



# FITTINGS

- DETACHABLE CHAIN CONNECTING LINKS
- KENTER JOINING SHACKLES • JAW & JAW SWIVEL SHACKLES
- ROUND PIN ANCHOR SHACKLES
- DETACHABLE ANCHOR CONNECTING LINKS
- OVAL PIN JOINING SHACKLES • PAWL TYPE CHAIN STOPPER
- PELICAN HOOK CHAIN STOPPER ASSEMBLY
- DEVIL'S CLAW CHAIN STOPPER ASSEMBLY • END SHACKLES
- END LINKS • SWIVELS • HINGE LINKS

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FITTINGS



# FITTINGS

## COUPLING TO THE ANCHOR

<b>A1</b>		<p> <b>A) COMMON LINK</b>  <b>B) ENLARGED LINK</b>  <b>C) END LINK</b>  <b>D) KENTER LINK</b>  <b>E) JOINING SHACKLE</b>  <b>F) END SHACKLE</b>  <b>G) SWIVEL ASSEMBLY</b>  <b>H) JAW &amp; JAW SWIVEL SHACKLE</b>  <b>J) PEAR ANCHOR JOINING LINK</b>  <b>K) DETACHABLE CONNECTING LINK</b> </p>
<b>A2</b>		
<b>A3</b>		
<b>A4</b>		
<b>A5</b>		
<b>A6</b>		
<b>A7</b>		
<b>A8</b>		

FITTINGS



# COUPLING TO THE ANCHOR

<p><b>A9</b></p>		<p>A) COMMON LINK B) ENLARGED LINK C) END LINK D) KENTER LINK E) JOINING SHACKLE F) END SHACKLE G) SWIVEL ASSEMBLY H) JAW &amp; JAW SWIVEL SHACKLE J) PEAR ANCHOR JOINING LINK K) DETACHABLE CONNECTING LINK</p>
<p><b>A10</b></p>		
<p><b>A11</b></p>		
<p><b>A12</b></p>		
<p><b>A13</b></p>		
<p><b>A14</b></p>		
<p><b>A15</b></p>		
<p><b>A16</b></p>	<p>Normal adaptor piece</p>	

FITTINGS



# FITTINGS

## COUPLING IN THE CHAIN LOCKER

A) COMMON LINK

B) ENLARGED LINK

C) END LINK

D) KENTER LINK

E) JOINING SHACKLE

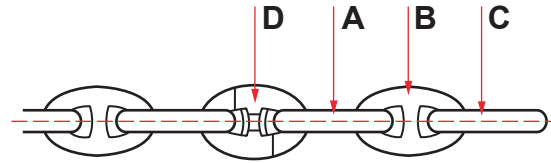
F) END SHACKLE

G) SWIVEL ASSEMBLY

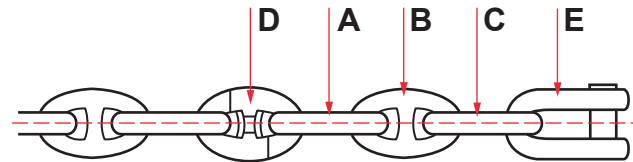
H) JAW & JAW SWIVEL SHACKLE

J) PEAR ANCHOR JOINING LINK

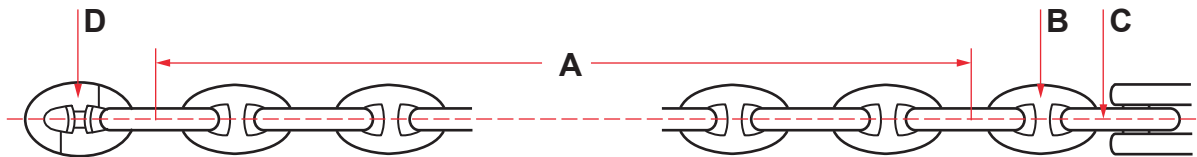
K) DETACHABLE CONNECTING LINK



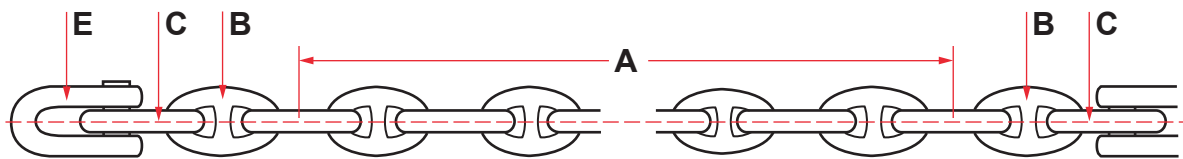
**B1**



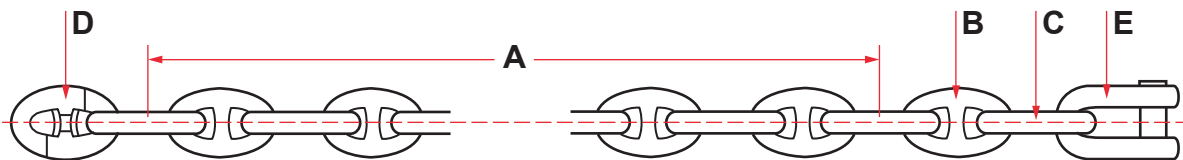
**B2**



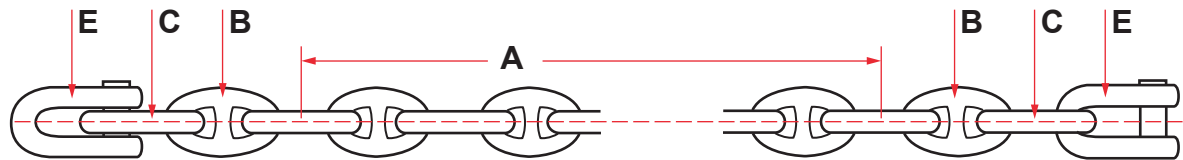
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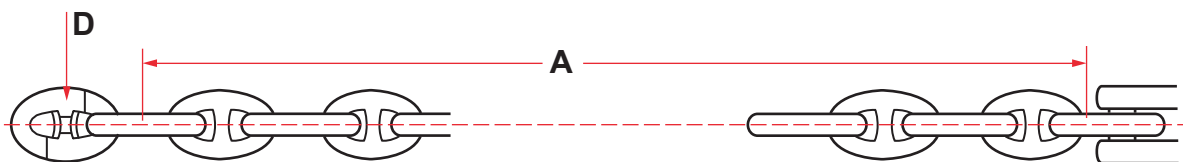
**B4**



**B5**



**B6**



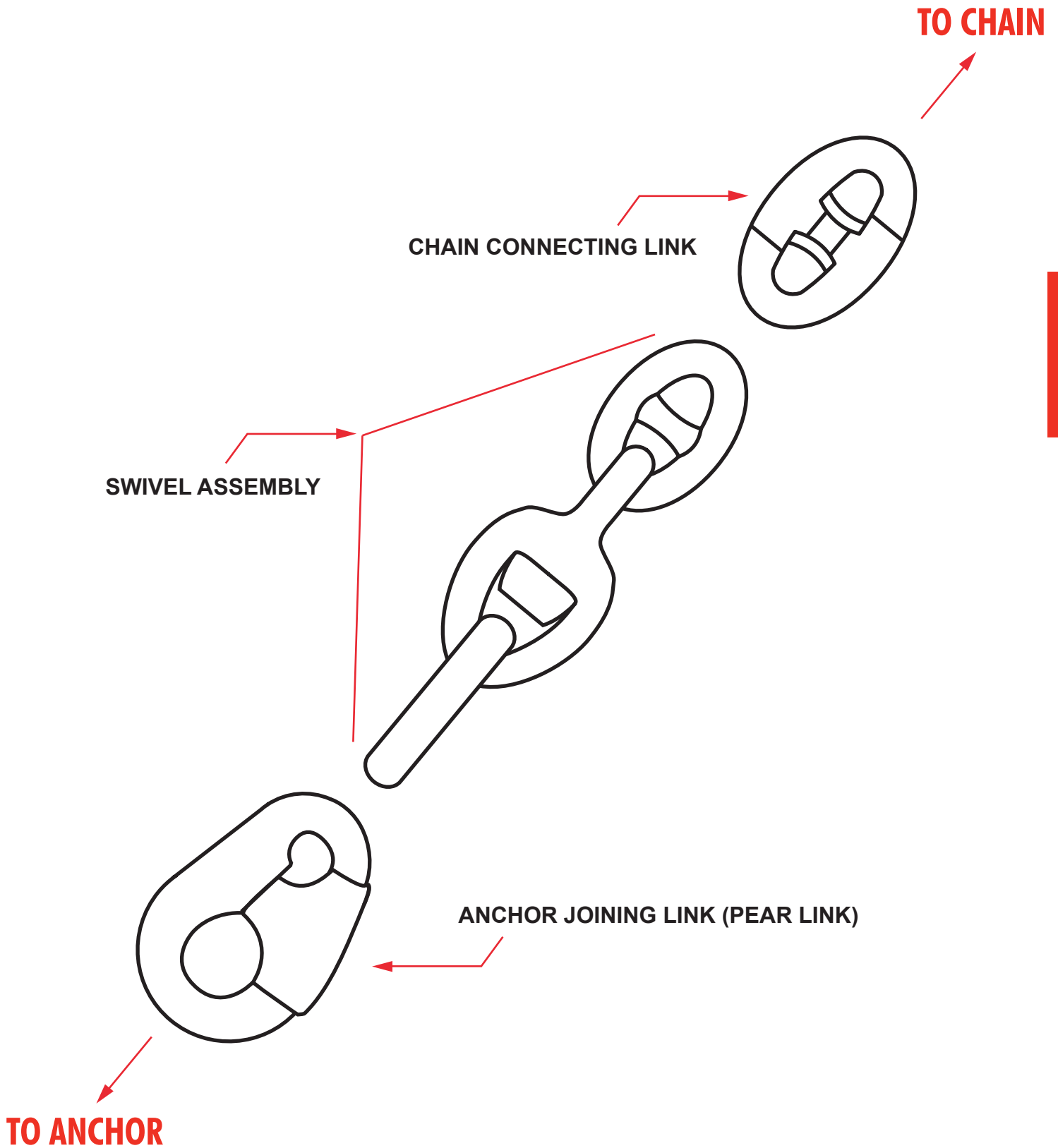
**B7**

FITTINGS





# FITTINGS



FITTINGS



# FITTINGS

## SHACKLES AND FITTINGS

APPROXIMATE WEIGHTS OF SHACKLES AND FITTINGS

CHAIN DIAMETER Ø		KENTER SHACKLE		JOINING SHACKLE		ANCHOR SHACKLE		END SHACKLE		SWIVEL		COMPLETE SWIVEL		SWIVEL SHACKLE	
INCHES	MM	KG	LBS.	KG	LBS.	KG	LBS.	KG	LBS.	KG	LBS.	KG	LBS.	KG	LBS.
3/4	19	1.1	2.4	1.7	3.7	2.5	5.5	1.6	3.5	2.8	6.2	6.4	14.1	9	19.8
13/16	20.5	1.3	2.9	2.2	4.9	3.1	6.9	1.9	4.2	3.5	7.8	7.8	17.2	11.3	24.9
7/8	22	1.6	3.5	2.7	5.9	3.8	8.4	2.4	5.3	4.4	9.7	9.8	21.6	13.9	30.8
15/16	24	2.1	4.6	3.5	7.7	5	11	3.1	6.8	5.6	12.3	12.8	28.3	18.1	39.9
1	25.5	2.6	5.7	4.2	9.3	6	13.3	3.8	8.4	6.8	15	15.4	33.9	20.9	46
1-1/16	27	3	6.6	5	11	7.1	16.7	4.5	9.9	8	17.9	18.2	40.2	25.8	56.8
1-1/8	28.5	3.5	7.7	5.8	12.8	8.4	18.6	5.2	11.5	9.4	20.7	21.9	48.4	30.6	67.6
1-3/16	30	4.2	9.2	6.8	15	9.8	21.6	6.1	13.5	11	24.3	24.9	54.9	35.4	78
1-1/4	31.5	4.8	10.6	7.8	17.2	11.3	25	7.1	15.7	12.7	28	28.4	62.5	40.9	90.3
1-5/16	33.5	5.8	12.8	9.4	20.7	13.6	30	8.5	18.8	15.3	33.7	34.7	76.6	49.2	108.6
1-3/8	35	6.5	14.3	10.8	23.8	15.5	34.2	9.8	21.6	17.5	38.6	39.6	87.4	56.2	123.8
1-7/16	36.5	7.5	16.5	12.2	26.9	17.6	38.8	11	24.3	19.8	43.7	44.8	98.8	63.7	140.4
1-1/2	38	8.4	18.5	13.8	30.4	19.8	43.7	12.4	27.4	22.5	49.6	50.7	111.8	71.9	158.5
1-9/16	39.5	9.5	21	15.5	34.2	22.3	49.2	14	30.9	25	55.2	56.5	124.7	80.7	178
1-5/8	41.5	11	24.2	17.9	39.5	25.8	56.9	16.2	35.7	29	64	65.4	144	93.6	206.4
1-11/16	43	12.3	27.1	20	44.1	28.7	63.3	18	39.7	32.5	71.6	72.3	159.4	104	230
1-3/4	44.5	13.5	29.8	22.1	48.7	31.9	70.3	20	44.1	36	79.4	81.4	179.5	115	254
1-13/16	46	15	33	24.4	53.8	35.2	77.6	22.1	48.7	39.5	87.1	89.2	196.6	128	281
1-7/8	47.5	16.5	36.4	26.9	59.3	38.8	85.5	24.3	53.6	43.5	117.9	99	218.2	140	309
1-15/16	49	18	39.7	29.5	65	42.5	93.7	26.7	58.9	48	105.8	109	240	154	340
2	51	20.5	45.2	33.3	73.4	48	105.8	30	66.1	54	119	122	270	174	383
2-1/16	52.5	22.3	49.2	36.3	80	52.3	115.3	32.8	72.3	59	130	134	295	190	418
2-1/8	54	24.2	53.4	39.5	87.5	57	125.7	35.7	78.7	64	141	147	324	206	455
2-3/16	55.5	26.3	58	43	94.8	61.8	136.2	38.8	85.6	69.5	153.2	158	349	224	494
2-1/4	57	28.5	62.8	46.5	102.5	67	144.7	42	92.6	75.5	166.4	173	381	243	535
2-5/16	58.5	30.8	67.9	50.3	110.9	72.4	159.6	45	99.2	81.5	179.7	185	408	262	578
2-3/8	60.5	34	75	55.6	122.6	80.1	176.6	50.2	110.7	90	198.4	204	450	290	640
2-7/16	62	36.7	80.9	59.8	131.8	86.2	190	54	119	97	213.8	220	485	312	688
2-1/2	63.5	39.4	86.8	64.3	141.8	92.6	204.2	58	127.9	104.5	230.4	237	523	335	739
2-9/16	65	42.3	93.3	69	152.1	99.3	219	62.4	137.6	112	247	254	560	360	793
2-5/8	66.5	45.3	99.9	73.8	162.7	106.4	234.6	66.7	147	120	265	272	600	385	849
2-11/16	68	48.3	106.5	78.9	174	113.6	250.5	71.3	157	128	282	292	644	412	908
2-3/4	69.5	51.6	113.8	84.3	185.8	121.4	267.7	76.1	167.7	137	302	311	685	440	969
2-13/16	71.5	56.2	123.9	91.8	202.4	132.2	291.5	82.9	182	149	328	338	745	479	1056
2-7/8	73	59.8	131.8	97.6	215.2	140.7	310	88.2	194	159	351	361	795	510	1123
2-15/16	74.5	63.6	140.2	103.8	229	149	328	93.8	207	169	373	383	845	542	1194

FITTINGS



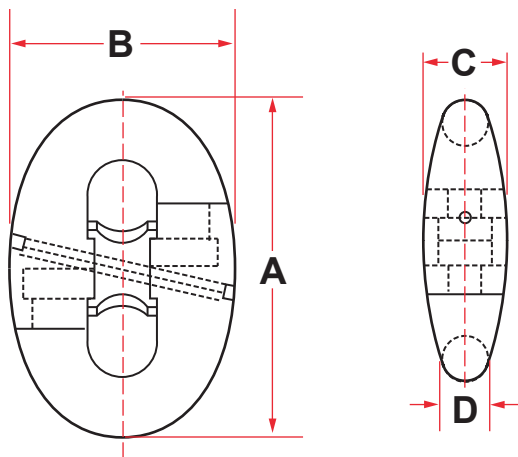
# FITTINGS

CHAIN DIAMETER Ø		KENTER SHACKLE		JOINING SHACKLE		ANCHOR SHACKLE		END SHACKLE		SWIVEL		COMPLETE SWIVEL		SWIVEL SHACKLE	
INCHES	MM.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.	KG.	LBS.
3	76	67.5	148.8	110	243	159	351	100	220	179	395	406	895	575	1268
3-1/16	77.5	71.6	157.8	117	258	168	370	106	234	190	419	431	950	610	1344
3-1/8	79.5	77.3	170.4	126	278	182	401	114	251	205	452	465	1025	658	1451
3-3/16	81	81.8	180.3	133	293	192	423	121	267	217	478	492	1085	696	1535
3-1/4	82.5	66.4	190.5	141	311	203	448	128	282	229	505	520	1146	736	1622
3-5/16	84	91.2	201	149	328	214	472	135	298	242	534	548	1208	776	1712
3-3/8	86	97.5	215	159	351	230	507	144	317	259	571	588	1296	833	1837
3-7/16	87.5	103	227	168	370	242	534	152	335	273	602	619	1366	878	1935
3-1/2	89	108	238	177	390	255	562	160	353	287	633	651	1438	924	2036
3-9/16	90.5	114	251	186	410	268	591	168	370	302	666	685	1511	971	2141
3-5/8	92	119	262	195	430	281	619	177	390	317	699	719	1586	1020	2249
3-11/16	93.5	125	276	205	452	295	650	185	408	333	734	756	1666	1071	2361
3-3/4	95	131	289	215	474	310	683	195	430	349	769	792	1746	1123	2476
3-13/16	97	140	309	229	505	330	728	207	456	372	820	844	1861	1196	2636
3-7/8	98.5	147	324	240	529	3415	761	217	478	389	858	883	1946	1252	2760
3-15/16	100	154	340	251	553	361	796	227	500	407	897	923	2036	1310	2888
4	101.5	161	355	262	578	378	833	237	522	426	939	967	2131	1370	3020
4-1/8	105	179	395	291	642	418	922	263	580	471	1038	1069	2356	1516	3343
4-1/4	108	194	428	316	697	455	1003	286	631	513	1131	1164	2566	1650	3638
4-3/8	111	211	465	343	756	494	1089	311	686	557	1228	1264	2786	1792	3950
4-1/2	114.5	231	509	377	831	544	1199	341	752	611	1347	1386	3056	1966	4335
4-5/8	117.5	250	551	407	897	585	1292	369	813	660	1455	1498	3301	2125	4685
4-3/4	120.5	270	595	439	968	632	1393	397	875	712	1570	1516	3562	2292	5053
4-7/8	124	294	648	479	1056	688	1517	433	955	776	1711	1761	3882	2498	5506
5	127	316	697	514	1133	739	1629	465	1025	834	1839	1892	4172	2793	5916
5-1/8	130	339	745	551	1215	793	1748	499	1100	894	1971	2028	4472	2878	6345
5-1/4	133.5	367	809	597	1316	859	1894	540	1190	969	2135	2199	4847	3117	6871
5-3/8	136.5	392	864	638	1407	918	2024	577	1272	1035	2282	2348	5177	3332	7345
5-1/2	140	423	933	689	1519	991	2185	623	1373	1117	2463	2534	5587	3595	7925
5-5/8	143	451	994	734	1618	1056	2328	664	1464	1190	2623	2700	5953	3831	8445
5-3/4	146	480	1058	781	1722	1123	2476	706	1556	1267	2793	2875	6338	4077	8988
5-7/8	149.5	515	1135	839	1850	1206	2659	758	1671	1360	2998	3086	6803	4377	9650
6	152.5	546	1204	890	1962	1280	2822	805	1775	1443	3181	3274	7218	4646	10246
6-1/8	155.5	579	1276	944	2081	1357	2992	854	1883	1530	3373	3472	7654	4926	10859
6-1/4	159	619	1365	1009	2224	1451	3199	912	2011	1636	3607	3712	8183	5266	11609
6-3/8	162	655	1444	1067	2352	1535	3384	965	2128	1730	3814	3925	8653	5570	12278
6-1/2	165	692	1526	1128	2487	1622	3576	1020	2249	1828	4030	4148	9145	5885	12973
6-5/8	168	730	1609	1190	2623	1712	3774	1076	2372	1930	4255	4379	9654	6212	13694
6-3/4	171.5	777	1713	1265	2791	1821	4015	1145	2524	2053	4526	4658	10269	6608	14568
6-7/8	174.5	818	1803	1334	2803	1918	4228	1206	2659	2163	4769	4908	10820	6961	15346
7	178	869	1916	1416	2916	2036	4489	1280	2821	2295	5060	5207	11479	7388	16288

FITTINGS



# FITTINGS



# KENTER JOINING SHACKLE



## GRADE 3

FITTINGS

NOMINAL DIAMETER D		A (MM)	B (MM)	C (MM)	WEIGHT		PROOF TEST KGF	BREAK TEST KGF
MM	INCHES				KG.	LBS.		
16	5/8	96	67	24	0.57	1.25	15100	21600
19	3/4	120	84	30.5	1.09	2.40	21600	30900
22	7/8	134	93	33	1.75	3.8	29300	41700
24	15/16	144	101	36	2.1	4.6	34000	48500
25	1	152	107	38	2.5	4.8	38000	54300
29	1-1/18	174	122	44	4.8	10.5	49200	70400
32	1-1/4	192	134	49	5.0	11.0	59500	84900
34	1-3/8	210	146	54	6.5	14.3	70400	100900
36	1-7/16	216	151	55	8.0	17.6	76700	109400
38	1-1/2	228	160	58	9.0	19.8	83300	118900
42	1-5/8	252	176	64	12.0	26.5	102000	143400
44	1-3/4	264	185	67	14.0	30.9	111900	159900
46	1-13/16	276	193	70	15.0	33.1	119800	171100
48	1-7/8	288	202	73	18.0	39.7	130000	185100
51	2	306	214	78	21.0	46.3	145400	207700
54	2-1/8	324	227	82	24.0	52.9	162000	231500
56	2-3/16	336	235	85	26.0	57.3	174000	248000
58	2-1/4	348	244	88	31.0	68.3	185400	265000
60	2-3/8	360	252	91	34.0	75.0	199600	285200
62	2-7/16	372	260	94	36.0	79.4	210000	300000
64	2-1/2	384	269	97	38.0	83.8	223000	319000
67	2-5/8	402	281	102	41.0	90.4	242900	347000
70	2-3/4	420	294	106	52.4	115.7	263500	376400
73	2-7/8	438	307	111	60.0	132.3	285000	407000
76	3	456	319	116	70.0	154.3	308200	440200
78	3-1/16	468	328	119	71.0	156.5	322000	459000
84	3-5/16	504	353	128	92.0	202.8	369300	527600
87	3-7/16	522	365	132	103.0	227.1	395100	564300
89	3-1/2	534	374	135	113.0	249.1	409000	584300
92	3-5/8	552	386	140	115.0	253.5	434800	621200
95	3-3/4	570	399	144	132.0	291.0	462300	660100
102	4	612	428	155	163.0	359.4	522100	746000
108	4-1/4	648	454	164	196.0	432.1	577000	825000
111	4-3/8	666	466	169	213.0	469.6	607000	867200
114	4-1/2	684	479	173	233.0	513.7	637300	910900

To convert to lbs., multiply by 2.2046





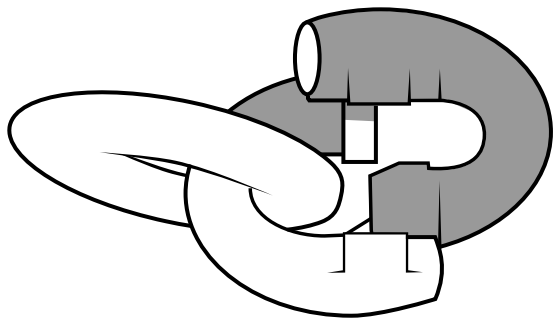
# KENTER JOINING LINK ASSEMBLY

The Kenter-type joining link contains three parts plus taper pin and lead plug. The two main halves have numbers to be matched and arrows to be lined up for ease of assembly with the third piece (stud). The two main parts are attached to the ends of the chain in a vertical position and then fitted together (1), and the stud is then slid into place (2), which locks the link. The stud is secured by hammering a tapered pin into the hole drilled diagonally (3) through all three parts of the joining link. This hole is tapered, and when the pin is driven home, a small conical recess (called the "dovetail chamber") is left clear above its head. A lead pellet is hammered broad end first into this chamber (4) so as to fill it completely and thereby keep the pin in place. Precaution

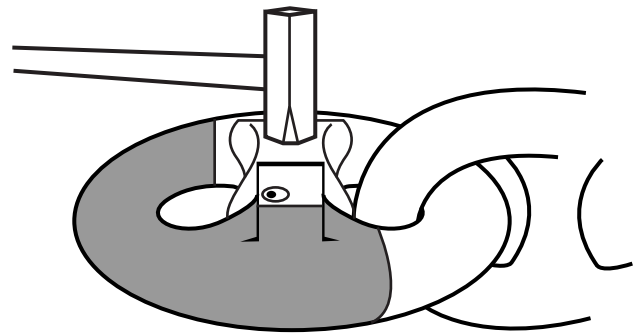
must be used to prevent flat, small pieces of lead from flying off the joining link into the face or eyes.

Prior to assembly, the internal mating surfaces should be coated with molybdenum disulphide grease (MIL-G-23529) or an equivalent lithium based grease. When assembling and before inserting the new lead, any remaining lead must be reamed out.

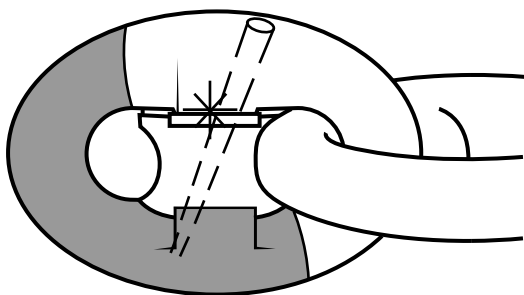
When disassembling, the locking pin is driven out with a "drift." To part the link, a top swage (shaped to the curvature of the link) must always be used between the hammer and link so as to avoid damaging the machined surfaces.



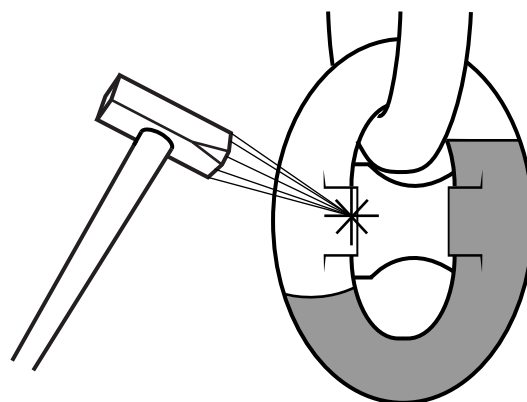
(1) After inserting the first half of the link through chain, the other link is inserted in the other and driven together.



(2) The center stud is inserted.



(3) When the center chock is in correct position the taper pin can with out a hammer be inserted as shown on the figure which also shows the center chock in correct postion.



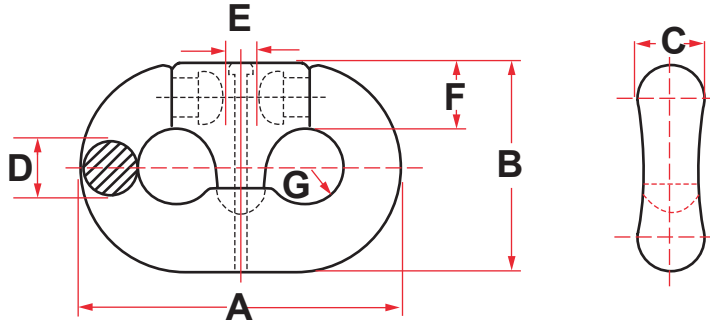
(4) The taper pin is driven in and is secured by the lead pellet which is inserted into place with a hammer.

FITTINGS



# FITTINGS

## DETACHABLE CHAIN CONNECTING LINK



### GRADE 3

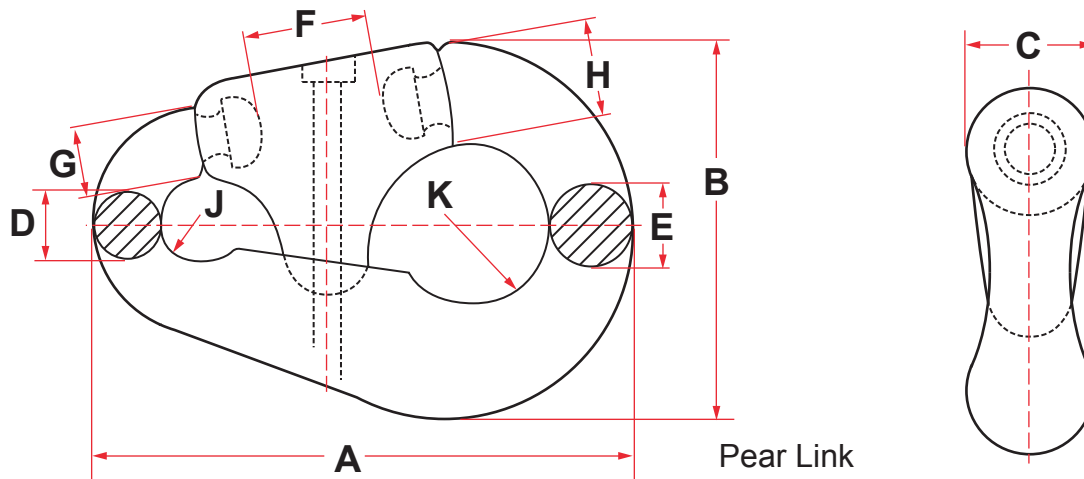
FITTINGS

CHAIN SIZE		A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	WEIGHT		PROOF TEST	BREAK TEST
MM	INCHES								KG.	LBS.	KGF	KGF
13 - 16	1/2 - 5/8	95	63	22	16	19	21	12	0.5	1.0	14651	23668
19	3/4	114	74	24	19	22	24	13	1.0	2.0	21771	34020
21 - 22	13/16 - 7/8	133	86	28	22	25	28	16	1.5	3.5	29030	44452
24 - 25	15/16 - 1	152	102	35	25	29	31	17	2.3	5.1	38000	54300
27 - 29	1-1/16 - 1-1/8	172	114	40	29	32	35	19	3.3	7.3	49200	70400
30 - 32	1-3/16 - 1-1/4	191	127	44	32	36	39	21	4.6	10.1	59500	84900
33 - 35	1-5/16 - 1-3/8	210	140	48	35	40	43	23	6.2	13.7	70700	101300
36 - 38	1-7/16 - 1-1/2	229	152	53	38	43	47	26	7.9	17.4	83300	118900
40 - 42	1-9/16 - 1-5/8	248	165	57	42	47	50	28	10.0	22.0	102000	143400
43 - 44	1-11/16 - 1-3/4	267	178	62	44	50	56	30	12.5	27.6	111900	159900
46 - 48	1-13/16 - 1-7/8	286	191	64	48	55	60	32	14.5	32.0	130000	185100
50 - 51	1-15/16 - 2	305	197	64	51	59	64	34	16.3	35.9	145400	207700
52 - 54	2-1/16 - 2-1/8	324	209	67	54	63	68	36	20.0	44.1	162000	231500
56 - 58	2-3/16 - 2-1/4	343	222	71	58	66	71	38	23.6	52.0	185400	265000
59 - 60	2-5/16 - 2-3/8	364	235	78	60	70	76	41	28.0	61.7	199600	285200
62 - 64	2-7/16 - 2-1/2	381	246	79	64	74	79	43	32.2	71.0	223000	319000
66 - 67	2-9/16 - 2-5/8	400	259	83	67	77	83	45	37.0	81.6	242900	347000
68 - 70	2-11/16 - 2-3/4	419	271	87	70	81	87	47	45.0	99.2	263500	376400
71 - 73	2-13/16 - 2-7/8	438	283	91	73	85	91	49	49.0	108.0	285000	407000
75 - 76	2-15/16 - 3	457	296	95	76	88	95	51	55.0	121.0	308200	440200
78 - 79	3-1/16 - 3-1/8	476	308	99	79	92	99	53	63.0	139.0	332100	474500
81 - 83	3-3/16 - 3-1/4	495	320	103	83	96	103	55	73.0	161.0	360400	514800
84 - 86	3-5/16 - 3-3/8	514	333	107	86	99	107	57	80.0	176.0	384400	549100
87 - 89	3-7/16 - 3-1/2	533	345	111	89	103	111	60	93.0	205.0	409000	584300
90 - 92	3-9/16 - 3-5/8	553	357	115	92	107	115	62	97.6	215.0	434800	621200
94 - 95	3-11/16 - 3-3/4	572	370	119	95	111	119	64	116.2	256.0	462300	660100
97 - 98	3-13/16 - 3-7/8	591	382	128	98	114	123	66	123.0	271.0	490000	700000
100 - 102	3-15/16 - 4	610	394	132	102	118	127	68	131.0	289.0	522100	746000
105	4-1/8	629	419	147	105	127	132	70	175.0	386.0	550000	785000
111	4-3/8	667	456	167	111	138	140	75	208.0	459.0	607000	867200
114	4-1/2	686	480	190	114	147	144	77	227.0	500.0	637300	910900

To convert to lbs., multiply by 2.2046



# PEAR SHAPE ANCHOR JOINING LINK



Pear Link

FITTINGS

## GRADE 3

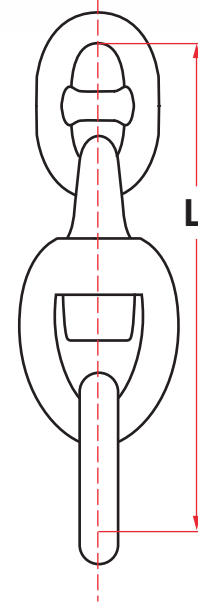
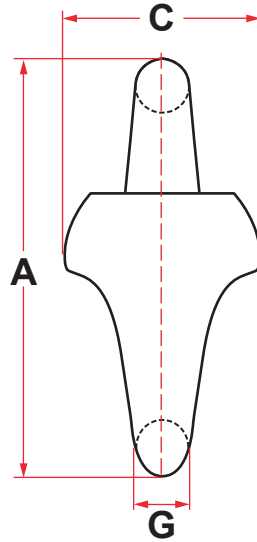
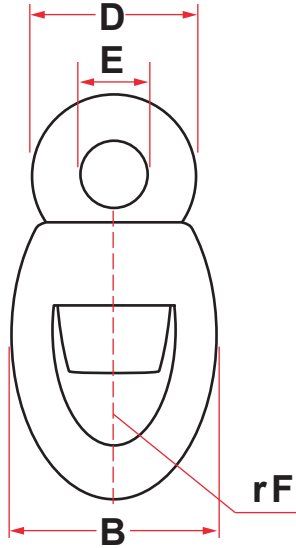
N°	CHAIN SIZE		A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	H (MM)	J (MM)	K (MM)	WEIGHT		PROOF TEST KGF	BREAK TEST KGF
	MM	INCHES											KG	LBS		
2	19-24	3/4 - 15/16	194	132	38	24	32	57	24	35	17	30	3.6	8	34000	48500
3	25-30	1 - 1-3/16	238	167	46	30	38	66	33	45	19	35	6.5	14	53000	75700
4	32-40	1-1/4 - 1-9/16	299	206	59	40	48	83	40x45	56	26	43	14.5	32	91400	131000
5	42-51	1-5/8 - 2	378	260	76	51	64	100	51x60	74	32	52	27.0	60	145400	207700
6	52-60	2-1/16 - 2-3/8	454	313	92	60	76	121	62x73	88	37	64	49.0	107	199600	285200
7	62-79	2-7/16 - 3-1/8	562	376	121	79	95	149	86x79	111	48	76	92.0	203	332100	474500
8	81-92	3-3/16 - 3-5/8	654	419	133	92	124	149	111x102	130x133	54	79	149.0	328	434800	621200
9	94-95	3-11/16 - 3-3/4	692	435	146	98	130	159	124x137	141	57	83	236.0	520	462300	660100
10	97-102	3-13/16 - 4	889	572	191	121	165	191	130x148	181	73	108	386.0	850	522100	746000
11	103-108	4-1/16 - 4-1/4	940	610	203	127	175	203	156	200	76	111	418.0	920	577000	825000
12	110-114	4-5/16 - 4-1/2	991	648	216	133	184	216	165x167	210x200	105	114	459.0	1010	637300	910900

To convert to lbs., multiply by 2.2046



# FITTINGS

## SWIVEL ASSEMBLY



## GRADE 3

CHAIN SIZE		A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	L (MM)	WEIGHT (*)		PROOF TEST KGF	BREAK TEST KGF
MM	INCHES									KG	LBS		
13-16	1/2 - 5/8	137	62	62	20	52	12	16	240	1.35	3	15100	21600
17-19	11/16 - 3/4	173	76	76	27	66	19	19	290	2.25	5	21600	30900
21-22	13/16 - 7/8	198	90	90	30	75	22	22	335	3.20	7	29300	41700
24-29	15/16 - 1-1/8	258	102	102	44	94	25	25	445	6.5	14	49200	70400
30-35	1-3/16 - 1-3/8	290	160	124	116	46	25	36	499	21.0	46.3	70700	101300
36-42	1-7/16 - 1-5/8	373	202	146	145	63	32	46	622	39.5	87.1	102000	143400
43-48	1-11/16 - 1-7/8	430	230	165	183	73	36	50	709	66.0	145.5	130000	185100
49-58	1-15/16 - 2-1/4	516	278	200	212	84	39	65	851	104.0	229.3	185400	265000
59-67	2-5/16 - 2-5/8	575	307	230	235	93	46	68	972	142.0	313.1	242900	347000
68-73	2-11/16 - 2-7/8	650	345	260	256	102	50	79	1078	208.0	458.6	285000	407000
75-79	2-15/16 - 3-1/8	757	370	325	281	109	52	94	1209	276.0	608.5	332100	474500
81-86	3-3/16 - 3-3/8	760	420	372	310	122	57	95	1260	336.0	740.8	384400	549100
87-92	3-7/16 - 3-5/8	800	430	390	320	130	60	98	1343	376.0	828.9	434800	621200
94-98	3-11/16 - 3-7/8	882	460	433	354	142	66	118	1442	557.0	1228.0	490000	700000
100-102	3-15/16 - 4	918	480	448	368	148	69	122	1502	612.0	1349.0	522100	746000
105-111	4-1/8 - 4-3/8	1000	530	478	400	160	74	133	1635	797.0	1757.0	607000	867200
114	4-1/2	1026	542	490	417	165	76	137	1675	871.0	1920.0	637300	910900

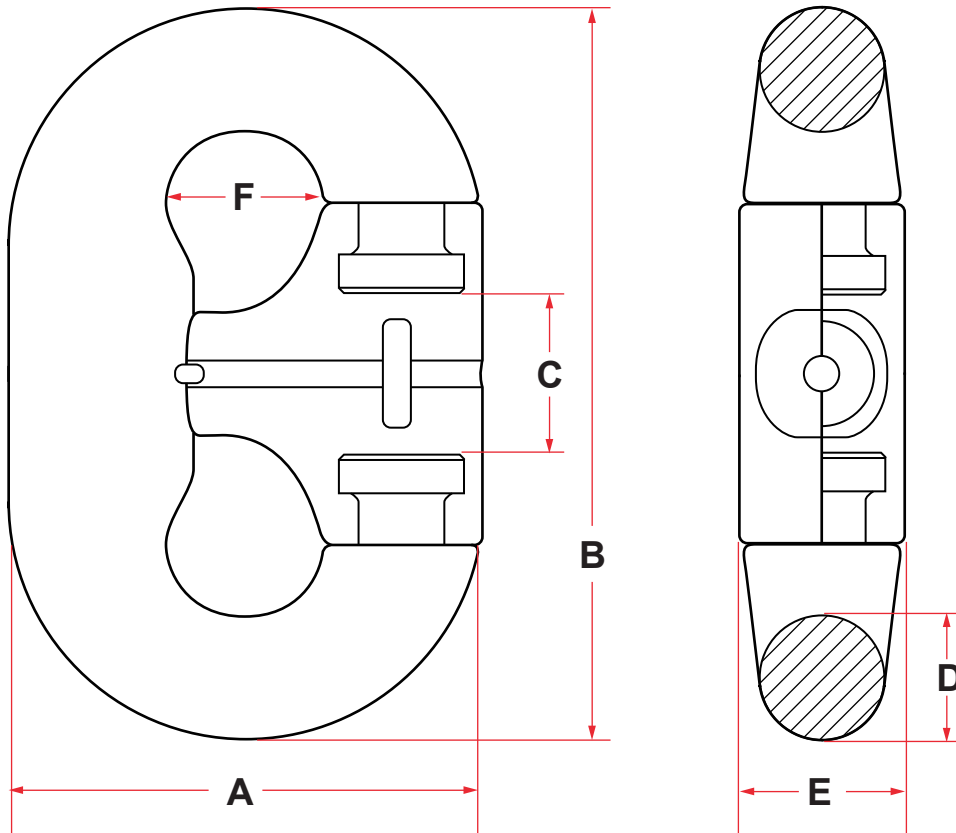
Weight of assembly (swivel and 2 common links).

To convert to lbs., multiply by 2.2046





# C-TYPE CHAIN CONNECTING LINK GRADE R4



DATA SHEETS	
NUMBER	SIZE
A	4 D
B	6 D
C	1,3 D
D	Ø D
E	1,4 D
F	1,1 D

CHAIN SIZE	NOMINAL DIA	GRADE	PL (KN)	BL (KN)	DIMENSIONS (MM)						WEIGHT (KG)
					A	B	C	D	E	F	
52-54	54	R4	2500	3171	216	324	70	54	76	59	20
62-64	64	R4	3440	4364	256	384	83	64	89	70	30
68-70	70	R4	4064	5156	280	420	91	70	98	77	46
74-76	76	R4	4731	6001	304	456	99	76	106	84	62
83-86	83	R4	5559	7052	344	516	111	86	120	95	81
87-89	89	R4	6310	8004	356	534	116	89	125	98	93
95-96	95	R4	7231	9172	384	576	125	96	134	106	116

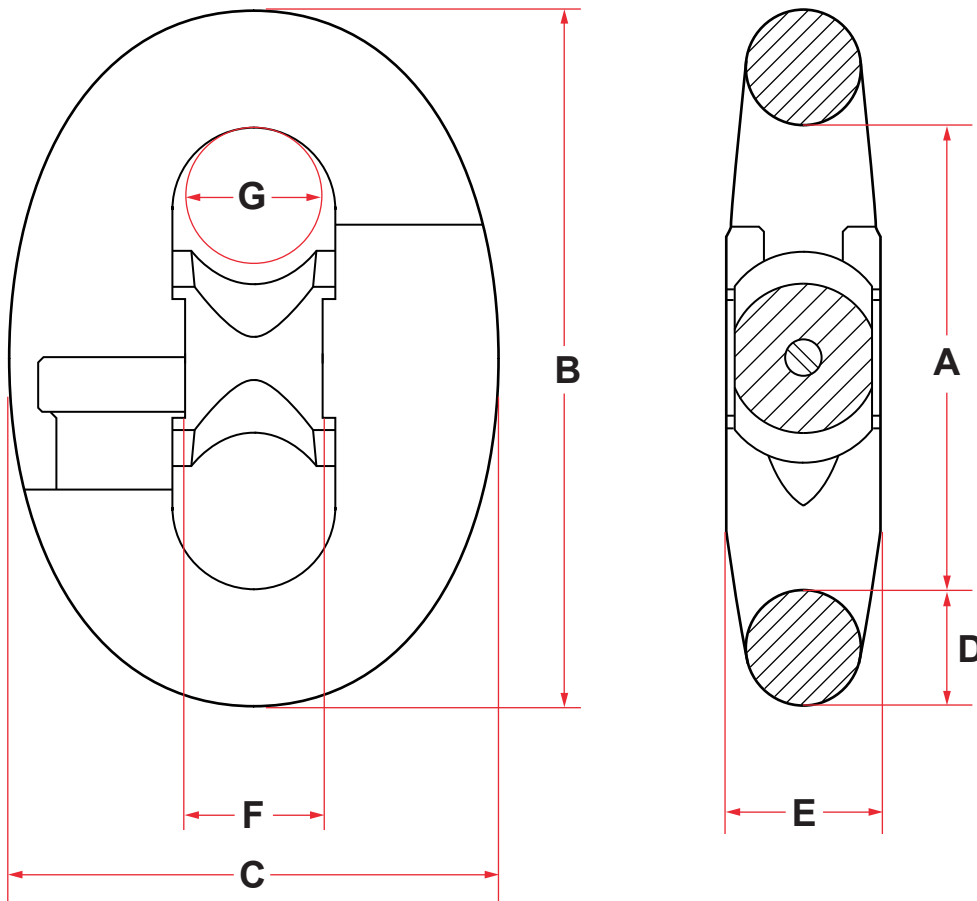
All measurements may vary slightly due to production but shall be within allowable tolerances to class society specifications.



# FITTINGS

## KENTER JOINING SHACKLE GRADE R4

FITTINGS



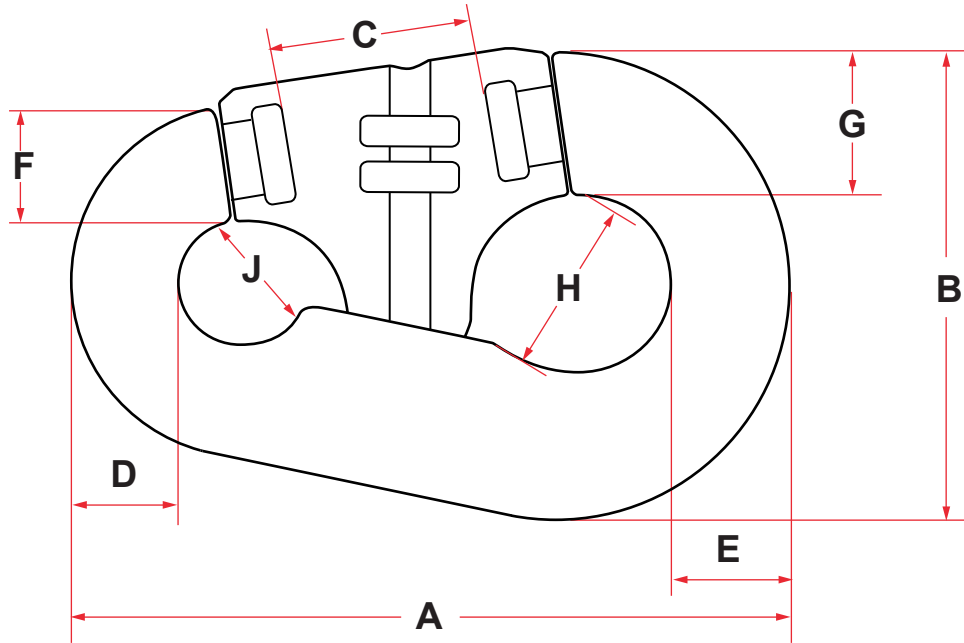
DATA SHEETS	
NUMBER	SIZE
A	4 D
B	6 D
C	4,18 D
D	Ø D
E	1,52 D
F	1,25 D
G	1,2 D

CHAIN SIZE	GRADE	PL (KN)	BL (KN)	DIMENSIONS (MM)							WEIGHT (KG)
				A	B	C	D	E	F	G	
70	R4	4064	5156	280	420	293	70	106	87	77	52
76	R4	4731	6001	304	456	318	76	115	95	84	65
84	R4	5682	7208	336	504	351	84	128	105	92	88
89	R4	6310	8004	356	534	372	89	135	111	98	101
100	R4	7776	9864	400	600	418	100	152	125	110	150
105	R4	8478	10754	420	630	439	105	160	131	115	168
114	R4	9791	12420	456	681	464	114	173	142	125	200

All measurements may vary slightly due to production but shall be within allowable tolerances to class society specifications.



# PEAR SHAPE ANCHOR JOINING LINKS GRADE ORQ & R4



FITTINGS

NO.	CHAIN SIZE (MM)	DIMENSIONS (MM)								
		A	B	C	D	E	F	G	H	J
4	32 - 40	298	207	89	41	50	45	60	83	52
5	42 - 51	380	264	100	52	65	60	84	109	65
6	52 - 60	480	337	125	66	83	81	103	142	86
7	62 - 79	570	370	155	85	96	92	113	140	98
8	81 - 92	655	430	162	99	129	119	131	162	115
10	97 - 102	900	580	192	127	168	151	181	207	150

NO	GRADE R4		GRADE ORQ	
	PROOF LOAD (KN)	BREAK LOAD (KN)	PROOF LOAD (KN)	BREAK LOAD (KN)
4	1410	1789	914	1377
5	2243	2845	1454	2191
6	3048	3867	1976	2978
7	5079	6443	3292	4962
8	6699	8497	4342	6544
9	7096	9001	4599	6932
10	8054	10217	5220	7868

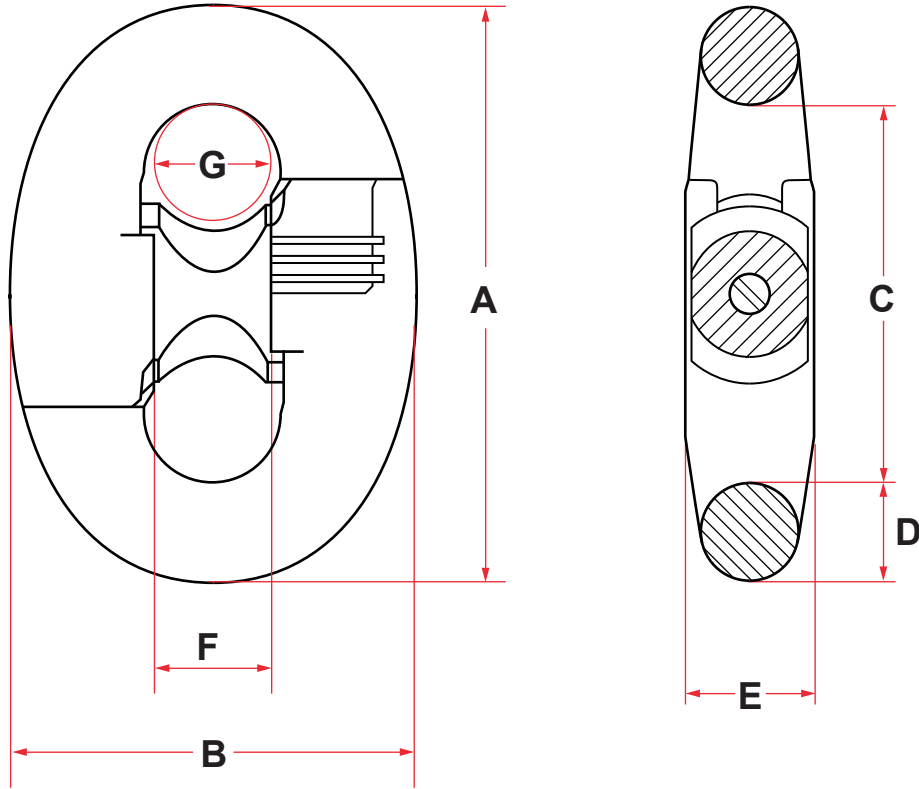
To convert to lbs., multiply by 225



# FITTINGS

## TRIDENT THIN KENTER (SLIMLINE) GRADE R4

FITTINGS



DATA SHEETS	
NUMBER	SIZE
A	6 D
B	4,18 D
C	4 D
D	Ø D
E	1,3 D
F	1,14 D
G	1,1 D

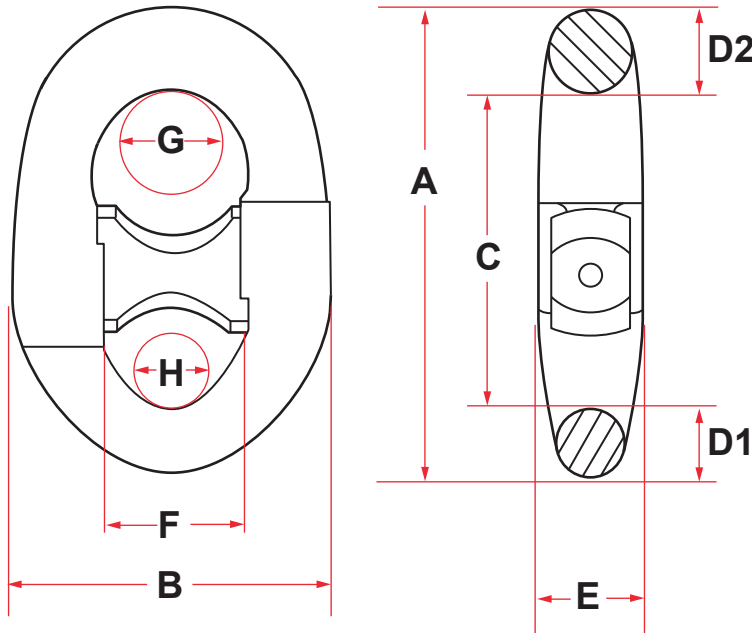
CHAIN SIZE	GRADE	PL (KN)	BL (KN)	DIMENSIONS (MM)							WEIGHT (KG)
				A	B	C	D	E	F	G	
70	R4	4064	5156	420	293	280	70	91	80	77	52
76	R4	4731	6001	456	318	304	76	99	87	84	65
84	R4	5682	7208	504	351	336	84	109	96	92	88
89	R4	6310	8004	534	372	356	89	111	101	98	101
95	R4	7096	9001	570	379	380	95	124	108	104	150
102	R4	8054	10217	612	426	408	102	133	116	112	172
114	R4	9791	12420	684	476	456	114	148	130	125	190

All measurements may vary slightly due to production but shall be within allowable tolerances to class society specifications.





# ANCHOR SHACKLE TRIDENT + RAPTOR



DATA SHEETS	
NUMBER	SIZE
A	8,13 D
B	5,4 D
C	5,4 D
D1	1,1 D
D2	1,5 D
E	1,75 D
F	2,26 D
G	1,9 D
H	1,55 D

## TRIDENT R4

CHAIN SIZE	GRADE	PL (KN)	BL (KN)	DIMENSIONS (MM)									WEIGHT (KG)
				A	B	C	D1	D2	E	F	G	H	
76	R4	4731	6001	618	410	410	84	114	133	172	144	118	120
84	R4	5682	7208	683	454	454	92	126	147	190	160	130	150
89	R4	6310	8004	724	481	481	98	133	156	201	169	138	175
95	R4	7096	9001	772	513	513	105	142	166	215	180	147	228

All measurements may vary slightly due to production but shall be within allowable tolerances to class society specifications.

## RAPTOR R5

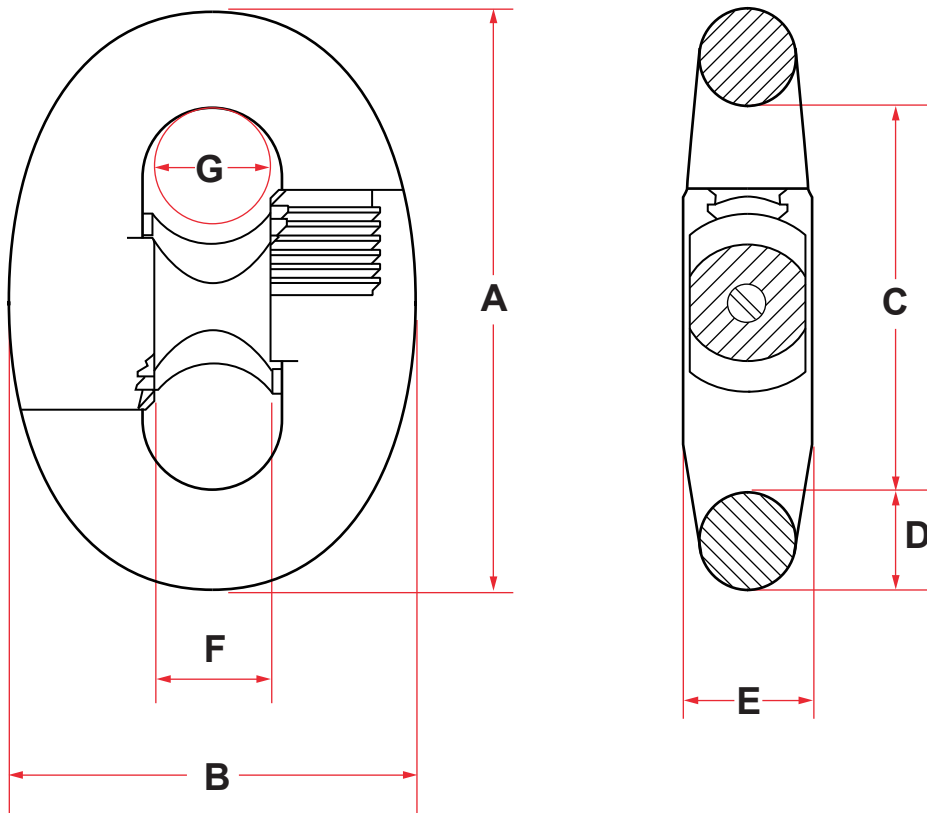
CHAIN SIZE	GRADE	PL (KN)	BL (KN)	DIMENSIONS (MM)									WEIGHT (KG)
				A	B	C	D1	D2	E	F	G	H	
76	R5	5498	7009	618	410	410	84	114	133	172	144	118	120
84	R5	6602	8418	683	454	454	92	126	147	190	160	130	150
89	R5	7332	9348	724	481	481	98	133	156	201	169	138	175
95	R5	8246	10512	772	513	513	105	142	166	215	180	147	228

All measurements may vary slightly due to production but shall be within allowable tolerances to class society specifications.



# FITTINGS

## RAPTOR THIN KENTER (SLIMLINE) GRADE 5



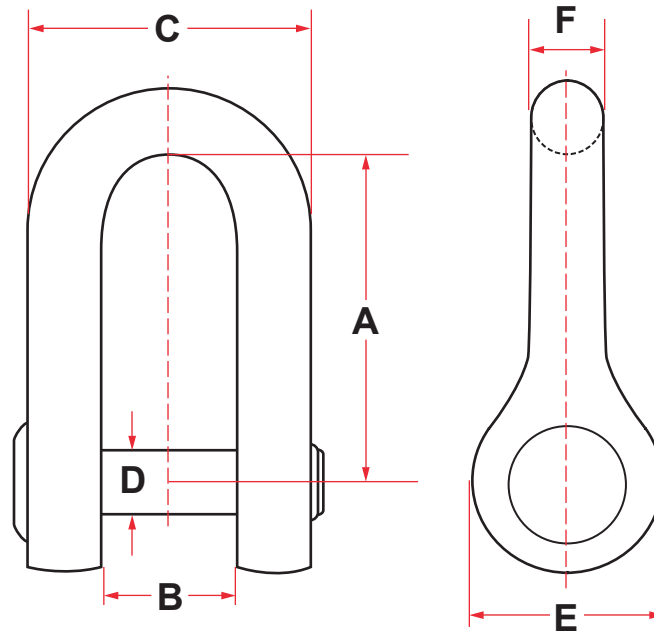
DATA SHEETS	
NUMBER	SIZE
A	6 D
B	4,18 D
C	4 D
D	Ø D
E	1,3 D
F	1,14 D
G	1,1 D

CHAIN SIZE	GRADE	PL (KN)	BL (KN)	DIMENSIONS (MM)							WEIGHT
				A	B	C	D	E	F	G	
70	R5	4732	6021	420	293	280	70	91	80	77	52
76	R5	5498	7009	456	318	304	76	99	87	84	65
84	R5	6602	8418	504	351	336	84	109	96	92	88
89	R5	7332	9348	534	372	356	89	116	101	98	101
95	R5	8246	10512	570	379	380	95	124	108	104	150
102	R5	9359	11932	612	426	408	102	133	116	112	172
114	R5	11378	14506	684	476	456	114	148	130	125	190

All measurements may vary slightly due to production but shall be within allowable tolerances to class society specifications.



# CROWN ANCHOR SHACKLE WITH ABS CERTIFICATION



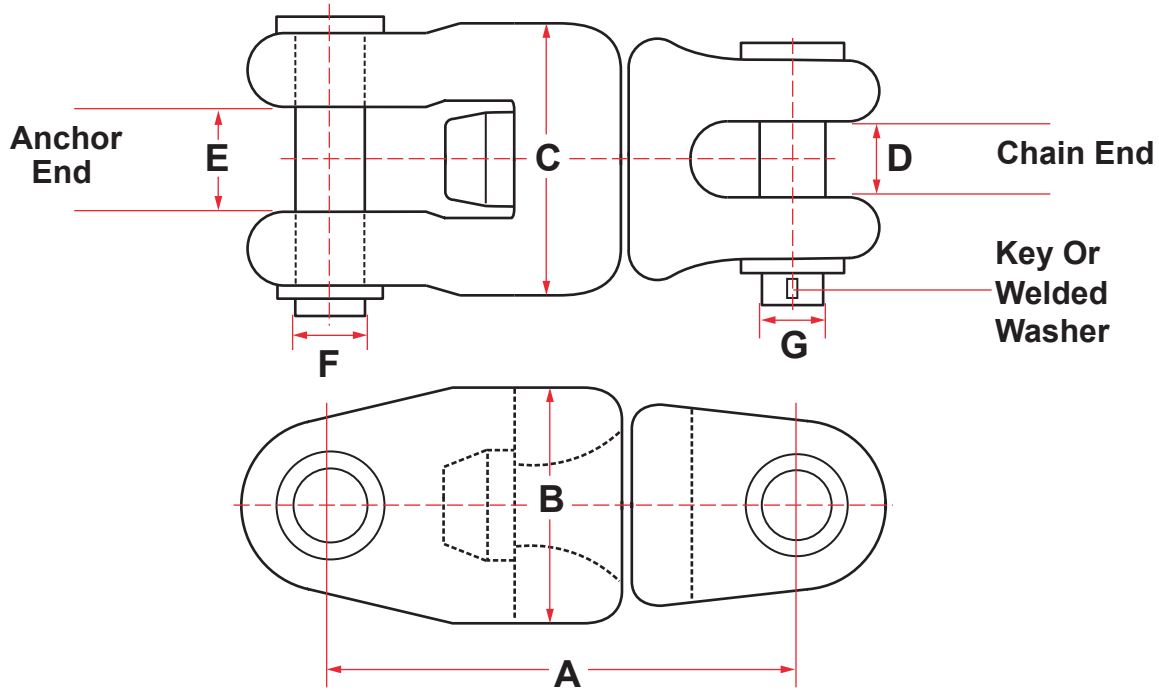
FITTINGS

SHACKLE SIZE		A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	WEIGHT		PROOF LOAD (LBS)
MM	INCHES							KG	LBS.	
51	2	254.0	88.9	180.6	50.8	136.0	50.8	20	44	54,500
64	2-1/2	304.8	111.1	238.1	63.5	168.0	63.5	50	110	90,700
76	3	355.6	152	304	76.2	200.0	76.2	80	176	145,000
89	3-1/2	406.4	165.1	342.9	88.9	230.0	88.9	120	265	165,600
102	4	482.6	194.2	357.4	101.6	265.0	101.6	170	375	230,000
114	4-1/2	558.8	203.2	431.8	114.3	300.0	114.3	240	529	282,500



# FITTINGS

## JAW & JAW SWIVEL SHACKLES



The Jaw & Jaw swivel shackle is designed to accept the shank of an anchor and the chain end is designed to accept a closed spelter socket or mooring chain. The applied proof load is dependent upon applicable design.

DIMENSIONS (INCHES)						
A	B	C	D	E	F	G
29-1/8	13-5/8	15	3-5/8	7-1/4	4-1/8	2-5/8
29-1/8	13-5/8	15	3-3/4	7-1/4	4-1/2	3
30-3/8	18	17	4-1/4	9	5-1/2	3-1/2
30-3/8	21-1/2	19	4-1/4	10	6-1/2	4
30-3/8	21-1/2	19	6	10	7-1/2	4

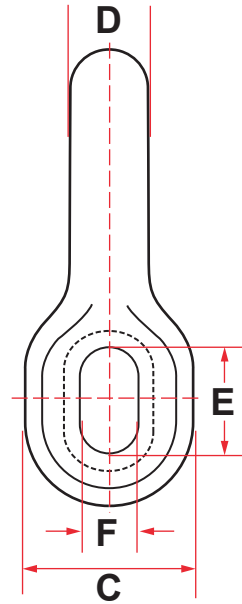
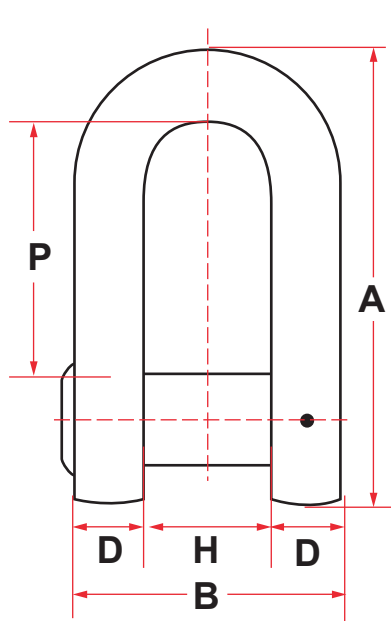
Dimensions above are in inches, weight is in pounds. Other sizes available.





# D-TYPE ANCHOR SHACKLE

All figures are factors which have to be multiplied with the nominal chain diameter.



- A = 8.7D
- B = 5.2D
- C = 3.1D
- D = 1.4D
- E = 1.8D
- F = 1.4D
- H = 2.4D
- P = 4.6D

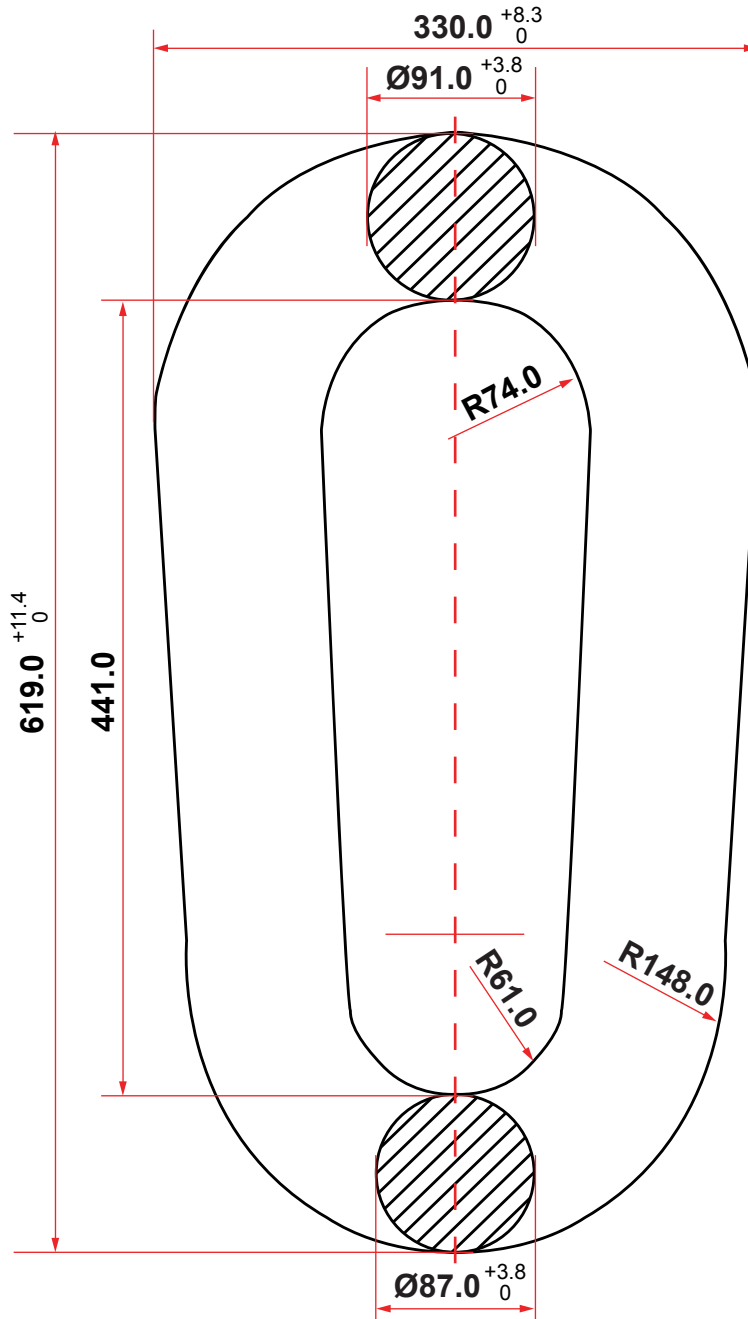
SIZE INCHES	MM	DIMENSIONS (INCHES)								WEIGHT (LBS)	WEIGHT (KG)
		A	B	C	D	E	F	H	P		
3/4	19	6-1/2	3-7/8	2-3/8	1	1-3/8	1	1-3/4	3-1/2	5.5	2.5
7/8	22	7-5/8	4-1/2	2-3/4	1-1/4	1-5/8	1-1/4	2-1/8	4	8.4	3.8
1	25	8-3/4	5-1/4	3-1/8	1-3/8	1-3/4	1-3/8	2-3/8	4-5/8	13.2	6
1-1/8	29	9-3/4	5-7/8	3-1/2	1-5/8	2	1-5/8	2-3/4	5-1/8	18.5	8.4
1-1/4	32	10-7/8	6-1/2	3-7/8	1-3/4	2-1/4	1-3/4	3	5-3/4	24.9	11.3
1-3/8	35	12	7-1/8	4-1/4	1-7/8	2-1/2	1-7/8	3-1/4	6-3/8	34.2	15.5
1-1/2	38	13	7-3/4	4-5/8	2-1/8	2-3/4	2-1/8	3-5/8	6-7/8	43.7	19.8
1-5/8	41	14-1/8	8-1/2	5	2-1/4	2-7/8	2-1/4	3-7/8	7-1/2	56.9	25.8
1-3/4	44	15-1/4	9-1/8	5-3/8	2-1/2	3-1/8	2-1/2	4-1/4	8	70.3	31.9
1-7/8	48	16-3/8	9-3/4	5-7/8	2-5/8	3-3/8	2-5/8	4-1/2	8-5/8	85.5	38.8
2	51	17-3/8	10-3/8	6-1/4	2-3/4	3-5/8	2-3/4	4-3/4	9-1/4	105.8	48
2-1/8	54	18-1/2	11	6-5/8	3	3-7/8	3	5-1/8	9-3/4	125.7	57
2-1/4	57	19-5/8	11-3/4	7	3-1/8	4	3-1/8	5-3/8	10-3/8	147.7	67
2-3/8	60	20-5/8	12-3/8	7-3/8	3-3/8	4-1/4	3-3/8	5-3/4	10-7/8	176.6	80.1
2-1/2	64	21-3/4	13	7-3/4	3-1/2	4-1/2	3-1/2	6	11-1/2	204.1	92.6
2-5/8	67	22-7/8	13-5/8	8-1/8	3-5/8	4-3/4	3-5/8	6-1/4	12-1/8	234.6	106.4
2-3/4	70	23-7/8	14-1/4	8-1/2	3-7/8	5	3-7/8	6-5/8	12-5/8	267.6	121.4
2-7/8	73	25	15	8-7/8	4	5-1/8	4	6-7/8	13-1/4	310.2	140.7
3	76	26-1/8	15-5/8	9-1/4	4-1/4	5-3/8	4-1/4	7-1/4	13-3/4	350.5	159

Approximate dimensions shown. Contact us for specific dimensions, as they may differ between manufacturers.



# FITTINGS

## (76MM) PEAR SHAPED RING WITH ABS CERTIFICATION



### 3» (76mm) Pear Shaped Ring ABS Certified

Notes:

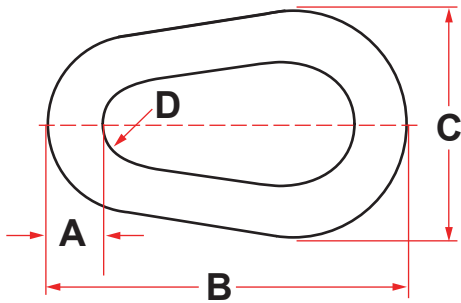
- |               |           |
|---------------|-----------|
| 1. Weight     | 160lbs    |
| 2. Proof Load | 3066.4 kN |
| 3. Break Load | 4621.4 kN |





# FITTINGS

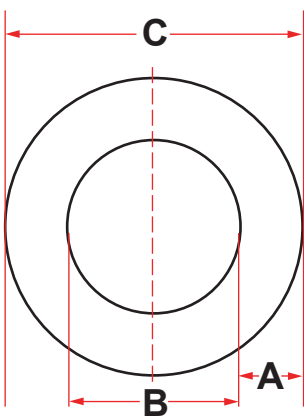
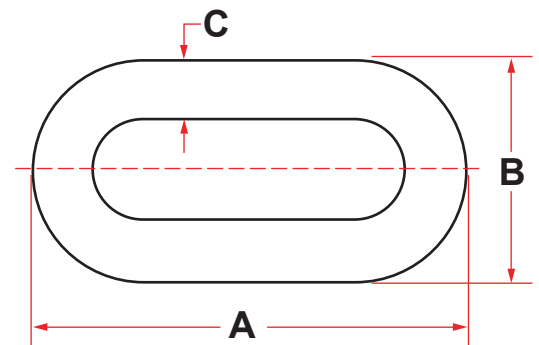
## PEAR RING



CHAIN SIZE		DIMENSIONS								WEIGHT	
MM	INCHES	INCHES				MM				KG	LBS
		A	B	C	D	A	B	C	D		
42	1-5/8	2.10	8.30	3.90	1.30	53	211	99	33	12	26
44	1-3/4	2.25	11.50	4.19	1.38	57	292	106	35	17	38
51	2	2.50	13.73	4.91	1.64	64	349	125	42	26	57
58	2-1/4	2.75	14.50	5.37	1.73	70	368	136	44	33	73
64	2-1/2	3.00	16.16	5.92	1.92	76	410	150	49	43	95
70	2-3/4	3.50	17.70	6.47	2.11	89	450	164	54	65	143
76	3	3.75	19.21	6.82	2.28	95	488	173	58	80	176
89	3-1/2	4.25	23.90	8.77	2.85	108	607	223	72	127	280
102	4	4.75	26.22	9.61	3.13	121	666	244	80	175	385

## END LINK

CHAIN SIZE		DIMENSIONS						WEIGHT	
MM	INCHES	INCHES			MM			KG	LBS
		A	B	C	A	B	C		
42	1-5/8	10.97	6.50	1.95	279	165	50	9	20
44	1-3/4	11.81	6.91	2.10	300	176	53	11	24
51	2	13.50	7.90	2.40	343	201	61	17	37
58	2-1/4	15.19	8.89	2.70	386	226	69	24	53
64	2-1/2	16.88	9.88	3.00	429	251	76	32	71
70	2-3/4	18.56	10.86	3.30	471	276	84	43	95
76	3	20.25	11.85	3.60	514	301	91	55	122
89	3-1/2	23.65	13.83	4.20	601	351	107	90	197
102	4	27.00	15.80	4.80	686	401	122	133	292



## MOORING RING

CHAIN SIZE		DIMENSIONS						WEIGHT		PROOF TEST
MM	INCHES	INCHES			MILLIMETERS			LBS	KG	LBS
		A	B	C	A	B	C			
25	1	2.125	7.2	11.22	54	183	291	26	12	83,600
32	1-1/4	2.5	9.02	14.06	64	229	357	51	23	129,000
38	1-1/2	3	10.79	16.77	76	274	426	86	39	183,500
44	1-3/4	3.5	12.76	19.84	90	324	504	143	65	247,000
51	2	4	14.41	22.44	102	366	570	207	94	318,000
58	2-1/4	4.5	16.18	25.16	114	411	639	291	132	396,000
64	2-1/2	5	17.99	27.99	127	457	711	401	182	484,000
76	3	6	21.57	33.54	152	548	852	688	312	679,000
89	3-1/2	7	25.20	39.21	178	640	996	1107	502	900,000
102	4	8	28.90	44.96	204	734	1142	1664	755	1,143,000



# FITTINGS

## RETRIEVING HARDWARE

### CHAIN CHASER AND GRAPNEL

Used in the recovery of anchors and mooring lines, J-type chain chasers, permanent chain chasers, detachable permanent chain chasers, and grapnels are manufactured as one-piece units from special cast steel which is annealed for maximum unit strength.

Retrieving hardware is designed for use with 2-3/4 to 3-1/2 in. mooring chain and anchors in the 30,000 to 45,000 lbs. class. All hardware is manufactured with rated testing loads which vary from 150 to 250 tons.

All chasing equipment comes standard with welded hard-facing on contact areas to inhibit wear. Optional treatments include Rapid Solidification Plasma Deposition or R.S.P.D for superior wear and corrosion resistance isolated areas or entire castings can be treated.

### J-TYPE CHAIN CHASER

The J-Type, chain chaser, complete with swivel shackle, is used to retrieve a rig's anchor when the pendant line is broken. It is a highly refined, stronger version of the conventional chain chaser originally developed for use in the North Sea. This unique design uses a sophisticated beam configuration in place of the usual T-type cross section to optimize quality and reliability.

### PERMANENT CHAIN CHASER

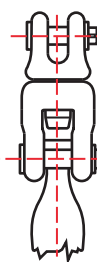
For rigs requiring a permanent-type chain chaser, offers a stronger, better engineered version of the conventional chain chaser used in the North Sea. This type of anchor retrieval system eliminates the need for a pendant line buoy system. As with the J-type chaser, the permanent chaser incorporates a beam configuration that lessens the possibility of breaking with a significant decrease in eccentric bending.

### DETACHABLE CHAIN CHASER

Engineers have modified the conventional permanent chaser design to make the wear area detachable and replaceable. This innovative design allows the user to hook up easily and replace individual parts that are prone to wear, rather than replacing the entire chain chaser.

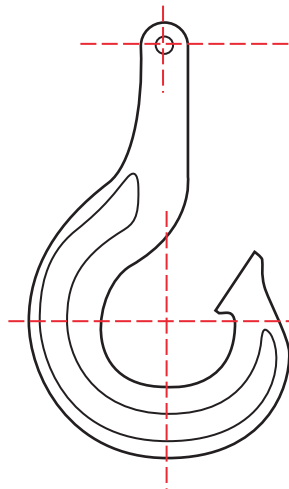
### GRAPNEL

In order to offer a total coverage for a variety of retrieving applications, we offer a four-prong grapnel. This unit is designed to recover lost anchors and mooring lines. The four-prong grapnel reduces the outfitting costs, since it is designed to accommodate the same connecting hardware as the permanent and J-type chain chasers.



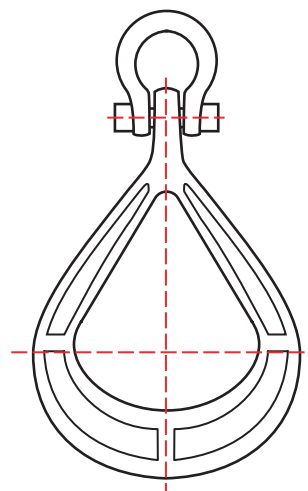
Recommended Standard Swivel Shackle

Alternate 3" Safety-Type Anchor Shackle



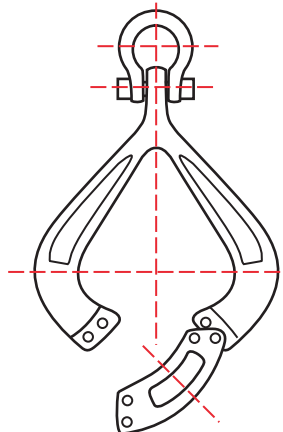
**J-Type Chain Chaser**

- Notes:
1. Weight - 3,200 lbs. (approx.)
  2. Test Load - 250 tons (500,000 lbs.) straight pull



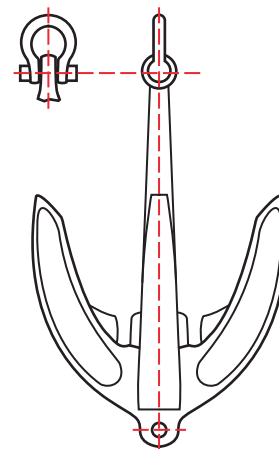
**Permanent Chain Chaser**

- Notes:
1. Weight - 2,600 lbs. (approx.)
  2. Test Load - 250 tons (500,000 lbs.) straight pull



**Detachable Chain Chaser**

- Notes:
1. Weight - 2,610 lbs. (approx.)
  2. Test load - 250 tons (500,000 lbs.) straight pull
  3. Safe Working Load - 110 tons (220,000 lbs.)



**Four-Prong Grapnel**

- Notes:
1. Weight - 4,000 lbs. (approx.)
  2. Test Load - 150 tons

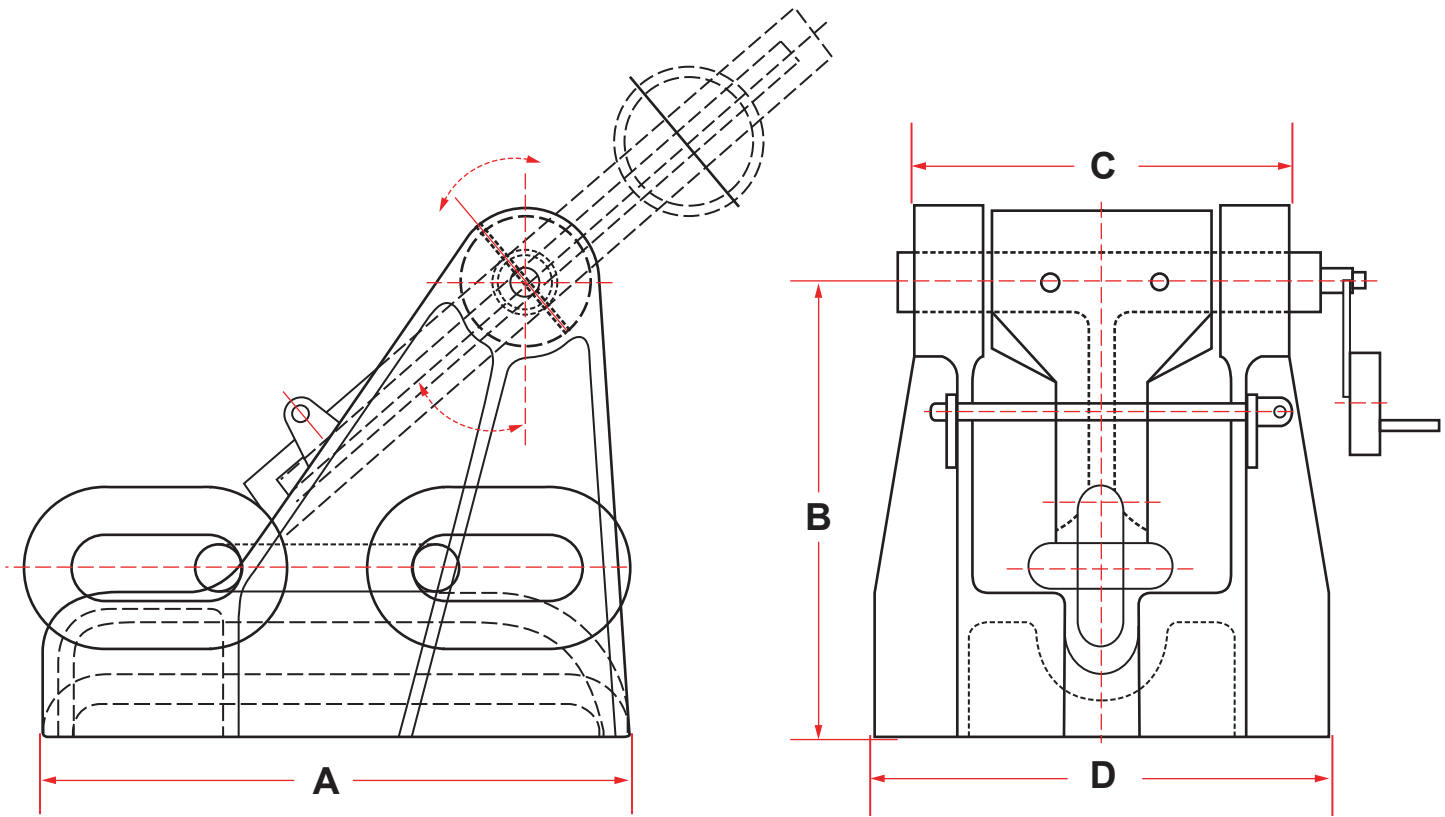
FITTINGS







# PAWL TYPE CHAIN STOPPER



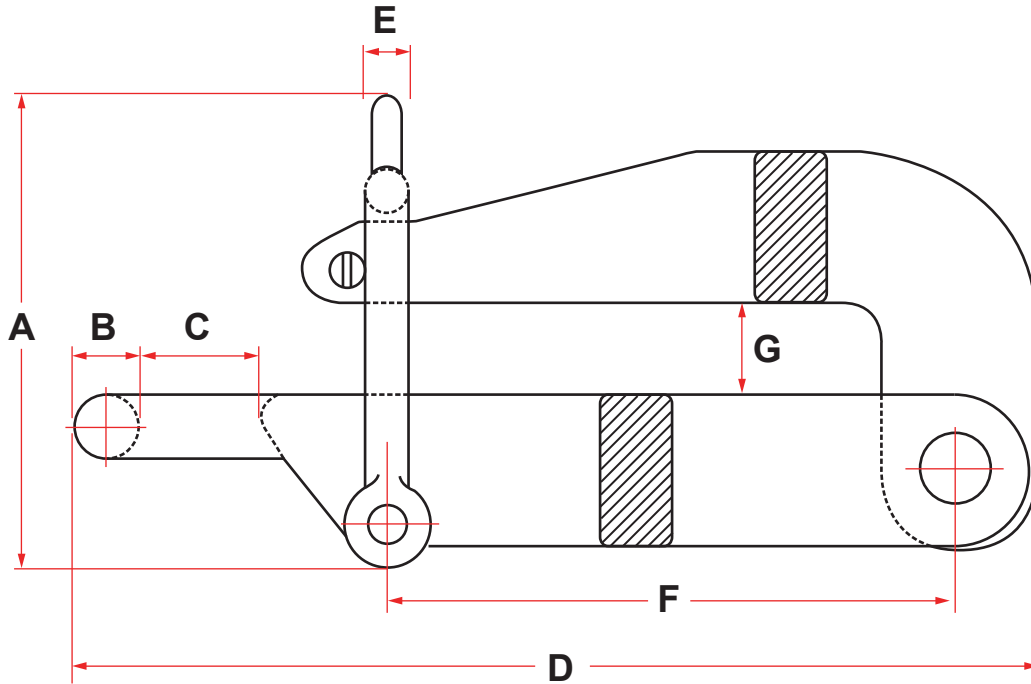
**FITTINGS**

NOMINAL NO.	NOMINAL DIA. OF ANCHOR CHAIN	DIMENSIONS (MM)				WEIGHT (KG.)
		A	B	C	D	
42	36-42	530	494	357	422	210
46	42-46	620	538	404	480	396
51	48-51	680	599	438	520	429
56	52-56	730	638	472	560	465
60	58-60	780	670	506	600	480
64	62-64	835	710	538	630	500
68	66-68	885	750	568	660	567
73	70-73	950	801	604	700	682
78	76-78	1015	852	641	750	818
84	81-84	1095	911	686	800	1030
90	87-90	1170	969	732	850	1220
95	92-95	1235	1021	768	900	1420
102	97, 100, 102	1350	1090	816	950	1830
107	105-107	1400	1148	857	1000	2130
114	111-114	1480	1207	902	1050	2410
122	117-122	1585	1280	956	1120	2900



# FITTINGS

## PELICAN HOOK CHAIN STOPPER WITH ABS CERTIFICATION

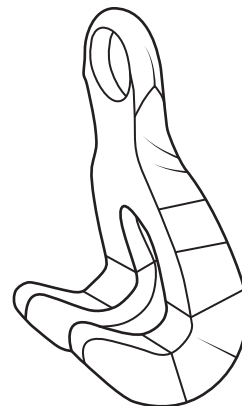
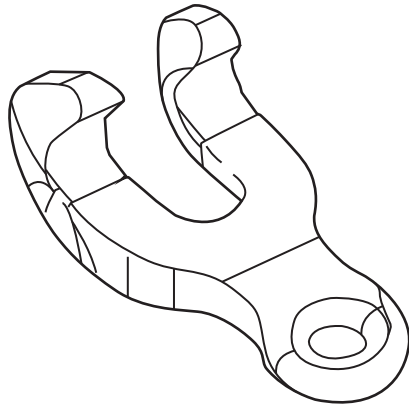


CHAIN SIZE		A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	F (MM)	G (MM)	LOADS		WEIGHT
MM	INCHES								PROOF TEST KN	BREAK TEST KN	LBS
19	3/4	190	19	32	266	16	137	25	291.3	385	13
22	7/8	193	22	35	337	16	178	31	392.7	529.8	21
25-32	1 - 1-1/4	219	29	41	446	19	260	39	730.6	985.6	41
32-38	1-1/4 - 1-1/2	270	38	48	490	22	267	44	941.6	1,271.1	50
35-41	1-3/8 - 1-5/8	270	38	48	490	22	267	51	941.6	1,271.1	59
41-51	1-5/8 - 2	313	38	54	565	25	305	62	1,122	1,514.6	95
54-60	2-1/8 - 2-3/8	375	41	57	680	32	394	65	1,122	1,514.6	172
64-70	2-1/2 - 2-3/4	410	48	70	780	35	457	79	1,567.1	2,119.1	216
76-83	3 - 3-1/4	454	51	76	860	38	502	95	1,816.5	2,715.9	280
86-89	3-3/8 - 3-1/2	495	64	86	927	41	514	98	2,190.5	3,312.5	357
89-95	3-1/2 - 3-3/4	568	73	108	997	44	533	114	3,137	4,746	440
121	4-3/4	568	73	108	1216	44	753	137	3,137	4,746	683





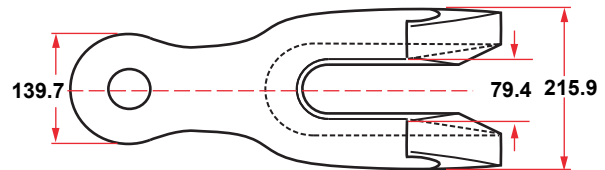
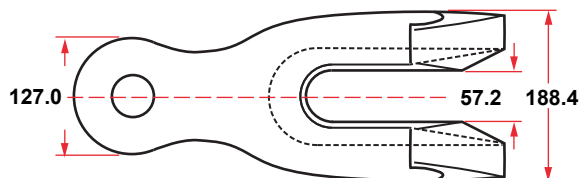
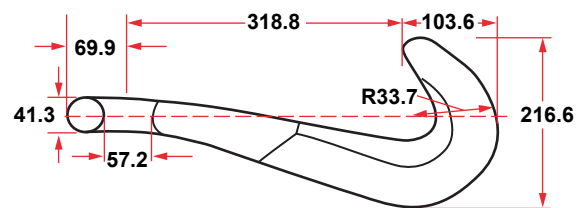
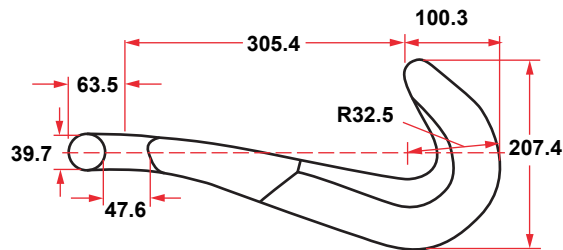
# DEVILS CLAW CHAIN STOPPER WITH ABS CERTIFICATION



FITTINGS

**DEVILS CLAW**  
**33 - 41MM (1-5/16" - 1-5/8")**  
**44 LBS**

**DEVILS CLAW**  
**46 - 60MM (1-11/16" - 2-3/8")**  
**70 LBS**

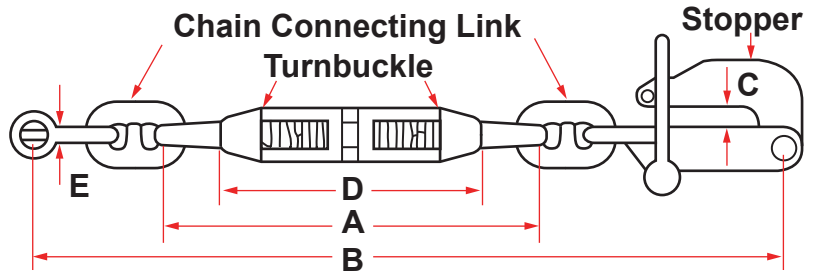


Dimension in millimeter. Other sizes available upon request.



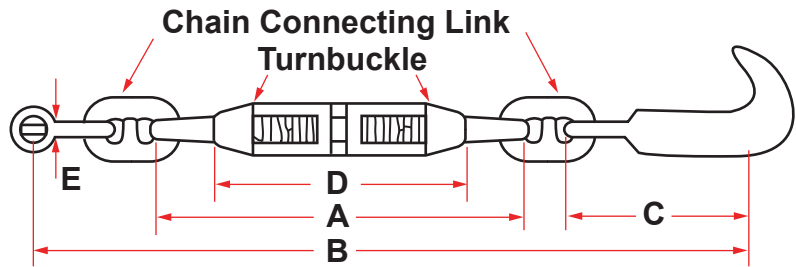
# FITTINGS

## PELICAN HOOK TYPE CHAIN STOPPER ASSEMBLY



CHAIN SIZE		INCHES						DET. LINK SIZE	PROOF LOAD LBS	BREAK LOAD LBS
INCHES	MM	A	B MIN.	B MAX.	C	D	E			
3/4	19	16	33-1/4	40-1/2	1	11	7/8	3/4	67,500	91,100
7/8	22	17-1/4	38-7/16	45-9/16	1-7/32	11	1	7/8	88,200	119,000
1 - 1-1/8	25 - 29	19-1/2	46-7/8	55-1/2	1-17/32	13	1-1/8	1-1/8	145,000	195,000
1-1/4	32	19-5/8	48	56-5/8	1-17/32	13	1-1/4	1-1/4	178,200	240,600
1-1/4 HS - 1-1/2	32HS - 38	23-3/4	55-3/16	65-11/16	1-3/4	16	1-1/2	1-3/8	211,500	285,500
1-3/8HS - 1-5/8	34HS - 42	23-3/4	55-3/16	65-11/16	2	16	1-1/2	1-3/8	211,500	285,500
1-5/8HS - 2	42HS - 51	24-1/8	59-3/16	65-11/16	2-7/16	16	1-1/2	1-1/2	252,000	340,200
2-1/8 - 2-3/8	54 - 60	26-1/4	65-3/8	76-1/8	2-9/16	16	1-5/8	1-1/2	252,000	340,200
2-1/2 - 2-5/8	64 - 67	29-3/4	74-3/8	87-1/2	3-1/8	20	1-7/8	1-5/8	292,500	395,000
2-3/4 - 2-3/4HD	70 - 70HD	29-3/4	86-5/8	89-3/4	3-1/8	20	1-7/8	1-3/4	352,000	476,000
3HD - 3-1/4	76HD - 83	36	90-3/4	106-1/2	3-3/4	24	2-3/8	2-1/4	403,000	610,000
3-3/8 - 3-1/2	86 - 89	38-5/8	97-7/16	113-3/16	3-7/8	24	2-5/8	2-1/2	492,000	744,000
3-1/2HD - 3-3/4	89HD - 95	44-3/8	110	128-1/8	4-1/2	27-1/2	2-7/8	3	706,000	1,068,000

## DEVIL'S CLAW TYPE CHAIN STOPPER ASSEMBLY

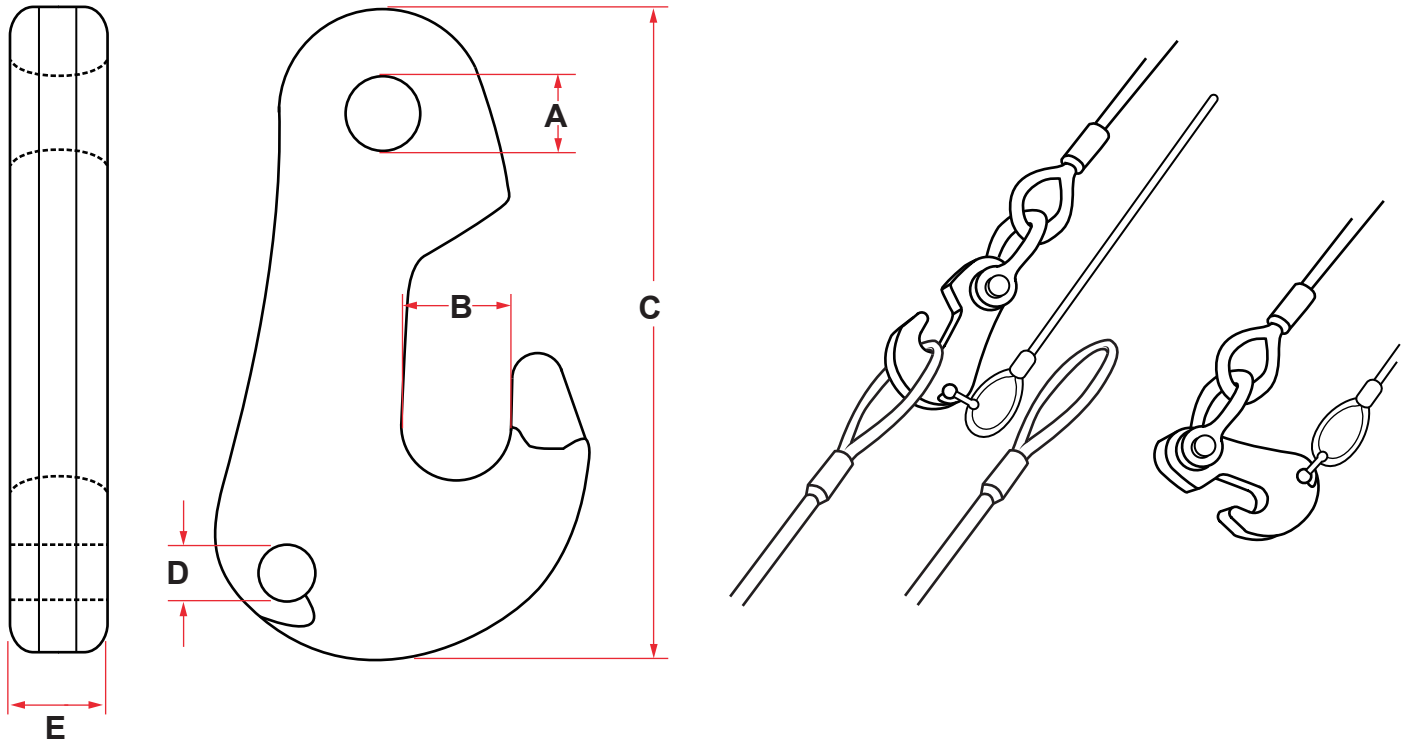


CHAIN SIZE		INCHES						DET. LINK SIZE	PROOF LOAD LBS	BREAK LOAD LBS
INCHES	MM	A	B MIN.	B MAX.	C	D	E			
3/4 - 3/4HS	19 - 19HS	16	35-1/2	42-3/4	10-1/2	11	7/8	3/4	67,500	91,100
7/8 - 7/8HS	22 - 22HS	17-1/4	38-1/4	45-3/8	10-1/2	11	1	7/8	88,200	119,000
1 - 1-1/8	25 - 29	19-1/2	43-1/16	51-11/16	10-1/2	13	1-1/8	1-1/8	145,000	195,000
1-1/4	32	19-5/8	44-3/16	52-13/16	10-1/2	13	1-1/4	1-1/4	178,200	240,600
1-1/4 HS - 1-1/2	32HS - 38	23-3/4	50-1/4	60-3/4	10-1/2	16	1-1/2	1-3/8	211,500	285,500
1-3/8HS - 1-5/8	34HS - 42	23-3/4	50-1/4	60-3/4	10-1/2	16	1-1/2	1-3/8	211,500	285,500
1-5/8HS - 2	42HS - 51	24-1/8	53-1/8	63-5/8	12	16	1-1/2	1-1/2	252,000	340,200
2-1/8 - 2-3/8	54 - 60	26-1/4	56-1/4	66-3/4	12-1/2	16	1-5/8	1-1/2	252,000	340,200
2-1/2 - 2-5/8	64 - 67	29-3/4	65	78-1/8	16	20	1-7/8	1-5/8	292,500	395,000
2-3/4 - 2-3/4HD	70 - 70HD	29-3/4	67-1/4	80-1/4	16	20	1-7/8	1-3/4	352,000	476,000
3HD - 3-1/4	76HD - 83	36	76-1/4	92-3/8	17-1/2	24	2-3/8	2-1/4	403,000	610,000
3-3/8 - 3-1/2	86 - 89	38-5/8	86-1/2	102-1/4	19	24	2-5/8	2-1/2	492,000	744,000
3-1/2HD - 3-3/4	89HD - 95	44-3/8	98-5/8	116-3/4	20-1/2	27-1/2	2-7/8	3	706,000	1,068,000





# ANCHOR LINE HOOK



**FITTINGS**

SWL	MBL (TON)	A (MM)	B (MM)	C (MM)	D (MM)	E (MM)	WEIGHT (KG)
15	60	38	58	343	32	45	8
20	80	40	74	343	32	60	13
25	100	52	86	440	38	65	22
50	200	80	112	618	45	90	100
80	320	90	130	709	62	100	145

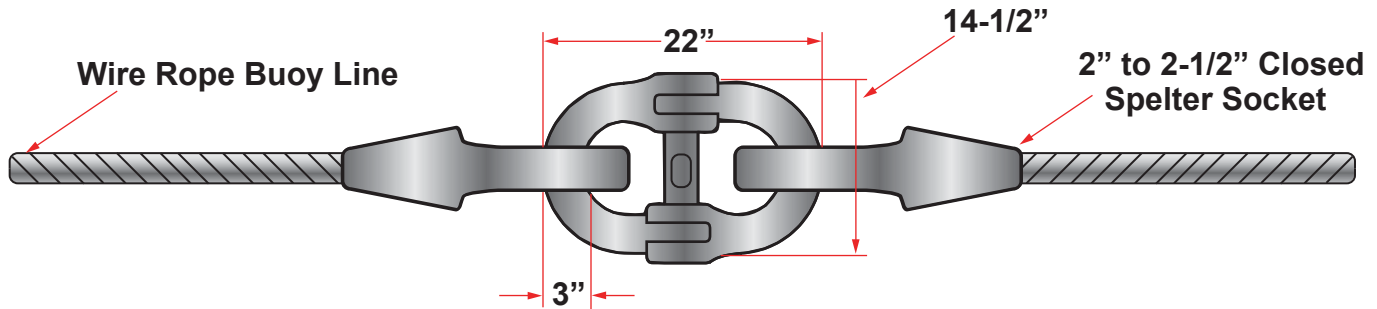
Tolerance ± 5%



# FITTINGS

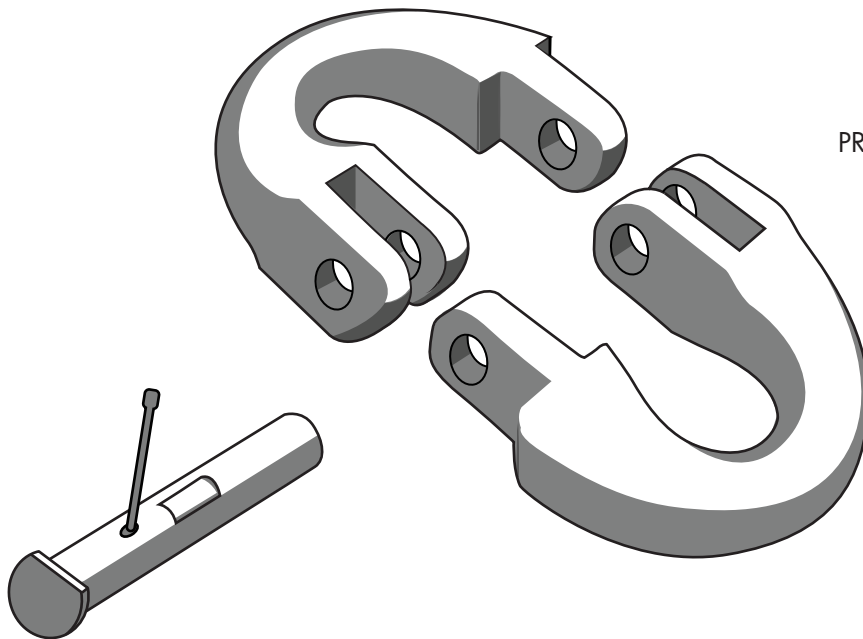
## HINGE LINK WITH ABS CERTIFICATION

Recommended above 2-3/16" chain



FITTINGS

The 110-ton S.W.L. Hinge Link is specifically designed to provide a single, fast, easy connection to spelter sockets or thimbles that will hinge when passing over a wire rope drum. Hinge Link can be used to connect up to 3" wire rope closed spelter sockets and thimbles on anchor pendant lines.



PROOF LOAD: 440,000 LB.

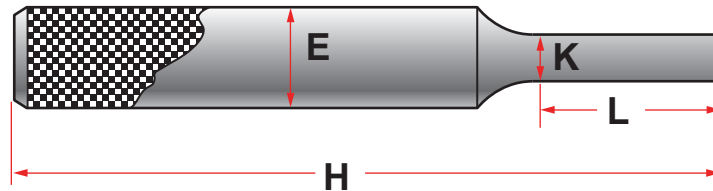




# DETACHABLE LINK PUNCHES

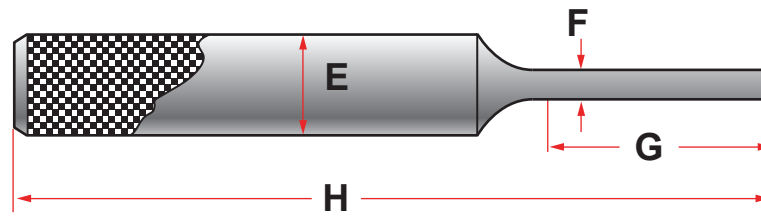
These punches are designed for the assembly and disassembly of detachable chain connecting links, kenter links, and anchor joining links. Sizes will vary for kenter and pear links made from steel, heat treated to 45-50 Rockwell C.

## ASSEMBLING PUNCHES

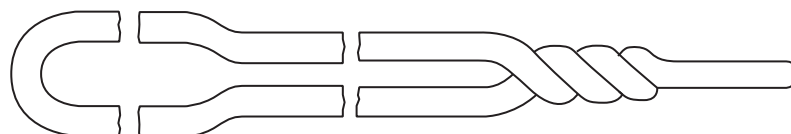


PUNCH NO.	INCHES					HANDLE
	LINK SIZE	E	K	H	L	
P-1A	5/8 - 3/4	3/4	15/64	5	1-1/8	
P-2A	7/8 - 1	3/4	17/64	5	1-1/8	
P-3A	1 - 1/8					
	1-1/4 - 1-3/8	1	3/8	6	1-3/8	
P-4A	1-1/2 - 1-5/8	1	33/64	6-1/2	1-3/8	
P-5A	1-3/4 - 2	1	21/32	6-1/2	1-1/2	X
P-6A	2-1/8 - 2-3/8	1	51/64	6-1/2	1-5/8	X
P-7A	2-1/2 - 2-7/8	1-1/8	61/64	6-1/2	1-5/8	X
P-8A	3	1-1/4	1-9/64	7	1-3/4	X

## DISASSEMBLY PUNCHES



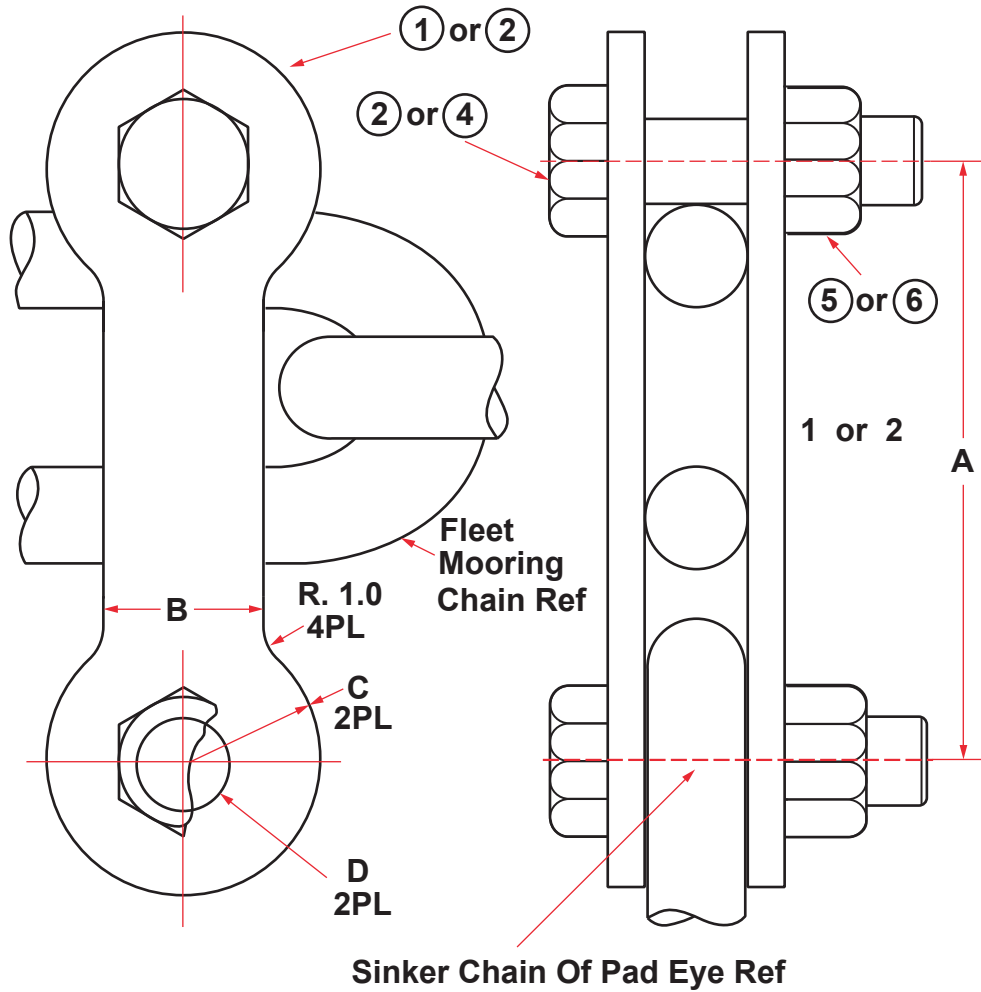
PUNCH NO.	INCHES					HANDLE
	LINK SIZE	E	F	H	G	
P-1D	5/8 - 3/4	3/4	13/64	5	1-1/4	
P-2D	7/8 - 1	3/4	15/64	5	1-1/2	
P-3D	1 - 1/8					
	1-1/4 - 1-3/8	1	5/16	6	2-1/2	
P-4D	1-1/2 - 1-5/8	1	15/32	6-1/2	2-7/8	
P-5D	1-3/4 - 2	1	9/16	6-1/2	3-1/4	X
P-6D	2-1/8 - 2-3/8	1	11/16	6-1/2	3-1/2	X
P-7D	2-1/2 - 2-7/8	1-1/8	13/16	6-1/2	3-1/2	X
P-8D	3	1-1/4	1	7	4	X





# FITTINGS

## PLATE SINKER SHACKLE



DASH NO.	SINKER CHAIN OR PAD EYE DIA RED	DIM. A $\pm .12$	DIM. B $\pm .12$	RADIUS C $\pm .12$	DIM. D $\pm .12$
-1	1-3/4 - 2	12.06	3.03	2.56	1.88
-2	2-1/4 - 4	22.06	4.03	3.56	2.38

2	-	6	GRADE DH	NUT, HEAVY, HEX, 2.250-SUN-2B	ASTM A563	STEEL
-	2	5	GRADE DH	NUT, HEAVY, HEX, 1.750-SUN-2B	ASTM A563	STEEL
2	-	4	GRADE BD	BOLT, HEX HD, 2.250-SUN-2B-2A X 9.25L	ASTM A354	STEEL
-	2	3	GRADE BD	BOLT, HEX HD, 1.750-SUN-2B-2A X 6.25L	ASTM A354	STEEL
2	-	2		PLATE, 1.25 STE	ASTM A36	STEEL
-	2	1		PLATE, 1.00 STE	ASTM A36	STEEL
QTY REQD	QTY REQD	FIND NO.	PART OF IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	SPECIFICATION	MATERIAL
-2	-1			PARTS LIST		

Note: Sinker shackle markings shall be as specified in Section 3.3.1

