



MARINE &
FISHING
CATALOG





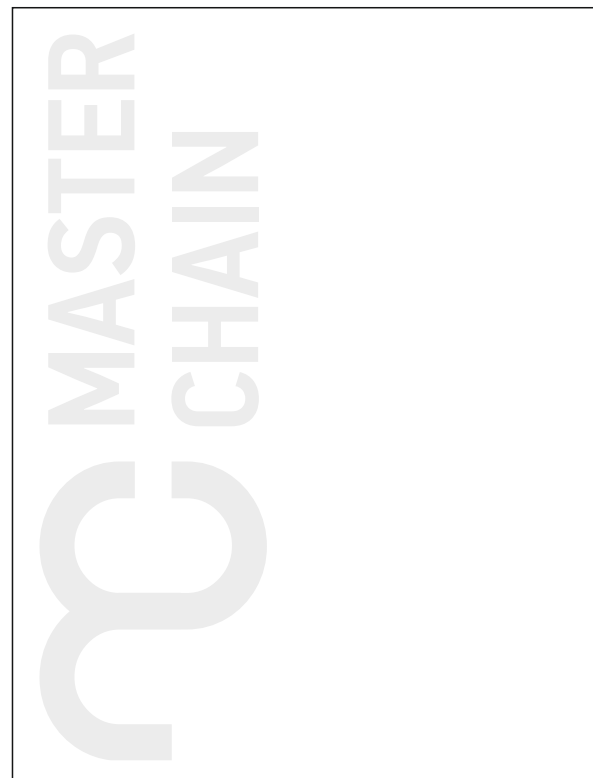
IQNet Quality Certificate

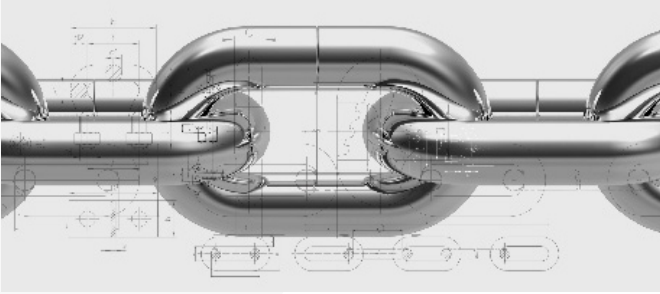


Rina ISO



TSE 11987





Company Profile

Master Chain is an international chain processing company belongs to ZINTAS GROUP which founded at the end of 1970's with the vision of becoming a global brand based on the belief in the power of high technology and continuous improvement. Masterchain manufactures industrial chains that are used worldwide for mining and conveying, high-alloyed G80 and G100 chains for moving and lifting, hoisting and stud and studless chains for marine industry, high alloyed calibrated chains for agriculture industry, high wear and temperature resistant specially designed chains for cement industry, specially designed chains for forestry, snow chains, transmission chains and chain accessories exporting to more than 30 countries today.

The factory ground covers a total area of 25.000 square meters of which approximately 10.000 square meters are built on and consists of technologically advanced 125 machine stations. The customer satisfaction is the result of our appropriate pricing policy and high quality standards.

Master Chain Co. was the first organization in Turkey that has certified its chain manufacturing according to the international standard ISO 9001 Quality Management System Certification in 1996.

Master Chain Co. acts with the consciousness of the quality target based on the principle of customer satisfaction, environmentally friendly production processes and recyclable raw materials and products. Over 40 years Master Chain Co. has served its customers with its successful, dynamic, flexible employees. As a reflection of our corporate culture, all of our employees behave and think as a part of chain link, and always challenge to be the most powerful chain link of the whole system and aware of the priority of their responsibilities.

MASTER CHAIN MARINE & FISHING



The Marine industry is one of the industries with the highest chain usage and Master Chain Co. is one of the leading suppliers in this industry. With wide production and quality range, Masterchain products appeal to many users in this sector. Master Chain manufactures chains in the range of 4mm-81mm diameter and Grade 30 - Grade 100 quality. Hot dip galvanized windlass chains, stud-link marine chains, hatch cover chains, chains used in fishing and buoys are our main productions.

Master Chain Co. pays maximum attention to each chain link during the production process and has a comprehensive quality control mechanism to eliminate possible defects. Marine 40 and Marine 70 products that we have developed as a result of this precise production and quality control have minimized the problems experienced by yacht users regarding windlass chain.



- **Windlass Chain**
- **Studlink Anchor Chain**
- **Fishing Chains**
- **Hatch Cover Chain**
- **General Used Chain in Marine Industry**
- **Marine Accessories**

MASTER MARINE

INNOVATION
CHAIN

WINDLASS CHAIN

MARINE 40

Marine 40 chain has special tolerance values, almost with zero tolerance, presents a completely new standard in marine industry. This production technology offers precise chain sizes and prevents the problems caused by the width tolerances of standard chains. Marine 40, with the quality corresponding to the tensile strength of 40kg / mm², performs 30 percent better than traditional chains.

CERTIFIED CHAIN

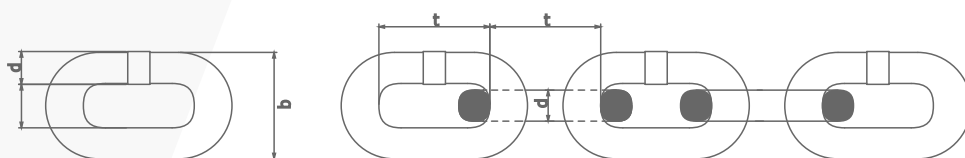
All anchor chain products has been awarded two certifications for its branded chain. Marine 40 chains provided with RINA and IQNET certifications those are the two master certifying bodies. Marine 40 chain marked at approximately every 60cm, and it has a special marking that states quality grade and brand name as "M40" and "MASTER".

THICK ZINC LAYER

Marine 40 chain is continuously hot dip galvanized to provide a deep and strong protective coating. Marine 40 chain has a minimum of 70 micron thick zinc layer that is over 30% more zinc than standard galvanised chain. Marine 40 chain is mechanically and chemically cleaned before galvanizing to create the longest lasting protection against corrosion. Thanks to the processes after the galvanizing, Marine 40 chain has no burr and irregular thickness on the zinc layer.

ONE DIMENSION, ZERO TOLERANCE

We proud to offer the most suitable chain to our customers with Marine 40 brand that we have created as a result of 45 years of knowledge and experience. Marine 40 brand chains eliminate the problems that are caused by the thickness of zinc layer and chain in wide ranges specified by international standards to the windlass gears. Unlike other chains, Marine 40 chains can be used on windlass gears without problems for many years, in which the link length and outer width are presented as a standard single figure.



Marine 40

M40 Calibrated Chain Sizes (d x t)	Outside Width (b)	Weight kg/m	Working Load kg max	Breaking Load KN Min.
6x18,5	20	0,8	550	22
8x24	27	1,4	1000	40
10x28	34	2,3	1500	62
10x30	34	2,3	1500	62
12x36	41	3,3	2250	90
13x36	45	3,9	2600	106
14x41	48	4,4	3100	125
16x45	55	6	4000	160
16x48	55	6	4000	160

WINDLASS CHAIN

MARINE 70

Master Chain, in parallel with the development of material industry, has developed its production technology and know-how continuously and used its knowledge and technology in this sector to offer a better product in the marine industry. Marine 70 (M70), which is developed to solve the problems of boat owners, who expect performance above standards, has 130% more tensile strength compared to traditional chain with its tensile strength corresponding to 70kg / mm².

BETTER PERFORMANCE

At equal capacity and length, Marine 70 has less weight on the bow, and it provides more powerful engine performance and lower fuel consumption. For instance, instead of a 100-meter chain with a thickness of 12 mm weighing 330 kg, 10mm Marine 70 branded chain weighing 230 kg can be used with a better tensile strength.

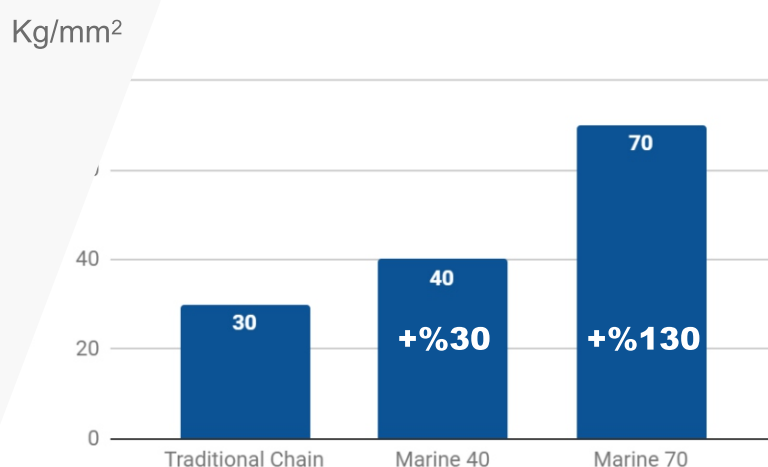
Its benefit is not only about weight or performance, at equal length and working capacity, it also answers design problems with taking less space in the peak on the bow.

CERTIFIED CHAIN

Marine 70 has been also awarded with RINA and IQNET certifications. Marine 70 chain marked at approximately every 60cm, and it has a special marking that states quality grade and brand name as M70 and "MASTER".

LONGER LIFE

Marine 70 chain offers more working load with special hardness level of 32-36 HRC. This special quality prevents the damage caused due to impact in the chain and buckling of the chain. With its special hardness, Marine 70 is able to work smoothly on windlass gears for long years by preventing its elongation due to sudden stresses that may occur in time.



Marine 70

M70 Calibrated Chain Sizes (d x t)	Outside Width (b)	Weight kg/m	Working Load kg max	Breaking Load KN Min.
6x18,5	20	0,8	750	38
8x24	27	1,4	1400	70
10x28	34	2,3	2200	110
10x30	34	2,3	2200	110
12x36	41	3,3	3100	155
13x36	45	3,9	3700	185
14x41	48	4,4	4300	215
16x45	55	6	5600	281
16x48	55	6	5600	281

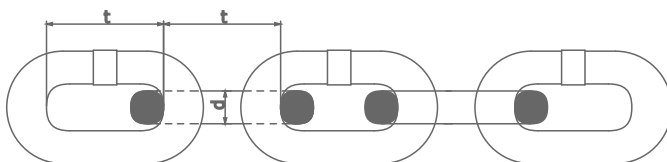
WINDLASS CHAIN

INOX 60

Stainless steel differs from carbon steel by the amount of chromium present and this is why stainless steels do not need any further corrosion treatment and appear to be as good as new, even after so many years. Master Chain Co. produces stainless steels from 6mm up to 12mm that has significant additional tensile strength compared to traditional Grade 30 chains.

CERTIFIED CHAIN

Inox 60 has been also awarded with RINA and IQNET certifications.



Inox 60

Calibrated Chain Sizes (d x t)	Weight kg/m	Working Load kg max	Breaking Load KN Min.
6x18,5	0,8	660	33
8x24	1,4	1200	60
10x28	2,3	1860	93
10x30	2,3	1860	93
12X36	3,31	2700	135



STUDLINK ANCHOR CHAIN

As a standard, chains are produced as studless and the chains subjected to the load begin to elongate and deform after a certain weight. Studlink chains, used for anchor and mooring applications, have a central stud for extra strength to prevent elongation.

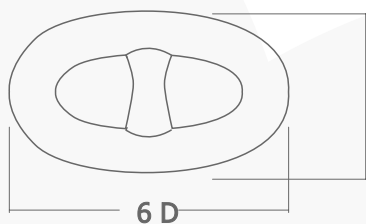
Studlink chains are produced according to ISO 1704 standards and available in various grades from 12.5 mm up to 80 mm . Studlink anchor chain in grade 2 and grade 3 quality are the most used anchor chains. Master Chain Co. have tons of stock in these grades that can keep studlink chains to guarantee availability. The surface treatment is hot-dip galvanized or gloss black painted.

OFFSHORE MOORING CHAIN

Generally used for mooring purposes, Masterchain has the capacity and technology to produce studlink or studless chain in G80 quality according to customer demands.



Studlink Anchor Chain



3.6 D



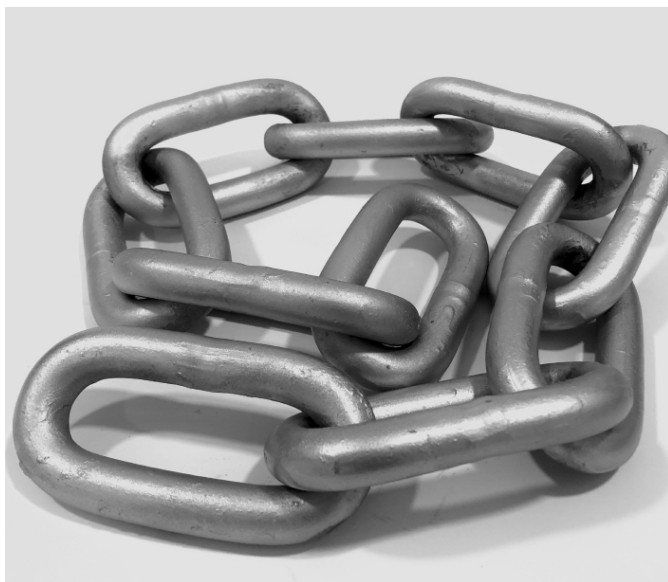
Chain Diameter		Grade 1		Grade 2		Grade 3		Weight 27.5 m	Weight 1 Metre	Number of Links Per (27.5m)
inches	mm	Proof Load kN	Breaking Load kN	Proof Load kN	Breaking Load kN	Proof Load kN	Breaking Load kN			
1/2	Ø 12.5	46	66	66	92	92	132	96	3.5	549
9/16	Ø 14	58	82	82	116	116	165	121	4.4	491
5/8	Ø 16	76	107	107	150	150	216	160	5.8	429
11/16	Ø 17.5	89	127	127	179	179	256	193	7	391
3/4	Ø 19	105	150	150	211	211	301	223	8.1	357
13/16	Ø 20.5	123	175	175	244	244	349	275	10.0	329
7/8	Ø 22	140	200	200	280	280	401	305	11.1	305
15/16	Ø 24	167	237	237	332	332	476	366	13.3	285
1	Ø 26	194	278	278	359	389	556	432	15.7	259
1 1/8	Ø 28	225	321	321	449	449	642	503	18.3	245
1 3/16	Ø 30	257	368	368	514	514	735	578	21.0	225
1 1/4	Ø 32	291	417	417	583	583	833	658	23.9	213
1 5/16	Ø 34	328	468	468	655	655	937	743	27.0	195
1 7/16	Ø 36	366	523	523	732	732	1050	831	30.2	187
1 1/2	Ø 38	406	581	581	812	812	1160	927	33.7	179
1 9/16	Ø 40	448	640	640	896	896	1280	1020	37.1	171
1 5/8	Ø 42	492	703	703	981	981	1400	1115	40.5	165
1 3/4	Ø 44	538	769	769	1080	1080	1540	1220	44.3	153
1 13/16	Ø 46	585	837	837	1170	1170	1680	1335	48.5	147
1 7/8	Ø 48	635	908	908	1270	1270	1810	1455	52.8	143
2	Ø 50	886	981	981	1370	1370	1960	1569	57	137
2 1/16	Ø 52	739	1060	1060	1480	1480	2110	1710	62	129
2 1/8	Ø 54	794	1140	1140	1590	1590	2270	1815	66	125
2 3/16	Ø 56	851	1220	1220	1710	1710	2430	1959	71	123
2 5/16	Ø 58	909	1290	1290	1810	1810	2600	2120	77	119
2 3/8	Ø 60	969	1380	1380	1940	1940	2770	2285	83	113
2 7/16	Ø 62	1030	1470	1470	2060	2060	2940	2420	88	111
2 1/2	Ø 64	1100	1560	1560	2190	2190	3130	2585	94	107
2 5/8	Ø 66	1160	1660	1660	2310	2310	3300	2750	100	105
2 11/16	Ø 68	1230	1750	1750	2450	2450	3500	2943	107	99
2 3/4	Ø 70	1290	1840	1840	2580	2580	3690	3135	114	97
2 7/8	Ø 72	1390	1990	1990	2790	2790	3990	3410	124	93
3	Ø 76	1500	2150	2150	3010	3010	4300	3715	135	89
3 1/16	Ø 78	1580	2260	2260	3160	3160	4500	3910	142	87
3 3/16	Ø 81	1690	2410	2410	3380	3380	4820	4235	154	85
3 5/16	Ø 84	1800	2580	2580	3610	3610	5160	4565	166	81
3 7/16	Ø 87	1920	2750	2750	3850	3850	5500	4895	178	79
3 9/16	Ø 90	2050	2920	2920	4090	4090	5840	5198	189	77
3 5/8	Ø 92	2130	3040	3040	4260	4260	6080	5473	199	73
3 3/4	Ø 95	2260	3230	3230	4510	4510	6440	5810	211	71
3 13/16	Ø 97	2340	3340	3340	4650	4680	6690	6050	220	71
3 15/16	Ø 100	2470	3530	3530	4940	4940	7060	6435	234	69
4	Ø 102	2560	3660	3660	5120	5120	7320	6685	243	67
4 1/8	Ø 105	2700	3850	3850	5390	5390	7700	7320	266	65
4 3/16	Ø 107	2790	3980	3980	5570	5570	7960	7895	287	63
4 3/8	Ø 111	2970	4250	4250	5940	5940	8480	8360	304	61
4 1/2	Ø 114	3110	4440	4440	6230	6230	8890	8720	317	59
4 5/8	Ø 117	3260	4650	4650	6510	6510	9300	9490	345	57
4 3/4	Ø 120	3400	4850	4850	6810	6810	9720	10313	375	57

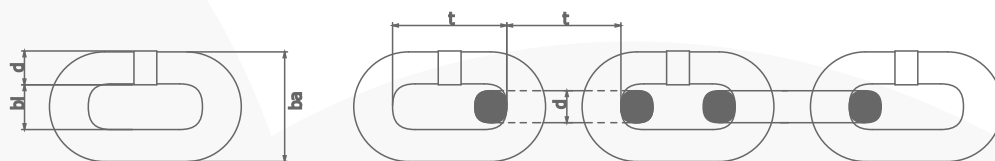
FISHING CHAIN

Master Chain Co. produce fishing chains from high quality steel, especially formulated and heat treated for fishing industry. Every link is proof tested and calibrated.

For Fishing Industry, Masterchain has short-link, mid-link and long-link chains. Fishing chains are used in especially towed nets or fish farms. We offer these chains in up to Grade 80 quality.

The surface treatment can be selected as hot-dip galvanizing, natural black surface or dyeing.





Short-Link Chain Acc. to En818-2 Grade 80 Quality

Size	Inside Width (Min.)	Outside Width (Min.)	Weight	Proof Load	Breaking Load
d x t mm	bi mm	ba mm	Kg/m	kN Min. G80	kN Min. G80
7x21	10	25,5	1,09	40	60
8x24	10,4	29,6	1,4	50	80
10x30	13	37	2,2	80	125
13x39	16,9	48,1	3,8	132	212
16x48	20,8	59,2	5,7	200	315
18x54	23,4	66,6	7,3	250	400
20x60	26	74	9	314	503
22x66	28,6	81,4	10,9	380	608
26x78	33,8	96,2	15,2	616	850
32x96	41,6	118	23	800	1290

Mid-Link Chain Grade 70 Quality

Size	Inside Width (Min.)	Outside Width (Min.)	Weight	Proof Load	Breaking Load
d x t mm	bi mm	ba mm	Kg/m	kN Min.	kN Min.
10X40	15	37	1,97	73	109
13X52	19,5	48,5	3,35	115	172
14X50	18,5	49,5	4	145	215
16X64	24	59	5,05	185	280
16X80	22,4	57,6	4,7	185	280
19X75	28,4	69,5	7,15	265	397
22X86	27	74	9,5	354	532
26X92	31	86	13,5	495	743

Long-Link Chain Grade 70 Quality

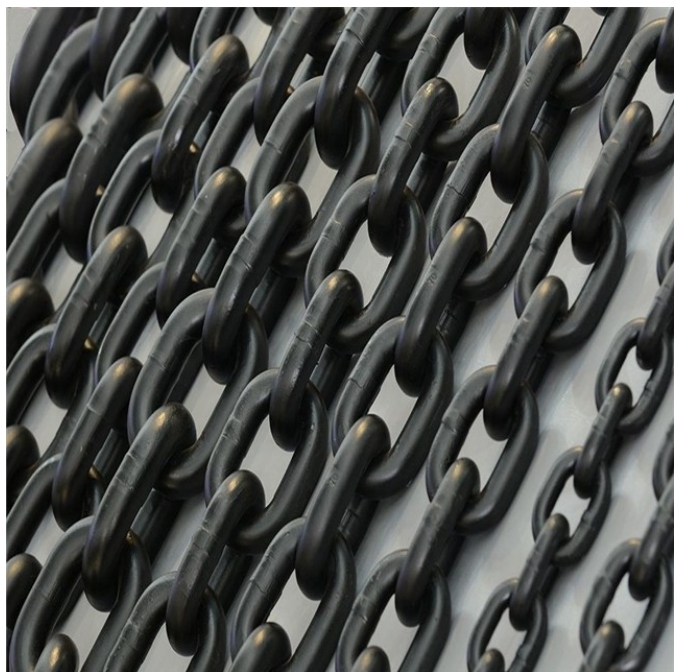
Size	Inside Width (Min.)	Outside Width (Min.)	Weight	Proof Load	Breaking Load
d x t mm	bi mm	ba mm	Kg/m	kN Min.	kN Min.
9X53	15	35	1,45	60	89
10X65	20	43	1,75	73	109
11X64	18	43	2,16	88	132
13X80	22	51	2,93	115	172
16X100	26	61	4,42	185	281
19X100	27	68	6,45	262	397
22X120	37	84	8,74	351	532
25X140	40	94	11,2	457	686

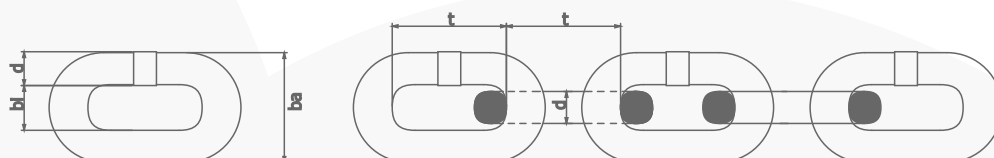
*Above values apply to chains in "natural black surface"

HATCH COVER CHAIN

Hatch cover chain are often used for rolling type hatch covers. For hatch cover chains, high-alloyed steel is used with industry leading induction heat treatment process to achieve highest tensile strenghts up to Grade 100 quality in the range of 11-30mm.

The surface treatment of hatch cover chain can be hot-dip galvanized, black painted or anti-rust oil. In addition to the common dimensions, Master Chain can supply other dimensions according to customer needs. Every link is calibrated and tested in technolohically advanced computer supported calibration machines for maximum safety.



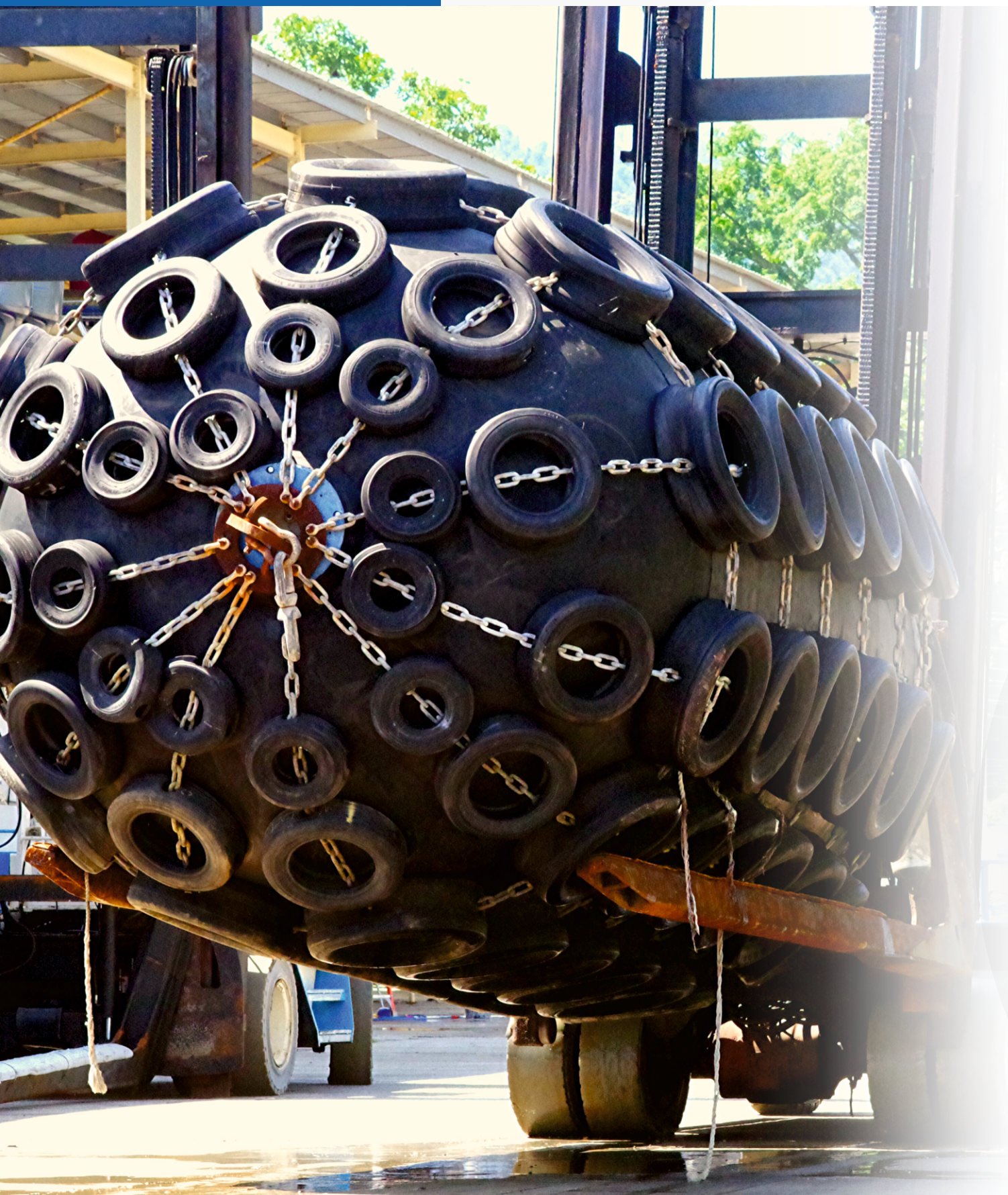


Grade 80

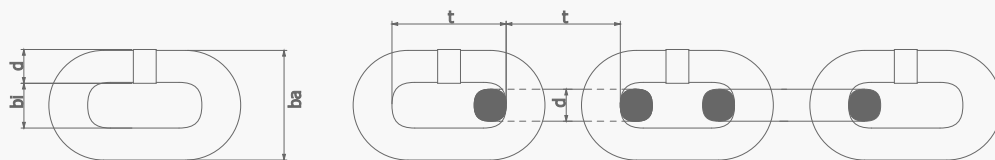
Size	Inside Width (Min.)	Outside Width (Min.)	Weight	Proof Load	Breaking Load
d x t mm	bi mm	ba mm	Kg/m	kN Min. G80	kN Min. G80
11x43	12,5	36,5	2,34	95	150
14x50	17	48	3,95	185	246
16x48	20,8	59,2	5,7	201	322
16x64	23,4	66,6	7,3	254	407
18x54	21	60	6,6	254	407
18x64	26	74	9	314	503
20x60	28,6	81,4	10,9	380	610
22x66	31	78	9,9	380	610
22x78	26	73	9,5	380	610
30X108	34	97	18	900	1130

Grade 100

Size	Inside Width (Min.)	Outside Width (Min.)	Weight	Proof Load	Breaking Load
d x t mm	bi mm	ba mm	Kg/m	kN Min. G10	kN Min. G10
16X48	20,8	59,2	5,7	251	402
18X54	23,4	66,6	7,3	318	510
18X64	21	60	6,6	318	510
20X60	26	74	9	393	628
22X66	28,6	81,4	10,9	475	760
22X86	26	73	9,5	475	760



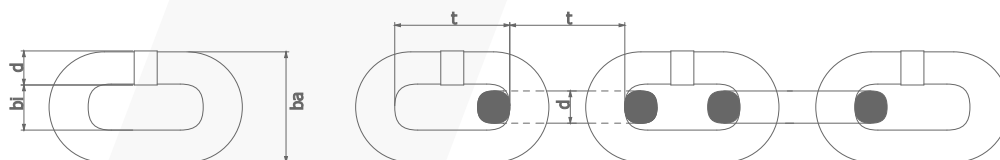
SHORT-LINK CHAIN



DIN 766 Calibrated Chain

Nominal Diameter	Hatve Pitch	Inside Width (Min.)	Outside Width (Max.)	Weight	Working Load	Proof Load	Breaking Load
d mm	t mm	bi mm	Ba mm	Kg/m	Kg Max.	kN Min.	kN Min
4 ±0,2	16 +0,3 -0,2	4,8	13,6	0,32	200	5	8
5 ±0,2	18,5 +0,4 -0,2	6	17	0,5	320	8	12,5
6 ±0,2	18,5 +0,4 -0,2	7,2	20,4	0,8	400	10	16
7 ±0,3	22 +0,4 -0,2	8,4	23,8	1,1	630	16	25
8 ±0,3	24 +0,4 -0,2	9,6	27,2	1,4	800	20	32
9 ±0,4	27 +0,5 -0,3	10,8	30,6	1,8	1000	25	40
10 ±0,4	28 +0,5 -0,3	12	36	2,3	1250	32	50
11 ±0,4	31 +0,5 -0,3	13,2	40	2,7	1600	40	63
13 ±0,5	36 +0,6 -0,3	15,6	47	3,9	2000	50	80
14 ±0,6	41 +0,7 -0,4	16,8	50	4,4	2500	63	100
16 ±0,6	45 +0,8 -0,4	19,2	58	5,8	3200	80	125
18 ±0,9	50 +0,8 -0,4	21,6	65	7,4	4000	100	160
20 ±1,0	56 +1,0 -0,5	24	72	9	5000	125	200
23 ±1,2	64 +1,1 -0,5	27,6	83	12	6300	160	250
26 ±1,3	73 +1,2 -0,6	31,2	94	15	8000	200	320
28 ±1,4	78 +1,3 -0,6	33,6	101	18	10000	250	400
30 ±1,5	84 +1,4 -0,7	36	108	20	11200	280	450
32 ±1,6	90 +1,5 -0,7	38,4	115	23	12500	320	500
36 ±1,8	101 +1,7 -0,8	43,2	130	29	16000	400	630
40 ±2,0	112 +1,9 -0,8	48	144	35	20000	500	800
42 ±2,1	118 +2,0 -1,0	50	151	40	22400	560	900

MEDIUM-LINK CHAIN



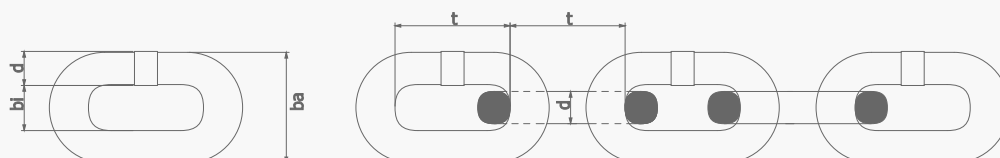
DIN 5685-A

Nominal Diameter	Diameter Tolerans	Pitch	Pitch Tolerance	Inside Width	Weight	Marking
d mm	mm	t mm	mm	Min. mm	Kg / m	
5	±0,30	21	±1,1	9	0,5	B orta
6	±0,30	24	±1,2	11	0,73	B orta
7	±0,40	28	±1,4	12	0,99	B orta
8	±0,40	32	±1,6	14	1,3	B orta
10	±0,50	40	±2	18	2,00	B orta
13	±0,70	52	±2,6	23	3,40	B orta

DIN 762

Nominal Diameter & Tolerance	Pitch & Tolerance	Inside Width (Min.)	Outside Width (Max.)	Weight	Working Load	Proof Load	Breaking Load	11 x t Length
d mm	t mm	bi mm	ba mm	Kg/m	kN Max. GK3	kN Max. GK3	kN Max. GK 3	mm
10 ±0,4	50 +0,8 -0,4	14	36	1,8	10	25	50	550
13 ±0,5	65 +1,0 -0,5	18,2	46,8	3,1	16	40	80	715
16 ±0,6	80 +1,3 -0,6	22,4	57,6	4,7	25	63	125	880
18 ±0,9	90 +1,4 -0,7	25	65	6	32	80	160	990
20 ±1,0	100 +1,6 -0,8	28	72	7,4	40	100	200	1100

LONG-LINK CHAIN



DIN 5685-C

Nominal Diameter	Hatve Pitch	Inside Width (Min.)	Outside Width (Max.)	Weight	Working Load	Proof Load	Breaking Load
d mm	t mm	b1 mm	Ba mm	Kg/m	Kg Max.	kN Min.	kN Min
4 ±0,2	32 ±1,0	7,2	16,8	0,27	100	2,5	6,3
5 ±0,25	35 ±1,1	9	21	0,43	160	4	10
6 ±0,3	42 ±1,3	10,8	25,2	0,63	200	5	12,5
7 ±0,35	49 ±1,5	12,6	29,4	0,86	300	7,5	19
8 ±0,4	52 ±1,6	14,4	33,6	1,1	400	10	25
10 ±0,5	65 ±2,0	18	42	1,75	630	16	40
13 ±0,65	82 ±2,5	23,4	54,6	2,95	1000	25	63
16 ±0,8	100 ±3,0	28,8	67,2	4,45	1600	40	100

DIN 763

Diameter	Pitch	Width b	Weight kg/m	Proof Load kN GK 2	Proof Load kN GK 3	Breaking Load kN GK 2	Breaking Load kN GK 3
16	144	88	4,3	15,0	32,2	75,0	161,0
18	162	99	5,5	18,3	40,7	91,5	203,5
20	180	110	6,8	22,8	50,3	114,0	251,5
23	207	127	8,9	30,0	66,5	150,0	332,5
26	234	143	11,4	38,4	85,0	192,0	425,0
30	270	165	15,2	51,0	113,0	255,0	565,0
33	297	181	18,3	61,8	136,8	309,0	684,0
36	324	198	21,9	75,0	163,0	375,0	815,0
39	351	214	25,7	90,0	191,0	450,0	955,0

WINDLASS CHAIN ACCESSORIES

U Type Chain Shackle

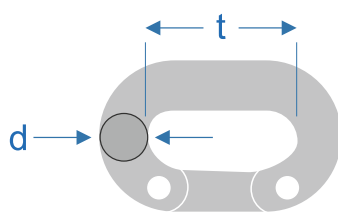
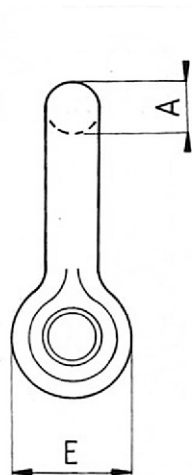
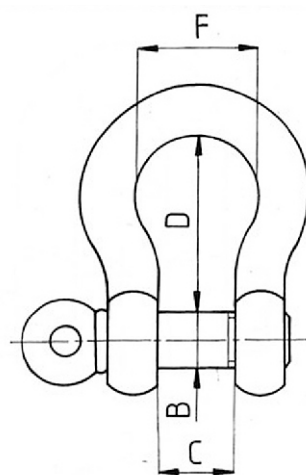
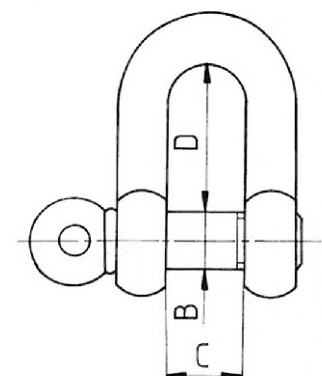
A mm	B mm	C mm	D mm	E mm	Weight Kg	Working L. Limit TON
6	8	12	22	18	0,05	0,50
8	10	14	26	21	0,06	0,75
10	11	16	32	25	0,11	1,00
11	13	18	37	27	0,18	1,50
13	16	21	41	30	0,34	2,00
16	19	27	51	40	0,67	3,25
19	22	32	60	48	1,14	4,75
22	25	37	71	54	1,74	6,50
25	29	43	81	60	2,52	8,50
28	32	46	90	67	3,45	9,50
32	35	52	100	76	4,90	12,00
35	38	57	111	84	6,47	13,50
38	41	60	122	92	8,63	17,00
45	51	73	146	110	14,20	25,00
50	57	83	171	127	21,20	35,00
65	70	105	203	152	38,50	55,00
76	82	127	216	165	56,50	85,00
89	95	133	266	203	93,00	120,00

Omega Type Chain Shackle

A mm	B mm	C mm	D mm	E mm	F mm	Weight Kg	Working L. Limit TON
5	6	10	22	14	18	0,02	0,33
6	8	12	29	18	20	0,05	0,50
8	10	14	31	21	21	0,08	0,75
10	11	16	37	25	26	0,14	1,00
11	13	18	43	27	29	0,20	1,50
13	16	21	48	30	33	0,36	2,00
16	19	27	60	40	43	0,73	3,25
19	22	32	71	48	51	1,23	4,75
22	25	37	84	54	58	1,79	6,50
25	29	43	95	60	68	3,75	8,50
28	32	46	108	67	74	3,75	9,50
32	35	52	119	76	83	5,31	12,00
35	38	57	132	84	89	7,18	13,50
38	41	60	146	92	98	9,43	17,00

Connecting Link

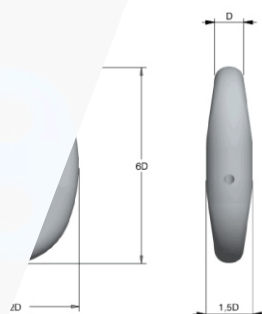
Diameter (d)	Pitch (t)
6	18,5
8	24
10	28
12	36



ANCHOR CHAIN ACCESSORIES

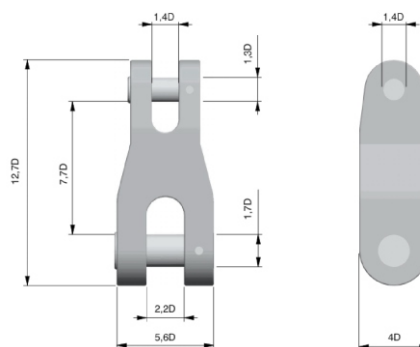
KENTER JOINING SHACKLE

A kenter joining-shackle is used to join two stud link chain elements ending in a common or enlarged link.



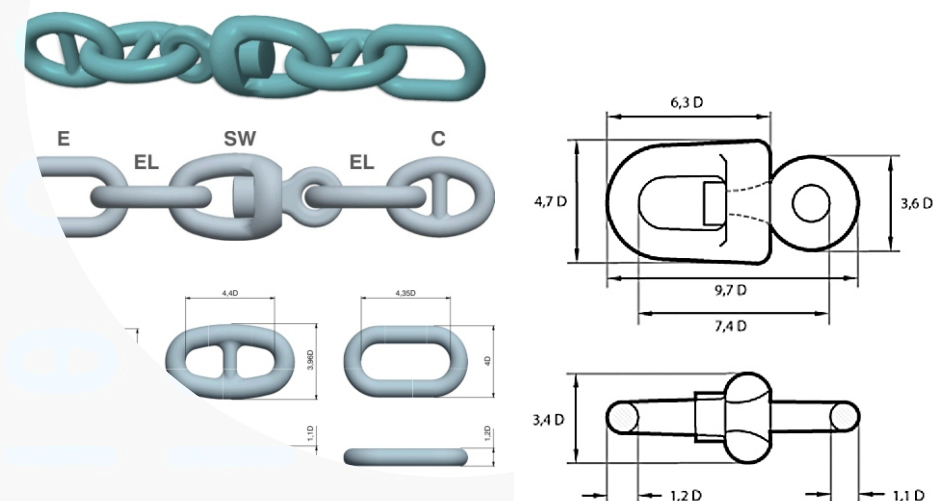
SWIVEL SHACKLE

The swivel-shackle is used to minimize the space between the anchor and the chain. One end can connect to crown-shackle or anchor-shank. The other end fit a studless endlink or a common link.



SWIVEL FORERUNNER

The swivel-forerunner is the most common swivel-connection used on ships. The end with a studless endlink fit the anchor-shackle, and the end with a common link for the kenter-shackle.





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