

MARINE TECHNICAL SUPPLIES



# GROUP GROUP

80%

of all the projects are carried out outside the Baltic Sea region

~300

employees and specialists

2100

ships served annualy

7400

projects worldwide

5000

m<sup>2</sup> of warehouse and workshop facilities

PIKASOMA MARINE SUPPLIES company started its journey in the port of Klaipeda in 1997 and is a part of GARANT GROUP international holding.

For more than 25 years Marine Supplies division has been implementing complete mooring and towing solutions, delivering marine supplies and everything you need for shipping, fishing industries, offshore, newbuilding and ship repair yards.

In recent years we have expanded our global warehouse network and shaped our stock to meet the specific needs of your fleet. Our expert sales managers quickly process your inquiry and support with a relevant technical advice. A team of dedicated logisticians secure a smooth delivery to the right location.

AMBER is our registered brand of high quality, reliable ship ropes. We have designed and developed AMBER ropes range to offer technologically relevant and safe solutions for your fleet.

Durable AMBER mooring ropes are easy to handle which makes maneuvering of vessels extremely accurate. The range of synthetic multipurpose ropes is available in different diameters with excellent performance indicators.



A member of















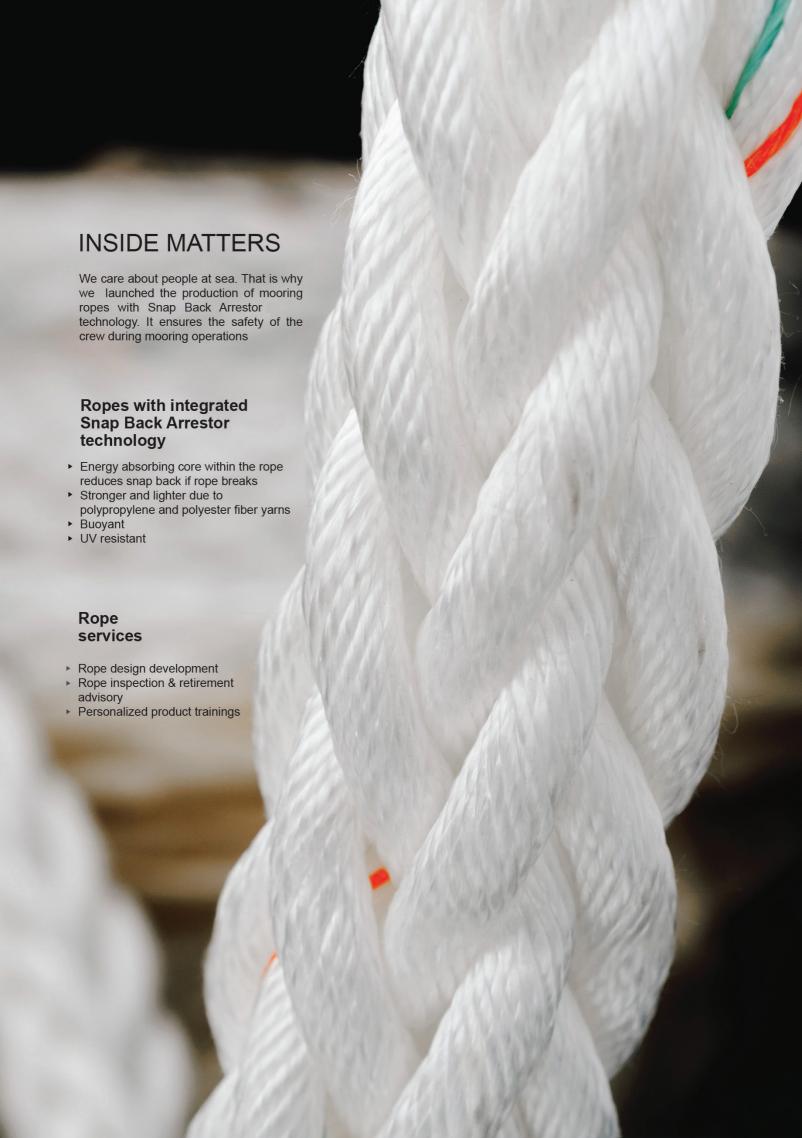




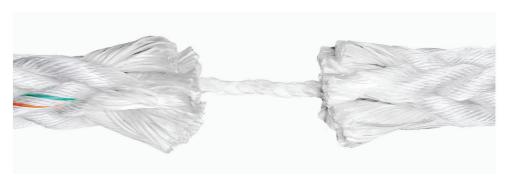
















# **Fiber**Combination of Polypropylene and Polyester Fiber yarns



#### Construction

12-Strand plaited regular lay with Anti-Snap Back rope in the core



Specific gravity 0.98 (floating)



Elongation 17-20%



# **Melting point** 165°C



**UV resistance** Excellent



Abrasion resistance Excellent



#### **Application**

Mooring, towing, anchor line, shock line, slings etc.



Integrated Snap Back Arrestor technology. Reduces snap back if rope breaks

Ensures safe mooring activities

Material composition as AMBER MIX

Polypropylene and polyester fiber yarns give higher strength and lighter weight to the rope

Diameter (mm)	Circ (inch)	Weight/220m (kg)	Breaking strength	LDBF MEG4
40	5	165	33.2	29.88
44	5-1/2	195	40.2	36.18
48	6	226	47.3	42.57
50	6-1/4	247	51.5	46.36
52	6-1/2	269	55.6	50.04
56	7	309	63.8	57.42
60	7-1/2	350	72.6	63.27
64	8	401	79	71.1
68	8-1/2	454	86.7	78.03
72	9	506	97	87.3
80	10	640	117.9	106.11

The product is approved by Lloyd Register. AMBER MIX S rope is produced according to ISO9554 and testedaccording to ISO2307 and OCIMF MEG4.









**Features** 

Polypropylene and

polyester fiber yarns give

higher strength and lighter weight to the rope. It has a great value among the

customers for its quality,

durability and performance indicators



High tenacity Polypropylene with outer yarns alternating with Polyester



#### Construction

8-strand braided rope



### **Specific gravity**

0.99 (floating)



### **Elongation**

18-20%



### **Melting point**



### **UV** resistance

Excellent



#### **Abrasion resistance** Excellent



#### **Application**

Mooring, towing, anchor line, shock line, slings etc.

Diameter (mm)	Circ (inch)	Weight/220m (kg)	Breaking strength	LDBF MEG4
40 44 48 50 52 56 60 64	5 5-1/2 6 6-1/4 6-1/2 7 7-1/2 8	165 195 226 247 269 309 350 401	33.2 40.2 47.3 51.5 55.6 63.8 72.6 82.5	30.0 36.2 42.6 46.4 50.0 57.4 65.3 74.2
66 68	8-1/16 8-1/2	427.7	87.8	79.0
72	0-1/2 9	454 506	93.0 103.9	83.7 93.5
80	10	640	127.6	114.8

All products are produced in accordance with OCIMF guidelines and IACS approved











**Fiber** UHMWPE,Nylon



Construction

12-Strand UHMWPE rope with Anti-Snap Back rope in the core



Specific gravity 0.97 (floating)



Elongation 3.5%-4%



Melting point 150°C



**UV resistance** Very good



**Abrasion resistance** Very good



**Application** 

Mooring, towing, anchor line, shock line, slings etc

#### **Features**

Integrated Snap Back Arrestor technology. The Snap Back Arrestor is an energy absorbing core within the rope

Material composition as AMBER ULTRA

Reduces snap back if rope breaks

Ensures safe mooring activities

Low water absorption. Remains light when working in wet conditions

Buoyant

UV resistant

Diameter (mm)	Circ (inch)	Weight/220m (kg)	Breaking strength	MBL (t)	LDBF (t)
28	3-1/2	91.3	56.92	56.92	51.23
30	3-3.4	107.8	66.1	66.1	59.49
32	4	122.1	74.66	74.66	67.19
34	4-1/4	136.4	83.23	83.23	74.91
36	4-1/2	155.1	93.94	93.94	84.55
38	4-3/4	173.8	104.65	104.65	94.19
40	5	192.5	114.75	114.75	103.28
42	5-1./4	215.97	124.85	124.85	112.37
44	5-1/2	237.97	135.86	135.86	122.27

The product is approved by Lloyd Register. AMBER ULTRA S rope is produced according to ISO 9554 and tested according to ISO 2307 and OCIMF MEG4.









**Features** 

Wire rope replacement

because of its superior strength



**Fiber** UHMWPE, Urethane coated



**Construction**12-strand braided rope



Specific gravity 0.99 (floating)



Elongation 4-5%



**Melting point** 150°C



**UV resistance** Excellent



Abrasion resistance Excellent



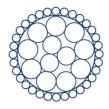
**Application**Mooring, towing, anchor line, shock line, slings etc.

Diameter (mm)	Circ (inch)	Weight/220m <sup>(kg)</sup>	Breaking strength	LDBF MEG4
22	2-3/4	67.1	50	45
24	3	78.9	58	52.2
26	3-1/4	90.2	66	59.4
28	3-1/2	103.4	74	66.6
30	3-3/4	114.4	81.5	73.4
32	4	125.4	88.5	79.7
34	4-1/4	137.5	96.3	86.67
36	4-1/2	149.6	104	93.6
40	5	184.4	184.8	166.3
44	5-1/2	224.4	152	136.8
48	6	266.6	179	161.1
50	6-1/4	290.4	194	174.6
52	6-1/2	310.2	206	185.4
54	6-7/8	347.6	221	198.9
56	7	358.6	236	212.4
60	7-1/2	385	252	226.8

All products are produced in accordance with OCIMF guidelines and IACS approved









Fiber
UHMWPE+ Polyester



# Construction 12-strand braided rope + outer layer cover



Specific gravity 0.99-1.11 polyester jacket 0.99 UHMWPE jacket



**Elongation** 4-5%



Melting point 150 °C UHMWPE jacket 250 °C polyester jacket



**UV resistance** Excellent



Abrasion resistance Excellent



# **Application**Mooring, towing, anchor line, shock line, etc.

#### **Features**

Ropes float in water which makes them significantly safer. Their low elongation combined with their low weight makes their handling easy and the maneuvering of vessels extremely accurate especially in distress & critical times. Polyester jacket will protect the UHMWPE rope core and prolong the service life of a rope

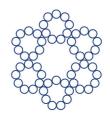
Diameter (mm)	Circ (inch)	Weight/220m (kg)	Breaking strength	LDBF MEG4
22	2-3/4	68.4	38.6	34.7
24	3	81.4	46.0	41.4
26	3-1/4	95.7	54.0	48.6
28	3-1/2	112.2	63.1	56.8
30	3-3/4	128.9	68.7	61.8
32	4	143	74.2	66.8
34	4-1/4	157.8	83.6	75.2
36	4-1/2	173.8	93.0	83.7
40	5	209	114	102.6
44	5-1/2	244.2	135	121.5
48	6	301.4	165.2	148.7
50	6-1/4	327.8	179.3	161.4
52	6-1/2	354.2	195.2	175.7
54	6-7/8	378	212.6	191.3
56	7	402.6	230	207.0
60	7-1/2	451	263	236.7

All products are produced in accordance with OCIMF and MEG4 guidelines and IACS approved









**Features** 

High deformation & fatigue

resistance



#### **Fiber**

Nylon monofilament and high tenacity nylon multifilament



#### Construction

6-strand cross lay rope +



### Specific gravity

1.14



### **Elongation**



# **Melting point** 218°C



### **UV** resistance

Excellent



## Abrasion resistance

Excellent



#### **Application**

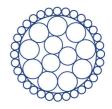
Mooring, towing, winch line, anchor line and other heavy duty applications.

Diameter (mm)	Circ (inch)	Weight/220m <sup>(kg)</sup>	Breaking strength	LDBF MEG4
40	5	217.8	31.4	28.3
44	5-1/2	253	39.9	35.9
48	6	301.4	47.5	42.8
52	6-1/2	354.2	51.3	46.2
56	7	411.4	63.7	57.3
60	7-1/2	470.8	68.4	61.6
64	8	536.8	77.9	70.1
68	8-1/2	607.2	89.3	80.4
72	9	679.8	102.6	92.3
80	10	838.2	119.7	107.7

All products are produced in accordance with OCIMF and MEG4 guidelines and IACS approved









#### **Fiber**

UV stabilized high tenacity polyolefin hybrid yarn



#### Construction

12-strand braided core + outer cover layer



### **Specific gravity**

0.93 (floating)



#### **Elongation** Approx. 15%



### **Application**

Excellent

**Melting point** 

**UV** resistance

165°C

Good

Mooring, winch line, anchor line and other heavy duty applications.

Abrasion resistance

Diameter (mm)	Circ (inch)	Weight/220m (kg)	Breaking strength	LDBF MEG4
48	6	291.5	48	43
50	6-1/4	316.4	52	47
52	6-1/2	351	59	53
56	7	401.5	65	59
60	7-1/2	440	75	68
64	8	490.6	86	77
66	8-1/16	506.9	91	82
68	8-1/2	550	95	86
72	9	617.1	106	95
80	10	792	130	117



#### **Features**

Low elongation increases safety by minimizing risks due to snapback action. Doesn't lose strength when wet.





### **Mooring tails**





#### Fiber

High tenacity Polypropylene with outer yarns alternating with Polyester



#### Construction

8-strand braided rope



**Specific gravity** 0.99 (floating)



Elongation 18-20%



# **Melting point** 165°C



**UV resistance** Excellent



Abrasion resistance Excellent



Application

Mooring, towing, offshore.

F	e	a	t	u	r	e	S
	•	•		•		v	•

Mooring tails provide elasticity and shock/energy absorbtion within the mooring arrangement and prevent damages to primary mooring line. Used especially in combination with steel or UHMWPE ropes.

Diameter (mm)	Lenght (m)	Wt/tail <sup>(kg)</sup>	Breaking strength	LDBF MEG4
60	11	37	73.5	66.15
64	11	42	84.1	75.69
68	11	48	93.7	84.33
72	11	54	103.8	93.42
76	11	60	115	103.5
80	11	65	127.7	114.93
88	11	95	158	142.2

All products are produced in accordance with OCIMF guidelines and IACS approved



### **Protection sleeves**



### **Features**

- ▶ Improves rope lifespan
- ▶ Easily installed using extra durable velcro lining
- ▶ Lightweight, with a smooth surface
- ▶ Excellent UV and heat resistance
- Customized sizes
- Suitable for all fiber ropes

Rope size (mm)	Width (mm)	Length (mm)
20-40	250	3000
44-64 68-96	350 500	3000 3000

# **Mooring links**



### **Features**

- ▶ Connection between wire rope and fiber tail
- Galvanized steel
- ▶ Compact design

Link 90 T	Link 120 T
Tail 56-68 mm	Tail 72-80 mm
Breaking load: 90 T	Breaking load: 120 T
Proof load: 45 Tonnes	Proof load: 60 Tonnes
Weight: 11,2 kg	Weight: 16,9 kg

Link 180 T Tail 88-112 mm	Link 300 T Tail 88-112 mm
Breaking load: 90 T Proof load: 45 Tonnes Weight: 11,2 kg	Breaking load: 120 T Proof load: 60 Tonnes Weight: 16,9 kg



General purpose wire rope 6×36 WS+FC

Application: multipurpose

General purpose wire rope 6×36 WS+IWRC

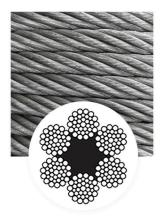
Application: multipurpose

Poweract 4 4x36

Application: high lifting tower cranes

SES Swaged 4x39

Application: cranes, cargo lifting, hoisting



Non-rotating wire rope 19x7 WSC

Application: multipurpose, safety launching appliances



Non-rotating wire rope 35x7 WSC

Application: multipurpose, safety launching appliances



Compacted nonrotating wire rope 35x7 WSC

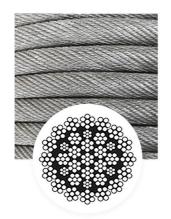
Application: multipurpose



General purpose wire rope 6×19 WS+FC

Application: general purpose, fishing, slings, winch and hoist ropes, construction









General purpose wire rope 6×19 WS+IWRC

Application: general purpose, fishing, slings, winch and hoist ropes, construction





Galvanized steel wire rope 3×31 WS

Application: trawl warp. Bottom trawling: upper/lower bridles, sweepline, headline



# Fitting eyes using our 600 t press



Tensile test using our own test bed









- Hoisting
  Luffing
  Lifting
  DNV certification upon request





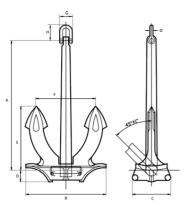
An official distributor



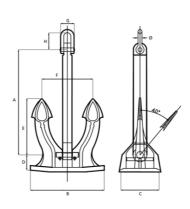
- ▶ Grease up to 2000m of rope per hour
- ► Increase wire rope life up to 300%
- ► Light weight, easy to install and operate
- ▶ Unlike the manual method, operators have no direct contact with the lubricant
- ▶ All excess lubricant is captured and may be re-used, no wastage

Sale & rental

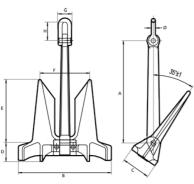
### **Anchors**



Stockless Anchor type "HALL"

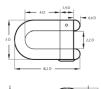


Stockless Anchor type "SPEK"

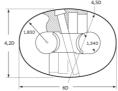


High Holding Power Anchor type "AC-14"

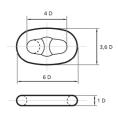
### **Chain accessories**







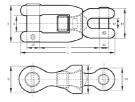
End Shackle type D



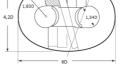
Common link



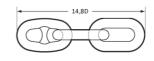
Swivel Forerunner



Swivel Shackle type B



Joining Shackle Type Kenter



3 Link Adaptor



Diam (mm)	Stud link Chain (27,5mtr) weights	3-Link Adaptor (E+EL+C) (kgs)	Joining Shackle Type Kenter (kgs)	End Shackle Type D (kgs)	Swivel-Forerunner (E+EL+SW + EL+C) (kgs)	Proof load (kN)	Breaking load (kN)
16	160	1.37	0.62	1.6	3.57		-
17.5	193	1.89	0.82	2.0	4.73	-	-
19	223	2.37	1.00	2.5	5.75	-	-
20.5	275	2.98	1.35	3.3	7.18	244	349
22	305	3.46	1.6	4.0	8.21	280	401
24	366	4.68	2.0	5.0	11.38	332	476
26	432	5.9	2.7	6.0	14.05	389	556
28	503	7.6	3.3	8.0	17.9	449	642
30	578	8.9	3.9	9.5	21.1	514	735
32	657	10.8	4.6	12.0	25.7	583	833
34	743	13.1	5.8	14.0	31.3	655	937
36	831	15.4	6.6	17.0	36.9	732	1050
38	927	17.6	7.8	20.0	42.7	812	1160
40	1020	20.8	9.1	23.0	50.7	896	1280
42	1114	24.4	10.5	26.0	59.8	981	1400
44	1218	28.6	12.2	29.0	70.6	1080	1540
46	1334	33.0	14.0	33.0	81.5	1170	1680
48	1452	37.9	16.0	37.0	95.0	1270	1810
50	1568	43	18	41	115	1370	1960
52	1705	50	20	45	124	1480	2110
54	1815	55	20	50	141	1590	2270
56	1953	60	24	54	148	1710	2430
58	2118	65	28	65	168	1810	2600
60	2283	71	28	70	191	1940	2770
62	2420	79	33	76	202	2060	2940
64	2585	88	38	82	231	2190	3130
66	2750	97	38	94	261	2310	3300
68	2943	106	44	101	273	2450	3500
70	3135	115	44	108	307	2580	3690
73	3410	131	51	124	348	2790	3990
76	3713	148	58	141	392	3010	4300
78	3905	160	65	150	409	3160	4500

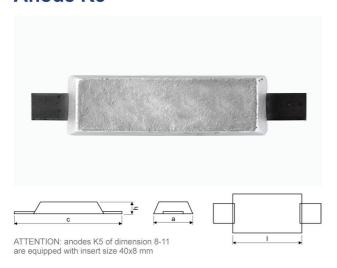


### **Anode K3**



No.	Dimmension (mm)		Zinc (ZnAlCd) Mass (kg)			Aluminium (AlZnIn) Mass (kg)			
	1	h	а	С	Gro	SS	Nett	Gross	Nett
1	130	25	60	100	1.0	08	1.00	0.52	0.45
2	150	30	80	220	2.1	15	1.90	0.97	0.75
3	250	30	80	320	3.4	10	3.10	1.57	1.30
4	250	40	100	320	5.5	50	5.10	2.45	2.05

### **Anode K5**



No.	Dimmension (mm)			Zinc (ZnAICd) Mass (kg)			Alu	Aluminium (AlZnIn) Mass (kg)		
	Ī	h	а	С		Gross	Nett		Gross	Nett
1	400	40	125	460		10.50	9.95		4.00	3.45
2	450	40	125	510		12.00	11.35		5.00	4.35
3	550	45	125	610		16.00	15.25		6.50	5.75
4	650	45	125	710		21.00	20.10		8.00	7.10
5	800	50	125	860		27.00	25.95		11.50	10.45
6	900	50	125	960		30.00	28.80		13.00	11.80
7	1200	50	125	1280		40.00	38.40		18.00	16.40
8	800	50	150	880		-	-		18.00	16.30
9	950	50	150	1030		-	=		21.00	19.20
10	1050	65	150	1130		-	-		30.00	27.60
11	1200	65	150	1280		-	-		34.00	31.60

# Zinc anodes alloy

Alloying	Maximum	Electrochemical parameters	AZn
elements (%)	impurities (%)	acc to DNV RP B401: TES	TA
Al 0.12 - 0.18 Cd 0.05 - 0.10 Zn - balance	Fe 0.005 Pb 0.005 Cu 0.002 Sn 0.002	Closed circuit potential acc Ag/AgCl Consumption rate Capacity	

# Aluminum anodes alloy

Alloying	Maximum impurities (%)	Electrochemical para	meters acc
elements(%)		to DNV RP B401 te:	st B (96H)
Zn 3.0-3.5	Fe 0.029-0.09	Closed circuit potential	1090mV
In 0.016-0.040	Si 0.034-0.10	Consumption Rate	3.5 kg/A*r
Al Remaining	Cu 0.0011-0.005	Capacity	2650A*h/kg



# **Isophthalic gratings**



### **Features**

- Easy to handle
- Lighter than steel
- Non-corrosive
- Do not require painting
- Superior grip
- Slip resistance

# **Application**

- Marine
- Offshore
- Transportation
- Industrial

# Connection clips

M - type

J - type





Panel Thickness (mm)	Panel size (mm)	Mesh size (mm)
25 30 38	Standard:1000x2000 Panels can be cut to any size according to requirements	25x100 38x38

Material	Operation temperature	Corrosion and chemical resistant
Isophthalic polyester resin	-50 - 90 °C	Industrial
Vinylester resin	-50 - 110 °C	Superior





# **Phenolic gratings**



### **Types**

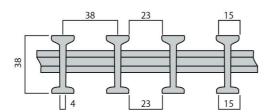
- Pultruded
- Molded
- Galvanized steel (available on special request)

### **Features**

- Superior fire safety characteristics
- Long service life
- Low maintenance
- High strength to weight ratio
- ► Slip resistance
- High corrosion resistance
- ▶ Low installations cost

# **Application**

- Marine
- Offshore
- Transportation
- Industrial



Oŗ	en area	Load bar	Top and bandwidth	Weight (kg)
1-6015	60	3B	15/15	14.4







# **DIN & JIS standards**



Body	Steam/seat	Flange Dimensions	Pressure Rating	Temp.Range	Upon Request
Cast iron, ductile iron, cast steel, marine bronze Rg5, stainless steel	Marine bronze Rg5, stainless steel	DIN flanges acc.to (DIN 5201)/JIS flanges acc.to 5K/10K/16K/20K	PN4-PN40/ 5K-40K	-10C+300C -10C+400C	IACS certificate



# Slip-on & blind type

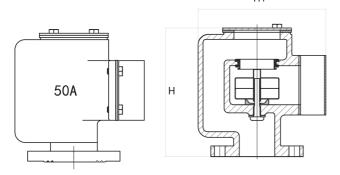
NIC	JIS

			DIN						JI	S		
DN		PN06	PN10	PN16	PN25	PN40		5K	10K	16K	40K	
15	D PCD holes	80 55 4x11	95 65 4x14	95 65 4x14	95 65 4x14	95 65 4x14		80 60 4x12	95 70 4x15	95 70 4x15	115 80 4x19	
20	D PCD holes	90 65 4x11	105 75 4x14	105 75 4x14	105 75 4x14	105 75 4x14		85 65 4x12	100 75 4x15	100 75 4x15	120 85 4x19	
25	D PCD holes	100 75 4x11	115 85 4x14	115 85 4x14	115 85 4x14	115 85 4x14		95 75 4x12	125 90 4x19	125 90 4x19	130 95 4x19	
32	D PCD holes	120 90 4x14	140 100 4x18	140 100 4x18	140 100 4x18	140 100 4x18		115 90 4x15	135 100 4x19	135 100 4x19	140 105 4x19	
40	D PCD holes	130 100 4x14	150 110 4x18	150 110 4x18	150 110 4x18	150 110 4x18		120 95 4x15	140 105 4x19	140 105 4x19	160 120 4x23	
50	D PCD holes	140 110 4x14	165 125 4x18	165 125 4x18	165 125 4x18	165 125 4x18		130 105 4x15	155 120 4x19	155 120 8x19	165 130 8x19	
65	D PCD holes	160 130 4x14	185 145 4x18	185 145 4x18	185 145 8x18	185 145 8x18		155 130 4x15	175 140 4x19	175 140 8x19	200 160 8x23	
80	D PCD holes	190 150 4x18	200 160 8x18	200 160 8x18	200 160 8x18	200 160 8x18		180 145 4x19	185 150 8x19	200 160 8x23	210 170 8x23	
100	D PCD holes	210 170 4x18	220 180 8x18	220 180 8x18	235 190 8x22	235 190 8x22		200 165 8x19	210 175 8x19	225 185 8x23	250 205 8x25	
125	D PCD holes	240 200 8x18	250 210 8x18	250 210 8x18	270 220 8x26	270 220 8x26		235 200 8x19	250 210 8x23	270 225 8x25	300 250 8x27	
150	D PCD holes	265 225 8x18	285 240 8x22	285 240 8x22	300 250 8x26	300 250 8x26		265 230 8x19	280 240 8x23	305 260 12x25	355 295 12x33	
200	D PCD holes	320 280 8x18	340 295 8x22	340 295 12x22	360 310 12x26	375 320 12x30		320 280 8x23	330 290 12x23	350 305 12x25	405 345 12x33	
250	D PCD holes	375 335 12x18	395 350 12x22	405 355 12x26	425 370 12x30	450 385 12x33		385 345 12x23	400 355 12x25	430 380 12x27	475 410 12x33	
300	D PCD holes	440 395 12x22	445 400 12x22	460 410 12x26	485 430 16x30	515 450 16x33		430 390 12x23	445 400 16x25	480 430 16x27	540 470 16x39	
350	D PCD holes	490 445 12x22	505 460 16x22	520 470 16x26	555 490 16x33	580 510 16x36		480 435 12x25	490 445 16x25	540 480 16x33	585 515 16x39	

# **Size 50A-80A**



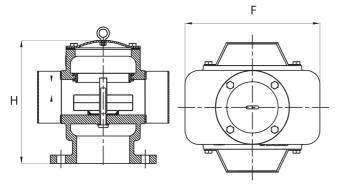
DN	Н	H1	
50 65 80	17! 204 244	4 207	



# Size 100A-450A



DN	F	н
100	246	220
125	284	250
150	326	285
200	428	365
250	542	430
300	612	530





### **Products & services**

- Packing foil
- Banding strap
- Separation nets
- Pneumatic rubber fender
- UHMWPE rope for trawling
- STS operation rope
- Steel wire rope 3x13 WS

Steel wire rope 6x19WS+IWRC/FC





### CONTACT US TO FIND OUT MORE

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