

# MASTER LINKS

The Crosby Group offers a wide range of links, from small 1,800 lb capacities all the way up to 395,000 lbs, as well as application-specific links, such as the hot-dip galvanized master links for use in highly corrosive environments.



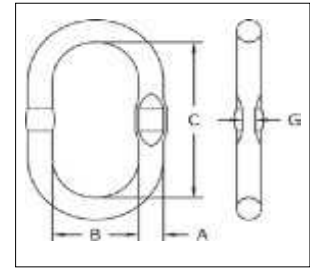
**theCrosbygroup**

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

## A-1343



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN 1677-4, reference applications & warnings.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the “CG” (Crosby Group).
- A-1343 master links are type approved to DNV Certification. Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- Fatigue rated to 20,000 cycles at 1.5 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



## Grade 100 A-1343 Welded Master Link

Stock No.	Weight Each (lb)	Grade 100 Chain Sling		Grade 80 Chain Sling		WLL (lb)	Proof Load (lb)	Dimensions (in)				Engineered Flat Size for S-1325A (in)
		Single Leg Chain Size (in)	Double Leg Chain Size (in)	Single Leg Chain Size (in)	Double Leg Chain Size (in)			A	B	C	G	
1247051	0.8	6mm, 9/32	6mm	6mm, 9/32	6mm, 9/32, 5/16	7000	17632	0.51	2.36	4.72	0.26	6mm, 9/32, 5/16
1247087	1.9	5/16, 3/8	9/32	5/16, 3/8	5/16	9000	22701	0.67	3.54	6.30	0.33	3/8
1247096	2.3	3/8, 1/2	5/16	3/8, 1/2	3/8	14700	37027	0.75	3.54	6.30	0.33	3/8, 1/2
1247122	5.2	3/8, 1/2	3/8	3/8, 1/2	3/8	15400	38570	0.87	5.71	10.83	0.41	1/2
1247120	3.6	3/8, 1/2	3/8	5/8	3/8	19400	48488	0.87	3.94	7.09	0.41	1/2
1247126	6.7	1/2	-	1/2, 5/8	3/8	19600	48929	0.98	5.71	10.83	0.53	5/8
1247124	5.3	5/8, 1/2	3/8	5/8	1/2	25300	63475	0.98	4.53	8.27	0.53	5/8
1247133	8.5	5/8, 1/2	1/2	5/8	1/2	28600	71630	1.10	5.71	10.83	0.53	5/8
1247142	10.6	5/8, 3/4	1/2	3/4	5/8	37400	93670	1.26	5.71	10.83	0.66	-
1247151	15.2	3/4	5/8	3/4, 7/8	3/4	52900	132240	1.42	6.10	11.22	-	-
1247163	16.1	7/8	3/4	7/8	7/8	69400	173675	1.57	5.51	10.63	-	-
1247164	28.4	1	7/8	1	1	84400	210923	1.77	7.09	13.39	-	-
1247166	42.1	1, 1-1/4	7/8	1	1	99200	247950	2.01	8.46	15.35	-	-
1247175	55.3	1-1/4	1	1-1/4	1-1/4	147600	369170	2.17	7.99	15.98	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to Applications & Warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm).

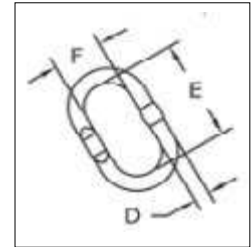
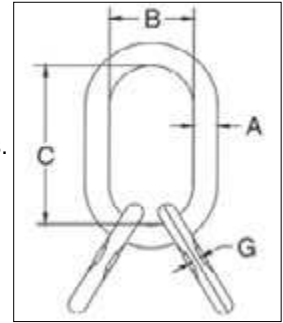


APPLICATION AND WARNING INFORMATION  
SECTION 17

## A-1346



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN 1677-4, reference Applications & Warnings.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the “CG” (Crosby Group). Each sublink is marked with traceability code.
- A-1346 master links are type approved to DNV Certification. Notes 2.7-1-Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impacted tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



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### Grade 100 A-1346 Welded Master Link Assembly

Stock No.	Weight Each (lb)	Grade 100 Chain Sling Three / Four Legs Chain Size (in)	Grade 80 Chain Sling Three / Four Legs Chain Size (in)	WLL (lb)	Proof Load (lb)	Dimensions (in)							Engineered Flat Size for S-1325A Chain Size (in)
						A	B	C	D	E	F	G	
1256865	2.4	-	6mm	7000	17632	0.51	2.36	4.72	0.51	4.72	2.36	0.26	6mm
1256868	3.5	6mm	6mm	9000	22701	0.67	3.54	6.30	0.51	4.72	2.36	0.26	6mm, 9/32
1256874	3.9	6mm	9/32	9200	23362	0.75	3.54	6.30	0.51	4.72	2.36	0.26	9/32, 5/16
1256878	7.3	5/16, 9/32	5/16	15400	38570	0.87	3.94	7.09	0.67	6.30	3.54	0.33	3/8
1256880	8.9	5/16, 9/32	5/16	15400	38570	0.87	5.71	10.83	0.67	6.30	3.54	0.33	3/8
1256876	8.4	5/16	3/8	18700	46725	0.87	3.94	7.09	0.75	6.30	3.54	0.33	3/8
1256882	10.1	5/16	3/8	19600	49149	0.98	4.53	8.27	0.75	6.30	3.54	0.33	3/8
1256892	11.4	5/16	3/8	19600	49149	0.98	5.71	10.83	0.75	6.30	3.54	0.33	3/8
1256917	15.6	3/8	1/2	31900	80005	1.10	5.71	10.83	0.87	7.09	3.94	0.41	1/2
1256926	21.2	3/8	1/2	37400	93670	1.26	5.71	10.83	0.98	8.27	4.53	0.53	5/8
1256929	28	1/2	5/8	52000	130036	1.42	6.10	11.22	1.10	7.48	4.33	0.53	5/8
1256930	40.6	5/8	5/8	61900	154941	1.57	5.51	10.63	1.26	10.83	5.71	0.66	-
1256953	58.6	5/8	3/4	84400	211143	1.77	7.09	13.39	1.42	11.22	6.10	-	-
1256958	78.2	3/4	7/8	99200	247950	2.01	8.46	15.35	1.57	10.63	5.51	-	-
1256973	134.6	7/8	1	147600	369170	2.17	7.99	15.98	2.01	15.35	8.46	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to applications & warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm).

**Fatigue Rated** Crosby 8/10™ CE QT

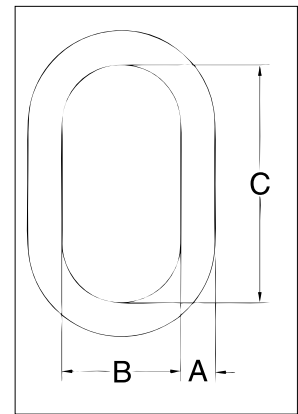
APPLICATION AND WARNING INFORMATION SECTION 17

## A-342



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

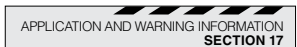
- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Proof Tested with special fixtures sized to prevent localized point loading.
- Forgings have a Product Identification Code (PIC) for material traceability, along with the size, the name Crosby and 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 7/8” to 2” A-342 master links are type approved to DNV-ST-E271-2.7-1 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 the 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.
- 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.



### A-342 Alloy Master Links

Size		OC	Stock No.	Weight Each (lb)	Working Load Limit (lb)	Proof Load (lb)	Grade 100 Chain Sling		Grade 80 Chain Sling		Dimensions (in)			
(in)	(mm)						Single Leg Chain Size (in)	Double Leg Chain Size (in)	Single Leg Chain Size (in)	Double Leg Chain Size (in)	A	B	C	Deformation Indicator
1/2W	13W	No	1014266	1.3	7400	17,200	6mm, 9/32, 5/16	6mm	6mm, 9/32, 5/16, 3/8	6mm, 9/32	0.62	2.80	5.00	3.50
5/8	16	No	1014280	1.5	9000	18,000	5/16, 3/8	9/32	3/8	5/16	0.62	3.00	6.00	3.50
3/4W	19W	No	1014285	2.0	12300	28,400	5/16, 3/8	5/16	1/2	3/8	0.73	3.20	6.00	4.00
7/8W	22W	Yes	3522213	3.3	15200	†38,000	3/8, 1/2	3/8	1/2	3/8	0.88	3.75	6.38	4.50
1W	26W	Yes	3522214	6.1	26000	†65,000	1/2, 5/8	1/2	5/8	1/2	1.10	4.30	7.50	5.50
1-1/4W	32W	Yes	3522215	12.0	39100	†97,750	5/8, 3/4	5/8	3/4, 7/8	5/8	1.33	5.50	9.50	7.00
1-1/2W	38W	Yes	3522216	18.6	61100	†15,2750	7/8, 1	3/4	1	3/4, 7/8	1.61	5.90	10.50	6.50
1-3/4	44	Yes	3522217	25.2	84900	†21,2250	1	7/8	1-1/4	1	1.75	6.00	12.00	7.50
2	51	Yes	3522218	37.0	102600	†25,6500	1-1/4	7/8	1-1/4	1	2.00	7.00	14.00	9.00
2-1/4	57	No	1014422	54.1	143100	289,200	1-1/4	1	1-1/4	1-1/4	2.25	8.00	16.00	10.00
2-1/2	63	No	1014468	68.5	160000	320,000	1-1/4	1-1/4	-	-	2.50	8.38	16.00	11.00
2-3/4	70	No	1014440	94.0	216900	433,800	-	-	-	-	2.75	9.88	18.00	12.50
3	76	No	1014486	115	228000	456,000	-	-	-	-	3.00	9.88	18.00	13.00
3-1/4	83	No	1014501	145	262200	524,400	-	-	-	-	3.25	10.00	20.00	13.50
3-1/2	89	No	1014529	200	279000	558,000	-	-	-	-	3.50	12.00	24.00	15.50
3-3/4	95	No	1015051	198	336000	672,000	-	-	-	-	3.75	10.00	20.00	13.50
4	102	No	1015060	264	373000	746,000	-	-	-	-	4.00	12.00	24.00	16.00
†† 4-1/4	†† 108	No	1015067	302	354000	708,000	-	-	-	-	4.25	12.00	24.00	-
†† 4-1/2	†† 114	No	1015079	345	360000	720,000	-	-	-	-	4.50	14.00	28.00	-
†† 4-3/4	†† 121	No	1015088	436	389000	778,000	-	-	-	-	4.75	14.00	28.00	-
†† 5	†† 127	No	1015094	516	395000	790,000	-	-	-	-	5.00	15.00	30.00	-

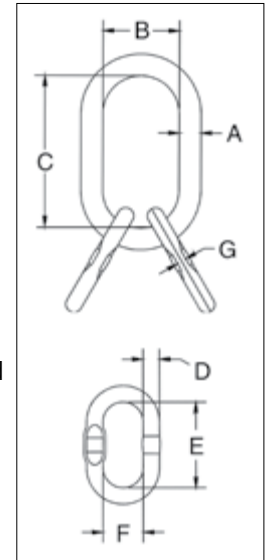
5:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Applications with wire rope and synthetic sling generally require a design factor of 5. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. †Offshore Container Master Links Proof Tested to 2.5 times the Working Load Limit with 70 percent fixtures. ††Welded Master Link. Chain slings require that the Minimum Ultimate Load be 4 times the Working Load Limit. Refer to applications & warnings 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.



## A-345



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 60% inside width special fixtures sized to prevent localized point loading per ASME A-952.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the "CG" (Crosby Group). Each sublink is marked with traceability code.
- 7/8" through 2" A-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.
- Engineered Flat for use with S-1325A coupler link.
- 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.

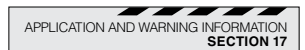


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### A-345 Master Link Assembly with Engineered Flat

Size		OC	Stock No.	Weight Each (lb)	Working Load Limit (lb)	For Grade 100 Chain Size (in) (According to ASME/NACM)	For Grade 80 Chain Size (in) (According to ASME/NACM)	Proof Load (lb)	Dimensions (in)							Deformation Indicator	Engineered Flat for S-1325
(in)	(mm)								A	B	C	D	E	F	G		
3/4W	19W	No	3685119	3.6	12,342	6mm, 9/32	6mm, 9/32, 5/16	†30,875	0.73	3.20	6.00	0.51	4.72	2.36	0.24	4.0	9/32 - 5/16
7/8W	22W	Yes	3014742	7.1	15,428	5/16	5/16	†38,594	0.88	3.75	6.38	0.66	6.69	3.15	0.33	4.5	9/32 - 5/16
1W	26W	Yes	3014766	12.7	26,007	3/8	3/8	†65,058	1.10	4.30	7.50	0.87	6.30	3.74	0.42	5.5	3/8
1-1/4W	32W	Yes	3014779	26.7	39,010	1/2	1/2	†97,588	1.33	5.50	9.50	1.10	9.45	5.12	-	7.0	-
1-1/2W	38W	Yes	3014807	40.3	61,050	5/8	5/8	†152,722	1.61	5.90	10.50	1.26	10.63	5.12	-	7.5	-
1-3/4W	44	Yes	3014814	51.9	84,854	5/8	3/4	†212,268	1.75	6.00	12.00	1.42	10.63	4.92	-	7.5	-
2	51	Yes	3014832	73.9	102,486	3/4	7/8	†256,376	2.00	7.00	14.00	1.57	10.63	5.51	-	9.0	-
2-1/2	64	No	3014855	137	160,010	7/8, 1	1	†400,277	2.50	8.38	16.00	1.97	12.13	7.48	-	11.0	-
2-3/4	70	No	3014864	186	216,873	1	1-1/4	†542,524	2.75	9.88	18.00	2.17	13.98	7.87	-	12.5	-
3-1/4	83	No	1014986	255	234,900	1-1/4	-	469,800	3.25	10.00	20.00	2.50	11.25	8.00	-	13.5	-
4	102	No	1014999	667	373,000	-	-	746,000	4.00	12.00	24.00	3.50	24.00	12.00	-	16	-

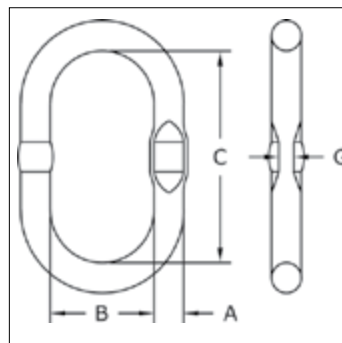
5:1 Design Factor. The maximum individual sublink working load limit is 75% of the assembly working load limit. Sublink for 3.25" and 4" is 61% of the assembly working load limit. Applications with wire rope and synthetic sling generally require a design factor of 5. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Minimum Ultimate Load be 4 times the Working Load Limit. Refer to applications & warnings 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. †Proof Tested to 2.5 times the Working Load Limit with 70 percent fixtures.



## A-344



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN1677.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the "CG" (Crosby Group).
- A-344 master links are type approved to DNV Certification Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- Fatigue rated to 20,000 cycles at 1.5 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Available only in EMEA.



7/16" through 1-7/32" have Engineered Flat.

### Grade 80 A-344 Welded Master Links available with Engineered Flat

Stock No.	Weight Each (lb)	Grade 100 Chain Sling		Grade 80 Chain Sling		WLL (lb)	Proof Load (lb)	Dimensions (in)				Engineered Flat Size for S-1325A (in)
		Single Leg Chain Size (in)	Double Leg Chain Size (in)	Single Leg Chain Size (in)	Double Leg Chain Size (in)			A	B	C	G	
1256988	0.8	6mm, 9/32	6mm	6mm, 9/32	6mm, 9/32, 5/16	7,000	17,632	0.51	2.36	4.72	0.26	6mm, 9/32, 5/16
1257002	1.9	5/16, 3/8	9/32	5/16, 3/8	5/16	9,000	22,701	0.67	3.54	6.30	0.33	3/8
1257072	2.3	3/8, 1/2	5/16	3/8, 1/2	3/8	14,700	37,027	0.75	3.54	6.30	0.33	3/8, 1/2
1257268	5.2	3/8, 1/2	3/8	3/8, 1/2	3/8	15,400	38,570	0.87	5.71	10.83	0.41	1/2
1257212	3.6	3/8, 1/2	3/8	5/8	3/8	19,400	48,488	0.87	3.94	7.09	0.41	1/2
1257332	6.7	1/2	-	1/2, 5/8	3/8	19,600	48,929	0.98	5.71	10.83	0.53	5/8
1257282	5.3	5/8, 1/2	3/8	5/8	1/2	25,300	63,475	0.98	4.53	8.27	0.53	5/8
1257382	8.5	5/8, 1/2	1/2	5/8	1/2	28,600	71,630	1.10	5.71	10.83	0.53	5/8
1257422	10.6	5/8, 3/4	1/2	3/4	5/8	37,400	93,670	1.26	5.71	10.83	0.66	-
1257492	15.2	3/4	5/8	3/4, 7/8	3/4	52,900	132,240	1.42	6.10	11.22	-	-
1257502	16.1	7/8	3/4	7/8	7/8	69,400	173,675	1.57	5.51	10.63	-	-
1257562	28.4	1	7/8	1	1	84,400	210,923	1.77	7.09	13.39	-	-
1257632	42.1	1, 1-1/4	7/8	1	1	99,200	247,950	2.01	8.46	15.35	-	-
1257573	55.3	1-1/4	1	1-1/4	1-1/4	147,600	369,170	2.17	7.99	15.98	-	-
1257591	94.36	-	-	-	-	198,416	496,153	2.75	9.84	17.72	-	-
1257600	125.66	-	-	-	-	275,577	689,264	3.14	10.24	17.72	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to applications & warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm). Two largest sizes are available globally.

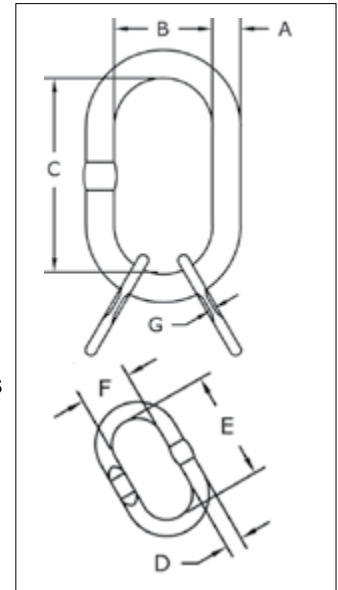


APPLICATION AND WARNING INFORMATION  
SECTION 17

## A-347



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested to values shown, with certification.
- Design Factor of 5 to 1.
- Proof Tested with 70% inside width special fixtures sized to prevent localized point loading per EN1677.
- Each main link is marked with Product Identification Code (PIC) for material traceability, Grade, CE, chain size and the "CG" (Crosby Group). Each sublink is marked with traceability code.
- A-347 master links are type approved to DNV Certification Notes 2.7-1- Offshore Containers. These Crosby master links are 100% proof tested. Every batch is impact tested. The tests are conducted by Crosby and 3.1 test certification is available upon request.
- Engineered Flat for use with S-1325A coupler link.
- Fatigue rated to 20,000 cycles at 1.5 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 links meet other critical performance requirements including fatigue life, impact properties and material traceability, not addressed by ASME B30.26.
- Available only in EMEA.



5

### Grade 80 A-347 Welded Master Link Assembly with Engineered Flat

Stock No.	Weight Each (lb)	Grade 100 Chain Sling Three / Four Legs Chain Size (in)	Grade 80 Chain Sling Three / Four Legs Chain Size (in)	WLL (lb)	Proof Load (lb)	Dimensions (in)							Engineered Flat Size for S1325A Chain Size (in)
						A	B	C	D	E	F	G	
1257755	2.4	-	6mm	7,000	17,632	0.51	2.36	4.72	0.51	4.72	2.36	0.26	6mm
1257762	3.5	6mm	6mm, 9/32	9,000	22,701	0.67	3.54	6.30	0.51	4.72	2.36	0.26	6mm
1257832	3.9	6mm	9/32	9,200	23,362	0.75	3.54	6.30	0.51	4.72	2.36	0.26	9/32
1258058	7.3	5/16, 9/32	5/16	15,400	38,570	0.87	3.94	7.09	0.67	6.30	3.54	0.33	3/8
1258067	8.9	5/16, 9/32	5/16	15,400	38,570	0.87	5.71	10.83	0.67	6.30	3.54	0.33	3/8
1258049	8.4	5/16	3/8	18,700	46,725	0.87	3.94	7.09	0.75	6.30	3.54	0.33	3/8
1258076	10.1	5/16	3/8	19,600	49,149	0.98	4.53	8.27	0.75	6.30	3.54	0.33	3/8
1258102	11.4	5/16	3/8	19,600	49,149	0.98	5.71	10.83	0.75	6.30	3.54	0.33	3/8
1258142	15.6	3/8	1/2	31,900	80,005	1.10	5.71	10.83	0.87	7.09	3.94	0.41	1/2
1258182	21.2	3/8	1/2	37,400	93,670	1.26	5.71	10.83	0.98	8.27	4.53	0.53	5/8
1258185	28	1/2	5/8	52,000	130,036	1.42	6.10	11.22	1.10	7.48	4.33	0.53	5/8
1258187	40.6	5/8	5/8	61,900	154,941	1.57	5.51	10.63	1.26	10.83	5.71	0.66	-
1258402	58.6	5/8	3/4	84,400	211,143	1.77	7.09	13.39	1.42	11.22	6.10	-	-
1258471	78.2	3/4	7/8	99,200	247,950	2.01	8.46	15.35	1.57	10.63	5.51	-	-
1258491	134.6	7/8	1	147,600	369,170	2.17	7.99	15.98	2.01	15.35	8.46	-	-

5:1 Design Factor. Applications with wire rope and synthetic sling generally require a Design Factor of 5. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120 degrees. Proof Test Load equals or exceeds the requirement of ASTM A952(8.1) and ASME B30.9. Chain slings require that the Design Factor be 4:1. Refer to applications & warnings to determine product's actual Ultimate Load. There are no manufactured flats on links over 1 1/4" (32mm).

**Fatigue Rated**

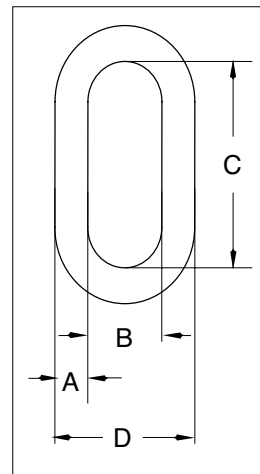


APPLICATION AND WARNING INFORMATION  
SECTION 17

## G-340 / S-340



- Forged carbon steel - Quenched & Tempered
- Self colored (S) or hot-dip galvanized (G).



### G-340/S-340 Weldless End Links

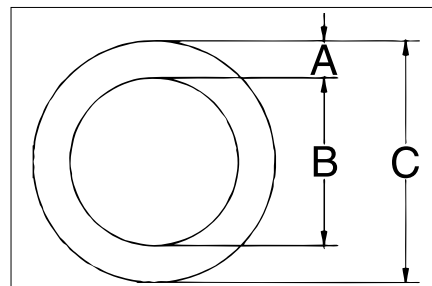
Size (in)	Stock No.		Working Load Limit (lb)	Weight Each (lb)	Dimensions (in)			
	G-340 Galv.	S-340 S.C.			A	B	C	D
5/16	1014057	1014066	2500	.15	.31	.50	1.75	1.18
3/8	1014075	1014084	3800	.22	.38	.56	1.88	1.38
1/2	1014093	1014100	6500	.49	.50	.75	2.38	1.81
5/8	1014119	1014128	9300	.97	.63	1.00	3.25	2.32
3/4	1014137	1014146	14000	1.51	.75	1.13	3.50	2.68
7/8	1014155	1014164	12000	2.59	.88	2.00	5.13	3.75
1	1014173	1014182	15200	3.95	1	2.25	5.75	4.25
1-1/4	1014191	1014208	26400	7.30	1.25	2.50	7.00	5.00
1-3/8	1014217	1014226	30000	10.38	1.38	2.75	7.75	5.50

5:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120°.

## S-643



- Forged carbon steel - Quenched & Tempered.



### S-643 Weldless Rings

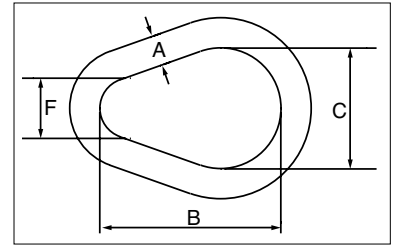
Size (in)	Stock No	Working Load Limit Single Pull (lb)	Weight Each (lb)	Dimensions (in)		
				A	B	C
7/8 x 4	1013780	7200	2.72	.88	4.00	5.75
7/8 x 5-1/2	1013806	5600	3.47	.88	5.50	7.25
1 x 4	1013824	10800	3.69	1.00	4.00	6.00
1-1/8 x 6	1013842	10400	6.60	1.13	6.00	8.25
1-1/4 x 5	1013860	17000	6.82	1.25	5.00	7.50
1-3/8 x 6	1013888	19000	10.12	1.38	6.00	8.75

6:1 Design Factor.

## A-341



- Alloy steel — Quenched & Tempered.
- Individually Proof Tested at 2 times Working Load Limit with certification.
- Sizes up to 2" are forged.



## A-341 Alloy Pear Shaped Links

5

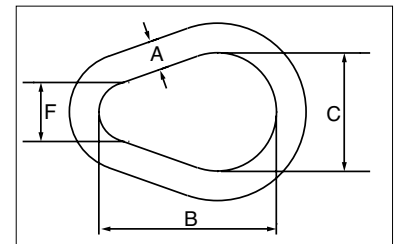
Size (A) (in)	Stock No	Working Load Limit		Weight Each (lb)	Dimensions (in)		
		(lb)	(t)		B	C	F
1/2	1013575	7000	3.15	.55	3.00	2.00	1.00
5/8	1013584	9000	4.09	1.10	3.75	2.50	1.25
3/4	1013595	12300	5.59	1.76	4.50	3.00	1.50
7/8	1013604	15000	6.81	2.82	5.25	3.50	1.75
1	1013613	24360	11.0	4.22	6.00	4.00	2.00
1 1/8	1013622	30600	13.9	6.25	6.50	4.50	2.25
1 1/4	1013631	36000	16.4	8.25	7.75	5.00	2.50
1 3/8	1013640	43000	19.5	11.25	8.25	5.50	2.75
1 1/2	1013654	54300	24.7	14.25	9.00	6.00	3.00
1 3/4	1013672	84900	38.6	22.50	10.50	7.00	3.50
2	1013690	102600	46.6	34.00	12.00	8.00	4.00
†† 2 1/2	1013703	147300	66.9	66.00	15.00	10.00	5.00
†† 2 3/4	1013712	216900	98.6	88.00	16.50	11.00	5.50
†† 3	1013721	228000	103	114.00	18.00	12.00	6.00
†† 4	1013748	373000	169	271.00	24.00	16.00	8.00

5:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120°. †† Welded Link.

## G-341 / S-341



- Forged carbon steel - Quenched & Tempered.
- Self colored (S) or hot-dip galvanized (G).



## G-341 / S-341 Weldless Sling Links

Size (A) (in)	Stock No.		Working Load Limit Single Pull (lb)	Weight Each (lb)	Dimensions (in)		
	G-341 Galv.	S-341 S.C.			B	C	F
3/8	1013897	1013904	1800	.23	2.25	1.50	.75
1/2	1013913	1013922	2900	.55	3.00	2.00	1.00
5/8	1013931	1013940	4200	1.06	3.75	2.50	1.25
3/4	1013959	1013968	6000	1.88	4.50	3.00	1.50
7/8	1013977	1013986	8300	2.75	5.25	3.50	1.75
1	1013995	1014002	10800	4.35	6.00	4.00	2.00
1 1/4	1014011	1014020	16750	7.60	7.75	5.00	2.50
1 3/8	1014039	1014048	20500	11.30	8.25	5.50	2.75

6:1 Design Factor. Based on single leg sling (in-line load), or resultant load on multiple legs with an included angle less than or equal to 120°.

# Identification of our Master Links

To provide good readability and traceability our master links have the following marking:

## Product type

- M - represents single type master link.
- MT - represents master link assembly.
- OS - is an abbreviation for offshore. All Arctic offshore master links are marked with OS and complies with DNV 2.7-1.

## Traceability code

- The traceability code is unique for the production batch and normally consists of a letter and a number; for example A2. The traceability code makes it possible to trace and track the product through the whole production process back to the raw material used for the actual product.

## Size designation

- The size is linked to the WLL as well as to compatible products, like attachment couplers and other components.
- Trade size.
- The size expressed in inch.

## Gunnebo Sweden

- To clearly highlight the Gunnebo Industries brand, our master links are marked with Gunnebo, Sweden.

## Meets the standards

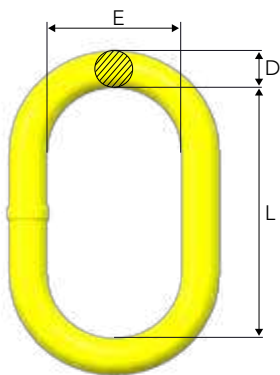
- The markings fulfills the requirements of EN 1677-4, ASTM A952, AS 3775.2 and DNV 2.7-1.

## Approved by BG/DGUV

- H32 – represents Gunnebo Industries' manufacturing ID. The ID also represents a 3rd part audit by BG in Germany.



## Master Link M



Stock No.	Code	WLL (lb) 5:1		L	E	D	Weight (lb)
		EN 1677-4	A-952/A952M AS 3775.2-2014				
Z101271	M-6-10	3,306	3,306	3.94	2.36	3/8"	0.44
Z100818	M-86-10	5510	7100	4.72	2.36	1/2"	0.88
Z101273	M-108-10	8,800	11,460	5.51	3.15	5/8"	1.76
Z101274	M-13-10	15,000	15,000	5.91	3.54	3/4"	2.20
Z101267	M-1310-10	16,530	17,632	6.30	3.74	7/8"	3.31
Z101268	M-1613-10	22,040	29,974	7.48	4.33	11/8"	6.17
Z101247	M-19-10	26,448	35,300	7.87	4.72	13/16"	7.72
Z101269	M-2016-10	37,468	45,402	9.45	5.51	13/8"	11.46
Z101270	M-2220-10	55,100	68,103	9.84	5.91	19/16"	16.09
Z101275	M-2622-10	61,712	70,528	9.84	5.91	15/8"	19.18
Z101284	M-32-10	72,732	85,074	11.81	7.09	13/4"	25.79
Z101276	M-3226-10	94,772	102,706	11.81	7.87	2"	32.63
Z101277	M-3632-10	123,424	143,260	13.78	7.87	21/8"	45.64
Z101278	M-4536-10	154,280	160,231	14.76	8.27	23/8"	58.20
Z101279	M-90T-10	198,360	220,400	17.72	9.84	23/4"	94.36
Z101280	M-125T-10**	275,500	275,500	17.72	10.24	31/8"	125.66

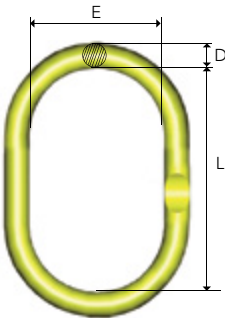
\*\* Dimension L and E not acc. to EN 1677-4.

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M, AS 3775:2014 and AS 3776:2015.

5:1 Design Factor

## Master Link MF with engineered flat

For 1-, 2-, 3- and 4-leg slings. Designed for use with CL, CLD, CG and CGD. 3- and 4-leg chain slings require CLD / CGD.



Stock No.	Code	WLL (lb) 5:1		For chain size			L	E	D	Weight (lb)
		EN 1677-4	A-952/A952M AS 3775.2-2014	1 leg	2 leg	3-4leg				
B14487	MF-6-10	3,306	3,306	(6mm)			3.94	2.36	3/8"	0.44
B14489	MF-86-10	5510	7100	5/16"	(6mm)	-	4.72	2.36	1/2"	0.88
B14482	MF-108-10	8,800	11,460	3/8"	5/16"	(6mm)	5.51	3.15	5/8"	1.76
B14483	MF-1310-10	16,530	17,632	1/2"	3/8"	5/16"	6.30	3.74	7/8"	3.31
B14484	MF-1613-10	22,040	29,974	5/8"	1/2"	3/8"	7.48	4.33	1 1/8"	6.17
B14485	MF-2016-10	37,468	45,402	3/4"	5/8"	1/2"	9.45	5.51	1 3/8"	11.46
B14486	MF-2220-10	55,100	68,103	7/8"	3/4"	5/8"	9.84	5.91	1 9/16"	16.09

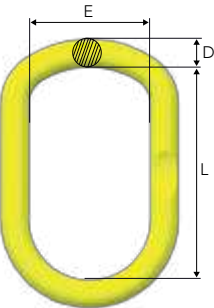
Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M, AS 3775:2014 and AS 3776:2015.

5:1 Design Factor



## Master Link MFH with engineered flat

Designed for crane hooks, DIN 15401 and 15402. Designed for use with CL, CLD, CG and CGD. 3- and 4-leg chain slings require CLD / CGD.



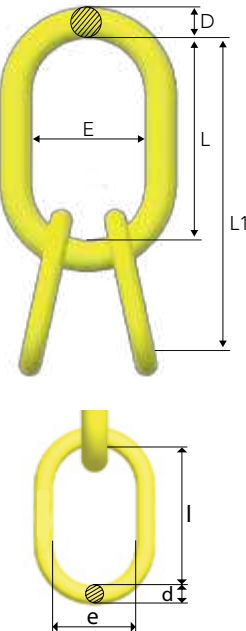
Stock No.	Code	WLL (lb) 5:1		For chain size			L	E	D	DIN15401	DIN15402	Weight (lb)
		EN 1677-4	A-952/A952M AS 3775.2-2014	1leg	2leg	3-4leg						
Z101262	MFH-1310-10	16530	17632	1/2"	3/8"	5/16"	9.06	4.92	7/8"	≤12mm	≤16mm	4.19
Z101263	MFH-1613-10	22040	29974	5/8"	1/2"	3/8"	9.84	5.31	1 1/8"	≤12mm	≤16mm	7.05
Z101264	MFH-2016-10	37468	45402	3/4"	5/8"	1/2"	11.02	5.31	1 1/4"	≤16mm	≤20mm	10.14
Z101265	MFH-2220-10	61712	68104	7/8"	3/4"	5/8"	12.60	6.89	1 9/16"	≤25mm	≤32mm	18.96
Z101266	MFHW-2220-10	61712	61712	7/8"	3/4"	5/8"	13.98	8.86	1 9/16"	≤50mm	≤63mm	21.83

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M-02, AS 3775:2014 and AS 3776:2015.

5:1 Design Factor

## Master Link with Sublinks MT

Designed for use with chain or wire rope. For 3- and 4-leg slings

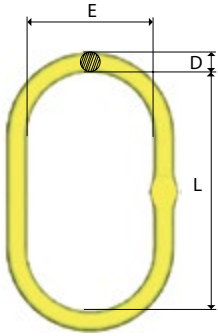


Stock No.	Code	WLL (lb) 5:1		L1	L	E	D	I	e	d	Weight (lb)
		EN 1677-4	A-952/A952M AS 3775.2-2014								
Z100091	MT-6-10	7714	11020	11.2	6.3	3.54	3/4"	4.72	2.36	1/2"	3.96
Z100903	MT-8-10	11461	17632	11.8	6.3	3.74	7/8"	5.51	3.15	5/8"	6.61
Z101359	MT-9-10	15208	21378	13.3	7.48	4.33	1-1/8"	6.30	3.54	3/4"	10.8
Z100904	MT-10-10	25346	35300	14.1	7.87	4.72	1-3/16"	6.30	3.74	7/8"	14.1
Z100905	MT-13-10	37468	57304	17.3	9.84	5.91	1-9/16"	7.48	4.33	1-1/8"	31.3
Z100906	MT-16-10	61712	77140	19.6	11.81	7.87	2"	7.87	4.72	1-1/4"	50.7
Z101074	MT-20-10	77140	110200	21.6	11.81	7.87	2-1/8"	9.84	5.91	1-9/16"	69.4
Z101281	MT-22-10	116812	165300	24.0	13.78	7.87	2-3/8"	10.24	5.51	1-3/4"	101
Z101282	MT-26-10	154280	220400	28.7	17.72	9.84	2-3/4"	11.02	6.3	2	156
Z101283	MT-32-10	198360	275500	28.7	17.72	10.2	3-1/8"	11.02	6.3	2-1/8"	200

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M, AS 3775:2014 and AS 3776:2015.

Engineered flat on the sublinks for sizes up to MT-16-10 except MT-9-10.

5:1 Design Factor



## Master Link MFX with engineered flat

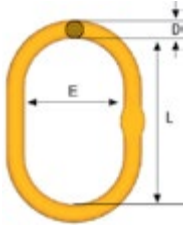
Oversized, for 1- and 2-leg slings. Designed for use with CL, CLD, CG and CGD.

Stock No.	Code	WLL (lb) 5:1		For chain 1-leg	For chain 2-leg	L	E	D	Weight (lb)
		EN 1677-4	A-952/A952M AS 3775.2-2014						
Z100550	MFX-108-10	9367	11461	5/16", 3/8"	5/16"	13.39	7.09	1"	8.16
Z100551	MFX-1310-10	16530	17632	1/2"	3/8"	13.39	7.09	11/8"	10.36
Z100552	MFX-1613-10	24685	29974	5/8"	1/2"	13.39	7.09	13/8"	15.65
Z101125	MFX-2016-10	35300	45402	3/4"	5/8"	13.39	7.09	19/16"	21.16

Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M-02, AS 3775:2014 and AS 3776:2015.  
5:1 Design Factor

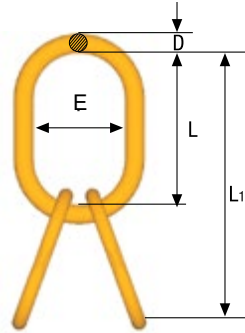
## Master Link MF with engineered flat

Classic yellow paint.



Stock No.	Code	WLL (lb)		L	E	D	Weight (lb)
		EN1677-4	A-952/A952M				
Z100817	MF-86-10	5510	7100	4.72	2.36	0.51	0.88
Z100861	MF-108-10	8800	11460	5.51	3.15	0.67	1.76
Z100862	MF-1310-10	16530	17632	6.30	3.74	0.87	3.31
Z100863	MF-1613-10	22040	29974	7.48	4.33	1.10	5.51
Z100864	MF-2016-10	37468	45402	9.45	5.51	1.34	11.46
Z100865	MF-2220-10	55100	68103	9.84	5.91	1.57	16.09

5:1 Design Factor. Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M.

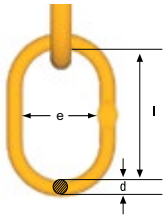


## Master Link with Sub Links MT

Engineered flat on the sublinks. Classic yellow paint.

Stock No.	Code	WLL (lb)		For chain 3-4-leg	L1	L	E	D	l	e	d	Weight (lb)
		EN1677-4	A-952/A952M									
Z100819	MT-6-10	7 714	11 020	(6mm)	10.63	5.91	3.54	0.75	4.72	2.36	0.51	3.97
Z100889	MT-8-10	11 461	17 632	9/32", 5/16"	11.81	6.30	3.74	0.87	5.51	3.15	0.67	6.61
Z100890	MT-10-10	25 346	35 300	3/8"	14.17	7.87	4.72	1.18	6.30	3.74	0.87	14.11
Z100891	MT-13-10	37 468	57 304	1/2"	17.72	9.84	5.91	1.57	7.87	4.72	1.18	31.31
Z100892	MT-16-10	61 712	77 140	5/8"	19.69	11.81	7.87	1.97	7.87	4.72	1.26	50.71

5:1 Design Factor. Fulfills requirements in: EN 1677:2008 (WLL +25%), ASTM A952/A952M.



## Master Link MF HDG with engineered flat

Stock No.	Code	WLL (lb)		L	E	D	Weight (lb)
		EN1677-4	A-952/A952M				
BG14481	MF-86-8 HDG	4500	5510	4.72	2.36	0.51	1.10
BG14482	MF-108-8 HDG	7100	8800	5.51	3.15	0.67	1.76
BG14483	MF-1310-8 HDG	12000	15000	6.30	3.74	0.87	3.31
BG14484	MF-1613-8 HDG	18000	22600	7.48	4.33	1.1	6.17

5:1 Design Factor.