Liftcrane Boom Capacities

Boom No. B10:82A
114,600 lb Crane Counterweight
0 lb Carbody Counterweight
360 Degree Rating

MLC250
SERIES 0

LIFTING CAPACITIES: Lifting capacities for various boom lengths and operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.

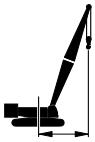
Upper boom point capacity for liftcrane service with single part whip line from Drum 1 or Drum 2 is 29,500 lb or 59,000 lb with two part whip line. When Drum 3 is used, capacity with single part whip line is 20,000 lb or 40,000 lb with two part whip line. In all cases, upper boom point capacities cannot exceed those listed for main boom capacity.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves is considered part of load. Boom is not to be lowered beyond radii where combined weights are greater than rated capacity. Where no capacity is shown, operation is not intended or approved.

BOOM BACKWARD STABILITY: Capacities indicated by (b) require 12,500 lb minimum weight. ***Caution:*** **Do not operate in areas indicated by (b) without required minimum weight.** *Boom may not lower and boom hoist wire rope may go slack causing wire rope damage or failure.*

OPERATING CONDITIONS: Machine to operate on a firm, level, and uniformly supporting surface with gantry up. Refer to Boom Rigging **No. 80137888,** Wire Rope Specifications chart **No. 9909-A,** Counterweight Arrangements chart **No. 9893-A,** and Wind Conditions chart **No. 9908-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level, and uniformly supporting surface. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specifications chart **No. 9907-A**.



OPERATING RADIUS: Operating radius is horizontal distance from axis of rotation to center of vertical hoist line or load block.

BOOM ANGLE: Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.

BOOM POINT ELEVATION: Boom point elevation is vertical distance from ground level to centerline of boom point shaft.

MACHINE EQUIPMENT: Machine equipped with 28 ft 2 in. crawlers, 48 in. or 60 in. treads, 10 ft 3 in. retractable gantry, 30 ft live mast, 20 part boom hoist reeving, and boom support straps.

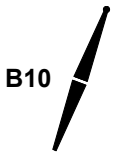
Refer to Table 1 for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath boom point sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on ground until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

Combined weight beneath boom point sheaves must not exceed block weight shown.

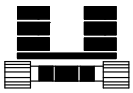
Table 1

Boom Length (ft)	Maximum Number of Lower Boom Point Sheaves	Over End or Side of Crawlers	Over End of Blocked Crawlers
		Block Weight (lb)	
70.0 - 140.0	8	10,000	10,000
150.0	8	8,800	8,800
160.0	8	6,500	6,700
170.0	8	4,200	5,600
180.0	8	#	4,500
190.0	8	#	3,600
200.0	8		#
210.0	8		#
Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. *Crane tipping or structural damage can occur.*			

Explanation of Symbols

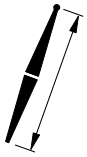


Boom No. B10:82A



Crane Counterweight
+
Carbody Counterweight

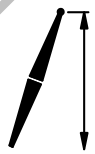
360 Degree Rating



Boom Length

Operating Radius
(see page 1)

Boom Angle
(see page 1)



Boom Point Elevation
(see page 1)

Lifting Capacities
(see page 1)

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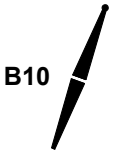
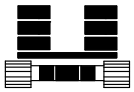
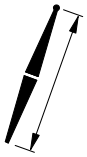
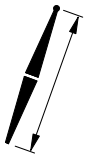


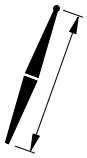




ft	°	ft	lb
16	82.8	77.4	432,000 **b**
17	82.0	77.2	408,500 **b**
18	81.1	77.0	387,400 **b**
19	80.3	76.8	368,300 **b**
20	79.5	76.6	350,900 **b**
22	77.8	76.1	290,700 **b**
24	76.1	75.6	247,200 **b**
26	74.4	75.0	214,500
28	72.7	74.3	189,100
30	70.9	73.6	168,800
32	69.2	72.8	152,200
34	67.4	71.9	138,300
36	65.6	71.0	126,600
38	63.7	70.0	116,500
40	61.9	68.9	107,800
42	60.0	67.7	100,100
44	58.0	66.4	93,400
46	56.0	65.0	87,300
48	54.0	63.5	82,000
50	51.9	61.9	77,100
55	46.3	57.2	66,900
60	40.1	51.5	58,600
65	32.9	44.3	51,800
70	23.7	34.3	46,000



ft	°	ft	lb
17	83.0	87.3	407,700 **b**
18	82.3	87.2	386,600 **b**
19	81.5	87.0	367,500 **b**
20	80.8	86.8	350,100 **b**
22	79.4	86.4	291,300 **b**
24	77.9	85.9	247,600 **b**
26	76.4	85.4	214,800
28	74.9	84.8	189,400
30	73.4	84.2	169,000
32	71.9	83.5	152,300
34	70.4	82.8	138,400
36	68.8	82.0	126,600
38	67.3	81.1	116,500
40	65.7	80.2	107,700
42	64.1	79.2	100,000
44	62.5	78.1	93,300
46	60.8	76.9	87,300
48	59.1	75.7	81,900
50	57.4	74.4	77,000
55	53.0	70.7	66,700
60	48.2	66.3	58,500
65	43.1	61.1	51,700
70	37.3	54.9	46,100
75	30.6	47.0	41,200
80	22.0	36.1	37,000



ft	°	ft	lb
19	82.5	97.1	366,800 **b**
20	81.8	97.0	349,500 **b**
22	80.6	96.6	291,800 **b**
24	79.3	96.2	247,900 **b**
26	77.9	95.7	215,100
28	76.6	95.2	189,500
30	75.3	94.7	169,100
32	74.0	94.1	152,300
34	72.6	93.4	138,400
36	71.3	92.7	126,600
38	69.9	91.9	116,400
40	68.6	91.1	107,600
42	67.2	90.3	100,000
44	65.8	89.3	93,200
46	64.3	88.3	87,100
48	62.9	87.3	81,700
50	61.4	86.2	76,900
55	57.7	83.1	66,600
60	53.8	79.5	58,400
65	49.6	75.3	51,600
70	45.2	70.5	45,900
75	40.4	64.8	41,100
80	35.0	58.0	37,000
85	28.7	49.5	33,400
90	20.7	37.9	30,100

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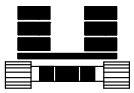

114,600 lb
+
0 lb

360°

100.0 ft

ft	°	ft	lb
20	82.7	107.1	349,400 **b**
22	81.5	106.8	292,300 **b**
24	80.3	106.4	248,400 **b**
26	79.2	106.0	215,500
28	78.0	105.5	189,900
30	76.8	105.0	169,400
32	75.6	104.5	152,600
34	74.4	103.9	138,600
36	73.2	103.3	126,800
38	72.0	102.6	116,700
40	70.8	101.9	107,900
42	69.6	101.1	100,200
44	68.3	100.3	93,400
46	67.1	99.4	87,300
48	65.8	98.5	81,900
50	64.6	97.5	77,100
55	61.3	94.8	66,800
60	57.9	91.7	58,500
65	54.4	88.2	51,800
70	50.8	84.2	46,100
75	46.9	79.6	41,300
80	42.7	74.4	37,200
85	38.2	68.2	33,600
90	33.1	60.9	30,500
95	27.2	51.8	27,700
100	19.5	39.5	25,100

110.0 ft

ft	°	ft	lb
22	82.3	116.9	292,600
24	81.2	116.6	248,600
26	80.2	116.2	215,600
28	79.1	115.8	189,900
30	78.0	115.3	169,300
32	77.0	114.8	152,500
34	75.9	114.3	138,500
36	74.8	113.8	126,600
38	73.7	113.1	116,500
40	72.6	112.5	107,600
42	71.5	111.8	99,900
44	70.4	111.1	93,100
46	69.3	110.3	87,100
48	68.2	109.5	81,600
50	67.0	108.6	76,800
55	64.1	106.2	66,500
60	61.2	103.5	58,200
65	58.1	100.4	51,400
70	55.0	97.0	45,800
75	51.7	93.1	41,000
80	48.2	88.7	36,900
85	44.5	83.7	33,300
90	40.6	78.0	30,200
95	36.3	71.5	27,400
100	31.5	63.7	24,900
105	25.8	54.1	22,600
110	18.6	41.1	20,500

120.0 ft

ft	°	ft	lb
22	82.9	127.0	292,900
24	82.0	126.7	248,800
26	81.0	126.4	215,700
28	80.0	126.0	190,000
30	79.1	125.6	169,400
32	78.1	125.1	152,600
34	77.1	124.7	138,500
36	76.1	124.1	126,700
38	75.1	123.6	116,500
40	74.1	123.0	107,700
42	73.1	122.4	99,900
44	72.1	121.7	93,100
46	71.1	121.0	87,100
48	70.1	120.2	81,600
50	69.1	119.5	76,700
55	66.5	117.3	66,400
60	63.8	114.9	58,200
65	61.1	112.1	51,400
70	58.3	109.1	45,700
75	55.4	105.7	41,000
80	52.4	101.9	36,900
85	49.3	97.7	33,300
90	46.0	92.9	30,100
95	42.5	87.6	27,400
100	38.8	81.5	24,900
105	34.7	74.6	22,700
110	30.1	66.3	20,600
115	24.7	56.2	18,800
120	17.7	42.5	17,100

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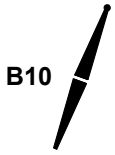
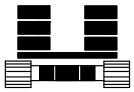
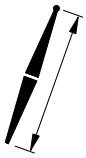
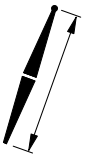


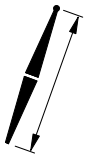




ft	°	ft	lb
24	82.6	136.8	249,000
26	81.7	136.5	215,800
28	80.8	136.2	190,100
30	79.9	135.8	169,400
32	79.0	135.4	152,600
34	78.1	134.9	138,500
36	77.2	134.5	126,600
38	76.3	133.9	116,400
40	75.4	133.4	107,600
42	74.5	132.8	99,800
44	73.5	132.2	93,000
46	72.6	131.6	86,900
48	71.7	130.9	81,500
50	70.7	130.2	76,600
55	68.4	128.2	66,200
60	66.0	126.0	58,000
65	63.5	123.5	51,200
70	61.0	120.8	45,500
75	58.4	117.8	40,700
80	55.8	114.4	36,600
85	53.0	110.7	33,100
90	50.2	106.6	29,900
95	47.2	102.0	27,200
100	44.1	97.0	24,700
105	40.7	91.3	22,500
110	37.1	84.9	20,500
115	33.2	77.5	18,600
120	28.8	68.9	17,000
125	23.6	58.2	15,400
130	17.0	44.0	14,000



ft	°	ft	lb
26	82.3	146.6	215,900
28	81.5	146.3	190,100
30	80.6	146.0	169,400
32	79.8	145.6	152,500
34	79.0	145.2	138,500
36	78.1	144.7	126,500
38	77.3	144.3	116,300
40	76.5	143.8	107,500
42	75.6	143.2	99,700
44	74.8	142.7	92,900
46	73.9	142.1	86,800
48	73.0	141.4	81,300
50	72.2	140.8	76,400
55	70.0	139.0	66,100
60	67.8	137.0	57,800
65	65.6	134.7	51,000
70	63.3	132.2	45,400
75	60.9	129.5	40,600
80	58.5	126.4	36,500
85	56.1	123.1	32,900
90	53.5	119.5	29,800
95	50.9	115.4	27,000
100	48.2	111.0	24,500
105	45.3	106.2	22,300
110	42.3	100.8	20,300
115	39.1	94.8	18,500
120	35.7	88.1	16,900
125	31.9	80.3	15,300
130	27.7	71.3	13,900
135	22.7	60.2	12,600
140	16.3	45.3	11,400

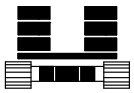


ft	°	ft	lb
26	82.8	156.7	215,900
28	82.0	156.4	190,000
30	81.3	156.1	169,300
32	80.5	155.8	152,400
34	79.7	155.4	138,200
36	78.9	155.0	126,300
38	78.2	154.5	116,000
40	77.4	154.1	107,200
42	76.6	153.6	99,400
44	75.8	153.0	92,500
46	75.0	152.5	86,400
48	74.2	151.9	81,000
50	73.4	151.3	76,100
55	71.4	149.6	65,700
60	69.4	147.8	57,400
65	67.3	145.7	50,600
70	65.2	143.4	44,900
75	63.0	140.9	40,100
80	60.9	138.1	36,000
85	58.6	135.1	32,400
90	56.4	131.8	29,300
95	54.0	128.2	26,500
100	51.6	124.3	24,100
105	49.1	120.0	21,800
110	46.4	115.3	19,800
115	43.7	110.2	18,000
120	40.8	104.5	16,400
125	37.7	98.2	14,900
130	34.4	91.1	13,500
135	30.8	83.1	12,200
140	26.7	73.6	11,000
145	21.9	62.1	9,800
150	15.7	46.7	8,800

Manitowoc Cranes
Manitowoc, Wisconsin 54220 U.S.A.

MLC250 S-0

ASME B30.5



114,600 lb
+
0 lb

360°

160.0 ft

ft	°	ft	lb
28	82.5	166.5	190,000
30	81.8	166.2	169,200
32	81.1	165.9	152,300
34	80.4	165.6	138,100
36	79.6	165.2	126,100
38	78.9	164.8	115,900
40	78.2	164.3	107,000
42	77.4	163.9	99,200
44	76.7	163.4	92,300
46	76.0	162.9	86,200
48	75.2	162.3	80,800
50	74.5	161.7	75,900
55	72.6	160.2	65,500
60	70.7	158.5	57,200
65	68.8	156.5	50,400
70	66.8	154.4	44,700
75	64.9	152.1	39,900
80	62.9	149.5	35,800
85	60.8	146.8	32,200
90	58.7	143.8	29,000
95	56.6	140.5	26,300
100	54.4	137.0	23,800
105	52.1	133.1	21,600
110	49.8	128.9	19,600
115	47.4	124.4	17,800
120	44.9	119.5	16,200
125	42.2	114.0	14,600
130	39.4	108.1	13,300
135	36.5	101.5	12,000
140	33.3	94.1	10,800
145	29.8	85.7	9,700
150	25.8	75.9	8,600
155	21.2	63.9	7,600
160	15.2	47.9	6,700

170.0 ft

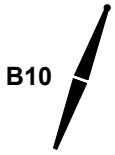
ft	°	ft	lb
28	83.0	176.6	189,900
30	82.3	176.4	169,100
32	81.6	176.0	152,100
34	80.9	175.7	138,000
36	80.3	175.4	126,000
38	79.6	175.0	115,700
40	78.9	174.6	106,800
42	78.2	174.1	99,000
44	77.5	173.7	92,100
46	76.8	173.2	86,000
48	76.1	172.7	80,500
50	75.4	172.1	75,600
55	73.7	170.7	65,200
60	71.9	169.1	56,900
65	70.1	167.3	50,000
70	68.3	165.3	44,400
75	66.4	163.1	39,500
80	64.6	160.8	35,400
85	62.7	158.2	31,800
90	60.8	155.4	28,700
95	58.8	152.4	25,900
100	56.8	149.2	23,500
105	54.7	145.7	21,200
110	52.6	141.9	19,200
115	50.4	137.8	17,400
120	48.2	133.4	15,800
125	45.9	128.6	14,300
130	43.4	123.4	12,900
135	40.9	117.8	11,600
140	38.2	111.5	10,400
145	35.3	104.6	9,300
150	32.2	97.0	8,300
155	28.8	88.2	7,400
160	25.0	78.0	6,400
165	20.5	65.7	5,600

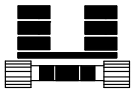
180.0 ft

ft	°	ft	lb
30	82.7	186.5	169,000
32	82.1	186.2	152,000
34	81.5	185.8	137,800
36	80.8	185.5	125,800
38	80.2	185.2	115,500
40	79.5	184.8	106,600
42	78.9	184.4	98,800
44	78.2	183.9	91,900
46	77.6	183.5	85,800
48	76.9	183.0	80,300
50	76.2	182.5	75,300
55	74.6	181.1	64,900
60	72.9	179.6	56,600
65	71.3	177.9	49,800
70	69.6	176.1	44,100
75	67.8	174.0	39,300
80	66.1	171.8	35,100
85	64.3	169.4	31,500
90	62.5	166.9	28,400
95	60.7	164.1	25,600
100	58.9	161.1	23,200
105	57.0	157.9	20,900
110	55.0	154.4	19,000
115	53.1	150.7	17,200
120	51.0	146.7	15,500
125	48.9	142.4	14,000
130	46.7	137.7	12,600
135	44.5	132.7	11,400
140	42.1	127.3	10,200
145	39.7	121.3	9,100
150	37.1	114.9	8,100
155	34.3	107.7	7,100
160	31.3	99.7	6,200
165	28.0	90.7	5,400
170	24.3	80.2	4,500

MLC250 S-0

ASME B30.5





190.0 ft

ft	°	ft	lb
32	82.5	196.3	151,900
34	81.9	196.0	137,600
36	81.3	195.7	125,600
38	80.7	195.3	115,300
40	80.1	194.9	106,300
42	79.5	194.6	98,500
44	78.8	194.2	91,600
46	78.2	193.7	85,400
48	77.6	193.3	79,900
50	77.0	192.8	75,000
55	75.4	191.5	64,500
60	73.9	190.1	56,200
65	72.3	188.5	49,300
70	70.7	186.7	43,600
75	69.1	184.8	38,800
80	67.4	182.8	34,600
85	65.8	180.5	31,100
90	64.1	178.1	27,900
95	62.4	175.5	25,100
100	60.7	172.7	22,700
105	58.9	169.8	20,400
110	57.1	166.6	18,400
115	55.3	163.1	16,600
120	53.4	159.4	15,000
125	51.5	155.5	13,500
130	49.5	151.3	12,100
135	47.5	146.8	10,800
140	45.4	141.9	9,600
145	43.2	136.7	8,600
150	40.9	131.0	7,500
155	38.6	124.8	6,600
160	36.0	118.1	5,700
165	33.3	110.7	4,800
170	30.4	102.4	4,100

200.0 ft

ft	°	ft	lb
32	82.9	206.4	151,700
34	82.3	206.1	137,400
36	81.7	205.8	125,400
38	81.2	205.5	115,000
40	80.6	205.1	106,100
42	80.0	204.7	98,200
44	79.4	204.4	91,300
46	78.8	204.0	85,200
48	78.2	203.5	79,700
50	77.6	203.1	74,700
55	76.2	201.8	64,200
60	74.7	200.5	55,900
65	73.2	199.0	49,000
70	71.7	197.3	43,300
75	70.2	195.6	38,500
80	68.6	193.6	34,300
85	67.1	191.5	30,700
90	65.5	189.2	27,600
95	63.9	186.8	24,800
100	62.3	184.2	22,300
105	60.7	181.4	20,100
110	59.0	178.4	18,100
115	57.3	175.2	16,300
120	55.6	171.8	14,600
125	53.8	168.2	13,100
130	52.0	164.3	11,800
135	50.1	160.2	10,500
140	48.2	155.8	9,300
145	46.2	151.0	8,200
150	44.2	146.0	7,200
155	42.1	140.5	6,300
160	39.8	134.6	5,400
165	37.5	128.2	4,500

210.0 ft

ft	°	ft	lb
34	82.7	216.2	137,200
36	82.1	215.9	125,100
38	81.6	215.6	114,800
40	81.0	215.3	105,800
42	80.5	214.9	98,000
44	79.9	214.5	91,000
46	79.4	214.2	84,900
48	78.8	213.7	79,300
50	78.2	213.3	74,400
55	76.8	212.2	63,900
60	75.4	210.9	55,500
65	74.0	209.4	48,600
70	72.6	207.9	42,900
75	71.1	206.2	38,100
80	69.7	204.4	33,900
85	68.2	202.4	30,300
90	66.7	200.2	27,200
95	65.2	197.9	24,400
100	63.7	195.5	21,900
105	62.2	192.9	19,700
110	60.6	190.1	17,700
115	59.0	187.1	15,900
120	57.4	183.9	14,200
125	55.8	180.5	12,700
130	54.1	176.9	11,300
135	52.4	173.1	10,100
140	50.6	169.1	8,900
145	48.8	164.7	7,800
150	47.0	160.1	6,800
155	45.0	155.2	5,800
160	43.1	149.9	4,900
165	41.0	144.2	4,100

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