



**GRUPO
EURORED**

SUPPLIES





MOORING AND ANCHOR ELEMENTS

Mooring and anchor elements



CHAIN AND RINGS

SHACKLES

CONNECTING LINKS

THIMBLES

ANCHORING ELEMENTS:

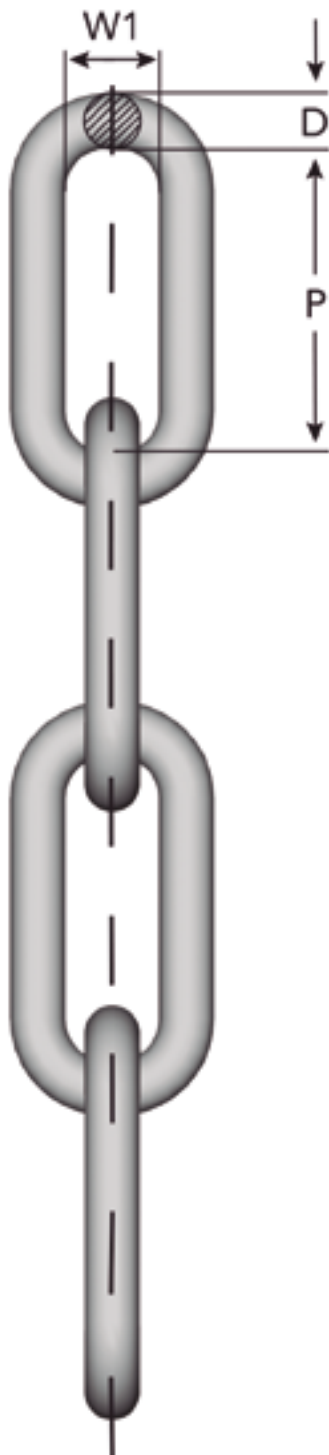
PLATES

ANCHOR SYSTEMS

Aquaculture: anchor elements



Long Link Chain LLZGrade 6



HDG CORROSION PROTECTION

The extreme weather conditions to which the aquaculture estates are exposed for the anchoring of the facilities must be taken into account factors that define the appropriate equipment to be used for anchoring.

Our Grade 6 certified chain is designed to meet the specific demands of the global aquaculture industry, backed by 50 years of manufacturing experience.

The chains are manufactured with top quality European steel, complying with the most demanding standards and specifications, subject to strict quality control of the materials.

Each component is 100% inspected during the manufacturing process.

tion through internal quality systems, which also applies to galvanizing and heat treatment procedures, which are critical factors in chain performance.

To avoid the risk of unwanted stress levels, each link in the chain is heat treated after calibration to reduce the stress levels transmitted within. Finally, each chain link is visually inspected after calibration.

The latest corrosion protection process for steel components in the marine industry is hot-dip galvanizing, again controlled to recognized maritime standards.

HDG CORROSION PROTECTION

REGULAR SURFACE FINISHES

> HOT GALVANIZED, LASTING PROTECTION AGAINST CORROSION

PREVENTION OF BREAKAGE DUE TO FRAGILITY (REDUCTION OF STRESS LEVELS)

> STRESS RELIEF PROCESS.

> A GALVANIZING PROCESS WITHOUT ACID PICKLING

QUALITY

> CERTIFIED PRODUCT: MEETS REQUIREMENTS ACCORDING TO STANDARD NS9415

> STRICT QUALITY CONTROLS THROUGHOUT THE MANUFACTURING PROCESS

> METICULOUS VISUAL INSPECTION

ART. NO	CÓDIGO	TAMAÑO ESABÓN (mm)			MIN. CARGA DE ROTURA (toneladas)	PESO (kgs/m)	LONGITUD DE ENTREGA C
		D nom.	P	W			
Z802207	LLZ-13-6	13	80	21.1	16.3	2.9	1 x 229,5 m
GS1073	LLZ-16-6	16	100	28	24.7	4.6	1 x 200 m
Z801458	LLZ-19-6	19	100	28,5	34.8	6.5	1 x 120 m
Z801887	LLZ-22-6	22	120	35	46.6	8.7	1 x 50 m
Z802447	LLZ-25-6	25	140	39	60.0	12.0	1 x 50 m
Z802449	LLZ-28-6	28	150	39	75.3	14.9	1 x 50 m
Z802451	LLZ-32-6	32	170	44	98.3	19.0	1 x 50 m

Chain and components

Chain with Contrast

The natural chain with concrete is used as an anchor element in moorings.

APPLICATIONS.

> FUNDING

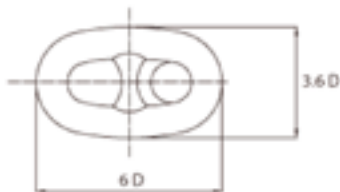


TECHNICAL REPORT

- > MATERIAL: PLAIN STEEL
- > FINISH: BLACK PAINT
- > GRADES: 1,2 AND 3

Diámetro (mm)	Grado 1		Grado 2		Grado 3		Peso (kg/m)
	Carga de Rotura (kN)	Carga de Prueba (kN)	Carga de Rotura (kN)	Carga de Prueba (kN)	Carga de Rotura (kN)	Carga de Prueba (kN)	
11	52	36	72	52	102	72	2.65
12.5	66	46	92	66	132	92	3.42
14	82	58	116	82	166	116	4.29
16	107	76	150	107	216	150	5.61
17.5	127	89	179	127	256	179	6.71
19	150	105	211	150	301	211	7.91
20.5	175	123	244	175	349	244	9.2
22	200	140	280	200	401	280	10.6
24	237	167	332	237	476	332	12.61
26	278	194	389	278	556	389	14.8
28	321	225	449	321	642	449	17.17
30	368	257	514	368	735	514	19.71
32	417	291	583	417	833	583	22.43
34	468	328	655	468	937	655	25.32
36	523	366	732	523	1050	732	28.38
38	581	406	812	581	1160	812	31.62
40	640	448	895	640	1280	895	35.04
42	703	492	981	703	1400	981	38.63
44	769	538	1080	769	1540	1080	42.4
46	837	585	1170	837	1680	1170	46.34
48	908	635	1270	908	1810	1270	50.46
50	981	686	1370	981	1960	1370	54.75
52	1060	739	1480	1060	2110	1480	59.22
54	1140	794	1590	1140	2270	1590	63.86
56	1220	851	1710	1220	2430	1710	68.68
58	1290	909	1810	1290	2600	1810	73.67
60	1380	969	1940	1380	2770	1940	78.84
62	1470	1030	2060	1470	2940	2060	84.18
64	1560	1100	2190	1560	3130	2190	89.7
66	1660	1160	2310	1660	3300	2310	95.4
68	1750	1230	2450	1750	3500	2450	101.3
70	1840	1290	2580	1840	3690	2580	107.3
73	1990	1390	2790	1990	3990	2790	116.71
76	2150	1500	3010	2150	4300	3010	126.5
78	2260	1580	3160	2260	4500	3160	133.2
81	2410	1690	3380	2410	4820	3380	143.69
84	2580	1800	3610	2580	5160	3610	154.53
87	2750	1920	3850	2750	5500	3850	165.76
90	2920	2050	4090	2920	5840	4090	177.39
92	3040	2130	4260	3040	6080	4260	185.36
95	3230	2260	4510	3230	6440	4510	197.56
97	3340	2340	4680	3340	6690	4680	206.06
100	3530	2470	4940	3530	7060	4940	219
102	3660	2560	5120	3660	7320	5120	227.85
105	3850	2700	5390	3850	7700	5390	241.45
107	3980	2790	5570	3980	7960	5570	250.73
111	4260	2970	5940	4260	8480	5940	269.83
114	4440	3110	6230	4440	8890	6230	284.61
117	4650	3260	6510	4650	9300	6510	299.79
120	4850	3400	6810	4850	9720	6810	315.86
122	5000	3500	7000	5000	9990	7000	325.96
124	5140	3600	7200	5140	10280	7200	336.73
127	5350	3750	7490	5350	10710	7490	353.23
130	5570	3900	7800	5570	11140	7800	370.11
132	5720	4000	8000	5720	11420	8000	381.59
137	6080	4260	8510	6080	12160	8510	411.04
142	6450	4520	9030	6450	12910	9030	441.59
147	6840	4790	9560	6840	13660	9560	473.59
152	7220	5050	10100	7220	14430	10100	505.98
157	7600	5320	10640	7600	15200	10640	539.81
162	7990	5590	11180	7990	15980	11180	574.74

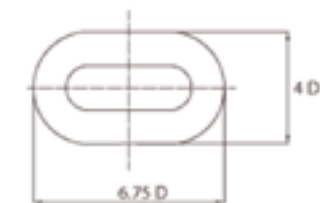
> ESLABÓN NORMAL



> ESLABÓN GRUESO



> ESLABÓN FINAL



HDG Chain Sling

Gunnebo Industries chain slings are manufactured from a specific standard material that has been tested to meet required industry standards.

Chain and master links are manufactured under our own quality control standards.

Own production allows for increased flexibility in terms of lengths and delivery times. The HDG hot dip galvanizing process is finished for its smooth surface and high corrosion resistance.

> FLATTENED SECTIONS IN THE MASTERLINK: QUICKER AND EASIER TO PLACE THE TIES.

> ALL PARTS ARE HOT GALVANIZED WITH HIGH QUALITY

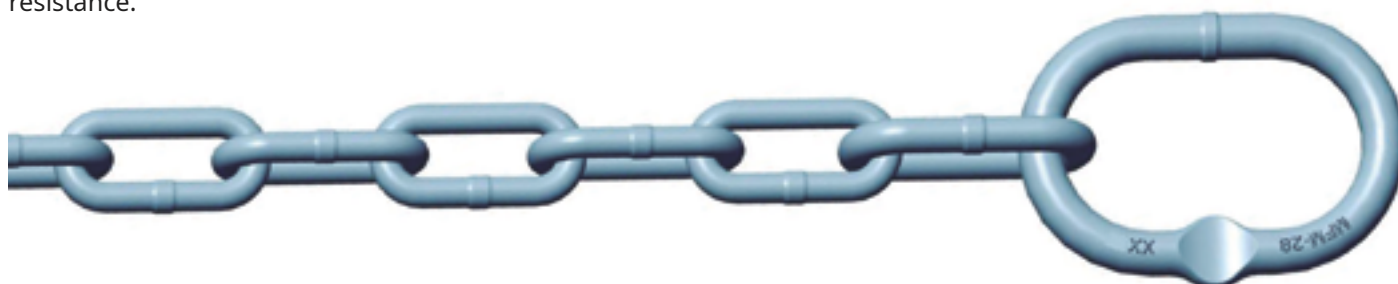
> CERTIFICATE NS 9415.

> SHORT PERIOD OF EXECUTION

> THREE COMPONENTS IN A SINGLE PRODUCT: AN INSPECTION POINT ONE CERTIFICATE.

> HIGH FLEXIBILITY IN LENGTH.
> NO PROJECTING PARTS.

> AVAILABLE FOR
DIMENSIONS 13- 22 mm. LLZ-CHAIN



Galvanized Master Ring

The Galvanized Master Link is made from a specific quality grade of steel to meet the most stringent aquaculture standards.

Gunnebo Industries' modern workshops are self-sufficient and fully compliant with continuous monitoring of quality and performance at all stages of component production.

> HDG TO IMPROVE LONG-TERM PROTECTION IN THE MARINE ENVIRONMENT

> FLATTENED SECTIONS IN THE MASTERLINK: QUICKER AND EASIER TO PLACE TIES.

> ALL PARTS ARE HOT GALVANIZED WITH HIGH QUALITY

> CERTIFICATE NS 9415.

MANUFACTURING

> **Standard:** NS9415

> **Matter:** High strength tempered steel. Grade 6

> **Finish:** All hot dip galvanized parts

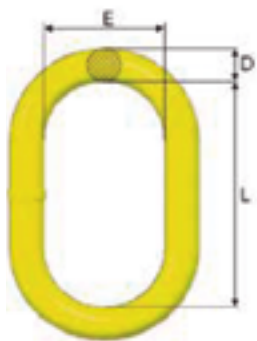
ART. NO	DIM Ø - D MM.	MBL	B	L
A825922	Ø22	40 T	95	160
A825928	Ø28	60 T	110	190
A825934	Ø34	80 T	140	240
A825940	Ø40	110 T	160	250



Mooring elements:Rings



Master Ring M



** Las medidas L y E no siguen las dimensiones de las normas EN 1677-4.

REFERENCIA		WLL tonnes (SF 5:1)		DIMENSIONES			PESO
nº stock	nº ref.	EN 1677-4	A952/A952M AS 3775.2	L (mm)	E (mm)	D (mm)	kg
Z101271	M-6-10	1.5	1.5	100	60	11	0.2
Z101272	M-86-10	2.5	3.2	125	70	14	0.4
Z101273	M-108-10	4.0	5.2	140	80	17	0.8
Z101274	M-13-10	6.8	6.8	150	90	19	1.0
Z101267	M-1310-10	7.5	8.0	160	95	22	1.5
Z101268	M-1613-10	10.0	13.6	190	110	28	2.8
Z101247	M-19-10	12.0	16.0	200	120	30	3.5
Z101269	M-2016-10	17.0	20.6	240	140	34	5.2
Z101270	M-2220-10	25.0	30.9	250	150	40	7.3
Z101275	M-2622-10	28.0	35.0	250	150	42	8.7
Z101284	M-32-10	33.0	38.6	300	180	45	11.7
Z101276	M-3226-10	43.0	46.6	300	200	50	14.8
Z101277	M-3632-10	56.0	65.0	350	200	55	20.7
Z101278	M-4536-10	70.0	72.7	375	210	60	26.4
Z101279	M-90T-10	90.0	100.0	450	250	70	42.8
Z101280	M-125T-10 **	125.0	125.0	450	260	80	57.0



Grade 8 Gunnebo KLFU short link



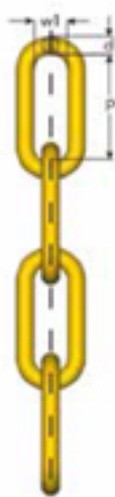
REFERENCIA		DIMENSIONES DEL ESLABÓN			CARGA DE ROTURA	PESO	LONGITUD
nº artículo	código	diámetro (d) mm	paso (p) mm	ancho (w) mm	toneladas	kg/m	estándar m
Z802330	KLFU-10-8	10	30	14.6	12.6	2.2	1 x 100
Z802331	KLFU-13-8	13	39	18.4	21.4	3.7	1 x 100
Z801146	KLFU-16-8	16	48	22.6	32.2	5.8	1 x 100
Z327377	KLFU-19-8	19	57	26	45.4	8.0	1 x 100
Z327385	KLFU-22-8	22	66	30	61.0	11.0	1 x 50
Z801505	KLFU-26-8	26	78	35	86.0	14.8	1 x 50

Grade 8 Gunnebo MLFU middle link



REFERENCIA		DIMENSIONES DEL ESLABÓN			CARGA DE ROTURA	PESO	LONGITUD
nº artículo	código	diámetro (d) mm	paso (p) mm	ancho (w) mm	toneladas	kg/m	estándar m
Z802332	MLFU-10-8	10	40	14	12.6	2.0	1 x 100
Z802333	MLFU-13-8	13	55	20	21.4	3.3	1 x 100
Z800564	MLFU-16-8	16	65	22	32.2	5.0	1 x 100
Z800476	MLFU-19-8	19	75	29	45.4	7.1	1 x 100
Z800661	MLFU-22-8	22	88	30	61.0	9.4	1 x 50
Z801770	MFLU-26-8	26	91	35	86.0	13.9	1 x 50

Grade 8 Gunnebo LLU long link



REFERENCIA		DIMENSIONES DEL ESLABÓN			CARGA DE ROTURA	PESO	LONGITUD
nº artículo	código	diámetro (d) mm	paso (p) mm	ancho (w) mm	toneladas	kg/m	estándar m
Z801933	LLU-6-8	6	35	10	4.5	0.6	5 x 100
Z801934	LLU-9-8	9	53	15	10.2	1.4	4 x 100
Z801935	LLU-11-8	11	64	18	15.4	2.1	4 x 100
Z801936	LLU-13-8	13	80	22	21.4	2.9	3 x 100
Z802160	LLU-16-8	16	100	27	32.2	4.6	1 x 100
Z601983	LLU-19-8	19	100	28	45.4	6.5	1 x 100
Z700526	LLU-22-8	22	120	36	61.0	8.7	1 x 50

Shackles



Mooring Shackle 852

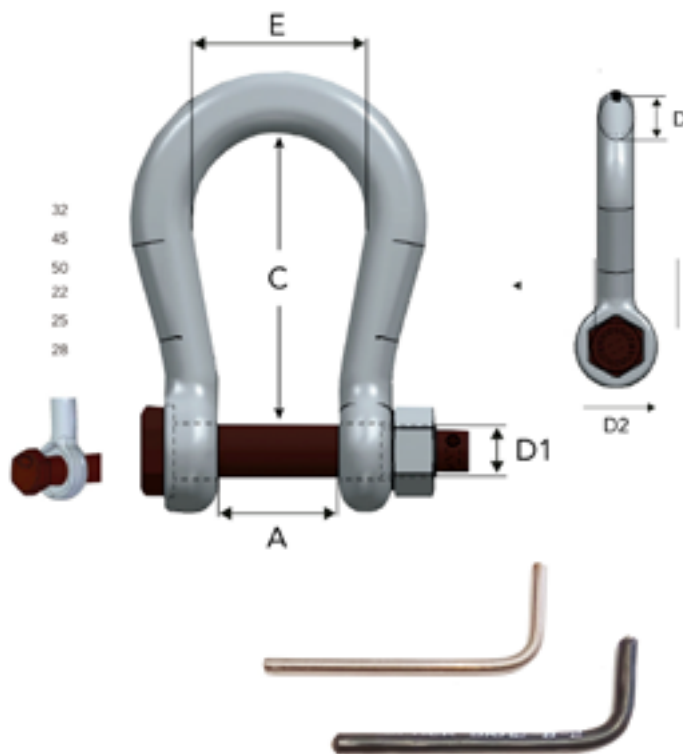
Gunnebo Industries 852 shackles are designed to meet the specific demands of the global aquaculture industry. Shackles are manufactured from a grade of steel that has been developed to meet industry standards.

All aspects of production are continuously controlled at every stage: including forging, heat treating, machining, hot dip galvanizing and final quality inspection.

Gunnebo has extensive experience in producing shackles using the most innovative manufacturing methods.

The 852 mooring shackle has been developed specifically for the aquaculture industry, with its unique bolt that locks the shackle, and a thicker material that improves fatigue strength.

Several fastening options are offered with all lashing shackles; standard or custom.



CARACTERÍSTICAS

- > EL PERNO SE BLOQUEA EN EL GRILLETE PARA EVITAR LA ROTACIÓN (AFLOJAMIENTO INVOLUNTARIO DE LA TUERCA).
- > EL PERNO HUNDIDO TAMBIÉN REDUCE EL RIESGO DE QUE EL GRILLETE DAÑE LA RED.
- > LA RESISTENCIA A LA FATIGA AUMENTA CON LA ADICIÓN DE UN 25% MÁS DE MATERIAL EN EL ARCO: (MAYOR VIDA ÚTIL Y SEGURIDAD).
- > ARCO ESPACIOSO PARA CONECTAR GUARDACABOS, CUERDA Y PLACAS DE AMARRE Y CONEXIÓN.
- > FÁCIL DE OPERAR. SOLO SE NECESITA UNA HERRAMIENTA PARA MONTAR Y DESMONTAR.
- > PERNOS GALVANIZADOS EN CALIENTE (NORMALMENTE CINCADOS) Y TUERCAS GRADO 6
- > CERTIFICADO DE PRUEBA Y MATERIA PRIMA TRAZABLE. INSPECCIÓN SEGÚN EN-10204 -3.1, DNV 2, -1 Y DNV 2, -3 D1.
- > ACC APROBADO POR TERCEROS SEGÚN NS 9415

FABRICACIÓN

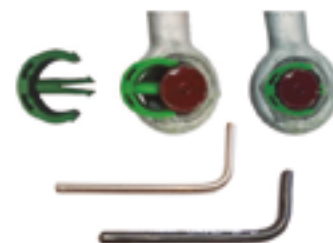
- > **Standar:** NS9415
- > **Materia:** NS9Acero templado de alta resistencia. Grado 6
- > **Acabado:** Todas las piezas galvanizadas en caliente, marcado de color marrón.
- > **Extras:** Clip de plástico suministrado como pasador de seguridad estándar para 28T -90T, pasadores divididos A4 de acero inoxidable incluidos como estándar para 110T y 150T

ART. No.	MLB	D TRADE SIZE		ANCHO INTERIOR	LONGITUD INTERIOR	ANCHO DE ARCO	EXTERIOR PERNO	DEM.
	(toneladas)	(mm)	(inch)	A*	C*	E	D2	D1
Safety bolt								
A085219	28	19	3/4"	44	100	58	48	22
*A085222	40	22	7/8"	52	125	68	52	25
*A085228	60	28	1 1/8"	62	150	89	64	28
*A085232	90	32	1 1/4"	82	170	98	72	32
A085242	110	42	1 5/8"	112	200	150	90	45
A085245	150	45	1 3/4"	126	248	175	105	50

Estos tamaños vienen con una cabeza de perno hexagonal hundida que reducirá en gran medida el riesgo de que el perno se desenrosque durante el uso, además de facilitar el ajuste para el usuario.

Opciones de seguridad personalizadas

- Alambre de agarre cubierto de plástico
- Alambre de acero recubierto de plástico
- Pasador de c. aveta de acero inoxidable
- Clips (28T a 40T) - Amarillo
- Clips (50T a 90 T) - Verde



Shackles



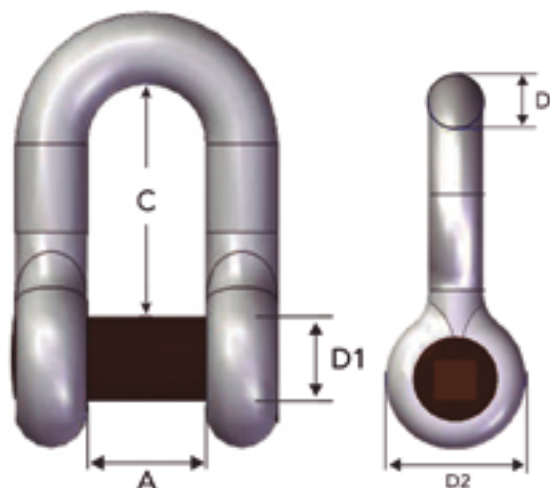
Gunnebo Industries shackles are made from high strength hardened steel to meet the most stringent specifications.

All parts are hot dip galvanized and have a brown coating applied to the pin on top of the zinc coating.

- > EL ORIFICIO AVELLANADO GARANTIZA UN APRIETE FÁCIL - BUENO
- > SIN RIESGO DE DAÑAR LAS REDES - SIN PIEZAS SALIENTES
- > CONEXIÓN (ENTRE DOS ESLABONES DE CADENA) GRILLETE POR CADENA
- > HDG DE ALTA CALIDAD APLICADO MEDIANTE ESCRITO CONTROL DE CALIDAD

- > PERNO DE GRILLETE PARA ENCAJAR DIRECTAMENTE EN EL TRINQUETE, NO SE NECESITAN HERRAMIENTAS ADICIONALES
- > CUMPLE REQUISITOS **NS 9415**
- > PASADORES GALVANIZADOS POR INMERSIÓN EN CALIENTE (NORMALMENTE ZINCADOS)

Straight Shackle Series 830

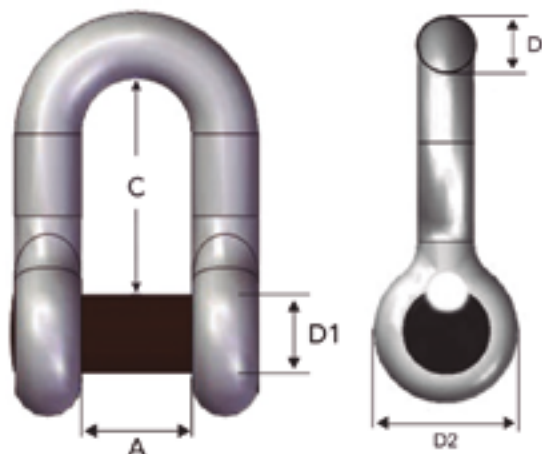


FABRICACIÓN

- > **Standar:** NS9415
- > **Materia:** Acero templado de alta resistencia. Grado 6
- > **Acabado:** Todas las piezas galvanizadas en caliente, marcado de color marrón

ART. NO	WLL	DIM. D	D1	D	A	C	D2
	(ton)	(inch - mm)	(mm)	(inch)	(mm)	(mm)	(mm)
A083013	2	1/2" - 13	16	1/2"	21	41	33
A083016	3.25	5/8" - 16	19	5/8"	27	51	40
A083019	4.75	3/4" - 19	22	3/4"	31	60	48
A083022	6.5	7/8" - 22	25	7/8"	37	71	52
A083025	8.5	1" - 25	28	1"	43	81	60

Straight Shackle Series 830 DP

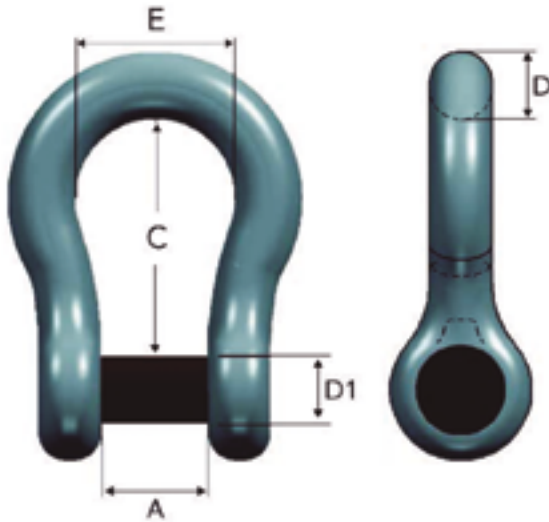


FABRICACIÓN

- > **Standar:** NS9415
- > **Materia:** Acero templado de alta resistencia. Grado 6
- > **Acabado:** Todas las piezas galvanizadas en caliente. Tapón de doble protección en material no corrosivo

ART. NO	WLL	DIM. D	D1	D	A	C	D2
	(ton)	(inch - mm)	(mm)	(inch)	(mm)	(mm)	(mm)
A083013DP	2	1/2" - 13	16	1/2"	21	41	33
A083016DP	3.25	5/8" - 16	19	5/8"	27	51	40
A083019DP	4.75	3/4" - 19	22	3/4"	31	60	48
A083022DP	6.5	7/8" - 22	25	7/8"	37	71	52
A083025DP	8.5	1" - 25	28	1"	43	81	60

850 Series Bell Shackle



FABRICACIÓN

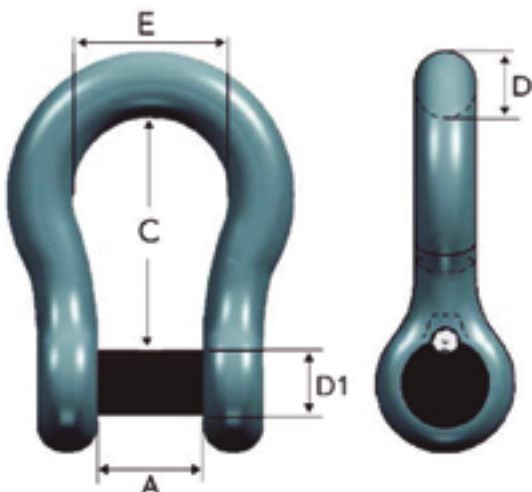
- > **Standar:** EN 13889
- > **Materia:** Acero templado de alta resistencia. Grado 6
- > **Acabado:** Todas las piezas galvanizadas en caliente, marcado de color marrón

ART. NO	WLL	DIM. D	D1	D	A	E	C	D2
	(ton)	(inch - mm).	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
A085013	2	1/2" - 13	16	1/2"	21	33	41	33
A085016	3.25	5/8" - 16	19	5/8"	27	40	51	40
A085019	4.75	3/4" - 19	22	3/4"	31	48	60	48
A085022	6.5	7/8" - 22	25	7/8"	37	52	71	52
A085025	8.5	1" - 25	28	1"	43	60	81	60

Los Grilletes de Campana Avellanados también se pueden suministrar con un seguro secundario para Doble Protección (DP); A0850DP.

Norwegian standard NS9415 requiere una sujeción secundaria (doble protección) en los grilletes utilizados en aplicaciones de amarre

850 DP Series Bell Shackle



FABRICACIÓN

- > **Standar:** Dimensiones acc. según EN 13889. Aprobado por terceros según las normas de acuicultura noruegas pertinentes (NS 9415)
- > **Materia:** Acero templado de alta resistencia. Grado 6
- > **Acabado:** Todas las piezas galvanizadas en caliente, más un tapón de doble protección en material no corrosivo

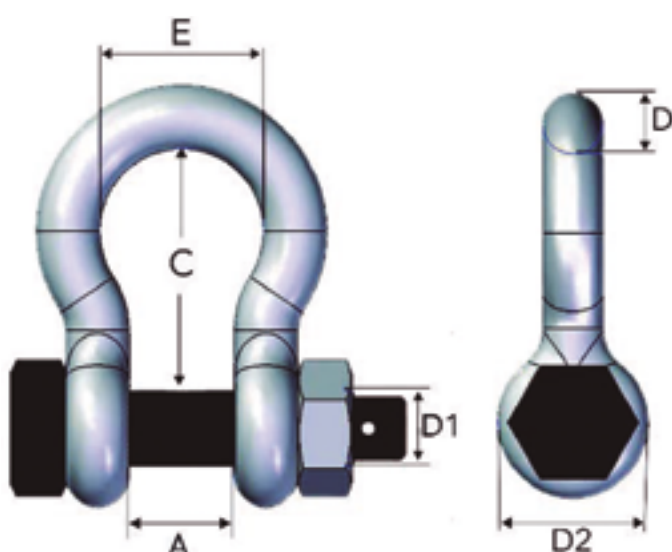
ART. NO	WLL	DIM. D	D1	D	A	E	C	D2
	(ton)	(inch - mm).	(mm)	(inch)	(mm)	(mm)	(mm)	(mm)
A085013DP	2	1/2" - 13	16	1/2"	21	33	41	33
A085016DP	3.25	5/8" - 16	19	5/8"	27	40	51	40
A085019DP	4.75	3/4" - 19	22	3/4"	31	48	60	48
A085022DP	6.5	7/8" - 22	25	7/8"	37	52	71	52
A085025DP	8.5	1" - 25	28	1"	43	60	81	60

Bell Shackle 855

Industries shackles are made from high strength, tempered steel to meet the most stringent specifications.

All parts are hot dip galvanized and have a brown coating applied to the pin on top of the zinc coating.

- > CERTIFICADO DE PRUEBA Y MATERIA
PRIMA TRAZABLE INSPECCIÓN SEGÚN
EN-10204 -3.1. HOMOLOGACIÓN DE TIPO
DNV 2. -1 Y DNV 2. -3.
- > CERTIFICADO NS 9415



FABRICACIÓN

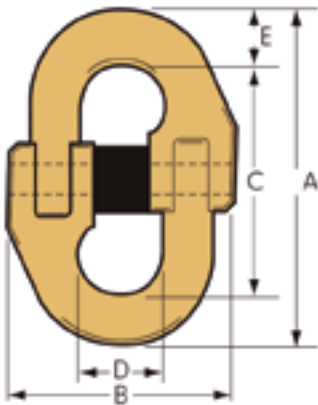
- > **Standard:** Dimensiones acc. según EN 13889 y U.S. Fed. Spec. RR-C-2 1 más DNV 2. -1. Aprobado por terceros según a las normas de acuicultura noruegas pertinentes (NS 9415)
- > **Materia:** Acero templado de alta resistencia. Grado 6
- > **Acabado:** Todas las piezas galvanizadas en caliente, marcado de color marrón
- > **Factor de seguridad:** 6:1

ART. No.	WLL	DIM.	D TRADE SIZE (mm)		INNER WIDTH	INNER LENGTH	BOW WIDTH	EYE OUTER	SAFETY BOLT
Safety bolt	(tonnes) 6:1	D1	(mm)	(inch)	A*	C*	E	D2	(kg)
A085513	2.0	16	13	1/2"	21	47	33	33	0.42
A085516	3.25	19	16	5/8"	27	60	42	40	0.70
A085519	4.75	22	19	3/4"	31	71	49	48	1.20
A085522	6.5	25	22	7/8"	37	84	60	52	1.70
A085525	8.5	28	25	1"	43	95	68	60	2.58
A085528	9.5	32	28	1 1/8"	46	108	74	64	3.40
A085532	12.0	35	32	1 1/4"	52	119	83	72	4.80
A085535	13.5	38	35	1 3/8"	57	132	89	76	7.00
A085538	17.0	42	38	1 1/2"	60	146	98	84	9.00
A085545	25.0	50	45	1 3/4"	74	178	127	105	15.00

Connecting links



TL Trawlex Connecting Link

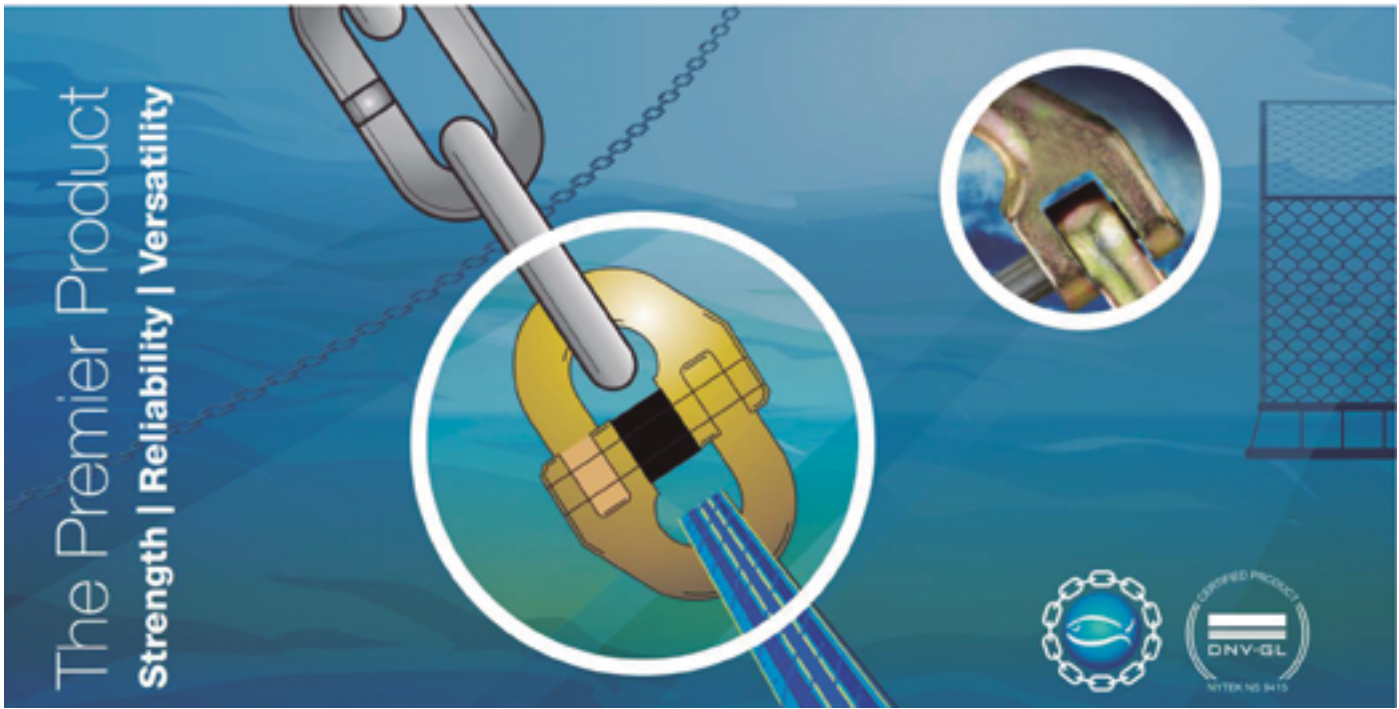


Trawlex

CARACTERÍSTICAS

- > EL CONECTOR MÁS INNOVADOR
- > DISEÑO DE DOS PIEZAS FORJADO EN MATRIZ CERRADA
- > GALVANIZADO EN ACABADO DORADO, PROTECCIÓN CONTRA LA CORROSIÓN
- > PUNTOS DE APOYO TOTALMENTE MECANIZADOS
- > CADA TL SE PRUEBA AL 100% ANTES DE SU ENVÍO
- > TRAZABILIDAD CON CÓDIGOS DE INFORMACIÓN DEL PRODUCTO EN LAS PARTES FORJADAS
- > CERTIFICADO NS 9415

REFERENCIA		W.L.L.	CADENA	DIMENSIONES					PESO
nº stock	nº ref.	Tn	diámetro mm	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	kg
2780583	TL7N	1.5	7	67	49	48	14.3	9	0.11
2780592	TL10N	3.2	10	89	66	64	19.2	13	0.36
2780609	TL13N	5.3	13	118	85	85	26.5	17	0.66
2780618	TL16N	8	16	144	96	106	32	19	1.08
2780627	TL19N	11.2	19	168	115	122	38.5	23	1.77
2780636	TL23N	16	23	206	140	150	49	28	2.8
2780645	TL26N	21.2	26	230	163	166	57	32	4.4
2780654	TL32N	31.5	32	278	210	200	63	39	8.4



Joining elements: thimbles



Joining elements: thimbles



K-series thimble

Heart thimble made of hot galvanized S275 steel. Designed to withstand extreme conditions in the mooring lines with a new reinforcement designed to guarantee maximum durability at anchor.

TECHNICAL REPORT

> MATERIAL: S275JR STEEL
> FINISH: HOT GALVANIZED

APPS

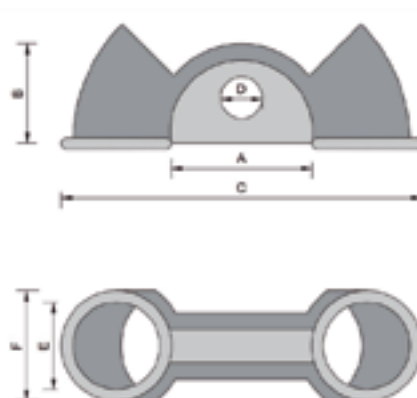
> UNION

Model	Diameter(mm)	TO.	B.	C	D	kg
K2-20	20-30	32	120	120	185	7
K2-30	30-40	42	130	130	200	9
K2-40	40-50	52	145	145	206	eleven
K2-50	50-60	62	150	150	255	12
K2-60	60-70	72	170	170	328	13
K2-80	70-82	82	176	176	405	14

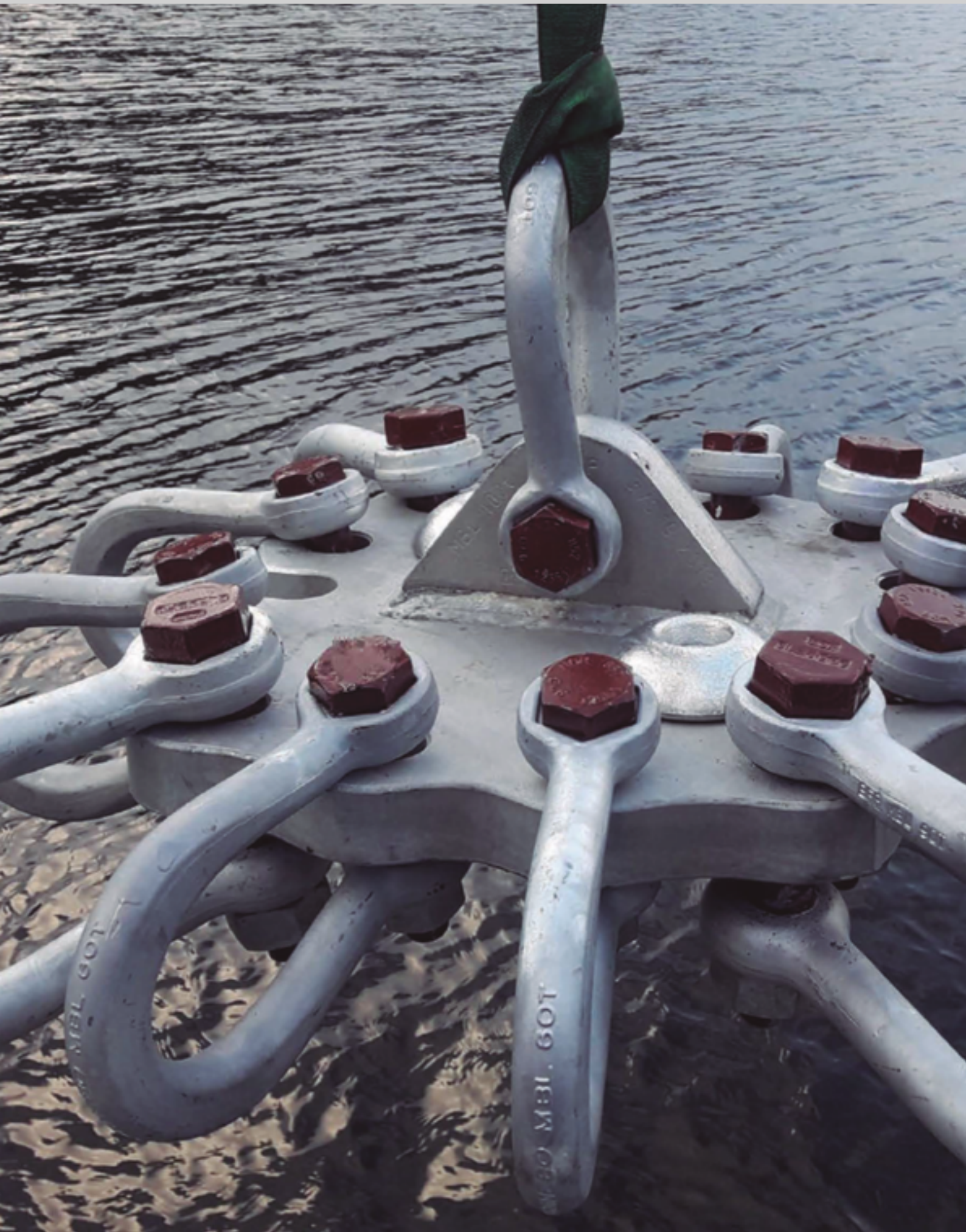
Model	Diameter(mm)	TO.	B.	C	D	kg
K3-20	20-30	32	120	120	185	8
K3-30	30-40	42	130	130	200	9.5
K3-40	40-50	52	145	145	206	11.5
K3-50	50-60	62	150	150	255	12.5
K3-60	60-70	72	170	170	328	14.5
K3-80	70-82	82	176	176	405	16.5

Model	Diameter(mm)	TO.	B.	C	D	kg
K10-20	20-30	32	120	120	185	7
K10-30	30-40	42	130	130	200	9
K10-40	40-50	52	145	145	206	eleven
K10-50	50-60	62	150	150	255	12
K10-60	60-70	72	170	170	328	13
K10-80	70-82	82	176	176	405	14

Model	Diameter(mm)	AND	B.	C	D	kg
K-RG-80	80	110	130	435	fifty	8



Mooring Elements



TXCP Distributor Plate

Manufactured under ISO9001 certification, the TXCP uses the latest robotic welding machines to deliver exceptional products.

- Equipped with zinc anodes as standard to reduce corrosion
- Mounting holes make installation and inspection easy
- Available in 5 sizes as standard to give the installer as much flexibility as possible during design and installation
- High quality steel provides excellent properties metallurgical
- The TXCP is fully galvanized to resist corrosion

- Certified according to NS9415

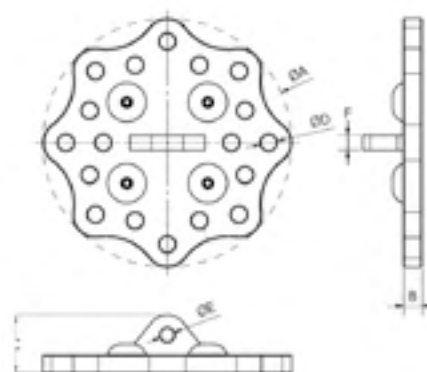
TECHNICAL REPORT

> MATERIAL: QUENCHED AND TEMPERED HIGH STRENGTH STEEL, GRADE 6

> FINISH: HOT GALVANIZED PARTS WITH BROWN MARKING

APPS

> UNION



PLATO REPARTIDOR TXCP

Estándar: Certificado NS9415

Material: High Tensile Steel

Acabado: Hot dip galvanized



Art.no	MBL t	Peso kg	Aguj. nº	Dimensions mm					
				A	B	C	D	E	F
2785700	50	28.5	8	410	30	138	36	37	30
2785709	100	56.5	12	527	40	148	39	37	40
2785759	100	72	16	572	40	148	39	37	40
2785718	150	114	16	680	50	158	46	37	40



Mooring Elements

HOOD C-800/60

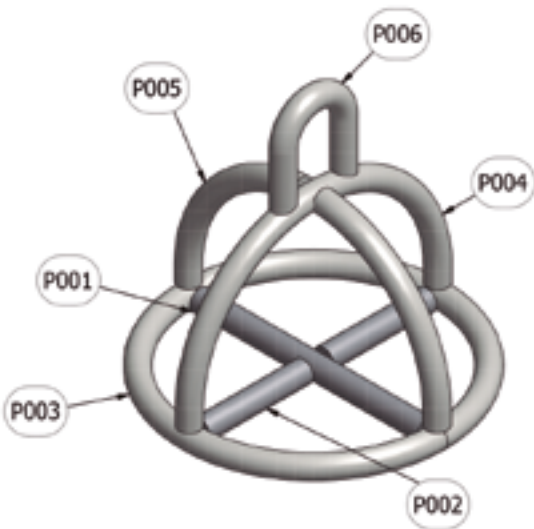
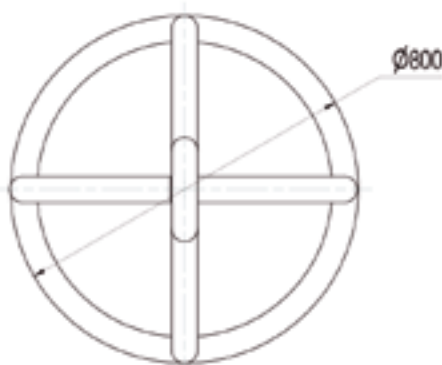
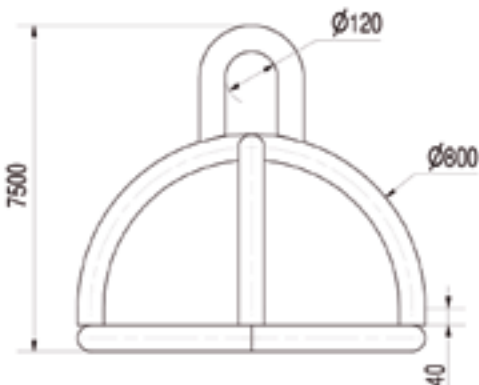
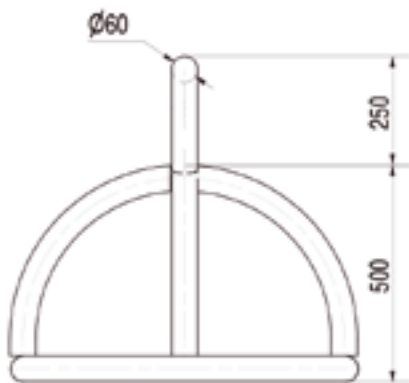
Accessory for the distribution and distribution of the different anchoring elements.

TECHNICAL REPORT

- > MATERIAL: S275JR STEEL
- > DIAMETER: 800mm
- > THICKNESS: 60mm
- > BREAKING LOAD: 100 t (961.5 Kn)
- > WEIGHT: 146.68 kg
- > FINISH: PAINTED BLACK

APPS

- > UNION



Características material S275JR

Composición química % según EN 10025

Material	C	Mn	P	S	Si	N	Ctv
S275JR	≤0,21	≤1,60	≤0,045	≤0,045	≤ 0,35	≤0,009	≤0,45

Características mecánicas según EN 10025

Material	Re (N/mm ²) d≤16,00	Re (N/mm ²) 16,00<d	Re (N/mm ²) d <3,00	Re (N/mm ²) 3,00≤d	Resiliencia Charpy * C (J)
S275JR	≥ 275	≥265	430-580	410-560	20 ≥ 27

Características material soldadura MC710-H

Composición química %

Material	C	Mn	P	S	Si
M21	0,05	1,35	0,015	0,023	0,6

Características técnicas (típ.):

Material	Re (N/mm ²)	Re (N/mm ²)	Resiliencia * C (J)	Ctv (J)
M21	495 (N/mm ²)	570 (N/mm ²)	-20	90
Gas protector:	Ar+ (15-25% CO ₂)		Elongación: 26%	

INVERTED HOOD CI-800/60

Accessory for the distribution and distribution of the different anchoring elements.

Load test certificate according to EN10204

TECHNICAL REPORT

- > MATERIAL: S275JR STEEL
- > DIAMETER: 800mm
- > THICKNESS: 60mm
- > BREAKING LOAD: 100 t (961.5 Kn)
- > FINISH: PAINTED BLACK

APPS

- > UNION



Características material S275JR

Composición química % según EN 10025

Material	C	Mn	P	S	Si	N	Ctv
S275JR	≤0,21	≤1,60	≤0,045	≤0,045	≤ 0,35	≤0,009	≤0,45

Características mecánicas según EN 10025

Material	Re (N/mm ²)		Re (N/mm ²)		Resiliencia	Charpy
	d≤16,00	16,00<d	d<3,00	3,00≤d	* C	(J)
S275JR	≥ 275	≥265	430-580	41 0-560	20	≥ 27

Características material soldadura MC710-H

Composición química %

Material	C	Mn	P	S	Si
M21	0,05	1,35	0,015	0,023	0,6

Características técnicas (tlp.):

Material	Re (N/mm ²)	Re (N/mm ²)	Resiliencia	Ctv
			* C	(J)
M21	495 (N/mm ²)	570 (N/mm ²)	-20	90
Gas protector:	Ar+ (15-25% CO ₂)		Elongación: 25%	

Mooring Elements

Union Ring A-500/32

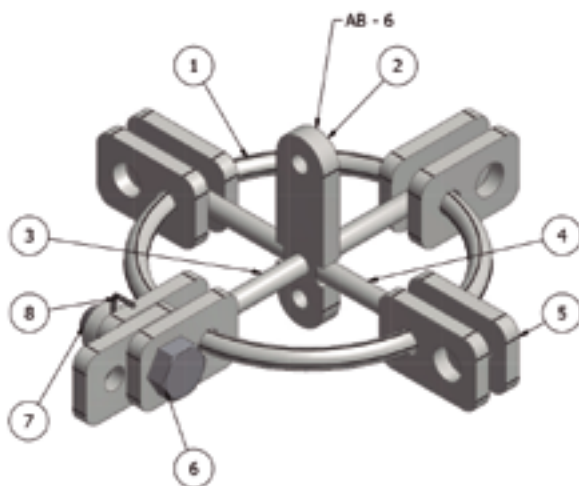
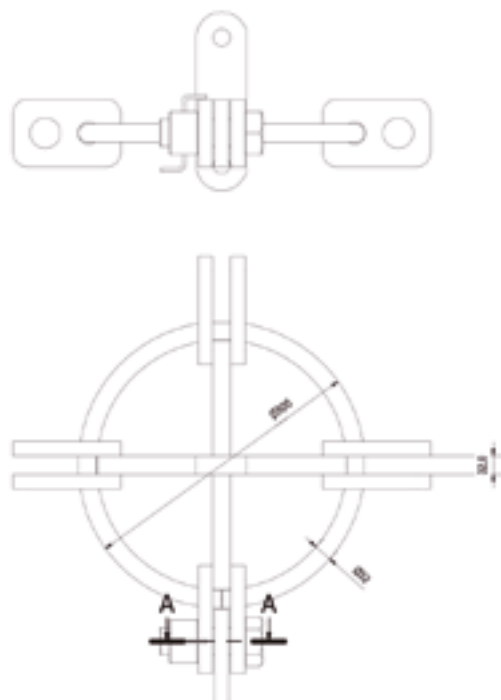
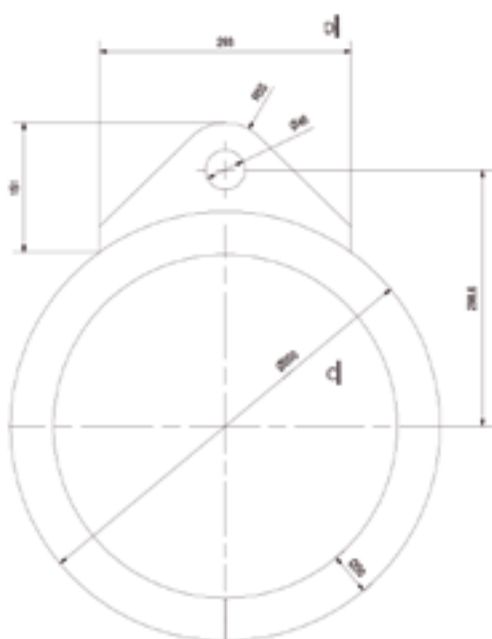
Accessory for the distribution and distribution of the different anchoring elements.

TECHNICAL REPORT

- > MATERIAL: S275JR STEEL
- > DIAMETER: 500mm
- > THICKNESS: 32mm
- > COMPARTMENTS: 4

APPS

- > UNION





Anchor Elements



Mooring Bolt - T-bolt N° 8250

Gunnebo Industries lashing bolts are made from high-strength, tempered steel to meet quality standards and continuous monitoring throughout manufacturing.

All parts are hot dip galvanized with a brown color mark.

> TIE BOLTS FOR WEDGE AND CEMENT APPLICATIONS

> THE BOLTS ARE MARKED WITH A TRACEABILITY CODE

> COLOR MARKING SHOWING THE REQUIRED FIXING DEPTH

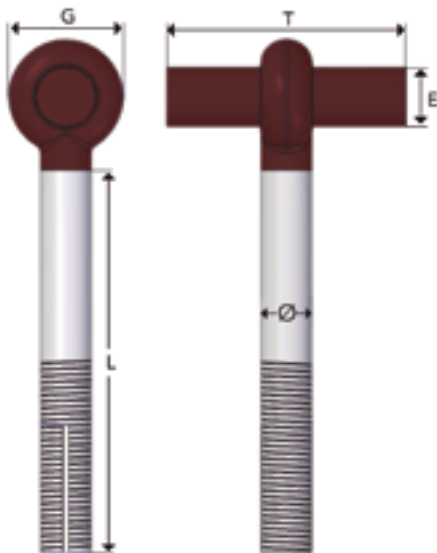
> THE TIE BOLTS ARE APPROVED BY THIRD PARTIES AND ACCORDING TO STANDARD NS 9415

> INSTRUCTION MANUAL AVAILABLE

> No A8252 - 7-BOLT FLEXIBLE TO ENSURE CORRECT STRAIGHT LINE STEERING

> CERTIFICATE ACCORDING TO NS 9415 INCL. 3.1 MATERIAL INFORMATION

> ALL PARTS ARE HIGH QUALITY HOT GALVANIZED



MANUFACTURING

> **Standard:** NS9415

> **Matter:** High strength tempered steel. Grade 6

> **Finish:** All parts hot dip galvanized, marked brown

ART. NO	MBL	DIM. D	G	E	T	Peso
	(ton)	(Ø x L)	(mm)	(mm)	(mm)	(kg)
A825232	40	Ø32 x 400	72	35	300	5,5
A825238	60	Ø38 x 500	84	42	350	9
A825445	80	Ø45x500	105	45	400	13,2
A825245	80	Ø45 x 600	105	45	400	14,3
A825450	100	Ø50x500	100	45	400	13,3
A825250	100	Ø50 x 700	110	50	400	20,3
A825256	100	Ø50 x 700	110	50	400	30,3
A825265	100	Ø50 x 700	110	50	400	38,3

Longitud adicional disponible bajo pedido.

Mooring Bolt - Eye-bolt N° 8250

MANUFACTURING

> **Standard:** NS9415

> **Material:** High strength tempered steel. Grade 6

> **Finish:** All parts hot dip galvanized, marked brown

ART. NO	MBL	DIM. D	G	E	Peso
	(ton)	(Ø x L)	(mm)	(mm)	(kg)
A825032	40	Ø32 x 400	72	37	3,25
A825038	60	Ø38 x 500	84	44	5,6
A825045	80	Ø45x500	105	47	10,1



Anchor Elements

Delta Flipper Anchor

The Delta type anchor has a high holding power and adapts to different seabed conditions, It is compact and easy to transport.

Material:Galvanized finished structural steel

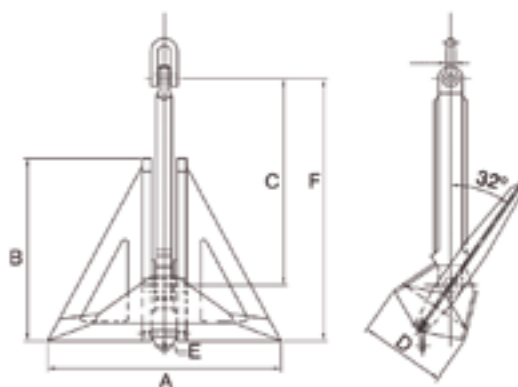
Weight:Min: 750kg -**Maximum:**13500kg.

> HIGH GRIPPING POWER, ALLOWS TO REDUCE THE WEIGHT OF THE ANCHOR

> COMPACT DESIGN FOR EASY HANDLING AND TRANSPORTATION

> SUITABLE FOR BODY, SANDY OR ROCKY BOTTOM

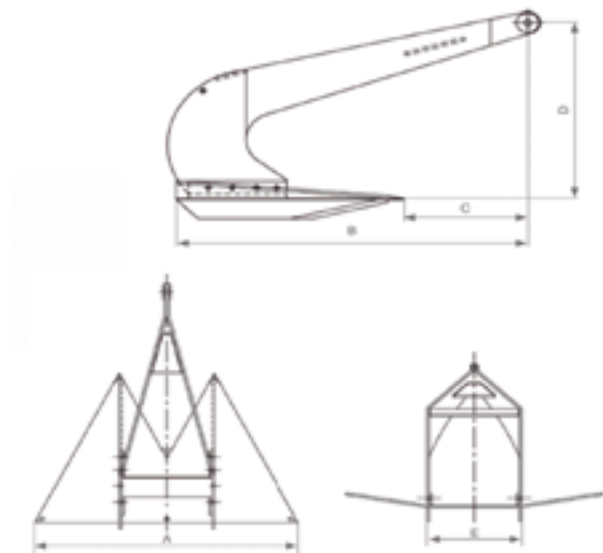
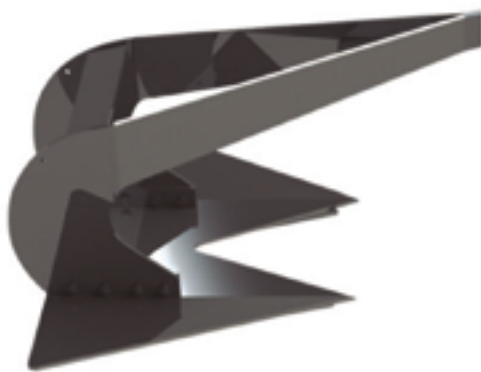
> RANGE FROM 50 KG TO 13,500 KG



ART. NO	PESO	A	B	C	D	E	F
	(Kilos)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
#	750	1760	1460	1500	600	45	2000
#	1000	1960	1560	1755	740	45	2605
#	1500	2260	1800	2025	840	45	2660
#	2000	2470	2000	2250	930	50	2960
#	2500	2660	2130	2395	1005	52	3150
#	3000	2830	2285	2565	1070	55	3380
#	4000	3180	2560	2880	1190	65	3790
#	5000	3300	2660	2995	1260	75	3945
#	7000	3750	2995	3365	1405	78	4440
#	10000	4270	3400	3825	1600	85	5040
#	13500	4670	3730	4195	1765	90	5535



Anchor Sting Ray



Weight	gripping power								
Weight kg	Sand you	Mud you	Silt you	TO hmm	B. hmm	C hmm	D hmm	AND hmm	F hmm
10	2.39	1.85	1.34						
25	4.95	3.86	2.77						
fifty	8.59	6.65	4.80	1013	1023	347	598	368	54
75	12.03	9.09	6.57	1060	1070	363	625	385	58
100	14.91	11.54	8.34	1171	1182	401	691	426	64
150	20.58	15.93	11.51	1258	1271	432	742	458	69
175	23.26	18.01	13.01						
250	30.89	23.92	17.27	1515	1530	519	895	556	89
375	42.64	33.01	23.84	1748	1765	599	1031	635	96
500	53.60	41.50	29.97	2024	2045	694	1190	736	111
750	73.99	57.28	41.37	2222	2243	761	1311	808	122
1000	93.00	72.00	52.00	2491	2516	854	1470	905	136
1500	128.37	99.39	71.78						
2000	161.36	124.93	90.22	3078	3109	1055	1817	1119	168
3000	222.74	172.44	124.54	3638	3719	1312	2160	1311	197
4000	279.98	216.76	156.55						
5000	334.32	258.83	186.93	4248	4291	1456	2504	1544	232



Nets and threads

Nets and threads



WITH KNOT

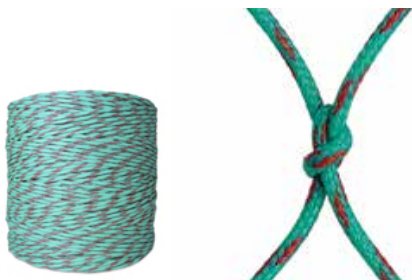
- > REDLINE PRO
- > PA BRIDED (BLACK)
- > PE BRIDED
- > PE TWISTED

WITHOUT KNOT

- > HDPE 90
- > HDPE250
- > POLYESTER
- > PPMF
- > NYLON
- > UHMPE

Nets and Threads with knot

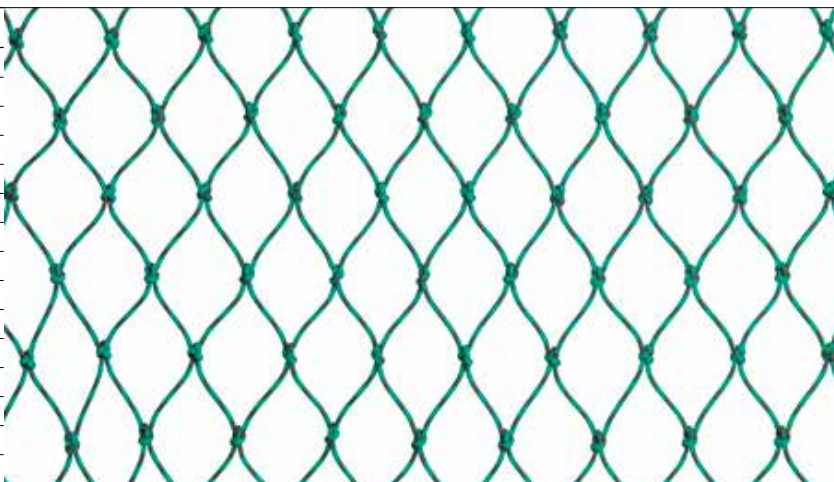
Red Line Pro



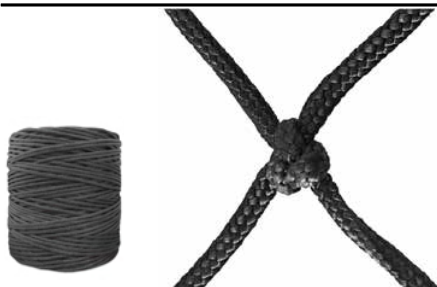
Known for its red look, it is also known to be the best compact network on the market. Produced from a high-density polyethylene, in a special extrusion process, it is the result of a presence in the market for more than 50 years.

- > HIGH TENACITY OF THE KNOT
- > RESISTANT TO ABRASION
- > LOW SAND PENETRATION
- > THERMAL FIXED FOR UNIFORMITY AND STABILITY OF THE TIGHTS

Ref	m / kg		Knot strength	
m	m / kg	tol.	kgf	tol.
1.2	875	5%	75	±
1.8	600	5%	90	± 10%
2.2	380	5%	148	± 10%
2.6	270	5%	203	± 10%
2.8	225	5%	245	± 10%
3.2	200	5%	285	± 10%
3.6	162	5%	3. 4. 5	± 10%
4.0	127	5%	460	± 10%
4.5	100	5%	550	± 10%
5.0	84	5%	640	± 10%
5.5	68	5%	720	± 10%
6.0	60	5%	800	± 10%
7.0	fifty	5%	860	± 10%
8.0	40	5%	110	± 10%
		0		10%

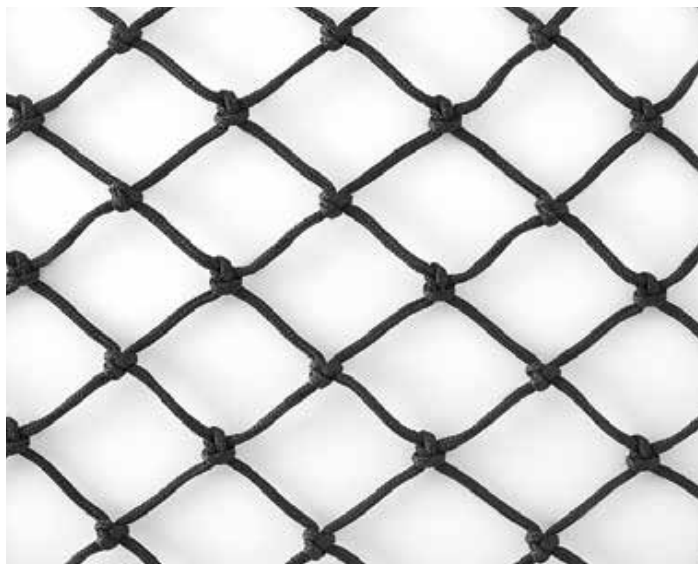


PA Braided (black)



- > MANUFACTURE WITH KNOT
- > GOOD RESISTANCE TO ABRASION
- > EXCELLENT BREAKING LOAD
- > HIGH ELASTICITY
- > THERMOSTABILIZED FOR BETTER DIMENSIONAL UNIFORMITY AND MESH STABILITY
- > POSSIBILITY OF SUPERTIAL TREATMENT

Ref.	Diameter	m / kg		Knot strength	
#	mm	m / kg	tol.	kgf	tol.
36	2.5	382	± 5%	135	± 10%
42	3.0	276	± 5%	187	± 10%
48	3.2	250	± 5%	205	± 10%
54	3.5	236	± 5%	222	± 10%
60	3.7	210	± 5%	250	± 10%
72	4.2	160	± 5%	315	± 10%
96	5.0	113	± 5%	440	± 10%
120	5.5	97	± 5%	490	± 10%
132	5.7	77	± 5%	580	± 10%
168	6.5	58	± 5%	953	± 10%
210	8.0	35	± 5%	1522	± 10%
300	10.0	22	± 5%	2450	± 10%
350	12.0	14	± 5%	3570	± 10%




PE Brided



- > HIGH DENSITY POLYETHYLENE
- > BRAIDED THREAD
- > LIGHTWEIGHT
- > GOOD RESISTANCE TO ABRASION
- > THERMAL FIXED FOR UNIFORMITY AND STABILITY OF THE MESH

Ref.	m / kg		Knot strength	
	mm	m / kg	kgf	tol.
23	450	± 5%	90	± 10%
2.5	380	± 5%	105	± 10%
2.7	310	± 5%	125	± 10%
3	270	± 5%	130	± 10%
3.5	225	± 5%	160	± 10%
4	200	± 5%	180	± 10%
4.5	162	± 5%	215	± 10%
5	127	± 5%	265	± 10%
5.5	100	± 5%	300	± 10%
6	84	± 5%	360	± 10%
7	68	± 5%	440	± 10%
8	40	± 5%	670	± 10%



Twisted PE

Ref.	Diameter	m / kg		Knot strength	
		mm	m / kg	kgf	tol.
12	1,3	1320	1964	± 5%	17 ± 10 %
15	1,4	1025	1525	± 5%	20 ± 10 %
18	1,5	850	1265	± 5%	28 ± 10 %
21	1,6	745	1109	± 5%	32 ± 10 %
24	1,8	642	955	± 5%	37 ± 10 %
27	1,9	570	848	± 5%	42 ± 10 %
30	2,0	518	771	± 5%	45 ± 10 %
33	2,1	470	699	± 5%	49 ± 10 %
36	2,2	430	640	± 5%	54 ± 10 %
39	2,3	395	588	± 5%	58 ± 10 %
42	2,4	368	548	± 5%	63 ± 10 %
45	2,5	340	506	± 5%	68 ± 10 %
50	3,0	295	439	± 5%	81 ± 10 %
54	3,2	242	360	± 5%	99 ± 10 %
60	3,4	216	321	± 5%	110 ± 10 %
70	3,8	195	290	± 5%	118 ± 10 %
90	4.0	140	208	± 5%	164 ± 10 %



- > HIGH DENSITY POLYETHYLENE
- > TWISTED THREAD
- > LIGHTWEIGHT
- > GOOD RESISTANCE TO ABRASION
- > THERMAL FIXED FOR UNIFORMITY AND STABILITY OF THE MESH



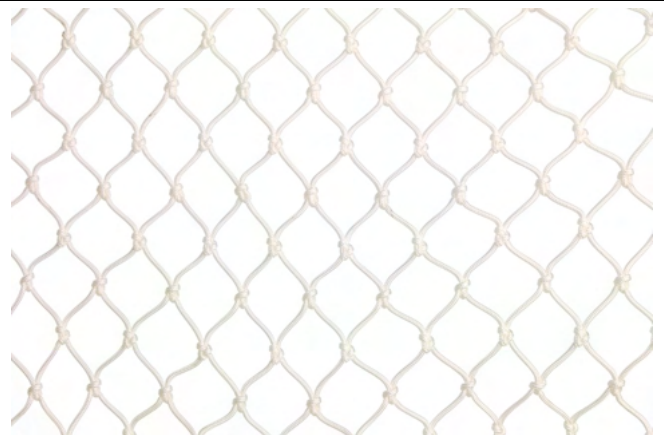
Nets and Threadswith knot

PA Braided



- > BRAIDED THREAD
- > GOOD RESISTANCE TO ABRASION
- > HIGH BREAKING LOAD
- > HIGH ELASTICITY
- > THERMAL FIXED FOR UNIFORMITY AND STABILITY OF THE MESH
- > POSSIBILITY OF COATING

Ref.	Diameter	m / kg		Knot strength	
		m / kg	tol.	kgf	tol.
#	mm				
8842	1.8	581	± 5%	95	± 10%
8843	2	430	± 5%	170	± 10%
4840/3	2.5	280	± 5%	250	± 10%
4840/4	3.2	190	± 5%	330	± 10%
4840/5	4.1	105	± 5%	510	± 10%
4840/6	4.4	90	± 5%	545	± 10%
4840/7	5.1	70	± 5%	580	± 10%
4840/8	5.8	fifty	± 5%	820	± 10%



PA Twisted



- > TWISTED THREAD
- > GOOD RESISTANCE TO ABRASION
- > HIGH ELASTICITY
- > SINGLE, DOUBLE OR TRIPLE MESH
- > THERMAL FIXED FOR UNIFORMITY AND STABILITY OF THE MESH
- > POSSIBILITY OF COATING

Ref.	Diameter	m / kg		Knot strength	
		m / kg	tol.	kgf	tol.
#	mm				
210/24	1.1	1,600	± 5%	38	± 10%
210/36	1.4	1,000	± 5%	60	± 10%
210/48	1.6	750	± 5%	80	± 10%
210/60	1.8	560	± 5%	95	± 10%
210/72	2.0	500	± 5%	115	± 10%
210/84	2.2	430	± 5%	130	± 10%
210/96	2.3	370	± 5%	140	± 10%
210/120	2.7	280	± 5%	190	± 10%
210/180	3.3	185	± 5%	310	± 10%
210/240	3.4	140	± 5%	390	± 10%



Nets and Threads without knot



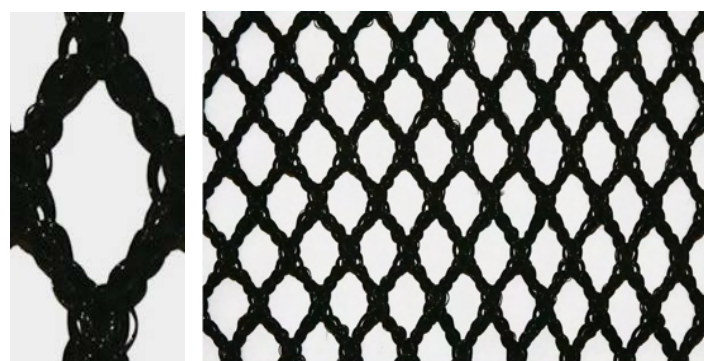
HDP E 90

Material	Denier	Line	Diameter	Límit. MD	Mesh size	Resistance
#	gr	PLY	MM	#	MMKK	Rango kgf
HDPE Aquatuf	90	30-40	1-1,1	780	10-15	10-14
HDPE Aquatuf	90	40-110	1-2,3	540	20-100	10-38
HDPE Aquatuf	90	115-200	2,5-3	540	25-100	56-68
HDPE Aquatuf	90	210-410	3,5-4,2	340	30-100	90-143



HDP E 250

Material	Denier	Line	Diameter	Límit. MD	Mesh size	Resistance
#	gr	PLY	MM	#	MMKK	Rango kgf
HDPE Aquatuf Lite	250	10-15	1-1,1	780	10-15	10-14
HDPE Aquatuf Lite	250	10-40	1- 2,3	540	20-100	10-38
HDPE Aquatuf Lite	250	54-72	2,5-3	540	25-100	56-68
HDPE Aquatuf Lite	250	96-150	3,5-4,2	340	30-100	90-143
HDPE Aquatuf Lite	250	180-260	4,8-5,2	340	30-100	171-247



Polyester Multifilament

Material	Denier	Line	Diameter	Límit. MD	Mesh size	Resistance
#	gr	PLY	MM	#	MMKK	Rango kgf
Polyester Multif.	250	20-36	1,5-1,9	780	16-1000	19-34
Polyester Multif.	250	36-60	1,5-1,9	780	24-1000	34-57
Polyester Multif.	250	72-90	2,0-2,9	780	30-1000	68-86
Polyester Multif.	250	96-240	3,0-3,8	780	40-1000	91-228
Polyester Multif.	250	300-400	4,1- 5,0	390	60-1000	285-380



Nets and Threads without knot

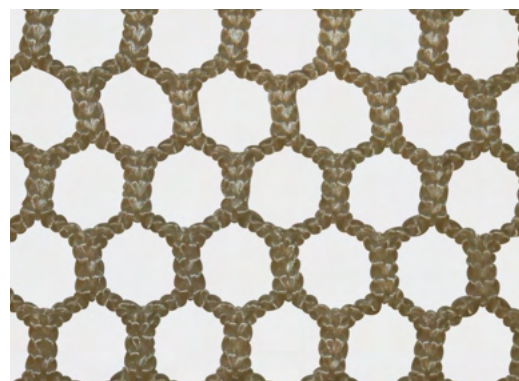
PPMF

Material	Denier	Line	Diameter	Limit. MD	Mesh size	Resistance
#	gr	PLY	MM	#	MMKK	Rango kgf
Polipropileno	1000	12	1,5	780	20-1000	50
Polipropileno	1000	18	2,5	780	30-1000	76
Polipropileno	1000	20	2,9	390	40-1000	84
Polipropileno	1000	24	3,1	390	50-1000	101
Polipropileno	1000	26	3,5	390	50-1000	109
Polipropileno	1000	34	4	390	60-1000	143
Polipropileno	1000	48	5	390	60-1000	202
Polipropileno	1000	60	6	390	80-1000	250
Polipropileno	1000	72	7	390	100-1000	300



Nylon

Material	Denier	Line	Diameter	Limit. MD	Mesh size	Resistance
#	gr	PLY	MM	#	MMKK	Rango kgf
Nylon	210	24-36	1-1,65	780	16-1000	24-36
Nylon	210	52-68	1,7- 2	780	24-1000	52-68
Nylon	210	72-112	2,1-2,5	780	30-1000	73-113
Nylon	210	130-168	2,6-3,2	780	40-1000	131-170



UHMPE

Material	Denier	Line	Diameter	Limit. MD	Mesh size	Resistance
#	gr	PLY	MM	#	MMKK	Rango kgf
UHMPE	1600	8	1,7-2	780	24-1000	96
UHMPE	1600	12	2,1-2,5	780	30-1000	144
UHMPE	1600	20	2,6-3,2	780	40-1000	240



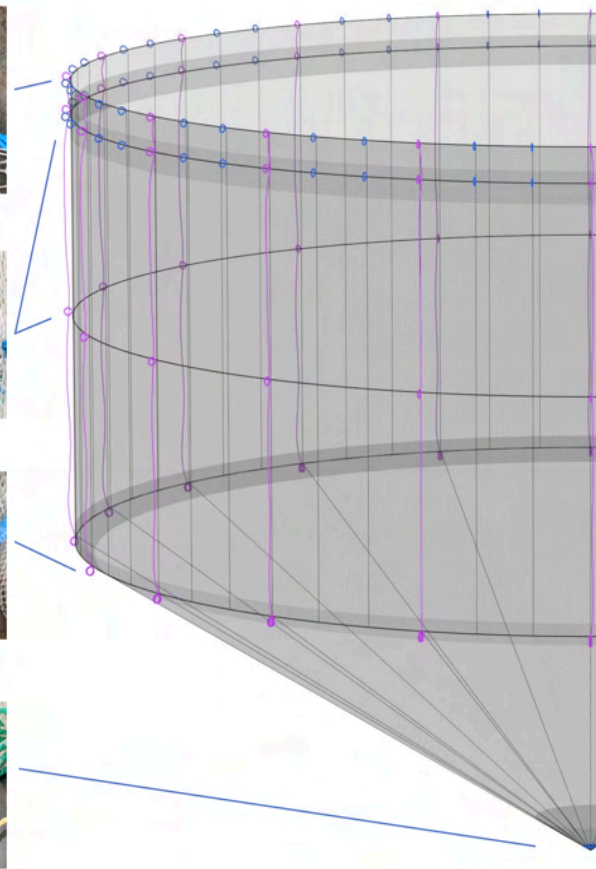
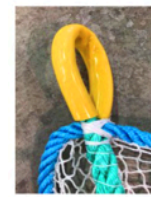
Network Design



At Grupo Eurored we specialize in the design and manufacture of various types of nets for cages depending on the characteristics of the aquaculture estate.

We have our own network in which we manufacture nets of the highest quality for the protection of farmed fish, taking into account the specifications related to oceanographic and environmental conditions to produce high quality nets under the NS9415 regulation that guarantee the integrity of the installation.

We offer a wide range of nets, including antifouling nets, aviary nets and harvest nets for round cages and square or rectangular cages, all designed for high performance, durability and escape prevention. You can get more information about our projects in the Fishfarming section.



DIMENSIONS

DIAMETRE	32m
SHAPE	CYLINDER
CIRCUNF. AT TOP AND WATERLINE	102m
CIRCUNF. AT BOTTOM ROPE	102m
Nº SIDES	25
LENGTH SIDES	4,08m
ANGLE ON BASE	10,52m
HEIGHT JUMPNET	1,35m
DEPTH TO BOTTOM ROPE	10m
DEPTH FROM BOTTOM TO CENTER BASE	3m
NETTING	NYLON
THREAD	210 / 105
HALF MESH	15mm
BREAKING STRENGTH	
OVERSIZED NET	2%

SYMBOLS

TOP ROPE	POLYSTEEL 22mm
WATERLINE ROPE	POLYSTEEL 24mm
MIDDLE ROPE	POLYSTEEL 22mm
BOTTOM LINE ROPE	POLYSTEEL 24mm
VERTICAL ROPE	POLYSTEEL 22mm
CROSS ROPE	POLYSTEEL 24mm
FLOAT ROPES	POLYSTEEL 20mm
FLAP NET	
SIDE NET	
BASE NET	
TRIPLE NET	
DOUBLE NET	
FLEXILOOPS	SLING TUB. 2T 40cm
LOOPS	NYLON 22mm 15cm



MOORING ROPES

Mooring Ropes

Mooring and anchoring



BRAIDED ROPE 3/4 CORDS

- > POLYSTEEL ORCA
- > ORCA FLEX NYLON
- > ORCA POLYESTER
- > ORCA POLYETHYLENE
- > ORCA PLUMB
- > SISAL

ROPES 8 AND 12 CORDS

- > POLYSTEEL ORCA
- > ORCA FLEX FLOATING
- > ORCA FLEX SINKING
- > ORCA FLEX NYLON
- > ORCA POLYESTER
- > DECKLINE
- > COMBO
- > DOUBLE BRAID
- > BERTHING ROPE
- > MOVSPUN

HMPWE AND 12 LACES

- > D-TECH
- > D-TECH WINCHLINE POLYESTER COVER
- > D-TECH WINCHLINE COVER HMPWE

MOORING AND ROPES

- > CONFECTION AND FINISHES

Polysteel Orca

Polysteel ropes are made from high tenacity composite fiber extruded in a proprietary process.

This extremely strong bipolymer and its balanced twist construction results in a rope with good wear resistance and exceptional gripping capabilities that are enhanced by the fuzzy outer surface, which protects the inner fibers from abrasion.



TECHNICAL INFORMATION

- > RAW MATERIAL: MIXED POLYOLEFINS
- > SPECIFIC GRAVITY: 0.94
- > MELTING POINT: 165°C
- > ELONGATION AT % BS:
 - 25% ... 6.0%
 - 50% ... 11.5%



APPLICATIONS.

- > HIGH RESISTANCE TO ABRASION AND WEAR
- > HIGH BUOYANCY
- > DOES NOT ABSORB WATER
- > UV RESISTANT

APPLICATIONS.

- > MOORING
- > STRUCTURAL
- > AQUACULTURE

DIAMETER		SIZE CIRC.	WEIGHT			LOAD BREAK *		
mm	inches	inches	ktex	Kg / 100m	lbs / 100ft	kgf	lbf	kN
4	5/32	3	8	0.8	0.5	337	742	3.3
5	3/16	3 1/4	12	1.2	0.8	510	1,124	5
6	1/4	3 1/2	16	1.6	1.1	689	1,520	6.8
8	5/16	3 3/4	29	2.9	1.9	1,193	2,630	11.7
10	3/8	4	45	4.5	3	1,835	4,047	18
12	1/2	4 1/2	65	6.5	4.4	2,590	5,710	25.4
14	9/16	5	88	8.8	5.9	3,467	7,643	3. 4
16	5/8	5 1/2	116	11.6	7.8	4,436	9,779	43.5
18	3/4	6	147	14.7	9.9	5,557	12,252	54.5
20	13/16	3	181	18.1	12.2	6,751	14,882	66.2
22	7/8	3 1/4	219	21.9	14.7	8,066	17,782	79.1
24	1	3	261	26.1	17.5	9,463	20,862	92.8
26	1 1/32	3 1/4	306	30.6	20.6	10,911	24,054	107
28	1 1/8	3 1/2	355	35.5	23.9	12,543	27,651	123
30	1 1/4	3 3/4	408	40.8	27.4	14,276	31,473	140
32	1 5/16	4	464	46.4	31.2	16,010	35,295	157
3. 4	1 11/32	4 1/4	525	52.5	35.3	17,845	39,341	175
36	1 1/2	4 1/2	587	58.7	39.4	19,783	43,612	194
38	1 9/16	4 3/4	656	65.6	44.1	21,822	48,108	214
40	1 5/8	5	725	72.5	48.7	23,861	52,605	234
44	1 3/4	5 1/2	877	87.7	58.9	28,246	62,271	277
48	2	6	1040	104	69.9	33,141	73,062	325
52	2 1/8	6 1/2	1220	122	82	38,341	84,527	376
56	2 1/4	7	1420	142	95.4	43,746	96,442	429
60	2 1/2	7 1/2	1630	163	109.5	49,558	109,256	486
64	2 5/8	8	1860	186	125	55,473	122,294	544
68	2 3/4	8 1/2	2100	210	141.1	62,101	136,907	609
72	2 7/8	9	2350	235	157.9	69,035	152,194	677
80	3 1/4	10	2900	290	194.9	83,413	183,891	818
90	3 9/16	11 1/8	3750	375	252	107,886	237,845	1058

ISO 10572-2009

* The above breaking loads are for 3 strands. For 4 strand ropes, the breaking loads are approximately 10% lower.

Orca Flex Nylon

Polyamide ropes provide high breaking strength, while its high elongation works as an excellent energy absorber. Its very good resistance to abrasion and heat is reinforced by a twisted and balanced construction, even in wet conditions, while the quality of the fibers ensures perfect twisting and laying tension that reduces natural shrinkage during use. .



TECHNICAL INFORMATION

- > RAW MATERIAL: POLYAMIDE
- > SPECIFIC GRAVITY: 0.14
- > MELTING POINT: 260°C
- > ELONGATION AT % BS:

25% ... 12.5%

50% ... 20.0%

APPLICATIONS.

- > GOOD RESISTANCE TO ABRASION AND WEAR, EVEN WET
- > EXCELLENT ENERGY ABSORPTION
- > GOOD RESISTANCE TO UV
- > SOFT AND FLEXIBLE CONSTRUCTION

APPLICATIONS.

- > MOORING
- > FUNDING
- > AQUACULTURE

DIAMETER		SIZE CIRC.	WEIGHT			LOAD BREAK *		
mm	inches	inches	ktex	Kg / 100m	lbs / 100ft	kgf	lbf	kN
4	5/32	3	9.87	1	0.7	377	832	3.7
5	3/16	3 1/4	15.4	1.5	1	575	1,268	5.6
6	1/4	3 1/2	22.2	2.2	1.5	809	1,783	7.9
8	5/16	3 3/4	39.5	4	2.7	1,407	3,102	13.8
10	3/8	4	61.7	6.2	4.1	2,162	4,766	21.2
12	1/2	4 1/2	88.8	8.9	6	3,069	6,767	30.1
14	9/16	5	121	12.1	8.1	4,079	8,992	40
16	5/8	5 1/2	158	15.8	10.6	5,292	11,667	51.9
18	3/4	6	200	20	13.4	6,557	14,455	64.3
20	13/16	3	247	24.7	16.6	8,076	17,805	79.2
22	7/8	3 1/4	299	29.9	20.1	9,585	21,132	94
24	1	3	355	35.5	23.9	11,421	25,178	112
26	1 1/32	3 1/4	417	41.7	28	13,154	29,000	129
28	1 1/8	3 1/2	484	48.4	32.5	15,194	33,496	149
30	1 1/4	3 3/4	555	55.5	37.3	17,233	37,992	169
32	1 5/16	4	632	63.2	42.5	19,579	43,163	192
3.4	1 11/32	4 1/4	716	71.6	48.1	22,026	48,558	216
36	1 1/2	4 1/2	800	80	53.8	24,473	53,953	240
38	1 9/16	4 3/4	894	89.4	60.1	27,227	60,023	267
40	1 5/8	5	987	98.7	66.3	29,980	66,093	294
44	1 3/4	5 1/2	1190	119	80	35,792	78,907	351
48	2	6	1420	142	95.4	42,012	92,620	412
52	2 1/8	6 1/2	1670	167	112.2	48,845	107,682	479
56	2 1/4	7	1930	193	129.7	56,085	123,643	550
60	2 1/2	7 1/2	2220	222	149.2	63,936	140,953	627
64	2 5/8	8	2530	253	170	72,298	159,387	709
68	2 3/4	8 1/2	2865	286.5	192.5	81,374	179,395	798
72	2 7/8	9	3200	320	215	90,449	199,403	887
80	3 1/4	10	3950	395	265.4	110,130	242,790	1080
90	3 9/16	11 1/8	5008	500.8	336.5	138,478	305,287	1358

ISO 1140-2004

* The above breaking loads are for 3 strands. For 4 strand ropes, the breaking loads are approximately 10% lower.

Orca Polyester

The softness and high tenacity characteristics of polyester are complemented in this rope by a balanced twist construction that enhances its excellent resistance to heat and abrasion, creating a durable, high tenacity rope with low elongation and excellent wear life.

ADVANTAGES

- > HIGH RESISTANCE TO HEAT AND ABRASION
- > HIGH RESISTANCE AND LOW ELONGATION UNDER LOAD
- > EXCELLENT UV RESISTANCE
- > SOFT AND FLEXIBLE

APPLICATIONS.

- > MOORING
- > STRUCTURAL
- > AQUACULTURE



TECHNICAL INFORMATION

- > RAW MATERIAL: POLYESTER
- > SPECIFIC GRAVITY: 0.38
- > MELTING POINT: 265°C
- > ELONGATION AT % BS:
 - 25% ... 5.0%
 - 50% ... 8.0%

DIAMETER		SIZE CIRC.	WEIGHT			LOAD BREAK *		
mm	inches	inches	ktex	Kg / 100m	lbs / 100ft	kgf	lbf	kN
4	5/32	3	12.1	1.2	0.8	286	629	2.8
5	3/16	3 1/4	19	1.9	1.3	435	960	4.3
6	1/4	3 1/2	27.3	2.7	1.8	620	1,367	6.1
8	5/16	3 3/4	48.5	4.9	3.3	1,071	2,360	10.5
10	3/8	4	75.8	7.6	5.1	1,652	3,642	16.2
12	1/2	4 1/2	109	10.9	7.3	2,345	5,171	23
14	9/16	5	149	14.9	10	3,151	6,947	30.9
16	5/8	5 1/2	194	19.4	13	4,058	8,947	39.8
18	3/4	6	246	24.6	16.5	5,088	11,218	49.9
20	13/16	3	303	30.3	20.4	6,220	13,713	61
22	7/8	3 1/4	367	36.7	24.7	7,454	16,433	73.1
24	1	3	437	43.7	29.4	8,780	19,356	86.1
26	1 1/32	3 1/4	512	51.2	34.4	10,299	22,705	101
28	1 1/8	3 1/2	594	59.4	39.9	11,829	26,077	116
30	1 1/4	3 3/4	682	68.2	45.8	13,460	29,674	132
32	1 5/16	4	776	77.6	52.1	15,296	33,721	150
3.4	1 11/32	4 1/4	879	87.9	59.1	17,233	37,992	169
36	1 1/2	4 1/2	982	98.2	66	19,171	42,264	188
38	1 9/16	4 3/4	1096	109.6	73.6	21,312	46,984	209
40	1 5/8	5	1210	121	81.3	23,454	51,705	230
44	1 3/4	5 1/2	1470	147	98.8	28,144	62,046	276
48	2	6	1750	175	117.6	33,243	73,287	326
52	2 1/8	6 1/2	2050	205	137.8	38,749	85,426	380
56	2 1/4	7	2380	238	159.9	44,562	98,240	437
60	2 1/2	7 1/2	2730	273	183.4	50,986	112,403	500
64	2 5/8	8	3100	310	208.3	57,716	127,240	566
68	2 3/4	8 1/2	3515	351.5	236.2	64,956	143,201	637
72	2 7/8	9	3930	393	264.1	72,196	159,163	708
80	3 1/4	10	4850	485	325.9	88,410	194,907	867
90	3 9/16	11 1/8	6150	615	413.3	110,946	244,589	1088

ISO 1141-2004

* The above breaking loads are for 3 strands. For 4 strand ropes, the breaking loads are approximately 10% lower.

Orca Polyethylene

Made of high-tenacity polyethylene, this polyethylene monofilament braided rope is lightweight with good abrasion resistance and long service life.

With UV light resistance, it has good elongation and high creep.



TECHNICAL INFORMATION

- > SPECIFIC GRAVITY: 0.95
- > MELTING POINT: 150°C
- > ELONGATION AT % BS:
 - 25% ... 10.0%
 - 50% ... 16.0%

* Breaking loads above are for 3 strands. In 4-strand ropes, the breaking loads are approximately 10% lower.

ADVANTAGES

- > GOOD RESISTANCE TO ABRASION
- > GOOD RESISTANCE TO UV RAYS
- > GOOD ELONGATION
- > FLOATS, DOES NOT ABSORB WATER

APPLICATIONS.

- > MOORING
- > AQUACULTURE

DIAMETER		SIZE CIRC.	WEIGHT			LOAD BREAK *		
mm	inches	inches	ktex	Kg / 100m	lbs / 100ft	kgf	lbf	kN
4	5/32	3	8.02	0.8	0.5	192	423	1.9
5	3/16	3 1/4	12.5	1.3	0.8	295	650	2.9
6	1/4	3 1/2	18	1.8	1.2	418	922	4.1
8	5/16	3 3/4	32.1	3.2	2.2	725	1,598	7.1
10	3/8	4	50.1	5	3.4	1,111	2,450	10.9
12	1/2	4 1/2	72.1	7.2	4.8	1,581	3,484	15.5
14	9/16	5	98.2	9.8	6.6	2,131	4,698	20.9
16	5/8	5 1/2	128	12.8	8.6	2,753	6,070	27
18	3/4	6	162	16.2	10.9	3,447	7,598	33.8
20	13/16	3	200	20	13.4	4,211	9,284	41.3
22	7/8	3 1/4	242	24.2	16.3	5,078	11,195	49.8
24	1	3	289	28.9	19.4	5,996	13,219	58.8
26	1 1/32	3 1/4	339	33.9	22.8	6,975	15,377	68.4
28	1 1/8	3 1/2	393	39.3	26.4	8,076	17,805	79.2
30	1 1/4	3 3/4	451	45.1	30.3	9,208	20,300	90.3
32	1 5/16	4	513	51.3	34.5	10,401	22,930	102
3. 4	1 11/32	4 1/4	581	58.1	39	11,727	25,853	115
36	1 1/2	4 1/2	649	64.9	43.6	13,052	28,775	128
38	1 9/16	4 3/4	726	72.6	48.8	14,582	32,147	143
40	1 5/8	5	802	80.2	53.9	16,010	35,295	157
44	1 3/4	5 1/2	970	97	65.2	19,171	42,264	188
48	2	6	1150	115	77.3	22,638	49,907	222
52	2 1/8	6 1/2	1350	135	90.7	26,411	58,225	259
56	2 1/4	7	1570	157	105.5	30,490	67,217	299
60	2 1/2	7 1/2	1800	180	121	34,772	76,659	341
64	2 5/8	8	2050	205	137.8	39,361	86,775	386
68	2 3/4	8 1/2	2325	232.5	156.2	44,358	97,791	435
72	2 7/8	9	2600	260	174.7	49,354	108,806	484
80	3 1/4	10	3210	321	215.7	60,367	133,085	592
90	3 9/16	11 1/8	4065	406.5	273.2	75,765	167,031	743

ISO 1969-2004

*The above breaking loads are for 3 strands. For 4 strand ropes, the breaking loads are approximately 10% lower.

Orca Plumb



DIAMETER		WEIGHT	BREAKING LOAD*
mm	inches	Kg/220m	kgf
8	5/16	35,20	1.110
10	3/8	52,80	1.630
12	1/2	77,50	2.320
14	9/16	105,60	3.200
16	5/8	136,10	3.950
18	3/4	173,50	5.050
20	13/16	211,20	6.090
24	1	305,10	8.530

Sisal

Traditional ropes made from a blend of selected natural fibres, with good abrasion resistance and low elongation, are biodegradable and non-polluting, and are excellent for vintage classic boats.

A special color treatment can be applied upon request to match the natural color of the Manila fiber.



TECHNICAL INFORMATION

- > RAW MATERIAL: SISAL
- > SPECIFIC GRAVITY: 1.38
- > FUSION POINT: 165°
- > ELONGATION TO% BS:
 - 25%... 4.0%
 - 50%... 7.0%

ADVANTAGES

- > LOW ELONGATION
- > BIODEGRADABLE/NON-POLLUTING
- > DOES NOT SLIP
- > GOOD RESISTANCE TO UV RAYS

APPLICATIONS.

- > MOORING

DIAMETER		SIZE CIRC.		WEIGHT			BREAKING LOAD *		
mm	inches	inches	ktex	Kg / 100m	lbs / 100ft	kgf	lbf	kN	
4	5/32	1/2	fifteen	1.5	1	153	337	1.5	
5	3/16	5/8		17.3	1.7	186	409	1.8	
6	1/4	3/4		24.9	2.5	263	580	2.6	
8	5/16	1		44.4	4.4	459	1,012	4.5	
10	3/8	1 1/4		69.3	6.9	707	1,558	6.9	
12	1/2	1 1/2		99.8	10	1,005	2,217	9.9	
14	9/16	1 3/4		136	13.6	1,356	2,990	13.3	
16	5/8	2		177	17.7	1,754	3,867	17.2	
18	3/4	2 1/4		225	22.5	2,203	4,856	21.6	
20	13/16	2 1/2		277	27.7	2,702	5,957	26.5	
22	7/8	2 3/4		335	33.5	3,253	7,171	31.9	
24	1	3		399	39.9	3,855	8,498	37.8	
26	1 1/32	3 1/4		468	46.8	4,507	9,936	44.2	
28	1 1/8	3 1/2		543	54.3	5,201	11,465	51	
30	1 1/4	3 3/4		624	62.4	5,945	13,106	58.3	
32	1 5/16	4		710	71	6,730	14,837	66	
3.4	1 11/32	4 1/4		804	80.4	7,546	16,636	74	
36	1 1/2	4 1/2		898	89.8	60.3	8,453	18,636	82.9
38	1 9/16	4 3/4		1004	100.4	67.5	9,381	20,682	92
40	1 5/8	5		1110	111	74.6	10,401	22,930	102
44	1 3/4	5 1/2		1340	134	90	12,441	27,426	122
48	2	6		1600	160	107.5	14,786	32,597	145
52	2 1/8	6 1/2		1870	187	125.7	17,233	37,992	169
56	2 1/4	7		2170	217	145.8	19,885	43,837	195
60	2 1/2	7 1/2		2490	249	167.3	22,740	50,132	223
64	2 5/8	8		2840	284	190.8	25,799	56,876	253
68	2 3/4	8 1/2		3200	320	215	28,960	63,845	284
72	2 7/8	9		3590	359	241.2	32,325	71,264	317
80	3 1/4	10		4440	444	298.3	39,667	87,450	389
90	3 9/16	11 1/8		5160	516	346.7	45,887	101,163	450

ISO 1181-2004

*The above breaking loads are for 3 strands. For 4 strand ropes, the breaking loads are approximately 10% lower.



MOORING ROPES

8 & 12 LACES

Polysteel Orca

Polysteel is an extremely strong, high tenacity bipolymer composite fiber extruded in a custom extrusion process.

Its gripping ability is enhanced by the fuzzy outer surface, which protects the inner fibers from abrasion.

The 8 and 12 strand round braid construction enhances its already good wear resistance.



TECHNICAL INFORMATION

- > RAW MATERIAL: MIXED POLYOLEFINS
- > SPECIFIC GRAVITY: 0.94
- > MELTING POINT: 165°C
- > ELONGATION AT % BS:
 - 25% ... 6.0%
 - 50% ... 11.5%

12 laces

- > ELONGATION AT % BS:
 - 25% ... 2.8%
 - 50% ... 5.5%



ADVANTAGES

- > HIGH RESISTANCE TO ABRASION
- > HIGH BUOYANCY
- > DOES NOT ABSORB WATER
- > UV RESISTANT
- > FLEXIBLE, DOES NOT SCREW, DOES NOT ROTATE

APPLICATIONS.

- > MOORING
- > FUNDING
- > TRAILER

DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	261	26,1	17,5	10.605	23.380	104,0
26	1 1/32	3 1/4	306	30,6	20,6	12.339	27.202	121,0
28	1 1/8	3 1/2	355	35,5	23,9	14.174	31.248	139,0
30	1 1/4	3 3/4	408	40,8	27,4	16.112	35.519	158,0
32	1 5/16	4	464	46,4	31,2	18.253	40.240	179,0
36	1 1/2	4 1/2	587	58,7	39,4	22.842	50.357	224,0
40	1 5/8	5	725	72,5	48,7	27.940	61.597	274,0
44	1 3/4	5 1/2	877	87,7	58,9	33.345	73.512	327,0
48	2	6	1040	104,0	69,9	39.259	86.550	385,0
52	2 1/8	6 1/2	1220	122,0	82,0	45.683	100.713	448,0
56	2 1/4	7	1420	142,0	95,4	52.414	115.550	514,0
60	2 1/2	7 1/2	1630	163,0	109,5	59.450	131.062	583,0
64	2 5/8	8	1860	186,0	125,0	66.996	147.698	657,0
68	2 3/4	8 1/2	2100	210,0	141,1	75.153	165.682	737,0
72	2 7/8	9	2350	235,0	157,9	83.617	184.341	820,0
80	3 1/4	10	2900	290,0	194,9	101.462	223.682	995,0
88	3 5/8	11	3510	351,0	235,9	121.347	267.519	1190,0
96	4	12	4170	417,0	280,2	142.761	314.728	1400,0
104	4 1/4	13	4900	490,0	329,3	165.195	364.186	1620,0
112	4 5/8	14	5680	568,0	381,7	191.707	422.635	1880,0
120	5	15	6520	652,0	438,1	217.200	478.837	2130,0
128	5 1/4	16	7420	742,0	498,6	246.772	544.031	2420,0
136	5 1/2	17	8380	838,0	563,1	277.364	611.472	2720,0

ISO 10572-2009

* The breaking load is reduced by 10% in the case of having loops at the ends.



Mooring ropes



Orca Flex Floating

Movflex is a special composite rope that blends high tenacity polyester yarns with high tenacity polyolefin yarns.

This specific combination gives flexibility and softness to this firm non-rotational braided rope made in 8 and 12 strands, while its double/triple twist strand cover gives it excellent resistance to abrasion and heat, giving it buoyant properties.

ADVANTAGES

- > EXCEPTIONAL RESISTANCE TO ABRASION AND WEAR EVEN WET
- > 38-40% LIGHTER THAN POLYESTER ROPES
- > SOFT AND FLEXIBLE, DOES NOT CURSE, DOES NOT TWIST
- > EXCELLENT UV RESISTANCE
- > FLOATING, VERY LOW WATER ABSORPTION

APPLICATIONS.

- > MOORING
- > TRAILER



8 laces



12 laces

TECHNICAL INFORMATION

- > RAW MATERIAL: POLYOLEFIN/POLYESTER
- > SPECIFIC GRAVITY: 0.99
- > MELTING POINT: 165°C/265°C
- > ELONGATION AT % BS:
 - 25% ... 4.0%
 - 50% ... 6.0%

DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	266	26,6	17,9	10.707	23.605	105,0
26	1 1/32	3 1/4	317	31,7	21,3	12.848	28.326	126,0
28	1 1/8	3 1/2	368	36,8	24,7	15.092	33.271	148,0
30	1 1/4	3 3/4	430	43,0	28,9	17.335	38.217	170,0
32	1 5/16	4	478	47,8	32,1	19.375	42.713	190,0
36	1 1/2	4 1/2	606	60,6	40,7	24.269	53.504	238,0
40	1 5/8	5	750	75,0	50,4	29.572	65.194	290,0
44	1 3/4	5 1/2	900	90,0	60,5	35.282	77.783	346,0
48	2	6	1075	107,5	72,2	41.503	91.496	407,0
52	2 1/8	6 1/2	1265	126,5	85,0	48.029	105.884	471,0
56	2 1/4	7	1460	146,0	98,1	55.269	121.845	542,0
60	2 1/2	7 1/2	1680	168,0	112,9	62.713	138.256	615,0
64	2 5/8	8	1910	191,0	128,3	70.871	156.240	695,0
68	2 3/4	8 1/2	2160	216,0	145,1	79.538	175.349	780,0
72	2 7/8	9	2425	242,5	162,9	88.716	195.581	870,0
80	3 1/4	10	2985	298,5	200,6	108.600	239.418	1065,0
88	3 5/8	11	3610	361,0	242,6	130.014	286.628	1275,0
96	4	12	4300	430,0	288,9	152.958	337.209	1500,0
104	4 1/4	13	5055	505,5	339,7	178.451	393.410	1750,0
112	4 5/8	14	5890	589,0	395,8	205.983	454.108	2020,0
120	5	15	6700	670,0	450,2	227.907	502.441	2235,0
128	5 1/4	16	7650	765,0	514,0	257.989	568.759	2530,0
136	5 1/2	17	8625	862,5	579,6	290.620	640.697	2850,0

8 Y 12 CORDONES

8 CORDONES

* The breaking load is reduced by 10% in the case of having loops at the ends.

Orca Flex Sinking

Movflex is a special composite rope that blends high tenacity polyester yarns with high tenacity polyolefin yarns.

This distinctive combination gives it excellent fatigue properties compared to an all polyester rope but with less handling weight.

Its firm, non-rotational braided construction provides flexibility and softness, and its double/triple-braided cover yarns give it excellent abrasion and heat resistance.

ADVANTAGES

> EXCEPTIONAL RESISTANCE TO ABRASION AND WEAR EVEN WET

> 18-20% LIGHTER THAN POLYESTER ROPE

> LOW WATER ABSORPTION

> SOFT, FLEXIBLE, DOES NOT CURSE, DOES NOT TWIST

> EXCELLENT UV RESISTANCE

> SINKS

APPLICATIONS.

> MOORING

> TRAILER



8 laces



12 laces

DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	345	34,5	23,2	14.174	31.248	139,0
26	1 1/32	3 1/4	411	41,1	27,6	17.131	37.767	168,0
28	1 1/8	3 1/2	477	47,7	32,1	20.088	44.287	197,0
30	1 1/4	3 3/4	559	55,9	37,6	22.332	49.233	219,0
32	1 5/16	4	623	62,3	41,9	26.003	57.326	255,0
36	1 1/2	4 1/2	789	78,9	53,0	32.529	71.713	319,0
40	1 5/8	5	969	96,9	65,1	39.769	87.674	390,0
44	1 3/4	5 1/2	1178	117,8	79,2	47.723	105.209	468,0
48	2	6	1406	140,6	94,5	56.492	124.543	554,0
52	2 1/8	6 1/2	1644	164,4	110,5	65.874	145.225	646,0
56	2 1/4	7	1910	191,0	128,3	75.969	167.480	745,0
60	2 1/2	7 1/2	2195	219,5	147,5	86.778	191.310	851,0
64	2 5/8	8	2497	249,7	167,8	97.893	215.814	960,0
68	2 3/4	8 1/2	2812	281,2	189,0	110.436	243.465	1083,0
72	2 7/8	9	3154	315,4	211,9	122.978	271.116	1206,0
80	3 1/4	10	3905	390,5	262,4	150.103	330.914	1472,0
88	3 5/8	11	4720	472,0	317,2	181.102	399.255	1776,0
96	4	12	5610	561,0	377,0	214.141	472.093	2100,0
104	4 1/4	13	6550	655,0	440,1	248.812	548.527	2440,0
112	4 5/8	14	7630	763,0	512,7	287.561	633.953	2820,0
120	5	15	8770	877,0	589,3	327.330	721.627	3210,0
128	5 1/4	16	9980	998,0	670,6	371.076	818.069	3639,0
136	5 1/2	17	11280	1128,0	758,0	416.556	918.332	4085,0

8 Y 12 CORDONES

8 CORDONES

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

> RAW MATERIAL: POLYOLEFIN/POLYESTER

> SPECIFIC GRAVITY: 1.10

> MELTING POINT: 165°C/265°C

> ELONGATION AT % BS:

25% ... 4.0%

50% ... 6.0%

Orca Flex Nylon

Polyamide ropes provide high breaking strength, while their high elongation works as an excellent energy absorber.

Its very good resistance to abrasion and heat is enhanced by the 8- and 12-strand braided construction, even in wet conditions, while the quality of the fibers ensures perfect torsion and laying tension, reducing shrinkage. natural during use.



8 laces



12 laces

ADVANTAGES

- > EXCELLENT ENERGY ABSORPTION
- > GOOD RESISTANCE TO ABRASION AND WEAR EVEN WET
- > GOOD UV RESISTANCE
- > FLEXIBLE, DOES NOT SCREW, DOES NOT ROTATE

APPLICATIONS.

- > MOORING
- > TRAILER



DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	355	35,5	23,9	11.421	25.178	112,0
26	1 1/32	3 1/4	420	42,0	28,2	13.358	29.450	131,0
28	1 1/8	3 1/2	484	48,4	32,5	15.194	33.496	149,0
30	1 1/4	3 3/4	556	55,6	37,4	17.335	38.217	170,0
32	1 5/16	4	632	63,2	42,5	19.579	43.163	192,0
36	1 1/2	4 1/2	800	80,0	53,8	24.473	53.953	240,0
40	1 5/8	5	987	98,7	66,3	29.980	66.093	294,0
44	1 3/4	5 1/2	1190	119,0	80,0	35.792	78.907	351,0
48	2	6	1420	142,0	95,4	42.012	92.620	412,0
52	2 1/8	6 1/2	1670	167,0	112,2	48.845	107.682	479,0
56	2 1/4	7	1930	193,0	129,7	56.085	123.643	550,0
60	2 1/2	7 1/2	2220	222,0	149,2	63.936	140.953	627,0
64	2 5/8	8	2530	253,0	170,0	72.298	159.387	709,0
68	2 3/4	8 1/2	2865	286,5	192,5	81.374	179.395	798,0
72	2 7/8	9	3200	320,0	215,0	90.449	199.403	887,0
80	3 1/4	10	3950	395,0	265,4	110.130	242.790	1080,0
88	3 5/8	11	4780	478,0	321,2	132.564	292.248	1300,0
96	4	12	5690	569,0	382,3	156.017	343.953	1530,0
104	4 1/4	13	6670	667,0	448,2	181.510	400.155	1780,0
112	4 5/8	14	7740	774,0	520,1	209.043	460.852	2050,0
120	5	15	8880	888,0	596,7	238.614	526.046	2340,0
128	5 1/4	16	10100	1010,0	678,7	270.226	595.736	2650,0
136	5 1/2	17	11400	1140,0	766,0	303.877	669.922	2980,0

ISO 1140-2004

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

- > RAW MATERIAL: POLYAMIDE
- > SPECIFIC GRAVITY: 1.14
- > MELTING POINT: 260°C
- > ELONGATION AT % BS:
 - 25% ... 11.0%
 - 50% ... 18.0%

Orca Polyester

The soft, high-tenacity characteristics of polyester are enhanced by a firm 8- and 12-strand braid construction that enhances its excellent abrasion and high heat resistance, creating a durable, high-tenacity rope with low elongation and excellent fatigue resistance.

ADVANTAGES

- > HIGH RESISTANCE TO HEAT AND ABRASION
- > HIGH STRENGTH AND LOW ELONGATION
- UNDER LOAD
- > EXCELLENT UV RESISTANCE
- > FLEXIBLE, DOES NOT SCREW, DOES NOT ROTATE

APPLICATIONS.

- > MOORING
- > TRAILER



8 laces



12 laces

DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	437	43,7	29,4	8.780	19.356	86,1
26	1 1/32	3 1/4	612	61,2	41,1	10.299	22.705	101,0
28	1 1/8	3 1/2	594	59,4	39,9	11.829	26.077	116,0
30	1 1/4	3 3/4	682	68,2	45,8	13.460	29.674	132,0
32	1 5/16	4	776	77,6	52,1	15.296	33.721	150,0
36	1 1/2	4 1/2	982	98,2	66,0	19.171	42.264	188,0
40	1 5/8	5	1210	121,0	81,3	23.454	51.705	230,0
44	1 3/4	5 1/2	1470	147,0	98,8	28.144	62.046	276,0
48	2	6	1750	175,0	117,6	33.243	73.287	326,0
52	2 1/8	6 1/2	2050	205,0	137,8	38.749	85.426	380,0
56	2 1/4	7	2380	238,0	159,9	44.562	98.240	437,0
60	2 1/2	7 1/2	2730	273,0	183,4	50.986	112.403	500,0
64	2 5/8	8	3100	310,0	208,3	57.716	127.240	566,0
68	2 3/4	8 1/2	3515	351,5	236,2	64.956	143.201	637,0
72	2 7/8	9	3930	393,0	264,1	72.196	159.163	708,0
80	3 1/4	10	4850	485,0	325,9	88.410	194.907	867,0
88	3 5/8	11	5870	587,0	394,4	106.051	233.798	1040,0
96	4	12	6990	699,0	469,7	125.426	276.511	1230,0
104	4 1/4	13	8220	822,0	552,3	145.820	321.473	1430,0
112	4 5/8	14	9510	951,0	639,0	168.254	370.930	1650,0
120	5	15	10900	1090,0	732,4	191.707	422.635	1880,0
128	5 1/4	16	12400	1240,0	833,2	217.200	478.837	2130,0
136	5 1/2	17	14000	1400,0	940,7	243.713	537.286	2390,0

ISO 1141-2004

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

- > RAW MATERIAL: POLYESTER
- > SPECIFIC GRAVITY: 1.38
- > MELTING POINT: 265°C
- > ELONGATION AT % BS:
 - 25% ... 5.0%
 - 50% ... 8.0%

Deckline

Deckline ropes are a special, economical blend that combines the abrasion resistance and toughness of our Movline Plus bipolymer.

This cost-effective floating rope has good wear and abrasion resistance given by the Movline Plus outer sheath and high breaking strength compared to other traditional PP ropes.

ADVANTAGES

- > LOW COST COMPARED TO OTHER PP ROPE.
- > HIGH RESISTANCE TO ABRASION
- > GOOD BREAKING LOAD
- > EXCELLENT UV RESISTANCE
- > DOES NOT SCREW, DOES NOT ROTATE

APPLICATIONS.

- > MOORING
- > TRAILER



DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	261	26,1	17,5	9.014	19.873	88,4
26	1 1/32	3 1/4	306	30,6	20,6	10.488	23.121	102,9
28	1 1/8	3 1/2	355	35,5	23,9	12.048	26.561	118,2
30	1 1/4	3 3/4	408	40,8	27,4	13.695	30.191	134,3
32	1 5/16	4	464	46,4	31,2	15.515	34.204	152,2
36	1 1/2	4 1/2	587	58,7	39,4	19.415	42.803	190,4
40	1 5/8	5	725	72,5	48,7	23.749	52.357	232,9
44	1 3/4	5 1/2	877	87,7	58,9	28.343	62.485	278,0
48	2	6	1040	104,0	69,9	33.370	73.568	327,3
52	2 1/8	6 1/2	1220	122,0	82,0	38.831	85.606	380,8
56	2 1/4	7	1420	142,0	95,4	44.552	98.218	436,9
60	2 1/2	7 1/2	1630	163,0	109,5	50.532	111.403	495,6
64	2 5/8	8	1860	186,0	125,0	56.946	125.543	558,5
68	2 3/4	8 1/2	2100	210,0	141,1	63.880	140.830	626,5
72	2 7/8	9	2350	235,0	157,9	71.074	156.690	697,0
80	3 1/4	10	2900	290,0	194,9	86.243	190.130	845,8
88	3 5/8	11	3510	351,0	235,9	103.145	227.391	1011,5
96	4	12	4170	417,0	280,2	121.347	267.519	1190,0
104	4 1/4	13	4900	490,0	329,3	140.415	309.558	1377,0
112	4 5/8	14	5680	568,0	381,7	162.951	359.240	1598,0
120	5	15	6520	652,0	438,1	184.620	407.011	1810,5
128	5 1/4	16	7420	742,0	498,6	209.756	462.426	2057,0
136	5 1/2	17	8380	838,0	563,1	235.759	519.751	2312,0

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

- > RAW MATERIAL: POLYOLEFIN
- > SPECIFIC GRAVITY: 0.93
- > MELTING POINT: 165°C
- > ELONGATION AT % BS:
 - 25% ... 2.8%
 - 50% ... 5.5%

Combo

This blended rope combines the best properties of polyester fiber with our Movline bipolymer fiber in a unique 8- and 12-strand braid construction where each Movline strand is covered with polyester, giving it exceptional wear resistance at a weight of Significantly less handling than regular polyester.

ADVANTAGES

- > EXCELLENT RESISTANCE TO ABRASION AND WEAR
- > 18-20% LIGHTER THAN POLYESTER ROPES
- > LESS WATER ABSORPTION THAN POLYESTER ROPE
- > SOFT, DOES NOT CURSE, DOES NOT TWIST

APPLICATIONS.

- > MOORING
- > FUNDING
- > MOORING ROPE FOR "H" BITTS
- > BARGE TOWING



8 laces



12 laces

DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	319	31,9	21,4	10.911	24.054	107,0
26	1 1/32	3 1/4	374	37,4	25,1	12.747	28.101	125,0
28	1 1/8	3 1/2	434	43,4	29,2	14.684	32.372	144,0
30	1 1/4	3 3/4	498	49,8	33,5	16.723	36.868	164,0
32	1 5/16	4	566	56,6	38,0	18.967	41.814	186,0
36	1 1/2	4 1/2	717	71,7	48,2	23.759	52.380	233,0
40	1 5/8	5	885	88,5	59,5	29.062	64.070	285,0
44	1 3/4	5 1/2	1070	107,0	71,9	34.874	76.884	342,0
48	2	6	1270	127,0	85,3	41.197	90.822	404,0
52	2 1/8	6 1/2	1500	150,0	100,8	48.029	105.884	471,0
56	2 1/4	7	1730	173,0	116,2	55.371	122.070	543,0
60	2 1/2	7 1/2	1990	199,0	133,7	63.223	139.380	620,0
64	2 5/8	8	2270	227,0	152,5	71.482	157.589	701,0
68	2 3/4	8 1/2	2560	256,0	172,0	80.150	176.698	786,0
72	2 7/8	9	2875	287,5	193,2	88.206	194.457	865,0
80	3 1/4	10	3545	354,5	238,2	108.600	239.418	1065,0
88	3 5/8	11	4275	427,5	287,3	131.034	288.876	1285,0
96	4	12	5095	509,5	342,4	156.017	343.953	1530,0
104	4 1/4	13	6000	600,0	403,2	183.550	404.651	1800,0
112	4 5/8	14	6900	690,0	463,7	211.082	465.348	2070,0
120	5	15	7960	796,0	534,9	243.509	536.837	2388,0
128	5 1/4	16	9060	906,0	608,8	277.160	611.023	2718,0
136	5 1/2	17	10200	1020,0	685,4	312.034	687.906	3060,0
ISO 14686-2004								

8 Y 12 CORDONES

8 CORDONES

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

- > RAW MATERIAL: POLYOLEFIN/POLYESTER
- > SPECIFIC GRAVITY: 1.16
- > MELTING POINT: 165°C /265°C
- > ELONGATION AT % BS:
 - 25% ... 3.2%
 - 50% ... 6.7%

Dobble Braid Polyamide

The double-braided polyamide ropes provide high breaking strength, while their high elongation works as an excellent energy absorber.

The quality of the fibers ensures a perfect twist and laying tension that reduces the natural shrinkage of the polyamide during use.

The braided core and jacket are oriented to maximize strength, abrasion and heat resistance even in wet conditions.



ADVANTAGES

- > EXCELLENT ENERGY ABSORPTION
- > GOOD RESISTANCE TO ABRASION AND WEAR EVEN WET
- > GOOD UV RESISTANCE
- > HIGH FLEXIBILITY,
- IT DOESN'T SCREW, IT DOESN'T SPIN

APPLICATIONS.

- > MOORING
- > TRAILER



DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
6	1/4	3/4	22,4	2,2	1,5	805	1.774	7,9
8	5/16	1	39,8	4,0	2,7	1.428	3.147	14,0
10	3/8	1 1/8	62,2	6,2	4,2	2.223	4.901	21,8
12	1/2	1 1/2	89,6	9,0	6,0	3.192	7.036	31,3
14	9/16	1 3/4	122	12,2	8,2	4.334	9.554	42,5
16	5/8	2	159	15,9	10,7	5.639	12.432	55,3
18	3/4	2 1/4	202	20,2	13,6	7.128	15.714	69,9
20	13/16	2 1/2	249	24,9	16,7	8.790	19.378	86,2
22	7/8	2 3/4	301	30,1	20,2	10.605	23.380	104,0
24	1	3	358	35,8	24,1	12.645	27.876	124,0
26	1 1/32	3 1/4	420	42,0	28,2	14.786	32.597	145,0
28	1 1/8	3 1/2	488	48,8	32,8	17.131	37.767	168,0
30	1 1/4	3 3/4	560	56,0	37,6	19.681	43.388	193,0
32	1 5/16	4	637	63,7	42,8	22.332	49.233	219,0
36	1 1/2	4 1/2	806	80,6	54,2	28.246	62.271	277,0
40	1 5/8	5	995	99,5	66,9	34.772	76.659	341,0
44	1 3/4	5 1/2	1200	120,0	80,6	42.012	92.620	412,0
48	2	6	1430	143,0	96,1	49.966	110.155	490,0
52	2 1/8	6 1/2	1680	168,0	112,9	58.532	129.039	574,0
56	2 1/4	7	1950	195,0	131,0	67.811	149.496	665,0
60	2 1/2	7 1/2	2240	224,0	150,5	77.703	171.302	762,0
64	2 5/8	8	2550	255,0	171,3	88.410	194.907	867,0
68	2 3/4	8 1/2	2880	288,0	193,5	98.709	217.612	968,0
72	2 7/8	9	3210	321,0	215,7	109.008	240.318	1069,0
80	3 1/4	10	3970	397,0	266,8	137.968	304.163	1353,0
88	3 5/8	11	4810	481,0	323,2	167.030	368.232	1638,0
96	4	12	5720	572,0	384,4	194.970	429.829	1912,0
104	4 1/4	13	6710	671,0	450,9	231.986	511.434	2275,0
112	4 5/8	14	7790	779,0	523,5	266.963	588.542	2618,0
120	5	15	8930	893,0	600,1	304.998	672.395	2991,0

ISO 14685-2004

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

- > RAW MATERIAL: POLYAMIDE
- > SPECIFIC GRAVITY: 1.14
- > MELTING POINT: 260°C
- > ELONGATION AT % BS:
 - 25% ... 6.7%
 - 50% ... 11.4%

Berthing Rope

An 8 and 12 strand braided rope that combines the high tenacity, abrasion and wear resistance of polyester with traditional PP filament.

This very special mix together with its unique construction that perfectly combines these two fibers, gives this rope an excellent handling and touch, much appreciated by the national marine defense fleets.

ADVANTAGES

- > EXCEPTIONAL HANDLING AND FEEL
- > GOOD RESISTANCE TO ABRASION AND WEAR
- > LOW WATER ABSORPTION
- > FLEXIBLE, DOES NOT SCREW, DOES NOT ROTATE

APPLICATIONS.

- > MOORING
- > FUNDING



8 laces



12 laces

DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	405	40,5	27,2	8.770	19.333	86,0
26	1 1/32	3 1/4	439	43,9	29,5	9.483	20.907	93,0
28	1 1/8	3 1/2	473	47,3	31,8	10.197	22.481	100,0
30	1 1/4	3 3/4	543	54,3	36,5	10.809	23.829	106,0
32	1 5/16	4	614	61,4	41,3	12.237	26.977	120,0
36	1 1/2	4 1/2	760	76,0	51,1	15.092	33.271	148,0
40	1 5/8	5	950	95,0	63,8	18.865	41.589	185,0
44	1 3/4	5 1/2	1175	117,5	79,0	22.638	49.907	222,0
48	2	6	1364	136,4	91,7	26.003	57.326	255,0
52	2 1/8	6 1/2	1600	160,0	107,5	30.082	66.318	295,0
56	2 1/4	7	1850	185,0	124,3	34.467	75.984	338,0
60	2 1/2	7 1/2	2120	212,0	142,5	39.157	86.326	384,0
64	2 5/8	8	2420	242,0	162,6	44.154	97.341	433,0
68	2 3/4	8 1/2	2732	273,2	183,6	49.456	109.031	485,0
72	2 7/8	9	3060	306,0	205,6	52.618	116.000	516,0
80	3 1/4	10	3780	378,0	254,0	63.631	140.279	624,0
88	3 5/8	11	4570	457,0	307,1	76.173	167.930	747,0
96	4	12	5450	545,0	366,2	89.429	197.155	877,0
104	4 1/4	13	6400	640,0	430,1	102.278	225.480	1003,0
112	4 5/8	14	7400	740,0	497,2	117.166	258.302	1149,0
120	5	15	8500	850,0	571,2	133.277	293.821	1307,0
128	5 1/4	16	9640	964,0	647,8	147.044	324.170	1442,0
136	5 1/2	17	10930	1093,0	734,4	165.908	365.759	1627,0

ISO 14686-2004

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

- > RAW MATERIAL: PP/POLYESTER
- > SPECIFIC GRAVITY: 1.16
- > MELTING POINT: 165°C / 265°C
- > ELONGATION AT % BS:
 - 25% ... 3.5%
 - 50% ... 7.9%

Movspun

Appearance and construction of old ropes made of natural fibers, with the strength and resistance to wear and abrasion of synthetic materials.

This floating polypropylene line has a smooth, fine feel and its shaggy surface improves wear resistance.

Light rope, very easy to handle and easy to splice.

ADVANTAGES

- > SOFT TOUCH
- > GOOD RESISTANCE TO ABRASION AND WEAR

> FLOATS, DOES NOT ABSORB WATER

> GOOD RESISTANCE TO UV RAYS

> FLEXIBLE, DOES NOT CURSE

APPLICATIONS.

- > MOORING
- > TRAILER



8 laces



12 laces

DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
24	1	3	260	26,0	17,5	8.035	17.715	78,8
26	1 1/32	3 1/4	306	30,6	20,6	9.330	20.570	91,5
28	1 1/8	3 1/2	354	35,4	23,8	10.707	23.605	105,0
30	1 1/4	3 3/4	407	40,7	27,3	12.135	26.752	119,0
32	1 5/16	4	463	46,3	31,1	13.664	30.124	134,0
36	1 1/2	4 1/2	586	58,6	39,4	17.029	37.543	167,0
40	1 5/8	5	723	72,3	48,6	20.802	45.860	204,0
44	1 3/4	5 1/2	875	87,5	58,8	24.779	54.628	243,0
48	2	6	1040	104,0	69,9	29.164	64.295	286,0
52	2 1/8	6 1/2	1220	122,0	82,0	33.855	74.636	332,0
56	2 1/4	7	1420	142,0	95,4	38.851	85.651	381,0
60	2 1/2	7 1/2	1630	163,0	109,5	44.154	97.341	433,0
64	2 5/8	8	1850	185,0	124,3	49.762	109.705	488,0
68	2 3/4	8 1/2	2095	209,5	140,8	55.881	123.194	548,0
72	2 7/8	9	2340	234,0	157,2	61.999	136.682	608,0
80	3 1/4	10	2890	289,0	194,2	75.459	166.356	740,0
88	3 5/8	11	3500	350,0	235,2	90.449	199.403	887,0
96	4	12	4170	417,0	280,2	106.051	233.798	1040,0
104	4 1/4	13	4890	489,0	328,6	123.386	272.015	1210,0
112	4 5/8	14	5670	567,0	381,0	141.741	312.480	1390,0
120	5	15	6510	651,0	437,4	161.116	355.193	1580,0
128	5 1/4	16	7410	741,0	497,9	181.510	400.155	1780,0
136	5 1/2	17	8360	836,0	561,8	203.944	449.612	2000,0
ISO 1346-2004								

8 Y 12 CORDONES

8 CORDONES

* The breaking load is reduced by 10% in the case of having loops at the ends.

TECHNICAL INFORMATION

- > RAW MATERIAL: SPUN POLYPROPYLENE
- > SPECIFIC GRAVITY: 0.91 (FLEET)
- > MELTING POINT: 165°C
- > ELONGATION AT % BS:
 - 25% ... 4.0%
 - 50% ... 7.5%



MOORING ROPES

HMPWE

D Tech

Made from HMWPE fibers and protected by a unique impregnation that improves their abrasion resistance, D-Tech ropes should be considered when high breaking strengths are required.

Stronger than steel wire of the same weight, it has proven to be an economical replacement for wire rope in various applications.

Its braided construction of 8 and 12 strands is soft and does not break.

ADVANTAGES

- > 1/7 LESS WEIGHT THAN STEEL
- > MORE DURABLE THAN STEEL
- > LOW OPERATIONAL COST
- > LOW ELONGATION
- > FLEXIBLE, DOES NOT SCREW, DOES NOT ROTATE
- > EASY AND SAFE USE
- > EASY TO HANDLE
- > 8 AND 12 CORDS

APPLICATIONS.

- > MOORING
- > FUNDING
- > WINCHES
- > TRAILER



8 laces



12 laces

TECHNICAL INFORMATION

- > RAW MATERIAL: HMWPE
- > SPECIFIC GRAVITY: 0.98 (FLEET)
- > MELTING POINT: 150°C
- > ELONGATION AT % BS:
 - 25% ... 0.9%
 - 50% ... 1.6%



DIAMETER		SIZE CIRC.	WEIGHT			BREAKING LOAD*		
mm	inches	inches	ktex	Kg/100m	lbs/100ft	kgf	lbf	kN
6	1/4	3/4	23	2,3	1,5	3742	8250	36,7
8	1/3	1	40	4	2,7	6659	14680	65,3
10	3/8	1 1/8	61	6,1	4,1	10401	22930	102
12	1/2	1 1/2	87	8,7	5,8	14990	33046	147
14	4/7	1 3/4	117	11,7	7,9	20394	44961	200
16	5/8	2	151	15,1	10,1	26513	58450	260
18	3/4	2 1/4	190	19	12,8	31611	69690	310
20	13/16	2 1/2	232	23,2	15,6	38749	85426	380
22	7/8	2 3/4	281	28,1	18,9	45887	101163	450
24	1	3	331	33,1	22,2	53025	116899	520
26	1 1/32	3 1/4	384	38,4	25,8	61.183	134.884	600
28	1 1/8	3 1/2	445	44,5	29,9	69.341	152.868	680
30	1 1/4	3 3/4	506	50,6	34	78.518	173.101	770
32	1 5/16	4	575	57,5	38,6	88.716	195.581	870
34	1 11/32	4 1/4	648	64,8	43,5	97.893	215.814	960
36	1 1/2	4 1/2	720	72	48,4	106.051	233.798	1040
38	1 9/16	4 3/4	798	79,8	53,6	118.288	260.775	1160
40	1 5/8	5	881	88,1	59,2	128.485	283.256	1260
44	1 3/4	5 1/2	1060	106	71,2	148.879	328.217	1460
48	2	6	1250	125	84	173.352	382.170	1700
52	2 1/8	6 1/2	1460	146	98,1	200.885	442.868	1970
56	2 1/4	7	1690	169	113,6	230.457	508.062	2260
60	2 1/2	7 1/2	1930	193	129,7	257.989	568.759	2530
64	2 5/8	8	2200	220	147,8	289.600	638.449	2840
68	2 3/4	8 1/2	2480	248	166,6	323.251	712.635	3170
72	2 7/8	9	2780	278	186,8	358.941	791.317	3520
76	3	9 3/8	3090	309	207,6	396.671	874.495	3890
80	3 1/4	10	3430	343	230,5	438.480	966.666	4300
88	3 5/8	11	4170	417	280,2	530.254	1.168.991	5200
96	4	12	4970	497	334	630.187	1.389.301	6180
104	4 1/4	13	5900	590	396,5	748.067	1.649.177	7336
112	4 5/8	14	6920	692	465	876.959	1.933.332	8600
120	5	15	8010	801	538,2	1.014.621	2.236.820	9950
128	5 1/4	16	9190	919	617,5	1.162.481	2.562.788	11400
136	5 1/2	17	10450	1045	702,2	1.315.439	2.899.997	12900

ISO 10572-2009

12 CORDONES

8 Y 12 CORDONES

8 CORDONES

D-Tech Winchline with Polyester sheath

Manufactured from HMWPE fibers and coated with a proprietary PRO-TECH impregnation which improves its abrasion resistance and fatigue properties, the D-Tech winch should be considered when high breaking strengths are required.

Stronger than wire ropes of the same weight, it has proven to be an economical replacement in many applications.

Double-braid construction for higher breaking loads, with a 12-strand HMWPE core and a 32-strand Polyester cover.



TECHNICAL INFORMATION

- > RAW MATERIAL: POLYESTER
- > SPECIFIC GRAVITY: 1.06 (DOES NOT FLOAT)
- > MELTING POINT: 150°C / 265°C
- > ELONGATION AT % BS:
 - 25% ... 0.9%
 - 50% ... 1.6%



ADVANTAGES

- > 1/7 LESS WEIGHT THAN STEEL
- > MORE DURABLE THAN STEEL
- > LOW OPERATIONAL COST
- > LOW ELONGATION
- > FLEXIBLE, DOES NOT SCREW, DOES NOT ROTATE
- > EASY AND SAFE TO USE
- > EASY TO HANDLE

APPLICATIONS.

- > MOORING
- > FUNDING
- > WINCHES
- > TRAILER

DIAMETER		SIZE CIRC.	ktex	WEIGHT		BREAKING LOAD*		
mm	inches	inches		Kg/100m	lbs/100ft	kgf	lbf	kN
16	5/8	5 1/2	158	15,8	13,8	14 990	33 046	147
18	3/4	6	215	21,5	18,7	20 394	44 961	200
20	13/16	3	265	26,5	23,1	26 513	58 450	260
22	7/8	3 1/4	307	30,7	26,7	31 611	69 690	310
24	1	3	409	40,9	35,6	38 749	85 426	380
30	1 1/4	3 3/4	489	48,9	42,6	45 887	101 163	450
32	1 1/3	4	508	50,8	44,2	53 025	116 899	520
34	1 1/3	4 1/4	581	58,1	50,6	61 183	134 884	600
36	1 1/2	4 1/2	682	68,2	59,4	69 341	152 868	680
38	1 4/7	4 3/4	750	75	65,3	78 518	173 101	770
40	1 5/8	5	800	80	69,6	88 716	195 581	870
42	1 5/7	5 1/4	918	91,8	79,9	97 893	215 814	960
44	1 3/4	5 1/2	1009	100,9	87,8	106 051	233 798	1040
46	1 3/4	5 1/2	1100	110	95,7	118 288	260 775	1160
48	2	6	1183	118,3	103	128 485	283 256	1260
52	2 1/8	6 1/4	1465	146,5	127,5	148 879	328 217	1460
54	2 1/8	6 1/2	1600	160	139,3	161 116	355 193	1580
56	2 1/4	7	1675	167,5	145,8	173 352	382 170	1700
60	2 1/2	7 1/2	1737	173,7	151,2	200 885	442 868	1970

* Other diameters available on request

*The breaking load is reduced by 10% in the case of wearing gauze at the ends.



D-Tech Winchline with HMWPE sheath

Manufactured from HMWPE fibers and coated with a proprietary PRO-TECH impregnation that improves its abrasion resistance and fatigue properties, D-Tech should be considered when high tear strengths are required.

Stronger than wire ropes of the same weight, it has proven to be an economical replacement in many applications.

Double-braid construction for higher breaking loads, with a 12-strand HMWPE core and a 32-strand HMWPE sheath.



TECHNICAL INFORMATION

- > RAW MATERIAL: HMWPE
- > SPECIFIC GRAVITY: 0.98 (FLEET)
- > MELTING POINT: 150°C / 265°C
- > ELONGATION AT % BS:
 - 25% ... 0.9%
 - 50% ... 1.6%



ADVANTAGES

- > 1/7 LESS WEIGHT THAN STEEL
- > MORE DURABLE THAN STEEL
- > LOW OPERATIONAL COST
- > LOW ELONGATION
- > FLEXIBLE, DOES NOT SCREW, DOES NOT ROTATE

APPLICATIONS.

- > MOORING
- > FUNDING
- > WINCHES
- > TRAILER

DIAMETER		SIZE CIRC.	WEIGHT			LOAD BREAK *		
mm	inches	inches	ktex	Kg / 100m	lbs / 100ft	kgf	lbf	kN
16	5/8	5 1/2	138	13.8	9.3	14,990	33,046	147
18	3/4	6	190	19	12.8	20,394	44,961	200
20	13/16	3	230	23	15.5	26,513	58,450	260
22	7/8	3 1/4	274	27.4	18.4	31,611	69,690	310
24	1	3	360	36	24.2	38,749	85,426	380
30	1 1/4	3 3/4	425	42.5	28.6	45,887	101,163	450
32	1 1/3	4	474	47.4	31.9	53,025	116,899	520
34	1 11/32	4 1/4	544	54.4	36.6	61,183	134,884	600
36	1 1/2	4 1/2	637	63.7	42.8	69,341	152,868	680
38	1 4/7	4 3/4	706	70.6	47.4	78,518	173,101	770
40	1 5/8	5	765	76.5	51.4	88,716	195,581	870
42	1 5/7	5 1/4	874	87.4	58.7	97,893	215,814	960
44	1 3/4	5 1/2	963	96.3	64.7	106,051	233,798	1040
46	1 3/4	5 1/2	1020	102	68.5	118,288	260,775	1160
48	2	6	1100	110	73.9	128,485	283,256	1260
52	2 1/8	6 1/4	1380	138	92.7	148,879	328,217	1460
54	2 1/8	6 1/2	1500	150	100.8	161,116	355,193	1580
56	2 1/4	7	1575	157.5	105.8	173,352	382,170	1700
60	2 1/2	7 1/2	1650	165	110.9	200,885	442,868	1970

* Other diameters available on request.

* The breaking load is reduced by 10% in the case of wearing gauze at the ends.



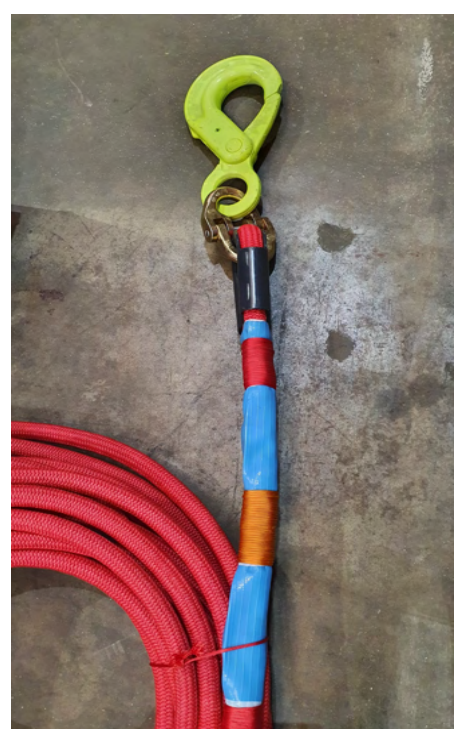
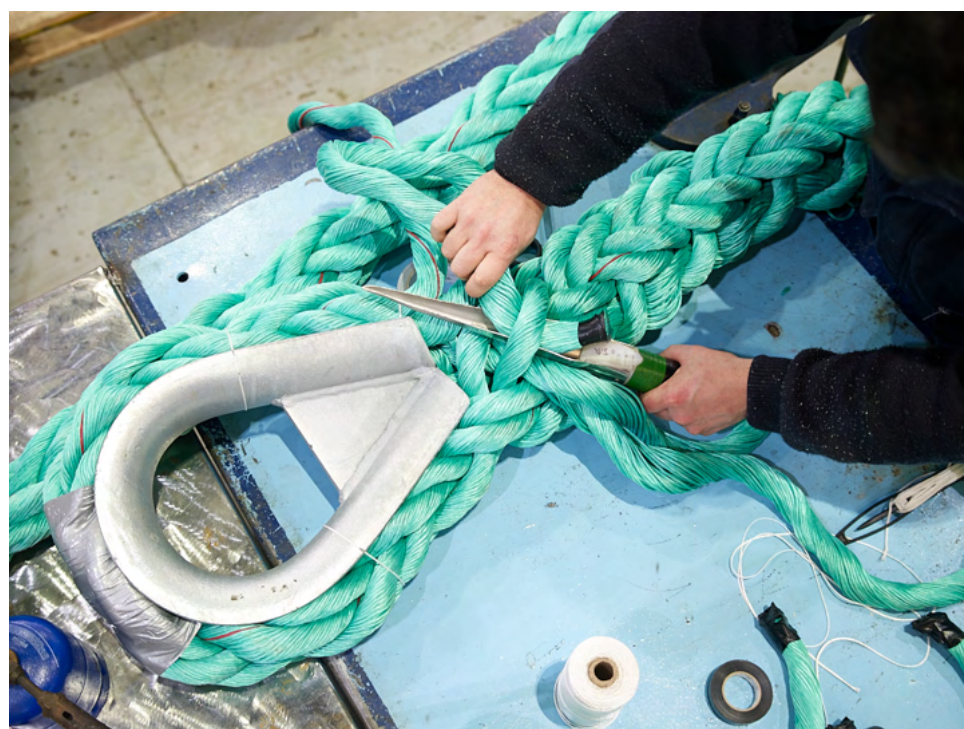
Preparation and Finishes

At Grupo Eurored we have a workshop specialized in sewing seams with different finishes, characterized by their high level of resistance and excellent quality.

We make solutions for various applications and with different materials, including loops, heart thimbles, reinforced, tubular, galvanized, stainless steel thimbles, hooks, rings, with and without cover, etc...

Our ropes are especially indicated for anchoring and mooring systems that ensure the integrity of the installation, even in adverse conditions.





A close-up photograph of several steel wire ropes. The ropes are twisted and show signs of wear, including rust and fraying. They are arranged in a diagonal pattern across the frame. A solid blue rectangular box is positioned in the lower right corner, containing the text 'STEEL WIRE ROPES' in white, bold, sans-serif capital letters.

STEEL WIRE ROPES

Steel wire ropes



STEEL WIRE ROPES

- > DYFORM 6X26 POLY CORE
- > DYFORM 6X26 IWRC
- > MARBLUE 6X19 POLY CORE
- > MARBLUE 6X19 IWRC

MIXED CABLES AND BAGS

- > POLYSTEEL SHOULDER
- > NYLON SHOULDER
- > POLYAMIDE SHOULDER

SLINGS

- > TUBULAR SLINGS

ACCESSORIES

- > THIMBLES FOR CABLES
- > BUSHINGS
- > GALVANIZED CABLE TIES AND TENSIONERS

Steel wire rope

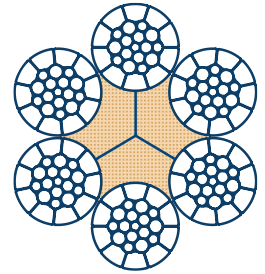
DYFORM 6x26 (10/5 & 5/5/1) Poly Core

High strength - compacted strands
reduces wear on pulleys.

BENEFITS

- > HIGH STRENGTH SMOOTH PERIPHERY FOR REDUCED PULLEY WEAR
- > TOUGH ROBUST 6 STRAND ROPE
- > ACCURATE ROPE DIAMETER FOR EFFECTIVE SPOOLING
- > LONG SERVICE LIFE

DIAMETER	WEIGHT	MINIMUM BREAKING LOAD	
		Tons	kN
mm	Kg / 100mtr		
16	103.3	17.1	168
18	129.1	21.6	212
20	159.7	26.7	262
22	191.7	32.3	317
24	224.8	38.5	377
26	271.5	45.1	443
28	317.4	52.4	514
30	357.3	60.1	590
32	408.8	68.4	671
34	468.2	77.2	757
36	514.5	86.6	849
38	578.6	96.4	946
40	635.2	106.9	1048
42	700.3	117.8	1155
44	768.5	129.3	1268



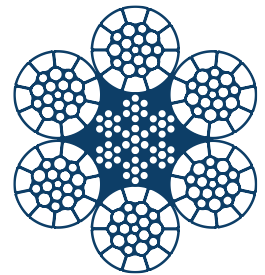
DYFORM 6x26 (10/5 & 5/5/1) IWRC

High strength - compacted strands
reduces wear on pulleys.

BENEFITS

- > HIGH STRENGTH SMOOTH PERIPHERY FOR REDUCED PULLEY WEAR
- > TOUGH ROBUST 6 STRAND ROPE
- > CRUSH RESISTANT
- > ACCURATE ROPE DIAMETER FOR EFFECTIVE SPOOLING
- > LONG SERVICE LIFE

DIAMETER	WEIGHT	MINIMUM BREAKING LOAD	
		Tons	kN
mm	Kg / 100mtr		
16	115.5	19.1	187
18	145.3	24.1	237
20	183	29.8	292
22	216.6	36.0	353
24	254.7	42.9	420
26	307.2	50.3	493
28	351.7	58.4	572
30	403.8	67.0	657
32	461.1	76.2	748
34	527.2	86.0	844
36	599.4	96.5	946
38	661.1	107.5	1054
40	725.4	119.1	1168
42	799.3	131.3	1288
44	876.3	144.1	1413



Steel wire rope

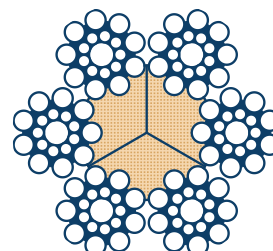
Marblue 6x19 (9/9/1) Poly Core

Larger diameter outer wires achieving better resistance to wear and abrasion.

BENEFITS

- > OUTER WIRES OF LARGER DIAMETER FOR A BETTER ABRASION RESISTANCE
- > FIBER CORE GIVES GREATER FLEXIBILITY

DIAMETER	WEIGHT	MINIMUM BREAKING LOAD	
		Tons	kN
mm	Kg / 100mtr		
14	70.3	10.4	102
16	90.9	14.9	146
18	116.8	18.8	185
20	144.2	23.2	228
22	175.1	25.6	276
24	205.4	33.5	328
26	241.4	39.3	385
27	261.8	42.4	416
28	279.2	45.6	447
30	315.6	52.3	513
32	370	59.5	584



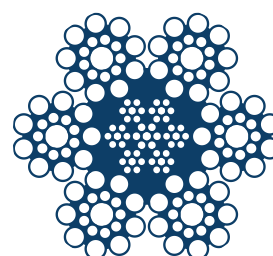
Marblue 6x19 (9/9/1) IWRC

Larger diameter outer wires achieving better resistance to wear and abrasion.

BENEFITS

- > OUTER WIRES OF LARGER DIAMETER FOR A BETTER ABRASION RESISTANCE
- > STEEL CORE FOR HIGH STRENGTH AND LOW ELONGATION.

DIAMETER	WEIGHT	MINIMUM BREAKING LOAD	
		Tons	kN
mm	Kg / 100mtr		
14	82.7	12.6	123
16	102	16.1	157
18	128.9	20.3	199
20	164.6	25.1	246
22	199.7	30.4	298
24	235.4	36.1	354
26	276.9	42.4	416
27	294.9	45.7	448
28	318.9	49.2	482
30	383.2	56.4	554
32	411	64.2	630



Polysteel case

This suitcase has an Itsasplus cover. It is especially suitable for working on marine soils very abrasive, due to the fact that it is very durable over time and maintains a low elongation.

BENEFITS
> EXCELLENT RESISTANCE TO ABRASION
> LOW ELONGATION



DIAMETER mm	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70
WEIGHT Kg/100mtr	60	70	90	95	100	100	105	110	120	140	150	160	180	200	240	260	270	280	290	300	310	320	330	340	350	360

Nylon case

This suitcase is generally made of cover materials that absorb water, allowing it to have a higher density. It is especially suitable for working on soils not very abrasive marine.

BENEFITS
> GOOD RESISTANCE TO ABRASION
> MEDIUM EXTENSION
> GOOD FLEXIBILITY



DIAMETER mm	24	26	28	30	32	3.4	36	38	40	42	44	46	48	50
WEIGHT Kg / 100mtr	65	70	90	97	105	115	120	135	150	160	185	195	205	215

High tenacity polyamide mesh

High tenacity case.

BENEFITS
> GREATER RESISTANCE TO ABRASION
> FOR VERY ABRASIVE GROUND

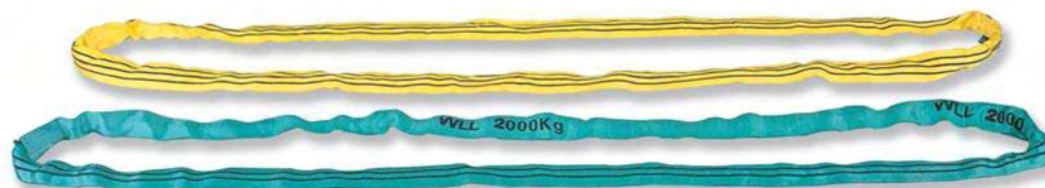


Tubular slings

Tubular slings made of 100% high-density polyester, resistant to moisture, which prevents damage by freezing (down to -40°). Color code according to DIN-EN1492-1.

BENEFITS

- > LOW ELONGATION
- > RESISTANT TO UV
- > COMPLY WITH MACHINERY DIRECTIVE 89/392/CE AND DIN61360

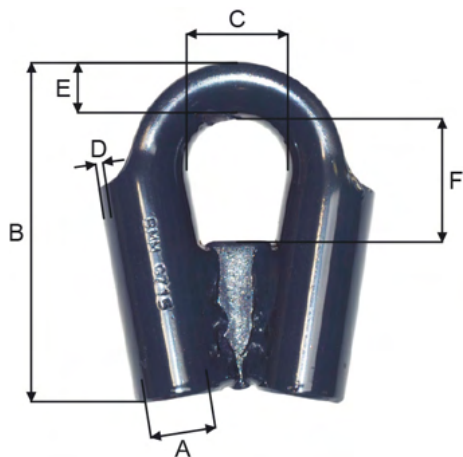


Código código / code	Referencia referencia / référence	Color cor / couleur	Largo comprimento / longueur (m)	Carga máxima de utilización (Kg) Carga máxima de trabalho / Charge maximale de travail			
78-386/010	ET 1000/0,5		0,5				
78-386/012	ET 1000/1		1				
78-386/014	ET 1000/1,5		1,5				
78-386/016	ET 1000/2		2	1.000	800	2.000	1.400
78-386/018	ET 1000/3		3				
78-386/020	ET 1000/4		4				
78-386/022	ET 1000/5		5				
78-386/024	ET 2000/0,5		0,5				
78-386/026	ET 2000/1		1				
78-386/028	ET 2000/1,5		1,5				
78-386/030	ET 2000/2		2	2.000	1.600	4.000	2.800
78-386/032	ET 2000/3		3				
78-386/034	ET 2000/4		4				
78-386/036	ET 2000/5		5				
78-386/040	ET 3000/1		1				
78-386/042	ET 3000/1,5		1,5				
78-386/044	ET 3000/2		2	3.000	2.400	6.000	4.200
78-386/046	ET 3000/3		3				
78-386/048	ET 3000/4		4				
78-386/050	ET 3000/5		5				
78-386/054	ET 4000/1,5		1,5				
78-386/056	ET 4000/2		2				
78-386/058	ET 4000/3		3	4.000	3.200	8.000	5.600
78-386/060	ET 4000/4		4				
78-386/062	ET 4000/5		5				
78-386/066	ET 5000/1,5		1,5				
78-386/068	ET 5000/2		2				
78-386/070	ET 5000/3		3	5.000	4.000	10.000	7.000
78-386/072	ET 5000/4		4				
78-386/074	ET 5000/5		5				
78-386/080	ET 6000/1,5		1,5				
78-386/082	ET 6000/2		2				
78-386/084	ET 6000/3		3	6.000	4.800	12.000	8.400
78-386/086	ET 6000/4		4				
78-386/088	ET 6000/5		5				
78-386/094	ET 8000/2		2				
78-386/096	ET 8000/3		3	8.000	6.400	16.000	11.200
78-386/098	ET 8000/4		4				
78-386/100	ET 8000/5		5				
78-386/106	ET 10000/3		3				
78-386/108	ET 10000/4		4	10.000	8.000	20.000	14.000

Accessories

Thimbles, cable ties and bushings

Tubular thimble: galvanized reinforced



Part no.	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg	For wire max. mm
G712K	12	84	23	4.0	8	24	0.36	10
G715K	15	95	27	5.0	10	31	0.52	12
G717K	17	100	27	5.0	10	38	0.55	14
G719K	20	112	32	5.0	12	46	0.65	16
G722K	22	125	35	5.0	15	47	0.90	18
G725K	25	150	45	6.3	16	61	1.26	22
G728K	28	157	45	7.0	16	56	1.64	24
G730K	30	170	47	7.0	18	68	2.02	25
G735K	35	190	60	7.0	22	73	2.50	32
G740K	40	212	70	9.0	36	80	3.70	36
G745K	45	228	70	7.0	27	86	3.71	38
G750K	50	255	75	7.0	35	97	4.65	42
G755K	55	268	80	7.0	31	99	4.90	48
G760K	60	270	100	7.0	37	120	6.10	54

Bushings: Aluminum, Copper and Stainless Steel



ALUMIUM

- > ISO-9000
- > FOR STEEL WIRE ROPES
- > DIAMETER: FROM 1 TO 50 MM



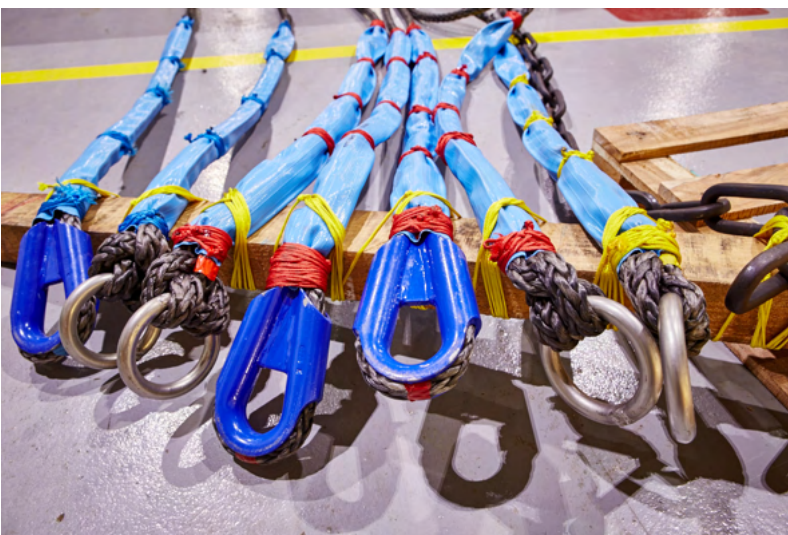
COOPER

- > FOR INOX WIRE ROPES
- > DIAMETER: FROM 1 TO 22 MM



STAINLESS STEEL

- > DIAMETER: FROM 4 TO 20 MM



Product safety:

Instructions and warnings in the use of wire rope

The following Instructions and Warnings are combined to serve as a guide on Product Safety and are intended for use by those with a basic understanding of cables, as well as the new user. These must be read, followed and passed on to others.

STORAGE

Inspect the cable immediately after delivery to verify that it matches the information detailed in the delivery documents.

The measurement of the cable diameter should be done as shown in figure 1.

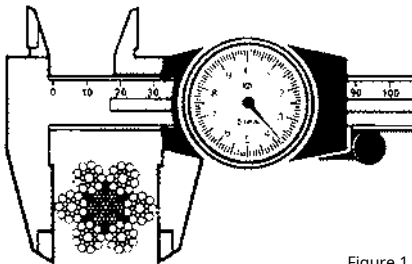


Figure 1

Failure to read, understand and follow these instructions can have damaging and damaging consequences.

A declaration of **Warning!** indicates a potentially situation

that could cause a significant reduction and / or jeopardize the performance of the cable, directly or indirectly, the safety or health of people who are within the danger zone of the cable and associated equipment.

Select a clean, well ventilated and dry area for storage, cover it with impermeable material if the conditions within the place require it.

Rotate the reel periodically during long periods of storage, especially in hot environments, to avoid losing the lubricant from the rope.

Warning! Never store wire rope in areas subject to high temperatures, as this could affect seriously your performance. In extreme cases, the original strength of its manufacture can be severely reduced, rendering it unsuitable.

for safe use. Keep the spool off the ground so that there is an air passage under the spool. Make sure that the cord is stored in a place free from chemical gases, steam or other harmful elements.

Warning! If this is not done, the cable will be contaminated by foreign elements and will begin to show corrosion before use.

Make sure that the cable is stored and protected in such a way that it is not exposed to accidental damage during storage or when putting it in or taking it out of storage.

HANDLING AND INSTALLATION

Cable handling and installation must be carried out according to a detailed plan and must be supervised by a competent person. Proper protective clothing and equipment should be worn.

Warning! An incorrect supervision in the handling and installation procedures can cause serious injuries to the people who are in the vicinity of the operation, as well as to the people directly involved in the process.

BEFORE INSTALLATION Visually inspect the cable to ensure that no damage or deterioration has occurred during storage or transportation. Verify that there are no potential hazards in the work area that could affect the

safe cable installation. Check the condition of the cable-related equipment in the container. Includes the following:

Drum

Check the general condition of the winch drum to make sure it is in good condition and that there are no damages or areas that could cause damage to the rope.

Pulleys

Make sure the groove in the pulley is the correct size and shape for the cable installation. Check that the pulleys rotate freely and in good condition. When a new cable is installed, a variation in diameter is observed compared to the previously used worn cable. The new cable may not fit properly

in the previously used worn groove profile, causing possible deterioration and unnecessary damage to the cable. This can be remedied by grinding the pulley grooves before installing the new cable. Before doing this, caution should be taken to ensure that there is enough material present to maintain strength in the pulley after machining.

Structure

Make sure that no part of the ship's steel frame is interfering with the cable routing and winch installation.

Warning! Failure to do so may cause the cord to become contaminated with foreign substances and cause oxidation before use.



Floatation

Floatation

Beaconing and Mooring



BEACONING AND MOORING

- > CONICAL
- > SPHERICAL
- > OFFSHORE
- > INFLATABLES
- > PRODUCTION BUOYS
- > FLOATS

PERIMETER

- > SIGNALING
- > MARINE LIGHTS

Floatation

Beaconing and Mooring



Flotation solutions designed for aquaculture

Grupo Eurored has a wide range of buoys of different volumes and shapes for its implementation in the maritime and aquaculture sector.

Our technical department deals with the design and manufacture of floating installations for the cultivation of different species or for the development of buoyage and mooring elements, applying technical and practical knowledge in order to offer the most suitable flotation solutions for each project.

The different models that we work with are specially designed for use in aquaculture and signalling. The quality and resistance of the materials with which they are manufactured provide durability and safety in the most severe marine conditions.

The structures are manufactured in HDPE using the rotational system and are injected with PUR in order to efficiently and durably withstand all the forces that act in the marine environment.



FEATURES

- > Different volumes: From 100 l. Up to 4000 litres.
- > Beacons approved by the IALA
- > Possibility of installing visual signaling
- > Custom designs

QUALITY

- > Materials conceived for great durability
- > Corrosion resistant in marine environment
- > They guarantee the safety of the installation even in severe conditions



Certified product

Meets strength and safety requirements in accordance with NS 9415 (Norwegian Standard) Marine Fish Farms.

Buoy Aqua-series

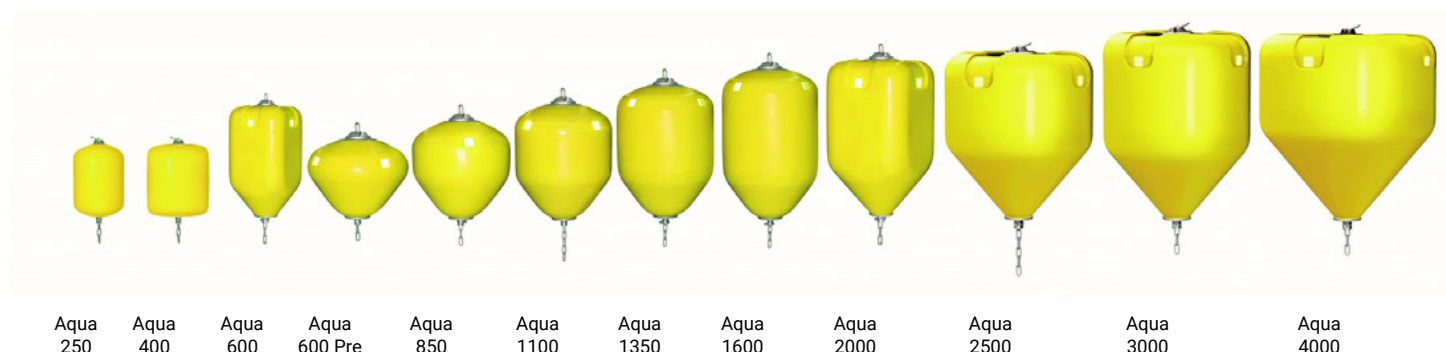
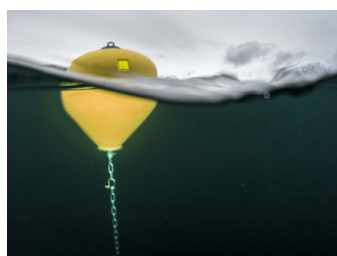


The Aqua series buoys are made with an outer shell made of rotationally molded PE and filled with polystyrene foam (EPS), which guarantees a compressive strength of 5 mH₂O and a density of 25 kg m³. High quality continuous chain is terminated at each end of the buoy through the use of termination discs that are designed to prevent damage to the buoy. The chain is easily attached by a shackle to the anchor line.

All wear parts are standard components and can be easily replaced. The Aqua series buoys are designed for surface use and are equipped with four yellow daylight reflective tapes for better visibility.

FEATURES

- > Hot-dip galvanized steel frames
- > Light armor option
- > Material: Rotomolded polyethylene (PE)
non-inflatable rigid shell and filled with polystyrene foam (EPS) or polyurethane foam (PUR)
- > Certified product: Meets resistance requirements and safety in accordance with marine fish farms. NS9415 (Norwegian Standard)



Ref	Buoyancy Weight		Height	Ø Width	Volume	Colour	Option light armor	WO
AQUA 250	228kg	32kg	124cm	65cm	260			
AQUA 400	400kg	45kg	110cm	77cm	450			
AQUA 600	560kg	55kg	165cm	77x77cm	620			
AQUA 600 PRE	560kg	60kg	127cm	120cm	620			
AQUA 850	800kg	73kg	143cm	120cm	873			
AQUA 1100	1035kg	95kg	165cm	120cm	1130			
AQUA 1350	1262kg	118kg	197cm	120cm	1380			
AQUA 1600	1510kg	130kg	227cm	120cm	1640			
AQUA 2000	1900kg	180kg	228cm	117 x 117cm	2020			
AQUA 2500	2340kg	210kg	201cm	160cm	2550			
AQUA 3000	2815kg	235kg	235cm	160cm	3050			
AQUA 4000	3790kg	285kg	235cm	194cm	4075			

APB modular buoys

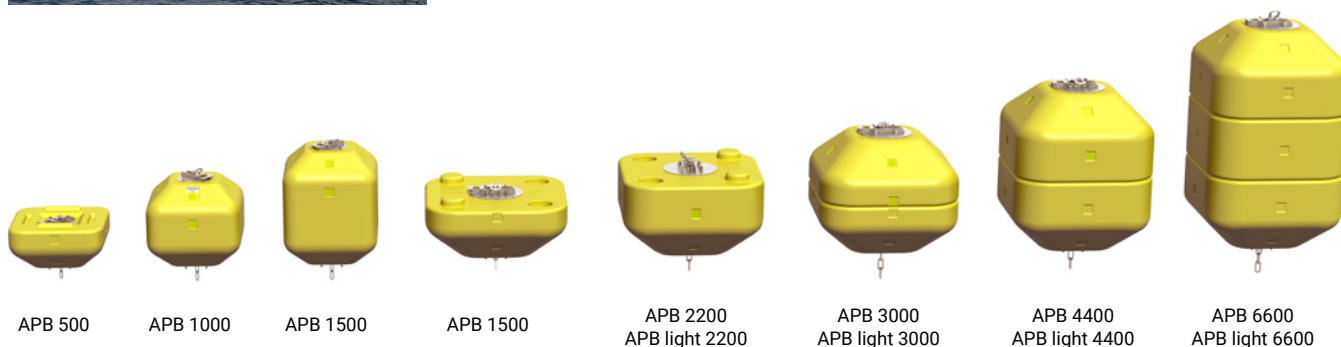


The APB series represents a modular series of buoys, designed for surface and underground use.



FEATURES

- > Hot-dip galvanized steel frames
- > Light armor option
- > Material: Rotational molded polyethylene (PE) non-inflatable rigid shell and filled with polystyrene foam (EPS) or polyurethane foam (PUR)
- > Certified product: Meets the strength and safety requirements in accordance with NS 9415 marine fish farms (Norwegian Standard).



Ref	Buoyancy	Weight	Height	Ø Width	Volume Color	Option light armor	WO
AQUA 500 APB	495kg	85kg	72cm	117 x 117cm	685		
AQUA 1000 APB	1015kg	145kg	139cm	117 x 117cm	1160		
AQUA 1500 APB	1500kg	255kg	109cm	180x180cm	1730		
AQUA 2200 APB	2200kg	280kg	145cm	180X180cm	2500		
AQUA 3000 APB	3000kg	400kg	194cm	180x180cm	3400		
AQUA 4400 APB	4400kg	590kg	245cm	180X180cm	5000		
AQUA 6600 APB	6400kg	890kg	335cm	180X180cm	7350		



PEHD 100 Offshore Buoy

The PEHD100 depth and mooring buoys are specially designed for Offshore aquaculture. Manufactured under ISO standards, they are very resistant and durable.

During the assembly process they are pressurized. This new system allows them to be submerged to depths greater than 3 bars.



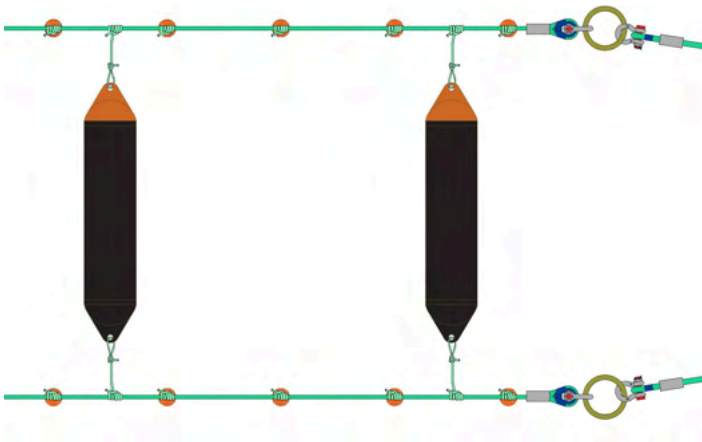
Offshore Buoy



Optimal for Long Line crops

The PEHD100 buoys are used for the installation of Long Line crops, especially in exposed areas, helping to maintain production and withstand high work pressures. They are very easy to install and can be manufactured according to the particular needs of each installation.

The utility of a PEHD buoy as a mooring element is to lift the catenary and offer better resistance to structures.



FEATURES

- > Optimal for Long Line cultivation systems

> Excellent performance in highly exposed areas.

> They withstand high work pressures.
- > Different diameters, length and volume: they can be manufactured according to the particular needs of the installation.

> Pressurized, they resist depths greater than 3 bar

> Guarantee over 20 years.



PEHD 100 PEHD 100 PEHD 100 PEHD 100 PEHD 100 PEHD 100

REF.	Volume	Weight	Height	Ø / Width	Colour	Preassure
PEHD 100	60	8,5	56,6	45	●	3
PEHD 100	126	17	113	45	●	3
PEHD 100	160	22,6	150,7	45	●	3
PEHD 100	180	25,5	169,5	45	●	3
PEHD 100	208	29,5	195,9	45	●	3
PEHD 100	287	40,7	270,3	45	●	3
PEHD 100	359	50,9	338	45	●	3

Volume in liters / Size in cm / Weight in kg / Preassure in at

Buoys EM PE100



Buoys made of PE100 last generation, an extremely resistant and flexible material with excellent performance in marine environments.

Among the numerous advantages, its great resistance stands out, since this material is not affected by salt water, sunlight or marine organisms, which gives it immunity to corrosion.

FEATURES

- > Great flexibility and resistance
- > Great Stability on the Long Line
- > Low maintenance
- > Pressurized to work in depth
- > Material: PE100



A



B



C



D



E



REF.	Volume	Total buoyancy	Weight	Height	Ø / Width	Ø Hole	Colour	Preasure
A	130-1004	114-1004	16-100	115-665	45	5	●	up to 2,5 or not pressurized
B	49	42	7	55	45	5	●	up to 2,5
C	50	42	8	65	45	5	●	up to 2,5
D	49	42	7	55	45	5	●	not pressurized
E	50	42	8	16,50	45	5	●	not pressurized
F	360	348	51	113	90	5	●	not pressurized

Volume in liters / buoyancy in kg / Size in cm / Weight in kg / Preasure in at



SBH-series Buoys



SBH buoys are specially developed and designed for mussel farming. This is due to features such as the ability to resist tearing and wear as they have the highest breaking load for cable support.

They are gray in color, cylindrical in shape and with a smooth surface that makes these buoys also ideal for places exposed to ice.

FEATURES

- > Buoys specially designed for mussel farming
- > Suitable for places with low temperatures
- > Abrasion resistant
- > Large breaking load

REF.	Volume	buoyancy	Weight	Height	Ø / Width	Colour
SBH120	120	114	6	90,5	50	●
SBH250	250	238	12	118	65	●

Volume in liters / buoyancy in kg / Size in cm / Weight in kg / Preassure in at

Buoys LSB-series



LSB buoys are constructed with a rotational molded PE outer shell filled with polystyrene foam (EPS). This model is designed for its use on the surface thanks to its materials, a high resistance to wear and the highest possible breaking load for the cable support is guaranteed.

FEATURES

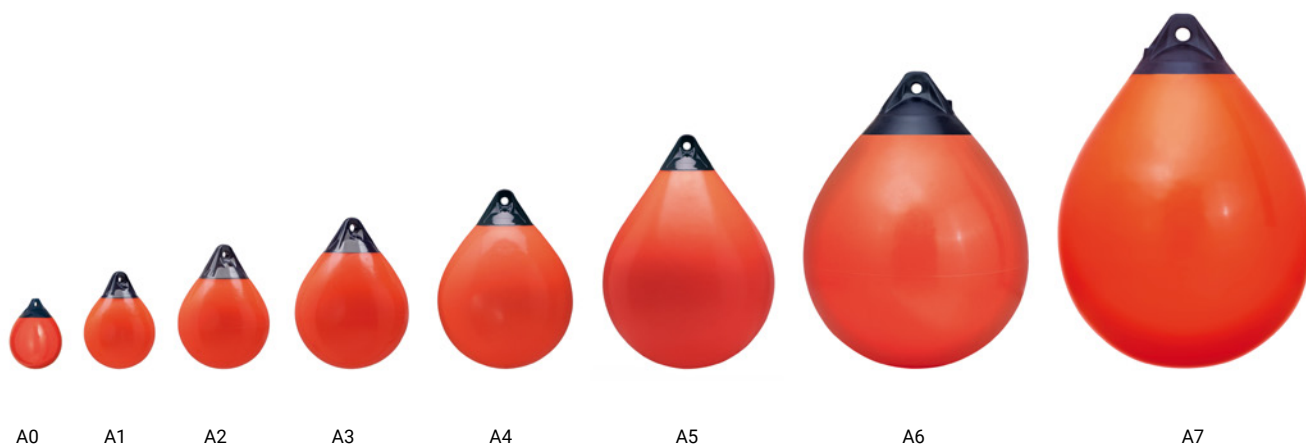
- > Light buoys for anchoring
- > High wear resistance
- > Excellent buoyancy
- > Yellow color for greater visibility
- > Large breaking load

REF.	Volume	buoyancy	Weight	Height	Ø / Width	Colour
LSB120	120	110	10	90,5	50	●
LSB250	250	230	19,5	118	65	●

Volume in liters / buoyancy in kg / Size in cm / Weight in kg / Preassure in at



A-Series inflatable buoy



REF.	Buoyancy*	Weight	Height	Ø / Width	Diameter of the eye	Colour of the body	fastening color
A0	5,7 / 3,4	0,60	28,0	21,0	1,8	○ ● ● ● ●	●
A1	13,0 / 7,8	1,15	38,0	29,5	2,2	○ ● ● ● ●	●
A2	32,0 / 19,2	2,10	50,0	39,0	2,5	○ ● ● ● ●	●
A3	52,0 / 31,2	3,10	57,5	46,0	2,8	○ ● ● ● ●	●
A4	90,0 / 54,0	4,10	71,0	55,0	2,8	○ ● ● ● ●	●
A5	215,0 / 129,0	8,30	94,0	71,0	2,8	○ ● ● ● ●	●
A6	405,0 / 243,0	11,30	112,0	85,0	3,5	○ ● ● ● ●	●
A7	670,0 / 402,0	21,00	142,0	110,0	6,0	○ ● ● ● ●	●

Size in cm / Weight in kg

* Gross buoyancy / Maximum recommended load. Do not over inflate. Maximum 0.15 - 0.20 bar pressure at 20° Celsius. Subsidy +/- 5%.

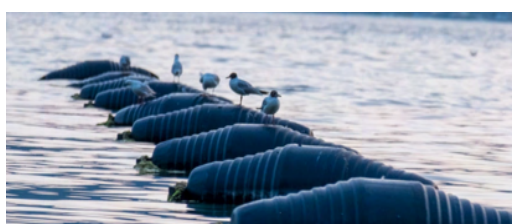
Suspended system production buoy

Pescafloat floats for medium and great depths.



FEATURES

- > Design with central hole.
- > Manufactured by injection and friction welded.
- > Available in 280mm models. (11").
- > Special for of medium and great depths trawling.



Model	Volume	Diameter(mm)	Length(mm)
ACUI550	130L	550	1400
ACUI700	250L	700	1800

NF-series buoys



The NF series floats are manufactured from ethylene vinyl acetate (EVA) that maintains its buoyancy for a long period of time, even under extreme conditions, without cracking. In addition, they have a very high tensile strength and do not absorb water.

The extraordinary elasticity of the BacelITM material provides floats with the maximum resistance to contraction, permanent deformation and breakage.

FEATURES

- > The eyelets of each float are included in the first stage of the production cycle and, therefore, form an integral part of the finished products.
- > Material: made with BacelITM foam.

REF.	Buoyancy*	Weight	Height	Ø / Width	Ø / Hole	Colour
NF7	8	1,2	24,2	23,5	3,2	Yellow
NF10	11	1,6	26,5	26	3,2	Yellow

Net buoyancy / Size in cm / Weight in kg

Buoys BPB-series



BacelITM BPB floats are lightweight, have a very high tensile strength and do not absorb water. Its production technology guarantees superior quality floats.

FEATURES

- > High resistance and lightness
- > Outstanding elasticity provides floats that have the highest resistance to shrinkage, permanent deformation and breakage.
- > Material: Ethylene vinyl acetate (EVA)



BPB 3500 BPB 4600 BPB 5700 BPB 6800 BPB 8000 BPB 9000 BPB 9800 BPB 11000 BPB 14000

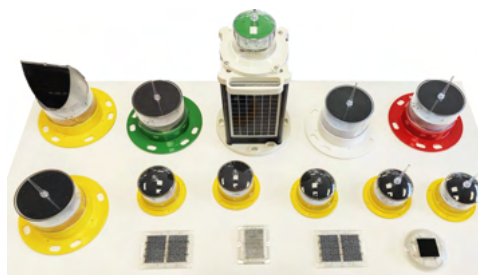
REF.	Buoyancy*	Weight	Height	Ø / Width	Ø / Hole	Colour
BPB3500	3,5	0,5	20,1	17,6	3,2	Yellow
BPB4600	4,6	0,6	22,5	18,6	3,2	Yellow
BPB5700	5,7	0,7	22,4	21,2	4,5	Yellow
BPB6800	6,9	0,9	23,0	22,6	4,5	Yellow
BPB8000	8,0	1,0	26,4	23,2	4,5	Yellow
BPB9000	9,0	1,0	27,3	24,0	5,0	Yellow
BPB9800	9,7	1,2	27,4	24,8	4,5	Yellow
BPB11000	10,9	1,2	28,5	25,5	5,0	Yellow
BPB14000	14,0	1,2	31,0	28,5	5,0	Yellow

Net buoyancy / Size in cm / Weight in kg



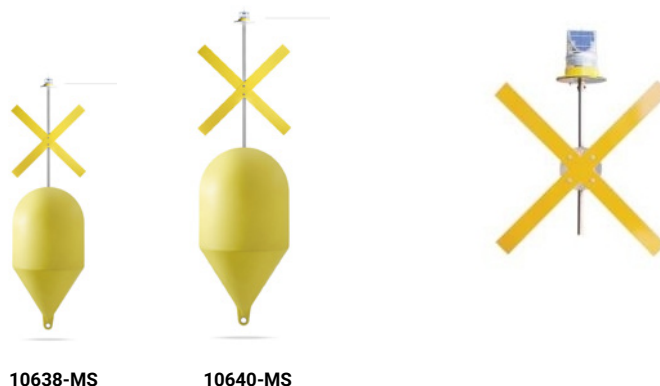
Technical drawing of a vertical industrial machine, likely a pump or valve assembly. The drawing shows the following dimensions and features:

- Overall Height:** 4479
- Top Section Height:** 1394
- Mid Section Height:** 1276
- Bottom Section Height:** 1123
- Top Flange Diameter:** $\phi 245$
- Bottom Flange Diameter:** $\phi 1100$
- Label:** LF



San Andres Cross Conical Perimeter Buoy

Rigid buoy for special mark.
Buoy of special mark with cross of San Andrés.



REF.	Total buoyancy	Working buoyancy	Buoy Hight	Total Hight	Ø Width	Bar	Cross
10638-MS	120	45	110	220	60	3	70x9
10640-MS	335	110	164	270	80	3	70x9

Buoyancy in kg / Size in cm / Weight in kg

It is supplied empty or filled with polyurethane foam, which will influence the total buoyancy kg and working buoyancy.



Standard signaling buoys

High visibility flotation solutions according to IALA recommendations, with mooring systems and chain available.

Available in different configurations to adapt to each installation, they have excellent buoyancy and stability.

FEATURES

- > Materials: rotomolded polyethylene body.
- Uniform wall thickness.
- > Specially designed for beach marking.
- > Molded in one piece.
- > Smooth surface.
- > Supplied empty or filled with polyurethane foam.



Bicónical 1

Bicónical 2



cylindrical 1



cylindrical 2



spherical 1



spherical 2



spherical 3

Ref	Buoyancy total	Buoyancy Working	Weight	Height	Ø Width	Ø Hollow	Colour
bico 30	35	-	-	740	400	35	Red
bico 290	290	-	-	1610	800	55	Red
Cyl 25	25	-	-	640	400	35	Green
Cyl 200	200	-	-	1610	800	55	Green
Esf 45	45	-	-	660	400	35	Yellow
Esph 130	130	-	-	1100	600	55	Yellow
Esf 410	410	-	-	1610	800	55	Yellow

Buoyancy in kg / Size in cm / Weight in kg

It is supplied empty or filled with polyurethane foam, which will influence the total buoyancy kg and working buoyancy.



marine lights



Signal lights for beacons and buoys with high intensity LED technology, with a visible range of up to 6 nautical miles depending on the model and IP68 sealing, which guarantees the durability of the lanterns. They work autonomously with solar technology using integrated solar panels, which makes them more efficient, works better in low light conditions and gives them a longer lifespan.

The latest LED technology offers superior

visibility, requires minimal maintenance and has a lifespan of up to 12 years.

Optionally, you can also incorporate nickel batteries housed in a sealed compartment for greater autonomy, as well as various monitoring and remote control options. Ideal for signaling aids to navigation, lighting of marinas, aquaculture facilities, docks and ports. Signal colors compatible with IALA-E-200-1.

FEATURES

- > Solar efficiency with great autonomy
- > Wide current range 1MN-13MN
- > Easy installation on beacons and buoys
- > IP68 tightness and IALA compliance

OPTIONAL BENEFITS

- > Battery extension up to 29ah depending on model
- > Monitoring, programming and IR remote control
- > GPS synchronization
- > Satellite and GSM communications



Adaptability



Battery



Colours



APP remote control

Allows full programming of the ER-75 marine lantern via Bluetooth® technology. Commissioning, configuration and maintenance checks can be controlled from a distance of up to 50 meters via phone or tablet. Plus, with the built-in solar calculator, you can check the flashlight's working capacity remotely using the device's GPS coordinates or manually select a global location from anywhere. The Solar Calculator will determine the selected location's average sunlight, power needs based on the flash code and intensity settings, providing a suitability result to the user.













REF.	Range NM*	Colour	GPS / Sincro	Autonomy	Optional Battery	Warranty	Tightness
ER-15	1-2	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68
ER-60	2-3	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68
ER-70	2-3	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68
ER-C310	3-5	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68
ER-75	5	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68
ER-M550	1	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68
ER-M650	3	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68
ER-M850	6	● ● ○ ●	✓	Solar+Battery	✓	3 years	IP68

*Range in Nautical Miles / The ER-75 model has a Bluetooth connection for remote programming





Flashlight Accessories






Mounting plates

PRODUCT	REF.	DESCRIPTION	PRODUCT	REF.	DESCRIPTION
	ER-MC-01	50 mm mounting plate for ER-07 and ER-15 base		ER-MC-09	Buoy mounting plate for ER-15 lantern on ER-B600 and ER-B700 buoys
	ER-MC-02	50 mm mounting plate for ER-60 base		ER-MC-10	Buoy mounting plate for ER-60 lantern on ER-B600 and ER-B700 buoys
	ER-MC-03	Mounting plate 50 mm. for 200mm base flashlights: ER-60LB, ER-70, ER-C310...		ER-MC-11	Buoy mounting plate for ER-70 lantern on ER-B600 and ER-B700 buoys
	ER-MC-07	Mounting plate 200 mm. to fit ER-C500		ER-MC-13	200 mm flashlight plate adapter. Converts 3/4 base mounting points
	ER-MC-08	Mounting plate 200 mm. to fit ER-C600		ER-MC-13HD	200 mm flashlight plate. Converts 3/4 base mounting points

Mounting brackets

PRODUCT	REF.	DESCRIPTION	PRODUCT	REF.	DESCRIPTION
	ER-MC-04	Mounting bracket to fit to ER-10, ER-50 and ER-23 series • Post 50mm • 200mm base, 3 mounting points		ER-MC-05	90 degree wall mount bracket • 50mm

Screws

ER-MC-14	ER-MC-14	ER-MC-14	ER-MC-14	ER-MC-14
				
316 stainless steel screws to mount the ER-15 • M5 x 20mm	316 stainless steel screws to mount the ER-60 • M4 x 20mm	316 stainless steel screws to mount the ER-70 and ER-125 • M8 x 25mm	316 stainless steel screws to mount the ER-C310, ER-C410 • M8 x 30mm	316 stainless steel screws to mount the ER-C500 and ER-C600 • M8 x 20mm

Toolbox

Tool Kit (complete including battery chargers), includes:

1x Polycarbonate Tool Box
1x small flat blade screwdriver
1x Medium Phillips Screwdriver
1x 5mm Allen key
1x 6mm Allen key
1x 13mm combination wrench
1x Adjustment Plug Wrench
1x 5/8 adapter
1x 50gm tube of marine grease
1x NiMH battery charger (BTC. NiMH3,6V)
1x SLA battery charger (BTC SLA. 12V)

Spare parts:

2x 20mm plugs
5x valves
5x battery o-rings for standard flashlights
SL-60/SL-70
5x battery o-rings for standard flashlight SL-70-RF
5x O-rings for SL-C310/ standard flashlights
SL-C410/SL-C420
20x battery cover screws







**GRUPO
EURORED**

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División de acuicultura:

Estrada Fortóns nº 23.
Redondela - 36812
Pontevedra

+34 986 203 312

+34 626 461 848

tecnico@grupoeurored.com

www.grupoeurored.com

   @grupoeurored

