolt Weight (kg)
				(mm)	(in)					
A083416	A083516	3.25	19	16	5/8"	27	51	40	0.55	0.60
A083419	A083519	4.75	22	19	3/4"	31	60	48	1.00	1.10
A083422	A083522	6.5	25	22	7/8"	37	71	52	1.30	1.50
A083425	A083525	8.5	28	25	1"	43	81	60	1.90	2.20
A083428	A083528	9.5	32	28	1 1/8"	46	90	64	2.80	3.10
A083432	A083532	12.0	35	32	1 1/4"	52	100	72	3.60	4.20
A083435	A083535	13.5	38	35	1 3/8"	57	111	76	4.60	5.60
A083438	A083538	17.0	42	38	1 1/2"	60	122	84	6.50	7.50
A083445	A083545	25.0	50	45	1 3/4"	74	149	105	11.50	13.00

* Forging tolerance: +/- 5% on inside width/length.

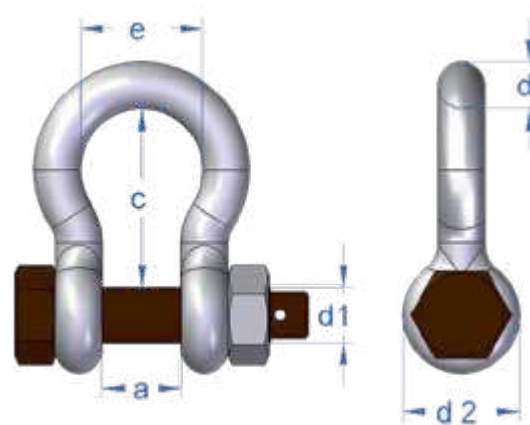
Split pin included

Bow Shackle No 854 and No 855

- Standard:** DNV 2.7-1 Type Approved, EN 13889 and US Federal Spec. RR-C-271
- Material:** High tensile carbon steel, Quenched & Tempered, Grade 6
- Finish:** All parts hot-dip galvanized, brown painted bolts on top of galvanized.
- Design Factor:** 6:1
- Documentation:** Test certificate and traceable raw material / inspection certificate acc. EN 10204 - 3.1.
DNVGL-ST-E271-2.7-1 and E273-2.7-3 Type Approval Certification.
- Temperature:** - 40°C to 200°C



Shackle No 854 with screw pin



Shackle No 855 with safety bolt



854 Screw Pin Stock No.	855 Safety Bolt Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d		Inner Width a* (mm)	Inner Length c* (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	854 Screw Pin Weight (kg)	855 Safety Bolt Weight (kg)
				(mm)	(in)						
A085413	A085513	2.0	16	13	1/2"	21	47	33	33	0.37	0.42
A085416	A085516	3.25	19	16	5/8"	27	60	42	40	0.65	0.70
A085419	A085519	4.75	22	19	3/4"	31	71	49	48	1.10	1.20
A085422	A085522	6.5	25	22	7/8"	37	84	60	52	1.50	1.70
A085425	A085525	8.5	28	25	1"	43	95	68	60	2.21	2.58
A085428	A085528	9.5	32	28	1 1/8"	46	108	74	64	3.10	3.40
A085432	A085532	12.0	35	32	1 1/4"	52	119	83	72	4.20	4.80
A085435	A085535	13.5	38	35	1 3/8"	57	132	89	76	6.00	7.00
A085438	A085538	17.0	42	38	1 1/2"	60	146	98	84	8.00	9.00
A085445	A085545	25.0	50	45	1 3/4"	74	178	127	105	13.50	15.00
A085452	A085552	35.0	57	50	2"	83	197	138	112	19.00	21.00
A085464	A085564	55.0	70	65	2 1/2"	105	260	180	145	38.00	39.00

Split pin included

Arctic Shackle No 856

Bow shackle with safety bolt

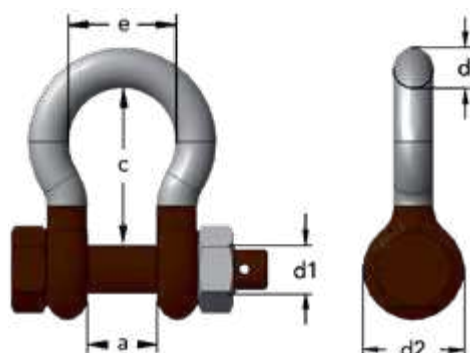


Unique benefits with the Arctic Shackle

Adverse weather and rough sea conditions in combination with extremely low temperatures, as often encountered for instance in the North Sea, places tough requirements on the products used. 856 Arctic shackles are specially designed for these conditions. The Arctic Shackle is type approved to DNV 2.7-1 Offshore containers and meets the impact requirements of 42 J at – 40 degrees °C.

The Arctic Shackle is a grade 8 shackle with all parts hot-dip galvanized, including the safety bolt, and has the characteristic brown color marking.

- Standard:** DNV 2.7-1, US Federal Spec. RR.C-271 and EN-13889
- Material:** Special alloy steel, Quenched & Tempered, Grade 8
- Finish:** All parts hot-dip galvanized + brown color marking
- Design Factor:** As specified in the table below
- Documentation:** Test certificate and traceable raw material / inspection certificate acc. EN 10204 - 3.1. DNVGL-ST-E271-2.7-1 and E273-2.7-3 Type Approval Certification.
- Temperature:** - 40°C to 200°C



Stock No.	WLL (t)	Design Factor	Pin d1 (mm)	Nominal Size d		Inner Width a (mm)	Inner Length c (mm)	Eye Outer e (mm)	Bow Width d2 (mm)	Weight (kg)
				(mm)	(in)					
A085613	2.0	8.00	16	13	1/2"	21	47	33	33	0.42
A085616	3.25	8.00	19	16	5/8"	27	60	42	40	0.7
A085619	4.75	8.00	22	19	3/4"	31	71	49	48	1.2
A085622	6.5	7.85	25	22	7/8"	37	84	60	52	1.7
A085625	8.5	7.25	28	25	1"	43	95	68	60	2.5
A085628	9.5	6.94	32	28	1 1/8"	46	108	74	64	3.4
A085632	12.0	6.40	35	32	1 1/4"	52	119	83	72	4.8
A085635	13.5	6.10	38	35	1 3/8"	57	132	89	76	7
A085638	17.0	6.00	42	38	1 1/2"	60	146	98	84	9
A085645	25.0	6.00	50	45	1 3/4"	74	178	127	105	15
A085652	35.0	6.00	57	50	2"	83	197	138	116	21
A085664	55.0	6.00	70	65	2 1/2"	105	260	180	145	39

Split pin included

Super Shackle No 858 Bow shackle with safety bolt

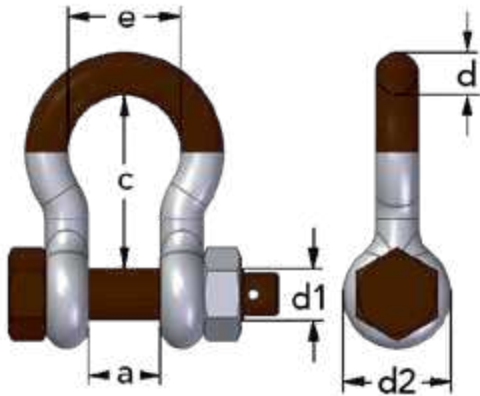


Unique Benefits with The Super Shackle

In certain situations a demand for extra Working Load Limit occurs in others the lifting environment has limited space for the lifting application. The 858 Super Shackle enables a higher working load limit for the same nominal size.

The Super shackle meets the US Federal Specification RR.C-271. It is a grade 8 shackle and has all parts hot dipped galvanized, including the safety bolt.

Standard:	US Federal Spec. RR.C-271 Type IVA Class 3, Grade B
Material:	High tensile steel. Quenched & Tempered, Grade 8
Finish:	All parts hot-dip galvanized + brown color marking
Design Factor:	5:1
Documentation:	Test certificate and traceable 3.1 certificate
Temperature:	-40°C to 200°C

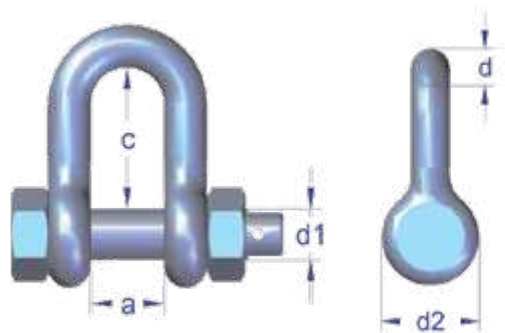


Stock No.	WLL (t) 5:1	Pin d1 (mm)	Nominal Size d		Inner Width a (mm)	Inner Length c (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	Weight (kg)
			(mm)	(in)					
A085813	3.3	16	13	1/2"	21	51	33	33	0.4
A085816	5.0	19	16	5/8"	27	60	42	40	0.7
A085819	7.0	22	19	3/4"	31	71	49	48	1.2
A085822	9.5	25	22	7/8"	37	84	60	52	1.7
A085825	12.5	28	25	1"	43	95	68	60	2.5
A085828	15.0	32	28	1 1/8"	46	108	74	64	3.4
A085832	18.0	35	32	1 1/4"	52	119	83	72	4.8
A085835	21.0	38	35	1 3/8"	57	132	89	76	7
A085838	30.0	42	38	1 1/2"	60	146	98	84	8.8
A085845	40.0	50	45	1 3/4"	74	178	127	105	15

Split pin included

Stainless Steel Shackle No 735 Dee shackle with safety bolt

Material: AISI 316
Finish: Highly polished
Design Factor: 6:1
Documentation: Test certificate and traceable 3.1 certificate supplied upon request.

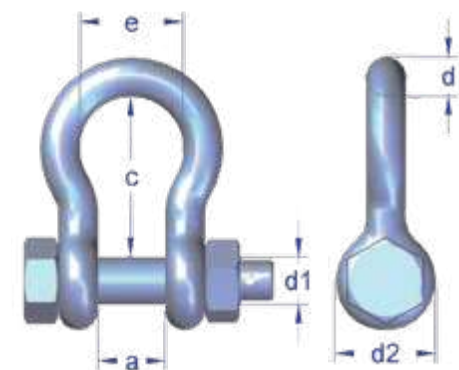


Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
A073510	0.6	10	10	20	40	20	0.2
A073512	0.9	12	12	26	50	24	0.3
A073516	1.5	16	13	24	52	33	0.4
A073520	2.5	19	16	28	65	40	0.7
A073522	3.0	22	19	31	60	48	1.5
A073524	4.5	25	22	37	71	52	1.3
A073533	7.5	32	28	46	90	64	3.0
A073536	10.0	35	32	52	100	72	4.1

Split pin included

Stainless Steel Shackle No 755 Bow shackle with safety bolt

Material: AISI 316
Finish: Highly polished
Design Factor: 6:1
Documentation: Test certificate and traceable 3.1 certificate supplied upon request.

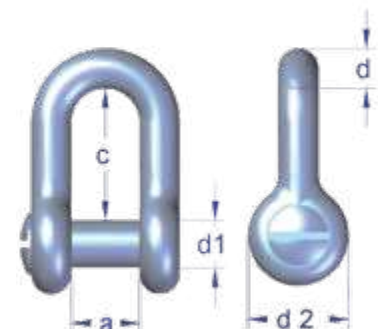


Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	Weight (kg)
7200685	0.6	10	10	20	40	27	20	0.2
A075512	0.9	12	12	25	47	37	26	0.3
A075516	1.5	16	13	25	47	33	34	0.4
A075520	2.5	20	16	28	60	42	40	0.8
A075522	3.0	22	19	31	71	51	48	1.3
A075524	4.5	25	22	37	84	58	52	1.7
A075533	7.5	32	28	46	108	74	64	3.4
A075536	10.0	35	32	52	119	83	72	5.2

Split pin included

Stainless Steel Shackle No 732 Dee shackle with countersunk pin

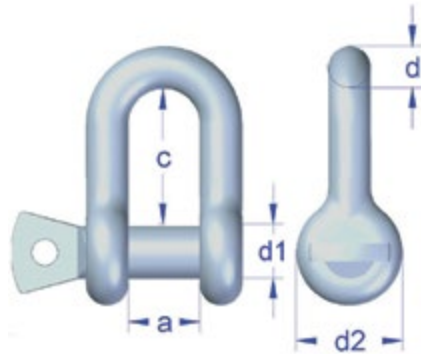
Material: AISI 316
Finish: Highly polished
Design Factor: 6:1
Documentation: Test certificate supplied upon request.



Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
A073216	2.0	M16	13	24	52	34	0.3
A073220	3.0	M20	16	28	65	40	0.6
A073222	3.0	M22	19	31	60	48	1.4

Stainless Steel Shackle No 730 Dee shackle with screw pin

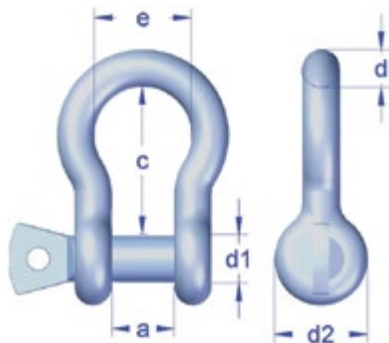
Material: AISI 316
Finish: Highly polished
Design Factor: 6:1
Documentation: Test certificate supplied upon request.



Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
A073008S	0.4	M8	8	16	30	16	0.06
A073010S	0.6	M10	10	20	40	20	0.1
A073012S	0.9	M12	12	26	50	24	0.2
A073016S	1.5	M16	13	24	52	34	0.3
A073020S	2.5	M20	16	28	65	40	0.6
A073022S	3.0	M22	19	30	72	48	0.9

Stainless Steel Shackle No 750 Bow shackle with screw pin

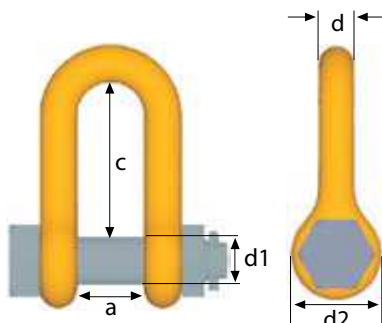
Material: AISI 316
Finish: Highly polished
Design Factor: 6:1
Documentation: Test certificate supplied upon request.



Stock No.	WLL (t) 6:1	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Bow Width e (mm)	Eye Outer d2 (mm)	Weight (kg)
A075008S	0.4	M8	8	16	30	23	16	0.07
A075010S	0.6	M10	10	20	40	27	20	0.11
A075012S	0.9	M12	12	25	47	37	26	0.25
A075016S	1.5	M16	13	25	47	34	33	0.33
A075020S	2.5	M20	16	28	60	42	40	0.96
A075022S	3.0	M22	19	31	71	51	48	1.0

Shackle SA Grade 8

Material: Alloy steel
Finish: Painted yellow
Design Factor: 4:1



Stock No.	Code	WLL (t) 4:1	For Chain Size (mm)	Pin d1 (mm)	Nominal Size d (mm)	Inner Width a (mm)	Inner Length c (mm)	Eye Outer d2 (mm)	Weight (kg)
Z100706	SA-7/8-8	2.0	7, 8	M10	8	15	30	20	0.1
Z298728	SA-10-8	3.2	10	M16	13	24	52	34	0.4
Z292528	SA-13-8	5.4	13	M20	16	28	65	40	0.7
Z293024	SA-16-8	8.2	16	M22	18	30	72	46	1
Z299622	SA-19-8	11.5	19	M27	22	36	86	52	1.7
Z294122	SA-22-8	15.5	22	M30	25	40	94	60	2.5
Z304328	SA-26-8	21.7	26	M38	32	48	116	76	5.2

Split pin included

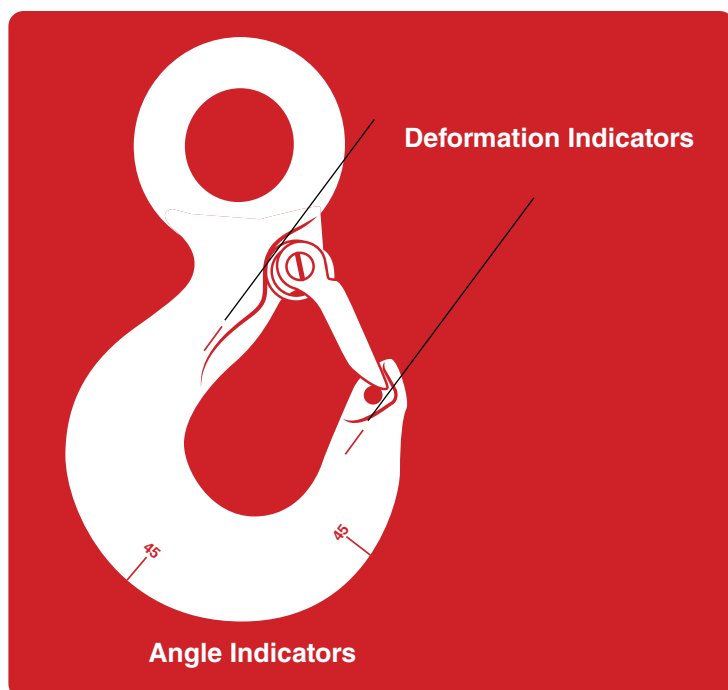


HOOKS & SWIVELS

Setting the standard for hooks with industry-changing innovations. With the most extensive product range in the industry, there's a hook for every lift.



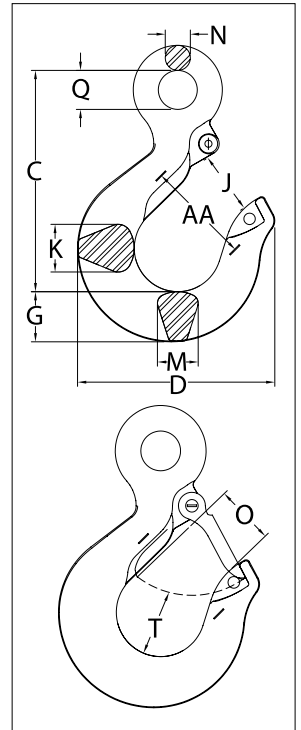
- **Application information:** Application and warning information is available for Crosby hooks. The Crosby Warning System is designed to attract the attention of the user, clearly inform the user of the factors involved in the task, and provide the user with proper application procedures. Each Crosby hook is tagged with appropriate application and warning information, thus ensuring that the information is available at the point of application.
- **Charpy impact properties:** Crosby's Quenched & Tempered® hooks have enhanced impact properties for greater toughness at all temperatures. Crosby can provide typical Charpy impact properties on selected sizes upon special request at the time of order.
- **Fatigue properties:** Typical fatigue properties are available for selected sizes. In addition, these properties will be provided upon special request for other sizes.
- **Ductility properties:** Crosby provides results of actual test values for ductility of the material. These results are measured by reduction of area and elongation. This is done for each production lot and is traceable by the Product Identification Code (PIC).
- **Tensile strengths:** Crosby provides hardness, tensile, and yield strength for each production lot of hooks, traceable by the PIC.
- **Material analysis:** Crosby can provide certified material (mill) analysis for each production lot, traceable by the PIC. Crosby, through its own laboratory, verifies the analysis of each heat of steel. Crosby purchases only special bar forging quality steel with specific cleanliness requirements and guaranteed hardenability.
- **Field inspection:** Written instructions for visual, magnaflux, and dye penetrant inspection of hooks are available from Crosby. In addition, acceptance criteria and repair procedures for hooks are available.
- **Proof testing:** If requested at the time of order, hooks can be furnished proof tested with certification. All SHUR-LOC® hooks (clevis and eye styles) are 100% proof tested with certificates.
- **Magnetic particle certification:** If requested at the time of order, hooks can be magnetic particle inspected with certification.
- **World-class certification:** Certification to world standards can be furnished upon request at the time of order. Specific standards include American Bureau of Shipping, Lloyds Register of Shipping, Det Norske Veritas, American Petroleum Institute, RINA, Nuclear Regulatory Commission, and other worldwide standards.
- **Bronze hooks:** Crosby provides bronze shank hooks for non-sparking applications.
- **QUIC-CHECK®:** Hooks incorporate markings forged into the product which address two QUIC-CHECK features:
 Deformation Indicators: Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a QUIC-CHECK measurement to determine if the throat opening has changed, thus indicating abuse or overload.
 Angle Indicators: Indicates the maximum included angle which is allowed between two sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.
- **McKissick® Split-Nut® Hook Retention System:** Shank hooks on crane blocks must be inspected in accordance with applicable ASME B30, CSA Z150, and other crane standards. These standards mandate the crane hook to be inspected for surface indications, damage and corrosion which could compromise the integrity of the crane block. Because of the type of environment in which these hooks are required to perform, the removal of corroded nuts from the threads can become a problem during inspections. The innovative, patented system is available on Crosby shank hooks. With four easy steps, the hook can be disassembled, inspected and put back into service in a fraction of the time of a conventional threaded nut.



L-1327



- For use with wire rope. Suitable for use with Grade 100 and Grade 80 chain. Working load limit needs to be de-rated to achieve a 5:1 design factor.
- Forged alloy steel, Quenched & Tempered.
- Each hook has a Product Identification Code (PIC) for material traceability, along with the size and the name Crosby.
- 25% stronger than Grade 80.
- Eye Sling Hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)
- When secured with the proper cotter pin through the hole in the tip of hook, meets the intent of OSHA Rule 1926.1431(g) and 1926.1501(g) for personnel lifting.
- Individually Proof Tested to 2.5 times the Working Load Limit with certification.
- Fatigue rated to 20,000 cycles at 1.5 times the Working Load Limit.



Crosby 8/10

Fatigue Resistant

QUIC-CHECK

QT

APPLICATION AND WARNING INFORMATION
SECTION 17

L-1327 Eye Sling Hook

Grade 10 Alloy Chain Size		Working Load Limit (t)	Hook ID Code	Stock No.	Weight Each (kg)	Dimensions (mm)											Replacement Latch Stock No.
(in)	(mm)					C	D	G	J	K	M	N	O	Q	T	AA	
-	6	1.45	DA	1025860	.23	84.8	72.9	18.5	22.9	16.0	16.0	9.1	22.6	19.1	22.1	38.1	1096325
1/4-5/16	7 - 8	2.6	HA	1025869	.59	107	99.1	26.2	30.0	19.1	19.1	12.7	29.2	19.1	29.5	50.8	1096468
3/8	10	4.0	IA	1025878	1.04	127	110	30.2	38.9	30.2	25.4	14.2	35.6	23.9	31.2	63.5	1096515
1/2	13	6.8	JA	1025887	2.04	161	144	36.6	45.2	34.8	29.7	18.3	42.4	28.4	47.8	76.2	1096562
5/8	16	10.3	KA	1025896	3.81	189	172	47.8	60.5	42.2	36.6	22.4	56.1	33.3	51.6	102	1096609
3/4	18-20	16.0	KA	1025915	6.80	230	189	57.2	58.2	47.8	41.4	28.2	52.8	62.0	62.7	102	1096609
7/8	22-23	20.0	LA	1025924	9.39	256	211	65.8	63.5	55.6	49.3	32.3	57.7	72.1	66.5	102	1096657
1	26	27.1	NA	1025933	17.9	326	262	76.2	83.8	68.3	60.5	39.6	76.7	88.9	71.9	127	1096704
1 1/4	32	41.0	PA	1025942	47.6	462	357	116	108	95.3	81.0	50.8	76.2	114	98.6	178	1093717

4:1 Design Factor. *Deformation indicators.

S-319/S-319N



- The most complete line of shank marked hooks. Available 3/4 to 300 metric tons.
- Hook Identification code marked into each hook.
- All carbon and alloy hooks are quenched and tempered.
- Quenched & Tempered.
- Available in carbon steel, alloy steel, and bronze.
- Proper design, careful forging, and precision controlled quench and tempering give maximum strength without excessive weight and bulk.
- Every Crosby Shank Hook has a pre-drilled cam which can be equipped with a latch. Simply purchase the Crosby latch assemblies. Even years after the purchase of the original hook, latch assemblies can be added.
- Type Approval Certification in accordance with ABS 2016 Steel Vessels and ABS Guide for Certification on Cranes available. Certificates available when requested at time of order and may include additional charges.



S-319 / S-319N Shank Hook

Working Load Limit (t)			Hook ID Code	Shank Hooks Stock No.			Shank Length ‡	Weight Each (kg)	Rep. Latch Kits		
Carbon	Alloy	Bronze		Carbon S-319C S-319CN	Alloy S-319A S-319AN	Bronze S-319BN			S-4320 Stock No.	PL Stock No.	SS-4055 Stock No.
0.75	1.25	.5	†D	1028505	1028701	1028900	Std.	.23	1096325	-	-
1	1.6	.6	†F	1028514	1028710	1028909	Std.	.34	1096374	-	-
1.6	2.5	1	†G	1028523	1028723	1028918	Std.	.45	1096421	-	-
2	3.2	1.4	†H	1028532	1028732	1028927	Std.	.83	1096468	-	-
3.2	5.4	2	†I	1028541	1028741	1028936	Std.	1.67	1096515	1092000	-
5	8.0	3.5	†J	1028550	1028750	1028945	Std.	3.29	1096562	1092001	-
7.5	11.5	5	†K	1028563	1028765	1028954	Std.	6.12	1096609	1092002	-
10	16	6.5	†L	1028590	1028792	1028981	Std.	9.9	1096657	1092003	-
15	22	10	†N	1028599	1028801	1028990	Std.	17.4	1096704	1092004	-
20	30	-	O	1024386	1024803	-	Std.	32.7	-	1093716	1090161
20	30	-	O	1024402	1024821	-	Long	38.8	-	1093716	1090161
25	37	-	P	1024420	1024849	-	Std.	61	-	1093717	1090189
25	37	-	P	1024448	1024867	-	Long	78	-	1093717	1090189
30	45	-	S	1024466	1024885	-	Std.	83	-	1093718	1090189
30	45	-	S	1024484	1024901	-	Long	97	-	1093718	1090189
40	60	-	T	1024509	1024929	-	Std.	122	-	1093719	1090205
40	60	-	T	1024545	1024965	-	Long	142	-	1093719	1090205
50	75	-	U	1024563	1024983	-	Std.	177	-	1093720	-
50	75	-	U	1024581	1025009	-	Long	193	-	1093720	-
-	100	-	W	-	1025027	-	Std.	277	-	1093721	-
-	100	-	W	-	1025045	-	Long	306	-	1093721	-
-	150	-	X	-	1025063	-	Std.	333	-	1093721	-
-	200	-	Y	-	1025081	-	Std.	463	-	1093723	-
-	300	-	Z	-	1025090	-	Std.	630	-	1093724	-

Maximum allowable Proof Load is 2 Times Working Load Limit. All carbon hooks designed with a 5:1 design factor. All alloy hooks 1 through 22t designed with a 4.5:1 design factor. All alloy hooks 30t and larger designed with a 4:1 design factor. All bronze hooks designed with a 4:1 design factor. †New 319N style hook. ‡See column "Y" on following page for actual length.

S-319/S-319N

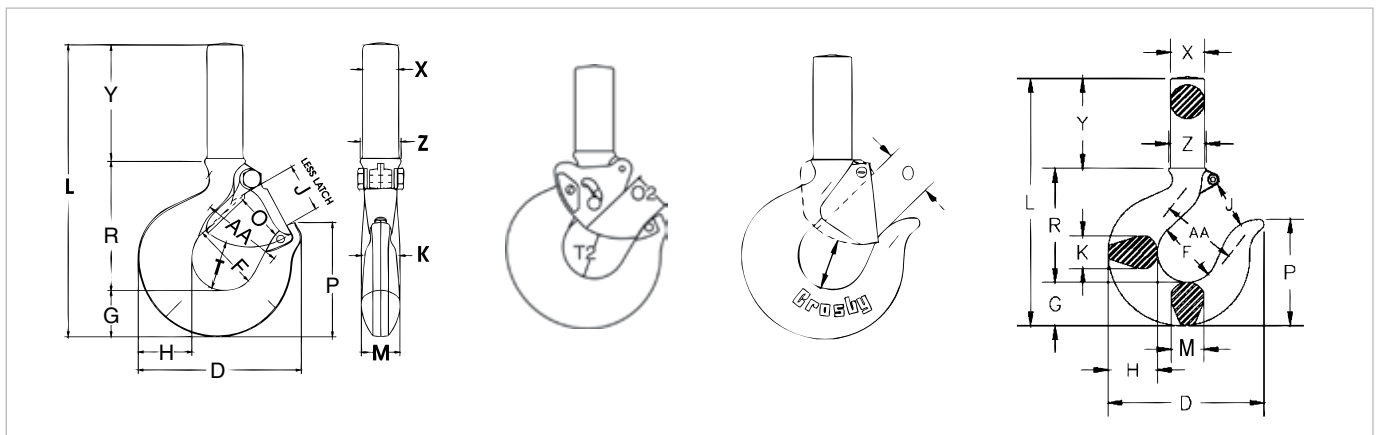


- Patented McKissick Split-Nut retention system available.
- Hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)
- Chemical analysis and tensile tests performed on each PIC to verify chemistry and mechanical properties.

4



APPLICATION AND WARNING INFORMATION
SECTION 17



S-319 / S-319N Shank Hook

Hook ID Code	Dimensions (mm)																	
	D	F	G	H	J	K	L	M	O	O2 ††	P	R	T	T2 ††	X	Y	Z	AA*
†D	72.5	31.8	18.5	20.6	23.6	16.0	131	16.0	†23.6	-	49.8	59.5	24.6	-	15.0	52.5	17.5	38.1
†F	80.5	35.1	21.3	23.9	24.6	18.0	144	18.0	†24.6	-	56.5	66.0	24.6	-	19.3	57.0	19.8	50.8
†G	91.0	38.1	25.4	29.5	26.9	22.4	161	22.4	†26.9	-	62.0	70.0	26.2	-	18.3	66.0	22.4	50.8
†H	102	41.1	29.0	33.3	30.2	23.9	181	23.9	†29.5	-	70.5	80.5	29.5	-	22.4	72.0	25.4	50.8
†I	123	51.0	36.6	41.4	38.1	33.3	219	28.7	†34.5	25.4	88.0	98.0	38.9	38.1	29.5	87.5	31.8	63.5
†J	160	63.5	46.2	52.5	45.2	42.2	265	36.6	40.9	33.3	117	121	49.3	47.8	35.8	97.5	39.6	76.2
†K	192	76.0	57.5	67.0	61.0	47.8	318	41.4	53.0	46.0	133	149	62.5	57.2	46.0	111	49.3	101
†L	212	82.5	66.0	74.5	66.5	55.5	409	49.3	57.5	51.0	151	162	66.0	58.7	51.0	178	55.5	101
†N	263	108	76.5	89.0	86.5	68.5	461	60.5	76.5	69.9	175	207	71.5	65.0	65.0	178	67.0	127
O	346	127	92.0	117	102	76.0	586	76.0	82.5	-	223	240	87.5	-	79.0	254	79.0	165
O	346	127	92.0	117	102	76.0	790	76.0	82.5	-	223	240	87.5	-	79.0	457	79.0	165
P	357	137	116	127	108	92.0	816	76.0	76.0	-	287	318	98.5	-	102	381	102	177
P	357	137	116	127	108	92.0	1044	76.0	76.0	-	287	318	98.5	-	102	610	102	177
S	392	152	129	140	121	94.5	867	82.5	86.0	-	319	356	121	-	106	381	106	203
S	392	152	129	140	121	94.5	1095	82.5	86.0	-	319	356	121	-	106	610	106	203
T	470	178	152	165	146	113	916	99.5	105	-	375	395	145	-	114	368	114	254
T	470	178	152	165	146	113	1208	99.5	105	-	375	395	145	-	114	660	114	254
U	524	197	170	184	165	133	1045	108	124	-	420	492	152	-	127	381	127	292
U	524	197	170	184	165	133	1249	108	124	-	420	492	152	-	127	584	127	292
W	584	173	218	251	149	140	1070	140	114	-	438	468	178	-	178	381	178	305
W	584	173	218	251	149	140	1222	140	114	-	438	468	178	-	178	533	178	305
X	619	171	232	278	152	152	1162	152	114	-	457	467	178	-	184	457	184	330
Y	678	191	248	300	168	178	1283	178	127	-	502	521	203	-	203	508	203	330
Z	765	241	270	329	203	184	1389	203	159	-	576	597	210	-	241	508	241	381

Rough as-forged dimension. Shank will not machine to this dimension. Please refer to the warnings & applications section for recommended shank diameter when machining.
 *Deformation indicators. †3/4t carbon through 22t alloy dimensions shown are for S-4320 Latch Kits. Dimensions for "O" frame size and larger are for PL Latch Kits. ††Dimensions are for PL-N latch kits. For the purpose of calculating D/d ratio, utilize dimension M.

L-320CN
Frame Size D-N



- Available in carbon steel and alloy steel.
- Eye hooks are load rated (marked with the Working Load Limit).
- Fatigue rated to 20,000 cycles at 1.5 times the Working Load Limit.
- Chemical analysis and tensile tests performed on each PIC to verify chemistry and mechanical properties.
- Hooks incorporate QUIC-CHECK® deformation and angle indicators.
(For detailed information, see the Crosby Value Added page at the beginning of this section.)

L-320C
Frame Size O-T



APPLICATION AND WARNING INFORMATION
SECTION 17

L-320N / L-320 Eye Hooks

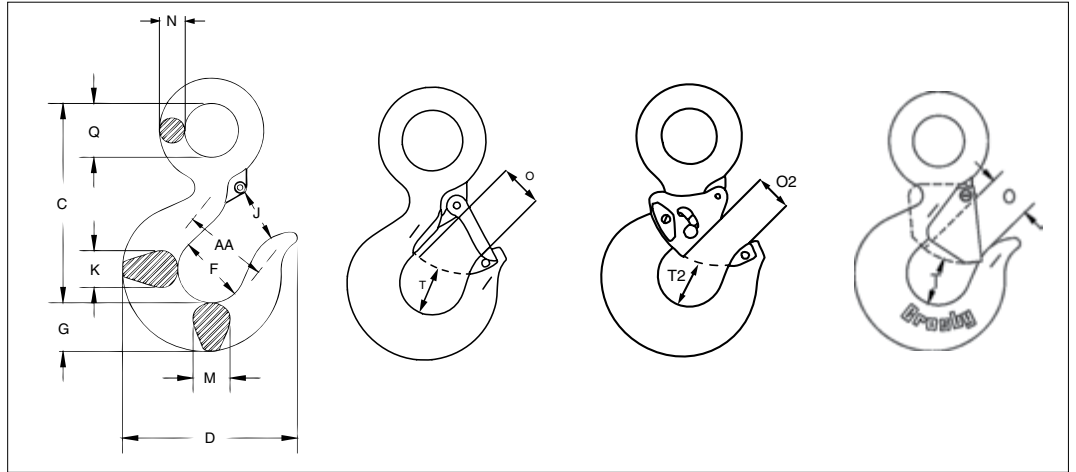
Working Load Limit (t)		Hook ID Code	Eye Hook Stock No.			Weight Each (kg)	Replacement Latch Kits		
Carbon	Alloy		Carbon L-320C L-320CN S.C.	Carbon GL-320CN Galv.	Alloy L-320A L-320AN S.C.		S-4320 Stock No.	PL Stock No.	SS-4055 Stock No.
0.75	1.25	†D	1022205	1022208	1022380	.28	1096325	-	-
1	1.6	†F	1022216	1022219	1022391	.40	1096374	-	-
1.6	2.5	†G	1022227	1022230	1022402	.65	1096421	-	-
2	3.2	†H	1022238	1022241	1022413	.94	1096468	-	-
3.2	5.4	†I	1022246	1022249	1022424	1.95	1096515	1092000	-
5	8.0	†J	1022260	1022262	1022435	3.76	1096562	1092001	-
7.5	11.5	†K	1022271	1022274	1022446	6.80	1096609	1092002	-
10	16	†L	1022282	1022285	1022457	9.42	1096657	1092003	-
15	22	†N	1022293	1022296	1022468	17.9	1096704	1092004	-
20	31.5	O	1022302	-	1022477	27.2	-	1093716	1090161
25	37	P	1023306	-	1023565	47.6	-	1093717	1090189
30	45	S	1023324	-	1023583	67	-	1093718	1090189
40	60	T	1023342	-	1023609	103	-	1093719	1090205

All carbon hooks have a 5:1 Design Factor. Alloy eye hooks 1t through 22t have a 5:1 Design Factor. Alloy eye hooks 30t through 60t have a 4.5:1 Design Factor. For 3/4t carbon through 22t alloy eye hooks, Proof Load is 2.5 times Working Load Limit. For 20t carbon through 60t alloy eye hooks, Proof Load is 2 times Working Load Limit.

L-320AN
Frame Size D-N



L-320AN
Frame Size O-T



Load Rated

Fatigue Rated

TA

QUIC-CHECK[®]

QT

APPLICATION AND WARNING INFORMATION
SECTION 17

L-320N / L-320 Eye Hooks

Hook ID Code*	Dimensions (mm)													
	C	D	F	G	J	K	M	N	O †	O2 ††	Q	T †	T2 ††	AA**
†D	85	72.0	31.8	18.5	22.9	16.0	16.0	9.14	22.6	-	19.1	22.1	-	38.1
†F	97	79.0	35.1	21.3	23.6	18.0	18.0	10.7	23.1	-	23.1	24.9	-	50.8
†G	105	89.5	38.1	25.4	25.4	22.4	22.4	14.0	25.4	-	28.7	26.2	-	50.8
†H	119	101	41.4	28.7	28.7	23.9	23.8	14.7	27.7	-	31.8	29.5	-	50.8
†I	147	122	51.0	36.6	37.3	33.3	33.3	18.3	34.5	25.4	39.6	38.9	38.1	63.5
†J	187	159	63.5	46.0	44.5	42.2	42.2	22.9	40.9	33.3	51.0	49.8	47.7	76.2
†K	230	189	76.0	57.0	58.0	47.8	41.4	28.2	53.0	46.0	62.0	62.5	57.2	102
†L	256	211	82.5	66.0	63.5	55.5	49.3	32.3	57.5	51.0	72.0	66.5	58.7	102
†N	318	262	108	76.0	84.0	68.5	60.5	39.6	76.5	69.8	89.0	72.0	65.0	127
O	357	346	127	92.0	102	76.0	76.2	44.5	82.5	-	89.0	87.5	-	165
P	462	357	137	116	108	95.2	81.0	51.0	76.0	-	114	98.5	-	178
S	511	392	152	129	121	114	82.6	55.4	86.0	-	125	121	-	203
T	602	470	178	152	146	140	99.3	64.3	105	-	145	145	-	254

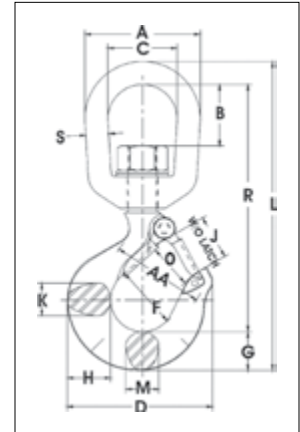
*Deformation indicators. †3/4t carbon though 22t alloy dimensions shown are for S-4320 Latch Kits. Dimensions for "O" frame size and larger are for PL Latch Kits.
††Dimensions are for PL-N latch kits.

L-322CN / L-322AN



- Forged, Quenched & Tempered.
- Suitable for positioning of the hook before the load is lifted.
- Swivel hooks are load rated.
- Proper design, careful forging, and precision controlled quench and tempering gives maximum strength without excessive weight and bulk.
- Low profile hook tip designed to utilize Crosby S-4320 or PL-N latch kit.
- Hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)

Use in corrosive environment requires shank and nut inspection in accordance with ASME B30.10-1.10.4(b)(5)(c).



Load Rated

Fatigue Rated

TA

QUIC-CHECK®

QT

APPLICATION AND WARNING INFORMATION
SECTION 17

L-322CN / L-322AN Swivel Hooks with Latch

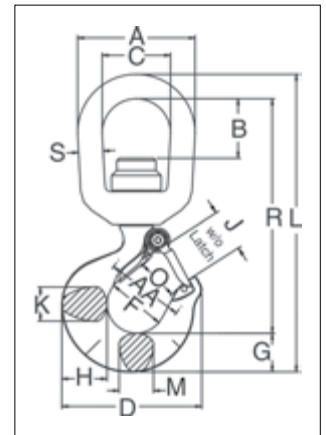
Working Load Limit (t)		Hook ID Code*	L-322CN Stock No.	L-322AN Stock No.	Weight Each (kg)	Dimensions (mm)														Rep. Latch Stock No.	
Carbon	Alloy					A	B	C	D	F	G	H	J	K	L	M	O†	R	S		AA*
0.75	1.25	D	1048603	1048807	.34	51.0	20.8	31.8	72.5	31.8	18.5	20.6	23.6	16.0	144	16.0	23.6	116	9.65	38.1	1096325
1	1.6	F	1048612	1048816	.57	63.5	33.3	38.1	80.0	35.1	21.3	23.9	24.6	18.0	170	18.0	24.6	136	12.7	50.8	1096374
1.6	2.5	G	1048621	1048825	1.02	76.0	38.1	44.5	91.0	38.1	25.4	29.5	26.9	22.4	197	22.4	26.9	155	16.0	50.8	1096421
2	3.2	H	1048630	1048834	1.04	76.0	38.1	44.5	102	41.1	28.7	33.3	30.2	23.9	210	23.9	29.5	165	16.0	50.8	1096468
3.2	5.4	I	1048639	1048840	2.25	89.0	41.7	50.8	123	51.0	36.6	41.4	38.1	33.3	246	28.7	35.8	191	19.1	63.5	1096515
5	8.0	J	1048648	1048859	4.67	116	58.0	63.5	160	63.5	46.0	52.5	45.2	42.2	317	36.6	42.9	245	25.4	76.2	1096562
7.5	11.5	K	1048657	1048868	8.80	127	62.0	70.0	192	76.0	57.0	67.0	51.0	47.8	375	41.4	56.5	289	28.7	101	1096609
10	16	L	1048666	1048880	10.5	143	63.0	79.0	212	82.5	66.0	74.5	66.5	55.5	417	49.3	61.0	311	31.8	101	1096657
15	22	N	1048675	1048889	21.3	180	95.5	104	263	108	76.0	89.0	86.5	68.5	542	60.5	81.0	424	38.1	127	1096704
-	31.5	O	-	1048898	32.0	180	95.5	104	346	127	93.0	118	102	72.5	590	76.2	82.6	459	38.1	165	1090161

All carbon swivel hooks have a 5:1 Design Factor and Proof Load is 2 times the Working Load Limit. Alloy swivel hooks 1t through 22t have a 4.5:1 Design Factor and Proof Load is 2.5 times the Working Load Limit. Alloy swivel hooks of 30t capacity have a 4:1 Design Factor and Proof Load is 2 times the Working Load Limit. *Deformation indicators †Dimensions for hooks 3/4t carbon through 22t alloy are for S-4320 latch kits. Dimensions for hooks 30t alloy are for 4055 latch kit.

L-3322B



- Bearing design allows hook to rotate freely under load.
- Capacities ranging from 2 through 15 metric tons.
- Forged, Quenched & Tempered.
- Low profile hook tip designed to utilize Crosby S-4320 or PL-N latch kit.
- L-3322 hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)



APPLICATION AND WARNING INFORMATION
SECTION 17

L-3322B Swivel Hooks with Bearing

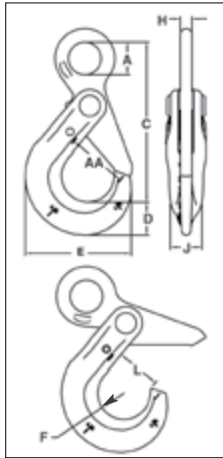
Working Load Limit (t)	Hook ID Code*	Stock No.	Weight Each (kg)	Dimensions (mm)																Rep. Latch Stock No.
				A	B	C	D	F	G	H	J	K	L	M	O	R	S	AA*		
2	GA	1028609	1.13	76.2	38.1	44.5	91.2	38.1	25.4	29.5	26.9	22.4	194	22.4	25.4	152	16.0	50.8	1096421	
3	HA	1028618	1.72	88.9	39.6	50.8	101	41.1	28.7	33.3	30.2	23.9	218	23.9	27.7	170	19.1	50.8	1096468	
5	IA	1028627	3.17	101	39.6	57.2	122	50.8	36.6	41.4	38.1	33.3	262	28.7	34.5	203	22.4	63.5	1096515	
7	JA	1028636	6.35	127	49.3	69.9	159	63.5	46.0	52.3	45.2	42.2	326	36.6	40.9	251	28.7	76.2	1096562	
11	KA	1028645	10.1	142	52.1	79.2	191	76.2	57.2	66.8	61.2	47.8	387	41.4	52.8	298	31.8	101	1096609	
15	LA	1028654	16.3	180	91.9	104	211	82.6	65.8	74.7	66.5	55.6	473	49.3	57.7	366	38.1	101	1096657	

4.5:1 Design Factor. Maximum allowable proof load is 2.5 times Working Load Limit. *Deformation indicators.

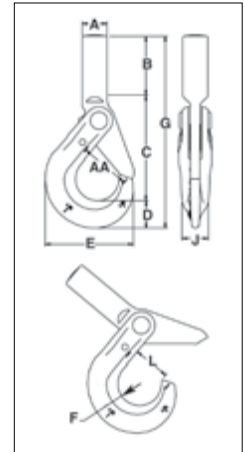
S-1316



- All SHUR-LOC® hooks have the following features:
 - Forged alloy steel, Quenched & Tempered.
 - Recessed trigger design is flush with the hook body, protecting the trigger from potential damage.
 - Easy to operate with enlarged thumb access.
 - Positive lock latch is self-locking when the hook is loaded.
 - The SHUR-LOC® hook, if properly installed and locked, can be used for personnel lifting applications and meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B).
 - Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
 - Contact Engineered Solutions for additional threading or Split-Nut options at thecrosbygroup.com/engineeredolutions.
- Eye Style incorporates these added features:
 - Individually Proof Tested to 2-1/2 times the chain Working Load Limit with certification.
 - S-1316 meets the performance requirements of EN1677-3.
 - Suitable for use with Grade 100 and Grade 80 chain.
 - Designed with 'engineered flat' to connect to S-1325 chain coupler.



S-1318A



APPLICATION AND WARNING INFORMATION
SECTION 17

S-1316 SHUR-LOC® Eye Hook with Positive Locking Latch

Chain Size		Stock No.	Frame code	Grade 10 Alloy Chain Working Load Limit (t) 4:1	Working Load Limit (t) 5:1	Weight Each (kg)	Dimensions (mm)								AA*
(in)	(mm)						A	C	D	E	F	H	J	L	
-	6	1022896	D	1.45	1.00	.39	19.8	100	20.1	66.0	17.0	7.87	16.0	29.5	38.1
1/4-5/16	7-8	1022914	G	2.60	1.90	.82	27.4	135	27.9	88.9	22.1	9.91	20.6	37.6	51.0
3/8	10	1022923	H	4.00	2.50	1.54	33.0	167	29.7	112	27.9	12.9	23.9	46.5	63.5
1/2	13	1022932	I	6.80	5.62	2.72	41.9	209	42.4	139	32.0	17.0	29.5	56.4	76.2
5/8	16	1022941	J	10.30	7.53	6.83	55.9	256	51.8	167	38.1	22.1	38.1	67.3	89.0
3/4	18-20	1022952	-	16.00	9.98	8.61	64.0	274	56.4	197	51.1	22.1	51.6	89.4	-
7/8	22	1022943	-	20.00	12.0	12.7	72.9	317	62.2	222	57.7	24.9	55.9	97.3	-
1	26	1022944	-	27.10	-	22.45	80.0	371	81.5	251	62.5	32.0	68.1	104	-

*Deformation indicators.

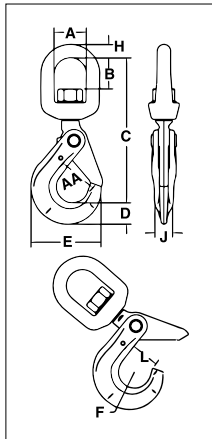
S-1318A SHUR-LOC® Shank Hook

Chain Size		Stock No.	Frame code	Grade 10 Alloy Chain Working Load Limit (t)	Dimensions (mm)										Weight Each (kg)
(in)	(mm)				A†	B	C	D	E	F	G	J	L	AA*	
-	6	1098200	D	1.45	20.1	55.0	84.0	20.1	66.0	17.0	159	16.0	28.7	38.1	.45
1/4-5/16	7-8	1098209	G	2.60	25.4	61.0	106	27.9	89.0	22.1	195	20.6	35.1	51.0	.90
3/8	10	1098218	H	4.00	29.0	75.0	131	29.7	112	27.9	235	23.9	46.5	63.5	1.61
1/2	13	1098227	I	7	34.0	85.0	160	42.4	138	32.0	288	29.5	53.5	76.2	3.18

4:1 Design Factor based on Grade 100 chain. *Deformation indicators. †Dimension before machining (as forged).



S-1326



- The S-1326 hook is a positioning device and is not intended to rotate under load. For swivel hook designed to rotate under load, use the S-13326.
- S-13326 Swivel Hook utilizes anti-friction bearing design which allows hook to rotate freely under load.
- Rated for both wire rope and for use with Grade 80/100 chain.
- Forged alloy steel, Quenched & Tempered.
- Individually Proof Tested at 2-1/2 times the chain Working Load Limit with certification.
- Recessed trigger design is flush with the hook body, protecting the trigger from potential damage.
- Easy to operate with enlarged thumb access.
- Positive lock latch is self-locking when hook is loaded.
- Trigger repair kit available (S-4316). Consists of spring, roll pin, and trigger.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- The SHUR-LOC® Hook, if properly installed and locked, can be used for personnel lifting applications and meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B).

Crosby 8/10™

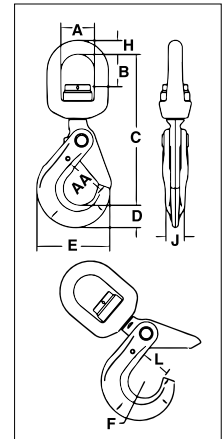
Fatigue Resistant

QT

CE

APPLICATION AND WARNING INFORMATION
SECTION 17

S-13326



4

S-1326 SHUR-LOC® Swivel Hooks Suitable for positioning before lifting.

Chain Size		Frame code	Grade 10 Alloy Chain Working Load Limit (t) 4:1 Design Factor	Working Load Limit (t) 5:1 Design Factor	Stock No.	Weight Each (kg)	Dimensions (mm)									
							A	B	C	D	E	F	H	J	L	AA*
(in)	(mm)															
-	6	D	1.45	1.16	1004304	.57	38.1	33.5	156	20.1	66.0	17.0	12.7	16.0	28.7	38.1
1/4 - 5/16	7-8	G	2.60	2.1	1004313	1.18	44.5	40.4	193	27.9	88.9	22.1	16.0	20.6	35.1	51.0
3/8	10	H	4.00	3.2	1004322	2.13	50.8	43.9	224	29.7	112	27.9	19.1	23.9	44.5	63.5
1/2	13	I	6.80	5.4	1004331	3.92	63.5	60.5	284	42.4	139	32.0	25.4	29.5	53.6	76.2
5/8	16	-	10.3	8.2	1004340	7.71	69.9	64.3	328	51.8	167	38.1	28.7	38.1	63.2	89.0
3/4	18 - 20	-	16.0	12.8	1004349	10.9	71.9	64.0	358	56.4	197	51.1	27.9	51.6	89.4	127
7/8	22	-	20.0	16.0	1004358	13.2	87.4	81.0	417	62.2	222	57.4	33.0	55.9	97.3	152

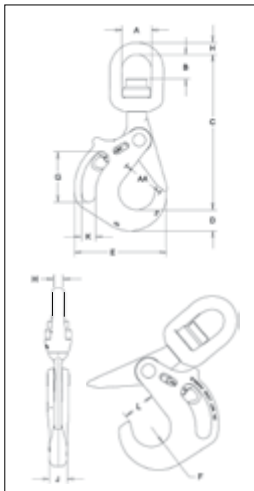
*Deformation indicators.

S-13326 SHUR-LOC® Swivel Hooks with Bearing Suitable for frequent rotation under load.

Chain Size		Frame code	Grade 10 Alloy Chain Working Load Limit (t) 4:1 Design Factor	Working Load Limit (t) 5:1 Design Factor	Stock No.	Weight Each (kg)	Dimensions (mm)									
(in)	(mm)						A	B	C	D	E	F	H	J	L	AA*
-	6	D	1.45	1.16	1004404	.57	38.1	29.0	157	20.1	66.0	17.0	12.7	16.0	28.7	38.1
1/4 - 5/16	7-8	G	2.60	2.1	1004413	1.18	44.5	38.6	192	27.9	89.0	22.1	16.0	20.6	35.1	51.0
3/8	10	H	4.00	3.2	1004422	2.13	51.0	40.9	226	29.7	112	27.9	19.1	23.9	46.5	63.5
1/2	13	I	6.80	5.4	1004431	3.92	63.5	51.6	282	42.4	138	32.0	25.4	29.5	53.5	76.2
5/8	16	-	10.3	8.2	1004440	7.71	70.0	50.3	328	52.0	167	38.1	28.7	38.1	63.0	89.0

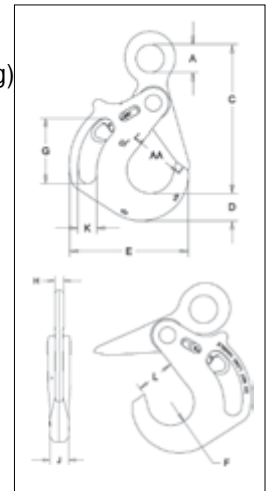
*Deformation indicators.

S-13326H



- The SHUR-LOC® Handle Hook allows the user to get a confident grip on a load with ease and comfort.
- Designed with a handle opening big enough to comfortably fit a gloved hand.
- Positive lock latch is self-locking when hook is loaded.
- Rated for both wire rope and use with Grade 80/100 chain.
- S-13326H Swivel Hook utilizes anti-friction bearing design which allows hook to rotate freely under load.
- Individually Proof Tested at 2-1/2 times the chain Working Load Limit with certification.
- The replaceable pull-trigger allows the user to easily open the SHUR-LOC's positive self-locking latch.
 - Ergonomically designed for easy use and precise control.
 - Secondary side trigger is recessed to avoid inadvertent release.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Forged alloy steel, Quenched & Tempered.
- The SHUR-LOC® hook, if properly installed and locked, can be used for personnel lifting applications and meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B).

S-1316AH



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S-13326H SHUR-LOC® Handle Swivel Hooks with Bearings

Chain Size		Grade 10 Alloy Chain Working Load Limit (t) 4:1*	Working Load Limit (t) 5:1*	Frame Code	Stock No.	Weight Each (kg)	Dimensions (mm)											
(in)	(mm)						A	B	C	D	E	F	G	H	J	K	L	AA*
5/8	16	10.3	8.2	JA	1005014	11.8	69.9	57.2	272	50	217	42.5	119	28.7	44	33.5	71	102
3/4	18/20	16.0	12.8	KA	1005023	16.8	79.2	51.9	393	66	255	50.5	120	31.8	52	32	84	127
7/8	22	19.4	15.5	LA	1005041	25.9	104	92.7	482	69	292	57	136	41.4	62	40	93	152
1	26	27.1	21.7	NA	1005050	38.1	127	102	547	79	324	64	164	41.4	70	40	104	165

4:1 Design Factor. *Deformation indicators.

S-1316AH SHUR-LOC® Handle Eye Hook

Chain Size		Grade 10 Alloy Chain Working Load Limit (t) 4:1*	Working Load Limit (t) 5:1*	Frame Code	Stock No.	Weight Each (kg)	Dimensions (mm)											
(in)	(mm)						A	B	C	D	E	F	G	H	J	K	L	AA*
5/8	16	10.3	8.2	JA	1023579	8.2	51	10.69	272	50	217	42.5	119	20	44	33.5	71	102
3/4	18/20	16.0	12.8	KA	1023599	12.7	70	12.03	306	66	255	50.5	120	22	52	32	84	127
7/8	22	19.4	15.5	LA	1023607	17.7	80	13.46	342	69	292	57	136	91	62	40	93	152
1	26	27.1	21.7	NA	1023625	27.2	90	15.55	395	79	324	64	164	30	70	40	104	165

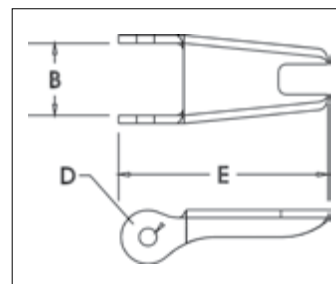
4:1 Design Factor. *Deformation indicators.

S-4320 Replacement Latch Kit



- Heavy duty stamped latch interlocks with the hook tip.
- High cycle, long life spring.
- Can be made into a "Positive Locking" Hook when proper cotter pin is utilized.
- Latch kits shipped unassembled and individually packaged with instructions.
- Meets the intent of OSHA Rule 1926.1431(g) and 1926.1501(g)(when secured with the bolt, nut and pin) for lifting personnel.

IMPORTANT: The new S-4320 Latch Kit will not fit the old style 319, 320 and 322 hooks.



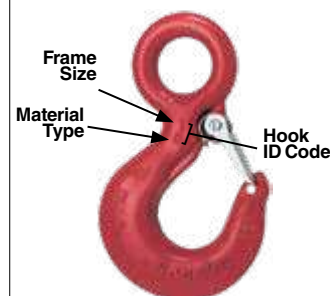
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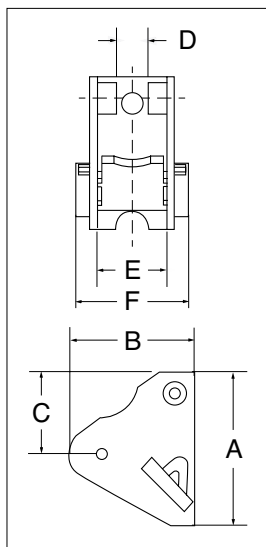
S-4320 Replacement Latch Kit for 319N, 320N, 322N, 339N, 1327 and 1339 Hooks

Hook Size (t)			Hook ID Code	Stock No.	Weight Each (kg)	Dimensions (mm)		
Carbon	Alloy	Bronze				B	D	E
3/4	1	.5	D	1096325	.01	12.7	3.80	36.6
1	1-1/2	.6	F	1096374	.02	13.7	4.30	39.6
1-1/2	2	1	G	1096421	.02	16.0	4.30	42.2
2	3	1.4	H	1096468	.03	16.8	4.30	48.5
3	5	2	I	1096515	.05	21.1	5.10	58.5
5	7	3.5	J	1096562	.07	26.4	5.10	73.2
7-1/2	11	5	K	1096609	.13	31.8	6.85	90.5
10	15	6.5	L	1096657	.15	34.3	6.85	97.0
15	22	10	N	1096704	.38	42.2	9.90	132

Example of Hook ID Placement Location



PL
Latch Kits



LATCH ORDERING INSTRUCTIONS

Specify PL, PL-N or PL-O latch kit stock number from charts below.

Specify capacity of hook to which latch will be assembled.

Specify hook material (carbon or alloy).

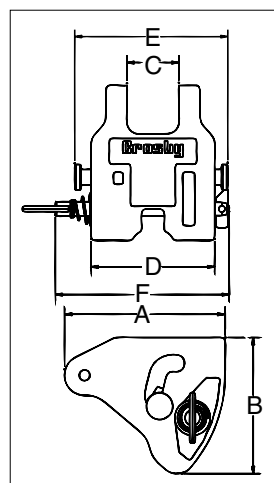
- Hot-dip galvanized.
- Heavy duty latch with easy operating features.
- Flapper lever indicates locked or unlocked position.
- Assembly instructions included with each latch.
- For additional dimensional data on eye, shank or swivel hooks, see Warnings & Applications.
- Meets the intent of OSHA Rule 1926.1431(g) and 1926.1501(g) (when secured with the bolt, nut and pin) for lifting personnel.

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PL LATCH KITS

Hook Size (t)		Hook ID Code	Stock No.	Weight Each (kg)	Dimensions (mm)					
Carbon	Alloy				A	B	C	D	E	F
3	4-1/2	I	1093711	.24	68.3	60.7	52.6	16.0	28.7	49.5
5	7	J	1093712	.30	76.0	63.2	51.0	16.0	35.1	55.9
7-1/2	11	K	1093713	.45	92.0	62.5	60.5	16.0	41.4	63.2
10	15	L	1093714	.57	102	83.1	68.5	16.0	47.8	82.6
15	22	N	1093715	1.34	135	106	74.0	21.3	60.5	88.6
20	30	O	1093716	1.84	152	115	83.3	26.9	84.1	119
25	37	P	1093717	3.91	178	174	126	57.0	60.5	155
30	45	S	1093718	4.54	171	183	100	57.0	121	162
40	60	T	1093719	6.49	203	202	108	88.0	151	196
50	75	U	1093720	12.2	251	213	149	86.0	165	226
-	100-150	W - X	1093721	15.1	276	276	165	86.0	200	254
-	200	Y	1093723	20.4	302	284	162	86.0	222	286
-	300	Z	1093724	24.9	318	315	201	86.0	254	311

PL-N/O
Latch Kits



LATCH ORDERING INSTRUCTIONS

Specify PL, PL-N or PL-O latch kit stock number from charts below.

Specify capacity of hook to which latch will be assembled.

Specify hook material (carbon or alloy).

- Heavy duty latch with easy operating features.
- PL-N designed for Crosby 319N & 320N style hooks, PL-O designed for Crosby 319 & 320 old style hooks.
- Flapper lever indicates locked or unlocked position.
- Assembly instructions included with each latch.
- For additional dimensional data on eye, shank or swivel hooks refer to the specific product page in this section.
- Meets the intent of OSHA Rule 1926.1431(g) and 1926.1501(g) (when secured with the supplied toggle pin) for lifting personnel.

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PL-N/O LATCH KITS

Hook Size (t)		Hook ID Code	PL-N Latch Kit Stock No.	PL-O Latch Kit Stock No.	Weight Each (kg)	Dimensions (mm)					
Carbon	Alloy					A	B	C	D	E	F
3	4.5 / 5 *	I	1092000	1091900	.36	60.9	51.0	21.1	54.1	68.8	87.4
5	7	J	1092001	1091901	.58	74.7	63.5	25.4	64.0	81.0	97.3
7-1/2	11	K	1092002	1091902	.90	92.2	76.7	30.2	69.9	87.4	111
10	15	L	1092003	1091903	1.27	102	86.1	34.0	81.0	102	114
15	22	N	1092004	1091904	2.22	132	110	40.9	98.0	122	130

*"N" style hooks are rated at 5 metric tons.

SS-4055 Latch Kits



LATCH ORDERING INSTRUCTIONS

Specify latch kit stock number.

Specify capacity of hook to which latch will be assembled.

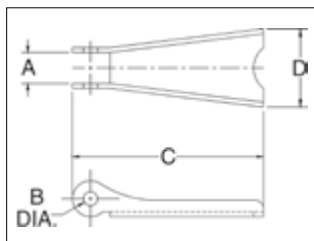
Specify hook material (carbon or alloy).

- Stainless steel construction with cadmium plated steel nuts.
- Shipped packaged and unassembled.
- Instructions included for easy field assembly.

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4

SS-4055 LATCH KITS



Hook Size (t)			Hook ID Code	Stock No.	Weight Each (kg)	Dimensions (mm)			
Carbon	Alloy	Bronze				A	B	C	D
3/4	1	.5	D	1090027	.01	9.65	4.05	36.6	15.0
1	1-1/2	.6	F	1090045	.01	9.65	4.05	40.6	15.0
1-1/2 - 2	2 - 3	1.0 - 1.4	G / H	1090063	.01	11.9	4.85	46.7	20.8
3	4-1/2	2.0	I	1090081	.05	14.2	4.30	61.0	25.4
5	7	3.5	J	1090107	.05	14.7	5.10	75.5	30.7
7-1/2 - 10	11 - 15	5.0 - 6.5	K / L	1090125	.08	15.0	6.86	93.0	38.1
15	22	10.0	N	1090143	.18	21.1	9.90	125	48.3
20	30	-	O	1090161	.29	23.9	13.2	149	65.0
25 - 30	37 - 45	-	P / S	1090189	.51	55.5	9.90	165	97.5
40	60	-	T	1090205	.80	84.0	13.2	200	105

S-4088

Alloy Hook Latch Kits



LATCH ORDERING INSTRUCTIONS

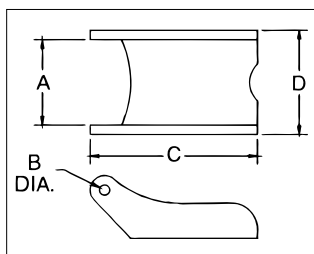
Specify latch kit stock number.

Specify capacity of hook to which latch will be assembled.

Specify hook material (carbon or alloy).

- To be used on A-327 and A-339 Grade 8 sling hooks.
- Latch kits shipped unassembled and individually packaged with instructions.

S-4088 Alloy Hook Latch Kits



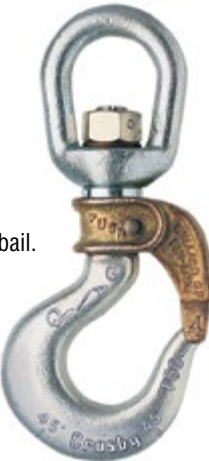
Hook Chain (mm)	Stock No.	Weight Each (kg)	Dimensions (mm)			
			A	B	C	D
6-7	1090250	.03	19.8	4.05	51.5	23.9
8-10	1090251	.06	26.2	4.85	68.5	31.8
13	1090252	.07	26.2	4.85	76.0	31.8
16	1090253	.07	26.2	4.85	82.5	31.8
19	1090254	.07	38.9	6.60	105	47.8
22	1090255	.07	38.9	6.60	118	51.0

HOOK CONNECTORS

The 5 connector styles shown below make it possible for Crosby to furnish a Golden Gate Hook to fit almost any make or model of hoisting equipment including, American Engineering Lo-Hed, ARO, Coffing, Electro Lift, Ingersoll-Rand, P & H, Robbins and Myers, Shepard Niles, CM, Shaw-Box, Wright, Yale & Towne.

CLOSED SWIVEL BAIL

For use where hoisting line or shackle can be inserted into the bail. Suitable for positioning before lifting. Hook sizes: 1 through 14.



Style C — with self-closing gate.
Style A — with manual-closing gate.

SHANK-TYPE HOOK

(Standard Length)

For use on existing load blocks, with standard shank length. Hook sizes: 2 through 14.

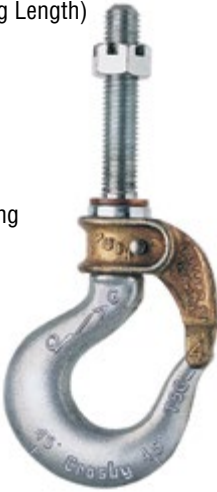


Style D — with self-closing gate.
Style B — with manual-closing gate.

SHANK-TYPE HOOK

(Long Length)

For use on existing load blocks requiring extra shank length. Hook sizes: 4 through 17.



Style K — with self-closing gate.
Style I — with manual-closing gate.

UNIVERSAL TYPE

Open swivel bail for attachment to link chain. Suitable for positioning before lifting. Hook sizes: 3, 4, and 5.



Style E — with self-closing gate.
Style G — with manual-closing gate.

LINK CHAIN NEST

With ball-bearing swivel; attaches to chain by an alloy pin. Suitable for frequent rotation under load. Hook sizes: 4, 5, and 7.



Style O — with self-closing gate.
Style P — with manual-closing gate.

Letter designations shown beneath each illustration above indicate BOTH connector style and gate type. Each connector is available with either a self-closing or manual-closing gate. (e.g. A size 4 hook with a closed swivel bail connector and self-closing gate is 4-C; with manual-closing gate, it is 4-A.)

GATE TYPES

Brass alloy Golden Gates® are engineered for quality, easy handling and dependability. The heavy duty, corrosion resistant locking mechanism will stay locked until an operator releases it; yet, can easily be shut with one hand. Cost effective, these gates reduce down time, providing the alternative to conventional latches.

LIF-LOK® GATE - SIZE 1



To lock: Close the gate; the built-in spring locks the gate against the hook tip.

To Unlock: Lift the gate upward on the hook shank and swing open.

ROLLOX® GATE - SIZE 5 through 9



To Lock: Close the gate; a stainless steel pin is mounted in a horizontal bore which passes through the gate and engages a notch milled in the hook shank.

To Unlock: Move the lever downward a quarter-turn or until it stops, the gate can now swing open 160 ° (approx.)

PIN-LOK® GATE - SIZE 2 through 4



To Lock: Close the gate; a stainless steel pin is carried in a horizontal bore and engages a milled slot in the hook shank.

To Unlock: Simply depress the stainless steel pin which causes the pin to disengage from the milled slot.

TIP-LOK® GATE - SIZE 10 through 17



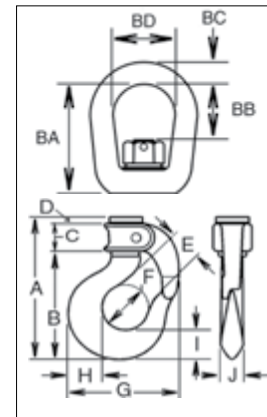
To Lock: Press the arm down until the lock trips; two arms of the gate now enclose the tip of the hook.

To Unlock: Manually depressing the locking trigger automatically raises the movable arm, allowing the gate to be rotated open.

Closed Swivel Bail



- For use where hoisting line or shackle can be inserted into the bail.
 - BL-C with self-closing gate
 - BL-A with manual-closing gate
- Suitable for positioning before lifting.
- Crosby Bullard® Hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)



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Closed Swivel Bail

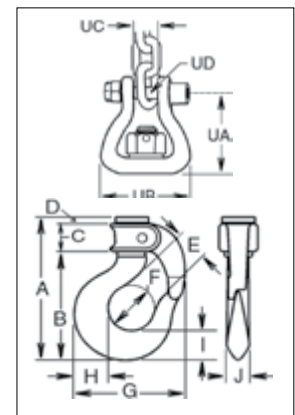
Hook Size	BL-C Stock No.	BL-A Stock No.	Gate Type	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)													
						A	B	C	D	E	F	G	H	I	J	BA	BB	BC	BD
1	1050210	1050001	LIF-LOK	.45	.36	82.0	58.7	16.0	6.60	17.5	22.4	57.0	17.5	16.0	11.2	44.5	16.0	7.85	25.4
2	1050221	1050012	PIN-LOK	.90	.59	105	76.2	23.6	4.06	24.6	31.8	73.0	20.6	19.1	11.2	47.2	24.1	9.65	31.8
3	1050232	1050023	PIN-LOK	1.3	.86	114	84.0	23.9	5.58	26.9	35.1	84.0	23.9	21.3	16.0	62.0	33.3	12.7	38.1
4	1050243	1050034	PIN-LOK	1.5	1.00	124	92.2	25.4	5.58	28.7	38.1	92.0	29.5	25.4	19.1	67.5	34.3	12.7	38.1
5	1050254	1050045	ROLLOX	2.1	1.72	143	105	31.2	6.35	31.8	41.7	104	33.3	28.4	21.3	74.0	40.6	16.0	44.5
6	1050265	1050056	ROLLOX	3.6	2.09	158	119	31.8	6.35	35.3	41.7	116	39.9	34.0	24.6	78.5	35.8	16.0	44.5
7	1050276	1050067	ROLLOX	3.8	3.13	168	132	28.4	6.35	38.1	51.0	125	41.4	36.6	28.7	88.5	42.4	19.1	51.0
8	1050287	1050078	ROLLOX	5.0	4.35	182	147	26.9	7.11	44.5	57.0	148	51.0	41.9	31.2	103	51.0	22.4	57.0
9	1050298	1050089	ROLLOX	6.5	6.12	199	164	26.9	7.87	47.8	63.5	165	52.5	46.0	35.1	118	56.0	26.2	63.5
11	1050309	1050100	TIP-LOK	8.3	9.30	244	203	31.8	7.87	57.0	76.0	192	67.0	57.0	41.1	124	66.5	28.7	70.0
12	1050320	1050111	TIP-LOK	11.1	12.3	267	225	31.8	9.65	63.5	82.5	221	74.5	65.5	49.3	130	57.0	31.8	79.5
14	1050342	1050133	TIP-LOK	16.7	25.0	320	273	35.8	9.65	86.0	108	279	89.0	75.5	60.5	203	108	41.4	104

4:1 Design Factor.

Open Swivel Bail



- Open Swivel Bail for attachment to link chain.
 - BL-E with self-closing gate
 - BL-G with manual-closing gate
- Suitable for positioning before lifting.
- Crosby Bullard® Hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)



Open Swivel Bail

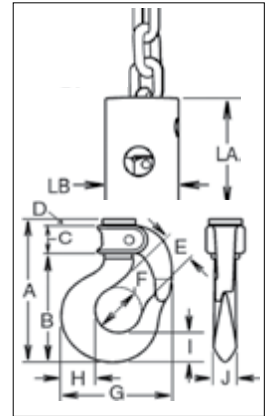
Hook Size	BL-E Stock No.	BL-G Stock No.	Gate Type	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)													
						A	B	C	D	E	F	G	H	I	J	UA	UB	UC	UD
3	1051607	1051706	PIN-LOK	1.3	.81	114	84.5	23.9	5.58	26.9	35.1	81.0	23.9	21.3	16.0	53.0	59.0	13.2	9.65
4	1051618	1051717	PIN-LOK	1.5	.95	124	92.2	25.4	5.58	28.7	38.1	92.0	29.5	25.4	19.1	54.5	59.0	13.2	9.65
5	1051629	1051728	ROLLOX	2.1	1.45	143	105	31.2	6.35	31.8	41.7	104	33.3	28.4	21.3	65.0	67.0	15.7	11.2

4:1 Design Factor.

Link Chain Nest



- With ball bearing swivel; attaches to chain by an alloy pin.
 - BL-O with self-closing gate
 - BL-P with manual-closing gate
- Suitable for frequent rotation under load.
- Crosby Bullard® Hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)



Link Chain Nest

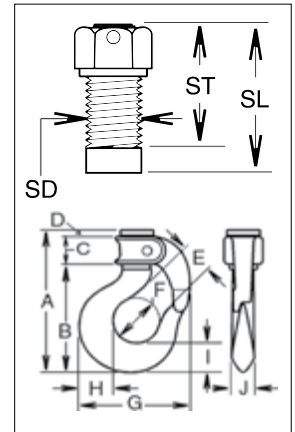
Chain Size	BL-O Stock No.	BL-P Stock No.	Gate Type	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)											
						A	B	C	D	E	F	G	H	I	J	LA	LB
4:1/4-9/32	1051409	1051508	PIN-LOK	1.5	1.13	124	92.2	25.4	5.58	28.7	38.1	92.0	29.5	25.4	19.1	67.0	44.5
5:5/16-3/8	1051442	1051541	ROLLOX	2.1	2.04	143	105	31.2	6.35	31.8	41.7	104	33.3	28.4	21.3	76.0	57.0
7:3/8-7/16	1051464	1051563	ROLLOX	3.8	5.0	168	132	28.4	6.35	38.1	51.0	125	41.4	36.6	28.7	111	76.0
7:1/2-9/16	1051486	1051585	ROLLOX	3.8	5.0	168	132	28.4	6.35	38.1	51.0	125	41.4	36.6	28.7	111	76.0

4:1 Design Factor.

Standard Length



- For use on existing load blocks, with standard shank length.
 - BL-D with self-closing gate
 - BL-B with manual-closing gate
- Numbers 2 through 12 style hooks are threaded approximately 80% of shank length.
- Crosby Bullard® Hooks incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)



Standard Length Shank Hooks

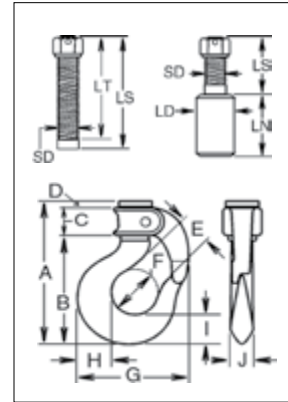
Hook Size	BL-D Stock No.	BL-B Stock No.	Gate Type	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)												
						A	B	C	D	E	F	G	H	I	J	SD	SL	ST
2	1050606	1050408	PIN-LOK	.91	.50	105	76.2	23.6	4.06	24.6	31.8	73.0	20.6	19.1	14.2	12.7	23.1	15
3	1050617	1050419	PIN-LOK	1.3	.59	114	84.1	23.9	5.58	26.9	35.1	81.0	23.9	21.3	16.0	14.2	31.8	19.1
4	1050628	1050430	PIN-LOK	1.5	.77	124	92.2	25.4	5.58	28.7	38.1	92.0	29.5	25.4	19.1	16	33.3	30.2
5	1050639	1050441	ROLLOX	2.1	1.13	143	105	31.2	6.35	31.8	41.7	104	33.3	28.4	21.3	19.1	33.3	25.4
6	1050650	1050452	ROLLOX	3.6	1.59	158	119	31.8	6.35	35.3	41.7	116	39.9	34.0	24.6	22.4	43	29.5
7	1050661	1050463	ROLLOX	3.8	2.36	168	132	28.4	6.35	38.1	51.0	125	41.4	36.6	28.7	25.4	46	35.1
8	1050672	1050474	ROLLOX	5.0	3.22	182	147	26.9	7.11	44.5	57.0	148	51.0	41.9	31.2	28.7	52.5	38.1
9	1050683	1050485	ROLLOX	6.5	4.31	199	164	26.9	7.87	47.8	63.5	165	52.5	46.0	35.1	31.8	62	46
11	1050694	1050496	TIP-LOK	8.3	7.08	244	203	31.8	7.87	57.0	76.0	192	67.0	57.0	41.1	38.1	68.5	47.8
12	1050705	1050507	TIP-LOK	11.2	9.53	267	225	31.8	9.65	63.5	82.5	221	74.5	65.5	49.3	41.4	73	54
13	1050716	1050518	TIP-LOK	13.6	13.6	285	242	31.8	9.65	76.0	95.0	245	83.5	70.0	49.3	44.5	89	56
14	1050727	1050529	TIP-LOK	16.8	18.1	320	273	35.8	9.65	86.0	108	279	89.0	75.5	60.5	51	92.5	60.5

4:1 Factor de diseño.

Long Length



- For use on existing load blocks requiring extra shank length.
 - BL-K with self-closing gate
 - BL-I with manual closing gate
- Numbers 4 through 9 style hooks are threaded approximately 80% of shank length.
- Crosby Bullard® Hooks incorporate QUIC-CHECK® deformation and angle indicators.



APPLICATION AND WARNING INFORMATION
SECTION 17

Long Length Shank Hooks

Hook Size	BL-K Stock No.	BL-I Stock No.	Gate Type	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)														
						A	B	C	D	E	F	G	H	I	J	SD	LN	LS	LT	
4 :1/2	1051002	1050804	PIN-LOK	1.45	.86	124	92.2	25.4	5.58	28.7	38.1	92.0	29.5	25.4	19.1	12.7	11.2	81.0	81.0	
4 :9/16	1051013	1050815	PIN-LOK	1.5	.86	124	92.2	25.4	5.58	28.7	38.1	92.0	29.5	25.4	19.1	14.2	12.2	81.0	81.0	
4 :5/8	1051024	1050826	PIN-LOK	1.5	.86	124	92.2	25.4	5.58	28.7	38.1	92.0	29.5	25.4	19.1	16.0	14.0	84.0	81.0	
5	1051035	1050837	ROLLOX	2.1	1.36	143	105	31.2	6.35	31.8	41.7	104	33.3	28.4	21.3	19.1	16.0	90.5	82.5	
6	1051046	1050848	ROLLOX	3.6	1.72	158	119	31.8	6.35	35.3	41.7	116	39.9	34.0	24.6	22.4	19.1	103	90.0	
7	1051057	1050859	ROLLOX	3.8	2.68	168	132	28.4	6.35	38.1	51.0	125	41.4	36.6	28.7	25.4	22.4	116	105	
8	1051068	1050870	ROLLOX	5.0	3.54	182	147	26.9	7.11	44.5	57.0	148	51.0	41.9	31.2	28.4	23.9	129	114	
9	1051079	1050881	ROLLOX	6.5	4.90	199	164	26.9	7.87	47.8	63.5	165	52.5	46.0	35.1	31.8	26.9	141	125	
12 ‡	1051101	1050903	TIP-LOK	11.2	12.7	267	225	31.8	9.65	63.5	82.5	221	74.5	65.5	49.3	41.4	39.6	137	118	
13 ‡	1051112	1050914	TIP-LOK	13.6	15.9	285	242	31.8	9.65	76.0	95.5	245	83.5	70.0	49.3	44.5	38.1	187	146	
14 ‡	1051123	1050925	TIP-LOK	16.8	20.4	320	273	35.8	9.65	86.0	108	279	89.0	75.5	60.5	51.0	50.8	137	102	
16	1051134	1050936	TIP-LOK	30.0	46.7	388	332	38.1	16.0	102	127	346	118	92.0	76.0	70.0	70.0	406	178	
17	1051156	1050958	TIP-LOK	60.0	168	615	522	66.8	23.9	146	178	470	165	152	113	102	100	578	356	

4:1 Design Factor. ‡Hook will have the shank extended by use of a Coupling Nut. Customer is required to complete and approve side 2 of a Crosby Bullard® hook data form.

Crosby® / Bullard Golden Gate Hooks Service Parts

Hook Size	Gate Type	BL-GA Gate Assemblies		BL-RK Gate Repair Kit Stock No.
		Manual Close Stock No.	Self Close Stock No.	
2	PIN-LOK	1100298	1100309	1100101
3	PIN-LOK	1100320	1100331	1100102
4	PIN-LOK	1100342	1100353	1100103
5	ROLLOX	1100364	1100375	1100112
6	ROLLOX	1100386	1100397	1100113
7	ROLLOX	1100408	1100419	1100123
8	ROLLOX	1100430	1100441	1100124
9	ROLLOX	1100452	1100463	1100125
10	TIP-LOK	1100474	1100485	1100133
11	TIP-LOK	1100496	1100507	1100144
12	TIP-LOK	1100518	1100529	1100155
13	TIP-LOK	1100540	1100551	1100166
14	TIP-LOK	1100562	1100573	1100177
15	TIP-LOK	1100584	1100595	1100188
16	TIP-LOK	1100606	1100617	1100199
17	TIP-LOK	1100639	1100628	1100210

Bullard® QUIC-CHECK® Deformation Indicator Table

Hook Size	Hook ID Code	AA (mm)
1	1	38.1
2	D	38.1
3	F	38.1
4	G	50.8
5	H	50.8
6	6	63.5
7	I	63.5
8	8	76.2
9	J	101.6
11	K	101.6
12	L	101.6
13	13	127.0
14	N	127.0
16	O	165.1
17	T	254.0

O-318

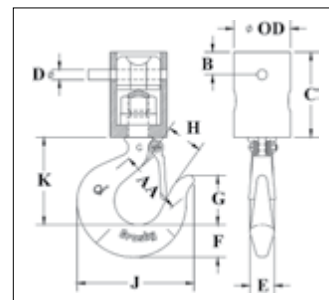
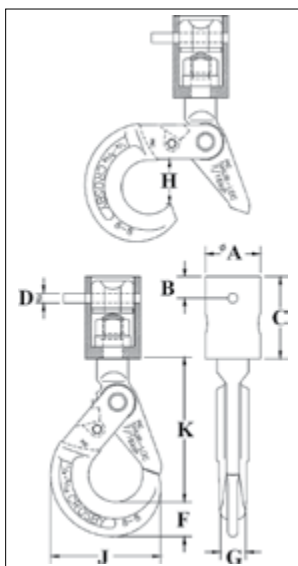


- With ball bearing swivel; attaches to chain by an alloy pin.
- Suitable for frequent rotation under load.
- O-318 Hooks utilize Crosby SHUR-LOC® positive locking hooks. Latch is self-locking when hook is loaded.
- O-319 Hooks utilize Crosby® standard 319 Shank Hooks which incorporate QUIC-CHECK® deformation and angle indicators. (For detailed information, see the Crosby Value Added page at the beginning of this section.)
- Entire assembly is zinc plated.
- Repair kit available consisting of bearing and spring pin.

O-319



4



APPLICATION AND WARNING INFORMATION
SECTION 17

O-318 Chain Nest Hooks

Chain Size (mm)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)									Replacement Trigger Kit Stock No.
				A	B	C	D	F	G	H	J	K	
6 - 7	1098409	1.5	1.59	44.5	17.8	66.5	7.87	27.9	20.6	37.1	89.0	117	6603011
8 - 10	1098427	2.1	2.72	54.0	17.8	81.0	9.65	29.2	23.9	46.5	110	144	6603012
10 - 11	1098445	3.8	6.24	76.0	25.4	111	12.7	42.2	29.5	53.5	138	179	6603013
13 - 14	1098463	3.8	6.24	76.0	25.4	111	16.0	42.2	29.5	53.5	138	179	6603013

4:1 Design Factor.

O-319 Chain Nest Hooks

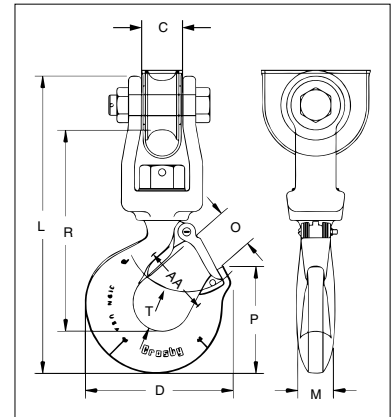
Chain Size (mm)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)											Replacement Trigger Kit Stock No.
				OD	AA	B	C	D	E	F	G	H	J	K	
6 - 7	1098312	1.5	1.16	44.5	51.0	17.8	66.5	7.87	19.1	25.4	38.9	25.4	92.0	68.5	1096421
8 - 10	1098334	2.1	1.81	54.0	51.0	17.8	81.0	9.65	21.3	28.4	43.7	28.4	104	77.5	1096468
10 - 11	1098356	3.8	4.54	76.0	63.5	25.4	111	12.7	28.4	36.6	54.0	34.0	123	96.0	1096515
13 - 14	1098378	3.8	4.54	76.0	63.5	25.4	111	16.0	28.4	36.6	54.0	34.0	123	96.0	1096515

4:1 Design Factor. *Deformation indicators.

S-3319



- Designed for utility applications using synthetic rope.
- Suitable for positioning before lifting.
- Hook is forged alloy steel, Quenched & Tempered.
- Design of hook provides needed overhaul weight.
- Utilizes spool & shield designed to protect rope and keep rope positioned correctly on spool.
- Spool provides wider rope bearing surface resulting in an increased area for load distribution and reduces rope abrasion.



APPLICATION AND WARNING INFORMATION
SECTION 17

S-3319 Utility Swivel Hook

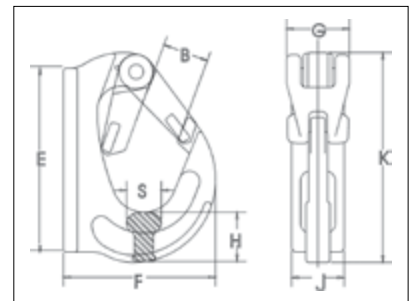
Working Load Limit (t)	Stock No.	Weight Each (kg)	Hook ID Code	Synthetic Rope Size (mm)	Dimensions (mm)									Replacement Latch Kit Stock No.
					C	D	L	M	O	P	R	T	AA*	
1.63	1002054	1.90	HA	14 - 16	27.7	101	222	23.9	29.5	70.6	151	29.5	2.00	1096468
2.50	1002063	3.62	IA	19 - 21	33.2	123	268	30.2	35.8	88.1	179	38.9	2.50	1096515
4.50	1002072	6.80	JA	22 - 27	45.2	160	324	36.6	45.2	117	221	49.3	3.00	1096562

5:1 Design Factor. Maximum allowable proof load is 2 times the Working Load Limit. *Deformation indicators.

BH-313



- Wide range of sizes available: 1-10 metric ton capacity.
- Forged alloy steel.
- Designed for attachment to mobile lifting equipment to provide a pick point for easy sling attachment.
- Large weld pad.
- Heavy duty latch interlocks with the hook tip. Replacement latches are available.
- Detailed installation and application instructions included with each hook.



BH-313 Weld-On Hooks

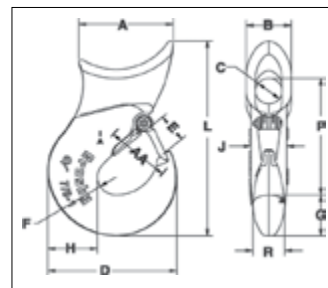
Working Load Limit (t)	Stock No.	Weight Each (kg)	Dimensions (mm)								Replacement Latch Kit Stock No.
			B	E	F	G	H	J	K	S	
1	1029105	.52	23.1	97.0	71.0	36.1	26.9	25.9	107	18.0	1092104
2	1029114	.84	23.1	82.0	91.0	36.1	24.9	34.0	115	21.1	1092104
3	1029123	1.18	29.0	117	105	36.1	31.0	36.1	131	23.9	1092104
4	1029132	1.90	34.0	131	114	46.0	36.1	42.9	147	29.0	1092105
5	1029141	2.55	34.0	161	133	47.0	45.0	43.9	173	29.0	1092105
8	1029150	3.30	35.1	166	135	47.0	52.0	52.0	178	39.1	1092105
10	1029169	5.00	49.0	205	168	47.0	57.0	54.0	222	39.1	1092106

5:1 Design Factor.

A-350L



- New style incorporates throat opening equal to or larger than old style hooks.
- Each product has a Product Identification Code (PIC) for material traceability, along with a Working Load Limit, and the name Crosby or "CG" forged into it.
- All hooks incorporate Crosby's patented QUIC-CHECK® deformation indicators to help in determining if throat opening dimension has changed.
- Each hook is equipped with a Crosby S-4320 heavy duty stamped latch with the high cycle, long life spring.
- Forged alloy steel, Quenched & Tempered.



4

A-350L Sliding Choker Hook



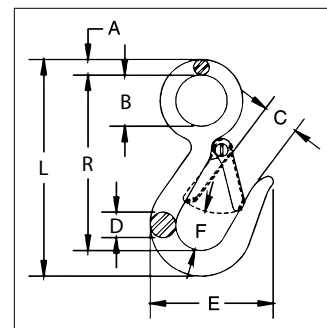
Single Part Rope Size (in. - mm)	Eight Part Rope Size (mm)	Stock No.	WLL (t)	Weight Each (kg)	Dimensions (mm)												Hook Frame Code	Replacement Latch Kit Stock No.
					A	B	C	D	E	F	G	H	L	P	R	AA*		
3/8 - 10	-	1011802	1.13	.35	52.5	28.7	16.0	61.0	16.0	9.65	21.3	23.1	109	66.0	16.0	38.1	DA	1096325
1/2 - 13	3	1011811	1.50	.54	57.0	33.3	19.1	75.5	19.8	12.7	24.6	26.9	126	78.5	19.1	38.1	FA	1096374
† 5/8 - 16	-	1011820	2.27	1.31	77.5	41.4	19.1	90.5	23.9	14.2	28.7	33.3	162	98.5	25.4	50.8	GA	1096421
† 5/8 - 16	4	1011839	2.27	1.22	77.5	41.4	25.4	90.5	23.9	14.2	28.7	33.3	162	102	28.7	50.8	GA	1096421
† 3/4 - 20	-	1011848	3.63	2.35	86.0	54.0	25.4	108	29.5	16.0	36.6	41.4	195	116	28.7	63.5	HA	1096468
† 3/4 - 20	6-7	1011857	3.63	2.27	86.0	54.0	36.6	108	29.5	16.0	36.6	41.4	195	121	28.7	63.5	HA	1096468
†† 7/8-1 - 22-25	-	1028177	6.75	4.40	112	53.8	31.8	154	35.8	22.4	51.0	59.2	243	145	38.1	76.2	IA	1096515

*Deformation indicators. †Determine eye diameter "C" before ordering. ††22-25mm is cast steel.

G-3315



- Forged carbon steel, Quenched & Tempered.
- Pressed steel latches and stainless steel springs, bolts and nuts.
- For replacement latch kit, order Stock No. 9900299.
- Hook body - galvanized.
- Suitable for overhead lifting if provisions are made for meeting applicable standards and the specific lifting requirements.



G-3315 Snap Hook



Hook Size (mm)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)							
				A	B	C	D	E	F	L	R
12	1023056	.34	.11	6.35	19.1	19.1	11.2	57.0	19.1	100	82.5
14	1023074	.45	.22	8.65	28.4	20.6	14.2	68.5	22.4	120	97.5

4:1 Design Factor.



S-377

- Forged carbon steel, Quenched & Tempered.
- The resultant load on each hook cannot exceed 0.5t.
- Meets the performance requirements of Federal Specification RR-C-271G, Type V, Class 6, except for those provisions required of the contractor.



S-377 Barrel Hooks

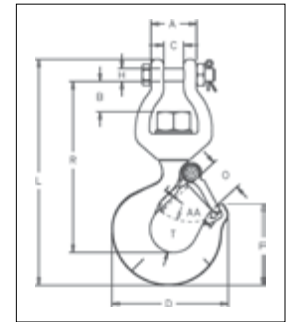
Working Load Limit Per Pair (t)	Stock No. Per Pair	Weight Each Per Pair (kg)	Dimensions (mm)			
			I.D. of Eye	O.D. of Eye	Overall Length	Width of Lip
1.0	1028248	1.61	39.6	71.4	127	73.2

4:1 Design Factor.



S-3316

- Easily attaches to any chain and electric hoist with welded link load chain, roller chain or wire rope with suitable end fitting.
- Swivel jaw is forged.
- Suitable for positioning before lifting.



APPLICATION AND WARNING INFORMATION
SECTION 17



S-3316 Replacement Hook

Working Load Limit (t)	Frame Code	Stock No.	Weight Each (kg)	Dimensions (mm)											Replacement Latch Kit Stock No.
				A	B	C	D	H	L	O	P	R	T	AA	
.5	F	1023029	.57	33.5	17.8	14.2	80.0	9.7	159	24.4	56.4	120	25.1	50.8	1096374
1	H	1023047	1.18	33.5	25.4	17.0	101	11.2	197	29.5	70.6	150	29.5	50.8	1096468

5:1 Design Factor.



A-378

- Forged alloy steel, Quenched & Tempered.
- Deep straight throat permits efficient handling of flat plates or large cylindrical shapes.



A-378 with Handle

A-378 Sorting Hook

Working Load Limit at tip of Hook (t)	Working Load Limit at bottom of Hook (t)	Stock No	Style	Weight Each (kg)	Dimensions (mm)			
					I.D. of Eye	Overall Length	Opening at top of Hook	Radius at bottom of Hook
1.8	6.8	1028024	No Handle	2.91	35.0	246	71.4	15.9
1.8	6.8	1028033	With Handle	2.91	35.0	246	71.4	15.9

4:1 Design Factor.



Crosby® Forged Swivels

- 402 and 403 forged swivels are positioning devices and are not intended to rotate under load.
- Hot-dip galvanized.
- Quenched & Tempered.
- Crosby products meet or exceed all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, Crosby products meet other critical performance requirements, including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- G-402 swivels meet the performance requirements of Federal Specification RR-C-271G, Type VII, Class 2, except for those provisions required of the contractor.
- G-403 swivels meet the performance requirements of Federal Specification RR-C-271G, Type VII, Class 3, except for those provisions required of the contractor.



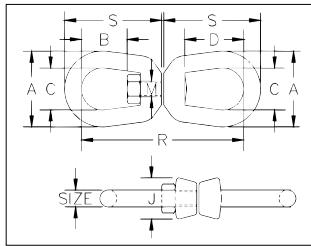
4



13 - 32mm size



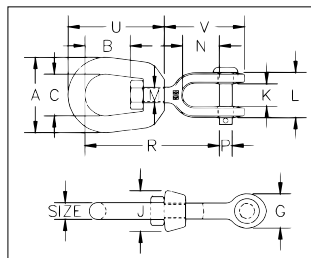
38mm size



G-402 Regular Swivels

Size (mm)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)							
				A	B	C	D	J	M	R	S
6	1016019	.39	.10	31.8	17.5	19.1	26.9	17.5	7.85	74.6	42.9
8	1016037	.57	.18	41.4	20.6	25.4	31.8	20.6	9.65	90.4	52.3
10	1016055	1.02	.32	51.0	23.9	31.8	38.1	25.4	12.7	109	63.5
13	1016073	1.63	.60	63.5	33.3	38.1	51.0	33.3	16.0	138	81.0
16	1016091	2.36	1.13	76.0	39.5	44.5	60.5	38.1	19.1	167	98.5
19	1016117	3.27	1.82	89.0	44.5	51.0	67.0	47.8	22.4	183	109
22	1016135	4.54	2.83	102	52.0	57.0	77.5	54.0	25.4	213	127
25	1016153	5.67	4.06	114	58.5	63.5	89.0	60.5	28.7	245	146
32	1016199	8.16	7.42	143	68.5	79.5	93.5	76.0	38.1	291	172
38	1016215	20.5	20.8	180	98.5	104	98.5	95.2	57.0	424	252

5:1 Design Factor.



G-403 Jaw End Swivels

Size (mm)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)												
				A	B	C	G	J	K	L	M	N	P	R	U	V
6	1016395	.39	.10	31.8	17.5	19.1	17.5	17.5	11.9	26.2	7.9	22.4	6.4	67.0	42.9	42.9
8	1016411	.57	.15	41.4	20.6	25.4	20.6	20.6	12.7	28.7	9.7	22.4	7.9	74.5	52.0	46.0
10	1016439	1.02	.30	51.0	23.9	31.8	25.4	25.4	16.0	35.8	12.7	26.9	9.7	92.0	63.5	57.0
13	1016457	1.63	.61	63.5	33.3	38.1	33.3	33.3	19.1	44.5	16.0	33.3	12.7	114	81.0	73.0
16	1016475	2.36	1.12	76.0	39.5	44.5	41.4	38.1	23.9	52.0	19.1	38.1	16.0	135	98.5	87.5
19	1016493	3.27	1.76	89.0	44.5	51.0	47.8	47.8	28.7	64.5	22.4	44.5	19.1	154	109	102
22	1016518	4.54	2.66	102	52.0	57.0	54.0	54.0	34.0	70.9	25.4	52.0	22.4	178	127	115
25	1016536	5.67	4.46	114	58.5	63.5	67.0	60.5	44.5	94.5	28.7	71.5	28.7	217	146	151
32	1016572	8.16	7.14	145	68.5	79.5	79.5	76.0	52.0	109	41.4	71.5	35.1	248	179	162
38+	1016590	20.5	24.8	178	98.5	102	143	102	73.0	152	57.0	113	57.0	362	254	275

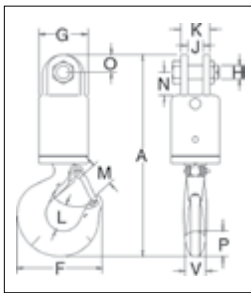
5:1 Design Factor.

Crosby® Tapered Roller Bearing Swivels

- Equipped with tapered roller thrust bearing.
- Suitable for frequent rotation under load.
- All swivels individually proof tested to 2 times the Working Load Limit with labeled documentation.
- All hooks furnished with latches assembled.
- All jaws complete with bolts, nuts, and cotter pins.
- Pressure lube fitting provided.
- NOT TO BE USED ON DEMOLITION (WRECKING) BALLS.
- Other types and capacities up to 1,250t available to meet your requirements. Visit thecrosbygroup.com/engineeredolutions for more information.
- IMPORTANT - Crosby swivels should only be used with the recommended wire rope. Contact the wire rope manufacturer for the proper wire rope to be used with Crosby swivels.



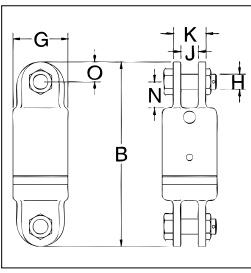
S-1 Jaw & Hook



Swivel No.	Stock No.	Working Load Limit (t)	Wire Rope Size (mm)	Weight Each (kg)	Dimensions (mm)											
					A	F	G	H	J	K	L	M	N	O	P	V
3-S-1	297011	3	13	4.45	291	123	70.0	19.1	22.4	41.1	38.9	35.8	33.3	25.4	36.6	28.4
5-S-1	297217	5	16	7.04	339	160	76.0	22.4	25.4	57.0	49.3	42.9	41.1	28.4	46.0	36.6
8-S-1	297413	8.5	19	13.3	418	192	102	25.4	39.5	71.5	62.5	56.5	54.0	35.1	57.0	41.1
10-S-1	297618	10	22	21.2	502	212	114	38.1	44.5	86.0	66.0	61.0	89.0	44.5	66.0	49.3
15-S-1	297814	15	26	33.5	565	263	127	38.1	44.5	86.0	71.5	81.0	89.0	44.5	76.0	60.5
25-S-1	298118	25	-	64	680	346	152	51.0	51.0	117	87.5	92.0	93.5	60.5	93.0	76.0
35-S-1	298216	35	-	100	760	357	165	51.0	51.0	117	98.5	95.5	93.5	60.5	116	81.0
45-S-1	298314	45	-	114	891	392	178	57.0	63.5	127	121	108	102	76.0	129	82.5

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

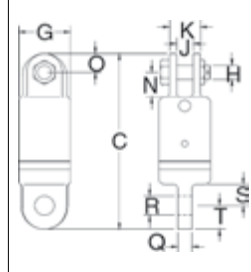
S-2 Jaw & Jaw



Swivel No.	Stock No.	Working Load Limit (t)	Wire Rope Size (mm)	Weight Each (kg)	Dimensions (mm)						
					B	G	H	J	K	N	O
3-S-2	297020	3	13	4.37	236	70.0	19.1	22.4	41.1	33.3	25.4
5-S-2	297226	5	16	6.21	262	76.0	22.4	25.4	57.0	41.1	28.4
8-S-2	297422	8.5	19	11.9	321	102	25.4	39.5	71.5	54.0	35.1
10-S-2	297627	10	22	20.8	426	114	38.1	44.5	86.0	89.0	44.5
15-S-2	297823	15	26	28.5	435	127	38.1	44.5	86.0	89.0	44.5
25-S-2	298127	25	-	64	527	152	51.0	51.0	117	93.5	60.5
35-S-2	298225	35	-	70	527	165	51.0	51.0	117	93.5	60.5
45-S-2	298323	45	-	107	641	178	57.0	63.5	127	102	76.0

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

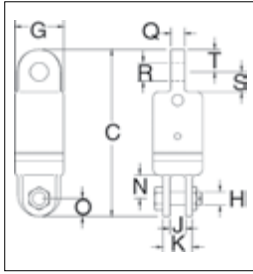
S-3 Jaw & Eye



Swivel No.	Stock No.	Working Load Limit (t)	Wire Rope Size (mm)	Weight Each (kg)	Dimensions (mm)									
					C	G	H	J	K	N	O	Q	R	T
3-S-3	297039	3	13	4.14	237	70.0	19.1	22.4	41.1	33.3	25.4	19.1	26.2	28.4
5-S-3	297235	5	16	6.12	256	76.0	22.4	25.4	57.0	41.1	28.4	25.4	32.5	31.8
8-S-3	297431	8.5	19	11.3	311	102	25.4	39.5	71.5	54.0	35.1	31.8	35.8	41.1
10-S-3	297636	10	22	19.7	409	114	38.1	44.5	86.0	89.0	44.5	42.9	42.9	70.0
15-S-3	297832	15	26	27.7	425	127	38.1	44.5	86.0	89.0	44.5	49.3	51.5	70.0
25-S-3	298136	25	-	61	546	152	51.0	51.0	117	93.5	60.5	57.0	58.5	98.5
35-S-3	298234	35	-	68	546	165	51.0	51.0	117	93.5	60.5	57.0	58.5	98.5
45-S-3	298332	45	-	102	657	178	57.0	63.5	127	102	76.0	63.5	64.5	102

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

S-4 Eye & Jaw

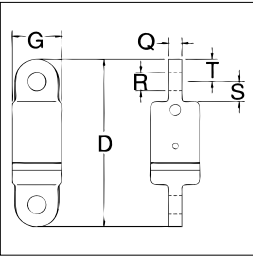


Swivel No.	Stock No.	Working Load Limit (t)	Wire Rope Size (mm)	Weight Each (kg)	Dimensions (mm)										
					C	G	H	J	K	N	O	Q	R	S	T
3-S-4	297048	3	13	4.08	237	70.0	19.1	22.4	41.1	33.3	25.4	19.1	26.2	28.4	31.8
5-S-4	297244	5	16	5.60	256	76.0	22.4	25.4	57.0	41.1	28.4	25.4	32.5	31.8	31.8
8-S-4	297440	8.5	19	13.2	311	102	25.4	39.5	71.5	54.0	35.1	31.8	35.8	41.1	38.1
10-S-4	297645	10	22	20.0	409	114	38.1	44.5	86.0	89.0	44.5	42.9	42.9	70.0	47.8
15-S-4	297841	15	26	27.7	425	127	38.1	44.5	86.0	89.0	44.5	49.3	51.5	70.0	54.0
25-S-4	298145	25	-	61	546	152	51.0	51.0	117	93.5	60.5	57.0	58.5	98.5	60.5
35-S-4	298243	35	-	68	546	165	51.0	51.0	117	93.5	60.5	57.0	58.5	98.5	60.5
45-S-4	298341	45	-	102	657	178	57.0	63.5	127	102	76.0	63.5	64.5	102	76.0

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

4

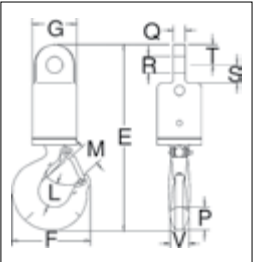
S-5 Eye & Eye



Swivel No.	Stock No.	Working Load Limit (t)	Wire Rope Size (mm)	Weight Each (kg)	Dimensions (mm)					
					D	G	Q	R	S	T
3-S-5	297057	3	13	3.86	239	70.0	19.1	26.2	28.4	31.8
5-S-5	297253	5	16	5.13	249	76.0	25.4	32.5	31.8	31.8
8-S-5	297459	8.5	19	13.3	302	102	31.8	35.8	41.1	38.1
10-S-5	297654	10	22	19.1	394	114	42.9	42.9	70.0	47.8
15-S-5	297850	15	26	22.2	416	127	49.3	51.5	70.0	54.0
25-S-5	298154	25	-	59	565	152	57.0	58.5	98.5	60.5
35-S-5	298252	35	-	66	565	165	57.0	58.5	98.5	60.5
45-S-5	298350	45	-	98	673	178	63.5	64.5	102	76.0

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

S-6 Eye & Hook



Swivel No.	Stock No.	Working Load Limit (t)	Wire Rope Size (mm)	Weight Each (kg)	Dimensions (mm)										
					E	F	G	L	M	P	Q	R	S	T	V
3-S-6	297066	3	13	4.23	292	123	70.0	38.9	35.8	36.6	19.1	26.2	28.4	31.8	28.4
5-S-6	297262	5	16	6.46	332	160	76.0	49.3	42.9	46.0	25.4	32.5	31.8	31.8	36.6
8-S-6	297468	8.5	19	14.5	408	192	102	62.5	56.5	57.0	31.8	35.8	41.1	38.1	41.1
10-S-6	297663	10	22	20.6	486	212	114	66.0	61.0	66.0	42.9	42.9	70.0	47.8	49.3
15-S-6	297869	15	26	28.6	540	263	127	71.5	81.0	76.0	49.3	51.5	70.0	54.0	60.5
25-S-6	298163	25	-	61	699	346	152	87.5	92.0	93.0	57.0	58.5	98.5	60.5	76.0
35-S-6	298261	35	-	98	780	357	165	98.5	95.5	116	57.0	58.5	98.5	60.5	81.0
45-S-6	298369	45	-	122	907	392	178	121	108	129	63.5	64.5	102	76.0	82.5

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

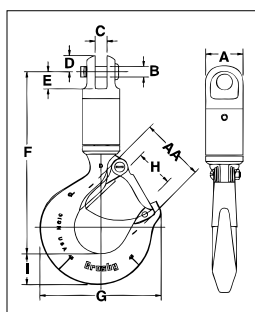
Crosby® Angular Contact Bearing Swivels



- Designed for high rotation speed, lower torque required to initiate rotation.
- Angular contact bearings maximize efficiency, reliability, and service life of swivel and extend the life of the wire rope.
- Entire swivel is zinc plated to resist corrosion.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Hook models utilize genuine Crosby hooks which are forged alloy steel, quenched and tempered, and contain patented QUIC-CHECK® markings.
- Each swivel 7.65 metric tons and larger is furnished with a pressure lubrication fitting.
- For swivels larger than those listed, visit thecrosbygroup.com/engineeredolutions for more information.



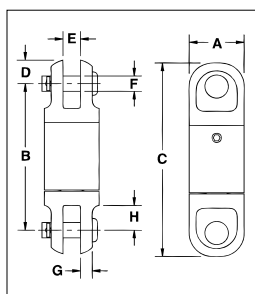
AS-1 Jaw & Hook



AS-1 JAW & HOOK				Dimensions (mm)									Deformation Indicator AA	Replacement Latch Kit Stock No.
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G	H	I		
.40	3	1016001	.32	22.4	6.35	6.35	9.65	10.4	110	72.5	23.6	18.5	38.1	1096325
.68	6	1016010	.68	33.3	9.65	7.85	11.2	14.2	138	80.0	24.6	21.3	38.1	1096374
1.35	10	1016025	1.04	41.4	12.7	12.7	17.5	19.8	161	102	29.5	29.0	38.1	1096374
2.70	13	1016026	2.95	51.0	19.1	19.1	23.9	30.2	221	123	35.8	36.6	63.5	1096374
4.50	16	1016040	5.85	63.5	22.4	25.4	28.7	38.9	272	160	42.9	46.2	76.0	1096562
7.65	19	1016045	12.0	76.0	30.2	39.5	34.0	53.0	347	212	61.0	66.0	102	1096657
9.00	22	1016056	24.0	102	38.1	44.5	44.5	89.0	456	263	81.0	76.0	127	1096704
13.5	25	1016064	24.0	102	38.1	44.5	44.5	89.0	456	263	81.0	76.0	127	1096704
22.5	32	1016075	44.0	127	51.0	51.0	60.5	93.5	530	346	82.5	92.0	165	1090161
31.5	38	1016082	63.5	127	51.0	51.0	60.5	93.5	610	357	76.0	116	178	1090189

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

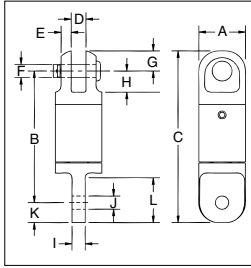
AS-2 Jaw & Jaw



AS-2 JAW & JAW				Dimensions (mm)							
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G	H
.40	3	1016103	.18	22.4	60.5	79.5	9.65	6.35	6.35	4.80	10.4
.68	6	1016114	.41	33.3	90.0	113	11.2	7.85	9.65	5.60	14.2
1.35	10	1016122	.91	41.4	103	138	17.5	12.7	12.7	7.10	19.8
2.70	13	1016131	2.22	51.0	159	207	23.9	19.1	19.1	9.65	30.2
4.50	16	1016139	4.35	63.5	197	270	28.7	25.4	22.4	13.5	38.9
7.65	19	1016148	7.17	76.0	245	313	34.0	39.5	30.2	14.2	53.0
9.00	22	1016157	18.1	102	356	445	44.5	44.5	38.1	20.6	89.0
13.5	25	1016166	18.1	102	356	445	44.5	44.5	38.1	20.6	89.0
22.5	32	1016175	35.4	127	405	526	60.5	51.0	51.0	28.7	93.5
31.5	38	1016184	35.4	127	405	526	60.5	51.0	51.0	28.7	93.5

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

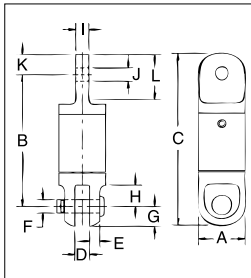
AS-3 Jaw & Eye



AS-3 JAW & EYE				Dimensions (mm)											
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G	H	I	J	K	L
.40	3	1016205	.14	22.4	63.5	82.5	6.35	4.80	6.35	9.65	10.4	6.35	6.35	9.65	21.3
.68	6	1016216	.41	33.3	93.5	116	7.85	5.60	9.65	11.2	14.2	7.85	9.65	11.0	22.4
1.35	10	1016224	.86	41.4	106	138	12.7	7.10	12.7	17.5	19.8	12.7	16.8	16.0	35.1
2.70	13	1016232	2.09	51.0	157	207	19.1	9.65	19.1	23.9	30.2	19.1	23.1	25.0	51.0
4.50	16	1016243	4.13	63.5	200	259	25.4	13.5	22.4	28.7	38.1	25.4	31.8	30.0	67.0
7.65	19	1016250	7.08	76.0	241	311	39.5	14.2	31.8	34.0	53.0	31.8	35.8	38.0	79.5
9.00	22	1016259	17.7	102	349	440	44.5	20.6	38.1	44.5	89.0	43.7	41.4	46.0	119
13.5	25	1016268	18.1	102	341	440	44.5	20.6	38.1	44.5	89.0	51.0	51.0	54.0	119
22.5	32	1016277	35.4	127	406	527	51.0	28.7	51.0	60.5	93.5	57.0	58.5	61.0	133
31.5	38	1016286	35.4	127	406	527	51.0	28.7	51.0	60.5	93.5	57.0	58.5	61.0	133

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

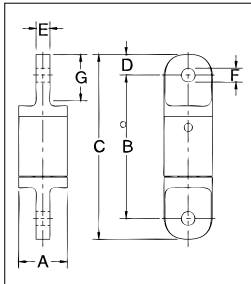
AS-4 Eye & Jaw



AS-4 EYE & JAW				Dimensions (mm)											
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G	H	I	J	K	L
.40	3	1016306	.14	22.4	63.5	82.5	6.35	4.80	6.35	9.65	10.4	6.35	6.35	9.65	20.6
.68	6	1016314	.41	33.3	92.0	116	7.85	5.60	9.65	11.2	14.2	7.85	9.65	11.0	22.4
1.35	10	1016325	.86	41.4	106	140	12.7	7.10	12.7	17.5	19.8	12.7	16.8	16.0	34.0
2.70	13	1016332	2.09	51.0	157	207	19.1	9.65	19.1	23.9	30.2	19.1	23.1	25.4	51.0
4.50	16	1016343	4.13	63.5	200	259	25.4	13.5	22.4	28.7	36.6	25.4	31.8	30.2	67.0
7.65	19	1016352	7.12	76.0	240	311	39.5	14.2	30.2	34.0	53.0	31.8	35.8	38.1	79.5
9.00	22	1016361	17.7	102	359	451	44.5	20.6	38.1	44.5	89.0	43.7	42.2	46.0	119
13.5	25	1016370	18.1	102	351	451	44.5	20.6	38.1	44.5	89.0	51.0	51.5	54.0	119
22.5	32	1016375	34.0	127	405	527	51.0	28.7	51.0	60.5	93.5	57.0	58.5	60.5	133
31.5	38	1016379	34.0	127	405	527	51.0	28.7	51.0	60.5	93.5	57.0	58.5	60.5	133

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

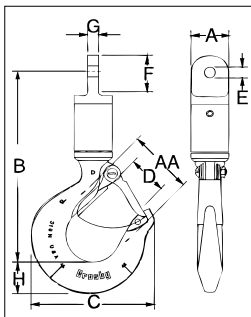
AS-5 Eye & Eye



AS-5 EYE & EYE				Dimensions (mm)						
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G
.40	3	1016409	.14	22.4	67.0	86.0	9.65	6.35	6.35	20.6
.68	6	1016418	.41	33.3	95.0	118	11.2	7.85	9.65	22.4
1.35	10	1016427	.82	41.4	110	141	16.0	12.7	16.8	34.0
2.70	13	1016436	1.95	51.0	156	207	25.4	19.1	23.1	51.0
4.50	16	1016445	3.90	63.5	197	270	30.2	25.4	31.8	67.0
7.65	19	1016454	7.00	76.0	237	313	38.1	31.8	35.8	79.5
9.00	22	1016463	16.8	102	353	445	46.0	43.7	41.4	119
13.5	25	1016472	17.7	102	337	445	54.0	51.0	54.0	119
22.5	32	1016481	32.7	127	406	527	60.5	57.0	58.5	133
31.5	38	1016490	32.7	127	406	527	60.5	57.0	58.5	133

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

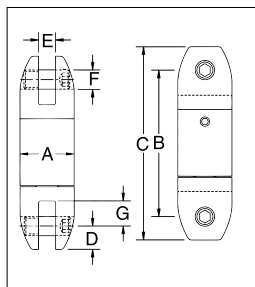
AS-6 Eye & Hook



AS-6 EYE & HOOK				Dimensions (mm)								Deformation Indicator AA	Replacement Latch Kit Stock No.
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G	H		
.40	3	1016502	.32	22.4	111	72.5	23.6	6.35	20.6	6.35	18.5	38.1	1096325
.68	6	1016513	.68	33.3	141	80.0	24.6	9.65	22.4	7.85	21.3	38.1	1096374
1.35	10	1016520	1.32	41.4	158	102	29.5	16.8	34.0	12.7	29.0	51.0	1096374
2.70	13	1016529	2.81	51.0	219	123	35.8	23.1	51.0	19.1	36.6	63.5	1096374
4.50	16	1016538	5.62	63.5	274	160	42.9	31.8	67.0	25.4	46.2	76.0	1096562
7.65	19	1016547	10.7	76.0	343	212	61.0	35.6	79.5	31.8	66.0	102	1096657
9.00	22	1016556	23.6	102	459	263	81.0	42.2	119	43.7	76.0	127	1096704
13.5	25	1016565	24.0	102	448	263	81.0	51.5	119	51.0	76.0	127	1096704
22.5	32	1016574	42.6	127	530	346	82.5	59.0	133	57.0	92.0	165	1090161
31.5	38	1016583	62.6	127	610	357	76.0	59.0	133	57.0	116	178	1090189

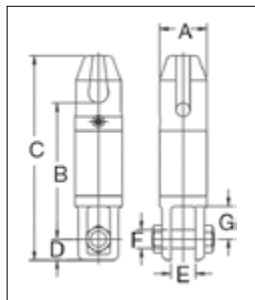
5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

AS-7 Bullet Style Jaw & Jaw



AS-7 BULLET STYLE JAW & JAW				Dimensions (mm)						
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G
.40	3	1016604	.18	22.4	60.5	79.5	9.65	6.35	7.85	10.2
.68	6	1016611	.50	33.3	90.0	113	11.2	7.85	9.65	14.2
1.35	10	1016622	.82	41.4	103	132	14.2	12.7	11.2	20.6
2.70	13	1016631	1.72	51.0	138	179	20.6	19.1	16.0	23.9
4.50	16	1016640	3.63	63.5	197	256	28.7	25.4	22.4	39.5
7.65	19	1016649	6.58	76.0	251	314	31.8	33.3	25.4	54.0
9.00	22	1016652	18.1	102	334	425	44.5	44.5	38.1	82.5
13.5	25	1016658	18.1	102	334	425	44.5	44.5	38.1	82.5
22.5	32	1016662	38.1	127	405	527	60.5	51.0	51.0	93.5
31.5	38	1016667	38.1	127	405	527	60.5	51.0	51.0	93.5

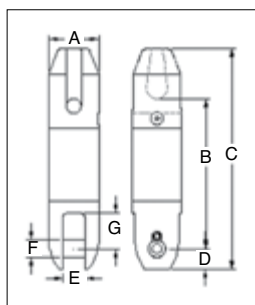
5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.



AS-11 Thimble & Jaw

AS-11 THIMBLE & JAW				Dimensions (mm)						
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G
7.65	19	1017020	12.0	76.2	22.0	330	34.0	39.6	30.2	53.1
13.5	25	1017029	24.0	102	296	445	44.5	45.0	38.1	89.0

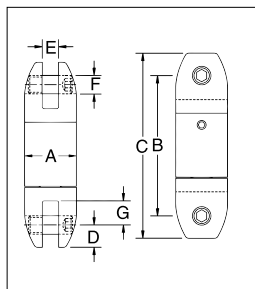
5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.



AS-14 Thimble & Bullet

AS-14 THIMBLE & BULLET				Dimensions (mm)						
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G
7.7	20	1017255	9.0	76.2	229	337	31.8	33.3	25.4	54.1
13.6	26	1017258	18.0	102	292	441	44.5	44.5	38.1	82.6
22.7	32	1017261	37.0	127	363	538	60.5	50.8	50.8	93.7

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.



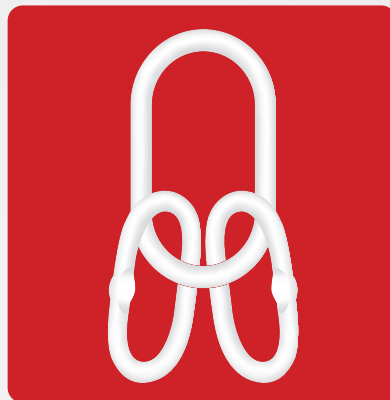
AS-17 Bullet Style Jaw & Jaw Slurry Swivel

AS-17 BULLET JAW & SLURRY SWIVEL				Dimensions (mm)						
Working Load Limit (t)	Wire Rope Size (mm)	Stock No.	Weight Each (kg)	A	B	C	D	E	F	G
7.65	19	8013342	6.57	76.2	257	321	31.8	33.3	25.4	54.1
13.5	25	8013343	18.1	102	343	432	44.5	44.5	38.1	82.5
22.5	32	8013376	38.1	127	410	531	60.5	51.0	51.0	93.7
31.5	38	8013344	38.1	127	410	531	60.5	51.0	51.0	93.7
40.5	-	2016585	68.0	152	514	666	76.2	64.3	57.2	69.9

5:1 Design Factor. Individually Proof Tested to 2 times the Working Load Limit.

MASTER LINKS

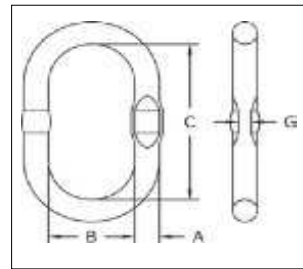
The Crosby Group offers a wide range of links, from small 0.8 tonne capacities all the way up to 179 tonnes, as well as application-specific links, such as the hot-dip galvanized master links for use in highly corrosive environments.



A-1343



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN 1677-4, reference applications & warnings.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the “CG” (Crosby Group).
- A-1343 master links are type approved to DNV Certification. Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- Fatigue rated to 20,000 cycles at 1.5 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



Grade 100 A-1343 Welded Master Link

Stock No.	Weight Each (kg)	Grade 100 Chain Sling		Grade 80 Chain Sling		WLL (t)	Proof Load (t)	Dimensions (mm)				Engineered Flat Size for S-1325A (mm)
		Single Leg Chain Size (mm)	Double Leg Chain Size (mm)	Single Leg Chain Size (mm)	Double Leg Chain Size (mm)			A	B	C	G	
1247051	0.4	6, 7	6, 7	6, 7, 8	6, 7, 8	3.2	8.0	13	60	120	6.5	6, 7, 8
1247087	0.84	8, 10	8	8, 10	8	4.1	10.2	17	90	160	8.5	10
1247096	1.1	10, 13	10	10, 13	10	6.7	16.7	19	90	160	8.5	10, 13
1247122	2.3	10, 13	10	10, 13	10	7.0	17.5	22	145	275	10.5	13
1247120	1.6	13	10	13, 16	13	8.8	22.0	22	100	180	10.5	13
1247126	3	13	-	13, 16	13	8.9	22.2	25	145	275	13.5	16
1247124	2.4	13, 16	13	16	16	11.5	28.7	25	115	210	13.5	16
1247133	3.9	13, 16	13	16	16	13.0	32.5	28	145	275	13.5	16
1247142	4.8	16	16	19, 20	19, 20	17.0	42.5	32	145	275	16.7	-
1247151	6.9	20	20	20, 22	20, 22	24.0	60.0	36	155	285	-	-
1247163	7.3	22, 23	22, 23	23, 26	23, 26	31.5	78.7	40	140	270	-	-
1247164	12.9	26	26	26	26	38.3	95.7	45	180	340	-	-
1247166	19.1	26	26	32	32	45.0	112.5	51	215	390	-	-
1247175	25.1	32	32	32	32	67.0	167.5	55	203	406	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to Applications & Warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm).

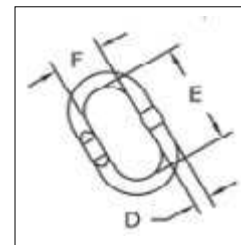
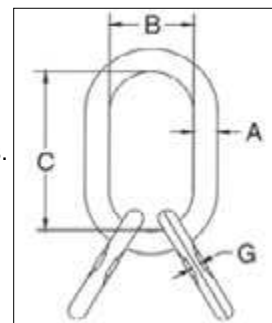
Fatigue Rated Crosby 8/10⁺ CE

APPLICATION AND WARNING INFORMATION
SECTION 17

A-1346



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN 1677-4, reference Applications & Warnings.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the “CG” (Crosby Group). Each sublink is marked with traceability code.
- A-1346 master links are type approved to DNV Certification. Notes 2.7-1-Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impacted tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



5

Grade 100 A-1346 Welded Master Link Assembly

Stock No.	Weight Each (kg)	Grade 100 Chain Sling Three / Four Legs Chain Size (mm)	Grade 80 Chain Sling Three / Four Legs Chain Size (mm)	WLL (t)	Proof Load (t)	Dimensions (mm)							Engineered Flat Size for S-1325A Chain Size (mm)
						A	B	C	D	E	F	G	
1256865	1.1	6	6	3.2	8.0	13	60	120	13	120	60	6.5	6
1256868	1.6	6	6, 7	4.1	10.2	17	90	160	13	120	60	6.5	6, 7
1256874	1.8	6, 7	7	4.2	10.6	19	90	160	13	120	60	6.5	7, 8
1256878	3.3	8	10	7.0	17.5	22	100	180	17	160	90	8.5	10
1256880	4.1	8	10	7.0	17.5	22	145	275	17	160	90	8.5	10
1256876	3.8	10	10	8.5	21.2	22	100	180	19	160	90	8.5	10
1256882	4.6	10	10	8.9	22.2	25	115	210	19	160	90	8.5	10
1256892	5.2	10	10	8.9	22.2	25	145	275	19	160	90	8.5	10
1256917	7.1	13	13	14.5	36.2	28	145	275	22	180	100	10.5	13
1256926	9.6	13	16	17.0	42.5	32	145	275	25	210	115	13.5	16
1256929	12.7	16	16	23.6	59.0	36	155	285	28	190	110	13.5	16
1256930	18.4	16	19, 20	28.1	70.3	40	140	270	32	275	145	16.7	-
1256953	26.6	19, 20	22	38.3	95.7	45	180	340	36	285	155	-	-
1256958	35.5	22, 23	26	45.0	112.5	51	215	390	40	270	140	-	-
1256973	61.1	26	32	67.0	167.5	55	203	406	51	390	215	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to applications & warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm).

Fatigue Rated

Crosby 8/10

CE

QT

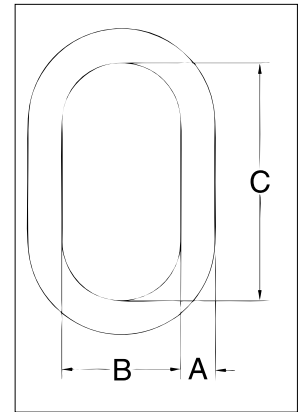
APPLICATION AND WARNING INFORMATION
SECTION 17

A-342



Ratings below are for use with chain slings fabricated in accordance with ASME B30.9. For other applications, see Applications & Warnings.

- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Proof Tested with special fixtures sized to prevent localized point loading.
- Forgings have a Product Identification Code (PIC) for material traceability, along with the size, the name Crosby and USA in raised lettering.
- Selected sizes designated with "W" in the size column have enlarged inside dimensions to allow additional room for sling hardware and crane hook.
- Crosby 7/8" to 2" A-342 master links are type approved to DNV-ST-E271-2.7-1 Offshore Containers. These Crosby master links are 100% proof tested, MPI and impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request. Refer to the Crosby COLD TUFF® master links that meet the additional requirements of DNV rules for certification of lifting appliances - Loose Gear.
- Incorporates patented QUIC-CHECK® deformation indicators.
- 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



A-342 Alloy Master Links

Size		OC	Stock No.	Weight Each (kg)	Working Load Limit (t)	Proof Load (kN)	Grade 100 Chain Sling		Grade 80 Chain Sling		Dimensions (mm)			
(in)	(mm)						Single Leg Chain Size (mm)	Double Leg Chain Size (mm)	Single Leg Chain Size (mm)	Double Leg Chain Size (mm)	A	B	C	Deformation Indicator
1/2W	13W	No	1014266	0.59	3.40	77	6, 7, 8	6mm	6mm, 9/32, 5/16, 3/8	6mm, 9/32	13	71.1	127	89
5/8	16	No	1014280	0.69	4.00	80	8, 10	9/32	3/8	5/16	16	76.2	152	89
3/4W	19W	No	1014285	0.91	5.60	126	8, 10	5/16	1/2	3/8	19	81.3	152	102
7/8W	22W	Yes	3522213	1.50	6.90	†169	10, 13	3/8	1/2	3/8	22	95.3	162	114
1W	26W	Yes	3522214	2.77	11.8	†289	13, 16	1/2	5/8	1/2	26	109	191	140
1-1/4W	32W	Yes	3522215	5.44	17.7	†435	16, 20	5/8	3/4, 7/8	5/8	32	140	241	178
1-1/2W	38W	Yes	3522216	8.44	27.7	†680	22, 26	3/4	1	3/4, 7/8	38	150	267	191
1-3/4	44	Yes	3522217	11.4	38.5	†944	26	7/8	1-1/4	1	44	152	305	191
2	51	Yes	3522218	16.8	46.5	†1141	32	7/8	1-1/4	1	51	178	356	229
2-1/4	57	No	1014422	24.5	64.9	1287	32	1	1-1/4	1-1/4	57	203	406	254
2-1/2	63	No	1014468	31.1	72.6	1423	1-1/4	1-1/4	-	-	63	213	406	279
2-3/4	70	No	1014440	42.6	98.4	1930	-	-	-	-	70	251	457	318
3	76	No	1014486	52.0	103	2029	-	-	-	-	76	251	457	330
3-1/4	83	No	1014501	66.0	119	2332	-	-	-	-	83	254	508	343
3-1/2	89	No	1014529	91.0	126	2483	-	-	-	-	89	305	610	394
3-3/4	95	No	1015051	90.0	152	2990	-	-	-	-	95	254	508	343
4	102	No	1015060	120	169	3319	-	-	-	-	102	305	610	406
†† 4-1/4	†† 108	No	1015067	137	160	3150	-	-	-	-	108	305	610	-
†† 4-1/2	†† 114	No	1015079	156	163	3202	-	-	-	-	114	356	711	-
†† 4-3/4	†† 121	No	1015088	198	176	778,000	-	-	-	-	121	356	711	-
†† 5	†† 127	No	1015094	234	179	790,000	-	-	-	-	127	381	762	-

5:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Applications with wire rope and synthetic sling generally require a design factor of 5. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. †Offshore Container Master Links Proof Tested to 2.5 times the Working Load Limit with 70 percent fixtures. ††Welded Master Link. Chain slings require that the Minimum Ultimate Load be 4 times the Working Load Limit. Refer to applications & warnings to determine products actual Ultimate Load. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9-1.4 for the chain size and number of legs.

Fatigue Rated

Crosby 8/10

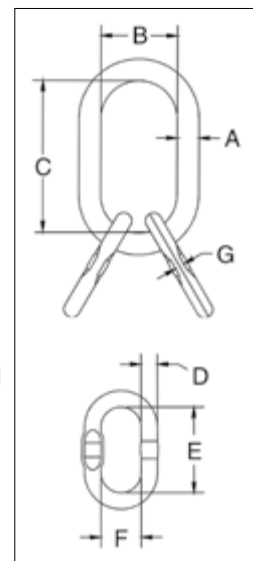
QUIC-CHECK®

APPLICATION AND WARNING INFORMATION
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A-345



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1
- Proof Tested with 60% inside width special fixtures sized to prevent localized point loading per ASME A-952.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the "CG" (Crosby Group). Each sublink is marked with traceability code.
- 22mm - 51mm A-345 master links are type approved to DNV Certification Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested, MPI and impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



5

A-345 Master Link Assembly with Engineered Flat

Size		OC	Stock No.	Weight Each (kg)	Working Load Limit (t)	For Grade 100 Chain Size (mm)	For Grade 80 Chain Size (mm)	Proof Load (kN)	Dimensions (mm)								Engineered Flat for S-1325
(in)	(mm)								A	B	C	D	E	F	G	Deformation Indicator	
3/4W	19W	No	3685119	1.8	5.6	6, 7, 8	6, 7, 8	†137.3	19	82	152	13	120	60	6.2	102	6 - 8
7/8W	22W	Yes	3014742	3.2	6.9	8	10	†171.7	22	95	162	17	170	80	8.5	114	6 - 8
1W	26W	Yes	3014766	5.8	11.8	10	13	†289.4	28	109	191	22	160	95	10.6	140	10
1-1/4W	32W	Yes	3014779	12.1	17.7	13	16	†434.1	34	140	241	28	240	130	-	178	-
1-1/2W	38W	Yes	3014807	18.3	27.7	16	19	†679.3	41	150	267	32	270	130	-	191	-
1-3/4W	44	Yes	3014814	23.5	38.5	20	22	†944.2	44	152	305	36	270	125	-	191	-
2	51	Yes	3014832	33.5	46.5	22	26	†1140.4	51	178	356	40	270	140	-	229	-
2-1/2	64	No	3014855	62.2	72.6	26	32	†1780.5	64	213	406	50	308	190	-	279	-
2-3/4	70	No	3014864	84.5	98.4	32	32	†2413.3	70	251	457	55	355	200	-	318	-
3-1/4	83	No	1014986	116	106.5	32	-	2611.9	83	254	508	63	286	203	-	343	-
4	102	No	1014999	303	169	-	-	4144.7	102	306	610	89	610	305	-	394	-

5:1 Design Factor. The maximum individual sublink working load limit is 75% of the assembly working load limit. Sublink for 3.25" and 4" is 61% of the assembly working load limit. Applications with wire rope and synthetic sling generally require a design factor of 5. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Minimum Ultimate Load be 4 times the Working Load Limit. Refer to applications & warnings to determine products actual Ultimate Load. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9-1.4 for the chain size and number of legs. †Proof Tested to 2.5 times the Working Load Limit with 70 percent fixtures.

Fatigue Rated

Crosby 8/10™

QUIC-CHECK®

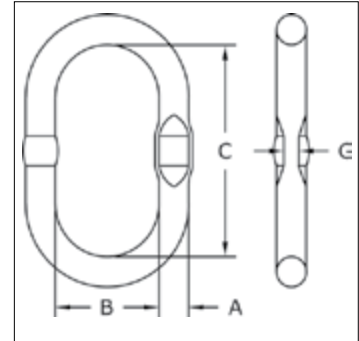
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APPLICATION AND WARNING INFORMATION
SECTION 17

A-344



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN1677.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the "CG" (Crosby Group).
- A-344 master links are type approved to DNV Certification Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- Fatigue rated to 20,000 cycles at 1.5 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- 13mm through 32mm have Engineered Flat.



11mm through 31mm have Engineered Flat.

Grade 80 A-344 Welded Master Links available with Engineered Flat

Stock No.	Weight Each (kg)	Grade 100 Chain Sling		Grade 80 Chain Sling		WLL (t)	Proof Load (t)	Dimensions (mm)				Engineered Flat Size for S-1325A (mm)
		Single Leg Chain Size (mm)	Double Leg Chain Size (mm)	Single Leg Chain Size (mm)	Double Leg Chain Size (mm)			A	B	C	G	
1256988	0.36	6, 7	6, 7	6, 7, 8	6, 7, 8	3.2	8.0	13	60	120	6.5	6, 7, 8
1257002	0.84	8, 10	8	8, 10	8	4.1	10.2	17	90	160	8.5	10
1257072	1.06	10, 13	10	10, 13	10	6.7	16.7	19	90	160	8.5	10, 13
1257268	2.34	10, 13	10	10, 13	10	7.0	17.5	22	145	275	10.5	13
1257212	1.63	13	10	13, 16	13	8.8	22.0	22	100	180	10.5	13
1257332	3.04	13		13, 16	13	8.9	22.2	25	145	275	13.5	16
1257282	2.41	13, 16	13	16	16	11.5	28.7	25	115	210	13.5	16
1257382	3.86	13, 16	13	16	16	13.0	32.5	28	145	275	13.5	16
1257422	4.82	16	16	19, 20	19, 20	17.0	42.5	32	145	275	16.7	-
1257492	6.88	20	20	20, 22	20, 22	24.0	60.0	36	155	285	-	-
1257502	7.31	22, 23	22, 23	23, 26	23, 26	31.5	78.7	40	140	270	-	-
1257562	12.89	26	26	26	26	38.3	95.7	45	180	340	-	-
1257632	19.12	26	26	32	32	45.0	112.5	51	215	390	-	-
1257573	25.10	32	32	32	32	67.0	167.5	55	203	406	-	-
1257591	42.80	-	-	-	-	90	225	70	250	450	-	-
1257600	57.00	-	-	-	-	125	312.5	80	260	450	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to applications & warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm). Two largest sizes are available globally.

Fatigue Rated

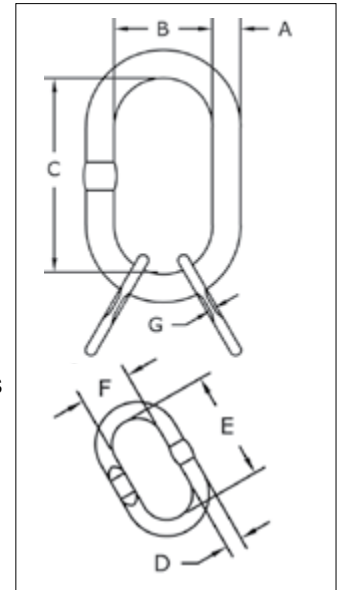


APPLICATION AND WARNING INFORMATION
SECTION 17

A-347



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN1677.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the "CG" (Crosby Group). Each sublink is marked with traceability code.
- A-347 master links are type approved to DNV Certification Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- Fatigue rated to 20,000 cycles at 1.5 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Available only in EMEA.



5

Grade 80 A-347 Welded Master Link Assembly with Engineered Flat

Stock No.	Weight Each (kg)	Grade 100 Chain Sling Three / Four Legs Chain Size (mm)	Grade 80 Chain Sling Three / Four Legs Chain Size (mm)	WLL (t)	Proof Load (t)	Dimensions (mm)							Engineered Flat Size for S1325A Chain Size (mm)
						A	B	C	D	E	F	G	
1257755	1.1	6	6	3.2	8.0	13	60	120	13	120	60	6.5	6
1257762	1.6	6	6, 7	4.1	10.3	17	90	160	13	120	60	6.5	6, 7
1257832	1.8	6, 7	7	4.2	10.6	19	90	160	13	120	60	6.5	7, 8
1258058	3.3	8	10	7.0	17.5	22	100	180	17	160	90	8.5	10
1258067	4.1	8	10	7.0	17.5	22	145	275	17	160	90	8.5	10
1258049	3.8	10	10	8.5	21.2	22	100	180	19	160	90	8.5	10
1258076	4.6	10	10	8.9	22.2	25	115	210	19	160	90	8.5	10
1258102	5.3	10	10	8.9	22.2	25	145	275	19	160	90	8.5	10
1258142	7.2	13	13	14.5	36.2	28	145	275	22	180	100	10.5	13
1258182	9.9	13	16	17.0	42.5	32	145	275	25	210	115	13.5	16
1258185	12.7	16	16	23.6	59.0	36	155	285	28	190	110	13.5	16
1258187	18.4	16	19, 20	28.1	70.2	40	140	270	32	275	145	16.7	-
1258402	26.7	19, 20	22	38.3	95.7	45	180	340	36	285	155	-	-
1258471	35.5	22, 23	26	45.0	112.5	51	215	390	40	270	140	-	-
1258491	61.1	26	32	67.0	167.5	55	203	406	51	390	215	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to applications & warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm).

Fatigue Rated

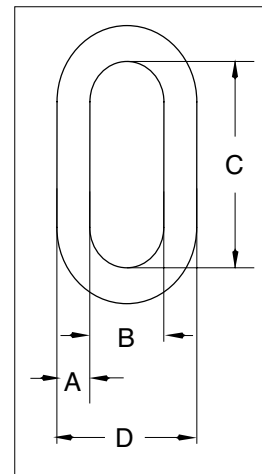


APPLICATION AND WARNING INFORMATION
SECTION 17

G-340 / S-340



- Forged carbon steel - Quenched & Tempered
- Self colored (S) or hot-dip galvanized (G).



G-340/S-340 Weldless End Links

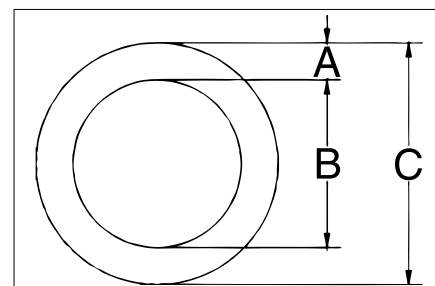
Size (A) (mm)	Stock No.		Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)			
	G-340 Galv.	S-340 S.C.			A	B	C	D
8	1014057	1014066	1.13	.07	8	12.7	44.5	30.0
10	1014075	1014084	1.72	.10	10	14.2	47.8	35.1
13	1014093	1014100	2.95	.22	13	19.1	60.5	46.0
16	1014119	1014128	4.22	.44	16	25.4	82.5	59.0
19	1014137	1014146	6.35	.68	19	28.7	89.0	68.0
22	1014155	1014164	5.44	1.17	22	51.0	130	95.5
25	1014173	1014182	6.89	1.79	25	57.0	146	108
32	1014191	1014208	11.97	3.31	32	63.5	178	127
35	1014217	1014226	13.61	4.71	35	70.0	197	140

5:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120°.

S-643



- Forged carbon steel - Quenched & Tempered.



S-643 Weldless Rings

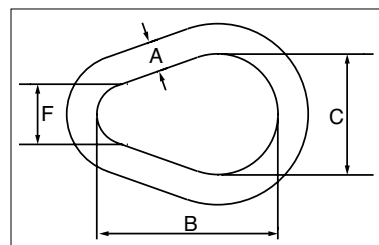
Size (mm)	Stock No	Working Load Limit Single Pull (t)	Weight Each (kg)	Dimensions (mm)		
				A	B	C
22.2 x 102	1013780	3.27	1.23	22.2	102	146
22.2 x 140	1013806	2.54	1.57	22.2	140	184
25.4 x 102	1013824	4.90	1.67	25.4	102	152
28.6 x 152	1013842	4.72	2.99	28.6	152	210
31.8 x 127	1013860	7.71	3.09	31.8	127	191
34.9 x 152	1013888	8.62	4.59	34.9	152	222

6:1 Design Factor.

A-341



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested at 2 times Working Load Limit with certification.
- Sizes up to 51mm are forged.



A-341 Alloy Pear Shaped Links

Size (A) (mm)	Stock No	Working Load Limit		Weight Each (kg)	Dimensions (mm)		
		(t)	(lb)		B	C	F
13	1013575	3.15	7000	.25	76.2	50.8	25.4
16	1013584	4.09	9000	.50	95.3	63.5	31.8
19	1013595	5.59	12300	.80	114	76.2	38.1
22	1013604	6.81	15000	1.28	133	88.9	44.5
25	1013613	11.0	24360	1.91	152	102	51.0
28	1013622	13.9	30600	2.83	171	114	57.0
32	1013631	16.4	36000	3.74	191	127	63.5
35	1013640	19.5	43000	5.10	210	140	70.0
38	1013654	24.7	54300	6.46	229	152	76.0
44	1013672	38.6	84900	10.2	267	178	89.0
51	1013690	46.6	102600	15.4	305	203	102
†† 64	1013703	66.9	147300	29.9	381	254	127
†† 70	1013712	98.6	216900	39.9	419	279	140
†† 76	1013721	103	228000	52	457	305	152
†† 102	1013748	169	373000	123	610	406	203

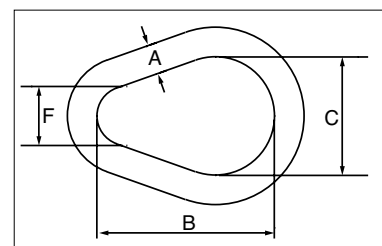
5:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120°. †† Welded Link.

5

G-341 / S-341



- Forged carbon steel - Quenched & Tempered.
- Self colored (S) or hot-dip galvanized (G).



G-341 / S-341 Weldless Sling Links

Size (A) (mm)	Stock No.		Working Load Limit Single Pull (t)	Weight Each (kg)	Dimensions (mm)		
	G-341 Galv.	S-341 S.C.			B	C	F
10	1013897	1013904	.82	0.10	57.2	38.1	19.1
13	1013913	1013922	1.32	.25	76.2	50.8	25.4
16	1013931	1013940	1.91	.48	95.5	63.5	31.8
19	1013959	1013968	2.72	.85	114	76.2	38.1
22	1013977	1013986	3.76	1.25	133	88.9	44.5
25	1013995	1014002	4.90	1.97	152	102	51.0
32	1014011	1014020	7.60	3.45	197	127	63.5
35	1014039	1014048	9.30	5.13	210	140	70.0

6:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120°.

Identification of our Master Links

To provide good readability and traceability our master links have the following marking:

Product type

- M - represents single type master link.
- MT - represents master link assembly.
- OS - is an abbreviation for offshore. All Arctic offshore master links are marked with OS and complies with DNV 2.7-1.

Size designation

- The size is linked to the WLL as well as to compatible products, like attachment couplers and other components.
- Trade size.
- The size expressed in inch.

Approved by BG/DGUV

- H32 – represents Gunnepro Industries' manufacturing ID. The ID also represents a 3rd part audit by BG in Germany.

Traceability code

- The traceability code is unique for the production batch and normally consists of a letter and a number; for example A2. The traceability code makes it possible to trace and track the product through the whole production process back to the raw material used for the actual product.

Gunnepro Sweden

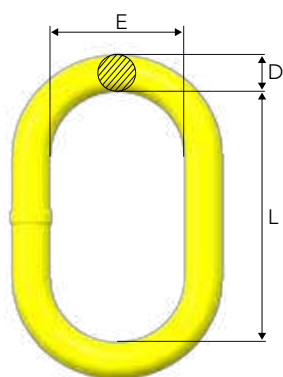
- To clearly highlight the Gunnepro Industries brand, our master links are marked with Gunnepro, Sweden.

Meets the standards

- The markings fulfills the requirements of EN 1677-4, ASTM A952, AS 3775.2 and DNV 2.7-1.



Master Link M



Stock No.	Code	WLL (t) 5:1		Dimensions (mm)			Weight (kg)
		EN 1677-4	A-952/A952M AS 3775.2-2014	L	E	D	
Z101271	M-6-10	1.5	1.5	100	60	11	0.2
Z100818	M-86-10	2.5	3.2	2.36	60	13	0.4
Z101273	M-108-10	4.0	5.2	140	80	17	0.8
Z101274	M-13-10	6.8	6.8	160	90	19	1.0
Z101267	M-1310-10	7.5	8.0	160	95	22	1.5
Z101268	M-1613-10	10.0	13.6	190	110	28	2.8
Z101247	M-19-10	12.0	16.0	200	120	30	3.5
Z101269	M-2016-10	17.0	20.6	240	140	34	5.2
Z101270	M-2220-10	25.0	30.9	250	150	40	7.3
Z101275	M-2622-10	28.0	32.0	250	150	42	8.7
Z101284	M-32-10	33.0	38.6	340	180	45	12.9
Z101276	M-3226-10	43.0	46.6	300	200	50	14.8
Z101277	M-3632-10	56.0	65.0	350	200	55	20.7
Z101278	M-4536-10	70.0	72.7	375	210	60	26.4
Z101279	M-90T-10	90.0	100.0	450	250	70	42.8
Z101280	M-125T-10*	125.0	125.0	450	260	80	57.0

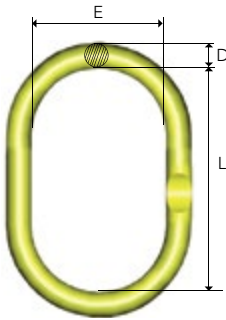
* Dimension L and E not acc. to EN 1677-4.

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M, AS 3775:2014.

5:1 Design Factor

Master Link MF with engineered flat

For 1-, 2-, 3- and 4-leg slings. Designed for use with CL, CLD, CG and CGD. 3- and 4 leg chain slings require CLD / CGD.



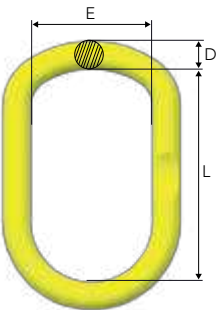
Stock No.	Code	WLL (t) 5:1		For chain size (mm)			Dimensions (mm)			Weight (kg)
		EN 1677-4	A-952/A952M AS 3775.2-2014	1-leg	2-leg	3-4 leg	L	E	D	
B14487	MF-6-10	1.5	1.5	6	-	-	100	60	11	0.2
B14489	MF-86-10	2.5	3.2	6, 8	6	-	120	60	13	0.4
B14482	MF-108-10	4.0	5.2	10	8	6	140	80	17	0.8
B14483	MF-1310-10	7.5	8.0	13	10	8	160	95	22	1.5
B14484	MF-1613-10	10.0	13.6	16	13	10	190	110	28	2.8
B14485	MF-2016-10	17.0	20.6	20	16	13	240	140	34	5.2
B14486	MF-2220-10	25.0	30.9	22	20	16	250	150	40	7.3

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M, AS 3775:2014.
5:1 Design Factor

5

Master Link MFH with engineered flat

Designed for crane hooks, DIN 15401 and 15402. Designed for use with CL, CLD, CG and CGD. 3- and 4-leg chain slings require CLD / CGD.

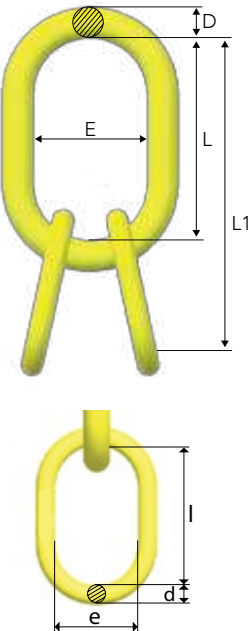


Stock No.	Code	WLL (t) 5:1		For chain size (mm)			Dimensions (mm)			DIN15401	DIN15402	Weight (kg)
		EN 1677-4	A-952/A952M AS 3775.2-2014	1-leg	2-leg	3-4 leg	L	E	D			
Z101262	MFH-1310-10	7.5	8.0	13	10	8	230	125	22	≤ 12	≤ 16	2.1
Z101263	MFH-1613-10	10.0	13.6	16	13	10	250	135	28	≤ 12	≤ 16	3.7
Z101264	MFH-2016-10	17.0	20.6	20	16	13	280	135	32	≤ 16	≤ 20	5.3
Z101265	MFH-2220-10	28.0	30.9	26	20	16	320	175	40	≤ 25	≤ 32	9.7
Z101266	MFHW-2220-10	28.0	28.0	26	20	16	355	225	40	≤ 50	≤ 63	11.1

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M, AS 3775:2014.
5:1 Design Factor

Master Link with Sublinks MT

Designed for use with chain or wire rope. For 3- and 4-leg slings

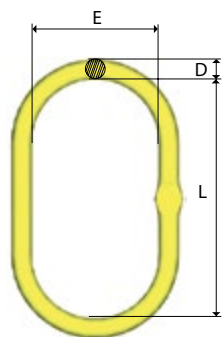


Stock No.	Code	WLL (t) 5:1		Dimensions (mm)							Weight (kg)
		EN 1677-4	A-952/A952M AS 3775,2-2014	L1	L	E	D	I	e	d	
Z100091	MT-6-10	3.5	5.0	285	160	90	19	120	60	13	2.0
Z100903	MT-8-10	5.2	8.0	300	160	95	22	140	80	17	3.0
Z101359	MT-9-10	6.9	9.7	340	190	110	28	160	90	19	5.1
Z100904	MT-10-10	11.5	16.0	360	200	120	30	160	95	22	6.4
Z100905	MT-13-10	17.0	26.0	440	250	150	40	190	110	28	14.2
Z100906	MT-16-10	28.0	35.0	500	300	200	50	200	120	32	23
Z101074	MT-20-10	35.0	50.0	550	300	200	55	250	150	40	31.5
Z101281	MT-22-10	53.0	75.0	610	350	200	60	260	140	45	46
Z101282	MT-26-10	70.0	100.0	730	450	250	70	280	160	50	71
Z101283	MT-32-10	90.0	125.0	730	450	260	80	280	160	55	91

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M, AS 3775:2014.

Engineered flat on the sublinks for sizes up to MT-16-10 except MT-9-10.

5:1 Design Factor



Master Link MFX with engineered flat

Oversized, for 1- and 2-leg slings. Designed for use with CL, CLD, CG and CGD.

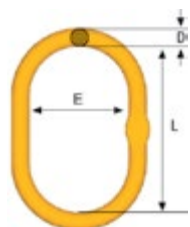
Stock No.	Code	WLL (t) 5:1		For chain size (mm)		Dimensions (mm)			Weight (kg)
		EN 1677-4	A-952/A952M AS 3775.2-2014	1-leg	2-leg	L	E	D	
Z100550	MFX-108-10	4.25	5.2	8, 10	8	340	180	25	3.7
Z100551	MFX-1310-10	7.5	8.0	13	10	340	180	28	4.7
Z100552	MFX-1613-10	11.2	13.6	16	13	340	180	34	7.1
Z101125	MFX-2016-10	16.0	20.6	20	16	340	180	40	9.6

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M-02, AS 3775:2014.

5:1 Design Factor

Master Link MF with engineered flat

Classic yellow paint.

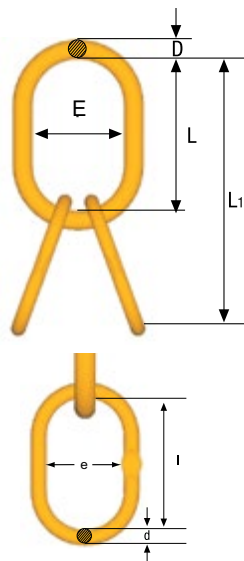


Stock No.	Code	WLL (t)		Dimensions (mm)			Weight (kg)
		EN1677-4	A-952/A952M	L	E	D	
Z100817	MF-86-10	2.5	3.2	120	60	13	0.4
Z100861	MF-108-10	4.0	5.2	140	80	17	0.8
Z100862	MF-1310-10	7.5	8.0	160	95	22	1.5
Z100863	MF-1613-10	10.0	13.6	190	110	28	2.5
Z100864	MF-2016-10	17.0	20.6	240	140	34	5.2
Z100865	MF-2220-10	25.0	30.9	250	150	40	7.3

5:1 Design Factor. Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M.

Master Link with Sub Links MT

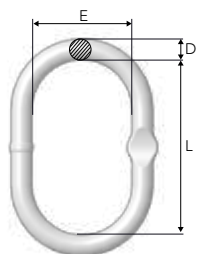
Engineered flat on the sublinks. Classic yellow paint.



Stock No.	Code	WLL (t)		Dimensions (mm)							Weight (kg)
		EN1677-4	A-952/A952M	L1	L	E	D	I	e	d	
Z100819	MT-6-10	3.5	5.0	270	150	90	19	120	60	13	1.8
Z100889	MT-8-10	5.2	8.0	300	160	95	22	140	80	17	3.0
Z100890	MT-10-10	11.5	16.0	360	200	120	30	160	95	22	6.4
Z100891	MT-13-10	17.0	26.0	440	250	150	40	190	110	28	14.2
Z100892	MT-16-10	28.0	35.0	500	300	200	50	200	120	32	23

5:1 Design Factor. Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M.

Master Link MF HDG with engineered flat



Stock No.	Code	WLL (t)		Z100902			Weight (kg)
		EN1677-4	A-952/A952M	L	E	D	
BG14489	MF-86-8 HDG	2.0	2.5	120	60	13	0.5
BG14482	MF-108-8 HDG	3.2	4.0	140	80	17	0.8
BG14483	MF-1310-8 HDG	5.4	6.8	160	95	22	1.5
BG14484	MF-1613-8 HDG	8.2	10.3	190	110	28	2.8

5:1 Design Factor.

WIRE ROPE END FITTINGS

A full line of forged fittings and accessories for wire rope applications.



CROSBY VALUE ADDED

- **Full line:** Crosby provides both forged Red U-Bolt Clips and forged Fist Grip Clips.
- **Forged:** Crosby Red U-Bolt Clips have forged bases on all sizes, except 70mm and 89mm base is a steel casting. The entire clip is galvanized to resist corrosive and rusting action. Clip sizes 3mm through 40mm have U-Bolts with rolled threads which enhance the strength of the material and fatigue properties.
- **Forged:** Fist Grip Clips are forged, and the entire clip is galvanized. The double saddle design eliminates the possibility of incorrect installation. Designed as an integral part of the clip, the bolts are opposite one another (see G-429 example below). As result, the nuts can be installed in such a way as to enable the operator to swing the wrench in a full arc for ease of installation.
- **Application information:** Application and warning information is available for both Crosby Red U-Bolt Clips and Fist Grip Clips. The Crosby Warning System is designed to attract the attention of the user, clearly inform the user of the factors involved in the task, and provide the user with proper application procedures. Each Crosby Red U-Bolt Clip and Fist Grip Clip is either bagged or tagged with appropriate application and warning information, thus ensuring that the information is available at the point of application for each and every clip during installation.
- **Material analysis:** Crosby can provide certified material (mill) analysis for each production lot, traceable by the Product Identification Code (PIC). Crosby, through its own laboratory, verifies the analysis of each heat of steel.
- **Testing:** Crosby periodically audits the termination efficiencies of the Red U-Bolt Clips and Fist Grip Clips. Upon special request, Crosby will determine the efficiencies of clip assemblies when applied to special rope constructions and special applications.

7

G-450



G-429



S-421T



S-423T



G-416



G-417



S-409



S-505



S-501



S-502



G-411



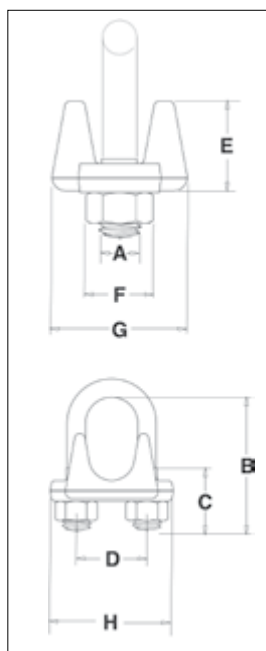
G-450
Red U-Bolt® Clip



- Each base has a Product Identification Code (PIC) for material traceability, the name Crosby or "CG," and a size forged into it.
- Based on the catalog breaking strength of wire rope, Crosby wire rope clips have an efficiency rating of 80% for 3mm through 22mm sizes, and 90% for sizes 24mm through 90mm.
- Entire clip is galvanized to resist corrosive and rusting action.
- Sizes 3mm through 62mm and 75mm have forged bases.
- All clips are individually bagged or tagged with proper application instructions and warning information.
- Clip sizes up through 38mm have rolled threads.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these wire rope clips meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- Look for the Red U-Bolt®, your assurance of genuine Crosby Clips.

APPLICATION AND WARNING INFORMATION
SECTION 17

G-450 Crosby Clips



Rope Size		Stock No.	Std. Package Qty.	Weight Per 100 (kg)	Dimensions (mm)							
(in)	(mm)				A	B	C	D	E	F	G	H
1/8	3-4*	1010015	100	2.72	5.60	18.3	11.2	11.9	10.4	9.65	20.6	23.9
3/16*	5*	1010033	100	4.54	6.35	24.6	14.2	15.0	12.7	11.2	23.9	29.5
1/4	6-7	1010051	100	8.62	7.85	26.2	12.7	19.1	16.8	14.2	30.2	36.6
5/16	8	1010079	100	12.7	9.65	35.1	19.1	22.4	18.3	17.5	33.3	42.9
3/8	9-10	1010097	100	21.8	11.2	38.1	19.1	25.4	23.1	19.1	41.4	49.3
7/16 - 1/2	11-13	1010131	50	80	.50	1.88	1.00	1.19	1.13	.88	1.91	2.28
9/16 - 5/8	14-16	1010177	50	110	.56	2.25	1.25	1.31	1.34	.94	2.06	2.50
3/4	18-20	1010195	25	64	15.7	70.0	36.6	38.1	35.8	26.9	57.0	72.0
7/8	22	1010211	25	96	19.1	79.0	41.1	44.5	40.4	31.8	62.0	80.5
1	24-26	1010239	10	114	19.1	89.0	46.0	47.8	45.2	31.8	67.0	88.0
1-1/8	28-30	1010257	10	128	19.1	98.5	51.0	51.0	48.5	31.8	71.5	91.0
1-1/4	32-34	1010275	10	199	22.4	108	54.0	59.4	55.5	36.6	79.5	105
1-3/8	36	1010293	10	200	22.4	118	58.5	59.4	58.5	36.6	79.5	106
1-1/2	38	1010319	10	247	22.4	125	60.5	66.5	62.0	36.6	86.5	113
1-5/8	41-42	1010337	Bulk	319	25.4	135	66.5	70.0	67.5	41.4	92.0	121
1-3/4	44-46	1010355	Bulk	424	28.7	146	70.0	77.5	74.5	46.0	97.0	134
2	48-52	1010373	Bulk	590	31.8	164	76.0	86.0	77.0	51.0	113	149
2-1/4	56-58	1010391	Bulk	726	31.8	181	81.0	98.5	81.0	51.0	114	162
2-1/2	62-65	1010417	Bulk	862	31.8	195	87.5	105	93.5	51.0	119	168
** 2-3/4	** 68-72	1010435	Bulk	1043	31.8	211	90.5	111	124	51.0	127	175
3	75-78	1010453	Bulk	1406	38.1	233	98.5	121	119	60.5	149	194
** 3-1/2	** 85-90	1010426	Bulk	1814	38.1	273	114	140	152	60.5	157	213

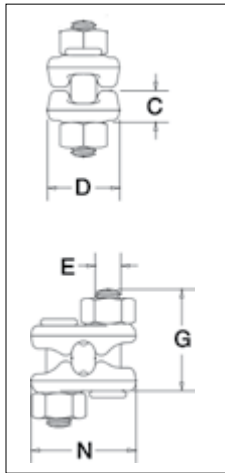
*Electro-plated U-Bolt and Nuts. ** 70mm and 89mm base is made of cast steel.

G-429

Fist Grip® Clip
5mm - 16mm



5mm - 16mm



- Entire clip is galvanized to resist corrosive and rusting action.
- Based on the catalog breaking strength of wire rope, Crosby wire rope clips have an efficiency rating of 80% for 5mm through 22mm sizes, and 90% for sizes 24mm through 40mm.
- Bolts are an integral part of the saddle. Nuts can be installed in such a way as to enable the operator to swing the wrench in a full arc for fast installation.
- All sizes have forged steel saddles.
- All Clips are individually bagged or tagged with proper application instructions and warning information.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these wire rope clips meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- Assembled with standard heavy hex nuts.

G-429 Fist Grip® Clips

Rope Size		Stock No.	Std. Package Qty.	Weight Per 100 (kg)	Dimensions (mm)					
(in)*	(mm)				C	D	E	G	N	
3/16 - 1/4	5-7	1010471	100	10.4	10.2	23.9	9.65	32.5	36.6	
5/16	8	1010499	100	12.7	11.9	26.9	9.65	37.3	39.1	
3/8	10	1010514	50	18.1	13.0	26.9	11.2	46.0	45.2	
7/16 - 1/2	11-13	1010532	50	28.1	15.0	31.8	12.7	55.5	54.6	
9/16 - 5/8	14-16	1010550	50	46.7	18.3	38.1	16.0	68.5	65.3	
3/4	18-20	1010578	25	79.0	21.8	46.0	19.1	74.5	67.8	
7/8	22	1010596	25	102	24.6	53.8	19.1	84.0	72.6	
1	24-26	1010612	10	136	28.7	57.0	19.1	94.5	77.7	
1-1/8	28-30	1010630	10	181	32.5	60.5	22.4	107	87.4	
1-1/4	32-34	1010658	10	181	34.0	63.5	22.4	108	90.4	
1-3/8 - 1-1/2	36-40	1010676	Bulk	318	39.6	76.0	25.4	141	105	

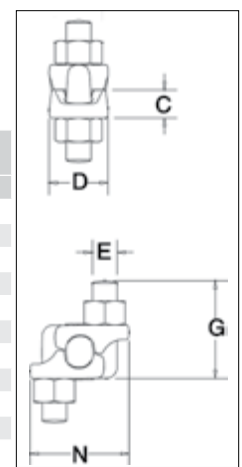
* Sizes through 16mm incorporate new style design.

G-429

Fist Grip® Clip
19mm - 38mm



19mm - 38mm

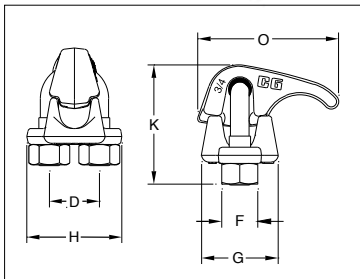


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APPLICATION AND WARNING INFORMATION
SECTION 17

G-460 Soft Eye Bundle Clip

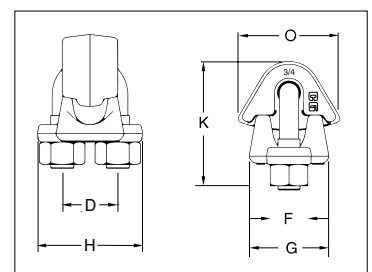
(For use without Thimble)



- Forged bases and bundle clip adapters.
- All bundle clips are individually bagged or tagged with proper application instructions and warning information.
- Bundle Clip Adapter for Soft Eye (G4460) and for Thimble Eye (G4461) kits available.
- Meets or exceeds all requirements of ASME B30.26 including manufacturing ID and size requirements. Importantly, these wire rope bundle clips meet material traceability not addressed by ASME B30.26.

G-461

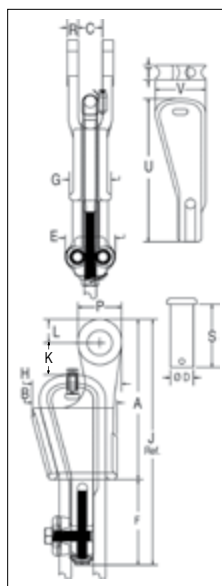
Thimble
Eye Bundle Clip



G-460 Soft Eye / G-461 Thimble Eye Bundle Clip

Rope Size		Bundle Clip Style	Stock No.	Dimensions (mm)						Weight each (kg)
(in)	(mm)			D	F	G	H	K	O	
3/4	18-20	G460	1010509	38.1	26.9	57.2	72.1	88.9	105	1.1
3/4	18-20	G461	1010619	38.1	26.9	57.2	72.1	88.9	72.4	1.1

S-421T



- Wedge socket terminations have an efficiency rating of 80% based on the catalog strength of XXIP wire rope.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these sockets meet other critical performance requirements, including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Type Approval certification in accordance with ABS rules for conditions of classification, Part 1 2017 Steel Vessels and ABS guide for certification of lifting appliances 2017 available. Certificates available when requested at time of order and may include additional charges.
- Basket is cast steel and individually magnetic particle inspected.
- Pin diameter and jaw opening allows wedge and socket to be used in conjunction with closed swage and spelter sockets.
- Secures the tail or dead end of the wire rope to the wedge, thus eliminates loss or punch out of the wedge.
- Eliminates the need for an extra piece of rope and is easily installed.
- The Terminator wedge eliminates the potential breaking off of the tail due to fatigue.
- The tail, which is secured by the base of the clip and the wedge, is left undeformed.
- Incorporates Crosby's patented QUIC-CHECK® 'Go' and 'No-Go' feature cast into the wedge. The proper size rope is determined when the following criteria are met:
 - 1) The wire rope should pass through the 'Go' hole in the wedge.
 - 2) The wire rope should NOT pass through the 'No-Go' hole in the wedge.
- Utilizes standard Crosby Red U-Bolt® wire rope clip.
- The 9mm through 28mm standard S-421 wedge socket can be retrofitted with the new style Terminator wedge.
- Available with bolt, nut, and cotter pin: S-421TB.
- US patent 5,553,360, Canada patent 2,217,004, and foreign equivalents.
- Meets the performance requirements of EN 13411-6.
- Available with API-2C certification upon request.
- Wedge sockets meet the performance requirements of Federal specification RR-S-550F, Type C, except those provisions required of the contractor.
- The S-423T Super Terminator wedge is designed to be assembled only into the Crosby S-421T Terminator socket body. Important: The S-423TW for sizes 14mm through 28mm (5/8" through 1-1/8") will fit respective size standard Crosby S-421T basket. The 30-32mm (1-1/4") S-423TW will only fit the Crosby S-421T 1-1/4" basket marked with Terminator.

APPLICATION AND WARNING INFORMATION
SECTION 17

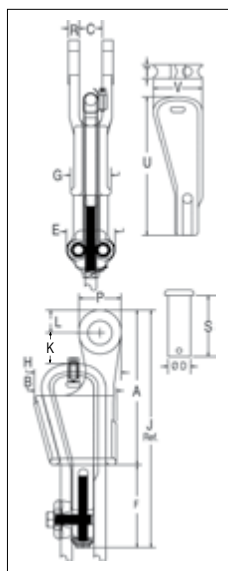
S-421T WEDGE SOCKETS (Assembly includes socket, wedge, pin and wire rope clip)

Wire Rope Dia.		Stock No.	Weight Each (kg)	Wedge Only	Weight Each (lb)	Standard Bolt, Nut & Cotter Assy	Weight Each (kg)
(in)	(mm)						
3/8	9-10	1035000	1.44	1035555	.23	2038971	.38
1/2	11-13	1035009	2.79	1035564	.48	2038972	.69
5/8	14-16	1035018	4.40	1035573	.81	2038974	1.15
3/4	18-19	1035027	6.58	1035582	1.18	2038976	1.91
7/8	20-22	1035036	9.75	1035591	1.82	2038978	3.23
1	24-26	1035045	13.9	1035600	2.44	2038980	5.40
1-1/8	28	1035054	20.5	1035609	3.56	2038982	7.50
1-1/4	30-32	1035063	29.4	1035618	4.80	2038984	10.34

Wire Rope Dia.		S-421T Stock No.	S-421TB Stock No.	Dimensions (mm)															
(in)	(mm)			A	B	C +/- 2.29	D	G	H	J*	K*	L	P	R	S	T	U	V	
3/8	9-10	1035000	1035203	145	69.1	20.6	20.6	35.1	77.7	198	47.8	22.4	39.6	11.2	54.1	11.2	31.8	35.1	
1/2	11-13	1035009	1035212	175	88.1	25.4	25.4	41.1	95.5	226	32.0	26.9	49.3	12.7	65.0	13.5	44.5	47.8	
5/8	14-16	1035018	1035221	210	109	31.8	30.2	53.8	114	273	50.5	31.0	57.2	14.2	82.6	17.5	51.0	55.5	
3/4	18-19	1035027	1035230	251	130	38.1	35.1	62.0	134	314	61.2	35.6	66.8	16.8	92.2	19.8	59.5	65.0	
7/8	20-22	1035036	1035249	286	149	44.5	41.4	68.5	156	365	63.0	42.4	79.5	19.1	109	22.4	68.5	74.5	
1	24-26	1035045	1035258	325	161	51.0	51.0	74.7	177	414	77.2	51.0	95.5	22.4	119	26.2	73.0	83.5	
1-1/8	28	1035054	1035267	365	176	57.0	57.0	84.0	194	466	65.0	57.0	108	25.4	138	27.9	82.6	90.5	
1-1/4	30-32	1035063	1035276	415	222	66.5	63.5	90.5	239	520	74.7	59.5	114	26.9	156	30.2	117	125	

* Nominal **note:** For intermediate wire rope sizes, use next larger size socket.

US-422T



- Wedge socket terminations have an efficiency rating of 80% based on the catalog strength of XXIP wire rope.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these sockets meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- Basket is cast steel and individually magnetic particle inspected.
- Wedges are color coded for easy identification.
 - Blue - largest wire line size for socket.
 - Black - mid size wire line for socket.
 - 11mm on US4
 - 14mm on US5
 - Orange - smallest wire line size for socket.
- By simply changing out the wedge, each socket can be utilized for various wire line sizes (ensure correct wedge is used for wire rope size).
- Cast into each wedge is the model number of the socket and the wire line size for which the wedge is to be used.
- Load pin is forged and headed on one end.
- US-422T wedge sockets contain a hammer pad (lip) to assist in proper securement of termination.
- Incorporates Crosby's patented QUIC-CHECK® 'Go' and 'No-Go' feature cast into the wedge. The proper size rope is determined when the following criteria are met:
 - 1) The wire rope should pass through the 'Go' hole in the wedge.
 - 2) The wire rope should NOT pass through the 'No-Go' hole in the wedge.
- Available with API-2C certification upon request.
- UWO-422T Wedges are to be used only with the US-422T Wedge Socket Assemblies.

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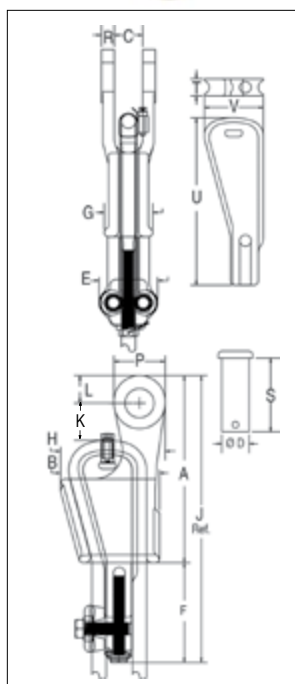
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US-422T Utility Wedge Sockets

Model No.	Wire Rope Size		Stock No.	Weight Each (kg)	Wedge Only Stock No.	Wedge Only Weight Each (kg)	Dimensions (mm)														
	(in)	(mm)					A	B	C +/- 2.29	D	G	H	J	K	L	P	R	S	T	U	V
US4T	3/8	10	1044300	2.09	1047310	0.32	173	90.2	25.4	25.4	41.4	71.4	214	35.1	26.9	49.3	12.7	64.3	11.2	48.5	54.4
US4T	7/16	11	1044309	2.09	1047301	0.46	173	90.2	25.4	25.4	41.4	71.4	222	27.4	26.9	49.3	12.7	64.3	13.5	44.7	47.8
US4T	1/2	13	1044318	2.09	1047329	0.46	173	90.2	25.4	25.4	41.4	71.4	222	25.9	26.9	49.3	12.7	64.3	13.5	44.7	47.8
US5T	1/2	13	1044327	3.86	1047338	0.91	233	107	35.8	31.8	54.1	84.1	284	46.7	38.1	76.2	16.0	82.6	19.1	48.8	54.9
US5T	9/16	14	1044336	3.86	1047347	0.82	233	107	35.8	31.8	54.1	84.1	291	61.0	38.1	76.2	16.0	82.6	17.5	50.8	55.4
US5T	5/8	16	1044345	3.86	1047356	0.82	233	107	35.8	31.8	54.1	84.1	291	59.4	38.1	76.2	16.0	82.6	17.5	50.8	55.4
US6T	5/8	16	1044354	4.26	1047365	1.37	240	119	38.1	31.8	56.9	92.2	303	63.0	38.1	76.2	14.2	82.6	22.4	60.5	69.9
US6T	3/4	19	1044363	4.26	1047374	1.14	240	119	38.1	31.8	56.9	92.2	300	51.6	38.1	76.2	14.2	82.6	22.4	54.1	66.8
US8AT	5/8	16	1044372	9.0	1047383	1.46	269	144	46.0	41.4	60.5	140	335	48.5	38.9	73.2	19.1	105	17.5	82.8	88.9
US8AT	3/4	19	1044381	9.3	1047392	1.55	269	144	46.0	41.4	60.5	148	344	60.5	38.9	73.2	19.1	105	19.8	79.2	85.9
US7*	7/8	22	1038580	7.48	1046674	1.18	286	130	33.3	31.8	68.3	—	—	65.0	41.4	82.8	16.8	82.6	26.9	53.8	65.0
US7*	1	25	1038589	7.48	1046683	1.18	286	130	33.3	31.8	68.3	—	—	65.0	41.4	82.8	16.8	82.6	26.9	47.8	60.5
US8T	7/8	22	1044404	14.3	1047425	2.50	324	177	46.0	41.4	77.7	183	407	72.9	41.9	79.2	19.1	105	22.4	98.6	106
US8T	1	25	1044417	14.7	1047431	2.77	324	177	46.0	41.4	77.7	186	417	58.9	41.9	79.2	19.1	105	26.2	95.5	103
US10T	1-1/8	28	1044426	25.1	1047440	4.40	405	219	46.0	41.4	90.7	232	501	82.8	55.6	111	19.1	105	27.7	121	129
US10T	1-1/4	32	1044435	26.3	1047459	4.72	405	219	46.0	41.4	90.7	239	514	71.9	55.6	111	19.1	105	30.2	117	125
US11T	1-1/8	28	1044444	27.5	1047468	5.7	415	222	66.5	63.5	90.4	232	507	85.6	59.4	114	26.9	156	27.7	121	129
US11T	1-1/4	32	1044453	29.4	1047477	6.8	415	222	66.5	63.5	90.4	239	520	74.7	59.4	114	26.9	156	30.2	117	125

* Non-Terminator Style.

S-423T



- The 423T wedge socket terminations have a minimum efficiency rating on most high-performance, high-strength, compacted-strand, rotation-resistant wire ropes of 80% based on the catalog breaking strength of the various ropes.
- Design eliminates the difficulty of properly seating the wedge with high performance wire rope into a wedge socket termination.
- Proper application of the Super Terminator eliminates the 'first load' requirement of conventional wedge socket terminations.
- S-423TW Wedge Kit can be retrofitted onto existing Crosby S-421T Terminator Wedge Sockets.
- Wedge and accessories provided with a zinc finish.
- Meets the performance requirements of EN13411-6.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these sockets meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- Basket is cast steel and individually magnetic particle inspected.
- Pin diameter and jaw opening allows wedge and socket to be used in conjunction with closed swage and spelter sockets.
- Secures the tail or dead end of the wire rope to the wedge, thus eliminates loss or punch out of the wedge.
- Eliminates the need for an extra piece of rope, and is easily installed.
- The Terminator wedge eliminates the potential breaking off of the tail due to fatigue.
- The tail, which is secured by the base of the clip and the tension device, is left undeformed.
- Available with bolt, nut, and cotter pin: S-423TB.
- Available with API-2C certification upon request.
- Wedge sockets meet the performance requirements of Federal Specification RR-S-550F, Type C, except those provisions required of the contractor.
- The S-423T Super Terminator wedge is designed to be assembled only into the Crosby S-421T Terminator socket body. Important: The S-423TW for sizes 14mm through 28mm will fit respective size standard Crosby S-421T basket. The 30-32mm S-423TW will only fit the Crosby S-421T 30-32mm basket marked with Terminator.

Assembly includes socket, wedge, pin, wire rope clip, tensioner, bolts and secondary retention wire.

APPLICATION AND WARNING INFORMATION
SECTION 17

S-423T WEDGE SOCKETS

Wire Rope Dia.		S-423T Assembly with Round Pin and Cotter Pin			S-423TB Assembly with Bolt, Nut and Cotter Pin			S-423TW** Wedge Kit		
(in)	(mm)	S-423T Stock No.	S-423T Weight Each		S-423TB Stock No.	S-423TB Weight Each		S-423TW Stock No.	S-423TW Weight Each	
			(lb)	(kg)		(lb)	(kg)		(lb)	(kg)
5/8	14- 16	1035123	12.7	5.8	1035218	13.1	5.9	1034018	5.2	2.4
3/4	18-19	1035132	19.4	8.8	1035227	19.1	8.7	1034027	7.2	3.3
7/8	20-22	1035141	28.8	13.1	1035236	27.8	12.6	1034036	10.3	4.7
1	24-26	1035150	39.2	17.8	1035245	37.3	16.9	1034045	11.9	5.4
1-1/8	28	1035169	57.1	25.9	1035254	57.9	25.9	1034054	19.9	9.0
1-1/4	30-32	1035178	88.6	40.2	1035272	88.1	39.9	1034063	33.8	15.3

**Kit contains wedge, wire rope clip and bolts, tensioner bolt, and secondary retention wire.

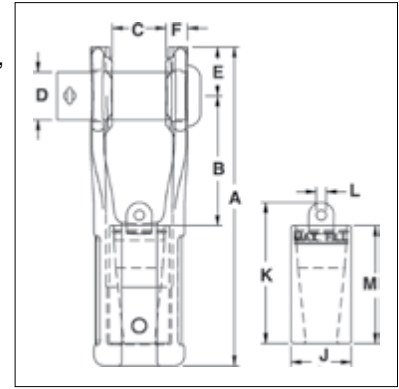
Wire Rope Dia.		S-423T Stock No.	Dimensions (mm)																
(in)	(mm)		A	B	C	D	E	F	G	H	J*	K	L	P	R	S	T	U	V
5/8	14- 16	1035123	210	114	31.8	30.2	76.2	103	54.1	117	313	28.0	31.0	57.2	14.2	82.6	19.1	175	66.0
3/4	18-19	1035132	251	132	38.1	35.1	82.6	122	62.0	136	373	38.0	35.6	66.5	16.8	92.2	22.4	194	76.7
7/8	20-22	1035141	286	149	44.5	41.4	96.8	146	68.3	156	431	40.5	42.4	79.5	19.1	109	25.4	241	88.1
1	24-26	1035150	325	167	50.8	50.8	96.8	146	74.7	179	471	36.5	51.1	95.3	22.4	119	28.7	264	97.0
1-1/8	28	1035169	365	176	57.2	57.2	102	174	85.9	198	539	28.5	57.4	108	25.4	138	31.8	300	107
1-1/4	30-32	1035178	415	219	66.5	63.5	114	197	90.7	238	612	38.0	59.4	114	26.9	168	35.1	352	148

* Nominal note: For intermediate wire rope sizes, use next larger size socket.

SB-427



- Available in six sizes from 13mm - 38mm.
- Button Spelter terminations have a 100% efficiency rating, based on the catalog strength of the wire rope.
- Designed for use with mobile cranes. Can be used to terminate high performance, rotation resistant ropes, and standard 6 strand ropes.
- Easy to install assembly utilizes Crosby WIRELOCK® socketing compound.
- Sockets and buttons are re-usable.
- Replacement buttons and sockets are available.
- Locking feature available to prevent rotation of rope.
- Button contains cap with eye that can be attached to, and used to pull, rope during reeving process.
- Manufactured to the requirements of API-2C.



APPLICATION AND WARNING INFORMATION
SECTION 17

SB-427 Button Spelter Sockets

Wire Rope Size		Stock No.	Ultimate Load (t)	Weight Each (kg)	Button Only Stock No.	Dimensions (mm)										Tolerance +/- (mm)
(in)	(mm)					A	B	C	D	E	F	J	K	L	M	
1/2 - 5/8	13-16	1052005	27	2.76	1052309	202	82	33	30	31	14	38	89	6	74	1.52
5/8 - 3/4	16-19	1052014	45	4.67	1052318	240	99	39	35	37	17	44	109	10	87	1.52
3/4 - 7/8	19-22	1052023	57	7.75	1052327	275	112	45	41	43	19	52	121	10	101	1.52
7/8 - 1	22-26	1052032	82	13.24	1052336	327	139	52	51	51	23	62	143	16	115	2.29
1-1/8 - 1-1/4	28-32	1052041	136	20.86	1052345	378	144	64	57	64	28	75	180	19	145	2.29
1-3/8 - 1-1/2	35-38	1052050	161	35.38	1052354	459	182	77	70	70	31	92	205	19	172	2.29

SB-427TB (Bolt, Nut and Cotter Pin)

Wire Rope Size		Stock No.	Ultimate Load (t)	Weight Each (kg)	Button Only Stock No.	Dimensions (mm)										Tolerance +/- (mm)
(in)	(mm)					A	B	C	D	E	F	J	K	L	M	
1/2 - 5/8	13-16	1052406	27	2.76	1052309	202	82	33	30	31	14	38	89	6	74	1.52
5/8 - 3/4	16-19	1052415	45	4.67	1052318	240	99	39	35	37	17	44	109	10	87	1.52
3/4 - 7/8	19-22	1052424	57	7.75	1052327	275	112	45	41	43	19	52	121	10	101	1.52
7/8 - 1	22-26	1052433	82	13.24	1052336	327	139	52	51	51	23	62	143	16	115	2.29
1-1/8 - 1-1/4	28-32	1052442	136	20.86	1052345	378	144	64	57	64	28	75	180	19	145	2.29
1-3/8 - 1-1/2	35-38	1052451	161	35.38	1052354	459	182	77	70	70	31	92	205	19	172	2.29

Wirelock® Requirements

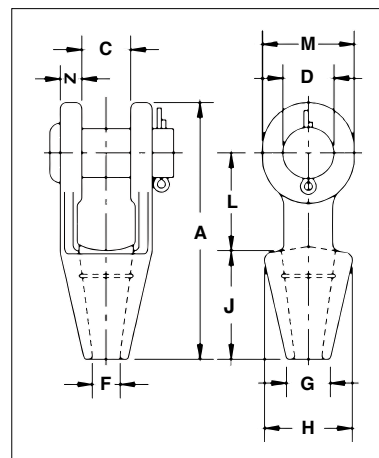
Wire Rope Size		WIRELOCK Required (cc)	WIRELOCK Stock No.	WIRELOCK Kit Size (cc)
(in)	(mm)			
1/2 - 5/8	13-16	35	1039602	100
5/8 - 3/4	16-19	60	1039602	100
3/4 - 7/8	19-22	100	1039602	100
7/8 - 1	22-26	140	1039602*	100
1-1/8 - 1-1/4	28-32	250	1039604	250
1-3/8 - 1-1/2	35-38	420	1039606	500

* 2 kits required.

G-416 / S-416



- Forged steel sockets through 38mm, cast alloy steel 40mm through 102mm.
- Spelter socket terminations have an efficiency rating of 100%, based on the catalog strength of wire rope.
- Ratings are based on recommended use with 6 x 7, 6 x 19 or 6 x 37, IPS or XIP (EIP), XXIP (EEIP), RRL, FC or IWRC wire rope.
- Strand constructed with minimal number of wires (e.g. 1 x 7) requires special consideration that socket basket length be five (5) times the strand diameter or fifty (50) times the wire diameter, whichever is the greater.
- All cast steel sockets 40mm and larger are magnetic particle inspected and ultrasonic inspected. Proof testing available on special order.
- Available with bolt nut and cotter: G-416B.
- Open Grooved Sockets meet the performance requirements of Federal Specification RR-S-550F, Type A, except for those provisions required of the contractor.



G-416 / S-416 Open Spelter Sockets

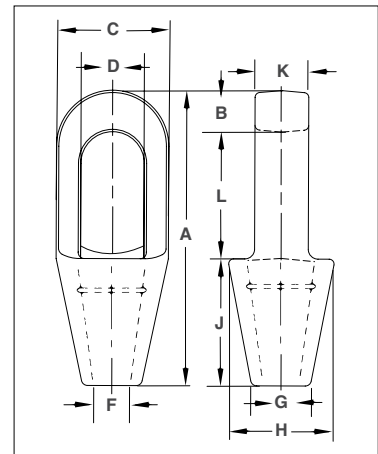
Rope Dia.		Structural Strand Dia. (mm)	Ultimate Load (t)	Stock No.		Weight Each (kg)	Dimensions (mm)											Tolerance +/- (mm)
(in)	(mm)			G-416 Galv.	S-416 S.C.		A	C	D	F	G	H	J	L	M	N	C	
5/16-3/8	8-10	—	12	1039637	1039646	.59	123	20.6	20.6	12.7	20.6	42.9	57.0	44.5	38.1	11.2	1.52	
7/16-1/2	11-13	—	20	1039655	1039664	1.02	141	25.4	25.4	14.2	23.9	47.8	63.5	51.0	47.8	12.7	1.52	
9/16-5/8	14-16	12-13	27	1039673	1039682	1.63	171	31.8	30.2	17.5	28.7	57.0	76.0	63.5	57.0	14.2	1.52	
3/4	18	14-16	43	1039691	1039708	2.64	202	38.1	35.1	20.6	31.8	66.5	89.0	76.0	66.5	15.7	1.52	
7/8	20-22	18-19	55	1039717	1039726	4.38	235	44.5	41.4	23.9	38.1	82.5	102	89.0	79.5	20.3	1.52	
1	24-26	20-22	78	1039735	1039744	7.03	268	51.0	51.0	28.7	44.5	95.5	114	102	95.5	22.4	1.52	
1-1/8	28-30	24-26	92	1039753	1039762	9.75	300	57.0	57.0	31.8	51.0	105	127	117	105	25.4	3.05	
1-1/4 - 1-3/8	32-35	28	136	1039771	1039780	14.1	335	63.5	63.5	38.1	57.0	121	140	127	121	28.7	3.05	
1-1/2	38	30-32	170	1039799	1039806	21.4	384	76.0	70.0	41.4	70.0	133	152	152	137	30.2	3.05	
* 1-5/8	* 40-42	33-35	188	1039815	1039824	24.9	413	76.0	76.0	44.5	76.0	140	165	165	146	33.3	3.05	
* 1-3/4 - 1-7/8	* 44-48	36-40	268	1039833	1039842	37.2	464	89.0	89.0	51.0	79.5	162	191	178	165	39.6	3.05	
* 2 - 2-1/8	* 50-54	42-45	291	1039851	1039860	59	546	102	95.5	57.0	95.5	187	216	229	178	46.0	3.05	
* 2-1/4 - 2-3/8	* 56-60	46-48	360	1039879	1039888	76	597	114	108	63.5	102	210	229	254	197	54.0	3.05	
* 2-1/2 - 2-5/8	* 64-67	50-54	424	1041633	1041642	114	648	127	121	73.0	114	235	248	274	216	60.5	3.05	
* 2-3/4 - 2-7/8	* 70-73	56-62	511	1041651	1041660	143	692	133	127	79.0	124	267	279	279	229	73.0	6.35	
* 3 - 3-1/8	* 75-80	64-67	563	1041679	1041688	172	737	146	133	86.0	133	282	305	287	241	76.0	6.35	
* 3-1/4 - 3-3/8	* 82-86	70-73	722	1041697	1041704	197	784	159	140	92.0	146	302	330	300	254	79.0	6.35	
* 3-1/2 - 3-5/8	* 88-92	76-80	779	1041713	1041722	255	845	171	152	98.5	165	314	356	318	274	82.5	6.35	
* 3-3/4 - 4	* 94-102	—	875	1041731	1041740	355	921	191	178	108	184	346	381	343	318	89.0	6.35	

* Cast alloy steel.

G-417 / S-417



- Forged steel sockets through 38mm, cast alloy steel 40mm through 102mm.
- Spelter socket terminations have an efficiency rating of 100%, based on the catalog strength of wire rope.
- Ratings are based on recommended use with 6 x 7, 6 x 19 or 6 x 37, IPS or XIP (EIP), XXIP (EEIP), RRL, FC or IWRC wire rope.
- Strand constructed with minimal number of wires (e.g. 1 x 7) requires special consideration that socket basket length be five (5) times the strand diameter or fifty (50) times the wire diameter, whichever is the greater.
- All cast steel sockets 40mm and larger are magnetic particle inspected and ultrasonic inspected. Proof testing available on special order.
- Closed Grooved Sockets meet the performance requirements of Federal Specification RR-S-550F, Type B, except for those provisions required of the contractor.



G-417 / S-417 Closed Spelter Sockets

Rope Dia.		Structural Strand Dia. (mm)	Ultimate Load (t)	Stock No.		Weight Each (kg)	Dimensions (mm)									
(in)	(mm)			G-417 Galv.	S-417 S.C.		A	B	C	D*	F	G	H	J	K	L
5/16 - 3/8	8-10	—	12.0	1039913	1039922	.34	125	15.8	42.9	24.6	12.7	20.6	42.9	57.2	17.5	52.3
7/16 - 1/2	11-13	—	20.0	1039931	1039940	.68	140	17.5	51.0	29.5	14.2	23.9	51.0	63.5	22.4	58.7
9/16 - 5/8	14-16	12-13	30.8	1039959	1039968	1.13	162	20.6	67.0	35.8	17.5	30.2	67.0	76.2	25.4	65.0
3/4	18	14-16	43.5	1039977	1039986	1.92	194	26.9	76.2	42.2	22.4	33.3	70.0	89.0	31.8	77.7
7/8	20-22	18-19	65.3	1039995	1040000	3.28	226	33.3	92.0	49.3	25.4	38.1	82.5	102	38.1	90.5
1	24-26	20-22	81.6	1040019	1040028	4.76	254	36.6	105	58.5	28.7	44.5	95.5	114	44.5	103
1-1/8	28-30	24-26	100	1040037	1040046	6.46	283	39.6	114	65.0	31.8	51.0	105	127	51.0	116
1-1/4 - 1-3/8	32-35	28	136	1040055	1040064	8.95	309	41.4	127	71.0	38.1	58.5	119	138	56.5	129
1-1/2	38	30-32	170	1040073	1040082	13.24	355	49.3	137	81.0	41.4	70.5	132	151	62.5	155
† 1-5/8	† 40-42	33-35	188	1040091	1040108	16.32	390	54.0	146	82.5	44.5	76.2	140	165	70.0	171
† 1-3/4 - 1-7/8	† 44-48	36-40	268	1040117	1040126	25.96	445	55.5	171	95.5	51.0	79.5	162	191	76.2	198
† 2 - 2-1/8	† 50-54	42-45	309	1040135	1040144	35.83	505	62.0	194	111	57.2	95.5	187	216	82.5	224
† 2-1/4 - 2-3/8	† 56-60	46-48	360	1040153	1040162	47.62	546	70.0	216	127	66.8	105	210	229	92.0	248
† 2-1/2 - 2-5/8	† 64-67	50-54	424	1041759	1041768	63.50	597	79.5	241	140	74.5	114	235	248	102	270
† 2-3/4 - 2-7/8	† 70-73	56-62	549	1041777	1041786	99.79	645	79.5	273	159	79.5	124	259	279	124	286
† 3 - 3-1/8	† 75-80	64-67	656	1041795	1041802	125	689	85.6	292	171	86.0	133	292	305	133	298
† 3-1/4 - 3-3/8	† 82-86	70-73	750	1041811	1041820	142	743	102	311	184	92.0	146	311	330	146	311
† 3-1/2 - 3-5/8	† 88-92	76-80	820	1041839	1041848	181	787	102	330	197	98.5	160	330	356	159	330
† 3-3/4 - 4	† 94 - 102	—	1005	1041857	1041866	246	845	108	362	216	108	184	362	381	178	356

* Diameter of pin must not exceed pin used on companion 416 socket. Reference adjacent page "D" dimension. † Cast alloy steel.

RESIN FOR SPELTER SOCKETS

Note: For use on 416, 417, 427 and 517 spelter sockets only.



WIRELOCK®
Socketing Compound

- 100% termination efficiency.
- Temperature operating range is -54°C to +116°C (-65°F to +240°F).
- Ideal for on-site applications.
- No hazardous molten metal.
- Improved fatigue life.
- Pouring temperature without booster pack is 6.67°C to 43.3°C (48°F to 110°F).
- One booster pack if pouring temperature is 1.67°C to 8.89°C (35°F to 48°F).
- Two booster packs if pouring temperature is -2.78°C to +1.67°C (27°F to 35°F).
- Refer to Crosby® Wire Rope End Terminations Manual for more information.
- Storage temperature is 20°C (68°F) max. Store in well ventilated area away from sunlight and sources of ignition.



7

APPROVALS:

Lloyds Register of Shipping

Det Norske Veritas (DNV)

United States Coast Guard

Registro Italiano Navale

Germanischer Lloyd

United States Navy

American Bureau of Shipping

ISO 17.558

DNV-OS-E304



U.S. Department of Transportation
United States Coast Guard



NATO Numbers:

100cc	8030-21-902-1823
250cc	8030-21-902-1824
500cc	8030-21-902-1825
1000cc	8030-21-902-1826

Witnessed and tested by American Bureau of Shipping. (ABS)

Approximate U.S. Measurements:
250cc's Kit 1 Cup

WIRELOCK® W416-7 Socket Compound

W416-7 Kits				Booster Pak Stock No.
Kit Size	Kit Per Case	Stock No.	Weight Each (kg)	
100	20	1039602	.28	1039603
250	12	1039604	.57	1039605
500	12	1039606	1.15	1039607
1000	12	1039608	2.08	1039609
2000	6	1039610	4.08	1039611

Guide to amount WIRELOCK® Required

Wire Rope Size		WIRELOCK Required (cc)	Wire Rope Size		WIRELOCK Required (cc)
(in)	(mm)		(in)	(mm)	
1/4	6-7	9	1-3/4	44	700
5/16	8	17	1-7/8	48	700
3/8	9-10	17	2	51	1265
7/16	11	35	2-1/8	54	1265
1/2	13	35	2-1/4	56	1410
9/16	14	52	2-3/8	60	1410
5/8	16	52	2-1/2	64	1830
3/4	20	86	2-5/8	67	1830
7/8	22	125	2-3/4	70	2250
1	26	160	3	76	3160
1-1/8	28	210	3-1/4	82	3795
1-1/4	32	350	3-1/2	88	4920
1-3/8	36	350	3-3/4	94	5980
1-1/2	40	420	4	102	7730
1-5/8	42	495	—	—	—

Wirelock is a hazardous material regulated by US DOT, ICAO/IATA and IMO for transportation.

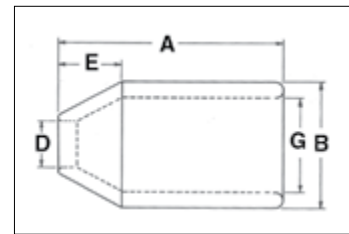
APPLICATION AND WARNING INFORMATION
SECTION 17

S-505 Swaging Sleeve



Cross Section of Swaged Sleeve

- For flemish eye wire rope splicing.
- Designed for low temperature toughness.
- Resists cracking when swaged (equals or exceeds stainless steel sleeves).
- Special processed low carbon steel.
- COLD TUFF® for better swageability.
- Can be stamped for identification after swaging without concern for fractures when following these directions:
 - Use round corner stamps to a maximum depth of 1.38mm.
 - The area for stamping should be on the side of the sleeve in the plane of the sling eye, and no less than 7mm from either end of the sleeve.
- Standard steel sleeve terminations have efficiency ratings as follows based on the catalog strength of wire rope.
- Do not use on wire rope size other than size shown.



S-505 Termination Efficiency		
Size (mm)	Type of Wire Rope *	
	IWRC	FC
6 - 26	96%	93%
28 - 52	92%	89%
56 and Larger	90%	87%

Intermediate Metric Die Chart

Sleeve and Swaging Die Requirements for Intermediate Sizes of Metric Wire Rope							
S-505 Stock No.	S-505 Sleeve Size	Metric Wire Rope Size (mm)	Standard Round Dies				Maximum After Swage Dimension (mm)
			1st Stage Die		2nd Stage Die		
1041143	1/2	12	1190881	5 x 7 Double Cavity	—		25.1
1041223	7/8	20	1190901	5 x 7 Double Cavity	—		41.1
1041241	1	24	1190921	5 x 7 Double Cavity	—		47.8
1041321	1-1/2	36	1192649	5 x 7	1190941	5 x 7	66.8
1041349	1-3/4	40	1192685	5 x 7	1190961	5 x 7	74.9
1041367	2	48	1192729	5 x 7	1190971	5 x 7	87.9
1041401	2-1/2	60	1192809	5 x 7	1190981	5 x 7	111
1041401	2-1/2	60	1191061	6 x 12	1190991	6 x 12	111
1041447	3	72	1193201	6 x 12	1191001	6 x 12	122
1041483	3-1/2	80	1193247	6 x 12	1191101	6 x 12	138
1041483	3-1/2	84	1193247	6 x 12	1191121	6 x 12	141

QUIC-PASS® system not available for these metric rope sizes. Note: Fittings designed only to be used on exact sizes listed.

** NOTE: S-505 Standard Sleeves are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), XXIP (EEIP), RRL, FC or IWRC wire rope.

Before using any National Swage fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive and documented to prove the adequacy of the assembly to be manufactured.

S-505 COLD TUFF® Standard Steel Sleeves

S-505 Standard Steel Sleeve Specifications												Swager / Die Data		
S-505 Stock No.	Rope Size		Weight Per 100 (kg)	Pkg. Qty.	Before Swage Dimensions (mm)					Maximum After Swage Dimensions (mm)		Standard Round Dies		QUIC-PASS® Dies
	(in)	(mm)			A	B	D	E	G	Standard Die	QUIC-PASS Die	Die Description	Standard Die Stock No.	QUIC-PASS Die Stock No.
1041063	1/4	6-7	3.60	250	25.4	16.8	7.88	7.12	11.9	14.5	14.4	1/4 Taper	1197528	1923530
1041090	5/16	8	4.08	200	38.1	23.1	11.2	11.2	15.8	19.1	19.5	3/8 Taper	1192364	1923551
1041107	3/8	9-10	5.44	100	38.1	23.1	11.9	9.91	16.8	19.1	19.5	3/8 Taper	1192364	1923551
1041125	7/16	11	13.6	50	51.0	31.0	14.0	16.5	21.6	25.7	25.8	1/2 Taper	1192408	1923572
1041143	1/2	13	13.2	50	51.0	31.0	16.0	14.2	23.1	25.7	25.8	1/2 Taper	1192408	1923572
1041161	9/16	14	30.8	25	70.0	37.3	17.5	16.0	26.2	31.5	31.7	5/8 Taper	1192444	1923593
1041189	5/8	16	25.9	25	70.0	37.3	19.1	16.0	27.7	31.5	31.7	5/8 Taper	1192444	1923593
1041205	3/4	18-19	40.0	20	81.0	43.7	23.1	21.3	32.5	37.1	37.5	3/4 Taper	1192462	1923614
1041223	7/8	22	62	10	90.5	51.5	26.2	25.4	38.9	42.7	44.1	7/8 Taper	1192480	1923635
1041241	1	25-26	89	10	102	58.0	29.5	28.6	43.7	49.0	49.7	1 Taper	1192505	1923656
1041269	1-1/8	28-29	118	Bulk	122	63.5	32.5	31.8	49.3	54.1	55.1	1-1/8 Open 1st Stage 2nd Stage	1192523 1192541	1923677
1041287	1-1/4	31-32	154	Bulk	132	70.5	36.5	35.8	55.0	58.9	61.1	1-1/4 Open 1st Stage 2nd Stage	1192621 1192587	1923698
1041303	1-3/8	34-35	195	Bulk	148	76.0	39.7	39.7	60.5	64.0	66.3	1-3/8 Open 1st Stage 2nd Stage	1192667 1192621	1923717
1041321	1-1/2	37-38	226	Bulk	159	82.5	42.9	42.9	67.0	69.0	72.0	1-1/2 Open 1st Stage 2nd Stage	1192649 1192667	1923736

Note: Fittings designed only to be used on exact sizes listed.

S-505 COLD TUFF® Standard Steel Sleeves

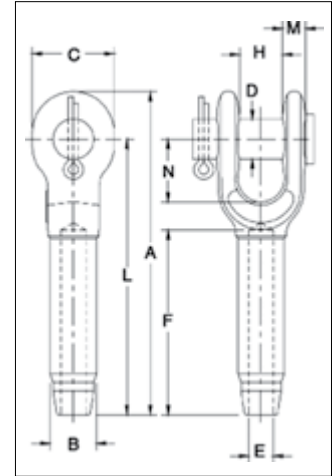
S-505 Standard Steel Sleeve Specifications											Swager / Die Data					
S-505 Stock No.	Rope Size		Weight Per 100 (kg)	Pkg. Qty.	Before Swage Dimensions (mm)					Maximum After Swage Dimensions (mm)	Die Description	Stock No.				
					A	B	D	E	G			500 Tons 1000 Tons 1500 Tons 5x7	Front Load		Side Load	
	1500 Ton 6x12	3000 Ton 6x12											1500 Ton 6x12	3000 Ton 6x12		
1041349	1-3/4	44-45	367	Bulk	184	97.5	49.2	50.0	79.5	78.7	1-3/4 Open 1st Stage 2nd Stage	1192685 1192701	—	—	—	—
1041367	2	50-52	510	Bulk	216	111	57.0	57.0	92.0	90.4	2 Open 1st Stage 2nd Stage	1192729 1192747	—	—	—	—
1041385	2-1/4	56-57	862	Bulk	243	128	63.5	64.5	102	105	2-1/4 Open 1st Stage 2nd Stage	1192765 1192783	1191089 1191043	1191089 1191043	—	1195085 1195067
1041401	2-1/2	62-64	1043	Bulk	267	140	70.0	71.5	114	114	2-1/2 Open 1st Stage 2nd Stage	—	1191061 1191089	1191061 1191089	1195370 1195469	1195076 1195085
1041429	2-3/4	68-70	1270	Bulk	292	146	76.0	78.5	121	119	2-3/4 Open 1st Stage 2nd Stage	—	1191034 1191052	1191034 1191052	1195389 1195478	1195094 1195101
1041447	3	75-76	1334	Bulk	305	152	82.5	86.0	127	126	3 Open 1st Stage 2nd Stage	—	1193201 1193229	1193201 1193229	1195398 1195487	1195110 1195129
1041483	3-1/2	87-89	2105	Bulk	356	178	98.5	100	148	147	3-1/2 Open 1st Stage 2nd Stage	—	1193247 1193265	1193247 1193265	—	1195138 1195147
1041492	3-3/4	93-95	2495	Bulk	381	191	103	108	160	158	3-3/4 Open 1st Stage 2nd Stage	—	—	1191114 1191132	—	1195263 1195272
1041508	4	100-105	3130	Bulk	406	206	111	114	173	170	4 Open 1st Stage 2nd Stage	—	—	1191150 1191178	—	1195156 1195165
1041526	4-1/2	112-114	4536	Bulk	457	232	124	129	195	189	4-1/2 Open 1st Stage 2nd Stage	—	—	1191187 1191203	—	1195174 1195183

Note: Fittings designed only to be used on exact sizes listed.

S-501



- Forged from special bar quality carbon steel, suitable for cold forming.
- Swage socket terminations have an efficiency rating of 100% based on the catalog strength of wire rope.
- Hardness controlled by spheroidize annealing.
- Stamp for identification after swaging without concern for fractures (as per directions in Wire Rope End Terminations User's Manual).
- Swage sockets incorporate a reduced machined area of the shank which is equivalent to the proper 'after swage' dimension. Before swaging, this provides for an obvious visual difference in the shank diameter. After swaging, a uniform shank diameter is created allowing for a QUIC-CHECK® and permanent visual inspection opportunity.
- S-501 Swage Sockets are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), XXIP (EEIP), RRL, FC or IWRC wire rope.
- In accordance with ASME B30.9, all slings terminated with swage sockets shall be proof loaded. *



S-501 Open Swage Sockets

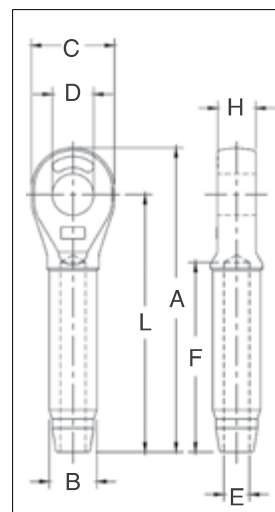
S-501 and S-501B Open Socket Specifications																Max. After Swage Dim. (mm)	Swager / Die Data					
S-501 Stock No.	S-501B Stock No. †	Rope Size		Wt. Each (kg)	Ultimate Load** (t)	Before Swage Dimensions (mm)								Tolerance +/-	Die Description		Stock No.		Side Load			
		(in)	(mm)			A	B	C	D	E	F	H	L				M	N	500 1000 1500 Ton 5 x 7	1500 3000 Ton 6 x 12	1500 Ton 6 x 12	3000 Ton 6 x 12
1039021	1054001	1/4	6	0.24	5.4	122	12.7	35.1	17.5	6.85	54.0	17.5	102	9.65	38.1	1.52	11.7	1/4 Socket	1192845	-	-	-
1039049	1054010	5/16	8	0.51	11.8	159	19.6	41.1	20.6	8.65	81.0	20.6	135	11.9	44.5	1.52	18.0	5/16-3/8 Socket	1192863	-	-	-
1039067	1054029	3/8	9-10	0.59	13.6	159	19.6	41.1	20.6	10.4	81.0	20.6	135	11.9	44.5	1.52	18.0	5/16-3/8 Socket	1192863	-	-	-
1039085	1054038	7/16	11-12	0.94	18.1	198	24.9	51.0	25.4	12.2	108	25.4	170	14.2	51.0	1.52	23.1	7/16-1/2 Socket	1192881	-	-	-
1039101	1054047	1/2	13	0.94	21.3	198	24.9	51.0	25.4	14.0	108	25.4	170	14.2	51.0	1.52	23.1	7/16-1/2 Socket	1192881	-	-	-
1039129	1054056	9/16	14	2.12	31.8	241	31.8	60.5	30.2	15.5	135	31.8	207	17.3	57.0	1.52	29.5	9/16-5/8 Socket	1192907	-	-	-
1039147	1054065	5/8	16	2.05	34.9	241	31.8	60.5	30.2	17.0	135	31.8	207	17.3	57.0	1.52	29.5	9/16-5/8 Socket	1192907	-	-	-
1039165	1054074	3/4	18-20	3.62	43.5	294	39.4	70.0	35.1	20.3	162	38.1	254	20.3	70.0	1.52	36.1	3/4 Socket	1192925	-	-	-
1039183	1054083	7/8	22	5.23	51.5	341	43.2	79.5	41.1	23.9	189	44.5	295	23.9	82.5	1.78	39.4	7/8 Socket	1192943	-	-	-
1039209	1054092	1	24-26	8.07	71.4	393	50.5	93.5	51.0	26.9	216	51.0	340	26.9	95.5	2.03	45.7	1 Socket	1192961	-	-	-
1039227	1054104	1-1/8	28	11.5	83.3	440	57.0	105	57.0	30.2	245	57.0	381	30.2	108	2.54	52.0	1-1/8 Socket	1192989	-	-	-
1039245	1054113	1-1/4	32	16.1	109	484	64.5	117	63.5	33.8	272	63.5	419	31.0	119	2.54	58.5	1-1/4 Socket	1193005	-	-	-
1039263	1054122	1-3/8	34-36	19.8	136	532	71.0	127	63.5	36.8	297	63.5	461	35.1	133	2.07	65.0	1-3/8 Socket	1193023	-	-	-
1039281	1054131	1-1/2	38-40	26.5	181	589	78.0	140	70.0	40.1	325	76.0	502	43.2	145	2.54	71.5	1-1/2 Socket	1193041	1191267	1195355	1195192
1039307	1054140	1-3/4	44	40.3	228	676	86.0	170	89.0	47.2	378	89.0	584	53.6	171	2.54	77.5	1-3/4 Socket	1193069	1191276	1195367	1195209
1042767	1054159	2	48-52	66	272	799	100	203	95.5	53.5	432	102	683	60.0	203	2.54	90.5	2 Socket	1193087	1191294	1195379	1195218

*Maximum Proof Load shall not exceed 50% of XXIP rope catalog breaking strength. ** The Ultimate Loads of 3/4" through 1 1/4" sizes have been increased to meet the requirements for 8 strand 2160 Grade pendants. † Assembly with bolt, nut and cotter pin. Note: Fittings designed only to be used on exact sizes listed. NOTE: Before using any Crosby fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive tested and documented to prove the adequacy of the assembly to be manufactured.

S-502



- Forged from special bar quality carbon steel, suitable for cold forming.
- Swage socket terminations have an efficiency rating of 100% based on the catalog strength of wire rope.
- Hardness controlled by spheroidize annealing.
- Stamp for identification after swaging without concern for fractures (as per directions in Wire Rope End Terminations User's Manual).
- Swage sockets incorporate a reduced machined area of the shank which is equivalent to the proper 'after swage' dimension. Before swaging, this provides for an obvious visual difference in the shank diameter. After swaging, a uniform shank diameter is created allowing for a QUIC-CHECK® and permanent visual inspection opportunity.
- S-502 Swage Sockets are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), XXIP (EEIP), RRL, FC or IWRC wire rope.
- In accordance with ASME B30.9, all slings terminated with swage sockets shall be proof loaded.*



S-502 Closed Swage Sockets

S-502 Closed Socket Specifications															Swager / Die Data				
S-502 Stock No.	Rope Size		Wt. Each (kg)	Ultimate Load** (t)	Before Swage Dimensions (mm)								Max. After Swage Dim. (mm)	Die Description	Stock No.		Side Load		
	(in)	(mm)			A	B	C	D	E	F	H	L			500 1000 1500 Ton 5 x 7	1500 3000 Ton 6 x 12	1500 Ton 6 x 12	3000 Ton 6 x 12	
1039325	1/4	6	.15	5.4	109	12.7	35.1	35.1	6.85	81.0	12.7	89.0	11.7	1/4 Socket	1192845	-	-	-	
1039343	5/16	8	.34	11.8	138	19.6	41.1	41.1	8.65	81.0	17.0	114	18.0	5/16-3/8 Socket	1192863	-	-	-	
1039361	3/8	9-10	.33	13.6	138	19.6	41.1	41.1	10.4	81.0	17.0	114	18.0	5/16-3/8 Socket	1192863	-	-	-	
1039389	7/16	11-12	.64	18.1	176	24.9	51.0	51.0	12.2	108	21.8	146	23.1	7/16-1/2 Socket	1192881	-	-	-	
1039405	1/2	13	.64	21.3	176	24.9	51.0	51.0	14.0	108	21.8	146	23.1	7/16-1/2 Socket	1192881	-	-	-	
1039423	9/16	14	1.32	31.8	220	31.8	60.5	60.5	15.5	135	28.7	184	29.5	9/16-5/8 Socket	1192907	-	-	-	
1039441	5/8	16	1.29	34.9	220	31.8	60.5	60.5	17.0	135	28.7	184	29.5	9/16-5/8 Socket	1192907	-	-	-	
1039469	3/4	18-20	2.27	43.5	261	39.4	73.0	73.0	20.3	162	33.3	219	36.1	3/4 Socket	1192925	-	-	-	
1039487	7/8	22	3.08	51.5	303	43.2	79.0	79.0	23.9	189	38.1	257	39.4	7/8 Socket	1192943	-	-	-	
1039502	1	24-26	4.72	71.4	344	50.5	92.0	92.0	26.9	216	44.5	292	45.7	1 Socket	1192961	-	-	-	
1039520	1-1/8	28	6.72	83.3	382	57.0	102	102	30.2	243	51.0	324	52.0	1-1/8 Socket	1192989	-	-	-	
1039548	1-1/4	32	9.78	109	430	64.5	114	114	33.8	270	57.0	365	58.5	1-1/4 Socket	1193005	-	-	-	
1039566	1-3/8	34-36	12.9	136	473	71.0	127	127	36.8	297	57.0	400	65.0	1-3/8 Socket	1193023	-	-	-	
1039584	1-1/2	38-40	17.3	181	511	78.0	137	137	40.1	325	65.0	432	71.5	1-1/2 Socket	1193041	1191267	1195355	1195192	
1039600	1-3/4	44	23.1	228	598	86.0	159	159	47.2	378	76.0	508	77.5	1-3/4 Socket	1193069	1191276	1195367	1195209	
1042589	2	48-52	40.5	272	702	100	184	184	53.5	432	82.5	584	90.5	2 Socket	1193087	1191294	1195379	1195218	

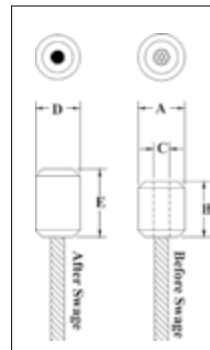
Maximum Proof Load shall not exceed 50% of XXIP rope catalog breaking strength. *The Ultimate Loads of 3/4" through 1 1/4" sizes have been increased to meet the requirements for 8 strand 2160 Grade pendants. Note: Fittings designed only to be used on exact sizes listed.

NOTE: Before using any Crosby fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive tested and documented to prove the adequacy of the assembly to be manufactured.

S-409



- Swage button terminations have an efficiency rating of 98% based on the catalog strength of wire rope.
- Special processed, low carbon steel.
- COLD TUFF® for better swageability.
- Stamp for identification after swaging without concern for fractures (as per directions in the Wire Rope End Terminations User's Manual).
- S-409 Buttons are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), RRL, FC or IWRC wire rope. Before using any National Swage fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive tested and documented to prove the adequacy of the assembly to be manufactured.



S-409 COLD TUFF® Buttons

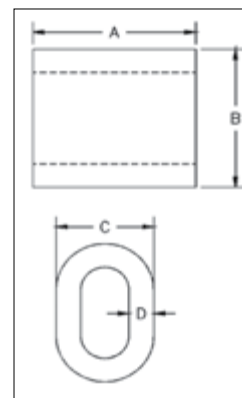
S-409 Steel Swage Button Specifications										Swager / Die Data	
S-409 Stock No.	Size No.	Rope Size		Weight Per 100 (kg)	Before Swage Dimensions (mm)			After Swage Dimensions (mm)		Die Description	Stock No. 500 Tons 1000 Tons 1500 Tons 5 x 7
		(in)	(mm)		A	B	C	D Maximum After Swage Dimensions	E Length*		
1040171	1 SB	1/8	3	.91	10.7	12.7	3.56	10.2	15.5	1/8 - 1/4 Button	1191621
1040215	3 SB	3/16	5	1.81	14.2	17.8	5.08	13.2	21.3	1/4 1st Stage	1197528
1040251	5 SB	1/4	6-7	3.63	17.3	26.9	7.87	14.7	33.5	1/8 - 1/4 Button	1191621
1040297	7 SB	5/16	8	7.26	22.4	28.7	9.14	19.6	33.8	3/8 1st Stage	1192364
1040313	8 SB	3/8	9-10	6.80	22.4	37.6	10.7	19.6	42.9	3/8 1st stage	1192364
1040331	9 SB	7/16	11	13.6	28.7	41.4	12.2	26.2	49.3	1/2 1st Stage	1192408
1040359	10 SB	1/2	13	22.7	33.3	48.0	14.0	29.5	55.1	5/8 Socket	1192907
1040377	11 SB	9/16	14	31.8	36.6	51.3	15.5	32.8	61.2	9/16 - 5/8 Button	1191665
1040395	12 SB	5/8	16	45.4	39.6	61.5	17.0	36.1	73.4	3/4 Socket	1192925
1040411	13 SB	3/4	18-20	59	42.7	69.6	20.3	39.6	82.6	3/4 1st Stage	1192462
1040439	14 SB	7/8	22	100	50.8	83.1	23.9	45.7	98.0	7/8 1st Stage	1192480
1040457	15 SB	1	25-26	141	57.2	93.2	26.9	52.1	111	1 1st Stage	1192505
1040475	16 SB	1-1/8	28-29	204	65.0	103	30.2	58.4	122	1-1/8 1st Stage	1192523
1040493	17 SB	1-1/4	31-32	295	71.4	116	33.8	65.0	138	1-3/8 Socket	1193023

* NOTE: Length is measured from outside end of termination. Fittings designed only to be used on exact sizes listed.

S-506



- For turnback wire rope splicing.
- Special processed low carbon steel.
- Turnback terminations have efficiency ratings of 94% based on the catalog strength of wire rope.
- COLD TUFF® for better swageability and low temperature toughness.
- S-506 Sleeves are recommended for use with 6 x 19 or 6 x 37, IPS or XIP (EIP), RRL, FC or IWRC wire rope. Before using any National Swage fitting with any other type lay, construction or grade of wire rope, it is recommended that the termination be destructive tested and documented to prove the adequacy of the assembly to be manufactured.
- Resists cracking when swaged (equals or exceeds stainless steel sleeves).
- Stamp for identification after swaging without concern for fractures (as per directions in the Wire Rope End Termination User's Manual).



S-506 COLD TUFF® Duplex Non-Tapered Sleeves

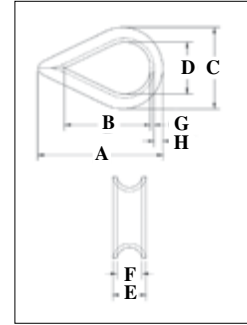
S-506 Steel Duplex Non-Tapered Sleeve Specifications										Swager / Die Data	
S-506 Stock No.	Rope Size		Weight Per 100 (kg)	Pkg. Qty.	Before Swage Dimensions (mm)				Max. After Swage Dimensions (mm)	Die Description	Stock No. 500 Tons 1000 Tons 1500 Tons 5 x 7
	(in)	(mm)			A	B	C	D			
1039334	5/16	8	7.7	200	31.8	26.9	20.6	4.85	19.6	3/8 1st Stage	1192364
1039352	3/8	9-10	5.9	100	31.8	28.4	20.6	3.55	19.6	3/8 1st Stage	1192364
1039370	7/16	11	14.1	50	41.4	35.8	25.9	4.85	26.2	1/2 1st Stage	1192408
1039398	1/2	13	12.2	50	41.4	36.6	25.9	4.05	26.2	1/2 1st Stage	1192408
1039414	9/16	14	28.6	25	57.0	43.7	31.2	5.85	32.8	5/8 1st Stage	1192444
1039432	5/8	16	24.5	25	57.0	46.7	32.5	5.10	32.8	5/8 1st Stage	1192444
1039450	3/4	18-20	41.3	10	67.0	55.0	38.6	5.85	39.4	3/4 1st Stage	1192462
1039478	7/8	22	57	10	73.0	63.5	44.5	6.85	45.7	7/8 1st Stage	1192480
1039496	1	25-26	85	10	77.5	72.0	51.0	8.40	52.0	1 1st Stage	1192505
1039539	1-1/4	30-32	174	Bulk	103	89.0	63.5	9.65	65.0	1-3/8 Socket	1193023

Note: Fittings designed only to be used on exact sizes listed.

G-411



- Hot-dip galvanized steel.
- The standard choice for light duty loading conditions and applications.
- Meets the performance requirements of EN13411-1:2002.
- Meets the performance requirements of Federal Specification FF-T-276b Type II, except for those provisions required of the contractor.



Standard Wire Rope Thimbles

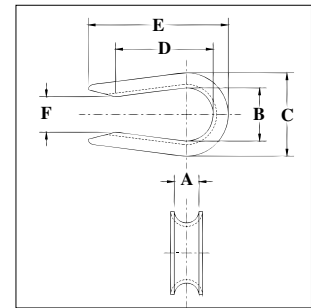
Rope Diameter		Stock No	Weight Per 100 (kg)	Dimensions (mm)							
(in)	(mm)			A	B	C	D	E	F	G	H
1/8	3-4	1037256	1.59	49.3	33.3	26.9	17.5	6.35	4.05	1.25	3.30
3/16	5	1037274	1.59	49.3	33.3	26.9	17.5	7.85	5.60	1.25	3.30
1/4	6-7	1037292	1.59	49.3	33.3	26.9	17.5	9.65	7.10	1.25	3.30
5/16	8	1037318	1.81	54.0	38.1	31.8	20.6	11.2	8.65	1.25	3.30
3/8	9-10	1037336	3.04	60.5	41.4	37.3	23.9	13.5	10.4	1.50	4.06
1/2	11-13	1037354	5.67	70.0	47.8	44.5	28.7	17.5	13.5	2.05	4.83
5/8	16	1037372	15.7	89.0	57.0	60.5	35.1	23.1	16.8	3.30	8.64
3/4	18-20	1037390	21.4	95.5	63.5	68.5	41.4	27.4	19.8	3.55	8.64
7/8	22	1037416	38.4	127	89.0	81.0	47.8	32.3	23.9	4.05	11.2
1	24-26	1037434	44.2	145	108	95.5	63.5	35.3	26.9	4.05	10.4
1-1/8 - 1-1/4	28-32	1037452	79	159	114	109	70.0	44.5	33.3	5.60	12.7

7

G-408



- Hot-dip galvanized steel.
- Meets the performance requirements of EN13411-1:2002.
- Recommended for light duty applications where assembly into another fitting (i.e., shackle or master link) is required.



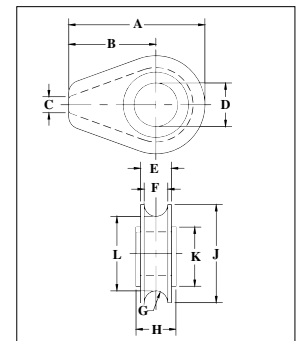
Open Pattern Thimbles

Rope Diameter		Stock No	Weight Per 100 (kg)	Dimensions (mm)					
(in)	(mm)			A	B	C	D	E	F
1/4	6-7	1037531	1.36	7.10	17.5	26.9	35.8	51.5	9.65
5/16	8	1037559	1.72	8.65	20.6	31.8	38.9	55.0	12.7
3/8	9-10	1037577	3.18	11.2	23.9	37.3	43.7	62.5	15.7
1/2	11-13	1037595	5.67	13.5	28.4	44.5	37.3	72.0	19.1
5/8	16	1037611	11.3	16.8	35.1	60.5	59.5	91.0	25.4

S-412



- Cast ductile iron.
- Fits pin for open wire rope socket, boom pendant clevis, and wedge socket.



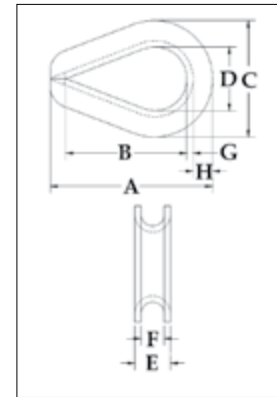
Solid Wire Rope Thimbles

Rope Diameter		Stock No	Weight Per 100 (kg)	Dimensions (mm)										
(in)	(mm)			A	B	C	D	E	F	G	H	J	K	L
1/2	13	1037121	.28	71.5	44.5	6.35	26.9	19.1	14.2	7.10	22.4	54.0	41.4	39.6
5/8	16	1037149	1.00	119	76.0	9.65	33.3	26.9	20.6	10.4	28.7	86.0	57.0	65.0
3/4	18-20	1037167	1.05	119	76.0	9.65	38.1	26.9	20.6	10.4	35.1	86.0	57.0	65.0
7/8	22	1037185	2.47	154	97.0	12.7	44.5	35.1	26.9	13.5	41.4	114	82.5	87.5
1	24-26	1037201	2.38	154	97.0	12.7	54.0	35.1	26.9	13.5	46.0	114	82.5	87.5
1-1/8	28-30	1037229	4.21	184	116	16.0	60.5	44.5	33.3	16.8	52.5	137	98.5	103
1-1/4 - 1-3/8	32-35	1037247	4.45	184	116	16.0	67.0	49.3	38.9	19.8	58.5	137	98.5	105

G-414



- Available in hot-dip galvanized or stainless steel (Type 304).
- Stainless steel recommended for more corrosive environments where greater protection is required.
- Greater protection against wear and deformation of the wire rope eye.
- Longer service life.
- Meets the performance requirements of Federal Specification FF-T-276b Type III, except for those provisions required of the contractor.
- Meets the performance requirements of EN13411-1:2002.



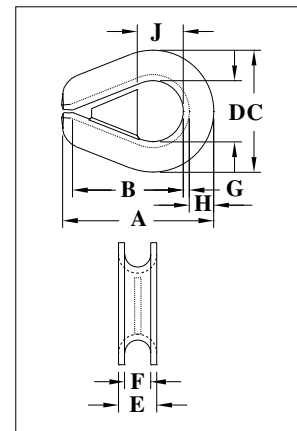
Extra Heavy Wire Rope Thimbles

Rope Diameter		Stock No.		Weight Per 100	Dimensions (mm)							
(in)	(mm)	G-414 Stock No	SS-414 Stainless		A	B	C	D	E	F	G	H
1/4	6-7	1037639	1037960	2.95	55.5	41.4	38.1	22.4	11.2	7.10	1.50	5.85
5/16	8	1037657	1037988	5.35	63.5	47.8	46.0	26.9	14.0	8.65	2.05	7.10
3/8	9-10	1037675	1038004	9.80	73.0	54.0	54.0	28.7	16.8	10.4	2.80	8.65
7/16	11-12	1037693	-	15.7	82.5	60.5	60.5	31.8	18.8	11.9	3.30	9.65
1/2 - 9/16	13-15	1037719	1038022	23.1	92.0	70.0	70.0	38.1	23.4	13.5	3.55	10.4
5/8	16	1037755	1038040	34.3	108	82.5	79.5	44.5	26.2	16.8	4.05	12.7
3/4	18-20	1037773	1038068	72	127	95.5	96.5	51.0	33.0	19.8	5.60	16.8
7/8	22	1037791	-	81	140	108	108	57.0	37.3	23.9	5.60	19.1
1	24-26	1037817	-	142	156	114	125	63.5	44.5	26.9	6.35	22.4
1-1/8 - 1-1/4	28-32	1037835	-	181	178	130	149	73.0	47.8	33.3	6.35	28.7
1-1/4 - 1-3/8	32-35	1037853	-	402	230	165	173	89.0	57.2	36.6	9.65	28.7
1-3/8 - 1-1/2	35-38	1037871	-	587	229	159	181	89.0	66.5	39.6	12.7	28.7
1-5/8	40	1037899	-	771	286	203	207	102	76.2	43.7	12.7	35.1
1-3/4	44	1037915	-	805	310	229	216	114	77.7	46.7	12.7	33.3
1-7/8 - 2	48-52	1037933	-	1259	384	305	264	152	85.9	53.0	12.7	38.1
2-1/4	56	1037951	-	1792	435	356	302	178	98.6	60.5	16.0	41.4

G-414 SL



- Prevents the shackle from being removed and replaced in the field, which could compromise the certified integrity of the sling assembly.
- Available in hot-dip galvanized. Crosby's shackle locking thimbles are galvanized after the welding of the wedge has been completed.
- Greater protection against wear and deformation of the wire rope eye.
- Longer service life.
- Meets the performance requirements of Federal Specification FF-T-276b Type III, except for those provisions required of the contractor.
- Meets the performance requirements of EN13411-1:2002

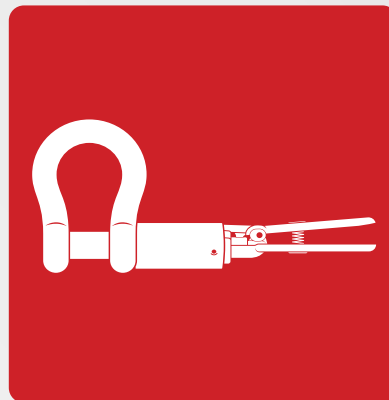


Extra Heavy Wire Rope Thimbles (Shackle-Loc)

Rope Diameter		Stock No	Weight Per 100 (kg)	Dimensions (mm)								
(in)	(mm)			A	B	C	D	E	F	G	H	J
3/8	9-10	1036800	9.80	73.0	54.0	54.0	28.7	16.8	10.4	2.80	8.65	20.5
1/2 - 9/16	13-15	1036808	23.1	92.0	70.0	70.0	38.1	23.4	13.5	3.55	10.4	28.4
5/8	16	1036817	34.3	108	82.5	79.5	44.5	26.2	16.8	4.05	12.7	31.7
3/4	18-20	1036826	72	127	95.5	96.5	51.0	33.0	19.8	5.60	16.8	38.1
7/8	22	1036835	81	140	108	108	57.0	37.3	23.9	5.60	19.1	41.4
1	24-26	1036844	142	156	114	125	63.5	44.5	26.9	6.35	22.4	47.7
1-1/8 - 1-1/4	28-32	1036853	181	178	130	149	73.0	47.8	33.3	6.35	28.7	54.1
1-3/8 - 1-1/2	35-38	1036862	587	229	159	181	89.0	66.5	39.6	12.7	28.7	63.5

ROV

Manufactured to withstand the toughest environments on earth.

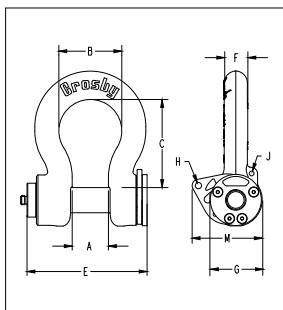




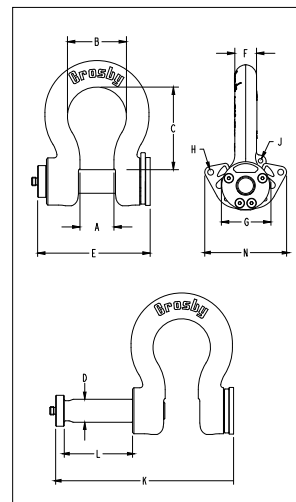
G-2100
Release & Retrieve
ROV Shackle with
QUIC-Thread Bolt



G-2110
Release & Retrieve
ROV Shackle with
Non - Thread Bolt



- Forged alloy bow with an industry best 6 to 1 performance design factor.
- Patented captured bolt can withstand over 907 kg (2,000 lb) of pull-out force.
- Galvanized bow with an API RP 17H color compliant coating.
- Galvanized alloy bolt (non-threaded) (G-2110)
- On average, QUIC-Thread bolt requires only 3.5 rotations for full engagement (G-2100)
- Raised pad for serialization.
- API RP 17H compliant 316 stainless steel handles available in T, D, F, and Eye models (sold separately).
- Built in eyelets for optional tether points.
- Monkey fist(s) included.
- Capacities from 9.5t through 85t.
- Forged steel, Quenched & Tempered, with alloy pins.
- Working Load Limit permanently shown on every shackle.
- QUIC-CHECK® deformation and angle indicators forged on the bow.



G-2100 ROV Release & Retrieve Shackle — QUIC-Threaded

Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)											
			A	B	C	D	E	F	G	H	J	K	L	N
9.5	2038739	5.1	46.0	73.9	108	31.8	186	29.5	2.68	11.2	7.9	293	107	97.3
12	2038762	6.2	51.6	82.6	119	35.1	197	32.8	3.00	11.2	7.9	311	114	101
17	2038785	10.7	60.5	98.6	146	41.4	217	38.9	3.62	12.7	7.9	349	132	126
25	2038614	17.5	73.2	127	178	50.8	242	46.7	4.20	12.7	9.7	393	151	141
35	2038808	23.3	82.6	146	197	57.9	264	52.8	4.82	12.7	9.7	431	167	149
55	2038831	49	105	184	266	70.6	320	69.1	5.81	12.7	9.7	527	207	191
85	2038877	71	127	200	330	83.3	361	79.2	6.50	12.7	12.7	600	238	199

6:1 Design Factor. *Note: Maximum Proof Loads are 2xWLL in metric tons.

G-2110 ROV Release & Retrieve Shackle — Non-Threaded

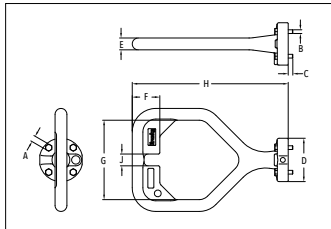
Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)											
			A	B	C	D	E	F	G	H	J	K	L	N
9.5	2038740	5.2	46.0	73.9	108	31.8	186	29.5	68.1	9.7	7.9	293	107	126
12	2038763	6.3	51.6	82.6	119	35.1	197	32.8	76.2	9.7	7.9	311	114	126
17	2038786	10.8	60.5	98.6	146	41.4	217	38.9	91.9	12.7	7.9	349	132	160
25	2038621	17.5	73.2	127	178	50.8	242	46.7	107	12.7	9.7	393	151	176
35	2038809	23.3	82.6	146	197	57.9	264	52.8	122	12.7	9.7	431	167	176
55	2038832	49	105	184	266	70.6	320	69.1	148	12.7	9.7	527	207	217
85	2038878	71	127	200	330	83.3	361	79.2	165	12.7	12.7	600	238	217

6:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.

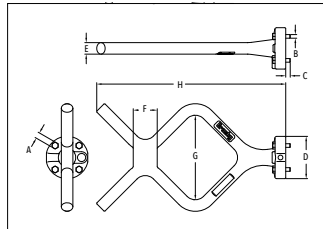




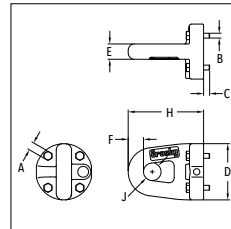
"D" Handle



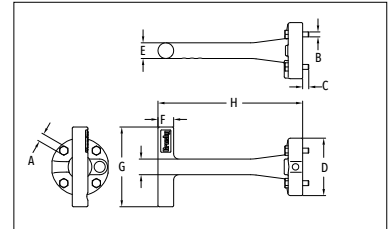
"F" Handle



"Eye" Handle



"T" Handle



- New Interchangeable handles for ROV shackle bolts.
- For use with G-2100 and G-2110 ROV shackles only.
- Handles are stainless steel and painted fluorescent orange.
- "D" and "F" handle kits available containing handle, retaining bolts, and individual packet of Loctite for easy installation.

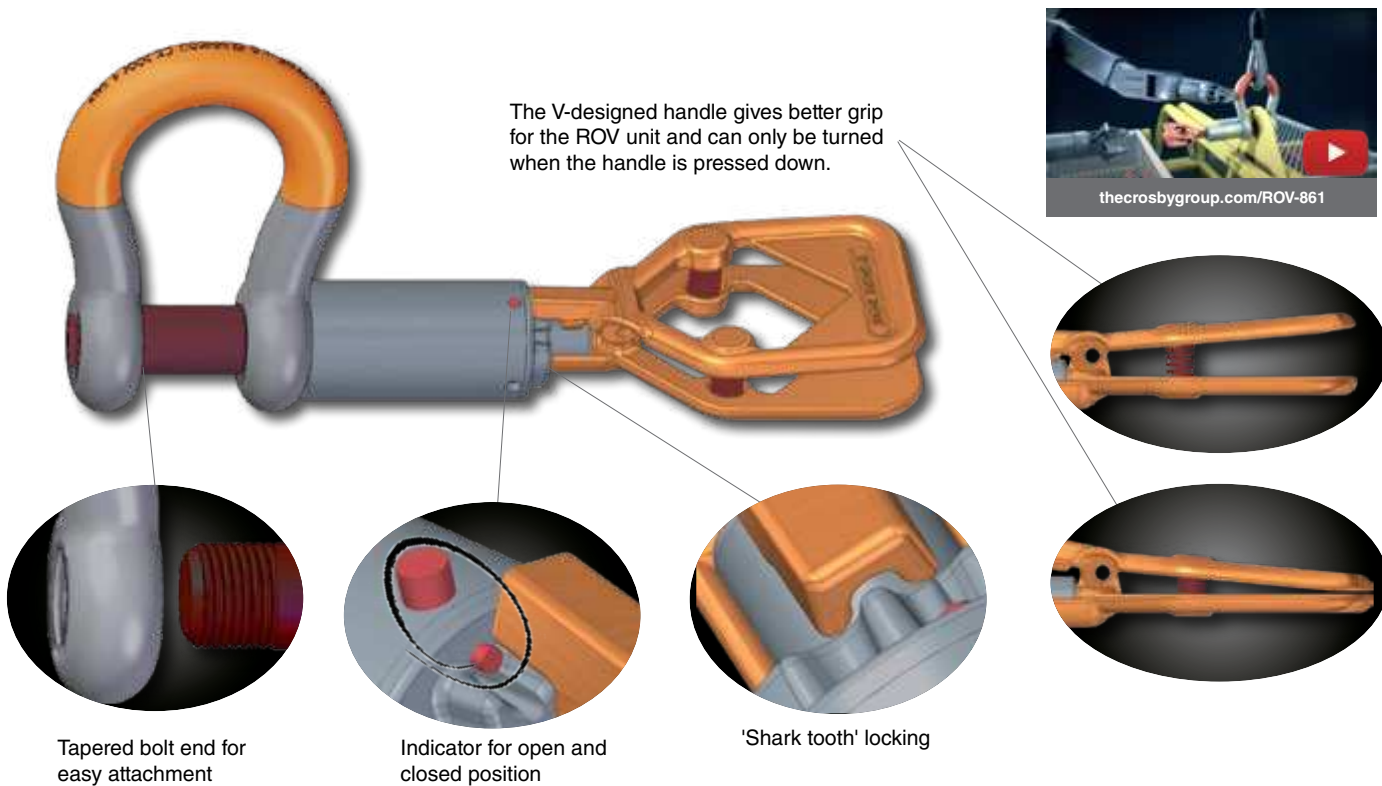
G-42100H ROV Handles

Handle Style	Stock No.	Weight Each (kg)	Dimensions (mm)									
			A	B	C	D	E	F	G	H	J	K
D	1021324	10.0	7.1	6	7.4	70.0	19.1	44.5	128	251	19.1	—
F	1021315	11.1	7.1	6	7.4	70.0	19.1	44.5	140	312	—	—
T	1021306	5.4	7.1	6	7.4	70.0	19.1	19.1	97	157	—	19.1
Eye	1021333	4.7	7.1	6	7.4	70.0	19.1	19.1	—	93.7	21.8	—



ROV Shackles

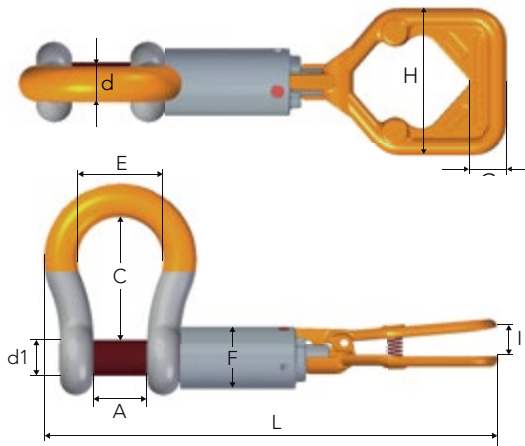
The ROV Retrieve Shackle is designed for smooth and easy use in retrieving and releasing subsea lifting and rigging operations. It has no loose parts in closed or opened position. Therefore there is no need for wires or monkey fists. The high visibility handles are close-die forged and has double safety functions. The shark tooth locking with indicator that will show if the shackle is in open or locked position as well as the spring loaded handle. The handle is the same size, regardless of size of shackle. The ROV Retrieve Shackle No. 861 is an easy to operate shackle, saving valuable time and money.



ROV Retrieve Shackle No 861

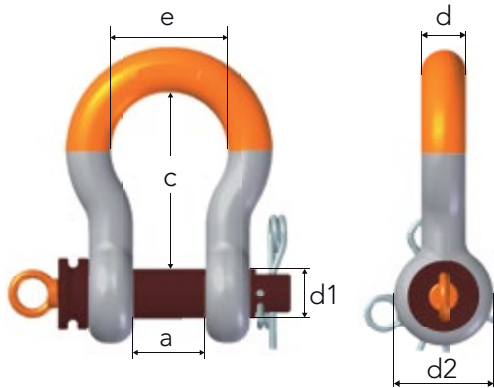
All shackles have unique markings.

- Dim. according to EN 13889
- High tensile steel, Quenched & Tempered
- All load bearing parts hot-dip galvanized
- 6:1 Design Factor
- Test certificate and traceable 3.1 certificate supplied upon request.
- Temperature: -40°C to 200°C



Stock No.	WLL (t)	Dimensions (mm)										Weight (kg)
		d1	d	A	C	E	F	L	I	H	G	
A086128	9.5	32	28	46	108	74	60	440	31	132	33	6.5
A086132	12.0	35	32	52	119	83	60	460	31	132	33	8.0
A086138	17.0	42	38	60	146	98	63.5	501	31	132	33	10.0
A086145	25.0	50	45	74	178	127	70	565	31	132	33	15.7
A086152	35.0	57	50	83	197	138	76	604	31	132	33	20.0
A086164	55.0	70	65	105	260	180	88	712	31	132	33	42.0
A086176	85.0	83	84	133	330	190	108	745	31	132	33	78.3

ROV Release Shackle No 863



- Equipped with bolt and two locking pins
- Dim. according to EN 13889
- High tensile steel, Quenched & Tempered
- All load bearing parts hot-dip galvanized
- 5:1 Design Factor
- Test certificate and traceable 3.1 certificate supplied on request.
- Temperature: -40°C to 200°C



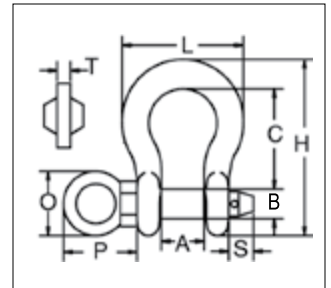
Stock No.	WLL (t)	Dimensions (mm)						Weight (kg)
		d1	d	a	c	d2	e	
A086322	6.5	25	22	37	84	52	58	1.6
A086328	9.5	32	28	46	108	64	74	3.4
A086332	12.0	35	32	52	119	72	83	5.0
A086338	17.0	42	38	60	146	84	98	7.8
A086345	25.0	50	45	74	178	105	127	13.9
A086352	35.0	57	50	83	197	127	138	17.0
A086364	55.0	70	65	105	260	152	180	37.0

8

G-209R



- Capacities from 6.5t through 55t.
- Forged steel, Quenched & Tempered, with alloy pins.
- Working Load Limit permanently shown on every shackle.
- Fatigue rated.
- QUIC-CHECK® deformation and angle indicators forged on the bow.
- All ROV shackle bows are galvanized, then painted fluorescent yellow.
- Look for the Red Pin®... the mark of genuine Crosby quality.



G-209R Subsea Shackles

Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)								
			A +/- .25	B	C	H	L	O	P	S	T
6.5	1020872	1.69	36.6	25.4	84	148	102	50	58	17	10
8.5	1020902	2.59	42.9	28.7	95.5	167	119	50	61	18	10
9.5	1020932	3.77	46.0	31.8	108	190	131	70	83	18	12
12	1020952	5.02	51.5	35.1	119	210	146	70	84	23	12
13.5	1020972	6.65	57.0	38.1	133	233	162	75	91	23	15
17	1020992	8.58	60.5	41.4	146	254	175	75	93	24	15
25	1021102	14.1	73.0	51.0	178	313	225	90	114	29	17.5
35	1021125	21.4	82.5	57.0	197	348	253	106	132	30	20
55	1021158	42.8	105.0	70.0	267	453	327	120	145	45	25

5:1 Design Factor. Maximum Proof Load is 2.0 times the Working Load Limit.



L-562A



- Hook identification code stamped on each hook.
- Quenched & Tempered.
- QUIC-CHECK® angle indicators forged into the top eye; and deformation and angle indicators forged on the hook.
- Fluorescent yellow finish for high subsea visibility.
- Tip extension allows for easy handling.
- Sizes 5.4t through 31.5t utilize a new integrated latch (S-4320) that meets the world-class standard for lifting.
 - Heavy duty stamped latch interlocks with the hook tip.
 - High cycle, long life spring.
- Pad eyes are provided on either side of hook as cable guides. The cable is passed through a hole drilled in the latch that assists in allowing the remotely operated cable to open latch.
- Crosby supplies latches with drilled holes for sizes 5.4t through 31.5t. Other sizes can be fitted by your local Authorized Crosby Dealer. Cables are not provided by Crosby.

Load Rated

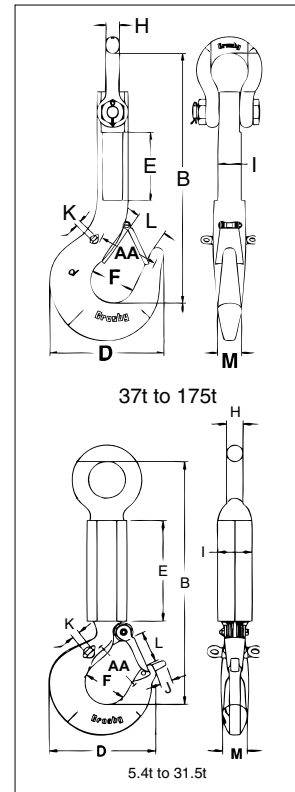
Fallage Rated

QUIC-CHECK®

QT

CE

APPLICATION AND WARNING INFORMATION
SECTION 17



L-562A ROV Eye Shank Hooks

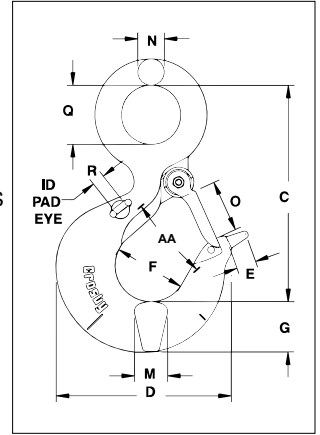
Working Load Limit (t)	Hook ID Code	L-562A Stock No.	Weight Each (kg)	Dimensions (mm)												Replacement Latch Stock No.
				I	E	B	D	J	F	M	H	L	K	AA**		
†5.4	IA	1297722	9.5	65	250	421	123	9.9	51	29	22	35	6.4	63.5	1096515	
†11.5	KA	1297792	15	65	250	518	192	30	76	41	32	53	9.7	330	1096611	
†16	LA	1297806	18	65	250	550	212	30	83	49	35	58	9.7	330	1096657	
†22	NA	1297862	31	85	250	608	263	45	108	60	40	77	19	305	1096704	
31.5	OA	1298042	44	85	250	660	346	-	127	76	48	106	19	254	1090161	
‡37	PA	1298049	44	80	235	828	357	-	137	76	47	95	19	203	1090189	
‡45	SA	1298057	90	80	235	865	392	-	152	83	47	108	19	177	1090189	
‡60	TA	1298087	131	90	215	941	470	-	178	99	53	130	19	165	1090205	
‡100	WA	1298103	303	140	300	1185	584	-	173	140	69	124	19	127	1090241	
‡150	XA	1298117	395	150	230	1233	619	-	171	152	92	137	19	101	1090241	
**175	YA	1298130	515	170	255	1326	678	-	191	178	102	-	19	101	143062	

4:1 Design Factor. ** Deformation Indicators. † Utilizes Crosby S319N style hook. Maximum proof load is 2 times the Working Load Limit. ‡ Utilizes Crosby G-2140 shackle as eye.

L-320R



- Hook identification code stamped on each hook.
- Quenched & Tempered.
- QUIC-CHECK® deformation and angle indicators forged on the hook.
- Fluorescent yellow finish for high subsea visibility.
- Tip extension allows for easy handling.
- Sizes 3.2t through 31.5t utilize new integrated latch (S-4320) that meets the world-class standard for lifting.
 - Heavy duty stamped latch interlocks with the hook tip.
 - High cycle, long life spring.
- Pad eyes are provided on either side of hook as cable guides. The cable is passed through a hole drilled in the latch that assists in allowing the remotely operated cable to open latch.
- Crosby supplies latches with drilled holes for sizes 5.4t through 31.5t. Other sizes can be fitted by your local authorized distributor. Cables are not provided by Crosby.



APPLICATION AND WARNING INFORMATION
SECTION 17

L-320R ROV Hooks

Working Load Limit (t)*	Hook ID Code	L-320R Stock No.	Weight Each (kg)	Dimensions (mm)												Replacement Latch Stock No.
				C	D	E	F	G	M	N	O	Q	R	AA**		
†3.2	HA	1298427	1.01	119	101	25	41	29	24	15	28	32	6	50.8	1096468	
†5.4	IA	1298497	2.04	147	122	25	51	37	33	18	35	40	6	63.5	1096515	
†8	JA	1298567	3.92	187	159	35	64	46	42	23	41	51	10	76.2	1096562	
†11.5	KA	1298637	7.02	230	189	35	76	57	41	28	53	62	10	102	1096611	
†16	LA	1298707	10.1	256	211	35	83	66	49	32	58	72	10	102	1096657	
†22	NA	1298777	18.4	318	262	45	108	76	60	40	77	89	19	127	1096704	
†31.5	OA	1298847	28.1	357	346	-	127	92	76	44	93	89	19	165	1090161	
37	PA	1298857	48.5	462	357	-	137	116	81	51	95	114	19	178	1090189	
45	SA	1298867	62.1	511	392	-	152	129	82	55	114	125	19	203	1090189	
60	TA	1298877	102	602	470	-	178	152	99	64	130	145	19	254	1090205	

4:1 Design Factor. *Deformation Indicators. †Utilizes Crosby S320N style hook. Maximum proof load is 2 times the Working Load Limit.

SYNTHETIC SLING FITTINGS

Steel end fittings designed to be used on synthetic web slings to increase usability & durability.



APPLICATION INFORMATION

Crosby's Sling Saver® line is the first broad line of fittings developed exclusively for use with synthetic slings. Combined with additional Crosby products, a complete system is now available.

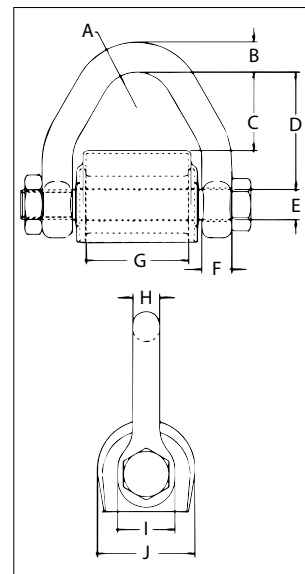
RECOMMENDED APPLICATION CHART

APPLICATION	USE
Web slings, connect to pad eye, eye bolt, or lifting lug.	S-281 Sling Saver Web Sling Shackle 
Web slings or roundslings, connecting to pad eye, eye bolt, or lifting lug.	S-253 or S-252 Sling Saver Shackle 
Connect two S-252 or S-253 Sling Saver shackles together.	S-256 Link Plate 
To keep the load centered on the pin, thus keeping the sling positioned correctly in the shackle bow.	S-255 Spool 
Web slings or roundslings connecting to master links, rings, or Crosby 320N Eye Hooks.	S-280 Sling Saver Web Connector with spool 
High strength, high capacity web or roundslings.	WSL-320A Synthetic Sling Hook 
Choking with web slings or roundslings.	S-287 Sliding Choker Hook 
Master links or master link assembly to be sewn into eye of web sling or attached utilizing web connector.	Welded Master Link A-1343 and Master Link Assembly A-1346 
Master links or master link assembly to be sewn into eye of web sling or attached utilizing web connector.	Welded Master Link A-342 and Master Link Assembly A-345 
Connecting high performance slings to master links or eye hooks and to other high performance slings.	S-237 or S-238 High Performance Connectors 
Wide body shackles greatly improve wearability of wire rope slings.	S/G-2160 Wide Body Bolt Type Shackles S/G-2169 Wide Body Screw Pin Shackles 
Always ensure rated Working Load Limits are greater than the load placed on the fitting. Designed for use with Type III (eye & eye), Class 7, 2-ply webbing, and synthetic round slings. Also accommodates single ply and endless slings.	
Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness and effective contact width shown in the recommended standard specification for synthetic polyester round slings by the Web Sling and Tie Down Association. WSTDA-RS1 (revised 2010).	

S-280



- Connects synthetic web and synthetic round slings to conventional Crosby hardware.
- All alloy construction.
- Durable vinyl cover that:
 - Protects sling at eye
 - Keeps sling positioned correctly on spool.
- Makes a field assembled bridle quick and easy.
- No retaining pin to snag sling material.
- Increased radius of spool gives wider sling bearing surface resulting in an increased area for load distribution, allowing better load distribution on internal fibers.
- Increases synthetic sling efficiency as compared to standard anchor and chain shackle bows and conventional eye hooks. This allows 100% of the slings rated Working Load Limit to be achieved.
- Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness, and effective contact width shown in the Recommended Standards Specification for Synthetic Polyester Round Slings by the Web Sling & Tie Down Association (WSTDA-RS1).
- Replacement kit for spool and web cover available.
- Designed for use with Type III (eye & eye), Class 7, 2-ply webbing and synthetic round slings. Also accommodates single ply and endless slings.



S-280 Web Connector

CE Sling Saver Load Rated QT

9

Round Sling Size (No.)	Web Slings*			Working Load Limit (t)†	S-280 Stock No.	Weight Each (kg)	Dimensions (mm)									
	Webbing Width (mm)	Eye Width (mm)	Ply				A	B	C	D	E	F	G	H	I	J
1 & 2	50	50	2	2.95	1021681	.68	19.1	15.7	41.4	62.0	16.0	15.7	68.5	14.2	30.2	51.5
3	35	75	2	4.08	1021690	.86	19.1	17.5	27.9	51.0	19.1	17.5	55.5	15.2	35.1	59.5
4	50	100	2	5.67	1021700	1.32	19.1	20.6	42.2	65.0	22.4	19.1	68.5	17.5	41.1	62.5
5 & 6	75	150	2	7.70	1021709	2.31	25.4	23.9	62.5	89.0	25.4	22.4	93.5	22.4	47.8	72.0

Design Factor of 5:1.

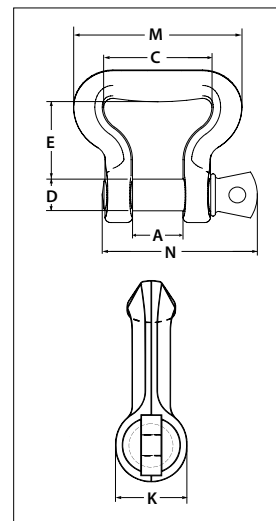
* Designed for use with Type III, (eye & eye), Class 7, 2-ply web slings. For 35mm and larger webbing width, tapered eye is required.

† Maximum Proof Load is 2 times the Working Load Limit.

S-281



- Web Sling Shackle is designed to connect synthetic web slings and synthetic round slings to eyebolts, pad eyes, and lifting lugs.
- All alloy construction.
- Each shackle has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby forged into it.
- Incorporates the same ear spread and pin dimensions as conventional Crosby shackles. Allows easy connection to pad eyes, eye bolts, and lifting lugs.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these shackles meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness, and effective contact width shown in the Recommended Standards Specification for Synthetic Polyester Round Slings by the Web Sling & Tie Down Association (WSTDA-RS1).
- Look for the Red Pin®... The mark of genuine Crosby quality.



S-281 Web Sling Shackle



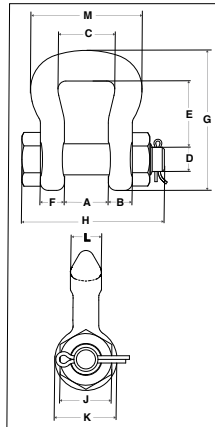
Round Sling Size (No.)	Web Slings*			Working Load Limit (t)†	S-281 Stock No.	Weight Each (kg)	Dimensions (mm)						
	Webbing Width (mm)	Eye Width (mm)	Ply				A	C	D	E	K	M	N
1 & 2	50	50	2	2.95	1021048	.54	26.9	63.5	19.1	41.1	31.0	97.5	85.0
3	35	75	2	4.08	1021057	.68	31.8	51.0	22.4	38.1	35.8	86.0	101
4	50	100	2	5.67	1021066	1.13	36.6	63.5	25.4	51.0	41.1	107	114
5 & 6	75	150	2	7.70	1021075	1.95	42.9	92.0	28.7	70.0	46.7	143	130

Design Factor of 5:1.

*Designed for use with Type III, (eye & eye), Class 7, 2-ply web slings. For 35mm and larger webbing width, tapered eye is required.

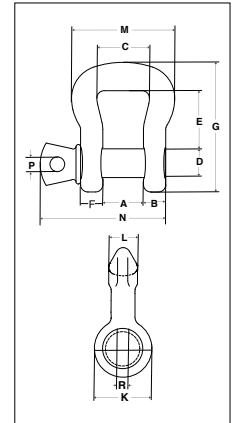
† Maximum Proof Load is 2 times the Working Load Limit.

S-252



- All alloy construction.
- Each shackle has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby forged into it.
- Increased radius of bow gives wider sling bearing surface resulting in an increased area for load distribution, allows better load distribution on internal fibers.
 - Increasing Synthetic Sling efficiency as compared to standard anchor and chain shackle bows and conventional hooks. This allows 100% of the sling's rated Working Load Limit to be achieved.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these shackles meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness, and effective contact width shown in the Recommended Standards Specification for Synthetic Polyester Round Slings by the Web Sling & Tie Down Association (WSTDA-RS1).
- Bolt (pin) has a larger diameter that provides better load distribution.
- Look for the Red Pin®... the mark of genuine Crosby quality.

S-253



S-252 Bolt Type Sling Shackle

CE Sling Saver Fatigue Resistant Load Rated QT

Web Sling Eye Width (mm)	Round Sling Size (No.)	Working Load Limit (t)*	S-252 Stock No.	Weight Each (kg)	Dimensions (mm)											
					A	B	C	D	E	F	G	H	J	K	L	M
25	1 & 2	3.25	1020485	.64	26.9	14.7	35.1	19.1	38.1	11.2	86.0	93.5	28.4	38.1	19.1	68.5
35	3 & 4	6.5	1020496	1.09	31.8	19.1	44.5	22.4	47.8	12.7	105	108	33.3	46.0	25.4	86.0
50	5 & 6	8.75	1020507	1.86	35.1	22.4	57.0	25.4	71.5	14.2	140	120	38.1	53.0	28.4	106
75	7 & 8	12.5	1020518	3.63	41.1	28.4	82.5	31.8	77.5	19.1	161	149	47.8	66.5	35.1	143
100	9 & 10	20.5	1020529	7.67	54.0	35.1	114	38.1	133	22.4	240	183	57.0	79.0	44.5	191
125	11 & 12	35	1020540	15.9	63.5	44.5	140	51.0	161	28.4	292	236	76.0	106	57.0	233
150	13	50	1020551	26.1	76.0	54.0	165	57.0	196	31.8	349	264	86.0	121	70.0	279

Design factor of 5:1.

* Maximum Proof Load is 2.5 times the Working Load Limit.

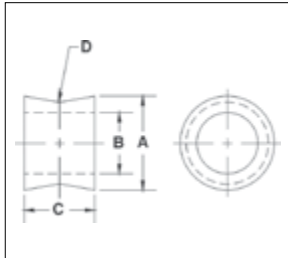
S-253 Screw Pin Sling Shackle

Web Sling Eye Width (mm)	Round Sling Size (No.)	Working Load Limit (t)*	S-253 Stock No.	Weight Each (kg)	Dimensions (mm)											
					A	B	C	D	E	G	K	L	M	N	P	R
25	1 & 2	3.25	1020575	.64	22.4	15.7	35.1	19.1	38.1	86.0	38.1	19.1	68.5	82.0	11.2	25.4
35	3 & 4	6.5	1020584	1.00	31.8	19.1	44.5	22.4	47.8	105	46.0	25.4	86.0	102	12.7	30.2
50	5 & 6	8.75	1020593	1.72	35.1	22.4	57.0	25.4	71.5	140	53.0	28.4	106	114	12.7	36.6
75	7 & 8	12.5	1020602	3.31	41.1	28.4	82.5	31.8	77.5	161	66.5	35.1	143	142	15.7	46.0
100	9 & 10	20.5	1020611	6.89	54.0	35.1	114	38.1	133	240	79.0	44.5	191	175	19.1	54.0
125	11 & 12	35	1020620	14.0	63.5	44.5	140	51.0	161	292	106	57.0	233	220	25.4	73.0
150	13	50	1020629	23.6	76.0	54.0	165	57.0	196	349	121	70.0	279	260	31.0	81.0

* Maximum Proof Load is 2.5 times the Working Load Limit.



S-255



S-255 Spool

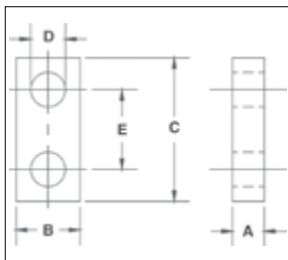
- Designed to keep the load centered on the pin, which keeps the sling positioned correctly in the shackle bow.

Working Load Limit (t)	S-255 Stock No.	Weight Each (kg)	Dimensions (mm)			
			A	B	C	D
3.25	1020903	0.15	31.8	20.6	19.1	4.85
6.5	1020912	0.26	38.1	23.9	25.4	6.35
8.75	1020921	0.40	44.5	26.7	30.2	7.85
12.5	1020930	0.66	51.0	33.3	38.1	9.65
20.5	1020939	1.27	63.5	41.4	47.8	11.2
35	1020948	1.09	82.5	54.0	57.0	12.7
50	1020957	1.84	95.5	60.5	70.0	15.7

* 5:1 Design Factor



S-256



S-256 Link Plate

- Designed to connect two (2) S-252 or S-253 Sling Saver Shackles together.

Working Load Limit (t)	S-256 Stock No.	Weight Each (kg)	Dimensions (mm)				
			A	B	C	D	E
3.25	1020785	.38	19.1	38.1	86.0	20.6	47.8
6.5	1020796	.73	25.4	44.5	105	23.9	57.0
8.75	1020807	1.23	31.8	51.0	121	26.9	66.5
12.5	1020818	2.35	38.1	63.5	152	33.3	85.6
20.5	1020829	3.71	44.5	76.0	178	41.1	95.5
35	1020840	7.80	51.0	102	235	54.0	127
50	1020851	17.0	73.1	127	267	60.5	146

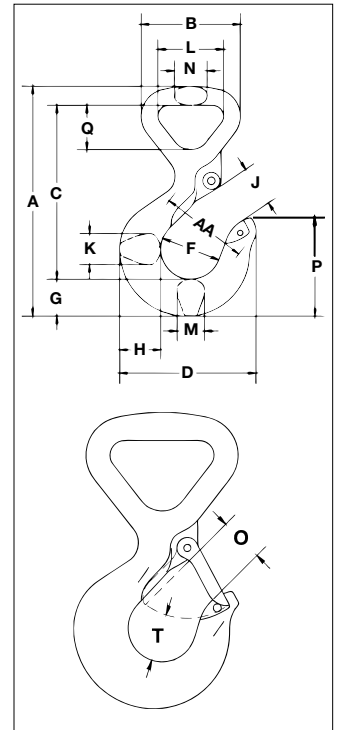
* 5:1 Design Factor



WSL-320A



- Suitable for use with 2-ply web slings and round slings.
 - Eye is designed with a wide beam surface, which eliminates bunching effects, reduces sling tendency to slide, and allows a better load distribution on internal fibers.
- All alloy construction.
- Each hook has a Product Identification Code (PIC) for material traceability along with a working load limit and the name Crosby forged into it.
- All hooks feature Crosby's patented QUIC-CHECK® indicators.
- Fatigue rated to 20,000 cycles at 1.5 times the Working Load Limit.
- Includes S-4320 latch.
- Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness, and effective contact width shown in the Recommended Standards Specification for Synthetic Polyester Round Slings by the Web Sling & Tie Down Association (WSTDA-RS1).



APPLICATION AND WARNING INFORMATION
SECTION 17

WSL-320A Synthetic Sling Hook



9

Web Sling Eye Width (mm)	Round Sling Size (No.)	Working Load Limit (t)	WSL-320A with Latch	Weight Each (kg)	Hook I.D. Code	S-4320 Rep. Latch
25.0	1	1.5	1022706	.50	FA	1096374
50.0	2	3	1022717	1.30	HA	1096468
75.0	3	5	1022728	3.00	IA	1096515

Hook ID Code	Working Load Limit (t)	Dimensions (mm)																
		A	B	C	D	F	G	H	J	K	L	M	N	O	P	Q	T	AA
FA	1.5	133	57.5	101	79.0	35.1	21.3	23.9	23.6	18.0	38.1	16.0	19.1	23.1	57.0	25.7	24.9	51.0
HA	3	181	93.0	135	101	41.4	28.7	33.5	28.7	23.9	63.5	21.6	28.7	27.7	71.5	42.9	29.5	51.0
IA	5	237	130	179	122	51.0	36.6	41.4	37.3	33.3	95.5	28.7	41.4	34.5	89.0	66.0	38.9	63.5

Design factor of 5:1.

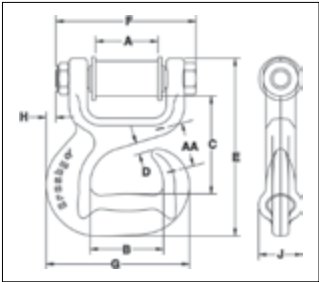
Maximum Proof Load is 2.5 times the Working Load Limit.



S-287



- Special design of hook protects the synthetic sling when dropped or dragged.
- Uses same spool and cover as S-280 Web Connector.
 - Replacement Kit for Spool and Web Cover available.
 - No retaining pin to snag sling material.
- Forged alloy steel, Quenched & Tempered.
- Each Connector has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby forged into it.
- Designed to reduce friction, abrasion, and fraying in choker area.
- Designed for use with Type III, (eye & eye).
- Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness, and effective contact width shown in the Recommended Standards Specification for Synthetic Polyester Round Slings by the Web Sling & Tie Down Association (WSTDA-RS1).



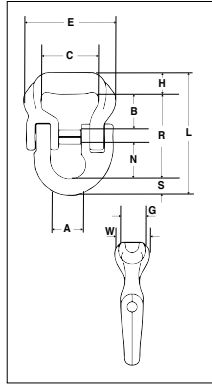
S-287 Sliding Choker Hook



Round Sling Size (No.)	Web Slings			Working Load Limit (t)	S-287 Stock No.	Weight Each (kg)	Dimensions (mm)									
	Webbing Width (mm)	Eye Width (mm)	Ply				A	B	C	D	E	F	G	H	J	AA
1 & 2	50	50	2	2.95	1021909	1.68	54.0	63.5	84.5	9.65	153	121	124	8.65	38.1	38.1
3	75	35	2	4.08	1021918	2.77	41.4	89.0	93.0	9.65	179	115	165	34.5	47.8	—

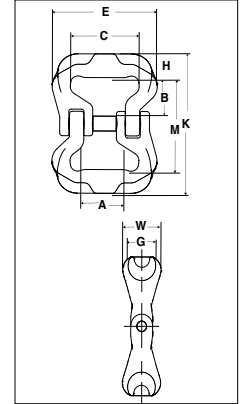
Design factor of 5:1.
Maximum Proof Load is 2 times the Working Load Limit.

S-237



- High Performance Sling Connector is designed to connect to slings of all materials.
- Allows easy connection to master links or eye hooks and is ideal for bridles.
- Increased radius of bow gives wider sling bearing surface resulting in an increased area for load distribution, allows better load distribution on internal fibers.
 - Increases synthetic sling efficiency as compared to master links, shackle bows and conventional eye hooks. This allows 100% of the sling's rated Working Load Limit to be achieved.
- All alloy construction
- Each connector has a Product Identification Code (PIC) for material traceability, along with a frame size and the name Crosby forged into it.
- Crosby Sling Saver hardware meets the requirements for minimum stock diameter or thickness, and effective contact width shown in the Recommended Standards Specification for Synthetic Polyester Round Slings by the Web Sling & Tie Down Association (WSTDA-RS1).

S-238



S-237 High Performance Sling Connector



Working Load Limit		Stock No.	Frame No.	Nominal Sling Body Width (mm)	Lok-A-Loy Size (mm)	Weight Each (kg)	Dimensions (mm)										
4:1 (kg)*	5:1 (kg)						A	B	C	E	G	H	L	N	R	S	W
2835	2268	1020695	5	51	10	.52	22.4	36.1	50.8	80.8	25.4	20.3	107	26.4	74.2	12.2	35.1
5670	4536	1020704	10	76	16	1.34	36.1	38.6	69.9	105	31.8	24.9	144	43.4	100	19.0	44.5
8505	6804	1020713	15	76	20	2.15	41.4	40.1	69.9	111	35.1	27.9	165	51.8	113	23.6	47.8
14175	11340	1020722	25	102	22	3.90	50.8	59.2	95.3	152	44.5	35.8	202	57.7	140	26.9	57.2
17010	13607	1020731	30	102	22	4.19	50.8	55.9	95.3	157	44.5	35.8	199	57.7	137	26.9	60.5
22680	18145	1020740	40	127	26	7.1	57.2	73.9	121	184	57.2	45.2	240	62.0	164	31.0	78.5
34020	27215	1020759	60	152	32	11.8	65.0	85.3	146	232	58.7	47.2	281	78.0	196	38.1	80.3

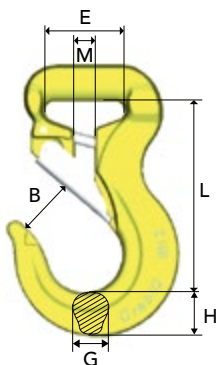
Design Factor of 5:1.

Maximum allowable Proof Load is 2 times the Working Load Limit when used at 4:1 design factor.

S-238 High Performance Sling Connector

Working Load Limit (kg)	Stock No.	Frame No.	Nominal Sling Body Width (mm)	Weight Each (kg)	Dimensions (mm)								
					A	B	C	E	G	H	K	M	W
2268	1020415	5	50.8	.73	22.4	36.1	50.8	80.8	25.4	20.3	124	83.8	35.1
4536	1020423	10	76.2	1.50	36.1	38.6	69.9	105	31.8	24.9	145	95.5	44.5
6804	1020432	15	76.2	2.22	41.4	40.1	69.9	111	35.1	27.9	156	101	47.8
11340	1020441	25	102	4.58	50.8	59.2	95.3	152	44.5	35.8	213	142	57.2
13608	1020450	30	102	5.17	50.8	55.9	95.3	157	44.5	35.8	207	135	60.5
18144	1020469	40	127	9.39	57.2	73.9	121	184	57.2	45.2	266	176	78.5
27216	1020478	60	152	14.5	65.0	85.3	146	232	58.7	47.2	298	203	80.3

5:1 Design Factor



Roundsling Hook RH

The RH-hook is the perfect load connection solution, combining the advantages of both soft lifting slings and grade 100 components. It can be inserted into a softsling and is quicker and safer to use than the commonly used shackle. The RH-hook is a connector as well as a hook, which gives the user increased flexibility, safer use and increased durability of the soft slings.

The RH-hook comes with a blocking pin, but thanks to the narrow opening it may be used without blocking pin.



Stock No.	Code	WLL (t)	Dimensions (mm)						Weight (kg)
			B	E	G	L	H	M	
B14490	RH-1-10	1	24	35	17	84	19	8	0.5
B14491	RH-2-10	2	28	40	17	96	22	10	0.7
B14492	RH-3-10	3	33	47	24	117	30	12	1.4
B14493	RH-5-10	5	43	73	27	155	36	17	3.2

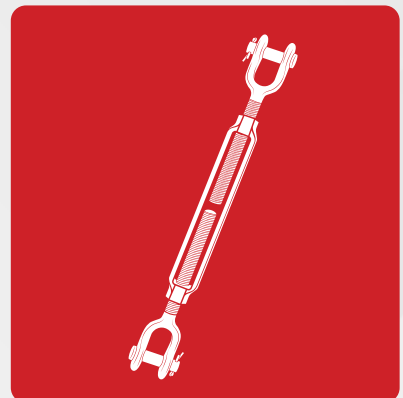
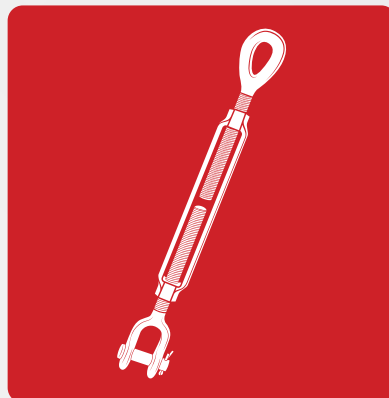
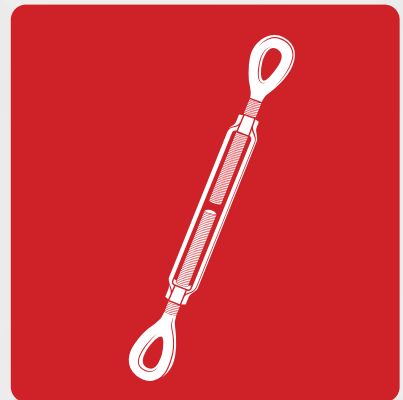
4:1 Design Factor. Tested according to EN 1677-2.



The roundsling hooks are color coded in order to match the corresponding sizes of roundslings marked according to EN 1492: Red=5T, Yellow=3T, Green=2T and Violet=1T.

TURNBUCKLES

Drop-forged and hot-dip galvanized turnbuckles for in-line pull.





HG-223

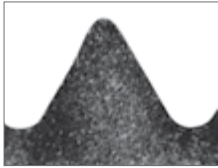
HOOK & HOOK

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.

HG-227

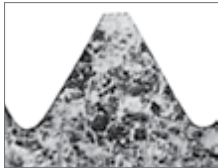
JAW & EYE

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.

HG-228

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.

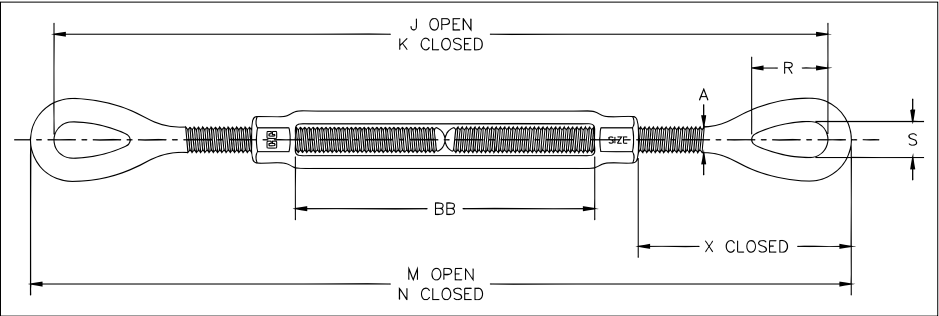


TURNBUCKLES



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

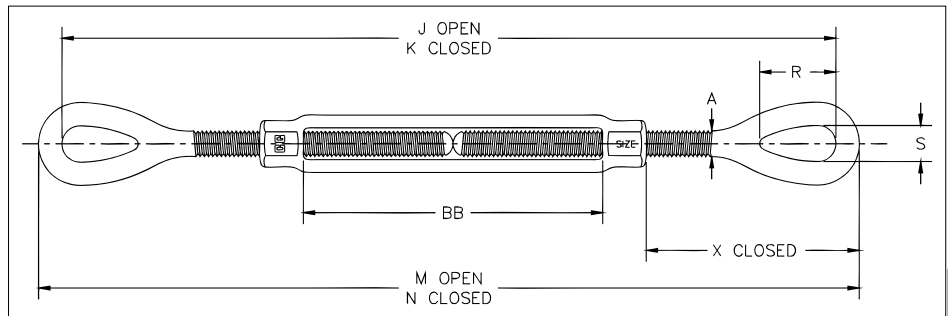


HG-226



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

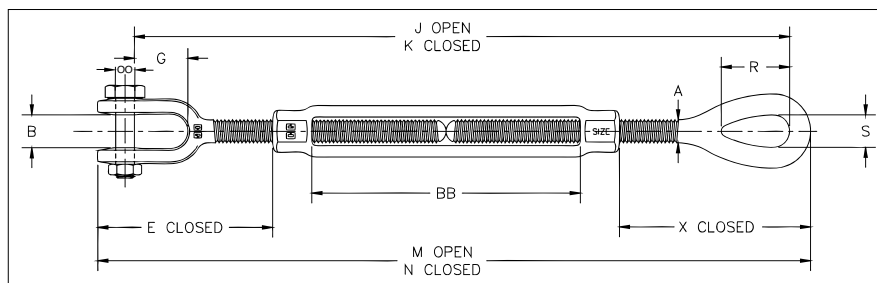


HG-227



APPLICATION AND WARNING INFORMATION
SECTION 17

- End fittings are Quenched & Tempered or normalized, bodies heat-treated by normalizing.
- Hot-dip Galvanized steel.
- Turnbuckles eyes are forged and elongated, by design, to maximize easy attachment in system and minimize stress in the eye. For turnbuckles size 6 mm through 64 mm, a shackle one size smaller can be reeved through eye.
- Forged jaw ends are fitted with bolts and nuts for 6mm through 16mm, and pins and cotters on 19 mm through 70 mm sizes.
- 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 8, and ASTM F-1145, except for those provisions required of the contractor. For additional information, see warnings and applications section.



HG-227 Jaw & Eye

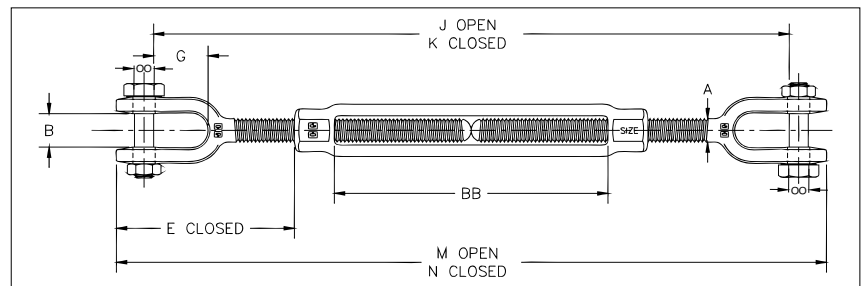
Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)											
				A	B	E Closed	G	J Open	K Closed	M Open	N Closed	R	S	X Closed	BB
* 5/16 x 4-1/2	1031895	.36	.24	7.94	12.7	51.2	22.0	343	228	363	249	24.1	11.2	55.8	116
* 3/8 x 6	1031911	.54	.36	9.53	13.5	53.5	21.5	429	277	454	301	28.7	13.5	62.9	155
1/2 x 6	1031939	1.00	.80	12.7	16.3	81.8	27.1	490	338	520	368	35.8	18.0	90.4	153
1/2 x 9	1031957	1.00	1.02	12.7	16.3	81.3	27.1	650	421	680	451	35.8	18.0	89.9	238
1/2 x 12	1031975	1.00	1.21	12.7	16.3	81.3	27.1	802	497	832	528	35.8	18.0	89.9	314
5/8 x 6	1031993	1.59	1.35	15.9	20.1	99.1	33.5	527	374	566	413	45.7	22.4	110	153
5/8 x 9	1032019	1.59	1.69	15.9	20.1	98.8	33.5	688	459	727	498	45.7	22.4	110	239
5/8 x 12	1032037	1.59	1.97	15.9	20.1	98.8	33.5	840	535	879	574	45.7	22.4	110	315
3/4 x 6	1032055	2.36	2.05	19.1	24.6	120	38.5	563	411	612	459	53.1	25.4	130	156
3/4 x 9	1032073	2.36	2.52	19.1	24.6	119	38.5	726	497	774	546	53.1	25.4	129	244
3/4 x 12	1032091	2.36	2.91	19.1	24.6	119	38.5	878	573	927	622	53.1	25.4	129	320
3/4 x 18	1032117	2.36	3.69	19.1	24.6	120	38.5	1183	726	1232	774	53.1	25.4	130	471
7/8 x 12	1032135	3.27	4.13	22.2	29.5	140	44.8	906	601	963	658	60.5	31.8	147	309
7/8 x 18	1032153	3.27	5.28	22.2	29.5	140	44.8	1223	766	1280	822	60.5	31.8	147	473
1 x 6	1032171	4.54	4.55	25.4	34.0	155	52.1	636	483	701	548	76.2	36.3	165	157
1 x 12	1032199	4.54	6.06	25.4	34.0	155	52.1	941	636	1006	701	76.2	36.3	165	309
1 x 18	1032215	4.54	7.58	25.4	34.0	155	52.1	1245	788	1310	853	76.2	36.3	165	462
1 x 24	1032233	4.54	9.33	25.4	34.0	154	52.1	1565	956	1630	1021	76.2	36.3	164	631
1-1/4 x 12	1032251	6.89	9.48	31.8	46.7	205	71.5	1035	730	1117	812	91.2	46.2	216	306
1-1/4 x 18	1032279	6.89	11.3	31.8	46.7	205	71.5	1340	883	1422	965	91.2	46.2	216	459
1-1/4 x 24	1032297	6.89	13.1	31.8	46.7	205	71.5	1659	1050	1741	1131	91.2	46.2	216	625
1-1/2 x 12	1032313	9.71	13.9	38.1	52.3	227	71.4	1080	775	1174	869	104	53.8	240	313
1-1/2 x 18	1032331	9.71	16.3	38.1	52.3	227	71.4	1384	927	1479	1021	104	53.8	240	465
1-1/2 x 24	1032359	9.71	18.8	38.1	52.3	227	71.4	1705	1095	1799	1189	104	53.8	240	633
1-3/4 x 18	1032395	12.7	23.6	44.5	66.0	238	85.0	1406	949	1518	1061	118	60.5	253	467
1-3/4 x 24	1032411	12.7	27.1	44.5	66.0	238	85.0	1711	1101	1823	1213	118	60.5	253	619
2 x 24	1032439	16.8	40.8	50.8	66.5	300	95.0	1846	1236	1980	1370	148	68.3	331	622
2-1/2 x 24	1032457	27.2	71.7	63.5	77.7	337	113	1932	1323	2100	1490	165	79.2	350	625
2-3/4 x 24	1032475	34.0	84.6	69.9	93.7	379	106	1982	1373	2176	1566	178	82.6	383	626

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



HG-228

- End fittings are Quenched & Tempered or normalized, bodies heat-treated by normalizing.
- Hot-dip Galvanized steel.
- TURNBUCKLES RECOMMENDED FOR STRAIGHT OR IN-LINE PULL ONLY.
- Forged jaw ends are fitted with bolts and nuts for 6 mm through 16 mm, and pins and cotters on 19 mm through 70 mm sizes.
- Modified UNJ thread on end fittings for improved fatigue properties.
- Body has UNC threads.
- 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 7, and ASTM F-1145, except for those provisions required of the contractor. For additional information, see Warnings & Applications.



APPLICATION AND WARNING INFORMATION
SECTION 17

HG-228 Jaw & Jaw

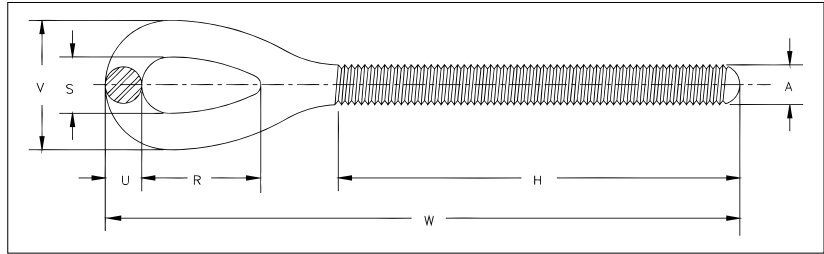
Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)								
				A	B	E Closed	G	J Open	K Closed	M Open	N Closed	BB
* 5/16 x 4-1/2	1032518	.36	.25	7.94	12.7	51.2	22.0	332	218	359	244	116
* 3/8 x 6	1032536	.54	.39	9.53	13.5	53.5	21.5	413	260	445	292	155
1/2 x 6	1032554	1.00	.83	12.7	16.3	81.8	27.1	474	321	512	359	153
1/2 x 9	1032572	1.00	1.04	12.7	16.3	81.3	27.1	633	405	671	443	238
1/2 x 12	1032590	1.00	1.23	12.7	16.3	81.3	27.1	786	481	824	519	314
5/8 x 6	1032616	1.59	1.46	15.9	20.1	99.1	33.5	501	349	554	402	153
5/8 x 9	1032634	1.59	1.79	15.9	20.1	98.8	33.5	662	434	715	487	239
5/8 x 12	1032652	1.59	2.08	15.9	20.1	98.8	33.5	815	510	868	563	315
3/4 x 6	1032670	2.36	2.18	19.1	24.6	120	38.5	536	383	601	449	156
3/4 x 9	1032698	2.36	2.65	19.1	24.6	119	38.5	698	470	764	535	244
3/4 x 12	1032714	2.36	3.05	19.1	24.6	119	38.5	851	546	916	612	320
3/4 x 18	1032732	2.36	3.83	19.1	24.6	120	38.5	1155	698	1221	764	471
7/8 x 12	1032750	3.27	4.25	22.2	29.5	140	44.8	880	575	956	651	309
7/8 x 18	1032778	3.27	5.34	22.2	29.5	140	44.8	1197	740	1272	815	473
1 x 6	1032796	4.54	4.74	25.4	34.0	155	52.1	605	453	690	538	157
1 x 12	1032812	4.54	6.25	25.4	34.0	155	52.1	910	605	995	690	309
1 x 18	1032830	4.54	7.77	25.4	34.0	155	52.1	1215	757	1300	843	462
1 x 24	1032858	4.54	9.51	25.4	34.0	154	52.1	1535	925	1620	1010	631
1-1/4 x 12	1032876	6.89	9.94	31.8	46.7	205	71.5	1000	695	1107	802	306
1-1/4 x 18	1032894	6.89	11.7	31.8	46.7	205	71.5	1305	848	1412	955	459
1-1/4 x 24	1032910	6.89	13.5	31.8	46.7	205	71.5	1624	1014	1731	1121	625
1-1/2 x 12	1032938	9.71	14.8	38.1	52.3	227	71.4	1035	731	1160	855	313
1-1/2 x 18	1032956	9.71	17.2	38.1	52.3	227	71.4	1340	883	1465	1008	465
1-1/2 x 24	1032974	9.71	19.7	38.1	52.3	227	71.4	1661	1051	1786	1176	633
1-3/4 x 18	1033018	12.7	24.3	44.5	66.0	238	85.0	1355	898	1503	1045	467
1-3/4 x 24	1033036	12.7	27.7	44.5	66.0	238	85.0	1660	1050	1807	1198	619
2 x 24	1033054	16.8	43.7	50.8	66.5	300	95.0	1769	1159	1949	1339	622
2-1/2 x 24	1033072	27.2	75.9	63.5	77.7	337	113	1853	1244	2087	1478	625
2-3/4 x 24	1033090	34.0	90.1	69.9	93.7	379	106	1899	1289	2172	1562	626

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



HG-4037

- Quenched & Tempered or normalized.
- 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 for improved fatigue properties.
- Fatigue rated.



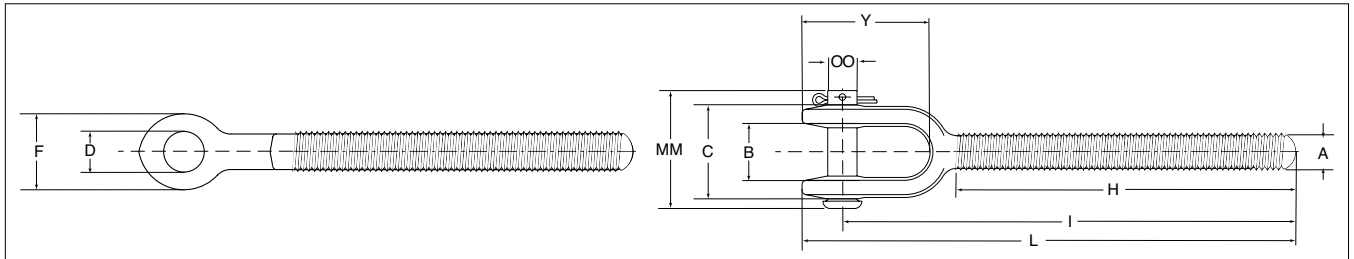
HG-4037 Eye End Fittings

Shank Dia. & Take Up (in)	RH Eye Stock No.	LH Eye Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)						
					A	H	R	S	U	V	W
* 1/4 x 4	1071057	1071672	.23	.03	6.35	65.8	20.6	8.64	5.59	19.8	106
* 5/16 x 4 1/2	1071075	1071690	.36	.06	7.94	76.2	24.1	11.2	7.11	25.4	127
* 3/8 x 6	1071093	1071716	.54	.10	9.53	98.6	28.7	13.5	8.64	30.7	155
1/2 x 6	1071119	1071734	1.00	.23	12.7	106	35.8	18.0	11.2	40.4	188
1/2 x 9	1071137	1071752	1.00	.27	12.7	145	35.8	18.0	11.2	40.4	226
1/2 x 12	1071155	1071770	1.00	.31	12.7	183	35.8	18.0	11.2	40.4	264
5/8 x 6	1071173	1071798	1.59	.37	15.9	113	45.7	22.4	12.7	47.8	212
5/8 x 9	1071191	1071814	1.59	.43	15.9	151	45.7	22.4	12.7	47.8	250
5/8 x 12	1071217	1071832	1.59	.49	15.9	189	45.7	22.4	12.7	47.8	289
3/4 x 6	1071235	1071850	2.36	.62	19.1	116	53.1	25.4	16.0	57.4	235
3/4 x 9	1071253	1071878	2.36	.70	19.1	154	53.1	25.4	16.0	57.4	273
3/4 x 12	1071271	1071896	2.36	.78	19.1	192	53.1	25.4	16.0	57.4	311
3/4 x 18	1071299	1071912	2.36	.95	19.1	268	53.1	25.4	16.0	57.4	387
7/8 x 12	1071315	1071930	3.27	1.18	22.2	198	60.5	31.8	19.1	69.9	333
7/8 x 18	1071333	1071958	3.27	1.42	22.2	275	60.5	31.8	19.1	69.9	409
1 x 6	1071351	1071976	4.54	1.43	25.4	129	76.2	36.3	22.4	81.0	279
1 x 12	1071379	1071994	4.54	1.73	25.4	205	76.2	36.3	22.4	81.0	356
1 x 18	1071397	1072010	4.54	2.03	25.4	281	76.2	36.3	22.4	81.0	432
1 x 24	1071413	1072038	4.54	2.34	25.4	357	76.2	36.3	22.4	81.0	508
1-1/4 x 12	1071431	1072056	6.89	3.21	31.8	213	91.2	46.2	28.4	103	411
1-1/4 x 18	1071459	1072074	6.89	3.68	31.8	289	91.2	46.2	28.4	103	487
1-1/4 x 24	1071477	1072092	6.89	4.15	31.8	365	91.2	46.2	28.4	103	564
1-1/2 x 12	1071495	1072118	9.71	4.68	38.1	222	104	53.8	31.8	117	441
1-1/2 x 18	1071510	1072136	9.71	5.37	38.1	298	104	53.8	31.8	117	517
1-1/2 x 24	1071538	1072154	9.71	6.05	38.1	375	104	53.8	31.8	117	594
1-3/4 x 18	1071574	1072190	12.7	7.93	44.5	309	118	60.5	38.1	137	538
1-3/4 x 24	1071592	1072216	12.7	8.85	44.5	385	118	60.5	38.1	137	614
2 x 24	1071618	1072234	16.8	13.1	50.8	396	148	68.3	44.5	157	701
2-1/2 x 24	1071636	1072252	27.2	21.0	63.5	446	165	79.2	50.8	181	752
2-3/4 x 24	1071654	1072270	34.0	27.3	69.9	449	178	82.6	57.2	197	785

*Mechanically galvanized

HG-4037 Jaw End Fittings

- Quenched & Tempered or normalized.
- Hot-dip galvanized steel.
- Forged jaw ends are fitted with bolts and nuts on sizes 6 mm through 16 mm, and pins and cotters on sizes 19 mm through 70 mm.
- Modified UNJ thread for improved fatigue properties.
- Fatigue Rated.



HG-4037 Jaw End Fittings

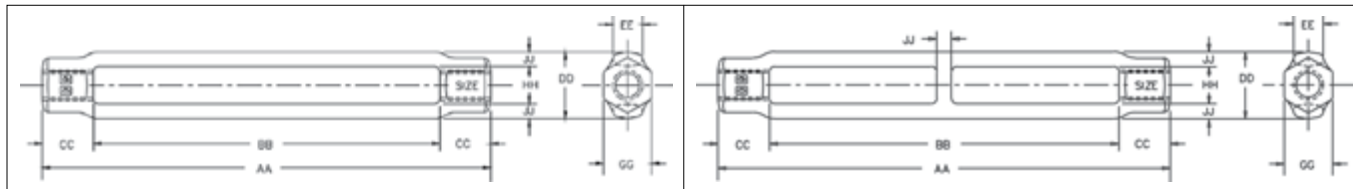
Shank Dia. & Take Up (in)	RH Jaw Stock No.	LH Jaw Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)										
					A	B	C	D	F	H	I Nom. Min.	L Nom. Min.	Y	MM	OO Bolt Pin
* 1/4 x 4	1072298	1072911	.23	.05	6.35	11.4	23.1	7.62	16.0	65.8	94.5	104	28.7	35.8	6.35
* 5/16 x 4 1/2	1072314	1072939	.36	.08	7.94	12.7	25.9	7.62	17.5	76.2	112	122	35.3	35.8	6.35
* 3/8 x 6	1072332	1072957	.54	.13	9.53	13.5	29.2	9.14	20.6	98.6	134	146	37.3	40.1	7.87
1/2 x 6	1072350	1072975	1.00	.25	12.7	16.3	34.5	10.7	25.4	106	165	180	46.0	47.5	9.40
1/2 x 9	1072378	1072993	1.00	.29	12.7	16.3	34.5	10.7	25.4	145	203	218	46.0	47.5	9.40
1/2 x 12	1072396	1073019	1.00	.33	12.7	16.3	34.5	10.7	25.4	183	242	256	46.0	47.5	9.40
5/8 x 6	1072412	1073037	1.59	.48	15.9	20.1	44.5	14.0	33.3	109	181	201	59.9	62.0	12.7
5/8 x 9	1072430	1073055	1.59	.54	15.9	20.1	44.5	14.0	33.3	148	219	239	59.9	62.0	12.7
5/8 x 12	1072458	1073073	1.59	.59	15.9	20.1	44.5	14.0	33.3	186	257	277	59.9	62.0	12.7
3/4 x 6	1072476	1073091	2.36	.75	19.1	24.6	53.1	17.5	41.4	116	200	225	71.4	65.0	16.0
3/4 x 9	1072494	1073117	2.36	.83	19.1	24.6	53.1	17.5	41.4	154	238	263	71.4	65.0	16.0
3/4 x 12	1072519	1073135	2.36	.92	19.1	24.6	53.1	17.5	41.4	192	276	301	71.4	65.0	16.0
3/4 x 18	1072537	1073153	2.36	1.09	19.1	24.6	53.1	17.5	41.4	268	352	377	71.4	65.0	16.0
7/8 x 12	1072555	1073171	3.27	1.31	22.2	29.5	65.0	20.6	47.8	198	297	325	82.6	78.5	19.1
7/8 x 18	1072573	1073199	3.27	1.47	22.2	29.5	65.0	20.6	47.8	275	373	402	82.6	78.5	19.1
1 x 6	1072591	1073215	4.54	1.61	25.4	34.0	70.1	23.9	53.8	129	237	269	94.7	87.4	22.4
1 x 12	1072617	1073233	4.54	1.91	25.4	34.0	70.1	23.9	53.8	205	314	345	94.7	87.4	22.4
1 x 18	1072635	1073251	4.54	2.22	25.4	34.0	70.1	23.9	53.8	281	390	421	94.7	87.4	22.4
1 x 24	1072653	1073279	4.54	2.52	25.4	34.0	70.1	23.9	53.8	357	466	498	94.7	87.4	22.4
1-1/4 x 12	1072671	1073297	6.89	3.67	31.8	46.7	94.5	30.2	66.8	213	362	401	125	115	28.7
1-1/4 x 18	1072699	1073313	6.89	4.15	31.8	46.7	94.5	30.2	66.8	289	438	477	125	115	28.7
1-1/4 x 24	1072715	1073331	6.89	4.62	31.8	46.7	94.5	30.2	66.8	365	514	553	125	115	28.7
1-1/2 x 12	1072733	1073359	9.71	5.57	38.1	52.3	106	37.3	79.2	222	383	428	134	130	35.1
1-1/2 x 18	1072751	1073377	9.71	6.26	38.1	52.3	106	37.3	79.2	298	459	504	134	130	35.1
1-1/2 x 24	1072779	1073395	9.71	6.94	38.1	52.3	106	37.3	79.2	375	535	580	134	130	35.1
1-3/4 x 18	1072813	1073439	12.7	8.57	44.5	66.0	118	43.7	88.9	309	470	523	159	152	41.4
1-3/4 x 24	1072831	1073457	12.7	9.50	44.5	66.0	118	43.7	88.9	385	546	599	159	152	41.4
2 x 24	1072859	1073475	16.8	16.0	50.8	66.5	142	53.1	106	396	605	670	185	175	50.8
2-1/2 x 24	1072877	1073493	27.2	25.3	63.5	77.7	148	60.5	143	437	650	739	230	191	57.2
2-3/4 x 24	1072895	1073518	34.0	32.8	69.9	93.7	167	73.2	155	441	679	781	243	213	69.9

*Mechanical galvanized

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HG-2510 Body

- Heat treat by normalizing.
- Hot-dip Galvanized.
- UNC threads
- Fatigue rated.
- Meets the performance requirements of Federal Specifications FF-T-791b, Type 1, Form 1 - Class 2, except for those provisions required by the contractor.



HG-2510 Body



Shank Dia. & Take Up (in)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)							
				AA	BB	CC	DD	EE	GG	HH	JJ
* 5/16 x 4-1/2	1033919	.36	.10	142	116	12.7	20.8	9.65	14.2	11.2	4.83
* 3/8 x 6	1033937	.54	.13	185	155	15.0	22.4	9.65	16.0	12.7	4.83
1/2 x 6	1033955	1.00	.32	196	153	21.1	30.2	17.3	20.6	16.0	7.11
† 1/2 x 9	1033973	1.00	.47	280	238	21.1	30.2	17.3	20.6	16.0	7.11
† 1/2 x 12	1033991	1.00	.58	356	314	21.1	30.2	17.3	20.6	16.0	7.11
5/8 x 6	1034017	1.59	.50	204	153	25.1	36.3	21.1	25.4	19.1	8.64
† 5/8 x 9	1034035	1.59	.72	289	239	25.1	36.3	21.1	25.4	19.1	8.64
† 5/8 x 12	1034053	1.59	.89	365	315	25.1	36.3	21.1	25.4	19.1	8.64
3/4 x 6	1034071	2.36	.68	210	156	26.9	44.2	23.9	28.7	23.9	10.2
† 3/4 x 9	1034099	2.36	.98	298	244	26.9	44.2	23.9	28.7	23.9	10.2
† 3/4 x 12	1034115	2.36	1.21	374	320	26.9	44.2	23.9	28.7	23.9	10.2
† 3/4 x 18	1034133	2.36	1.65	525	471	26.9	44.2	23.9	28.7	23.9	10.2
7/8 x 12	1034179	3.27	1.64	371	309	31.2	50.8	28.7	33.3	26.9	11.9
† 7/8 x 18	1034197	3.27	2.39	536	473	31.2	50.8	28.7	33.3	26.9	11.9
1 x 6	1034213	4.54	1.51	229	157	35.8	62.2	31.8	38.1	31.8	15.2
1 x 12	1034231	4.54	2.42	381	309	35.8	62.2	31.8	38.1	31.8	15.2
† 1 x 18	1034259	4.54	3.33	533	462	35.8	62.2	31.8	38.1	31.8	15.2
† 1 x 24	1034277	4.54	4.47	703	631	35.8	62.2	31.8	38.1	31.8	15.2
1-1/4 x 12	1034339	6.89	2.59	391	306	42.4	66.5	31.8	47.8	38.1	14.2
1-1/4 x 18	1034357	6.89	3.44	544	459	42.4	66.5	31.8	47.8	38.1	14.2
† 1-1/4 x 24	1034375	6.89	4.29	710	625	42.4	66.5	31.8	47.8	38.1	14.2
1-1/2 x 12	1034437	9.71	3.63	402	313	44.5	75.9	38.1	57.2	44.5	15.7
1-1/2 x 18	1034455	9.71	4.72	554	465	44.5	75.9	38.1	57.2	44.5	15.7
† 1-1/2 x 24	1034473	9.71	5.85	723	633	44.5	75.9	38.1	57.2	44.5	15.7
1-3/4 x 18	1034552	12.7	7.12	570	467	51.6	91.9	44.5	66.5	53.8	19.1
1-3/4 x 24	1034570	12.7	8.71	722	619	51.6	91.9	44.5	66.5	53.8	19.1
2 x 24	1034632	16.8	11.7	740	622	58.9	105	50.8	76.2	60.5	22.4
2-1/2 x 24	1034678	27.2	25.4	804	625	89.7	143	69.9	98.6	79.3	31.8
2-3/4 x 24	1034696	34.0	24.5	804	626	88.9	143	69.9	98.6	114	31.8

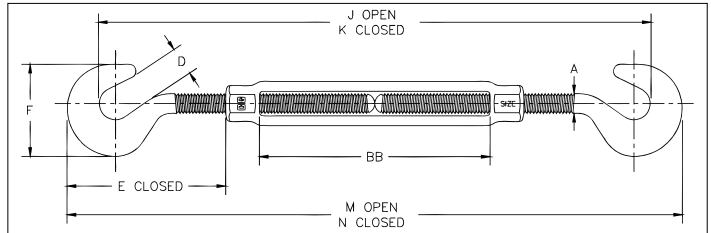
*Mechanically galvanized

†Contains Center Rib for additional body support



HG-223

- End fittings are Quenched & Tempered or normalized, bodies heat-treated by normalizing.
- Hot-dip galvanized steel.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- TURNBUCKLES RECOMMENDED FOR STRAIGHT OR IN-LINE PULL ONLY.
- Modified UNJ thread on end fittings for improved fatigue properties.
- Body has UNC threads.
- 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 5, and ASTM F-1145, except for those provisions required of the contractor. For additional information, see warnings and applications section.



HG-223 Hook & Hook

Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (t)*	Weight Each (kg)	Dimensions (mm)								
				A	D	E Closed	F	J Open	K Closed	M Open	N Closed	BB
1 x 12	1030333	2.27	6.70	25.4	31.8	167	108	929	637	1019	714	309

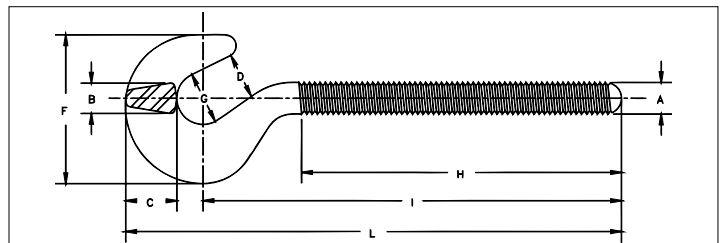
5:1 Design Factor. Proof Load is 2.5 times the Working Load Limit.

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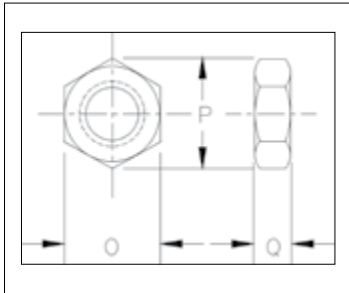
HG-4037

- Quenched & Tempered or normalized.
- Hot-dip galvanized steel.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.



HG-4037 Hook End Fittings

Shank Dia. & Take Up (in)	RH Hook Stock No.	LH Hook Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)								
					A	B	C	D	F	G	H	I	L
1 x 12	1070334	1070851	2.27	2.14	25.4	25.4	38.9	31.8	108	35.1	205	301	357



HG-4060 / HG-4061

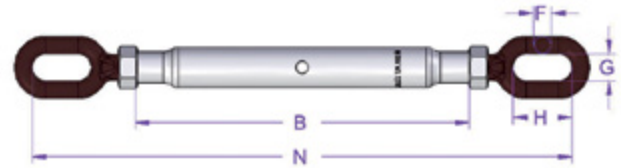
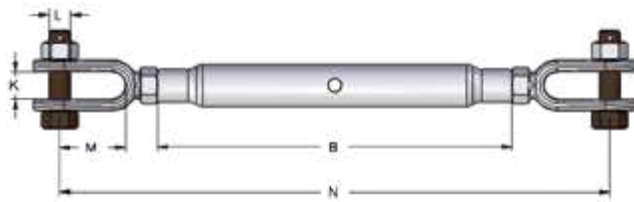
- Secures the turnbuckle into position at final adjustment.

HG-4060 / HG-4061 Lock Nuts

Shank Diameter (in)	Right Hand HG-4060 Stock No.	Left Hand HG-4061 Stock No.	Weight Per 100 (kg)	Dimensions (mm)		
				O	P	Q
1/4	1075115	1075491	.36	11.2	12.7	4.05
5/16	1075133	1075516	.59	12.7	14.2	4.85
3/8	1075151	1075534	.91	14.2	16.3	5.60
1/2	1075197	1075570	1.81	19.1	21.8	7.85
5/8	1075213	1075598	3.18	23.9	26.9	9.65
3/4	1075231	1075614	4.99	28.7	32.0	10.7
7/8	1075259	1075632	7.39	33.3	38.1	12.2
1	1075277	1075650	10.8	38.1	42.9	14.0
1-1/8	1075295	1075678	14.5	38.1	42.9	14.0
1-1/4	1075311	1075696	28.3	47.8	54.0	18.3
1-1/2	1075357	1075730	32.7	57.0	64.5	21.3
1-3/4	1075393	1075776	51	70.0	81.0	25.4
2	1075419	1075794	68	79.0	91.5	28.4
2-1/2	1075455	1075838	150	98.5	114	38.1
2-3/4	1075473	1075856	193	108	125	41.1

Alloy Steel Rigging Screw No 801 / 802 / 804 Grade 6

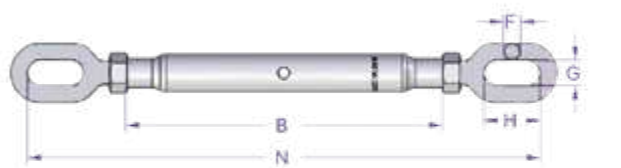
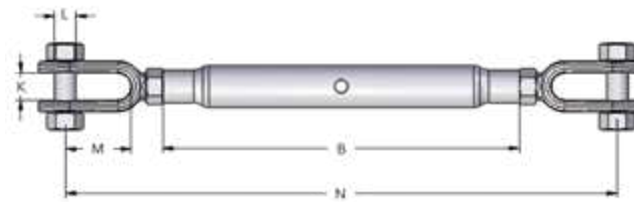
Standard	Working load acc. to US Federal spec. FF-T-791.b. Supplied with closed body from 5,510 - 37,468 lb, larger dimensions open body.
Material:	Quenched & Tempered alloy steel.
Surface treatment	Hot-dip galvanized.
Design Factor	5:1
Certificate:	Test certificate and traceable 3.1 certificate supplied on request.
Tolerances:	+/- 5%
Temperature:	-20°C to 200°C



Stock no. Jaw/Jaw 801	Stock no. Jaw/Eye 802	Stock no. Eye/Eye 804	Thread M/UNC	WLL (t)	Take up range (mm)	Dimensions (mm)								Weight each (kg)
						B	N	K	L	M	F	G	H	
A801420	A802420	A804420	M 20	2.5	210	270	455	20	16	50	13	21	45	2.3
A801424	A802424	A804424	M 24	5.0	250	340	570	28	22	65	19	28	56	4.6
A801432	A802432	A804432	1-1/4	7.0	270	370	680	38	28	85	22	35	70	8.0
A801438	A802438	A804438	1-1/2	10.0	300	400	790	45	32	100	25	40	78	14.0
A801445	A802445	A804445	1-3/4	13.0	360	500	870	50	39	105	30	45	90	24.0
A801450	A802450	A804450	2"	17.0	450	600	1030	58	45	120	35	45	100	38.0
A801464			2-1/2	27.2	534	780	1312	75	57	142				88.0
A801470			2-3/4	34.0	576	780	1418	90	70	145				98.0

Rigging Screw No 401 / 402 / 404 - Hot-Dip Galvanized

Design:	Jaw-Jaw (jaw-eye and eye-eye on request)
Standard	According to B.S. 4429, closed body - with locking nut.
Material:	St. 42/St. 52, normalized
Surface treatment	Hot-dip galvanized (M6 & M8 zinc plated).
Design Factor	5:1
Note:	The items marked with * below are not for lifting.
Tolerances:	+/- 5%



Stock no. Jaw/ Jaw 401	Stock no. Jaw/ Eye 402	Stock no. Eye/Eye 404	Thread M/UNC	WLL (t)	Take up range (mm)	Dimensions (mm)								Weight each (kg)
						B	N	L	M	K	F	G	H	
A401510	A402410	A404410	M 10	0.5	90	145	225	8	20	9.5	7	13	13	0.3
A401512	A402412	A404412	M 12	0.7	155	195	315	10	30	13	10	14	28	0.65
A401516	A402416	A404416	M 16	1.2	185	230	380	12	44	18	12	18	45	1.25
A401520	A402420	A404420	M 20	1.5	210	270	450	16	50	20	13	21	45	2.2
A401422	A402422	A404422	M 22	2.2	230	295	500	20	60	25	16	24	50	3.3
A401424	A402424	A404424	M 24	3.2	250	325	555	22	65	28	19	28	56	4.6
A401432	A402432	A404432	1-1/4	4.8	290	370	680	28	85	38	22	35	70	8.5
A401438	A402438	A404438	1-1/2	6.0	300	400	760	32	100	45	25	40	90	14.5
A401445	A402445	A404445	1-3/4	8.5	290	400	760	38	105	50	30	45	90	20.9
A401452	A402452	A404452	2"	11.0	290	400	820	45	120	58	35	45	100	24.0

* Will not be delivered with lifting certificate.

LIFTING POINTS

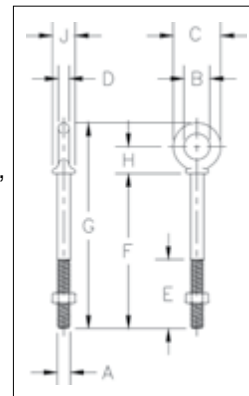
A wide range of high-quality lifting points for every application.



G-277



- Forged steel, Quenched & Tempered.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Working Load Limits shown are for in-line pull. For angle loading, see warnings and application section.
- Meets or exceeds all requirements of ASME B30.26, including identification, ductility, design factor, proof load, and temperature requirements. Importantly, these bolts meet other critical performance requirements, including fatigue life, impact properties, and material traceability not addressed by ASME B30.26.
- All bolts hot-dip Galvanized after threading (UNC).
- Furnished with standard hot-dip Galvanized, heavy hex nuts.



G-277 Shoulder Nut Eye Bolts

Shank Diameter & Length (mm)	Stock No.	Working Load Limit (t)	Weight Per 100 (kg)	Dimensions (mm)								
				A	B	C	D	E	F	G	H	J
7.94 x 57.0	1045050	.54	5.67	7.85	15.7	28.4	6.35	38.1	57.0	89.0	17.5	14.2
7.94 x 108	1045078	.54	8.53	7.85	15.7	28.4	6.35	63.5	108	140	17.5	14.2
9.53 x 63.5	1045096	.70	9.71	9.65	19.1	35.1	7.85	38.1	63.5	101	19.8	16.8
9.53 x 114	1045112	.70	11.5	9.65	19.1	35.1	7.85	63.5	114	152	19.8	16.8
12.7 x 82.5	1045130	1.18	19.3	12.7	25.4	44.5	9.65	38.1	82.5	130	25.4	23.1
12.7 x 152	1045158	1.18	25.8	12.7	25.4	44.5	9.65	76.0	152	200	25.4	23.1
15.9 x 102	1045176	2.35	31.1	15.7	31.8	57.0	12.7	51.0	102	164	33.3	28.4
15.9 x 152	1045194	2.35	46.4	15.7	31.8	57.0	12.7	76.0	152	214	33.3	28.4
19.1 x 114	1045210	3.26	66	19.1	38.1	70.0	15.7	51.0	114	189	39.6	35.1
19.1 x 152	1045238	3.26	76	19.1	38.1	70.0	15.7	76.0	152	227	39.6	35.1
22.2 x 127	1045256	4.80	102	22.4	44.5	82.5	19.1	63.5	127	215	46.7	39.6
25.4 x 152	1045292	6.03	166	25.4	51.0	95.5	22.4	76.0	152	253	53.0	46.0
25.4 x 229	1045318	6.03	192	25.4	51.0	95.5	22.4	102	229	329	53.0	46.0
31.8 x 203	1045336	9.52	295	31.8	63.5	114	25.4	102	203	323	62.5	58.0
31.8 x 305	1045354	9.52	361	31.8	63.5	114	25.4	102	305	425	62.5	58.0
38.1 x 381	1045372	10.8	646	38.1	76.0	140	31.8	152	381	527	76.0	70.0

5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.

Fatigue Rated

QT

CE

APPLICATION AND WARNING INFORMATION
SECTION 17



S-276 Shoulder Rivet Eye Bolts

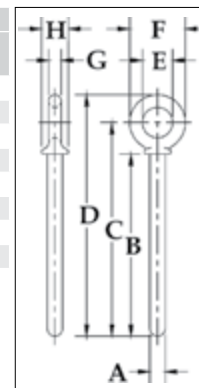
- Forged steel - Quenched & Tempered.

Shank Dia. & Length (mm)	Stock No.	Weight Per 100 (kg)	Dimensions (mm)							
			A	B	C	D	E	F	G	H
12.7 x 82.5	1045862	15.0	12.7	82.5	108	130	25.4	44.5	9.65	23.1
19.1 x 114	1045942	57	19.1	114	154	189	38.1	70.0	15.7	35.1
19.1 x 152	1045960	68	19.1	152	192	227	38.1	70.0	15.7	35.1
22.2 x 127	1045988	91	22.4	127	174	215	44.5	82.5	19.1	39.6
25.4 x 152	1046022	135	25.4	152	205	253	51.0	95.5	22.4	46.0
25.4 x 229	1046040	193	25.4	229	282	329	51.0	95.5	22.4	46.0
31.8 x 203	1046068	297	31.8	203	266	323	63.5	114	25.4	58.0
31.8 x 305	1046086	323	31.8	305	368	425	63.5	114	25.4	58.0
38.1 x 381	1046102	646	38.1	381	457	527	76.0	140	31.8	70.0

QUIC-CHECK®



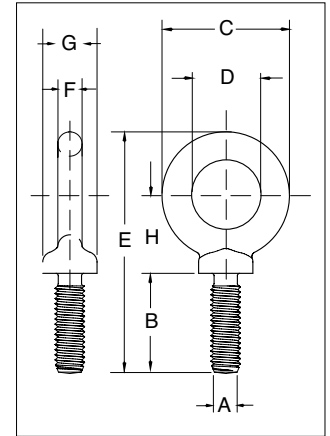
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S-279 / M-279



- Forged steel - Quenched & Tempered.
- Working Load Limits shown are for in-line pull. For angle loading, see Warnings & Applications.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- Recommended for in-line pull.
- S-279 threaded UNC.
- M-279 metric threaded.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these bolts meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



S-279 UNC Shoulder Type Machinery Eye Bolts

Size (mm)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)							
				A* Thread	B	C	D	E	F	G	H
9.53 x 31.8	9900208	.70	.06	3/8 - 16	32.3	41.1	25.4	78.0	7.85	17.5	26.7
12.7 x 38.1	9900217	1.18	.12	1/2 - 13	38.9	49.5	30.2	94.0	9.65	23.1	32.3
15.9 x 44.5	9900226	2.35	.24	5/8 - 11	45.5	60.5	35.1	113	12.7	28.7	38.9
19.1 x 51.0	9900235	3.26	.43	3/4 - 10	52.0	70.0	38.1	129	16.0	35.1	43.4
22.2 x 57.0	9900244	4.80	.70	7/8 - 9	58.5	82.5	44.5	149	19.1	39.6	50.8
25.4 x 63.5	9900253	6.03	1.1	1 - 8	65.5	95.5	51.0	169	22.4	46.0	58.4
28.5 x 70.0	9900257	6.80	1.5	1-1/8 - 7	69.8	107	57.1	183	24.6	52.3	59.7
31.8 x 76.0	9900262	9.52	1.8	1-1/4 - 7	78.5	114	63.5	202	25.4	58.0	69.3
38.1 x 89.0	9900271	10.8	3.2	1-1/2 - 6	91.5	140	76.0	241	31.8	70.0	83.3
44.5 x 95.0	9900280	15.4	4.7	1-3/4 - 5	95.2	159	88.9	266	35.0	76.2	91.4
51 x 102	9900289	19.0	8.6	2 - 4-1/2	102	194	101	313	46.0	85.9	114
63.5 x 127	9900298	29.5	14.5	2-1/2 - 4	127	223	114	378	53.8	108	140

5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit. *All bolts threaded UNC.

Fatigue Rated

QT

QUIC-CHECK®

APPLICATION AND WARNING INFORMATION
SECTION 17

11

M-279 Metric Shoulder Type Machinery Eye Bolts

Size (mm)	Stock No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)							
				A* Thread	B	C	D	E	F	G	H
M6 x 13	1045753	.20	.03	M6 x 1.0	13.0	28.7	19.1	47.0	4.9	13.5	19.6
M8 x 13	1045789	.40	.05	M8 x 1.25	13.0	35.1	22.4	54.6	6.4	15.0	24.1
M10 x 17	1045833	.64	.07	M10 x 1.5	17.0	41.1	25.4	64.3	7.9	17.5	26.5
M12 x 20.5	1045869	1.0	.11	M12 x 1.75	20.5	49.5	30.2	77.7	9.7	23.1	32.8
M16 x 27	1045913	1.8	.25	M16 x 2.0	27.0	60.5	35.1	96.0	12.7	28.7	38.9
M20 x 30	1045995	2.5	.42	M20 x 2.5	30.0	70.0	38.1	108	16.0	35.1	43.4
M24 x 36	1046029	4.0	1.05	M24 x 3.0	36.0	95.5	51.0	142	22.4	46.0	58.4
M27 x 69.8	1046038	5.0	1.42	M27 x 3.0	69.8	107	57.1	183	24.6	52.3	59.7
M30 x 45	1046075	6.0	1.77	M30 x 3.5	45.0	114	63.5	171	25.4	58.0	69.3
M36 x 54	1046109	8.5	3.12	M36 x 4.0	54.0	140	76.0	207	31.8	70.0	83.3
M42 x 95.2	1046118	14.0	4.58	M42 x 4.5	95.2	159	88.9	266	35.0	76.2	91.4
M48 x 102	1046127	17.3	8.71	M48 x 5.0	102	194	101	313	46.0	85.9	114
M64 x 127	1046136	29.5	14.74	M64 x 6.0	127	223	114	378	53.8	108	140

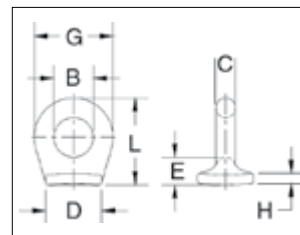
5:1 Design Factor. Maximum Proof Load is 2 times the Working Load Limit.

QT

S-264



- Forged steel - Quenched & Tempered.
- Forged from 1035 carbon steel.
- Excellent welding qualities.
- Widely used on farm machinery, trucks, steel hulled marine vessels and material handling equipment.
- Reference American Welding Society specifications for proper welding procedures.



S-264 Pad Eyes

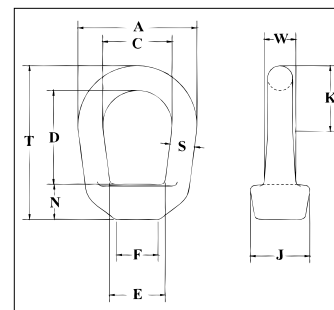
Size No.	Stock No.	Weight Per 100 (kg)	Dimensions (mm)						
			B	C	D	E	G	H	L
* 0	1090722	1.27	6.35	4.85	16.0	7.85	16.0	2.30	19.1
* 1	1090740	2.95	9.65	6.35	22.4	10.4	22.4	3.30	26.2
* 1-1/2	1090768	4.72	16.0	6.35	25.4	11.2	28.7	4.05	33.3
2	1090786	9.57	19.1	9.65	26.9	12.7	38.1	4.85	41.4
4	1090802	23.7	25.4	14.2	36.6	19.8	54.0	5.60	59.5
5	1090820	37.4	31.8	17.5	44.5	20.6	67.0	6.35	70.0

*Meets the requirements of Military Specification MS-51930A.

G-400



- Forged steel - Quenched & Tempered.
- Hot-dip Galvanized
- Tapped with standard UNC class 2 threads after galvanizing.
- Also available in blank (as forged) item (S-4028).
- Meets or exceeds all requirements of ASME B30.26.



G-400 Eye Nuts

Size No.	"S" Stock Size (mm)	Stock No	Std. Tap Size (in)	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)									
						A	C	D	E	F	J	K	N	T	W
1	6.35	1090438	1/4	.24	.04	31.8	19.1	25.4	19.1	12.7	17.5	16.0	9.65	43.7	7.85
2	7.85	1090474	3/8	.57	.08	41.1	25.4	30.5	21.1	14.2	20.6	22.6	12.7	53	10.4
3A	9.65	1090517	1/2	1.02	.13	51.0	31.8	36.6	27.4	20.6	25.4	27.7	15.7	63.5	12.7
4	12.7	1090535	5/8	1.63	.27	63.5	38.1	48.8	34.3	25.4	33.3	33.3	17.5	82.5	17.5
5	16	1090553	3/4	2.36	.45	76.0	44.5	60.5	40.4	28.4	38.1	39.9	22.4	98.8	21.3
6	19.1	1090571	7/8	3.27	.75	89.0	51.0	66.8	49.8	35.1	47.8	45.0	23.9	110	25.4
7	22.4	1090599	1	4.54	1.22	102	57.0	77.7	56.0	39.6	54.0	51.5	27.2	127	30.2
8	25.4	1090633	1-1/4	7.03	1.98	114	63.5	88.9	62.5	47.8	60.5	57.5	31.8	147	35.1
9	28.7	1090651	1-3/8	8.39	2.27	127	70.0	102	68.5	51.0	65.0	64.5	35.1	165	38.1
10	31.8	1090679	1-1/2	10.21	3.08	143	79.0	109	78.5	57.0	76.0	71.5	38.1	179	42.2
11	38.1	1090697	2	18.14	6.62	181	104	157	104	79.5	95.5	93.5	52.3	252	49.3

5:1 Design Factor. Working Load Limit shown is for In-Line pull. Rating based on standard tap size.

Swivel Hoist Ring



HR-125M
Swivel Hoist Ring

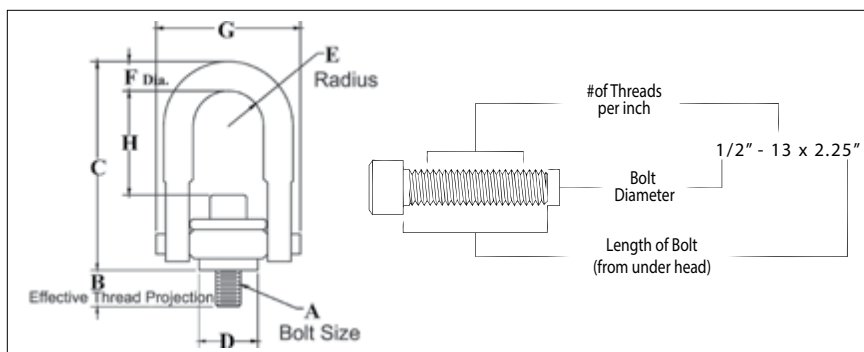
Color coded to distinguish between UNC (Red) and Metric (Silver) thread types.



HR-125
Swivel Hoist Ring

- Available in UNC and Metric thread sizes.
- UNC threads available in sizes from 800 pounds to 100,000 pounds Working Load Limit, with a design factor of 5 to 1.
- Metric threads available in sizes from 400kg to 16,900kg and dual rated in both a 4 to 1 and 5 to 1 design factor.
- All components are alloy steel - Quenched & Tempered.
- Designed to be used at full WLL within angular loading range.
- 100% individually proof tested to 2.5 times the Working Load Limit with certification and Statistically Magnetic Particle inspected. (Can be furnished 100% Magnetic Particle inspected when requested at time of order.)
- Each product has a Product Identification Code (PIC) for material traceability along with a Working Load Limit and the name Crosby or "CG" stamped into it.
- 360° swivel and 180° pivot action.
- Fatigue rated to 20,000 cycles at 1.5 times the Working Load Limit.
- Individually packaged along with proper application instructions and warning information.
- Bolt is secured with E-clip, threads are grooved. This method allows for easy disassembly and assembly of hoist ring for thorough examination of all components. Replacement kits are available.
- Bolts are individually Proof Tested.
- Multiple bolt length available to meet specific application requirements.
- Zinc plated (yellow chromate) finish for increased corrosion protection.
- Meets or exceeds all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these hoist rings meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.

HR-125



- Top washer has the following features:
 - The Working Load Limit and recommended torque value are permanently stamped into each washer.
 - Washer is color-coded for easy identification: Red - UNC thread.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- Bolt specification is an alloy socket head cap screw to ASTM A 574.
- All threads listed are UNC.
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

HR-125 UNC Threads

Frame Size No.	Stock No.	Working Load Limit (kg)	Torque (Nm)	Bolt Size A (in)	Dimensions (mm)								Weight Each (kg)
					Effective Thread Projection Length	C	D	Radius E	Diameter F	G	H		
1 †	1016887	363	10	5/16 - 18 x 1.50	14.7	69.1	24.6	11.7	8.60	47.5	28.4	.17	
1 †	1016898	454	16	3/8 - 16 x 1.50	14.7	69.1	24.6	11.7	8.60	47.5	26.7	.18	
2	1016909	1134	38	1/2 - 13 x 2.00	17.8	123	49.8	22.1	19.0	85.1	58.2	1.06	
2 †	1016912	1134	38	1/2 - 13 x 2.50	30.5	123	49.8	22.1	19.0	85.1	58.2	1.07	
2	1016920	1814	81	5/8 - 11 x 2.00	17.8	123	49.8	22.1	19.0	85.1	54.9	1.09	
2 †	1016924	1814	81	5/8 - 11 x 2.75	36.8	123	49.8	22.1	19.0	85.1	54.9	1.12	
2	1016931	2268	136	3/4 - 10 x 2.25	24.1	123	49.8	22.1	19.0	85.1	51.8	1.14	
2 †	1016935	2268	136	3/4 - 10 x 2.75	36.8	123	49.8	22.1	19.0	85.1	51.8	1.17	
3	1016942	3175*	136	3/4 - 10 x 2.75	22.6	167	75.2	34.5	23.9	124	75.4	3.05	
3 †	1016946	3175*	136	3/4 - 10 x 3.50	41.7	167	75.2	34.5	23.9	124	75.4	3.09	
3	1016953	3629	217	7/8 - 9 x 2.75	22.6	167	75.2	34.5	23.9	124	72.1	3.10	
3 †	1016957	3629	217	7/8 - 9 x 3.50	41.7	167	75.2	34.5	23.9	124	72.1	3.16	
3	1016964	4536	312	1 - 8 x 3.00	29.0	167	75.2	34.5	23.9	124	69.1	3.22	
3 †	1016969	4536	312	1 - 8 x 4.00	54.4	167	75.2	34.5	23.9	124	69.1	3.32	
4	1016975	6804	637	1-1/4 - 7 x 4.50	56.1	221	94.2	44.5	30.2	157	99.8	6.58	
5	1016986	10890	1085	1-1/2 - 6 x 6.75	3.0	315	120	60.7	44.5	215	143	17.1	
5	1016997	13610	1491	2 - 4-1/2 x 6.75	3.0	315	120	60.7	44.5	215	131	18.5	
6	1017001	22680	2847	2-1/2 - 4 x 8.0	102	429	146	76.2	57.2	279	204	39.9	
7	1017005	34020	5830	3 - 4 x 10.5	127	495	184	95.3	69.9	360	216	75.3	
8	1017009	45360	6915	3-1/2 - 4 x 13.0 #	178	561	197	102	82.6	404	236	120	

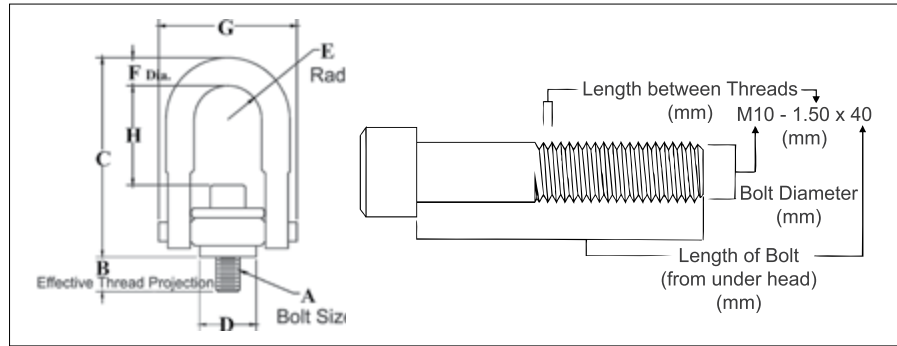
5:1 Design Factor. *4:1 Design Factor when tested in 90 degree orientation. †Long Bolts are designed to be used with soft metal (i.e., aluminum) workpiece. While the long bolts may also be used with ferrous metal (i.e., steel & iron) workpiece, short bolts are designed for ferrous workpieces only. Hex head bolt used on Frame 8 (100,000 lb) Hoist Ring.

Load Rated

Fatigue Rated

APPLICATION AND WARNING INFORMATION
SECTION 17

HR-125M

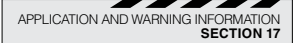


- Top washer has the following features:
 - The Working Load Limit and recommended torque value are permanently stamped into each washer.
 - Washer is color-coded for easy identification: Silver - Metric thread.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- Bolt specification is a Grade 12.9 alloy socket head cap screw to DIN 912. All threads listed are metric (ASME B18.3.1m).
- Designed to be used with ferrous workpiece only.
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

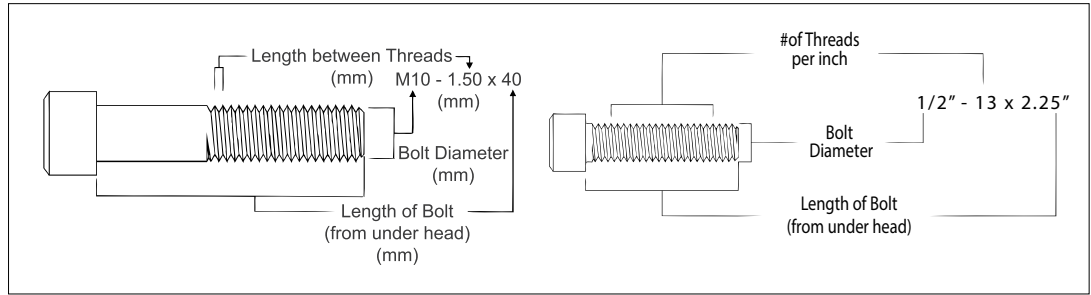
HR-125M Metric Threads

Frame Size No.	Stock No.	Working Load Limit (kg)		Torque (Nm)	Dimensions (mm)								Weight Each (kg)
		5:1 Design Factor †	4:1 Design Factor †		Bolt Size A	Effective Thread Projection Length B	C	D	Radius E	Diameter F	G	H	
1	1016602	400	500	10	M8X1.25X40	16.9	69.9	24.6	11.8	8.5	47.5	29.9	.17
1	1016613	450	550	16	M10X1.50X40	16.9	69.9	24.6	11.8	8.5	47.5	28.1	.18
2	1016624	1050	1300	38	M12X1.75X50	16.9	123	49.8	22.3	17.5	85.1	60.4	1.05
2	1016635	1900	2400	81	M16X2.00X60	26.9	123	49.8	22.3	17.5	85.1	56.3	1.11
2	1016644	2150	2700	136	M20X2.50X65	31.9	123	49.8	22.3	17.5	85.1	52.3	1.17
3	1016657	3000	3750	136	M20X2.50X75	27.8	167	75.2	34.7	25.4	124	76.6	3.09
3	1016668	4200	5250	312	M24X3.00X80	32.8	167	75.2	34.7	25.4	124	70.5	3.21
4	1016679	7000	8750	637	M30X3.50X120	61.7	222	94.2	44.5	30.5	157	102	6.53
5	1016690	11000	13750	1005	M36X4.00X150	54.0	318	120	60.7	44.5	215	142	16.8
5	1016701	12500	15600	1005	M42X4.50X160	64.0	318	120	60.7	44.5	215	136	17.4
5	1016712	13500	16900	1350	M48X5.00X160	74.0	318	120	60.7	44.5	215	130	18.0

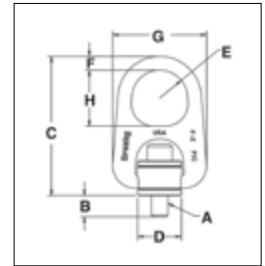
† Individually proof loaded to 2-1/2 times the Working Load Limit based on the 4:1 design factor.



HR-1000



- Forged bail provides the following:
 - Easily readable raised lettering showing the name Crosby or "CG" and PIC for material traceability.
 - Greater durability providing the increased "Toughness" desired in potentially abusive field conditions.
 - Larger opening than standard hoist ring bail.
- Top washer is color-coded for easy identification (Red for UNC threads and Silver for Metric threads)
- The Working Load Limit and Recommended Torque value are permanently stamped into each washer.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- Available in both UNC thread and Metric thread style.
- UNC bolt specification is an alloy socket head cap screw to ASTM A 574. Metric bolt specification is a Grade 12.9 alloy socket head cap screw to DIN 912.
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing. Illustration shows meaning of each dimension given.



HR-1000 UNC Threads

Frame Size No.	Stock No.	Working Load Limit (kg)	Torque (Nm)	Bolt Size A (in)	Eff. Thread Projection Length B	Dimensions (mm)						Weight Each (kg)
						C	D	Radius E	F	G	H	
1	1068002	363	10	5/16 - 18 x 1.50	13.2	93.7	24.6	15.7	11.2	57.7	35.1	.27
1	1068006	454	16	3/8 - 16 x 1.50	13.2	93.7	24.6	15.7	11.2	57.7	35.1	.28
2	1068010	1134	38	1/2 - 13 x 2.25	17.5	159	49.8	31.8	.75	107	63.5	1.38
2 †	1068014	1134	38	1/2 - 13 x 2.75	30.2	159	49.8	31.8	.75	107	63.5	1.39
2	1068018	1814	81	5/8 - 11 x 2.25	17.5	159	49.8	31.8	.75	107	63.5	1.41
2 †	1068022	1814	81	5/8 - 11 x 3.00	36.6	159	49.8	31.8	.75	107	63.5	1.44
2	1068026	2268	136	3/4 - 10 x 2.50	23.9	159	49.8	31.8	.75	107	63.5	1.47
2 †	1068030	2268	136	3/4 - 10 x 3.00	36.6	159	49.8	31.8	.75	107	63.5	1.50
3	1068034	3175*	136	3/4 - 10 x 3.00	21.6	220	75.2	41.4	25.4	159	82.6	4.58
3 †	1068038	3175*	136	3/4 - 10 x 3.50	34.3	220	75.2	41.4	25.4	159	82.6	4.63
3	1068042	3629	217	7/8 - 9 x 3.00	21.6	220	75.2	41.4	25.4	158	82.6	4.63
3 †	1068046	3629	217	7/8 - 9 x 3.50	34.3	220	75.2	41.4	25.4	158	82.6	4.71
3	1068050	4536	312	1 - 8 x 3.50	34.3	220	75.2	41.4	25.4	158	82.6	4.76
3 †	1068054	4536	312	1 - 8 x 4.50	59.7	220	75.2	41.4	25.4	158	82.6	4.86
4	1068058	6804	637	1-1/4 - 7 x 5.00	53.1	285	94.2	50.8	31.8	199	102	9.93
4	1068062	10890	1085	1-1/2 - 6 x 5.50	65.8	285	94.2	50.8	36.6	199	102	10.4

5:1 Design Factor. *4.5:1 Design Factor when tested in 90 degree orientation. †Long Bolts are designed to be used with soft metal (i.e., aluminum) workpiece.

HR-1000M Metric Threads

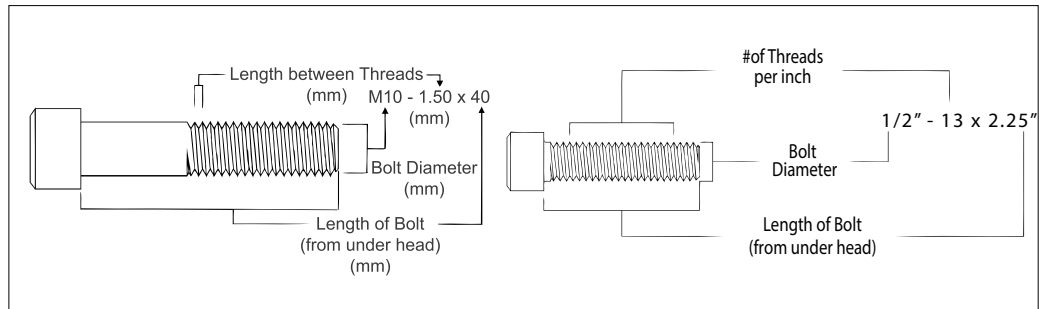
Frame Size No.	Stock No.	Working Load Limit (kg)		Torque Nm	Dimensions (mm)								Weight Each (kg)
		5:1 Design Factor*	4:1 Design Factor*		Bolt Size A	Eff. Thread Projection Length B	C	D	Radius E	F	G	H	
1	1068307	400	500	10	M8 x 1.25 x 40	15.2	93.7	24.6	15.7	11.2	57.7	35.1	0.3
1	1068316	450	550	16	M10 x 1.50 x 40	15.2	93.7	24.6	15.7	11.2	57.7	35.1	0.3
2	1068325	1050	1300	38	M12 x 1.75 x 55	15.5	162	49.8	31.8	19.1	107	63.5	1.5
2	1068334	1900	2400	81	M16 x 2.00 x 65	25.5	162	49.8	31.8	19.1	107	63.5	1.5
2	1068343	2150	2700	136	M20 x 2.50 x 70	30.5	162	49.8	31.8	19.1	107	63.5	1.6
3	1068352	3000	3750	136	M20 x 2.50 x 80	25.4	220	75.2	41.4	25.4	159	82.6	4.6
3	1068361	4200	5250	312	M24 x 3.00 x 90	35.4	220	75.2	41.4	25.4	159	82.6	4.8
4	1068370	7000	8750	637	M30 x 3.50 x 140	66.2	285	94.2	50.8	31.8	199	102	9.7
4	1068389	11000	13750	1005	M36 x 4.00 x 130	56.2	285	94.2	50.8	31.8	199	102	10.2

*Individually proof loaded to 2-1/2 times the Working Load Limit based on the 4:1 Design Factor.

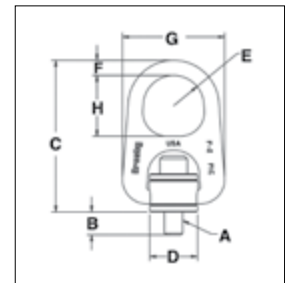
Load Rated

Fatigue Rated

APPLICATION AND WARNING INFORMATION
SECTION 17



- All load bearing components are heat treated, Quenched & Tempered alloy steel.
- All components, with the exception of the retaining ring, are produced with maximum material hardness of 34 HRC.
- All primary load-bearing components have Charpy impact testing. The body, bushing, washer and bail meet impact requirements of 42-joule min. avg. at -20°C. The bolt meets impact requirements of 27-joule min. avg. at -100°C.
- Individually magnetic particle inspected with certification.
- Forged bail provides the following:
 - Easily readable raised lettering showing the name Crosby or "CG" and PIC for material traceability.
 - Greater durability providing the increased toughness desired in potentially abusive field conditions.
 - Larger opening than standard hoist ring bail.
- Bolt specification is an alloy socket head cap screw to ASTM A320 Grade L7 or L43.
- Top washer is color-coded for easy identification (blue for UN threads and grey for Metric threads).
- The Working Load Limit and recommended torque value are permanently stamped into each washer.
- Individually Proof Tested to 2 times Working Load Limit (90° and in-line).
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.
- Type approval and certification in accordance with DNV Offshore Standard DNV-OS-E101, Drilling Plant, Standard for Certification DNVGL-ST-0378, Lifting Appliances, and DNVGL-SI-0166.
- Individually serialized.
- 100% MPI all primary load bearing components.
- Coating: Thermo-diffusion galvanized.
- Optional bolt sizes available upon request.



HR-1000CT UNC Threads

Frame Size No.	Stock No.	Working Load Limit (kg)	Torque (Nm)	Bolt Size A (in)	Dimensions (mm)							
					Effective Thread Projection Length B	C	D	Radius E	Diameter F	G	H	Mass Each (kg)
2	6608103	862	38	1/2 - 13 x 2.25	17.8	161	49.8	31.8	19.1	107	63.5	3
2	6608112	862	38	1/2 - 13 x 2.75	30.5	161	49.8	31.8	19.1	107	63.5	3
2	6608121	1361	81	5/8 - 11 x 2.25	17.8	161	49.8	31.8	19.1	107	63.5	3
3	6608130	2177	136	3/4 - 10 x 3.00	21.6	218	75.2	41.4	25.4	159	82.6	11
3	6608139	2812	217	7/8 - 9 x 3.00	21.6	218	75.2	41.4	25.4	159	82.6	11
3	6608148	3765	312	1 - 8 x 3.50	34.3	218	75.2	41.4	25.4	159	82.6	11
4	6608149	5670	637	1-1/4 - 7 x 5.00	53.3	287	94.2	50.8	36.6	207	102	24
4	6607669	9072	1085	1-1/2 - 6 x 5.50	66.0	287	94.2	50.8	36.6	207	102	27
4	6607727	9072	1085	1-1/2 - 8 x 5.50	66.0	287	94.2	50.8	36.6	207	102	27
5	6607670	12701	1491	2 - 4.5 x 7.50	81.3	385	102	68.3	44.5	296	127	69
6	6607671	20412	2847	2 1/2 - 4 x 9.50	94.7	506	146	76.2	69.9	368	143	157

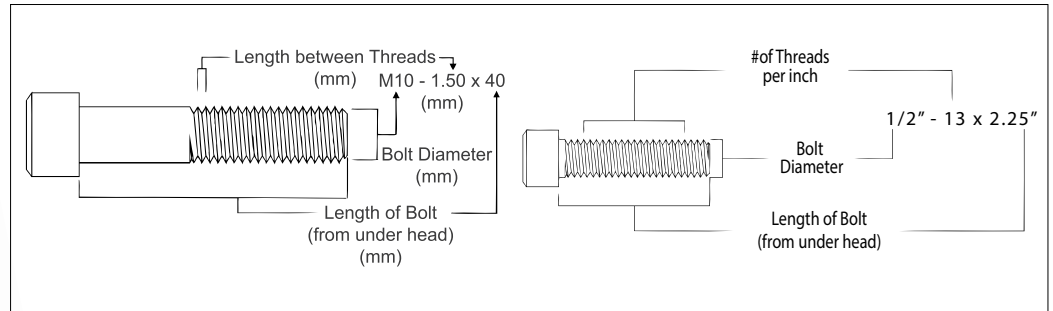
5:1 Design Factor.

Load Rated

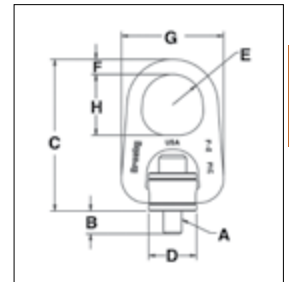
Fatigue Rated

APPLICATION AND WARNING INFORMATION
SECTION 17

HR-1000MCT



- All load bearing components are heat treated, Quenched & Tempered alloy steel.
- All components, with the exception of the retaining ring, are produced with maximum material hardness of 34 HRC.
- All primary load-bearing components have Charpy impact testing. The body, bushing, washer and bail meet impact requirements of 42-joule min. avg. at -20°C. The bolt meets impact requirements of 27-joule min. avg. at -100°C.
- Individually magnetic particle inspected with certification.
- Forged bail provides the following:
 - Easily readable raised lettering showing the name Crosby or "CG" and PIC Code for material traceability.
 - Greater durability providing the increased toughness desired in potentially abusive field conditions.
 - Larger opening than standard hoist ring bail.
- Bolt specification is an alloy socket head cap screw to ASTM A320 Grade L7 or L43.
- Top washer is color-coded for easy identification (blue for UN threads and grey for Metric threads).
- The Working Load Limit and recommended torque value are permanently stamped into each washer.
- Individually Proof Tested to 2 times Working Load Limit (90° and in-line).
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.
- Type approval and certification in accordance with DNV Offshore Standard DNV-OS-E101, Drilling Plant, Standard for Certification DNVGL-ST-0378, Lifting Appliances, and DNVGL-SI-0166.
- Individually serialized.
- 100% MPI all primary load bearing components.
- Coating: Thermo-diffusion galvanized.
- Optional bolt sizes available upon request.



11

HR-1000MCT Metric Threads

Frame Size No.	Stock No.	Working Load Limit (kg)		Torque (Nm)	Dimensions (mm)								Mass Each (kg)
		Design Factor 5:1	Design Factor 4:1		Bolt Size A	Eff. Thread Projection Length B	C	D	Radius E	Diameter F	G	H	
2	6630058	825	1,030	38	M12 x 1.75 x 55	15.6	160.6	49.7	31.8	19.1	106.7	63.5	1
2	6630059	1,350	1,690	81	M16 x 2.00 x 65	25.5	160.6	49.7	31.8	19.1	106.7	63.5	1
3	6630060	2,250	2,810	136	M20 x 2.50 x 80	25.3	218.2	75.1	41.4	25.4	158.8	82.6	5
3	6630061	3,175	3,970	312	M24 x 3.00 x 90	35.4	218.2	75.1	41.4	25.4	158.8	82.6	5
4	6630062	5,450	6,810	637	M30 x 3.50 x 140	65.9	287.3	94.1	50.8	36.6	206.5	101.6	11
4	6630063	7,450	9,310	1,005	M36 x 4.00 x 130	56.3	287.3	94.1	50.8	36.6	206.5	101.6	12
5	6630064	13,250	16,560	1,350	M48 x 5.00 x 180	70.7	384.9	101.6	68.3	44.5	295.6	127.0	30

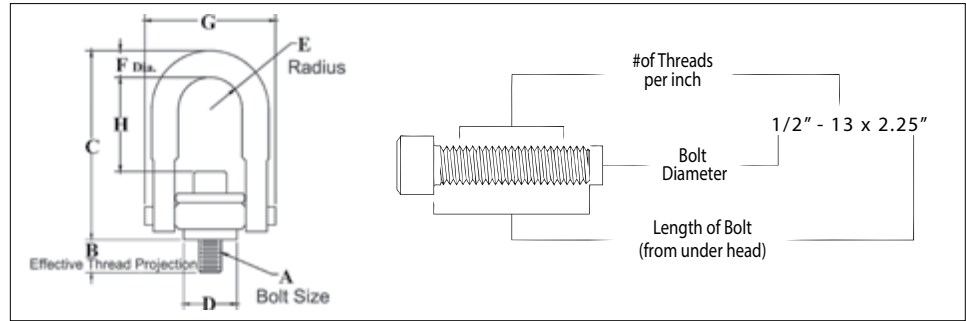
5:1 Design Factor.

Load Rated

Fatigue Rated

APPLICATION AND WARNING INFORMATION
SECTION 17

SS-125UNC



- All components are 316 stainless steel, except bolt retainers, which are made from 15-7 PH (UNS 15700) magnetic stainless steel.
- Rated at 100 percent at 90 degree angle.
- Each product has a Product Identification Code (PIC) for material traceability, along with the Working Load Limit and the name Crosby or "CG" stamped into it.
- Individually proof tested to 2 times the Working Load Limit with certification.
- Fatigue Rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Washer is color-coded for easy identification (Red - UNC thread).
- Bolt specification is 316 stainless steel socket head cap screw to ASTM F837 Group 1 (316).
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

SS-125UNC Threads

Frame Size No.	Stock No.	Working Load Limit (kg)	Torque (Nm)	Bolt Size A (mm)	Dimensions (mm)							Weight Each (kg)
					Effective Thread Projection Length B	C	D	Radius E	Diameter F	G	H	
1	1065000	181	4.7	5/16 - 18 x 1.0	7.4	67.8	21.6	10.9	8.6	46.7	32.3	0.14
1	1065004	181	4.7	5/16 - 18 x 1.25	13.7	67.8	21.6	10.9	8.6	46.7	32.3	0.14
1	1065008	227	8	3/8 - 16 x 1.25	13.7	67.8	21.6	10.9	8.6	46.7	32.3	0.14
2	1065016	567	19	1/2 - 13 x 2.0	19.8	121	36.8	22.4	17.5	89.4	58.7	1.18
2	1065020	567	19	1/2 - 13 x 2.25	26.2	121	36.8	22.4	17.5	89.4	58.7	1.18
2	1065024	567	19	1/2 - 13 x 2.5	32.5	121	36.8	22.4	17.5	89.4	58.7	1.18
2	1065028	907	41	5/8 - 11 x 2.0	19.8	121	36.8	22.4	17.5	89.4	55.4	1.18
2	1065032	907	41	5/8 - 11 x 2.25	26.2	121	36.8	22.4	17.5	89.4	55.4	1.18
2	1065036	907	41	5/8 - 11 x 2.5	32.5	121	36.8	22.4	17.5	89.4	55.4	1.18
2	1065040	1134	68	3/4 - 10 x 2.25	26.2	121	36.8	22.4	17.5	89.4	52.3	1.36
2	1065044	1134	68	3/4 - 10 x 2.75	38.9	121	36.8	22.4	17.5	89.4	52.3	1.36
3	1065048	1588	68	3/4 - 10 x 2.75	26.4	166	55.9	35.6	23.9	131	77.7	3.18
3	1065052	1588	68	3/4 - 10 x 3.25	39.1	166	55.9	35.6	23.9	131	77.7	3.18
3	1065056	1814	108	7/8 - 9 x 2.75	26.4	166	55.9	35.6	23.9	131	74.4	3.18
3	1065060	1814	108	7/8 - 9 x 3.0	32.8	166	55.9	35.6	23.9	131	74.4	3.18
3	1065064	2268	115	1 - 8 x 3.0	1.29	6.52	2.20	1.40	.94	5.14	2.81	7.5
3	1065068	2268	156	1 - 8 x 3.25	39.1	166	55.9	35.6	23.9	131	71.4	3.40
3	1065072	2268	156	1 - 8 x 4.0	58.2	166	55.9	35.6	23.9	131	71.4	3.4
4	1065080	2268	156	1-1/4 - 7 x 4.0	48.0	222	81	44.5	31.8	165	105	6.35
5	1065084	3402	319	1-1/2 - 6 x 5.5	68.6	317	124	57.2	44.5	217	163	15.4
5	1065088	5443	542	2 - 4.5 x 5.75	75.2	317	124	57.2	44.5	217	150	16.3
6	1065092	6804	746	2-1/2 - 4 x 8.0	102	428	166	76.2	57.2	296	204	39.9
6	1065096	11340	1424	2-1/2 - 8 x 8.0	102	428	166	76.2	57.2	296	204	39.9
7	1065100	11340	1424	3 - 4 x 10.25	127	495	206	95.3	69.9	359	215	75.3
8	1065104	17010	2915	3-1/2 - 4 x 13	178	561	218	102	82.6	404	236	120

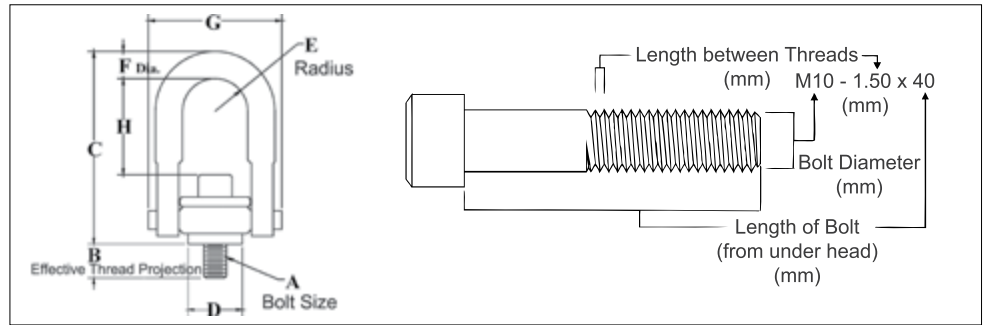
5:1 Design Factor.

Load Rated

Fatigue Rated

APPLICATION AND WARNING INFORMATION
SECTION 17

SS-125M



- All components are 316 stainless steel, except bolt retainers, which are made from 15-7 PH (UNS 15700) magnetic stainless steel.
- Rated at 100 percent at 90 degree angle.
- Each product has a Product Identification Code (PIC) for material traceability, along with the Working Load Limit and the name Crosby or "CG" stamped into it.
- Individually proof tested to 2 times the Working Load Limit with certification.
- Fatigue Rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Washer is color-coded for easy identification (Silver - Metric thread)).
- Bolt specification is 316 stainless steel socket head cap screw to ASTM F 837M (316).
- BOLT SIZE IDENTIFICATION: The size of the bolt will be stated as in the drawing above. Illustration shows meaning of each dimension given.

SS-125M Metric Threads

Frame Size No.	Stock No.	Working Load Limit (kg)	Torque (Nm)	Dimensions (mm)								Weight Each (kg)
				Bolt Size A	Effective Thread Projection Length B	C	D	Radius E	Diameter F	G	H	
1	1065203	200	4	M8 x 1.25	13	68	21.6	11	8.5	47	32	.17
1	1065207	250	8	M10 x 1.50	18	68	21.6	11	8.5	47	30	.17
2	1065211	525	18	M12 x 1.75	19	121	37	22	17.5	89	60	1.1
2	1065215	950	40	M16 x 2.00	29	121	37	22	17.5	89	56	1.1
2	1065219	1075	68	M20 x 2.50	34	121	37	22	17.5	89	52	1.2
3	1065223	1500	68	M20 x 2.50	32	166	56	36	25	131	78	3.0
3	1065227	2100	108	M24 x 3.00	37	166	56	36	25	131	74	3.1
3	1065231	2100	108	M30 x 3.50	58	206	56	36	25	131	108	3.1
4	1065235	3500	318	M30 x 3.50	42	222	81	45	31	165	106	6.3
4	1065239	3500	318	M30 x 3.50	62	222	81	45	31	165	106	6.4
5	1065243	5500	542	M36 x 4.00	64	317	124	57	43	217	166	15.5
5	1065247	6250	542	M42 x 4.50	82	317	124	57	43	217	160	16.0
5	1065251	6750	542	M48 x 5.00	82	317	124	57	43	217	154	16.8
6	1065255	11150	1423	M64 x 6.00	101	428	165	76	56	296	204	39.0
7	1065259	15750	2915	M72 x 6.00	132	495	206	95	69	359	220	74.0
8	1065263	22300	3459	M90 x 6.00	177	561	216	102	83	404	235	118.0

5:1 Design Factor

Load Rated

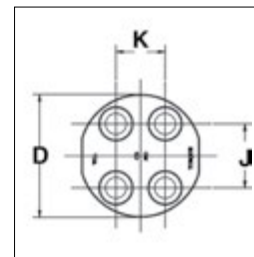
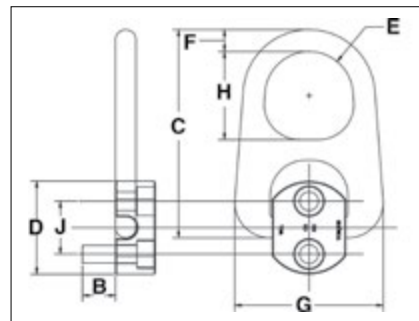
Fatigue Rated

APPLICATION AND WARNING INFORMATION
SECTION 17

HR-100UNC



- Forged bail provides the following:
 - Easily readable raised lettering showing the name Crosby or "CG" and PIC for material traceability.
 - More durability provides the increased toughness desired in potentially abusive field conditions.
 - Larger opening than standard hoist ring bails.
- 180 degree pivot action at full capacity.
- Bolts included as part of assembly.
- Individually Proof Tested to 2-1/2 times Working Load Limit.
- UNC Bolt specification is a Grade 8 alloy socket head cap screw to ASTM A574.



HR-100 Pivot Hoist Rings Coil Threads

Frame Size No.	Stock No.	Working Load Limit (kg)	Torque (Nm)	No. of Bolts	Weight Each (kg)	Bolt Size A (in)	Dimensions (mm)								
							Effective Thread Projection Length B	C	Diameter D	Radius E	F	G	H	J	K
1	1067408	907	10	2	.30	5/16 - 18 x 1.50	20.8	87.1	50.8	15.7	11.2	57.7	35.1	25.4	-
2	1067417	1134	16	2	1.40	3/8 - 16 x 1.50	16.5	153	57.2	31.8	19.1	107	63.5	28.6	-
2	1067426	2268	38	2	1.50	1/2 - 13 x 2.25	35.6	153	66.8	31.8	19.1	107	63.5	38.1	-
3	1067435	5443	38	4	4.80	1/2 - 13 x 2.75	41.9	210	79.5	41.4	25.4	159	82.6	41.3	31.8
4	1067444	9072	81	4	10.0	5/8 - 11 x 2.25	41.9	270	114	50.8	31.8	199	102	52.4	31.8

5:1 Design Factor

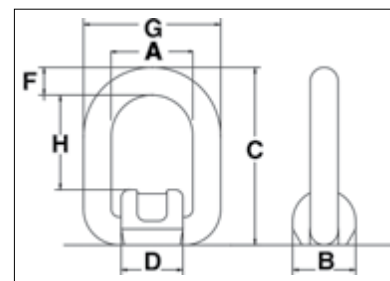


APPLICATION AND WARNING INFORMATION
SECTION 17

S-265



- Widely used on farm machinery, trucks, steel hulled marine vessels and material handling equipment.
- Forged link and bracket — Quenched & Tempered.
- Excellent welding qualities.
- Reference American Welding Society specifications for proper welding procedures.



APPLICATION AND WARNING INFORMATION
SECTION 17

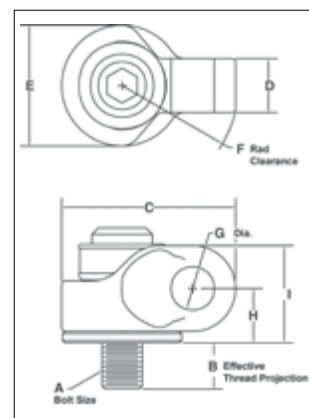
S-265 Forged Link

Working Load Limit (t)		Stock No.	Weight Each (kg)	Dimensions (mm)							Minimum Fillet Weld Size (mm)
Design Factor	Design Factor			A	B	C	D	F	G	H	
5:1	4:1										
1.0	1.2	1290839	0.40	40	36	83	35	13	66	42	3
2.5	3.2	1290848	0.60	45	44	99	42	18	81	48	3
4.2	5.3	1290857	1.20	55	50	123	49	22	99	57	6
6.4	8	1290866	2.40	70	64	144	64	26	122	67	6
12.0	15	1290875	5.90	97	90	193	86	34	165	94	8

HR-1200



- Body components are alloy steel - Quenched & Tempered.
- Rated at 100% of Working Load Limit for angles up to 90 degrees.
- Each product is stamped with a Product Identification Code (PIC) for material traceability, along with a Working Load Limit, and the name Crosby or "CG."
- Hoist ring body is furnished with a yellow chromate finish for improved corrosion resistance.
- Utilize standard Crosby Red Pin® Shackles to connect to wire rope or synthetic slings (sold separately).
- Multiple bolt lengths available to meet specific application requirements.
- Individually Proof Tested to 2-1/2 times Working Load Limit.



HR-1200 UNC Side Pull Hoist Rings

Weight Each (kg)	Working Load Limit (kg)	Stock No.	Hoist Ring Bolt Torque (Nm)	Bolt Size A (in)	Eff. Thread Proj. (mm) B	Dimensions (mm)							Recommended Shackles			
						C	D	E	F	Dia. G	H	I	Shackles 209, 210, 213, 215, 2130, 2150		Web Shackles S-281	
													Nominal Size (in)	WLL (t)	Web Size (mm)	WLL (t)
.16	290	1067700	10	5/16-18x1.50	15.0	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.16	360	1067704	16	3/8-16x1.50	15.0	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.64	900	1067708	38	1/2-13x2.00	18.0	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.64	900	1067712	38	1/2-13x2.50	30.7	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.68	1360	1067716	81	5/8-11x2.00	18.0	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.68	1360	1067720	81	5/8-11x2.75	37.1	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
2.04	2260	1067724	136	3/4-10x2.75	22.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.09	2260	1067728	136	3/4-10x3.50	41.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.09	2940	1067732	217	7/8-9x2.75	22.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.18	2940	1067736	217	7/8-9x3.50	41.9	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.18	3620	1067740	312	1-8x3.00	29.2	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
2.27	3620	1067744	312	1-8x4.00	54.6	110	34.0	76.2	76.2	27.2	34.3	61.5	7/8	6-1/2	50	5.67
4.63	6350	1067748	637	1-1/4-7x4.5	56.4	142	39.9	95.3	99.3	37.3	48.8	86.9	1, 1-1/8, 1-1/4	8-1/2, 9-1/2, 12	75	7.70
10.7	7800	1067756	1085	1-1/2-6x6.5	75.7	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2, 1-3/4	13-1/2, 17, 25	-	-
11.5	13150	1067764	1491	2-4.5x6.5	75.7	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2, 1-3/4	13-1/2, 17, 25	-	-

5:1 Design Factor.

11

HR-1200M Metric Side Pull Hoist Rings

Weight Each (kg)	Working Load Limit (kg)	Stock No.	Hoist Ring Bolt Torque (Nm)	Bolt Size A (mm)	Eff. Thread Proj. (mm) B	Dimensions (mm)							Recommended Shackles			
						C	D	E	F	G	H	I	Shackles 209, 210, 213, 215, 2130, 2150		Web Shackles S-281	
													Nominal Size (in)	WLL (t)	Web Size (mm)	WLL (t)
.18	300	1067803	10	M8x1.25x40	16.9	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.18	400	1067807	16	M10x1.50x40	16.9	49.0	18.3	25.4	39.6	20.3	21.6	36.3	1/2, 5/8	2, 3-1/4	50	2.95
.63	1000	1067811	38	M12x1.75x50	17.2	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
.68	1400	1067815	81	M16x2.0x60	27.2	75.4	24.6	50.8	54.1	23.6	27.2	45.5	5/8, 3/4	3-1/4, 4-3/4	50, 35	2.95, 4.08
2.0	2250	1067823	136	M20x2.5x75	28.1	110	34.0	76.2	76.2	27.2	34.4	61.5	7/8	6-1/2	50	5.67
2.2	3500	1067827	312	M24x3.0x80	33.1	110	34.0	76.2	76.2	27.2	34.4	61.5	7/8	6-1/2	50	5.67
4.5	6250	1067831	637	M30x3.5x120	65.1	142	39.9	95.3	99.3	37.3	48.8	86.9	1, 1-1/8, 1-1/4	8-1/2, 9-1/2, 12	75	7.70
10.4	7750	1067835	1005	M36x4.0x150	60.6	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2, 1-3/4	13-1/2, 17, 25	-	-
10.7	10000	1067839	1005	M42x4.5x160	70.6	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2, 1-3/4	13-1/2, 17, 25	-	-
11.0	13000	1067843	1350	M48x5.0x160	70.6	186	52.3	121	132	53.6	61.2	109	1-3/8, 1-1/2, 1-3/4	13-1/2, 17, 25	-	-

5:1 Design Factor.

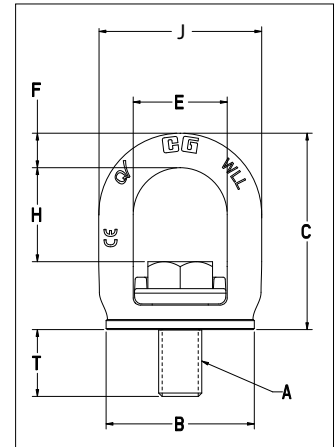


APPLICATION AND WARNING INFORMATION
SECTION 17

SL-150



- When compared to respective size eye bolts, the Crosby SL-150 Slide-Loc™ has a larger eye opening for easy access.
- Bail is forged alloy steel – Quenched & Tempered.
- Bail swivels 360° degrees to keep the load aligned with the sling leg.
- Rated at 100% for 90 degree angle.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.
- Meets the Machinery Directive 2006/42/EC guidelines and is marked with CE accordingly.
- Bolt specification for metric bolt is Grade 10.9 alloy cap screw to ISO 898-1.
- Unique locking mechanism makes the lifting point well suited for quick attachment to load surface. No need for tools.
- Features QUIC-CHECK® markings on bail to assist in knowing when device is ready for lifting.



APPLICATION AND WARNING INFORMATION
SECTION 17

Load Rated Fatigue Rated QUIC-CHECK® QT CE

SL-150 UNC SLIDE-LOC™ LIFT POINT

Weight Each (kg)	Stock No.	Working Load Limit (t)*	Bolt Size A (in)	Dimensions (mm)						Effective Thread Projection Length T
				B	C	E	F	H	J	
0.14	1068407	0.50	3/8 - 16 x 1	35.6	53.1	27.9	8.4	28.2	45.0	15.2
0.24	1068416	0.75	1/2 - 13 x 1 - 1/4	42.4	62.7	33.0	10.4	33.0	54.1	20.1
0.50	1068425	1.50	5/8 - 11 x 1 - 5/8	55.1	75.7	37.1	13.2	37.1	63.5	25.7
0.93	1068434	2.30	3/4 - 10 x 2	68.8	91.2	43.7	16.0	43.7	75.7	32.0
0.98	1068443	2.30	7/8 - 9 x 2	68.8	91.7	43.7	16.0	43.7	75.7	31.2
1.69	1068452	3.20	1 - 8 x 2 - 1/2	82.6	110.0	52.8	19.3	49.0	91.2	40.4

4:1 Design Factor.

SL-150 METRIC SLIDE-LOC™ LIFT POINT

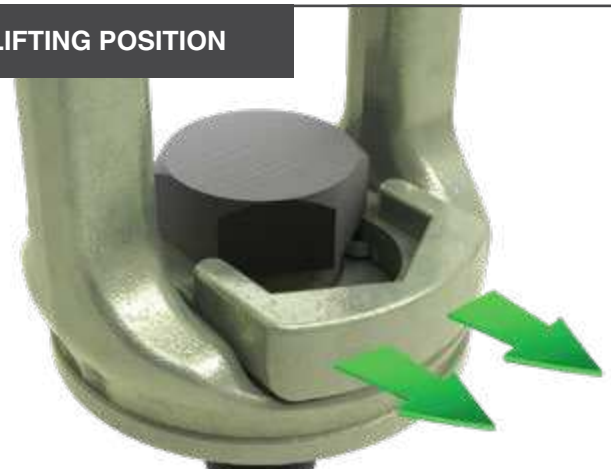
Weight Each (kg)	Stock No.	Working Load Limit (t)*	Dimensions (mm)							Effective Thread Projection Length T
			Bolt Size A	B	C	E	F	H	J	
0.14	1068515	0.50	M10X1.5 X 25	35.5	53.0	28.0	8.5	27.8	45.0	14.6
0.23	1068524	0.75	M12x1.75x30	42.5	62.6	33.0	10.5	32.9	54.0	18.3
0.50	1068533	1.50	M16x2x40	55.0	75.7	37.0	13.2	37.0	63.4	24.5
0.94	1068542	2.30	M20x2.5x50	68.8	91.1	43.9	16.0	43.6	75.6	31.0
1.60	1068551	3.20	M24x3x60	82.5	110.0	52.8	19.2	52.8	91.2	37.0

4:1 Design Factor.

INSTALLATION POSITION



LIFTING POSITION



The visible red QUIC-CHECK® mark indicates that the Crosby Slide-Loc™ is ready for installation but not for lifting.



When the red QUIC-CHECK® mark is under the slide, the Crosby Slide-Loc™ is ready for lifting.

COMPLETE WIND PROJECTS ON TIME & WITHIN BUDGET

Partner with the leading total rigging provider with the most comprehensive product portfolio, training opportunities & support

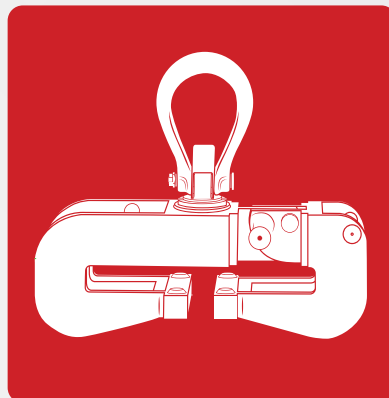
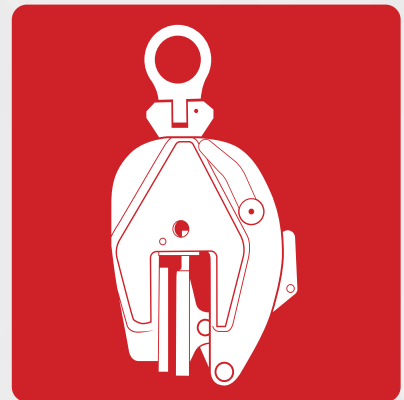
Keep your project on track through improved job site efficiency and safety with lifting and rigging hardware from The Crosby Group.

- Get the product you need, when you need it through a global network of 3,000+ authorized distributors with stock ready to ship.
- Ensure a well-trained workforce with access to extensive training curriculum and industry experience.
- Reduce time between lifts with quick-release shackle bolt securement and an adjustable, lightweight chain sling system.
- Prevent incidents through the use of top-quality hardware from a highly vertically integrated manufacturer.
- Create smarter lift plans with center of gravity calculations using wireless load cells.
- Obtain product authenticity certificates online at any time.

Crosby[®]

LIFTING CLAMPS & MAGNETS

Innovative lifting clamps for safer and more efficient lifts.



IPU10



Universal - for lifting in any direction

- Available in capacities of .5 thru 30 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0 to 155mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Available in a variety of styles:
 - IPU10 - Standard clamp for materials with a surface hardness to 363HV10 (345 HB).
 - IPU10J - Larger jaw opening.
 - IPU10S - For use with stainless steel material.
 - IPU10H - For use with materials with a surface hardness to 472HV10 (450 HB).
- Full 180° turning range for material transfer, turning or moving.
- Lock open, lock closed ability with latch for pretension on material and then release of material.
- For use with materials with a surface hardness to 279HV10. Only 5% minimum WLL is needed.
- Maintenance and repair kits are available.
- Minimum WLL is 5% of maximum WLL for .5t IPU10 only.
- Minimum WLL is 10% of maximum WLL for all other IPU10, IPU10J, IPU10S, IPU10H clamps.

IPU10S

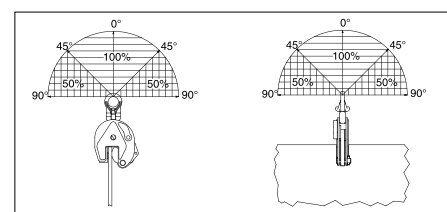
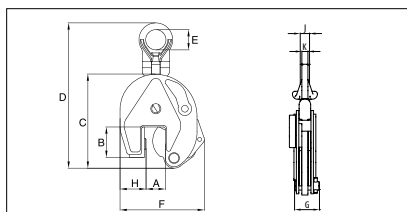


Model IPU10 / IPU10J / IPU10S / IPU10H

Load Rated

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPU10	0.5	2701675	1.9	0 - 16	44	130	216	40	115	42	28	-	11
IPU10	1	2701663	2.4	0 - 20	45	139	225	40	127	42	38	-	11
IPU10	2	2701677	8.5	0 - 35	78	201	368	70	188	64	55	-	16
IPU10	3	2701665	14.8	0 - 40	100	253	436	75	222	78	60	-	20
IPU10	4.5	2701667	16.0	0 - 40	100	253	436	75	227	82	65	-	20
IPU10	6	2701669	24.0	0 - 50	126	302	525	80	292	84	95	44	20
IPU10	9	2701671	29.5	0 - 50	126	325	552	80	310	94	104	44	20
IPU10	12	2701679	57.0	0 - 54	160	392	616	80	433	121	137	41	25
IPU10	16	2701683	79.0	5 - 64	180	463	736	88	492	121	153	45	25
IPU10	22.5	2701687	126.0	5 - 80	222	554	863	110	565	139	186	49	25
IPU10	30	2701691	141.0	5 - 80	222	554	868	110	580	153	186	54	30
With larger jaw opening													
IPU10J	0.5	2701647	1.9	15 - 30	45	128	209	40	128	42	32	-	11
IPU10J	1	2702463	2.5	20 - 40	55	151	221	40	141	42	41	-	11
IPU10J	3	2702465	17.3	40 - 80	115	270	432	75	277	78	67	-	20
IPU10J	4.5	2702467	18.9	40 - 80	115	270	432	75	281	82	72	-	20
IPU10J	6	2702469	26.5	50 - 100	126	302	515	80	336	84	95	44	20
IPU10J	9	2701673	30.5	50 - 100	126	325	550	80	360	94	105	44	20
IPU10J	12	2701681	65.0	54 - 108	178	438	662	80	491	121	136	41	25
IPU10J	16	2701685	85.0	64 - 128	208	521	784	88	562	121	160	45	25
IPU10J	22.5	2701689	149.0	80 - 155	255	628	938	110	660	139	196	49	25
IPU10J	30	2701693	165.0	80 - 155	255	628	942	110	660	153	196	54	30
For stainless steel - with universal hoisting eye													
IPU10S	0.5	2702275	1.9	0 - 16	44	130	216	40	115	42	28	-	11
IPU10S	1	2702263	2.4	0 - 20	45	139	225	40	127	42	38	-	11
IPU10S	2	2702277	8.5	0 - 35	78	201	368	70	188	64	55	-	16
IPU10S	3	2702265	14.8	0 - 40	100	253	436	75	222	78	60	-	20
IPU10S	4.5	2702267	16.0	0 - 40	100	253	436	75	227	82	65	-	20
IPU10S	6	2702269	24.0	0 - 50	126	302	525	80	292	84	95	44	20
IPU10S	9	2702271	29.5	0 - 50	126	325	552	80	310	94	104	44	20
IPU10S	12	2702279	57.0	0 - 54	160	392	616	80	433	121	137	41	25
For very hard materials - with universal hoisting eye													
IPU10H	0.5	2702175	1.9	0 - 16	44	130	216	40	115	42	28	-	11
IPU10H	0.75	2702163	2.4	0 - 20	45	139	225	40	127	42	38	-	11
IPU10H	1	2702177	7.6	0 - 35	78	201	368	70	188	64	55	-	16
IPU10H	2	2702165	14.8	0 - 40	100	253	436	75	222	78	60	-	20
IPU10H	3	2702167	16.0	0 - 40	100	253	436	75	227	82	65	-	20
IPU10H	4.5	2702169	24.0	0 - 50	126	302	525	80	292	84	95	44	20
IPU10H	6	2702171	29.5	0 - 50	126	325	552	70	310	94	104	44	20

Design Factor based on EN 13155 and ASME B30.20. Model IPU10R (remote control opening and closing via a cable) on request. Model IPU10W (wedge) available on request.



IP10



For vertical lifting, turning and transfer

- Available in capacities of .5 through 30 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0 to 155mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual and test certificate included with each clamp.
- Available in a variety of styles:
 - IP10 - Standard clamp for materials with a surface hardness to 363HV10 (345 HB).
 - IP10J - Larger jaw opening.
 - IP10S - For use with stainless steel material.
 - IP10H - For use with materials with a surface hardness to 472HV10 (450 HB).
- Full 180° turning range for material transfer, turning or moving.
- Lock open, lock closed ability with latch for pretension on material and then release of material.
- For plate surface hardness till 279HV10, only 5% min. WLL is needed.
- Maintenance and repair kits are available.
- Minimum WLL is 5% of maximum WLL for .5t IP10 only.
- Minimum WLL is 10% of maximum WLL for all other IP10, IP10J, IP10S, IP10H clamps.

IP10H

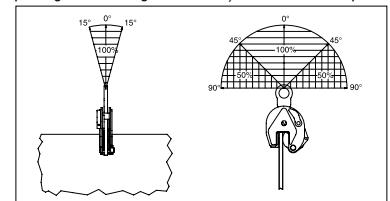
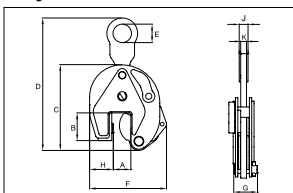


Load Rated

Model IP10 / IP10J / IP10S / IP10H

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	D	E	F	G	H	J	K
IP10	0.5	2701674	1.8	0 - 16	44	130	203	40	115	42	28	-	11
IP10	1	2701662	2.2	0 - 20	45	139	212	40	127	42	38	-	11
IP10	2	2701676	7.6	0 - 35	78	201	330	70	188	64	55	-	16
IP10	3	2701664	13.8	0 - 40	100	253	434	75	222	78	60	-	20
IP10	4.5	2701666	15.0	0 - 40	100	253	434	75	227	82	65	-	20
IP10	6	2701668	23.5	0 - 50	126	302	517	80	292	84	95	40	20
IP10	9	2701670	27.5	0 - 50	126	325	445	80	310	94	104	44	25
IP10	12	2701678	49.0	0 - 54	160	392	574	80	433	121	137	41	25
IP10	16	2701682	68.0	5 - 64	180	463	686	88	492	121	153	49	25
IP10	22.5	2701686	108	5 - 80	222	554	803	110	565	153	186	54	30
IP10	30	2701690	124	5 - 80	222	554	803	110	565	153	186	54	30
With larger jaw opening													
IP10J	0.5	2701646	1.8	15 - 30	45	128	209	40	128	42	32	-	11
IP10J	1	2702462	2.5	20 - 40	55	151	207	40	141	42	41	-	11
IP10J	3	2702458	16.4	40 - 80	115	271	432	75	276	78	67	-	20
IP10J	4.5	2702460	18.0	40 - 80	115	271	432	75	281	82	72	-	20
IP10J	6	2701705	24.5	50 - 100	126	302	506	80	336	84	95	40	20
IP10J	9	2701672	28.5	50 - 100	126	325	542	80	360	94	105	44	25
IP10J	12	2701680	58.0	54 - 108	178	438	620	80	491	121	136	41	25
IP10J	16	2701684	80.0	64 - 128	208	521	734	88	562	121	160	45	25
IP10J	22.5	2701688	131.0	80 - 155	255	628	883	110	660	139	196	49	25
IP10J	30	2701692	147.0	80 - 155	255	628	887	110	660	153	196	54	30
For stainless steel - with fixed hoisting eye													
IP10S	0.5	2702274	1.8	0 - 20	44	130	203	40	115	42	28	11	11
IP10S	1	2702262	2.2	0 - 35	45	139	212	40	127	42	38	11	11
IP10S	2	2702276	7.6	0 - 40	78	201	330	70	188	64	55	16	16
IP10S	3	2702264	13.8	0 - 40	100	253	434	75	222	78	60	20	20
IP10S	4.5	2702266	15.0	0 - 50	100	253	434	75	227	82	65	20	20
IP10S	6	2702268	23.5	0 - 50	126	302	517	80	292	84	95	20	20
IP10S	9	2702270	27.5	0 - 54	126	325	544	80	310	94	104	25	25
IP10S	12	2702278	49.0	0-16	160	392	574	80	433	121	137	25	25
For very hard materials - with fixed hoisting eye													
IP10H	0.5	2702174	1.8	0-16	44	130	207	40	115	42	28	11	11
IP10H	0.75	2702162	2.2	0-20	45	139	219	40	130	42	38	11	11
IP10H	1	2702176	7.6	0-35	78	201	330	70	188	64	55	16	16
IP10H	2	2702164	13.8	0-40	100	253	434	75	222	78	60	20	20
IP10H	3	2702166	15.0	0-40	100	253	434	75	227	82	65	20	20
IP10H	4.5	2702168	23.5	0-50	126	302	517	80	292	84	95	20	20
IP10H	6	2702170	27.5	0-50	126	325	544	80	310	92	105	25	25

Design Factor based on EN 13155 and ASME B30.20. Model IP10 available in 40t, 55t and 100t on request. Model IP10R (remote control opening and closing via a cable) available on request.



IPNM10N



For use in almost all sectors of industry where, during the lift or transfer, no damage to the material is permitted.

- Available in capacities of .5 , 1 and 2 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0 to 40mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Full 180° turning range for material transfer, turning or moving.
- Lock open, lock closed ability with latch for pretension on material and then release of material.
- Material must be clean and dry.
- There is no minimum WLL required.
- Maintenance and repair kits are available.
- Temperature range -20° C to 70° C
- Optional with brake pad lining for temperature range -40° C to +200° C
- Special jaw openings or curved jaws upon request.

IPNM10P

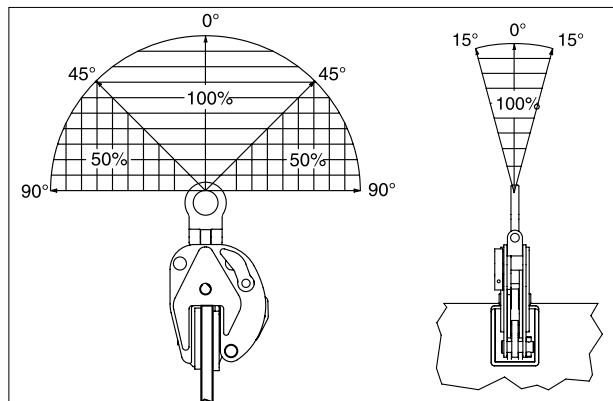
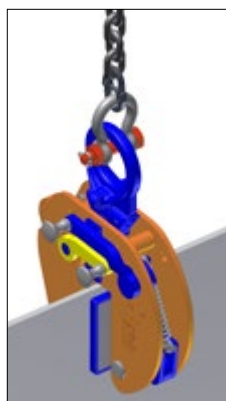
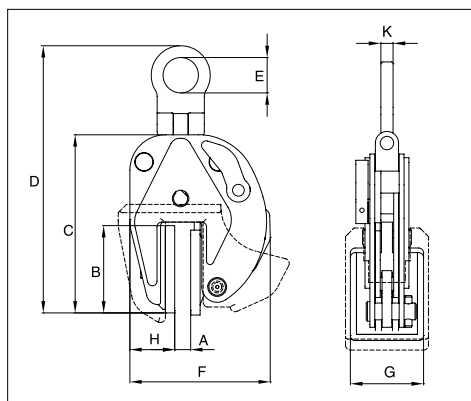


Load Rated

Model IPNM10

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)								
				Jaw A	B	C	D	E	F	G	H	K
IPNM10N	0.5	2703811	2.7	0 - 10	84	159	235	40	128	60	42	11
IPNM10N	1	2703738	4.4	0 - 20	97	209	278	40	184	80	56	11
IPNM10	2	2703442	14.5	0 - 40	153	258	396	70	296	100	161	16
With protection cap												
IPNM10P	0.5	2703278	2.8	0 - 10	82	157	221	40	145	68	48	11
IPNM10P	1	2703279	4.5	0 - 20	97	195	276	40	205	82	66	11
With larger jaw opening												
IPNM10NJ	1	2703814	4.7	20 - 37	97	220	321	40	200	80	56	11
IPNM10NJ1	1	2703819	5.5	0 - 25	97	238	351	40	213	80	63	11

* Design Factor based on EN 13155 and ASME B30.20.

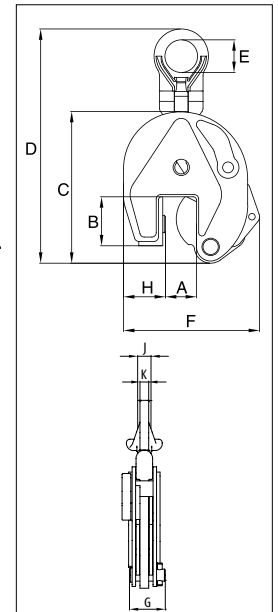


IPU10A



For vertical transport of plates

- Available in capacities of 1, 2 and 6 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: 0 to 50mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Full 180° turning range for material transfer, turning or moving.
- Lock open, lock closed ability with latch for pretension on material and then release of material.
- Minimum WLL of 10% of Maximum WLL.
- Maintenance and repair kits are available.
- For use with materials with a plate surface hardness to 279HV10, only 5% of minimum WLL is needed.

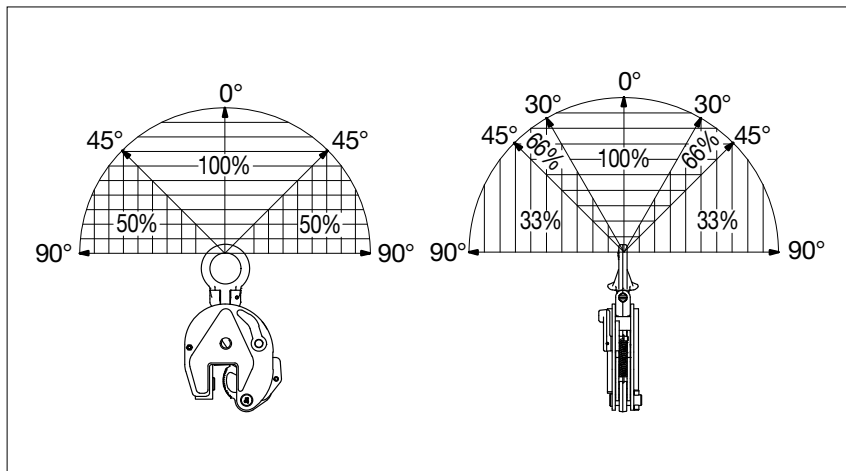


Load Rating

Model IPU10A

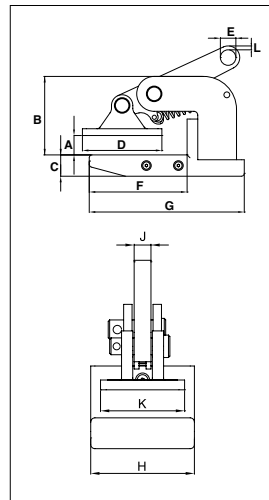
Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPU10A	1	2701628	2.3	0 - 20	45	139	225	40	127	42	38	-	11
IPU10A	2	2701629	8.4	0 - 35	78	201	368	70	188	64	55	-	16
IPU10A	6	2701638	25.4	0 - 50	126	302	525	80	292	84	95	44	20

* Design Factor based on EN 13155 and ASME B30.20.

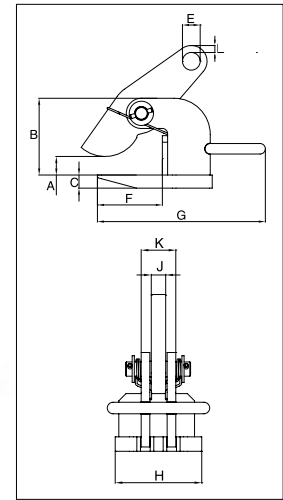


12

IPHNM10



IPH10



For Horizontal Lift and Transfer with Pretension System

- Available in capacities of .5 through 12 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: 0 to 120mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.

Load Rated

Model IPHNM10

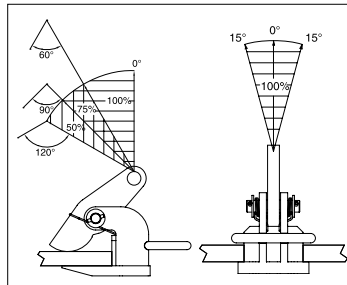
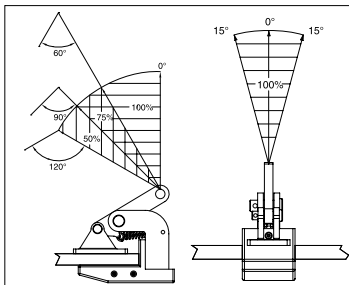
Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)										
				Jaw A	B	C	D	E	F	G	H	J	K	L
IPHNM10	0.5	2703287	2.0	0 - 20	81	22	82	16	101	160	74	12	60	4
IPHNM10	1	2703288	3.5	0 - 35	93	30	92	16	103	164	74	12	60	7
IPHNM10	2	2703290	7.5	0 - 30	139	30	131	22	166	245	100	20	74	9
IPHNM10J	2	2703291	8.0	30 - 60	169	30	131	22	166	245	100	20	74	9

* Design Factor based on EN 13155 and ASME B30.20.

Model IPH10 / IPH10J: With Spring Loaded Tension, Magnets and Handle

	Working Load Limit (Per Pair)		Weight Each	Dimensions (mm)									
Model	(t)*	Stock No.	(kg)	Jaw A	B	C	E	F	G	H	J	K	L
IPH10	0.5+	2703297	1.8	0 - 20	86	12	16	103	150	60	12	27	4
IPH10	1+	2703298	2.5	0 - 35	100	16	16	103	150	60	12	31	7
IPH10	2	2703522	5.5	0 - 60	117	16	22	109	256	110	20	40	9
IPH10	3	2703523	7.5	0 - 60	117	20	26	109	266	120	20	48	11
IPH10	4.5	2703524	10.5	0 - 60	132	25	30	104	280	130	20	48	12
IPH10	6	2703525	13.0	0 - 60	143	25	36	123	320	130	20	48	14
IPH10	9	2703526	18.5	0 - 60	157	30	43	133	330	140	25	62	16
IPH10	12	2703527	21.5	0 - 60	172	30	47	141	353	150	25	62	17
With larger jaw opening #													
IPH10J	3	2703533	9.0	60 - 120	177	20	26	109	266	120	20	48	9
IPH10J	4.5	2703534	12.0	60 - 120	192	25	30	104	280	130	20	48	11
IPH10J	6	2703535	15.0	60 - 120	203	25	36	123	320	130	20	48	12
IPH10J	9	2703536	20.5	60 - 120	217	30	43	133	330	140	25	62	14
IPH10J	12	2703537	24.0	60 - 120	232	30	47	141	353	150	25	62	16

* Design Factor based on EN 13155 and ASME B30.20.+ No handle or magnets. # Larger Working Load Limits available.

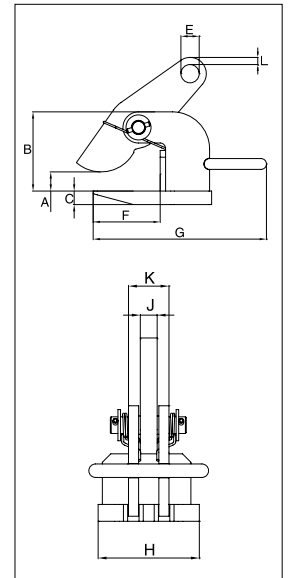


IPH10E



For horizontal lifting and transfer

- Available in capacities of 2.0 thru 25 metric tons.
- Wide variety of jaw openings available: 0 to 120mm.
- Welded alloy steel body for strength and smaller size. Forged alloy, components where required.
- Equipped with handle for easy placement.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (CrosbyIP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair spare kits are available.



Model IPH10E

Load Rated

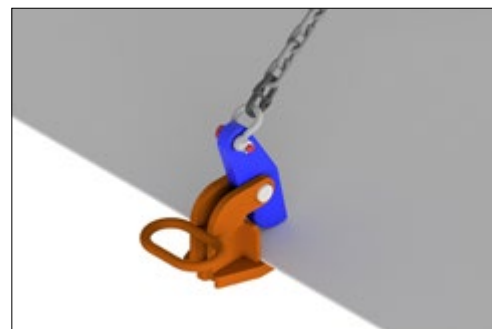
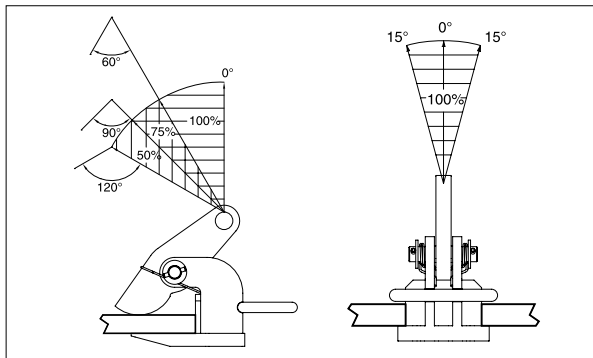
Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPH10E	2	2703542	5.5	0 - 60	117	16	22	109	256	110	20	40	9
IPH10E	3	2703543	7.5	0 - 60	117	20	26	109	266	120	20	48	11
IPH10E	4.5	2703544	10.5	0 - 60	132	25	30	104	280	130	20	48	12
IPH10E	6	2703545	13	0 - 60	143	25	36	123	320	130	20	48	14
IPH10E	9	2703546	18.5	0 - 60	157	30	43	133	330	140	25	62	16
IPH10E	12	2703547	21.5	0 - 60	172	30	47	141	353	150	25	62	17

* Design Factor based on EN 13155 and ASME B30.20.

Model IPH10JE

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPH10JE	3	2703553	9.0	60 - 120	177	20	26	109	266	120	20	48	11
IPH10JE	4.5	2703554	12.0	60 - 120	192	25	30	104	280	130	20	48	12
IPH10JE	6	2703555	15.0	60 - 120	203	25	36	123	320	130	20	48	14
IPH10JE	9	2703556	20.5	60 - 120	217	30	43	133	330	140	25	62	16
IPH10JE	12	2703557	24.0	60 - 120	232	30	47	141	353	150	25	62	17

* Design Factor based on EN 13155 and ASME B30.20.

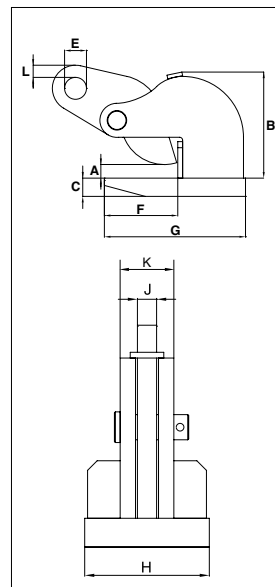


IPHOZ



For Horizontal Lifting and Transfer

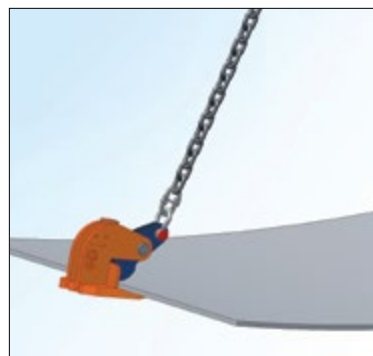
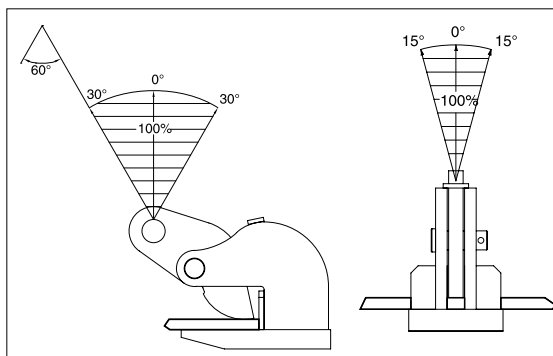
- Available in capacities of .75 through 15 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0 to 60mm.
- Welded alloy steel body for strength and smaller size. Forged alloy, components where required.
- Equipped with handle for easy placement.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.



Model IPHOZ

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPHOZ	0.75	2705401	3.0	0 - 30	94	16	16	70	118	81	12	31	12
IPHOZ	1.5	2705402	5.5	0 - 45	133	16	22	125	192	100	16	36	12
IPHOZ	3	2705403	8.0	0 - 45	137	20	26	125	200	120	20	48	10
IPHOZ	4.5	2705404	9.5	0 - 45	138	25	30	126	220	120	20	50	10
IPHOZ	6	2705405	15.5	0 - 60	171	30	36	135	235	130	20	56	20
IPHOZ	9	2705406	25.0	0 - 60	211	30	43	166	276	160	25	62	20
IPHOZ	12	2705407	29.0	0 - 60	217	40	47	168	294	190	25	62	19
IPHOZ	15	2705408	36.5	0 - 60	220	40	47	183	317	250	25	62	22

*Design Factor based on EN 13155 and ASME B30.20.



IPPE10B(E)



For lifting and transporting non-bendable sheet metal in a horizontal position.

- Available in capacities of 3 through 12 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0 to 180mm
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.
- IPPE10B: Magnets in foot plate (also applies for D and H Type).
- IPPE10BE: Economic version (also applies for D and H-Type).
- IPPE10BNM: Non-marring (also applies for D and H-Type).

IPPE10BNM

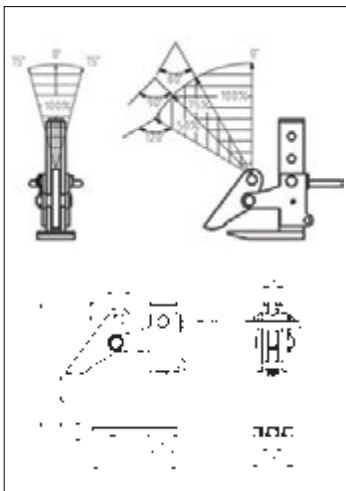


Load Rating

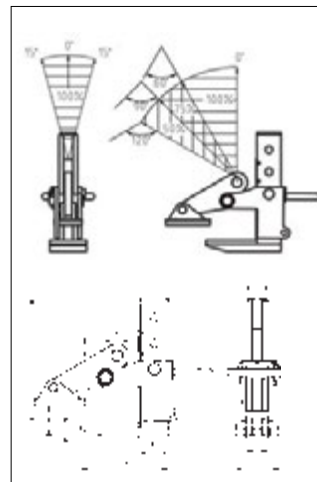
Model IPPE10B / IPPE10BE / IPPE10BNM

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	D	E	F	G	H	J	L
IPPE10B	3	2703862	11.5	0-180	204	322	20	26	66	20	100	50	15
IPPE10B	6	2703871	16.3	0-180	220	340	25	30	74	20	140	60	13
IPPE10B	9	2703888	24.8	0-180	248	365	25	34	90	20	190	70	13
IPPE10B	12	2703921	32.7	0-180	252	376	30	40	90	25	200	70	18
IPPE10BE	3	2703863	11.5	0-180	204	322	20	26	66	20	100	50	15
IPPE10BE	6	2703870	16.3	0-180	220	340	25	30	74	20	140	60	13
IPPE10BE	9	2703891	24.8	0-180	248	365	25	34	90	20	190	70	13
IPPE10BE	12	2703924	32.7	0-180	262	376	30	40	90	25	200	70	18
IPPE10BNM	3	2703864	12.4	0-180	204	322	30	26	68	20	100	50	15
IPPE10BNM	6	2703872	17.3	0-180	220	340	35	30	76	20	140	60	13
IPPE10BNM	9	2703894	27.7	0-180	248	365	35	34	92	20	190	70	13
IPPE10BNM	12	2703927	35.2	0-180	262	376	40	40	92	25	200	70	15

* Design Factor based on EN 13155 and ASME B30.20. Also available in D-Type (maximum jaw opening of 300mm) and H-Type (maximum jaw opening of 420mm).



IPPE10(E)



IPPE10NM

IPBC



For Horizontal Transfer - with Pretension System

- Available in capacities of 1 through 4.5 metric tons (Higher Working Load Limits are available upon request).
- Jaw openings available: 0 to 40mm.
- Welded alloy steel body for strength and smaller size. Forged alloy, components where required.
- Equipped with handle for easy placement.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (CrosbyIP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.

IPHGUZ

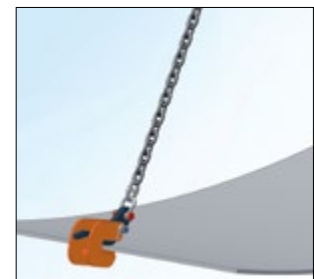
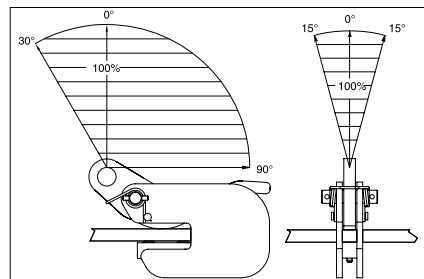
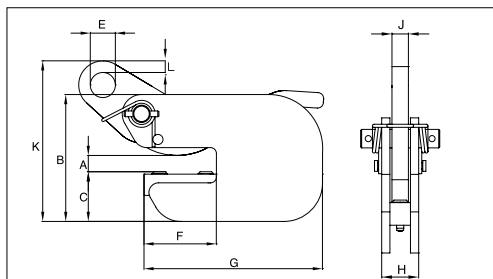


Model IPBC

Load Rated

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPBC	1	2700410	3.5	0 - 20	132	52	26	75	185	36	16	182	12
IPBC	2	2700411	6.5	0 - 25	152	62	30	82	210	49	20	218	15
IPBC	3	2700412	8.5	0 - 25	157	66	30	82	210	57	20	225	15

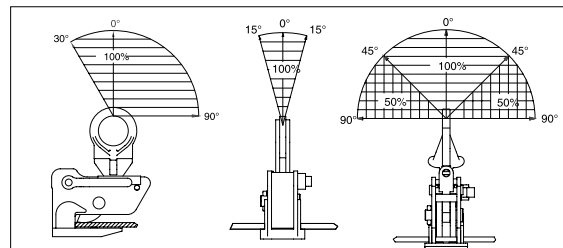
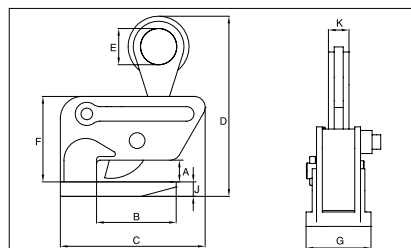
* Design Factor based on EN 13155 and ASME B30.20.



Model IPHGUZ: Universal Lifting Eye / Model IPHGZ: Fixed Hoisting Eye

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	D	E	F	G	J	K	
IPHGUZ	1.5	2705455	9.0	0 - 25	110	232	287	70	139	90	20	16	
IPHGUZ	3	2705456	19.9	0 - 40	119	253	348	75	175	120	25	20	
IPHGUZ	4.5	2705457	30.0	0 - 40	119	301	370	80	175	155	30	44	
Fixed Hoisting Eye													
IPHGZ	0.75	2705451	4.0	0 - 25	82	148	206	50	99	98	12	22	
IPHGZ	1.5	2705452	7.3	0 - 25	110	200	250	50	118	90	20	28	
IPHGZ	3	2705453	12.3	0 - 40	120	227	305	70	148	120	25	32	
IPHGZ	4.5	2705454	25.0	0 - 40	120	284	381	70	181	155	30	40	

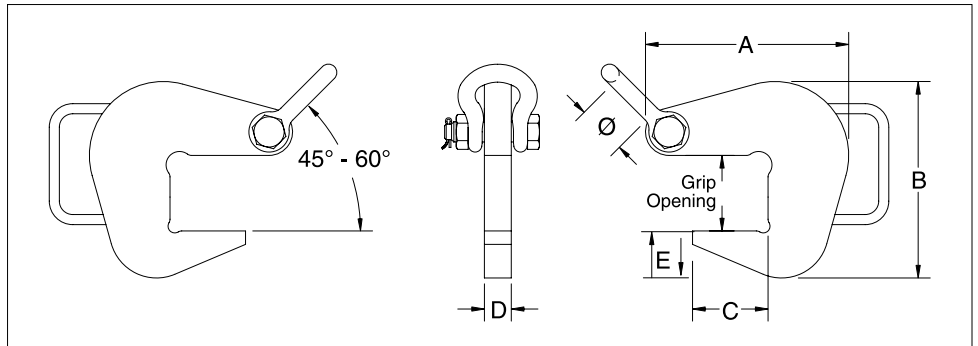
* Design Factor based on EN 13155 and ASME B30.20.



IPPH



- Crosby IP Pipe Hooks provide a fast and efficient method for lifting pipe, tube or any similarly shaped fabrications.
- Alloy steel plate construction.
- Equipped with a convenient handle.
- Equipped with a Bolt Type Shackle.
- Optional non marring inserts available.
- Used in pairs with 45° - 60° horizontal angle or 60° - 90° included angle.



Pipe Hook

Model	Working Load Limit Per Pair (t)**	Stock No.	Weight Each (kg)	Grip Opening (mm)	Dimensions (mm)						Shackle Size (mm)	Nylon (PA6) Inserts*
					A	B	C	D	E	Ø		
IPPH	2	2734500	2.70	52.3	148	129	52.3	25.4	31.8	42.9	5/8	2734900 2734909
IPPH	4	2734509	4.56	71.4	192	186	71.4	25.4	44.4	42.9	5/8	2734918
IPPH	6	2734518	8.05	103	259	256	103	25.4	57.2	50.8	3/4	2734927
IPPH	10	2734527	17.5	154	376	383	154	25.4	88.9	68.3	1.0	2734936

**Design factor based on EN13155 and ASME B30.20.

NOTE: To determine grip opening when equipped with an insert, add the insert thickness shown in the Pipe Hook Insert table below.

IPPHI



- Replaceable nylon (PA6) inserts for use with the IPPHI Pipe Hook that minimizes thread and pipe damage.

Pipe Hook Inserts

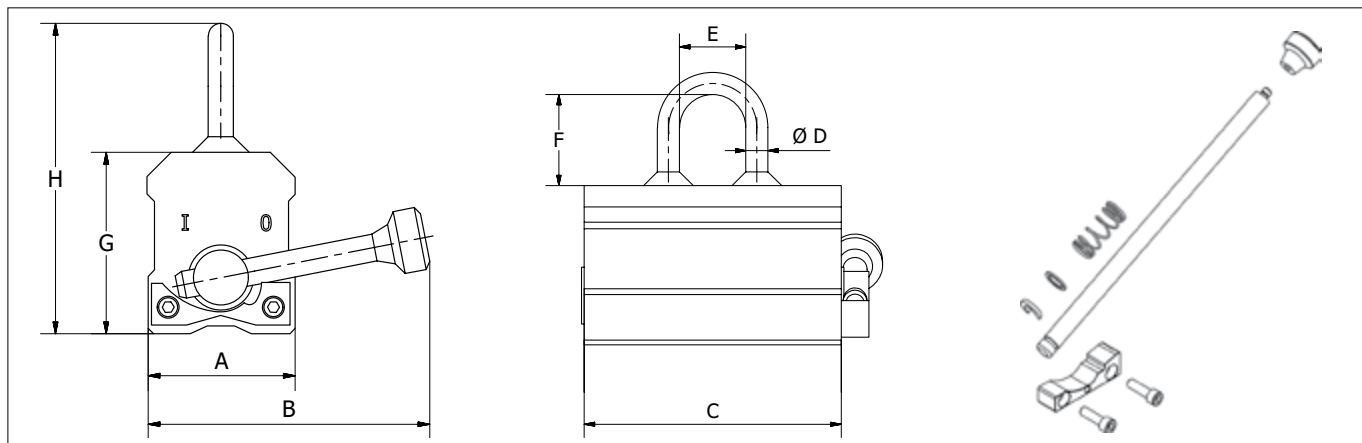
Model	Stock No.	ID of Pipe (mm)	Grip Opening (mm)
IPPHI	2734900	76 - 305	41
	2734909	305 - 457	44
	2734918	457 - 762	63
	2734927	762 - 1067	95
	2734936	1067 - 1329	145



MAGNEX™



- Solid steel construction with recessed area, reducing risk of damage to tags for identification and technical user information.
- Fully welded construction, minimizing maintenance costs.
- Innovative and patented easy switch stop block, equipped with ball bearing and ergonomic handle for increased safety and ease of use.
- Individually proof tested to 3 times the working load limit with certification.
- Each product is individually serialized, with the serial number and proof load test date stamped on body.
- User manual with test certificate included with each magnet
- 5-year warranty on magnetic system.
- CE certified including test certificate in accordance with EN 13155.
- Maintenance replacement kits are available.
- Can be used on both flat and round steel surfaces.



Crosby MAGNEX™ Lifting Magnet

Model	WLL (kg)*	Stock No.	Weight each (kg)	Dimensions (mm)							
				A	B	C	D	E	F	G	H
MAGNEX150	150	2708023	3.1	60	115	102	10	30	40	69	119
MAGNEX300	300	2708024	10.9	100	210	152	14	50	65	99	178
MAGNEX600	600	2708025	21.7	120	245	246	20	64	65	99	184
MAGNEX1000	1000	2708026	40.9	146	329	306	20	64	92	125	237
MAGNEX1500	1500	2708027	71.7	165	392	374	20	64	92	161	273
MAGNEX2000	2000	2708028	91.4	165	475	478	20	64	92	161	273

Model	Flat Material			Round Material		
	WLL (kg)*	min. thickness for max. WLL (mm)*	min. load thickness (mm)	WLL (kg)*	min. Ø (mm)	max. Ø (mm)
MAGNEX150	150	25	2	75	50	100
MAGNEX300	300	30	4	150	60	200
MAGNEX600	600	40	6	300	65	270
MAGNEX1000	1000	60	10	500	100	300
MAGNEX1500	1500	80	15	750	150	350
MAGNEX2000	2000	80	15	1000	150	350

*WLL based on low carbon, mild steel and a working temperature 20° C.

IPBK10



For the transfer and stacking of steel beams

- IPVUZ / IPVZ: Available in capacities of 0.75 through 1.5 metric tons.
- IPVUZ / IPVZ: Jaw openings available: 0 to 20mm
- IPBK10: Available in capacities of 0.5 through 4 metric tons.
- IPBK10: Jaw openings available: 5 to 28mm
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Minimum WLL of 10% of Maximum WLL.
- Maintenance and repair kits are available.
- For use with materials with a plate surface hardness to 279HV10, only 5% min WLL is needed.

IPVZ

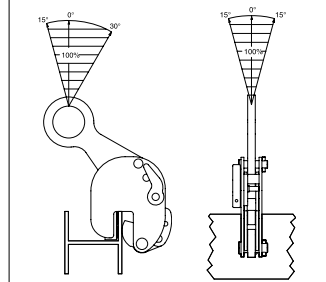
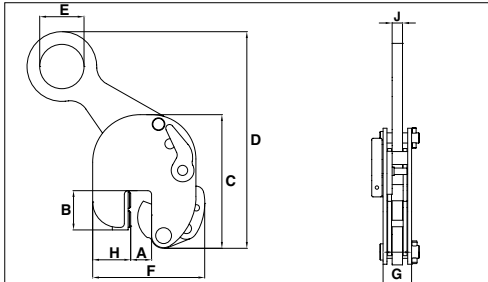


Load Rated

Model IPBK10

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)								
				Jaw A	B	C	D	E	F	G	H	J
IPBK10	0.5	2703931	2.4	5-15	43	134	216	45	120	48	45	10
IPBK10	1	2703837	2.6	5-15	43	152	230	45	123	47	45	10
IPBK10	2	2703838	7.3	5-25	62	223	341	70	198	61	70	16
IPBK10	4	2703839	16.9	5-28	75	282	431	100	232	78	72	20

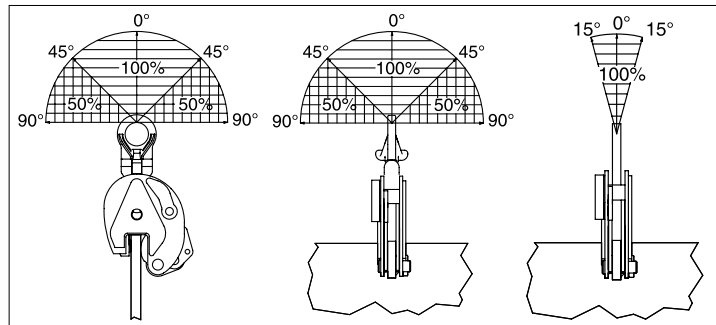
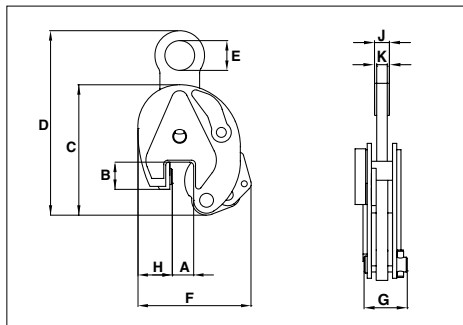
Design Factor based on EN 13155 and ASME B30.20.



Model IPVUZ: Universal Hoisting Eye / Model IPVZ: Fixed Hoisting Eye

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)								
				Jaw A	B	C	D	E	F	G	H	K
IPVUZ	0.75	2705146	2.3	0 - 15	26	130	216	40	115	42	30	11
IPVUZ	1.5	2705147	6.9	0 - 20	55	200	378	70	200	61	64	16
Fixed Hoisting Eye												
IPVZ	0.75	2705096	2.1	0 - 15	26	130	203	40	115	42	30	11
IPVZ	1.5	2705097	5.9	0 - 20	55	200	339	70	180	61	64	16

* Design Factor based on EN 13155 and ASME B30.20.



12

IPBHZ



For the lifting and transfer of steel beams

- IPBHZ: Available in capacities of .75 through 12 metric tons (higher Working Load Limits are available upon request).
- IPBHZ: Wide variety of jaw openings available: 0 to 40mm.
- IPBSNZ: Available in capacities of 1.5 through 4.5 metric tons (higher Working Load Limits are available upon request).
- IPBSNZ: Wide variety of jaw openings available: 0 to 50mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Minimum WLL of 10% of Maximum WLL.
- Maintenance and repair kits are available.

IPBSNZ

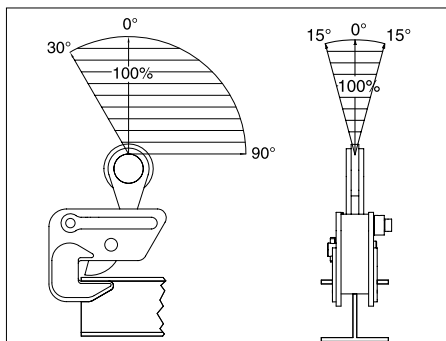
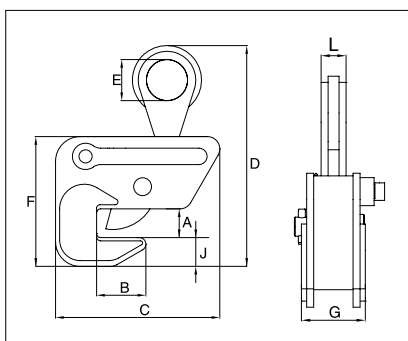


Model IPBHZ

Load Rated

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)								
				Jaw A	B	C	D	E	F	G	J	L
IPBHZ	0.75	2705461	3.0	0 - 25	40	148	220	50	130	69	33	22
IPBHZ	1.5	2705462	6.0	0 - 25	60	203	255	50	158	73	35	28
IPBHZ	3	2705463	10.5	0 - 40	80	227	325	70	188	112	38	32
IPBHZ	4.5	2705464	25.0	0 - 40	112	284	413	70	251	116	80	40
IPBHZ	12	2705467	42.3	0 - 40	125	466	490	90	317	90	90	47

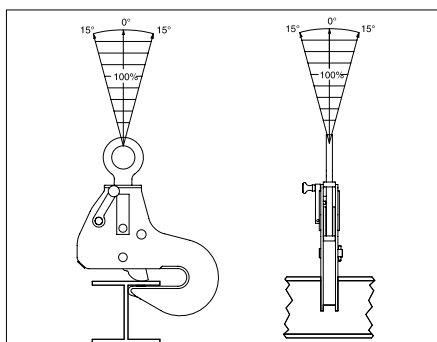
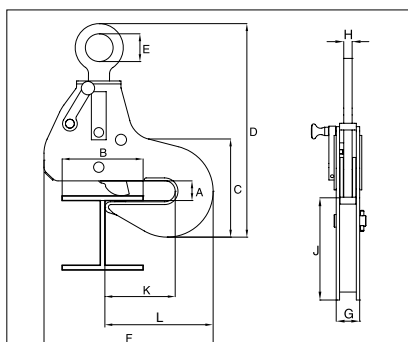
* Design Factor based on EN 13155 and ASME B30.20.



Model IPBSNZ

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)										
				Jaw A	B	C	D	E	F	G	H	J	K	L
IPBSNZ	1.5	2705925	14.0	0 - 32	100 - 270	304	480	70	319	47	16	165	148	240
IPBSNZ	3	2705926	22.0	0 - 40	100 - 330	352	494	75	408	56	20	207	182	260
IPBSNZ	4.5	2705927	30.5	0 - 50	100 - 360	420	630	75	457	56	20	250	188	293

* Design Factor based on EN 13155 and ASME B30.20.



IPTK



IPTKW

For transferring steel beams and attaching tackle eye

- Available in capacities of 2 through 25 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 75 to 1020mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.

IPTKU



IPTKUM

Load Tested

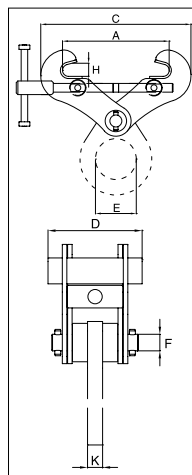
IPTK: with hoisting eye / **IPTKW:** without hoisting eye

IPTKU: with hinged hoisting eye / **IPTKUD:** with double locking device

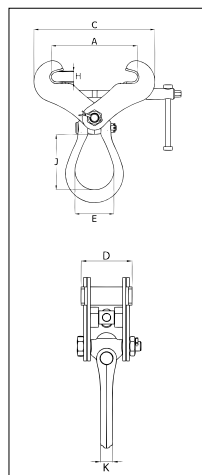
IPTKUM: Suitable as anchor device for personnel fall arrest equipment

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)							
				Jaw A	C	D	E	F	H	J	K
IPTK	2	2700996	6.0	75 - 190	A + 80	125	75	-	25	-	20
IPTK	3	2700997	6.5	75 - 190	A + 80	125	75	-	25	-	20
IPTK	4	2700998	8.5	150 - 280	A + 100	125	75	-	35	-	20
IPTK	5	2700994	11.0	120 - 350	A + 195	125	75	-	40	-	20
IPTK	25	2702999	225	450 - 1020	A + 220	500	125	-	76	-	45
Without Hoisting Eye											
IPTKW	2	2700966	4.0	75 - 190	A + 80	125	-	28	25	-	-
IPTKW	3	2700967	4.5	75 - 190	A + 80	125	-	28	25	-	-
IPTKW	4	2700968	6.3	150 - 280	A + 100	125	-	33	35	-	-
IPTKW	5	2700969	8.8	120 - 350	A + 195	125	-	33	40	-	-
With Improved Hinged Hoisting Eye											
IPTKU	2	2707996	5.7	75 - 190	A + 100	121	76	-	22	99	19
IPTKU	3	2707997	6.4	75 - 190	A + 100	121	89	-	22	122	22
IPTKU	4	2707998	12.1	120 - 280	A + 150	140	89	-	40	122	22
IPTKU	5	2707994	14.5	120 - 350	A + 175	140	89	-	40	122	22
IPTKU	10	2707970	41.0	200 - 460	A + 300	200	105	-	60	152	26
Suitable as anchor device for personnel fall arrest equipment - standard according to EN 795											
IPTKUM	1 person	2709991	6	75 - 190	A + 100	165	76	-	22	99	19
With Optional Double Locking Device											
IPTKUD	2	2709996	6.0	75 - 190	A + 100	165	76	-	22	99	19
IPTKUD	3	2709993	6.6	75 - 190	A + 100	165	89	-	22	122	22
IPTKUD	4	2709995	12.3	120 - 280	A + 150	185	89	-	40	122	22
IPTKUD	5	2709994	15.3	120 - 350	A + 175	185	89	-	40	122	22
IPTKUD	10	2709970	43.0	200 - 460	A + 300	215	105	-	60	152	26

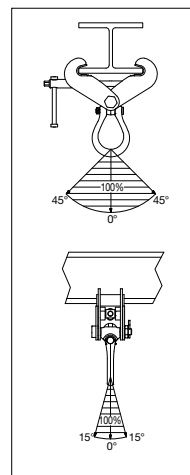
* Design Factor based on EN 13155 and ASME B30.20.



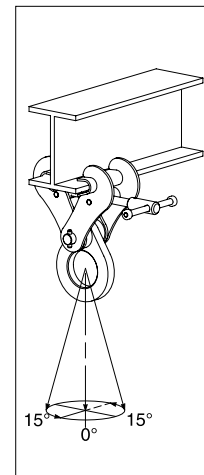
IPTK/IPTKW



IPTKU(D)(M)



IPTKU(D)

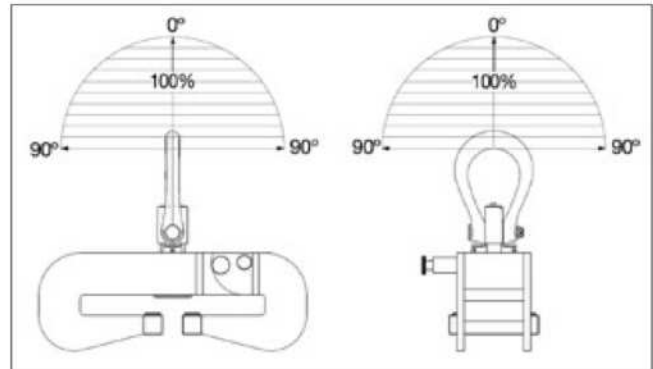
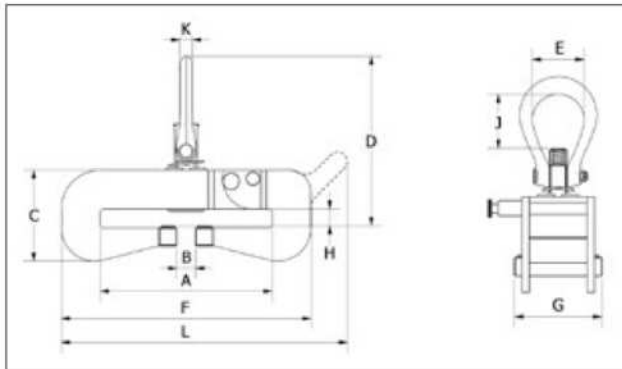


IPTK(W)

IPTKA



- Maintains full WLL at angles up to 90°.
- Bail swivels 360° and pivots 180°.
- Easy to close and open with a hinged body with self-locking device.
- Easy to handle with handgrips.
- No interference or space limitations when tightening the clamp.
- Multi-purpose hoisting eye to be used for tightening as well as for hoisting.
- Light weight design.
- All parts are replaceable.
- Maintenance and repair kits are available.
- Can be used for a wide range of profile sizes.



IPTKA Universal Beam Clamp

Load Rating

Model	WLL (t)	Stock No.	Weight (kg)	Dimensions (mm)											
				A	B	C	D	E	F	G	H	J	K	L	
IPTKA	3	2707111	15.9	100 - 205	34	149	307	89	310	130	6 - 26	94	22	369	
IPTKAJ1	3	2707116	14.2	70 - 125	24	134	297	89	257	130	6 - 26	94	22	315	
IPTKAJ2	3	2707117	16.0	100 - 205	54	164	322	89	310	130	20 - 40	94	22	369	
IPTKA	5	2707065	23.3	100 - 305	34	164	306	89	450	150	6 - 26	94	22	-	
IPTKAJ1	5	2707114	16.9	70 - 125	24	139	296	89	297	150	6 - 26	94	22	336	
IPTKAJ2	5	2707115	23.2	100 - 305	74	179	321	89	450	150	20 - 40	94	22	-	
IPTKA	10	2707118	62	140 - 405	74	234	450	121	600	220	12 - 42	152	30	-	
IPTKA	15	2707124	71	140 - 405	74	244	450	121	630	220	12 - 42	152	30	-	



IPBCF / IPBCNS



For the lifting and transfer of wide flange beam sections and plate girders

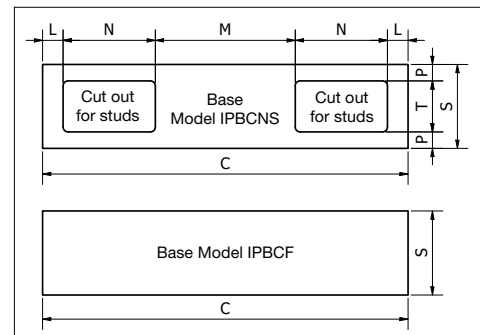
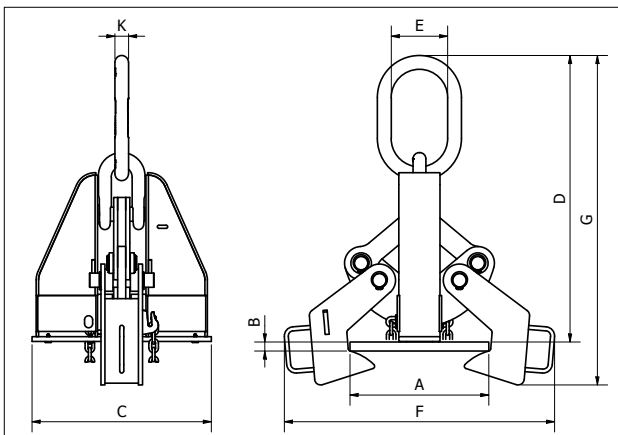
- When lifting, these beam clamps grip the beam at three points, and when properly balanced and safely guided, the beam can be handled even if the clamp is slightly off center lengthwise.
- Capacities: 4.5 through 32 metric tons. (higher Working Load Limits are available upon request).
- Eliminates the need for slings, chokers, and spreader bars.
- When applied to load, the tongs automatically open and slide under the flange of the beam.
- Center plate and gripping tongs work together - the heavier the beam, the greater the clamping pressure.
- Model IPBCNS clamps have a recessed base to accept studs welded to the beam surface.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.

Beam Clamps

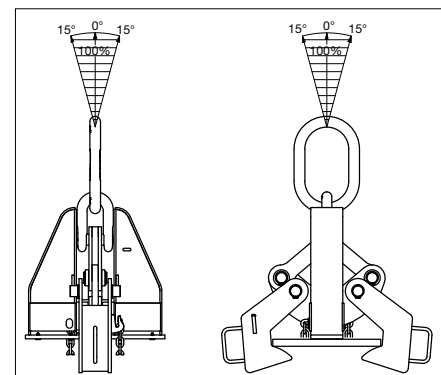
Model No.	WLL (t)*	Stock No.	Weight Each (kg)	Flange Grip Range (mm)		Dimensions (mm)					
				Width (A)	Thickness (B)	C	D	E	F	G	K
IPBCF	4.5	2702000	29.4	102 - 254	13 - 25	348	536 - 452	95	338 - 475	602 - 531	21
IPBCNS	13.5	2702018	62.0	178 - 432	13 - 51	444	775 - 592	140	505 - 749	894 - 719	34
IPBCNS	22.5	2702036	132	406 - 610	25 - 76	596	1012 - 812	152	775 - 969	1140 - 982	44
IPBCNS	32	2702054	240	406 - 914	41 - 102	730	1189 - 1023	178	792 - 1348	1458 - 1258	51

Design factor based on EN 13155 and ASME B30.20.

NOTE: Control the beam at all times. Beams should be gripped as near the center as possible. Snubbing lines at each end must be used to control excessive twisting or swinging, and to guide the beam to its proper place. Each lifting situation may have a specific demand which should be addressed before lifting.



Base Stock No.	Base Dimensions (mm)						
	C	L	M	N	P	S	T
IPBCF	348	-	-	-	-	76	-
IPBCNS	444	25	170	112	20	102	62
IPBCNS	596	33	190	170	30	152	92
IPBCNS	730	49	226	203	30	152	92

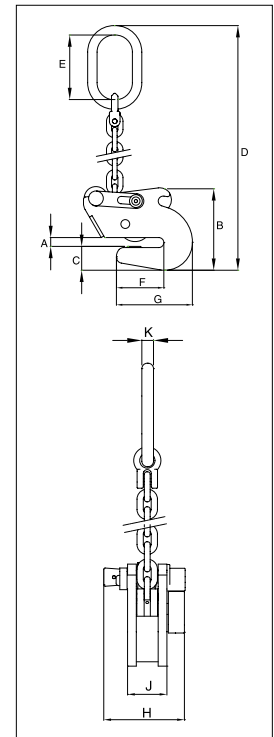


IPSTARTEC11



For Lifting, Transferring and Controlled Tilting of Steel Beams

- Available in capacities of 1.5 and 2.5 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: 6 to 20mm.
- Welded alloy steel body for strength and smaller size. Forged alloy, components where required.
- Equipped with handle for easy placement.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance replacement parts are available.

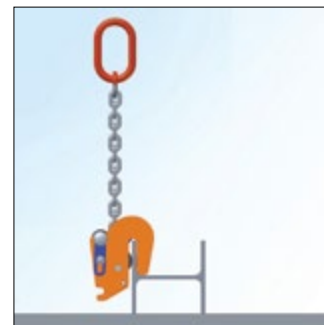
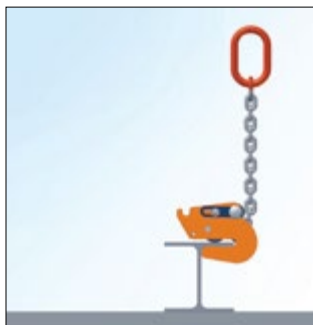
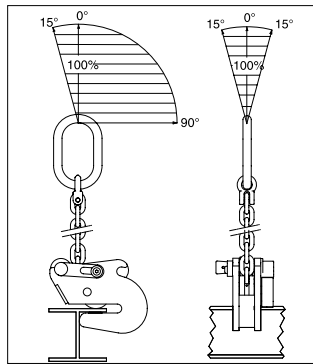


Load Rating

Model IPSTARTEC11

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPSTARTEC11	1.5	2701812	6.6	6 - 12	140	39	575	110	81	129	126	54	16
IPSTARTEC11	2.5	2701822	14.5	6 - 20	210	55	725	135	115	182	140	74	18

* Design Factor based on EN 13155 and ASME B30.20.



IPSC10

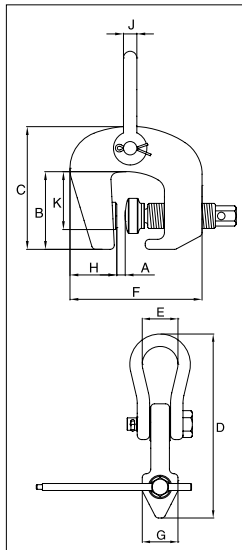


Suitable for use in positioning & turning steel plates and sections. Not to be used as a lifting clamp.

- Available in capacities of 1.5 and 3 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: 0 to 60mm.
- Suitable for steel with a surface hardness up to 300 HV10.
- Forged alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.

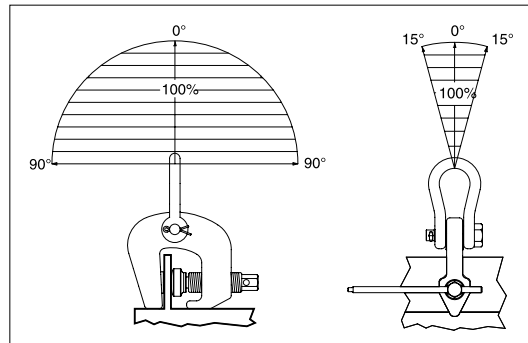
Model IPSC10

Load Rated



Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPSC10	1.5	2703857	4.6	0 - 40	91	143	251	44	156	50	45	16	65
IPSC10	3	2703858	8.4	0 - 60	109	175	310	51	200	62	55	19	83

* Design Factor based on EN 13155 and ASME B30.20.

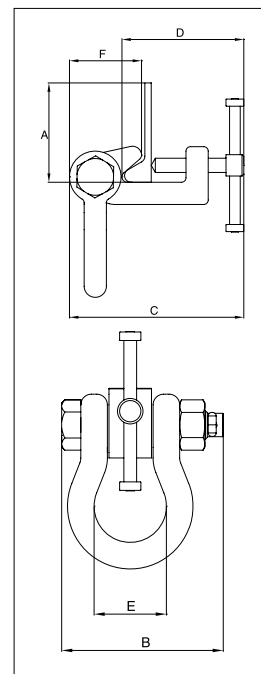


IPBTO10



For use as a temporary tackle eye in spaces that have been reinforced with HP (bulb) profiles such as engine rooms and shipsections.

- Available in capacities of 1.5 through 6 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: HP 160mm to HP 430mm
- Alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.

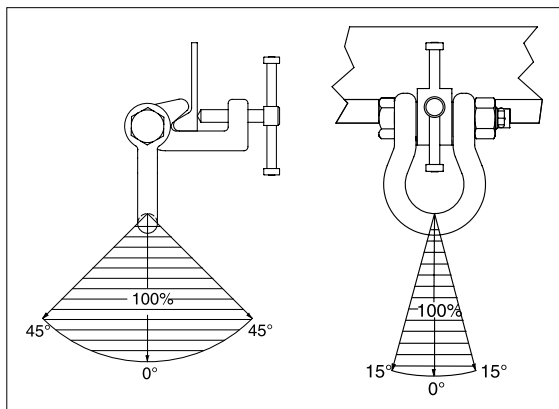


Model IPBTO10

Load Rated

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)					
				Profile A †	B	C	D	E	F
IPBTO10	1.5	2700980	4.3	HP 160-240	137	188-209	129-150	68	81
IPBTO10	3	2700986	6.0	HP 240-320	137	188-217	145-174	68	78
IPBTO10	6	2700991	13.0	HP 300-430	185	255-297	195-236	82	102

* Design Factor based on EN 13155 and ASME B30.20. † Profile A is the type of Holland Bulb (HP) style and size material.

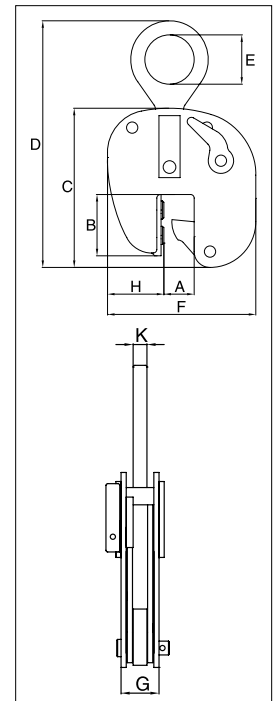


IPBUZ



For Lifting, Transferring and Placing Bulb Profiles onto Ship's Hulls Perpendicularly

- Available in capacities of .75 through 3.75 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: HP 120mm to HP 430mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.



Load Rated

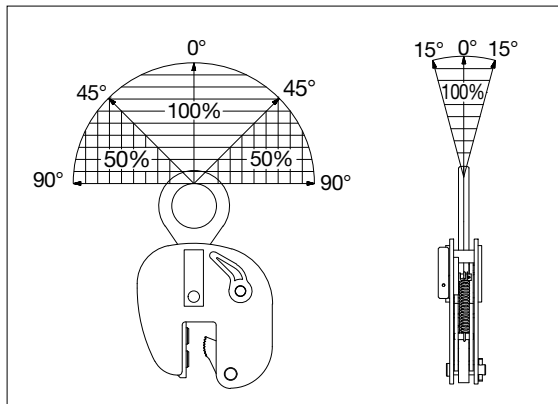
Model IPBUUZ: with Universal Hoisting Eye

Model IPBUZ: with Fixed Hoisting Eye

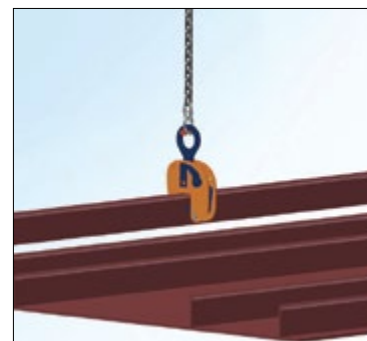
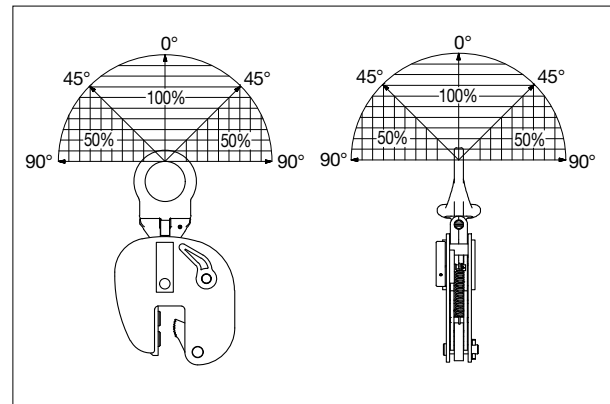
Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)								
				Profile A †	B	C	D	E	F	G	H	K
IPBUUZ	0.75	2705601	8.5	HP 120-200	85	226	390	70	210	61	70	16
With fixed hoisting eye												
IPBUZ	0.75	2705600	7.0	HP 120-200	85	226	390	70	210	61	70	16
IPBUZ	1.5	2705701	15.0	HP 220-430	196	397	568	70	256	69	48	16
IPBUZ	3.75	2705702	29.2	HP 220-430	238	438	565	80	355	64	100	20

* Design Factor based on EN 13155 and ASME B30.20. † Profile A is the type of Holland Bulb (HP) style and size material.

IPBUZ



IPBUUZ



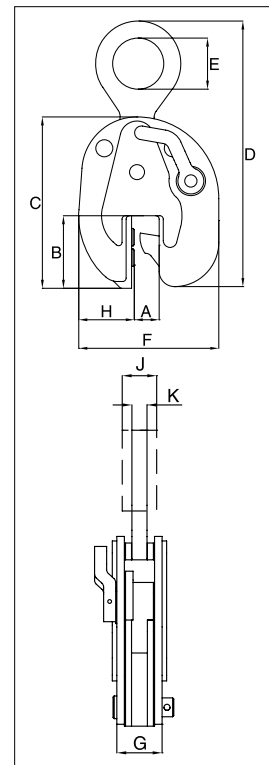
12

IPSBUUZ



For Lifting, Transferring and Placing Complete Shipsections

- Available in capacities of 4.5 through 22.50 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: HP 100mm to HP 430mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.



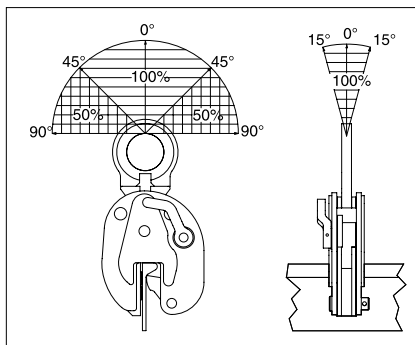
Model IPSBUUZ / IPSBUSUZ: With Universal Hoisting Eye
Model IPSBUZ / IPSBUSZ: With Fixed Hoisting Eye

Load Rated

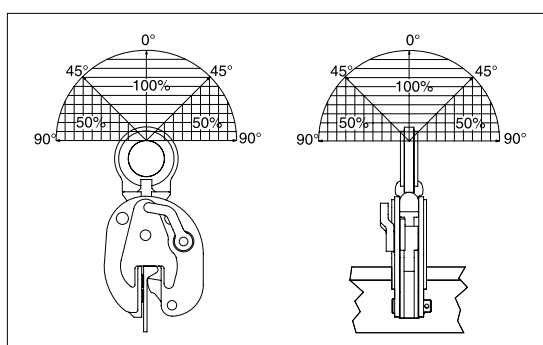
Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)									
				Profile A†	B	C	D	E	F	G	H	J	K
IPSBUUZ	4.5	2705771	15.5	HP 100-160	107	252	450	75	206	96	82	36	20
IPSBUUZ	9	2705773	43.0	HP 100-160	105	274	491	80	248	123	104	44	20
IPSBUSUZ	4.5	2705772	38.0	HP 180-430	227	428	635	75	377	95	128	-	20
IPSBUSUZ	9	2705774	69.0	HP 180-430	227	478	718	80	425	118	155	44	25

Design Factor based on EN 13155 and ASME B30.20. † Profile A is the type of Holland Bulb (HP) style and size material.

IPSBUZ



IPSBUUZ

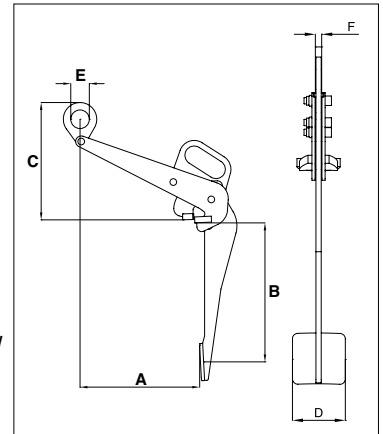


IPDV



Designed to lift, move and transfer 50-55 gallon drums with steel tops

- Available in capacity of .5 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: IPDV - 300mm and IPVK - 17mm.
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance and repair kits are available.

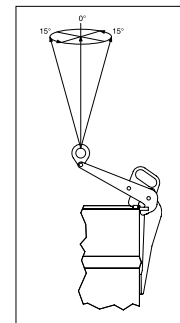


Model IPDV

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)					
				Jaw A	B	C	D	E	F
IPDV	0.5	2700118	7.1	300	375	290	100	50	12

* Design Factor based on EN 13155 and ASME B30.20.

Load Tested



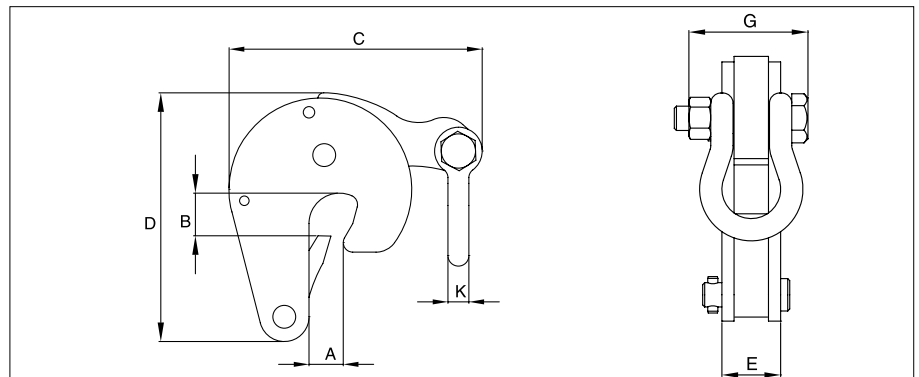
IPVK



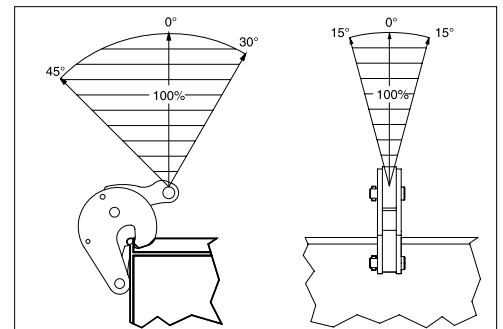
Model IPVK

Model	Working Load Limit (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)						
				Jaw A	B	C	D	E	G	K
IPVK	0.5	2700116	1.6	0 - 17	26	135	132	29	51	11

* Design Factor based on EN 13155 and ASME B30.20.



12

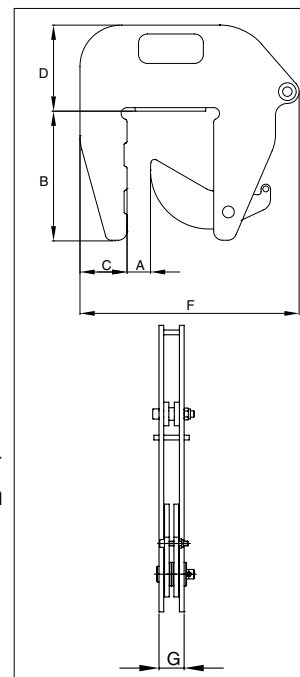


IPCC



For Lifting and Transferring Concrete Pipe Sections and Wells

- Available in capacity of 1 metric tons (higher Working Load Limits are available upon request).
- Jaw opening available: 40 - 140mm.
- Welded alloy steel body for strength and smaller size. Forged alloy, components where required.
- Equipped with handle for easy placement.
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.
- Maintenance replacement parts are available.

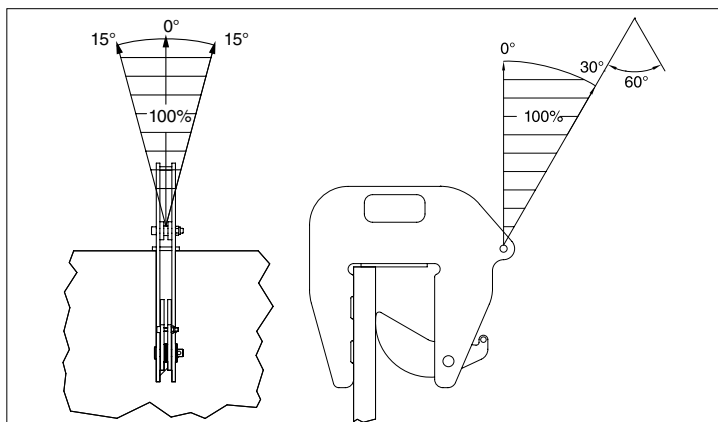


Load Rated

Model IPCC

Model	Working Load Limit Per Pair (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)					
				Jaw A	B	C	D	F	G
IPCC	1	2700037	9.2	40-140	225	80	146	372	37

* Design Factor based on EN 13155 and ASME B30.20.

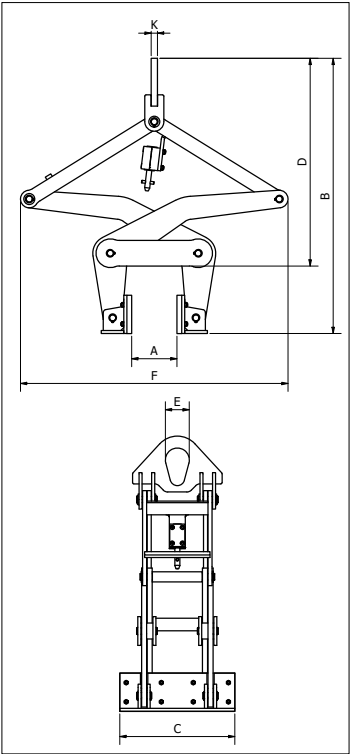


IPBG



The CrosbyIP Barrier Grab provides a fast and efficient method for handling road barriers.

- Hands-free operation.
- Welded alloy steel construction for strength and smaller size.
- Comes equipped with polyurethane pads. (Replacement kits are available.)
- Individually Proof Tested to 2 times the Working Load Limit with certification.
- Company name (Crosby IP), logo, Working Load Limit and jaw opening permanently stamped on body.
- Each product is individually serialized, with the serial number and Proof Load test date stamped on body. User manual with test certificate is included with each clamp.



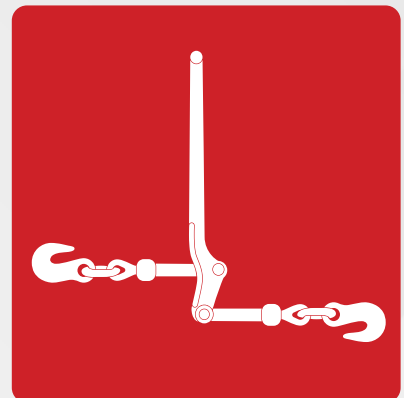
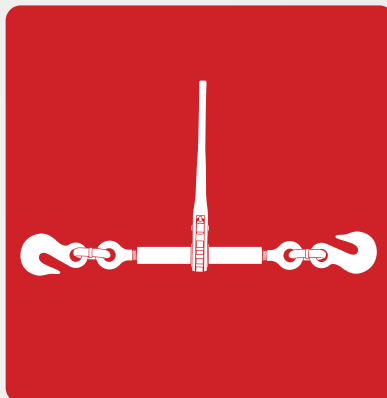
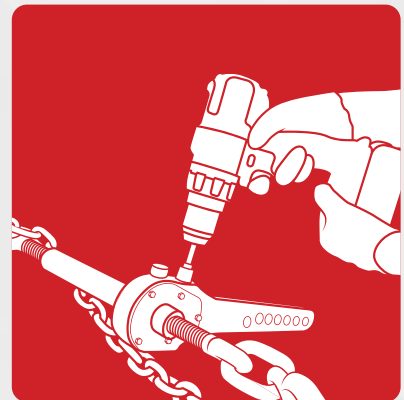
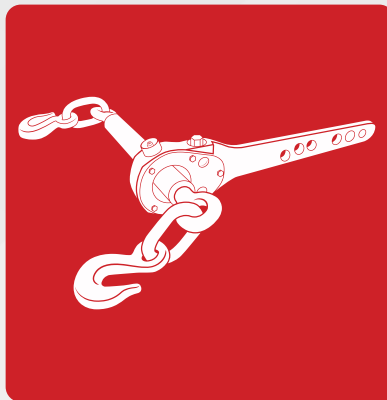
Barrier Grab

Model	WLL (t)*	Stock No.	Weight Each (kg)	Dimensions (mm)						
				Jaw A	B	C	D	E	F	K
IPBG	4	2704018	156	152 (min.)	1149	457	882	95	1038	25
				305 (max.)	861	457	598	95	1128	25

* Design factor based on EN13155 and ASME B30.20.

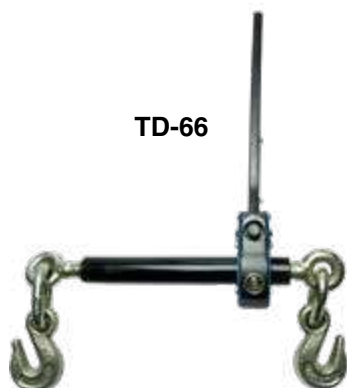
LOAD SECUREMENT

The safest and strongest in load securement with renowned premier brands.



EFFICIENT & ERGONOMIC LOAD SECUREMENT TECHNOLOGY

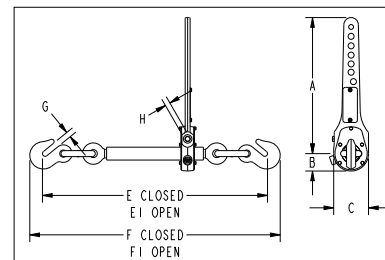
Speedbinders is changing the load binder industry with its patented Torque Drive technology. Our line of products provide considerable time saving benefits for drivers as well as enhanced benefits by eliminating repetitive, straining operations.



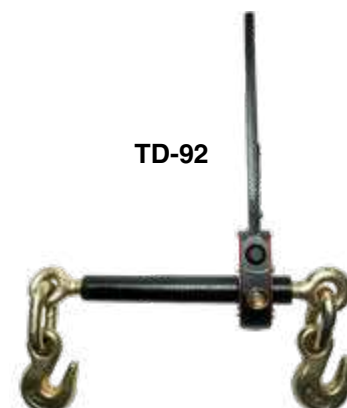
TD-66



- Blue marking
- Common applications: Light equipment transport & logging
- 3:1 design factor



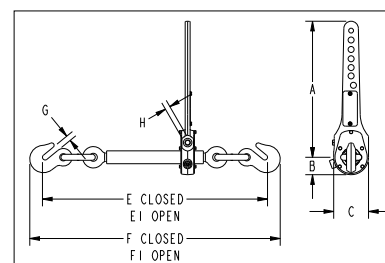
Model	Stock No.	Min-Max Chain Size (mm)	Working Load Limit (kg)	Proof Load (kg)	Weight Each (kg)	Dimensions (mm)								
						A	B	C	E	E1	F	F1	G	H
TD-66	3674481	8 - 10	2994	4491	6	357	46	91	585	813	642	870	13	13



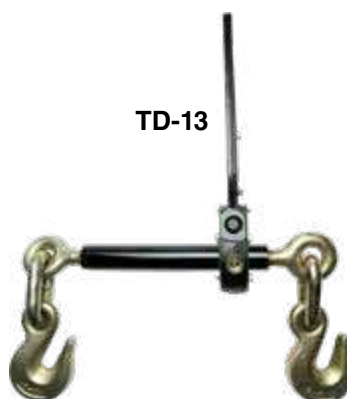
TD-92



- Red marking
- Common applications: Equipment transport, heavy towing & steel coil transport
- 3:1 design factor



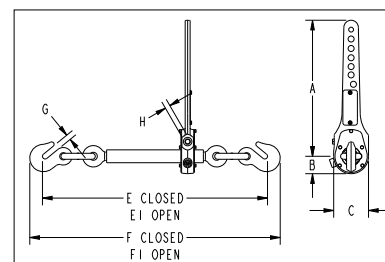
Model	Stock No.	Min-Max Chain Size (mm)	Working Load Limit (kg)	Proof Load (kg)	Weight Each (kg)	Dimensions (mm)								
						A	B	C	E	E1	F	F1	G	H
TD-92	3674490	10 - 13	4173	6260	7	357	46	91	591	819	657	886	14	13



TD-13



- Green marking
- Common applications: Equipment transport, heavy hauling & steel coil transport
- 3:1 design factor



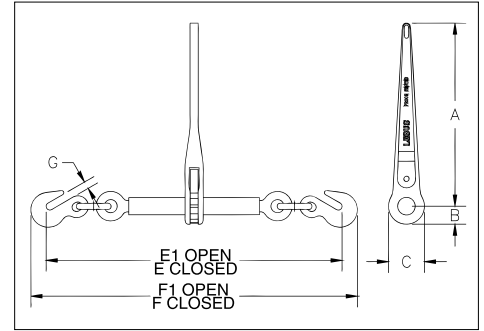
Model	Stock No.	Min-Max Chain Size (mm)	Working Load Limit (kg)	Proof Load (kg)	Weight Each (kg)	Dimensions (mm)								
						A	B	C	E	E1	F	F1	G	H
TD-13	3674499	13 - 16	5897	8846	9	357	46	91	671	899	750	979	18	13

Spare drive bolts and grease zerks available

APPLICATION AND WARNING INFORMATION
SECTION 17



Crosby LEBUS L-140



Load Rated

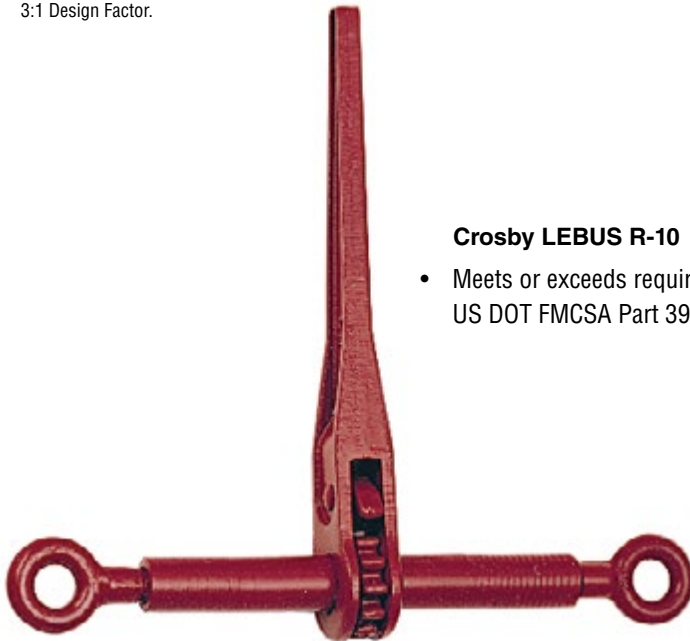
- Upgraded for use with Grades 70, 80 and 100 Chain.
- Utilizes standard Crosby A-323 Alloy Eye Grab Hooks.
- New design one piece forged handle.
- Continuous take-up feature provides finite adjustment to tie down load.
- One piece assembly, no bolts or nuts to loosen.
- Ratchet spring is rust proofed.
- All load bearing or holding parts forged.
- Easy operating positive ratchet.
- Binders shown with Proof Loads have been individually proof tested to values shown, prior to shipment.
- Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.
- Matches the Working Load Limit of Grade 100 chain except for 16mm size.

APPLICATION AND WARNING INFORMATION
SECTION 17

Crosby LEBUS L-140 Standard Ratchet Type Load Binders

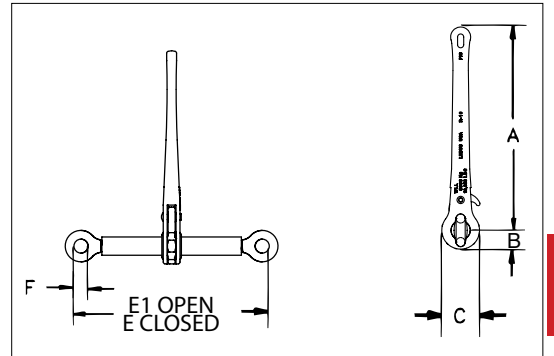
Model	Stock No.	Min-Max Chain Size (mm)	Working Load Limit (t)	Proof Load (kN)	Weight Each (kg)	Handle Length (mm)	Barrel Length (mm)	Take Up (mm)	Dimensions (mm)							
									A	B	C	E	E1	F	F1	G
R-7	1048404	8 - 10	3.99	79	5.49	356	254	203	356	35.1	70.0	583	786	638	842	12.7
R-A	1048422	10 - 13	6.80	134	6.66	356	254	203	356	35.1	70.0	641	845	702	905	16.0
R-C	1048440	13 - 16	7.26	143	6.60	356	254	203	356	35.1	70.0	670	873	748	951	18.3

3:1 Design Factor.



Crosby LEBUS R-10

- Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.



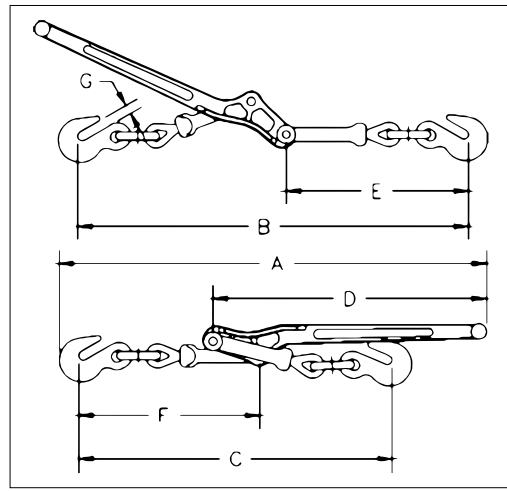
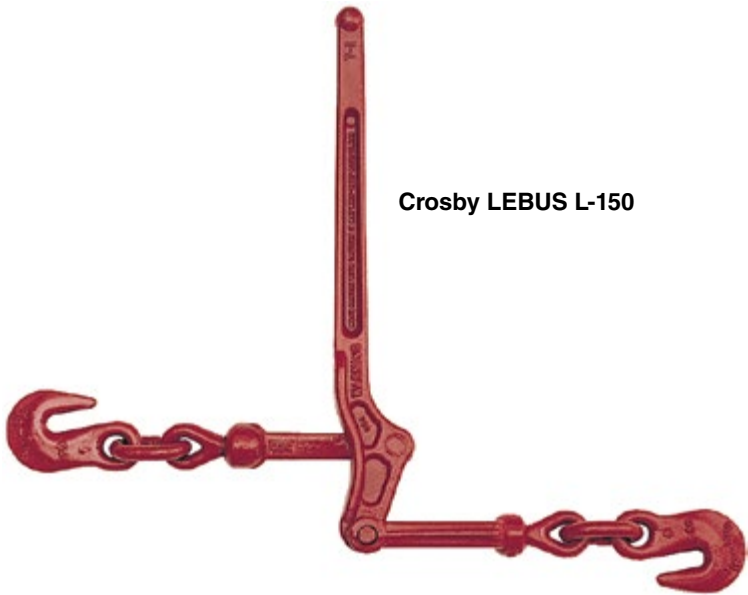
13

Crosby LEBUS R-10 Binder without Links and Hooks

Model	Stock No.	Working Load Limit (t)	Weight Each (kg)	Handle Length (mm)	Barrel Length (mm)	Take Up (mm)	Dimensions (mm)					
							A	B	C	E	E1	F
R-10	1048468	7.26	3.65	356	254	203	356	35.1	70.0	356	559	25.4

3:1 Design Factor.

Crosby LEBUS L-150



APPLICATION AND WARNING INFORMATION
SECTION 17

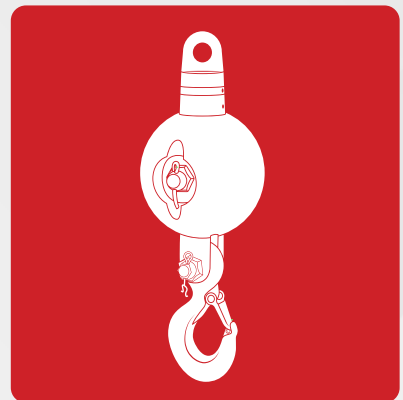
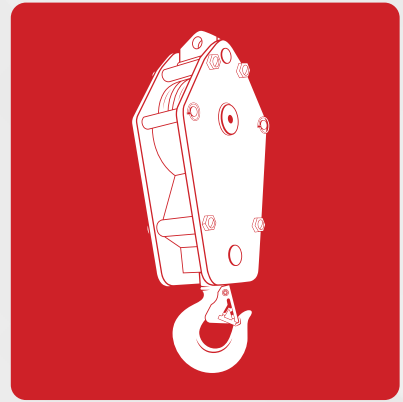
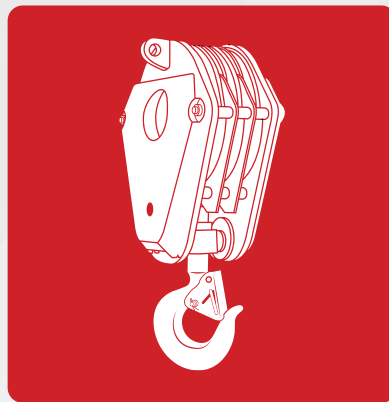
- Extra heavy construction at leverage point to prevent spreading. Heel of binder toggles away from load, permitting easy release.
- Ball and socket swivel joints at hook assemblies permit a straight line pull.
- Binders shown with Proof Loads have been individually proof tested to values shown, prior to shipment.
- Forged steel – Quenched & Tempered.
- Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.

Crosby LEBUS L-150 Standard Lever Type Load Binders

Model	Stock No.	Std. Pkg.	Min-Max Chain Size (mm)	Working Load Limit (t)	Proof Load (kN)	Ultimate Load (t)	Weight Each (kg)	Handle Length (mm)	Take Up (mm)	Dimensions (mm)						
										A	B	C	D	E	F	G
7-1	1048128	4	8 - 10	2.45	48	8.63	3.18	406	114	613	562	454	406	264	264	12.7
A-1	1048146	4	10 - 13	4.17	82	15.0	5.66	475	114	730	654	540	475	313	314	16.0
C-1	1048164	4	13 - 16	5.90	116	20.9	8.93	533	121	794	756	635	533	372	349	18.3

BLOCKS

Wide range of blocks and overhaul balls, all made in the USA.



IMPORTANT CONSIDERATIONS

Some of the most important considerations in your block requirements are:

Available bearing types



Bronze Bushed
SAE 660 bronze with
figure 8 oil groove



Double Row Sealed
Tapered Roller Bearing



Straight Roller
Bearing



Full Complement
Cylindrical Roller Bearing

The sheave

In the image on the right, note the groove form with proper line support and gently rounded lips to prevent line chafing when fleet angles are present.

The sheave cross-section is machined in the image to the right, and the dense martensitic structure is clearly outlined by the etching.

This flame-hardened surface in the wear area of the sheave always presents a smooth, uncorrugated, proper size groove – face to the line. Sheaves 356 mm (14in) diameter and larger are flame hardened in groove to minimum 35 Rockwell C.

Smaller sheaves can be flame hardened on special order.



Unretouched photograph
of a section cut from a flame-
hardened McKissick sheave
(etched 2-1/2 minutes)

Additional connections

All crane and construction blocks can be furnished with:



Swivel shackle in selected
capacities with bronze thrust
or roller thrust bearing



Single hook in capacities to
300 metric tons



Duplex swivel hook in standard
capacities up to 1,000 metric tons
(larger sizes available)



Quad swivel hook from 200
Metric tons and larger

ORDERING INSTRUCTIONS

The following information should be specified when ordering blocks and sheaves:

Blocks

- Wire rope diameter
- Working Load Limit
- Number of sheaves
- Minimum overhaul weight
- Sheave diameter
- Hook or shackle fittings
- Type of bearing: bronze bushed (BB), roller (RB), tapered roller (TB)

All crane and some construction blocks are available as shown or with swivel shackle assembly, duplex swivel hook assembly, or quadruple hook assembly. Various combinations of bearing assemblies can be furnished, such as bronze bushed sheaves and swivel hooks, roller or tapered roller bearing sheaves and hook assemblies, or a combination of bronze, roller, or tapered roller bearings.

Sheaves

- Wire rope diameter
- Sheave OD
- Shaft or bore size
- Bearing type or blain bore
- Hub width & rim width
- Stock number (if known)
- Special machine features
- Special finishes

If hub or rim dimensions necessitate a dimension other than those shown in this catalog, please contact The Crosby Group for minimums and maximums. Tapered roller bearing sheaves show width over bearing cones, which cannot be altered. Price and delivery for your special needs, if not shown, are available upon request.

UB-500 Series Top Swiveling Overhaul Balls



With
S320
Eye Hook



With
S1316 A
SHUR-LOC®
Eye Hook



Both styles available with
optional **McKissick®**
Wedge Socket Assembly
or **S-422 TERMINATOR**
Wedge Socket



UWO 422T
TERMINATOR
Wedge Only

- Sizes 3.6 tonnes through 27 tonnes are available with Crosby's S1316A positive-locking SHUR-LOC® hook, which may be used for lifting personnel. Meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B).
- Design Factor 4:1
- The top swivel design on the UB-500 assures the ball remains stationary if the wireline spins.
- The swivel incorporates a sealed roller thrust bearing together with a grease fitting for easy lubrication.
- Each ball can be equipped with the new McKissick® US-422T Wedge Socket which can be easily adjusted to fit various sizes of wireline by changing the wedge (ensure that correct wedge is used for selected wireline size).
- All hooks used on UB-500 Overhaul Balls (S320, S320N & S1316A) are forged from alloy steel. The S320 and S320N hooks come complete with latches.
- The S320 hook (PL latch) and the S320N hook (S4320 latch), with the proper latch attached, may be used for personnel lifting when secured with proper device (bolt, nut and pin for the PL latch; Cotter pin for the S4320 latch). Meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B).

Overhaul Ball Assembly

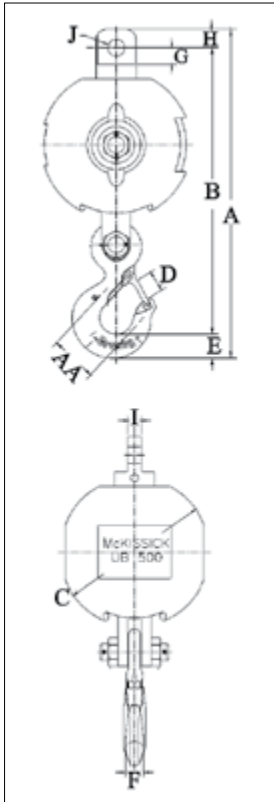
Optional US-422T Wedge Sockets

McKissick® UB-500 Model No.	UB-500 "E" Eye Hook Stock No.	UB-500 "S" SHUR-LOC® Stock No.	Working Load Limit (t)	Weight Each (kg)	Wireline Size (mm)	Model No.	Wedge Socket Assy. Stock No.	Weight Each (kg)	Wedge Only Stock No.	Weight Each (kg)
MB4T35E	1036000*	1036005	3.6	26.3	10	US4T	1044300	2.09	1047310	2.09
MB4T85E	1036009*	1036018	3.6	46.3	11	US4T	1044309	2.09	1047301	2.09
MB4T150E	1036027*	1036032	3.6	73.5	13	US4T	1044318	2.09	1047329	2.09
MB4T200E	1036036*	1036041	3.6	91.2	13	US5T	1044327	3.86	1047338	3.86
MB7T85E	1036045*	1036050	6.3	49.4	14	US5T	1044336	3.86	1047347	3.86
MB7T150E	1036054*	1036063	6.3	77.1	16	US5T	1044345	3.86	1047356	3.86
MB7T200E	1036072*	1036077	6.3	95.3	16	US6T	1044354	4.26	1047365	4.26
MB7T285E	1036081*	1036086	6.3	146	19	US6T	1044363	4.26	1047374	4.26
MB10T150E	1036090*	1036095	9.0	98						
MB10T200E	1036099*	1036108	9.0	118						
MB10T285E	1036117*	1036122	9.0	166	16	US6T	1044354	4.26	1047365	4.26
MB10T350E	1036126*	1036131	9.0	183	19	US6T	1044363	4.26	1047374	4.26
MB10T650E	1036135*	1036140	9.0	326	22	US8T	1044404	14.3	1047425	14.3
MB12T150E	1036144*	1036520	10.8	98	26	US8T	1044417	14.7	1047431	14.7
MB12T200E	1036153*	1036529	10.8	117	28	US10T	1044426	25.1	1047440	25.1
MB12T285E	1036171*	1036538	10.8	166	32	US10T	1044435	26.3	1047459	26.3
MB12T350E	1036180*	1036547	10.8	183						
MB12T650E	1036189*	1036556	10.8	326						
MB15T200E	1036198*	1036565	13.5	135						
MB15T350E	1036207*	1036574	13.5	207						
MB15T650E	1036216*	1036583	13.5	342						
MB15T1150E	1036225*	1036592	13.5	595						
MB20T200E	1036234*	1036611	18.0	135	16	US8AT	1044372	9.0	1047383	9.0
MB20T350E	1036243*	1036620	18.0	207	19	US8AT	1044381	9.3	1047392	9.3
MB20T650E	1036252*	1036629	18.0	342	22	US8T	1044404	14.3	1047425	14.3
MB20T1150E	1036261*	1036638	18.0	595	26	US8T	1044417	14.7	1047431	14.7
MB25T350E	1036270	1036647	22.5	242	28	US10T	1044426	25.1	1047440	25.1
MB25T650E	1036279	1036656	22.5	392	32	US10T	1044435	26.3	1047459	26.3
MB25T1150E	1036288	1036665	22.5	645						
MB30T650E	1036297	1036674	27.0	392						
MB30T1150E	1036306	1036683	27.0	645						

4:1 Design Factor. * Utilizes Crosby "N" style hooks with integrated latch. Replacement latch kit is S-4320. PL latch and S-4055 latch will not fit. Standard Crosby S-5 Thrust style swivels can not be used with UB-500 Overhaul Balls. For replacement swivels, contact Crosby Customer Service.

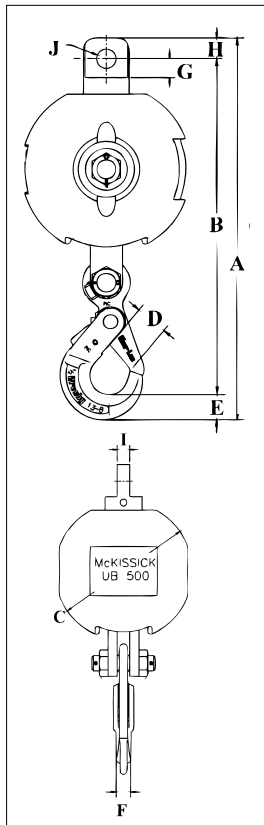
UB-500 TOP SWIVEL OVERHAUL BALLS

UB-500E Top Swivel Overhaul Balls with 320 Eye Hooks



Model No.	UB-500 "E" Stock No.*	Dimensions (mm)										
		A	B	C	D	E	F	G	H	I	J	AA
MB4T35E	1036000*	510	439	191	34.5	36.6	28.4	47.8	35.1	22.4	33.3	63.5
MB4T85E	1036009*	533	461	235	34.5	36.6	28.4	47.8	35.1	22.4	33.3	63.5
MB4T150E	1036027*	558	487	286	34.5	36.6	28.4	47.8	35.1	22.4	33.3	63.5
MB4T200E	1036036*	568	496	318	34.5	36.6	28.4	47.8	35.1	22.4	33.3	63.5
MB7T85E	1036045*	589	517	235	40.9	46.0	35.1	47.8	35.1	22.4	33.3	76.0
MB7T150E	1036054*	624	543	286	40.9	46.0	35.1	47.8	35.1	22.4	33.3	76.0
MB7T200E	1036072*	632	551	318	40.9	46.0	35.1	47.8	35.1	22.4	33.3	76.0
MB7T285E	1036081*	657	576	353	40.9	46.0	35.1	47.8	35.1	22.4	33.3	76.0
MB10T150E	1036090*	799	691	286	53.0	57.0	41.1	70.0	51.0	22.4	45.2	102
MB10T200E	1036099*	808	700	318	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB10T285E	1036117*	832	724	353	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB10T350E	1036126*	846	738	381	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB10T650E	1036135*	884	776	456	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB12T150E	1036144*	799	691	286	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB12T200E	1036153*	808	700	318	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB12T285E	1036171*	832	724	353	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB12T350E	1036180*	846	738	381	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB12T650E	1036189*	909	776	456	53.0	57.0	41.1	70.0	51.0	31.8	45.2	102
MB15T200E	1036198*	955	828	318	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB15T350E	1036207*	986	859	381	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB15T650E	1036216*	1022	895	456	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB15T1150E	1036225*	1072	945	549	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB20T200E	1036234*	955	828	318	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB20T350E	1036243*	986	859	381	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB20T650E	1036252*	1022	895	456	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB20T1150E	1036261*	1072	945	549	76.5	76.0	60.5	60.5	51.0	31.8	45.2	127
MB25T350E	1036270	1198	1021	381	76.0	92.0	76.0	84.0	70.0	44.5	45.2	165
MB25T650E	1036279	1248	1086	456	76.0	92.0	76.0	84.0	70.0	44.5	45.2	165
MB25T1150E	1036288	1297	1135	549	76.0	92.0	76.0	84.0	70.0	44.5	45.2	165
MB30T650E	1036297	1248	1086	456	76.0	92.0	76.0	84.0	70.0	44.5	45.2	165
MB30T1150E	1036306	1297	1135	549	76.0	92.0	76.0	84.0	70.0	44.5	45.2	165

4:1 Design Factor. *3.6 short Ton through 27 short Ton models use Crosby "N" style hooks with integrated latch.



UB-500S Top Swivel Overhaul Balls with SHUR-LOC® Hooks

Model No.	UB-500 "S" Stock No.	Dimensions (mm)										
		A	B	C	D	E	F	G	H	I	J	
MB4T35S	1036005	525	462	191	46.5	29.2	23.9	47.8	35.1	22.4	33.3	
MB4T85S	1036018	547	484	235	46.5	29.2	23.9	47.8	35.1	22.4	33.3	
MB4T150S	1036032	573	509	286	46.5	29.2	23.9	47.8	35.1	22.4	33.3	
MB4T200S	1036041	582	519	318	46.5	29.2	23.9	47.8	35.1	22.4	33.3	
MB7T85S	1036050	607	541	235	53.5	42.2	29.5	47.8	35.1	22.4	33.3	
MB7T150S	1036063	642	566	286	53.5	42.2	29.5	47.8	35.1	22.4	33.3	
MB7T200S	1036077	650	575	318	53.5	42.2	29.5	47.8	35.1	22.4	33.3	
MB7T285S	1036086	675	600	353	53.5	42.2	29.5	47.8	35.1	22.4	33.3	
MB10T150S	1036095	793	691	286	63.0	52.5	38.1	70.0	51.0	31.8	45.2	
MB10T200S	1036108	803	700	318	63.0	52.5	38.1	70.0	51.0	31.8	45.2	
MB10T285S	1036122	827	724	353	63.0	52.5	38.1	70.0	51.0	31.8	45.2	
MB10T350S	1036131	841	738	381	63.0	52.5	38.1	70.0	51.0	31.8	45.2	
MB10T650S	1036140	879	776	456	63.0	52.5	38.1	70.0	51.0	31.8	45.2	

UB-500 Series Non Swiveling Overhaul Balls



S320
Eye Hook



S1316 A
SHUR-LOC®
Eye Hook



Both styles available with
optional **McKissick®**
Wedge Socket Assembly
or **S-422 TERMINATOR**
Wedge Socket



UWO 422T
TERMINATOR
Wedge Only

- Sizes 3.6 short Tons through 13.5 short Tons are available with Crosby's S1316A "Positive Locking" SHUR-LOC® hook which may be used for lifting personnel. Meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B).
- Design Factor 4:1.
- Each ball can be equipped with the new McKissick® US-422T Wedge Socket which can be easily adjusted to fit various sizes of wireline by changing the wedge.

Key to McKissick® UB-500 Utility Overhaul Ball Model Number				
MB	4	T	35	E
↓	↓	↓	↓	↓
McKissick® Utility Overhead Ball	Working Load Limit (Tons)	Swivel Style T = Top NS = Non	Ball Only Weight	Hook Style E = 320 or 320N S = SHUR-LOC® Eye Hook

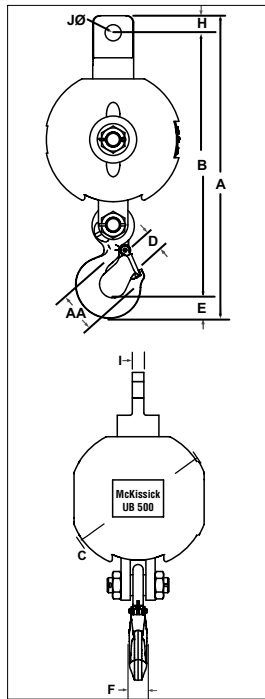
Overhaul Ball Assembly

Optional US-422T Wedge Sockets

McKissick® UB-500 Model No.	UB-500 "E" Eye Hook Stock No.*	UB-500 "S" SHUR-LOC® Stock No.	Working Load Limit (t)	Weight Each (kg)	Wire Rope Diameter (mm)	Model No.	Wedge Socket Assy. Stock No.	Weight Each (kg)	Wedge Only Stock No.	Weight Each (kg)
MB4NS35E	1036402	1036407	3.6	24.5						
MB4NS85E	1036411	1036416	3.6	44.5	10	US4T	1044300	2.09	1047310	2.09
MB4NS150E	1036420	1036425	3.6	71.5	11	US4T	1044309	2.09	1047301	2.09
MB4NS200E	1036429	1036434	3.6	90.7	13	US4T	1044318	2.09	1047329	2.09
MB7NS85E	1036438	1036443	6.3	47.2	13	US5T	1044327	3.86	1047338	3.86
MB7NS150E	1036447	1036452	6.3	74.8	14	US5T	1044336	3.86	1047347	3.86
MB7NS200E	1036456	1036461	6.3	92.9	16	US5T	1044345	3.86	1047356	3.86
MB7NS285E	1036465	1036470	6.3	143	16	US6T	1044354	4.26	1047365	4.26
					19	US6T	1044363	4.26	1047374	4.26
MB10NS150E	1036474	1036479	9.0	89.8						
MB10NS200E	1036483	1036488	9.0	110						
MB10NS285E	1036492	1036497	9.0	157						
MB10NS350E	1036501	1036506	9.0	175	16	US6T	1044354	4.26	1047365	4.26
MB10NS650E	1036510	1036511	9.0	318	19	US6T	1044363	4.26	1047374	4.26
MB12NS150E	1036519	—	10.8	89.8	22	US8T	1044404	14.3	1047425	14.3
MB12NS200E	1036528	—	10.8	109	26	US8T	1044417	14.7	1047431	14.7
MB12NS285E	1036537	—	10.8	157	28	US10T	1044426	25.1	1047440	25.1
MB12NS350E	1036546	—	10.8	175	32	US10T	1044435	26.3	1047459	26.3
MB12NS650E	1036555	—	10.8	318						
MB15NS200E	1036564	—	13.5	121	16	US8AT	1044372	9.0	1047383	9.0
MB15NS350E	1036573	—	13.5	193	19	US8AT	1044381	9.3	1047392	9.3
MB15NS650E	1036582	—	13.5	327	22	US8T	1044404	14.3	1047425	14.3
MB15NS1150E	1036591	—	13.5	581	26	US8T	1044417	14.7	1047431	14.7
					28	US10T	1044426	25.1	1047440	25.1
					32	US10T	1044435	26.3	1047459	26.3

4:1 Design Factor. *Utilizes Crosby "N" style hooks with integrated latch. Replacement latch kit is S-4320. PL latch and S-4055 latch will not fit.

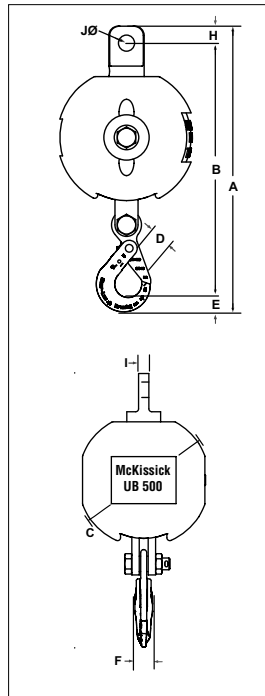
UB-500 NON SWIVEL OVERHAUL BALLS



UB-500NS Non Swivel Overhaul Balls with 320N Eye Hooks

Model No.	UB-500NS "E" Stock No.*	Dimensions (mm)									
		A	B	C	D	E	F	H	I	J	AA
MB4NS35E	1036402	510	439	191	34.5	36.6	28.4	35.1	19.1	33.3	63.5
MB4NS85E	1036411	533	461	235	34.5	36.6	28.4	35.1	19.1	33.3	63.5
MB4NS150E	1036420	558	487	286	34.5	36.6	28.4	35.1	19.1	33.3	63.5
MB4NS200E	1036429	568	496	318	34.5	36.6	28.4	35.1	19.1	33.3	63.5
MB7NS85E	1036438	589	517	235	40.9	46.0	35.1	35.1	19.1	33.3	76.0
MB7NS150E	1036447	624	543	286	40.9	46.0	35.1	35.1	19.1	33.3	76.0
MB7NS200E	1036456	632	551	318	40.9	46.0	35.1	35.1	19.1	33.3	76.0
MB7NS285E	1036465	657	576	353	40.9	46.0	35.1	35.1	19.1	33.3	76.0
MB10NS150E	1036474	799	691	286	53.0	57.0	41.1	51.0	31.8	45.2	102
MB10NS200E	1036483	808	700	318	53.0	57.0	41.1	51.0	31.8	45.2	102
MB10NS285E	1036492	832	724	353	53.0	57.0	41.1	51.0	31.8	45.2	102
MB10NS350E	1036501	846	738	381	53.0	57.0	41.1	51.0	31.8	45.2	102
MB10NS650E	1036510	884	776	456	53.0	57.0	41.1	51.0	31.8	45.2	102
MB12NS150E	1036519	799	691	286	53.0	57.0	41.1	51.0	31.8	45.2	102
MB12NS200E	1036528	808	700	318	53.0	57.0	41.1	51.0	31.8	45.2	102
MB12NS285E	1036537	832	724	353	53.0	57.0	41.1	51.0	31.8	45.2	102
MB12NS350E	1036546	846	738	381	53.0	57.0	41.1	51.0	31.8	45.2	102
MB12NS650E	1036555	909	776	456	53.0	57.0	41.1	51.0	31.8	45.2	102
MB15NS200E	1036564	955	828	318	76.5	76.0	60.5	51.0	31.8	45.2	127
MB15NS350E	1036573	986	859	381	76.5	76.0	60.5	51.0	31.8	45.2	127
MB15NS650E	1036582	1022	895	456	76.5	76.0	60.5	51.0	31.8	45.2	127
MB15NS1150E	1036591	1072	945	549	76.5	76.0	60.5	51.0	31.8	45.2	127

4:1 Design Factor. *Utilizes Crosby "N" style hooks with integrated latch.
Replacement latch kit is S-4320. PL latch and S-4055 latch will not fit.



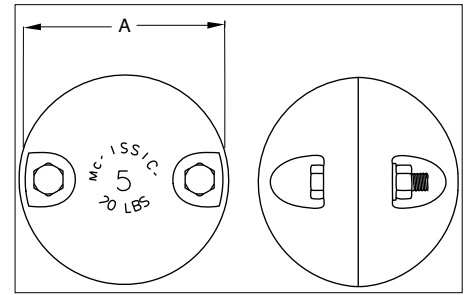
UB-500NS Non Swivel Overhaul Balls with SHUR-LOC® Hooks

Model No.	UB-500NS "S" Stock No.	Dimensions (mm)								
		A	B	C	D	E	F	H	I	J
MB4NS35S	1036407	525	462	191	46.5	29.2	23.9	35.1	19.1	33.3
MB4NS85S	1036416	547	484	235	46.5	29.2	23.9	35.1	19.1	33.3
MB4NS150S	1036425	573	509	286	46.5	29.2	23.9	35.1	19.1	33.3
MB4NS200S	1036434	582	519	318	46.5	29.2	23.9	35.1	19.1	33.3
MB7NS85S	1036443	607	541	235	53.5	42.2	29.5	35.1	19.1	33.3
MB7NS150S	1036452	642	566	286	53.5	42.2	29.5	35.1	19.1	33.3
MB7NS200S	1036461	650	575	318	53.5	42.2	29.5	35.1	19.1	33.3
MB7NS285S	1036470	675	600	353	53.5	42.2	29.5	35.1	19.1	33.3
MB10NS150S	1036479	793	691	286	63.0	52.0	38.1	51.0	31.8	45.2
MB10NS200S	1036488	803	700	318	63.0	52.0	38.1	51.0	31.8	45.2
MB10NS285S	1036497	827	724	353	63.0	52.0	38.1	51.0	31.8	45.2
MB10NS350S	1036506	841	738	381	63.0	52.0	38.1	51.0	31.8	45.2
MB10NS650S	1036511	879	776	456	63.0	52.0	38.1	51.0	31.8	45.2



Split Overhaul Ball

- Attaches easily to Wireline.



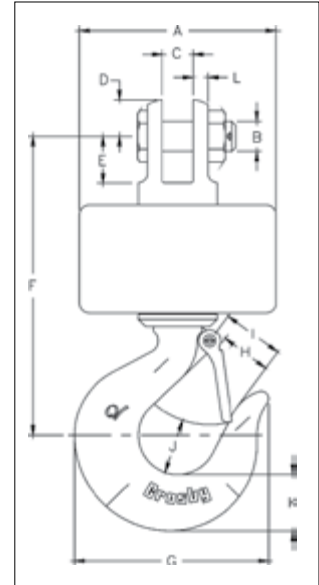
Split Overhaul Ball

Catalog No.	Stock No.	Wire Rope Diameter (mm)	Weight Each (kg)	Ball Diameter A (mm)
SHB - 15	2003822	6-8	6.80	129
SHB - 20	2003830	10	9.07	137
SHB - 50	2003831	13 - 16	22.7	181
SHB - 100	2003832	16 - 19 - 22	45.4	233



AS-15

- Utilizes genuine Crosby hooks which are forged alloy steel, Quenched & Tempered, and contain the patented QUIC-CHECK® marking.
- Entire overhaul ball is zinc plated to resist corrosion.
- Designed with angular contact bearings which maximizes efficiency, reliability, and service life of swivel and extend the life of the wireline.
- Available with wide jaw opening that utilizes nylon spools and shields.
- Designed for applications where headroom is critical.
- Other upper fittings available upon request.



Angular Contact Bearing Swivel Overhaul Balls

Stock No.	Working Load Limit (t)	Wire Rope Diameter (mm)	Dimensions (mm)												Weight Each (kg)
			A	B	C	D	E	F	G	H	I	J	K	L	
2009806	1.36	10	102	12.7	12.7	17.5	19.8	160	104	28.4	31.0	30.2	28.4	7.85	4.08
2009807	2.72	13	127	19.1	19.1	23.9	30.2	217	126	34.0	38.1	35.1	36.6	9.65	8.62
2003969	4.54	16	175	22.4	26.9	28.4	39.6	275	165	42.9	47.8	44.5	46.0	14.2	19.5
2009808	7.71	19	178	30.2	39.6	34.0	53.0	349	221	57.0	63.5	65.0	66.0	13.5	27.2

5:1 Design Factor.



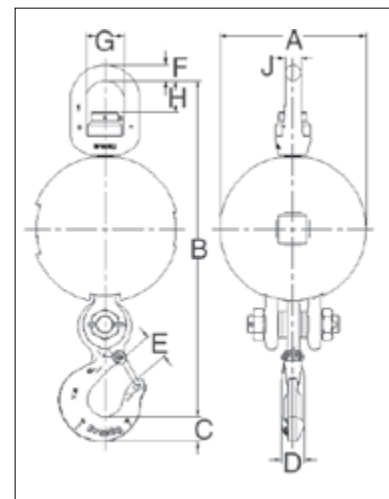
UB-550E

UB-550 Top Swivel Overhaul Balls

- Top swivel design assures that the ball remains stationary if the wireline spins.
- Utilizes genuine forged Crosby hooks, bail and connector.
- Quenched and Tempered.
- Both styles of hooks incorporate QUIC-CHECK® Deformation and Angle Indicators.
- Easy disassembly for periodic inspection and maintenance.
- Design factor of 4:1.



UB-550S



UB-550E Top Swivel Overhaul Balls with Crosby Eye Hook

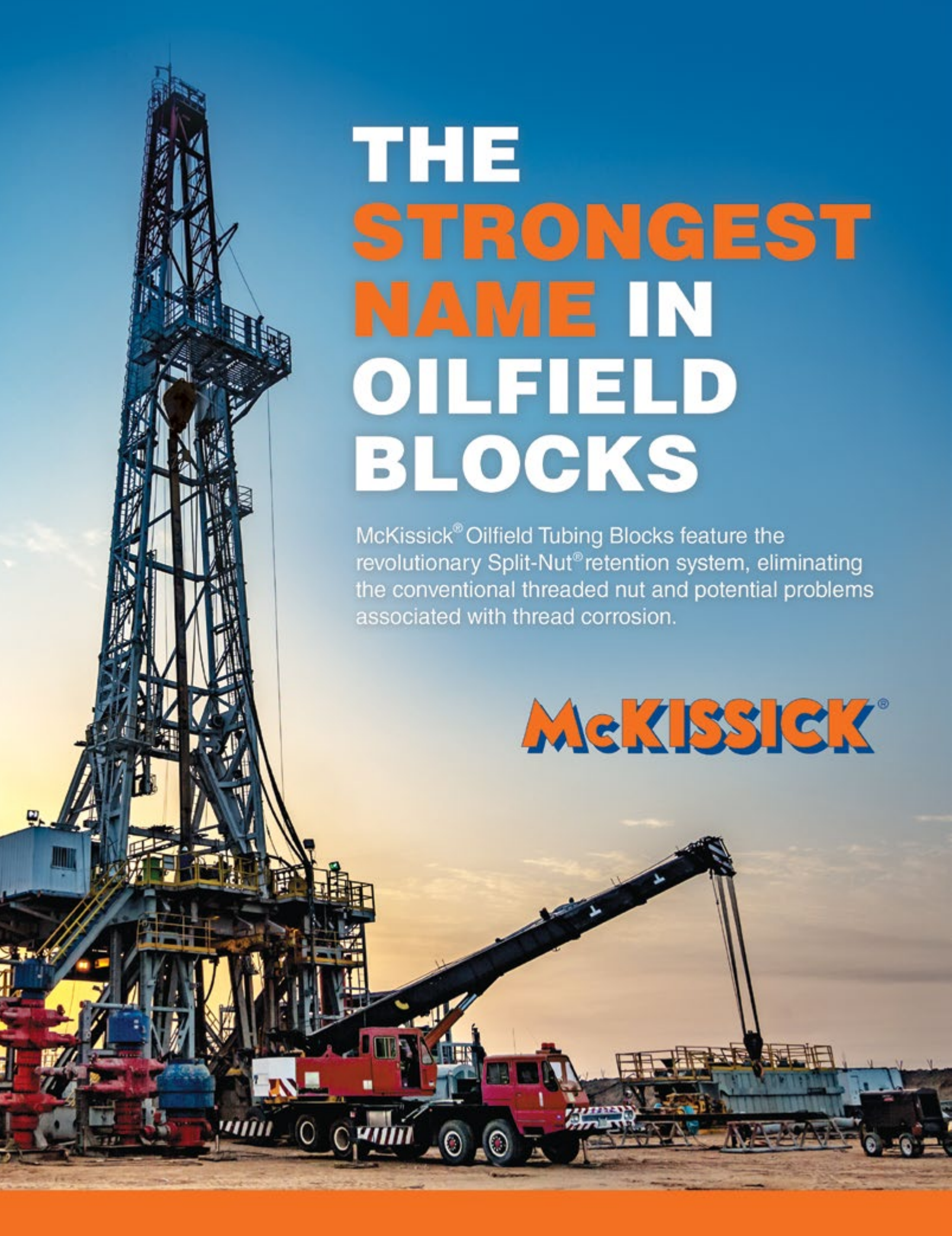
Stock No.	Model No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)								
				A	B	C	D	E	F	G	H	J
1036621	MB04BT085E	3.6	51.3	226	533	36.6	33.3	34.5	28.4	69.9	57.9	28.4
1036649	MB04BT150E	3.6	80.7	268	577	36.6	33.3	34.5	28.4	69.9	57.9	28.4
1036667	MB04BT200E	3.6	105	295	602	36.6	33.3	34.5	28.4	69.9	57.9	28.4
1036685	MB07BT085E	6.3	51.3	226	571	46.0	42.2	40.9	28.4	69.9	57.9	28.4
1036705	MB07BT150E	6.3	80.7	268	615	46.0	42.2	40.9	28.4	69.9	57.9	28.4
1036723	MB07BT200E	6.3	105	295	640	46.0	42.2	40.9	28.4	69.9	57.9	28.4

4:1 Design Factor.

UB-550S Top Swivel Overhaul Balls with SHUR-LOC® Eye Hook

Stock No.	Model No.	Working Load Limit (t)	Weight Each (kg)	Dimensions (mm)								
				A	B	C	D	E	F	G	H	J
1036630	MB04BT085S	3.6	51.3	226	592	42.4	29.5	53.6	28.4	69.9	57.9	28.4
1036658	MB04BT150S	3.6	80.7	268	636	42.4	29.5	53.6	28.4	69.9	57.9	28.4
1036676	MB04BT200S	3.6	105	295	661	42.4	29.5	53.6	28.4	69.9	57.9	28.4
1036694	MB07BT085S	6.3	51.3	226	592	42.4	29.5	53.6	28.4	69.9	57.9	28.4
1036714	MB07BT150S	6.3	80.7	268	636	42.4	29.5	53.6	28.4	69.9	57.9	28.4
1036732	MB07BT200S	6.3	105	295	661	42.4	29.5	53.6	28.4	69.9	57.9	28.4

4:1 Design Factor.

A large blue oilfield drilling rig stands on the left side of the image. In the foreground, a red truck with a long black crane arm is positioned. The background shows a clear blue sky with some light clouds. The overall scene is an oilfield operation.

THE STRONGEST NAME IN OILFIELD BLOCKS

McKissick® Oilfield Tubing Blocks feature the revolutionary Split-Nut® retention system, eliminating the conventional threaded nut and potential problems associated with thread corrosion.

McKISSICK®

VALUE ADDED

- **Dual Rated:** To meet the requirements of both short tons and metric tons.
- **Metric Rating:** McKissick® snatch blocks are metric rated to a design factor of 4:1. Because they are metric rated with a world-class design, they are applicable to global use without conversion.
- **US Rating:** When compared to other blocks that are rated in short tons, the design factor of McKissick snatch blocks is 4.5 to 1.
- **Fatigue Properties:** McKissick snatch blocks are fatigue rated. The blocks are designed to meet specific fatigue performance levels and the requirements for the new Euronorm Standards: 20,000 cycles at 1-1/2 times the Working Load Limit.
- **Latch Kits:** McKissick snatch blocks that utilize a hook as an end fitting connection are equipped with latches.
- **Application Information:** Application and warning information for tackle block systems is attached directly to each block. In addition, each block has a product warning sticker attached directly to it for the purpose of giving specific warning instructions about the block.
- **Lock Nut:** McKissick snatch blocks have a special high-performance lock nut on the non-moveable side plate for securing the sheave pin.
- **Sheave & Wireline:** Sheaves for McKissick snatch blocks have a machine-formed groove.
- **Secondary Securement Systems:** McKissick snatch blocks are designed to incorporate a secondary securement system that retains the end fitting connection bolt when the block is in the closed position. In addition, a patented system retains the end fitting connection bolt when the block is in the open position, thus eliminating the loss of block parts.

404
TAIL
BOARD



418
WITH
HOOK



419
WITH
SHACKLE



SNATCH BLOCK DEMONSTRATION

- How to determine snatch block capacity
- How to use a snatch block to gain a mechanical advantage
- Importance of using a load cell in conjunction with a snatch block on a lift



WATCH VIDEO
[thecrosbygroup.com/snatchblockdemo](https://www.thecrosbygroup.com/snatchblockdemo)

15

SNATCH BLOCK WITH SHACKLE FITTING, SINGLE SHEAVE, 2-12t



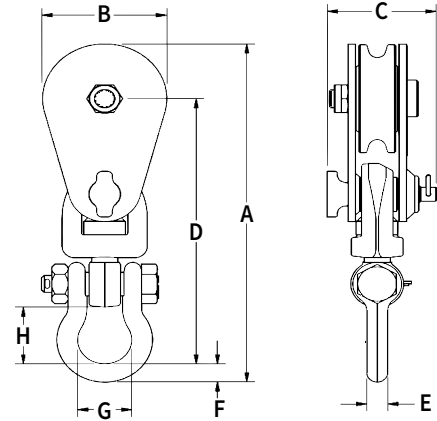
L-170



L-160



417



- Opening feature permits easy insertion of rope without reeving, or while the block is suspended.
- Bolt for opening feature is retained, to ensure no lost bolts.
- Forged steel swivel tees, yokes and shackles.
- Can be furnished with bronze bushings or roller bearings.
- Center pin equipped with pressure lube fitting.
- All sizes feature sheave grooves suited for a range of wireline diameters.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life and material traceability, not addressed by ASME B30.26.
- 417 alloy snatch blocks feature a significant reduction in weight compared to snatch blocks made of non-alloy materials.
- L-170 snatch blocks (with shackle or hook) feature an easy-to-open bolt design. The retaining bolt is released by rotating the fitting assembly, no tools required.
- Crosby's Engineered Solutions Group is ready to discuss your requirements and help select or develop the ideal block for your application.
- Visit thecrosbygroup.com/engineeredolutions for more information.

APPLICATION AND WARNING INFORMATION
SECTION 17

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Catalog No.	Stock No.	Dimensions (mm)							
							A	B	C	D	E	F	G	H
2 metric tons														
2	8 - 10	76	BB	1.8	419 w/Eye	109037†	220	76	67	168	14	14	35	35
2	8 - 10	76	BB	2.3	419	109091	235	76	67	185	13	13	34	40
4 metric tons														
4	10 - 13	114	BB	5.4	419	109064	340	108	79	268	16	18	43	51
5 metric tons														
5	10 - 13 ‡	102	BB	5.0	L-170	599828	353	114	75	278	16	18	43	51
5	10 - 13 ‡	102	RB	5.0	L-170	599837	353	114	75	278	16	18	43	51
6 metric tons														
6*	10 - 13	127	BB	5.9	L-160	599524	351	130	94	268	16	18	43	51
6*	10 - 13	127	RB	5.9	L-160	599533	351	130	94	268	16	18	43	51
8 metric tons														
8	16 - 19	152	BB	12.7	419	109126	481	152	106	373	32	32	76	88
8	16 - 19	152	RB	12.7	419	109153	481	152	106	373	32	32	76	88
8	16 - 19	203	BB	15.0	419	109224	533	206	106	398	32	32	76	88
8	16 - 19	203	RB	15.0	419	109251	533	206	106	398	32	32	76	88
8	16 - 19	254	BB	19.5	419	109322	586	257	106	425	32	32	76	88
8	16 - 19	254	RB	19.5	419	109359	586	257	106	425	32	32	76	88
8	16 - 19	305	BB	24.9	419	109420	657	308	106	471	32	32	76	88
8	16 - 19	305	RB	24.9	419	109457	657	308	106	471	32	32	76	88
8	16 - 19	356	BB	30.4	419	109527	695	359	106	484	32	32	76	88
8	16 - 19	356	RB	30.4	419	109545	695	359	106	484	32	32	76	88
12 metric tons														
12*	16 - 19	146	BB	13.2	L-160	599588	483	152	106	375	32	32	76	88
12*	16 - 19	146	RB	13.2	L-160	599597	483	152	106	375	32	32	76	88
12	19 - 22	152	BB	12.7	417	168972	481	152	106	373	32	32	76	88
12	19 - 22	152	RB	12.7	417	193757	481	152	106	373	32	32	76	88
12	19 - 22	203	BB	15.4	417	168990	533	206	106	398	32	32	76	88
12	19 - 22	203	RB	15.4	417	193819	533	206	106	398	32	32	76	88
12	19 - 22	254	BB	19.1	417	193882	586	257	106	425	32	32	76	88
12	19 - 22	254	RB	19.1	417	193935	586	257	106	425	32	32	76	88

4:1 Design Factor. *3.5:1 Design Factor. † Fitted with 32mm ID Swivel Eye ‡ Special Dual Groove Sheave also accepts 32mm Manila Rope.

SNATCH BLOCK WITH SHACKLE FITTING, SINGLE SHEAVE, 15-60t

Fatigue Rated 



421



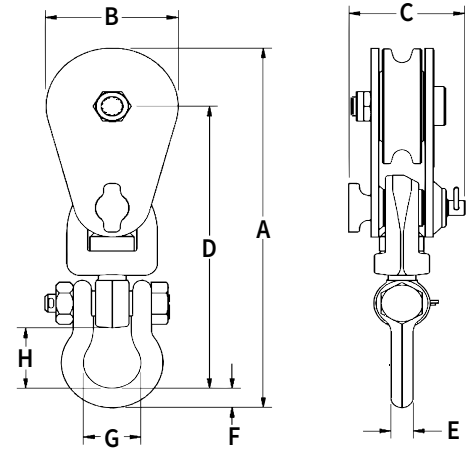
419



431



435



- Opening feature permits easy insertion of rope without reeving, or while the block is suspended.
- Can be furnished with bronze bushings or roller bearings.
- Center pin equipped with pressure lube fitting.
- All sizes feature sheave grooves suited for a range of wireline diameters.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life and material traceability, not addressed by ASME B30.26.
- 435 alloy snatch blocks feature a significant reduction in weight compared to snatch blocks made of non-alloy materials.
- Crosby's Engineered Solutions Group is ready to discuss your requirements and help select or develop the ideal block for your application. Visit thecrosbygroup.com/engineeredolutions for more information.



APPLICATION AND WARNING INFORMATION
SECTION 17

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Catalog No.	Stock No.	Dimensions (mm)							
							A	B	C	D	E	F	G	H
15 metric tons														
15	19 - 22	203	BB	26.8	421	108308	584	206	129	437	38	44	79	79
15	19 - 22	203	RB	26.8	421	108309	584	206	129	437	38	44	79	79
15	19 - 22	254	BB	30.8	421	108390	629	257	129	456	38	44	79	79
15	19 - 22	254	RB	30.8	421	108391	629	257	129	456	38	44	79	79
15	19 - 22	406	BB	59.0	419	109607	806	409	129	559	38	44	79	79
15	19 - 22	406	RB	59.0	419	109625	806	409	129	559	38	44	79	79
15	22 - 26	457	BB	72.1	419	109643	841	460	129	565	38	44	79	79
15	22 - 26	457	RB	72.1	419	109661	841	460	129	565	38	44	79	79
20 metric tons														
20	26 - 29	203	BB	41.7	431	121022	675	206	152	502	51	70	94	101
20	26 - 29	203	RB	41.7	431	121040	675	206	152	502	51	70	94	101
20	26 - 29	254	BB	50.8	431	121095	727	257	152	526	51	70	94	102
20	26 - 29	254	RB	50.8	431	121111	727	257	152	526	51	70	94	102
20	26 - 29	305	BB	59.0	431	121175	779	311	152	553	51	70	94	102
20	26 - 29	305	RB	59.0	431	121193	779	311	152	553	51	70	94	102
20	26 - 29	356	BB	72.6	431	121255	838	356	152	591	51	70	94	102
20	26 - 29	356	RB	72.6	431	121273	838	356	152	591	51	70	94	102
25 metric tons														
25	26 - 32	203	BB	46.7	435	208954	688	210	156	513	51	70	94	102
25	26 - 32	254	BB	53.1	435	208965	745	260	156	545	51	70	94	102
25	26 - 32	457	BB	122.5	431	119495	1051	464	181	740	51	79	89	122
25	26 - 32	457	RB	127.0	431	119496	1051	464	181	740	51	79	89	122
30 metric tons														
30	26 - 32	305	BB	94.3	435	208976	930	311	178	695	51	79	89	122
30	26 - 32	356	BB	104.3	435	208977	987	362	178	727	51	79	89	122
30	26 - 32	508	BB	228.2	431	119589	1331	514	211	974	64	100	143	179
30	26 - 32	508	RB	220.0	431	119598	1331	514	211	974	64	100	143	179
30	26 - 32	610	BB	263.5	431	119605	1422	616	211	1016	64	100	143	179
30	26 - 32	610	RB	260.8	431	119614	1422	616	211	1016	64	100	143	179
60 metric tons														
60	26 - 32	305	BB	142.9	435	8027291	1058	308	220	843	52	61	146	155

4:1 Design Factor.

SNATCH BLOCK WITH HOOK FITTING, SINGLE SHEAVE, 2-12t



416



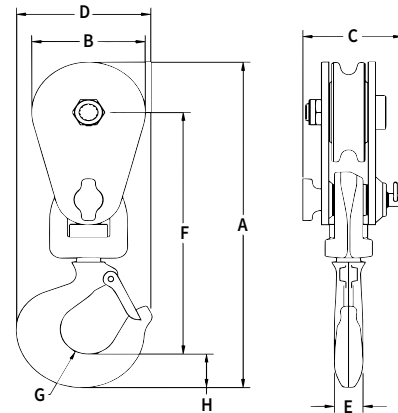
L-170



L-160



C-720



- Opening feature permits easy insertion of rope without reeving, or while the block is suspended.
- Bolt for opening feature is retained, to ensure no lost bolts.
- Forged steel swivel tees, yokes and hooks.
- Furnished with a latch installed.
- Can be furnished with bronze bushings or roller bearings.
- Center pin equipped with pressure lube fitting.
- All sizes feature sheave grooves suited for a range of wireline diameters.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life and material traceability, not addressed by ASME B30.26.
- 416 alloy snatch blocks feature a significant reduction in weight compared to snatch blocks made of non-alloy materials.
- L-170 snatch blocks (with shackle or hook) feature an easy-to-open bolt design. The retaining bolt is released by rotating the fitting assembly, no tools required.
- Crosby's Engineered Solutions Group is ready to discuss your requirements and help select or develop the ideal block for your application.
- Visit thecrosbygroup.com/engineeredolutions for more information.



APPLICATION AND WARNING INFORMATION
SECTION 17

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Catalog No.	Stock No.	Dimensions (mm)							
							A	B	C	D	E	F	G	H
2 metric tons														
2	8 - 10	76	BB	2.3	418	108038	247	76	67	91	19	184	19	25
4 metric tons														
4	10 - 13	114	BB	5.4	418	108065	359	108	79	133	25	257	24	47
5 metric tons														
5	10 - 13 ‡	102	BB	5.0	L-170	599800	371	116	75	133	25	267	24	47
5	10 - 13 ‡	102	RB	5.0	L-170	599819	371	116	75	133	25	267	24	47
6 metric tons														
6*	10 - 13	127	BB	5.9	L-160	599506	370	130	94	133	25	257	24	47
6*	10 - 13	127	RB	5.9	L-160	599515	370	130	94	133	25	257	24	47
7 short Tons														
7T*	19 - 22	6	BB	12.7	C-720	280010	410	152	97	159	37	288	32	41
8 metric tons														
8	16 - 19	152	BB	12.2	418	108127	481	152	106	173	40	344	33	61
8	16 - 19	152	RB	12.2	418	108154	481	152	106	173	40	344	33	61
8	16 - 19	203	BB	15.0	418	108225	534	206	106	173	40	369	33	61
8	16 - 19	203	RB	15.0	418	108252	534	206	106	173	40	369	33	61
8	16 - 19	254	BB	18.6	418	108323	586	257	106	173	40	396	33	61
8	16 - 19	254	RB	18.6	418	108350	586	257	106	173	40	396	33	61
8	16 - 19	305	BB	21.8	418	108421	658	308	106	173	40	442	33	61
8	16 - 19	305	RB	21.8	418	108458	658	308	106	173	40	442	33	61
8	16 - 19	356	BB	24.9	418	108528	696	359	106	173	40	455	33	61
8	16 - 19	356	RB	24.9	418	108546	696	359	106	173	40	455	33	61
12 metric tons														
12*	16 - 19	146	BB	13.2	L-160	599560	508	152	106	200	40	365	37	67
12*	16 - 19	146	RB	13.2	L-160	599579	508	152	106	200	40	365	37	67
12	19 - 22	152	BB	11.8	416	193427	505	152	106	200	40	362	37	67
12	19 - 22	152	RB	11.8	416	193472	505	152	106	200	40	362	37	67
12	19 - 22	203	BB	15.0	416	193490	558	206	106	200	40	388	37	67
12	19 - 22	203	RB	15.0	416	193542	558	206	106	200	40	388	37	67
12	19 - 22	254	BB	18.6	416	193613	610	257	106	200	40	415	37	67
12	19 - 22	254	RB	18.6	416	193677	610	257	106	200	40	415	37	67

4:1 Design Factor. *3.5:1 Design Factor.. ‡ Special Dual Groove Sheave also accepts 32mm Manila Rope

SNATCH BLOCK WITH HOOK FITTING, SINGLE SHEAVE, 15-30t

Fatigue Tested®



420



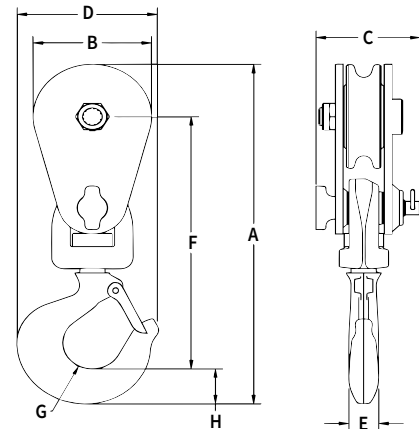
418



430



434



- Opening feature permits easy insertion of rope without reeving, or while the block is suspended.
- Furnished with a latch installed.
- Can be furnished with bronze bushings or roller bearings.
- Center pin equipped with pressure lube fitting.
- All sizes feature sheave grooves suited for a range of wireline diameters.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life and material traceability, not addressed by ASME B30.26.
- 434 snatch blocks feature a significant reduction in weight compared to snatch blocks made of non-alloy materials.
- Crosby's Engineered Solutions Group is ready to discuss your requirements and help select or develop the ideal block for your application.
- Visit thecrosbygroup.com/engineeredolutions for more information.

APPLICATION AND WARNING INFORMATION
SECTION 17

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Catalog No.	Stock No.	Dimensions (mm)							
							A	B	C	D	E	F	G	H
15 metric tons														
15	19 - 22	203	BB	23.1	420	108275	597	206	129	212	45	419	38	74
15	19 - 22	203	RB	23.1	420	108276	597	206	129	212	45	419	38	74
15	19 - 22	254	BB	28.6	420	108371	641	257	129	212	45	438	38	74
15	19 - 22	254	RB	28.6	420	108372	641	257	129	212	45	438	38	74
15	19 - 22	406	BB	59.0	418	108608	819	409	129	212	45	540	38	74
15	19 - 22	406	RB	59.0	418	108626	819	409	129	212	45	540	38	74
15	22 - 26	457	BB	68.0	418	108644	851	460	129	212	45	546	38	74
15	22 - 26	457	RB	68.0	418	108662	851	460	129	212	45	546	38	74
20 metric tons														
20	26 - 29	203	BB	34.0	430	120023	657	206	152	239	51	468	38	86
20	26 - 29	203	RB	34.0	430	120041	657	206	152	239	51	468	38	86
20	26 - 29	254	BB	40.4	430	120096	710	257	152	239	51	495	38	86
20	26 - 29	254	RB	40.4	430	120112	710	257	152	239	51	495	38	86
20	26 - 29	305	BB	46.7	430	120176	762	311	152	239	51	521	38	86
20	26 - 29	305	RB	46.7	430	120194	762	311	152	239	51	521	38	86
20	26 - 29	356	BB	55.8	430	120256	821	356	152	239	51	558	38	86
20	26 - 29	356	RB	55.8	430	120274	821	356	152	239	51	558	38	86
25 metric tons														
25	26 - 32	203	BB	40.8	434	208896	675	210	156	238	51	484	38	86
25	26 - 32	254	BB	48.5	434	208910	727	260	156	238	51	511	38	86
25	26 - 32	457	BB	108.9	430	119486	1052	464	181	299	64	710	49	110
25	26 - 32	457	RB	108.9	430	119487	1052	464	181	299	64	710	49	110
30 metric tons														
30	26 - 32	305	BB	74.8	434	208931	923	311	178	299	64	657	49	110
30	26 - 32	356	BB	81.6	434	208932	980	362	178	299	64	689	49	110
30	26 - 32	508	BB	170.1	430	119507	1325	514	211	387	76	917	57	150
30	26 - 32	508	RB	170.1	430	119516	1325	514	211	387	76	917	57	150
30	26 - 32	610	BB	204.1	430	119525	1416	616	211	387	76	959	57	150
30	26 - 32	610	RB	204.1	430	119534	1416	616	211	387	76	959	57	150

4:1 Design Factor.

SNATCH BLOCK, TAIL BOARD, SINGLE SHEAVE, 2-12t



- Opening feature permits easy insertion of rope without reeving. Bolt for opening feature is retained, to ensure no lost bolts.
- All sizes feature sheave grooves suited for a range of wireline diameters.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life and material traceability, not addressed by ASME B30.26.
- 402 snatch blocks feature a significant reduction in weight compared to snatch blocks made of non-alloy materials.
- Crosby's Engineered Solutions Group is ready to discuss your requirements and help select or develop the ideal block for your application.
- Visit thecrosbygroup.com/engineeredolutions for more information.



APPLICATION AND WARNING INFORMATION
SECTION 17

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Model No.	Stock No.	Dimensions (mm)							
							A	B	C	D	E	F	G	H
2 metric tons														
2	8 - 10	76	BB	1.4	404	102016	124	76	67	26	13	67	22	19.1
4 metric tons														
4	10 - 13	114	BB	3.2	404	102025	197	108	79	40	19	108	41	35.1
5 metric tons														
5	10 - 13 ‡	102	BB	3.2	L-170	599846	213	114	75	40	22	119	57	36.6
5	10 - 13 ‡	102	RB	5.0	L-170	599855	213	114	75	40	22	119	57	36.6
6 metric tons														
6*	10 - 13	127	BB	5.9	L-160	599542	210	130	94	39	19	108	35	36.6
6*	10 - 13	127	RB	5.9	L-160	599551	210	130	94	39	19	108	35	36.6
8 metric tons														
8	16 - 19	152	BB	6.8	404	102098	251	152	106	46	25	130	41	44.5
8	16 - 19	152	RB	6.8	404	102114	251	152	106	46	25	130	41	44.5
8	16 - 19	203	BB	9.5	404	102169	303	206	106	46	25	155	41	44.5
8	16 - 19	203	RB	9.5	404	102187	303	206	106	46	25	155	41	44.5
8	16 - 19	254	BB	13.2	404	102230	356	257	106	46	25	183	43	44.5
8	16 - 19	254	RB	13.2	404	102258	356	257	106	46	25	183	43	44.5
8	16 - 19	305	BB	16.3	404	102301	427	308	106	46	25	229	64	44.5
8	16 - 19	305	RB	16.3	404	102329	427	308	106	46	25	229	64	44.5
12 metric tons														
12*	16 - 19	146	BB	13.2	L-160	599604	253	152	106	44	25	133	47	44.5
12*	16 - 19	146	RB	13.2	L-160	599613	253	152	106	44	25	133	47	44.5
12	19 - 22	152	BB	6.8	402	179238	251	152	106	46	25	130	41	44.5
12	19 - 22	152	RB	6.8	402	179283	251	152	106	46	25	130	41	44.5
12	19 - 22	203	BB	9.5	402	179318	303	206	106	46	25	155	41	44.5
12	19 - 22	203	RB	9.5	402	179363	303	206	106	46	25	155	41	44.5
12	19 - 22	254	BB	13.2	402	179434	356	257	106	46	25	183	43	44.5
12	19 - 22	254	RB	13.2	402	179498	356	257	106	46	25	183	43	44.5

4:1 Design Factor. *3.5:1 Design Factor. ‡ Special Dual Groove Sheave also accepts 32mm Manilla Rope.

SNATCH BLOCK, TAIL BOARD, SINGLE SHEAVE, 15-60t

Fatigue Resistant



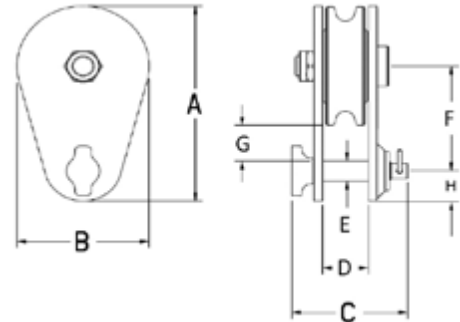
406



407



401



- Opening feature permits easy insertion of rope without reeving. Bolt for opening feature is retained, to ensure no lost bolts.
- Can be furnished with bronze bushings or roller bearings.
- Center pin equipped with pressure lube fitting.
- All sizes feature sheave grooves suited for a range of wireline diameters.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life and material traceability, not addressed by ASME B30.26.

APPLICATION AND WARNING INFORMATION
SECTION 17

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Model No.	Stock No.	Dimensions (mm)							
							A	B	C	D	E	F	G	H
15 metric tons														
15	19 - 22	203	BB	13.6	406	108311	335	206	130	60	32	171	54	60.5
15	19 - 22	203	RB	13.6	406	108312	335	206	130	60	32	171	54	60.5
15	19 - 22	254	BB	19.1	406	108406	379	257	130	60	32	191	49	60.5
15	19 - 22	254	RB	19.1	406	108407	379	257	130	60	32	191	49	60.5
20 metric tons														
20	26 - 29	203	BB	19.1	407	103523	344	206	152	65	38	181	60	60.5
20	26 - 29	203	RB	19.1	407	103541	344	206	152	65	38	181	60	60.5
20	26 - 29	254	BB	24.9	407	103603	397	257	152	65	38	208	62	60.5
20	26 - 29	254	RB	24.9	407	103621	397	257	152	65	38	208	62	60.5
20	26 - 29	305	BB	31.8	407	103685	451	311	152	65	38	235	65	60.5
20	26 - 29	305	RB	31.8	407	103701	451	311	152	65	38	235	65	60.5
20	26 - 29	356	BB	40.8	407	103765	511	356	152	65	38	272	75	60.5
20	26 - 29	356	RB	40.8	407	103783	511	356	152	65	38	272	75	60.5
25 metric tons														
25	26 - 32	203	BB	22.7	401	178151	343	210	156	65	38	181	60	57.2
25	26 - 32	254	BB	29.5	401	179167	392	260	156	65	38	208	62	53.8
25	26 - 32	457	BB	74.8	407	119652	625	464	181	77	44	330	79	63.5
25	26 - 32	457	RB	74.8	407	119653	625	464	181	77	44	330	79	63.5
30 metric tons														
30	26 - 32	305	BB	43.1	401	179178	473	311	178	77	44	254	79	63.5
30	26 - 32	356	BB	49.9	401	179187	530	362	178	77	44	286	86	63.5
30	26 - 32	508	BB	97.5	407	119669	734	514	211	90	57	387	105	88.9
30	26 - 32	508	RB	97.5	407	119678	734	514	211	90	57	387	105	88.9
30	26 - 32	610	BB	131.5	407	119687	826	616	211	90	57	429	95	88.9
30	26 - 32	610	RB	131.5	407	119696	826	616	211	90	57	429	95	88.9
60 metric tons														
60	26 - 32	305	BB	43.1	401	8027292	516	308	220	71	64	273	89	88.9

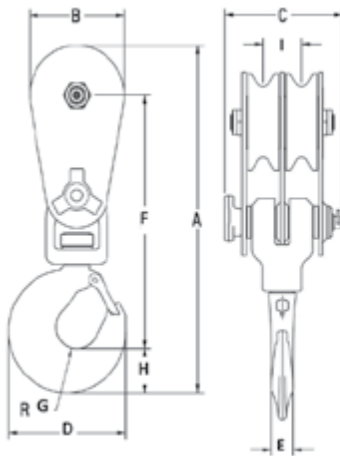
4:1 Design Factor.

15

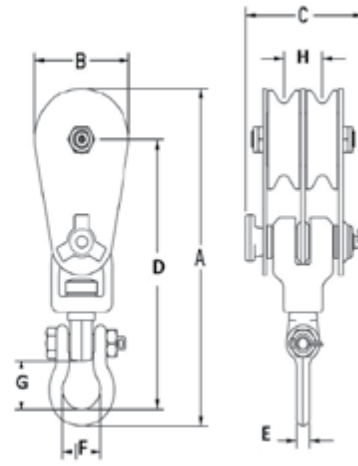
SNATCH BLOCK WITH HOOK OR SHACKLE FITTING DOUBLE SHEAVE, 4-12t



408
With Hook



409
With Shackle



- Two sheave snatch block to allow for additional mechanical advantage, must be reeved with four parts of line.
- Opening feature permits easy insertion of wireline in both sheaves with removal of one bolt.
- 408 is furnished with S-4320 hook latch.
- Center Pin equipped with pressure lube fittings.
- All sizes feature sheave grooves suited for a range of wireline diameters.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life and material traceability, not addressed by ASME B30.26.
- Crosby's Engineered Solutions Group is ready to discuss your requirements and help select or develop the ideal block for your application. Visit thecrosbygroup.com/engineeredolutions for more information.

408 Double Sheave Snatch Block with Hook

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Stock No.	Dimensions (mm)								
						A	B	C	D	E	F	G	H	I
4 metric tons														
4	10 - 13	114	BB	8.2	104023	375	108	133	133	25	274	24	47	44
12 metric tons														
12	16 - 19	152	BB	20.4	104103	536	152	156	200	40	394	37	67	52
12	16 - 19	152	RB	20.4	104121	536	152	156	200	40	394	37	67	52
12	16 - 19	203	BB	24	104185	589	206	156	200	40	419	37	67	52
12	16 - 19	203	RB	24	104201	589	206	156	200	40	419	37	67	52

4:1 Design Factor.

409 Double Sheave Snatch Block with Shackle

Working Load Limit (t)	Wire Rope Diameter (mm)	Sheave Diameter (mm)	Bearing Code	Weight Each (kg)	Stock No.	Dimensions (mm)							
						A	B	C	D	E	F	G	H
4 metric tons													
4	10 - 13	114	BB	8.2	105022	356	108	133	285	16	43	51	44
12 metric tons													
12	16 - 19	152	BB	22.7	105102	536	152	156	416	38	79	79	52
12	16 - 19	152	RB	22.7	105120	536	152	156	416	38	79	79	52
12	16 - 19	203	BB	26.3	105184	589	206	156	441	38	79	79	52
12	16 - 19	203	RB	26.3	105200	589	206	156	441	38	79	79	52

4:1 Design Factor.



APPLICATION AND WARNING INFORMATION
SECTION 17



HF-1

- Hay Fork Pulleys with Swivel Hook or Swivel Eye
- Forged steel eyes and hooks.
- Available painted or zinc plated.
- One piece pressed steel shells.
- Edges well rounded to prevent chaffing of rope.
- Can be equipped with hook latch.
- Furnished with roller bearings.
- Pressure lube fittings.
- Natural Rope: Rope constructed of natural or plant based fibers, including manila, hemp, linen, cotton, coir, jute, and sisal.



HF-2

HF-1 / HF-2 Hay Fork Pulleys with Swivel Hook or Swivel Eye

Sheave Diameter (mm)	Model No.	Hay Fork Pulleys Stock No.		Working Load Limit (t)	Wire Rope Diameter (mm)	Rope Type	End Fitting	Weight Each (kg)
		Painted	Zinc Plated					
114	HF-1	170022	170594	.91	32 MR	Natural Rope	Swivel Hook	2.72
114	HF-2	170086	170629	.91	32 MR	Natural Rope	Swivel Eye	2.72
114	HF-3	170148	170656	.91	13 WR	Wire Rope	Swivel Hook	2.72
114	HF-4	170200	170683	.91	13 WR	Wire Rope	Swivel Eye	2.72
203	HF-5	170264	-	1.81	13 WR	Wire Rope	Swivel Eye	4.99
152	HF-11	170380	-	1.81	38 MR	Natural Rope	Swivel Hook	4.99
152	HF-12	170442	-	1.81	38 MR	Natural Rope	Swivel Eye	4.99
152	HF-13	170503	-	1.81	16 WR	Wire Rope	Swivel Hook	4.99
152	HF-14	170567	-	1.81	16 WR	Wire Rope	Swivel Eye	4.99

4:1 Design Factor.

171

- Steel sheaves with roller bearings and pressure lubrication.
- Forged steel swivel eyes.
- Easy opening feature shown available in 303mm size only.

APPLICATION AND WARNING INFORMATION
SECTION 17

171 Tong Block

Sheave Diameter (mm)	Stock No.	Working Load Limit (t)	Wire Rope Diameter (mm)	Weight Each (kg)
152	171012	.45	19	4.99
203	171058	.91	19	5.44
254	171101	2.27	19	13.6
305	171156	2.27	19	15.9

4:1 Design Factor.



443

- All steel construction, steel sheaves mounted on roller bearings, grooved for maximum of 3/4" wire rope diameter.
- May be used with three parts of line if utilizing dead end becket.

443 Lay Down Block

Sheave Diameter (mm)	Stock No.	Working Load Limit (t)	Wire Rope Diameter (mm)	Weight Each (kg)
114	171414	.23	13	5.44
152	171432	.45	19	7.71

4:1 Design Factor.



Tower/Derrick Hoist Blocks

M-491



G-491



- New design provides the dependability of standard McKissick® Snatch Blocks, along with features that make it perfect for the challenging needs of Tugger Hoist and Tower Erection applications.
- Fully recessed sideplate design eliminates gap between sheave rim and sideplate, providing failsafe capture of the sheave in the case of center pin overloading.
- Sealed tapered roller bearings extend the life of the center pin and bearings, and allows for faster line speeds than recommended with standard snatch blocks.
- Holes through side plates are available for secondary block securement device.
- Suitable for hoisting personnel, contingent upon all employees, including the winch operator, being trained to follow applicable Federal, local and industry standards.
 - Tugger/Derrick applications: API RP54
 - Tower applications: OSHA directive CPL 2-1.36
- Blocks furnished with dual rated wireline sheaves.
- Forged steel swivels, tees, yokes and shackles are Quenched & Tempered.
- Sheave lubrication through center pin for easy maintenance.
- All blocks 356mm and larger are furnished with McKissick® Roll Forged sheaves with flame hardened grooves.
- Shackle fitting swivels for easy positioning.
- Manufactured by an API Q1 Certified facility.
- ABS Type Approval and Certification under 2019 Guide for Certification of Lifting Appliances and 2019 Guide for Classification of Drilling Systems.



M-491 / G-491 Tower/Derrick Hoist Blocks

Working Load Limit (t)	Sheave Diameter (mm)	Wire Rope Diameter (mm)	M-491 Stock No. Painted	G-491 Stock No. Galvanized	Weight Each (kg)
4	203	10 - 13	2020161	2020170	16
8	254	10 - 13	2020806	2020815	25
8	254	13 - 14	2020824	2020833	25
12	254	13 - 14	2021118	2021127	25
12	356	13 - 16	2021136	2021145	43
12	356	16 - 19	2021154	2021163	43
15	406	19 - 22	2021172	2021181	68
15	406	22 - 26	2021190	2021199	48
25	457	26 - 29	2032312	2032315	118
30	508	29 - 32	2032321	2032324	306

4:1 Design Factor.

**70 Series
Blocks**



McKissick® Oilfield Tubing Blocks

- Manufactured in the USA to API-8C PSL-1 specifications with a minimum design temperature of -4°F (-20°C).
- The 70 Series has a spring loaded hook that is desirable for higher utilization and larger depths. The spring mitigates shock loadings and reduces wear on components.
- The 80 Series is not spring loaded and is desirable for shallow depths and rework.
- Utilizing the McKissick® revolutionary split nut retention system, these critical components:
 - Are precision machined and individually fitted for maximum performance.
 - Eliminate conventional threaded nut and potential problems associated with thread corrosion during regular maintenance.
- Equipped with a duplex hook for easy elevator operation which features:
 - An eight position locking mechanism and rotates on a roller thrust bearing.
 - Locking arms with self-retaining bolts to mitigate drop hazards.
 - Available with optional 35 Ton rod hook clevis.
- McKissick® API-8C sheaves are roll-forged and come equipped with flame hardened grooves for exceptional groove life.
 - Each sheave is individually lubricated from easily accessible lubrication fittings located on the center pin.
 - Equipped with double row tapered roller bearings and seals.
- The E-Z opening roll guards facilitate the fastest possible exposure of sheave cluster for quick reeving and contain no bolts to pull out and lose.
- Engineered for short overall length, extra weight, excellent balance for fast non-wobbling falls.
- Completely streamlined exterior surfaces with no unnecessary projections minimize opportunities for interference during operations.
- Contact the BS&E (Blocks, Sheaves and Engineered Solutions) team for any special requests.
- Email: specials@kitocrosby.com
- Phone: 1-800-777-1555



**80 Series
Blocks**



APPLICATION AND WARNING INFORMATION
SECTION 17

Standard Tubing Block Offerings								
	Series	Number of Sheaves	Block Capacity (Tons)	Sheave Diameter (in)	Nominal Wire Rope Size (in)			
					7/8	1	1-1/8	1-1/4
70 Series	72	2	75	24				
	73	3	75	20				
	73	3	125	24				
	73	3	175	30				
	74	4	175	30				
80 Series	82	2	75	24				
	83	3	75	20				
	83	3	125	24				
	83	3	175	30				
	84	4	125	24				
	84	4	175	30				

WELL LOGGER'S BLOCKS



475



477



476

- Alloy aluminum housing for maximum strength and minimum weight.
- Extra large double row, pre-adjusted sealed tapered bearing.
- Quick opening pin for fast string-up, light weight for easy handling.



Licensed Under
API Spec 8C-0021

APPLICATION AND WARNING INFORMATION
SECTION 17

475 / 477 Floor Blocks

Sheave Diameter (mm)	Model No.	Floor Block Stock No.	Working Load Limit (t)	Conductor Cable Size (mm)	Weight Each (kg)	Connection
178	475	180020	1.35	5	4.5	Swivel Hanger
254	475	180253	2.25	8	9.5	Swivel Hanger
305	475	180440	2.25	8	10.8	Swivel Hanger
356	475	180618	2.25	8	19.5	Swivel Hanger
356	477	169784	5.4	6	26.3	Swivel Clevis
508	477	191072	5.4	6	31.8	Swivel Clevis
610	477	191107	9.0	8	58.9	Swivel Clevis

4:1 Design Factor.

476 Top Blocks

Sheave Diameter (mm)	Model No.	Top Block Stock No.	Working Load Limit (t)	Conductor Cable Size (mm)	Weight Each (kg)	Connection
178	476	180075	2.25	5	4.5	Stinger Pin
254	476	180333	3.6	8	9.5	Stinger Pin
305	476	180529	3.6	8	10.8	Stinger Pin
356	476	180707	3.6	8	19.5	Stinger Pin

4:1 Design Factor.



458

Guy Line Blocks

- Used on guy lines to gain mechanical advantage through rapid take-up, taking less pull to guy down.



459

APPLICATION AND WARNING INFORMATION
SECTION 17

Guy Line Blocks

Model No.	No. of Sheaves	Stock No.	Working Load Limit (t)	Sheave Diameter (mm)	Wire Rope Diameter (mm)	Weight Each (kg)
458	1	171619	4.5	152	13	9.5
458H	1	239067	7.2	152	14-16	11.3
459	2	171637	9	152	13	12.7
459H	2	239076	10.8	152	14-16	14.1



731

Crown Blocks

- McKissick® Roll-Forged sheaves with flame hardened grooves.
- Double row pre-adjusted sealed tapered bearings mounted on a steel shaft.
- Heavy center and side plates for proper support of center pin.
- Pre-assembled units for rapid attachment to crown assembly for installation on derrick.
- On multiple sheave assemblies, one sheave can be grooved for sand line on request.
- Other sizes available upon request.
- Sheaves manufactured to API-8C specifications.

APPLICATION AND WARNING INFORMATION
SECTION 17

Crown Blocks

Sheave Diameter (mm)	Model No.	Stock No.	No. of Sheaves	Working Load Limit (t)	Wire Rope Diameter (mm)	Weight Each (kg)
610	241	351158	1	13.5	22	91
610	242	351167	2	27	22	126
610	243	351176	3	40.5	22	170
610	731	351185	1	31.5	25	91
610	732	351194	2	67.5	25	159
610	733	351201	3	90	25	238
610	734	351210	4	113	25	327
762	741	351229	1	36	28	147
762	742	351238	2	72	28	254
762	743	351247	3	99	28	363
762	744	351256	4	126	28	445
762	745	351265	5	153	28	528

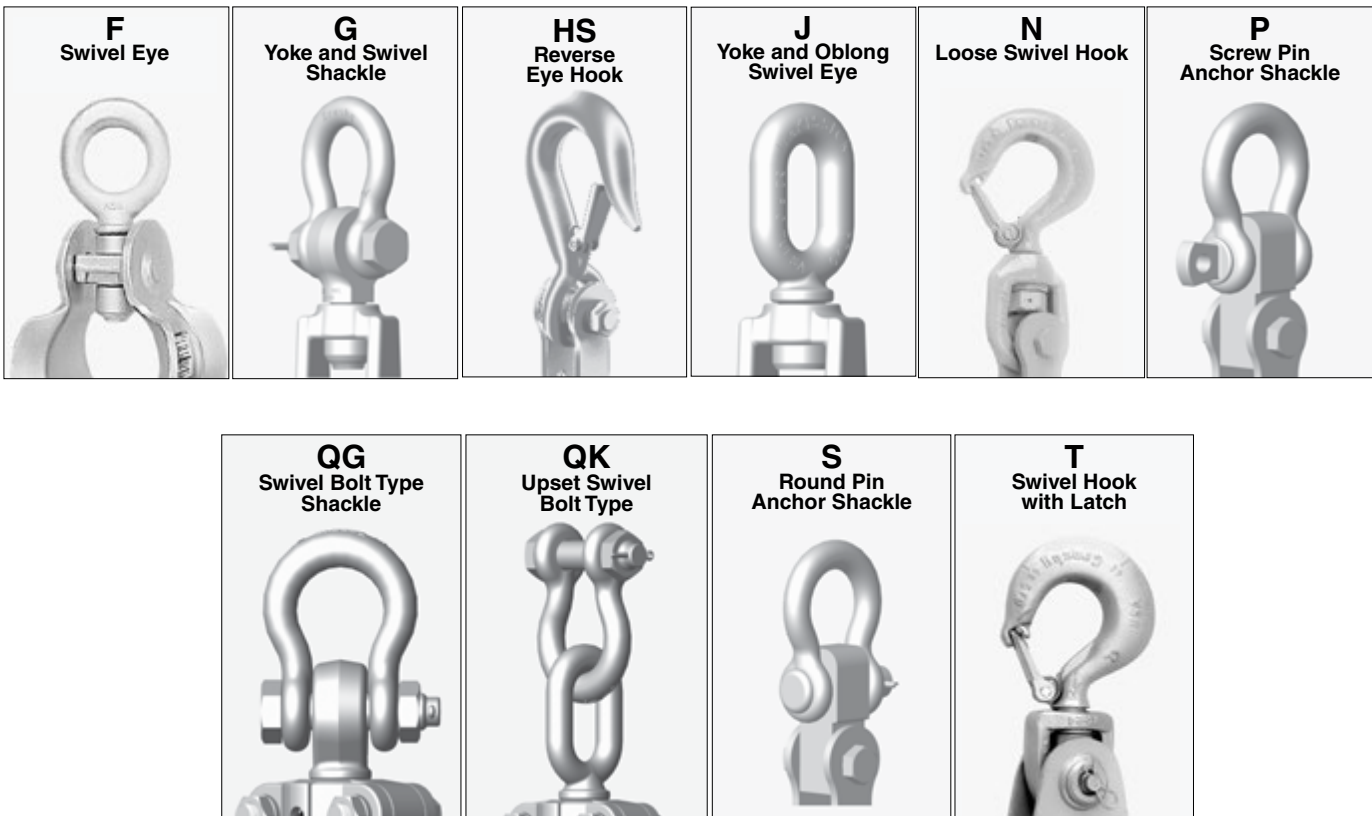
Marine Blocks

McKissick® Marine Blocks offer solutions for the unique application of marine environments.

Where corrosion resistance is paramount, hot dip galvanized finishes are available as the best solution for saltwater or highly corrosive environments.

Blocks that follow have sheaves specifically grooved for certain rope types. Ensure that the correct block is specified for the type of rope being used.
rope Types:

- Wire rope: Rope constructed of metal (most commonly steel) wires, twisted into strands that are laid in a helical pattern around a core.
- Natural Rope: Rope constructed of natural or plant based fibers, including manila, hemp, linen, cotton, coir, jute, and sisal.
- Synthetic Rope: Rope constructed of Synthetic or man-made fibers including polypropylene, nylon, polyesters, polyethylene, Aramids, and acrylics.



Regular Wood Blocks for Natural Manila Rope

- Hot-dip Galvanized for corrosion resistance.
- Grade 5 bolts secured with lock washers and staked nuts.
- Bronze bushed sheaves with large bearing diameter for extended block life.
- Becketts furnished on all blocks.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Fitting Type: HS-Latch Hook; N-Swivel Hook with Latch; S- Round Pin Anchor Shackle

**HS-21-B****21B, 22B, 23B**

Block Size (in)	Fitting	Single Sheave 21 B Stock No.	Double Sheave 22 B Stock No.	Triple Sheave 23 B Stock No.
4	HS	603831	604634	605438
5	HS	603859	604652	605456
6	HS	603877	604670	605474
8	HS	603911	604714	605517
4	N	606437	606838	607230
5	N	606455	606856	607258
6	N	606473	606874	607276
8	N	606516	606918	607310
4	S	610039	611635	613232
5	S	610057	611653	613250
6	S	610075	611671	613278
8	S	610119	611715	613312

21B, 22B, 23B

Block Size (in)	Sheave Diameter	Manila Rope Size (mm)	Working Load Limit (t)			Weight Each (kg)		
			21 Single	22 Double	23 Triple	21 Single	22 Double	23 Triple
4	57.0	13	.45	.64	.82	.79	1.36	1.81
5	76.0	16	.54	.82	1.09	1.47	2.54	2.95
6	89.0	19	.82	1.13	1.45	2.27	3.86	5.22
8	121	22-26	1.27	1.72	2.18	5.90	6.35	9.75

4:1 Design Factor.

Steel Shell Blocks for Natural or Manila Rope

- Hot-dip Galvanized for corrosion resistance.
- Grade 5 bolts secured with lock washers and staked nuts.
- Bronze bushed sheaves with large bearing diameter for extended block life.
- Fitting Type: HS- Latch Hook; N- Swivel Hook with Latch; P- Screw Pin Anchor Shackle

APPLICATION AND WARNING INFORMATION
SECTION 17**P-303B****301B, 302B, 303B**

Block Size (in)	Fitting	Single Sheave 301 B Stock No.	Double Sheave 302 B Stock No.	Triple Sheave 303 B Stock No.
4	HS	680971	681373	681774
6	HS	680999	681391	-
8	HS	681015	681417	681818
4	N	682639	683031	683433
6	N	682675	683077	683479
8	P	691111	692717	694314

15

301B, 302B, 303B

Block Size (in)	Sheave Diameter	Manila Rope Size (mm)	Working Load Limit (kg)			Weight Each (kg)		
			Single	Double	Triple	Single	Double	Triple
4	57.2	13	.50	.73	1.00	1.02	1.70	2.27
6	89.0	19	.91	1.50	1.81	2.49	4.20	5.67
8	121	26	1.50	2.31	3.18	4.54	7.48	9.98

3.5:1 Design Factor.



HS-262 Double

Loose Side Hooks with Latch for Manila Rope

- Grade 5 bolts secured with lock washers and staked nuts.
- Bronze bushed sheaves with large bearing diameter for extended block life.
- Fitting Type : HS - Latch Hook

HS-262 Double, HA-261, 262, 263

Block Size (in)	Fitting	Manila Rope Size (mm)	Sheave Diameter	261 B Stock No.	262 B Stock No.	263 B Stock No.	Working Load Limit (t)			Weight Each (kg)		
							261 Single	262 Double	263 Triple	261 Single	262 Double	263 Triple
4	HS	13	57.0	666826	666229	667228	.41	.64	.82	.63	1.46	1.47
5	HS	16	76.0	666844	666247	-	.54	.82	-	1.02	1.76	-
6	HS	19	89.0	666862	666265	-	.82	1.13	-	1.70	2.72	-
8	HS	22-26	121	666906	666309	667308	1.27	1.72	2.18	3.23	4.88	6.69

3:1 Design Factor.

APPLICATION AND WARNING INFORMATION
SECTION 17

T-350-C

350C, 350B, 350R**Gin Blocks for Manila Rope**

- For light hoisting by roofers and contractors.
- Furnished with drop forged swivel latch hooks.
- Equipped with swivel hook with latch.

APPLICATION AND WARNING INFORMATION
SECTION 17

Block Size (in)	Gin Block Stock No.			Sheave Size (mm)			Manila Rope Size (mm)	Working Load Limit (t)	Weight Each (kg)
	T-350-B	T-350-R	T-350-C	Outside Diam.	Rim Thickness	Bearing Diam.			
8	710403	710207	710001	203	31.8	19.1	22	.45	4.10
10	710421	710225	710029	254	31.8	22.4	26	.45	5.45
12	710449	710243	710047	305	35.1	22.4	26	.45	7.25

3:1 Design Factor.

Bearing Code : B - Self Lubricating Bronze Bushed; R - Roller Bearing; C - Common Iron

STEEL SHELL & WOOD SHELL



- New style blocks feature higher working load limits.
- Painted or Galvanized steel with replaceable wood bumpers.
- Side plate opens for insertion of wire rope.
- Incorporates exclusive bolt retaining spring to assure no lost bolts, plus utilizes secondary retaining pin.
- Bronze bushed sheaves with large bearing diameter for extended block life.
- Utilizes Crosby "N" style hooks with integrated latch.
- Lubricated center pin.
- 10" and 12" sizes utilize steel sheaves.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.

APPLICATION AND WARNING INFORMATION
SECTION 17

385B, 390B Blocks

Block Size (in)	Fitting	Wood Shell		Steel Shell	
		385-B Stock No. S.C.	385-B Stock No. Galv.	390-B Stock No. S.C.	390-B Stock No. Galv.
6	T	702000	702108	702216	702324
8	T	702009	702117	702225	702333
10	T	702018	702126	702234	702342
12	T	702027	702135	702243	702351
6	J	702036	702144	702252	702360
8	J	702045	702153	702261	702369
10	J	702054	702162	702270	702378
12	J	702063	702171	702279	702387
6	G	702072	702180	702288	702396
8	G	702081	702189	702297	702405
10	G	702090	702198	702306	702414
12	G	702099	702207	702315	702423

385B, 390B Blocks

Sheave Diameter	Manila Rope Size (mm)	Working Load Limit (t)	Weight Each (kg)
76.2	19-22	1.8	3.18
102	26-29	3.6	5.90
152	32	7.3	11.3
203	38	7.3	15.4

4:1 Design Factor



N-411B

Blocks for Synthetic Fiber Rope with loose swivel hooks

- These blocks are built to carry the increased loads of synthetic fiber ropes.
- Self-lubricated bronze bushed sheaves with large bearing diameter for extended block life.
- Meets or exceeds all requirements of ASME B30.26. Importantly, these blocks meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Fitting Type: S- Round Pin Anchor; N- Swivel Hook Latch

411B, 412B, 413B

Block Size (in)	Fitting	411 B Stock No.	412 B Stock No.	413 B Stock No.
4	S	755105	755301	755506
6	S	755123	755329	755524
4	N	757103	757309	757504
6	N	757121	757327	757522

411B, 412B, 413B

Block Size (in)	Fitting	Sheave Diameter	Synthetic Rope Size (mm)	Working Load Limit (t)			Weight Each (kg)		
				Single	Double	Triple	Single	Double	Triple
4	S	57.2	13	.90	1.36	1.36	1.36	1.81	2.72
6	S	89.0	19	1.36	3.18	3.63	2.83	4.54	6.35
4	N	57.2	13	.91	1.36	1.36	1.36	1.81	2.72
6	N	89.0	19	1.36	1.81	2.72	2.83	4.54	6.35

4:1 Design Factor.

APPLICATION AND WARNING INFORMATION
SECTION 17

TRY NET BLOCKS



F-453 6"



F-454 6"



J-454 8"

- Forged steel swivel eyes.
- Hot-dip galvanized.
- 6" 453 - Pressed steel side plates with flared edges. Figure 8 grooved, self-lubricating bronze bushed sheaves, with pressure lube fittings. 453 has an extra wide throat opening to allow fittings to pass through.
- 6" 454 - Forged side plates designed to eliminate rope jamming. Wide throat opening and pressure lube fitting on sheave and eye fitting.
- 8" 454 - Forged steel side plates designed to eliminate possibility of rope jamming. Furnished with sealed tapered bearings. Flame-hardened forged steel sheaves for wear resistance.

APPLICATION AND WARNING INFORMATION
SECTION 17

453, 454, Blocks

Sheave Dia. and Model No.	Bearing Type	Stock No.	Working Load Limit (t)	Weight Each (kg)	Sheave Dimensions (mm)	
					Outside Diameter	Rim Thickness
6" F-453	Bronze Bushed	769886	4.54	15.9	152	70.0
6" F-454	Needle Bearing	2001763	4.54	10.4	152	70.0
8" J-454	Tapered Bearing	130726	9.07	16.3	203	73.0

4:1 Design Factor.

DOUBLE RIG TRAWL BLOCKS



J-452

Double Rig Trawl Blocks

- Steel sheave with flame hardened groove, for maximum wear under abrasive conditions.
- Double row, permanently sealed tapered roller bearings.
- Pressure lubrication throughout.
- All steel construction.
- Hot-dip Galvanized.
- Available in "J" oblong swivel eye and "F" standard swivel eye.

APPLICATION AND WARNING INFORMATION
SECTION 17

J-452 Blocks

Sheave Dia. and Model No.	Stock No.	Working Load Limit (t)	Weight Each (kg)	Sheave Dimensions (mm)	
				Outside Diam.	Rim Thickness
8" J-452	130655	9.07	21.8	203	95.5
12" J-452	130673	9.07	38.6	305	95.5
16" F-452	130682	18.14	53.0	406	95.5
18" J-452	2015467	22.50	136	457	138
22" F-452	130708	27.22	109	559	95.5

4:1 Design Factor.

Marine Block Fitting Codes



QG
Swivel Bolt Type
Shackle



QK
Upset Swivel
Bolt Type

CARGO HOISTING BLOCKS



E-566
with Drilled
Swivel Eye

- Block is galvanized.
- Blocks 356mm and larger have flame-hardened roll forged sheaves that assure greater wire life.
- Roll forged sheave is fitted closely into mortise of shell so wire cannot jam between sheave and shell.
- Available for 19mm or 25mm wire.
- Block is fitted with tapered roller bearings which take both load and side thrusts and hold sheave central so it cannot chafe or wear on the sides.
- Tapered Roller bearing with neoprene seals and stainless steel center pin provide long life and trouble-free service.
- Stainless steel center pin has recessed nuts with lock washers.
- Swivel fitting has permanently sealed thrust bearing.
- Pressure lubrication fittings are standard on both center pin and swivel.
- Individually Proof Tested at 4 times Working Load or 2 times Resultant Load.
- A.B.S. recognized load test certificates are furnished.
- Cargo hoist blocks are rated by the maximum single line pull of the wire rope being used.
- Resultant Load equals 2 times single line pull. Ultimate load equals 5 times the Resultant Load.



J-566
with Oblong
Swivel Eye

566 Hoisting Blocks

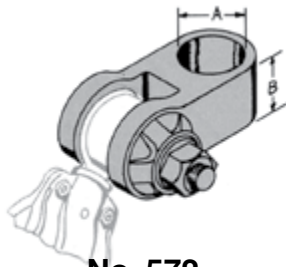
APPLICATION AND WARNING INFORMATION
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Sheave Size (mm)	E-566 Stock No.	J-566 Stock No.	QG-566 Stock No.	QK-566 Stock No.	Single Line Pull (t)	Wire Rope Diameter (mm)	Weight Each (kg)
305	775003	775209	775806	776002	4.54	19	43.1
356	775058	775254	775450	775655	4.54	19	45.4
356	775067	775263	775469	775664	9.07	25	45.4
406	776609	776672	776681	776690	9.07	19	59
406	752956	752965	752974	752983	9.07	25	59

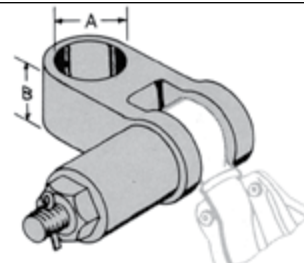
5:1 Design Factor based on Resultant Load. Working Load equals maximum single line pull.

HEEL AND LEAD BLOCK ADJUSTER FITTINGS

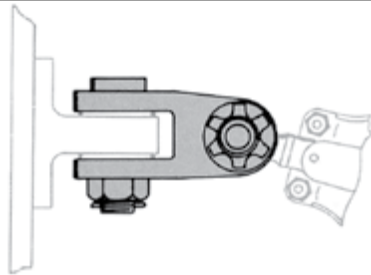
(For use with E-566 Cargo Blocks)

**No. 572**

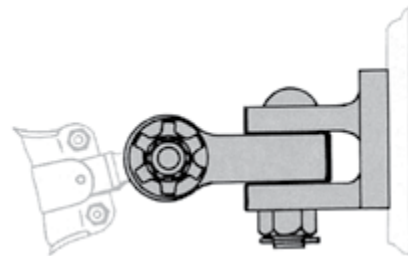
Self-adjuster Fitting with Tension Pin, Cup Spring and Washers.

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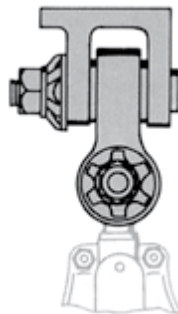
Self-adjuster Fitting with Tension Pin, Coil Spring, Cup and Washers.

**No. 574**

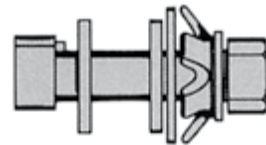
Self-adjuster Fitting with Tension Pin, Cup Spring and Washers, and King Pin to fit Pad Eye (can also be furnished with 2 Tension Pins).

**No. 576**

Self-adjuster Fitting with Pad Jaw, King Pin, Tension Pin, Cup Spring and Washers.

**No. 575**

Self-adjuster Fitting with Tension Pin, Cup Spring, and Washer.

**No. 571**

Tension Pin with Cup Spring, Nut and Washers.

**No. 570**

Tension Pin with Coil Spring, Nut and Washers, Cotter and Cup.

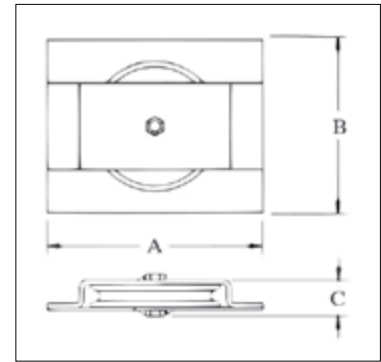
When ordering Specify: "A" - Pin Diameter, "B" - Height of Fitting, and Tension Pin Diameter.



S-600S

Horizontal Lead Blocks

- Available painted or galvanized.
- Fitted with steel sheaves.
- Self-lubricated Bronze Bushed.



S-600S / G-600S

Sheave Diameter (mm)	600 Series Stock No.		Resultant Working Load Limit (t)	Wire Rope Diameter (mm)	Weight Each (kg)	Dimensions (mm)		
	S-600-S Painted	G-600-S Galv.				A	B	C
152	771999	772006	1.81	10	5.6	279	162	63.5
203	772015	772024	2.27	13	9.5	330	216	76.0
254	772033	772042	2.72	16	16.3	381	267	82.5
305	772051	772060	3.63	19	27.7	432	318	102
356	772079	772088	4.54	22	43.0	483	368	102

4:1 Design Factor

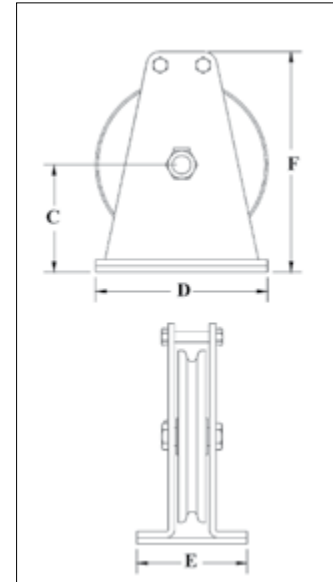
APPLICATION AND WARNING INFORMATION
SECTION 17



G-601S

Vertical Lead Blocks

- Available painted or galvanized.
- Fitted with steel sheaves.
- Self-lubricated Bronze Bushed.



S-601S / G-601S

Sheave Diameter (mm)	601 Series Stock No.		Resultant Working Load Limit (t)	Wire Rope Diameter (mm)	Weight Each (kg)	Dimensions (mm)			
	S-601-S Painted	G-601-S Galv.				C	D	E	F
152	772195	772202	1.81	10	4.5	89	152	140	178
203	772211	772220	2.27	13	11.0	124	203	171	248
254	772239	772248	2.72	16	14.3	162	254	197	298
305	772257	772266	3.63	19	27.2	184	305	152	387
356	2003424	2003425	4.54	22	44.5	222	356	229	457

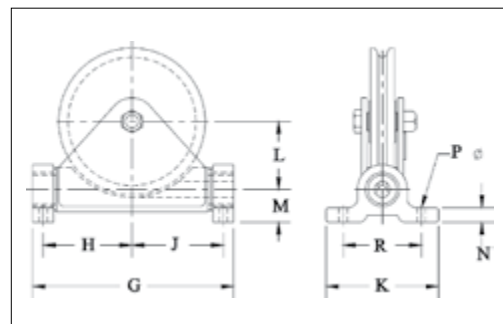
4:1 Design Factor.



G-602S

Flag Blocks

- Base plates are drilled.
- Available painted or galvanized.
- Fitted with steel sheaves.
- Self-lubricated Bronze Bushed.

**S-602S / G-602S Flag Blocks**

Sheave Diameter (mm)	602 Series Stock No.		Resultant Working Load Limit (t)	Wire Rope Diameter (mm)	Weight Each (kg)	Dimensions (mm)								
	S-602-S Painted	G-602-S Galv.				G	H	J	K	L	M	N	P	R
152	772391	772408	1.8	10	7.71	229	95.5	98.5	159	73.0	41.1	19.1	14.2	121
203	1420885	772426	2.2	13	14.3	289	121	130	178	92.0	51.0	25.4	17.5	140
254	772435	772444	2.7	16	19.1	340	145	154	178	117	51.0	25.4	17.5	140
305	772453	772462	3.6	19	52	438	184	197	273	137	79.0	35.1	20.6	191
356	772471	-	4.5	22	62	489	216	222	273	165	79.0	35.1	20.6	191

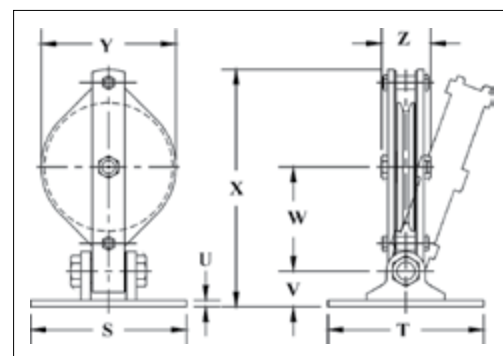
4:1 Design Factor.

APPLICATION AND WARNING INFORMATION
SECTION 17

S-603S

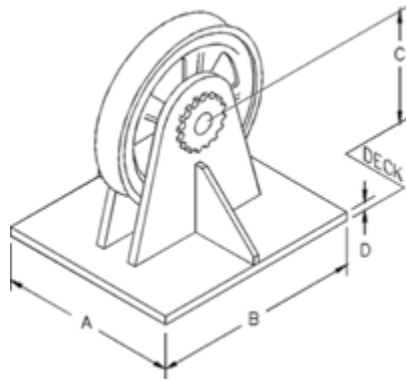
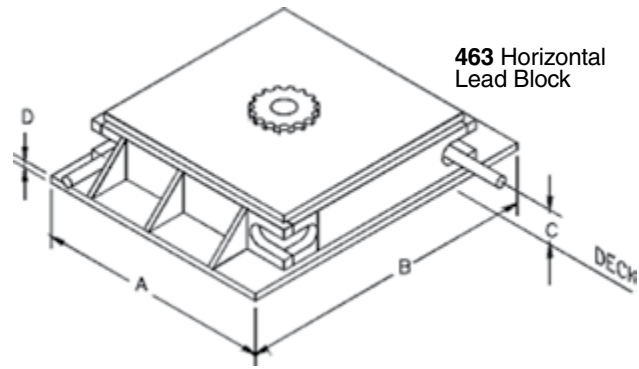
Hinged Lead Blocks

- Base plates are not drilled.
- Available painted or galvanized.
- Self-lubricated Bronze Bearings.

**S-603S / G-603S Hinged Lead Blocks**

Sheave Diameter (mm)	603 Series Stock No.		Resultant Working Load Limit (t)	Wire Rope Diameter (mm)	Weight Each (kg)	Dimensions (mm)							
	S-603-S Painted	G-603-S Galv.				S	T	U	V	W	X	Y	Z
152	772596	772603	1.81	10	13.6	152	114	12.7	51.0	148	325	171	82.5
203	772612	772621	2.27	13	15.4	203	171	9.65	66.5	167	393	229	95.5
254	772630	772649	2.72	16	20.4	305	305	12.7	70.0	203	464	273	111
305	772658	772667	3.63	19	34.0	305	305	12.7	70.0	241	473	330	116
356	772676	772685	4.54	22	45.4	305	305	12.7	70.0	273	524	381	122

4:1 Design Factor.

**461 Vertical Lead Block****463 Horizontal Lead Block**

Furnish the following important information when ordering:

- A, B and C dimensions.
- Line pull in pounds and degree of wrap.
- Line speed.
- Diameter of wire rope.
- Roller bearings, bronze bushings, or sealed double row tapered bearings.
- Guide and control your deck lines with McKissick's deck-mounted wire rope blocks. Built to your specific requirements.
- Extra heavy construction, built to withstand breaking strength of indicated rope (XIP, IWRC).
- Flame-hardened sheaves, machined grooves for proper rope size.
- For special requirements contact Crosby.

461 Vertical & 463 Horizontal Lead Blocks

Figure No.	Stock No.	Sheave Diameter (mm)	Wire Rope Diameter (mm)	Weight Each (kg)	Dimensions (mm)			
					A	B	C	D
461-18	239753	457	22	227	305	508	279	38.1
461-24	131574	610	32	227	381	660	356	38.1
461-26	238120	660	38	299	406	711	381	38.1
461-36	148389	914	42	386	508	914	495	50.8
461-40	136285	1016	50	910	584	1067	572	50.8
461-42	130753	1067	64	1814	711	1321	648	63.5
463-26	4440359	660	26	448	838	838	95.5	38.1
463-30	1404377	762	32	556	940	940	89.0	38.1
463-36	146522	914	38	862	1092	1092	89.0	38.1
463-42	1406525	1067	44	1350	1270	1270	111	51.0
463-48	131583	1219	50	1630	1397	1397	118	51.0
463-60	123164	1524	64	2900	1727	1727	146	51.0

For custom orders contact our Block Hotline, (1-800-727-1555).

OVAL PATTERN CONSTRUCTION BLOCKS



Q-681-Z



Q-682-Z



Q-683-Z

- All blocks are galvanized.
- Sheave lubricated through pressure lube fitting in center pin.
- Assembled with self lubricated bronze bushing.
- Combines weight of regular oval blocks with strength of extra heavy oval blocks.
- Assembled with bolt type anchor shackle.
- Side plates are rounded to provide additional stiffness and reduce wear and chaffing of the rope.

Q-681-Z / Q-682-Z / Q-683-Z

Block Size (in)	Stock No. Bronze Bushed Steel Sheaves		
	Q-681-Z	Q-682-Z	Q-683-Z
6	760441	760665	-
6	760452	760676	760812
8	760463	760687	760823
10	760474	760698	760834

Q-681-Z / Q-682-Z / Q-683-Z

Block Size (in)	Sheave Dimensions (mm)			Wire Rope Diameter (mm)	Working Load Limit (t)			Weight Each (kg)		
	Outside Diam.	Rim Thickness	Center Pin Dia.		Single	Double	Triple	Single	Double	Triple
6	152	25.4	19.1	10	2.70	3.63	-	6.8	12.7	14.5
6	152	25.4	19.1	13	2.70	3.63	4.50	7.3	12.7	14.5
8	203	31.8	25.4	16	3.63	5.44	-	13.2	20.4	28.1
10	254	31.8	25.4	16	3.63	6.35	7.25	17.2	27.7	36.3

4:1 Design Factor