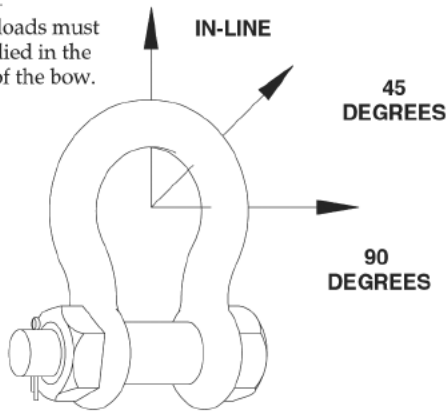


# Crosby® Shackles

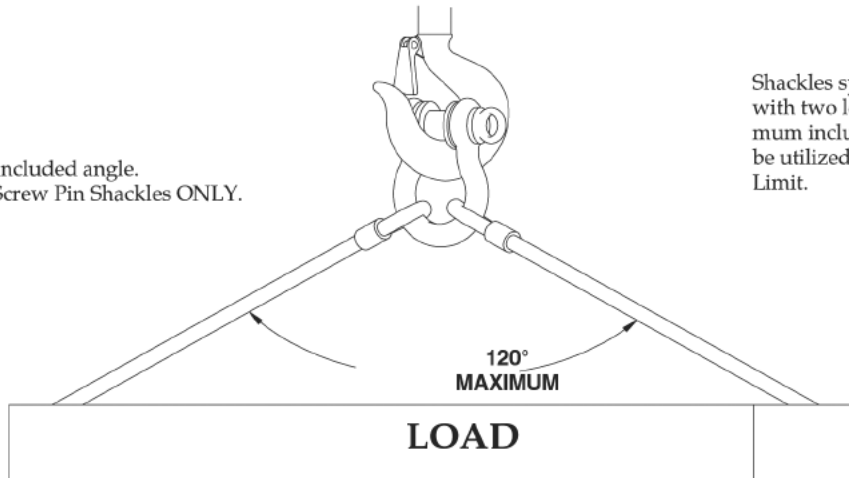
Angle loads must be applied in the plane of the bow.



Side Loading Reduction Chart For Screw Pin and Bolt Type Shackles Only †	
Angle of Side Load from Vertical In-Line of shackle	Adjusted Working Load Limit
0° 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 applied perpendicular to pin.  
† DO NOT SIDE LOAD ROUND PIN SHACKLES

Never Exceed 120° included angle.  
Use Bolt Type and Screw Pin Shackles ONLY.



Shackles symmetrically loaded with two leg slings having a maximum included angle of 120° can be utilized to full Working Load Limit.

**WIRE ROPE SLINGS AND CONNECTIONS TO FITTINGS**

USE A THIMBLE TO PROTECT SLING AND TO INCREASE D/d

NEVER PLACE EYE OVER A FITTING SMALLER DIAMETER OR WIDTH THAN THE ROPE'S DIAMETER

(POH515)

**WIRE ROPE SLINGS AND CONNECTIONS TO FITTINGS**

NEVER PLACE A SLING EYE OVER A FITTING WITH A DIAMETER OR WIDTH GREATER THAN ONE HALF THE NATURAL LENGTH OF THE EYE

(POH516)

**SYNTHETIC SLINGS RATED LOAD** (POH517)

FOLDING, BUNCHING OR PINCHING OF SYNTHETIC SLINGS, WHICH OCCURS WHEN USED WITH SHACKLES, HOOKS OR OTHER APPLICATIONS WILL REDUCE THE RATED LOAD

BUNCHING

PINCHING

ANSI B30.9-1994

**CHOKER HITCH FORMED**

WITH SHACKLES

WRONG!

PLACE PIN IN EYE OF SLING

CORRECT!

POH519

**CROSBY SHACKLES POINT LOADING**

POINT LOADING OF CROSBY SHACKLE BOWS IS ACCEPTABLE

POINT LOADING OF CROSBY SHACKLE PINS IS ACCEPTABLE AS LONG AS LOAD IS REASONABLY CENTERED ON THE PIN

ALTHOUGH POINT LOADING IS ACCEPTABLE, A PAD EYE WIDTH OF 80% OR MORE OF SHACKLE SPREAD IS BEST PRACTICE

(TP18 page 23)

# Crosby® Round Pin Shackles

Load Rated

Fatigue Rated



## ROUND PIN ANCHOR SHACKLES



G-213 S-213

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

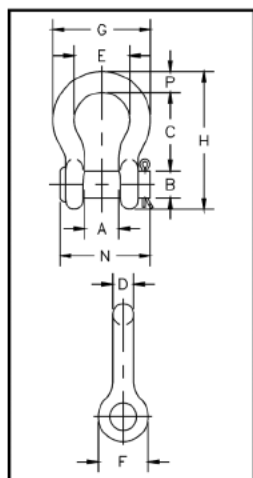
- Shackles are Quenched and Tempered and can meet DNV impact requirements of 42 joules at -20 degree C.
- Working Load Limit permanently shown on every shackle.
- Forged - Quenched and Tempered, with alloy pins.
- Capacities 1/2 thru 35 metric tons.
- Look for the Red Pin® . . . the mark of genuine Crosby quality.
- 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.
- Hot Dip galvanized or Self Colored.
- Fatigue rated.

## ROUND PIN CHAIN SHACKLES



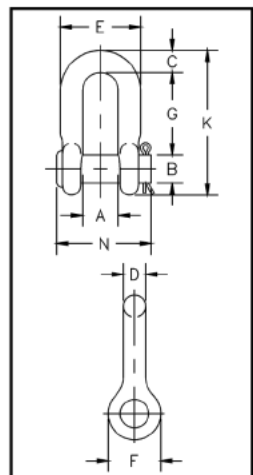
G-215 S-215

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



G-213 S-213

Nominal Size (in.)	Working Load Limit (t)	Stock No.		Weight Each (lbs.)	Dimensions (in.)													Tolerance +/-	
		G-213	S-213		A	B	C	D	E	F	G	H	N	P	C	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	1.16	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			



G-215 S-215

Nominal Size (in.)	Working Load Limit (t)	Stock No.		Weight Each (lbs.)	Dimensions (in.)											Tolerance +/-	
		G-215	S-215		A	B	C	D	E	F	G	K	N	G	A		
1/4	1/2	1018810	1018829	.10	.47	.31	.25	.25	.97	.61	.88	1.59	1.34	.06	.06		
5/16	3/4	1018838	1018847	.18	.53	.38	.31	.31	1.16	.75	1.03	1.91	1.59	.06	.06		
3/8	1	1018856	1018865	.25	.66	.44	.38	.38	1.41	.91	1.25	2.30	1.86	.13	.06		
7/16	1-1/2	1018874	1018883	.40	.75	.50	.44	.44	1.63	1.06	1.44	2.66	2.13	.13	.06		
1/2	2	1018892	1018909	.50	.81	.63	.50	.50	1.81	1.19	1.63	3.03	2.38	.13	.06		
5/8	3-1/4	1018918	1018927	1.21	1.06	.75	.62	.63	2.31	1.50	2.00	3.75	2.91	.13	.06		
3/4	4-3/4	1018936	1018945	2.00	1.25	.88	.81	.75	2.75	1.81	2.38	4.53	3.44	.25	.06		
7/8	6-1/2	1018954	1018963	3.28	1.44	1.00	.97	.88	3.19	2.09	2.81	5.33	3.81	.25	.06		
1	8-1/2	1018972	1018981	4.75	1.69	1.13	1.00	1.00	3.69	2.38	3.19	5.94	4.53	.25	.06		
1-1/8	9-1/2	1018990	1019007	6.30	1.81	1.25	1.13	1.13	4.06	2.69	3.58	6.78	5.13	.25	.06		
1-1/4	12	1019016	1019025	9.00	2.03	1.38	1.38	1.25	4.53	3.00	3.94	7.50	5.50	.25	.13		
1-3/8	13-1/2	1019034	1019043	12.00	2.25	1.50	1.50	1.38	5.00	3.31	4.38	8.28	6.13	.25	.13		
1-1/2	17	1019052	1019061	16.15	2.38	1.63	1.62	1.50	5.38	3.62	4.81	9.06	6.50	.25	.13		
1-3/4	25	1019070	1019089	29.96	2.88	2.00	2.12	1.75	6.38	4.19	5.75	10.97	7.75	.25	.13		
2	35	1019098	1019105	43.25	3.25	2.25	2.00	2.00	7.25	4.81	6.75	12.28	8.75	.25	.13		

\* NOTE: Maximum Proof Load is 2.0 times the Working Load Limit. Minimum Ultimate Strength is 6 times the Working Load Limit.

Round Pin shackles are not suitable for side loading applications.

# Crosby® Screw Pin Shackles

Load Rated

Fatigue Rated



## SCREW PIN ANCHOR SHACKLES



G-209 S-209

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

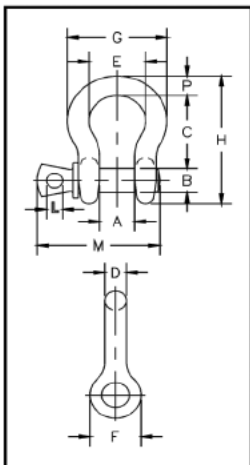
- Shackles are Quenched and Tempered and can meet DNV impact requirements of 42 joules at -20 C.
- Working Load Limit permanently shown on every shackle.
- Forged - Quenched and Tempered, with alloy pins.
- Capacities 1/3 thru 55 metric tons.
- Look for the Red Pin® . . . the mark of genuine Crosby quality.
- 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.
- Hot Dip galvanized or Self Colored.
- Fatigue rated.

## SCREW PIN CHAIN SHACKLES



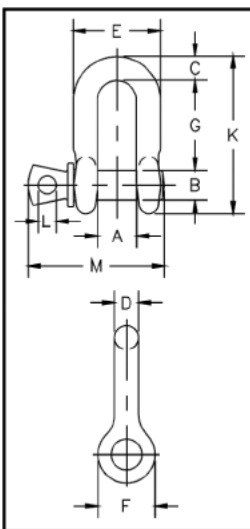
G-210 S-210

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



G-209 S-209

Nominal Size (in.)	Working Load Limit* (t)	Stock No.		Weight Each (lbs.)	Dimensions (in.)													Tolerance +/-	
		G-209	S-209		A	B	C	D	E	F	G	H	L	M	P	C	A		
3/16	1/3	1018357	-	.06	.38	.25	.88	.19	.60	.56	.98	1.47	.16	1.12	.19	.06	.06		
1/4	1/2	1018375	1018384	.10	.47	.31	1.13	.25	.78	.61	1.28	1.84	.19	1.38	.25	.06	.06		
5/16	3/4	1018393	1018400	.19	.53	.38	1.22	.31	.84	.75	1.47	2.09	.22	1.66	.31	.06	.06		
3/8	1	1018419	1018428	.31	.66	.44	1.44	.38	1.03	.91	1.78	2.49	.25	2.03	.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	2.38	.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	5.07	1.06	.25	.06		
1-1/8	9-1/2	1018552	1018561	7.41	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	12	1018570	1018589	9.50	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	13-1/2	1018598	1018605	13.53	2.25	1.50	5.25	1.42	3.63	3.31	6.38	9.16	.75	6.84	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	7.35	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	9.08	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	10.34	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

Nominal Size (in.)	Working Load Limit* (t)	Stock No.		Weight Each (lbs.)	Dimensions (in.)													Tolerance +/-	
		G-210	S-210		A	B	C	D	E	F	G	K	L	M	G	A			
1/4	1/2	1019150	1019169	.11	.47	.31	.25	.25	.97	.61	.88	1.59	.19	1.38	.06	.06			
5/16	3/4	1019178	1019187	.17	.53	.38	.31	.31	1.16	.75	1.03	1.91	.22	1.66	.06	.06			
3/8	1	1019196	1019203	.28	.66	.44	.38	.38	1.41	.91	1.25	2.30	.25	2.03	.13	.06			
7/16	1-1/2	1019212	1019221	.43	.75	.50	.44	.44	1.63	1.06	1.44	2.66	.31	2.38	.13	.06			
1/2	2	1019230	1019249	.59	.81	.63	.50	.50	1.81	1.19	1.63	3.03	.38	2.69	.13	.06			
5/8	3-1/4	1019258	1019267	1.25	1.06	.75	.62	.63	2.31	1.50	2.00	3.75	.44	3.34	.13	.06			
3/4	4-3/4	1019276	1019285	2.63	1.25	.88	.81	.75	2.75	1.81	2.38	4.53	.50	3.97	.25	.06			
7/8	6-1/2	1019294	1019301	3.16	1.44	1.00	.97	.88	3.19	2.09	2.81	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	3.19	5.94	.56	5.07	.25	.06			
1-1/8	9-1/2	1019338	1019347	6.75	1.81	1.25	1.25	1.13	4.06	2.69	3.58	6.78	.63	5.59	.25	.06			
1-1/4	12	1019356	1019365	9.06	2.03	1.38	1.38	1.25	4.53	3.00	3.94	7.50	.69	6.16	.25	.13			
1-3/8	13-1/2	1019374	1019383	11.63	2.25	1.50	1.50	1.38	5.00	3.31	4.38	8.28	.75	6.84	.25	.13			
1-1/2	17	1019392	1019409	15.95	2.38	1.63	1.62	1.50	5.38	3.62	4.81	9.06	.81	7.35	.25	.13			
1-3/4	25	1019418	1019427	26.75	2.88	2.00	2.12	1.75	6.38	4.19	5.75	10.97	1.00	9.08	.25	.13			
2	35	1019436	1019445	42.31	3.25	2.25	2.00	2.00	7.25	4.81	6.75	12.28	1.22	10.34	.25	.13			
2-1/2	55	1019454	1019463	71.75	4.13	2.75	2.62	2.62	9.38	5.69	8.00	14.84	1.38	13.00	.25	.25			

\* NOTE: 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 page 240.



# Crosby® Bolt Type Shackles

Load Rated

Fatigue Rated



## BOLT TYPE ANCHOR SHACKLES



G-2130 S-2130

Bolt Type Anchor shackles with thin head bolt - nut with cotter pin. Meets the performance requirements of Federal Specification RR-C-271D Type IVA, Grade A, Class 3, except for those provisions required of the contractor.

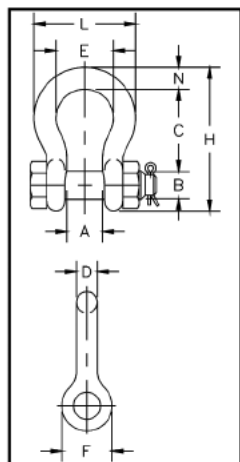
- Working Load Limit permanently shown on every shackle. Capacities 1/3 thru 150 metric tons.
- Forged — Quenched and Tempered, with alloy pins.
- Look for the Red Pin® . . . the mark of genuine Crosby quality.
- Shackles 55 metric tons and smaller can be furnished proof tested with certificates to designated standards, such as ABS, DNV, Lloyds, or other certification.
- Shackles 85 metric tons and larger can be provided as follows.
  - Non Destructive Tested
  - Serialized Pin and Bow
  - Material Certification (Chemical) Certification must be requested at time of order.
- Hot Dip galvanized or Self Colored.
- Fatigue rated.

## BOLT TYPE CHAIN SHACKLES



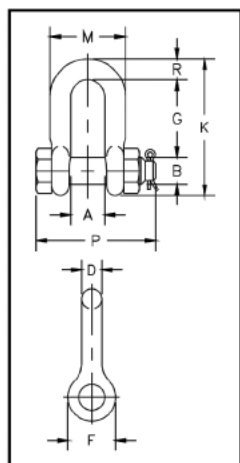
G-2150 S-2150

Bolt Type Chain shackles. Thin hex head bolt - nut with cotter pin. Meets the performance requirements of Federal Specification RR-C271D Type IVB, Grade A, Class 3, except for those provisions required of the contractors.



G-2130 S-2130

Nominal Size (in.)	Working Load Limit (t)*	Stock No.		Weight Each (lbs.)	Dimensions (in.)										Tolerance +/-	
		G-2130	S-2130		A	B	C	D	E	F	H	L	N	C	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	.63	1.88	.50	1.31	1.19	3.28	2.31	.50	.13	.06	
5/8	3-1/4	1019490	1019506	1.68	1.06	.75	2.38	.63	1.69	1.50	4.19	2.94	.69	.13	.06	
3/4	4-3/4	1019515	1019524	2.72	1.25	.88	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	1.00	3.31	.88	2.28	2.09	5.83	4.03	.97	.25	.06	
1	8-1/2	1019551	1019560	5.66	1.69	1.13	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	1.38	4.69	1.25	3.25	3.00	8.25	5.75	1.38	.25	.06	
1-3/8	13-1/2	1019613	1019622	15.83	2.25	1.50	5.25	1.38	3.63	3.31	9.16	6.38	1.50	.25	.13	
1-1/2	17	1019631	1019640	20.80	2.38	1.63	5.75	1.50	3.88	3.63	10.00	6.88	1.62	.25	.13	
1-3/4	25	1019659	1019668	33.91	2.88	2.00	7.00	1.75	5.00	4.19	12.34	8.86	2.25	.25	.13	
2	35	1019677	1019686	52.25	3.25	2.25	7.75	2.00	5.75	4.81	13.68	9.97	2.40	.25	.13	
2-1/2	55	1019695	1019702	98.25	4.13	2.75	10.50	2.62	7.25	5.69	17.84	12.87	3.13	.25	.25	
3	† 85	1019711	-	154.00	5.00	3.25	13.00	3.00	7.88	6.50	21.50	14.36	3.62	.25	.25	
3-1/2	† 120 ±	1019739	-	265.00	5.25	3.75	14.63	3.62	9.00	8.00	24.63	16.50	4.12	.25	.25	
4	† 150 ‡	1019757	-	338.00	5.50	4.25	14.50	4.10	10.00	9.00	25.69	18.42	4.56	.25	.25	



G-2150 S-2150

Nominal Size (in.)	Working Load Limit (t)*	Stock No.		Weight Each (lbs.)	Dimensions (in.)										Tolerance +/-	
		G-2150	S-2150		A	B	D	F	G	K	M	P	R	G	A	
1/4	1/2	1019768	-	.13	.47	.31	.25	.61	.75	1.59	.97	1.56	.25	.06	.06	
5/16	3/4	1019770	-	.23	.53	.38	.31	.75	1.00	1.91	1.16	1.82	.31	.06	.06	
3/8	1	1019772	-	.33	.66	.44	.38	.91	1.22	2.30	1.41	2.17	.38	.13	.06	
7/16	1-1/2	1019774	-	.49	.75	.50	.44	1.06	1.42	2.66	1.62	2.51	.44	.13	.06	
1/2	2	1019775	1019784	.75	.81	.63	.50	1.19	1.63	3.03	1.81	2.80	.50	.13	.06	
5/8	3-1/4	1019793	1019800	1.47	1.06	.75	.63	1.50	2.00	3.75	2.31	3.53	.63	.13	.06	
3/4	4-3/4	1019819	1019828	2.52	1.25	.88	.75	1.81	2.38	4.53	2.75	4.07	.81	.25	.06	
7/8	6-1/2	1019837	1019846	3.85	1.44	1.00	.88	2.09	2.81	5.33	3.19	4.71	.97	.25	.06	
1	8-1/2	1019855	1019864	5.55	1.69	1.13	1.00	2.38	3.19	5.94	3.69	5.31	1.00	.25	.06	
1-1/8	9-1/2	1019873	1019882	7.60	1.81	1.25	1.13	2.69	3.58	6.78	4.06	5.90	1.25	.25	.06	
1-1/4	12	1019891	1019908	10.81	2.03	1.38	1.25	3.00	3.94	7.50	4.53	6.51	1.38	.25	.06	
1-3/8	13-1/2	1019917	1019926	13.75	2.25	1.50	1.38	3.31	4.38	8.28	5.00	7.21	1.50	.25	.13	
1-1/2	17	1019935	1019944	18.50	2.38	1.63	1.50	3.63	4.81	9.06	5.38	7.73	1.62	.25	.13	
1-3/4	25	1019953	1019962	31.40	2.88	2.00	1.75	4.19	5.75	10.97	6.38	9.05	2.12	.25	.13	
2	35	1019971	1019980	46.75	3.25	2.25	2.00	4.81	6.75	12.28	7.25	10.41	2.00	.25	.13	
2-1/2	55	1019999	1020004	85.00	4.13	2.75	2.62	5.69	8.00	14.84	9.38	13.56	2.62	.25	.25	
3	† 85	1020013	-	124.25	5.00	3.25	3.00	6.50	8.50	16.88	11.00	16.50	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. For Working Load Limit reduction due to side loading applications, see page 240.  
 † Individually Proof Tested with certification.  
 ‡ Furnished in Anchor style only. Furnished with Round Head Bolts with welded handles