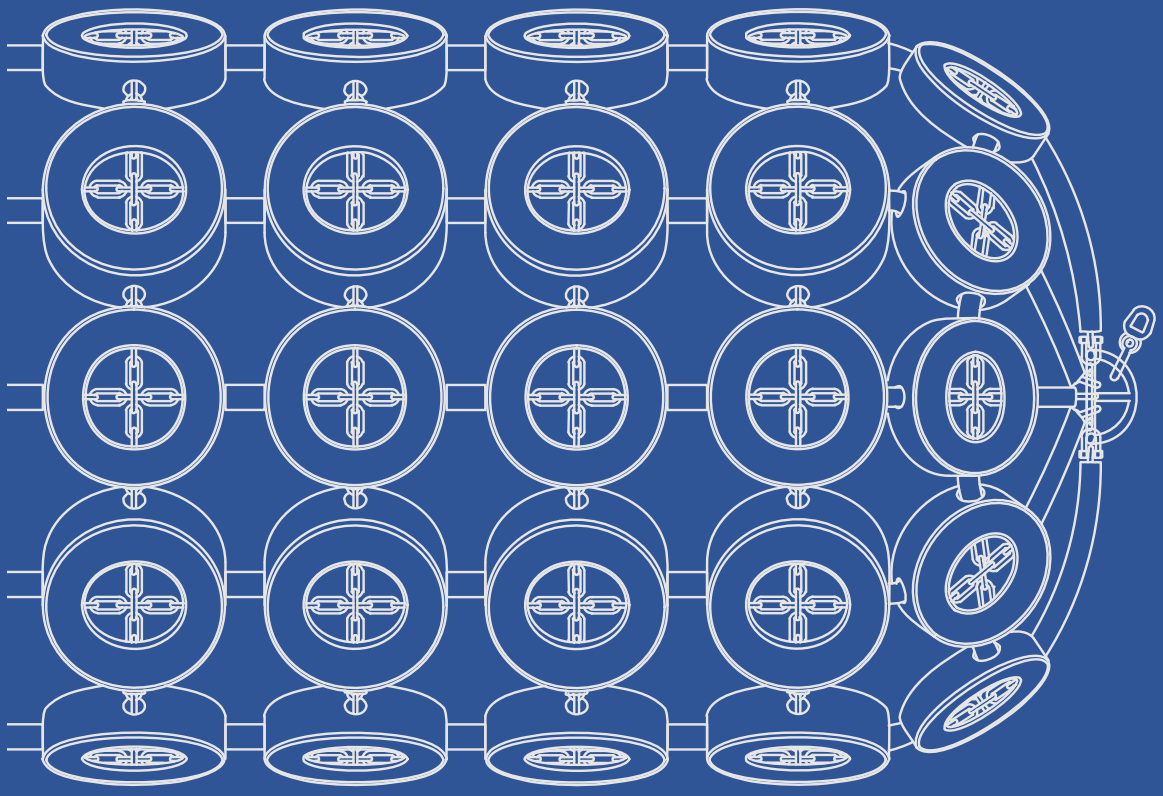
PNEUMATIC FENDERS



M.E.C.I. Srl
LASHING AND LIFTING EQUIPMENT

Pneumatic Fenders – **Chart**

50 kPa

Size	Energy Absorption	Reaction Force	Weight
Mm	kNm	kN	kg
700 x 1500	17	137	50
1000 x 1500	32	182	80
1000 x 2000	45	257	100
1200 x 2000	63	297	120
1500 x 3000	153	579	320
2000 x 3500	308	875	590
2500 x 3500	580	1208	1282
2500 x 4000	663	1380	1800
2500 x 5500	932	2010	1400
3000 x 5000	1050	2030	1800
3000 x 6000	1315	2488	2200
3300 x 4500	1180	1885	1890
3300 x 6500	1814	3015	2700
4500 x 6500	3432	4150	4982
4500 x 9000	4752	5747	6800

80 kPa

Size	Energy Absorption	Reaction Force	Weight
Mm	kNm	kN	kg
700 x 1500	21	171	60
1000 x 1500	40	266	96
1000 x 2000	56	321	120
1200 x 2000	79	371	144
1500 x 3000	191	724	384
2000 x 3500	385	1094	708
2500 x 3500	726	1408	1200
2500 x 4000	829	1725	1200
2500 x 5500	1165	2513	1680
3000 x 5000	1313	2538	2160
3000 x 6000	1644	3110	2640
3300 x 4500	1640	2647	2270
3300 x 6500	2268	3769	3240
4500 x 6500	4518	4998	3990
4500 x 9000	6633	7551	9850

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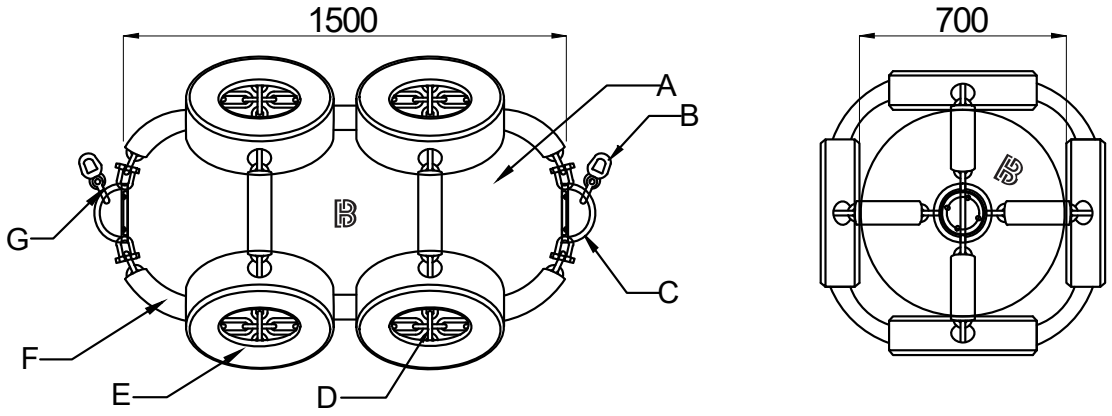
700 x 1500 – Pneumatic Fender

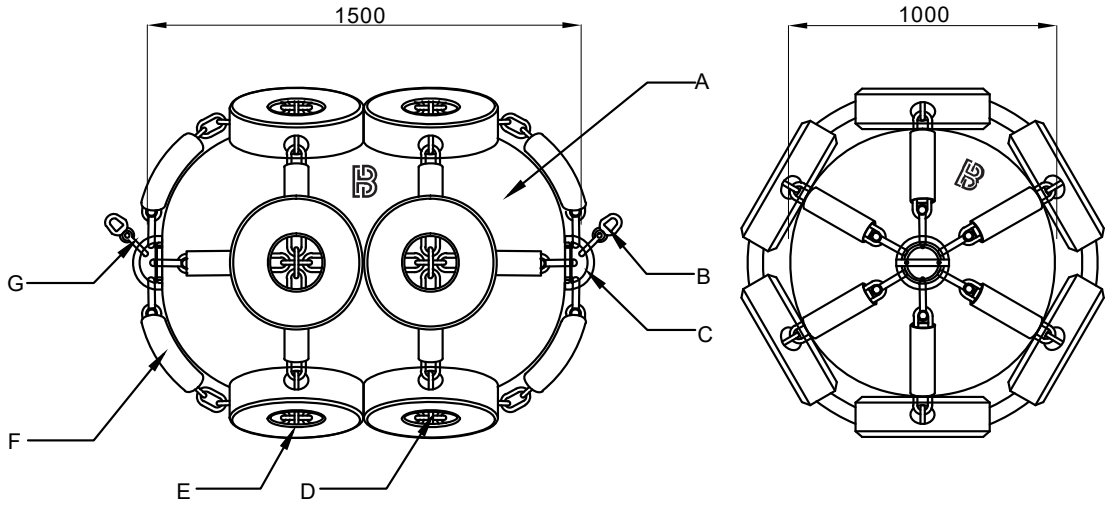


50 kPa	Value	80 kPa	Value
Energy Absorption	17 kNm	Energy Absorption	21 kNm
Reaction Force	137 kN	Reaction Force	171 kN
Weight	50 kgs	Weight	60 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Swivel	B	Swivel
C	Pull Ring	C	Pull Ring
D	Chain	D	Chain
E	Tires	E	Tires
F	Rubber Sleves	F	Rubber Sleves
G	Shackle	G	Shackle

Performance is calculated at 60% compression. ISO17357-1: 2014

Weight unit is Kilograms. All measurements in mm. Measurements, weights, and drawings, are based on industry standards, and at 60% compression. A size tolerance of 5%, and other possible deviation margins need to be taken in mind.

Pneumatic Fender – **1000 x 1500**



50 kPa	Value	80 kPa	Value
Energy Absorption	32 kNm	Energy Absorption	40 kNm
Reaction Force	181 kN	Reaction Force	266 kN
Weight	80 kgs	Weight	96 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Swivel	B	Swivel
C	Pull Ring	C	Pull Ring
D	Chain	D	Chain
E	Tires	E	Tires
F	Rubber Sleves	F	Rubber Sleves
G	Shackle	G	Shackle

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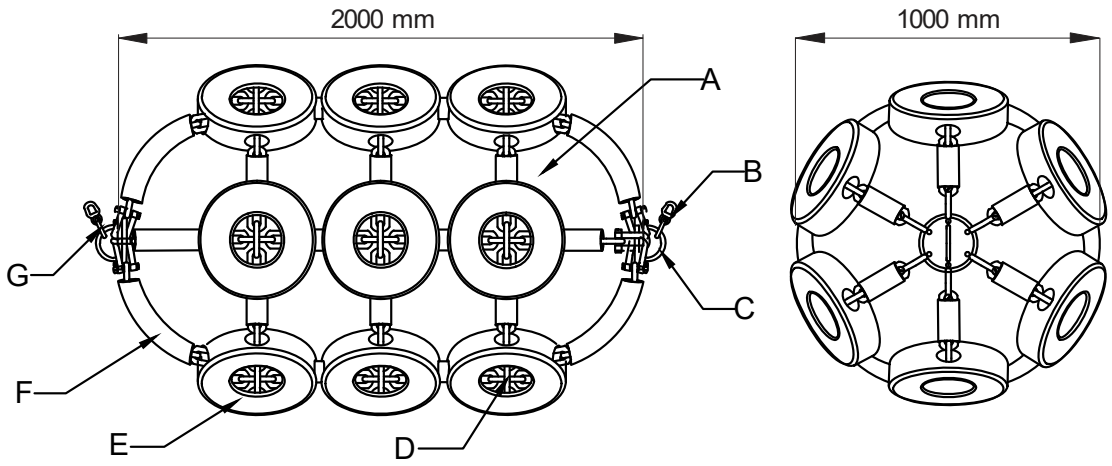
1000 x 2000 – Pneumatic Fender

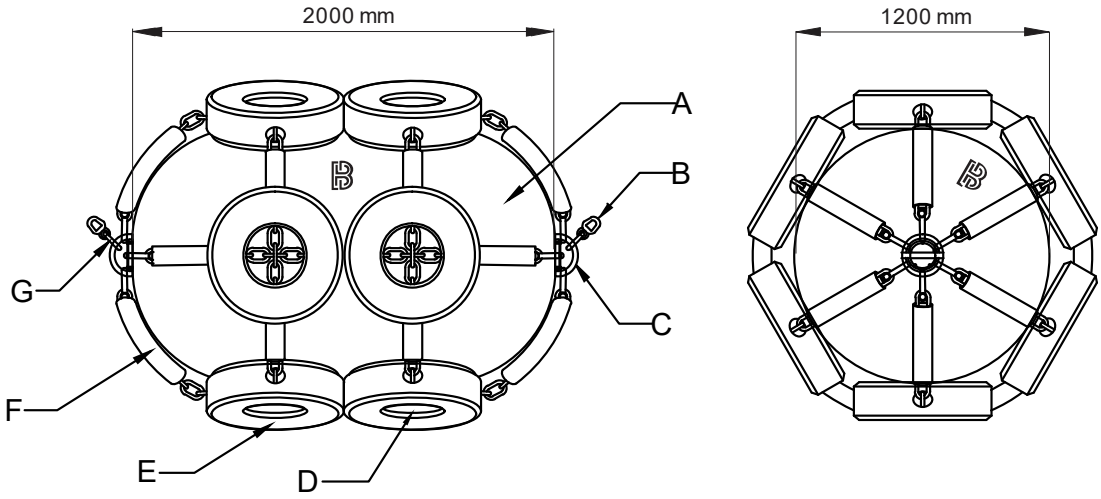


50 kPa	Value	80 kPa	Value
Energy Absorption	45 kNm	Energy Absorption	56 kNm
Reaction Force	257 kN	Reaction Force	321 kN
Weight	100 kgs	Weight	120 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Swivel	B	Swivel
C	Pull Ring	C	Pull Ring
D	Chain	D	Chain
E	Tires	E	Tires
F	Rubber Sleves	F	Rubber Sleves
G	Shackle	G	Shackle

Performance is calculated at 60% compression. ISO17357-1: 2014

Weight unit is Kilograms. All measurements in mm. Measurements, weights, and drawings, are based on industry standards, and at 60% compression. A size tolerance of 5%, and other possible deviation margins need to be taken in mind.

Pneumatic Fender – **1200 x 2000**



50 kPa	Value	80 kPa	Value
Energy Absorption	63 kNm	Energy Absorption	79 kNm
Reaction Force	297 kN	Reaction Force	371 kN
Weight	120 kgs	Weight	144 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Swivel	B	Swivel
C	Pull Ring	C	Pull Ring
D	Chain	D	Chain
E	Tires	E	Tires
F	Rubber Sleves	F	Rubber Sleves
G	Shackle	G	Shackle

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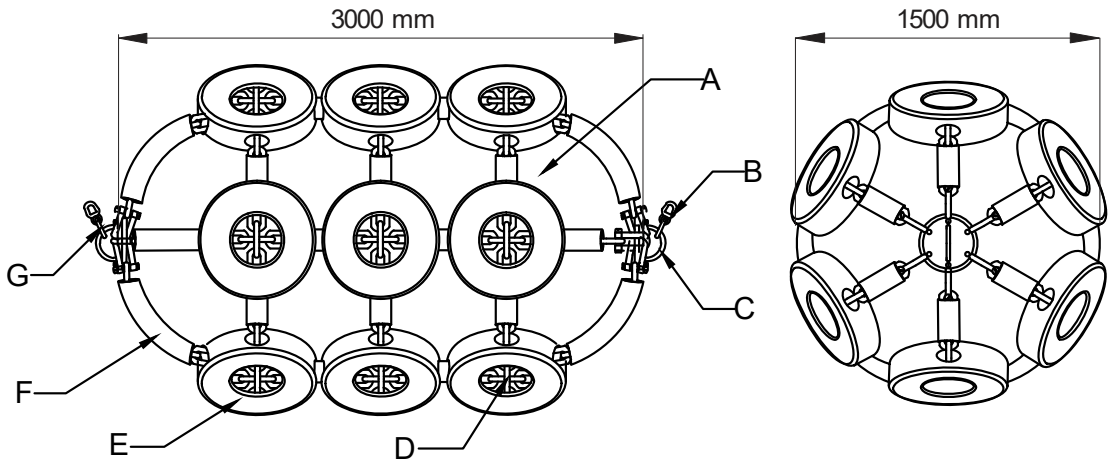
1500 x 3000 – Pneumatic Fender

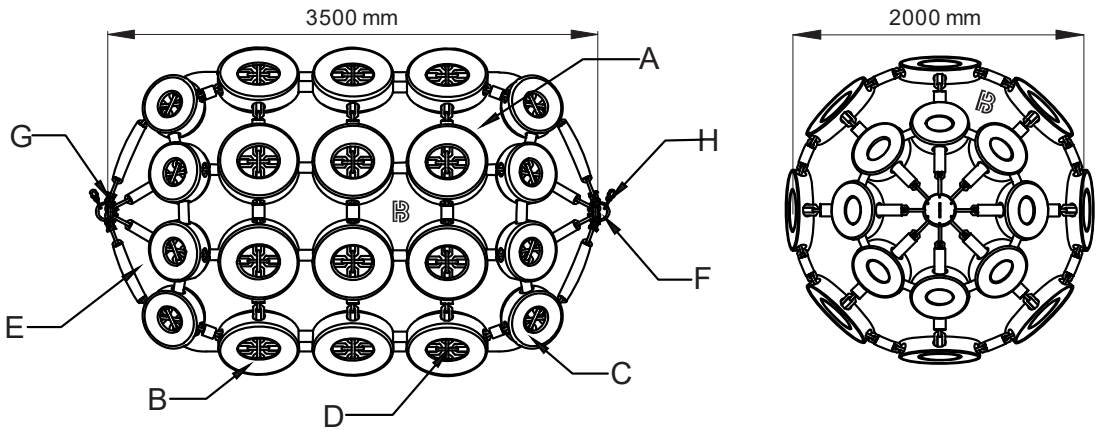


50 kPa	Value	80 kPa	Value
Energy Absorption	153 kNm	Energy Absorption	191 kNm
Reaction Force	579 kN	Reaction Force	724 kN
Weight	320 kgs	Weight	384 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Swivel	B	Swivel
C	Pull Ring	C	Pull Ring
D	Chain	D	Chain
E	Tires	E	Tires
F	Rubber Sleves	F	Rubber Sleves
G	Shackle	G	Shackle

Performance is calculated at 60% compression. ISO17357-1: 2014

Weight unit is Kilograms. All measurements in mm. Measurements, weights, and drawings, are based on industry standards, and at 60% compression. A size tolerance of 5%, and other possible deviation margins need to be taken in mind.

Pneumatic Fender – **2000 x 3500**



50 kPa	Value	80 kPa	Value
Energy Absorption	308 kNm	Energy Absorption	385 kNm
Reaction Force	875 kN	Reaction Force	1094 kN
Weight	590 kgs	Weight	708 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

Performance is calculated at 60% compression. ISO17357-1: 2014

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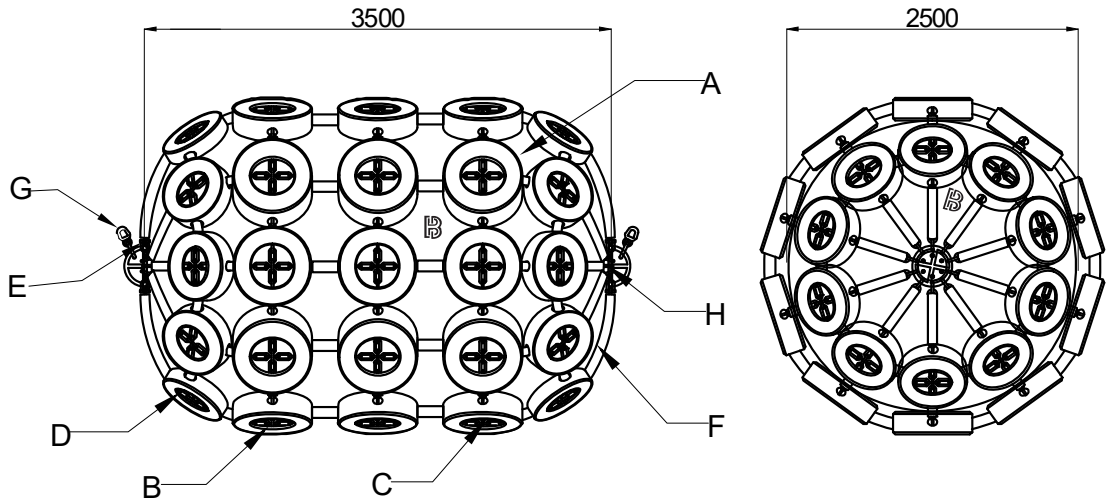
2500 x 3500 – Pneumatic Fender

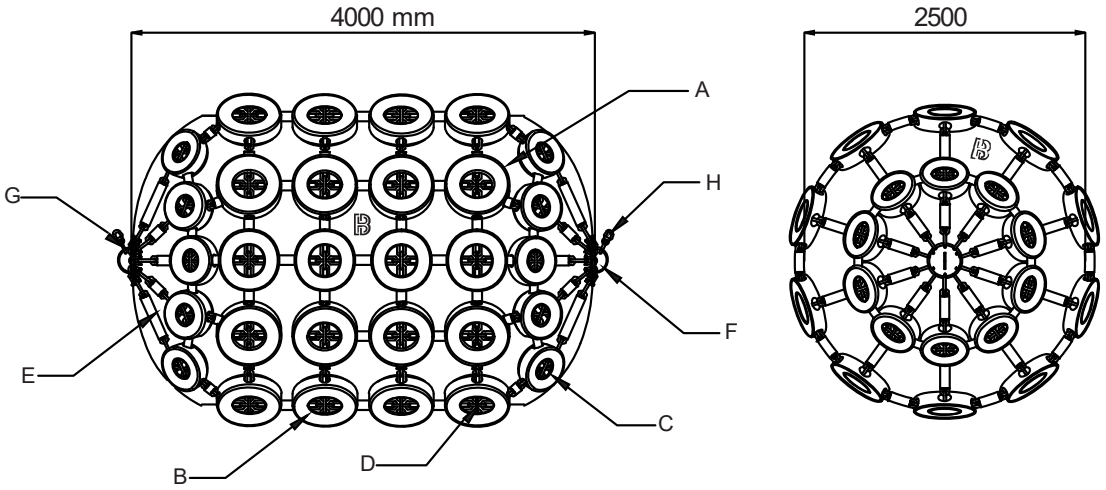


50 kPa	Value	80 kPa	Value
Energy Absorption	580 kNm	Energy Absorption	726 kNm
Reaction Force	1208 kN	Reaction Force	1408 kN
Weight	1282 kgs	Weight	1200 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Chain	C	Chain
D	Shoulder Tires	D	Shoulder Tires
E	Shackle	E	Shackle
F	Rubber Sleeves	F	Rubber Sleeves
G	Swivel	G	Swivel
H	Pull Ring	H	Pull Ring

Performance is calculated at 60% compression. ISO17357-1: 2014

Weight unit is Kilograms. All measurements in mm. Measurements, weights, and drawings, are based on industry standards, and at 60% compression. A size tolerance of 5%, and other possible deviation margins need to be taken in mind.

Pneumatic Fender – **2500 x 4000**



50 kPa	Value	80 kPa	Value
Energy Absorption	663 kNm	Energy Absorption	829 kNm
Reaction Force	1380 kN	Reaction Force	1725 kN
Weight	1800 kgs	Weight	1200 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

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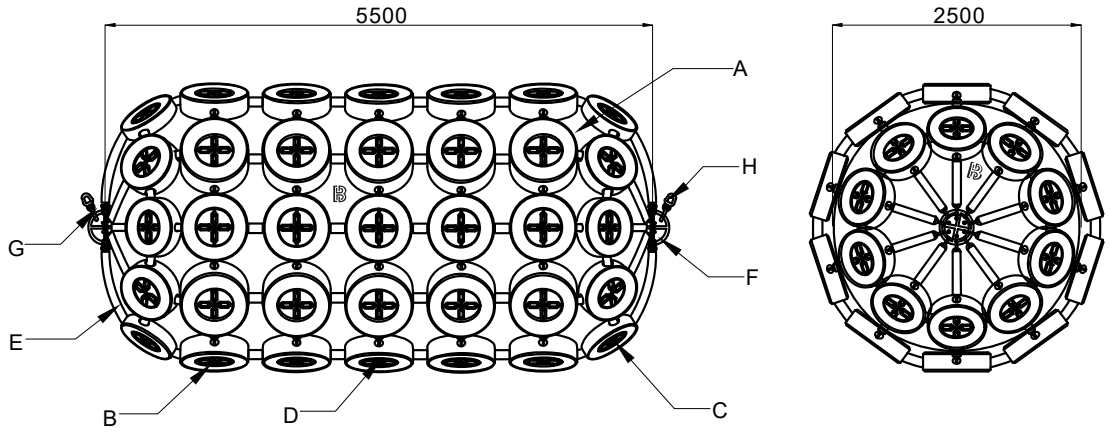
2500 x 5500 – Pneumatic Fender

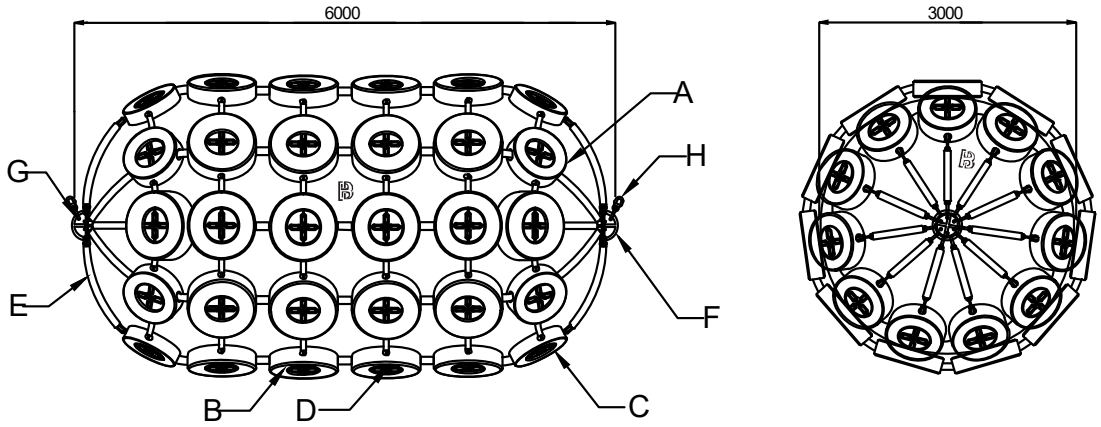


50 kPa	Value	80 kPa	Value
Energy Absorption	932 kNm	Energy Absorption	1165 kNm
Reaction Force	2010 kN	Reaction Force	2513 kN
Weight	1400 kgs	Weight	1680 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

Performance is calculated at 60% compression. ISO17357-1: 2014

Weight unit is Kilograms. All measurements in mm. Measurements, weights, and drawings, are based on industry standards, and at 60% compression. A size tolerance of 5%, and other possible deviation margins need to be taken in mind.

Pneumatic Fender – **3000 x 6000**



50 kPa	Value	80 kPa	Value
Energy Absorption	1315 kNm	Energy Absorption	1644 kNm
Reaction Force	2488 kN	Reaction Force	3110 kN
Weight	2200 kgs	Weight	2640 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

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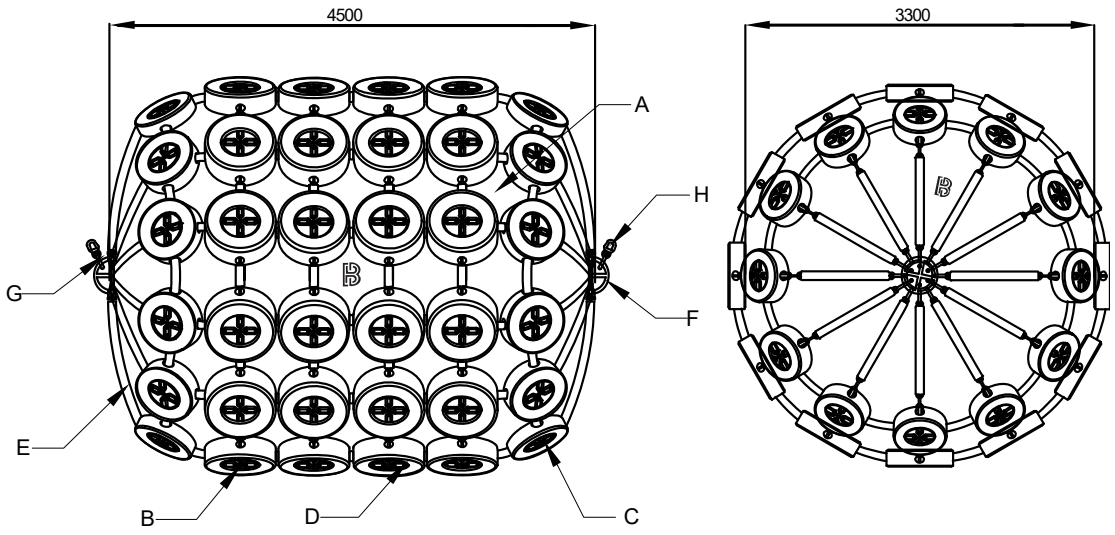
3300 x 4500 – Pneumatic Fender

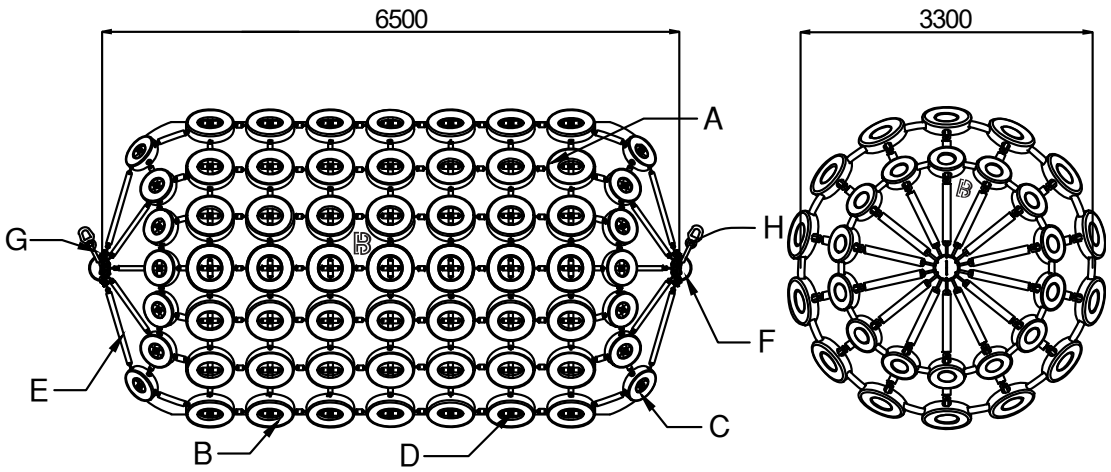


50 kPa	Value	80 kPa	Value
Energy Absorption	1175 kNm	Energy Absorption	1640 kNm
Reaction Force	1884 kN	Reaction Force	2467 kN
Weight	1890 kgs	Weight	2270 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

Performance is calculated at 60% compression. ISO17357-1: 2014

Weight unit is Kilograms. All measurements in mm. Measurements, weights, and drawings, are based on industry standards, and at 60% compression. A size tolerance of 5%, and other possible deviation margins need to be taken in mind.

Pneumatic Fender – **3300 x 6500**



50 kPa	Value	80 kPa	Value
Energy Absorption	1814 kNm	Energy Absorption	2268 kNm
Reaction Force	3015 kN	Reaction Force	3769 kN
Weight	2700 kgs	Weight	3240 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

Performance is calculated at 60% compression. ISO17357-1: 2014

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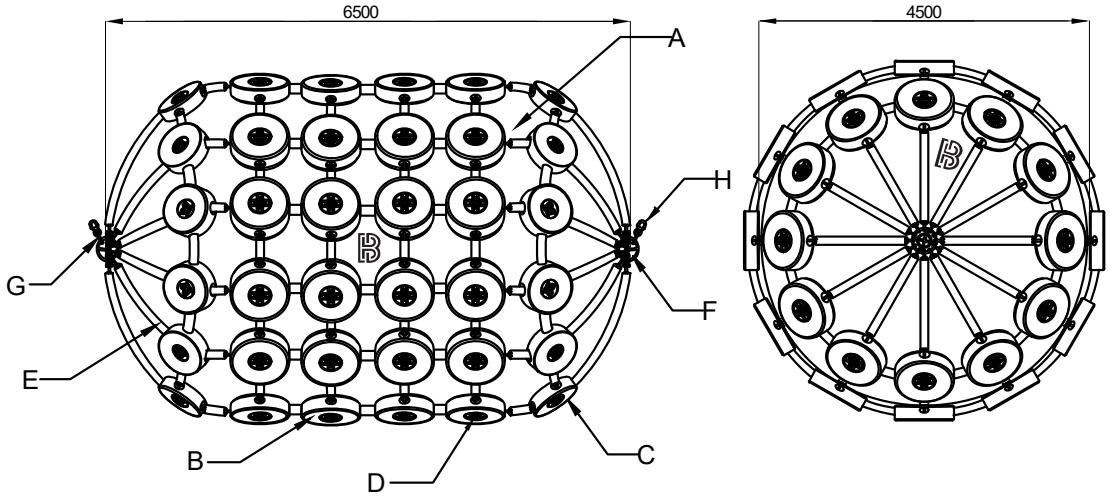
4500 x 6500 – Pneumatic Fender



50 kPa	Value	80 kPa	Value
Energy Absorption	3432 kNm	Energy Absorption	4518 kNm
Reaction Force	4150 kN	Reaction Force	4998 kN
Weight	4982 kgs	Weight	3990 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

Performance is calculated at 60% compression. ISO17357-1: 2014

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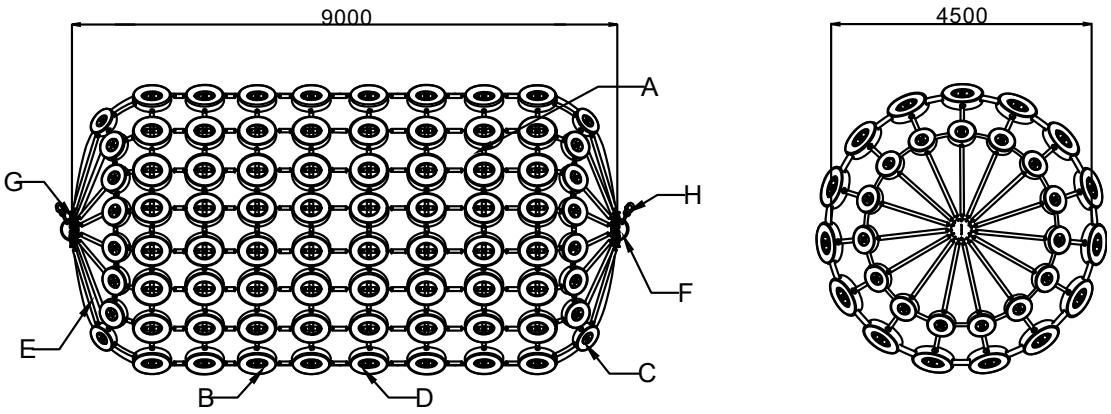
Pneumatic Fender – **4500 x 9000**



50 kPa	Value	80 kPa	Value
Energy Absorption	4752 kNm	Energy Absorption	6633 kNm
Reaction Force	5747 kN	Reaction Force	7551 kN
Weight	6800 kgs	Weight	9850 kgs
Initial Pressure	50 kPa	Initial Pressure	80 kPa
A	Fender Body (Rubber)	A	Fender Body (Rubber)
B	Tires	B	Tires
C	Shoulder Tires	C	Shoulder Tires
D	Chain	D	Chain
E	Rubber Sleeves	E	Rubber Sleeves
F	Pull Ring	F	Pull Ring
G	Shackle	G	Shackle
H	Swivel	H	Swivel

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