

Manitowoc 18000

Product Guide

ASME B30.5

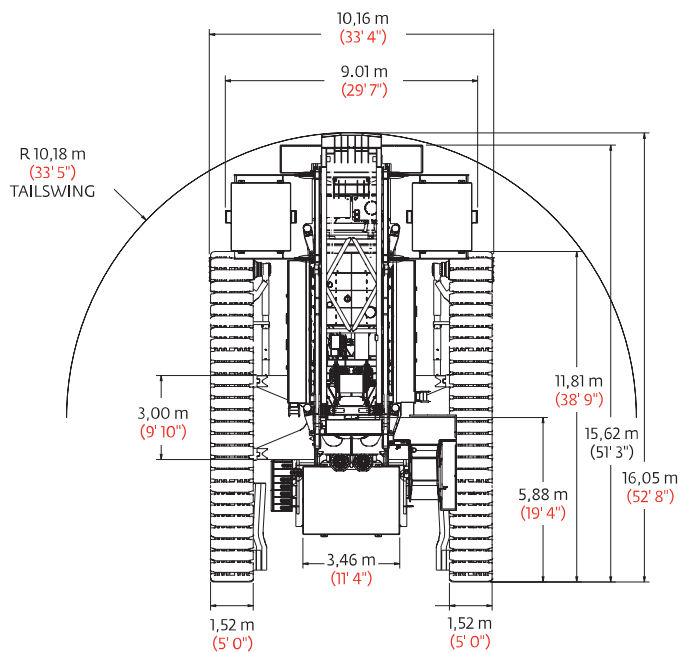
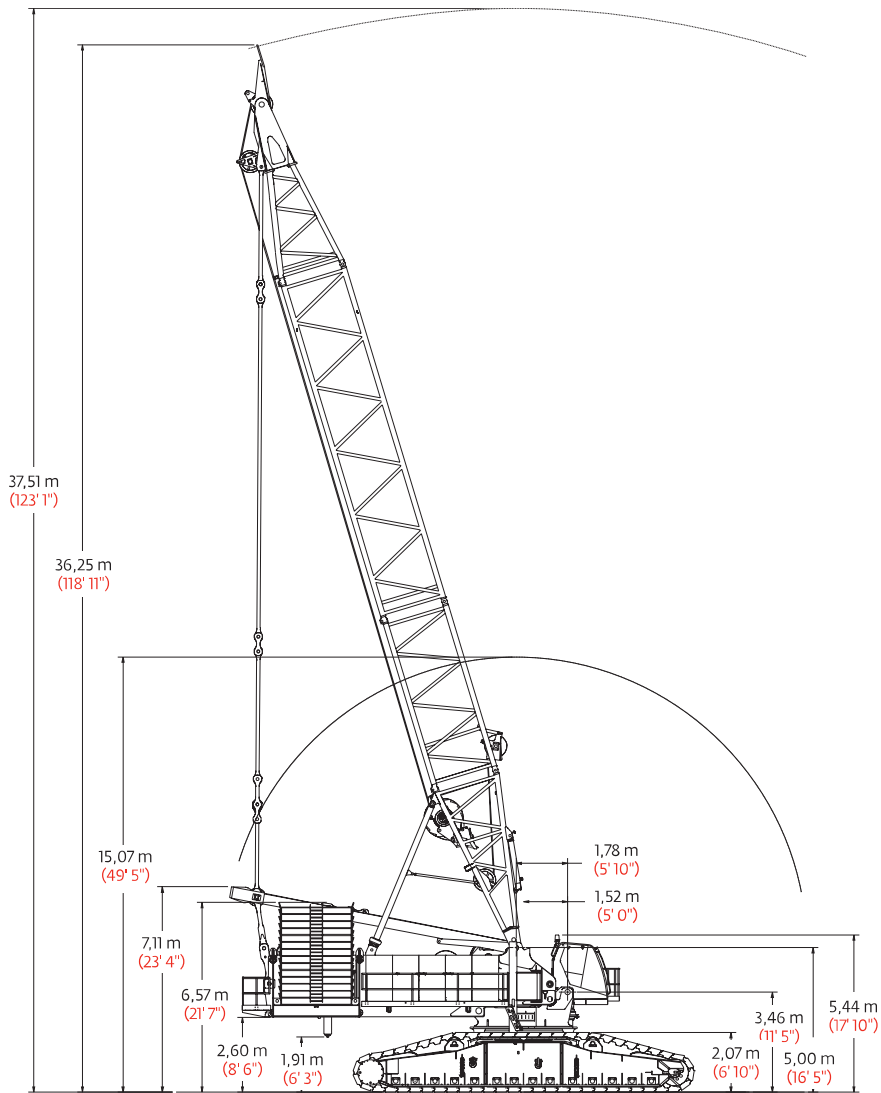
Metric / Imperial



Features

- 750 t (825 USt) capacity No. 55A boom with MAX-ER®
- 600 t (660 USt) capacity No. 55 boom
- 9 098 mton-m (65,505 ft-kips) maximum load moment with MAX-ER®
- 97,5 m (320 ft) No. 55 boom
- 149,3 m (490 ft) No. 79A luffing jib on No. 55 boom
- 447 kW (600 HP) engine

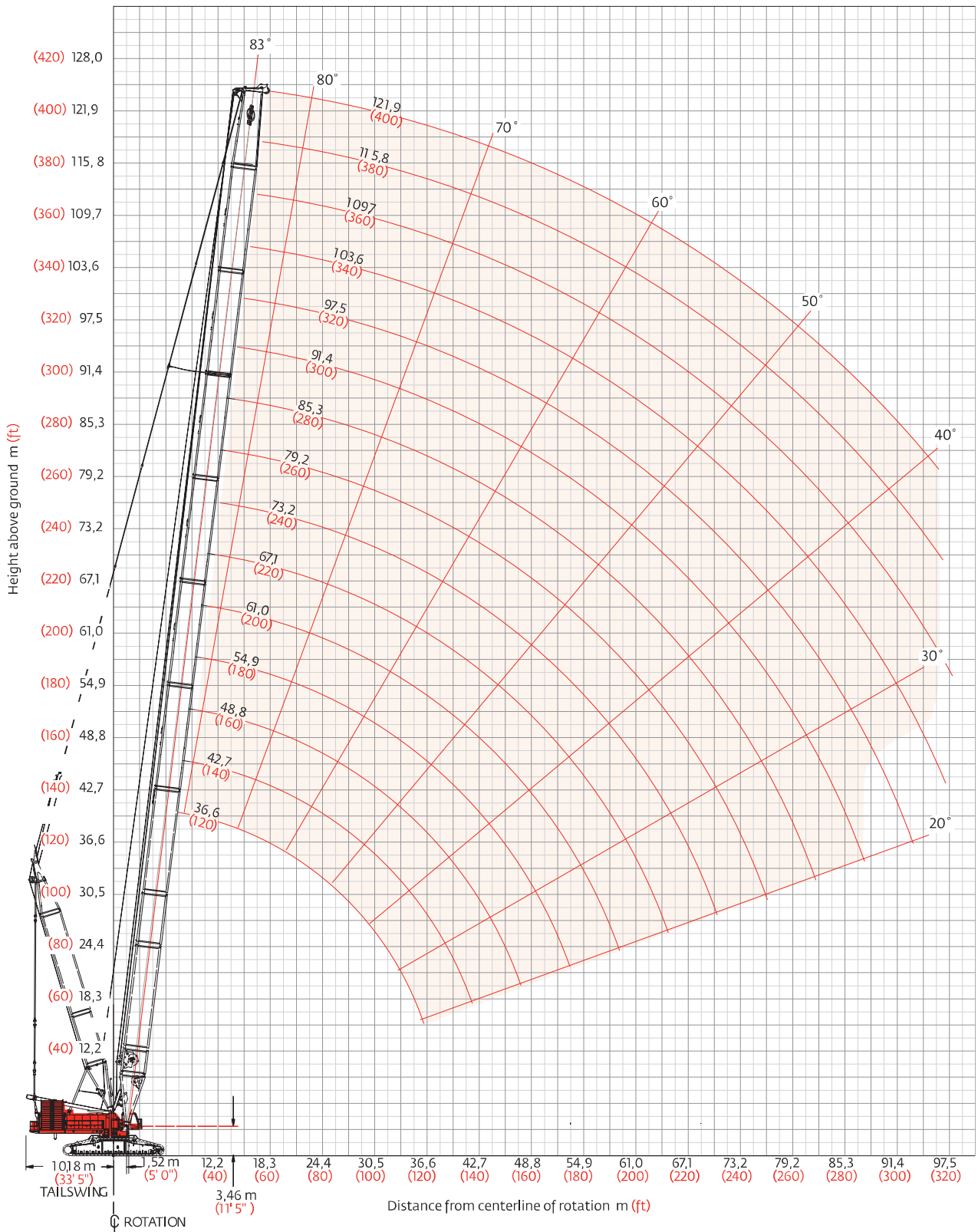
Outline dimensions



Manitowoc 18000

No. 55-79A boom range diagram

No. 55-79A boom



No. 55-79A boom load charts

No. 55-79A boom

239 500 kg (528,000 lb) Counterweight 145 150 kg (320,000 lb) Carbody counterweight

360° Rating, kg (lb) x 1 000

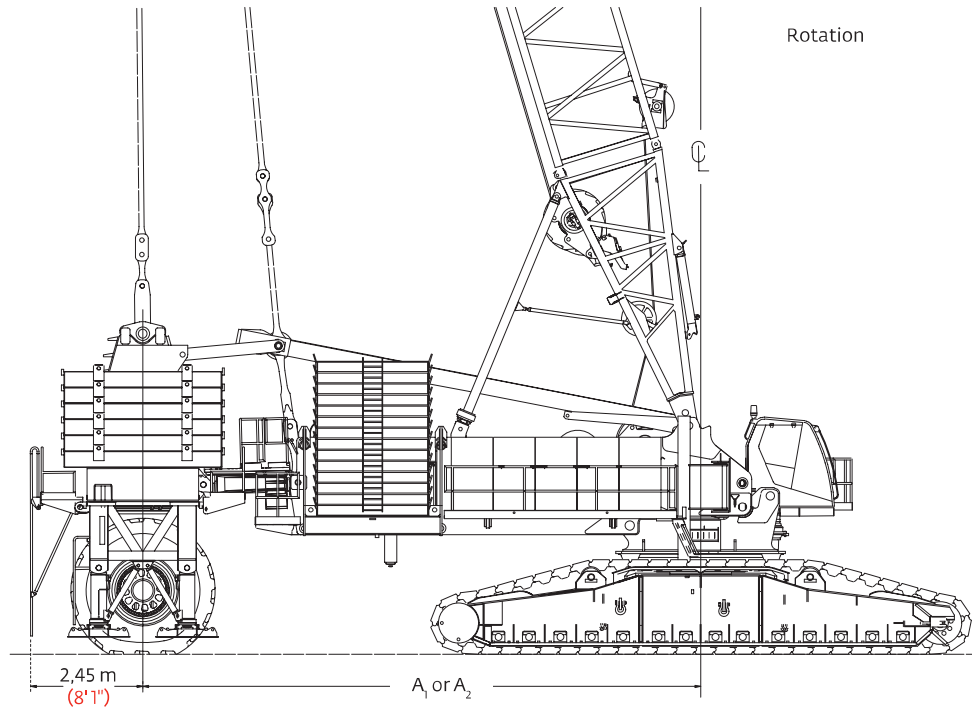
Boom length m (ft)

Radius m (ft)	36,6 (120)	42,7 (140)	48,8 (160)	61,0 (200)	67,1 (220)	73,2 (240)	85,3 (280)	91,4 (300)	97,5 (320)	109,7 (360)	115,8 (380)	121,9 (400)
7,9 (26)	453,5 (1000.0)											
9,1 (30)	453,5 (1000.0)	453,5 (1000.0)	426,0 (939.3)									
10,0 (34)	419,2 (891.6)	417,7 (888.6)	416,0 (884.8)									
12,0 (40)	349,5 (758.5)	348,2 (755.7)	346,6 (752.0)	340,7 (750.0)	309,8 (683.2)	– (633.7)						
14,0 (45)	297,2 (670.2)	296,2 (667.9)	294,8 (664.8)	294,2 (663.5)	287,1 (647.5)	268,0 (599.8)	220,7 (488.0)					
16,0 (50)	255,8 (595.8)	254,8 (593.6)	253,4 (590.5)	252,8 (589.2)	251,4 (582.7)	235,8 (543.9)	210,9 (481.2)	192,0 (430.5)	177,4 (397.5)			
18,0 (60)	224,1 (485.5)	223,1 (483.4)	221,8 (480.4)	221,2 (479.1)	220,6 (477.4)	211,8 (460.5)	186,8 (406.1)	177,3 (383.4)	167,3 (364.3)	135,3 (298.3)	– (257.4)	– (220.2)
20,0 (70)	199,0 (407.6)	198,0 (405.6)	196,6 (402.6)	196,1 (401.3)	195,3 (399.6)	192,6 (398.8)	169,7 (352.8)	159,9 (332.2)	151,7 (314.8)	133,7 (282.8)	116,0 (254.6)	99,8 (220.2)
24,0 (80)	161,5 (349.7)	160,6 (347.7)	159,3 (344.8)	158,7 (343.5)	157,9 (341.7)	157,5 (340.9)	143,8 (312.6)	135,2 (293.8)	127,8 (277.8)	114,7 (249.0)	109,5 (236.2)	99,5 (219.3)
26,0 (90)	146,0 (299.2)	145,6 (298.1)	144,7 (296.2)	144,4 (296.1)	143,6 (295.0)	143,2 (294.7)	133,7 (280.9)	125,6 (263.7)	118,7 (248.9)	106,0 (221.8)	100,3 (209.6)	95,6 (199.1)
30,0 (100)	120,0 (258.9)	119,5 (257.8)	118,6 (255.8)	118,5 (255.7)	118,0 (254.5)	117,8 (254.1)	116,5 (251.8)	110,0 (239.2)	103,8 (225.5)	92,1 (199.9)	86,8 (188.3)	82,1 (178.2)
36,0 (120)	91,1 (192.1)	92,7 (199.9)	91,7 (197.9)	91,6 (197.6)	91,1 (196.4)	90,9 (195.9)	89,8 (193.5)	89,0 (190.7)	87,2 (189.4)	76,7 (166.5)	71,9 (155.9)	67,6 (146.7)
42,0 (140)		74,2 (160.0)	73,4 (158.2)	73,3 (157.9)	72,7 (156.7)	72,5 (156.2)	71,4 (153.7)	75,5 (151.8)	70,0 (150.7)	65,4 (141.9)	60,9 (132.1)	57,0 (123.6)
48,0 (160)			59,9 (129.0)	59,9 (129.0)	59,3 (127.8)	59,2 (127.3)	58,0 (124.8)	57,2 (122.9)	56,6 (121.7)	54,9 (118.0)	52,4 (113.6)	48,9 (105.8)
54,0 (180)				49,7 (106.9)	49,2 (105.7)	49,0 (105.3)	47,8 (102.8)	47,0 (100.9)	46,4 (99.7)	44,7 (95.9)	43,8 (93.8)	42,2 (91.3)
60,0 (200)					41,1 (88.3)	41,0 (88.0)	39,8 (85.5)	39,0 (83.6)	38,4 (82.4)	36,7 (78.6)	35,8 (76.5)	35,1 (74.9)
66,0 (220)						34,5 (73.8)	33,4 (71.4)	32,5 (69.6)	32,0 (68.4)	30,3 (64.6)	29,3 (62.5)	28,6 (60.9)
72,0 (240)							28,0 (59.8)	27,2 (58.0)	26,6 (56.8)	24,9 (53.1)	24,0 (50.9)	23,2 (49.3)
78,0 (260)							23,5 (50.0)	22,7 (48.2)	22,2 (47.1)	20,4 (43.3)	19,5 (41.2)	18,8 (39.6)
84,0 (280)								18,8 (39.8)	18,3 (38.7)	16,6 (35.0)	15,7 (32.9)	14,9 (31.1)
88,0 (300)								16,4	16,0 (30.6)	14,3 (26.6)	13,1 (24.1)	12,2 (22.2)
92,0 (310)									13,5 (26.3)	11,7 (22.6)	10,5 (20.0)	9,7 (–)
96,0 (320)									10,9 (–)	9,3 (18.7)	8,2 (16.2)	7,4 (–)

For complete chart, refer to www.cranelibrary.com.

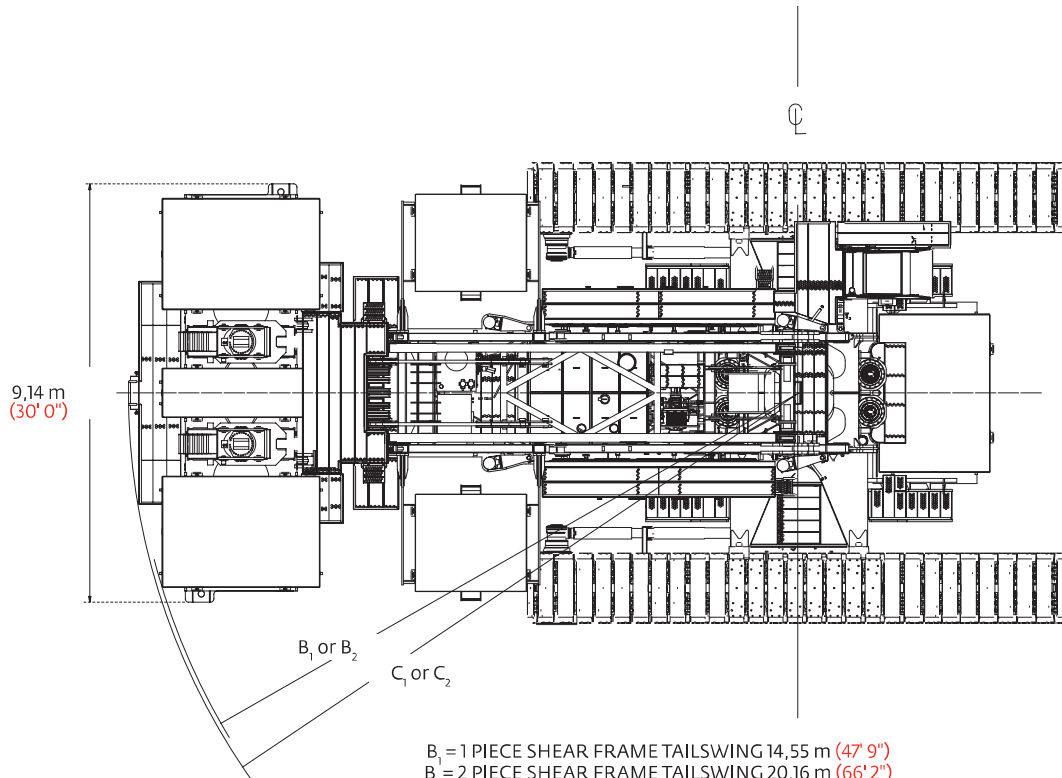
Outline dimensions

MAX-ER®



A₁ = 1 PIECE SHEAR FRAME 12,19 m (40' 0")
 A₂ = 2 PIECE SHEAR FRAME 17,98 m (59' 0")

WHEELED COUNTERWEIGHT (ONE PIECE SHEAR FRAME FOR 40' RADIUS SHOWN.)



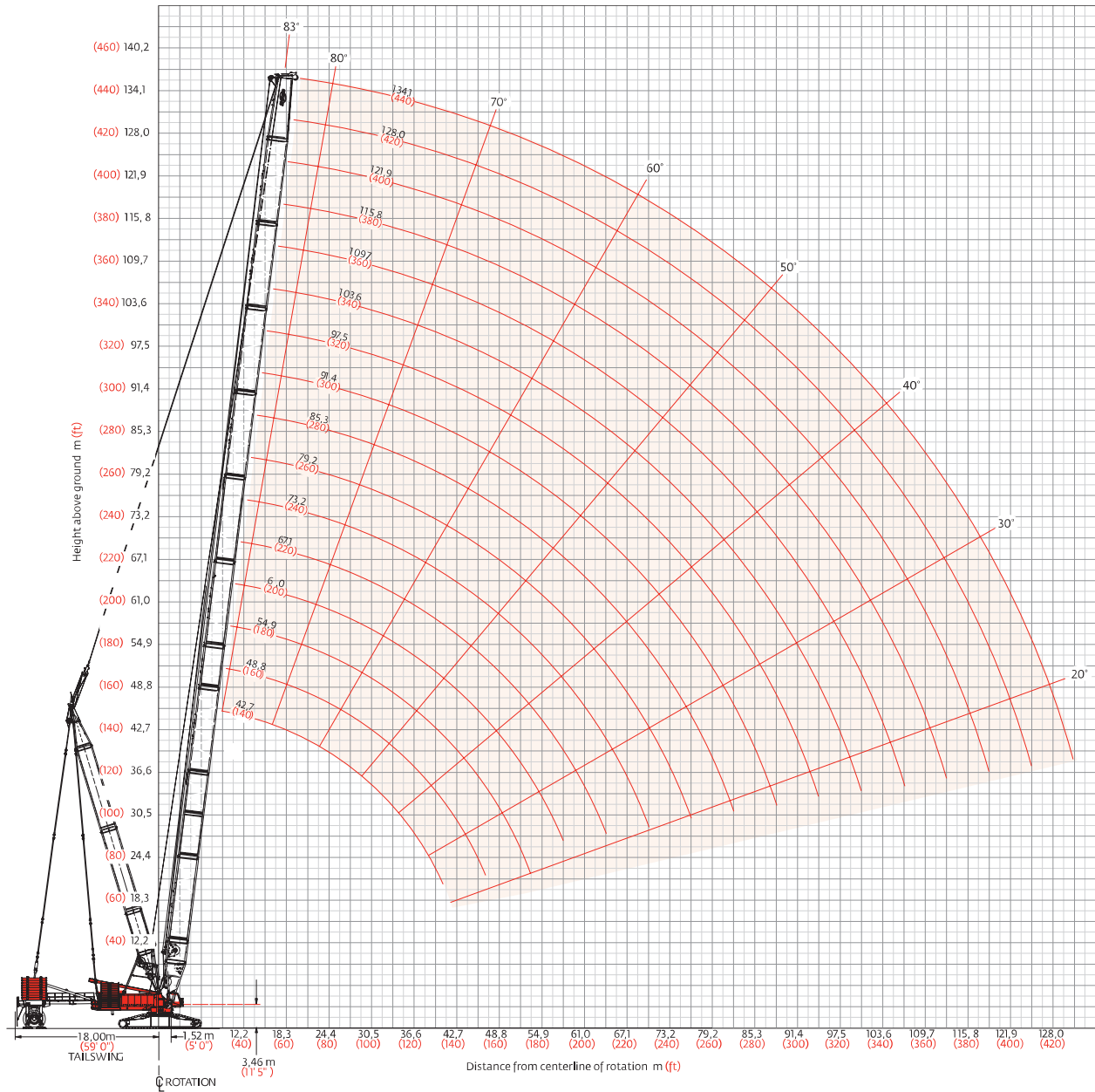
B₁ = 1 PIECE SHEAR FRAME TAILSWING 14,55 m (47' 9")
 B₂ = 2 PIECE SHEAR FRAME TAILSWING 20,16 m (66' 2")

C₁ = 1 PIECE SHEAR FRAME TAILSWING 14,66 m (48' 1")
 C₂ = 2 PIECE SHEAR FRAME TAILSWING 20,44 m (67' 1")

No. 55 or 55A boom range diagram

MAX-ER®

No. 55 or 55A boom



No. 55 or 55A boom load charts

MAX-ER®

No. 55 or 55A boom 18 m (59 ft) MAX-ER® counterweight position

223 170 kg (492,000 lb) Counterweight 145 150 kg (320,000 lb) Carbody counterweight

390 090 kg (860,000 lb) Wheeled counterweight or 391 810 kg (863,800 lb) hanging counterweight

360° Rating, kg (lb) x 1 000

Boom length m (ft)

Boom m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)	134,0 (440)
Radius								
8,5 (28)	750,0 (1653.5)							
10,0 (34)	750,0 (1653.5)	684,8 (1509.8)						
12,0 (40)	715,7 (1543.3)	684,8 (1509.8)	570,9 (1258.0)					
14,0 (50)	649,9 (1310.1)	647,9 (1303.8)	565,8 (1240.2)	405,6 (894.4)	— (655,0)			
18,0 (60)	502,1 (1089.4)	499,3 (1083.3)	497,8 (1075.8)	405,6 (894.4)	297,1 (655,0)	223,1 (491.9)	— (374.2)	
20,0 (70)	450,8 (929.9)	448,0 (923.9)	444,6 (916.3)	405,6 (894.4)	297,1 (655,0)	223,1 (491.9)	169,7 (374.2)	117,2 (258.5)
24,0 (80)	373,1 (809.2)	370,4 (803.3)	367,0 (795.7)	364,8 (789.4)	297,1 (655,0)	223,1 (491.9)	169,7 (374.2)	117,2 (258.5)
30,0 (100)	294,5 (638.4)	291,9 (632.8)	288,5 (625.2)	285,6 (618.9)	284,2 (612.1)	223,1 (491.9)	169,7 (374.2)	117,2 (258.5)
36,0 (120)	233,1 (502.2)	239,1 (518.0)	235,6 (510.4)	232,8 (504.2)	229,7 (497.4)	223,1 (491.9)	169,5 (373.7)	116,4 (256.5)
42,0 (140)	181,4 (387.5)	201,0 (435.4)	197,6 (427.7)	194,8 (421.6)	191,8 (414.9)	189,9 (410.9)	167,2 (368.2)	115,1 (253.4)
48,0 (160)		167,5 (359.6)	168,9 (365.4)	166,1 (359.3)	163,1 (352.6)	161,3 (348.7)	159,4 (343.7)	113,6 (250.1)
54,0 (180)		134,5 (285.7)	146,4 (316.6)	143,7 (310.6)	140,7 (304.0)	138,9 (300.1)	136,6 (295.1)	112,0 (246.5)
66,0 (220)				— (237.2)	— (232.7)	106,2 (229.0)	103,9 (224.0)	110,3 (216.2)
72,0 (240)				— (197.2)	— (205.8)	— (202.1)	— (197.2)	— (189.4)
78,0 (260)					82,7 (175.8)	83,3 (179.3)	81,1 (174.5)	77,6 (166.7)
84,0 (280)					— (145.6)	— (157.4)	— (154.9)	— (147.2)
90,0 (300)					— (145.6)	62,3 (131.6)	64,2 (137.8)	60,7 (130.2)
96,0 (320)						— (107.9)	— (115.2)	— (115.3)
102,0 (340)							45,3 (94.8)	47,4 (99.6)
108,0 (360)							— (75.6)	— (81.6)
114,0 (380)								31,7 (65.3)
130,0 (430)								13,9 (28.0)

For complete chart, refer to www.cranelibrary.com.

No. 55 or 55A boom load charts

MAX-ER®

No. 55 or 55A boom 12 m (40 ft) MAX-ER® counterweight position

223 170 kg (492,000 lb) Counterweight 145 150 kg (320,000 lb) Carbody counterweight
390 090 kg (860,000 lb) Wheeled counterweight or 391 810 kg (863,800 lb) hanging counterweight

360° Rating, kg (lb) x 1 000

Boom length m (ft)

Radius m (ft)	42,7 (140)	54,9 (180)	67,1 (220)	79,2 (260)	91,4 (300)	103,6 (340)	115,8 (380)	134,0 (440)
Radius								
8,5 (28)	750,0 (1653.5)							
10,0 (34)	729,8 (1543.3)	684,8 (1509.8)						
12,0 (40)	614,4 (1333.6)	611,4 (1327.0)	570,9 (1258.0)					
14,0 (50)	526,7 (1066.1)	523,8 (1059.8)	522,6 (1052.4)	405,6 (894.4)	— (655,0)			
18,0 (60)	407,8 (884.7)	405,0 (878.6)	401,6 (871.1)	394,8 (864.8)	297,1 (655,0)	223,1 (491.9)	— (374.2)	
20,0 (70)	365,7 (753.6)	362,9 (747.6)	359,5 (740.0)	356,7 (733.8)	297,1 (655,0)	223,1 (491.9)	169,7 (374.2)	117,2 (258.5)
24,0 (80)	299,3 (646.1)	299,1 (648.4)	295,7 (640.9)	292,8 (634.6)	287,8 (627.8)	223,1 (491.9)	169,7 (374.2)	117,2 (258.5)
30,0 (100)	222,7 (480.4)	234,6 (508.3)	231,1 (500.7)	228,3 (494.4)	225,2 (487.6)	220,5 (483.6)	169,7 (374.2)	117,2 (258.5)
36,0 (120)	171,3 (368.6)	189,2 (407.2)	187,7 (406.3)	184,8 (400.1)	181,8 (393.3)	180,0 (389.3)	169,5 (373.7)	116,4 (256.5)
42,0 (140)	131,4 (280.0)	149,8 (322.1)	156,4 (338.3)	153,6 (332.1)	150,5 (325.4)	148,7 (321.5)	146,4 (316.4)	115,1 (253.4)
48,0 (160)		119,9 (256.9)	128,7 (276.3)	130,0 (280.9)	126,9 (274.2)	125,2 (270.3)	122,9 (265.3)	113,6 (250.1)
54,0 (180)		94,7 (199.7)	104,6 (223.9)	110,8 (237.1)	108,5 (234.2)	106,8 (230.3)	104,5 (225.3)	100,9 (217.4)
66,0 (220)				74,3 (158.1)	77,4 (165.0)	79,8 (171.8)	77,5 (166.8)	74,0 (159.0)
72,0 (240)				— (127.1)	— (134.6)	— (142.0)	— (144.7)	— (136.9)
78,0 (260)					51,5 (108.5)	54,8 (115.8)	56,3 (119.2)	55,2 (118.2)
84,0 (280)					— (85.1)	— (93.2)	— (96.4)	— (98.3)
90,0 (300)					— (—)	35,2 (73.2)	36,7 (76.5)	37,4 (78.0)
96,0 (320)						— (54.7)	— (59.0)	— (60.2)
102,0 (340)							21,4 (43.1)	22,0 (44.6)
108,0 (360)							— (28.2)	— (30.7)
114,0 (380)								9,8 (18.0)
130,0 (430)								

For complete chart, refer to www.cranelibrary.com.