

**TEKMARINE**



**Marine Fenders**



# About TekMarine

From its base in the United States, TekMarine Systems LLC designs and supplies advanced marine fendering and mooring systems to ports, harbors and waterways across the world.

We bring a wealth of engineering and market experience to each project. Our fender solutions range from simple modules to the most sophisticated engineered systems. We supply every type of berth, including passenger terminals, bulk and RoRo ports, Oil and Gas installations and naval facilities.

We offer full support at each step from early concept discussions through to design and detailing, material selection, construction, testing, shipping, and installation. A full after-care service helps keep your investment working safely and reliably for many years after commission.

## Disclaimer

TekMarine Systems LLC ("TekMarine") has made every effort to ensure that the product descriptions and technical specifications in this catalog are correct. TekMarine can not accept liability or responsibility for errors and omissions for any reason. Customers and catalog users are kindly requested to ask TekMarine for a detailed specification and approved drawings before manufacturing and construction. TekMarine reserves the right to make changes to specifications and drawings without prior notice. All dimensions, performance values, material properties and other product specifications are subject to standard tolerances. This catalog and the information herein replaces all earlier editions. If in any doubt, please contact TekMarine.

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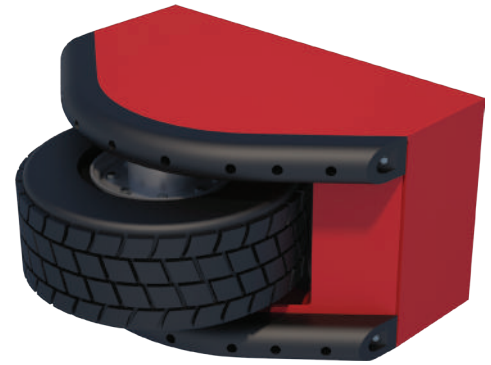


# TJZD-A Wheel Fenders

TekMarine TJZD-A Wheel Fenders guide vessels safely into berths and narrow channels, such as dry-docks or lock entrances, or around corners. On contact, the wheel slides back against concealed rollers for higher energy absorption than a traditional Roller Fender and a very low rolling resistance.

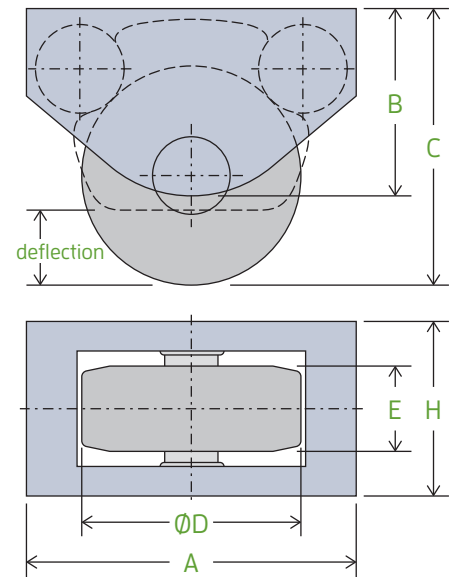
Fenders can be grouped vertically to deal with high water-level variations, or side-by-side to guide vessels along a channel. For large hull angles, fenders can be mounted at an angle.

Every Wheel Fender installation is custom designed. Please ask TekMarine about the best choice of tire size, casing and layout for your project.



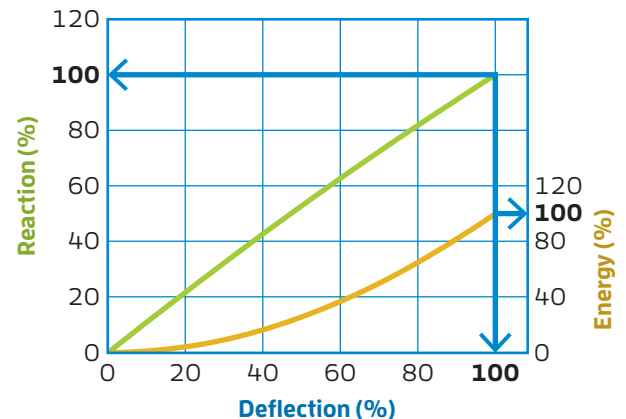
## Dimensions

Size		A		B		C		ØD		E		H	
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
110 × 45	4.3 × 1.8	1700	66.9	1000	39.4	1450	57.1	1080	42.5	460	18.1	900	35.4
130 × 50	5.1 × 2.0	2000	78.7	1200	47.2	1750	68.9	1300	51.2	510	20.1	1000	39.4
175 × 70	6.9 × 2.8	2650	104	1500	59.1	2200	86.6	1750	68.9	690	27.2	1150	45.3
200 × 75	7.9 × 3.0	2750	108	1750	68.9	2550	100	1980	78.0	760	29.9	1250	49.2
250 × 100	9.8 × 3.9	3350	132	2200	86.6	3200	126	2550	100	970	38.2	1600	63.0
290 × 110	11.4 × 4.3	4200	165	2500	98.4	3750	148	2900	114	900	35.4	1700	66.9



## Performance

Size		Energy		Reaction		Deflection		Pressure	
mm	in	kNm	ft.kip	kN	kips	mm	in	bar	psi
110 × 45	4.3 × 1.8	33	24.3	150	33.7	400	15.7	5.5	79.8
130 × 50	5.1 × 2.0	61	45.0	220	49.5	500	19.7	3.5	50.8
175 × 70	6.9 × 2.8	100	73.8	315	70.8	600	23.6	4.8	69.6
200 × 75	7.9 × 3.0	220	162	590	133	700	27.6	5.5	79.8
250 × 100	9.8 × 3.9	440	325	920	207	925	36.4	5.5	79.8
290 × 110	11.4 × 4.3	880	649	1300	292	1200	47.2	5.8	84.1



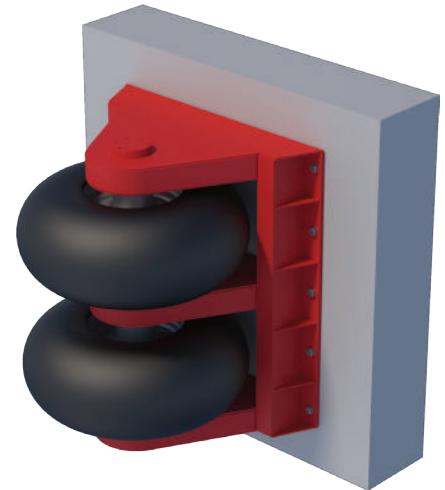


# TJZD-B Roller Fenders

TekMarine TJZD-B Roller Fenders are often used to protect lock and dry-dock entrances and narrow channels, and for effective corner protection. The bearings are made from stainless steel and a low-friction composite, and sit safely inside a rugged steel casing. The design allows for minimal rolling resistance and years of safe operation with little maintenance.

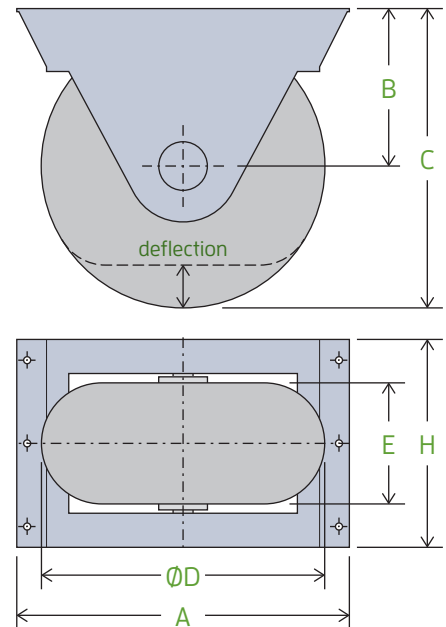
Fenders can be grouped vertically to deal with high tidal variations, or side-by-side to guide vessels along a channel. For large hull angles, fenders can be mounted at an angle.

All Roller Fenders are custom designed. Please ask TekMarine about the best choice of size, casing and layout for your project.



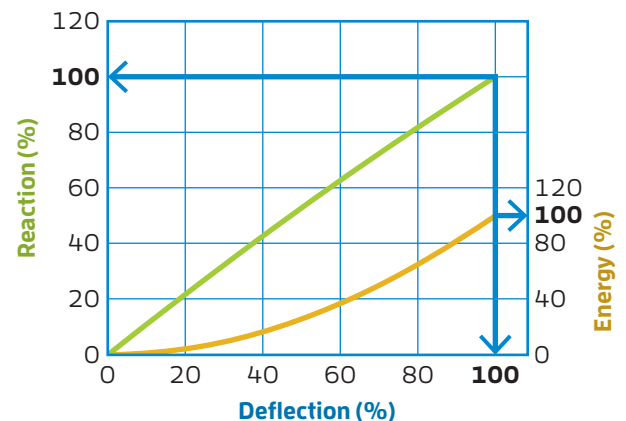
## Dimensions

Size		A		B		C		ØD		E		H	
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in
110 × 45	4.3 × 1.8	1250	49.2	610	24.0	1150	45.3	1080	42.5	460	18.1	800	31.5
130 × 50	5.1 × 2.0	1530	60.2	740	29.1	1400	55.1	1320	52.0	510	20.1	950	37.4
140 × 60	5.5 × 2.4	1600	63.0	765	30.1	1450	57.1	1370	53.9	610	24.0	1000	39.4
175 × 70	6.9 × 2.8	2050	80.7	975	38.4	1850	72.8	1750	68.9	690	27.2	1250	49.2
200 × 75	7.9 × 3.0	2300	90.6	1110	43.7	2100	82.7	1980	78.0	765	30.1	1400	55.1
250 × 100	9.8 × 3.9	3000	118	1425	56.1	2700	106	2550	100	895	35.2	1800	70.9



## Performance

Size		Energy		Reaction		Deflection		Pressure	
mm	in	kNm	ft.kip	kN	kips	mm	in	bar	psi
110 × 45	4.3 × 1.8	13	9.6	175	39.3	152	6.0	5.5	79.8
130 × 50	5.1 × 2.0	22	16.2	200	45.0	230	9.1	3.5	50.8
140 × 60	5.5 × 2.4	20	14.8	210	47.2	205	8.1	3.5	50.8
175 × 70	6.9 × 2.8	37	27.3	345	77.6	225	8.9	4.8	69.6
200 × 75	7.9 × 3.0	100	73.8	765	172	270	10.6	5.5	79.8
250 × 100	9.8 × 3.9	170	125	1000	225	345	13.6	5.5	79.8

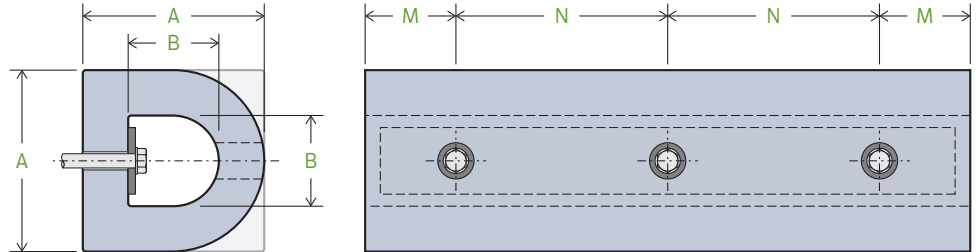








# Profile Fenders

Profile Fenders are used for smaller vessels and lighter applications. They are usually bolted to the structure, either through the top or sides of the fender. Available in various sections including D and square, they can be supplied in almost any length then cut and drilled as needed.

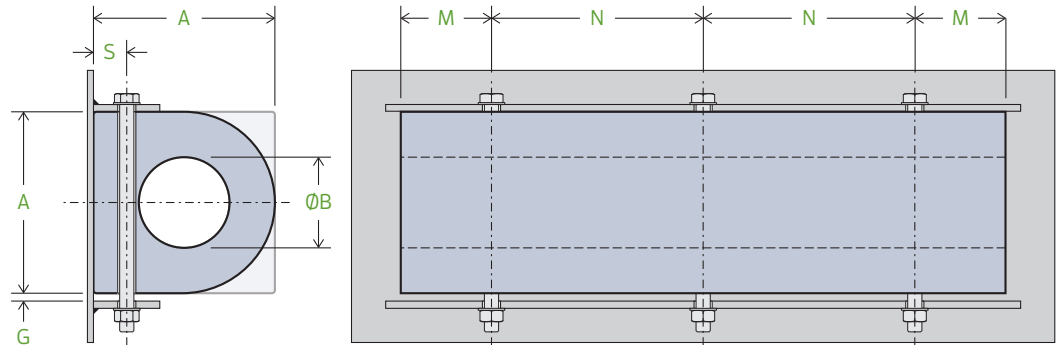
TJDD   
 TJSD 







A		B		M		N		Bolt	Weight				Performance							
									TJDD 		TJSD 		TJDD 				TJSD 			
mm	in	mm	in	mm	in	mm	in		kg	lb	kg	lb	Energy		Reaction		Energy		Reaction	
100	3.9	50	2.0	90-130	3.7-5.3	200-300	8.2-12.2	M12	8.0	17.6	9.3	20.5	1.4	1.0	76	17.0	2.6	1.9	137	30.8
150	5.9	75	3.0	110-150	4.5-6.1	250-350	10.2-14.3	M16	18.1	39.9	21.0	46.3	3.1	2.3	114	25.6	6.5	4.8	205	46.1
200	7.9	100	3.9	130-180	5.3-7.3	300-400	12.2-16.3	M20	32.1	70.8	37.3	82.2	5.6	4.1	152	34.2	11.3	8.3	273	61.4
250	9.8	125	4.9	140-200	5.7-8.2	350-450	14.3-18.4	M24	50.2	111	58.3	129	8.9	6.6	190	42.7	17.6	13.0	345	77.6
300	11.8	150	5.9	140-200	5.7-8.2	350-450	14.3-18.4	M24	72.3	159	83.9	185	12.8	9.4	232	52.2	25.3	18.7	413	92.8
350	13.8	175	6.9	140-200	5.7-8.2	350-450	14.3-18.4	M30	98.4	217	114	251	17.6	13.0	270	60.7	34.3	25.3	504	113
400	15.7	200	7.9	140-200	5.7-8.2	350-450	14.3-18.4	M30	129	284	149	328	23.2	17.1	305	68.6	45.1	33.3	590	133
500	19.7	250	9.8	140-200	5.7-8.2	350-450	14.3-18.4	M36	201	443	233	514	36.0	26.6	384	86.3	70.3	51.9	737	166

Values are for single units, L=1m.

TJDO   
 TJSO 



A		ØB		G		S		M		N		Bolt	Weight				Performance							
													TJDO 		TJSO 		TJDO 				TJSO 			
mm	in	mm	in	mm	in	mm	in	mm	in	mm	in		kg	lb	kg	lb	Energy		Reaction		Energy		Reaction	
100	3.9	50	2.0	10	0.4	25	1.0	90-130	3.7-5.3	200-300	8.2-12.2	M12	9.9	21.8	11.1	24.5	1.9	1.4	154	34.7	2.8	2.1	173	38.9
150	5.9	75	3.0	12	0.5	30	1.2	110-150	4.5-6.1	250-350	10.2-14.3	M16	20.0	44.1	22.9	50.5	4.2	3.1	233	52.4	6.4	4.7	260	58.5
200	7.9	100	3.9	15	0.6	45	1.8	130-180	5.3-7.3	300-400	12.2-16.3	M20	37.4	82.5	42.6	93.9	7.5	5.5	315	70.8	11.2	8.3	343	77.1
250	9.8	125	4.9	20	0.8	50	2.0	140-200	5.7-8.2	350-450	14.3-18.4	M24	57.2	126	65.3	144	11.8	8.7	390	87.7	17.6	13.0	435	97.8
300	11.8	150	5.9	25	1.0	60	2.4	140-200	5.7-8.2	350-450	14.3-18.4	M24	81.3	179	92.9	205	16.9	12.5	474	107	25.3	18.7	520	117
350	13.8	175	6.9	25	1.0	70	2.8	140-200	5.7-8.2	350-450	14.3-18.4	M30	110	241	118	259	23.0	17.0	545	123	34.2	25.2	605	136
400	15.7	200	7.9	30	1.2	80	3.1	140-200	5.7-8.2	350-450	14.3-18.4	M30	142	313	154	339	29.3	21.6	625	141	45.0	33.2	688	155
500	19.7	250	9.8	40	1.6	90	3.5	140-200	5.7-8.2	350-450	14.3-18.4	M36	208	459	240	529	46.5	34.3	790	178	70.2	51.8	865	194

Values are for single units, L=1m.





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