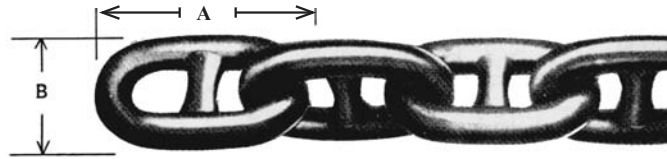




Marine Products

Stud Link Chain

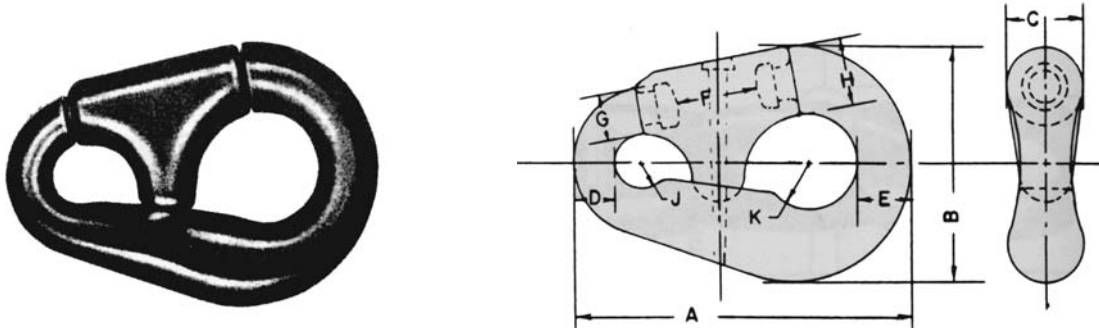


Chain Size		Dimensions				Test Requirements								No. of Links per 15 Fm Shot
(in.)	(mm)	Link Length A	Link Width B	Length over 5-Links	Weight per 15 Fm shot (Appx.)	Grade 1		Grade 2		Grade 3		Oil Rig Quality		
						Proof Load	Break Load	Proof Load	Break Load	Proof Load	Break Load	Proof Load	Break Load	
5/8	16	3-3/4	2-1/4	13-3/4	365	16620	23745	23745	33220	33220	47465			432
3/4	19	4-1/2	2-5/8	16-1/2	480	23800	34000	34000	47600	47600	68000			357
13-16	20	4-7/8	2-7/8	17-7/8	570	27800	39800	39800	55700	55700	79500			329
7/8	22	5-1/4	3-1/8	19-1/4	660	32200	46000	46000	64400	64400	91800			305
15-16	24	5-5/8	3-5/16	20-5/8	760	36800	52600	52600	73700	73700	105000			285
1	25	6	3-9/16	22	860	41800	59700	59700	83600	83600	119500	84000	129000	267
1-1/16	27	6-3/8	3-3/4	23-3/8	970	47000	67200	67200	94100	94100	135000			251
1-1/8	29	6-3/4	4	24-3/4	1080	52600	75000	75000	105000	105000	150000	106000	161000	237
1-3/16	30	7-1/8	4-1/4	26-1/8	1220	58400	83400	83400	116500	116500	167000			225
1-1/4	32	7-1/2	4-1/2	27-1/2	1350	64500	92200	92200	129000	129000	184000	130000	198000	213
1-5/16	33	7-7/8	4-3/4	28-7/8	1490	70900	101500	101500	142000	142000	203000			203
1-3/8	34	8-1/4	4-15/16	30-1/4	1630	77500	111000	111000	155000	155000	222000	157000	235000	195
1-7/16	36	8-5/8	5-3/16	31-5/8	1780	84500	120500	120500	169000	169000	241000			187
1-1/2	38	9	5-3/8	33	1940	91700	131000	131000	183500	183500	262000	185000	280000	179
1-9/16	40	9-3/8	5-5/8	34-3/8	2090	99200	142000	142000	198500	198500	284000			171
1-5/8	42	9-3/4	5-7/8	35-3/4	2240	108000	153000	153000	214000	214000	306000	216000	325000	165
1-11/16	43	10-1/8	6-1/16	37-1/8	2410	115000	166500	166500	229000	229000	327000			159
1-3/4	44	10-1/2	6-5/16	38-1/2	2590	123500	176000	176000	247000	247000	352000	249000	380000	153
1-13/16	46	10-7/8	6-1/2	39-7/8	2790	132000	188500	188500	264000	264000	377000			147
1-7/8	48	11-1/4	6-3/4	41-1/4	2980	140500	201000	201000	281000	281000	402000	285000	432000	143
1-15/16	50	11-5/8	7	42-5/8	3180	149500	214000	214000	299000	299000	427000			139
2	51	12	7-3/16	44	3360	159000	227000	227000	318000	318000	454000	322000	488000	133
2-1/16	52	12-3/8	7-7/16	45-3/8	3570	168500	241000	241000	337000	337000	482000	342000	518000	129
2-1/8	54	12-3/4	7-5/8	46-3/4	3790	178500	255000	255000	357000	357000	510000	362000	548000	125
2-3/16	56	13-1/8	7-7/8	48-1/8	4020	188500	269000	269000	377000	377000	538000	382500	579100	123
2-1/4	58	13-1/2	8-1/8	49-1/2	4250	198500	284000	284000	396000	396000	570000	403000	610000	119
2-5/16	59	13-7/8	8-5/16	50-7/8	4490	209000	299000	299000	418000	418000	598000	425000	642500	117
2-3/8	60	14-1/4	8-9/16	52-1/4	4730	212000	314000	314000	440000	440000	628000	447000	675000	113
2-7/16	62	14-5/8	8-3/4	53-5/8	4960	231000	330000	330000	462000	462000	660000	469500	709500	111
2-1/2	64	15	9	55	5270	242000	346000	346000	484000	484000	690000	492000	744000	107
2-9/16	66	15-3/8	9-1/4	56-3/8	5540	254000	363000	363000	507000	507000	726000	516000	778500	105
2-5/8	67	15-3/4	9-7/16	57-3/4	5820	265000	379000	379000	530000	530000	758000	540000	813000	103
2-11/16	68	16-1/8	9-11/16	59-1/8	6110	277000	396000	396000	554000	554000	792000	565000	849000	99
2-3/4	70	16-1/2	9-7/8	60-1/2	6410	289000	413000	413000	578000	578000	826000	590000	885000	97
2-13/16	71	16-7/8	10-1/8	61-7/8	6710	301000	431000	431000	603000	603000	861000	615000	925000	95
2-7/8	73	17-1/4	10-3/8	63-1/4	7020	314000	449000	449000	628000	628000	897000	640000	965000	93
2-15/16	75	17-5/8	10-9/16	64-5/8	7330	327000	467000	467000	654000	654000	934000	666500	1005000	91
3	76	18	10-13/16	66	7650	340000	485000	485000	679000	679000	970000	693000	1045000	89

Larger sizes are available.



Detachable Anchor Connecting Link

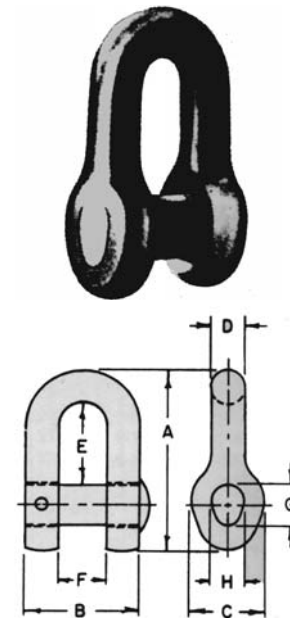


No.	Chain Size		Dimensions										Proof Test in Pounds	Break Test in Pounds	Weight (lbs)
	(in.)	(mm)	A	B	C	D	E	F	G	H	J	K			
2	3/4 - 15/16	19 - 24	7-5/8	5-1/16	1-1/2	15-16	1-1/4	2-1/4	15-16	1-3/8	21/32	1-3/16	74000	113500	7
3	1 - 1-3/16	25 - 30	9-3/8	6-3/16	1-13/16	1-3/16	1-1/2	2-19/32	1-5-16	1-3/4	3/4	1-3/8	118000	179500	14
4	1-1/4 - 1-9/16	32 - 40	11-3/4	8-1/8	2-1/16	1-9/16	1-7/8	3-1/4	1-9/16 x 1-3/4	2-7/32	1-1/32	1-11/16	200500	302500	28
5	1-5/8 - 2	42 - 51	14-7/8	10-1/4	3	2	2-1/2	3-15/16	2-15/16 x 2-3/8	2-29/32	1-1/4	2-1/16	322000	488000	60
6	2-1/16 - 2-3/8	52 - 60	17-7/8	12-5/16	3-5/8	2-3/8	3	4-3/4	2-7/16 x 2-7/8	3-15/32	1-15/32	2-17/32	447000	675000	107
7	2-7/16 - 3-1/8	62 - 79	22-1/8	14-13/16	4-5/8	3-1/8	3-3/4	5-7/8	3-3/8 x 3-1/8	4-3/8	1-29/32	3	748000	1128000	208
8	3-3/16 - 3-5/8	81 - 92	25-3/4	16-1/2	5-1/4	3-5/8	4-7/8	5-7/8	4-3/8 x 4	5-1/8 x 5-1/4	2-1/8	3-1/8	1021000	1566000	328
9	3-11/16 - 3-3/4	94 - 95	27-1/4	17-1/8	5-3/4	3-7/8	5-1/8	6-1/4	4-7/8 x 5-3/8	5-9/16	2-1/4	3-1/4	1120000	1750000	520
10	3-13/16 - 4	97 - 102	35	22-1/2	7-1/2	4-3/4	6-1/2	7-1/2	4-7/8 x 5-13/16	7-1/8	2-7/8	4-1/4	1298000	1996500	850
11	4-1/16 - 4-3/8	103 - 111	37	24	8	5	6-7/8	8	5-3/4 x 6-1/8	7-5/8	3	4-3/8	1569700	2398000	925
12	4-5/16 - 4-1/2	109 - 114	39	25-1/2	8-1/2	5-1/4	7-1/4	8-1/2	6-1/2 x 6-7/8	8	4-1/8	4-1/2	1870000	2805000	1010

Oval Pin Joining Shackles

Chain Size	Weight (lbs)	A	B	C	D	E	F	G	H
		(in.)	(mm)						
1/2 - 5/8	3	5-3/16	3-1/4	2	13-16	2-7/8	1-5/8	1-1/8	1
11-16 - 3/4	5	6-1/4	4	2-3/8	1	3-1/8	2	1-3/8	1-1/8
13/16 - 7/8	7.5	7-1/4	4-1/2	2-5/8	1-1/8	3-5/8	2-1/4	1-9/16	1-1/4
15-16 - 1	10	7-7/8	4-7/8	3	1-1/4	3-7/8	2-3/8	1-3/4	1-3/8
1-1/16 - 1-1/8	14	8-5/8	5-3/8	3-3/8	1-3/8	4-1/4	2-5/8	1-15/16	1-1/2
1-3/16 - 1-1/4	19	9-3/8	5-7/8	3-5/8	1-1/2	4-5/8	2-7/8	2-1/8	1-3/4
1-5/16 - 1-3/8	27	10-3/4	6-1/2	4-1/4	1-3/4	5-1/8	3	2-1/2	2
1-7/16 - 1-1/2	34	11-1/2	6-7/8	4-5/8	1-7/8	5-3/8	3-1/8	2-3/4	2-1/4
1-9/16 - 1-5/8	40	12-1/4	7-3/8	5	2	5-3/4	3-3/8	2-15/16	2-3/8
1-11/16 - 1-3/4	52	13-1/8	8-1/8	5-1/4	2-1/4	6-1/8	3-5/8	3-1/8	2-1/2
1-13/16 - 1-7/8	76	14-5/8	8-3/4	6	2-1/2	6-3/4	3-3/4	3-1/2	2-7/8
1-15/16 - 2-1/8	100	15-7/8	9-1/2	6-5/8	2-3/4	7-1/8	4	3-7/8	3-1/8
2-3/16 - 2-3/8	131	17-3/8	10-3/8	7-1/4	3	7-3/4	4-3/8	4-1/4	3-3/8
2-7/16 - 2-5/8	170	19-1/8	11-1/8	8	3-1/4	8-3/4	4-5/8	4-5/8	3-3/4
2-11/16 - 2-7/8	212	20-1/2	12-3/8	8-5/8	3-5/8	9-1/8	5-1/8	5	4
3 - 3-1/8	293	22-5/8	13-1/4	9-5/8	4	9-7/8	5-1/4	5-5/8	4-1/2

Larger Sizes Available.



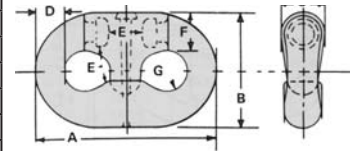
TOOLS & OTHER PRODUCTS



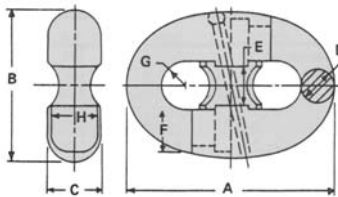
Detachable Chain Connecting Link

Chain Size		A	B	C	D	E	F	G	Proof Test (lbs)	Break Test (lbs)	Weight (lbs)
(in.)	(mm)										
3/4	19	4-1/2	3	1-3/64	3/4	27/32	59/64	1/2	67,500	91,100	2.1
13/16 - 7/8	21-22	5-1/4	3-1/2	1-7/32	7/8	63/64	1-1/16	19/32	88,200	119,000	3.4
15/16 - 1	24 - 25	6	4	1-25/64	1	1-1/8	1-7/32	21-32	116,100	156,700	5.1
1-1/16 - 1-1/8	27 - 29	6-3/4	4-1/2	1-9/16	1-1/8	1-17/64	1-3/8	47/64	145,000	195,000	7.2
1-3/16 - 1-1/4	30 - 32	7-1/2	5	1-47/64	1-1/4	1-13/32	1-17/32	13/16	178,200	240,000	9.9
1-5/16 - 1-3/8	33 - 34	8-1/4	5-1/2	1-29/32	1-3/8	1-35/64	1-43/64	29/32	211,500	285,500	13.3
1-7/16 - 1-1/2	36 - 38	9	6	2-5/64	1-1/2	1-11/16	1-53/64	63/64	252,000	340,200	17.3
1-9/16 - 1-5/8	40 - 42	9-3/4	6-1/2	2-1/4	1-5/8	1-63/64	1-63/64	1-1/16	292,500	395,000	22.0
1-11/16 - 1-3/4	43 - 44	10-1/2	7-1/2	2-7/16	1-3/4	2	2-7/32	1-3/16	352,000	376,000	27.5
1-13/16 - 1-7/8	46 - 48	11-1/4	7-1/4	2-1/2	1-7/8	2-5/32	2-11/32	1-15/64	285,000	432,000	32
1-15/16 - 2	50 - 51	12	7-3/4	2-1/2	2	2-5/16	2-1/2	1-5/16	322,000	488,000	36
2-1/16 - 2-1/8	52 - 54	12-3/4	8-1/4	2-21/32	2-1/8	2-1/2	2-21/32	1-13/32	362,000	548,000	44
2-3/16 - 2-1/4	56 - 58	13-1/2	8-23/32	2-13/16	2-1/4	2-5/8	2-13/16	1-1/2	403,000	610,000	52
2-5/16 - 2-3/8	59 - 60	14-1/4	9-7/32	3-1/16	2-3/8	2-3/4	2-15/16	1-9/16	447,000	675,000	61
2-7/16 - 2-1/2	62 - 64	15	9-11/16	3-1/8	2-1/2	2-7/8	3-1/8	1-21/32	492,000	744,000	71
2-9/16 - 2-5/8	66 - 67	15-3/4	10-3/16	3-1/4	2-5/8	3-1/16	3-1/16	1-3/4	540,000	813,000	82
2-11/16 - 2-3/4	68 - 70	16-1/2	10-13/16	3-11/16	2-7/8	3-1/4	3-11/16	1-13/16	640,000	981,000	100
2-13/16 - 2-7/8	71 - 73	17-1/4	11-1/8	3-19/32	2-7/8	3-11/32	3-9/16	1-29/32	649,000	965,000	107
2-15/16 - 3	75 - 76	18	11-5/8	3-3/4	3	3-17/32	3-3/4	1-31/32	693,000	1,045,000	120

Larger Sizes Available.



Kenter Detachable Connecting Links



Chain Size		A	B	C	D	E	F	G	H
(in.)	(mm)								
3/4	19	4-1/2	3-1/8		3/4	7/8	15-16	1/2	1
7/8	22	5-1/4	3-11/16	1-5/16	7/8	1	1-1/8	9/16	1-3/16
1	25	6	4-3/16	1-1/2	1	1-1/8	1-1/4	11-16	1-3/8
1-1/8	29	6-3/4	4-3/4	1-11/16	1-1/8	1-1/4	1-7/16	3/4	1-1/2
1-1/4	32	7-1/2	5-1/4	1-7/8	1-1/4	1-3/8	1-9/16	13/16	1-11/16
1-3/8	34	8-1/4	5-3/4	2-1/8	1-3/8	1-1/2	1-3/4	15/16	1-7/8
1-1/2	38	9	6-5/16	2-1/4	1-1/2	1-11/16	1-15/16	1	2
1-5/8	42	9-3/4	6-13/16	2-1/2	1-5/8	1-13/16	2-1/16	1-3/32	2-3/16
1-3/4	44	10-1/2	7-5/16	2-5/8	1-3/4	2	2-1/4	1-3/16	2-3/8
1-7/8	48	11-1/4	7-7/8	2-7/8	1-7/8	2-1/8	2-3/8	1-1/4	2-1/2
2	51	12	8-3/8	3-1/16	2	2-1/4	2-9/16	1-11/32	2-11/16
2-1/8	54	12-3/4	8-15/16	3-1/4	2-1/8	2-3/8	2-3/4	1-7/16	2-7/8
2-1/4	58	13-1/2	9-3/8	3-7/16	2-1/4	2-1/2	2-7/8	1-1/2	3
2-3/8	60	14-1/4	9-15/16	3-5/8	2-3/8	2-11/16	3-1/16	1-19/32	3-7/32
2-1/2	64	15	10-1/2	3-13/16	2-1/2	2-13/16	3-3/16	1-11/16	3-3/8
2-5/8	67	15-3/4	11-1/16	4	2-5/8	3	3-3/8	1-3/4	3-9/16

Larger Sizes Available.



Pilot Ladders

The **DJM Series Pilot Ladder** replaces the obsolete “Jacob’s and Chain Suspension Ladder.” The step spacing is 13-3/4 inches. DJM-I lengths up to 60 feet (USCG Approval Series 163.003/11/0). DJM-II length up to 90 feet (USCG Approval Series 163.003/17/0).

- DJM-I Ladder has steps/spreaders of hardwood except for the bottom 4 steps that are the same as found on the DJM II to withstand greater impact.
- DJM II ladder has all synthetic step/spreaders made from Dupont® high impact strength surlyn HP. All steps and spreaders are painted international orange.
- All steps and spreaders have non-skid grit applied to the surface using 2-part epoxy.
- All U. S. C. G. ladders have the A. L. Don patented clamp made from Dupont® high impact strength surlyn HP that is designed for quick step replacement with no special tools.
- The suspension rope is one continuous length on each side comprised of 3/4” diameter 3-strand synthetic PolyPro-Dacron with a white outer jacket and an orange inner safety core.
- All U. S. C. G. ladders are tested to 2000 lbs. Steps are tested to 700 lbs. with no more than 3/4” deflection.
- Replacement steps/spreaders are white in color designed in the same manner as the original steps/spreaders to allow for quick replacement.
- Standard Lanyards are 10 ft. in accordance with CFR specifications. Other lengths available.
- SOLAS type ladders available also if U. S. C. G. approval is not required.



Embarkation Ladders

The **ERIK Series Embarkation Ladder** replaces the obsolete “Chain Suspension Ladder.” The step spacing is 15 inches. ERIK-I lengths up to 95 feet SOLAS (USCG Approval Series 160.117/6/0). ERIK-II lengths up to 110 feet SOLAS (USCG Approval Series 160.117/7/0).

- ERIK - I ladder has steps of hardwood. ERIK-II ladder has all synthetic steps made from Dupont® high impact strength surlyn HP. All steps are painted international orange.
- All steps have non-skid rit applied to the surface of all steps using 2-part epoxy.
- All U.S.C.G. ladders have the A. L. Don patented clamp made from Dupont® high impact strength surlyn HP that is designed for quick step replacement with no special tools.
- The suspension rope is one continuous length on each side comprised of 3/4” diameter 3-strand synthetic PolyPro-Dacron with a white outer jacket and an orange inner safety core.
- All U. S. C. G. ladders are tested to 2000 lbs. Steps are tested to 700 lbs. with no more than 3/4” deflection.
- Replacement steps/spreaders are white in color designed in the same manner as the original steps/spreaders to allow for quick replacement.
- Both ERIK-I and ERIK-II come with a two (2) foot tail complete with thimble/ring assembly.
- SOLAS type ladders available if U.S.C.G. approval is not required.



TOOLS &
OTHER
PRODUCTS



Mooring Buoys

JIM-BUOY

Swivel & Eye Style Mooring Buoys



Features Include:

- Hot dipped galvanized swivel & eyes (also available in stainless steel)
- Interior rod bent to prevent pull-thru in stormy conditions
- Hard Polyethylene shell - 2 lb. high density foam filled
- Standard color is white
- Also available in orange, specify “O”, and yellow, specify “Y”

Premium Mark V Selection Chart

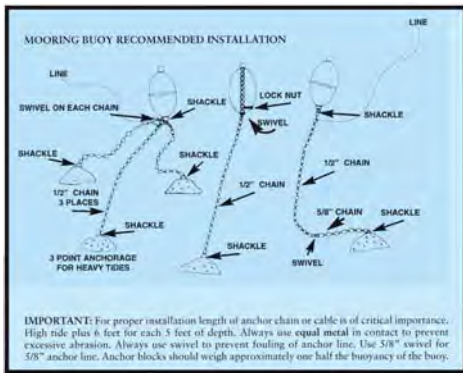
Model Number	Diameter	Swivel & Eye	Buoyancy (+/- 5 lb)	Pack	Shipping Weight
4400	12”	1/2”	22 lb	4	26 lb
4401	15”	1/2”	46 lb	4	42 lb
4402	18”	1/2”	90 lb	1	14 lb
4403	24”	5/8”	209 lb	1	27 lb
4404	30”	5/8”	400 lb	1	47 lb

Tube Style Mooring Buoys

Features Include:

- 2”, 2-1/2” & 3” PVC Tube (other sizes available)
- Hard Shell - 2 lb. high-density foam filled
- Standard color is white
- Also available in orange, specify “O” and yellow, specify “Y”

Premium Mark V Selection Chart - Tube Style



Model Number	Diameter	Tube Size	Buoyancy (+/- 5 lb)	Pack	Shipping Weight
4402-T-2”	18”	2”	87 lb	1	13 lb
4402-T-2-1/2”	18”	2-1/2”	86 lb	1	13 lb
4402-T-3”	18”	3”	85 lb	1	13 lb
4403-T-2”	24”	2”	196 lb	1	24 lb
4403-T-2-1/2”	24”	2-1/2”	195 lb	1	24 lb
4403-T-3”	24”	3”	194 lb	1	24 lb
4404-T-2”	30”	2”	396 lb	1	47 lb
4404-T-2-1/2”	30”	2-1/2”	395 lb	1	47 lb
4404-T-3”	30”	3”	394 lb	1	47 lb

Drum Mooring Buoy

Feature Include:

- Heavy Duty Construction
- High Density Polyethylene
- Maximum stability - flat top & bottom
- Galvanized swivel & eye (Stainless available)
- 3” tube will accommodate model 4000 mooring system



Model Number	Diameter	Swivel & Eye	Buoyancy (+/- 5 lb)	Pack	Shipping Weight
4304	30”	5/8”	240 lb	1	33 lb
4304-T	30”	3” Tube	230 lb	1	30 lb