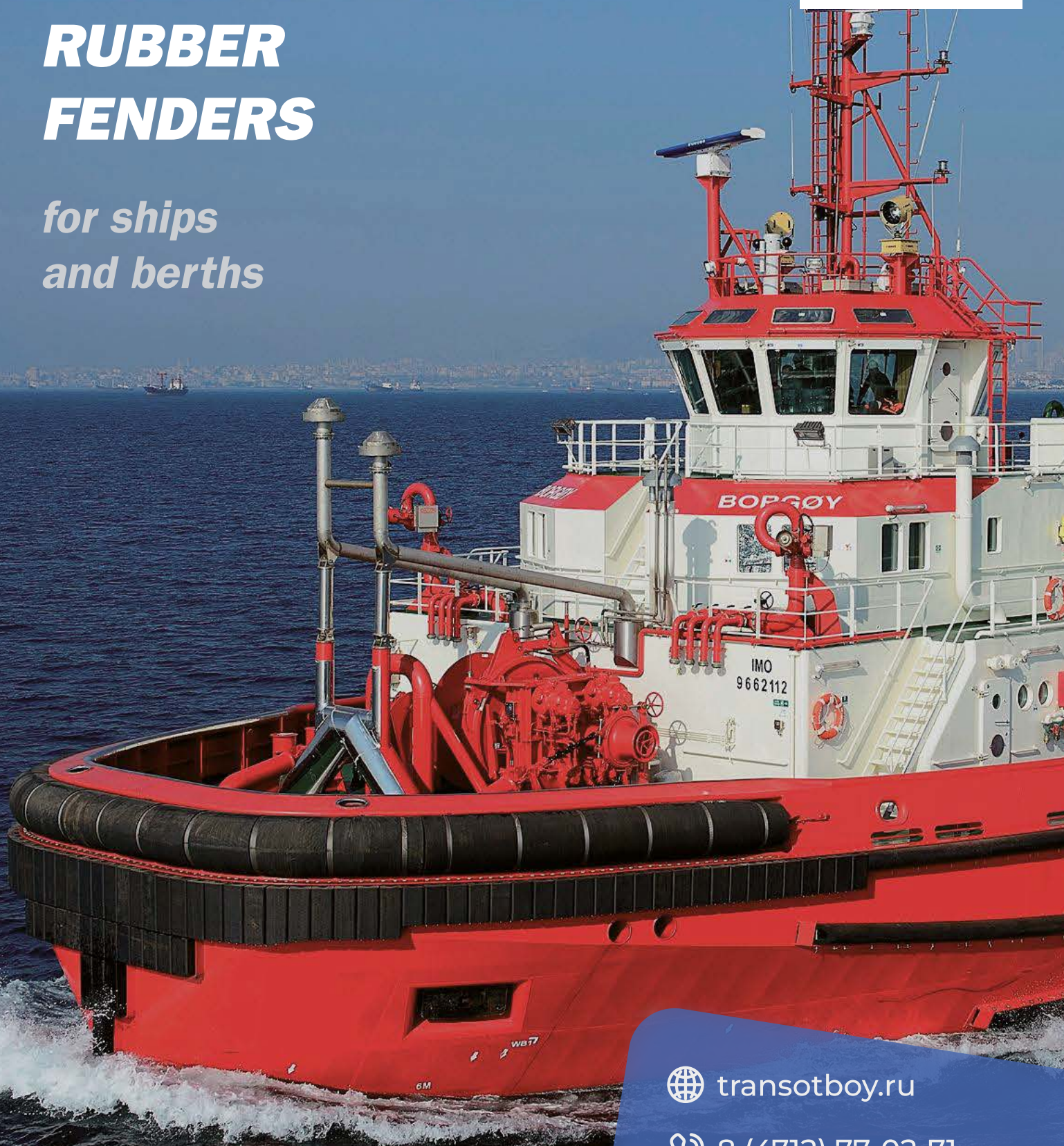




RUBBER FENDERS

*for ships
and berths*



 transotboy.ru

 8 (4712) 77-02-71

 info@transotboy.ru

ABOUT THE COMPANY



OOO TransTekhnologiya is a steadily growing company comprised of a team of highly skilled professionals.

For over 15 years, we have been a leading manufacturer of rubber products for ships and berths.

During this time, our rubber mooring fenders have proven to be reliable and high-quality equipment, successfully undergoing not only research and design phases but also rigorous operational testing.

With a strong scientific-technical and experimental foundation, TransTekhnologiya not only produces rubber mooring fenders but also ensures timely manufacturing, paying close attention to the specific requirements of each order.

Our product range is extensive, and all raw materials are certified by quality passports and laboratory tests. We manufacture:

- ☑ Mooring fenders
- ☑ Arch fenders
- ☑ Tugboat fenders
- ☑ W-fenders, M-fenders, D-fenders
- ☑ Square fenders (D and C inner diameters)
- ☑ Keyhole fenders
- ☑ Solid rubber fenders

We also produce custom rubber compounds for various industrial applications.

WHY CHOOSE TRANSTEKHOLOGIYA?

- **RELIABILITY, QUALITY, AND EXPERIENCE**
- **COMPETITIVE PRICING**
- **CUSTOMIZABLE PARAMETERS TO MEET CUSTOMER NEEDS**
- **FAST ORDER FULFILLMENT**
- **PROFESSIONAL BUSINESS APPROACH**
- **EXPERT UNDERSTANDING OF CUSTOMER REQUIREMENTS**

products to meet customer demands. Our diverse product range ensures we can serve a wide variety of needs.

Working with us is cost-effective!

For over 15 years, our customers have valued:

- ☑ Flexible discount systems
- ☑ Sustainable company growth
- ☑ Fast turnaround times
- ☑ Accountability for results
- ☑ Quick response to inquiries
- ☑ Option to visit production facilities at any stage

We are dedicated to:

- ☑ Ongoing modernization
- ☑ Maintaining high quality and service standards
- ☑ Implementing innovations
- ☑ Delivering top-tier products and services

Since 2005, our company has specialized in supplying ships and berths with proven products. We offer volume-based discounts and can customize mooring fenders to meet specific requests, though our standard designs often meet customer needs without modifications.

Our team provides flexible and efficient delivery solutions tailored to your time and budget constraints.

We are committed to fostering closer collaboration by:

- ☑ Addressing and fulfilling customer needs
- ☑ Offering discounts for large orders
- ☑ Adhering to international quality standards (GOST certified)
- ☑ Continuously improving product quality and exploring new projects

Our top priority is maintaining high service standards at every stage, resolving issues promptly, and enhancing the quality of our rubber mooring equipment.

We continuously expand our production capabilities, integrating modern technologies and developing new

The TransTekhnologiya team saves you time, reduces costs, and minimizes risks by providing efficient products that meet all modern quality and safety criteria. We help you achieve your goals with the right resources!

TABLE OF CONTENTS

Tugboat Fenders 5

Cylindrical Tugboat Fenders 6

M- fenders and W- fenders 7

D- fenders 8

Square fenders D and C inner diameters 9

Wing-Type Fenders 11

Keyhole fender 14

Solid Rubber Fenders 15

Baffle Rubber Plate 15

Cylindrical fenders 16

Arch fenders 18

Cone fenders 21

ME element fenders 24

TUGBOAT FENDERS



TUGS CAN BE EQUIPPED WITH VARIOUS TYPES OF FENDERS, EACH DESIGNED FOR SPECIFIC APPLICATIONS.

Cylindrical Tugboat Fenders:

Mounted on the bow/stern of tugboats, primarily used for:

- ✓ Push-towing vessels with flared bows
- ✓ Open sea operations

M- fenders and W- fenders:

- ✓ Extended contact surfaces reduce hull pressure
- ✓ Corrugated profiles provide superior grip

D- fenders:

- ✓ Standard protection system for vessel sides
- ✓ Used as protective rub rails during:
- ✓ Berthing maneuvers
- ✓ Docking operations

Square Fenders (C/D Profiles):

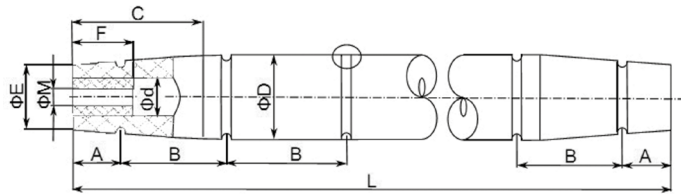
Applications include:

- ✓ Small craft marinas
- ✓ Mooring pontoons
- ✓ Guide piles for:
- ✓ Floating structures
- ✓ Push-tow configurations

Keyhole fender:

- ✓ Engineered for extreme service conditions
- ✓ Ultra-high load capacity
- ✓ Standard equipment for:
- ✓ Harbor tugs
- ✓ Offshore towing vessels

CYLINDRICAL TUGBOAT FENDERS



Bow cylindrical fenders are commonly used as forward pushing fenders on the bow or stern of modern tugboats. Their rounded shape makes them ideal for working with vessels featuring pronounced bow flare (such as container ships) and equally suitable for pushing vessels with flat-sided hulls.

A longitudinal target runs through the center of the fender, while the circumference is reinforced with slings or chains secured in specially designed grooves. Conical end caps are also available as an option.

D*d	E	A max	B max	C	M	F	w kg/m
200 x 100	170	200	335	500	75	300	35
300 x 150	225	225	600	700	75	350	68
450 x 225	350	250	700	850	100	400	155
500 x 250	375	400	750	900	100	500	195
600 x 300	450	300	800	900	125	500	240



M-FENDERS AND W-FENDERS



Fenders of this shape provide large contact surfaces to reduce hull pressure. The corrugated surfaces ensure excellent grip.

W-fenders and M-fenders are designed for the most severe operating conditions. Their flexible mounting allows W-fenders to follow curved hull contours, adapting to virtually any hull shape.

Applications include:

- ✓ Ocean-going tugboats
- ✓ Icebreakers
- ✓ Harbor tugs for large ports
- ✓ Bridge and pile protection

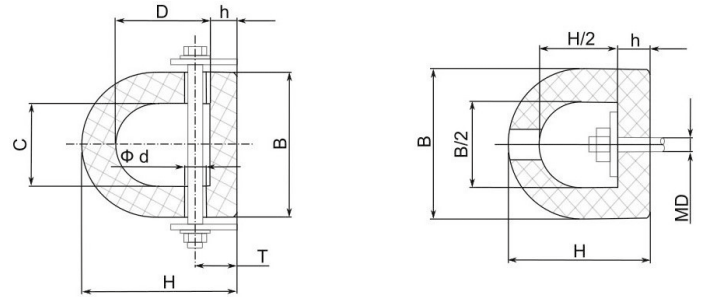
SIZE	A	B	C	D	F	L max	w kg/m	HOLE
M 400	400	200	40	23	150	1440	66	ø 23
M 500	500	250	50	27	190	2000	95	ø 27
M 600	600	300	60	33	230	2000	157	ø 33

SIZE	A	B	C	D	F	L max	w kg/m
W 400-200	400	200	180	67	50	1000	80
W 480-300	480	300	265	90	65	2000	142
W 500-450	500	450	270	100	75	2000	212

D-FENDERS



D-shaped rub rail fenders feature both circular and D-shaped inner diameters. These fendering systems are widely used as protective rub rails on tugboats and other work vessels, providing excellent protection against damage to vessels of all sizes and hull configurations.

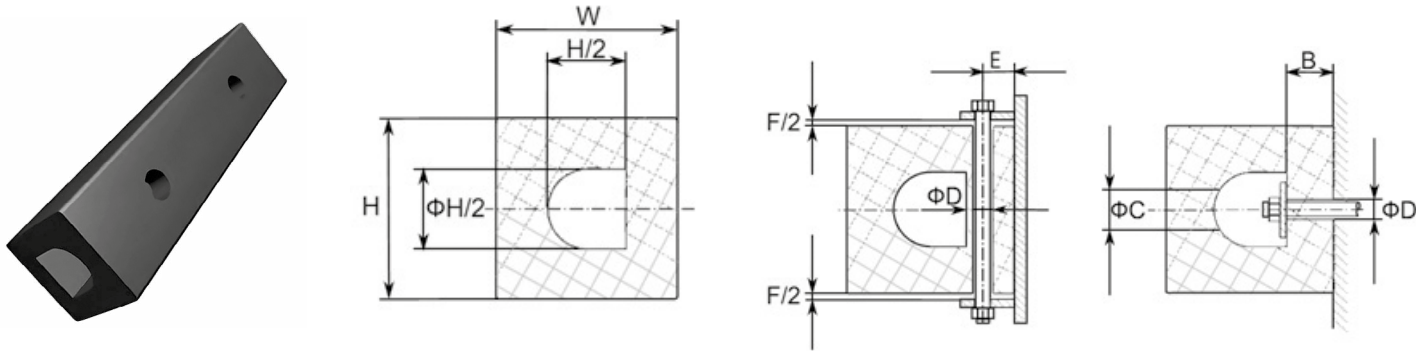


- Ideal for:
- ✓ Small waterfront marinas servicing fishing boats
 - ✓ Tugboats and barge operations
 - ✓ Workboat protection
 - ✓ Inshore docking facilities

Fenders of this shape provide large contact surfaces to reduce hull pressure. The corrugated surfaces ensure excellent grip.

SIZE, MM	W, KG
80x80x2000 (DC-42)	18
100x100x2000 (DD-50)	20
100x100x2000 (DC-30)	23
120x90x2000 (DD-90x60)	18
125x160x2000 (DC-50)	61
150x150x2000 (DD- 75)	40
150x150x2000 (DC- 75)	43
190x200x2000 (DC- 65)	70
200x200x2000 (DD-100)	72
200x200x3000 (DD-100)	108
200x200x3000 (DC-100)	125
200x200x2000 (DC - 75)	90
250x250x3000 (DD-120)	180
300x300x2000 (DD-150)	180
300x300x2000 (DC-150)	190
300x300x2000 (DC-125)	200
300x300x3000 (DD-150)	270
300x300x3000 (DC-150)	285
300x300x3000 (DC-125)	300
300x300x4000 (DD-150)	360
300x300x4000 (DC-150)	380
300x300x4000 (DC-125)	400
350x350x2000 (DD-175)	210
400x400x2000 (DD-200)	280
500x500x2000 (DD-250)	436
500x500x2000 (DC-250)	486
500x500x3000 (DC-200)	810

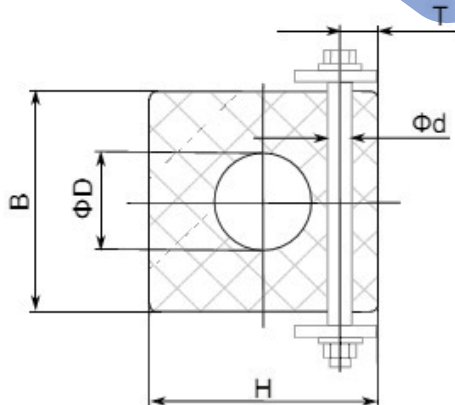
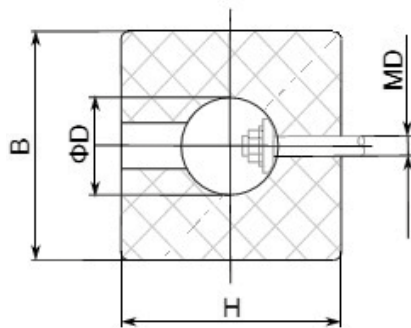
SQUARE FENDERS D AND C INNER DIAMETERS



DIMENSIONAL CHARACTERISTICS (MM, KG)

H, mm	W, mm	B, mm	C, mm	D, mm	E, mm	F, mm	Anchors	w kg/m
150	150	37,5	40	20	30	12	M16	25
200	200	50,0	50	25	45	15	M20	43
250	250	62,5	60	30	50	20	M24	66
300	250	62,5	60	30	50	25	M24	80
300	300	75,0	75	30	60	25	M30	99
400	400	100,0	75	35	80	30	M30	164
500	500	125,0	90	45	90	40	M36	256

SIZE	NOMINAL DEFORMATION 40%	
	R:KN	E:KNm
150	224	6
200	298	11
250	370	17
300	447	25
350	530	34
400	590	44
500	750	69



DIMENSIONAL CHARACTERISTICS (MM, KG)

B, mm	H, mm	D, mm	MD	T, mm	Ø d, mm	weight
150	150	75	M22	30	27	28
200	200	100	M24	35	30	50
250	250	125	M27	45	33	77
300	300	150	M30	55	36	110
350	350	175	M33	65	40	151
400	400	200	M36	75	45	198
500	500	250	M42	95	50	308

SIZE	NOMINAL DEFORMATION 40%	
	R:KN	E:KNm
150	224	6
200	298	11
250	370	17
300	447	25
350	530	34
400	590	44
500	750	69

WING-TYPE FENDERS



Purpose:

Specially designed to protect vessel structures during:

- Mooring operations
- Berthing maneuvers
- Port/harbor docking

Construction:

Manufactured from high-strength wear-resistant rubber featuring:

- Exceptional durability
- Superior resistance to harsh marine environments

Material Specifications:

- Premium-grade rubber compound
- Enhanced resistance to:
 - Abrasion
 - UV radiation
 - Saltwater corrosion
 - Extreme temperature fluctuations (- 40°C to + 80°C)

Typical Applications:

- Seagoing & river vessels
- Quay walls & dock structures
- Any marine installation requiring impact/friction protection

ADVANTAGES

- High energy absorption capacity and effective shock load dissipation
- Extended service life due to wear-resistant material composition
- Universal compatibility with various vessel types

and marine structures

- Compliance with international quality and safety standards

DESIGN FEATURES (COMMON TO ALL SIZES)

- Construction type: Solid-molded rectangular-section rubber fenders
- Standard lengths: 1000-3000 mm (in 500 mm increments)
- Key dimensions:
 - Height (C): 145-150 mm
 - Width (P): 540-700 mm (tapered with length increase)
- Mounting system:
 - Number of holes (n): 2-6 (length-dependent)
 - Hole diameter: 30 mm
 - Mounting pitch: 250-300 mm

MATERIALS & MANUFACTURING

- Rubber compound:
 - Base: Natural rubber (NR) + Styrene-butadiene rubber (SBR) blend
 - Additives: Carbon black, antiozonants, UV stabilizers
- Production: Injection molding with post-vulcanization
- Reinforcement: Standard textile cord; optional steel plates

PERFORMANCE SPECIFICATIONS (STANDARD ACROSS ALL SIZES)

- Operating temperature: -45°C to +80°C
- Allowable deformation: ≤50% of original size
- Service life: 10-12 years under normal conditions
- Color: Standard black

MECHANICAL PROPERTIES

- Hardness: 65±5 Shore A
- Density: 1.18-1.22 g/cm³
- Tensile strength: ≥18 MPa
- Elongation at break: ≥450%

DYNAMIC PARAMETERS

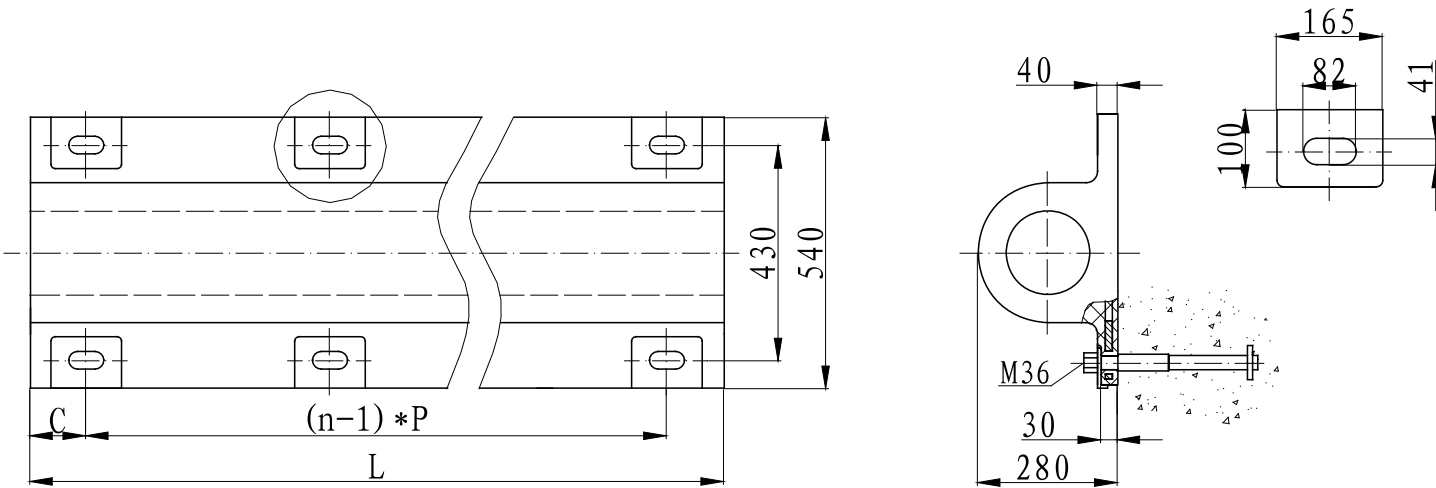
- Recovery coefficient: ≥0.65
- Energy absorption: 20-59 kN·m (length-dependent)
- Loading rate: Up to 2 m/s

WING-TYPE FENDERS 280 x 540

DIMENSIONAL CHARACTERISTICS (MM, KG)

	C	P	L	n	weight
280x540x1000	150	700	1000	2	99
280x540x1500	150	600	1500	3	148,5
280x540x2000	150	570	2000	4	198
280x540x2500	150	550	2500	5	247,5
280x540x3000	150	540	3000	6	297

Other characteristics are available upon request.



	Nominal deformation 50 %	
	R:KN	E:KNm
280x540x1000	375	14
280x540x1500	565	21
280x540x2000	750	28
280x540x2500	940	35
280x540x3000	1130	42

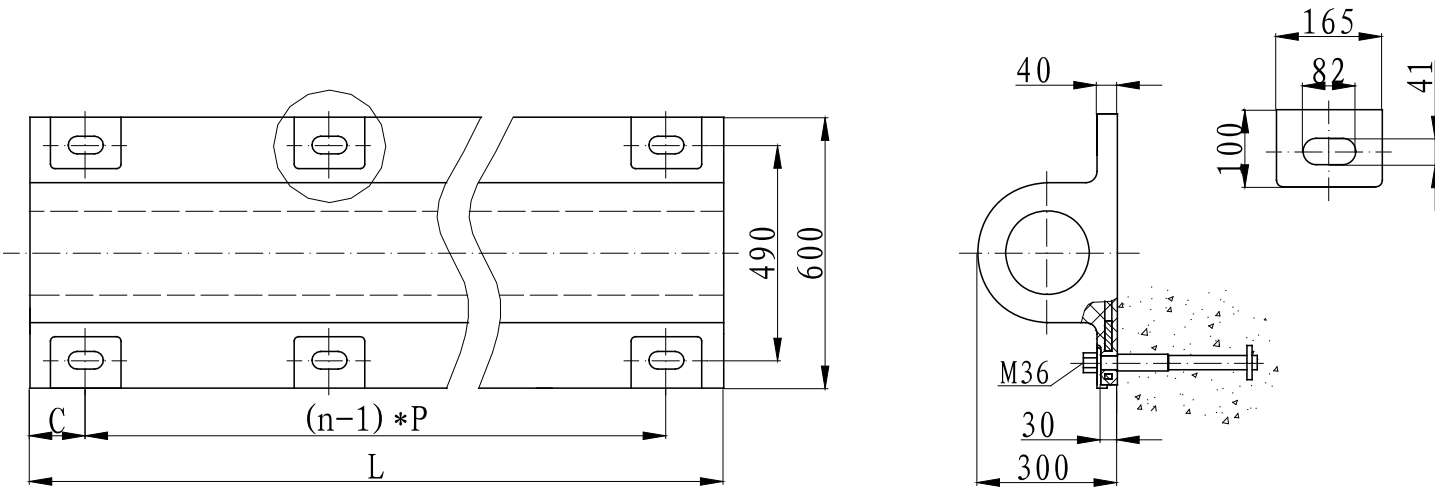
Standard tolerances: ± 10%.

WING-TYPE FENDERS 300 x 600

DIMENSIONAL CHARACTERISTICS (MM, KG)

	C (mm)	P (mm)	L (mm)	n	weight (kg)
300x600x1000	150	700	1000	2	106
300x600x1500	150	600	1500	3	159
300x600x2000	150	570	2000	4	212
300x600x2500	150	550	2500	5	265
300x600x3000	150	540	3000	6	318

Other characteristics are available upon request.



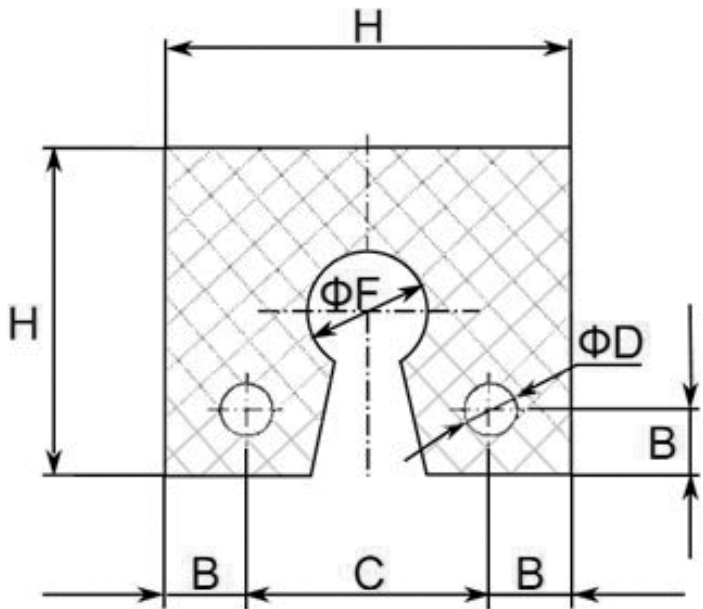
	Nominal deformation 50 %	
	R:KN	E:KNm
300x600x1000	495	20
300x600x1500	765	30
300x600x2000	989	39
300x600x2500	1237	49
300x600x3000	1484	59

Standard tolerances: ± 10%.

KEYHOLE FENDERS



Designed for heavy-duty applications, these fenders are used on tugboats and can withstand extreme loads.



DIMENSIONAL CHARACTERISTICS (MM, KG)

H, mm	B, mm	C, mm	Ø D, mm	Ø F, mm	L, mm	weight, kg/m
200	35	130	28	90	1000	40
250	50	150	33	96	2000	59
300	60	180	33	115	2000	88
350	70	210	33	125	2000	126

SOLID RUBBER FENDERS



Used for mooring small watercraft and protecting tugboat sides and sterns. These fenders withstand significant impacts and suit general-purpose applications.

SIZE, MM	WEIGHT, KG
100x 90x2500 (trapezoid)	40
105x75x2000	25
100x100x2000	28
100x120x2000	34
100x140x2000	39
100x230x2380	80
120x120x2000	44
120x140x2000 (trapezoid)	42
130x250x2000	91
150x150x2000	69
150x250x2500	144
170x170x2000	81
180x150x2000	75
180x180x2000	90
200x200x2000	112
210x250x2000	130

BAFFLE RUBBER PLATE



- ✓ Dimensions: 100x600x1000 mm
- ✓ Inner opening: 50 mm
- ✓ Specifications: TU 22.19.73-002-30867179-2017
- ✓ Designed to protect mooring walls and pusher tugboat elements
- ✓ Operates in marine environments with oil exposure at temperatures from -45°C to +60°C
- ✓ Made from high-quality rubber compound (Group B/C) with a hardness of 55-75 Shore A

CYLINDRICAL FENDERS



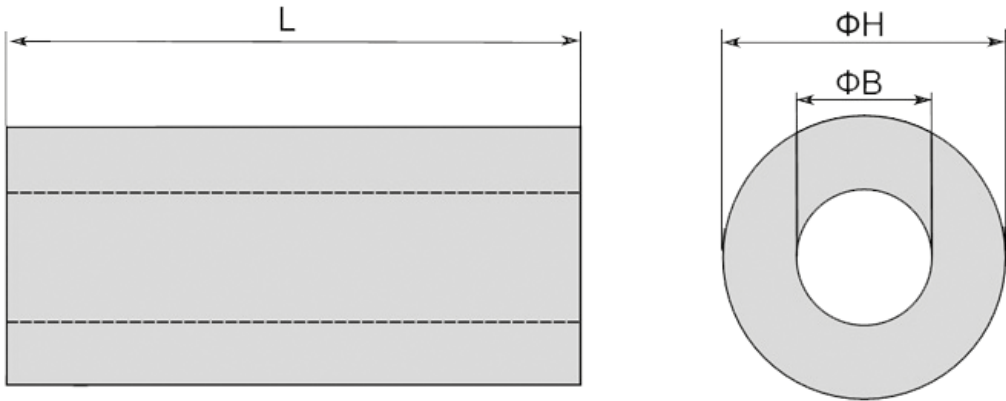
Our company manufactures cylindrical mooring fenders from high-quality Group B(C) rubber compound using molding technology (machine molding) in accordance with Technical Specifications TU 22.19.73-002-30867179-2017.



- Product Features:
- ☑ Globally recognized cylindrical fender design
 - ☑ Simple shape for easy installation
 - ☑ Optimal reaction force and energy absorption characteristics
 - ☑ Suitable for berths servicing vessels of all sizes

- Installation:
- ☑ Mounted horizontally or vertically in single/double rows on quay walls
 - ☑ Configuration adapts to:
 - Berth structure
 - Mooring conditions
 - Vessel accommodation requirements

- Technical Specifications:
- ☑ Construction: Rubber pipes of various diameters
 - ☑ Operational environment:
 - Marine conditions (saltwater resistant)
 - Temporary oil/hydrocarbon exposure
 - ☑ Temperature range: - 45°C to + 60°C



H*B*L	Nominal deformation 50 %		Weight, kg/m
	R (κН/м)	E (κНм/м)	
200x100x2000	86	3,3	33
300x150x1000	129	7,4	67
300x150x2000	129	7,4	67
300x150x3000	129	7,4	67
400x200x1000	172	13,1	120
400x200x1500	172	13,1	120
400x200x2000	172	13,1	120
400x200x2700	172	13,1	120
400x200x3000	172	13,1	120
400x200x4000	172	13,1	120
500x250x1500	275	28	200
500x250x2000	275	28	200
500x250x3000	275	28	200
600x300x1000	330	40	240
600x300x2000	330	40	240
600x300x3000	330	40	240
800x400x2000	550	112	473
1000x500x1500	550	112	800
1000x500x2000	550	112	800
1000x500x3000	550	112	800
1200x600x1500	660	162,0	1100
1200x600x2000	660	162,0	1100
1200x600x2500	660	162,0	1100

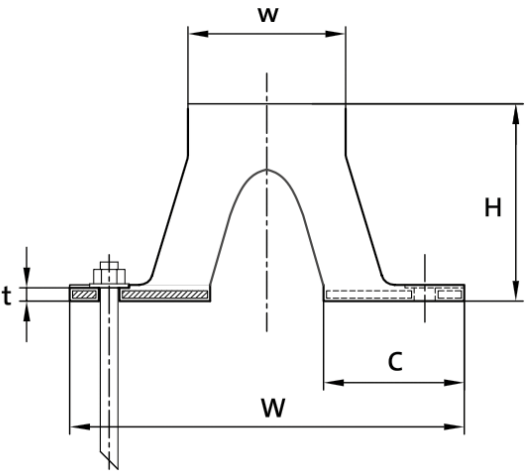
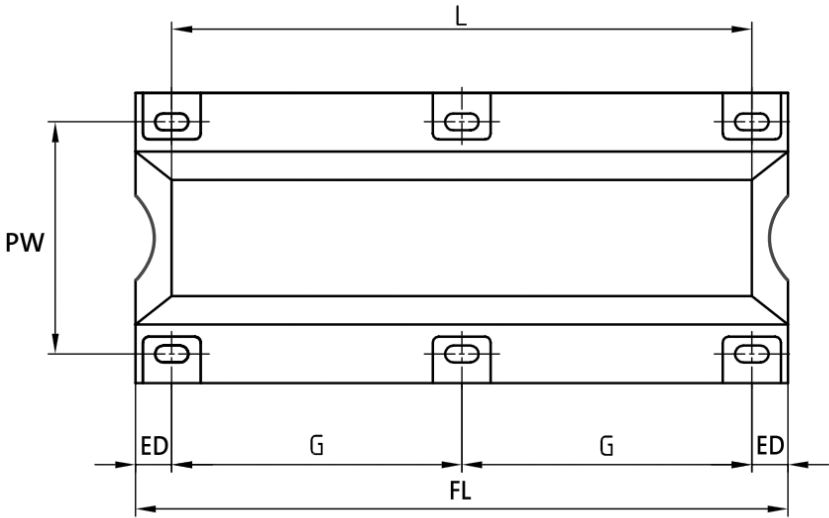
ARCH FENDERS



Arch mooring fenders feature a simple yet robust design, delivering reliable performance for diverse mooring applications-even under extreme operating conditions. Their monolithic construction ensures exceptional strength and durability.

Manufactured to engineering drawings, our arch fenders (arch-type bumper systems) offer:

- ✓ High elasticity & energy absorption capacity
- ✓ Stable performance across wide temperature ranges
- ✓ Weather & UV radiation resistance
- ✓ Chemical & microbial degradation resistance
- ✓ Superior performance under:
 - Tensile stress
 - Compression
 - Shear forces
 - Bending moments
 - Torsional loads



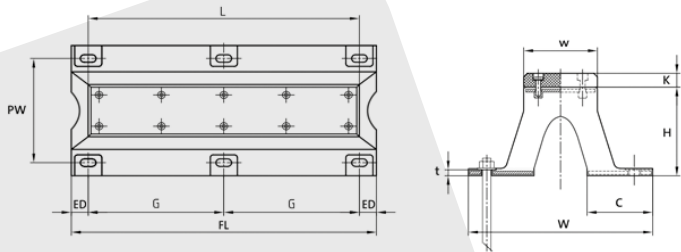
DIMENSIONAL CHARACTERISTICS (MM, KG)

OY	H, (mm)	W, (mm)	w, (mm)	t, (mm)	C, (mm)	PW, (mm)	Anchor bolts
250	250	500	200	18	178	400	M24
300	300	600	240	23	213	480	M30
400	400	800	260	27	285	640	M36
500	500	1000	400	29	358	800	M36
600	600	1200	480	34	425	960	M42
800	800	1500	640	38	520	1300	M48

«Other standard sizes can be made at the request of the buyer»

THE DATA IS GIVEN FOR A PRODUCT WITH A LENGTH OF 1000 MM

SIZE	CHARACTERISTIC	NOMINAL DEFORMATION 52,5 %	MAXIMUM DEFORMATION 55 %
250H	REACTION	148	205
	ENERGY	16	17
300H	REACTION	177	246
	ENERGY	22	24
400H	REACTION	236	328
	ENERGY	40	43
500H	REACTION	295	410
	ENERGY	62	66
600H	REACTION	354	492
	ENERGY	89	95
800H	REACTION	472	656
	ENERGY	159	170



OY	H, (mm)	W, (mm)	w, (mm)	t, (mm)	C, (mm)	PW, (mm)	K, (mm)	Anchors	Bolts
250	250	500	200	18	178	400	40	M24	M16
300	300	600	240	23	213	480	40	M30	M20
400	400	800	260	27	285	640	40	M30	M20
500	500	1000	400	29	358	800	50	M36	M24
600	600	1200	480	34	425	960	50	M42	M24
800	800	1500	640	38	520	1300	60	M48	M30

OY	L, (mm)	ED, (mm)	G, (mm)	FL, (mm)	Anchors (pcs.)	Weight (kg)
250	1500	112.5	2*700	1625	6	148
	2000	117.5	3*630	2125	8	194
	2500	112.5	3*800	2625	8	240
	3000	112.5	4*725	3125	10	287
	3500	112.5	5*680	3625	12	332
300	1500	125.0	2*700	1650	6	224
	2000	130.0	3*630	2150	8	293
	2500	125.0	3*800	2650	8	362
	3000	125.0	4*725	3150	10	431
	3500	125.0	5*680	3650	12	500
400	1500	150.0	2*700	1700	6	410
	2000	155.0	3*630	2200	8	534
	2500	150.0	3*800	2700	8	658
	3000	150.0	4*725	3200	10	781
	3500	150.0	5*680	3700	12	905
500	1500	175.0	2*700	1750	6	607
	2000	180.0	3*630	2250	8	785
	2500	175.0	3*800	2750	8	962
	3000	175.0	4*725	3250	10	1141
600	1500	200.0	2*700	1800	6	881
	2000	205.0	3*630	2300	8	1133
	2500	200.0	3*800	2800	8	1384
	3000	200.0	4*725	3300	10	1636
800	1500	250.0	2*700	1750	6	1472
	2000	255.0	3*630	2400	8	1876
	2500	250.0	3*800	2900	8	2280
	3000	250.0	4*725	3400	10	2684

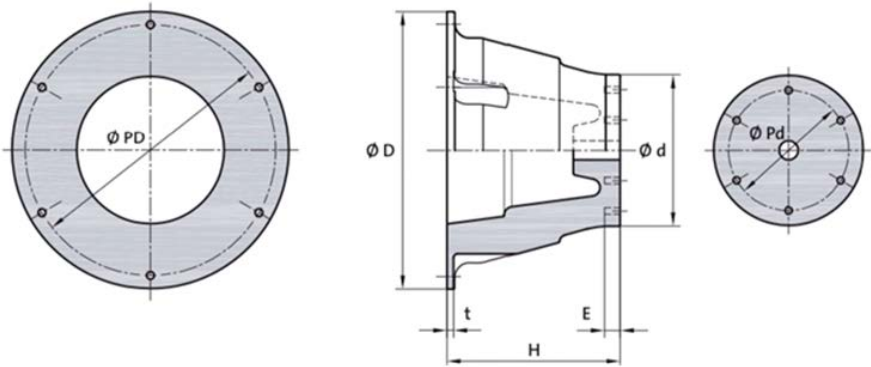
CONE FENDER



Cone-Type Fender Systems
Cone fenders represent the latest generation of docking solutions, delivering optimal performance characteristics and operational efficiency.

- Key Advantages:**
- ✓ Conical geometry ensures exceptional stability at high compression angles
 - ✓ Superior shear strength with overload protection features
 - ✓ Fully integrated rubber mounting flanges for seamless installation

- Performance Features:**
- ✓ Industry-leading energy absorption capacity
 - ✓ Progressive load-deflection response
 - ✓ Omnidirectional impact resistance



- Typical Applications:**
- ✓ Offshore mooring terminals
 - ✓ Heavy-duty port facilities
 - ✓ Specialized vessel berthing systems

FEATURES
The cone fender boasts an advanced design with enhanced deflection, superior energy absorption, and extended service life.

- Key Characteristics:**
- ✓ Universal performance meeting diverse design requirements
 - ✓ Customizable properties through tailored rubber compound formulations

- ✓ Optional front/face panel installation to reduce shear load impact
- ✓ Simplified installation and replacement procedures

- APPLICATIONS:**
- ✓ Container terminals
 - ✓ Oil & gas berths
 - ✓ General cargo docks
 - ✓ Ore terminals
 - ✓ Ro-Ro ramps
 - ✓ Shipyards
 - ✓ Bulk terminals
 - ✓ Ro-Ro and cruise terminals
 - ✓ Parallel motion systems.

TYPE	Highest Reaction Force (FS)		High reaction power (FE)		The usual reaction force(FO)		Low reaction power (FL)	
	Action power (KN)	Energy absorption (KN-M)	Reaction power (KN)	Energy absorption (KN-M)	Reaction power (KN)	Energy absorption (KN-M)	Reaction force (KN)	Energy absorption (KN-M)
FCO 500	342	80.6	273	64.3	204	47.9	168	37.7
FCO 600	490	160	390	130	289	95.9	230	76.5
FCO 700	665	240	532	185	320	153	314	122
FCO 800	879	375	720	300	512	229	410	183
FCO 900	1099	504	879	407	648	312	518	260
FCO 1000	1366	682	1100	552	800	505	641	357
FCO 1100	1459	847	1169	663	946	446	816	416
FCO 1150	1799	1050	1420	900	1059	679	847	543
FCO 1200	1883	1115	1526	971	1128	719	908	571
FCO 1300	2168	1617	1739	1336	1346	1064	1148	765
FCO 1400	2300	1720	1840	1376	1472	1101	1173	877
FCO 1600	3084	2467	2313	1974	1850	1579	1446	1259
FCO 1800	3825	3609	3060	2887	2442	2309	1950	1840

Note: the margin of error is $\pm 10\%$. Maximum deflection during compression: 72.5 %.

TYPE	Highest Reaction Force (FS)		High reaction power (FE)		The usual reaction force(FO)		Low reaction power (FL)	
	Action power (KN)	Energy absorption (KN-M)	Reaction power (KN)	Energy absorption (KN-M)	Reaction power (KN)	Energy absorption (KN-M)	Reaction force (KN)	Energy absorption (KN-M)
FCO 500	388	91.8	317	71.4	237	51	197	41.8
FCO 600	553	164	438	132	325	106	263	86.7
FCO 700	705	248	579	196	435	157	348	127
FCO 800	949	388	850	322	588	257	437	212
FCO 900	1213	527	976	440	717	341	569	275
FCO 1000	1537	750	1237	600	900	488	712	388
FCO 1100	1601	882	1284	695	1039	538	850	441
FCO 1150	2025	1125	1625	957	1175	731	937	600
FCO 1200	2086	1172	1698	1018	1252	754	1005	599
FCO 1300	2358	1673	1938	1387	1567	1099	1224	816
FCO 1400	2556	1791	2045	1433	1636	1147	1304	914
FCO 1600	3213	2570	2570	2056	2056	1645	1606	1311
FCO 1800	4249	3760	3400	3007	2720	2406	2168	1918

Note: the margin of error is $\pm 10\%$.



TYPE	H, mm	Ø D, mm	Ø d, mm	t, mm	E, mm	Ø PD, mm	Ø Pd, mm	Bolts	Weight, kg
FCO 300	300	500	262	18	38	440	210	4 x M20	34
FCO 350	350	570	305	20	38	510	245	4 x M20	52
FCO 400	400	650	350	20	38	585	280	4 x M20	74
FCO 500	500	820	435	22	40	730	350	4 x M24	148
FCO 600	600	900	525	23	45	810	420	4 x M24	243
FCO 700	700	1120	615	26	45	1020	490	4 x M30	396
FCO 800	800	1280	700	31	72	1165	560	6 x M30	577
FCO 900	900	1450	785	36	72	1313	630	6 x M30	846
FCO 1000	1000	1600	875	38	82	1460	700	6 x M36	1114
FCO 1100	1100	1650	935	50	87	1485	715	6 x M42	1500
FCO 1150	1150	1850	1000	41	92	1550	805	6 x M42	1731
FCO 1200	1200	1920	1050	46	92	1750	840	8 x M42	1951
FCO 1300	1300	2080	1140	50	105	1900	910	8 x M48	2446
FCO 1400	1400	2240	1230	53	105	2040	980	8 x M48	2987
FCO 1600	1600	2500	1400	80	105	2330	1120	8 x M48	4409
FCO 1800	1800	2880	1575	90	120	2620	1260	10 x M56	6618
FCO 2000	2000	3090	1750	100	120	2920	1400	10 x M56	9560

Note: rubber products of different sizes can be made at the request of the customer.

ME ELEMENT FENDERS



All fender systems utilize one or multiple pairs of energy-absorbing elements with a front panel.

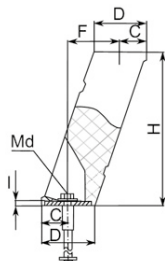
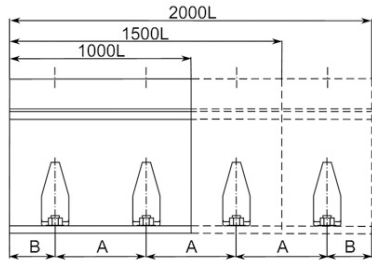
Key Design Features:

1. Structural Panel
 - ☑ Directly attached to ME elements
 - ☑ Engineered to withstand continuous loading
 - ☑ Serves as primary load-bearing component
2. UHMW-PE Coating Advantages
 - ☑ Hull-friendly surface:
 - ☑ Conforms to vessel contours
 - ☑ Non-marking paint protection
 - ☑ Ultra-low friction properties:
 - ☑ Reduces operational wear on fender body
 - ☑ Minimizes stress on mounting systems

These fenders use energy-absorbing elements and a front panel. The UHMW-PE coating is gentle on ship hulls, adapts to their shape, and leaves no marks. Its low friction reduces load on the fenders and fasteners.

DIMENSIONAL CHARACTERISTICS (MM, KG/M)

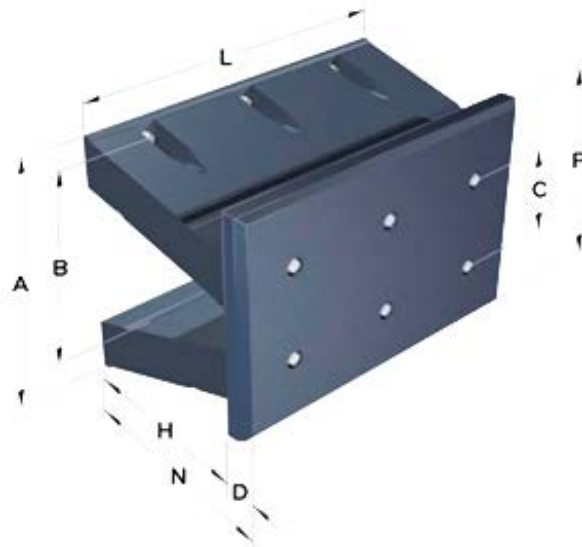
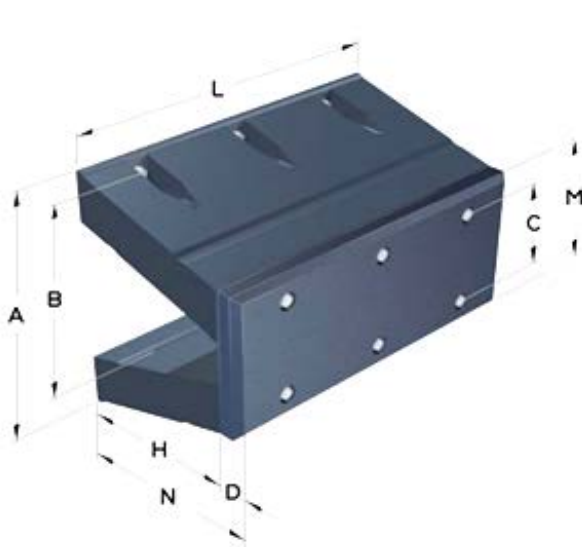
	H	A	B	C	D	I	F	Md	Weight
ME 400	400	400	250	63	125	17	124	M24	77
ME 500	500	500	250	87	158	20	142	M30	121
ME 600	600	500	250	87	188	20	199	M30	172
ME 750	750	500	250	118	235	26	230	M36	253
ME 800	800	500	250	129	250	26	240	M36	311
ME 1000	1000	500	250	162	322	31	310	M42	473
ME 1250	1250	500	250	202	401	36	388	M48	720
ME 1450	1450	500	250	228	454	41	454	M48	919
ME 1600	1600	500	250	257	500	55	480	M56	1105

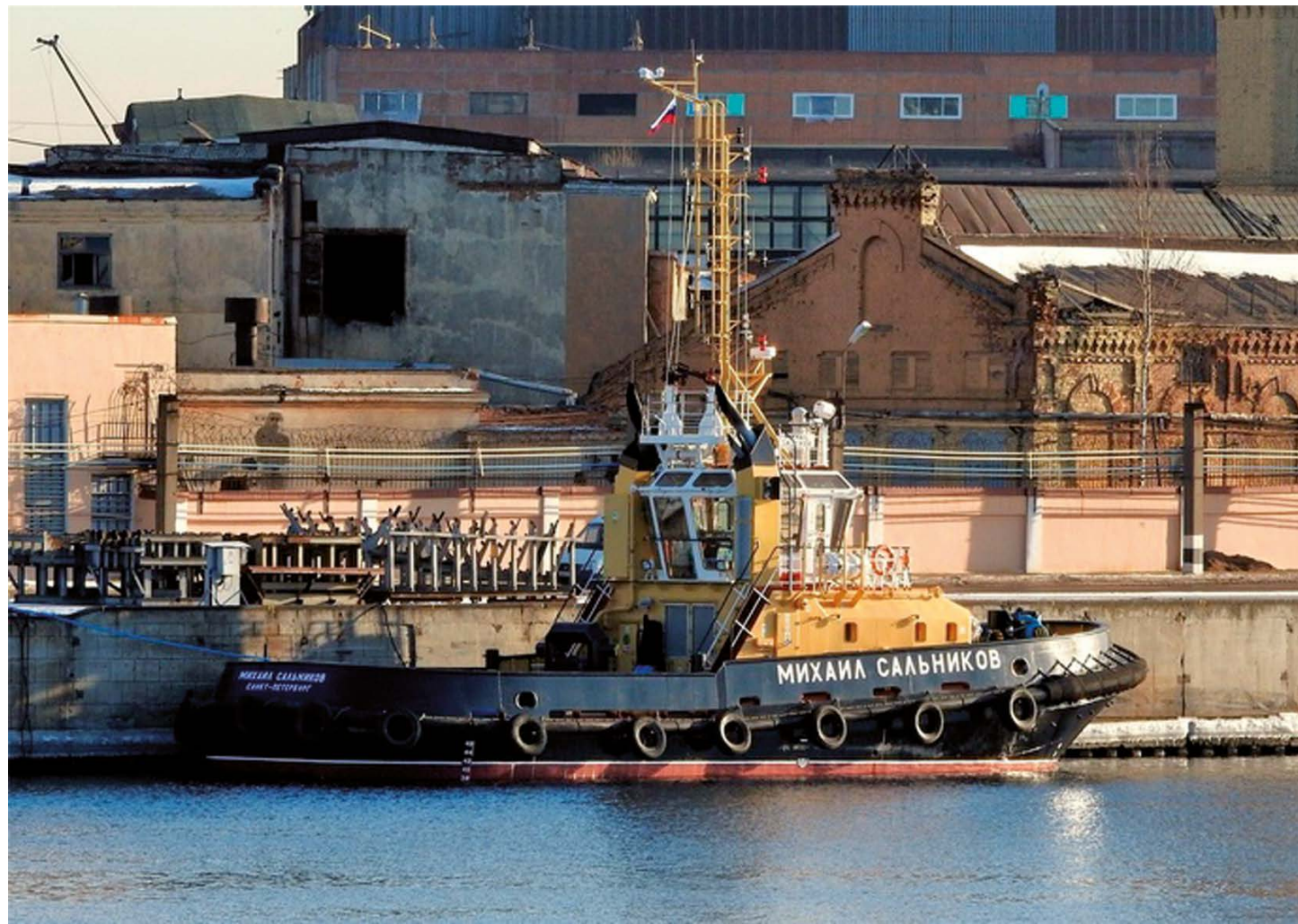


NOMINAL DEFORMATION 57,5 %

	RO		RH	
	R:KN	E:KNm	R:KN	E:RNm
ME 400	150	27	214	39
ME 500	187	43	267	61
ME 600	224	62	320	89
ME 750	282	96	402	137
ME 800	299	110	428	157
ME 1000	374	172	534	245
ME 1250	467	268	667	383
ME 1450	543	361	775	516
ME 1600	599	440	855	628

H	D (min)	A	B	C	N	M	P	Bracing
ME 400	80	606	480	232	480	360	500	M24
ME 500	90	774	600	316	590	460	660	M30
ME 600	90	894	720	322	690	530	800	M30
ME 750	100	1136	900	440	850	680	1010	M36
ME 800	100	1218	960	480	900	730	1170	M36
ME 1000	120	1524	1200	580	1120	900	1330	M42
ME 1250	120	1904	1500	724	1370	1140	1660	M48







RUBBER FENDERS
for ships and berths

 transotboy.ru

 8 (4712) 77-02-71

 info@transotboy.ru