

Monopile Specification Data

Marine Guard™

Monopile Donut Fender Engineering Specification Data

FENDERS



DONUT DIAMETER feet / meters	4.5 / 1.37		5.0 / 1.52		6.0 / 1.82		7.0 / 2.13		7.5 / 2.29		9.0 / 2.74	
PILE DIAMETER feet / meters	2.0 / 0.61		2.5 / 0.76		3.0 / 0.91		3.5 / 1.06		4.0 / 1.22		5.0 / 1.52	
PERFORMANCE	ENERGY ABSORPTION	REACTION FORCE	ENERGY ABSORPTION	REACTION FORCE	ENERGY ABSORPTION	REACTION FORCE	ENERGY ABSORPTION	REACTION FORCE	ENERGY ABSORPTION	REACTION FORCE	ENERGY ABSORPTION	REACTION FORCE
FLAT HEIGHT feet / meters	ft*kip (kN*m)	kip (kN)	ft*kip (kN*m)	kip (kN)	ft*kip (kN*m)	kip (kN)	ft*kip (kN*m)	kip (kN)	ft*kip (kN*m)	kip (kN)	ft*kip (kN*m)	kip (kN)
2.0 / 0.61	4 (5)	18 (80)	5 (7)	20 (89)	7 (9)	24 (107)	-	-	-	-	-	-
3.0 / 0.91	6 (8)	27 (120)	7 (9)	29 (129)	11 (15)	35 (156)	15 (20)	41 (182)	17 (23)	44 (196)	24 (33)	53 (236)
4.0 / 1.22	8 (11)	35 (156)	10 (14)	39 (173)	14 (19)	47 (209)	19 (26)	55 (245)	22 (30)	59 (262)	32 (43)	71 (316)
5.0 / 1.52	10 (14)	44 (196)	12 (16)	49 (218)	18 (24)	59 (262)	24 (33)	69 (307)	28 (38)	74 (329)	40 (54)	88 (391)
6.0 / 1.82	12 (16)	53 (236)	15 (20)	59 (262)	21 (28)	71 (316)	29 (39)	83 (369)	33 (45)	88 (391)	48 (65)	106 (471)
7.0 / 2.13	14 (19)	63 (280)	17 (23)	69 (307)	25 (34)	83 (369)	34 (46)	96 (427)	39 (53)	103 (458)	56 (76)	124 (552)
8.0 / 2.44	16 (22)	72 (320)	20 (27)	79 (351)	29 (39)	94 (418)	39 (53)	110 (489)	45 (61)	118 (525)	64 (87)	141 (627)
2.0 / 0.61	7 (9)	29 (129)	8 (11)	34 (151)	12 (16)	39 (179)	-	-	-	-	-	-
3.0 / 0.91	10 (14)	43 (191)	11 (15)	51 (227)	17 (23)	58 (258)	24 (33)	65 (289)	27 (37)	72 (320)	39 (53)	87 (387)
4.0 / 1.22	13 (18)	58 (258)	15 (20)	68 (302)	23 (31)	77 (342)	33 (45)	87 (387)	36 (49)	96 (427)	52 (71)	116 (516)
5.0 / 1.52	16 (22)	72 (320)	19 (26)	84 (374)	29 (39)	96 (427)	41 (56)	109 (485)	45 (61)	121 (538)	65 (88)	145 (645)
6.0 / 1.82	20 (27)	87 (387)	23 (31)	101 (449)	35 (47)	116 (516)	49 (66)	130 (578)	54 (73)	145 (645)	78 (106)	174 (774)
7.0 / 2.13	23 (31)	101 (449)	27 (37)	118 (525)	41 (56)	135 (600)	57 (77)	152 (676)	63 (85)	169 (752)	91 (123)	203 (903)
8.0 / 2.44	26 (35)	116 (516)	30 (41)	135 (600)	46 (62)	154 (685)	65 (88)	174 (774)	72 (98)	193 (858)	104 (141)	232 (1032)
2.0 / 0.61	10 (14)	44 (196)	12 (16)	51 (227)	18 (24)	59 (262)	-	-	-	-	-	-
3.0 / 0.91	15 (20)	66 (294)	17 (23)	77 (342)	26 (35)	88 (391)	37 (50)	99 (440)	41 (56)	110 (489)	59 (80)	132 (587)
4.0 / 1.22	20 (27)	88 (391)	23 (31)	103 (458)	35 (47)	117 (520)	49 (66)	132 (587)	55 (75)	147 (654)	79 (107)	176 (783)
5.0 / 1.52	25 (34)	110 (489)	29 (39)	128 (569)	44 (60)	147 (654)	62 (84)	165 (734)	69 (94)	183 (814)	99 (134)	220 (979)
6.0 / 1.82	30 (41)	132 (587)	35 (47)	154 (685)	53 (72)	176 (783)	74 (100)	198 (881)	82 (111)	220 (979)	119 (161)	264 (1174)
7.0 / 2.13	35 (47)	154 (685)	40 (54)	180 (801)	62 (84)	205 (912)	87 (118)	231 (1027)	96 (130)	256 (1139)	138 (187)	308 (1370)
8.0 / 2.44	40 (54)	176 (783)	46 (62)	205 (912)	70 (95)	234 (1041)	99 (134)	264 (1174)	110 (149)	293 (1303)	158 (214)	352 (1566)
2.0 / 0.61	15 (20)	66 (294)	17 (23)	77 (342)	26 (35)	88 (391)	-	-	-	-	-	-
3.0 / 0.91	22 (30)	99 (440)	26 (35)	115 (512)	40 (54)	132 (587)	56 (76)	148 (658)	62 (84)	165 (734)	89 (121)	198 (881)
4.0 / 1.22	30 (41)	132 (587)	35 (47)	154 (685)	53 (72)	176 (783)	74 (100)	198 (881)	82 (111)	219 (974)	119 (161)	263 (1170)
5.0 / 1.52	37 (50)	165 (734)	43 (58)	192 (854)	66 (89)	219 (974)	93 (126)	247 (1099)	103 (140)	274 (1219)	148 (201)	329 (1463)
6.0 / 1.82	44 (60)	198 (881)	52 (71)	230 (1023)	79 (107)	263 (1170)	111 (151)	296 (1317)	123 (167)	329 (1463)	178 (241)	395 (1757)
7.0 / 2.13	52 (71)	230 (1023)	60 (81)	269 (1197)	92 (125)	307 (1366)	130 (176)	346 (1539)	144 (195)	384 (1708)	207 (281)	461 (2051)
8.0 / 2.44	59 (80)	263 (1170)	69 (94)	307 (1366)	105 (142)	351 (1561)	148 (201)	395 (1757)	165 (224)	439 (1953)	237 (321)	527 (2344)

STANDARD CAPACITY

HIGH CAPACITY

EXTRA HIGH CAPACITY

SUPER HIGH CAPACITY

ACTUAL VALUES MAY VARY ±15% DUE TO VARIATIONS IN MATERIALS, TEMPERATURE, TOLERANCES, AND SPEED OF COMPRESSION.
CUSTOM FENDER SIZES AVAILABLE.

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