



# Ocean Cushion Fenders.

## Characteristics

- ▶ Proportional increase of energy and reaction
- ▶ Extremely robust
- ▶ No performance loss and unsinkable even if damaged
- ▶ Smaller skin damages can easily be repaired on site
- ▶ Optional aircraft tires

## Applications

- ▶ Ship-to-shore operations with very rough and uneven surfaces
- ▶ Heavy duty ship-to-ship lightering operations

## OCEAN CUSHION FENDER DIMENSIONS AND PERFORMANCE VALUES

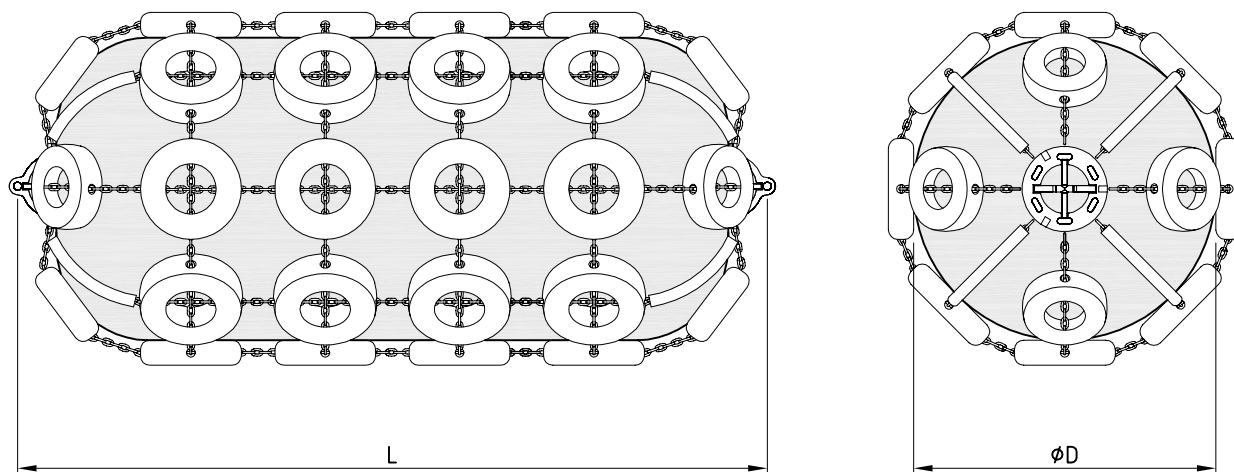
Fender Size D x L [mm]	Overall Diameter* [mm]	Low Capacity				Standard Capacity				High Capacity			
		Energy [kJNm]	Reaction [kN]	Pressure [kN/m <sup>2</sup> ]	Weight** [kg]	Energy [kJNm]	Reaction [kN]	Pressure [kN/m <sup>2</sup> ]	Weight** [kg]	Energy [kJNm]	Reaction [kN]	Pressure [kN/m <sup>2</sup> ]	Weight** [kg]
1,000 x 2,000	1,300	39	177	104	393	69	294	172	891	98	422	224	473
1,200 x 2,000	1,600	49	206	104	474	88	334	172	529	128	481	224	585
1,350 x 2,500	1,800	88	284	104	646	137	481	172	736	206	677	224	826
1,500 x 3,000	2,000	128	392	104	882	216	647	172	1,018	304	912	224	1,154
1,700 x 3,000	2,200	157	432	104	968	265	716	172	1,139	383	1,010	224	1,309
2,000 x 3,500	2,500	255	589	104	1,546	432	991	172	1,823	628	1,393	224	2,098
2,000 x 4,000	2,500	304	687	104	1,837	500	1,148	172	2,160	726	1,619	224	2,424
2,200 x 4,500	2,700	402	853	104	2,275	677	1,432	172	2,719	981	2,011	224	3,163
2,500 x 4,000	3,000	441	814	104	1,642	736	1,354	172	2,125	1,069	1,913	224	2,607
2,500 x 5,500	3,000	647	1,197	104	2,678	1,079	1,991	172	3,387	1,560	2,796	224	4,096
3,000 x 6,000	3,500	991	1,521	104	3,506	1,648	2,541	172	4,606	2,384	3,581	224	5,707
3,300 x 4,500	3,800	824	1,148	104	3,075	1,373	1,913	172	3,980	1,982	2,698	224	4,886
3,300 x 6,500	3,800	1,285	1,805	104	4,580	2,148	3,002	172	6,017	3,110	4,228	224	7,295
4,200 x 8,400	4,800	2,708	2,972	104	10,363	4,513	4,934	172	13,372	6,533	6,955	224	16,381

Intermediate sizes and different foam capacities available upon request | Above mentioned sizes are indicative and may change during final design process

\* Subject to availability of suitable tires

\*\* Total weight (fender body including chain & tire net)

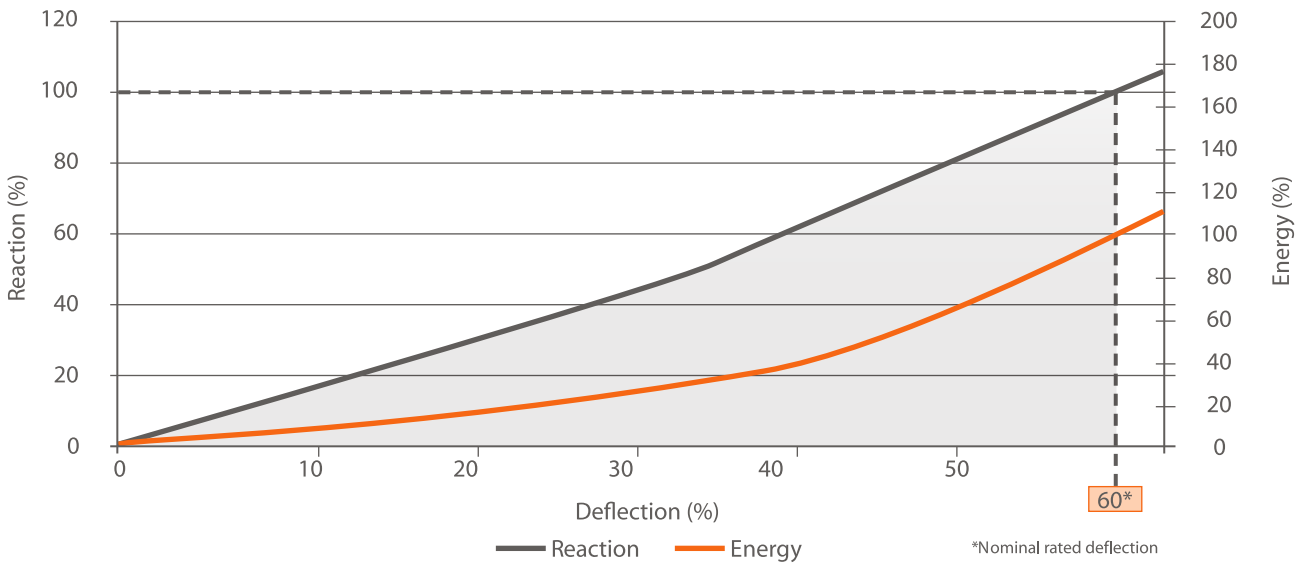
## OCEAN CUSHION FENDER DRAWING





Osthafen | Bremerhaven | Germany

GENERIC PERFORMANCE CURVE OCEAN CUSHION FENDERS



\*Nominal rated deflection



Zeeland Seaports | Vlissingen |  
The Netherlands



Kaiserschleuse | Bremerhaven | Germany

