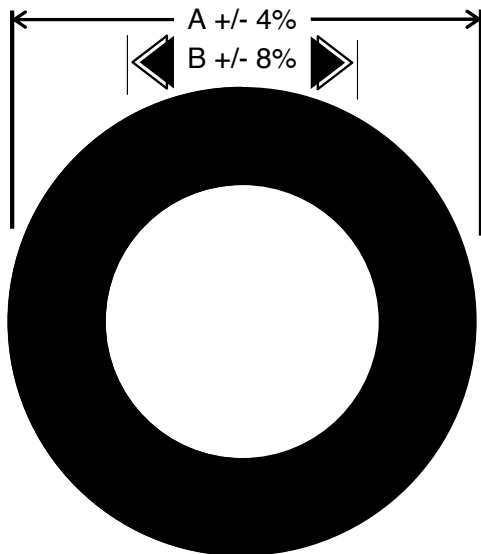


CYLINDRICAL FENDERS



STANDARD CYLINDRICAL					
A		B		APPROX. LBS./FT.	APPROX. Kg/M
O.D.	MM	I.D.	MM		
3"	76	1-3/8"	35	3	4
5"	127	2-1/2"	64	8	11
7"	178	3"	76	16	24
7"	178	3-1/2"	89	15	22
7"	178	5"	127	10	14
8"	203	3-1/2"	89	21	31
8"	203	4"	102	19	29
9"	229	3"	76	29	43
10"	254	5"	127	30	45
12"	305	4"	102	51	76
12"	305	6"	152	43	65
15"	381	5"	127	80	120
15"	381	7-1/2"	191	68	101
18"	457	6"	152	116	172
18"	457	9"	229	98	145
21"	533	10-1/2"	267	133	198
24"	610	12"	305	173	258
27"	686	13-1/2"	343	220	327
28"	711	14"	356	236	351

Contact factory if other sizes required.

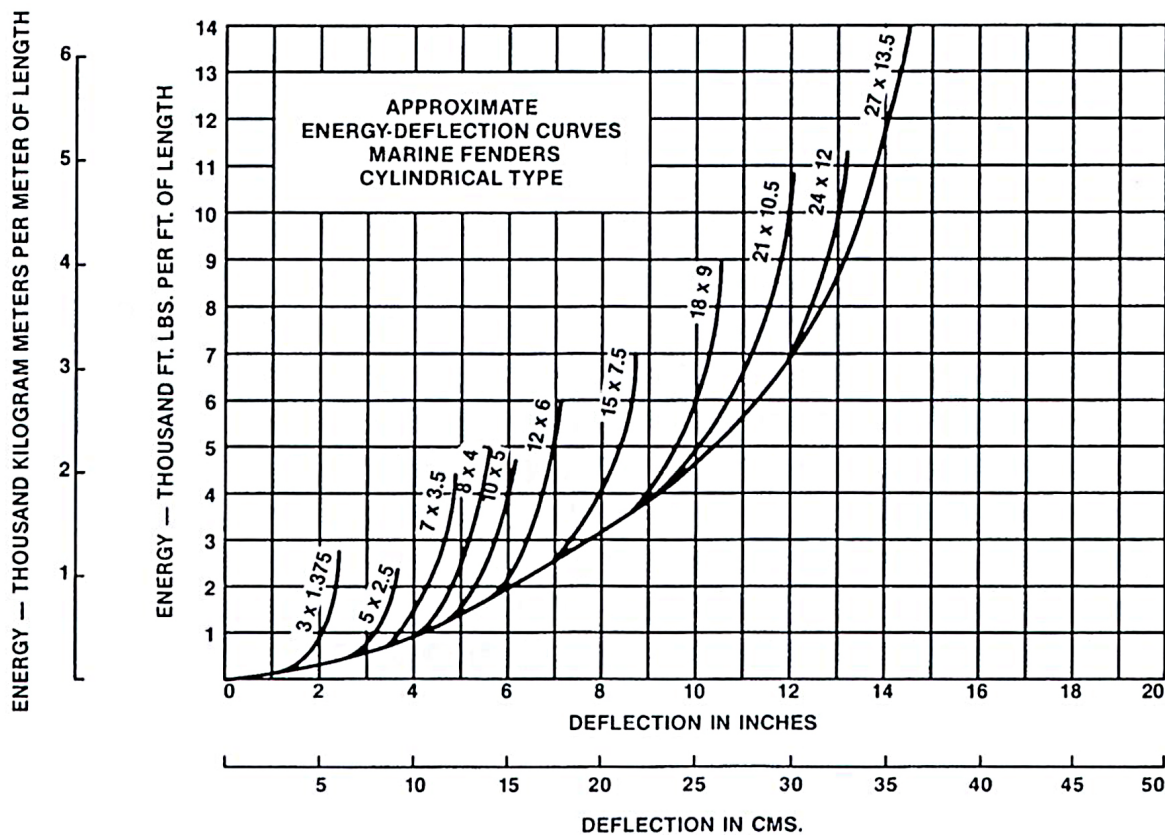
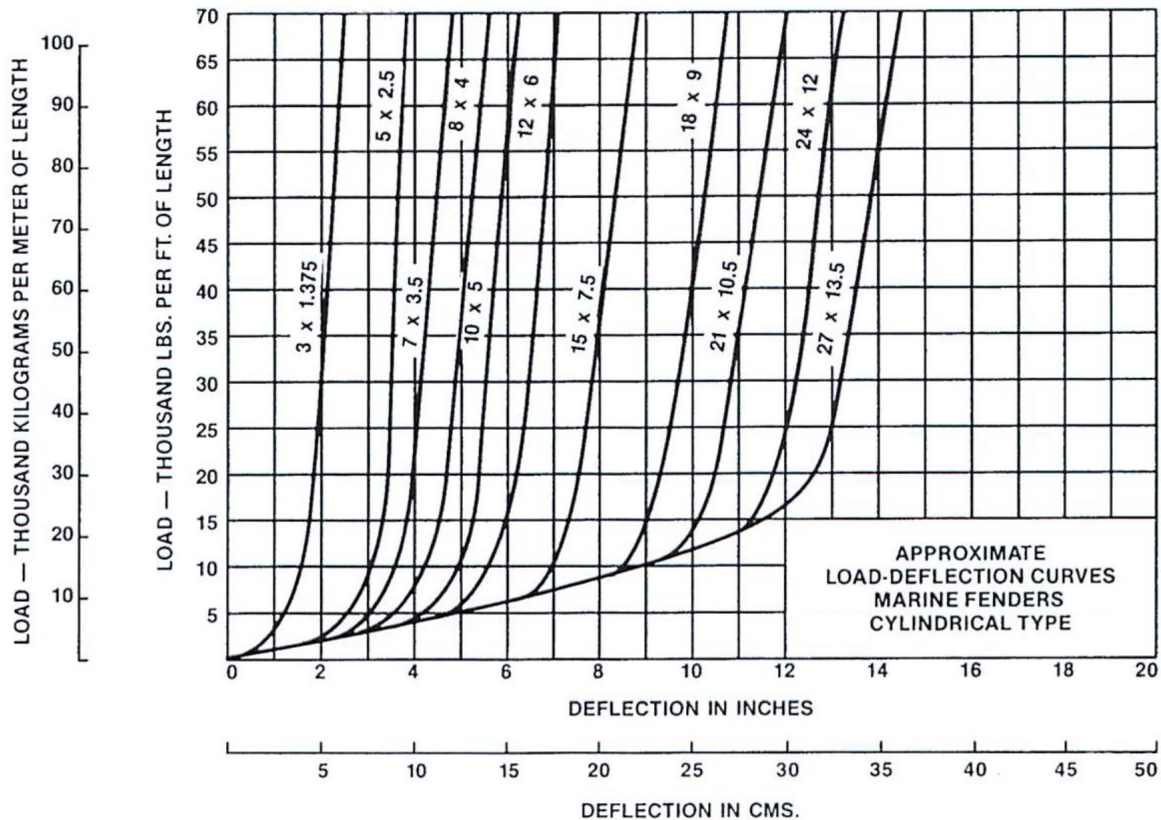
QUICK REFERENCE CHART

LOAD - ENERGY VALUES FOR POPULAR CYLINDRICAL FENDERS

L = LOAD IN POUNDS PER FOOT OF FENDER

E = ENERGY IN FOOT - POUNDS PER FOOT OF FENDER

SIZE		ENERGY IN FOOT POUNDS OF PENDER															
8 x 4	L			3500	10000	47000											
	E			500	900	3000											
10 x 5	L			4500	13000	70000											
	E				900	1600	5000										
12 x 6	L				6000	22000	70000										
	E					1200	2000	6000									
15 x 7-1/2	L					7000	10000	42000									
	E						1900	2500	4500								
18 x 9	L							8500	17000	45000							
	E							3200	4000	6200							
21 x 10-1/2	L							10000	14000	40000							
	E								3900	5000	6800						
24 x 12	L									4800	15000	28000	70000				
	E										4800	5800	7300	11500			
27 x 13-1/2	L											17000	30000	63000			
	E												7200	9000	12500		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16



RUBBER COMPOUNDS AND SPECIFICATIONS

MARINE STRUCTURES High Performance Black EPDM Compound

Military Specification MIL-R-3065C, MIL Std 417, Type R, Class RS, Grade 720 A, B, C₁, F₂, Z₁, Z₂, and Z₃
 ASTM Designation - D-2000 3BA 720A₁₄, B₁₃, C₁₂, F₁₉, Z₁, Z₂, and Z₃

MARINE STRUCTURES Black SBR Compound

Military Specification - MIL-R-3065C, MIL Std 417, Type R, Class RS, Grade 720 A, B, C₁, F₁, Z₁, Z₂, and Z₃
 ASTM Designation - D-2000 4AA 720 A₁₃, B₁₃, C₁₂, EA₁₄, F₁₇, Z₁, and Z₂

MARINE STRUCTURES Non-Marking Gray EPDM Compound

ASTM Designation - D-2000 3BA710A₁₄, C₁₂, F₁₉, Z₁, Z₂, Z₃, and Z₄

PROPERTY	TEST METHOD	BLACK EPDM	BLACK SBR	GRAY EPDM
Min. Tensile Strength	ASTM D-412	2000 PSI	2000 PSI	1000 PSI
Min. Elongation	ASTM D-412	400%	400%	400%
Hardness-Shore A Durometer	ASTM D-412	70 ± 5	70 ± 5	70 ± 5
Modulus @ 400% Elongation	ASTM D-412	900 PSI Min.	900 PSI Min.	300 PSI Min.
Heat Resistance	ASTM D-573 A ₁₄ 70 h @ 212°F A ₁₃ 70 h @ 158°F Max. Change in Hardness Max. Change in Tensile Max. Change in Ultimate Elongation	+ 10 Pts. - 25% - 25%	+ 10 Pts. - 25% - 25%	+ 10 Pts. - 25% - 25%
Compression Set	ASTM D-395 Method B B ₁₃ & Z ₄ 22 h @ 158°F	25% Max.	25% Max,	40%
Ozone Resistance	ASTM D-1171 C ₁₂ 100°F @ 50 pphm	No Cracks	No Cracks	No Cracks
Water Resistance	ASTM D-471 EA ₁₄ 70 h @ 212°F Z ₃ 166 h @ 212°F	10% Max. Swell	10% Max. Swell	10% Max. Swell
Low Temperature Brittleness	ASTM D-2137 Method A, 9.3.2 F ₁₇ Non-brittle after 3 min. @ - 40°F F ₁₉ Non-brittle after 3 min. @ - 67°F	Passes	Passes	Passes
Load Deflection	ASTM D-575 Method A Z, 20% Deflection	300 ± 70 PSI	300 ± 70 PSI	250 ± 70 PSI
Tear Resistance	ASTM D-624 Z ₂ , Die B	200 PPI Min.	200 PPI Min.	150 PPI Min.