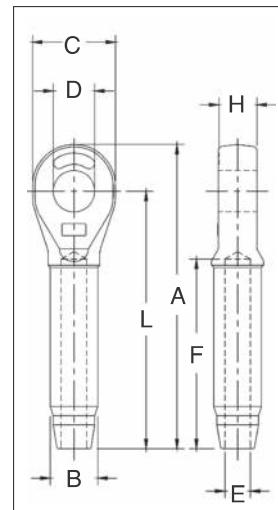


## S-502



- 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.\*



QUIC-CHECK®  
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## S-502 Closed Swage Sockets

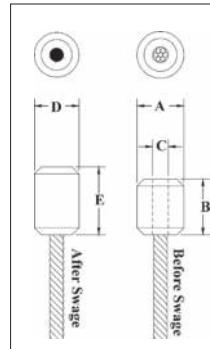
S-502 Stock No.	S-502 Closed Socket Specifications										Max. After Swage Dim. (in)	Die Description	Swager / Die Data					
	Rope Size		Wt. Each (lb)	Ultimate Load** (t)	Before Swage Dimensions (in)									Stock No.	Side Load			
	(in)	(mm)			A	B	C	D	E	F	H	L	500 Ton 5 x 7		1000 Ton 6 x 12	1500 Ton 6 x 12	1500 Ton 6 x 12	3000 Ton 6 x 12
1039325	1/4	6	.33	5.4	4.28	.50	1.38	.76	.27	2.19	.50	3.50	.46	1/4 Socket	1192845	-	-	-
1039343	5/16	8	.75	11.8	5.42	.77	1.62	.88	.34	3.25	.68	4.50	.71	5/16-3/8 Socket	1192863	-	-	-
1039361	3/8	9-10	.72	13.6	5.42	.78	1.62	.88	.41	3.25	.68	4.50	.71	5/16-3/8 Socket	1192863	-	-	-
1039389	7/16	11-12	1.42	18.1	6.88	1.01	2.00	1.07	.49	4.31	.87	5.75	.91	7/16-1/2 Socket	1192881	-	-	-
1039405	1/2	13	1.42	21.3	6.88	1.01	2.00	1.07	.55	4.31	.87	5.75	.91	7/16-1/2 Socket	1192881	-	-	-
1039423	9/16	14	2.92	31.8	8.59	1.27	2.38	1.28	.61	5.38	1.14	7.25	1.16	9/16-5/8 Socket	1192907	-	-	-
1039441	5/8	16	2.85	34.9	8.59	1.27	2.38	1.28	.68	5.38	1.14	7.25	1.16	9/16-5/8 Socket	1192907	-	-	-
1039469	3/4	18-20	5.00	43.5	10.25	1.56	2.88	1.49	.80	6.44	1.33	8.63	1.42	3/4 Socket	1192925	-	-	-
1039487	7/8	22	6.80	51.5	11.87	1.72	3.12	1.73	.94	7.50	1.53	10.09	1.55	7/8 Socket	1192943	-	-	-
1039502	1	24-26	10.40	71.4	13.56	2.00	3.62	2.11	1.07	8.63	1.78	11.50	1.80	1 Socket	1192961	-	-	-
1039520	1-1/8	28	14.82	83.3	15.03	2.25	4.00	2.37	1.19	9.75	2.03	12.75	2.05	1-1/8 Socket	1192989	-	-	-
1039548	1-1/4	32	21.57	109	16.94	2.53	4.50	2.62	1.34	10.81	2.25	14.38	2.30	1-1/4 Socket	1193005	-	-	-
1039566	1-3/8	34-36	28.54	136	18.59	2.81	5.00	2.62	1.46	11.88	2.29	15.75	2.56	1-3/8 Socket	1193023	-	-	-
1039584	1-1/2	38-40	38.06	181	20.13	3.08	5.38	2.87	1.59	12.81	2.56	17.00	2.81	1-1/2 Socket	1193041	1191267	1195355	1195192
1039600	1-3/4	44	51.00	228	23.56	3.40	6.25	3.63	1.87	15.06	3.08	20.00	3.06	1-3/4 Socket	1193069	1191276	1195367	1195209
1042589	2	48-52	89.25	272	27.13	3.94	7.25	3.88	2.12	17.06	3.31	23.00	3.56	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: Fitings 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.



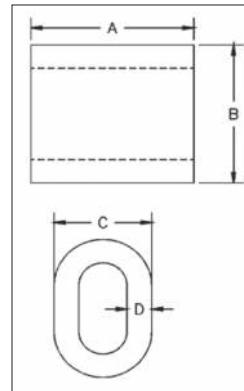
### **S-409 COLD TUFF® Buttons**

S-409 Stock No.	Size No.	S-409 Steel Swage Button Specifications							Swager / Die Data	
		Rope Size		Weight Per 100 (lb)	Before Swage Dimensions (in)			After Swage Dimensions (in)		
		(in)	(mm)		A	B	C	D Maximum After Swage Dimensions	E Length*	
1040171	1 SB	1/8	3	2	.42	.50	.14	.40	.61	1/8 - 1/4 Button 1191621
1040215	3 SB	3/16	5	4	.56	.70	.20	.52	.84	1/4 1st Stage 1197528
1040251	5 SB	1/4	6-7	8	.68	1.06	.31	.58	1.41	1/8 - 1/4 Button 1191621
1040297	7 SB	5/16	8	16	.88	1.13	.36	.77	1.33	3/8 1st Stage 1192364
1040313	8 SB	3/8	9-10	15	.88	1.48	.42	.77	1.69	3/8 1st stage 1192364
1040331	9 SB	7/16	11	30	1.13	1.63	.48	1.03	1.94	1/2 1st Stage 1192408
1040359	10 SB	1/2	13	50	1.31	1.89	.55	1.16	2.17	5/8 Socket 1192907
1040377	11 SB	9/16	14	70	1.44	2.02	.61	1.29	2.41	9/16 - 5/8 Button 1191665
1040395	12 SB	5/8	16	100	1.56	2.42	.67	1.42	2.89	3/4 Socket 1192925
1040411	13 SB	3/4	18-20	131	1.68	2.74	.80	1.55	3.25	3/4 1st Stage 1192462
1040439	14 SB	7/8	22	220	2	3.27	.94	1.80	3.86	7/8 1st Stage 1192480
1040457	15 SB	1	25-26	310	2.25	3.67	1.06	2.05	4.36	1 1st Stage 1192505
1040475	16 SB	1-1/8	28-29	450	2.56	4.05	1.19	2.30	4.81	1-1/8 1st Stage 1192523
1040493	17 SB	1-1/4	31-32	650	2.81	4.57	1.33	2.56	5.42	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).



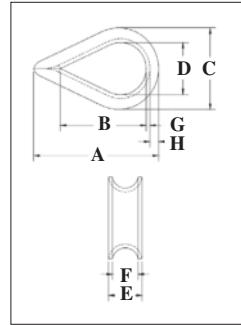
### **S-506 COLD TUFF® Duplex Non-Tapered Sleeves**

S-506 Stock No.	S-506 Steel Duplex Non-Tapered Sleeve Specifications							Max. After Swage Dimensions (in)	Swager / Die Data		
	Rope Size		Weight Per 100 (lb)	Pkg. Qty.	Before Swage Dimensions (in)						
	(in)	(mm)			A	B	C				
1039334	5/16	8	17	200	1.25	1.06	.81	.19	.77	3/8 1st Stage 1192364	
1039352	3/8	9-10	13	100	1.25	1.12	.81	.14	.77	3/8 1st Stage 1192364	
1039370	7/16	11	31	50	1.63	1.41	1.02	.19	1.03	1/2 1st Stage 1192408	
1039398	1/2	13	27	50	1.63	1.44	1.02	.16	1.03	1/2 1st Stage 1192408	
1039414	9/16	14	63	25	2.25	1.72	1.23	.23	1.29	5/8 1st Stage 1192444	
1039432	5/8	16	54	25	2.25	1.84	1.28	.20	1.29	5/8 1st Stage 1192444	
1039450	3/4	18-20	91	10	2.63	2.16	1.52	.23	1.55	3/4 1st Stage 1192462	
1039478	7/8	22	126	10	2.88	2.50	1.75	.27	1.80	7/8 1st Stage 1192480	
1039496	1	25-26	187	10	3.06	2.84	2.00	.33	2.05	1 1st Stage 1192505	
1039539	1-1/4	30-32	384	Bulk	4.06	3.50	2.50	.38	2.56	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 Federal Specification FF-T-276b Type II, except for those provisions required of the contractor.

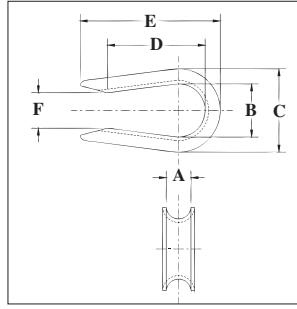


### Standard Wire Rope Thimbles

Rope Diameter		Stock No	Weight Per 100 (lb)	Dimensions (in)							
(in)	(mm)			A	B	C	D	E	F	G	H
1/8	3-4	1037256	3.50	.94	1.31	1.06	.69	.25	.16	.05	.13
3/16	5	1037274	3.50	.94	1.31	1.06	.69	.31	.22	.05	.13
1/4	6-7	1037292	3.50	.94	1.31	1.06	.69	.38	.28	.05	.13
5/16	8	1037318	4.00	2.13	1.50	1.25	.81	.44	.34	.05	.13
3/8	9-10	1037336	6.70	2.38	1.63	1.47	.94	.53	.41	.06	.16
1/2	11-13	1037354	12.50	2.75	1.88	1.75	1.13	.69	.53	.08	.19
5/8	16	1037372	34.50	3.50	2.25	2.38	1.38	.91	.66	.13	.34
3/4	18-20	1037390	47.10	3.75	2.50	2.69	1.63	1.08	.78	.14	.34
7/8	22	1037416	84.60	5.00	3.50	3.19	1.88	1.27	.94	.16	.44
1	24-26	1037434	97.50	5.69	4.25	3.75	2.50	1.39	1.06	.16	.41
1-1/8 - 1-1/4	28-32	1037452	175.00	6.25	4.50	4.31	2.75	1.75	1.31	.22	.50

**G-408**


- Hot-dip galvanized steel.
- Recommended for light duty applications where assembly into another fitting (i.e., shackle or master link) is required.

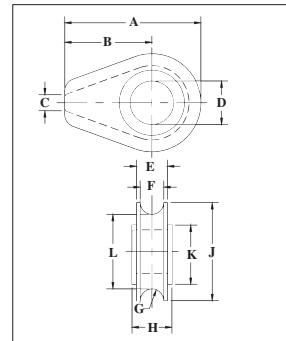


### Open Pattern Thimbles

Rope Diameter		Stock No	Weight Per 100 (lb)	Dimensions (in)					
(in)	(mm)			A	B	C	D	E	F
1/4	6-7	1037531	3.00	.28	.69	1.06	1.41	2.03	.38
5/16	8	1037559	3.80	.34	.81	1.25	1.53	2.16	.50
3/8	9-10	1037577	7.00	.44	.94	1.47	1.72	2.47	.62
1/2	11-13	1037595	12.50	.53	1.12	1.75	1.97	2.84	.75
5/8	16	1037611	25.00	.66	1.38	2.38	2.34	3.59	1.00

**S-412**


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

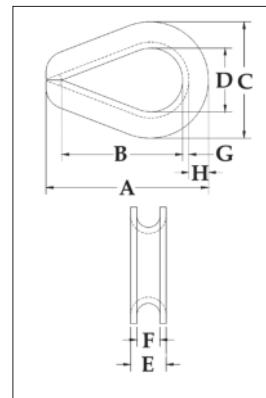


### Solid Wire Rope Thimbles

Rope Diameter		Stock No	Weight Per 100 (lb)	Dimensions (in)										
(in)	(mm)			A	B	C	D	E	F	G	H	J	K	L
1/2	13	1037121	.61	2.81	1.75	.25	1.06	.75	.56	.28	.88	2.13	1.63	1.56
5/8	16	1037149	2.21	4.69	3.00	.38	1.31	1.06	.81	.41	1.13	3.38	2.25	2.56
3/4	18-20	1037167	2.32	4.69	3.00	.38	1.50	1.06	.81	.41	1.38	3.38	2.25	2.56
7/8	22	1037185	5.45	6.06	3.81	.50	1.75	1.38	1.06	.53	1.63	4.50	3.25	3.44
1	24-26	1037201	5.25	6.06	3.81	.50	2.13	1.38	1.06	.53	1.81	4.50	3.25	3.44
1-1/8	28-30	1037229	9.29	7.25	4.56	.63	2.38	1.75	1.31	.66	2.06	5.38	3.88	4.06
1-1/4 - 1-3/8	32-35	1037247	9.81	7.25	4.56	.63	2.63	1.94	1.53	.78	2.31	5.38	3.88	4.13

**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.

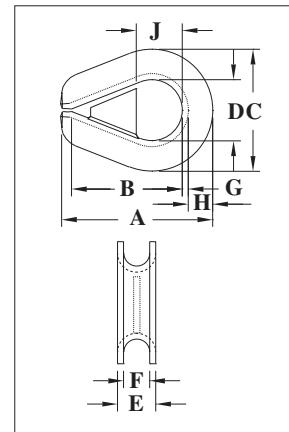


### Extra Heavy Wire Rope Thimbles

Rope Diameter		Stock No.		Weight Per 100 (lb)	Dimensions (in)							
(in)	(mm)	G-414 Stock No.	SS-414 Stainless		A	B	C	D	E	F	G	H
1/4	6-7	1037639	1037960	7	2.19	1.62	1.50	.88	.41	.28	.06	.25
5/16	8	1037657	1037988	14	2.50	1.88	1.81	1.06	.50	.34	.08	.30
3/8	9-10	1037675	1038004	23	2.88	2.12	2.12	1.12	.63	.41	.11	.39
7/16	11-12	1037693	-	37	3.25	2.38	2.38	1.25	.72	.47	.12	.45
1/2 - 9/16	13-15	1037719	1038022	50	3.62	2.75	2.75	1.50	.89	.59	.15	.48
5/8	16	1037755	1038040	82	4.25	3.25	3.12	1.75	1.00	.66	.16	.53
3/4	18-20	1037773	1038068	157	5.00	3.75	3.81	2.00	1.22	.78	.22	.69
7/8	22	1037791	-	190	5.50	4.25	4.25	2.25	1.38	.94	.22	.78
1	24-26	1037817	-	280	6.12	4.50	4.75	2.50	1.56	1.06	.25	.88
1-1/8 - 1-1/4	28-32	1037835	-	-	7.00	5.12	5.88	2.88	1.88	1.31	.25	1.25
1-1/4 - 1-3/8	32-35	1037853	-	830	9.08	6.50	6.81	3.50	2.25	1.44	.37	1.29
1-3/8 - 1-1/2	35-38	1037871	-	1250	9.00	6.25	7.12	3.50	2.62	1.56	.50	1.31
1-5/8	40	1037899	-	-	11.25	8.00	8.12	4.00	3.00	1.72	.50	1.38
1-3/4	44	1037915	-	1860	12.19	9.00	8.50	4.50	3.06	1.84	.50	1.50
1-7/8 - 2	48-52	1037933	-	2780	15.12	12.00	10.38	6.00	3.38	2.09	.50	1.69
2-1/4	56	1037951	-	-	17.50	14.00	11.88	7.00	3.88	2.38	.62	1.82

**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.

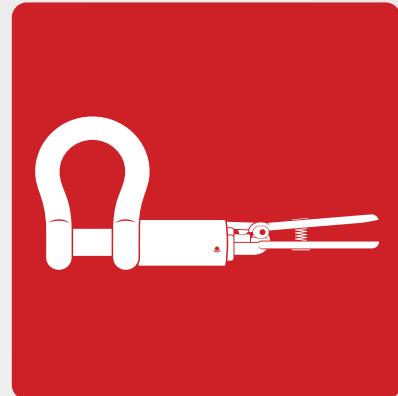
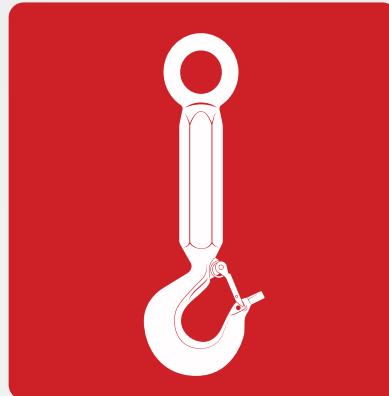


### Extra Heavy Wire Rope Thimbles (Shackle-Loc)

Rope Diameter		Stock No	Weight Per 100 (lb)	Dimensions (in)								
(in)	(mm)			A	B	C	D	E	F	G	H	J
3/8	9-10	1036800	24	2.88	2.12	2.12	1.12	.63	.41	.11	.39	.81
1/2 - 9/16	13-15	1036808	55	3.62	2.75	2.75	1.50	.89	.59	.15	.48	1.12
5/8	16	1036817	82	4.25	3.25	3.12	1.75	1.00	.66	.16	.53	1.25
3/4	18-20	1036826	161	5.00	3.75	3.81	2.00	1.22	.78	.22	.69	1.50
7/8	22	1036835	206	5.50	4.25	4.25	2.25	1.38	.94	.22	.78	1.63
1	24-26	1036844	300	6.12	4.50	4.75	2.50	1.56	1.06	.25	.88	1.88
1-1/8 - 1-1/4	28-32	1036853	425	7.00	5.12	5.88	2.88	1.88	1.31	.25	1.25	2.13
1-3/8 - 1-1/2	35-38	1036862	1317	9.00	6.25	7.12	3.50	2.62	1.56	.50	1.31	2.50

# ROV

Manufactured to withstand the toughest environments on earth.



theCrosbygroup®

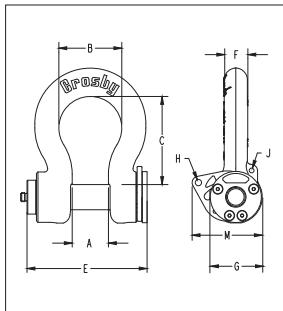
[thecrosbygroup.com](http://thecrosbygroup.com)



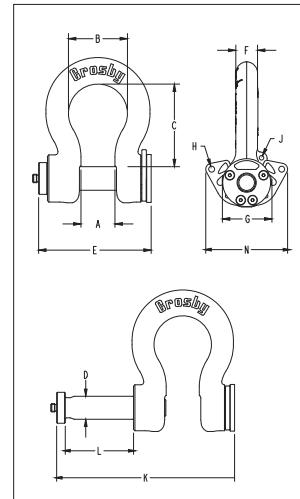
**G-2100**  
Release & Retrieve  
ROV Shackle with  
QUIC-Thread Bolt



**G-2110**



- Forged alloy bow with an industry best 6 to 1 performance design factor.
  - Patented captured bolt can withstand over 2,000 lb (907 kg) 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 (lb)	Dimensions (in)											
			A	B	C	D	E	F	G	H	J	K	L	N
9.5	2038739	11.4	1.81	2.91	4.25	1.25	7.33	1.16	2.68	0.38	0.31	11.54	4.21	4.97
12	2038762	13.8	2.03	3.25	4.69	1.38	7.75	1.29	3.00	0.38	0.31	12.25	4.50	4.97
17	2038785	23.7	2.38	3.88	5.75	1.63	8.54	1.53	3.62	0.50	0.31	13.74	5.20	6.28
25	2038614	38.6	2.88	5.00	7.00	2.00	9.54	1.84	4.20	0.50	0.38	15.48	5.94	6.94
35	2038808	51.2	3.25	5.75	7.74	2.28	10.41	2.08	4.82	0.50	0.38	16.97	6.56	6.94
55	2038831	108	4.12	7.25	10.49	2.78	12.61	2.72	5.81	0.50	0.38	20.74	8.13	8.53
85	2038877	157	5.00	7.88	12.98	3.28	14.23	3.12	6.50	0.50	0.50	23.61	9.38	8.53

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 (lb)	Dimensions (in)											
			A	B	C	D	E	F	G	H	J	K	L	N
9.5	2038740	11.4	1.81	2.91	4.25	1.25	7.33	1.16	2.68	0.38	0.31	11.54	4.21	4.97
12	2038763	13.8	2.03	3.25	4.69	1.38	7.75	1.29	3.00	0.38	0.31	12.25	4.50	4.97
17	2038786	23.7	2.38	3.88	5.75	1.63	8.54	1.53	3.62	0.50	0.31	13.74	5.20	6.28
25	2038621	38.6	2.88	5.00	7.00	2.00	9.54	1.84	4.20	0.50	0.38	15.48	5.94	6.94
35	2038809	51.2	3.25	5.75	7.74	2.28	10.41	2.08	4.82	0.50	0.38	16.97	6.56	6.94
55	2038832	108	4.12	7.25	10.49	2.78	12.61	2.72	5.81	0.50	0.38	20.74	8.13	8.53
85	2038878	157	5.00	7.88	12.98	3.28	14.23	3.12	6.50	0.50	0.50	23.61	9.38	8.53

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



APPLICATION AND WARNING INFORMATION  
**SECTION 17**



"D" Handle



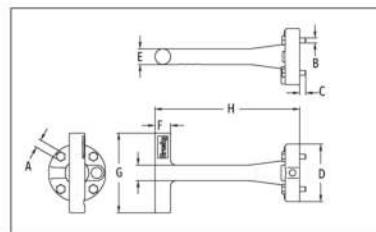
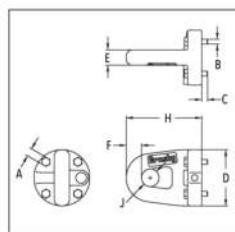
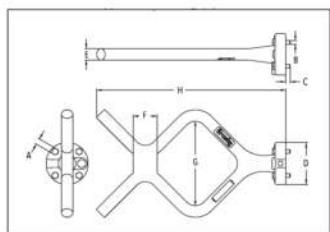
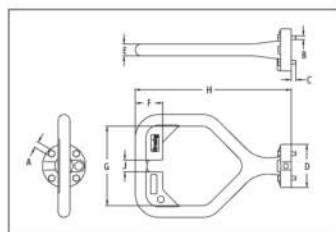
"F" Handle



"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

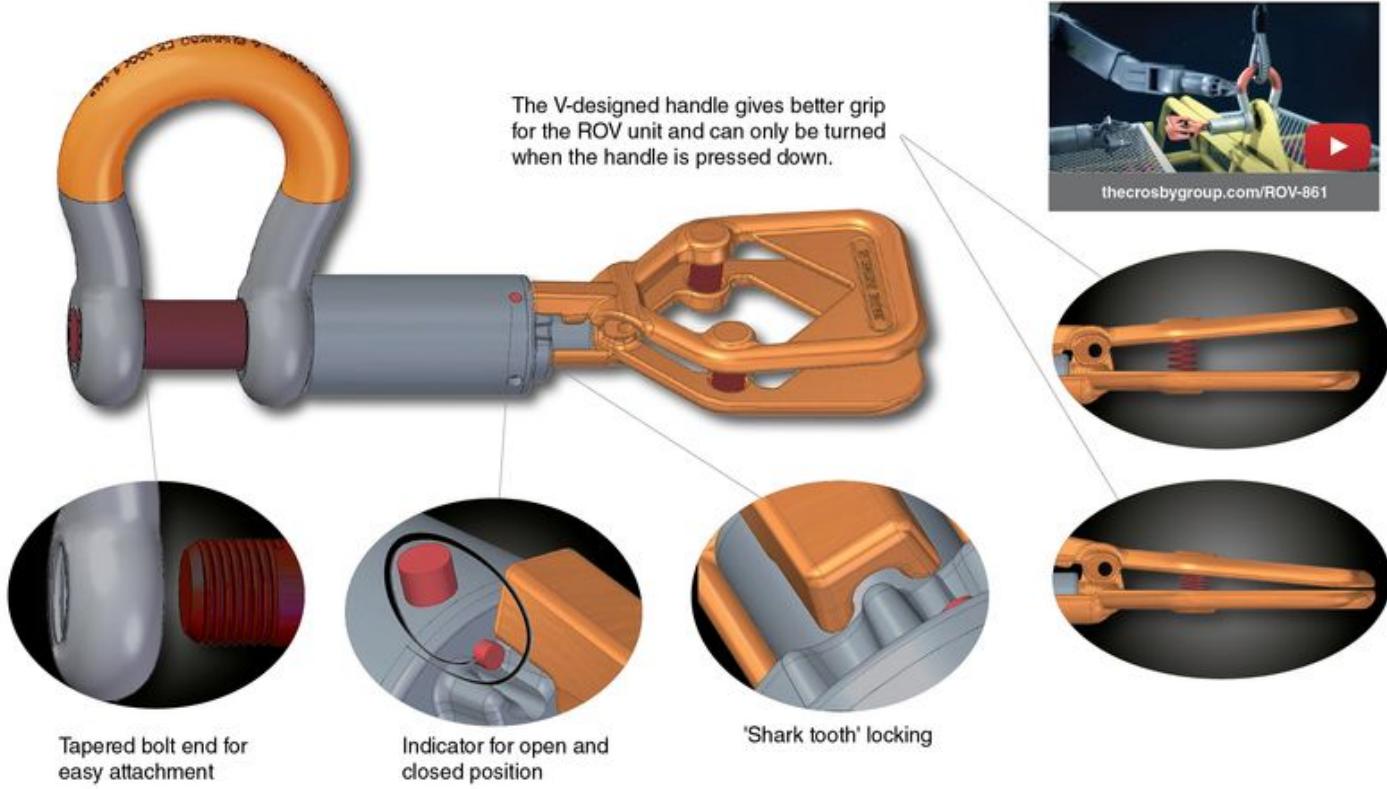
8

Handle Style	Stock No.	Weight Each (lb)	Dimensions (in)									
			A	B	C	D	E	F	G	H	J	K
D	1021324	4.5	0.28	0.24	0.29	2.75	0.75	1.75	5.04	9.9	0.75	—
F	1021315	5	0.28	0.24	0.29	2.75	0.75	1.75	5.5	12.29	—	—
T	1021306	2.4	0.28	0.24	0.29	2.75	0.75	0.75	3.82	6.18	—	0.75
Eye	1021333	2.1	0.28	0.24	0.29	2.75	0.75	0.75	—	3.69	0.86	—



## ROV Shackles

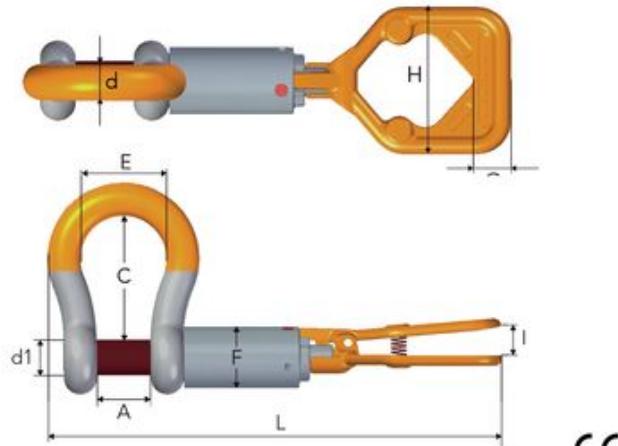
The ROV Retrieve Shackle is designed for smooth and easy use in retrieving and releasing subsea lifting and rigging operations. It has no loose parts in closed or opened position. Therefore there is no need for wires or monkey fists. The high visibility handles are close-die forged and has double safety 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

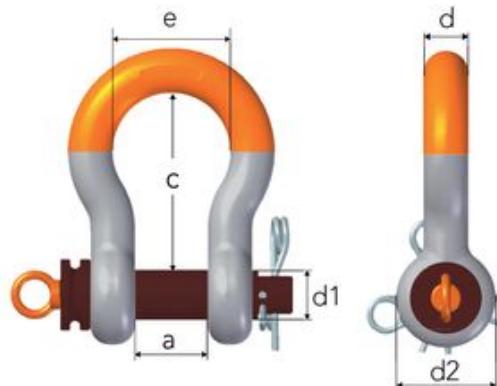
All shackles have unique markings.

- 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 °F to 392 °F



Stock No.	WLL metric tonnes	d1	d	A	C	E	F	L	I	H	G	Weight (lb)
A086128	9.5	1.26	1.10	1.81	4.25	2.91	2.36	17.32	1.22	5.20	1.30	14.3
A086132	12.0	1.38	1.26	2.05	4.69	3.27	2.36	18.11	1.22	5.20	1.30	17.6
A086138	17.0	1.65	1.50	2.36	5.75	3.86	2.50	19.72	1.22	5.20	1.30	23.1
A086145	25.0	1.97	1.77	2.91	7.01	5.00	2.76	22.24	1.22	5.20	1.30	36.3
A086152	35.0	2.24	1.97	3.27	7.76	5.43	2.99	23.78	1.22	5.20	1.30	45.1
A086164	55.0	2.76	2.56	4.13	10.24	7.09	3.46	28.03	1.22	5.20	1.30	92.5
A086176	85.0	3.27	3.31	5.24	12.99	7.48	4.25	29.33	1.22	5.20	1.30	170.25

## 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 °F to 392 °F

CE

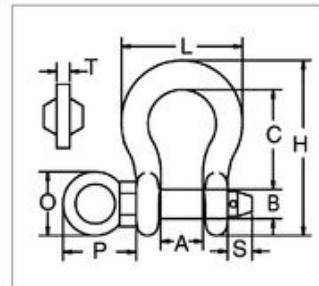
Stock No.	WLL metric tonnes	d1	d	a	c	d2	e	Weight (lb)
A086322	6.5	0.98	0.87	1.46	3.31	2.05	2.28	3.52
A086328	9.5	1.26	1.10	1.81	4.25	2.52	2.91	7.49
A086332	12.0	1.38	1.26	2.05	4.69	2.83	3.27	11.0
A086338	17.0	1.65	1.50	2.36	5.75	3.31	3.86	17.1
A086345	25.0	1.97	1.77	2.91	7.01	4.13	5.00	30.6
A086352	35.0	2.24	1.97	3.27	7.76	5.00	5.43	37.4
A086364	55.0	2.76	2.56	4.13	10.24	5.98	7.09	81.5

8

## G-209R



- Capacities from 6-1/2t 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 (lb)	Dimensions (in)								
			A +/- .25	B	C	H	L	O	P	S	T
6.5	1020872	3.62	1.44	1.00	3.31	5.83	4.03	1.18	2.28	.65	.39
8.5	1020902	5.03	1.69	1.13	3.75	6.56	4.69	1.18	2.40	.73	.39
9.5	1020932	7.41	1.81	1.25	4.25	7.47	5.16	2.28	3.27	.75	.47
12	1020952	9.50	2.03	1.38	4.69	8.25	5.75	2.28	3.31	.89	.47
13.5	1020972	13.53	2.25	1.50	5.25	9.16	6.38	2.36	3.58	.91	.59
17	1020992	17.20	2.38	1.63	5.75	10.00	6.88	2.36	3.66	1.18	.59
25	1021102	27.78	2.88	2.00	7.00	12.34	8.86	2.16	4.49	1.14	.69
35	1021125	45.00	3.25	2.25	7.75	13.68	9.97	2.60	5.12	1.18	.79
55	1021158	85.75	4.13	2.75	10.50	17.84	12.87	2.76	5.63	1.50	.98

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

Load Rated

Fatigue Rated

QUIC-CHECK®

QT

CE

APPLICATION AND WARNING INFORMATION SECTION 17

## 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 Tested

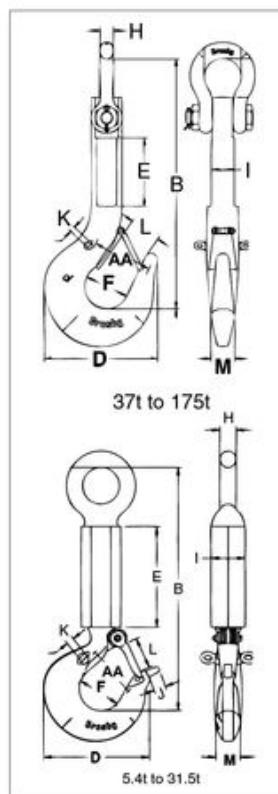
Fatigue Tested

QUIC-CHECK®

QT

CE

APPLICATION AND WARNING INFORMATION  
SECTION 17



## L-562A ROV Eye Shank Hooks

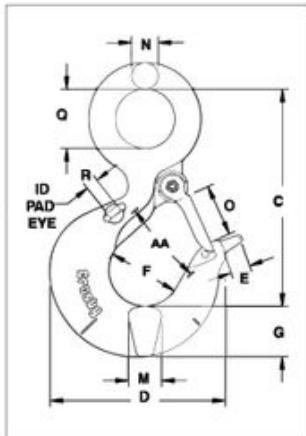
Working Load Limit (t)	Hook ID Code	L-562A Stock No.	Weight Each (lb)	Dimensions (in)												Replacement Latch Stock No.
				I	E	B	D	J	F	M	H	L	K	AA**		
†5.4	IA	1297722	21	2.56	9.84	16.57	4.84	.39	2.00	1.13	.88	1.36	.25	2.50	1096515	
†11.5	KA	1297792	33	2.56	9.84	20.39	7.54	1.18	3.00	1.63	1.25	2.08	.38	4.00	1096611	
†16	LA	1297806	42	2.56	9.84	21.65	8.34	1.18	3.25	1.94	1.38	2.27	.38	4.00	1096657	
†22	NA	1297862	68	3.35	9.84	23.94	10.34	1.77	4.25	2.38	1.59	3.02	.75	5.00	1096704	
31.5	OA	1298042	97	3.35	9.84	26.00	13.62	-	5.00	3.00	1.89	3.62	.75	6.50	1090161	
‡37	PA	1298049	97	3.15	9.25	32.58	14.06	-	5.38	3.00	1.84	3.75	.75	7.00	1090189	
‡45	SA	1298057	198	3.15	9.25	34.07	15.44	-	6.00	3.25	1.84	4.25	.75	8.00	1090189	
‡60	TA	1298087	289	3.54	8.46	37.06	18.50	-	7.00	3.91	2.08	5.12	.75	10.00	1090205	
‡100	WA	1298103	668	5.51	11.81	46.67	23.00	-	6.81	5.50	2.71	4.88	.75	12.00	1090241	
‡150	XA	1298117	871	5.91	9.06	48.53	24.38	-	6.75	6.00	3.62	5.38	.75	13.00	1090241	
***175	YA	1298130	1135	6.69	10.04	52.24	26.69	-	7.50	7.00	4.00	-	.75	13.00	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.



Load Rated Fatigue Rated

QUIC-CHECK®

QT

CE

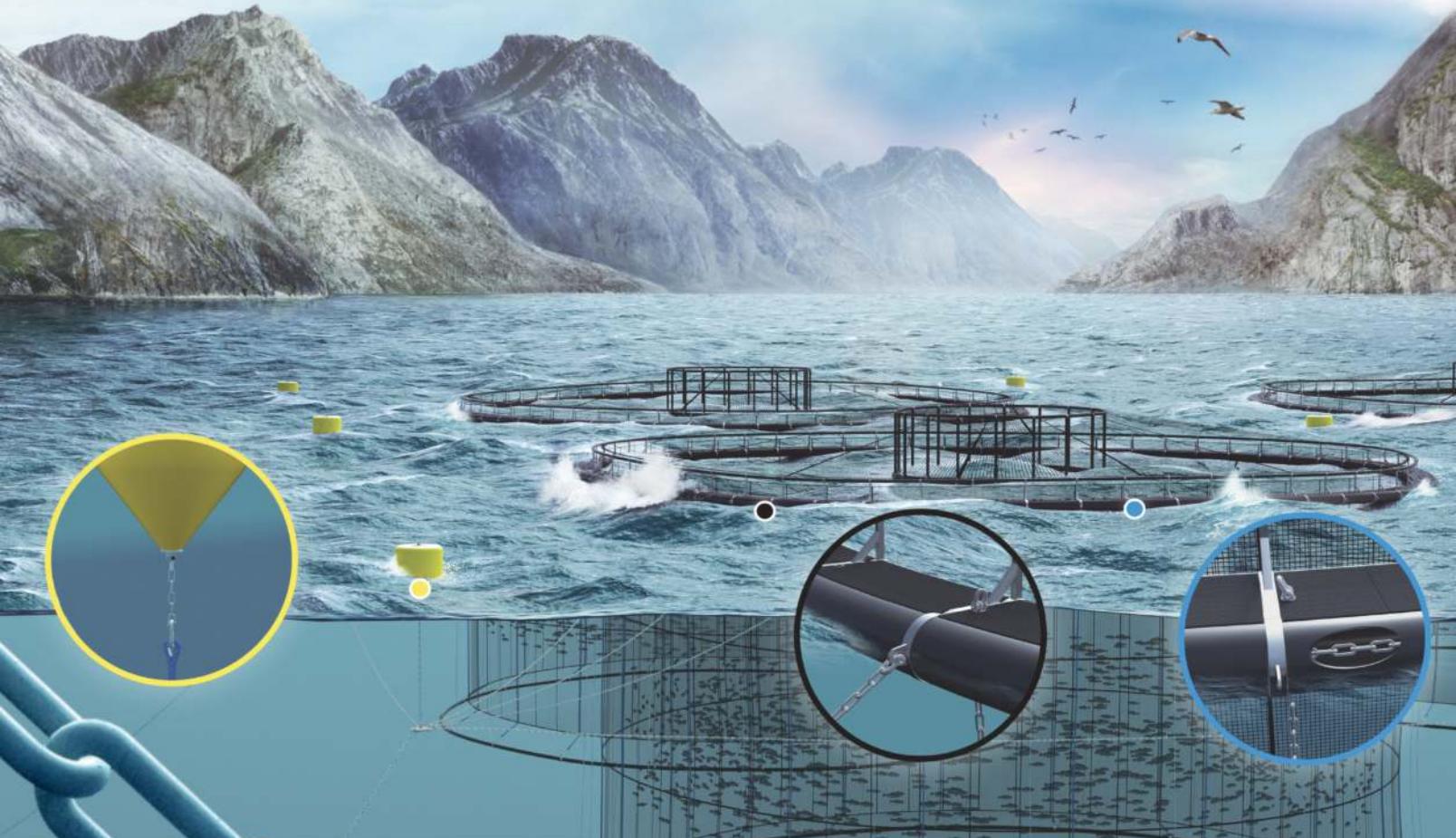
APPLICATION AND WARNING INFORMATION SECTION 17

### L-320R ROV Hooks

Working Load Limit (l)*	Hook ID Code	L-320R Stock No.	Weight Each (lb)	Dimensions (in)											Replacement Latch Stock No.
				C	D	E	F	G	M	N	O	Q	R	AA**	
†3.2	HA	1298427	2.0	4.69	3.97	.39	1.63	1.13	.94	.58	1.09	1.25	.25	2.00	1096468
†5.4	IA	1298497	4.0	5.77	4.81	.39	2.00	1.44	1.31	.72	1.36	1.56	.25	2.50	1096515
†8	JA	1298567	8.2	7.37	6.27	.79	2.50	1.81	1.66	.90	1.61	2.00	.38	3.00	1096562
†11.5	KA	1298637	15	9.07	7.45	1.18	3.00	2.25	1.63	1.11	2.08	2.44	.38	4.00	1096611
†16	LA	1298707	21	10.19	8.39	1.18	3.25	2.59	1.94	1.27	2.33	2.84	.38	4.00	1096657
†22	NA	1298777	38	12.53	10.30	1.77	4.25	3.00	2.38	1.56	3.02	3.50	.75	5.00	1096704
†31.5	OA	1298847	60	14.07	13.63	-	5.00	3.62	3.00	1.75	3.67	3.50	.75	6.50	1090161
37	PA	1298857	107	18.19	14.06	-	5.38	4.56	3.19	2.00	3.75	4.50	.75	7.00	1090189
45	SA	1298867	137	20.12	15.45	-	6.00	5.06	3.24	2.18	4.25	4.94	.75	8.00	1090189
60	TA	1298877	224	23.72	18.50	-	7.00	6.00	3.91	2.53	5.12	5.69	.75	10.00	1090205

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

# SAFER SOLUTIONS THAT WITHSTAND THE TOUGHEST ENVIRONMENTS



## Increased safety & efficiency in aquaculture operations

Tackle the toughest environments with our wide range of products, including hot-dip galvanized welded chain slings and shackles.

Our products offer reduced corrosion and fatigue, are easier to handle, and are faster to assemble, resulting in longer product life and time and cost savings.

Gunnebo Industries Mooring Bolt,  
Countersunk Dee Shackle, and  
Long Link Chain LLZ



**GUNNEBO**  
Industries

# SYNTHETIC SLING FITTINGS

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



theCrosbygroup®

[thecrosbygroup.com](http://thecrosbygroup.com)

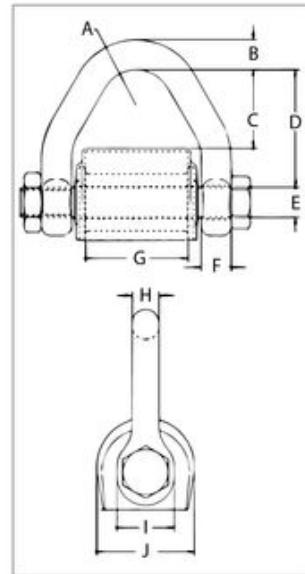
**APPLICATION INFORMATION**

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 Tested QT

9

Round Sling Size (No.)	Web Slings*			Working Load Limit (Tons)†	S-280 Stock No.	Weight Each (lb)	Dimensions (in)									
	Webbing Width (in)	Eye Width (in)	Ply				A	B	C	D	E	F	G	H		
1 & 2	2	2	2	3-1/4	1021681	1.5	.75	.62	1.63	2.44	.63	.62	2.13	.56	1.19	2.02
3	3	1.5	2	4-1/2	1021690	1.9	.75	.69	1.10	2.01	.75	.69	1.63	.60	1.38	2.34
4	4	2	2	6-1/4	1021700	2.9	.75	.81	1.66	2.56	.88	.75	2.13	.69	1.62	2.46
5 & 6	6	3	2	8-1/2	1021709	5.1	1.00	.94	2.47	3.50	1.00	.88	3.13	.88	1.88	2.84

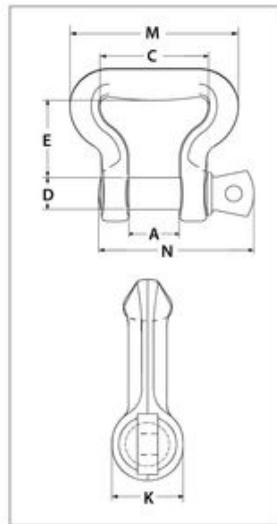
Design Factor of 5:1.

\* Designed for use with Type III, (eye &amp; eye), Class 7, 2-ply web slings. For 3" 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.

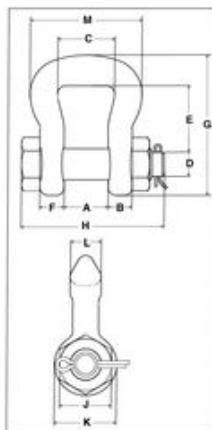
**S-281 Web Sling Shackle**
CE SlingSaver Load Rated QT

Round Sling Size (No.)	Web Slings*			Working Load Limit (Tons)†	S-281 Stock No.	Weight Each (lb)	Dimensions (in)						
	Webbing Width (in)	Eye Width (in)	Ply				A	C	D	E	K	M	N
1 & 2	2	2	2	3-1/4	1021048	1.2	1.06	2.50	.75	1.62	1.22	3.84	3.34
3	3	1.5	2	4-1/2	1021057	1.5	1.25	2.00	.88	1.50	1.41	3.38	3.97
4	4	2	2	6-1/4	1021066	2.5	1.44	2.50	1.00	2.00	1.62	4.22	4.50
5 & 6	6	3	2	8-1/2	1021075	4.3	1.69	3.62	1.13	2.75	1.84	5.64	5.13

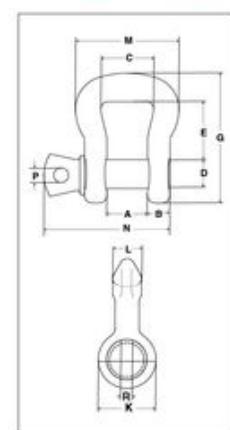
Design Factor of 5:1.

\*Designed for use with Type III, (eye &amp; eye), Class 7, 2-ply web slings. For 3" 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 Tested Load Tested QR

Web Sling Eye Width (in)	Round Sling Size (No.)	Working Load Limit (t)*	S-252 Stock No.	Weight Each (lb)	Dimensions (in)												
					A	B	C	D	E	F	G	H	J	K	L	M	
1	1 & 2	3.25	1020485	1.4	1.06	.58	1.38	.75	1.50	.44	3.38	3.68	1.12	1.50	.75	2.69	
1.5	3 & 4	6.5	1020496	2.4	1.25	.75	1.75	.88	1.88	.50	4.15	4.25	1.31	1.81	1.00	3.38	
2	5 & 6	8.75	1020507	4.1	1.38	.88	2.25	1.00	2.81	.56	5.50	4.72	1.50	2.09	1.12	4.19	
3	7 & 8	12.5	1020518	8.0	1.62	1.12	3.25	1.25	3.06	.75	6.34	5.88	1.88	2.62	1.38	5.62	
4	9 & 10	20.5	1020529	16.9	2.12	1.38	4.50	1.50	5.25	.88	9.45	7.19	2.25	3.12	1.75	7.50	
5	11 & 12	35	1020540	35.0	2.50	1.75	5.50	2.00	6.34	1.12	11.50	9.31	3.00	4.19	2.25	9.19	
6	13	50	1020551	57.5	3.00	2.12	6.50	2.25	7.70	1.25	13.75	10.38	3.38	4.75	2.75	11.00	

Design factor of 5:1.

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

9

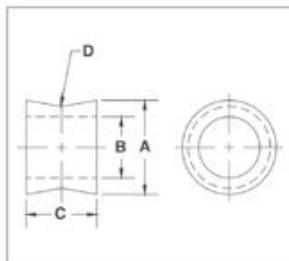
### S-253 Screw Pin Sling Shackle

Web Sling Eye Width (in)	Round Sling Size (No.)	Working Load Limit (t)*	S-253 Stock No.	Weight Each (lb)	Dimensions (in)												
					A	B	C	D	E	G	K	L	M	N	P	R	
1	1 & 2	3.25	1020575	1.4	.88	.62	1.38	.75	1.50	3.38	1.50	.75	2.69	3.22	.44	1.00	
1.5	3 & 4	6.5	1020584	2.2	1.25	.75	1.75	.88	1.88	4.15	1.81	1.00	3.38	4.03	.50	1.19	
2	5 & 6	8.75	1020593	3.8	1.38	.88	2.25	1.00	2.81	5.50	2.09	1.12	4.19	4.50	.50	1.44	
3	7 & 8	12.5	1020602	7.3	1.62	1.12	3.25	1.25	3.06	6.34	2.62	1.38	5.62	5.59	.62	1.81	
4	9 & 10	20.5	1020611	15.2	2.12	1.38	4.50	1.50	5.25	9.45	3.12	1.75	7.50	6.88	.75	2.13	
5	11 & 12	35	1020620	30.8	2.50	1.75	5.50	2.00	6.34	11.50	4.19	2.25	9.19	8.66	1.00	2.88	
6	13	50	1020629	52.0	3.00	2.12	6.50	2.25	7.70	13.75	4.75	2.75	11.00	10.22	1.22	3.19	

\* 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.

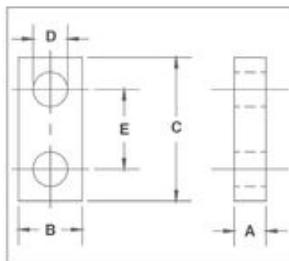
Working Load Limit (t)	S-255 Stock No.	Weight Each (lb)	Dimensions (in)			
			A	B	C	D
3.25	1020903	.33	1.25	.81	.75	.19
6.5	1020912	.57	1.50	.94	1.00	.25
8.75	1020921	.89	1.75	1.05	1.19	.31
12.5	1020930	1.45	2.00	1.31	1.50	.38
20.5	1020939	2.79	2.50	1.63	1.88	.44
35	1020948	2.40	3.25	2.13	2.25	.50
50	1020957	4.06	3.75	2.38	2.75	.62

\* 5:1 Design Factor

CE



**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 (lb)	Dimensions (in)				
			A	B	C	D	E
3.25	1020785	.83	.75	1.50	3.38	.81	1.88
6.5	1020796	1.62	1.00	1.75	4.12	.94	2.25
8.75	1020807	2.71	1.25	2.00	4.75	1.06	2.62
12.5	1020818	5.18	1.50	2.50	6.00	1.31	3.37
20.5	1020829	8.19	1.75	3.00	7.00	1.62	3.75
35	1020840	17.19	2.00	4.00	9.25	2.12	5.00
50	1020851	37.40	2.88	5.00	10.50	2.38	5.75

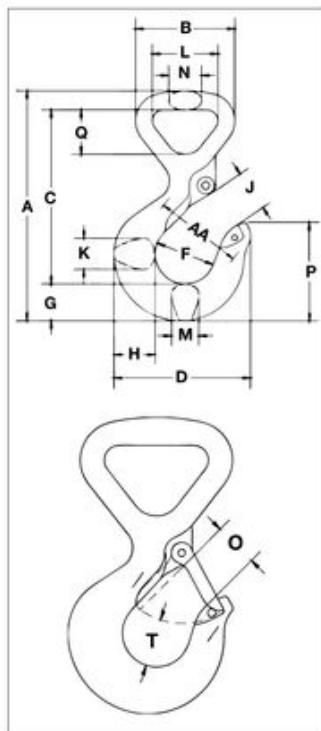
\* 5:1 Design Factor

SlingSaver® CE

## 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

9

## WSL-320A Synthetic Sling Hook

**QUIC-CHECK®** **CE** **Sling Saver®** **Fatigue Rated®** **Load Rated®**

Web Sling Eye Width (in)	Round Sling Size (No.)	Working Load Limit (t)	WSL-320A with Latch	Weight Each (lb)	Hook I.D. Code	S-4320 Rep. Latch
1"	1	1.5	1022706	1.10	FA	1096374
2"	2	3	1022717	2.86	HA	1096468
3"	3	5	1022728	6.60	IA	1096515

## WSL-320A Synthetic Sling Hook

Hook ID Code	Working Load Limit (t)	Dimensions (in)																
		A	B	C	D	F	G	H	J	K	L	M	N	O	P	Q	T	AA
FA	1.5	5.25	2.26	3.98	3.11	1.38	.84	.94	.93	.71	1.50	.63	.75	.91	2.24	1.01	.98	2.00
HA	3	7.11	3.66	5.31	3.97	1.63	1.13	1.32	1.13	.94	2.50	.85	1.13	1.09	2.82	1.69	1.16	2.00
IA	5	9.33	5.13	7.06	4.81	2.00	1.44	1.63	1.47	1.31	3.75	1.13	1.63	1.36	3.51	2.59	1.53	2.50

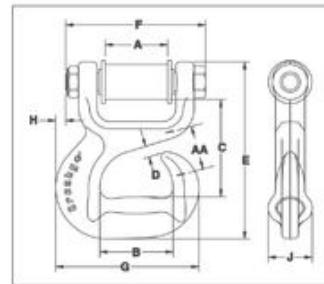
Design factor of 5:1.

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

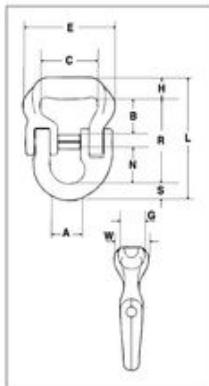
QUIC-CHECK® CE Sling Saver® Load Rating

Round Sling Size (No.)	Web Slings			Working Load Limit (Tons)	S-287 Stock No.	Weight Each (lb)	Dimensions (in)									
	Webbing Width (in)	Eye Width (in)	Ply				A	B	C	D	E	F	G	H	J	AA
1 & 2	2	2	2	3-1/4	1021909	3.7	2.13	2.50	3.32	.38	6.03	4.77	4.88	.34	1.50	1.50
3	3	1.5	2	4-1/2	1021918	6.1	1.63	3.50	3.67	.38	7.06	4.53	6.51	1.36	1.88	—

Design factor of 5:1.

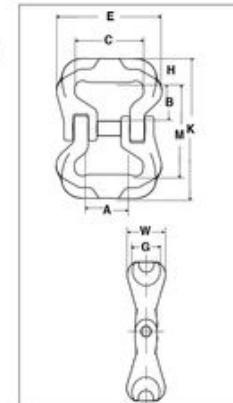
Maximum Proof Load is 2 times the Working Load Limit.

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

CE Sling Saver Lead Traced QT

Working Load Limit (lb)*	5:1 (lb)	Stock No.	Frame No.	Nominal Sling Body Width (in)	Lok-A-Loy Size (in)	Weight Each (lb)	Dimensions (in)											
							A	B	C	E	G	H	L	N	R	S	W	
6250	5000	1020695	5	2	3/8	1.14	.88	1.42	2.00	3.18	1.00	.80	4.20	1.04	2.92	.48	1.38	
12500	10000	1020704	10	3	5/8	2.96	1.42	1.52	2.75	4.13	1.25	.98	5.68	1.71	3.94	.75	1.75	
18750	15000	1020713	15	3	3/4	4.75	1.63	1.58	2.75	4.37	1.38	1.10	6.49	2.04	4.46	.93	1.88	
31250	25000	1020722	25	4	7/8	8.59	2.00	2.33	3.75	6.00	1.75	1.41	7.97	2.27	5.51	1.06	2.25	
37500	30000	1020731	30	4	7/8	9.24	2.00	2.20	3.75	6.19	1.75	1.41	7.84	2.27	5.38	1.06	2.38	
50000	40000	1020740	40	5	1	15.7	2.25	2.91	4.75	7.25	2.25	1.78	9.45	2.44	6.45	1.22	3.09	
75000	60000	1020759	60	6	1-1/4	26.0	2.56	3.36	5.75	9.13	2.31	1.86	11.08	3.07	7.72	1.50	3.16	

Design Factor of 5:1.

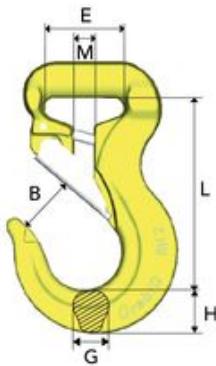
Maximum allowable Proof Load is 2 times the Working Load Limit when used at 4:1 design factor.

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### S-238 High Performance Sling Connector

Working Load Limit (lb)	Stock No.	Frame No.	Nominal Sling Body Width (in)	Weight Each (lb)	Dimensions (in)											
					A	B	C	E	G	H	K	M	W			
5000	1020415	5	2	1.6	.88	1.42	2.00	3.18	1.00	.80	4.90	3.30	1.38			
10000	1020423	10	3	3.3	1.42	1.52	2.75	4.13	1.25	.98	5.72	3.76	1.75			
15000	1020432	15	3	4.9	1.63	1.58	2.75	4.37	1.38	1.10	6.16	3.96	1.88			
25000	1020441	25	4	10.1	2.00	2.33	3.75	6.00	1.75	1.41	8.40	5.58	2.25			
30000	1020450	30	4	11.4	2.00	2.20	3.75	6.19	1.75	1.41	8.14	5.32	2.38			
40000	1020469	40	5	20.7	2.25	2.91	4.75	7.25	2.25	1.78	10.48	6.92	3.09			
60000	1020478	60	6	32.0	2.56	3.36	5.75	9.13	2.31	1.86	11.72	8.00	3.16			

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 (lb)	B	E	G	L	H	M	Weight (lb)
B14490	RH-1-10	2204	0.94	1.37	0.65	3.30	0.74	0.31	1.10
B14491	RH-2-10	4500	1.10	1.57	0.66	3.77	0.86	0.39	1.54
B14492	RH-3-10	6612	1.29	1.85	0.94	4.60	1.18	0.47	2.86
B14493	RH-5-10	11020	1.69	2.87	1.06	6.10	1.41	0.64	7.05

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.

## The SK-System

A range of specialized components for safe and easy assembly to chain, steel wire rope, webbing and roundsling, designed to solve your below-the-hook problems.

The Polyester Sling System provides:

- Universal coupling of components to chain, wire and synthetic slings.
- Quick and simple assembly (only a hammer needed).
- Easy assembly - standardized dimensions within each size range effectively eliminates the incorrect assembly of components with different safe working loads.
- Heavy hoisting with strong yet lightweight equipment.
- All components are manufactured from alloy steel for use with Grade 8 chain.



### SKA – pin & collar

The SKA set, containing pin and collar, can be used to connect all products in the SK-range. This creates a multitude of available combinations, each adaptable to the unique lifting situation.

The SKA set gives you flexibility. It can be disassembled and put in new combinations, providing solutions for a versatile lifting environment.



### SKLI/SKLU

Electrically insulated, lubricated, sealed roller bearing swivel. Fully rotational even at maximum load. Tested to resist 1000 V. Suitable for protection of overhead cranes during welding operations on suspended loads.

By using the SKLI/SKLU with the SK-system you get a versatile solution that will fit almost any situation.



## Rapid Rescue Chain Kit

Rapid rescue chain kits for a quick and patient-friendly rescue.

### Rapid Rescue Chain Kits

A few seconds can make a significant impact in a serious accident rescue operation. The vehicle construction and extreme deformations common in accidents make the work of emergency workers increasingly more difficult. The use of Gunnebo Industries' chain rescue kit is simple and effective for a patient-friendly rescue. The methodology and equipment is standardized in many parts of Europe including Germany and Scandinavia. The pulling moves the fire brigade's working space to the outside and allows parallel work of medical care and technical rescue.

Chain rescue can be used successfully in various accident scenarios such as frontal impact, side and rear impact.

### Recommended kit

- 4 x 2,7m (9ft) chain sling MG1-CL
- 2 x 6m (20ft) synthetic sling\*
- 4 x RH synthetic sling hooks
- 4 x G209 or 854 bow screw pin shackles
- 2 x metal or plastic hardcase for easy storage\*

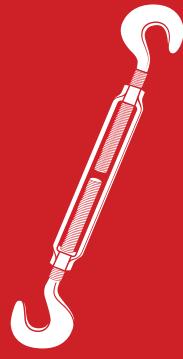
\*not manufactured by The Crosby Group



The kits are available in sizes from 6mm (7/32 inch) up to 16mm (5/8 inch) and working load limits up to 10 t (22 600 lb). Most commonly 8mm (5/16 inch) or 10mm (3/8 inch) are used, along with appropriately sized synthetic slings and synthetic sling hooks.

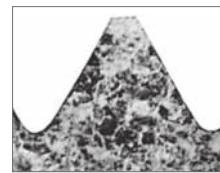
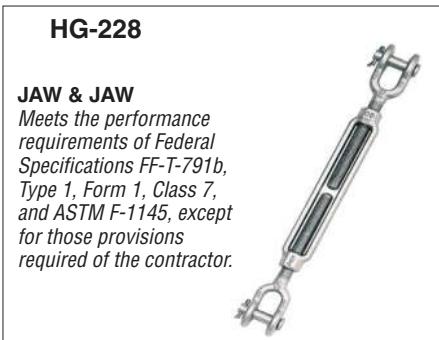
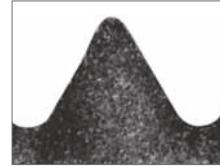
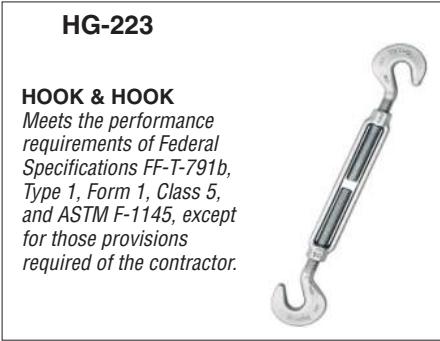
# TURNBUCKLES

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



theCrosby group®

[thecrosbygroup.com](http://thecrosbygroup.com)



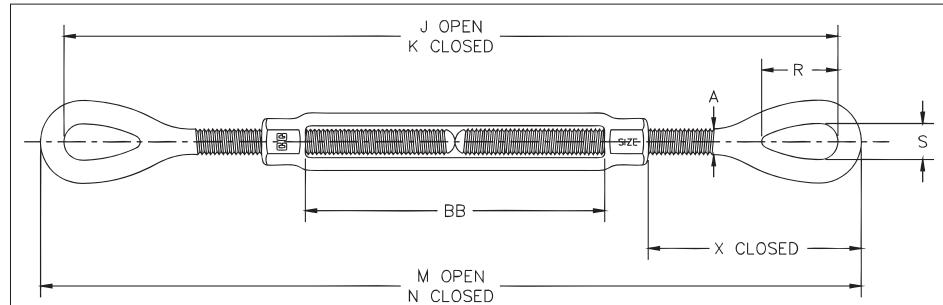
## Turnbuckle Information

- Turnbuckle assembly combinations include: eye & eye, hook & hook, hook & eye, 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 1/4" through 2-1/2", a shackle one size smaller can be reeved through eye.
- Forged jaw ends are fitted with bolts and nuts on size 1/4" - 5/8", and pins and cotter on sizes 3/4" through 2-3/4".
- **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.


**HG-226**
**QT**  
 Quality Through Engineering

**Fatigue Rated**

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 SECTION 17

**HG-226 Eye & Eye**

**10**

Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)								
				A	J Open	K Closed	M Open	N Closed	R	S	X Closed	BB
* 1/4 x 4	1031252	500	.29	.25	11.94	7.94	12.38	8.38	.81	.34	1.76	4.07
* 5/16 x 4-1/2	1031270	800	.48	.31	13.92	9.42	14.48	9.98	.95	.44	2.20	4.58
* 3/8 x 6	1031298	1200	.75	.38	17.56	11.56	18.24	12.24	1.13	.53	2.48	6.10
1/2 x 6	1031314	2200	1.72	.50	19.94	13.94	20.82	14.82	1.41	.71	3.56	6.03
1/2 x 12	1031350	2200	2.63	.50	32.23	20.23	33.11	21.11	1.41	.71	3.54	12.36
5/8 x 6	1031378	3500	2.75	.63	21.72	15.72	22.72	16.72	1.80	.88	4.35	6.03
5/8 x 12	1031412	3500	4.12	.63	34.06	22.06	35.06	23.06	1.80	.88	4.34	12.39
3/4 x 6	1031430	5200	4.22	.75	23.24	17.24	24.50	18.50	2.09	1.00	5.12	6.13
3/4 x 12	1031476	5200	6.12	.75	35.64	23.64	36.90	24.90	2.09	1.00	5.09	12.59
3/4 x 18	1031494	5200	7.83	.75	47.64	29.64	48.90	30.90	2.09	1.00	5.12	18.53
7/8 x 12	1031519	7200	8.83	.88	36.70	24.70	38.20	26.20	2.38	1.25	5.79	12.16
7/8 x 18	1031537	7200	11.5	.88	49.17	31.17	50.67	32.67	2.38	1.25	5.79	18.63
1 x 6	1031555	10000	9.62	1.00	26.24	20.24	28.00	22.00	3.00	1.43	6.50	6.18
1 x 12	1031573	10000	13.0	1.00	38.24	26.24	40.00	28.00	3.00	1.43	6.50	12.18
1 x 18	1031591	10000	16.3	1.00	50.24	32.24	52.00	34.00	3.00	1.43	6.50	18.18
1 x 24	1031617	10000	20.2	1.00	62.84	38.84	64.60	40.60	3.00	1.43	6.47	24.84
1-1/4 x 12	1031635	15200	19.9	1.25	42.14	30.14	44.38	32.38	3.59	1.82	8.49	12.06
1-1/4 x 18	1031653	15200	23.8	1.25	54.14	36.14	56.38	38.38	3.59	1.82	8.49	18.06
1-1/4 x 24	1031671	15200	27.8	1.25	66.70	42.70	68.94	44.94	3.59	1.82	8.49	24.62
1-1/2 x 12	1031699	21400	28.7	1.50	44.24	32.24	46.74	34.74	4.09	2.12	9.46	12.32
1-1/2 x 18	1031715	21400	34.1	1.50	56.24	38.24	58.74	40.74	4.09	2.12	9.46	18.32
1-1/2 x 24	1031733	21400	39.6	1.50	68.86	44.86	71.36	47.36	4.09	2.12	9.46	24.94
1-3/4 x 18	1031779	28000	50.7	1.75	57.38	39.38	60.38	42.38	4.65	2.38	9.97	18.37
1-3/4 x 24	1031797	28000	58.2	1.75	69.38	45.38	72.38	48.38	4.65	2.38	9.97	24.37
2 x 24	1031813	37000	83.5	2.00	75.68	51.68	79.18	55.18	5.81	2.69	13.03	24.48
2-1/2 x 24	1031831	60000	149	2.50	79.18	55.18	83.18	59.18	6.49	3.12	13.76	24.60
2-3/4 x 24	1031859	75000	174	2.75	81.34	57.34	85.84	61.84	7.00	3.25	15.09	24.65

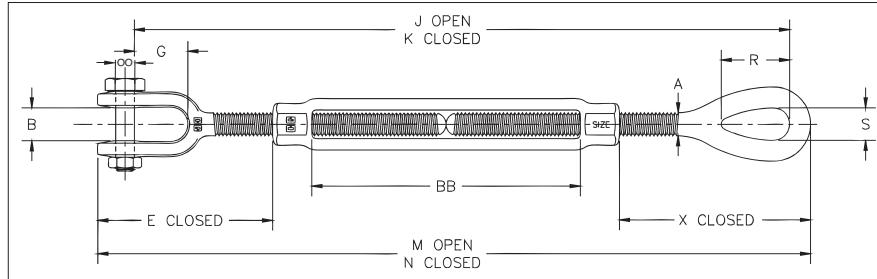
5:1 Design Factor. Proof Load is 2.5 times the Working Load Limit.\*Mechanically galvanized



HG-227



- 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 1/4" through 2-1/2", a shackle one size smaller can be reeved through eye.
- Forged jaw ends are fitted with bolts and nuts for 1/4" through 5/8", and pins and cotters on 3/4" through 2-3/4" 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.



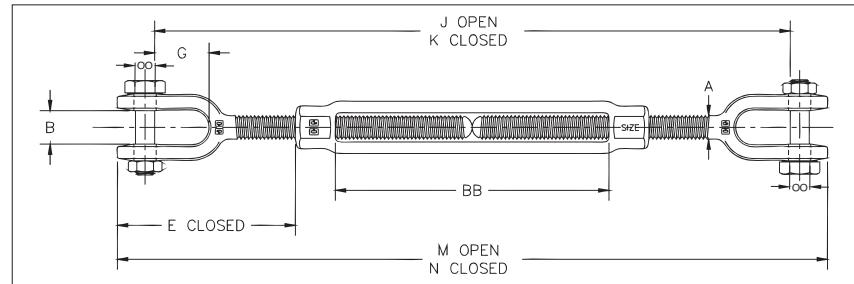
### HG-227 Jaw & Eye

Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)											
				A	B	E Closed	G	J Open	K Closed	M Open	N Closed	R	S	X Closed	BB
* 1/4 x 4	1031877	500	.33	.25	.45	1.66	.64	11.57	7.57	12.28	8.28	.81	.34	1.76	4.07
* 5/16 x 4-1/2	1031895	800	.52	.31	.50	2.02	.87	13.50	9.00	14.30	9.80	.95	.44	2.20	4.58
* 3/8 x 6	1031911	1200	.80	.38	.53	2.11	.85	16.91	10.91	17.87	11.87	1.13	.53	2.48	6.10
1/2 x 6	1031939	2200	1.77	.50	.64	3.22	1.07	19.30	13.30	20.48	14.48	1.41	.71	3.56	6.03
1/2 x 9	1031957	2200	2.25	.50	.64	3.20	1.07	25.59	16.59	26.77	17.77	1.41	.71	3.54	9.36
1/2 x 12	1031975	2200	2.67	.50	.64	3.20	1.07	31.59	19.59	32.77	20.77	1.41	.71	3.54	12.36
5/8 x 6	1031993	3500	2.98	.63	.79	3.90	1.32	20.73	14.73	22.27	16.27	1.80	.88	4.35	6.03
5/8 x 9	1032019	3500	3.72	.63	.79	3.89	1.32	27.07	18.07	28.61	19.61	1.80	.88	4.34	9.39
5/8 x 12	1032037	3500	4.35	.63	.79	3.89	1.32	33.07	21.07	34.61	22.61	1.80	.88	4.34	12.39
3/4 x 6	1032055	5200	4.51	.75	.97	4.71	1.52	22.17	16.17	24.09	18.09	2.09	1.00	5.12	6.13
3/4 x 9	1032073	5200	5.56	.75	.97	4.68	1.52	28.57	19.57	30.49	21.49	2.09	1.00	5.09	9.59
3/4 x 12	1032091	5200	6.42	.75	.97	4.68	1.52	34.57	22.57	36.49	24.49	2.09	1.00	5.09	12.59
3/4 x 18	1032117	5200	8.14	.75	.97	4.71	1.52	46.57	28.57	48.49	30.49	2.09	1.00	5.12	18.53
7/8 x 12	1032135	7200	9.10	.88	1.16	5.50	1.77	35.68	23.68	37.91	25.91	2.38	1.25	5.79	12.16
7/8 x 18	1032153	7200	11.6	.88	1.16	5.50	1.77	48.15	30.15	50.38	32.38	2.38	1.25	5.79	18.63
1 x 6	1032171	10000	10.0	1.00	1.34	6.09	2.05	25.03	19.03	27.59	21.59	3.00	1.43	6.50	6.18
1 x 12	1032199	10000	13.4	1.00	1.34	6.09	2.05	37.03	25.03	39.59	27.59	3.00	1.43	6.50	12.18
1 x 18	1032215	10000	16.7	1.00	1.34	6.09	2.05	49.03	31.03	51.59	33.59	3.00	1.43	6.50	18.18
1 x 24	1032233	10000	20.6	1.00	1.34	6.06	2.05	61.63	37.63	64.19	40.19	3.00	1.43	6.47	24.84
1-1/4 x 12	1032251	15200	20.9	1.25	1.84	8.09	2.82	40.76	28.76	43.98	31.98	3.59	1.82	8.49	12.06
1-1/4 x 18	1032279	15200	24.8	1.25	1.84	8.09	2.82	52.76	34.76	55.98	37.98	3.59	1.82	8.49	18.06
1-1/4 x 24	1032297	15200	28.8	1.25	1.84	8.09	2.82	65.32	41.32	68.54	44.54	3.59	1.82	8.49	24.62
1-1/2 x 12	1032313	21400	30.6	1.50	2.06	8.93	2.81	42.50	30.50	46.21	34.21	4.09	2.12	9.46	12.32
1-1/2 x 18	1032331	21400	36.0	1.50	2.06	8.93	2.81	54.50	36.50	58.21	40.21	4.09	2.12	9.46	18.32
1-1/2 x 24	1032359	21400	41.5	1.50	2.06	8.93	2.81	67.12	43.12	70.83	46.83	4.09	2.12	9.46	24.94
1-3/4 x 18	1032395	28000	52.1	1.75	2.60	9.36	3.35	55.37	37.37	59.77	41.77	4.65	2.38	9.97	18.37
1-3/4 x 24	1032411	28000	59.7	1.75	2.60	9.36	3.35	67.37	43.37	71.77	47.77	4.65	2.38	9.97	24.37
2 x 24	1032439	37000	89.9	2.00	2.62	11.80	3.74	72.66	48.66	77.95	53.95	5.81	2.69	13.03	24.48
2-1/2 x 24	1032457	60000	158	2.50	3.06	13.26	4.44	76.08	52.08	82.68	58.68	6.49	3.12	13.76	24.60
2-3/4 x 24	1032475	75000	187	2.75	3.69	14.92	4.19	78.05	54.05	85.67	61.67	7.00	3.25	15.09	24.65

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



- 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 1/4" through 5/8", and pins and cotters on 3/4" through 2-3/4" 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.



### HG-228 Jaw & Jaw

Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)								
				A	B	E Closed	G	J Open	K Closed	M Open	N Closed	BB
* 1/4 x 4	1032493	500	.37	.25	.45	1.66	.64	11.19	7.19	12.18	8.18	4.07
* 5/16 x 4-1/2	1032518	800	.56	.31	.50	2.02	.87	13.07	8.57	14.12	9.62	4.58
* 3/8 x 6	1032536	1200	.85	.38	.53	2.11	.85	16.25	10.25	17.50	11.50	6.10
1/2 x 6	1032554	2200	1.82	.50	.64	3.22	1.07	18.65	12.65	20.14	14.14	6.03
1/2 x 9	1032572	2200	2.29	.50	.64	3.20	1.07	24.94	15.94	26.43	17.43	9.36
1/2 x 12	1032590	2200	2.71	.50	.64	3.20	1.07	30.94	18.94	32.43	20.43	12.36
5/8 x 6	1032616	3500	3.21	.63	.79	3.90	1.32	19.74	13.74	21.82	15.82	6.03
5/8 x 9	1032634	3500	3.95	.63	.79	3.89	1.32	26.08	17.08	28.16	19.16	9.39
5/8 x 12	1032652	3500	4.58	.63	.79	3.89	1.32	32.08	20.08	34.16	22.16	12.39
3/4 x 6	1032670	5200	4.80	.75	.97	4.71	1.52	21.09	15.09	23.68	17.68	6.13
3/4 x 9	1032698	5200	5.85	.75	.97	4.68	1.52	27.49	18.49	30.08	21.08	9.59
3/4 x 12	1032714	5200	6.72	.75	.97	4.68	1.52	33.49	21.49	36.08	24.08	12.59
3/4 x 18	1032732	5200	8.45	.75	.97	4.71	1.52	45.49	27.49	48.08	30.08	18.53
7/8 x 12	1032750	7200	9.37	.88	1.16	5.50	1.77	34.65	22.65	37.62	25.62	12.16
7/8 x 18	1032778	7200	11.8	.88	1.16	5.50	1.77	47.12	29.12	50.09	32.09	18.63
1 x 6	1032796	10000	10.4	1.00	1.34	6.09	2.05	23.82	17.82	27.18	21.18	6.18
1 x 12	1032812	10000	13.8	1.00	1.34	6.09	2.05	35.82	23.82	39.18	27.18	12.18
1 x 18	1032830	10000	17.1	1.00	1.34	6.09	2.05	47.82	29.82	51.18	33.18	18.18
1 x 24	1032858	10000	21.0	1.00	1.34	6.06	2.05	60.42	36.42	63.78	39.78	24.84
1-1/4 x 12	1032876	15200	21.9	1.25	1.84	8.09	2.82	39.37	27.37	43.58	31.58	12.06
1-1/4 x 18	1032894	15200	25.9	1.25	1.84	8.09	2.82	51.37	33.37	55.58	37.58	18.06
1-1/4 x 24	1032910	15200	29.8	1.25	1.84	8.09	2.82	63.93	39.93	68.14	44.14	24.62
1-1/2 x 12	1032938	21400	32.6	1.50	2.06	8.93	2.81	40.76	28.76	45.68	33.68	12.32
1-1/2 x 18	1032956	21400	38.0	1.50	2.06	8.93	2.81	52.76	34.76	57.68	39.68	18.32
1-1/2 x 24	1032974	21400	43.5	1.50	2.06	8.93	2.81	65.38	41.38	70.30	46.30	24.94
1-3/4 x 18	1033018	28000	53.5	1.75	2.60	9.36	3.35	53.35	35.35	59.16	41.16	18.37
1-3/4 x 24	1033036	28000	61.1	1.75	2.60	9.36	3.35	65.35	41.35	71.16	47.16	24.37
2 x 24	1033054	37000	96.3	2.00	2.62	11.80	3.74	69.64	45.64	76.72	52.72	24.48
2-1/2 x 24	1033072	60000	167	2.50	3.06	13.26	4.44	72.97	48.97	82.18	58.18	24.60
2-3/4 x 24	1033090	75000	199	2.75	3.69	14.92	4.19	74.75	50.75	85.50	61.50	24.65

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

**QT** **Fatigue Rated**

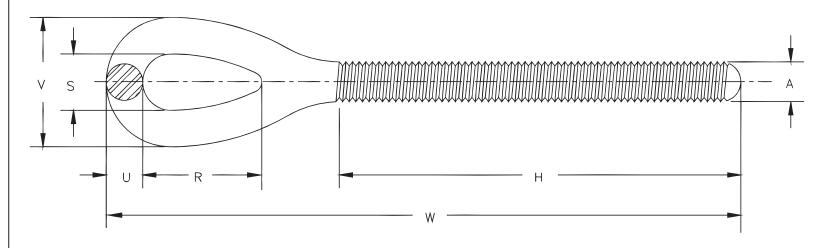
APPLICATION AND WARNING INFORMATION  
SECTION 17

10



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 1/4" through 2-1/2", a shackle one size smaller can be reeved through eye.
- Modified UNJ thread for improved fatigue properties.
- Fatigue rated.

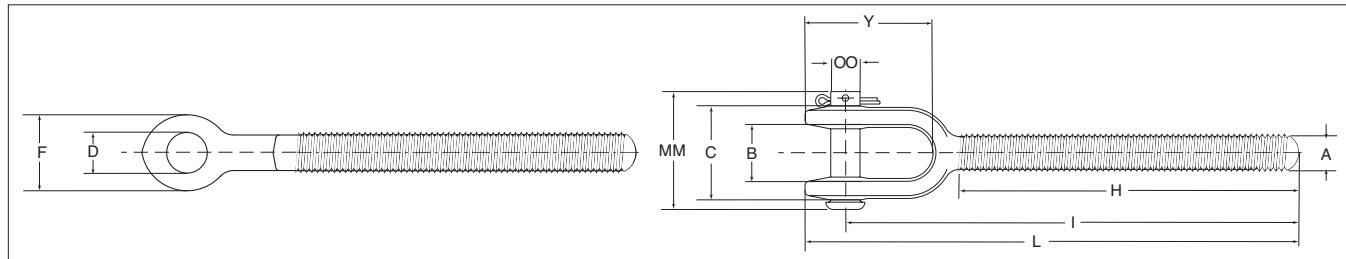
**QT****Fatigue Rated****HG-4037 Eye End Fittings**

Shank Dia. & Take Up (in)	RH Eye Stock No.	LH Eye Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)						
					A	H	R	S	U	V	W
* 1/4 x 4	1071057	1071672	500	.07	.25	2.59	.81	.34	.22	.78	4.19
* 5/16 x 4 1/2	1071075	1071690	800	.13	.31	3.00	.95	.44	.28	1.00	4.99
* 3/8 x 6	1071093	1071716	1200	.23	.38	3.88	1.13	.53	.34	1.21	6.12
1/2 x 6	1071119	1071734	2200	.51	.50	4.19	1.41	.71	.44	1.59	7.41
1/2 x 9	1071137	1071752	2200	.59	.50	5.69	1.41	.71	.44	1.59	8.91
1/2 x 12	1071155	1071770	2200	.68	.50	7.19	1.41	.71	.44	1.59	10.41
5/8 x 6	1071173	1071798	3500	.82	.63	4.44	1.80	.88	.50	1.88	8.36
5/8 x 9	1071191	1071814	3500	.95	.63	5.94	1.80	.88	.50	1.88	9.86
5/8 x 12	1071217	1071832	3500	1.08	.63	7.44	1.80	.88	.50	1.88	11.36
3/4 x 6	1071235	1071850	5200	1.36	.75	4.56	2.09	1.00	.63	2.26	9.25
3/4 x 9	1071253	1071878	5200	1.55	.75	6.06	2.09	1.00	.63	2.26	10.75
3/4 x 12	1071271	1071896	5200	1.73	.75	7.56	2.09	1.00	.63	2.26	12.25
3/4 x 18	1071299	1071912	5200	2.10	.75	10.56	2.09	1.00	.63	2.26	15.25
7/8 x 12	1071315	1071930	7200	2.61	.88	7.81	2.38	1.25	.75	2.75	13.10
7/8 x 18	1071333	1071958	7200	3.12	.88	10.81	2.38	1.25	.75	2.75	16.10
1 x 6	1071351	1071976	10000	3.15	1.00	5.06	3.00	1.43	.88	3.19	11.00
1 x 12	1071379	1071994	10000	3.81	1.00	8.06	3.00	1.43	.88	3.19	14.00
1 x 18	1071397	1072010	10000	4.48	1.00	11.06	3.00	1.43	.88	3.19	17.00
1 x 24	1071413	1072038	10000	5.15	1.00	14.06	3.00	1.43	.88	3.19	20.00
1-1/4 x 12	1071431	1072056	15200	7.07	1.25	8.38	3.59	1.82	1.12	4.06	16.19
1-1/4 x 18	1071459	1072074	15200	8.12	1.25	11.38	3.59	1.82	1.12	4.06	19.19
1-1/4 x 24	1071477	1072092	15200	9.16	1.25	14.38	3.59	1.82	1.12	4.06	22.19.
1-1/2 x 12	1071495	1072118	21400	10.3	1.50	8.75	4.09	2.12	1.25	4.62	17.37
1-1/2 x 18	1071510	1072136	21400	11.8	1.50	11.75	4.09	2.12	1.25	4.62	20.37
1-1/2 x 24	1071538	1072154	21400	13.3	1.50	14.75	4.09	2.12	1.25	4.62	23.37
1-3/4 x 18	1071574	1072190	28000	17.5	1.75	12.16	4.65	2.38	1.50	5.38	21.19
1-3/4 x 24	1071592	1072216	28000	19.5	1.75	15.16	4.65	2.38	1.50	5.38	24.19
2 x 24	1071618	1072234	37000	28.9	2.00	15.59	5.81	2.69	1.75	6.19	27.59
2-1/2 x 24	1071636	1072252	60000	46.4	2.50	17.56	6.50	3.12	2.00	7.12	29.59
2-3/4 x 24	1071654	1072270	75000	60.2	2.75	17.69	7.00	3.25	2.25	7.75	30.92

\*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 1/4" through 5/8", and pins and cotters on sizes 3/4" through 2-3/4".
- Modified UNJ thread for improved fatigue properties.
- Fatigue Rated.

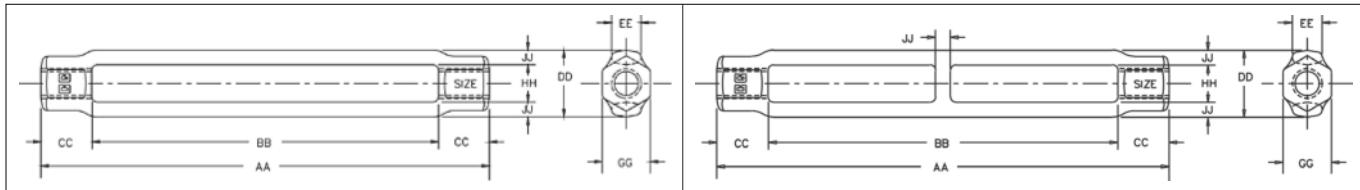

**QT & Fatigue Rated**
**HG-4037 Jaw End Fittings**

Shank Dia. & Take Up (in)	RH Jaw Stock No.	LH Jaw Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)										
					A	B	C	D	F	H	I Nom. Min.	L Nom. Min.	Y	MM	OO Bolt Pin
* 1/4 x 4	1072298	1072911	500	.11	.25	.45	.91	.30	.63	2.59	3.72	4.09	1.13	1.41	.25
* 5/16 x 4 1/2	1072314	1072939	800	.17	.31	.50	1.02	.30	.69	3.00	4.41	4.81	1.39	1.41	.25
* 3/8 x 6	1072332	1072957	1200	.28	.38	.53	1.15	.36	.81	3.88	5.28	5.75	1.47	1.58	.31
1/2 x 6	1072350	1072975	2200	.56	.50	.64	1.36	.42	1.00	4.19	6.51	7.07	1.81	1.87	.37
1/2 x 9	1072378	1072993	2200	.63	.50	.64	1.36	.42	1.00	5.69	8.01	8.57	1.81	1.87	.37
1/2 x 12	1072396	1073019	2200	.72	.50	.64	1.36	.42	1.00	7.19	9.51	10.07	1.81	1.87	.37
5/8 x 6	1072412	1073037	3500	1.05	.63	.79	1.75	.55	1.31	4.31	7.12	7.91	2.36	2.44	.50
5/8 x 9	1072430	1073055	3500	1.18	.63	.79	1.75	.55	1.31	5.81	8.62	9.41	2.36	2.44	.50
5/8 x 12	1072458	1073073	3500	1.31	.63	.79	1.75	.55	1.31	7.31	10.12	10.91	2.36	2.44	.50
3/4 x 6	1072476	1073091	5200	1.65	.75	.97	2.09	.69	1.63	4.56	7.86	8.84	2.81	2.56	.63
3/4 x 9	1072494	1073117	5200	1.84	.75	.97	2.09	.69	1.63	6.06	9.36	10.34	2.81	2.56	.63
3/4 x 12	1072519	1073135	5200	2.03	.75	.97	2.09	.69	1.63	7.56	10.86	11.84	2.81	2.56	.63
3/4 x 18	1072537	1073153	5200	2.41	.75	.97	2.09	.69	1.63	10.56	13.86	14.84	2.81	2.56	.63
7/8 x 12	1072555	1073171	7200	2.88	.88	1.16	2.56	.81	1.88	7.81	11.70	12.81	3.25	3.09	.75
7/8 x 18	1072573	1073199	7200	3.25	.88	1.16	2.56	.81	1.88	10.81	14.70	15.81	3.25	3.09	.75
1 x 6	1072591	1073215	10000	3.56	1.00	1.34	2.76	.94	2.12	5.06	9.35	10.59	3.73	3.44	.88
1 x 12	1072617	1073233	10000	4.22	1.00	1.34	2.76	.94	2.12	8.06	12.35	13.59	3.73	3.44	.88
1 x 18	1072635	1073251	10000	4.89	1.00	1.34	2.76	.94	2.12	11.06	15.35	16.59	3.73	3.44	.88
1 x 24	1072653	1073279	10000	5.56	1.00	1.34	2.76	.94	2.12	14.06	18.35	19.59	3.73	3.44	.88
1-1/4 x 12	1072671	1073297	15200	8.10	1.25	1.84	3.72	1.19	2.63	8.38	14.25	15.79	4.92	4.53	1.13
1-1/4 x 18	1072699	1073313	15200	9.14	1.25	1.84	3.72	1.19	2.63	11.38	17.25	18.79	4.92	4.53	1.13
1-1/4 x 24	1072715	1073331	15200	10.2	1.25	1.84	3.72	1.19	2.63	14.38	20.25	21.79	4.92	4.53	1.13
1-1/2 x 12	1072733	1073359	21400	12.3	1.50	2.06	4.16	1.47	3.12	8.75	15.07	16.84	5.27	5.13	1.38
1-1/2 x 18	1072751	1073377	21400	13.8	1.50	2.06	4.16	1.47	3.12	11.75	18.07	19.84	5.27	5.13	1.38
1-1/2 x 24	1072779	1073395	21400	15.3	1.50	2.06	4.16	1.47	3.12	14.75	21.07	22.84	5.27	5.13	1.38
1-3/4 x 18	1072813	1073439	28000	18.9	1.75	2.60	4.66	1.72	3.50	12.16	18.49	20.58	6.25	6.00	1.63
1-3/4 x 24	1072831	1073457	28000	21.0	1.75	2.60	4.66	1.72	3.50	15.16	21.49	23.58	6.25	6.00	1.63
2 x 24	1072859	1073475	37000	35.3	2.00	2.62	5.61	2.09	4.19	15.59	23.82	26.36	7.28	6.88	2.00
2-1/2 x 24	1072877	1073493	60000	55.8	2.50	3.06	5.84	2.38	5.62	17.20	25.61	29.09	9.04	7.50	2.25
2-3/4 x 24	1072895	1073518	75000	72.4	2.75	3.69	6.57	2.88	6.12	17.35	26.75	30.75	9.56	8.38	2.75

\*Mechanically galvanized

**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**
**QT** *Fatigue Rated*

Shank Dia. & Take Up (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)							
				AA	BB	CC	DD	EE	GG	HH	JJ
* 5/16 x 4-1/2	1033919	800	.22	5.59	4.58	.51	.82	.38	.56	.44	.19
* 3/8 x 6	1033937	1200	.29	7.29	6.10	.60	.88	.38	.63	.50	.19
1/2 x 6	1033955	2200	.70	7.70	6.03	.84	1.19	.68	.81	.63	.28
† 1/2 x 9	1033973	2200	1.03	11.03	9.36	.84	1.19	.68	.81	.63	.28
† 1/2 x 12	1033991	2200	1.27	14.03	12.36	.84	1.19	.68	.81	.63	.28
5/8 x 6	1034017	3500	1.11	8.02	6.03	1.00	1.43	.83	1.00	.75	.34
† 5/8 x 9	1034035	3500	1.59	11.38	9.39	1.00	1.43	.83	1.00	.75	.34
† 5/8 x 12	1034053	3500	1.96	14.38	12.39	1.00	1.43	.83	1.00	.75	.34
3/4 x 6	1034071	5200	1.50	8.26	6.13	1.07	1.74	.94	1.13	.94	.40
† 3/4 x 9	1034099	5200	2.17	11.72	9.59	1.07	1.74	.94	1.13	.94	.40
† 3/4 x 12	1034115	5200	2.66	14.72	12.59	1.07	1.74	.94	1.13	.94	.40
† 3/4 x 18	1034133	5200	3.63	20.66	18.53	1.07	1.74	.94	1.13	.94	.40
7/8 x 12	1034179	7200	3.61	14.62	12.16	1.23	2.00	1.13	1.31	1.06	.47
† 7/8 x 18	1034197	7200	5.27	21.09	18.63	1.23	2.00	1.13	1.31	1.06	.47
1 x 6	1034213	10000	3.32	9.00	6.18	1.41	2.45	1.25	1.50	1.25	.60
1 x 12	1034231	10000	5.34	15.00	12.18	1.41	2.45	1.25	1.50	1.25	.60
† 1 x 18	1034259	10000	7.35	21.00	18.18	1.41	2.45	1.25	1.50	1.25	.60
† 1 x 24	1034277	10000	9.85	27.66	24.84	1.41	2.45	1.25	1.50	1.25	.60
1-1/4 x 12	1034339	15200	5.72	15.40	12.06	1.67	2.62	1.25	1.88	1.50	.56
1-1/4 x 18	1034357	15200	7.58	21.40	18.06	1.67	2.62	1.25	1.88	1.50	.56
† 1-1/4 x 24	1034375	15200	9.45	27.96	24.62	1.67	2.62	1.25	1.88	1.50	.56
1-1/2 x 12	1034437	21400	8.01	15.82	12.32	1.75	2.99	1.50	2.25	1.75	.62
1-1/2 x 18	1034455	21400	10.4	21.82	18.32	1.75	2.99	1.50	2.25	1.75	.62
† 1-1/2 x 24	1034473	21400	12.9	28.45	24.94	1.75	2.99	1.50	2.25	1.75	.62
1-3/4 x 18	1034552	28000	15.7	22.44	18.37	2.04	3.62	1.75	2.62	2.12	.75
1-3/4 x 24	1034570	28000	19.2	28.44	24.37	2.04	3.62	1.75	2.62	2.12	.75
2 x 24	1034632	37000	25.8	29.13	24.48	2.33	4.14	2.00	3.00	2.38	.88
2-1/2 x 24	1034678	60000	55.9	31.66	24.60	3.53	5.62	2.75	3.88	3.12	1.25
2-3/4 x 24	1034696	75000	54.0	31.66	24.65	3.51	5.62	2.75	3.88	4.48	1.25

\*Mechanically galvanized

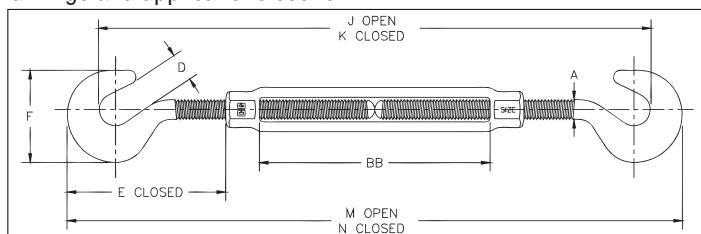
†Contains Center Rib for additional body support



**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.

**QT** *Fatigue Rated*



**HG-223 Hook & Hook**

Thread Dia. & Take Up (in)	Stock No.	Working Load Limit (lb)*	Weight Each (lb)	Dimensions (in)								
				A	D	E Closed	F	J Open	K Closed	M Open	N Closed	BB
1 x 12	1030333	5000	14.8	1.00	1.25	6.56	4.25	36.59	25.06	40.12	28.12	12.18

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

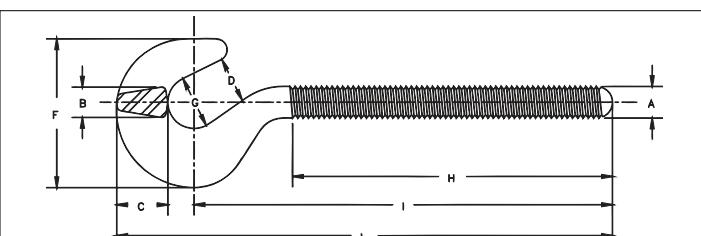
**10**



**HG-4037**

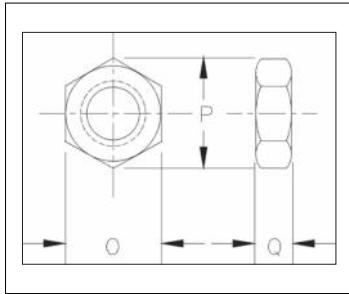
- Quenched & Tempered or normalized.
- Hot-dip galvanized steel.
- Hooks are forged with a greater cross sectional area that results in a stronger hook with better fatigue properties.
- Fatigue rated to 20,000 cycles at 1-1/2 times the Working Load Limit.

**QT** *Fatigue Rated*



**HG-4037 Hook End Fittings**

Shank Dia. & Take Up (in)	RH Hook Stock No.	LH Hook Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)								
					A	B	C	D	F	G	H	I	L
1 x 12	1070334	1070851	5000	4.72	1.00	1.00	1.53	1.25	4.25	1.38	8.06	11.84	14.06



### HG-4060 / HG-4061

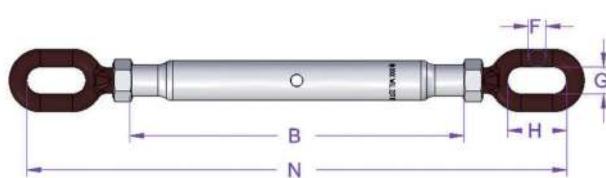
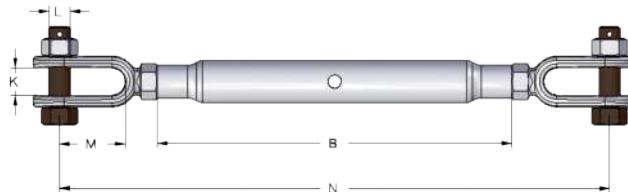
- Secures the turnbuckle into position at final adjustment.

### HG-4060 / HG-4061 Lock Nuts

Shank Dia. & Take Up (in)	Right Hand HG-4060 Stock No.	Left Hand HG-4061 Stock No.	Weight Per 100 (lb)	Dimensions (in)		
				O	P	Q
1/4	1075115	1075491	.80	.44	.50	.16
5/16	1075133	1075516	1.30	.50	.56	.19
3/8	1075151	1075534	2.00	.56	.64	.22
1/2	1075197	1075570	4.00	.75	.86	.31
5/8	1075213	1075598	7.00	.94	1.06	.38
3/4	1075231	1075614	11.00	1.13	1.26	.42
7/8	1075259	1075632	16.30	1.31	1.50	.48
1	1075277	1075650	23.80	1.50	1.69	.55
1-1/8	1075295	1075678	32.00	1.50	1.69	.55
1-1/4	1075311	1075696	62.50	1.88	2.13	.72
1-1/2	1075357	1075730	72.00	2.25	2.53	.84
1-3/4	1075393	1075776	112.00	2.75	3.18	1.00
2	1075419	1075794	150.00	3.12	3.61	1.12
2-1/2	1075455	1075838	330.00	3.88	4.47	1.50
2-3/4	1075473	1075856	425.00	4.25	4.91	1.62

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

<b>Standard</b>	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.
<b>Material:</b>	Quenched & Tempered alloy steel.
<b>Surface treatment</b>	Hot-dip galvanized.
<b>Design Factor</b>	5:1
<b>Certificate:</b>	Test certificate and traceable 3.1 certificate supplied on request.
<b>Tolerances:</b>	+/- 5%
<b>Temperature:</b>	-4°F to 392°F

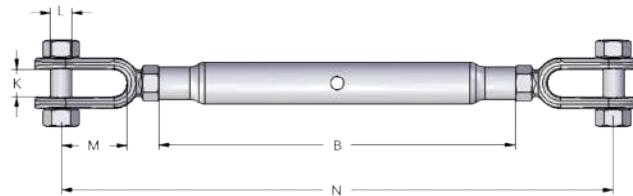


Stock no. Jaw/Jaw 801	Stock no. Jaw/Eye 802	Stock no. Eye/Eye 804	Thread M/UNC	WLL metric tonnes	Take up range	Dimensions (in)								Weight each (lb)
						B	N	K	L	M	F	G	H	
A801420	A802420	A804420	M 20	2.5	8.27	10.63	17.91	0.79	0.63	1.97	0.51	0.83	1.77	5.07
A801424	A802424	A804424	M 24	5.0	9.84	13.39	22.44	1.10	0.87	2.56	0.75	1.10	2.20	10.14
A801432	A802432	A804432	1.1/4"	7.0	10.63	14.57	26.77	1.50	1.10	3.35	0.87	1.38	2.76	17.64
A801438	A802438	A804438	1.1/2"	10.0	11.81	15.75	31.10	1.77	1.26	3.94	0.98	1.57	3.07	30.86
A801445	A802445	A804445	1.3/4"	13.0	14.17	19.69	34.25	1.97	1.54	4.13	1.18	1.77	3.54	52.91
A801450	A802450	A804450	2"	17.0	17.72	23.62	40.55	2.28	1.77	4.72	1.38	1.77	3.94	83.78
A801464			*2.1/2"	27.2	21.02	30.71	51.65	2.95	2.24	5.59	-	-		194.01
A801470			*2.3/4"	34.0	22.68	30.71	55.83	3.54	2.76	5.71				216.05

\* Open turnbuckle body without nut and split pin

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

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



Stock no. Jaw/ Jaw 401	Stock no. Jaw/ Eye 402	Stock no. Eye/Eye 404	Thread M/UNC	WLL metric tonnes	Take up range	Dimensions (in)								Weight each (lb)
						B	N	L	M	K	F	G	H	
	*A402406		M 6	-	3.15	3.94	6.89	0.20	0.71	0.31	0.20	0.39	0.39	0.29
	*A402408		M 8	-	3.35	4.33	8.27	0.24	0.83	0.35	0.24	0.47	0.47	0.55
A401510	*A402410	*A404410	M 10	0.5	3.54	5.71	8.86	0.31	0.79	0.37	0.28	0.51	0.51	0.66
A401512	*A402412	*A404412	M 12	0.7	6.10	7.68	12.40	0.39	1.18	0.51	0.39	0.55	1.10	1.43
A401516	*A402416	*A404416	M 16	1.2	7.28	9.06	14.96	0.47	1.73	0.71	0.47	0.71	1.77	2.76
A401520	A402420	A404520	M 20	1.5	8.27	10.63	17.72	0.63	1.97	0.79	0.51	0.83	1.77	4.85
A401422	A402422	A404422	M 22	2.2	9.06	11.61	19.69	0.79	2.36	0.98	0.63	0.94	1.97	7.28
A401424	A402424	A404424	M 24	3.2	9.84	12.80	21.85	0.87	2.56	1.10	0.75	1.10	2.20	10.14
A401432	A402432	A404432	1.1/4"	4.8	11.42	14.57	26.77	1.10	3.35	1.50	0.87	1.38	2.76	18.74
A401438	A402438	A404438	1.1/2"	6.0	11.81	15.75	29.92	1.26	3.94	1.77	0.98	1.57	3.54	31.97
A401445	A402450	A404445	1.3/4"	8.5	11.42	15.75	29.92	1.50	4.13	1.97	1.18	1.77	3.54	46.08
A401452	A402452	A404452	2"	11.0	11.42	15.75	32.28	1.77	4.72	2.28	1.38	1.77	3.94	52.91

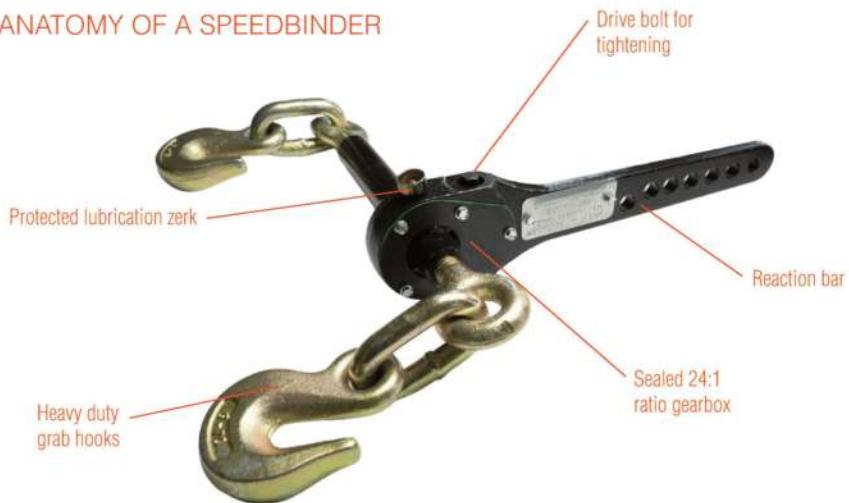
\* Will not be delivered with lifting certificate.



## EFFICIENT & ERGONOMIC LOAD SECUREMENT TECHNOLOGY

Speedbinders is changing the load binder industry with patented **Torque Drive** technology. Our line of products provide considerable time savings and enhanced safety benefits for drivers by eliminating repetitive, straining operations. Torque Drive binders are revolutionizing load securement. By adopting the practice of using portable power drill to secure loads and pull the chain tight, you can alleviate shoulder strain, reduce injuries, and allow for easier operation and reduced operation time.

### ANATOMY OF A SPEEDBINDER



#### ENHANCED SAFETY FEATURES

#### MORE ERGONOMIC

#### QUICKER TIE-DOWN & RELEASE TIMES

#### LONGER LASTING

#### HIGHEST TENSION

#### EASY TO OPERATE IN TIGHT SPOTS

#### UNMATCHED TENSION RETENTION

#### TAMPER-RESISTANT

### PRODUCT RANGE



#### TD66BL

Color marking: Blue  
WLL: 6,600 lb  
Chain size: 5/16"-3/8"  
Proof tested to: 9,900 lb  
Design factor: 3:1  
Common applications:  
Light equipment transport,  
Logging



#### TD92RL

Color marking: Red  
WLL: 9,200 lb  
Chain size: 3/8"-1/2"  
Proof tested to:  
13,800 lb  
Design factor: 3:1  
Common applications:  
Equipment transport,  
Heavy towing,  
Steel coil transport



#### TD13GLHH

Color marking: Green  
WLL: 13,000 lb  
Chain size: 1/2"-5/8"  
Proof tested to: 19,500 lb  
Design factor: 3:1  
Common applications:  
Equipment transport,  
Heavy hauling,  
Steel coil transport

**Speedbinders™**

find more information in section 13



# LIFTING POINTS

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

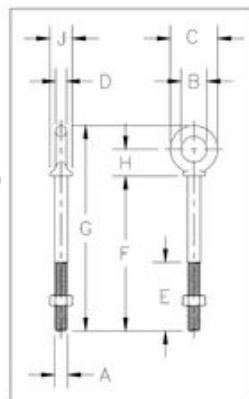


theCrosbygroup®

[thecrosbygroup.com](http://thecrosbygroup.com)



- 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
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
7.94 x 108	1045078	.54	8.53	7.85	15.7	28.4	6.35	63.5	108	140	17.5
9.53 x 63.5	1045096	.70	9.71	9.65	19.1	35.1	7.85	38.1	63.5	101	19.8
9.53 x 114	1045112	.70	11.5	9.65	19.1	35.1	7.85	63.5	114	152	19.8
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
12.7 x 152	1045158	1.18	25.8	12.7	25.4	44.5	9.65	76.0	152	200	25.4
15.9 x 102	1045176	2.35	31.1	15.7	31.8	57.0	12.7	51.0	102	164	33.3
15.9 x 152	1045194	2.35	46.4	15.7	31.8	57.0	12.7	76.0	152	214	33.3
19.1 x 114	1045210	3.26	66	19.1	38.1	70.0	15.7	51.0	114	189	39.6
19.1 x 152	1045238	3.26	76	19.1	38.1	70.0	15.7	76.0	152	227	39.6
22.2 x 127	1045256	4.80	102	22.4	44.5	82.5	19.1	63.5	127	215	46.7
25.4 x 152	1045292	6.03	166	25.4	51.0	95.5	22.4	76.0	152	253	53.0
25.4 x 229	1045318	6.03	192	25.4	51.0	95.5	22.4	102	229	329	53.0
31.8 x 203	1045336	9.52	295	31.8	63.5	114	25.4	102	203	323	62.5
31.8 x 305	1045354	9.52	361	31.8	63.5	114	25.4	102	305	425	62.5
38.1 x 381	1045372	10.8	646	38.1	76.0	140	31.8	152	381	527	76.0

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

Fellows Beam

QT

CE

APPLICATION AND WARNING INFORMATION SECTION 17

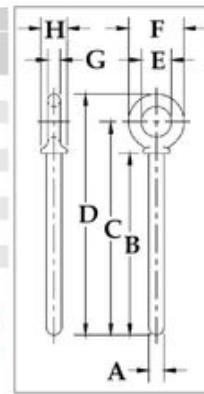


- Forged steel - Quenched & Tempered.

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®

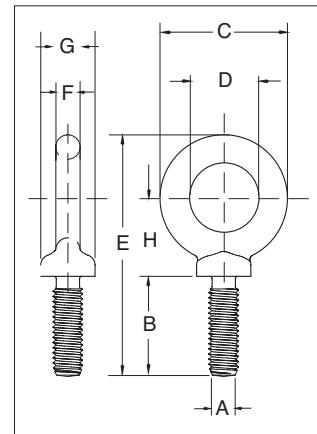
QT



### 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 (in)	Stock No.	Working Load Limit (lb)	Weight Per 100 (lb)	Dimensions (in)							
				A* Thread	B	C	D	E	F	G	H
1/4 x 1	9900182	650	5.00	1/4 - 20	1.02	1.13	.75	2.29	.19	.53	.77
5/16 x 1-1/8	9900191	1200	9.00	5/16 - 18	1.15	1.38	.88	2.74	.25	.59	.95
3/8 x 1-1/4	9900208	1550	15.00	3/8 - 16	1.27	1.62	1.00	3.07	.31	.69	1.05
1/2 x 1-1/2	9900217	2600	28.00	1/2 - 13	1.53	1.95	1.19	3.70	.38	.91	1.27
5/8 x 1-3/4	9900226	5200	55.00	5/8 - 11	1.79	2.38	1.38	4.45	.50	1.13	1.53
3/4 x 2	9900235	7200	96.00	3/4 - 10	2.05	2.76	1.50	5.07	.63	1.38	1.71
7/8 x 2-1/4	9900244	10600	154.00	7/8 - 9	2.31	3.25	1.75	5.87	.75	1.56	2.00
1 x 2-1/2	9900253	13300	238.00	1 - 8	2.57	3.76	2.00	6.66	.88	1.81	2.30
1-1/8 x 2-3/4	9900257	15000	320.00	1-1/8 - 7	2.75	4.19	2.25	7.20	.97	2.06	2.35
1-1/4 x 3	9900262	21000	399.00	1-1/4 - 7	3.09	4.50	2.50	7.95	1.00	2.28	2.73
1-1/2 x 3-1/2	9900271	24000	720.00	1-1/2 - 6	3.60	5.50	3.00	9.49	1.25	2.75	3.28
1-3/4 x 3-3/4	9900280	34000	1040.00	1-3/4 - 5	3.75	6.26	3.50	10.48	1.38	3.00	3.60
2 x 4	9900289	42000	1880.00	2 - 4-1/2	4.00	7.62	4.00	12.31	1.81	3.38	4.50
2-1/2 x 5	9900298	65000	3250.00	2-1/2 - 4	5.00	8.76	4.50	14.88	2.12	4.25	5.50

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

Fatigue Rated

QT

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APPLICATION AND WARNING INFORMATION SECTION 17

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### M-279 Metric Shoulder Type Machinery Eye Bolts

Size (mm)	Stock No.	Working Load Limit (kg)	Weight Each (kg)	Dimensions (mm)							
				A* Thread	B	C	D	E	F	G	H
M6 x 13	1045753	200	.03	M6 x 1.0	13.0	28.7	19.1	47.0	4.9	13.5	19.6
M8 x 13	1045789	400	.05	M8 x 1.25	13.0	35.1	22.4	54.6	6.4	15.0	24.1
M10 x 17	1045833	640	.07	M10 x 1.5	17.0	41.1	25.4	64.3	7.9	17.5	26.5
M12 x 20.5	1045869	1000	.11	M12 x 1.75	20.5	49.5	30.2	77.7	9.7	23.1	32.8
M16 x 27	1045913	1800	.25	M16 x 2.0	27.0	60.5	35.1	96.0	12.7	28.7	38.9
M20 x 30	1045995	2500	.42	M20 x 2.5	30.0	70.0	38.1	108	16.0	35.1	43.4
M24 x 36	1046029	4000	1.05	M24 x 3.0	36.0	95.5	51.0	142	22.4	46.0	58.4
M27 x 69.8	1046038	5000	1.42	M27 x 3.0	69.8	107	57.1	183	24.6	52.3	59.7
M30 x 45	1046075	6000	1.77	M30 x 3.5	45.0	114	63.5	171	25.4	58.0	69.3
M36 x 54	1046109	8500	3.12	M36 x 4.0	54.0	140	76.0	207	31.8	70.0	83.3
M42 x 95.2	1046118	14000	4.58	M42 x 4.5	95.2	159	88.9	266	35.0	76.2	91.4
M48 x 102	1046127	17300	8.71	M48 x 5.0	102	194	101	313	46.0	85.9	114
M64 x 127	1046136	29500	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

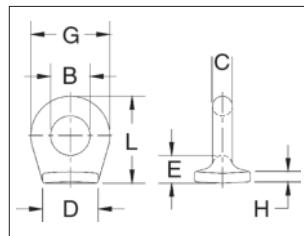
S-264



## S-264 Pad Eyes

- 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.

**QT**



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

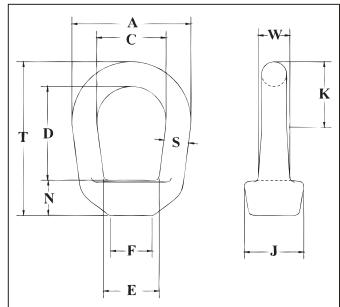
G-400



## G-400 Eye Nuts

- 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.

**QT**



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



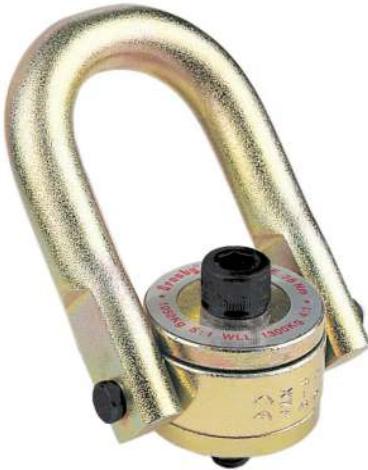
# User's Guide for Lifting Online Course

This training resource covers rigging fundamentals through a series of self-paced lessons that explain the Crosby User's Guide for Lifting pocket rigging card.

## **Take the online course**



# Swivel Hoist Ring



**HR-125M**  
Swivel Hoist Ring



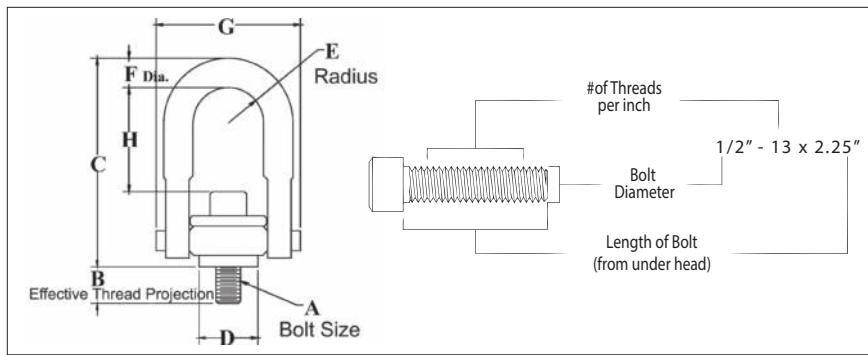
Color coded to distinguish between UNC (Red) and Metric (Silver) thread types.

**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 2-1/2 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 1-1/2 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.

**Load Rated™** **Fatigue Rated™** **QT**

### 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 (lb)	Torque in ft-lb	Dimensions (in)								Weight Each (lb)
				Bolt Size A	Effective Thread Projection Length B	C	D	Radius E	Diameter F	G	H	
1 †	1016887	800	7	5/16 - 18 x 1.50	.58	2.72	.97	.46	.34	1.87	1.12	.37
1 †	1016898	1000	12	3/8 - 16 x 1.50	.58	2.72	.97	.46	.34	1.87	1.05	.39
2	1016909	2500	28	1/2 - 13 x 2.00	.70	4.85	1.96	.87	.75	3.35	2.29	2.33
2 †	1016912	2500	28	1/2 - 13 x 2.50	1.20	4.85	1.96	.87	.75	3.35	2.29	2.36
2	1016920	4000	60	5/8 - 11 x 2.00	.70	4.85	1.96	.87	.75	3.35	2.16	2.41
2 †	1016924	4000	60	5/8 - 11 x 2.75	1.45	4.85	1.96	.87	.75	3.35	2.16	2.47
2	1016931	5000	100	3/4 - 10 x 2.25	.95	4.85	1.96	.87	.75	3.35	2.04	2.52
2 †	1016935	5000	100	3/4 - 10 x 2.75	1.45	4.85	1.96	.87	.75	3.35	2.04	2.59
3	1016942	7000*	100	3/4 - 10 x 2.75	.89	6.57	2.96	1.36	.94	4.87	2.97	6.72
3 †	1016946	7000*	100	3/4 - 10 x 3.50	1.64	6.57	2.96	1.36	.94	4.87	2.97	6.81
3	1016953	8000	160	7/8 - 9 x 2.75	.89	6.57	2.96	1.36	.94	4.87	2.84	6.84
3 †	1016957	8000	160	7/8 - 9 x 3.50	1.64	6.57	2.96	1.36	.94	4.87	2.84	6.96
3	1016964	10000	230	1 - 8 x 3.00	1.14	6.57	2.96	1.36	.94	4.87	2.72	7.09
3 †	1016969	10000	230	1 - 8 x 4.00	2.14	6.57	2.96	1.36	.94	4.87	2.72	7.31
4	1016975	15000	470	1-1/4 - 7 x 4.50	2.21	8.72	3.71	1.75	1.19	6.18	3.93	14.51
5	1016986	24000	800	1-1/2 - 6 x 6.75	3.00	12.55	4.71	2.39	1.75	8.48	5.52	37.73
5	1016997	30000	1100	2 - 4-1/2 x 6.75	3.00	12.55	4.71	2.39	1.75	8.48	5.02	40.69
6	1017001	50000	2100	2-1/2 - 4 x 8.0	4.00	16.88	5.75	3.00	2.25	11.00	8.03	88.00
7	1017005	75000	4300	3 - 4 x 10.5	5.00	19.50	6.45	3.75	2.75	14.16	8.50	166.00
8	1017009	100000	5100	3-1/2 - 4 x 13.0 #	7.00	22.09	7.75	4.00	3.25	15.91	9.28	265.00

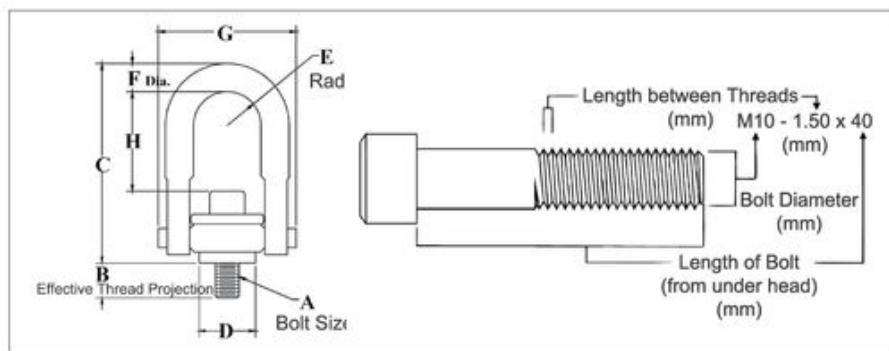
5:1 Design Factor. \*4:1 Design Factor when tested in 90 degree orientation. †Long Bolts are designed to be used with soft metal (i.e., aluminum) workpiece. While the long bolts may also be used with ferrous metal (i.e., steel & iron) workpiece, short bolts are designed for ferrous workpieces only. Hex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

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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)	Bolt Size A	Effective Thread Projection Length B	Dimensions (mm)						Weight Each (kg)
		5:1 Design Factor †	4:1 Design Factor †				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.

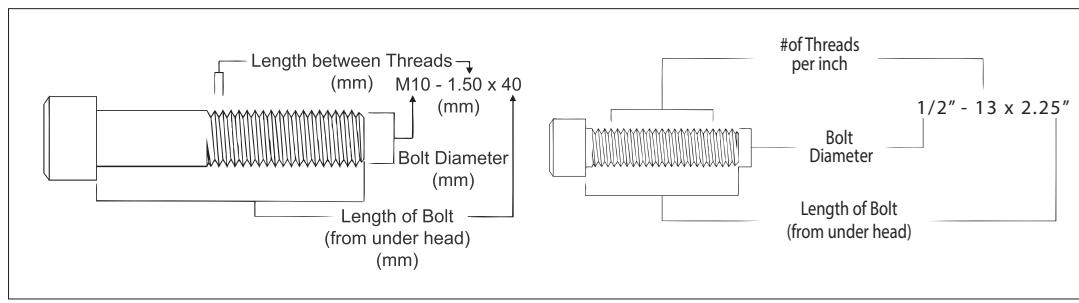
Load Rated

Fatigue Rated

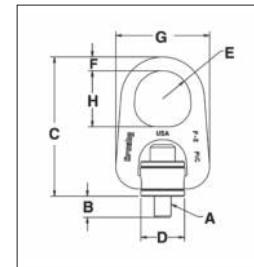
CE

APPLICATION AND WARNING INFORMATION  
SECTION 17

### 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 (lb)	Torque in Ft. Lbs	Dimensions (in)								Weight Each (lb)
				Bolt Size A		Eff. Thread Projection Length B	C		D		Radius E	
1	1068002	800	7	5/16 - 18 x 1.50	.52	.369	.97	.62	.44	.227	.138	.60
1	1068006	1000	12	3/8 - 16 x 1.50	.52	.369	.97	.62	.44	.227	.138	.62
2	1068010	2500	28	1/2 - 13 x 2.25	.69	.626	1.96	1.25	.75	4.20	2.50	3.05
2†	1068014	2500	28	1/2 - 13 x 2.75	1.19	6.26	1.96	1.25	.75	4.20	2.50	3.07
2	1068018	4000	60	5/8 - 11 x 2.25	.69	6.26	1.96	1.25	.75	4.20	2.50	3.11
2†	1068022	4000	60	5/8 - 11 x 3.00	1.44	6.26	1.96	1.25	.75	4.20	2.50	3.18
2	1068026	5000	100	3/4 - 10 x 2.50	.94	6.26	1.96	1.25	.75	4.20	2.50	3.24
2†	1068030	5000	100	3/4 - 10 x 3.00	1.44	6.26	1.96	1.25	.75	4.20	2.50	3.30
3	1068034	7000*	100	3/4 - 10 x 3.00	.85	8.66	2.96	1.63	1.00	6.25	3.25	10.09
3†	1068038	7000*	100	3/4 - 10 x 3.50	1.35	8.66	2.96	1.63	1.00	6.25	3.25	10.21
3	1068042	8000	160	7/8 - 9 x 3.00	.85	8.66	2.96	1.63	1.00	6.24	3.25	10.21
3†	1068046	8000	160	7/8 - 9 x 3.50	1.35	8.66	2.96	1.63	1.00	6.24	3.25	10.40
3	1068050	10000	230	1 - 8 x 3.50	1.35	8.66	2.96	1.63	1.00	6.24	3.25	10.50
3†	1068054	10000	230	1 - 8 x 4.50	2.35	8.66	2.96	1.63	1.00	6.24	3.25	10.72
4	1068058	15000	470	1-1/4 - 7 x 5.00	2.09	11.21	3.71	2.00	1.25	7.82	4.00	21.90
4	1068062	24000	800	1-1/2 - 6 x 5.50	2.59	11.21	3.71	2.00	1.44	7.82	4.00	23.00

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

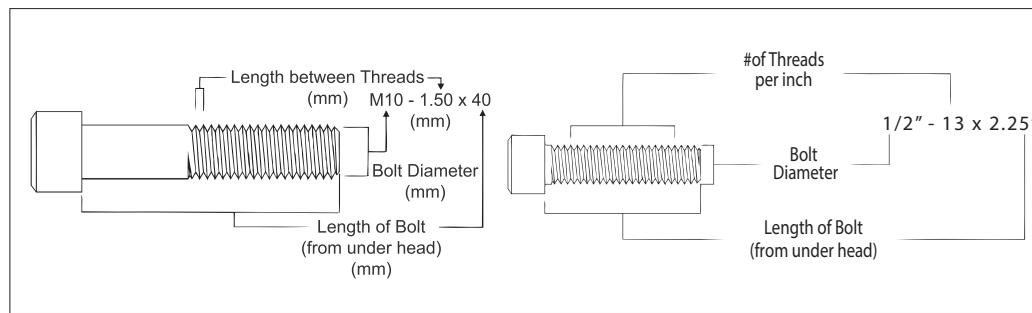
Frame Size No.	Stock No.	Working Load Limit (kg)		Torque in Nm	Dimensions (mm)								Weight Each (kg)
		At a 5:1 Design Factor*	At a 4:1 Design Factor*		Bolt Size A	Eff. Thread Projection Length B	C	D	Radius E		F	G	H
1	1068307	400	500	10	M8 x 1.25 x 40	15.2	93.7	24.6	15.7	11.2	57.7	35.1	0.3
1	1068316	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.

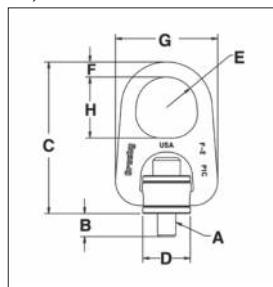
Load Rated

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APPLICATION AND WARNING INFORMATION SECTION 17

**HR-1000CT**

- 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 31 ft-lb min. avg. at -4°F. The bolt meets impact requirements of 20 ft-lb min. avg. at -150°F.
- 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.

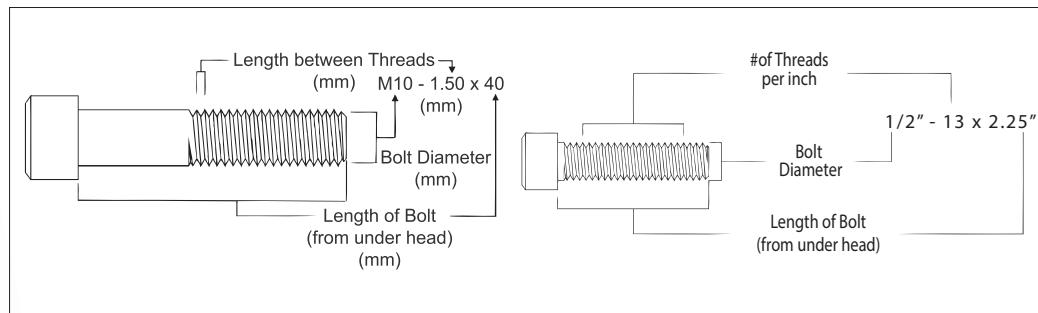
**HR-1000CT UNC Threads**

Frame Size No.	Stock No.	Working Load Limit (lb)	Torque (ft-lb)	Dimensions (in)								Mass Each (lb)
				Bolt Size A	Effective Thread Projection Length B	C	D	Radius E	Diameter F	G	H	
2	6608103	1900	28	1/2 - 13 x 2.25	0.70	6.32	1.96	1.25	0.75	4.20	2.50	3
2	6608112	1900	28	1/2 - 13 x 2.75	1.20	6.32	1.96	1.25	0.75	4.20	2.50	3
2	6608121	3000	60	5/8 - 11 x 2.25	0.70	6.32	1.96	1.25	0.75	4.20	2.50	3
3	6608130	4800	100	3/4 - 10 x 3.00	0.85	8.59	2.96	1.63	1.00	6.25	3.25	11
3	6608139	6200	160	7/8 - 9 x 3.00	0.85	8.59	2.96	1.63	1.00	6.25	3.25	11
3	6608148	8300	230	1 - 8 x 3.50	1.35	8.59	2.96	1.63	1.00	6.25	3.25	11
4	6608149	12500	470	1-1/4 - 7 x 5.00	2.10	11.31	3.71	2.00	1.44	8.13	4.00	24
4	6607669	20000	800	1-1/2 - 6 x 5.50	2.60	11.31	3.71	2.00	1.44	8.13	4.00	27
4	6607727	20000	800	1-1/2 - 8 x 5.50	2.60	11.31	3.71	2.00	1.44	8.13	4.00	27
5	6607670	28000	1100	2 - 4.5 x 7.50	3.20	15.15	4.00	2.69	1.75	11.64	5.00	69
6	6607671	45000	2100	2 1/2 - 4 x 9.50	3.73	19.93	5.75	3.00	2.75	14.47	5.62	157

5:1 Design Factor.

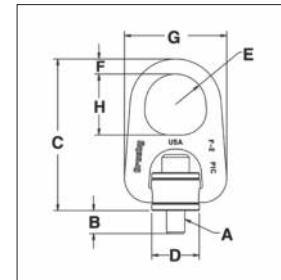
**Load Rated****Fatigue Rated**APPLICATION AND WARNING INFORMATION  
SECTION 17

### 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 31 ft-lb min. avg. at -4°F. The bolt meets impact requirements of 20 ft-lb min. avg. at -150°F.
- 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.

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### HR-1000MCT Metric Threads

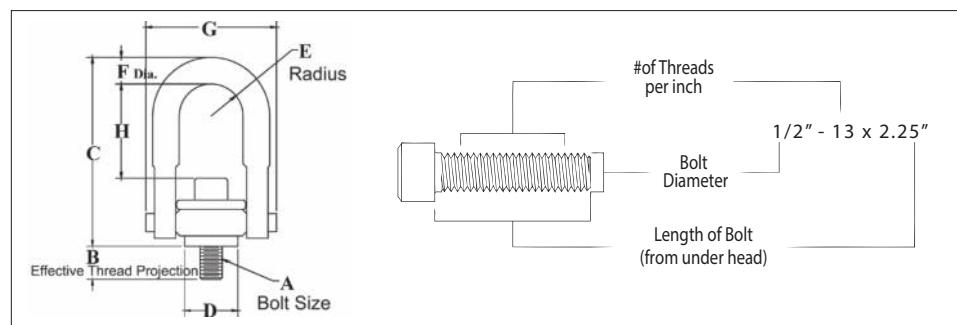
Frame Size No.	Stock No.	Working Load Limit (kg)		Torque (Nm)	Bolt Size A	Eff. Thread Projection Length B	Dimensions (mm)						Mass Each (kg)
		Design Factor 5:1	Design Factor 4:1				C	D	Radius E	Diameter F	G	H	
2	6630058	825	1,030	38	M12 x 1.75 x 55	15.6	160.6	49.7	31.8	19.1	106.7	63.5	1
2	6630059	1,350	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.

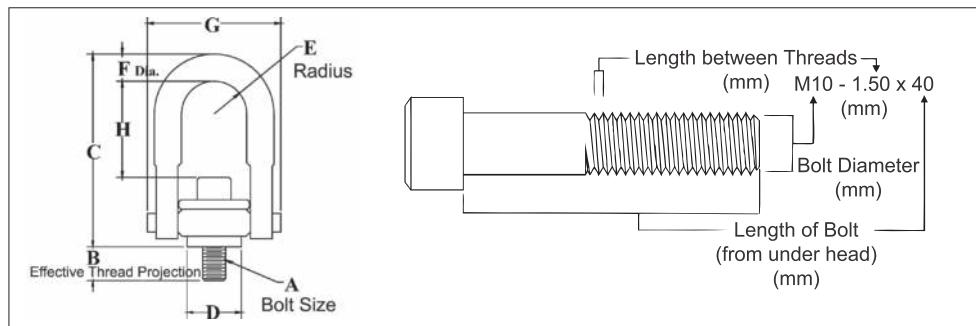
**SS-125UNC Threads**

Frame Size No.	Stock No.	Working Load Limit (lb)	Torque (ft-lb)	Bolt Size A	Dimensions (in)								Weight Each (lb)
					Effective Thread Projection Length B	C	D	Radius E	Diameter F	G	H		
1	1065000	400	3.5	5/16 - 18 x 1.0	.29	2.67	.85	.43	.34	1.84	1.27	.30	
1	1065004	400	3.5	5/16 - 18 x 1.25	.54	2.67	.85	.43	.34	1.84	1.27	.30	
1	1065008	500	6	3/8 - 16 x 1.25	.54	2.67	.85	.43	.34	1.84	1.27	.30	
2	1065016	1250	14	1/2 - 13 x 2.0	.78	4.78	1.45	.88	.69	3.52	2.31	2.6	
2	1065020	1250	14	1/2 - 13 x 2.25	1.03	4.78	1.45	.88	.69	3.52	2.31	2.6	
2	1065024	1250	14	1/2 - 13 x 2.5	1.28	4.78	1.45	.88	.69	3.52	2.31	2.6	
2	1065028	2000	30	5/8 - 11 x 2.0	.78	4.78	1.45	.88	.69	3.52	2.18	2.6	
2	1065032	2000	30	5/8 - 11 x 2.25	1.03	4.78	1.45	.88	.69	3.52	2.18	2.6	
2	1065036	2000	30	5/8 - 11 x 2.5	1.28	4.78	1.45	.88	.69	3.52	2.18	2.6	
2	1065040	2500	50	3/4 - 10 x 2.25	1.03	4.78	1.45	.88	.69	3.52	2.06	3.0	
2	1065044	2500	50	3/4 - 10 x 2.75	1.53	4.78	1.45	.88	.69	3.52	2.06	3.0	
3	1065048	3500	50	3/4 - 10 x 2.75	1.04	6.52	2.20	1.40	.94	5.14	3.06	7.0	
3	1065052	3500	50	3/4 - 10 x 3.25	1.54	6.52	2.20	1.40	.94	5.14	3.06	7.0	
3	1065056	4000	80	7/8 - 9 x 2.75	1.04	6.52	2.20	1.40	.94	5.14	2.93	7.0	
3	1065060	4000	80	7/8 - 9 x 3.0	1.29	6.52	2.20	1.40	.94	5.14	2.93	7.0	
3	1065064	5000	115	1 - 8 x 3.0	1.29	6.52	2.20	1.40	.94	5.14	2.81	7.5	
3	1065068	5000	115	1 - 8 x 3.25	1.54	6.52	2.20	1.40	.94	5.14	2.81	7.5	
3	1065072	5000	115	1 - 8 x 4.0	2.29	6.52	2.20	1.40	.94	5.14	2.81	7.5	
4	1065080	7500	235	1-1/4 - 7 x 4.0	1.89	8.73	3.19	1.75	1.25	6.50	4.12	14.0	
5	1065084	12000	400	1-1/2 - 6 x 5.5	2.70	12.47	4.87	2.25	1.75	8.55	6.41	34.0	
5	1065088	15000	550	2 - 4.5 x 5.75	2.96	12.47	4.87	2.25	1.75	8.55	5.91	36.0	
6	1065092	25000	1050	2-1/2 - 4 x 8.0	4.00	16.87	6.52	3.00	2.25	11.67	8.03	88.0	
6	1065096	25000	1050	2-1/2 - 8 x 8.0	4.00	16.87	6.52	3.00	2.25	11.67	8.03	88.0	
7	1065100	37500	2150	3 - 4 x 10.25	5.00	19.50	8.10	3.75	2.75	14.15	8.48	166.0	
8	1065104	50000	2550	3-1/2 - 4 x 13	7.00	22.09	8.60	4.00	3.25	15.90	9.28	265.0	

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 in 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

11

Load Rated

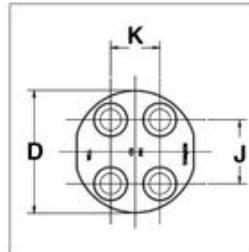
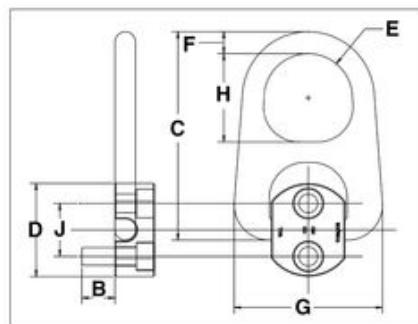
Fatigue Rated

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 (lb)	Torque (ft-lb)	No. of Bolts	Weight Each (lb)	Dimensions (in)									
						Bolt Size A	Effective Thread Projection Length B	C	Diameter D	Radius E	F	G	H	J	K
1	1067408	2000	7	2	.6	5/16-18 x 1.25	.82	3.43	2.00	.62	.44	2.27	1.38	1.00	—
2	1067417	2500	12	2	3.1	3/8-16 x 1.25	.65	6.03	2.25	1.25	.75	4.20	2.50	1.13	—
2	1067426	5000	28	2	3.3	1/2-13 x 2.00	1.40	6.03	2.63	1.25	.75	4.20	2.50	1.50	—
3	1067435	12000	28	4	10.5	1/2-13 x 2.75	1.65	8.27	3.13	1.63	1.00	6.25	3.25	1.63	1.25
4	1067444	20000	60	4	22.0	5/8-11 x 3.25	1.65	10.63	4.47	2.00	1.25	7.82	4.00	2.06	1.25

5:1 Design Factor

Load Rated

CE

APPLICATION AND WARNING INFORMATION SECTION 17

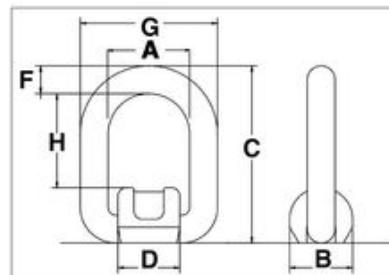
## S-265



- 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.

QT

APPLICATION AND WARNING INFORMATION SECTION 17



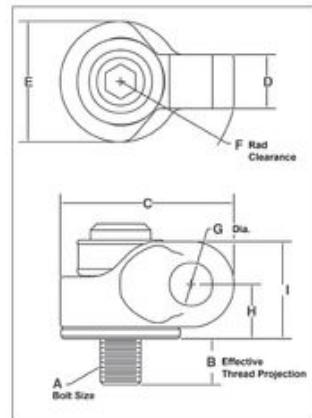
## S-265 Forged Link

Working Load Limit (lb)		Stock No.	Weight Each (lb)	Dimensions (in)							
Design Factor 5:1	Design Factor 4:1			A	B	C	D	E	F	G	H
2200	2600	1290839	0.8	1.57	1.42	3.27	1.38	0.51	2.60	1.65	
5500	7050	1290848	1.3	1.77	1.73	3.90	1.65	0.71	3.19	1.89	
9250	11650	1290857	2.6	2.17	1.97	4.84	1.93	0.87	3.90	2.24	
14100	17600	1290866	5.2	2.76	2.52	5.67	2.52	1.02	4.80	2.64	
25450	33050	1290875	13.0	3.82	3.54	7.60	3.39	1.34	6.50	3.70	

### 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			
					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.

### 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			
					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.

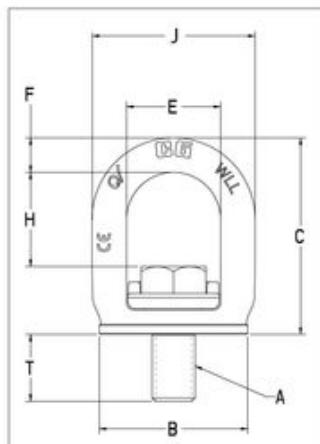
Load Rated

CE

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

**SL-150 UNC SLIDE-LOC™ LIFT POINT**

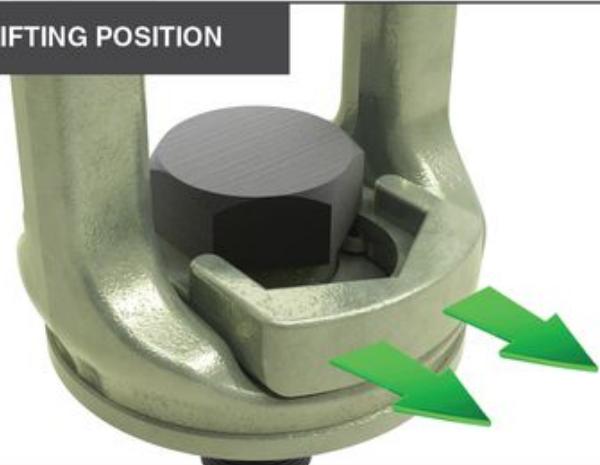
Weight Each (kg)	Stock No.	Working Load Limit (t)*	Bolt Size A (in)	Dimensions (mm)						Effective Thread Projection Length T
				B	C	E	F	H	J	
0.14	1068407	0.50	3/8 - 16 x 1	35.6	53.1	27.9	8.4	28.2	45.0	15.2
0.24	1068416	0.75	1/2 - 13 x 1 - 1/4	42.4	62.7	33.0	10.4	33.0	54.1	20.1
0.50	1068425	1.50	5/8 - 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		
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.

# The Lifting Point Family

We offer a wide range of lifting points that will fit most lifting and lashing applications. In our lifting point family you will find a full system, from master link to lifting point.

Choosing the right lifting point for your operation can be tricky, most lifting points can be used for a lot of purposes. But in order to give some guidance, and what we consider best practice, we have created a cross-chart (as seen on next page) to be used as indication to which lifting point that might be best suited for your specific purpose.

## Rotating Eye Lifting Point - RELP

The RELP is a compact and robust lifting point, ideal for top-mounting and when it is important to have quick and easy on-hooking. The lifting point is easy to assemble/disassemble with a standard allen key. On the bolt itself information such as the working load limit, mounting torque and manufacturing ID is stamped, so it is always available for the operator.

The RELP will automatically adjust to the loading direction which decreases the risk to load it incorrectly and endangering the lifting operation. For sensitive load surfaces the RELP is ideal, as the connecting sling hook will be positioned mainly parallel to the load surface, thus completely avoiding the hook causing damage on impact on the load. CE marked.



## Rotating Lifting Point - RLP

The RLP has an easily dismountable D-ring to enable assembly of wiresling, master link or hook directly onto the lifting point.

RLP has a hexagon bolt (RFID prepared) to make it easy to disassemble/assemble with a wrench. The bolt is also clearly marked with information such as working load limit, mounting torque and manufacturer ID so it is always available to the operator. The RLP rotates 360° and pivots 180°, making it strong, flexible and reliable. CE marked.



## De-centered Lifting Point - DLP

The design of the DLP allows the link to be folded over the housing when idle, allowing the lifting point to be almost completely stowed away when not in use.

The closed, oblong link is also equipped with a "stay-up"-function for easy on-hooking, (sizes up to M24) especially when there is limited space. This saves both the load from damage due to impacts from the hook, as well as making rigging fast and easy. The DLP is ideal in narrow spaces, such as corners or edge position, as the housing has a compact design.

DLP has a hexagon bolt (RFID prepared) to make it easy to disassemble/assemble with a wrench. The bolt is also clearly marked with information such as working load limit, mounting torque and manufacturer ID so it is always available to the operator. CE marked.



## Ball-bearing Lifting Point - BLP

The BLP is a very versatile lifting point and can safely be used for most applications. The ball-bearings in the BLP allow the load to be rotated during the lift, which is especially good when maintenance is needed on heavy tools and other types of equipment.

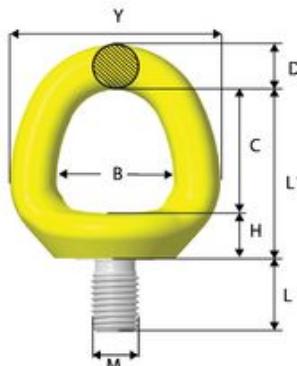
If the load surface is sensitive to impacts or scratches, the BLP is a good choice as it builds out from the load which makes it less likely that the lifting equipment will come in contact with it causing damage. The housing (RFID prepared) of the BLP is in-house drop-forged for increased strength and has a hexagon shape for easy mounting and dismounting. The housing is also clearly marked with information such as working load limit, mounting torque and manufacturer ID so it is always available to the operator. CE marked.





	RELP	RLP	DLP	BLP
Tight space	✓		✓	✓
Limited height (effective length)	✓	✓		
Vertical lift	✓	✓		✓
Angular lift		✓	✓	✓
Vertical rotation under load				✓
Tilting under load		✓	✓	✓
Sensitive load surface				✓
Single part lift	✓	✓		✓
Multiple part lift		✓	✓	✓
Integrated combination (hook or link)		✓		
RFID prepared		✓	✓	✓

This chart is intended to give guidance in choosing the right lifting point for your operation and is not rules for usage.  
For more advice contact your closest Gunnebo Industries dealer.



## Rotating Eye Lifting Point RELP

Stock No.	Code	Dimensions (mm)										Weight (kg)
		B	C	D	E	H	L	L1	M	Y	Z	
Z102408	RELP-M8 x 1.25	28	28	11	40	14	15	42	8	50	29	0.2
Z102410	RELP-M10 x 1.5	28	28	11	40	14	15	42	10	50	29	0.2
Z102412	RELP-M12 x 1.75	32	33	13	46	13	20	47	12	58	38	0.3
Z102416	RELP-M16 x 2	39	41	15	53	16	24	57	16	70	40	0.5
Z102420	RELP-M20 x 2.5	42	43	16	60	18	30	60	20	78	46	0.7
Z102424	RELP-M24 x 3	50	51	19	68	20	36	71	24	88	44	1.1
Z102430	RELP-M30 x 3.5	60	62	26	85	28	45	90	30	112	64	2.4
Z102436	RELP-M36 x 4	72	72	32	97	32	54	104	36	136	74	4.1
Z102442	RELP-M42 x 4.5	82	82	38	120	37	63	119	42	158	91	6.7
Z102448	RELP-M48 x 5	94	96	43	142	39	72	135	48	180	102	9.9

Bolt according to: ISO 898-1 Class 10.9

## RELP with UNC thread



Stock No.	Code	Dimensions (mm)										M (in)	Weight (kg)
		B	C	D	E	H	L	L1	Y	Z			
Z102508	RELP 5/16"-18 UNC	28	28	11	40	14	15	42	50	29	5/16"	0.2	
Z102510	RELP 3/8"-16 UNC	28	28	11	40	14	15	42	50	29	3/8"	0.2	
Z102512	RELP 1/2"-13 UNC	32	33	13	46	13	20	47	58	38	1/2"	0.3	
Z102516	RELP 5/8"-11 UNC	39	41	15	53	16	24	57	70	40	5/8"	0.5	
Z102520	RELP 3/4"-10 UNC	42	43	16	60	18	30	60	78	46	3/4"	0.7	
Z102521	RELP 7/8"-9 UNC	42	43	16	60	18	30	60	78	46	7/8"	0.7	
Z102524	RELP 1"-8 UNC	50	51	19	68	20	36	71	88	44	1"	1.1	
Z102530	RELP 1 1/4"-7 UNC	60	62	26	85	28	45	90	112	64	1 1/4"	2.4	
Z102536	RELP 1 1/2"-6 UNC	72	72	32	97	32	54	104	136	74	1 1/2"	4.1	
Z102542	RELP 1 3/4"-5 UNC	82	82	38	120	37	63	119	158	91	1 3/4"	6.8	
Z102548	RELP 2"-4.5 UNC	94	96	43	142	39	72	135	180	102	2"	10.0	

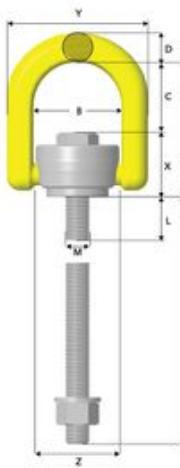
Bolt according to: ISO 898-1 Class 10.9

## Working Load Limits\* - RELP

Symmetric Load (tonnes)	1	1	2	2	2 symmetric	3 & 4 symmetric				
No. of Legs	1	1	2	2	0 - 45°	45° - 60°	0 - 45°	45° - 60°	Tightening Torque	Allen Key
Angle β	0°	90°	0°	90°	0 - 45°	45° - 60°	0 - 45°	45° - 60°		
RELP -M8 x 1.25	0.7	0.3	1.4	0.7	0.4	0.3	0.6	0.4	10 Nm	8 mm
RELP 5/16"-18 UNC	0.7	0.3	1.4	0.7	0.4	0.3	0.6	0.4	7Ft.Lbs	5/16" UNC
RELP-M10x1,5	1.2	0.5	2.4	1.0	0.7	0.5	1.0	0.7	15 Nm	8 mm
RELP 3/8"-16 UNC	1.2	0.5	2.4	1.0	0.7	0.5	1.0	0.7	11Ft.Lbs	5/16" UNC
RELP - M12x1,75	2.0	0.8	4.0	1.6	1.1	0.8	1.6	1.2	27 Nm	8 mm
RELP 1/2"-13 UNC	2.0	0.8	4.0	1.6	1.1	0.8	1.6	1.2	20Ft.Lbs	5/16" UNC
RELP - M16x2	3.5	1.5	7.0	3.0	2.1	1.5	3.1	2.2	60 Nm	8 mm
RELP 5/8"-11 UNC	3.5	1.5	7.0	3.0	2.1	1.5	3.1	2.2	44Ft.Lbs	5/16" UNC
RELP - M20x2,5	6.1	2.4	12.2	4.8	3.3	2.4	5.0	3.6	90 Nm	8 mm
RELP 3/4"-10 UNC	5.0	2.3	10.0	4.6	3.1	2.3	4.8	3.4	66Ft.Lbs	5/16" UNC
RELP 7/8"-9 UNC	6.1	2.9	12.2	5.8	4.1	2.9	6.1	4.3	66Ft.Lbs	5/16" UNC
RELP - M24x3	8.1	3.3	16.2	6.6	4.6	3.3	6.9	4.9	135 Nm	19 mm
RELP 1"-8 UNC	8.1	3.3	16.2	6.6	4.6	3.3	6.9	4.9	100Ft.Lbs	3/4" UNC
RELP - M30x3,5	12.1	4.6	24.2	9.2	6.4	4.6	9.6	6.9	270 Nm	19 mm
RELP 1 1/4"-7 UNC	12.1	4.6	24.2	9.2	6.4	4.6	9.6	6.9	200Ft.Lbs	3/4" UNC
RELP - M36x4	16.1	7.1	32.2	14.2	9.9	7.1	14.9	10.6	320 Nm	19 mm
RELP 1 1/2"-6 UNC	16.1	7.1	32.2	14.2	9.9	7.1	14.9	10.6	236Ft.Lbs	3/4" UNC
RELP - M42x4,5	24	9.1	48	18.2	12.7	9.1	19.1	13.6	600 Nm	19 mm
RELP 1 3/4"-5 UNC	24	9.1	48	18.2	12.7	9.1	19.1	13.6	440Ft.Lbs	3/4" UNC
RELP - M48x5	32	12.1	64	24.2	16.9	12.1	25.4	18.1	800 Nm	19 mm
RELP 2"-4.5 UNC	32	12.1	64	24.2	16.9	12.1	25.4	18.1	590Ft.Lbs	3/4" UNC

\*4:1 Design Factor.

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## Rotating Lifting Point RLP

Stock No. Standard Bolt Length	L (mm)	Stock No. Long Bolt Length**	L2 (mm)	Code	Dimensions (mm)							Weight (kg)***	
					B	C	D	L1	M	X	Y		
Z101708	16	Z1017080L	101	RLP-M8 x 1.25	42	35	12	62	8	27	64	Ø40	0.3
Z101710	16	Z1017100L	101	RLP-M10 x 1.5	42	35	12	62	10	27	64	Ø40	0.3
Z101712	25	Z1017120L	120	RLP-M12 x 1.75	57	46	19	88	12	42	91	Ø54	1.0
Z101716	25	Z1017160L	160	RLP-M16 x 2	57	46	19	88	16	42	91	Ø54	1.0
Z101720	36	Z1017200L	200	RLP-M20 x 2.5	83	55	28	110	20	55	133	Ø80	2.9
Z101724	36	Z1017240L	240	RLP-M24 x 3	83	55	28	110	24	55	133	Ø80	2.9
Z101730	58	Z1017300L	300	RLP-M30 x 3.5	114	70	34	148	30	78	182	Ø111	7.1
Z101736	58	Z1017360L	300	RLP-M36 x 4	114	70	34	148	36	78	182	Ø111	7.3
Z101742	81	Z1017420L	301	RLP-M42 x 4.5	149	91	40	190	42	99	229	Ø142	14.3
Z101748	81	Z1017480L	301	RLP-M48 x 5	149	91	40	190	48	99	229	Ø142	14.5

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9

## RLP with UNC thread

Stock No. Standard Bolt Length	L (mm)	Stock No. Long Bolt Length**	L2 (mm)	Code	Dimensions (mm)							M (in)	Weight (kg)***
					B	C	D	L1	X	Y	Z		
Z101808	16	Z1018080L	101	RLP-5/16"-18 UNC	42	35	12	62	27	64	Ø40	5/16"	0.3
Z101810	16	Z1018100L	101	RLP-3/8"-16 UNC	42	35	12	62	27	64	Ø40	3/8"	0.3
Z101812	25	Z1018120L	120	RLP-1/2"-13 UNC	57	46	19	88	42	91	Ø54	1/2"	1.0
Z101816	25	Z1018160L	160	RLP-5/8"-11 UNC	57	46	19	88	42	91	Ø54	5/8"	1.0
Z101820	36	Z1018200L	200	RLP-3/4"-10 UNC	83	55	28	110	55	133	Ø80	3/4"	2.9
Z101821	36	Z1018210L	200	RLP-7/8"-9 UNC	83	55	28	110	55	133	Ø80	7/8"	2.9
Z101824	36	Z1018240L	240	RLP 1"-8 UNC	83	55	28	110	55	133	Ø80	1"	2.9
Z101830	58	Z1018300L	300	RLP 1 1/4"-7 UNC	114	70	34	148	78	182	Ø111	1 1/4"	7.1
Z101836	58	Z1018360L	300	RLP 1 1/2"-6 UNC	114	70	34	148	78	182	Ø111	1 1/2"	7.3
Z101842	81	Z1018420L	301	RLP 1 3/4"-5 UNC	149	91	40	190	99	229	Ø142	1 3/4"	14.4
Z101848	81	Z1018480L	301	RLP 2"-4.5 UNC	149	91	40	190	99	229	Ø142	2"	14.7

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9

## Working Load Limits\* - RLP

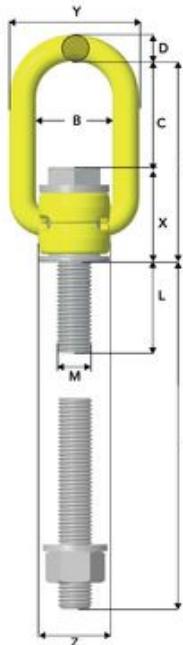
Symmetric Load (tonnes)	1	1	2	2	2 Symmetric	3 & 4 Symmetric	Tightening Torque	Spanner Size
	No. of Legs	1	2	2	0 - 45°	45° - 60°		
Angle B	0°	90°	0°	90°	0 - 45°	45° - 60°	0 - 45°	45° - 60°
RLP - M8 x 1.25	0.8	0.4	1.6	0.8	0.5	0.4	0.8	0.6
RLP 5/16"-18 UNC	0.8	0.4	1.6	0.8	0.5	0.4	0.8	0.6
RLP - M10 x 1.5	1.2	0.7	2.4	1.4	0.9	0.7	1.4	1.0
RLP 3/8"-16 UNC	1.2	0.65	2.4	1.3	0.9	0.6	1.3	0.9
RLP - M12 x 1.75	2.0	1.2	4.0	2.4	1.6	1.2	2.5	1.8
RLP 1/2"-13 UNC	2.0	1.2	4.0	2.4	1.6	1.2	2.5	1.8
RLP - M16 x 2	3.2	2.0	6.4	4.0	2.8	2.0	4.2	3.0
RLP 5/8"-11 UNC	3.2	2.0	6.4	4.0	2.8	2.0	4.2	3.0
RLP - M20 x 2.5	5.6	2.8	11.2	5.6	3.9	2.8	5.8	4.2
RLP 3/4"-10 UNC	5.0	2.5	10.0	5.0	3.5	2.5	5.2	3.7
RLP 7/8"-9 UNC	5.6	2.8	11.2	5.6	3.9	2.8	5.8	4.2
RLP - M24 x 3	8.0	4.6	16.0	9.2	6.4	4.6	9.6	6.9
RLP 1"-8 UNC	8.0	4.6	16.0	9.2	6.4	4.6	9.6	6.9
RLP - M30 x 3.5	12.0	6.0	24.0	12.0	8.4	6.0	12.6	9.0
RLP 1 1/4"-7 UNC	12.0	6.0	24.0	12.0	8.4	6.0	12.6	9.0
RLP - M36 x 4	14.0	8.0	28.0	16.0	11.2	8.0	16.8	12.0
RLP 1 1/2"-6 UNC	14.0	8.0	28.0	16.0	11.2	8.0	16.8	12.0
RLP - M42 x 4.5	16.0	14.0	32.0	28.0	19.6	14.0	29.4	21.0
RLP 1 3/4"-5 UNC	16.0	14.0	32.0	28.0	19.6	14.0	29.4	21.0
RLP - M48 x 5	20.0	16.0	40.0	32.0	22.4	16.0	33.6	24.0
RLP 2"-4.5 UNC	20.0	16.0	40.0	32.0	22.4	16.0	33.6	24.0

\*4:1 Design Factor.



Disassembly of the RLP is made easy by just folding the D-ring forward and push down.

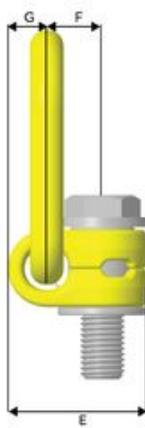
## De-centered Lifting Point DLP



Stock No. Standard Bolt Length	L (mm)	Stock No. Long Bolt Length**	L2 (mm)	Code	Dimensions (mm)											Weight (kg)***
					B	C	D	E	F	G	L1	M	X	Y	Z	
Z102208	13	Z1022080L	97.5	DLP-M8 x 1.25	35	48	10	39	14	10	78	8	30	55	26	0.3
Z102210	13	Z1022100L	97.5	DLP -M10 x 1.5	35	48	10	39	14	10	78	10	30	55	26	0.3
Z102212	23	Z1022120L	118	DLP -M12 x 1.75	35	48	12	51	20	14	91	12	44	59	32	0.5
Z102216	23	Z1022160L	158	DLP-M16 x 2	35	48	12	51	20	14	91	16	44	59	32	0.5
Z102220	34	Z1022200L	198	DLP-M20 x 2.5	54	88	18	71	28	18	145	20	58	90	48	1.6
Z102224	34	Z1022240L	238	DLP-M24 x 3	54	88	18	71	28	18	145	24	58	90	48	1.7
Z102230	53	Z1022300L	295	DLP-M30 x 3.5	82	94	26	104	39	27	182	30	88	122	75	5.0
Z102236	53	Z1022360L	295	DLP-M36 x 4	82	94	26	104	39	27	182	36	88	122	75	5.2
Z102242	73	Z1022420L	293	DLP-M42 x 4.5	100	104	36	136	54	34	216	42	113	156	110	11.6
Z102248	73	Z1022480L	293	DLP-M48 x 5	100	103	36	136	54	34	216	48	113	156	110	11.9

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9

## DLP with UNC thread



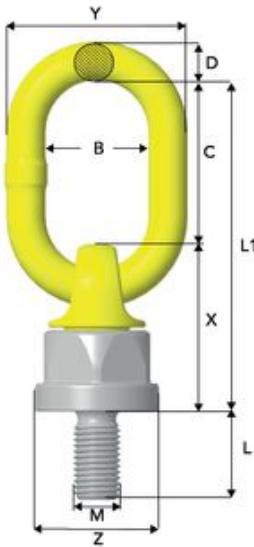
Stock No. Standard Bolt Length	L (mm)	Stock No. Long Bolt Length**	L2 (mm)	Code	Dimensions (mm)											M (in)	Weight (kg)***
					B	C	D	E	F	G	L1	X	Y	Z			
Z102308	13	Z1023080L	97.5	DLP-5/16"-18 UNC	35	48	10	39	14	10	78	30	55	26	5/16"	0.3	
Z102310	13	Z1023100L	97.5	DLP-3/8"-16 UNC	35	48	10	39	14	10	78	30	55	26	3/8"	0.3	
Z102312	23	Z1023120L	118	DLP-1/2"-13 UNC	35	48	12	51	20	14	91	44	59	32	1/2"	0.5	
Z102316	23	Z1023160L	158	DLP-5/8"-11 UNC	35	48	12	51	20	14	91	44	59	32	5/8"	0.5	
Z102320	34	Z1023200L	198	DLP-3/4"-10 UNC	54	88	18	71	28	18	145	58	90	48	3/4"	1.6	
Z102321	34	Z1023210L	198	DLP-7/8"-9 UNC	54	88	18	71	28	18	145	58	90	48	7/8"	1.6	
Z102324	34	Z1023240L	238	DLP-1"-8 UNC	54	88	18	71	28	18	145	58	90	48	1"	1.7	
Z102330	53	Z1023300L	295	DLP- 1 1/4"-7 UNC	82	94	26	104	39	27	182	88	122	75	1 1/4"	5.5	
Z102336	53	Z1023360L	295	DLP-1 1/2"-6 UNC	82	94	26	104	39	27	182	88	122	75	1 1/2"	5.7	
Z102342	73	Z1023420L	293	DLP-1 3/4"-5 UNC	100	103	36	136	54	34	216	113	156	110	1 3/4"	11.7	
Z102348	73	Z1023480L	293	DLP-2"- 4.5 UNC	100	103	36	136	54	34	216	113	156	110	2"	12.1	

\*\* Long Bolt supplied with nut and washer. \*\*\* Weight is calculated with standard bolt length.  
Bolt, nut and washer according to: ISO 898-1 Class 10.9

## Working Load Limits\* - DLP

Symmetric Load (tonnes)	1	2	2 Symmetric		3 & 4 Symmetric		Tightening Torque	Spanner Size
	Angle β	0° < β < 90°	0° < β < 90°	0 - 45°	45° - 60°	0 - 45°	45° - 60°	
DLP-M8		0.35	0.70	0.5	0.35	0.7	0.5	10 Nm
DLP-5/16"-18 UNC		0.35	0.70	0.5	0.35	0.7	0.5	7Ft.lb
DLP -M10		0.65	1.30	0.9	0.65	1.4	1.0	15 Nm
DLP-3/8"-16 UNC		0.60	1.20	0.8	0.60	1.3	0.9	11Ft.lb
DLP -M12		1.0	2.0	1.4	1.0	2.1	1.5	27 Nm
DLP-1/2"-13 UNC		1.0	2.0	1.4	1.0	2.1	1.5	20Ft.lb
DLP-M16		1.8	3.6	2.5	1.8	3.7	2.7	60 Nm
DLP-5/8"-11 UNC		1.6	3.2	2.2	1.6	3.3	2.4	44Ft.lb
DLP - M20x2.5		2.6	5.2	3.6	2.6	5.4	3.9	90 Nm
DLP 3/4"-10 UNC		2.2	4.4	3.0	2.2	4.6	3.3	66Ft.lb
DLP 7/8"-9 UNC		2.6	5.2	3.6	2.6	5.4	3.9	66Ft.lb
DLP - M24x3		4.1	8.2	5.7	4.1	8.6	6.1	135 Nm
DLP 1"-8 UNC		4.1	8.2	5.7	4.1	8.6	6.1	100Ft.lb
DLP 1 1/4"-7 UNC		5.0	10.0	7.0	5.0	10.5	7.5	270 Nm
DLP - M36x4		7.0	14.0	9.8	7.0	14.7	10.5	320 Nm
DLP 1 1/2"-6 UNC		7.0	14.0	9.8	7.0	14.7	10.5	236Ft.lb
DLP - M42x4.5		15.0	30.0	21.0	15.0	31.5	22.5	600 Nm
DLP 1 3/4"-5 UNC		15.0	30.0	21.0	15.0	31.5	22.5	440Ft.lb
DLP - M48x5		20.0	40.0	28.0	20.0	42.0	30.0	800 Nm
DLP 2"-4.5 UNC		20.0	40.0	28.0	20.0	42.0	30.0	590Ft.lb

\*4:1 Design Factor.



## Ball-bearing Lifting Point BLP

Stock No.	Code	Dimensions (mm)									Weight (kg)
		B	C	D	L	L1	M	X	Y	Z	
Z102008	BLP-M8 x 1.25	35	55	13	16	112	8	57	62	042	0.6
Z102010	BLP -M10 x 1.5	35	55	13	20	112	10	57	61	042	0.6
Z102012	BLP -M12 x 1.75	35	55	13	24	112	12	57	61	042	0.6
Z102016	BLP-M16 x 2	35	55	13	30	112	16	57	61	042	0.6
Z102020	BLP-M20 x 2.5	34	51	17	30	126	20	75	67	059	1.3
Z102024	BLP-M24 x 3	50	70	17	36	145	24	75	84	059	1.5
Z102030	BLP-M30 x 3.5	54	96	22	45	102	30	106	99	074	3.4
Z102036	BLP-M36 x 4	54	96	22	54	102	36	106	99	074	3.5
Z102042	BLP-M42 x 4.5	70	120	28	63	242	42	122	127	093	6.5
Z102048	BLP-M48 x 5	70	120	28	72	242	48	122	127	093	6.8

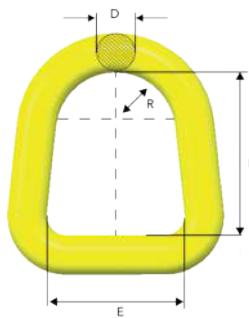
## BLP with UNC thread

Stock No.	Code	Dimensions (mm)									M	Weight (kg)
		B	C	D	L	L1	X	Y	Z			
Z102108	BLP-5/16"-18 UNC	35	55	13	16	112	57	61	042	5/16"	0.6	
Z102110	BLP-3/8"-16 UNC	35	55	13	20	112	57	61	042	3/8"	0.6	
Z102112	BLP-1/2"-13 UNC	35	55	13	24	112	57	61	042	1/2"	0.6	
Z102116	BLP-5/8"-11 UNC	35	55	13	30	112	57	61	042	5/8"	0.6	
Z102120	BLP-3/4"-10 UNC	34	51	17	30	126	75	67	059	3/4"	1.3	
Z102121	BLP-7/8"-9 UNC	50	51	17	30	126	75	67	059	7/8"	1.3	
Z102124	BLP-1"-8 UNC	54	70	17	38	145	75	84	059	1"	1.5	
Z102130	BLP-1 1/4"-7 UNC	54	96	22	48	202	106	99	074	1 1/4"	3.4	
Z102136	BLP-1 1/2"-6 UNC	70	96	22	57	202	106	99	074	1 1/2"	3.6	
Z102142	BLP-1 3/4"-5 UNC	70	120	28	67	242	122	127	093	1 3/4"	6.6	
Z102148	BLP-2"-4.5 UNC	70	120	28	76	242	122	127	093	2"	7.0	

## Working Load Limits\* - BLP

Symmetric Load (tonnes)	1	1	2	2	2	2 Symmetric	3 & 4 Symmetric				
No. of Legs	1	1	2	2	2	0 - 45°	45° - 60°	0 - 45°	45° - 60°	Tightening torque	Spanner Size
Angle B	0**	90°	0°	0 - 45°	90°	0 - 45°	45° - 60°	0 - 45°	45° - 60°		
BLP -M8x1.25	0.6	0.3	1.2	0.4	0.6	0.4	0.3	0.6	0.45	10 Nm	36 mm
BLP 5/16"-18 UNC	0.6	0.3	1.2	0.4	0.6	0.4	0.3	0.6	0.45	7Ft.Lb	1 1/2" UNC
BLP -M10x1.5	1.0	0.5	2.0	0.7	1.0	0.7	0.5	1.3	0.75	15 Nm	36 mm
BLP 3/8"-16 UNC	0.8	0.4	1.6	0.5	0.8	0.5	0.4	0.8	0.6	11Ft.Lb	1 1/2" UNC
BLP -M12x1.75	1.5	0.75	3.0	1.1	1.5	1.1	0.75	1.5	1.1	27 Nm	36 mm
BLP 1/2"-13 UNC	1.5	0.75	3.0	1.1	1.5	1.1	0.75	1.5	1.1	20Ft.Lb	1 1/2" UNC
BLP -M16x2	3.0	1.5	6.0	2.1	3.0	2.1	1.5	3.1	2.2	60 Nm	36 mm
BLP 5/8"-11 UNC	3.0	1.5	6.0	2.1	3.0	2.1	1.5	3.1	2.2	44Ft.Lb	1 1/2" UNC
BLP -M20x2.5	5.0	2.5	10.0	3.5	5.0	3.5	2.5	5.2	3.7	90 Nm	50 mm
BLP 3/4"-10 UNC	4.5	2.25	9.0	3.1	4.5	3.1	2.25	4.7	3.3	66Ft.Lb	2" UNC
BLP 7/8"-9 UNC	6.0	3.0	12.0	4.2	6.0	4.2	3.0	6.3	4.5	66Ft.Lb	2" UNC
BLP-M24x3	7.0	4.0	14.0	5.6	8.0	5.6	4.0	8.4	6.0	135 Nm	50 mm
BLP-1"-8 UNC	7.0	4.0	14.0	5.6	8.0	5.6	4.0	8.4	6.0	100Ft.Lb	2" UNC
BLP-M30x3.5	12.0	6.0	24.0	8.4	12.0	8.4	6.0	12.6	9.0	270 Nm	65 mm
BLP-1 1/4"-7 UNC	12.0	6.0	24.0	8.4	12.0	8.4	6.0	12.6	9.0	200Ft.Lb	2 5/8" UNC
BLP-M36x4	14.0	8.0	28.0	11.2	16.0	11.2	8.0	16.8	12.0	320 Nm	65 mm
BLP-1 1/2"-6 UNC	14.0	8.0	28.0	11.2	16.0	11.2	8.0	16.8	12.0	236Ft.Lb	2 5/8" UNC
BLP-M42x4.5	16.0	10.0	32.0	14.0	20.0	14.0	10.0	21.0	15.0	600 Nm	85 mm
BLP-1 3/4"-5 UNC	16.0	10.0	32.0	14.0	20.0	14.0	10.0	21.0	15.0	440Ft.Lb	3 1/8" UNC
BLP-M48x5	18.0	13.0	36.0	18.2	26.0	18.2	13.0	27.3	19.5	800 Nm	85 mm
BLP-2"-4.5 UNC	18.0	13.0	36.0	18.2	26.0	18.2	13.0	27.3	19.5	590Ft.Lb	3 1/8" UNC

\* provided only axial loading takes place, ie no bending force applied in the direction of the thread. 4:1 Design Factor.

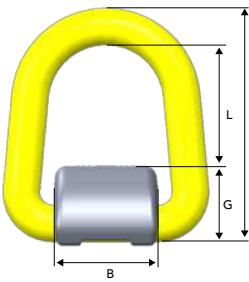


## Master Link D



Stock No.	Code	WLL (lb)*	E	D	L	R	Weight (lb)
Z7008771	D-14-10	5510	2.17	0.55	2.56	0.94	0.88
Z7008781	D-17-10	8800	2.52	0.67	2.44	1.14	1.10
Z7008801	D-22-10	15428	2.99	0.87	3.54	1.30	2.20
Z7008791	D-27-10	22040	3.35	1.06	3.86	1.50	4.19
Z7008792	D-32-10	35300	4.49	1.26	5.47	1.97	7.72

The load bearing width must be at least 0.5 x E.

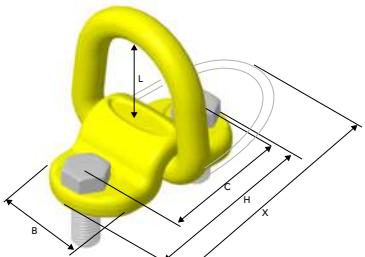


## Weldable Lifting Point WLP



Stock No.	Code	WLL (lb)*	B	G	L	X	Weight (lb)
Z7009001	WLP-2.5T	5510	1.97	1.06	2.09	3.74	1.10
Z7009011	WLP-4T	8800	2.28	1.34	1.89	3.82	1.76
Z7009021	WLP-7T	15428	2.52	1.61	2.87	5.31	3.97
Z7009031	WLP-10T	22040	2.56	2.05	2.87	5.98	7.50
Z7009041	WLP-16T	35300	3.54	2.60	4.13	7.99	14.77

Supplied with spring for stay up function.  
Master Link measurements , see Master Link D above.



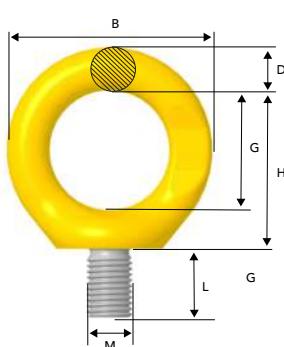
## Screw-on Lifting Point SLP



Stock No.	Code	WLL (lb)*	B	C	H	L	M (metric thread)	X	Bolt Protrusion	Weight (lb)
Z7009881	SLP-1T	2204	1.97	2.83	3.86	2.13	M14	5.47	25	1.76
Z7009871	SLP-3T	6612	2.28	3.31	4.49	1.93	M16	5.67	28	2.87
Z7009861	SLP-5T	11020	2.52	4.57	6.30	2.80	M20	7.99	34	5.73

**11**

Supplied with bolt and spring for stay up function.  
Bolt according to: ISO 898-1 Class 10.9.  
Master Link measurements , see Master Link D above.



## Eye Lifting Point ELP



Stock No.	Code	WLL		B	D	G	H	L	M	Weight (lb)
		metric tonnes*	(lb)							
Z100434	ELP-16-8	1.0**	2204	2.83	0.63	1.65	2.17	0.94	M16	0.88
Z100435	ELP-20-8	1.5**	3306	2.83	0.63	1.65	2.28	1.18	M20	0.88
Z100436	ELP-24-8	2.0**	4500	3.46	0.75	1.89	2.72	1.42	M24	1.98
Z100437	ELP-30-8	3.0**	6612	4.17	0.87	2.36	3.31	1.77	M30	3.09

\*\* In case of 1-leg application where loading is limited to straight loading in the direction of thread (no bending force) it is possible to use ELP with four times higher WLL. Note! Threaded depths need to be at least 1xM for steel, 1.25xM for cast iron and 2xM for aluminum alloy.

# Spare Parts

Standard length bolt and long bolt for RLP and DLP are available as spare parts.

## RDR LP - Metric

Standard length bolt including locking ring

Stock No.	Code
Z1017081	RDR LP-M8x1,25
Z1017101	RDR LP-M10x1,5
Z1017121	RDR LP-M12x1,75
Z1017161	RDR LP-M16x2
Z1017201	RDR LP-M20x2,5
Z1017241	RDR LP-M24x3
Z1017301	RDR LP-M30x3,5
Z1017361	RDR LP-M36x4
Z1017421	RDR LP-M42x4,5
Z1017481	RDR LP-M48x5



## RDR LP - UNC

Standard length bolt including locking ring

Stock No.	Code
Z1018081	RDR LP-UNC 5/16"-18
Z1018101	RDR LP-UNC 3/8"-16
Z1018121	RDR LP-UNC 1/2"-13
Z1018161	RDR LP-UNC 5/8"-11
Z1018201	RDR LP-UNC 3/4"-10
Z1018211	RDR LP-UNC 7/8"-9
Z1018241	RDR LP-UNC 1"-8
Z1018301	RDR LP-UNC 1 1/4"
Z1018361	RDR LP-UNC 1 1/2"
Z1018421	RDR LP-UNC 1 3/4"
Z1018481	RDR LP-UNC 2"



## RDD LP - Metric

Standard length bolt including locking ring

Stock No.	Code
Z1022081	RDD LP-M8x1,25
Z1022101	RDD LP-M10x1,5
Z1022121	RDD LP-M12x1,75
Z1022161	RDD LP-M16x2
Z1022201	RDD LP-M20x2,5
Z1022241	RDD LP-M24x3
Z1022301	RDD LP-M30
Z1022361	RDD LP-M36
Z1022421	RDD LP-M42
Z1022481	RDD LP-M48



## RDR LP - Metric

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10170801L	RDR LP-M8 LB
Z10171001L	RDR LP-M10 LB
Z10171201L	RDR LP-M12 LB
Z10171601L	RDR LP-M16 LB
Z10172001L	RDR LP-M20 LB
Z10172401L	RDR LP-M24 LB
Z10173001L	RDR LP-M30 LB
Z10173601L	RDR LP-M36 LB
Z10174201L	RDR LP-M42 LB
Z10174801L	RDR LP-M48 LB

## RDR LP - UNC

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10180801L	RDR LP-UNC 5/16" LB
Z10181001L	RDR LP-UNC 3/8" LB
Z10181201L	RDR LP-UNC 1/2" LB
Z10181601L	RDR LP-UNC 5/8" LB
Z10182001L	RDR LP-UNC 3/4" LB
Z10182101L	RDR LP-UNC 7/8" LB
Z10182401L	RDR LP-UNC 1" LB
Z10183001L	RDR LP-UNC 1 1/4" LB
Z10183601L	RDR LP-UNC 1 1/2" LB
Z10184201L	RDR LP-UNC 1 3/4" LB
Z10184801L	RDR LP-UNC 2" LB

## RDD LP - Metric

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10220801L	RDD LP M8 LB
Z10221001L	RDD LP M10 LB
Z10221201L	RDD LP M12 LB
Z10221601L	RDD LP M16 LB
Z10222001L	RDD LP M20 LB
Z10222401L	RDD LP M24 LB
Z10223001L	RDD LP M30 LB
Z10223601L	RDD LP M36 LB
Z10224201L	RDD LP M42 LB
Z10224801L	RDD LP M48 LB

## RDDLP - UNC

Standard length bolt including locking ring



Stock No.	Code
Z1023081	RDDLP UNC 5/16"
Z1023101	RDDLP UNC 3/8"
Z1023121	RDDLP UNC 1/2"
Z1023161	RDDLP -UNC 5/8"
Z1023201	RDDLP -UNC 3/4"
Z1023211	RDDLP -UNC 7/8"
Z1023241	RDDLP -UNC 1"
Z1023301	RDDLP -UNC 1 1/4"
Z1023361	RDDLP UNC 1 1/2"
Z1023421	RDDLP -UNC 1 3/4"
Z1023481	RDDLP -UNC 2"



## RDDLP - UNC

Long bolt including nut, locking ring and washer

Stock No.	Code
Z10230801L	RDDLP UNC 5/16" LB
Z10231001L	RDDLP UNC 3/8" LB
Z10231201L	RDDLP UNC 1/2" LB
Z10231601L	RDDLP UNC 5/8" LB
Z10232001L	RDDLP UNC 3/4" LB
Z10232101L	RDDLP UNC 7/8" LB
Z10232401L	RDDLP UNC 1" LB
Z10233001L	RDDLP UNC 1 1/4" LB
Z10233601L	RDDLP UNC 1 1/2" LB
Z10234201L	RDDLP UNC 1 3/4" LB
Z10234801L	RDDLP UNC 2" LB

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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 6.13".
- 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.

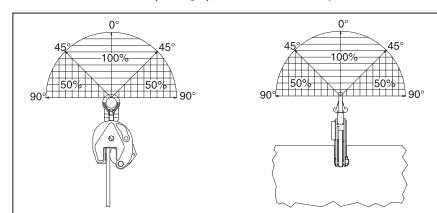
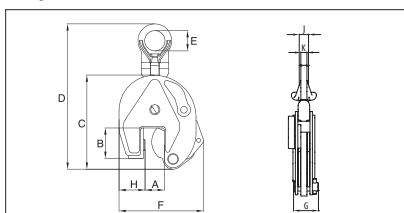
IPU10S

**Model IPU10 / IPU10J / IPU10S / IPU10H**

Load Rated

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPU10	0.5	2701675	4.19	0 - 0.63	1.73	5.12	8.50	1.57	4.53	1.65	1.10		0.43
IPU10	1	2701663	5.29	0 - 0.75	1.77	5.47	8.86	1.57	5.00	1.65	1.50		0.43
IPU10	2	2701677	18.3	0 - 1.38	3.07	7.91	14.49	2.76	7.40	2.52	2.17		0.63
IPU10	3	2701665	32.6	0 - 1.56	3.94	9.96	17.17	2.95	8.74	3.07	2.36		0.79
IPU10	4.5	2701667	35.3	0 - 1.56	3.94	9.96	17.17	2.95	8.94	3.23	2.56		0.79
IPU10	6	2701669	52.9	0 - 2.00	4.96	11.89	20.67	3.15	11.50	3.31	3.74	1.73	0.79
IPU10	9	2701671	65.0	0 - 2.00	4.96	12.80	21.73	3.15	12.20	3.70	4.09	1.73	0.79
IPU10	12	2701679	126	0 - 2.13	6.30	15.43	24.25	3.15	17.05	4.76	5.39	1.61	0.98
IPU10	16	2701683	174	0.2 - 2.50	7.09	18.23	28.98	3.46	19.37	4.76	6.02	1.77	0.98
IPU10	22.5	2701687	278	0.2 - 3.13	8.74	21.81	33.98	4.33	22.24	5.47	7.32	1.93	0.98
IPU10	30	2701691	311	0.2 - 3.13	8.74	21.81	34.17	4.33	22.83	6.02	7.32	2.13	1.18
<b>With larger jaw opening</b>													
IPU10J	0.5	2701647	4.19	0.63 - 1.19	1.77	5.04	8.19	1.57	5.04	1.65	1.34		0.43
IPU10J	1	2702463	5.51	0.75 - 1.56	2.17	5.94	8.86	1.57	5.55	1.65	1.57		0.43
IPU10J	3	2702465	38.1	1.56 - 3.13	4.53	10.63	17.01	2.95	10.91	3.07	2.64		0.79
IPU10J	4.5	2702467	41.9	1.56 - 3.13	4.53	10.63	17.01	2.95	10.91	3.23	2.83		0.79
IPU10J	6	2702469	58.4	2.00 - 4.00	4.96	11.89	20.28	3.15	13.23	3.31	3.74	1.73	0.79
IPU10J	9	2701673	67.2	2.00 - 4.00	4.96	12.80	21.65	3.15	14.17	3.70	4.13	1.73	0.79
IPU10J	12	2701681	143	2.13 - 4.25	7.01	17.24	26.06	3.15	19.33	4.76	5.35	1.61	0.98
IPU10J	16	2701685	187	2.50 - 5.00	8.19	20.51	30.87	3.46	22.13	4.76	6.30	1.77	0.98
IPU10J	22.5	2701689	328	3.13 - 6.13	10.04	24.72	36.93	4.33	25.98	5.47	7.72	1.93	0.98
IPU10J	30	2701693	364	3.13 - 6.13	10.04	24.72	37.09	4.33	25.98	6.02	7.72	2.13	1.18
<b>For stainless steel - with universal hoisting eye</b>													
IPU10S	0.5	2702275	4.19	0 - 0.63	1.73	5.12	8.50	1.57	4.53	1.65	1.10		0.43
IPU10S	1	2702263	5.29	0 - 0.75	1.77	5.47	8.86	1.57	5.00	1.65	1.50		0.43
IPU10S	2	2702277	18.7	0 - 1.38	3.07	7.91	14.49	2.76	7.40	2.52	2.17		0.63
IPU10S	3	2702265	32.6	0 - 1.56	3.94	9.96	17.17	2.95	8.74	3.07	2.36		0.79
IPU10S	4.5	2702267	35.3	0 - 1.56	3.94	9.96	17.17	2.95	8.94	3.23	2.56		0.79
IPU10S	6	2702269	52.9	0 - 2.00	4.96	11.89	20.67	3.15	11.50	3.31	3.74	1.73	0.79
IPU10S	9	2702271	65.0	0 - 2.00	4.96	12.80	21.73	3.15	12.20	3.70	4.09	1.73	0.79
IPU10S	12	2702279	126	0 - 2.13	6.30	15.43	24.25	3.15	17.05	4.76	5.39	1.61	0.98
<b>For very hard materials - with universal hoisting eye</b>													
IPU10H	0.5	2702175	4.19	0 - 0.63	1.73	5.12	8.50	1.57	4.53	1.65	1.10		0.43
IPU10H	0.75	2702163	5.29	0 - 0.79	1.77	5.47	8.86	1.57	5.00	1.61	1.50		0.43
IPU10H	1	2702177	18.3	0 - 1.38	3.07	7.91	14.49	2.76	7.40	2.52	2.17		0.63
IPU10H	2	2702165	32.6	0 - 1.56	3.94	9.96	17.17	2.95	8.74	3.07	2.36		0.79
IPU10H	3	2702167	35.3	0 - 1.56	3.94	9.96	17.17	2.95	8.94	3.23	2.56		0.79
IPU10H	4.5	2702169	52.9	0 - 2.00	4.96	11.89	20.67	3.15	11.50	3.31	3.74	1.73	0.79
IPU10H	6	2702171	65.0	0 - 2.00	4.96	12.80	21.73	2.76	12.20	3.70	4.09	1.73	0.79

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 6.13".
- 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.

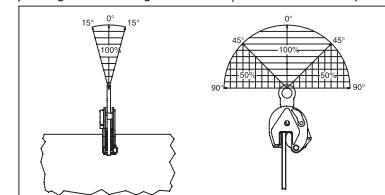
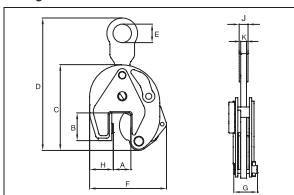
**IP10H**

**Model IP10 / IP10J / IP10S / IP10H**
*Load Tested*

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	D	E	F	G	H	J	K
IP10	0.5	2701674	3.97	0 - 0.63	1.73	5.12	7.99	1.57	4.53	1.65	1.10		0.43
IP10	1	2701662	4.85	0 - 0.75	1.77	5.47	8.35	1.57	5.00	1.65	1.50		0.43
IP10	2	2701676	16.8	0 - 1.38	3.07	7.91	12.99	2.76	7.40	2.52	2.17		0.63
IP10	3	2701664	30.4	0 - 1.56	3.94	9.96	17.09	2.95	8.74	3.07	2.36		0.79
IP10	4.5	2701666	33.1	0 - 1.56	3.94	9.96	17.09	2.95	8.94	3.23	2.56		0.79
IP10	6	2701668	51.8	0 - 2.00	4.96	11.89	20.35	3.15	11.50	3.31	3.74		0.79
IP10	9	2701670	60.6	0 - 2.00	4.96	12.80	17.52	3.15	12.20	3.70	4.09		0.98
IP10	12	2701678	108	0 - 2.13	6.30	15.43	22.60	3.15	17.05	4.76	5.39		1.61
IP10	16	2701682	150	0.25 - 2.50	7.09	18.23	27.01	3.46	19.37	4.76	6.02		1.93
IP10	22.5	2701686	243	0.25 - 3.13	8.74	21.81	31.81	4.33	22.24	5.47	7.32		1.93
IP10	30	2701690	273	0.25 - 3.13	8.74	21.81	31.61	4.33	22.24	6.02	7.32		2.13
<b>With larger jaw opening</b>													
IP10J	0.5	2701646	3.97	0.59 - 1.18	1.77	5.04	8.23	1.57	5.04	1.61	1.26		0.43
IP10J	1	2702462	5.07	0.75 - 1.56	2.17	5.94	8.35	1.57	5.55	1.65	1.57		0.43
IP10J	3	2702458	36.4	1.56 - 3.13	4.53	10.63	16.93	2.95	10.91	3.07	2.64		0.79
IP10J	4.5	2702460	39.7	1.56 - 3.13	4.53	10.63	16.93	2.95	10.91	3.23	2.83		0.79
IP10J	6	2701705	54.0	2.00 - 4.00	4.96	11.89	19.92	3.15	13.23	3.31	3.74		0.79
IP10J	9	2701672	62.8	2.00 - 4.00	4.96	12.80	21.34	3.15	14.17	3.70	4.13		1.73
IP10J	12	2701680	128	2.13 - 4.25	7.01	17.24	24.41	3.15	19.33	4.76	5.35		1.61
IP10J	16	2701684	176	2.50 - 5.00	8.19	20.51	28.90	3.46	22.13	4.76	6.30		1.77
IP10J	22.5	2701688	289	3.13 - 6.13	10.04	24.72	34.76	4.33	25.98	5.47	7.72		1.93
IP10J	30	2701692	324	3.13 - 6.13	10.04	24.72	34.92	4.33	25.98	6.02	7.72		2.13
<b>For stainless steel - with fixed hoisting eye</b>													
IP10S	0.5	2702274	3.97	0 - 1.38	1.73	5.12	7.99	1.57	4.53	1.65	1.10		0.43
IP10S	1	2702262	16.8	0 - 1.56	1.77	5.47	8.35	1.57	5.00	1.65	1.50		0.43
IP10S	2	2702276	30.4	0 - 1.56	3.07	7.91	12.99	2.76	7.40	2.52	2.17		0.63
IP10S	3	2702264	33.1	0 - 2.00	3.94	9.96	17.09	2.95	8.74	3.07	2.36		0.79
IP10S	4.5	2702266	51.8	0 - 2.00	3.94	9.96	17.09	2.95	8.94	3.23	2.56		0.79
IP10S	6	2702268	60.6	0 - 2.00	4.96	11.89	20.35	3.15	11.50	3.31	3.74		1.57
IP10S	9	2702270	60.6	0 - 2.13	4.96	12.80	21.42	3.15	12.20	3.70	4.09		1.73
IP10S	12	2702278	108	0 - 0.63	6.30	15.43	22.60	3.15	17.05	4.76	5.39		1.61
<b>For very hard materials - with fixed hoisting eye</b>													
IP10H	0.5	2702174	3.97	0 - 1.38	1.73	5.12	8.15	1.57	4.53	1.65	1.10		0.43
IP10H	0.75	2702162	4.85	0 - 1.56	1.77	5.47	8.62	1.57	5.12	1.10	1.50		0.43
IP10H	1.0	2702176	16.8	0 - 1.56	3.07	7.91	12.99	2.76	7.40	2.52	2.17		0.63
IP10H	2.0	2702164	30.4	0 - 2.00	3.94	9.96	17.09	2.95	8.74	3.07	2.36		0.79
IP10H	3.0	2702166	33.1	0 - 2.00	3.94	9.96	17.09	2.95	8.94	3.23	2.56		0.79
IP10H	4.5	2702168	51.8	0 - 2.36	4.96	11.89	20.35	3.15	11.50	3.31	3.74		1.57
IP10H	6.0	2702170	60.6	0 - 2.00	4.96	12.80	21.42	3.15	12.20	3.62	4.13		1.73

**12**

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 1.56"
- 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 replacement 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

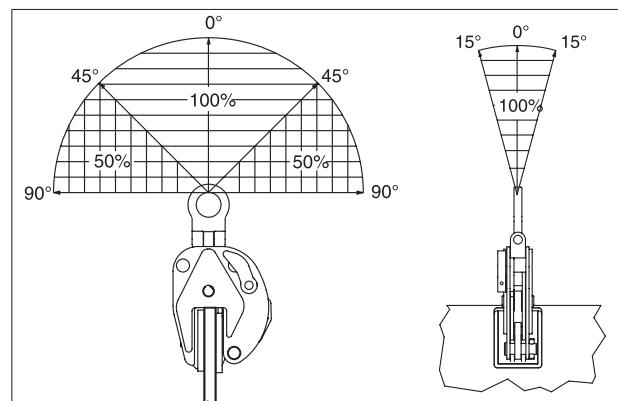
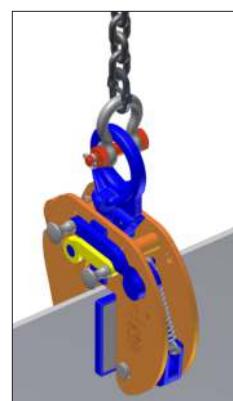
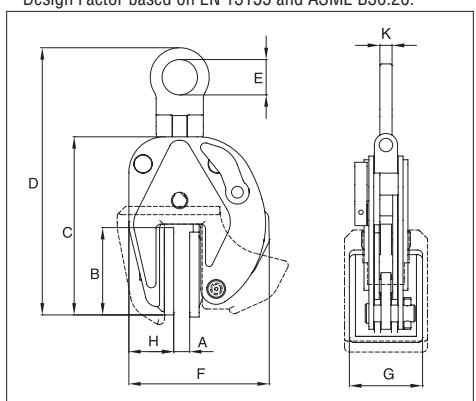


*Load Rated*

### Model IPNM10

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)								
				Jaw A	B	C	D	E	F	G	H	K
IPNM10N	0.5	2703811	5.95	0 - 0.38	3.31	6.26	9.25	1.57	5.04	2.36	1.61	0.43
IPNM10N	1	2703738	9.70	0 - 0.81	3.82	8.23	10.94	1.57	7.24	3.15	2.20	0.43
IPNM10	2	2703442	32.0	0 - 1.56	6.02	10.16	15.59	2.76	11.65	3.94	6.34	0.63
<b>With protection cap</b>												
IPNM10P	0.5	2703278	6.17	0 - 0.38	3.23	6.18	8.70	1.57	5.71	2.68	1.89	0.43
IPNM10P	1	2703279	9.92	0 - 0.81	3.82	7.68	10.87	1.57	8.07	3.23	2.60	0.43
<b>With larger jaw opening</b>												
IPNM10NJ	1	2703814	10.4	0.81 - 1.44	3.82	8.66	12.64	1.57	7.87	3.15	2.20	0.43
IPNM10NJ1	1	2703819	12.1	0 - 1.00	3.82	9.37	13.82	1.57	8.39	3.15	2.48	0.43

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

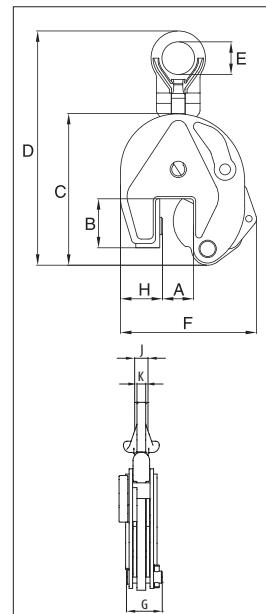


IPU10A



### 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 2".
- 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.

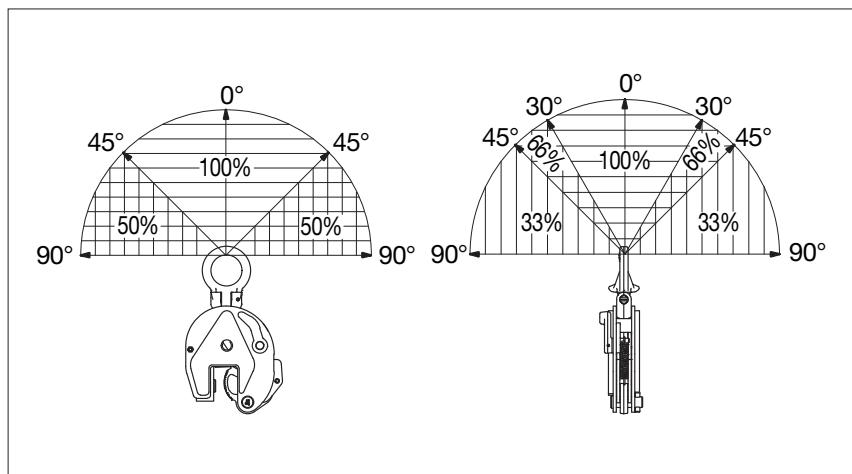


### Model IPU10A

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPU10A	1	2701628	5.07	0 - 0.81	1.77	5.47	8.86	1.57	5.00	1.65	1.50	-	0.43
IPU10A	2	2701629	18.5	0 - 1.38	3.07	7.91	14.49	2.76	7.40	2.52	2.17	-	0.63
IPU10A	6	2701638	56.0	0 - 2.00	4.96	11.89	20.67	3.15	11.50	3.31	3.74	1.73	0.79

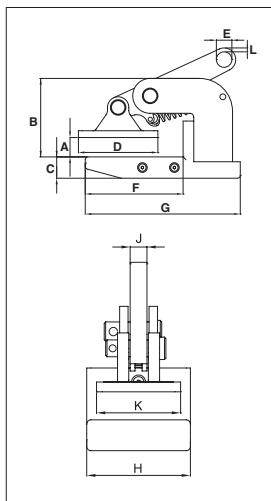
\* Design Factor based on EN 13155 and ASME B30.20.

Load Rated

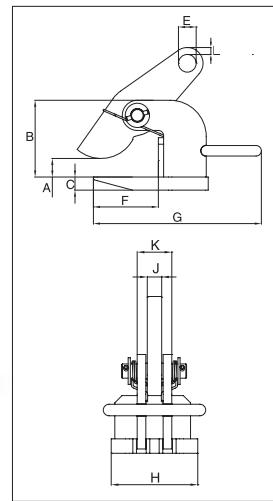


12

IPHNM10



IPH10



### For Horizontal Lift and Transfer with Pretension System

- Available in capacities of .5 thru 12 metric tons.
- Jaw openings available: 0" to 4.75".
- 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 IPHNM10

Load Rated

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (lb)	Dimensions (in)											
				Jaw A	B	C	D	E	F	G	H	J	K	L	
IPHNM10	0.5	2703287	4.0	0 - 0.81	3.19	0.87	3.23	0.63	3.98	6.30	2.91	0.47	2.36	0.16	
IPHNM10	1	2703288	7.0	0 - 1.38	3.66	1.18	3.62	0.63	4.06	6.46	2.91	0.47	2.36	0.28	
IPHNM10	2	2703290	16.0	0 - 1.18	5.47	1.18	5.16	0.87	6.54	9.65	3.94	0.79	2.91	0.35	
IPHNM10J	2	2703291	17.0	1.19 - 2.38	6.65	1.18	5.16	0.87	6.54	9.65	3.94	0.79	2.91	0.35	

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

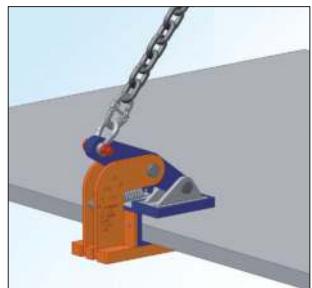
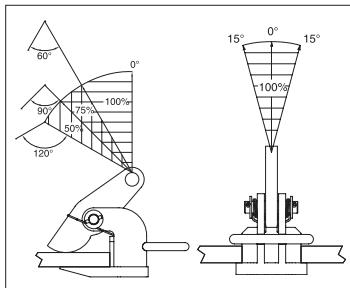
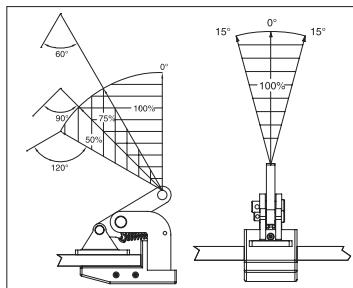
#### Model IPH10 / IPH10J: With Spring Loaded Tension, Magnets and Handle

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (lb)	Dimensions (in)											
				Jaw A	B	C	E	F	G	H	J	K	L		
IPH10	0.5+	2703297	3.97	0 - 0.81	3.39	0.47	0.63	4.06	5.91	2.36	0.47	1.06	0.16		
IPH10	1+	2703298	5.50	0 - 1.38	3.94	0.63	0.63	4.06	5.91	2.36	0.47	1.22	0.28		
IPH10	2	2703522	24.3	0 - 2.38	4.61	0.63	0.87	4.29	10.08	4.33	0.79	1.57	0.35		
IPH10	3	2703523	33.1	0 - 2.38	4.61	0.79	1.02	4.29	10.47	4.72	0.79	1.89	0.43		
IPH10	4.5	2703524	46.3	0 - 2.38	5.20	0.98	1.18	4.09	11.02	5.12	0.79	1.89	0.47		
IPH10	6	2703525	57.3	0 - 2.38	5.63	0.98	1.42	4.84	12.60	5.12	0.79	1.89	0.55		
IPH10	9	2703526	81.6	0 - 2.38	6.18	1.18	1.69	5.24	12.99	5.51	0.98	2.44	0.63		
IPH10	12	2703527	94.8	0 - 2.38	6.77	1.18	1.85	5.55	13.90	5.91	0.98	2.44	0.67		

#### With larger jaw opening #

IPH10J	3	2703533	19.0	2.38 - 4.75	6.97	0.79	1.02	4.29	10.47	4.72	0.79	1.89	0.35
IPH10J	4.5	2703534	26.0	2.38 - 4.75	7.56	0.98	1.18	4.09	11.02	5.12	0.79	1.89	0.43
IPH10J	6	2703535	33.0	2.38 - 4.75	7.99	0.98	1.42	4.84	12.60	5.12	0.79	1.89	0.47
IPH10J	9	2703536	45.0	2.38 - 4.75	8.54	1.18	1.69	5.24	12.99	5.51	0.98	2.44	0.55
IPH10J	12	2703537	53.0	2.38 - 4.75	9.13	1.18	1.85	5.55	13.90	5.91	0.98	2.44	0.63

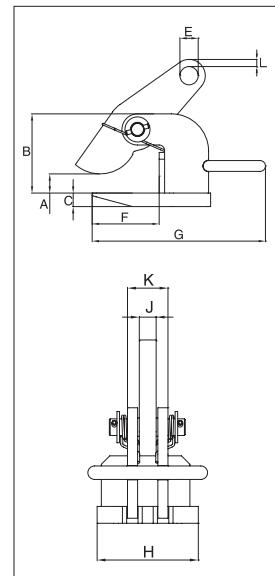
\* Design Factor based on EN 13155 and ASME B30.20.- No handle or magnets. # Larger Working Load Limits available.



IPH10E

**For horizontal lifting and transfer**

- Available in capacities of 2.0 thru 25 metric tons.
- Wide variety of jaw openings available: 0 to 4.75".
- 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**

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPH10E	2	2703542	24.0	0 - 2.38	4.61	0.63	0.87	4.29	10.08	4.33	0.79	1.57	0.35
IPH10E	3	2703543	32.0	0 - 2.38	4.61	0.79	1.02	4.29	10.47	4.72	0.79	1.89	0.43
IPH10E	4.5	2703544	46.0	0 - 2.38	5.20	0.98	1.18	4.09	11.02	5.12	0.79	1.89	0.47
IPH10E	6	2703545	56.0	0 - 2.38	5.63	0.98	1.42	4.84	12.60	5.12	0.79	1.89	0.55
IPH10E	9	2703546	80.0	0 - 2.38	6.18	1.18	1.69	5.24	12.99	5.51	0.98	2.44	0.63
IPH10E	12	2703547	94.0	0 - 2.38	6.77	1.18	1.85	5.55	13.90	5.91	0.98	2.44	0.67

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

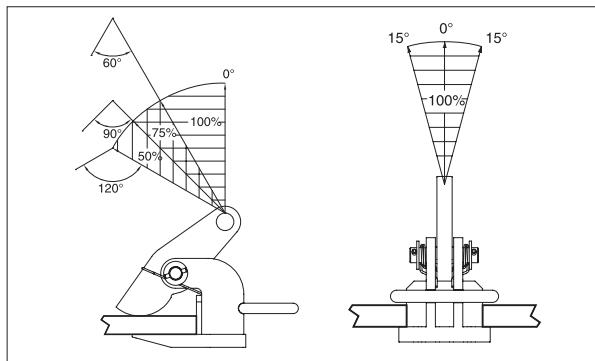
Load Rated

**Model IPH10JE**

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPH10JE	3	2703553	19.0	2.38 - 4.75	6.97	0.79	1.02	4.29	10.47	4.72	0.79	1.89	0.43
IPH10JE	4.5	2703554	26.0	2.38 - 4.75	7.56	0.98	1.18	4.09	11.02	5.12	0.79	1.89	0.47
IPH10JE	6	2703555	33.0	2.38 - 4.75	7.99	0.98	1.42	4.84	12.60	5.12	0.79	1.89	0.55
IPH10JE	9	2703556	45.0	2.38 - 4.75	8.54	1.18	1.18	5.24	12.99	5.51	0.98	2.44	0.63
IPH10JE	12	2703557	53.0	2.38 - 4.75	9.13	1.18	1.85	5.55	13.90	5.91	0.98	2.44	0.67

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

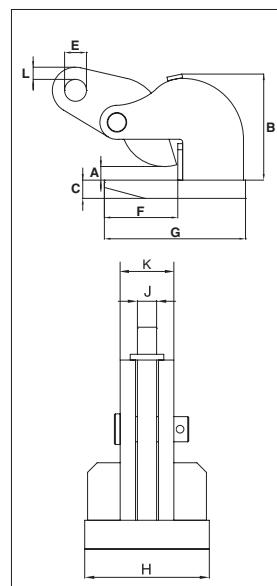
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## IPHOZ

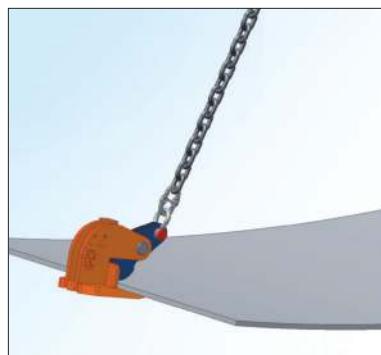
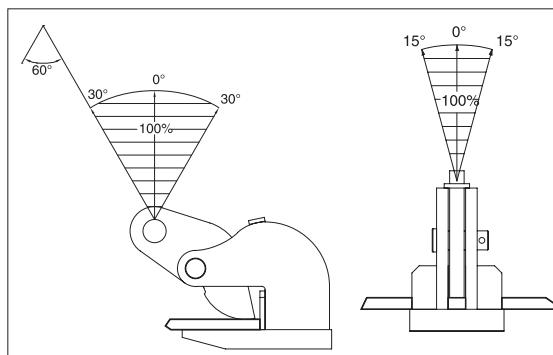
**For Horizontal Lifting and Transfer**

- 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 2.38".
- 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.

**Load Rated****Model IPHOZ**

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPHOZ	0.75	2705401	6.0	0 - 1.19	3.70	0.63	0.63	2.76	4.65	3.19	0.47	1.22	0.47
IPHOZ	1.5	2705402	12.0	0 - 1.75	5.24	0.63	0.87	4.92	7.56	3.94	0.63	1.42	0.47
IPHOZ	3	2705403	17.0	0 - 1.75	5.39	0.79	1.02	4.92	7.87	4.72	0.79	1.89	0.39
IPHOZ	4.5	2705404	21.0	0 - 1.75	5.43	0.98	1.18	4.96	8.66	4.72	0.79	1.97	0.39
IPHOZ	6	2705405	34.0	0 - 2.38	6.73	1.18	1.42	5.31	9.25	5.12	0.79	2.20	0.79
IPHOZ	9	2705406	55.0	0 - 2.38	8.31	1.18	1.69	6.54	10.87	6.30	0.98	2.44	0.79
IPHOZ	12	2705407	64.0	0 - 2.38	8.54	1.57	1.85	6.61	11.57	7.48	0.98	2.44	0.75
IPHOZ	15	2705408	80.0	0 - 2.38	8.66	1.57	1.85	7.20	12.48	9.84	0.98	2.44	0.87

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



IPPE10B(E)



IPPE10BNM



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

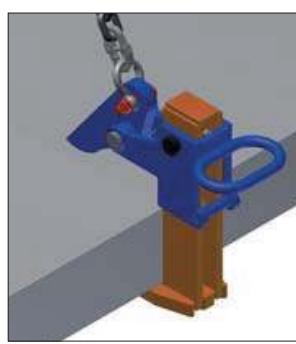
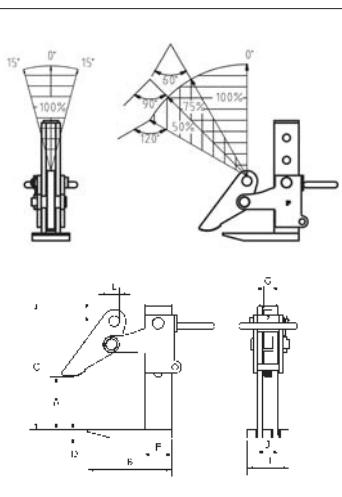
- Available in capacities of 3 through 12 metric tons (higher Working Load Limits are available upon request).
- Wide variety of jaw openings available: 0 to 7.13".
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times 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).

### Model IPPE10B / IPPE10BE / IPPE10BNM

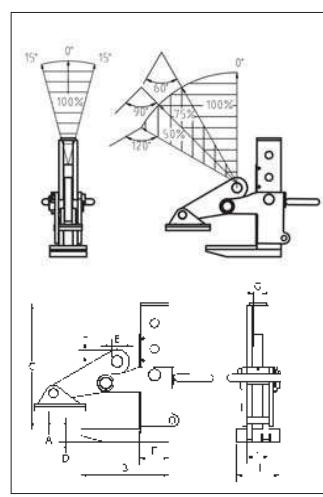
Load Rated

Model	Working Load Limit (Per Pair) (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	D	E	F	G	H	J	L
IPPE10B	3	2703862	25.0	0 - 7.13	8.03	12.68	0.79	1.02	2.60	0.79	3.94	1.97	0.59
IPPE10B	6	2703871	35.0	0 - 7.13	8.66	13.39	0.98	1.18	2.91	0.79	5.51	2.36	0.51
IPPE10B	9	2703888	54	0 - 7.13	9.76	14.37	0.98	1.34	3.54	0.79	7.48	2.76	0.51
IPPE10B	12	2703921	72	0 - 7.13	9.92	14.80	1.18	1.57	3.54	0.98	7.87	2.76	0.71
IPPE10BE	3	2703863	25	0 - 7.13	8.03	12.68	0.79	1.02	2.60	0.79	3.94	1.97	0.59
IPPE10BE	6	2703870	36	0 - 7.13	8.66	13.39	0.98	1.18	2.91	0.79	5.51	2.36	0.51
IPPE10BE	9	2703891	55	0 - 7.13	9.76	14.37	0.98	1.34	3.54	0.79	7.48	2.76	0.51
IPPE10BE	12	2703924	72	0 - 7.13	10.31	14.80	1.18	1.57	3.54	0.98	7.87	2.76	0.71
IPPE10BNM	3	2703864	27	0 - 7.13	8.03	12.68	1.18	1.02	2.68	0.79	3.94	1.97	0.59
IPPE10BNM	6	2703872	38	0 - 7.13	8.66	13.39	1.38	1.18	2.99	0.79	5.51	2.36	0.51
IPPE10BNM	9	2703894	61.0	0 - 7.13	9.76	14.37	1.38	1.34	3.62	0.79	7.48	2.76	0.51
IPPE10BNM	12	2703927	77.0	0 - 7.13	10.31	14.80	1.57	1.57	3.62	0.98	7.87	2.76	0.59

\* Design Factor based on EN 13155 and ASME B30.20. Also available in D-Type (maximum jaw opening of 11.75") and H-Type (maximum jaw opening of 16.50").



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 1.56".
- 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.

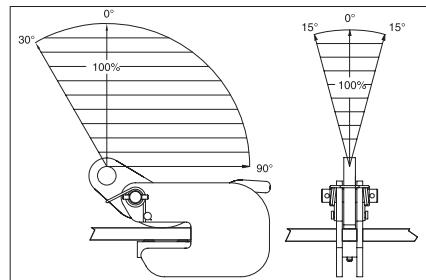
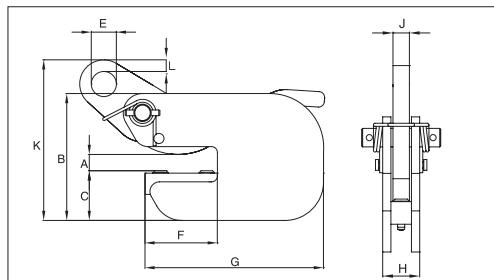
## IPHGUZ



## Model IPBC

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	E	F	G	H	J	K	L
IPBC	1	2700410	7.72	0 - 0.81	5.20	2.05	1.02	2.95	7.28	1.42	0.63	7.17	0.47
IPBC	2	2700411	14.3	0 - 1.00	5.98	2.44	1.18	3.23	8.27	1.93	0.79	8.58	0.59
IPBC	3	2700412	18.8	0 - 1.00	6.18	2.60	1.18	3.23	8.27	2.24	0.79	8.86	0.59

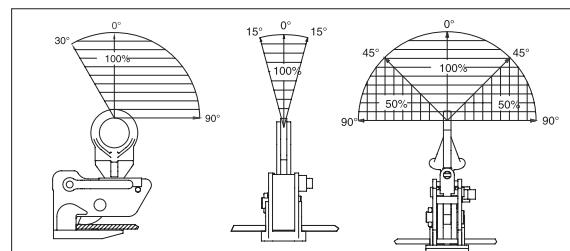
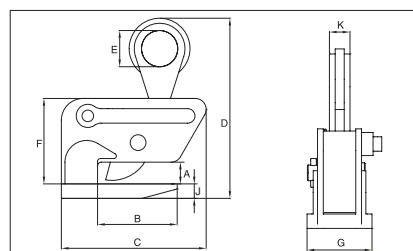
\* Design Factor based on EN 13155 and ASME B30.20.



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

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	D	E	F	G	J	K	
IPHGUZ	1.5	2705455	19.8	0 - 1.00	4.33	9.13	11.30	2.76	5.47	3.54	0.79	0.63	
IPHGUZ	3	2705456	43.9	0 - 1.56	4.69	9.96	13.70	2.95	6.89	4.72	0.98	0.79	
IPHGUZ	4.5	2705457	66.1	0 - 1.56	4.69	11.85	14.57	3.15	6.89	6.10	1.18	1.73	
Fixed Hoisting Eye													
IPHGZ	0.75	2705451	8.82	0 - 1.00	3.23	5.83	8.11	1.97	3.90	3.86	0.47	0.87	
IPHGZ	1.5	2705452	4.41	0 - 1.00	4.33	7.87	9.84	1.97	4.65	3.54	0.79	1.10	
IPHGZ	3	2705453	27.1	0 - 1.56	4.72	8.94	12.01	2.76	5.83	4.72	0.98	1.26	
IPHGZ	4.5	2705454	55.1	0 - 1.56	4.72	11.18	15.00	2.76	7.13	6.10	1.18	1.57	

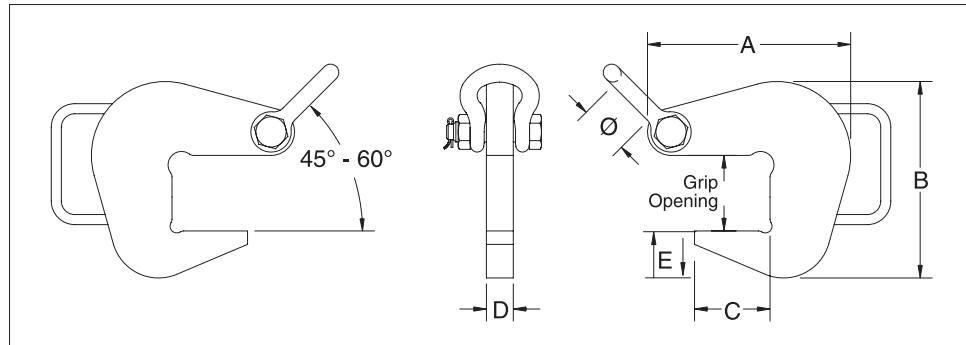
\* Design Factor based on EN 13155 and ASME B30.20.



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 (lb)	Grip Opening (in)	Dimensions (in)						Shackle Size (in)	Nylon (PA6) Inserts*
					A	B	C	D	E	Ø		
IPPH-2	2	2734500	5.94	2.06	5.81	5.06	2.06	1.00	1.25	1.69	5/8	2734900 2734909
IPPH-4	4	2734509	10.03	2.81	7.56	7.31	2.81	1.00	1.75	1.69	5/8	2734918
IPPH-6	6	2734518	17.74	4.06	10.18	10.06	4.06	1.00	2.25	2.00	3/4	2734927
IPPH-10	10	2734527	38.67	6.06	14.81	15.06	6.06	1.00	3.50	2.69	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.

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IPPHI



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

### Pipe Hook Inserts

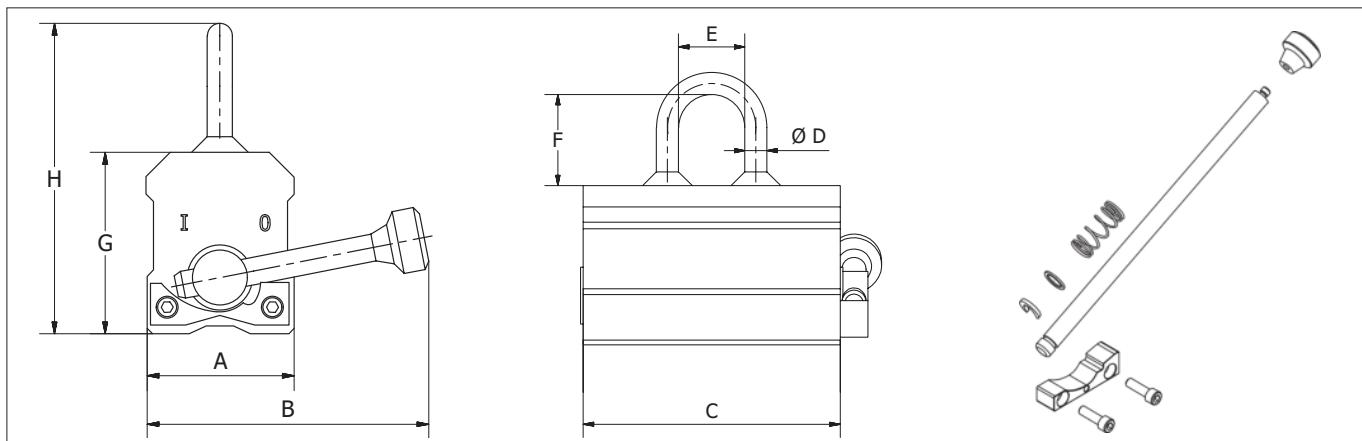
Model	Stock No.	ID of Pipe (in)	Grip Opening (in)
	2734900	3-12	1.61
	2734909	12-18	1.73
IPPHI	2734918	18-30	2.48
	2734927	30-42	3.74
	2734936	42-72	5.71



## 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 (lb)*	Stock No.	Weight each (lb)	Dimensions (in)							
				A	B	C	D	E	F	G	H
MAGNEX150	331	2708023	6.8	2.4	4.5	4.0	0.4	1.2	1.6	2.7	4.7
MAGNEX300	661	2708024	24	3.9	8.3	6.0	0.6	2.0	2.6	3.9	7.0
MAGNEX600	1323	2708025	47.8	4.7	9.6	9.7	0.8	2.5	2.6	3.9	7.2
MAGNEX1000	2205	2708026	90.2	5.7	13.0	12.0	0.8	2.5	3.6	4.9	9.3
MAGNEX1500	3307	2708027	158.1	6.5	15.4	14.7	0.8	2.5	3.6	6.3	10.7
MAGNEX2000	4409	2708028	201.5	6.5	18.7	18.8	0.8	2.5	3.6	6.3	10.7

Model	Flat Material			Round Material		
	WLL (lb)*	min. thickness for max. WLL (in)*	min. load thickness (in)	WLL (lb)*	min. Ø (in)	max. Ø (in)
MAGNEX150	331	0.98	0.08	166	2.0	3.9
MAGNEX300	661	1.18	0.16	331	2.4	7.9
MAGNEX600	1323	1.57	0.24	662	2.6	10.6
MAGNEX1000	2205	2.36	0.39	1103	3.9	11.8
MAGNEX1500	3307	3.15	0.59	1654	5.9	13.8
MAGNEX2000	4409	3.15	0.59	2205	5.9	13.8

\*WLL based on low carbon, mild steel and a working temperature 68°F

IPBK10

**For the transfer and stacking of steel beams**

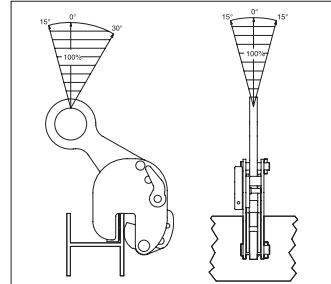
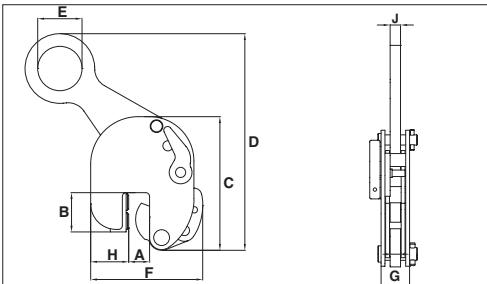
- IPVUZ / IPVZ: Available in capacities of 0.75 through 1.5 metric tons.
- IPVUZ / IPVZ: Jaw openings available: 0 to 0.81".
- IPBK10: Available in capacities of 0.5 through 4 metric tons.
- IPBK10: Jaw openings available: 0.2 to 1.13".
- Welded alloy steel body for strength and smaller size. Forged 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.

**Model IPBK10**

Load Tested

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)								
				Jaw A	B	C	D	E	F	G	H	J
IPBK10	0.5	2703931	5.29	0.19 - 0.63	1.69	5.28	8.50	1.77	4.72	1.89	1.77	0.39
IPBK10	1	2703837	5.73	0.19 - 0.63	1.69	5.98	9.06	1.77	4.84	1.85	1.77	0.39
IPBK10	2	2703838	16.1	0.19 - 1.00	2.44	8.78	13.43	2.76	7.80	2.40	2.76	0.63
IPBK10	4	2703839	37.3	0.19 - 1.13	2.95	11.10	16.97	3.94	9.13	3.07	2.83	0.79

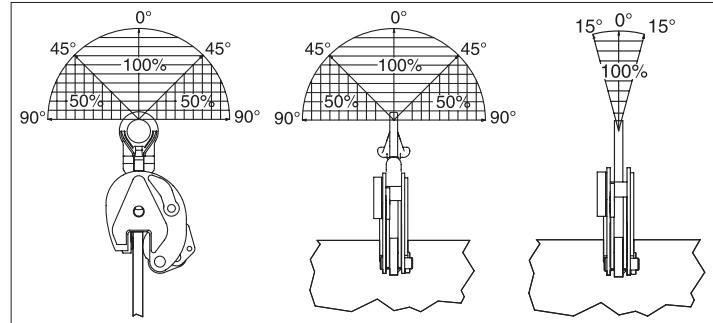
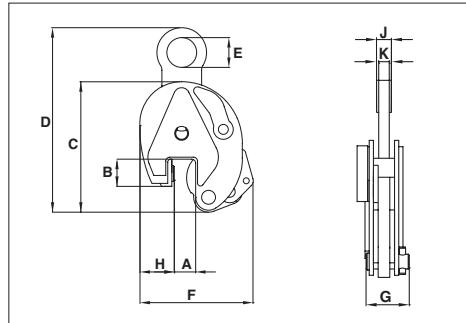
Design Factor based on EN 13155 and ASME B30.20.

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

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Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)								
				Jaw A	B	C	D	E	F	G	H	K
IPVUZ	0.75	2705146	5.07	0 - 0.63	1.02	5.12	8.50	1.57	4.53	1.65	1.18	0.43
IPVUZ	1.5	2705147	15.21	0 - 0.81	2.17	7.87	14.88	2.76	7.87	2.40	2.52	0.63
<b>Fixed Hoisting Eye</b>												
IPVZ	0.75	2705096	3.75	0 - 0.63	1.02	5.12	7.99	1.57	4.53	1.65	1.18	0.43
IPVZ	1.5	2705097	13.01	0 - 0.81	2.17	7.87	13.35	2.76	7.09	2.40	2.52	0.63

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



IPBHZ

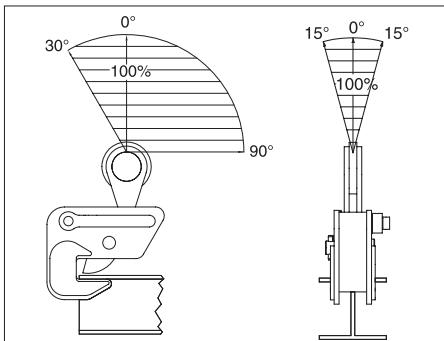
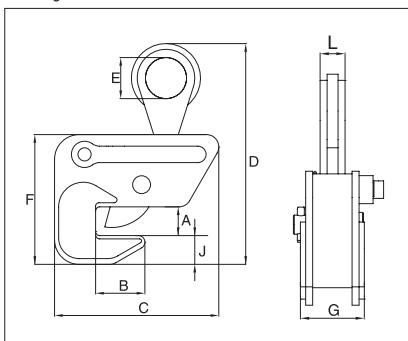
**For the lifting and transfer of steel beams**

- 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 1.56".
- 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 2.00".
- 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.

**Model IPBHZ****Load Rated**

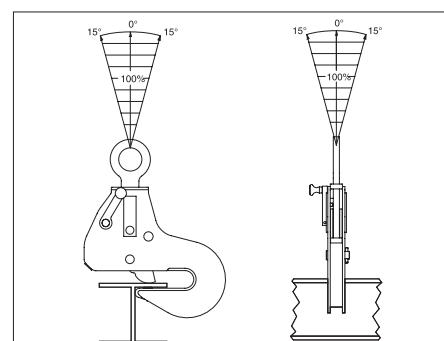
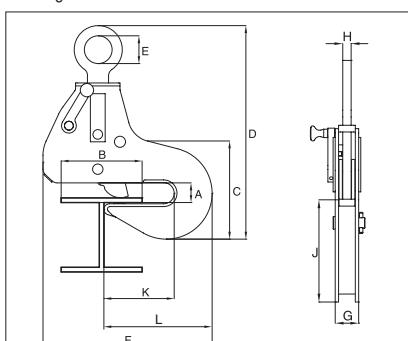
Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)								
				Jaw A	B	C	D	E	F	G	J	L
IPBHZ	0.75	2705461	6.61	0 - 1.00	1.57	5.83	8.66	1.97	5.12	2.72	1.30	0.87
IPBHZ	1.5	2705462	13.2	0 - 1.00	2.36	7.99	10.04	1.97	6.22	2.87	1.38	1.10
IPBHZ	3	2705463	23.2	0 - 1.56	3.15	8.94	12.80	2.76	7.40	4.41	1.50	1.26
IPBHZ	4.5	2705464	55.1	0 - 1.56	4.41	11.18	16.26	2.76	9.88	4.57	3.15	1.57
IPBHZ	12	2705467	93.3	0 - 1.56	4.92	18.35	19.29	3.54	12.48	3.54	3.54	1.85

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

**Model IPBSNZ**

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)								
				Jaw A	B	C	D	E	F	G	H	J
IPBSNZ	1.5	2705925	30.9	0 - 1.25	3.94-10.63	11.97	18.90	2.76	12.56	1.85	0.63	6.50
IPBSNZ	3	2705926	48.5	0 - 1.56	3.94-12.99	13.86	19.45	2.95	16.06	2.20	0.79	8.15
IPBSNZ	4.5	2705927	67.2	0 - 2.00	3.94-14.17	16.54	24.80	2.95	17.99	2.20	0.79	9.84

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





## 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: 2.95" to 40.16".
- 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**

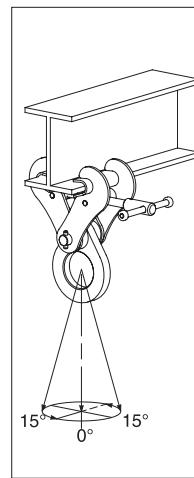
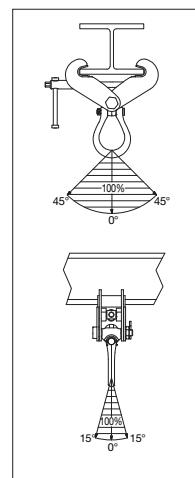
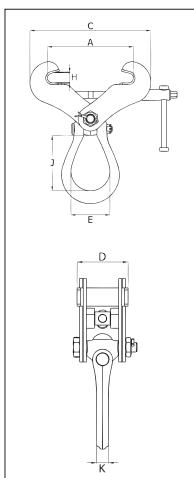
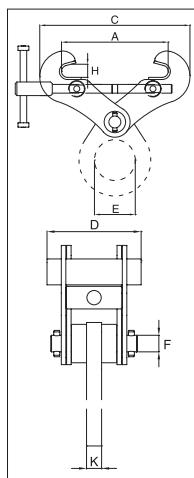
**IPTK:** with hoisting eye / **IPTKW:** without hoisting eye

**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 (lb)	Dimensions (in)							
				Jaw A	C	D	E	F	H	J	K
IPTK	2	2700996	13.2	2.95 - 7.48	A + 3.13	4.92	2.95	-	0.98	-	0.79
IPTK	3	2700997	14.3	2.95 - 7.48	A + 3.13	4.92	2.95	-	0.98	-	0.79
IPTK	4	2700998	18.7	5.91 - 11.02	A + 4.00	4.92	2.95	-	1.38	-	0.79
IPTK	5	2700994	24.3	4.72 - 13.78	A + 7.67	4.92	2.95	-	1.57	-	0.79
IPTK	25	2702999	496.0	17.72 - 40.16	A + 8.66	19.69	4.92	-	2.99	-	1.77
<b>Without Hoisting Eye</b>											
IPTKW	2	2700966	8.82	3.00 - 7.50	A + 3.13	4.92	-	1.10	0.98	-	-
IPTKW	3	2700967	9.92	3.00 - 7.50	A + 3.13	4.92	-	1.10	0.98	-	-
IPTKW	4	2700968	13.9	5.88 - 11.25	A + 4.00	4.92	-	1.30	1.38	-	-
IPTKW	5	2700969	19.4	4.75 - 13.75	A + 7.67	4.92	-	1.30	1.57	-	-
<b>With Improved Hinged Hoisting Eye</b>											
IPTKU	2	2707996	12.6	3.00 - 7.50	A + 3.94	6.50	2.99	0.87	0.87	3.90	0.75
IPTKU	3	2707997	14.1	3.00 - 7.50	A + 3.94	6.50	3.50	0.87	0.87	4.80	0.87
IPTKU	4	2707998	26.7	4.75 - 11.25	A + 5.91	7.28	3.50	1.57	1.57	4.80	0.87
IPTKU	5	2707994	32.0	4.75 - 13.75	A + 6.89	7.28	3.50	1.57	1.57	4.80	0.87
IPTKU	10	2707970	90.4	7.88 - 18.00	A + 11.81	8.46	4.13	2.36	2.36	5.98	1.02
<b>Suitable as anchor device for personnel fall arrest equipment - standard according to EN 795</b>											
IPTKUM	1 person	2709991	13.2	3.00 - 7.50	A + 3.94	6.50	2.99	-	0.87	3.90	0.75
<b>With Optional Double Locking Device</b>											
IPTKUD	2	2709996	13.2	3.00 - 7.50	A + 3.94	6.50	2.99	0.87	0.87	3.90	0.75
IPTKUD	3	2709993	14.6	3.00 - 7.50	A + 3.94	6.50	3.50	0.87	0.87	4.80	0.87
IPTKUD	4	2709995	27.1	4.75 - 11.25	A + 5.91	7.28	3.50	1.57	1.57	4.80	0.87
IPTKUD	5	2709994	33.7	4.75 - 13.75	A + 6.89	7.28	3.50	1.57	1.57	4.80	0.87
IPTKUD	10	2709970	94.8	7.88 - 18.00	A + 11.81	8.46	4.13	2.36	2.36	5.98	1.02

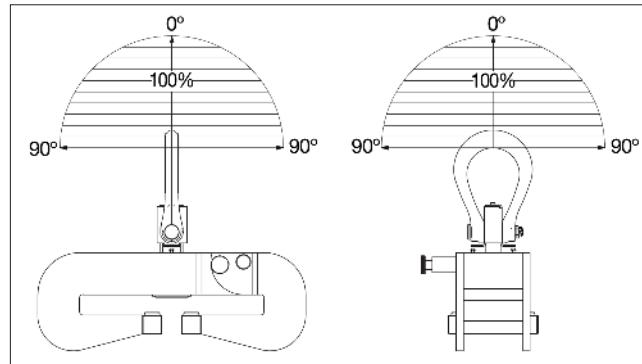
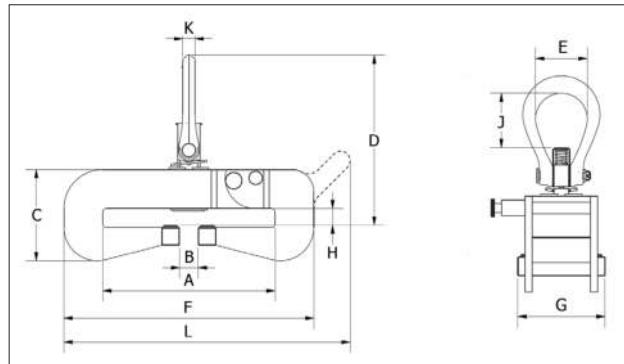
\* Design Factor based on EN 13155 and ASME B30.20.



## IPTKA



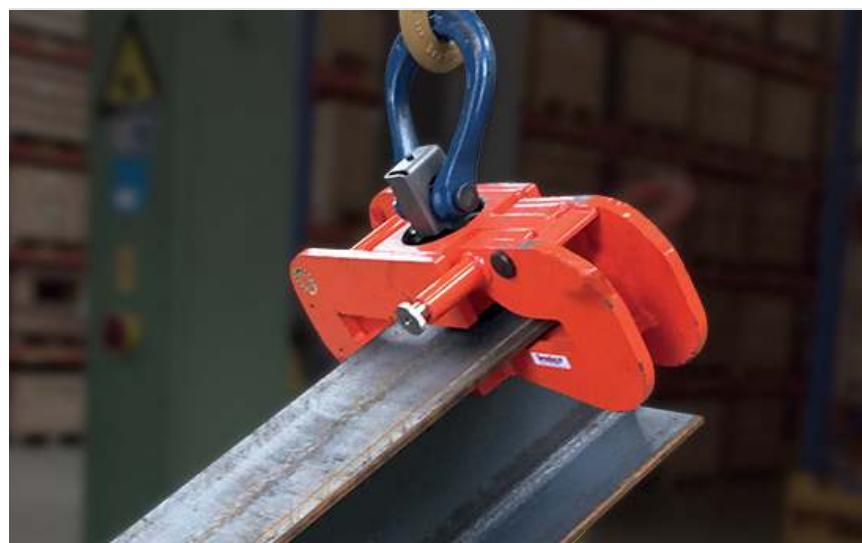
- Maintains full WLL at angles up to 90°.
- Bail swivels 360° and pivots 180°.
- Easy to close and open with a hinged body with self-locking device.
- Easy to handle with handgrips.
- No interference or space limitations when tightening the clamp.
- Multi-purpose hoisting eye to be used for tightening 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 Rated

Model	WLL (t)	Stock No.	Weight (lb)	Dimensions (in)										
				A	B	C	D	E	F	G	H	J	K	L
IPTKA	3	2707111	35	3.9 - 8.1	1.34	5.87	12.09	3.5	12.2	5.12	0.24 - 1	3.7	0.87	14.53
IPTKAJ1	3	2707116	31.3	2.8 - 4.9	0.94	5.28	11.69	3.5	10.12	5.12	0.24 - 1	3.7	0.87	12.4
IPTKAJ2	3	2707117	35.3	3.9 - 8.1	2.13	6.46	12.68	3.5	12.2	5.12	0.8 - 1.57	3.7	0.87	14.53
IPTKA	5	2707065	51.4	3.9 - 12	1.34	6.46	12.05	3.5	17.72	5.91	0.24 - 1	3.7	0.87	-
IPTKAJ1	5	2707114	37.3	2.8 - 4.9	0.94	5.47	11.65	3.5	10.51	5.91	0.24 - 1	3.7	0.87	13.23
IPTKAJ2	5	2707115	51.2	5.1 - 12	2.91	7.05	12.64	3.5	17.72	5.91	0.8 - 1.57	3.7	0.87	-
IPTKA	10	2707118	137	5.5 - 16	2.91	9.21	17.72	4.76	23.6	8.66	0.47 - 1.65	6.0	1.18	-
IPTKA	15	2707124	157	5.5 - 16	2.91	9.61	17.72	4.76	24.8	8.66	0.47 - 1.65	6.0	1.18	-



## IPBCF / IPBCNS

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

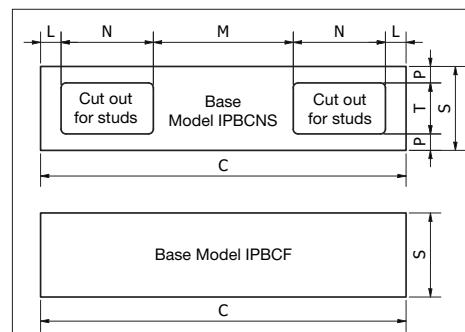
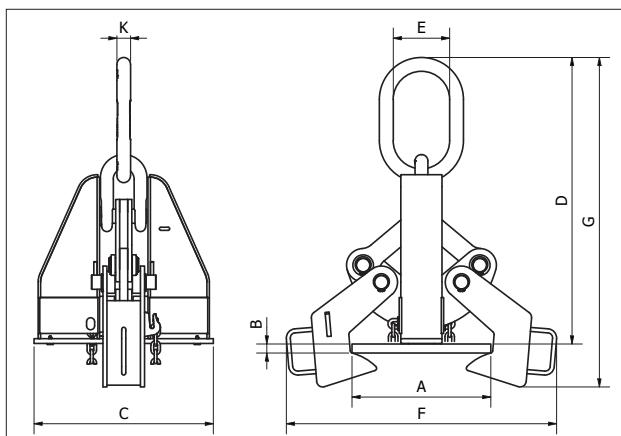
- When lifting, these beam clamps grip the beam at three points, and when properly balanced and safely guided, the beam can be handled even if the clamp is slightly off center lengthwise.
- Capacities: 4.5 through 32 metric tons. (higher Working Load Limits are available upon request).
- Eliminates the 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.
- Manufactured by an ISO 9001 facility.
- All sizes are RFID equipped.

**Beam Clamps**

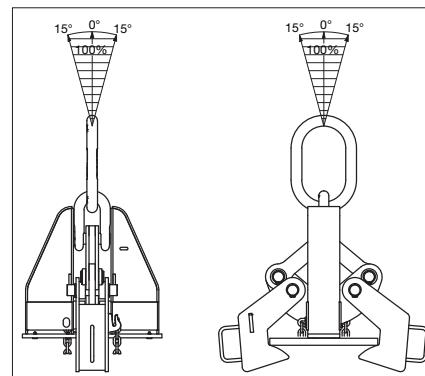
Model No.	WLL (t)	Stock No.	Weight Each (lb)	Flange Grip Range (in)		Dimensions (in)					
				Width (A)	Thickness (B)	C	D	E	F	G	K
IPBCF	4.5	2702000	64.9	4 - 10	0.5 - 1	13.7	21.1 - 17.8	3.75	13.3 - 18.7	23.7 - 20.9	0.84
IPBCNS	13.5	2702018	137	7 - 17	0.5 - 2	17.5	30.5 - 23.3	5.5	19.9 - 29.5	35.2 - 28.3	1.33
IPBCNS	22.5	2702036	291	16 - 24	1 - 3	23.5	39.8 - 32.0	6	30.5 - 38.1	44.9 - 38.7	1.75
IPBCNS	32	2702054	529	16 - 36	1.63 - 4	28.7	46.8 - 40.3	7	31.2 - 53.1	57.4 - 49.5	2.00

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.



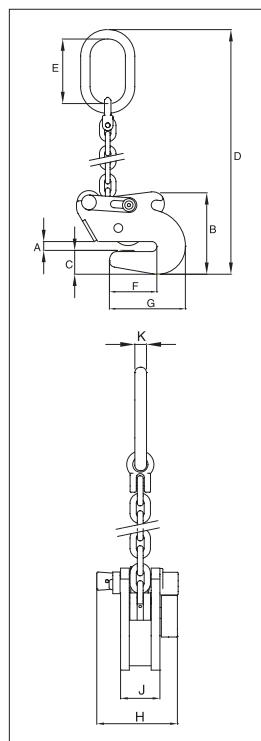
Base Stock No.	Base Dimensions (in)						
	C	L	M	N	P	S	T
IPBCNS	13.7	-	-	-	-	3.00	-
IPBCNS	17.5	1.00	6.70	4.40	0.78	4.00	2.44
IPBCNS	23.5	1.30	7.48	6.70	1.19	6.00	3.62
	28.7	1.90	8.90	8.00	1.19	6.00	3.62



## IPSTARTEC11


**For Lifting, Transferring and Controlled Tilting of Steel Beams**

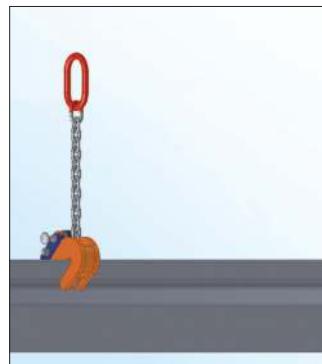
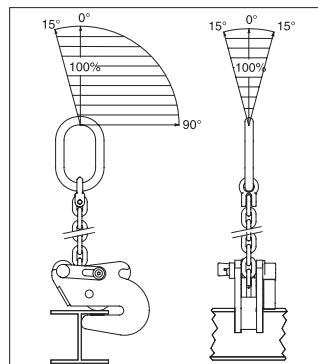
- Available in capacities of 1.5 and 2.5 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: .25" to .75".
- Welded alloy steel body for strength and smaller size. Forged alloy, components where required.
- Equipped with handle for easy placement.
- Individually 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.
- Manufactured by an ISO 9001 facility.
- All sizes are RFID equipped.

**Model IPSTARTEC11**

Load Rated

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPSTARTEC11	1.5	2701812	14.6	0.25 - 0.50	5.51	1.54	22.64	4.33	3.19	5.08	4.96	2.13	0.63
IPSTARTEC11	2.5	2701822	32.0	0.25 - 0.75	8.27	2.17	28.54	5.31	4.53	7.17	5.51	2.91	0.71

\* 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.**

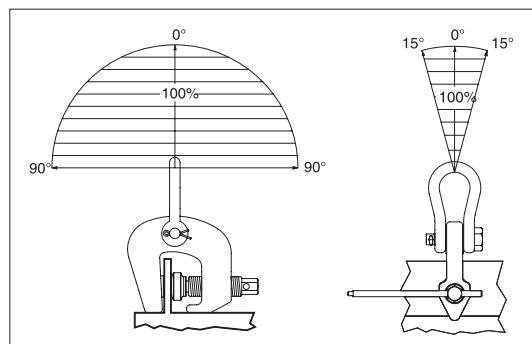
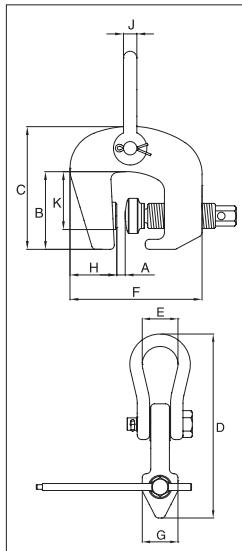
- Available in capacities of 1.5 and 3 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: 0" to 2.38".
- Suitable for steel with a surface hardness up to 30 Rc.
- Forged alloy steel body for strength and smaller size. Forged alloy components, where required.
- 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 (lb)	Dimensions (in)								
				Jaw A	B	C	D	E	F	G	H	J
IPSC10	1.5	2703857	10.1	0 - 1.57	3.58	5.63	9.88	1.73	6.14	1.97	1.77	0.63
IPSC10	3	2703858	18.5	0 - 2.38	4.29	6.89	12.20	2.01	7.87	2.44	2.17	0.75

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

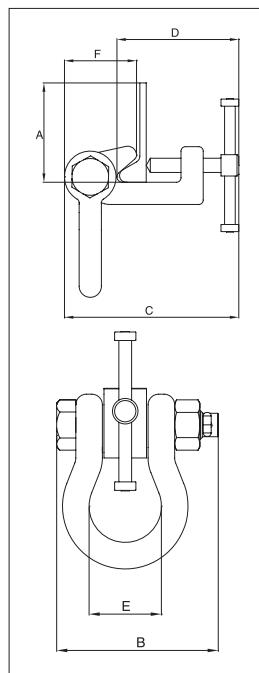


IPBTO10



**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 6.5" to HP 17".
- 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.
- Manufactured by an ISO 9001 facility.

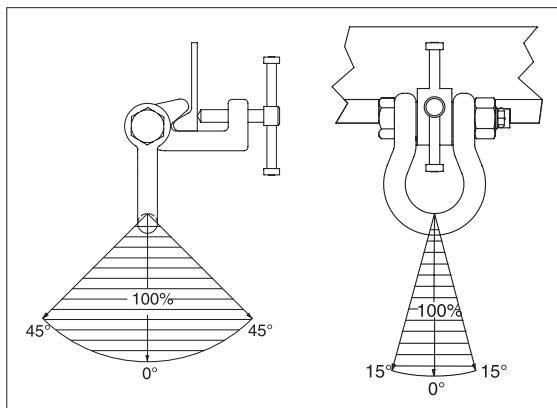


### Model IPBTO10

Load Rated

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)					
				Profile A †	B	C	D	E	F
IPBTO10	1.5	2700980	11.0	HP 6.5 - 9.44	5.39	7.40-8.23	5.08-5.91	2.68	3.19
IPBTO10	3	2700986	13.0	HP 9.44 - 12.56	5.39	7.40-8.54	5.71-6.85	2.68	3.07
IPBTO10	6	2700991	28.7	HP 11.75 - 17.00	7.28	10.03-11.69	7.68-9.29	3.23	4.02

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

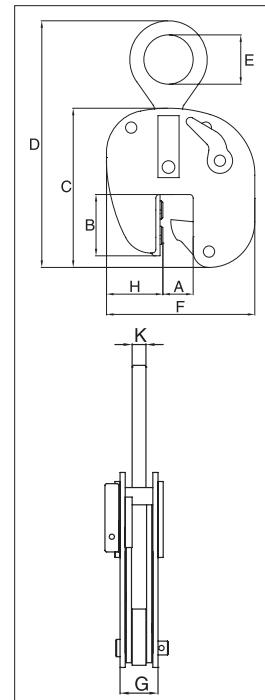


IPBUZ



### 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 4.75" to HP 17".
- 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 IPBUUZ:** with Universal Hoisting Eye

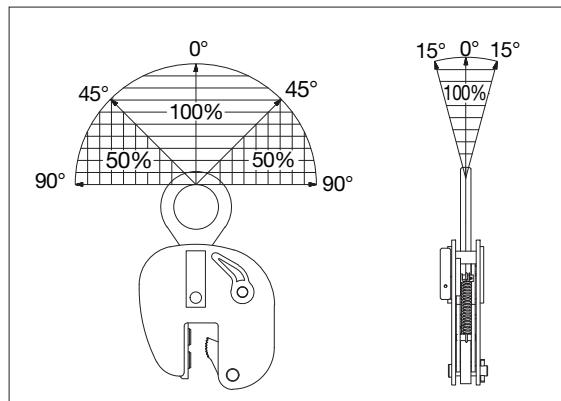
**Model IPBUZ:** with Fixed Hoisting Eye

Load Tested

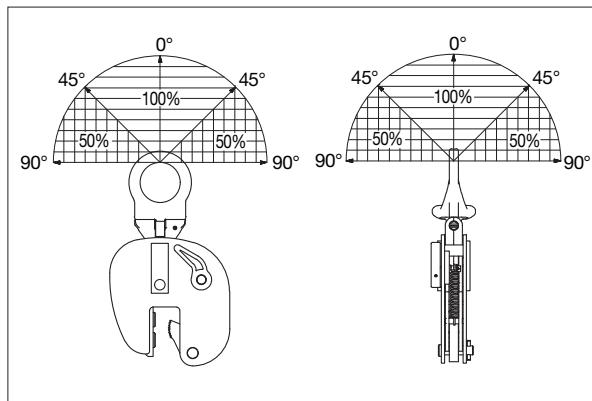
Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)							
				Profile A †	B	C	D	E	F	G	H
IPBUUZ	0.75	2705601	18.7	HP 4.75 - 7.88	3.35	8.90	15.35	2.76	8.27	2.40	2.76
<b>With fixed hoisting eye</b>											
IPBUZ	0.75	2705600	15.4	HP 4.75 - 7.88	3.35	8.90	15.35	2.76	8.27	2.40	2.76
IPBUZ	1.5	2705701	33.1	HP 8.63 - 17.00	7.72	15.63	22.36	2.76	10.08	2.72	1.89
IPBUZ	3.75	2705702	64.4	HP 8.63 - 17.00	9.37	17.24	22.24	3.15	13.98	2.52	3.94
0.63											

\* 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

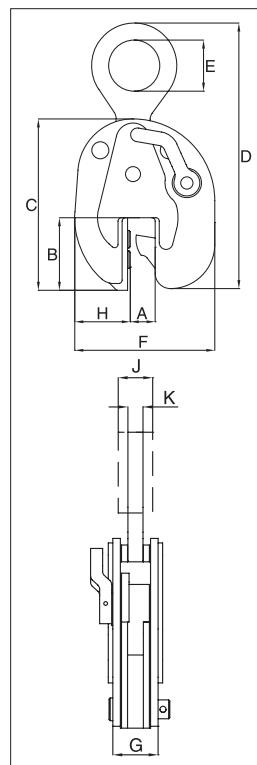


IPSBUUZ



### 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 4" to HP 17".
- 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

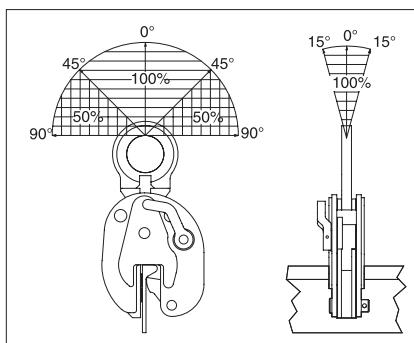
**Load Rated**

**Model IPSBUZ / IPSBUSZ:** With Fixed Hoisting Eye

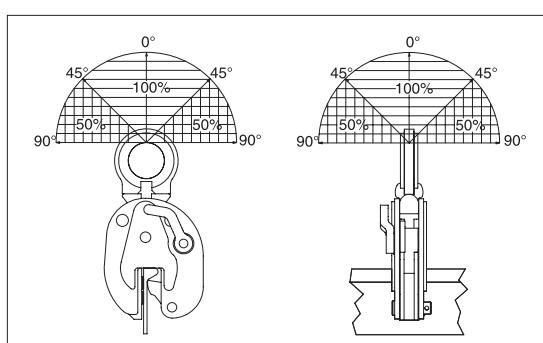
Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				A†	B	C	D	E	F	G	H	J	K
IPSBUUZ	4.5	2705771	34.2	HP 4.00 - 6.25	4.21	9.92	17.72	2.95	8.11	3.78	3.23	1.42	0.79
IPSBUUZ	9	2705773	94.8	HP 4.00 - 6.25	4.13	10.79	19.33	3.15	9.76	4.84	4.09	1.73	0.79
IPSBUSUZ	4.5	2705772	83.8	HP 7.13 - 17.00	8.94	16.85	25.00	2.95	14.84	3.74	5.04	-	0.79
IPSBUSUZ	9	2705774	152	HP 7.13 - 17.00	8.94	18.82	28.27	3.15	16.73	4.65	6.10	1.73	0.98
<b>With fixed hoisting eye</b>													
IPSBUZ	4.5	2705721	29.8	HP 4.00 - 6.25	4.21	9.92	15.04	2.95	8.11	3.78	3.23	-	0.79
IPSBUZ	9	2705723	50.7	HP 4.00 - 6.25	4.13	10.79	18.15	3.15	9.76	4.84	4.09	-	1.18
IPSBUSZ	4.5	2705722	78.9	HP 7.13 - 17.00	8.94	16.85	23.31	2.95	14.84	3.74	5.04	-	0.79
IPSBUSZ	9	2705724	150	HP 7.13 - 17.00	8.94	18.82	26.10	3.15	16.73	4.65	6.10	1.77	0.98
IPSBUSZ	15	2705728	141	HP 7.13 - 17.00	8.90	19.09	27.17	3.46	15.79	3.94	5.31	1.93	0.98
IPSBUSZ	22.5	2705730	220	HP 7.13 - 17.00	8.82	21.38	29.13	3.54	18.50	4.57	7.28	-	0.98

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

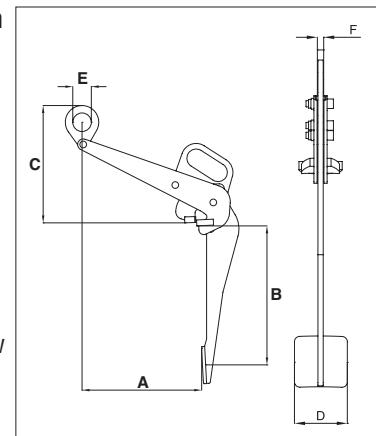


IPDV



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

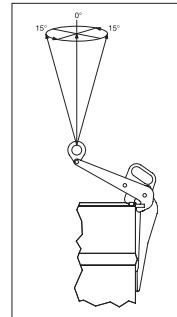
- Available in capacity of .5 metric tons (higher Working Load Limits are available upon request).
- Jaw openings available: IPDV - 11.75" and IPVK - .63".
- Welded alloy steel body for strength and smaller size. Forged alloy components, where required.
- Individually Proof Tested to 2 times the Working 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 (lb)	Dimensions (in)					
				Jaw A	B	C	D	E	F
IPDV	0.5	2700118	15.7	11.75	14.76	11.42	3.94	1.97	0.47

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

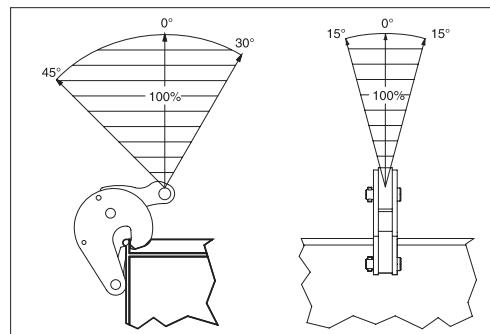
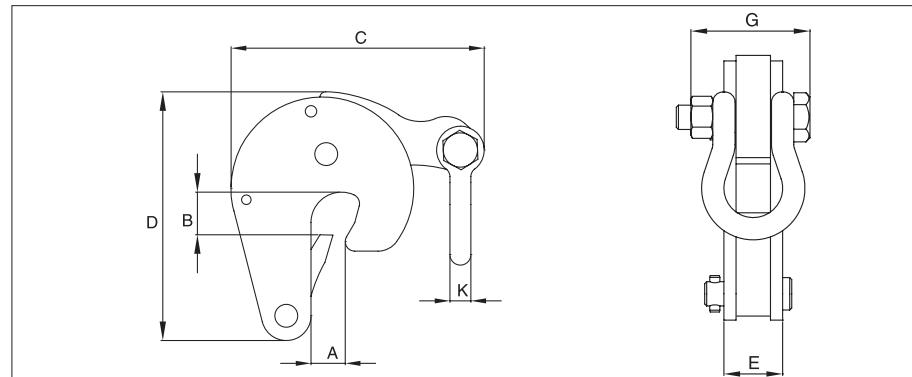
*Load Tested*

**IPVK****Model IPVK**

Model	Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)						
				Jaw A	B	C	D	E	G	
IPVK	0.5	2700116	3.53	0 - 0.63	1.02	5.31	5.20	1.14	2.01	0.43

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

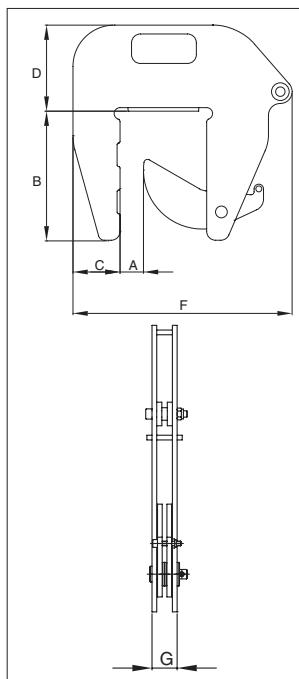
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## IPCC

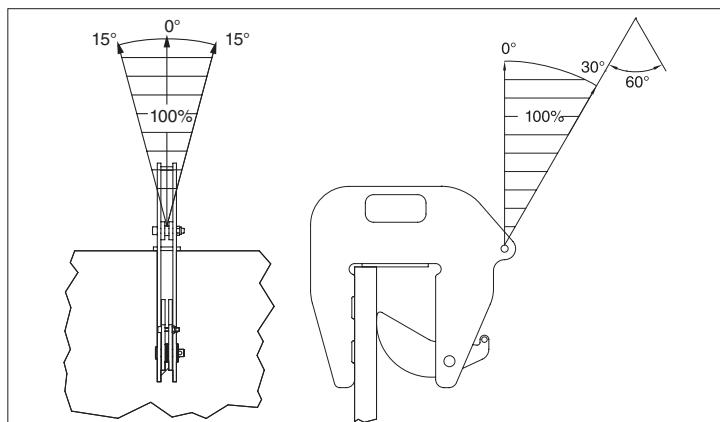

**For Lifting and Transferring Concrete Pipe Sections and Wells**

- Available in capacity of 1 metric tons (higher Working Load Limits are available upon request).
- Jaw opening available: 1.56" - 5.50".
- 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.

**Model IPCC**

Model	Working Load Limit Per Pair (t)*	Stock No.	Weight Each (lb)	Dimensions (in)									
				Jaw A	B	C	D	E	F	G	H	J	K
IPCC	1	2700037	20.3	1.56 - 5.50	8.86	3.15	5.75	-	14.65	1.46	-	-	-

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

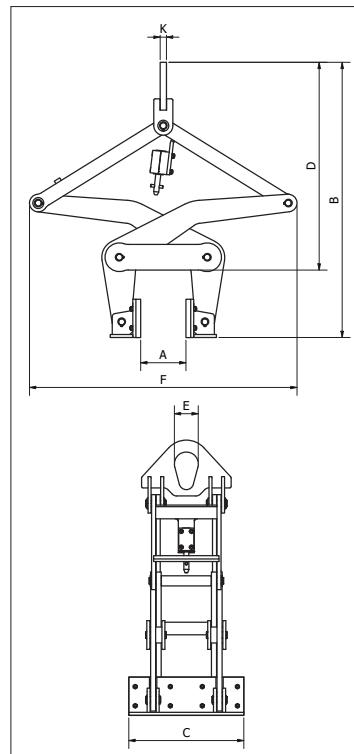


IPBG



**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 (lb)	Dimensions (in)						
				Jaw A	B	C	D	E	F	K
IPBG	4	2704018	345	6 (min.) 12 (max.)	45.3 33.9	18.0 18.0	34.7 23.5	3.74 3.74	40.9 44.4	1.00 1.00

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



The IPU10 vertical lifting clamp is used for lifting, turning, moving or vertical transfer of sheet, plates, or fabrications from horizontal to vertical and down to horizontal (180°) as needed. The hinged hoisting eye allows for the clamp to place and lift the load from any direction, or with a multiple leg sling without side-loading the clamp.



The IPNM10 vertical lifting clamp is used for lifting, turning, moving or vertical transfer of sheet, plates, or fabrications from horizontal to vertical and down to horizontal (180°) as needed without marring the surface of the material. Materials such as aluminum, stainless steel, painted materials, aircraft skins, composite material, glass, plastic, etc., can be lifted without marring. Will not mar, or scratch the material surface.



The IPNM10P vertical lifting clamp is used for lifting, turning, moving or vertical transfer of sheet, plates, or fabrications from horizontal to vertical and down to horizontal (180°) as needed without marring the surface of the material. Materials such as aluminum, stainless steel, painted materials, aircraft skins, composite material, glass, plastic, etc., can be lifted without marring. The protective cover reduces the risk of damage to surrounding plates. Will not mar, or scratch the material surface.



The IPU10A automatically clicks onto the material as soon as the clamp is placed on the plate. The fact that the safety lock remains in position as the clamp closes precludes hazardous situations. Fastening the IPU10A clamp in places that are difficult to reach is no problem.



The IPHNM10 horizontal lifting clamps have a pretension feature that allows the user to attach the clamps to the material for horizontal lifting and transfer of non-sagging material. To be used where material surface must not be damaged. These clamps must be used in pairs or more.



The IPH10 horizontal lifting clamps with spring loaded tension have a pretension feature that allows the user to attach the clamps to the material for horizontal lifting and transfer of non-sagging material. These clamps must be used in pairs or more.



The IPH10E / IPH10JE horizontal lifting clamps are for use in the lifting and transfer in horizontal position of non-sagging materials or of bundles of non-sagging material. These clamps must be used in pairs or more.



The IPHOZ horizontal lifting clamp is to be used for lifting and transferring, in the horizontal position, of thin sheet and other materials that will sag or bend when lifted. These clamps must be used in pairs or more.



The IPPE10 type clamp is suitable for lifting and transferring bundles of non-bendable sheets of metal in a horizontal position. The jaw opening can be easily adjusted for the height of the bundle or plate. The IPPE10 has magnets in the footplate. This allows one person to operate multiple clamps at the same time when lifting loads. These clamps must be used in pairs or more.



The IPPE10BNM lifting clamps may be used for virtually all applications, where the objects that are to be lifted or transported require optimal protection against surface damage. This also applies to materials with a very smooth surface, composites, plates with a protective cover or hard surface plates. These clamps have to be used in pairs.



The IPBC horizontal lifting clamps have a pretension feature that allows the user to attach the clamps to the material for horizontal lifting and transfer of sagging and non-sagging material. These clamps may also be used to handle material that will be used in shears, bending and rolling machines or other fabrication equipment. May also be used for turning beams from the "H" into the "I" position.



The IPHGZ, IPHGUZ horizontal lifting clamps have a pretension locking feature that allows the user to attach the clamps to the material for horizontal lifting and transfer of sagging and non-sagging material. These clamps may also be used to handle material that will be used in shears, bending and rolling machines or other fabrication equipment. May also be used to move and lift structural shapes such as I-Beams, H-beams etc.



The IPBK10 beam clamp is used for lifting, transferring and stacking H-Beams. A ring-center hoist eye allows for the beam flange to remain vertical. This series of clamps can be used in vertical and horizontal moving, transferring and stacking of different types of structural designs, such as H-Beams, angles, etc, depending on the application desired.



The IPVZ / IPVUZ beam clamp is used for vertical lift and transfer of angle iron and other loads that have only a small gripping area for the clamp ("U" has universal hoisting eye). This series of clamps can be used in vertical and horizontal moving, transferring and stacking of different types of structural designs, such as H-beams, angles, etc, depending on the application desired.



The IPBHZ beam clamp is used for lifting, transferring and stacking I-Beams & H-Beams. An ring-center hoist eye allows for the beam flange to remain vertical. This series of clamps can be used in vertical and horizontal moving, transferring and stacking of different types of structural designs, such as H-Beams, angles, etc, depending on the application desired.



The IPBSNZ beam clamp is used for lifting, transferring and stacking I-Beams. An ring-center hoist eye allows for the beam flange to remain vertical. This series of clamps can be used in vertical and horizontal moving, transferring and stacking of different types of structural designs, such as H-Beams, angles, etc, depending on the application desired.



The IPTK & IPTKW series beam clamp is suitable for use as a temporary tackle eye for a beam.

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The IPTKU series beam clamp has an improved hinged hoisting eye that increases the loading angles and an optional new double locking device.



This anchor clamp is suitable as an anchor device for one person, with a personal fall arrest (sheathed and with double locking) system.



The IPSTARTEC11 beam clamp has been specially developed for lifting with the body in vertical position, controlled tilting, transportation and stacking of steel "H" and "I" profiles. By placing the chain guide in the appropriate position, it is easy to switch from lifting to tilting and back again, which shifts the center of gravity.



The IPSC10 screw style clamp is for positioning, pulling and turning plates or fabrications.



The IPBT010 shipbuilding clamp is used as a temporary tackle eye in spaces which have been reinforced with HP (bulb) profiles such as engine rooms and shipsections. This clamp is fitted with a screwed spindle for easy attachment of the clamp. The moment a load is applied, the clamp is automatically fixed.



The IPBUZ shipbuilding clamps are used for lifting, transferring and placing bulb profiles onto ship's hulls perpendicularly. These clamps are fitted with a locking device for both open and closed positions, which ensures complete reliability. They are to be used exclusively for bulb profiles (not for plates).



The IPSBU(U)Z shipbuilding clamps are used for the lifting, transfer and placing of complete shipsections. These clamps are fitted with a locking device for both open and closed positions, which ensures complete reliability. They are to be used exclusively for bulb profiles (not for plates).



The IPDV drum clamp is for vertical lift and transfer. Allows drum to remain in an upright position during the lift and transfer using one clamp.



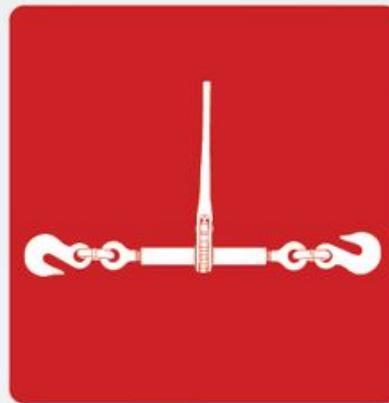
The IPVK drum clamp is for vertical lift and transfer. Automatically locks on drum, and can be used alone or in pairs.



The IPCC is suitable for the vertical lifting and transfer of concrete pipe sections and wells. Very easy application and removal of the clamp thanks to the built-in carrying-grips. Normally used in combination with 7mm chain (not supplied). These clamps must be used in pairs or more.

# LOAD SECUREMENT

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

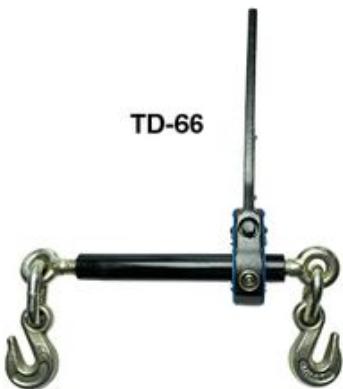


theCrosbygroup<sup>®</sup>

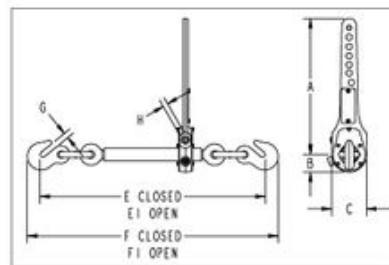
[thecrosbygroup.com](http://thecrosbygroup.com)

**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.



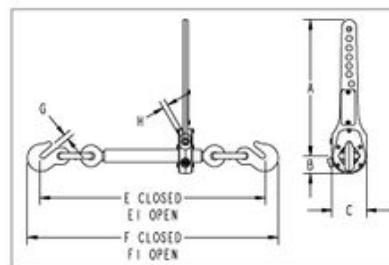
- Blue marking
- Common applications: Light equipment transport & logging
- 3:1 design factor



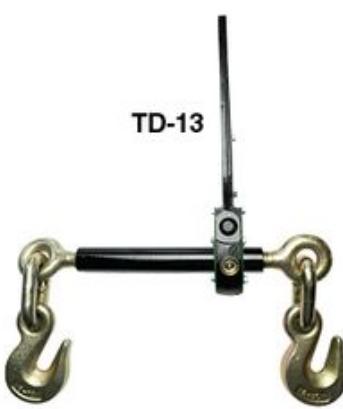
Model	Stock No.	Min-Max Chain Size (in)	Working Load Limit (lb)	Proof Load (lb)	Weight Each (lb)	Dimensions (in)								
						A	B	C	E	E1	F	F1	G	H
TD-66	3674481	5/16-3/8	6,600	9,900	14.3	14.06	1.80	3.60	23.02	32.02	25.26	34.26	0.51	0.53



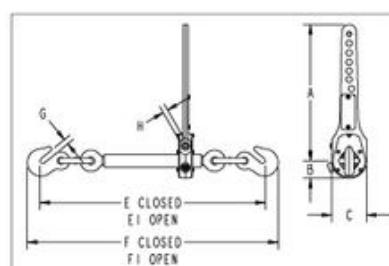
- Red marking
- Common applications: Equipment transport, heavy towing & steel coil transport
- 3:1 design factor



Model	Stock No.	Min-Max Chain Size (in)	Working Load Limit (lb)	Proof Load (lb)	Weight Each (lb)	Dimensions (in)								
						A	B	C	E	E1	F	F1	G	H
TD-92	3674490	3/8-1/2	9,200	13,800	16.0	14.06	1.80	3.60	23.26	32.26	25.88	34.88	0.56	0.53



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



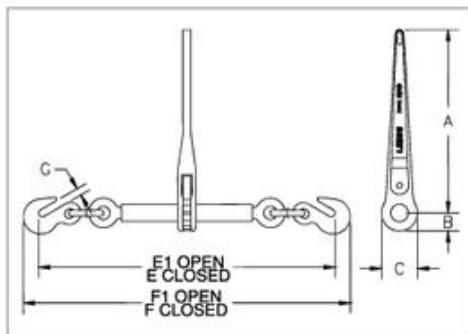
Model	Stock No.	Min-Max Chain Size (in)	Working Load Limit (lb)	Proof Load (lb)	Weight Each (lb)	Dimensions (in)								
						A	B	C	E	E1	F	F1	G	H
TD-13	3674499	1/2-5/8	13,000	19,500	19.9	14.06	1.80	3.60	26.41	35.41	29.53	38.53	0.72	0.53

Spare drive bolts and grease zerks available

 APPLICATION AND WARNING INFORMATION  
SECTION 17



Crosby LEBUS L-140



Load Pattern

- 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.

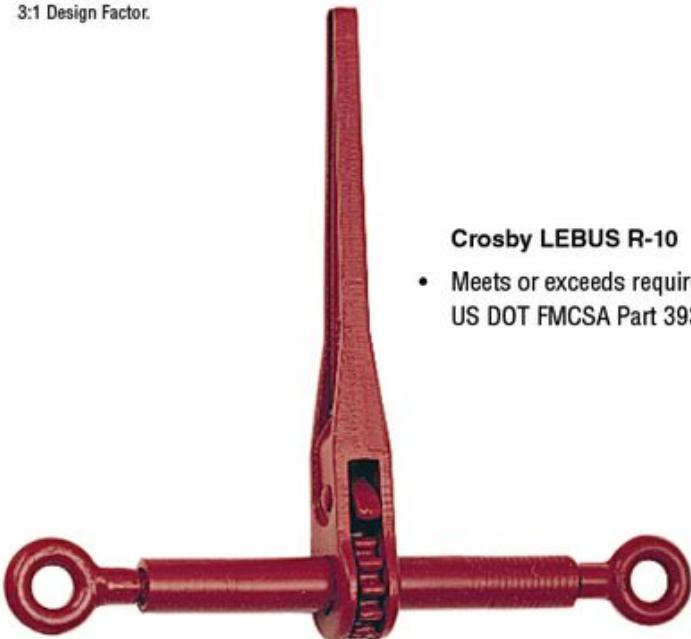
- Ratchet spring is rust proofed.
- All load bearing or holding parts forged.
- Easy operating positive ratchet.
- Binders shown with Proof Loads have been individually proof tested to values shown, prior to shipment.
- Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.
- Matches the Working Load Limit of Grade 100 chain except for 5/8" size.

APPLICATION AND WARNING INFORMATION SECTION 17

### Crosby LEBUS L-140 Standard Ratchet Type Load Binders

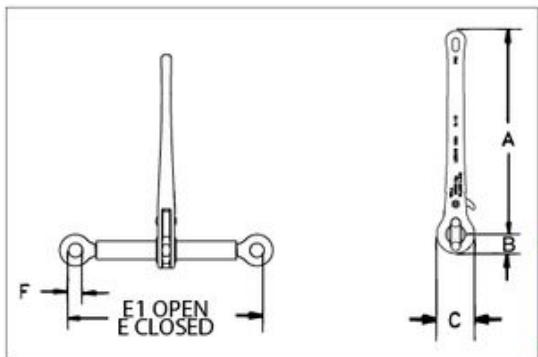
Model	Stock No.	Min-Max Chain Size (in)	Working Load Limit (lb)	Proof Load (lb)	Weight Each (lb)	Handle Length (in)	Barrel Length (in)	Take Up (in)	Dimensions (in)							
									A	B	C	E	E1	F	F1	G
R-7	1048404	5/16-3/8	8800	17600	12.11	14	10	8.0	14.00	1.38	2.75	22.94	30.94	25.13	33.13	.50
R-A	1048422	3/8-1/2	15000	30000	14.70	14	10	8.0	14.00	1.38	2.75	25.25	33.25	27.63	35.63	.63
R-C	1048440	1/2-5/8	16000	32000	14.55	14	10	8.0	14.00	1.38	2.75	26.38	34.38	29.44	37.44	.72

3:1 Design Factor.



Crosby LEBUS R-10

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

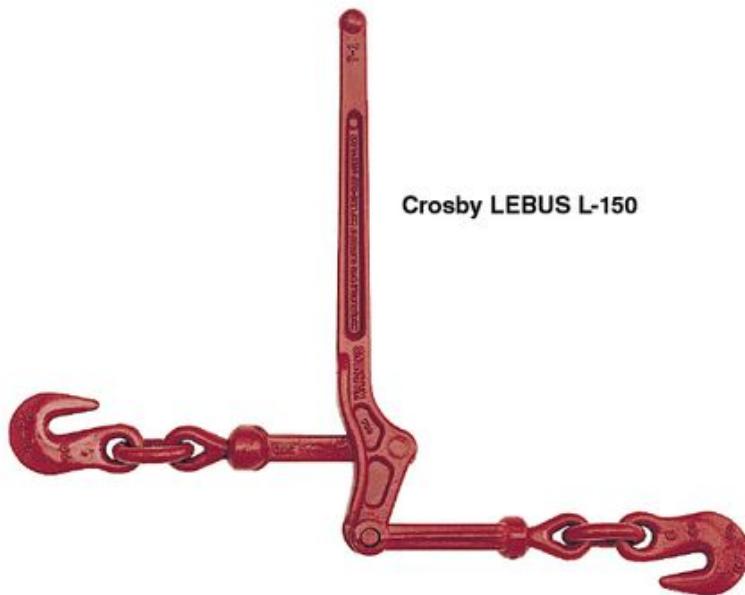


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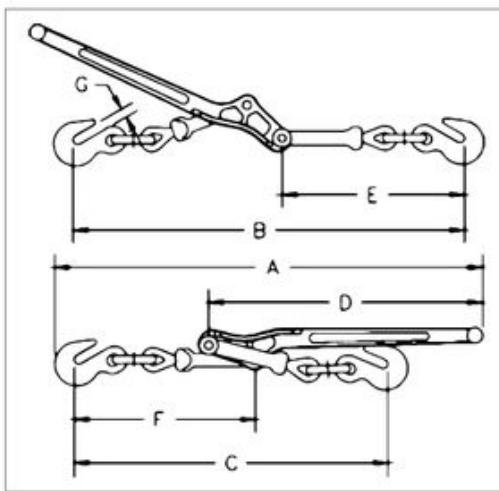
### Crosby LEBUS R-10 Binder without Links and Hooks

Model	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Handle Length (in)	Barrel Length (in)	Take Up (in)	Dimensions (in)					
							A	B	C	E	E1	F
R-10	1048468	16000	8.04	14	10	8.0	14	1.38	2.75	14	22	1.00

3:1 Design Factor.



Crosby LEBUS L-150



Load Tied™

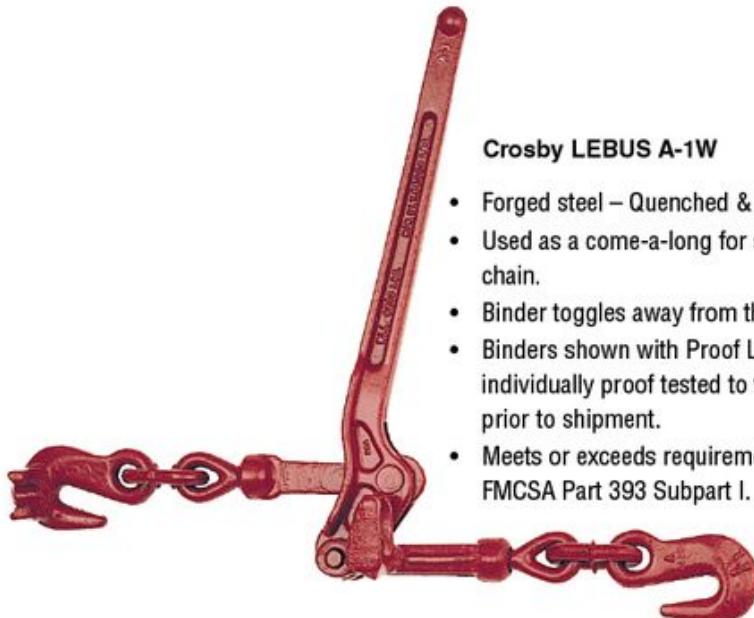
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APPLICATION AND WARNING INFORMATION  
SECTION 17

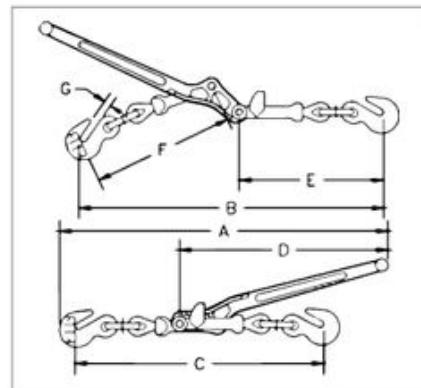
- Extra heavy construction at leverage point to prevent spreading. Heel of binder toggles away from load, permitting easy release.
- Ball and socket swivel joints at hook assemblies permit a straight line pull.
- Binders shown with Proof Loads have been individually proof tested to values shown, prior 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 (in)	Working Load Limit (lb)	Proof Load (lb)	Ultimate Load (lb)	Weight Each (lb)	Handle Length (in)	Take Up (in)	Dimensions (in)						
										A	B	C	D	E	F	G
7-1	1048128	4	5/16-3/8	5400	10800	19000	7.02	16.00	4.50	24.13	22.13	17.88	16.00	10.38	10.38	.50
A-1	1048146	4	3/8-1/2	9200	18400	33000	12.47	18.69	4.50	28.75	25.75	21.25	18.69	12.31	12.38	.63
C-1	1048164	4	1/2-5/8	13000	26000	46000	19.68	21.00	4.75	31.25	29.75	25.00	21.00	14.63	13.75	.72

**Crosby LEBUS A-1W**

- Forged steel – Quenched & Tempered.
- Used as a come-a-long for short take-up on chain.
- Binder toggles away from the load.
- 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.

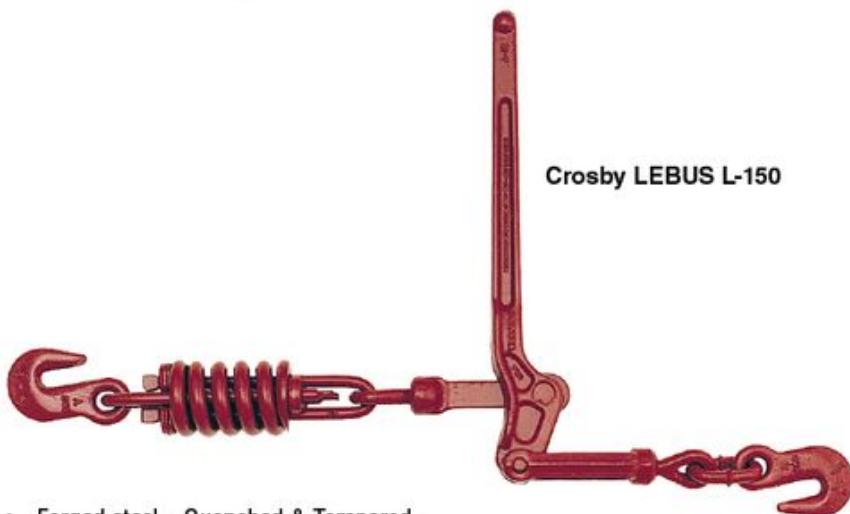


Load Tested

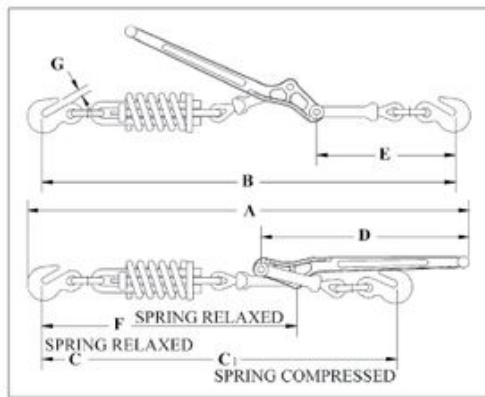
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APPLICATION AND WARNING INFORMATION  
SECTION 17**Crosby LEBUS A-1W Walking Load Binders**

Model	Stock No.	Chain Size (in)	Working Load Limit (lb)	Proof Load (lb)	Ultimate Load (lb)	Weight Each (lb)	Handle Length (in)	Dimensions (in)						
								A	B	C	D	E	F	G
A-1W	1048388	1/2 only	9200	18400	33000	13.10	18.69	28.75	25.75	21.25	18.69	12.31	12.38	.63



Crosby LEBUS L-150



- Forged steel – Quenched & Tempered.
- Spring cushion for load protection, cushions shock and sway.
- Binder toggles away from the load.

**Load Rated****QT**

APPLICATION AND WARNING INFORMATION SECTION 17

### Crosby LEBUS L-150 Snubbing Load Binders

Model	Stock No.	Min-Max Chain Size (in)	Working Load Limit (lb)	Ultimate Load (lb)	Weight Each (lb)	Handle Length (in)	Take Up (in)	Compression Strength of Spring (lb)	Dimensions (in)							
									A	B	C	C1	D	E	F	G
7-12	1048280	5/16 - 3/8	5400	16000	11.25	16.00	4.25	2300	32.75	30.75	28.00	26.50	16.00	10.38	19.00	.50
A-12	1048306	3/8 - 1/2	9200	20000	18.69	18.50	4.50	3300	37.19	34.00	29.50	30.44	18.69	12.31	20.88	.63

### Crosby LEBUS C-188 Spectrum 8®



- Heat treated alloy steel.
- Ends fitted with Crosby A-330 Quenched & Tempered alloy clevis grab hook.
- Finish – self colored.
- Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.

### Crosby LEBUS C-188 Spectrum 8® Alloy Boomer Chains

Chain Size (in)	Stock No.	Working Load Limit (lb)	Standard Length (ft)	Weight Each (lb)
3/8	279889	7100	20	30.28
1/2	279898	12000	20	54.04

### Crosby LEBUS L-180



- Hooks are Forged – Quenched & Tempered.
- Individually Proof Tested.
- Spectrum 8® alloy steel from 3/4" through 1-1/4" (20 - 32mm).
- Meets or exceeds requirements of US DOT FMCSA Part 393 Subpart I.

### Crosby LEBUS L-180 Winchline Tail Chain

Wire Rope Diameter (in)*	Stock No.	Working Load Limit (lb)†	Length (in)	No. of Links	Weight Each (lb)
5/16 - 3/8	1091473	5400	18	11	3.0
1/2 - 5/8	1091482	13000	18	7	6.2
3/4 - 7/8	1091511	34200	24	8	18.2
1 - 1-1/8	1091516	47700	18	5	21.2
1 - 1-1/8	1091525	47700	24	7	23.3
1-1/4	1091532	72300	24	5	40.0

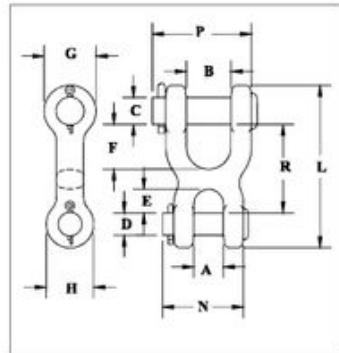
\* Recommended for IPS or XIP (EIP), RRL, FC or IWRC wire rope. † Ultimate Load is 3.5 times the Working Load Limit.



### S-247

#### Double Clevis Link

- All pins alloy steel - Quenched & Tempered.
- Body is forged and heat treated carbon steel.
- Designed for linking all popular sizes of Grade 3 and Grade 4 chain to rings, end links, eye hooks, pad eyes, tractor eye bolts, etc.
- Features quick and easy assembly.



**QT**  
QUENCHED & TEMPERED

### S-247 Double Clevis Link

Chain Size (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)											
				A	B	C	D	E	F	G	H	L	N	P	R
1/4	1013021	2600	.38	.50	.75	.50	.31	.38	.75	1.00	.81	2.81	1.38	1.66	1.50
5/16-3/8	1013049	5400	.81	.56	1.00	.63	.44	.47	1.00	1.19	1.00	3.53	1.75	2.25	1.91
7/16	1013067	7200	1.25	.69	1.13	.69	.56	.59	1.09	1.31	1.19	4.06	2.00	2.50	2.19
1/2	1013085	9200	1.56	.81	1.25	.75	.63	.68	1.25	1.44	1.31	4.53	2.25	2.75	2.47

\* Ultimate Load is 4 times the Working Load Limit.

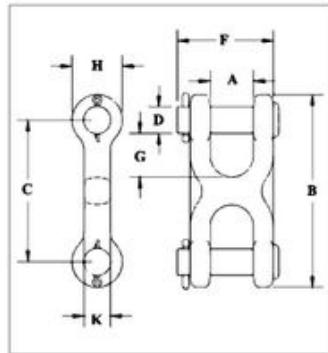
Not Suitable for use with Grade 80 or Grade 100 chain and chain slings used in overhead lifting.



### S-249

#### Twin Clevis Link

- Available in three popular sizes.
- Body is forged and heat treated carbon steel.
- All pins alloy steel - Quenched & Tempered.
- Features quick and easy assembly.
- Twin Clevis design provides a variety of uses and can be used with Grade 3, Grade 4 and Grade 7 chain.



**QT**  
QUENCHED & TEMPERED

### S-249 Twin Clevis Link

Chain Size (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)							
				A	B	C	D	F	G	H	K
1/4-5/16	1012861	4700	.31	.47	2.50	1.56	.38	1.31	.43	.94	.50
3/8	1012889	6600	.44	.53	2.81	1.81	.44	1.53	.50	1.00	.56
7/16-1/2	1012905	11300	.98	.65	3.62	2.31	.56	1.91	.63	1.31	.81

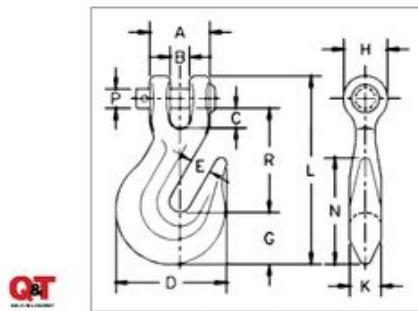
4:1 Design Factor.

Not Suitable for use with Grade 80 or Grade 100 chain and chain slings used in overhead lifting.

**Crosby®**

### A-330 Clevis Grab Hook

- Forged steel - Quenched & Tempered.
- Design factor is 4:1.
- Features quick and easy assembly.
- Designed for Grade 8 chain.



### A-330 Clevis Grab Hooks

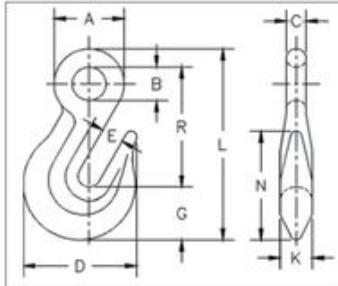
Chain Size (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)											
				(lb)	B	C	D	E	G	H	K	L	N	P	R
1/4	1027249*	3500	.36	1.00	.32	.31	1.81	.34	.88	.72	.47	3.05	1.75	.31	1.64
5/16	1027267*	4700	.62	1.22	.43	.36	2.12	.44	.97	.91	.59	3.66	2.06	.38	2.02
3/8	1027285*	7100	1.00	1.42	.48	.49	2.53	.50	1.17	1.00	.72	4.42	2.34	.44	2.41
1/2	1027329*	12000	2.22	1.88	.57	.51	3.56	.66	1.53	1.25	.78	5.72	2.97	.63	3.19
5/8	1027347	18100	4.41	2.31	.71	.67	4.39	.78	1.78	1.56	1.09	6.83	4.31	.75	4.09
3/4	1027365	24700	6.50	2.62	.94	.94	5.22	.94	2.13	1.88	1.31	8.13	5.09	.88	4.63

\* These A-330 hooks are forged with an "8" designating Grade 80, and are suitable for use with Grade 8 chain in overhead lifting applications as long as the hook is proof-tested as part of the chain sling assembly or as an individual component per ASME B30.9. We recommend the use of the A-1338 / A-1358 which is proof tested and supplied with a proof test certificate.



### A-323 Eye Grab Hook

- Forged steel - Quenched & Tempered.
- Design Factor is 4:1.
- Designed for Grade 8 chain.



### A-323 Eye Grab Hooks

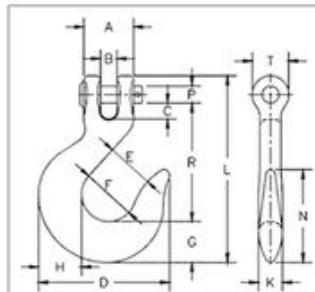
Chain Size (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)											
				(lb)	B	C	D	E	G	H	K	L	N	P	R
1/4	1026384*	3500	.28	1.09	.53	.31	1.81	.34	.88	.47	3.05	1.75	.31	1.88	
5/16	1026400*	4700	.45	1.31	.62	.38	2.12	.44	.97	.59	3.59	2.06	.38	2.28	
3/8	1026428*	7100	.79	1.56	.75	.44	2.53	.50	1.17	.72	4.28	2.34	.44	2.69	
1/2	1026464*	12000	1.75	1.94	.88	.53	3.56	.66	1.53	.78	5.44	2.97	.38	3.38	
5/8	1026482*	18100	3.25	2.48	1.16	.66	4.41	.79	1.89	1.16	6.82	4.25	.42	4.25	
3/4	1026507	24700	5.94	2.88	1.38	.75	5.22	.94	2.13	1.31	8.06	5.09	.51	5.16	

\* These A-323 hooks are forged with an "8" designating Grade 80, and are suitable for use with Grade 8 chain in overhead lifting applications as long as the hook is proof-tested as part of the chain sling assembly or as an individual component per ASME B30.9. We recommend the use of the A-1328 which is proof tested and supplied with a proof test certificate.



### A-331 Clevis Slip Hook

- Forged alloy steel – Quenched & Tempered.
- All pins are alloy steel – Quenched & Tempered.
- Not suitable for use with Grade 80 chain and chain slings used in overhead lifting. For slings or lifting chains, Grade 80 or 100 alloy components are recommended.



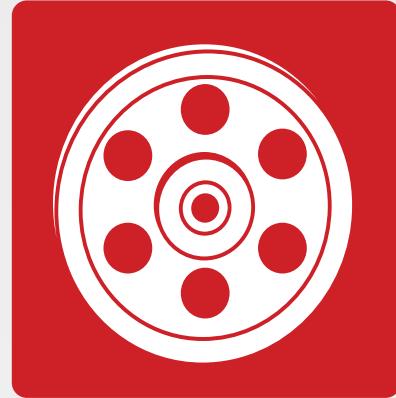
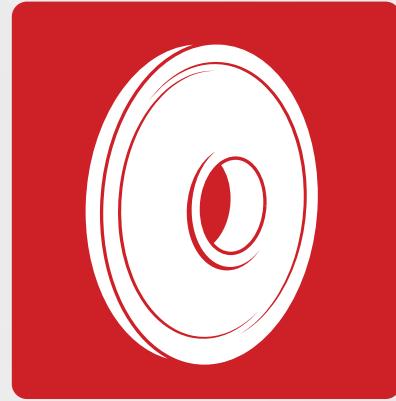
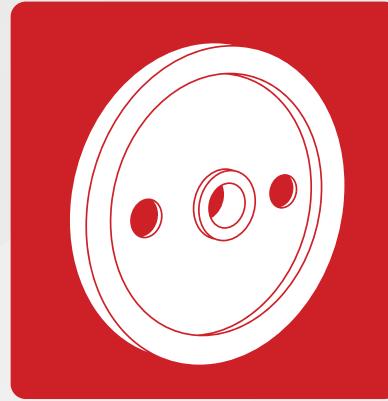
### A-331 Clevis Slip Hooks

Chain Size (in)	Stock No.	Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)													
				A	B	C	D	E	F	G	H	K	L	N	P	R	T
1/4	1027524	2750	0.55	1.06	0.32	0.29	2.76	0.94	1.19	0.81	0.88	0.50	3.94	2.13	0.31	2.58	0.72
5/16	1027542	4300	0.79	1.22	0.43	0.34	3.05	1.06	1.25	0.94	1.00	0.56	4.53	2.24	0.38	2.87	0.97
3/8	1027560	5250	1.21	1.38	0.45	0.44	3.62	1.31	1.50	1.13	1.19	0.66	5.16	2.56	0.44	3.25	1.06
7/16	1027588	7000	2.05	1.73	0.59	0.60	4.33	1.56	1.81	1.38	1.44	0.81	5.98	3.05	0.56	3.70	1.19
1/2	1027604	9000	2.76	1.88	0.57	0.53	4.80	1.69	1.94	1.56	1.63	0.91	6.54	3.44	0.63	4.02	1.31
5/8	1027622	13500	4.74	2.30	0.71	0.71	5.63	2.01	2.38	1.81	1.94	1.09	7.87	4.02	0.75	4.92	1.56
3/4	1027640	19250	11.28	3.19	1.18	1.29	7.38	2.50	3.00	2.38	2.50	1.44	10.02	5.06	1.00	6.09	2.09

4:1 Design Factor.

# SHEAVES

Roll-forged sheaves that provide an upset metal flow without creating a stress zone at the splitting point.



theCrosby group®

[thecrosbygroup.com](http://thecrosbygroup.com)

## CROSBY VALUE ADDED

**McKissick® Roll-Forged Heavy Duty Sheaves** are made by upsetting and forming the groove and flange walls in multiple steps, eliminating the need to split and weaken the groove. This exclusive forging process adds extra strength to the critical groove section.

**McKissick Domed Reinforced Extreme Duty Roll Forged Sheaves** are welded in a circular pattern thus eliminating the higher stresses created by welding ribs or other forms of stiffeners.

**McKissick Heavy Duty Sheaves** are available with machined groove rings or machine forged rings utilized for the rim or hub.

**McKissick Heavy Duty Closed-Die Forged Sheaves** offer the performance of closed-die forging with the precision machining capabilities of CNC machinery.

**McKissick Normal Duty Malleable Cast Sheaves** provide economical solutions for normal service applications.

**McKissick Sheaves** come in a variety of sizes to suit your specific applications. Crosby offers many sheaves as standard and these are shown in the pages that follow. For applications that require unique specifications, Crosby can make minor modifications to many of the sheaves listed at a reasonable charge. We can also custom design and manufacture sheaves to your exact requirements. McKissick roll forged sheaves can be furnished balanced or with lightening holes at a reasonable charge on request.

**Crosby's hardening technique** is a science. It provides a precise maximum hardness for wear-resistance across the wire rope contact area. The McKissick sheave groove is flame hardened to a minimum 35 Rockwell C for a 140° contact area with the wire rope (upon special request the McKissick sheave groove can be flame hardened to a minimum 50 Rockwell C for a 150° contact area with the wire rope). The solid steel plate provides the ideal surface for flame hardening and a closer tolerance fit to the wire rope to reduce fatigue and wear.

The **McKissick hub** is stepped to eliminate stress failure in the weld, common in traditional hub designs. The hub is pressed into place with complete metal-to-metal contact. This helps ensure an accurate alignment to the hub's axis so there is no wobble or lopping of the rotating sheave. The precision aligned hub / sheave wheel combination adds to the bearing life and keeps the sheave on the job longer.

## McKISSICK® STANDARD BEARINGS



## ORDERING INSTRUCTIONS

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

### Blocks

- Wire rope diameter
- Sheave OD
- Shaft or bore size
- Bearing type or plain 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.