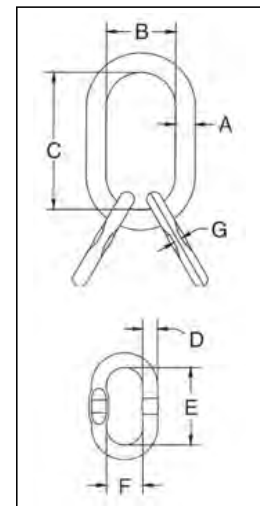


Alloy Master Links with Engineered Flat



A-345
Alloy Master
Links

- Alloy Steel — Quenched and Tempered.
- Individually Proof Tested to values shown, with certification.
- Proof Tested with 60% inside width special fixtures sized to prevent localized point loading per ASME A-952, reference page 276.
- Forgings have a Product Identification Code (PIC) for material traceability, along with the size, the name Crosby and USA in raised lettering.
- Selected sizes designated with "W" in the size column have enlarged inside dimensions to allow additional room for sling hardware and crane hook.
- Crosby 1 1/4" to 2" 342/345 master links are type approved to DNV Certification Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested, MPI and impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request. Refer to page 164 for Crosby COLD TUFF® master links that meet the additional requirements of DNV rules for certification of lifting appliances - Loose Gear.
- Incorporates patented **QUIC-CHECK®** deformation indicators.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



Load Rated

Fatigue Rated



MAXTOUGH



A-345 Master Link Assembly with Engineered Flat for use with S-1325A coupler link.

Size		A-345 Stock No.	Weight Each (lbs.)	Working Load Limit Based on 5:1 Design Factor (lbs.)*	Proof Load (lbs.)**	Dimensions (in.)							Deformation Indicator
(in.)	(mm)					A	B	C	D	E	F	G	
3/4W	19W	1014739	3.5	12300	28400	.73	3.20	6.00	.56	3.35	1.77	.30	4.00
7/8W	22W	1014742	4.8	15200	35200	.88	3.75	6.38	.56	3.35	1.77	.30	4.50
1W	26W	1014766	9.3	26000	60000	1.10	4.30	7.50	.75	3.94	2.36	.33	5.50
1-1/4W	32W	1014779	15.8	39100	90400	1.33	5.50	9.50	1.00	6.30	3.54	.51	7.00
† 1-1/4W	† 32W	1262603	† 27.6	† 36200	90500	1.25	4.38	8.75	1.25	8.75	4.38	-	5.50
1-1/2W	38W	1014807	34.1	61100	141200	1.61	5.90	10.50	1.25	7.09	3.94	.65	7.50
† 1-1/2W	† 38W	1262612	† 47.7	† 54300	135750	1.50	5.25	10.50	1.50	10.50	5.25	-	6.50
1-3/4	44	1014814	46.7	84900	212250	1.75	6.00	12.00	1.38	8.00	5.00	.73	7.50
† 1-3/4	† 44	1262603	† 74.4	† 84900	212250	1.75	6.00	12.00	1.75	12.00	6.00	-	7.50
2	51	1014832	67.2	102600	256500	2.00	7.00	14.00	1.50	9.00	5.75	-	9.00
† 2	† 51	1262630	† 113	† 102600	256500	2.00	7.00	14.00	2.00	14.00	7.00	-	9.00
2-1/2	64	1014855	206	160000	320000	2.50	8.38	16.00	2.50	16.00	8.38	-	11.00
2-3/4	70	1014864	282	216900	433800	2.75	9.88	18.00	2.75	18.00	9.88	-	12.50
4	102	1014999	667	373000	746000	4.00	12.00	24.00	3.50	24.00	12.00	-	15.50***

* Ultimate Load is 5 times the Working Load Limit. The maximum individual sublink working load limit is 75% of the assembly working load limit except for 2-1/2" and 2-3/4", which are 100% of assembly working load limit. Applications with wire rope and synthetic sling generally require a design factor of 5. **Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. †Ultimate Load is 4 times the Working Load Limit for Offshore Container Master Links. ‡Offshore Container Master Links Proof Tested to 2.5 times the Working Load Limit with 70 percent fixtures.



For use with chain slings, refer to page 244 for sling ratings and page 240 for proper master link selection.

SINGLE LEG SLING

Spectrum 10® Chain Size															
		Grade 100 Chain Stock No.	Master Link A-1342N Stock No.	Master Link Assembly A-1345N Stock No.	Master Link A-342 Stock No.	Master Link A-345 Stock No.	ELIMINATOR L-1361 Stock No.	LOK-A-LOY® A-1337 Stock No.	Chain Coupler S-1325A Stock No.	Chain Shortener Link S-1311N Stock No.	SHUR-LOC® Clevis Hook S-1317 Stock No.	SHUR-LOC® Eye Hook S-1316 Stock No.	SHUR-LOC® Swivel Hook S-1326 Stock No.		
(in.)	(mm)	1/4 (9/32)	7	273710	1011403X1	—	1014266	—	1049802	1015104	1098500	1017869	1029000	1022914	1004313
5/16	8	273729	1011412X2	—	1014266 1014280 1014285	—	1049809	1015113	1098504	1017878	1029009	1022914	1004313		
3/8	10	273738	1011421X3	—	1014285 1014319	—	1049818	1015122	1098508	1017897	1029018	1002923	1004323		
1/2	13	273747	1011430X4	—	1014319 1014331	—	1049827	1015136	1098512	1017906	1029027	1002932	1004331		
5/8	16	273756	1011449X5	—	1014331 1014348	—	1049836	1015145	1098516	1017915	1029036	1002941	1004340		
3/4	20	273858	1011458X6	—	1014348 1014365	—	—	1015154	—	—	1021071	1022942	1004349		
7/8	22-23	273867	1011467X7	—	1014365 1014388	—	—	1015163	—	—	1029080	1022943	1004358		
1	26	273876	—	—	1014388 1014404	—	—	1015172	—	—	1029089	1022944	—		
1-1/4	32	—	—	—	1014404 1014422	—	—	1015181	—	—	—	—	—		

DOUBLE LEG SLING

Spectrum 10® Chain Size		Grade 100 Chain Stock No.	Master Link A-1342N Stock No.	Master Link Assembly A-1345N Stock No.	Master Link A-342 Stock No.	Master Link A-345 Stock No.	ELIMINATOR L-1362 Stock No.	LOK-A-LOY® A-1337 Stock No.	Chain Coupler S-1325A Stock No.	Chain Shortener Link S-1311N Stock No.	SHUR-LOC® Clevis Hook S-1317 Stock No.	SHUR-LOC® Eye Hook S-1316 Stock No.	SHUR-LOC® Swivel Hook S-1326 Stock No.
(in.)	(mm)												
1/4 (9/32)	7	273710	1011403X1	—	1014266	—	1049913	1015104	1098500	1017869	1029000	1022914	1004313
5/16	8	273729	1011412X2	—	1014285	—	1049922	1015113	1098504	1017878	1029009	1022914	1004313
3/8	10	273738	1011421X3	—	1014319	—	1049931	1015122	1098508	1017897	1029018	1002923	1004323
1/2	13	273747	1011430X4	—	1014331	—	1049940	1015136	1098512	1017906	1029027	1002932	1004331
5/8	16	273756	1011449X5	—	1014348	—	1049949	1015145	1098516	1017915	1029036	1002941	1004340
3/4	20	273858	1011458X6	—	1014365	—	—	1015154	—	—	1021071	1022942	1004349
7/8	22-23	273867	1011467X7	—	1014388	—	—	1015163	—	—	1029080	1022943	1004358
1	26	273876	—	—	1014404	—	—	1015172	—	—	1029089	1022944	—
1-1/4	32	—	—	—	1014468	—	—	1015181	—	—	—	—	—

TRIPLE AND QUAD LEG SLINGS

Spectrum 10® Chain Size		Grade 100 Chain Stock No.	Master Link A-1342N Stock No.	Master Link Assembly A-1345N Stock No.	Master Link A-342 Stock No.	Master Link A-345 Stock No.	ELIMINATOR Stock No.	LOK-A-LOY® A-1337 Stock No.	Chain Coupler S-1325A Stock No.	Chain Shortener Link S-1311N Stock No.	SHUR-LOC® Clevis Hook S-1317 Stock No.	SHUR-LOC® Eye Hook S-1316 Stock No.	SHUR-LOC® Swivel Hook S-1326 Stock No.
(in.)	(mm)												
1/4 (9/32)	7	273710	—	1011510	—	1014739	See Page 225	1015104	1098500	1017869	1029000	1022914	1004313
5/16	8	273729	—	1011510	—	1014742		1015113	1098504	1017878	1029009	1022914	1004313
3/8	10	273738	—	1011529	—	1014766		1015122	1098508	1017897	1029018	1002923	1004323
1/2	13	273747	—	1011538	—	1014779		1015136	1098512	1017906	1029027	1002932	1004331
5/8	16	273756	—	1011547	—	1014807		1015145	1098516	1017915	1029036	1002941	1004340
3/4	20	273858	—	1011556	—	1014810		1015154	—	—	1021071	1022942	1004349
7/8	22-23	273867	—	1011565	—	1014845		1015163	—	—	1029080	1022943	1004358
1	26	273876	—	—	—	1014845		1015172	—	—	1029089	1022944	—
1-1/4	32	—	—	—	—	1014986		1015181	—	—	—	—	—

WORKING LOAD LIMIT – 4 TO 1 DESIGN FACTOR

Spectrum 8 [®] Alloy Chain Size		90° 	60° 	45° 	30° 	60° 	45° 	30°
(in.)	(mm)	Single Leg (lbs)		Double Leg (lbs)		Triple and Quad Leg (lbs)		
—	6	2500	4330	3540	2500	6500	5300	3750
1/4 (9/32)	7	3500	6100	4900	3500	9100	7400	5200
5/16	8	4500	7800	6400	4500	11700	9500	6800
3/8	10	7100	12300	10000	7100	18400	15100	10600
1/2	13	12000	20800	17000	12000	31200	25500	18000
5/8	16	18100	31300	25600	18100	47000	38400	27100
3/4	20	28300	49000	40000	28300	73500	60000	42400
7/8	22	34200	59200	48400	34200	88900	72500	51300
1	26	47700	82600	67400	47700	123900	101200	71500
1-1/4	32	72300	125200	102200	72300	187800	153400	108400

For choker applications, the Working Load Limit must be reduced by 20%. The Crosby A-1338 cradle grab hook and S1311N chain shortener link does not require any reduction of the Working Load Limit. The design factor of 4 to 1 on Spectrum[®] 8 Alloy Chain agrees with the design factor used by the International Standards Organization (I.S.O.) and ASME B30.9 and is the preferred set of Working Load Limit values to be used.

SINGLE LEG SLING

Spectrum 8 Chain Size (in.) (mm)	Grade 8 Chain Stock No.													
		Master Link A-342 Stock No.	Master Link Assembly A-345 Stock No.	Master Link with Flat A-344 Stock No.	Master Link Assembly A-347 Stock No.	LOK-A-LOY [®] A-1337 Stock No.	Chain Coupler S-1325 Stock No.	Clevis Sling Hook A-1339 A-339** Stock No.	SHUR-LOC [®] Clevis Hook S-1317 Stock No.	Latching Clevis Chain Hook S-314A Stock No.	Clevis Grab Hook A-338 Stock No.	Cradle Grab Hook A-1338 Stock No.	Eye Sling Hook A-1327 Stock No.	Eye Foundry Hook A-1329 Stock No.
1/4 7	273527	1014266	—	1256862	—	1015104	1098500	1048991	1029000	1225021	1027659	1049417	1003764	1026280
5/16 8	273536	1014266 1014280 1014285	—	1256932	—	1015113	1098504	1049000	1029009	1225021	—	1049426	—	1026280
3/8 10	273545	1014285 1014319	—	1257002	—	1015122	1098508	1049009	1029018	1225091	1027677	1049435	1003773	1026289
1/2 13	273554	1014319 1014331	—	1257072	—	1015136	1098512	1049018	1029027	1225161	1027686	1049444	1003782	1026297
5/8 16	273563	1014331 1014348	—	1257212	—	1015145	1098516	1049027	1029036	1225162	1027695	1049453	1003791	1026306
3/4 20	273572	1014348 1014365	—	1257382	—	1015154	—	1027793**	—	—	1027702	—	1003808	1026315
7/8 22	273581	1014365 1014388	—	1257422	—	1015163	—	1027800**	—	—	1027711	—	1003817	1026324
1 26	273590	1014388 1014404	—	1257492	—	1015172	—	—	—	—	—	—	—	—
1-1/4 32	273599	1014404 1014422	—	1257632	—	1015181	—	—	—	—	—	—	—	—

+ Available in eye style. ** Old style A-339

DOUBLE LEG SLING

Spectrum 8 Chain Size (in.) (mm)	Grade 8 Chain Stock No.	Master Link A-342 Stock No.	Master Link Assembly A-345 Stock No.	Master Link with Flat A-344 Stock No.	Master Link Assembly A-347 Stock No.	LOK-A-LOY [®] A-1337 Stock No.	Chain Coupler S-1325 Stock No.	Clevis Sling Hook A-1339 A-339** Stock No.	SHUR-LOC [®] Clevis Hook S-1317 Stock No.	Latching Clevis Chain Hook S-314A Stock No.	Clevis Grab Hook A-338 Stock No.	Cradle Grab Hook A-1338 Stock No.	Eye Sling Hook A-1327 Stock No.	Eye Foundry Hook A-1329 Stock No.
		Master Link A-342 Stock No.	Master Link Assembly A-345 Stock No.	Master Link with Flat A-344 Stock No.	Master Link Assembly A-347 Stock No.	LOK-A-LOY [®] A-1337 Stock No.	Chain Coupler S-1325 Stock No.	Clevis Sling Hook A-1339 A-339** Stock No.	SHUR-LOC [®] Clevis Hook S-1317 Stock No.	Latching Clevis Chain Hook S-314A Stock No.	Clevis Grab Hook A-338 Stock No.	Cradle Grab Hook A-1338 Stock No.	Eye Sling Hook A-1327 Stock No.	Eye Foundry Hook A-1329 Stock No.
1/4 7	273527	1014266	—	1256932	—	1015104	1098500	1048991	1029000	1225021	1027659	1049417	1003764	1026280
5/16 8	273536	1014280	—	1257002	—	1015113	1098504	1049000	1029009	1225021	—	1049426	—	1026280
3/8 10	273545	1014319	—	1257072	—	1015122	1098508	1049009	1029018	1225091	1027677	1049435	1003773	1026289
1/2 13	273554	1014331	—	1257282	—	1015136	1098512	1049018	1029027	1225161	1027686	1049444	1003782	1026297
5/8 16	273563	1014348	—	1257422	—	1015145	1098516	1049027	1029036	1225162	1027695	1049453	1003791	1026306
3/4 20	273572	1014365	—	1257492	—	1015154	—	1027793**	—	—	1027702	—	1003808	1026315
7/8 22	273581	1014388	—	1257562	—	1015163	—	1027800**	—	—	1027711	—	1003817	1026324
1 26	273590	1014404	—	1257632	—	1015172	—	—	—	—	—	—	—	—
1-1/4 32	273599	1014422	—	—	—	1015181	—	—	—	—	—	—	—	—

+ Available in eye style. ** Old style A-339

TRIPLE AND QUADRUPLE LEG SLING

Spectrum 8 [®] Chain Size (in.) (mm)	Grade 8 Chain Stock No.	Master Link A-342 Stock No.	Master Link Assembly A-345 Stock No.	Master Link with Flat A-344 Stock No.	Master Link Assembly A-347 Stock No.	LOK-A-LOY [®] A-1337 Stock No.	Chain Coupler S-1325 Stock No.	Clevis Sling Hook A-1339 A-339** Stock No.	SHUR-LOC [®] Clevis Hook S-1317 Stock No.	Latching Clevis Chain Hook S-314A Stock No.	Clevis Grab Hook A-338 Stock No.	Cradle Grab Hook A-1338 Stock No.	Eye Sling Hook A-1327 Stock No.	Eye Foundry Hook A-1329 Stock No.
		Master Link A-342 Stock No.	Master Link Assembly A-345 Stock No.	Master Link with Flat A-344 Stock No.	Master Link Assembly A-347 Stock No.	LOK-A-LOY [®] A-1337 Stock No.	Chain Coupler S-1325 Stock No.	Clevis Sling Hook A-1339 A-339** Stock No.	SHUR-LOC [®] Clevis Hook S-1317 Stock No.	Latching Clevis Chain Hook S-314A Stock No.	Clevis Grab Hook A-338 Stock No.	Cradle Grab Hook A-1338 Stock No.	Eye Sling Hook A-1327 Stock No.	Eye Foundry Hook A-1329 Stock No.
1/4 7	273527	—	1014739	—	1257832	1015104	1098500	1048991	1029000	1225021	1027659	1049417	1003764	1026280
5/16 8	273536	—	1014742	—	1257972	1015113	1098504	1049000	1029009	1225021	—	1049426	—	1026280
3/8 10	273545	—	1014766	—	1258142	1015122	1098508	1049009	1029018	1225091	1027677	1049435	1003773	1026289
1/2 13	273554	—	1014779	—	1258182	1015136	1098512	1049018	1029027	1225161	1027686	1049444	1003782	1026297
5/8 16	273563	—	1014807	—	1258332	1015145	1098516	1049027	1029036	1225162	1027695	1049453	1003791	1026306
3/4 20	273572	—	1014810	—	1258402	1015154	—	1027793**	—	—	1027702	—	1003808	1026315
7/8 22	273581	—	1014845	—	1258462	1015163	—	1027800**	—	—	1027711	—	1003817	1026324
1 26	273590	—	1014845	—	—	1015172	—	—	—	—	—	—	—	—
1-1/4 32	273599	—	1014986	—	—	1015181	—	—	—	—	—	—	—	—

+ Available in eye style. ** Old style A-339

Alloy Master Link Assembly with Engineered Flat

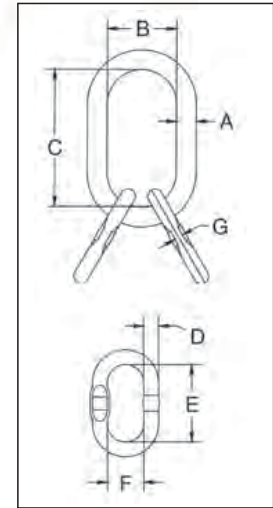


A-345

Master Link Assembly
with Engineered Flat

Ratings below are for use with chain slings fabricated in accordance with ASME B30.9. For other applications, see pages 161.

- Alloy Steel – Quenched and Tempered.
- Individually Proof Tested with certification. (See pages 161 for Proof Test values.)
- Proof Tested with 60% inside width special fixtures sized to prevent localized point loading per ASTM A-952. Reference page 276.
- Meets or exceeds all requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements. Importantly, these links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Forgings have a Product Identification Code (PIC) for material traceability, along with the size, the name Crosby and USA in raised lettering.
- Selected sizes designated with “W” in the size column have enlarged inside dimensions to allow additional room for sling hardware and crane hook.
- Incorporates patented **QUIC-CHECK®** deformation indicators.



A-345 Master Link Assembly with Engineered Flat (for use with S-1325A coupler link)

Size		A-345 Stock No.	Weight Each (lbs.)	Chain Size		Three and Four Leg Sling		Dimensions (in.)								Engineered Flat for S-1325 (in.) — (mm)
(in.)	(mm)			(in.)	(mm)	WLL Based on Grade 80 Chain 60° Sling Angle (lbs.)*	WLL Based on Grade 100 Chain 60° Sling Angle (lbs.)*	A	B	C	D	E	F	G	Deformation Indicator	
3/4W	19W	1014739	3.5	1/4	7	9100	11200	.73	3.20	6.00	.56	3.35	1.77	.30	4.00	1/4"-5/16", 7-8mm
7/8W	22W	1014742	4.8	5/16	8	11700	14800	.88	3.75	6.38	.56	3.35	1.77	.30	4.50	-
1W	26W	1014766	9.3	3/8	10	18400	22900	1.10	4.30	7.50	.75	3.94	2.36	.33	5.50	3/8", 10mm
1-1/4W	32W	1014779	15.8	1/2	13	31200	39000	1.33	5.50	9.50	1.00	6.30	3.54	.51	7.00	1/2", 13mm
1-1/2W	38W	1014807	34.1	5/8	16	47000	58700	1.61	5.90	10.50	1.25	7.09	3.94	.65	7.50	5/8", 16mm
1-3/4	44	1014810	46.7	3/4	20	73500	91700	1.75	6.00	12.00	1.50	6.00	4.00	-	7.50	No Flat
2-1/4	57	1014845	97	7/8	22	88900	110900	2.25	8.00	16.00	1.88	8.00	5.50	-	10.00	No Flat
				1	26	123900	155100	2.25	8.00	16.00	1.88	8.00	5.50	-	10.00	No Flat
3-1/4	83	1014986	255	1-1/4	32	187800	234900	3.25	10.00	20.00	2.50	11.25	8.00	-	13.50	No Flat

* Chain slings require that the Minimum Ultimate Load be 4 times the Working Load Limit. Refer to page 161 to determine products actual Ultimate Load. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9-1.4 for the chain size and number of legs. See chart on page 240 for other sling angles.