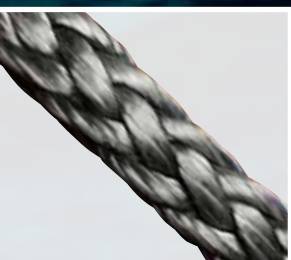




BEZABALA

MOORING
& WIRE
ROPES

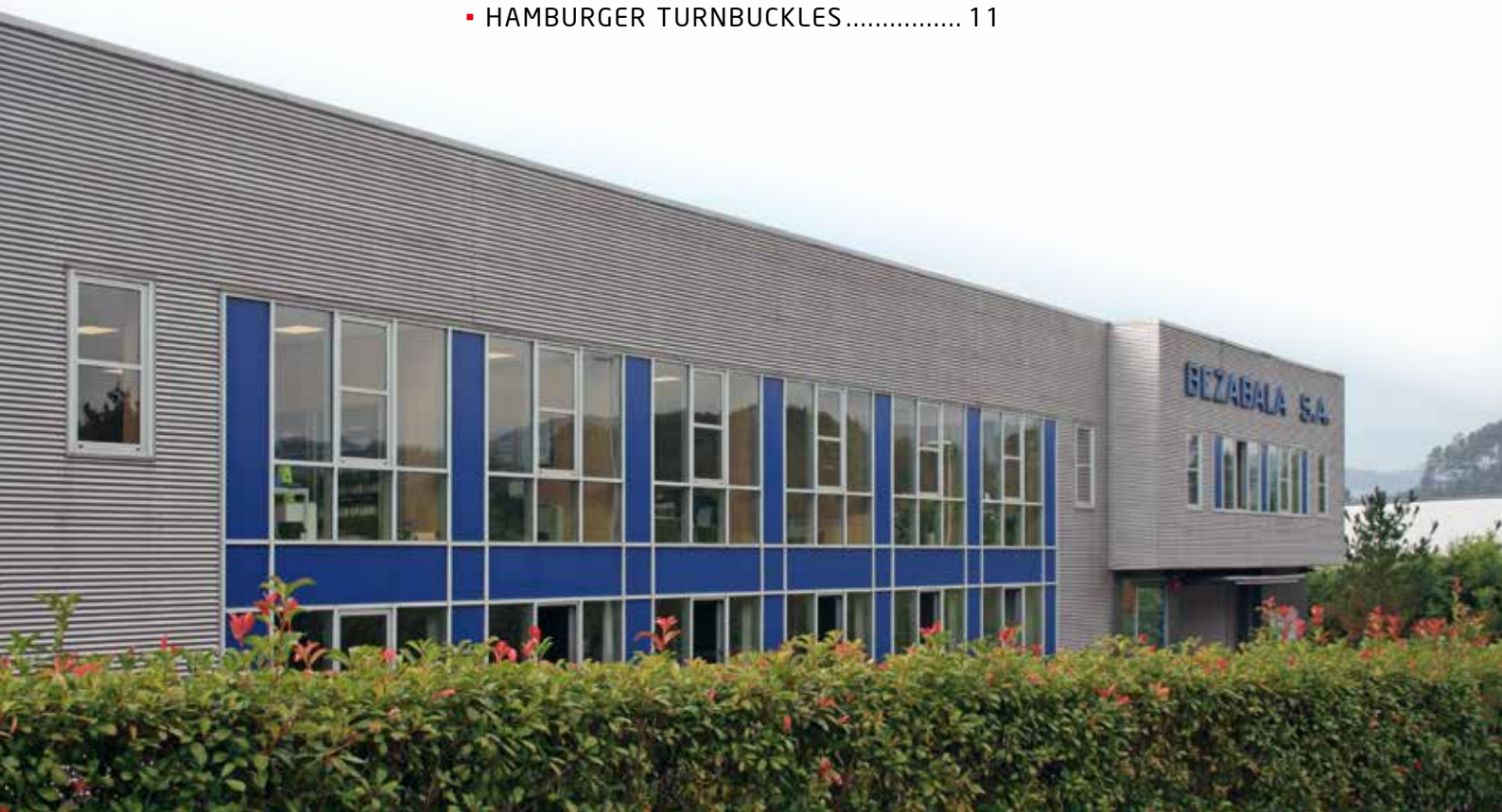




BEZABALA

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POLYESTEEL ROPE

Because Polysteel rope is manufactured from high tenacity Polypropylene yarns, Polysteel offers easy handling, high strength and excellent abrasion resistance.

DESCRIPTION

- 8 strand rope.
- Break load 40% higher than polypropylene.
- 20% lighter than nylon.
- Does not absorb water.
- Melting point 170 ° C.

FINISHES

On request, it can be supplied with:

- Thimbles
- Spliced eyes

CHARACTERISTICS:

- High tenacity polypropylene rope.
- Relative density 0.92.
- Excellent abrasion resistance.
- Flexibility.
- High ultra-violet light resistance.

Applications

- A multipurpose rope ideal for general industrial & commercial fishing applications.
- An excellent rope for deep sea pot rope.

BZ FLEX ROPE

Due to technically reinforced composition of high tenacity Polysteel and Polyester yarns, BZ Flex has retained its superior strength, when combined with unique double construction cover yarns, this composition provides superior abrasion resistance compared to conventional constructed ropes. This has been verified through frequent and repeated uses in mooring.

DESCRIPTION

- 8 strand rope.
- Break load almost 20% higher than polysteel.
- 20% lighter than nylon.
- Does not absorb water.
- Melting point 170 ° C.

FINISHES

On request, it can be supplied with:

- Thimbles
- Spliced eyes

CHARACTERISTICS:

- High tenacity polysteel and polyester.
- Relative density 0.97.
- Excellent abrasion resistance.
- Flexibility.
- High ultra-violet light resistance.

Applications

- Popular applications are mooring, towing and anchor lines...
- OCIMF-conforming mooring line for tankers.



NYLON ROPE

Nylon rope has twice the strength of manila rope. It has high elongation (under load) when compared to other synthetic ropes. Nylon has high energy absorption under shock and good abrasion resistance. When combined, these characteristics make nylon rope the best in handling compared to other synthetics.

DESCRIPTION

- 8 strand rope.
- Good elasticity.
- Good flexibility.
- Water absorption from 2-5%.
- Melting point 220 ° C.

FINISHES

On request, it can be supplied with:

- Thimbles
- Spliced eyes

CHARACTERISTICS:

- High tenacity polyamide fibers.
- Specific gravity 1.14.
- Excellent abrasion resistance.
- Non floating.
- High ultra-violet light resistance.

Applications

- Is utilized extensively in marine uses such as mooring lines, towing slings, commercial fishing, utility rope, leisure boat, sailing, etc.



BZ MAX ROPE

BZ MAX is the latest innovation in ultra-high molecular weight polyethylene fiber (UHMWPE) rope, designed after many years of research and experience. BZ MAX has the highest breakage load in regard to its weighs on the market. It is stronger than steel rope of an equal diameter and weighs one-eighth. It has a special coating and has undergone an anti-caloric treatment that significantly improves its performance in the face of abrasion.

DESCRIPTION

- 8-12 strand rope.
- Good elasticity.
- Good flexibility.
- Does not absorb water.
- Melting point 150 ° C.

FINISHES

On request, it can be supplied with:

- Thimbles
- Spliced eyes

CHARACTERISTICS:

- Elongation to the break 4-5%.
- Specific gravity 0.97.
- Excellent abrasion resistance.
- Flotability.
- High ultra-violet light resistance.

Applications

- Is utilized extensively in marine uses such as mooring lines, towing, hoisting slings, guides, bearings, etc.

CERTIFICATIONS

We dedicate this catalogue to you in the hope that it will teach you about our activities and that its contents will provide you with useful information.

We have tried to bring together what we consider to be the most relevant aspects of our experience during 75 years in this field.

We are at your disposition for any clarifications needed in this regard.

We hope that you will find this catalogue useful.

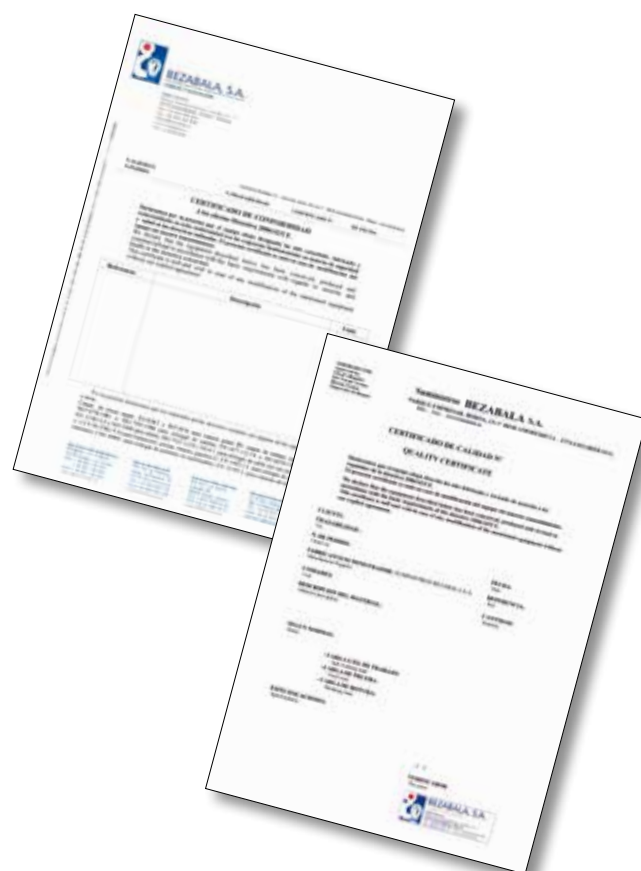
COMMITMENT TO QUALITY

Since its beginnings, the main priority of Bezabala SA has been continuous quality improvement in order to provide, maintain and develop a quality system that guarantees control over the various factors affecting its processes and meets the required quality standards. For this, all product manufacturing stages through to sales have suitable quality level.

Our experience of 70 years in the market, the firm commitment of management and the participation at all levels in the company has allowed the quality management system to be kept up-to-date, guaranteeing satisfaction for all clients.

Lloyd's Register, Det Norske Veritas, Bureau Veritas and the Shipping Inspectorate certify and periodically revise the tests carried out on our own test benches.

At the same time, all manufacturers whose products are distributed by Bezabala, S.A. are market leaders at both European and worldwide levels and have their own quality certificates.



COMPARATIVE TABLES

BREAKING LOAD



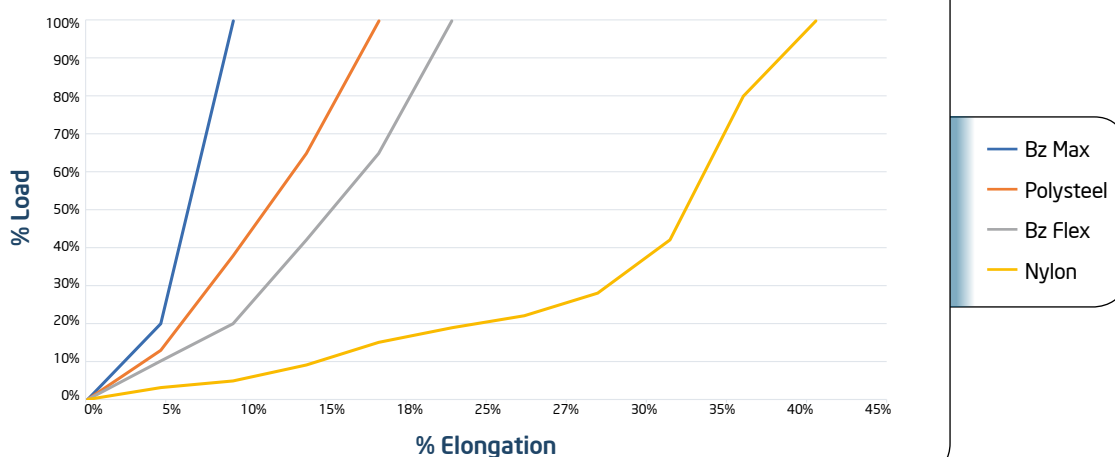
mm	Inches	POLYSTEEL		BZ FLEX		NYLON		BZ MAX	
		Weight Kg/100 m	Breaking load kg	Weight Kg/100 m	Breaking load kg	Weight Kg/100 m	Breaking load kg	Weight Kg/100 m	Breaking load kg
*40	5	72,0	26,860	91,5	32,000	103,8	29,842	91,0	117,000
*44	5 1/2	88,0	31,780	109,0	38,000	125,6	35,679	108,0	138,000
*48	6	104,0	37,180	132,0	44,000	149,4	42,000	129,0	164,000
*52	6 1/2	122,0	43,195	150,0	51,000	175,4	49,799	162,0	194,000
*56	7	142,0	49,380	179,0	59,000	203,4	56,071	177,0	224,000
*60	7 1/2	163,0	56,680	200,5	67,000	233,5	63,812	203,0	257,000
*64	8	185,0	64,140	226,0	75,000	265,6	72,018	231,0	292,000
*68	8 1/2	209,5	72,062	254,0	84,000	299,9	80,685	260,0	329,000
*72	9	234,0	80,225	284,0	94,000	336,2	89,810	292,0	369,000
*80	10	290,0	99,050	349,0	114,000	415,1	109,420	361,0	451,000
*88	11	351,0	123,000	420,0	138,000	502,2	130,823	439,0	545,000
*96	12	417,0	142,000	500,0	163,000	737,1	153,999	519,0	643,000

* 8 strand.

CHARACTERISTICS

	POLYSTEEL	BZ FLEX	NYLON	BZ MAX
FLOATING	YES	YES	NO	YES
ELONGATION	15-18%	20%	15-28%	4-5%
ABRASION RESISTANCE	GOOD	GOOD	VERY GOOD	EXCELLENT
RESISTANCE TO LOADS	VERY GOOD	VERY GOOD	VERY GOOD	EXCELLENT
ALKALI RESISTANCE	VERY GOOD	VERY GOOD	VERY GOOD	VERY GOOD
ACID RESISTANCE	VERY GOOD	VERY GOOD	MEDIUM	MEDIUM
UV RESISTANCE	GOOD	VERY GOOD	GOOD	GOOD

ELONGATION



MOORING TAILS

DESCRIPTION

Mooring tails provide elasticity and shock/energy absorbing within the mooring arrangement and prevent damages to primary mooring line.

Benefit & Features:

Advantage is extra shock absorption, high elongation (25% at break) and excellent UV protection. As per OCIMF regulation required MBL must be 37% higher than steel rope.



FINISHES

NYLON/POLYAMID

Applications

Mooring, Towing, anchoring lines...

Ø mm	NYLON/POLYAMID Weight of rope with eyes kg±5%		MBL t
	11 m	22 m	
64	43	75	83
72	54	94	100
80	65	116	123
88	75	146	146

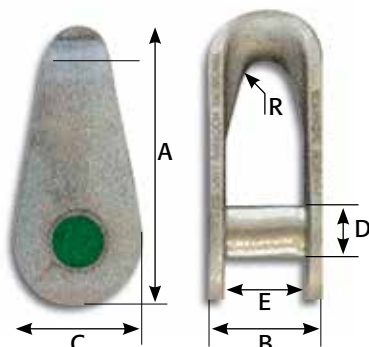
TONSBERG TYPE MOORING LINK

DESCRIPTION

Galvanized steel mooring link of compact design typically utilized as connection between wire rope and fiber forerunner.

SIZES

90, 120, 180 & 300 m/Tons.



Note: Fiber rope in the bolt.
Wire rope around the body.

	90 T	120T	180 T
Forerunner circ. inches	7-9	9-11	11-15
A mm	285	324	350
B mm	115	142	184
C mm	136	150	160
D mm	65	75	85
E mm	75	90	120
R mm	22	28	30
Breaking load m/tones	90	120	180
Proof load m/tones	55	70	95
Safe working load m/tones	30	40	60
Weight kg	11,2	16,9	25
libs.	25	37	55



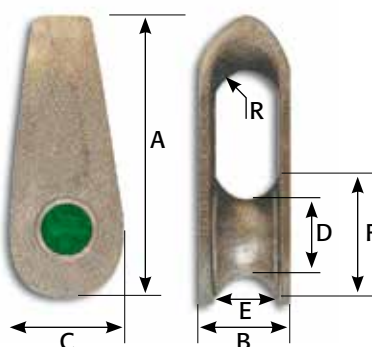
MANDAL TYPE FAIRLEAD SHACKLE

DESCRIPTION

Stainless steel mooring shackle with sleek shape designed to pass through fairleads.

USE SIZES

90, 120 & 300 m/Tons.

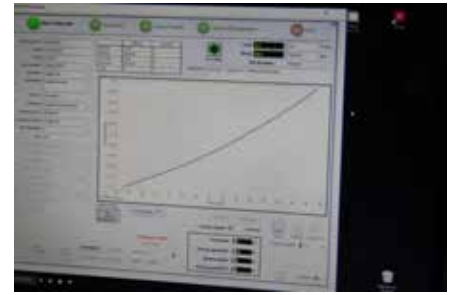


Note: Wire rope in the sheave.
Fiber rope around the body.

	90 M	120M
Forerunner circ. inches	6-9	9-11
A mm	255	310
B mm	97	121
C mm	120	130
D mm	65	82
E mm	67	90
F mm	100	128
R mm	34	45
Breaking load m/tones	90	120
Proof load m/tones	55	70
Safe working load m/tones	30	40
Weight kg	7.8	13.3
libs.	17.2	29

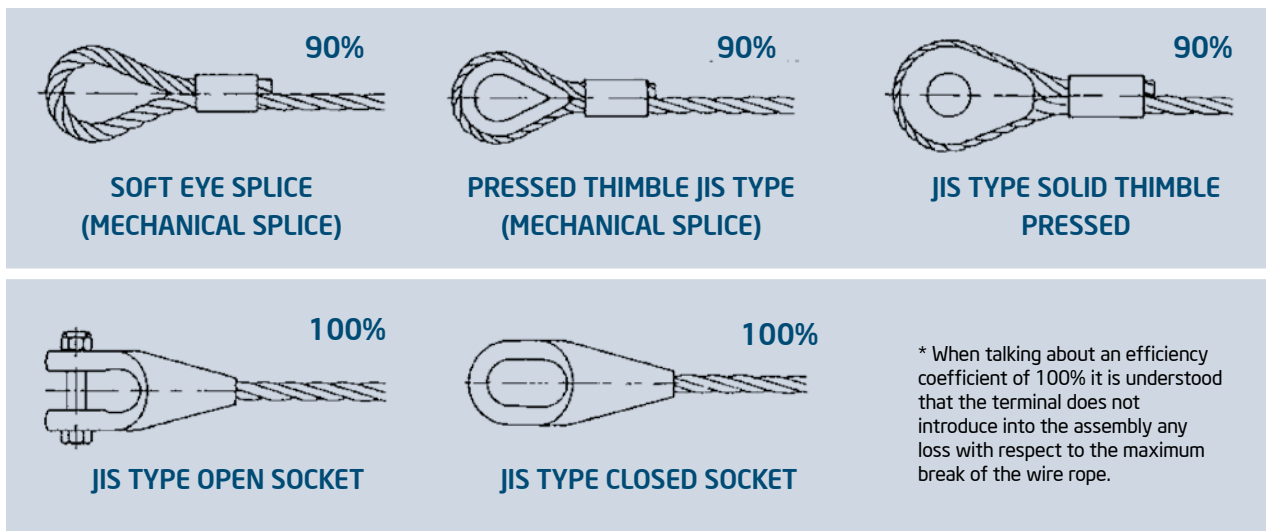


PRESS - TEST BENCH



WIRE ROPE TERMINALS

The following are the most common terminals and the % efficiency of possible terminations:



CABLE INSPECTION

With use, the cable tends to wear out and gradually loses the ability to work. That is why at BEZABALA we consider it vital to regularly inspect the cables.

When inspecting the cables we find:

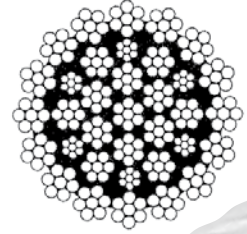
- The cable used is suitable for the use it is given.
- It tells us the conditions of it and if there is need to replace it before an unexpected break.
- Allows us to discover other elements that are defective (e.g. pulleys) and that can accelerate cable wear.

Inspections must be carried out by personnel who have received special training or practical experience on what to look for and who can interpret any abnormal conditions that they may discover. All information must be signed, stamped and recorded.

For more information of methods and revision techniques ask our Review Department for assistance.

WIRE ROPE 35 (W) x 7

Non rotating Galvanized



Code	Ø (mm)	Approx. weight kg/100 m	Minimum breaking load (kg) 1.960 N/mm ²	Minimum breaking load (kg) 2.160 N/mm ²
100357MWNL08B	8	29,10	4.600	4.930
100357MWNL09B	9	36,80	5.830	6.240
100357MWNL10B	10	45,40	7.190	7.710
100357MWNL11B	11	54,90	8.700	9.320
100357MWNL12B	12	65,40	10.360	11.100
100357MWNL13B	13	76,70	12.160	13.020
100357MWNL14B	14	89,00	14.100	15.100
100357MWNL15B	15	102,17	16.180	17.340
100357MWNL16B	16	116,00	18.410	19.730
100357MWNL18B	18	147,00	23.300	24.970
100357MWNL20B	20	182,00	28.770	30.830
100357MWNL21B	21	200,66	31.720	33.990
100357MWNL22B	22	220,00	34.810	37.300
100357MWNL24B	24	262,00	41.430	44.390
100357MWNL25B	25	284,29	44.950	48.170
100357MWNL26B	26	307,00	48.620	52.100
100357MWNL28B	28	356,00	56.390	60.420
100357MWNL30B	30	408,67	64.730	69.360
100357MWNL32B	32	465,00	73.650	78.910

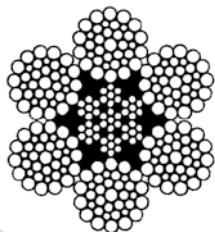
WIRE ROPE 4 x SeS39, 4 x SeS48

Galvanized

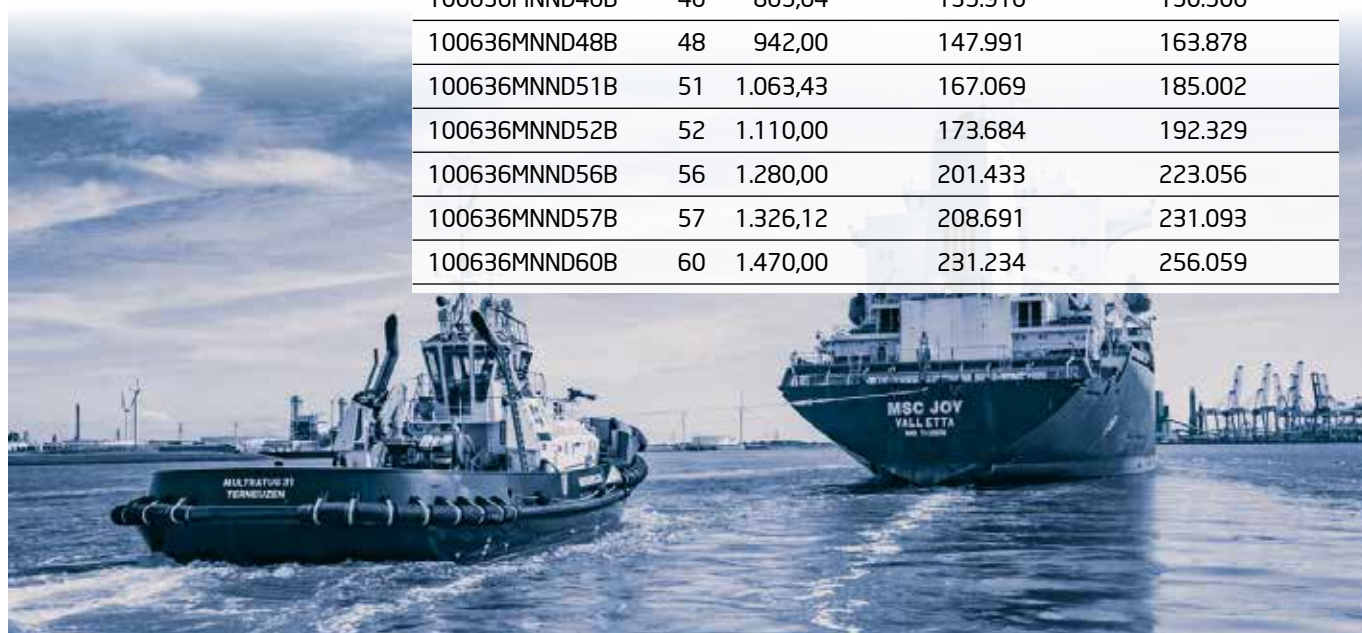
Ø (mm)	Minimum breaking load (metric tons)			Weight	
	SeS39 B(1770 N/mm ²)	SeS39 B(1910 N/mm ²)	SeS48 B(1910 N/mm ²)	4 x SeS39	4 x SeS48
8	4.2	4.5		26.2	
12.5	10.2	11.0		64.0	
18	21.3	22.8	24.4	134.0	127.0
22.4	32.8	35.4	37.7	204.5	196.0
26	44.0	47.7	49.7	276.0	264.0
31.5		70.1	72.8	411.2	388.0
34	75.4	81.6	84.8	479.0	452.0
36	84.5	91.5	92.8	537.0	507.0
38	94.2	102.0	97.3	598.3	565.0

WIRE ROPE 6 x 36WS + IWRC

Galvanized

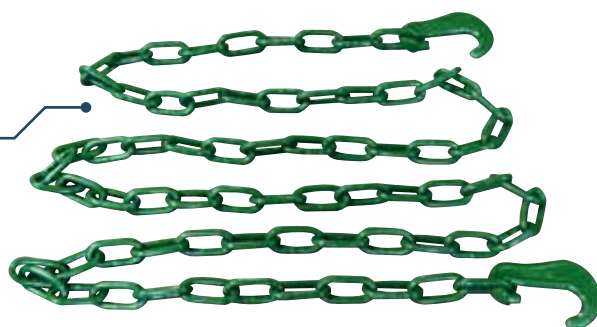
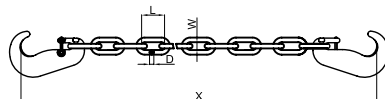


Code	Ø (mm)	Approx. weight kg/ 100 m	Minimum breaking load (kg) 1.770 N/mm ²	Minimum breaking load (kg) 1.960 N/mm ²
100636MNND08B	8	26,20	4.111	4.552
100636MNND09B	9	33,10	5.203	5.761
100636MNND10B	10	40,90	6.423	7.113
100636MNND11B	11	49,50	7.772	8.606
100636MNND12B	12	58,90	9.249	10.242
100636MNND13B	13	69,10	10.855	12.021
100636MNND14B	14	80,20	12.590	13.941
100636MNND16B	16	105,00	16.443	18.209
100636MNND18B	18	133,00	20.811	23.045
100636MNND19B	19	148,19	23.188	25.677
100636MNND20B	20	164,00	25.593	28.451
100636MNND22B	22	198,00	31.088	34.426
100636MNND24B	24	236,00	36.998	40.969
100636MNND26B	26	276,00	43.421	48.082
100636MNND28B	28	321,00	50.358	55.764
100636MNND30B	30	368,49	57.809	64.015
100636MNND32B	32	419,00	65.774	72.834
100636MNND34B	34	473,01	74.253	82.223
100636MNND36B	36	530,00	83.245	92.181
100636MNND38B	38	590,52	92.752	102.708
100636MNND40B	40	654,00	102.772	113.804
100636MNND42B	42	721,04	113.306	125.469
100636MNND44B	44	792,00	124.354	137.703
100636MNND46B	46	865,64	135.916	150.506
100636MNND48B	48	942,00	147.991	163.878
100636MNND51B	51	1.063,43	167.069	185.002
100636MNND52B	52	1.110,00	173.684	192.329
100636MNND56B	56	1.280,00	201.433	223.056
100636MNND57B	57	1.326,12	208.691	231.093
100636MNND60B	60	1.470,00	231.234	256.059



LASHING CHAINS

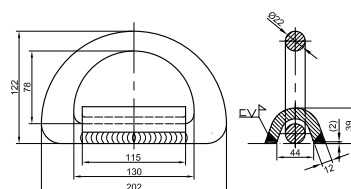
LASHING CHAINS	
Ø mm	13
L mm	80
W mm	22
X mm	6.000
B.L. kN	200
Weight Kg/m	3,0



D-RINGS

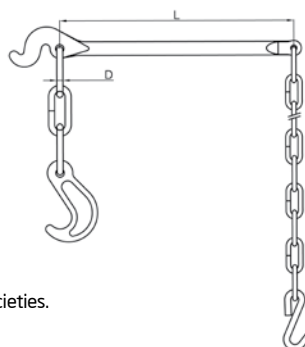
DR-1/36	
B.L. kN	253
Weight Kg/m	2,7

DR-1/50	
B.L. kN	500
Weight Kg/m	4,0



LASHING TURNBUCKLES

C-2R(13-E)	
D mm	14
L mm	485
B.L. kN	200
Weight Kg/m	6,0



Specifications:

Classification: All items are approved by major classification societies.

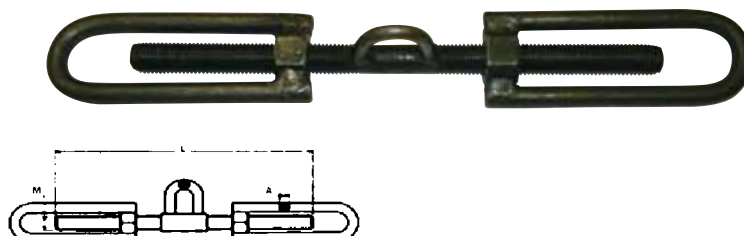
Materials: Forged & high tensile steel.

Finish: Hot dip galvanized & painted.

Remark: Other dimensions, materials and finish upon request.

HAMBURGER TURNBUCKLES

Code	Size mm	A mm	L mm	Weight Kg
THMBM24	M 24	16	400	3,0
THMBM28	M 28	18	400	4,4
THMBM30	M 30	20	400	5,0



OUR EXPERIENCE IS YOUR SECURITY



BEZABALA

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