

Crosby® Shackles

Side Loaded Rating Reduction Table for 3/16" - 3" (120 Metric Tons)

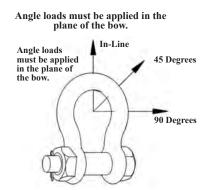
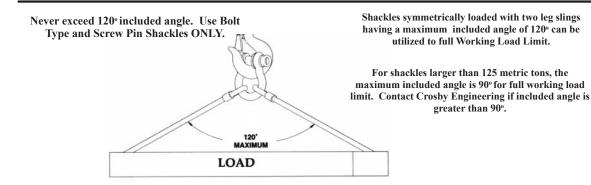
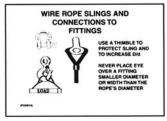


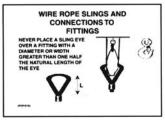
	Table 1
Side Loading Reduction Chart f	or Screw Pin and Bolt Type Shackles Only +
Angle of Side Load from Vertical In-Line of Shackle	Adjusted Working Load Limit
0° - 5° In-Line*	100% of Rated Working Load Limit
45° from In-Line*	70% of Rated Working Load Limit
90° from In-Line*	50% of Rated Working Load Limit
+ In-Line Load is	s applied perpendicular to pin
* DO NOT SIDE LO	DAD ROUND PIN SHACKLES

For shackles larger than 125 metric tons, where the angle of the side load is greater than 5 degrees, contact Crosby Engineering.

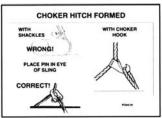
Included Angle - Shackles

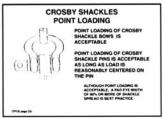












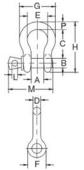


Crosby® Screw Pin Shackles



G-209/S-209 Screw Pin Anchor Shackle

G-209 Screw pin anchor shackles meet the performance requirements of Federal Specifications RR-C-271F Type IVA, Grade A, Class 2, except for those provisions required of the contractor.

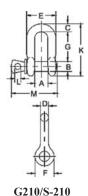


G-209/S-209



G-210/S-210 Screw Pin Chain Shackle

G-210 Screw pin chain shackles meet the performance requirements of Federal Specification RR-C 271F Type IVB, Grade A, Class 2, except for those provisions required of the contractor.



• Capacities 1/3 thru 55 metric tons, grade 6..

- · Forged Quenched and Tempered, with alloy pins.
- Working Load Limit and grade "6" permanently shown on every shackle.
- Hot Dip galvanized or Self Colored.
- · Fatigue Rated.
- Shackles 25t and larger are RFID EQUIPPED.
- 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 degree C (-40 degree F) to 204 degree C (400 degree F).
- 2t through 25t bow and screw pin are Certified to meet charpy impact testing of 42 joules (31 ft-lbs.) minimum average at -20 degree C (-4 degree F).
- All shackles are Quenches and Tempered and can meet DNV impact requirements of 42 joules (31 ft. lbs.) at -20 degree C (-4 degree F).
- Meet or exceeds all requirements of ASME B30.26.
- Type Approval and certification in accordance with ABS 2006 Steel Vessel Rules 1-1-17.7, and ABS Guide for Certification of Cranes.
- Crosby 2t through 25t G209 anchor shackles are type approved to DNV Certification Notes 2.7-1 Offshore
 Containers. These Crosby shackles are statistical proof and impact tested. The tests are conducted by Crosby
 and 3.1 test certification is available upon request.
- · 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	Stock N	Number	Weight Each					Dime	ensions	s (in.)					Toler +	ance /-
S ()	(tons) *	G-209	S-209	(lbs)	A	В	С	D	E	F	G	Н	L	M	P	С	A
3/16	1/3	1018357		.06	.38	.25	.88	.19	.60	.56	.98	1.47	.16	1.14	.19	.06	.06
1/4	1/2	1018375	1018384	.10	.47	.31	1.13	.25	.78	.61	1.28	1.84	.19	1.43	.25	.06	.06
5/16	3/4	1018393	1018400	.18	.53	.38	1.22	.31	.84	.75	1.47	2.09	.22	1.71	.31	.06	.06
3/8	1	1018419	1018428	.31	.66	.44	1.44	.38	1.03	.91	1.78	2.49	.25	2.02	.38	.13	.06
7/16	1-1/2	1018437	1018446	.38	.75	.50	1.69	.44	1.16	1.06	2.03	2.91	.31	2.37	.44	.13	.06
1/2	2	1018455	1018464	.72	.81	.63	1.88	.50	1.31	1.19	2.31	3.28	.38	2.69	.50	.13	.06
5/8	3-1/4	1018473	1018482	1.37	1.06	.75	2.38	.63	1.69	1.50	2.94	4.19	.44	3.34	.69	.13	.06
3/4	4-3/4	1018491	1018507	2.35	1.25	.88	2.81	.75	2.00	1.81	3.50	4.97	.50	3.97	.81	.25	.06
7/8	6-1/2	1018516	1018525	3.62	1.44	1.00	3.31	.88	2.28	2.09	4.03	5.83	.50	4.50	.97	.25	.06
1	8-1/2	1018534	1018543	5.03	1.69	1.13	3.75	1.00	2.69	2.38	4.69	6.56	.56	5.13	1.06	.25	.06
1-1/8	9-1/2	1018552	1018561	7.41	1.81	1.25	4.25	1.16	291	2.69	5.16	7.47	.63	5.71	1.25	.25	.06
1-1/4	12	1018570	1018589	9.50	2.03	1.38	4.69	1.29	3.25	3.00	5.75	8.25	.69	6.25	1.38	.25	.06
1-3/8	13-1/2	1018598	1018605	13.53	2.25	1.50	5.25	1.42	3.63	3.31	6.38	9.16	.75	6.83	1.50	.25	.13
1-1/2	17	1018614	1018623	17.20	2.38	1.63	5.75	1.54	3.88	3.63	6.88	10.00	.81	7.33	1.62	.25	.13
1-3/4	25	1018632	1018641	27.78	2.88	2.00	7.00	1.84	5.00	4.19	8.86	12.34	1.00	9.06	2.25	.25	.13
2	35	1018650	1018669	45.00	3.25	2.25	7.75	2.08	5.75	4.81	9.97	13.68	1.22	10.35	2.40	.25	.13
2-1/2	55	1018678	1018687	85.75	4.13	2.75	10.50	2.71	7.25	5.69	12.87	17.84	1.38	13.00	3.13	.25	.25

G-210 & S-210 Screw Pin Chain Shackles

Nominal Size (in.)	Working Load Limit	Stock N	Number	Weight Each				Di	imensi	ions (i	n.)					rance +/-
Size (iii)	(tons) *	G-210	S-210	(lbs)	A	В	С	D	E	F	G	K	L	M	G	A
1/4	1/2	1019150	1019169	.11	.47	.31	.25	.25	.97	.62	.97	1.59	.19	1.43	.06	.06
5/16	3/4	1019178	1019187	.17	.53	.38	.31	.31	1.15	.75	1.07	1.91	.22	1.71	.06	.06
3/8	1	1019196	1019203	.28	.66	.44	.38	.38	1.42	.92	1.28	2.31	.25	2.02	.13	.06
7/16	1-1/2	1019212	1019221	.43	.75	.50	.44	.44	1.63	1.06	1.48	2.67	.31	2.37	.13	.06
1/2	2	1019230	1019249	.59	.81	.63	.50	.50	1.81	1.18	1.66	3.03	.38	2.69	.13	.06
5/8	3-1/4	1019258	1019267	1.25	1.06	.75	.63	.63	2.32	1.50	2.04	3.76	.44	3.34	.13	.06
3/4	4-3/4	1019276	1019285	2.63	1.25	.88	.81	.75	2.75	1.81	2.40	4.53	.50	3.97	.25	.06
7/8	6-1/2	1019294	1019301	3.16	1.44	1.00	.97	.88	3.20	2.10	2.86	5.33	.50	4.50	.25	.06
1	8-1/2	1019310	1019329	4.75	1.69	1.13	1.00	1.00	3.69	2.38	3.24	5.94	.56	5.13	.25	.06
1-1/8	9-1/2	1019338	1019347	6.75	1.81	1.25	1.25	1.13	4.07	2.69	3.61	6.78	.63	5.71	.25	.06
1-1/4	12	1019356	1019365	9.06	2.03	1.38	1.38	1.25	4.53	3.00	3.97	7.50	.69	6.25	.25	.13
1-3/8	13-1/2	1019374	1019383	11.63	2.25	1.50	1.50	1.38	5.01	3.31	4.43	8.28	.75	6.53	.25	.13
1-1/2	17	1019392	1019409	15.95	2.38	1.63	1.62	1.50	5.38	3.62	4.87	9.05	.81	7.33	.25	.13
1-3/4	25	1019418	1019427	26.75	2.88	2.00	2.12	1.75	6.38	4.19	5.78	10.97	1.00	9.06	.25	.13
2	35	1019436	1019445	42.31	3.25	2.25	2.36	2.10	7.25	5.00	6.77	12.74	1.13	10.35	.25	.13
2-1/2	55	1019454	1019463	71.75	4.12	2.75	2.63	2.63	9.38	5.68	8.07	14.85	1.38	13.00	.25	.25
* Note: Ma	ximum Pro	of Load is	2.0 times t	he Worki	ng Loa	nd Lim	it. Min	imum	Ultim	ate Stre	ength i	s 6 tim	es the	Workir	ıg Loa	d Limit.



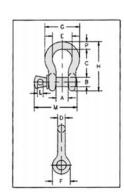
Crosby® Alloy Screw Pin Anchor Shackles



G-209A Alloy Screw Pin Shackle

Screw pin anchor shackles meet the performance requirements of Federal Specification RR-C-271DF Type IVA, Grade B, Class 2, except for those provi-sions required of the contractor.

- Capacities 2 thru 21 metric tons. Meets performance requirements of Grade 8 shackles.
- · Forged Alloy Steel Quenched and Tempered, with alloy pins.
- Working Load Limit permanently shown on every shackle.
- · Hot Dip Galvanized.
- 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.
- · 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 degree C (-40 degree F) to 204 degree C (400 degree F).



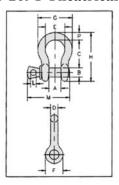
G-209A Alloy Screw Pin Shackles

Nominal	Working	G-209-A						Dim	ensions	(in.)					Tolera	nce +/-
Shackle Size (in.)	Load Limit * (tons)	Stock Number	Weight Each (lbs)	A	В	С	D	E	F	G	Н	L	M	P	С	A
3/8	2	1017450	.31	.66	.44	1.44	.38	1.03	.91	1.78	2.49	.25	2.03	.38	.13	.06
7/16	2-2/3	1017472	.38	.75	.50	1.69	.44	1.16	1.06	2.03	2.91	.31	2.38	.44	.13	.06
1/2	3-1/3	1017494	.63	.81	.63	1.88	.50	1.31	1.19	2.31	3.28	.38	2.69	.50	.13	.06
5/8	5	1017516	1.38	1.06	.75	2.38	.63	1.69	1.50	2.94	4.19	.44	3.34	.69	.13	.06
3/4	7	1017538	2.25	1.25	.88	2.81	.75	2.00	1.81	3.50	4.97	.50	3.97	.81	.25	.06
7/8	9-1/2	1017560	3.61	1.44	1.00	3.31	.88	2.28	2.09	4.03	5.83	.50	4.50	.97	.25	.06
1	12-1/2	1017582	5.32	1.69	1.13	3.75	1.00	2.69	2.38	4.69	6.56	.56	5.07	1.06	.25	.06
1-1/8	15	1017604	7.25	1.81	1.25	4.25	1.16	2.91	2.69	5.16	7.47	.63	5.59	1.25	.25	.06
1-1/4	18	1017626	9.88	2.03	1.38	4.69	1.29	3.25	3.00	5.75	8.25	.69	6.16	1.38	.25	.06
1-3/8	21	1017648	13.25	2.25	1.50	5.25	1.42	3.63	3.31	6.38	9.16	.75	6.84	1.50	.25	.13

Maximum Proof Load is 2 times the Working Load Limit (metric tons) and 2.2 times the Working Load Limit (short tons). Minimum Ultimate Strength is 4.5 times the Working Load Limit for metric tons, and 5 times the Working Load Limit for short tons.

For Working Load Limit reduction due to side loading applications, see section titled "Safe Shackle Use."

S-209T Theatrical Shackles



- Sizes 3/8" through 3/4".
 Capacities: 1 through 4-3/4 metric tonnes.
 Forged Quenched and Tempered with alloy pins.
 Working Load Limit permanently shown on every shackle.
 Flat Black baked on powder coat finish.
 Fetime Pared.
- Fatigue Rated.
- Frangue Rateu.
 Industry leading 6:1 design factor.
 Screw pin anchor shackles meet the performance requirement of Federal Specification RR-C-271F Type A, Grade A, Class 2, except for those provisions required of the contractor.
 Meets the performance requirements of EN 13889:2003.



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.

S-209 Theatrical Shackles

Nominal	Working	S-209T						Di	imensio	ns (in.)					Tolera	nce +/-
(in.)	Load Limit * (tons)	Stock Number	Weight Each (lbs)	A	В	С	D	E	F	G	Н	L	М	P	С	A
3/8	1	1018706	.31	.66	.44	1.44	.38	1.03	.91	1.78	2.49	.25	2.02	.38	.13	.06
7/16	1-1/2	1018724	.38	.75	.50	1.69	.44	1.16	1.06	2.03	2.91	.31	2.37	.44	.13	.06
1/2	2	1018742	.72	.81	.63	1.88	.50	1.31	1.19	2.31	3.28	.38	2.69	.50	.13	.06
5/8	3-1/4	1018760	1.37	1.06	.75	2.38	.63	1.69	1.50	2.94	4.19	.44	3.34	.69	.13	.06
3/4	4-3/4	1018778	2.35	1.25	.88	2.81	.75	2.00	1.81	3.50	4.97	.50	3.97	.81	.25	.06



Crosby® Round Pin Shackles



G-213/S-213 Round Pin Anchor Shackle

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

В

G

- Shackles are Quenched and Tempered and can meet DNV impact requirements of 42 joules (31 ft-lbs.) at -20 degree C (-4 degree F).
- Working Load Limit permanently shown on every shackle.
- Forged Quenched and Tempered, with alloy pins.
- Capacities 1/2 thru 35 metric tons.
- Hot Dip Galvanized or Self-Colored. Fatigue Rated.
- · Fatigue rated.
- 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 25t and larger are $\pmb{\mathsf{RFID}}\ \pmb{\mathsf{EQUIPPED}}$
- · Look for the Red Pin® ... the mark of genuine Crosby quality.



G-215/S-215 Round Pin Chain Shackle

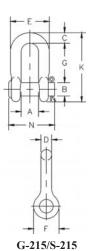
Round pin chain shackles meet the performance requirements of Federal Specification, RR-C 271F Type IVB, Grade A, Class I, except for those provisions required of the contractor.

G-213 & S-213 Round Pin Anchor Shackles

Nominal Size	Working Load Limit	Stock N	Number	Weight Each				Dir	mensi	ons (i	in.)				Toler	ance /-
(in.)	(tons) *	G-213	S-213	(lbs)	A	В	С	D	E	F	G	Н	N	P	С	A
1/4	1/2	1018017	1018026	.13	.47	.31	1.13	.25	.78	.61	1.28	1.84	1.34	.25	.06	.06
5/16	3/4	1018035	1018044	.18	.53	.38	1.22	.31	.84	.75	1.47	2.09	1.59	.31	.06	.06
3/8	1	1018053	1018062	.29	.66	.44	1.44	.38	1.03	.91	1.78	2.49	1.86	.38	.13	.06
7/16	1-1/2	1018071	1018080	.38	.75	.50	1.69	.44	1.16	1.06	2.03	2.91	2.13	.44	.13	.06
1/2	2	1018099	1018106	.71	.81	.63	1.88	.50	1.31	1.19	2.31	3.28	2.38	.50	.13	.06
5/8	3-1/4	1018115	1018124	1.50	1.06	.75	2.38	.63	1.69	1.50	2.94	4.19	2.91	.69	.13	.06
3/4	4-3/4	1018133	1018142	2.32	1.25	.88	2.81	.75	2.00	1.81	3.50	4.97	3.44	.81	.25	.06
7/8	6-1/2	1018151	1018160	3.49	1.44	1.00	3.31	.88	2.28	2.09	4.03	5.83	3.81	.97	.25	.06
1	8-1/2	1018179	1018188	5.00	1.69	1.13	3.75	1.00	2.69	2.38	4.69	6.56	4.53	1.06	.25	.06
1-1/8	9-1/2	1018197	1018204	6.97	1.81	1.25	4.25	1.13	2.91	2.69	5.16	7.47	5.13	1.25	.25	.06
1-1/4	12	1018213	1018222	9.75	2.03	1.38	4.69	1.29	3.25	3.00	5.75	8.25	5.50	1.38	.25	.06
1-3/8	13-1/2	1018231	1018240	13.25	2.25	1.50	5.25	1.42	3.63	3.31	6.38	9.16	6.13	1.50	.25	.13
1-1/2	17	1018259	1018268	17.25	2.38	1.63	5.75	1.54	3.88	3.63	6.88	10.00	6.50	1.62	.25	.13
1-3/4	25	1018277	1018286	29.46	2.88	2.00	7.00	1.84	5.00	4.19	8.86	12.34	7.75	2.25	.25	.13
2	35	1018295	1018302	45.75	3.25	2.25	7.75	2.08	5.75	4.81	9.97	13.68	8.75	2.40	.25	.13

* Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Strength is 6 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see section titled "Safe Shackle Use."

G-213/S-213



G-215 & S-215 Round Pin Chain Shackles

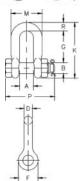
Nominal Size	working	Stock N	Number	Weight				Dim	ensions	(in.)				Tolera	nce +/-
(in.)	Load Limit (tons) *	G-215	S-215	Each (lbs)	A	В	С	D	E	F	G	K	N	G	A
1/4	1/2	1018810	1018829	.10	.47	.31	.25	.25	.97	.62	.91	1.59	1.34	.06	.06
5/16	3/4	1018838	1018847	.18	.53	.38	.31	.31	1.15	.75	1.07	1.91	1.63	.06	.06
3/8	1	1018856	1018865	.25	.66	.44	.38	.38	1.42	.92	1.28	2.31	1.86	.13	.06
7/16	1-1/2	1018856	1018865	.40	.75	.50	.44	.44	1.63	1.06	1.48	2.67	2.13	.13	.06
1/2	2	1018874	1018883	.50	.81	.63	.50	.50	1.81	1.18	1.66	3.03	2.38	.13	.06
5/8	3-1/4	1018892	1018909	1.21	1.06	.75	.63	.63	2.32	1.50	2.04	3.76	2.91	.13	.06
3/4	4-3/4	1018918	1018927	2.00	1.25	.88	.81	.75	2.75	1.81	2.40	4.53	3.44	.25	.06
7/8	6-1/2	1018936	1018945	3.28	1.44	1.00	.97	.88	3.20	2.10	2.86	5.33	3.81	.25	.06
1	8-1/2	1018954	1018963	4.75	1.69	1.13	1.00	1.00	3.69	2.38	3.24	5.94	4.53	.25	.06
1-1/8	9-1/2	1018972	1018981	6.30	1.81	1.25	1.25	1.13	4.07	2.68	3.61	6.78	5.13	.25	.06
1-1/4	12	1018990	1019007	9.00	2.03	1.38	1.38	1.25	4.53	3.00	3.97	7.50	5.50	.25	.13
1-3/8	13-1/2	1019016	1019025	12.00	2.25	1.50	1.50	1.38	5.01	3.31	4.43	8.28	6.13	.25	.13
1-1/2	17	1019034	1019043	16.15	2.38	1.63	1.62	1.50	5.38	3.62	4.87	9.05	6.50	.25	.13
1-3/4	25	1019052	1019061	29.96	2.88	2.00	2.12	1.75	6.38	4.19	5.82	10.97	7.75	.25	.13
2	35	1019070	1019105	43.25	3.25	2.25	2.36	2.10	7.25	5.00	6.82	12.74	8.75	.25	.13

* Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Strength is 6 times the Working Load Limit. For Working Load Limit reduction due to side loading applications, see section titled "Safe Shackle Use."



Crosby® Bolt Type Shackles

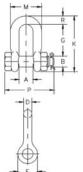




G-2130/S-2130 Bolt Type Anchor Shackle

G-2130/S-2130 Bolt Type Anchor shackles. Thin hex head bolt - nut with cotter pin. Meets the perfor-mance requirements of Federal Speci-fication RR-C-271F Type IVA, Grade A, Class 3, except for those provisions required of the contractors.





G-2150/S-2150 Bolt **Type Chain Shackle**

G-2150/S-2150 Bolt Type Chain shackles. Thin hex head bolt - nut with cotter pin. Meets the performance requirements of Federal Specification RR-C-271F Type IVB, Grade A, Class 3, except for those provisions required of the contractors.

- Capacities 1/3 thru 150 metric tons, grade 6.
- Working Load Limit and grade "6" permanently shown on every shackle.
- · Forged Quenched and Tempered, with alloy pins.
- Hot Dip galvanized or Self Colored. (85, 120 and 150 metric ton shackles are all hot dip galvanized bows and the bolts and Dimetcoted® and painted red).
- Fatigue rated (1/3t 55t).
- Shackles 25t and larger are RFID EQUIPPED.
- Approved for use at -40 degree C (-40 degree F) to 204 degree C (400 degree 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.
- · Shackles 120 metric tons and larger are proof tested, Magnetic Particle Inspected and provided with Serialized Pin and Bow.
- Type Approval and certification in accordance with ABS 2006 Steel Vessel Rules 1-1-17.7, and a BS Guide for Certification of Cranes.
- 3.1 Certification as standard available for charpy and statistical proof test for page 79 only up to 25 tons to DNV2.7-1 and EN13889.
- Crosby 2t through 25t G2130 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-lbs.) minimum average at -20 degree C (-4 degree F). The tests are conducted by Crosby and 3.1 test certification is available upon request. Refer to page 76 for Crosby COLD TUFF® shackles that meet the additional requirements of DNV rules for certification of lifting applications Loose Gear.
- All other 2130 and all 2150 shackles can meet charpy requirements of 42 joules (31 ft-lbs) average at -20 degree C (-4 degree F) upon
- · Look for the Red Pin® ... the mark of genuine Crosby quality.

Nominal	Working Load	Stock N	lumber	Weight Each				Dim	ensions	(in.)					rance /-
Size (in.)	Limit (t)*	G-2130	S-2130	(lbs)	A	В	С	D	E	F	Н	L	N	С	A
3/16	1/3++	1019464	-	.06	.38	.25	.88	.19	.60	.56	1.47	.98	.19	.06	.06
1/4	1/2	1019466	-	.11	.47	.31	1.13	.25	.78	.61	1.84	1.28	.25	.06	.06
5/16	3/4	1019468	-	.22	.53	.38	1.22	.31	.84	.75	2.09	1.47	.31	.06	.06
3/8	1	1019470	-	.33	.66	.44	1.44	.38	1.03	.91	2.49	1.78	.38	.13	.06
7/16	1-1/2	1019471	-	.49	.75	.50	1.69	.44	1.16	1.06	2.91	2.03	.44	.13	.06
1/2	2	1019472	1019481	.79	.81	.64	1.88	.50	1.31	1.19	3.28	2.31	.50	.13	.06
5/8	3-1/4	1019490	1019506	1.68	.77	2.38	.63	.63	1.69	1.50	4.19	2.94	.69	.13	.06
3/4	4-3/4	1019515	1019524	2.72	1.25	.89	2.81	.75	2.00	1.81	4.97	3.50	.81	.25	.06
7/8	6-1/2	1019533	1019542	3.95	1.44	1.02	3.31	.88	2.28	2.09	5.83	4.03	.97	.25	.06
1	8-1/2	1019551	1019560	5.66	1.69	1.15	3.75	1.00	2.69	2.38	6.56	4.69	1.06	.25	.06
1-1/8	9-1/2	1019579	1019588	8.27	1.81	1.25	4.25	1.13	2.91	2.69	7.47	5.16	1.25	.25	.06
1-1/4	12	1019597	1019604	11.71	2.03	1.40	4.69	1.29	3.25	3.00	8.25	5.75	1.38	.25	.06
1-3/8	13-1/2	1019613	1019622	15.83	2.25	1.53	5.25	1.42	3.63	3.31	9.16	6.38	1.50	.25	.13
1-1/2	17	1019631	1019640	19.00	2.38	1.66	5.75	1.53	3.88	3.63	10.00	6.88	1.62	.25	.13
1-3/4	25	1019659	1019668	33.91	2.88	2.04	7.00	1.84	5.00	4.19	12.34	8.80	2.25	.25	.13
2	35	1019677	1019686	52.25	3.25	2.30	7.75	2.08	5.75	4.81	13.68	10.15	2.40	.25	.13
2-1/2	55	1019695	1019702	98.25	4.13	2.80	10.50	2.71	7.25	5.69	17.90	12.75	3.13	.25	.25
3	#85	1019711	-	154.00	5.00	3.30	13.00	3.12	7.88	6.50	21.50	14.62	3.62	.25	.25
3-1/2	#120++	1019739	-	265.00	5.25	3.76	14.63	3.62	9.00	8.00	24.88	17.02	4.38	.25	.25
4	#150++	1019757	-	338.00	5.50	4.26	14.50	4.00	10.00	9.00	25.68	18.00	4.56	.25	.25

Nominal Size (in.)	Working Load Limit	Stock N	Number	Weight Each				D	imensio	ons (in.)					rance /-
	(t)*	G-2150	S-2150	(lbs)	A	В	D	F	G	K	M	P	R	G	A
1/4	1/2	1019768	-	.13	.47	.31	.25	.62	.91	1.59	.97	1.56	.25	.06	.06
5/16	3/4	1019770	-	.23	.53	.38	.31	.75	1.07	1.91	1.15	1.82	.31	.06	.06
3/8	1	1019772	-	.33	.66	.44	.38	.92	1.28	2.31	1.42	2.17	.38	.13	.06
7/16	1-1/2	1019774	-	.49	.75	.50	.44	1.06	1.48	2.67	1.63	2.51	.44	.13	.06
1/2	2	1019775	1019784	.75	.81	.64	.50	1.18	1.66	3.03	1.81	2.80	.50	.13	.06
5/8	3-1/4	1019793	1019800	1.47	1.06	.77	.63	1.50	2.04	3.76	2.32	3.56	.63	.13	.06
3/4	4-3/4	1019819	1019828	2.52	1.25	.89	.75	1.81	2.40	4.53	2.75	4.15	.81	.25	.06
7/8	6-1/2	1019837	1019846	3.85	1.44	1.02	.88	2.10	2.86	5.33	3.20	4.82	.97	.25	.06
1	8-1/2	1019855	1019864	5.55	1.69	1.15	1.00	2.38	3.24	5.94	3.69	5.39	1.00	.25	.06
1-1/8	9-1/2	1019873	1019882	7.60	1.81	1.25	1.13	2.68	3.61	6.78	4.07	5.90	1.25	.25	.06
1-1/4	12	1019891	1019908	10.81	2.03	1.40	1.25	3.00	3.97	7.50	4.53	6.69	1.38	.25	.06
1-3/8	13-1/2	1019917	1019926	13.75	2.25	1.53	1.38	3.31	4.43	8.28	5.01	7.21	1.50	.25	.13
1-1/2	17	1019935	1019944	18.50	2.38	1.66	1.50	3.62	4.87	9.05	5.38	7.73	162	.25	.13
1-3/4	25	1019953	1019962	31.40	2.88	2.04	1.75	4.19	5.82	10.97	6.38	9.33	2.12	.25	.13
2	35	1019971	1019980	46.75	3.25	2.30	2.10	5.00	6.82	12.74	7.25	10.41	2.36	.25	.13
2-1/2	55	101999	1020004	85.00	4.12	2.80	2.63	5.68	8.07	14.85	9.38	13.58	2.63	.25	.25
3	#85	1020013	-	124.25	5.00	3.25	3.00	6.50	8.56	16.87	11.00	15.13	3.50	.25	.25

*Note: Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Strength is 6 times the Working Load Limit. + Individually proof Tested with certification. ++ Furnished in Anchor style only and furnished with Round Head Bolts with welded handles.



Crosby® Alloy Bolt Type Shackles



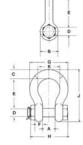
G-2140/S-2140 Alloy Bolt Type Anchor Shackles

- · Quenched and Tempered.
- · Alloy bows, Alloy bolts.
- Forged Alloy Steel 30 thru 200 metric tons and Cast Alloy Steel 250 thru 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 or self colored with pins that are galvanized and painted red.
- 120, 150 and 175 metric ton shackle bows are hotdip galvanized; pins are Dimetcoted® and painted
- · 200, 250, 300 and 400 metric ton shackle bows are Dimetcoted®; and painted red.
- · All sizes are RFID EQUIPPED
- Approved for use at -40 degree C (-40 degree F) to 204 degree C (400 degree F).
- Shackles are Quenches and Tempered and can meet DNV impact requirements of 42 joules (31 ft-lbs.) at -20 degree C (-4 degree F).
- All sizes are individually proof tested to 2.0 times the Working Load Limit.
- Check with your sales representative for Crosby COLD TUFF® shackles that meet the additional requirements of DNV rules for certification of

lifting applications - Loose Gear.

- · Shackles 200 metric tons and larger are provided as follows.
 - Serialized Pin and Bow
 - Material Certification (Chemical)

 - Magnetic Particle InspectedCertification 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 fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Type Approval and certification in accordance with ABS 2006 Steel Vessel Rules 1-1-17.7, and ABS Guide for Certification of Cranes.
- · Look for the Red Pin® ... the mark of genuine Crosby quality.



G-2140 & S-2140 Crosby® Alloy Bolt Type Shackles

Nominal	Working	Stock N	Number	Weight					Dim	ensions	s (in.)					Toler	
Shackle Size (in.)	Load Limit (tons)*	G-2140	S-2140	Each (lbs)	A	В	C	D +/- .02	E	F	G	Н	J	K	L	A	E
1-1/2	30	1021110	1021129	18.8	2.38	3.62	1.62	1.63	5.75	1.39	6.88	7.73	10.00	3.88	1.53	.13	.25
1-3/4	40	1021138	1021147	33.8	2.88	4.19	2.25	2.00	7.00	1.75	8.81	9.33	12.34	5.00	1.84	.13	.25
2	55	1021156	1021165	49.9	3.25	4.81	2.40	2.25	7.75	2.00	10.16	10.41	13.68	5.75	2.08	.13	.25
2-1/2	85	1021174	1021183	103	4.12	5.81	3.12	2.75	10.50	2.62	12.75	13.58	17.90	7.25	2.71	.25	.25
3	120	1921192	-	162	5.00	6.50	3.63	3.25	13.00	3.00	14.62	15.13	21.50	7.88	3.12	.25	.25
3-1/2	#150	1021218	-	268	5.25	8.00	4.38	3.75	14.63	3.75	17.02	17.62	24.88	9.00	3.62	.25	.25
4	#175	1021236	-	332	5.50	9.00	4.56	4.25	14.50	4.00	18.00	20.37	25.68	10.00	4.00	.25	.25
7**	#400	1021478	-	1200	8.25	14.00	7.25	7.00	22.50	6.50	26.00	28.68	40.25	13.00	6.00	.25	.25

*Note: Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Load is 4 times the Working Load Limit on 200 through 400 metric Tons. For sizes 30 through 175 metric Tons, Minimum Ultimate Load is 5.4 times the Working Load Limit.

** Cast Alloy Steel. # Furnished with Round Head Bolts with an eye bolt for handling.

Crosby® Alloy Easy-Loc Shackles



G-2140E

G-2140E & S-2140E Crosby® Alloy Easy-Loc Shackles

Nominal Shackle Size	Working Load Limit	Stock I	Number	Weight Each					Dime	ension	s (in.)							erance -/-
(in.)		G-2140E	S-2140E	(lbs)	A	В	C	D +/02	E	F	G	Н	J	K	L	M	A	E
4-3/4	#200	1021422	-	452	7.25	10.50	5.00	4.75	15.19	4.58	20.84	23.11	27.81	11.00	4.75	1.75	.25	.25
5**	#250	1021442	-	594	8.50	12.00	5.63	5.00	18.50	4.48	23.63	24.28	32.63	13.00	5.00	1.75	.25	.25
6**	#300	1021460	_	791	8.38	13.00	6.06	6.00	18.72	4.89	24.76	25.45	34.28	13.00	5.88	1.75	.25	.25