

## **Crosby**<sup>®</sup> Hoist Hooks

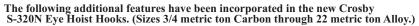
#### S-320 & S-320N Eye Hooks



S-320

#### All Crosby® 320 Eye Hoist Hooks incorporate the following features:

- The most complete line of Eye hoist hooks.
- · Available in carbon steel and alloy steel.
- Designed with a 5:1 Design Factor for (Carbon Steel); 4:5:1 Design Factor for 30t 60t (Alloy Steel). Eye hooks are load rated.
- Proper design, careful forging and precision controlled quenched and tempering give maximum strength without excessive weight and bulk.
- Every Crosby® Eye Hook has a pre-drilled cam which can be equipped with a latch. Even years after purchase of the original hook, latch assemblies can be added.
- Chemical analysis and tensile tests performed on each PIC to verify chemistry and mechanical properties.
- Type Approval and certification in accordance with ABS 2007 Steel Vessel Rules 1-1-17.7, and ABS Guide for Certification of Cranes.
- Hoists hooks incorporate two types of strategically placed markings forged into the product which address two (2) *QUIC-CHECK*\* features: Deformation Indicators and Angle Indicators.



- Metric Rated at 5:1 Design Factor for (Carbon Steel); 5:1 Design Factor for 1t 22 (Alloy Steel).
- Can be proof tested to 2 times the working Load Limit.
- · Low profile hook tip.
- New integrated latch (S-4320) meets the World class standard for lifting.
  - Heavy duty stamped latch interlocks with the hook tip.
  - High cycle, long life spring.
  - When secured with proper cotter pin through the hold in the tip of hook, meets the intent of OSHA Rule 1926.1431(g) and 1926.1501(g) for personnel hoisting.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.



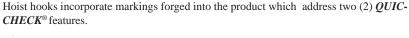
S-320N

Working I	oad Limit (t)		E	ye Hook Stock Numbe	r	Weight Each	Re	placement Latch	Kits
Carbon	Alloy	Hook ID Code	Carbon S.C. S-320C/S-320CN	Carbon Galv G-320N	Alloy S.C. S-320-A/S-320AN	(lbs)	S-4320 Stock Number	PL Stock Number	SS-4055 Stock Number
.75	1	#D	1022200	1022208	1022375	.61	1096325	-	-
1	1.5	#F	1022211	1022219	1022386	.89	1096374	-	-
1.5	2	#G	1022222	1022230	1022397	1.44	1096421	-	-
2	3	#H	1022233	1022241	1022406	2.07	1096468	-	-
3	5	#I	1022244	1022249	1022419	4.30	1096515	1092000	-
5	7	#J	1022255	1022262	1022430	8.30	1096562	1092001	-
7.5	11	#K	1022264	1022274	1022441	15.00	1096609	1092002	-
10	15	#L	1022277	1022285	1022452	20.77	1096657	1092003	-
15	22	#N	1022288	1022296	1022465	39.50	1096704	1092004	-
20	30	0	1023289		1023546	60.00	-	1093716	1090161
25	37	P	1023305		1023564	105.00	-	1093717	1090189
30	45	S	1023323		1023582	148.00	-	1093718	1090189
40	60	Т	1023341		1023608	228.00	-	1093719	1090205

<sup>\*</sup> Eye Hooks (3/4 TC - 22 TA), Proof load is 2 times Working Load Limit. Eye Hooks (20 TC - 60 TA). All carbon hooks - average straightening load (Ultimate Load) is 5 times Working Load Limit. Alloy eye hooks 1 ton through 22 ton - average straightening load (Ultimate Load) is 5 times Working Load Limit. Alloy eye hooks 30 tons through 60 tons - average straightening load (Ultimate Load) is 4.5 times Working Load Limit.

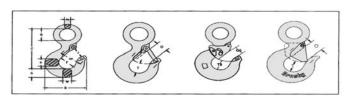
# New 320N style hook.





- Deformation Indicators Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a QUIC-CHECK® measurement to determine if the throat opening has changed, thus indicating abuse or overload. To check, use a measuring device (i.e., tape measure) to measure the distance between the marks. The marks should align to either an inch or half-inch increment on the measuring device. If the measurement does not meet this criteria, the hook should be inspected further for possible damage.
- Angle Indicators Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.

S-320CN



#### **S320 HOOK SPECIFICATIONS**

Hook ID*						Di	mensio	ns (in.)						
Code	С	D	F	G	J	К	M	N	О#	O2##	Q	T#	T2##	AA
D	3.34	2.83	1.25	.73	.90	.63	.63	.36	.89	-	.75	.87	-	1.50
F	3.81	3.11	1.38	.84	.93	.71	.71	.42	.91	-	.91	.98	-	2.00
G	4.14	3.53	1.50	1.00	1.00	.88	.88	.55	1.00	-	1.13	1.03	-	2.00
Н	4.69	3.97	1.63	1.13	1.13	.94	.94	.58	1.09	-	1.25	1.16	-	2.00
I	5.77	4.81	2.00	1.44	1.47	1.31	1.31	.72	1.36	1.00	1.56	1.53	1.50	2.50
J	7.37	6.27	2.50	1.81	1.75	1.66	1.66	.90	1.61	1.31	2.00	1.96	1.88	3.00
K	9.07	7.45	3.00	2.25	2.29	1.88	1.63	1.11	2.08	1.81	2.44	2.47	2.25	4.00
L	10.08	8.30	3.25	2.59	2.50	2.19	1.94	1.27	2.27	2.00	2.84	2.62	2.31	4.00
N	12.53	10.30	4.25	3.00	3.30	2.69	2.38	1.56	3.02	2.75	3.50	2.83	2.56	5.00
О	14.06	13.62	5.00	3.62	4.00	3.00	3.00	1.75	3.25	-	3.50	3.44	-	6.50
P	18.19	14.06	5.38	4.56	4.25	3.75	3.19	2.00	3.00	-	4.50	3.88	-	7.00
S	20.12	15.44	6.00	5.06	4.75	4.50	3.25	2.18	3.38	-	4.94	4.75	-	8.00
Т	23.72	18.50	7.00	6.00	5.75	5.50	3.91	2.53	4.12	-	5.69	5.69	-	10.00

\* Eye Hooks (3/4 TC-22TA), Proof load is 2 times Working Load Limit. Eye Hooks (20TC-60TA). All carbon hooks - average straightening load (Ultimate Load) is 5 times Working Load Limit. Alloy eye hooks 1t through 22t - average straightening load (Ultimate Load) is 5 times Working Load Limit. Alloy eye hooks 30t through 60t - average straightening load (Ultimate Load) is 4.5 times Working Load Limit. # 3/4tC - 22tA dimensions shown are for S-4320 Latch Kits. Dimensions for sizes 20t carbon and larger are for PL Latch Kits. ## Dimensions are for PL-N Latch Kits.

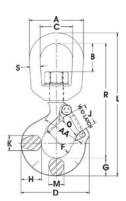


## Crosby® Swivel Hooks

#### S-322CN/S-322AN



- · Forged Quenches and Tempered.
- Proper design, careful forging, and precision controlled quench and tempering gives maximum strength without excessive weight and bulk.
- Low profile hook tip designed to utilize Crosby S-4320 or PL-N latch kit. Even years after purchase of the original hook, latch assemblies can be added.
- · Hoist hooks incorporate markings forged into the product which address two (2) QUIC-CHECK® features:- Deformation Indicators & Angle Indicators.
- Deformation Indicators Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a QUIC-CHECK® measurement to determine if the throat opening has changed, thus indicating
- Angle Indicators Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.
- Type Approval and certification in accordance with ABS 2007 Steel Vessel Rules 1-1-17.7, and ABS Guide for Certification of Cranes.



(L-322 AN Shown)

This hook is a positioning device and is not intended to rotate under load. Use in corrosive environment requires shank and nut inspection in accordance with ASME B30.10-1.10.4 (b)(5)(c) 2009.

Work Load L (ton	imit*	S-322CN Stock	S-322AN Stock	Weight Each							Dime	ensions	(in.)							Rep. Latch
322C	322A	Number	Number	(lbs)	A	В	С	D	F	G	Н	J	К	L	M	O+	R	s	AA	Stock Number
3/4	1	1048600	1048804	.75	2.00	.82	1.25	2.86	1.25	.73	.81	.93	.63	5.66	.63	.89	4.55	.38	1.50	1096325
1	1-1/2	1048609	1048813	1.25	2.50	1.31	1.50	3.15	1.38	.84	.94	.97	.71	6.71	.71	.91	5.37	.50	2.00	1096374
1-1/2	2	1048618	1048822	2.25	3.00	1.50	1.75	3.59	1.50	1.00	1.16	1.06	.88	7.75	.88	1.00	6.12	.63	2.00	1096421
2	3	1048627	1048831	2.30	3.00	1.50	1.75	4.00	1.62	1.13	1.31	1.19	.94	8.25	.94	1.09	6.50	.63	2.00	1096468
3	5	1048636	1048837	4.96	3.50	1.64	2.00	4.84	2.00	1.44	1.63	1.50	1.31	9.69	1.13	1.36	7.50	.75	2.50	1096515
5	7	1048645	1048854	10.29	4.56	2.29	2.50	6.28	2.50	1.81	2.06	1.78	1.66	12.47	1.44	1.61	9.63	1.00	3.00	1096562
7-1/2	11	1048654	1048865	19.40	5.00	2.53	2.75	7.54	3.00	2.25	2.63	2.41	1.88	14.75	1.63	2.08	11.37	1.13	4.00	1096609
10	15	1048663	1048877	23.25	5.62	2.48	3.12	8.34	3.25	2.59	2.94	2.62	2.19	16.40	1.94	2.27	12.25	1.25	4.00	1096657
15	22	1048672	1048886	47.00	7.10	3.76	4.10	10.34	4.25	3.00	3.50	3.41	2.69	21.34	2.38	3.02	16.71	1.50	5.00	1096704
	30		1025688	70.50	7.10	3.76	4.10	13.62	5.00	3.61	4.63	4.00	3.00	23.25	3.00	3.25	18.01	1.50	6.50	1093716

\*Note: Carbon swivel hooks .75tC-15tC: proof load is 2 times working load limit. Designed with a 5 to 1 design factor. Alloy swivel hooks 1tA-22A: proof load is 2.5 times working load limit. Designed with a 4.5 to 1 design factor. Alloy swivel hook 30tA: proof load is 2 times working load limit. Designed with a 4 to 1 design factor.

+ Dimensions for hooks 3 4t carbon thru 22t alloy are for S-4320 latch kits. Dimensions for hooks 31.5t alloy are for PL Latch Kit.

Workin Limit (		L-322 CN	L-322 AN	Weight Each							Din	ension	s (in.)							Rep. Latch Stock
Carbon	Alloy	Stock Number	Stock Number	(lbs)	A	В	С	D	F	G	Н	J	K	L	M	O+	R	s	AA	Number
3/4	1	1048603	1048807	.75	2.00	.82	1.25	2.86	1.25	.73	.81	.93	.63	5.66	.63	.89	4.55	.38	1.50	1096325
1	1-1/2	1048612	1048816	1.25	2.50	1.31	1.50	3.15	1.38	.84	.94	.97	.71	6.71	.71	.91	5.37	.50	2.00	1096374
1-1/2	2	1048621	1048825	2.25	3.00	1.50	1.75	3.59	1.50	1.00	1.16	1.06	.88	7.75	.88	1.00	6.12	.63	2.00	1096421
2	3	1048630	1048834	2.30	3.00	1.50	1.75	4.00	1.62	1.13	1.31	1.19	.94	8.25	.94	1.09	6.50	.63	2.00	1096468
3	5	1048639	1048840	4.96	3.50	1.64	2.00	4.84	2.00	1.44	1.63	1.50	1.31	9.69	1.13	1.36	7.50	.75	2.50	1096515
5	7	1048648	1048859	10.29	4.56	2.29	2.50	6.28	2.50	1.81	2.06	1.78	1.66	12.47	1.44	1.61	9.63	1.00	3.00	1096562
7-1/2	11	1048657	1048868	19.40	5.00	2.53	7.54	7.54	3.00	2.25	2.63	2.41	1.88	14.75	1.63	2.08	11.37	1.13	4.00	1096609
10	15	1048666	1048880	23.25	5.62	2.48	3.12	8.34	3.25	2.59	2.94	2.62	2.19	16.40	1.94	2.27	12.25	1.25	4.00	1096657
15	22	1048675	1048889	47.00	7.10	3.76	4.10	10.34	4.25	3.00	3.50	3.41	2.69	21.34	2.38	3.02	16.71	1.50	5.00	1096704
-	30	-	-	70.50	7.10	3.76	4.10	13.62	5.00	3.61	4.63	4.00	3.00	23.25	3.00	3.25	18.01	1.50	6.50	1093716

\*Note: Carbon swivel hooks .75tC-15tC: proof load is 2 times working load limit. Designed with a 5 to 1 design factor. Alloy swivel hooks 1A-22A: proof load is 2.5 times working load limit. Designed with a 4.5 to 1 design factor. Alloy swivel hook 30tA: proof load is 2 times working load limit. Designed with a 4 to 1 design factor.

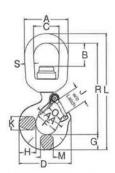
+ Dimensions for hooks 3 /4t carbon thru 22t alloy are for S-4320 latch kits. Dimensions for hooks 31.5t alloy for PL latch kit.



### S-3322B Swivel Hooks with Bearing

New anti-friction bearing design allows hook to rotate freely under load.

- Capacity ranging from 2 through 15 metric tonnes.
- Forged Quenched and Tempered.
- Proper design, careful forging, and precision controlled quench and tempering gives maximum strength without excessive weight and bulk.
- Low profile hook tip designed to utilize Crosby S-4320 or PL-N latch kit. Simply purchase the latch assemblies listed and shown. Even years after purchase of the original hook, latch assemblies can be added.
- S-3322 hooks incorporate markings forged into the product which addresses two
   QUIC-CHECK® features:
  - **Deformation Indicators** Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a QUIC-CHECK® measurement to determine if the throat opening has changed, thus indicating abuse or overload.
  - Angle Indicators Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles two sling legs.



For other swivel hooks designed to rotate under load, contact a Crosby Engineer. Use in corrosive environment requires shank and nut inspection in accordance with ASME B30.10-1.10.4 (b)(5)(c) 2009.

Working									I	Dimensi	ons (in.)	)							Rep.
Load Limit (tons)	S-3322B Stock Number	L-3322B Stock Number +	Weight Each (lbs)	A	В	C	D	F	G	Н	J	K	L	M	0	R	s	AA	Latch Stock Number
2	1028605	1028609	2.5	3.00	1.50	1.75	3.59	1.50	1.00	1.16	1.06	.88	7.64	.88	1.00	6.01	.63	2.00	1096421
3	1028614	1028618	3.8	3.50	1.56	2.00	4.00	1.62	1.13	1.31	1.19	.94	8.60	.94	1.09	6.72	.75	2.00	1096468
5	1028623	1028627	7.0	4.00	1.56	2.25	4.84	2.00	1.44	1.63	1.50	1.31	10.32	1.13	1.36	8.00	.88	2.50	1096515
7	1028632	1028636	14.0	5.00	1.94	2.75	6.27	2.50	1.81	2.06	1.78	1.66	12.84	1.44	1.61	9.90	1.13	3.00	1096562
11	1028641	1028645	22.3	5.62	2.05	3.12	7.54	3.00	2.25	2.63	2.41	1.88	15.24	1.63	2.08	11.74	1.25	4.00	1096609
15	1028650	1028654	36.0	7.12	3.62	4.10	8.33	3.25	2.59	2.94	2.62	2.19	18.64	1.94	2.27	14.41	1.50	4.00	1096657
		* Note: Pr	roof load i	s 2.5 times	workin	g load lii	nit. Des	signed w	ith a 4.5	to 1 des	sign fact	or. + S	Supplied	with l	atch at	tached.			



## Crosby® SHUR-LOC® Hooks



#### S1316 Hook

#### All SHUR-LOC® hooks have the following features:

- · Forged Alloy Steel Aquenches and Tempered.
- · Recessed trigger design is flush with the hook body, protecting the trigger from potential
  - damage.
     Easy to operate with enlarged thumb access.
- · Positive Lock Latch is Self-Locking when hook is loaded.
- The SHUR-LOC® hook, if properly installed and locked, can be used for personnel lifting applications and meets the intent of OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4) (iv)(B).

#### Eye Style incorporates these added features:

- Individually Proof Tested to 2-1/2 times the 4:1 Working Load Limit with certification.
- Fatigue rated at 1-1/2 times the Working Load Limit at 20,000 cycles.
- 25% stronger than grade 80.
- Suitable for use with Grade 100 and grade 80 chain.
- Designed with "Engineered Flat" to connect to S-1325 chain coupler.

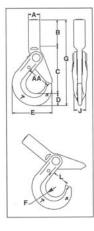
#### S1318 Hook

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

	4	- 11	
2	\	1	
9		Į,	
0	0	_	)
		(2)	
֡		AA	AA I

	Chain		XX	ire Rope IP IWRC anical Splice	S-1316 Stock					Di	mensio	18			
(in.)	(mm)	Working Load Limit (lbs)*	Size (in.)	Working Load Limit (lbs) 5:1	Number	Weight Each (lbs)	A	С	D	E	F	Н	J	L	AA
-	6	3200	5/16	2200	1022896	.85	.78	3.95	.79	2.60	.67	.31	.63	1.14	1.50
1/4-5/16	7-8	5700	7/16	4200	1022914	1.80	1.08	5.31	1.10	3.50	.87	.39	.81	1.48	2.00
3/8	10	8800	1/2	5600	1022923	3.40	1.30	6.57	1.17	4.39	1.10	.51	.94	1.83	2.50
1/2	13	15000	3/4	12400	1022932	6.00	1.65	8.23	1.67	5.45	1.26	.67	1.16	2.22	3.00
5/8	16	22600	7/8	16600	1022941	15.1	2.20	10.06	2.04	6.56	1.50	.87	1.50	2.65	3.50
3/4	18-20	35300	1	22000	1022942	19.0	2.60	10.77	2.22	7.76	2.01	.87	2.03	3.52	-
7/8	22	42700	1-1/8	26500	1022943	28.0	2.87	12.49	2.45	8.75	2.27	.98	2.20	3.83	-
1	26	59700	-	-	1022944	49.5	3.15	14.60	3.21	9.87	2.46	1.26	2.68	4.09	-

<sup>\*</sup> Minimum Ultimate Load is 4 times the Working Load Limit.



#### S-1318A SHUR-LOC® Shank Hooks

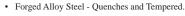
Chain	Size	S-1318A	Frame	Grade 100					Dimens	ions (in	.)				Weight
(in.)	(mm)	Stock Number	Code	Alloy Chain Working Load Limit (lbs)*	<b>A</b> +	В	С	D	E	F	G	J	L	AA	Each (lbs)
_	6	1098200	D	3200	.79	2.16	3.31	.79	2.60	.67	6.26	.63	1.16	1.50	1.00
1/4- 5/16	7-8	1098209	G	5700	1.00	2.40	4.16	1.10	3.51	.87	7.66	.81	1.48	2.00	1.99
3/8	10	1098218	Н	8800	1.14	2.95	5.14	1.17	4.39	1.10	9.26	.94	1.83	2.50	3.56
1/2	13	1098227	I	15000	1.34	3.35	6.31	1.67	5.49	1.26	11.33	1.16	2.22	3.00	7.00
5/8	16	1098236	J	22600	1.63	3.94	7.28	2.04	6.55	1.50	13.26	1.50	2.65	3.50	16.00
	*	Ultimate Lo	ad is 4 tir	nes the Working	Limit b	ased on	Grade 1	00 chair	. # Dim	ension	before m	achining	(as forge	ed).	



# Crosby® SHUR-LOC® Swivel Hooks

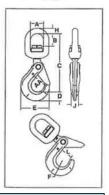
S-1326





- Individually Proof Tested at 2-1/2 times the 4:1 Working Load Limit with
- Recessed trigger design is flush with the hook body, protecting the trigger from potential damage.
  - Easy to operate with enlarged thumb access.
- Positive Lock Latch is Self-Locking when hook is loaded.
- · Rated for both Wire Rope and use with Grade 80/100 Chain.
- · G-414 Heavy Thimble should be used with wire rope slings.
- Trigger repair Kit available (S-4316). Consists of spring, roll pin and trigger.
- S-13326 Swivel Hook utilizes anti-friction bearing design which allows hook to rotate freely under load.
- · Fatigue rated.
- The SHUR-LOC® hook, if properly installed and locked, can be used for
  personnel lifting applications and meets the intent of OSHA Rule 1926.1431(g)(1)
  (i)(A) and 1926.1501(g)(4)(iv)(B).
- "Look for the Platinum Color Crosby Grade 100 Alloy Products".





#### S-1326 Shur-Loc® Swivel Hooks

Chain	Size	Grade 100 Alloy Chain Working Load Limit	Wire Rope XXIP IWRC Mechanical Splice	S-1326	Weight					Dimensi	ions (in.)				
(in.)	(mm) (lbs) 4:1* Workin Load Lin (lbs) 5:1 6 3200 2560	Working Load Limit (lbs) 5:1*	Stock Number	Each (lbs)	A	В	С	D	E	F	Н	J	L	AA	
-	6	3200	2560	1004304	1.26	1.50	1.32	6.13	.79	2.60	.67	.50	.63	1.13	1.50
1/4-5/16	7-8	5700	4560	1004313	2.62	1.75	1.59	7.60	1.10	3.50	.87	.63	.81	1.38	2.00
3/8	10	8800	7040	1004322	4.70	2.00	1.73	8.83	1.17	4.39	1.10	.75	.94	1.75	2.50
1/2	13	15000	12000	1004331	8.64	2.50	2.38	11.20	1.67	5.45	1.26	1.00	1.16	2.11	3.00
5/8	16	22600	18000	1004340	17.00	2.75	2.53	12.90	2.05	6.56	1.50	1.13	1.50	2.49	3.50
3/4	18-20	35300	28240	1004349	24.00	2.83	2.52	14.10	2.22	7.76	2.01	1.10	2.03	3.52	5.00
7/8	22	44100	35280	1004358	29.00	3.44	3.19	16.40	2.45	8.75	2.26	1.30	2.20	3.83	6.00
		Suitab	le for infrequent	, non-continuo	ous rotation un	der load.	* Ultima	te Load i	s 4 times	the Work	ing Load	Limit.			

#### S-13326 Shur-Loc® Swivel Hooks with Bearing

Chain	Size	Grade 100 Alloy Chain Working	Wire Rope XXIP IWRC Mechanical Splice							Dimensi	ons (in.)				
(in.)	(mm)	Load Limit (lbs) 4:1*	Working Load Limit (lbs) 5:1*	S-13326 Stock Number	Weight Each (lbs)	A	В	С	D	E	F	Н	J	L	AA
-	6	3200	2560	1004404	1.50	1.50	1.14	6.17	.79	2.60	.67	.50	.63	1.13	1.50
1/4-5/16	7-8	5700	4560	1004413	3.10	1.75	1.52	7.54	1.10	3.50	.87	.63	.81	1.44	2.00
3/8	10	8800	7040	1004422	5.26	2.00	1.61	8.88	1.16	4.35	1.10	.75	.94	1.83	2.50
1/2	13	15000	12000	1004431	11.22	2.50	2.03	11.11	1.66	5.45	1.26	1.00	1.16	2.19	3.00
5/8	16	22600	18000	1004440	17.32	2.75	1.98	12.90	2.05	6.56	1.50	1.13	1.50	2.61	3.50
			Suitable for	frequent rotati	ion under load	* Ultim	ate Load	is 4 times	the Worl	king Load	l Limit.				

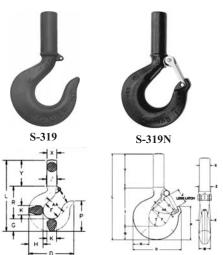
Use in corrosive environment requires shank and nut inspection in accordance with ASME B 30.10-1.10.4 (b)(5)(c) 2009.



## Crosby® Shank Hooks

- The most complete line of shank hoist hooks. Available 3/4 to 300 metric tons.
- · Hook Identification code forged into each hook.
- · Quenches and Tempered.
- · Available in carbon steel, alloy steel and bronze.
- Proper design, careful forging, and precision controlled quench and tempering give maximum strength without excessive weight and bulk.
- Every Crosby Shank Hook has a pre-drilled cam which can be equipped with a latch. Simply purchase the latch assemblies. Even years after purchase of the original hook, latch assemblies can be added.
- Type Approval and certification in accordance with ABS 2006 Steel Vessel Rules 1-1-17.7, and ABS Guide for Certification of Cranes.

Patented McKissick Split-Nut retention system available.



	ng Loac	l Limit	Hook ID	Shank Ho	oks Stock	Number	Shank Length	Weight Each	Re	p. Latch l	Kits
Carbon	Alloy	Bronze	Code	Carbon S-319C & S-319N	Alloy S-319A & 319AN	Bronze S-19BN	++	(lbs)	S-4320 Stock #	PL Stock #	SS-4055 Stock#
3/4	1	.5	#D	1028505	1028701	1028900	Std.	.50	1096325	-	-
1	1.5	.6	#F	1028514	1028710	1028909	Std.	.75	1096374		
1-1/2	2	1	#G	1028523	1028723	1028918	Std.	1.00	1096421	_	
2	3	1.4	#H	1028532	1028732	1028927	Std.	1.82	1096468	_	
3	5	2	#I	1028541	1028741	1028936	Std.	3.69	1096515	1092000	-
5	7	3.5	#J	1028550	1028750	1028945	Std.	7.25	1096562	1092001	
7-1/2	-11	5	#K	1028563	1028765	1028954	Std.	13.49	1096609	1092002	
10	15	6.5	#L	1028590	1028792	1028981	Std.	21.90	1096657	1092003	
15	22	10	#N	1028599	1028801	1028990	Std.	38.40	1096704	1092004	
20	30	_	0	1024386	1024803	_	Std.	72.00		1093716	1090161
20	30		0	1024402	1024821		Long	85.50		1093716	1090161
25	37	_	P	1024420	1024849		Std.	134.00		1093717	1090189
25	37		P	1024448	1024867		Long	172.00		1093717	1090189
30	45	_	s	1024466	1024885		Std.	182.00		1093718	1090189
30	45		S	1024484	1024901		Long	214.00		1093718	1090189
40	60	_	Т	1024509	1024929		Std.	268.00		1093719	1090205
40	60		Т	1024545	1024965		Long	312.00		1093719	1090205
50	75	-	U	1024563	1024983		Std.	390.00		1093720	
50	75	-	U	1024581	1025009		Long	426.00		1093720	
	100		w	_	1025027		Std.	610.00		1093721	
_	100	_	W	_	1025045		Long	675.00		1093721	
	150		x		1025063		Std.	735.00		1093721	
-	200	-	Y	-	1025081	-	Std.	1020.00	-	1093723	-
-	300	-	Z	-	1025090	-	Std.	1390.00	-	1093724	-

\*Note: Proof load is 2 times Working Load Limit. All carbon hooks designed with a 5/1 design factor. All alloy hooks 1-22t designed with a 4.5/1 design factor. All alloy hooks 30t and larger designed with a 4/1 design factor. All bronze hooks designed with a 4/1 design factor.

+ New 319N style hook. ++ See column "Y" on following page for actual length.

# Hoist hooks incorporated markings forged into the product which address two (2) QUIC-CHECK® features.

- **Deformation Indicators** Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a QUIC-CHECK\* measurement to determine if the throat opening has changed, thus indicating abuse or overload. To check, use a measuring device (i.e., tape measure) to measure the distance between the marks. The marks should align to either an inch increment on the measuring device. If the measurement does not meet this criteria, the hook should be inspected further for possible damage.
- Angle Indicators Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.
- Chemical analysis and tensile tests performed on each PIC to verify chemistry and mechanical properties.

Rough as forged dimension. Shank will not machine to this dimension. + 3 /4(C - 221.4 dimensions shown are for S-4320 Latch Kits. Dimensions for sizes 20 ton carbon and larger are for PL Latch Kits. ++ Dimensions are for PL-N Latch Kits. For the purpose of calculating D / d ratio, utilize dimension M.

Trademark indicates QUIC-CHECK® product. Hook Material Codes: A-Alloy Steel, B-Bronze High Strength, C-Carbon Steel.

Hook									Dimensi	ons (ir	1)							
ID Code	D	F	G	н	J	К	L	М	0	O2	P	R	Т	T2++	х	Y	z	AA
D	2.86	1.25	.73	.81	.93	.63	5.14	.63	.93+	-	1.96	2.35	.97		.59	2.06	.69	1.50
F	3.16	1.38	.84	.94	.97	.71	5.68	.71	.97+	_	2.22	2.59	.97		.66	2.25	.78	2.00
G	3.59	1.50	1.00	1.16	1.06	.88	6.35	.88	1.06+	_	2.44	2.76	1.03		.72	2.59	.88	2.00
Н	4.00	1.62	1.14	1.31	1.19	.94	7.14	.94	1.16+		2.78	3.16	1.16		.88	2.84	1.00	2.00
I	4.84	2.00	1.44	1.63	1.50	1.31	8.36	1.13	1.36+	1.00	3.47	3.85	1.53	1.50	1.16	3.44	1.25	2.50
J	6.28	2.50	1.82	2.06	1.78	1.66	10.43	1.44	1.61+	1.31	4.59	4.77	1.96	1.88	1.41	3.84	1.56	3.00
К	7.54	3.00	2.26	2.63	2.41	1.88	12.52	1.63	2.08+	1.81	5.25	5.88	2.47	2.25	1.81	4.38	1.94	4.00
L	8.34	3.25	2.60	2.94	2.62	2.19	16.10	1.94	2.27+	2.00	5.96	6.37	2.62	2.31	2.00	7.00	2.19	4.00
N	10.34	4.25	3.01	3.50	3.41	2.69	18.15	2.38	3.02+	2.75	6.88	8.14	2.83	2.56	2.56	7.00	2.63	5.00
0	13.62	5.00	3.62	4.62	4.00	3.00	23.09	3.00	3.25	_	8.78	9.44	3.44		3.12	10.00	3.12	6.50
0	12.62	5.00	3.62	4.62	4.00	3.00	31.09	3.00	3.25	_	8.78	9.44	3.44		3.12	18.00	3.12	6.50
P	14.06	5.38	4.56	5.00	4.25	3.62	32.12	3.00	3.00	_	11.31	12.50	3.88		4.00	15.00	4.00	7.00
P	14.06	5.38	4.56	5.00	4.25	3.62	41.12	3.00	3.00	_	11.31	12.50	3.88		4.00	24.00	4.00	7.00
S	15.44	6.00	5.06	5.50	4.75	3.72	34.12	3.25	3.38		12.56	14.00	4.75		4.19	15.00	4.19	8.00
S	15.44	6.00	5.06	5.50	4.75	3.72	43.12	3.25	3.38	_	12.56	14.00	4.75		4.19	24.00	4.19	8.00
Т	18.50	7.00	6.00	6.50	5.75	4.44	36.06	3.91	4.12		14.75	15.56	5.69		4.50	14.50	4.50	10.00
Т	18.50	7.00	6.00	6.50	5.75	4.44	47.56	3.91	4.12		14.75	15.56	5.69		4.50	26.00	4.50	10.00
U	20.62	7.75	6.69	7.25	6.50	5.25	41.16	4.25	4.88		16.53	19.38	6.00		5.00	15.00	5.00	11.50
U	20.62	7.75	6.69	7.25	6.50	5.25	49.16	4.25	4.88	_	16.53	19.38	6.00		5.00	23.00	5.00	11.50
W	23.00	6.81	8.59	9.88	5.88	5.50	42.12	5.50	4.50		17.25	18.41	7.00		7.00	15.00	7.00	12.00
W	23.00	6.81	8.59	9.88	5.88	5.50	48.12	5.50	4.50		17.25	18.41	7.00		7.00	21.00	7.00	12.00
Х	24.38	6.75	9.12	10.94	6.00	6.00	45.75	6.00	4.50	_	18.00	18.38	7.00		7.25	18.00	7.25	13.00
Y	26.69	7.50	9.75	11.81	6.60	7.00	50.50	7.00	5.00	_	19.75	20.50	8.00		8.00	20.00	8.00	13.00
Z	30.12	9.50	10.62	12.94	8.00	7.25	54.69	8.00	6.25	_	22.69	23.50	8.25		9.50	20.00	9.50	15.00



## Crosby Gate® Hooks

#### **Hook Connectors**

The six (6) connector styles shown below make it possible for Crosby to furnish a Golden Gate Hook to fit almost any make or model of hoisting equipment including American Engineering Lo-Hed, ARO, Coffing, Electro Lift, Ingersoll-Rand, P & H, Robbins and Myers, Shepard Niles, CM, Shaw-Box, Wright, Yale & Towne.

#### CLOSED SWIVEL BAIL

For use where hoisting line or shackle can be inserted into the bail. Suitable for infrequent, non continuous rotation under load. Hook sizes: 1 through 14.



SHANK-TYPE HOOK - Standard Length

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



SHANK -TYPE HOOK - Long Length

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



Style I - Manual -Closing Gate Style K - Self-Closing Gate

#### UNIVERSAL TYPE

Style E - Self-Closing Gate

Open swivel bail for attachment to link chain. Suitable for infrequent, non continuous rotation under load. Hook sizes: 3, 4 and 5.



LINK CHAIN NEST

Style P - Manual-Closing Gate

Style O - Self-Closing Gate

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



Attachment with ball-bearing swivel and full-floating connector. Suitable for frequent rotation under load. Hook sizes: 4, 5 and 6.

**ROLLER CHAIN NEST** 



Style R - Manual-Closing Gate Style S - Self-Closing Gate

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



#### **Warnings and Application Instructions**



QUIC-CHECK\* Hoist hooks incorporate markings forged into the product which address two (2) QUIC-CHECK\* features:

**Deformation Indicators** - Two strategically placed marks, one just below the shank or eye and the other on the hook tip, which allows for a **QUIC-CHECK\*** measurement to determine if the throat opening has changed, thus indicating abuse or overload.

To check, use a measuring device (i.e., tape measure) to measure the distance between the marks. The marks should align to either an inch or half-inch increment on the measuring device. If the measurement does not meet criteria, the hook should be inspected further for possible damage.

**Angle Indicator** - Indicates the maximum included angle which is allowed between two (2) sling legs in the hook. These indicators also provide the opportunity to approximate other included angles between two sling legs.

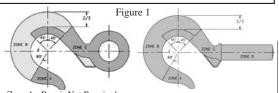
#### IMPORTANT SAFETY INFORMATION

#### READ AND FOLLOW

- A visual periodic inspection for cracks, nicks, wear, gouges and deformation as part of a comprehensive documented inspection program, should be conducted by trained personnel in compliance with the schedule in ANSI B30.10.
- For hooks used in frequent load cycles or pulsating loads, the hook and threads should be periodically inspected by Magnetic Particle or Dye Penetrant. (Note: Some disassembly may be required.)
- Never use a hook whose throat opening has been increased, or whose tip has been bent more than 10 degrees out of plane from the hook body, or is in any other way distorted or bent. Note: A latch will not work properly on a hook with a bent or worn tip.
- Never use a hook that is worn beyond the limits shown in Figure 1.
- Remove from service any hook with a crack, nick, or gouge. Hooks
  with a nick or gouge shall be repaired by grinding lengthwise, following
  the contour of the hook, provided that the reduced dimension is within
  the limits shown in Figure 1. Contact Crosby Engineering to evaluate
- Never repair, alter, rework, or reshape a hook by welding, heating, burning or bending.
- Never side load, back load, or tip load a hook. (Side loading, back loading and tip loading are conditions that damage and reduce the capacity of the hook.) (See Figure 2.)
- Eye hooks, shank hooks and swivel hooks are designed to be used with wire rope or chain. Efficiency of assembly may be reduced when used with synthetic material.
- Do not swivel the S-322, S-3316, or S-3319 swivel hooks while supporting a load. These hooks are distinguishable by hex nuts and flat washers.
- The S-3322 swivel hook is designed to rotate under load. The S-3322 is distinguishable from the S-322 by use of a round nut designed to shield
- The frequency of bearing lubrication on the S-3322 depends upon frequency and period of product use as well as environmental conditions, which are contingent upon the user's good judgement.
- The use of a latch may be mandatory by regulations or safety codes; e.g., OSHA, MSHA, ANSI/ASME B30, Insurance, etc.. (Note: When using latches, see instructions in "Understanding: The Crosby group Warnings" for further information.)
- Always make sure the hook supports the load. (See Figure 3). The latch must never support the load (See Figure 4).
- When placing two (2) sling legs in hook, make sure the angle from the vertical to the outermost leg is not greater than 45 degrees, and the included angle between the legs does not exceed 90 degrees\* (See Figure 5).
- · See ANSI/ASME B30.10 "Hooks" for additional information.

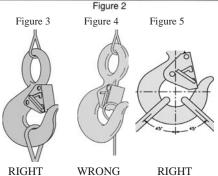
#### Warning!

- Loads may disengage from hook if proper procedures are not followed.
- A falling load may cause serious injury or death.
  See OSHA Rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4)(iv)(B) for personnel hoisting by cranes or derricks, and OSHA Directive CPL 2-1.36 - Interim Inspection Procedures During Communication. Tower Construction Activities. A Crosby 319, 320, or 322 hook with a PL Latch attached and secured with a bolt, nut and cotter pin (or toggle pin) may be used for lifting personnel. A Crosby 319N, 320N or 322N hook with a S-4320 latch attached and secured with cotter pin or bolt, nut and pin; or a PL-N latch attached and secured with toggle pin may be used for lifting personnel. A hook with a Crosby SS-4055 latch attached shall NOT be used for personnel lifting.
  • See OSHA Directive CPL 2-1.36 - Crosby does not recommend
- the placement of lanyards directly into the positive locking Crosby hook when hoisting personnel. Crosby requires that all suspension systems (vertical lifelines/lanyards) shall be gathered at the positive locked load hook by use of a master link, or a bolt-type shackle secured with cotter pin.
- Threads may corrode and/or strip and drop the load.
- Remove securement nut to inspect or to replace S-322, S-3316 and S3319 bearing washers (2).
- · Hook must always support the load. The load must never be sup-
- Prook must always support the load. The load must never be supported by the latch.
  Never apply more force than the hook's assigned Working Load Limit (WLL) rating.
  Read and understand these instructions before using hook.



Zone A: Repair Not Required Zone B: 10% of Original Dimension Zone C: 5% of Original Dimension Zone D: Consult Minimum Thread Chart 2009 Crosby Catalog p. 125.





<sup>\*</sup> For two legged slings with angles greater than 90 degrees, use an intermediate link such as a master link or bolt type shackle to collect the legs of the slings. The intermediate link can be placed over the hook to provide an in-line load on the hook. This approach must also be used when using slings with three or more legs.



## SS-4055 Safety Latches

#### SS-4055 Latch Kits

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

#### Caution

Read and Understand latch kit package before installing.

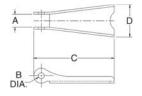
These latches will not work on new "N" Style Hooks.
Use with "old style" hook.

Review the Warning and Application Information on page 114 (except Step 7).



#### LATCH ORDERING INSTRUCTIONS:

- Specify latch kit stock number.
   Specify capacity of hook to which latch will be assembled.
   Specify hook material (carbon or alloy).



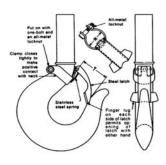
Н	ok Size	(t)	Hook	SS-4055	Weight	Dimensions (in.)				
Carbon	Alloy	Bronze	ID Code	Stock Number	Each (lbs)	A	В	C	D	
3/4	1	.5	D	1090027	.02	.38	.16	1.44	.59	
1	1-1/2	.6	F	1090045	.02	.38	.16	1.60	.59	
1-1/2-2	2-3	1.0-1.4	G/H	1090063	.03	.47	.19	1.84	.82	
3	4-1/2	2.0	I	1090081	.06	.56	.17	2.41	1.00	
5	7	3.5	J	1090107	.11	.58	.20	2.97	1.21	
7-1/2-10	11-15	5.0-6.5	K/L	1090125	.17	.59	.27	3.66	1.50	
15	22	10.0	N	1090143	.39	.83	.39	4.94	1.90	
20	30		0	1090161	.63	.94	.52	5.88	2.56	
25-30	37-45		P/S	1090189	1.12	2.19	.39	6.50	3.84	
40	60		T	1090205	1.77	3.31	.52	7.88	4.12	

#### **Universal Hook Latch**

#### **PRODUCT FEATURES:**

- Keeps fingers out of danger zones.
- Keeps load on bottom hook when load is slack.
- Keeps top hook on ring, hook or trolley.
- Can be installed on any hook in minutes with only simple tools.
- Meets requirements: Sec. 1910.181(a)(29) OSHA.





#### **Specifications**

Model Number	Hook Dimensions							
Model Number	Neck (N)	Throat (T)						
A	9/16 to 5/8	1-1/16 to 1-1/8						
В	3/4 to 13/16	1-1/4						
С	7/8 to 1	1-3/8 to 1-1/2						
D	1-1/8 to 1-1/4	1-3/4 to 1-7/8						
Е	1-3/8 to 1-1/2	2-1/16						
F	1-5/8 to 1-11/16	2-1/4						
G	1-3/4 to 1-13/16	2-1/2						
Н	1-7/8 to 2	3						
J	2-1/16 to 2-1/8	3-3/8						
K	2-3/16 to 2-1/4	3-1/2						
L	2-5/16 to 2-3/8	3-3/4						
M	2-7/16 to 2-3/4	4						
0	3 to 3-1/4	4-1/2						



## **Crosby® Hook Latch Kit**

#### S-4320 Latch Kits

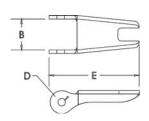
- Heavy duty stamped latch interlocks with the hook tip.
- High cycle, long life spring.
- Can be made into a "Positive Locking" Hook when proper cotter pin is utilized.
- Latch kits shipped unassembled and individually packaged with instructions.
- Meets the intent of OSHA Rule 1926.1431(g) of 1926.1501(g)(when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



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

#### S-4320 Replacement Latch Kit

(For New 319N, and 320N, 322N and 339N and New 1327 and 1339 Hooks)



Н	ook Size	(t)		S-4320	SS-4320	Weight	Dimensions (in.)			
Carbon	Alloy	Bronze	Hook ID Code	Stock Number	Stock Number*	Each (lbs)	В	D	E	
3/4	1	.5	D	1096325	1097100	.03	.50	.15	1.44	
1	1-1/2	.6	F	1096374	1097109	.04	.54	.17	1.56	
1-1/2	2	1	G	1096421	1097118	.04	.63	.17	1.66	
2	3	1.4	Н	1096468	1097127	.06	.66	.17	1.91	
3	5	2	I	1096515	1097136	.10	.83	.20	2.31	
5	7	3.5	J	1096562	1097145	.15	1.04	.20	2.88	
7-1/2	11	5	K	1096609	1097154	.28	1.25	.27	3.56	
10	15	6.5	L	1096657	1097163	.33	1.35	.27	3.81	
15	22	10	N	1096704	1097172	.84	1.66	.39	5.18	



#### S-4320 HOOK LATCH KIT

(For Crosby® 319N, 320N, 322N, S-1327, A1339 Hooks)

#### WARNINGS & APPLICATION INSTRUCTIONS

#### Important Safety Information - Read & Follow

- · Always inspect hook and latch before using.
- · Never use a latch that is distorted or bent.
- Always make sure spring will force the latch against the tip of the hook.
- Always make sure hook supports the load. The latch must never support the load. (See figure 1&2).
- When placing two (2) sling legs in hook, make sure the angle between the legs is less than 90° and if the hook or load is tilted, nothing bears against the bottom of this latch. (See figure 3&4).
- · Latches are intended to retain loose sling or devices under slack conditions
- Latches are not intended to be an anti-fouling device. When using a latch for personnel lifting, select proper cotter pin (See figure 5).
- · See Step 7 below for proper installation instructions.
- · Never reuse a bent cotter pin.
- Never use a cotter pin with a smaller diameter or different length than recommended in Figure 5.
- Never use a nail, a welding rod, wire, etc., in place of a recommended cotter pin.
- Always ensure cotter pin is bent so as not to interfere with
- Periodically inspect cotter pin for corrosion and general adequacy.



#### Warning!

- · Loads may disengage from hook if proper procedures are not followed.
- · A falling load may cause serious injury or death.
- Hook must always support the load. The load must never be supported by the latch.
- See OSHA rule 1926.1431(g)(1)(i)(A) and 1926.1501(g)(4) (iv)(B) for personnel hoisting by crane or Derricks. A Crosby S-319N, S-320N, S-322N, S-1327, A-1339 Hook with an S-4320 latch attached (when secured with cotter pin) may be used for lifting personnel.
- An S-4320 Latch is only to be used with a Crosby S-319N, S-320N, S-322N, S-1327 and A-1339 Hook.
- · DO NOT use this latch in applications requiring non-sparking.
- · Read and understand these instructions before using hook and









Figure 4

Hook Identification	Recommended Cotter Pin Dimensions (in.)					
Code	Diameter	Length				
D	1/8	3/4				
F	1/8	3/4				
G	1/8	1				
Н	3/16	1-1/4				
I	1/4	1-1/2				
J	5/16	2				
K	5/16	2				
L	3/8	3				
N	3/8	3				

# The current SS-4055 latch kit and the PL latch will not fit new 319N, 320N, or 322N hooks. They will continue to be offered in both styles to service existing hooks.

Important - The new S4320 latch kit will not fit the old 319, 320 or 322 hooks.

#### IMPORTANT - Instructions for Assembling S-4320 Latch on Crosby 320N Hooks











Step 1

a 45 degree angle with the cam up.

#### Step 2

Place hook at approximately Position coils of spring over cam with legs of spring pointing toward point of hook and loop of spring positioned down and lying against the hook.

#### Step 3

Position latch to side of hook points. Slide latch onto spring legs between lock plate and latch body until latch is partially over hook cam. Then depress latch and spring until latch clears point of hook.

#### Steps 4, 5, & 6

- 4. Line up holes in latch with hook cam. 5. Insert bolt through
- latch, spring, and cam. 6. Tighten self-locking nut on one end of bolt.

## Step 7

For Personnel Lifting With latch in closed position and rigging resting in bowl of hook, insert cotter pin through hook tip and secure by bending prongs.



## **Positive Flapper Latch Kits**

#### PL Latch Kit

- Hot Dipped Galvanized.
- Heavy duty latch with easy operating features.
- Flapper lever indicates locked or unlocked position.
- Assembly instructions included with each latch.
- For additional dimensional data on eye, shank or swivel hooks refer to previous pages in this section.
- Meets the intent of OSHA Rule 1926.1431(g) and 1926.1501(g) (when secured with the bolt, nut, and pin) for lifting personnel.

Hook siz	ze (tons)	Hook	PL Latch Kit	Weight	Dimensions (in.)						
Carbon	Alloy	ID Code	Stock Number	Each (lbs)	A	В	С	D	E	F	
3	4-1/2	#I	1093711	.54	2.57	2.34	1.94	.56	1.13	2.00	
5	7	#J	1093712	.66	3.00	2.34	2.00	.63	1.38	2.22	
7-1/2	11	#K	1093713	1.00	3.63	2.77	2.38	.63	1.63	2.38	
10	15	#L	1093714	1.25	4.00	3.22	2.69	.63	1.88	3.38	
15	22	#N	1093715	2.96	5.31	4.00	2.91	.84	2.38	3.44	
20	30	О	1093716	4.05	6.00	4.44	3.19	1.06	2.88	4.25	
25	37	P	1093717	8.63	7.00	6.63	4.06	2.24	4.50	6.12	
30	45	S	1093718	10.00	6.75	7.00	4.03	2.24	4.75	6.38	
40	60	T	1093719	14.30	8.00	7.66	4.38	3.46	5.50	7.25	
50	75	U	1093720	27.00	9.88	8.19	5.13	3.38	6.50	8.88	
-	100-150	W - X	1093721	33.25	10.88	11.06	6.38	3.38	7.50	10.00	
-	200	Y	1093723	45.00	11.88	11.19	6.38	3.38	8.75	11.25	
-	300	Z	1093724	55.00	12.50	12.19	8.00	3.38	9.75	13.00	
	# New 319N style hook.										





#### LATCH ORDERING INSTRUCTIONS:

- 1. Specify PL latch kit stock number from chart.
- 2. Specify capacity of hook to which latch will be
- 3. Specify hook material (carbon or alloy).

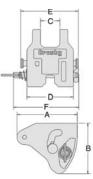
## PL-N/O Latch Kits

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

Hook S	Hook Size (tons)		PL-N	PL-O	Weight	Dimension (in.)							
Carbon	Alloy	ID Code			Stock Number		Each (lbs)	A	В	С	D	E	F
3	4.5/5*	I	1092000	1091900	.8	2.40	2.01	.83	2.13	2.71	3.44		
5	7	J	1092001	1091901	1.3	2.94	2.50	1.00	2.52	3.19	3.83		
7-1/2	11	K	1092002	1091902	2.0	3.63	3.02	1.19	2.75	3.44	4.38		
10	15	L	1092003	1091903	2.8	4.00	3.39	1.34	3.19	4.00	4.50		
15	22	N	1092004	1091904	4.9	5.19	4.32	1.61	3.86	4.81	5.13		
	* "N" style hooks are rated at 5 tonnes.												



PL-N/O Latch Kits



#### Note

The PL latch will not work on 319N, 320N, or 322N Hooks. The PL-N/O Latches, in the sizes available, will work on both the old style and new style hooks.