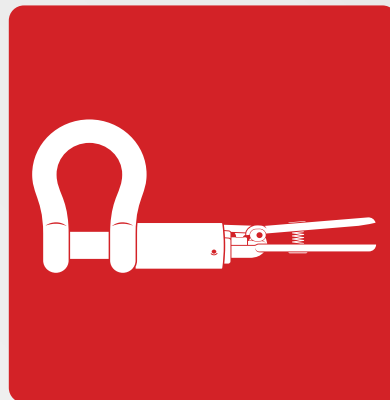


ROV

Manufactured to withstand the toughest environments on earth.

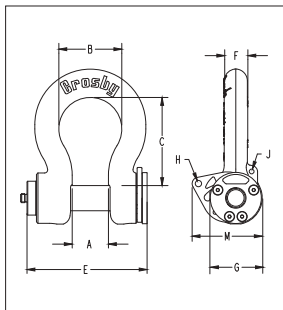




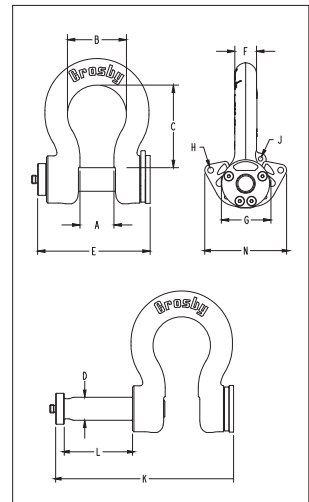
G-2100
Release & Retrieve
ROV Shackle with
QUIC-Thread Bolt



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



- Forged alloy bow with an industry best 6 to 1 performance design factor.
- Patented captured bolt can withstand over 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

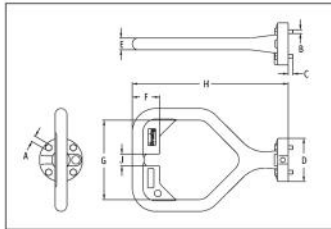
Working Load Limit (t)*	Stock No.	Weight Each (lb)	Dimensions (in)											
			A	B	C	D	E	F	G	H	J	K	L	N
9.5	2038740	11.4	1.81	2.91	4.25	1.25	7.33	1.16	2.68	0.38	0.31	11.54	4.21	4.97
12	2038763	13.8	2.03	3.25	4.69	1.38	7.75	1.29	3.00	0.38	0.31	12.25	4.50	4.97
17	2038786	23.7	2.38	3.88	5.75	1.63	8.54	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.

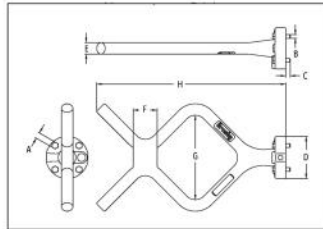




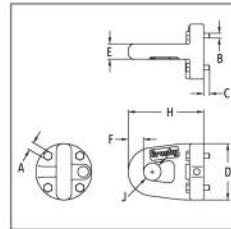
"D" Handle



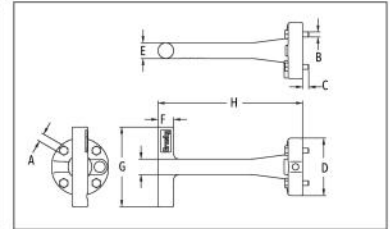
"F" Handle



"Eye" Handle



"T" Handle



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

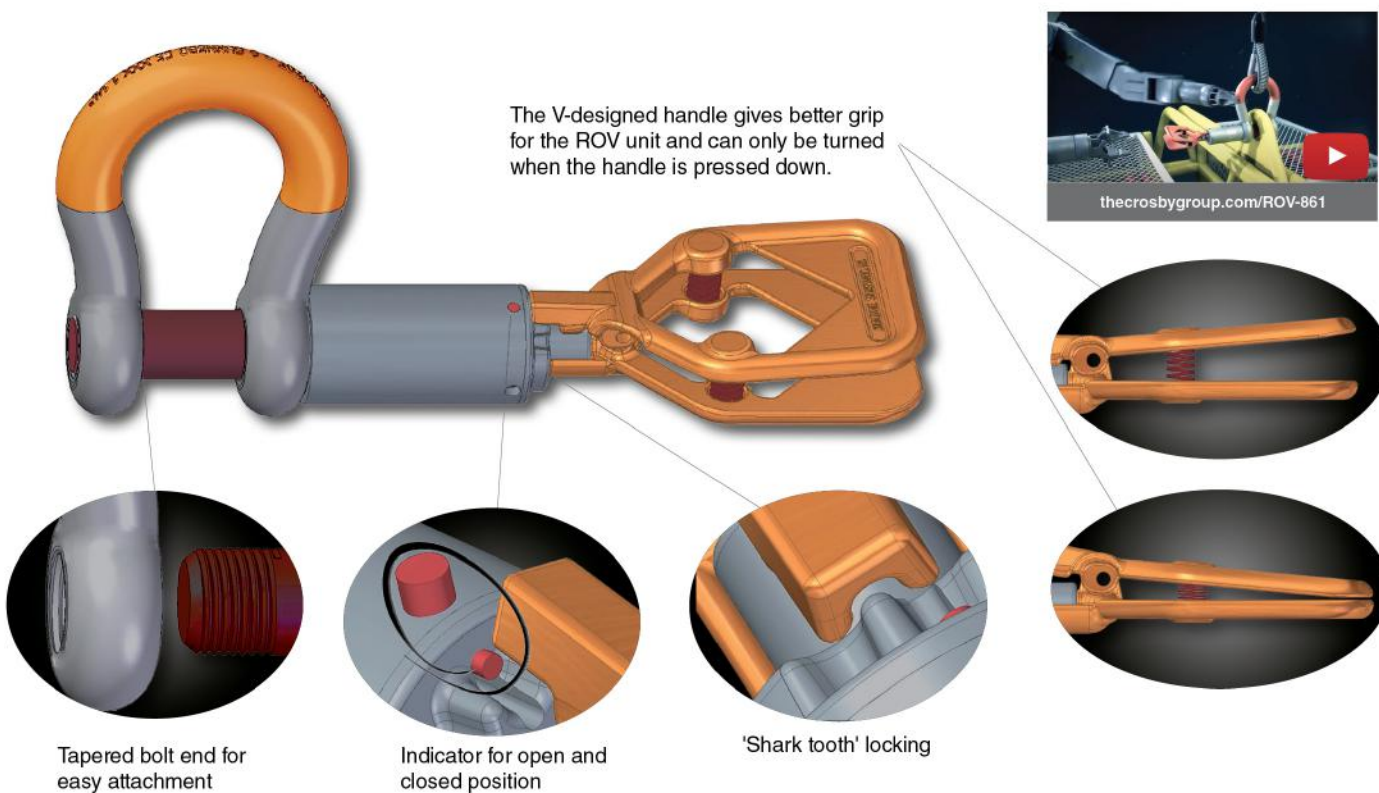
G-42100H ROV Handles

Handle Style	Stock No.	Weight Each (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

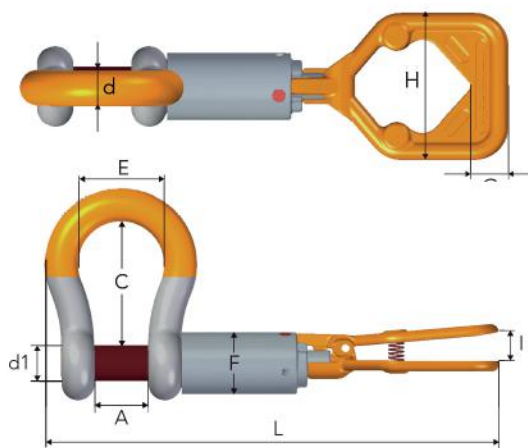
The ROV Retrieve Shackle is designed for smooth and easy use in retrieving and releasing subsea lifting and rigging operations. It has no loose parts in closed or opened position. Therefore there is no need for wires or monkey fists. The high visibility handles are close-die forged and has double safety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

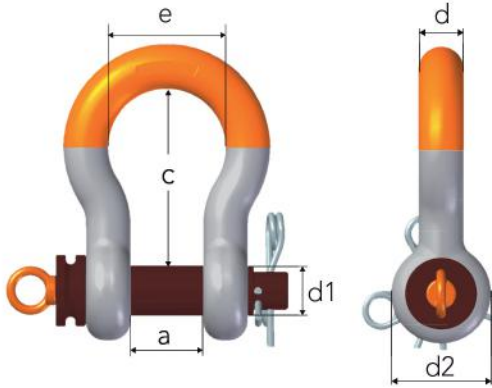
- Dim. according to EN 13889
- High tensile steel, Quenched & Tempered
- All load bearing parts hot-dip galvanized
- 6:1 Design Factor
- Test certificate and traceable 3.1 certificate supplied upon request.
- Temperature: -40 °F to 392 °F



CE

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



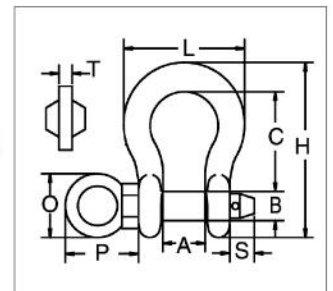
Stock No.	WLL metric tonnes	d1	d	a	c	d2	e	Weight (lb)
A086322	6.5	0.98	0.87	1.46	3.31	2.05	2.28	3.52
A086328	9.5	1.26	1.10	1.81	4.25	2.52	2.91	7.49
A086332	12.0	1.38	1.26	2.05	4.69	2.83	3.27	11.0
A086338	17.0	1.65	1.50	2.36	5.75	3.31	3.86	17.1
A086345	25.0	1.97	1.77	2.91	7.01	4.13	5.00	30.6
A086352	35.0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

Q&T

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 Rated

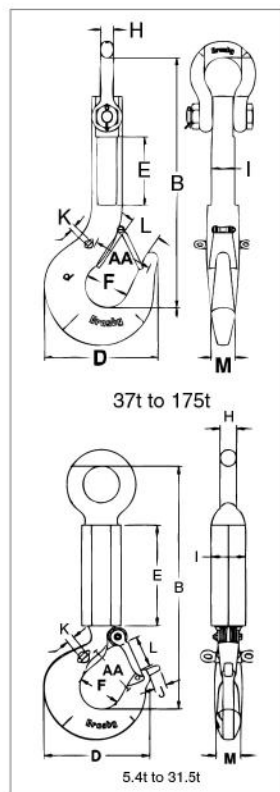
Fatigue Rated

QUIC-CHECK®

QT

CE

APPLICATION AND WARNING INFORMATION
SECTION 17



L-562A ROV Eye Shank Hooks

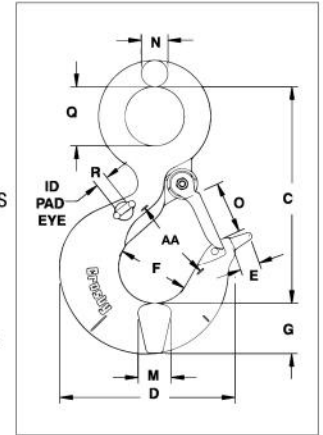
Working Load Limit (t)	Hook ID Code	L-562A Stock No.	Weight Each (lb)	Dimensions (in)											Replacement Latch Stock No.
				I	E	B	D	J	F	M	H	L	K	AA**	
†5.4	IA	1297722	21	2.56	9.84	16.57	4.84	.39	2.00	1.13	.88	1.36	.25	2.50	1096515
†11.5	KA	1297792	33	2.56	9.84	20.39	7.54	1.18	3.00	1.63	1.25	2.08	.38	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

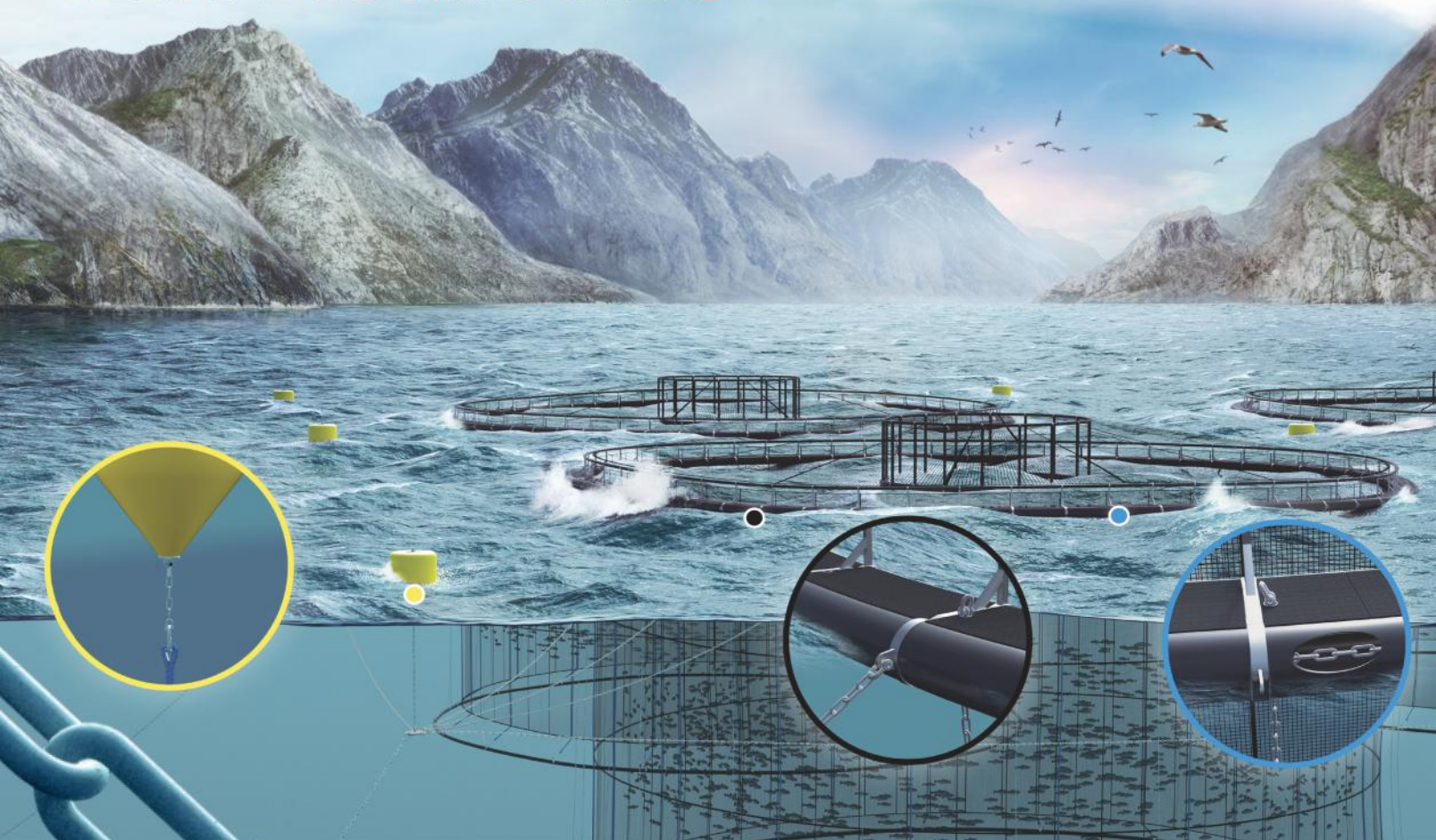
APPLICATION AND WARNING INFORMATION
SECTION 17

L-320R ROV Hooks

Working Load Limit (t)*	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	10.08	8.30	1.18	3.25	2.59	1.94	1.27	2.27	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