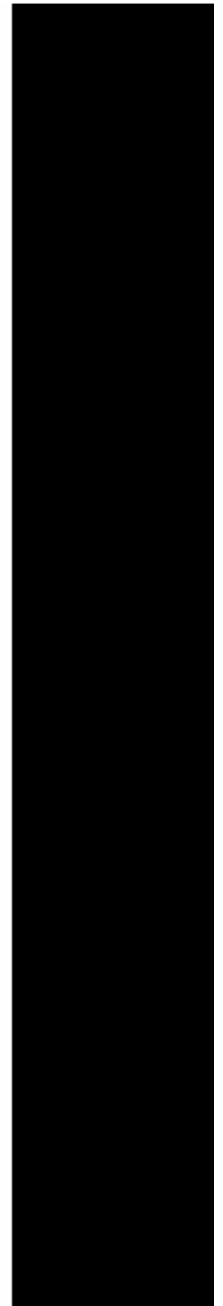


RUBBER CYLINDRICAL FENDERS



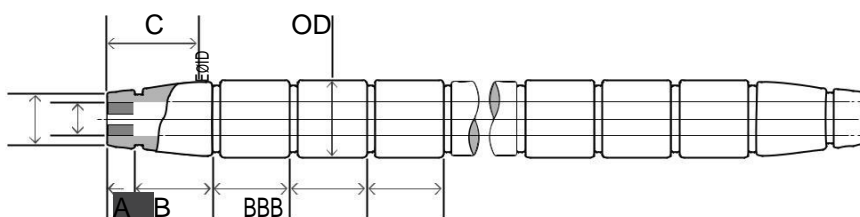
Engineer Company manufacture and supply a wide variety of rubber cylindrical fenders, which can be directly mounted to a ship. These fenders come in a variety of sizes to fit the smallest, as well as largest sea craft.

Our cylindrical ship fenders are typically mounted to the hull of the ship using the suspended installation method. This method utilises a longitudinal chain which provides continuous, secure protection. We can taper the ends of the fender to get a body blend connection to the hull of the sea vessel.

These fenders offer heavy duty protection against a wide variety of impacts. They are commonly used in larger sea craft due to the excellent protection they offer.

We only manufacture using a high quality SBR/natural compound. This compound is highly resistant to warping as well as deterioration. It also offers excellent resistance to both UV radiation and saltwater.

Cylindrical Ship Fenders



Product Reference	OD mm	ID mm	A mm	B mm	C mm	FL E mm
ECR0801-200-SF	200	100	150	530	500	150
ECR0801-250-SF	250	125	200	570	500	190
ECR0801-300-SF	300	150	225	600	700	225
ECR0801-380-SF	380	190	250	630	800	260
ECR0801-400-SF	400	200	300	670	800	300
ECR0801-500-SF	500	250	300	730	900	375
ECR0801-600-SF	600	300	350	800	900	450
ECR0801-700-SF	700	350	350	860	1000	525
ECR0801-800-SF	800	400	350	930	1000	600
ECR0801-900-SF	900	450	350	1000	1100	675
ECR0801-1000-SF	1000	500	350	1000	1200	750



Cylindrical Marine Fenders



As well as ship fenders, Engineer Company also produce a wide range of large cylindrical fenders for use in marinas and jetties.

We manufacture the smaller sizes through a die using the extrusion method. This gives us greater control over the outcome of the product and enables us to produce these fenders as small as 20mm OD all the way up to 2700mm OD. The design of hollow cylindrical fenders are relatively simple. The standard rule is the ID is typically 50% less than the OD. We can produce this product in various lengths to suit your unique requirements, (up to the maximum run lengths).

Our hollow cylindrical fenders are most commonly used for marine applications, however they offer excellent protection for a wide range of applications.

We also offer the option of pre-curving and drilling the fenders prior to dispatch to assist with transportation as well as installation.

Product Reference	OD x ID mm	Chain Size mm	Steel Bar mm	Anchor mm
ECR0802-100	100 x 50	16	25	25
ECR0802-125	125 x 62	16	25	25
ECR0802-150	150 x 75	16	25	25
ECR0802-200	200 x 100	19	28	25
ECR0802-250	250 x 125	19	28	25
ECR0802-300	300 x 150	22	32	32
ECR0802-350	350 x 175	22	32	32
ECR0802-380	380 x 190	22	32	32
ECR0802-400	400 x 200	25	38	36
ECR0802-450	450 x 225	25	38	40
ECR0802-500	500 x 250	28	42	40
ECR0802-600	600 x 300	30	46	42
ECR0802-700	700 x 350	32	50	46
ECR0802-800	800 x 400	34	55	48
ECR0802-900	900 x 450	34	55	48
ECR0802-1000	1000 x 500	38	60	55
ECR0802-1100	1100 x 550	38	60	55
ECR0802-1200	1200 x 600	40	70	62
ECR0802-1300	1300 x 650	42	70	62
ECR0802-1400	1400 x 700	44	70	62
ECR0802-1500	1500 x 750	46	70	66



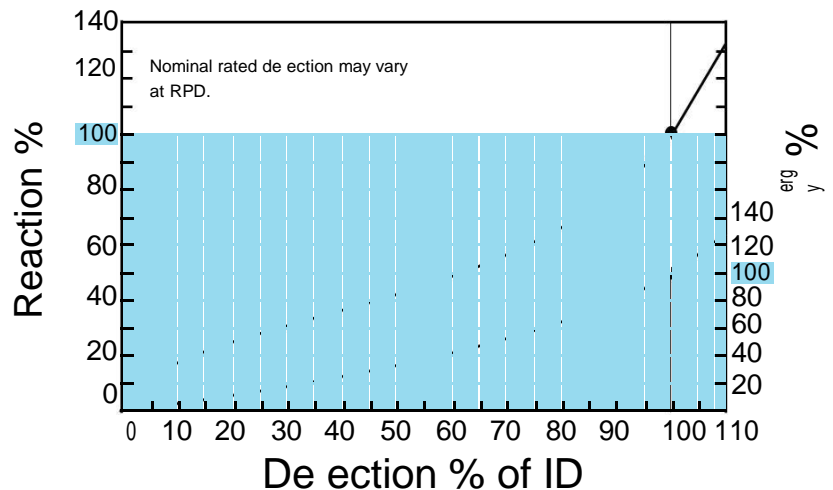
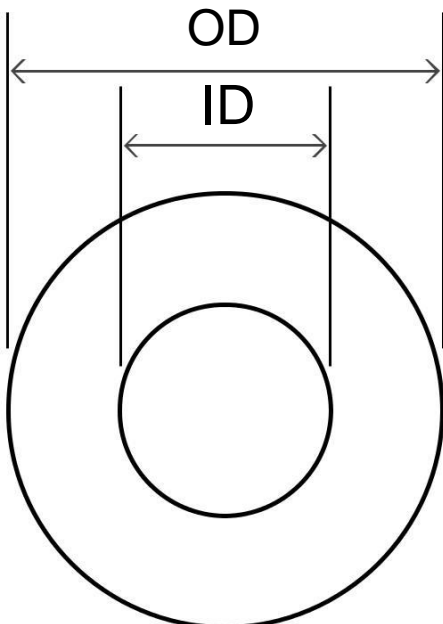
Fender Performance Guide

In order to ensure you pick the correct fender size for your unique application we have included test results from many of our most popular fender sizes. It is important, particularly with larger size fenders that the installing surface can handle the additional weight.

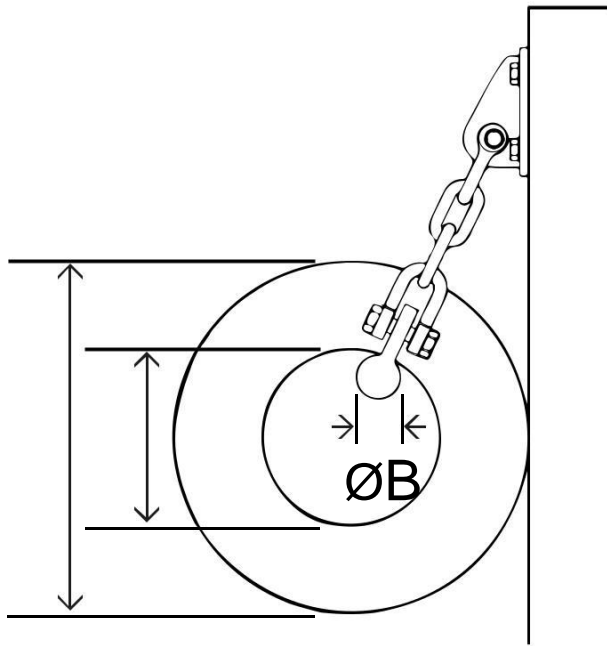
From the results you can see that the larger size fenders offer superior performance at the cost of weight. However, multiple smaller fenders will still offer excellent protection at a fraction of the weight.

The results on the table are only from the fender itself, and excludes the affect of any fixing accessories.

OD x ID mm	Energy (kJ)	Reaction (kN)	Performance (kJ/m ²)	Weight (kg/m)
100 x 50	0.8	43	547	7.2
125 x 62	1.3	51	500	11.0
150 x 75	1.8	65	552	16.3
175 x 75	2.7	92	781	24.1
200 x 100	3.3	86	547	29.0
250 x 125	5.1	108	550	45.3
300 x 150	7.4	129	547	65.2
380 x 190	11.8	164	550	105
400 x 200	13.1	172	547	116
450 x 225	16.6	194	549	147
500 x 250	28	275	700	181
600 x 300	40	330	700	255
800 x 400	72	440	700	453
1000 x 500	112	550	700	707
1200 x 600	162	660	700	1018
1400 x 700	220	770	700	1386
1400 x 800	208	649	516	1245
1500 x 750	253	825	700	1591
1600 x 800	288	880	700	1810
1750 x 900	340	929	657	2124
2000 x 1200	415	871	462	2414
2400 x 1200	647	1321	701	4073
2700 x 1300	818	1486	728	5154

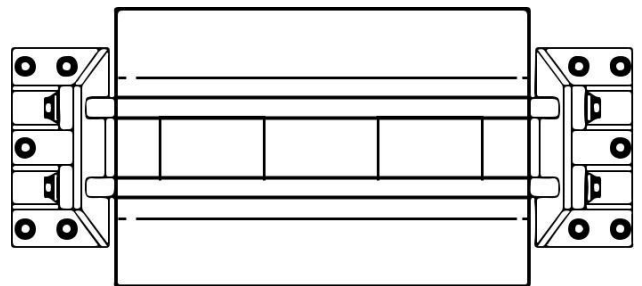
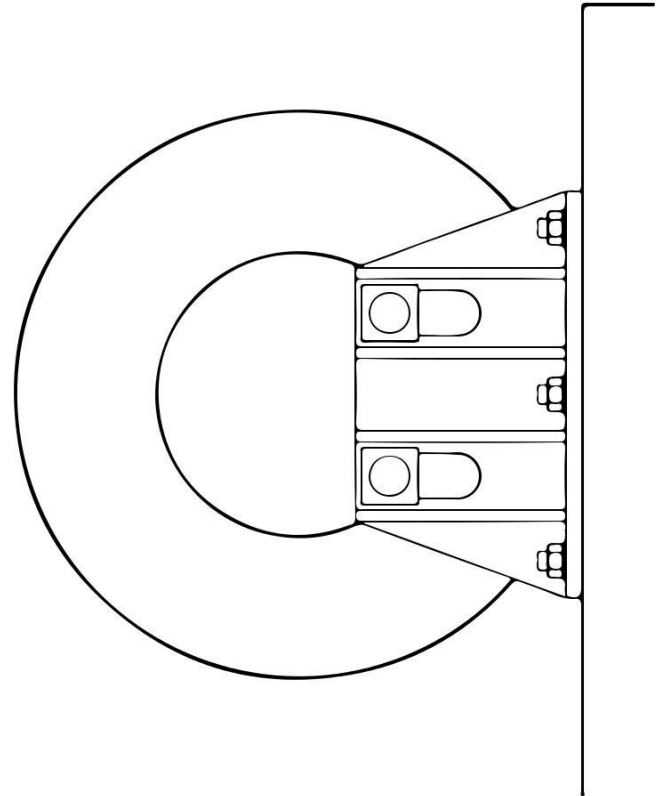


Fender Installation



Chain System

Marine fenders with a diameter between 900 and 1600mm often use a central support bar connected using chains at each end to wall brackets or U-anchors on the quay wall.



Bracket System

Marine fenders with a diameter which is larger than 1600mm can benefit from the use of special ladder brackets to hold the additional weight. They are uniquely designed for each application.

