



# Donut Fenders.

## Characteristics

- ▶ Proportional load deflection curve
- ▶ Low shear forces
- ▶ Self-adjusting to changing water levels
- ▶ Low installation costs
- ▶ Generally maintenance free
- ▶ Individual drafts can be controlled by counterweights

## Applications

- ▶ Locks and dry dock entrances, corner protection, turning dolphins, areas with large tidal variations or bridge protections
- ▶ Other monopile structures
- ▶ Submarine jetties

## DONUT FENDER DIMENSIONS

Fender Size D [mm]	Max. Pile Diameter [mm]	Low Capacity*		Standard Capacity*		High Capacity*	
		Energy [kNm]	Reaction [kN]	Energy [kNm]	Reaction [kN]	Energy [kNm]	Reaction [kN]
1,270	610	4.2	68	7.2	116	11.3	182
1,450	710	5.4	77	9.2	131	14.4	206
1,520	762	6.2	82	10.5	140	16.5	220
1,780	914	8.3	95	14.1	162	22.1	254
1,910	995	9.6	103	16.4	175	25.7	275
2,030	1,067	10.9	109	18.6	186	29.2	292
2,210	1,185	13.1	120	22.3	204	35.0	320
2,290	1,219	13.9	124	23.6	210	37.1	330
2,490	1,345	16.5	135	28.0	229	44.0	360
2,540	1,372	17.2	138	29.3	234	46.0	367
2,790	1,524	20.8	151	35.3	256	55.4	402
2,970	1,639	23.6	161	40.1	273	63.0	429
3,050	1,676	24.8	165	42.1	280	66.1	440
3,300	1,829	29.1	179	49.5	304	77.7	477
3,450	1,933	32.1	188	54.6	319	85.7	501
3,530	1,981	33.6	192	57.2	327	89.8	513
3,810	2,134	38.8	206	65.9	350	103.5	550
3,960	2,241	42.4	215	72.1	366	113.2	575
4,060	2,286	44.2	220	75.1	374	117.9	587
4,220	2,388	47.8	229	81.3	389	127.6	611

Intermediate sizes and different foam capacities available upon request

\* Value for height = 1,000 mm

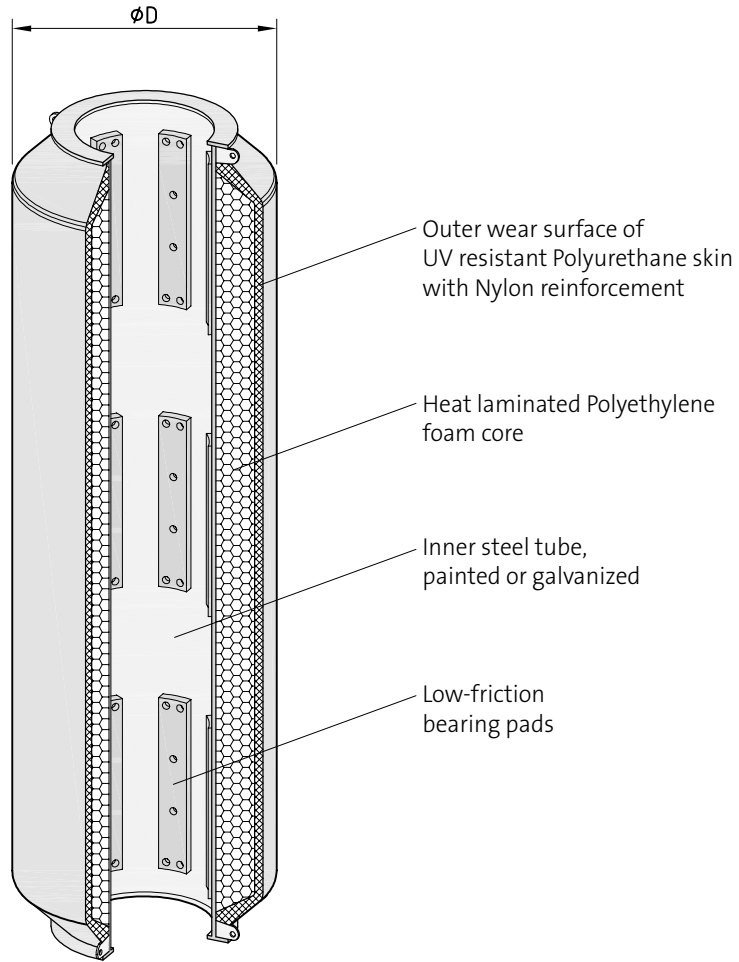


Ferry Terminal | Sejerø | Denmark

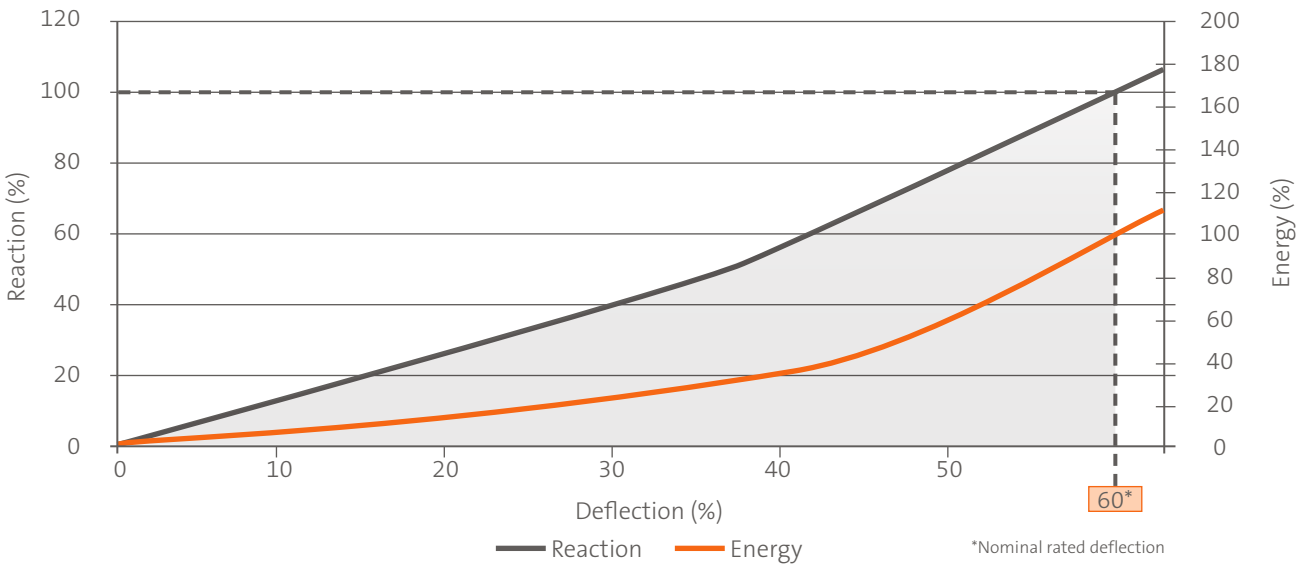


General Cargo Terminal | Cuxhaven | Germany

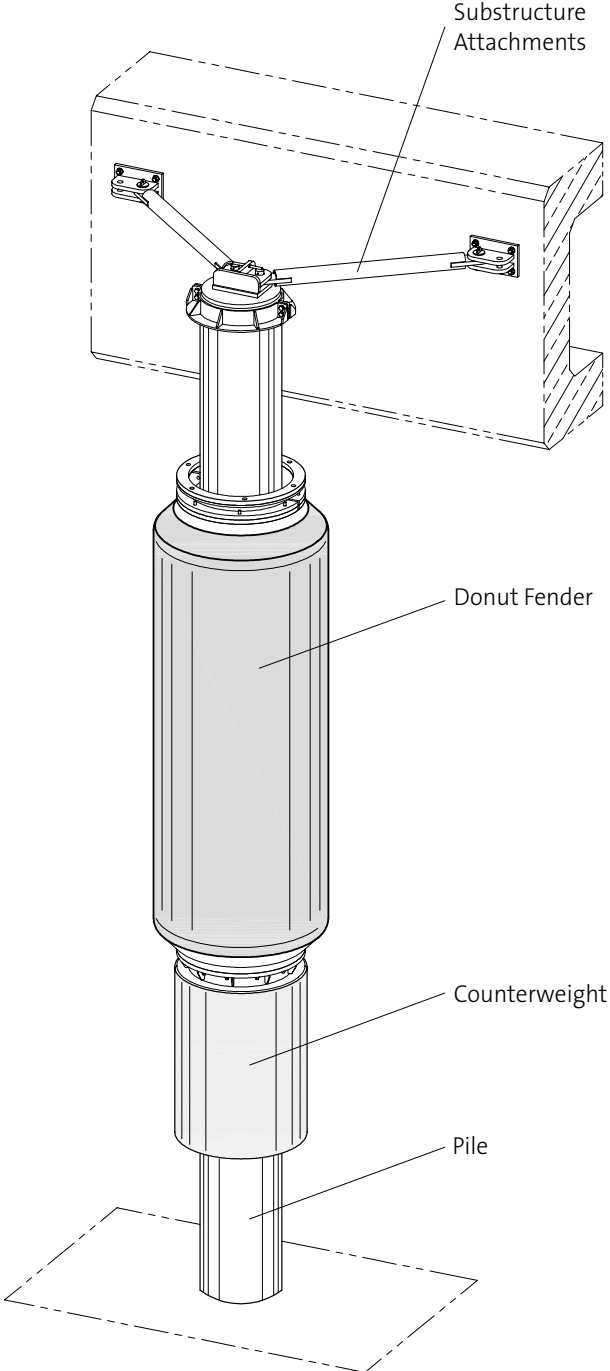
### DONUT FENDER DRAWING



### GENERIC PERFORMANCE CURVE DONUT FENDERS



### DONUT FENDER DRAWING WITH COUNTERWEIGHT



Navy Base | Eckernförde | Germany