

# Liftcrane Boom Capacities With Luffing Jib Attached

## MLC300 VPC-MAX SERIES 1

**Boom No. B65:505-500**  
**Luffing Jib No. LJ11:500-501**  
**with Mast No. M11:503**  
**297,800 lb VPC (Variable Position Counterweight)**  
**360 Degree Rating**



**LIFTING CAPACITIES:** Lifting capacities for various boom lengths, luffing jib lengths, boom-to-luffing jib angles, and boom 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.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom point sheaves, is considered part of load. Weight of luffing jib and 11,000 lb suspended beneath luffing jib point sheaves have been included in capacity determination. 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.

**OPERATING CONDITIONS:** Machine to operate on a firm, level, and uniformly supporting surface. Supporting surface and bearing turntable are to be level within a tolerance of 1/2 in. in 10 ft. During operation, luffing jib must be maintained at proper boom-to-luffing jib angle shown in table. Refer to Luffing Jib Rigging **No. 84050217**, Mast Rigging **No. 84045340**, Wire Rope Specifications chart **No. 9732-A**, Counterweight Arrangements chart **No. 9345-A**, Luffing Jib Raising Procedure chart **No. 9665-A**, and Wind Conditions chart **No. 9667-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 and luffing jib must be within angle range shown in capacity chart. Refer to Maximum Allowable Travel Specifications chart **No. 9666-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 VPC-MAX, 31 ft 10 in. crawlers, 48 in. or 60 in. treads, 30 ft live mast, 98.4 ft mast, 10 part boom hoist reeving, boom support straps, 14 part luffing jib hoist reeving, luffing jib and backstay support straps, and 297,800 lb VPC.

Select counterweight position from Luffing Jib Raising Procedure chart **No. 9665-A** that will allow raising and lowering of boom and luffing jib length. Counterweight position selection may be changed with boom and luffing jib on ground or while boom and luffing jib are within operating range of capacity chart.

Consult Chart **No. 9660-A** for luffing jib capacities.

Luffing Jib Position During Operation	
Luffing Jib Length Feet	Boom-to-Luffing Jib Angle Degrees
78.7 - 98.4	140
118.1 - 157.5	155
177.2 - 275.6	169

### Explanation of Symbols



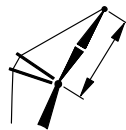
Luffing Jib No. LJ11:500-501  
+  
Boom No. B65:505-500



VPC (Variable Position Counterweight)



360 Degree Rating



Luffing Jib Length



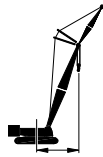
Boom-to-Luffing Jib Angle



Boom Length

REFERENCE ONLY!

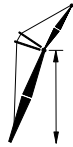
**Explanation of Symbols**  
(continued)



Operating Radius  
(see page 1)



Boom Angle  
(see page 1)



Boom Point Elevation  
(see page 1)



Counterweight Position  
from Axis of Rotation

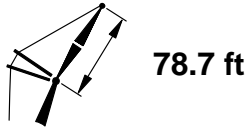


Lifting Capacities  
(see page 1)

REFERENCE ONLY!

# MLC300 VPC-MAX S-1

ASME B30.5

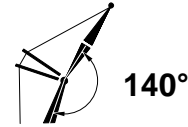
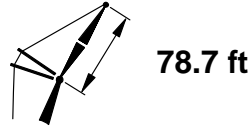


177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	556,800	556,800
26	84.3	183.1	555,700	555,700
28	83.7	182.8	554,700	554,700
30	83.0	182.6	548,300	548,300
32	82.4	182.3	525,500	537,500
34	81.7	182.0	481,600	537,500
36	81.1	181.6	443,400	537,500
38	80.4	181.2	409,800	537,500
40	79.8	180.9	380,000	516,800
45	78.1	179.8	318,700	452,500
50	76.4	178.5	270,900	383,000
55	74.8	177.1	232,700	329,500
60	73.1	175.6	201,500	287,000
65	71.4	173.9	175,400	252,400
70	69.6	172.0	153,400	223,800
75	67.9	169.9	134,500	199,600
80	66.1	167.7	118,100	179,000
85	64.3	165.3	103,800	161,100
90	62.5	162.6	91,200	145,600
95	60.6	159.8	79,900	131,900
100	58.7	156.7	69,800	119,700
105	56.8	153.4	60,800	108,900
110	54.8	149.9	52,600	99,100
115	52.8	146.1	45,100	90,300
120	50.7	142.0	38,300	82,300
125	48.5	137.5	32,100	75,000
130	46.3	132.7	26,400	68,300
135	44.0	127.6	21,100	62,200
140	41.5	121.9	16,200	56,500

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	501,900	501,900
28	84.3	202.7	500,900	500,900
30	83.7	202.4	499,700	499,700
32	83.2	202.2	498,600	498,600
34	82.6	201.9	481,800	497,400
36	82.0	201.6	443,500	496,300
38	81.4	201.2	409,800	495,100
40	80.8	200.9	380,000	493,900
45	79.3	199.9	318,500	450,900
50	77.8	198.8	270,600	383,300
55	76.3	197.6	232,300	329,700
60	74.8	196.2	201,000	287,000
65	73.3	194.7	174,900	252,400
70	71.8	193.0	152,800	223,600
75	70.2	191.2	133,800	199,400
80	68.6	189.2	117,400	178,700
85	67.1	187.0	103,000	160,800
90	65.5	184.7	90,300	145,200
95	63.8	182.3	79,000	131,500
100	62.2	179.6	68,900	119,300
105	60.5	176.7	59,900	108,400
110	58.8	173.7	51,600	98,600
115	57.1	170.4	44,200	89,800
120	55.3	167.0	37,300	81,700
125	53.5	163.2	31,100	74,400
130	51.6	159.3	25,300	67,700
135	49.7	155.0	20,000	61,500
140	47.7	150.5	15,000	55,800
145	45.7	145.6	10,500	50,600
150	43.6	140.3		45,700
155	41.4	134.7		41,200

# MLC300 VPC-MAX S-1

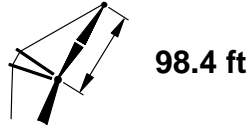
ASME B30.5



ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	447,900	447,900
30	84.3	222.3	447,900	447,900
32	83.8	222.0	447,900	447,900
34	83.2	221.8	447,900	447,900
36	82.7	221.5	443,100	447,100
38	82.2	221.2	409,300	445,800
40	81.6	220.9	379,400	444,500
45	80.3	220.0	317,800	439,800
50	79.0	219.0	269,800	383,300
55	77.6	217.9	231,400	329,500
60	76.2	216.6	200,000	286,800
65	74.9	215.2	173,900	252,000
70	73.5	213.7	151,700	223,200
75	72.1	212.1	132,700	198,900
80	70.7	210.3	116,300	178,200
85	69.3	208.4	101,900	160,200
90	67.8	206.3	89,200	144,600
95	66.4	204.1	77,900	130,800
100	64.9	201.8	67,700	118,600
105	63.4	199.2	58,600	107,700
110	61.9	196.6	50,400	97,900
115	60.4	193.7	42,900	89,000
120	58.9	190.7	36,000	80,900
125	57.3	187.4	29,800	73,600
130	55.7	184.0	24,000	66,900
135	54.1	180.4	18,600	60,700
140	52.4	176.5	13,700	55,000
145	50.7	172.4		49,700
150	48.9	168.0		44,800
155	47.1	163.4		40,200
160	45.2	158.4		36,000
165	43.3	153.1		32,000
170	41.3	147.4		28,300

# MLC300 VPC-MAX S-1

ASME B30.5

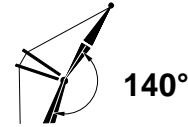
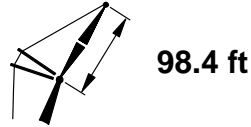


ft	°	ft	lb	lb
24	85.0	183.3	548,400	548,400
26	84.3	183.1	547,700	547,700
28	83.7	182.8	547,000	547,000
30	83.0	182.6	541,600	541,600
32	82.4	182.3	505,400	541,600
34	81.7	182.0	462,500	541,600
36	81.1	181.6	425,100	541,600
38	80.4	181.2	392,300	530,600
40	79.8	180.9	363,300	505,400
45	78.1	179.8	303,300	439,200
50	76.4	178.5	256,700	370,900
55	74.8	177.1	219,400	318,300
60	73.1	175.6	188,900	276,600
65	71.4	173.9	163,400	242,600
70	69.6	172.0	141,900	214,400
75	67.9	169.9	123,500	190,700
80	66.1	167.7	107,500	170,500
85	64.3	165.3	93,500	153,000
90	62.5	162.6	81,200	137,700
95	60.6	159.8	70,300	124,300
100	58.7	156.7	60,500	112,300
105	56.8	153.4	51,600	101,700
110	54.8	149.9	43,700	92,100
115	52.8	146.1	36,400	83,500
120	50.7	142.0	29,800	75,700
125	48.5	137.5	23,800	68,500
130	46.3	132.7	18,200	62,000
135	44.0	127.6	13,100	56,000
140	41.5	121.9		50,500

ft	°	ft	lb	lb
26	84.9	202.9	495,100	495,100
28	84.3	202.7	494,200	494,200
30	83.7	202.4	493,400	493,400
32	83.2	202.2	492,500	492,500
34	82.6	201.9	462,900	491,700
36	82.0	201.6	425,500	490,500
38	81.4	201.2	392,600	489,400
40	80.8	200.9	363,400	488,200
45	79.3	199.9	303,300	439,900
50	77.8	198.8	256,600	371,400
55	76.3	197.6	219,200	318,700
60	74.8	196.2	188,500	276,800
65	73.3	194.7	163,000	242,700
70	71.8	193.0	141,500	214,500
75	70.2	191.2	123,000	190,700
80	68.6	189.2	106,900	170,400
85	67.1	187.0	92,900	152,800
90	65.5	184.7	80,500	137,500
95	63.8	182.3	69,500	124,000
100	62.2	179.6	59,700	112,000
105	60.5	176.7	50,800	101,300
110	58.8	173.7	42,800	91,700
115	57.1	170.4	35,600	83,100
120	55.3	167.0	28,900	75,200
125	53.5	163.2	22,800	68,000
130	51.6	159.3	17,200	61,400
135	49.7	155.0	12,100	55,400
140	47.7	150.5		49,800
145	45.7	145.6		44,700
150	43.6	140.3		39,900
155	41.4	134.7		35,500

# MLC300 VPC-MAX S-1

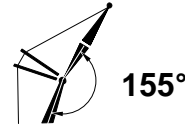
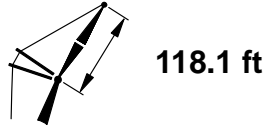
ASME B30.5



 216.5 ft				
ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	442,900	442,900
30	84.3	222.3	442,900	442,900
32	83.8	222.0	442,900	442,900
34	83.2	221.8	442,900	442,900
36	82.7	221.5	425,200	442,000
38	82.2	221.2	392,300	441,000
40	81.6	220.9	363,100	440,000
45	80.3	220.0	302,800	429,900
50	79.0	219.0	256,000	371,500
55	77.6	217.9	218,500	318,600
60	76.2	216.6	187,800	276,700
65	74.9	215.2	162,200	242,500
70	73.5	213.7	140,600	214,200
75	72.1	212.1	122,100	190,300
80	70.7	210.3	106,000	169,900
85	69.3	208.4	91,900	152,300
90	67.8	206.3	79,500	137,000
95	66.4	204.1	68,500	123,400
100	64.9	201.8	58,600	111,400
105	63.4	199.2	49,800	100,700
110	61.9	196.6	41,700	91,100
115	60.4	193.7	34,400	82,400
120	58.9	190.7	27,700	74,500
125	57.3	187.4	21,600	67,300
130	55.7	184.0	16,000	60,700
135	54.1	180.4	10,800	54,600
140	52.4	176.5		49,000
145	50.7	172.4		43,900
150	48.9	168.0		39,100
155	47.1	163.4		34,600
160	45.2	158.4		30,500
165	43.3	153.1		26,600
170	41.3	147.4		22,900

# MLC300 VPC-MAX S-1

ASME B30.5



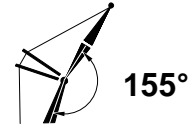
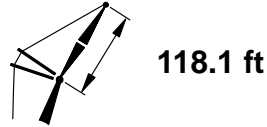
177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	545,300	545,300
26	84.3	183.1	544,500	544,500
28	83.7	182.8	543,400	543,400
30	83.0	182.6	540,900	540,900
32	82.4	182.3	504,600	540,900
34	81.7	182.0	460,900	540,000
36	81.1	181.6	422,900	538,900
38	80.4	181.2	389,500	528,200
40	79.8	180.9	359,900	502,600
45	78.1	179.8	298,800	436,000
50	76.4	178.5	251,300	367,000
55	74.8	177.1	213,300	313,700
60	73.1	175.6	182,200	271,500
65	71.4	173.9	156,300	237,100
70	69.6	172.0	134,400	208,700
75	67.9	169.9	115,600	184,600
80	66.1	167.7	99,300	164,100
85	64.3	165.3	85,000	146,400
90	62.5	162.6	72,500	131,000
95	60.6	159.8	61,300	117,300
100	58.7	156.7	51,300	105,300
105	56.8	153.4	42,300	94,500
110	54.8	149.9	34,100	84,800
115	52.8	146.1	26,700	76,000
120	50.7	142.0	20,000	68,100
125	48.5	137.5	13,800	60,900
130	46.3	132.7		54,200
135	44.0	127.6		48,100
140	41.5	121.9		42,500
145	39.0	115.8		37,300
150	36.2	109.0		32,500
155	33.3	101.5		28,000
160	30.1	93.0		23,900
165	26.6	83.3		19,500

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	491,000	491,000
28	84.3	202.7	490,100	490,100
30	83.7	202.4	489,100	489,100
32	83.2	202.2	488,300	488,300
34	82.6	201.9	461,900	487,000
36	82.0	201.6	423,800	485,900
38	81.4	201.2	390,300	484,700
40	80.8	200.9	360,600	483,400
45	79.3	199.9	299,400	437,300
50	77.8	198.8	251,800	368,000
55	76.3	197.6	213,700	314,700
60	74.8	196.2	182,500	272,300
65	73.3	194.7	156,600	237,800
70	71.8	193.0	134,600	209,300
75	70.2	191.2	115,700	185,200
80	68.6	189.2	99,400	164,600
85	67.1	187.0	85,100	146,800
90	65.5	184.7	72,500	131,300
95	63.8	182.3	61,300	117,600
100	62.2	179.6	51,200	105,500
105	60.5	176.7	42,200	94,700
110	58.8	173.7	34,000	85,000
115	57.1	170.4	26,600	76,200
120	55.3	167.0	19,800	68,200
125	53.5	163.2	13,600	60,900
130	51.6	159.3		54,300
135	49.7	155.0		48,100
140	47.7	150.5		42,500
145	45.7	145.6		37,300
150	43.6	140.3		32,400
155	41.4	134.7		27,900
160	39.1	128.5		23,600
165	36.7	121.9		18,800
170	34.1	114.6		14,300
175	31.3	106.5		10,000



# MLC300 VPC-MAX S-1

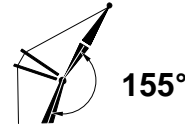
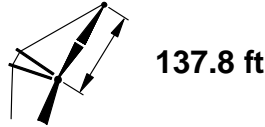
ASME B30.5



ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	438,500	438,500
30	84.3	222.3	438,500	438,500
32	83.8	222.0	438,500	438,500
34	83.2	221.8	438,100	438,100
36	82.7	221.5	424,000	437,100
38	82.2	221.2	390,500	436,200
40	81.6	220.9	360,700	435,000
45	80.3	220.0	299,400	427,300
50	79.0	219.0	251,700	368,600
55	77.6	217.9	213,500	315,100
60	76.2	216.6	182,300	272,600
65	74.9	215.2	156,300	238,000
70	73.5	213.7	134,300	209,400
75	72.1	212.1	115,400	185,300
80	70.7	210.3	99,000	164,600
85	69.3	208.4	84,700	146,800
90	67.8	206.3	72,000	131,300
95	66.4	204.1	60,800	117,600
100	64.9	201.8	50,700	105,400
105	63.4	199.2	41,700	94,500
110	61.9	196.6	33,500	84,800
115	60.4	193.7	26,000	76,000
120	58.9	190.7	19,200	68,000
125	57.3	187.4	13,000	60,700
130	55.7	184.0		54,000
135	54.1	180.4		47,800
140	52.4	176.5		42,200
145	50.7	172.4		36,900
150	48.9	168.0		32,100
155	47.1	163.4		27,500
160	45.2	158.4		22,600
165	43.3	153.1		17,800
170	41.3	147.4		13,200

# MLC300 VPC-MAX S-1

ASME B30.5

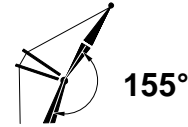
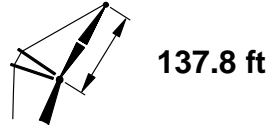


177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	536,600	536,600
26	84.3	183.1	535,700	535,700
28	83.7	182.8	534,800	534,800
30	83.0	182.6	533,900	533,900
32	82.4	182.3	486,700	533,000
34	81.7	182.0	443,800	532,200
36	81.1	181.6	406,400	531,400
38	80.4	181.2	373,600	517,500
40	79.8	180.9	344,500	491,900
45	78.1	179.8	284,500	423,700
50	76.4	178.5	237,800	355,600
55	74.8	177.1	200,500	303,100
60	73.1	175.6	170,000	261,400
65	71.4	173.9	144,600	227,600
70	69.6	172.0	123,000	199,500
75	67.9	169.9	104,600	175,800
80	66.1	167.7	88,600	155,600
85	64.3	165.3	74,600	138,100
90	62.5	162.6	62,300	122,900
95	60.6	159.8	51,300	109,500
100	58.7	156.7	41,500	97,600
105	56.8	153.4	32,700	87,000
110	54.8	149.9	24,700	77,500
115	52.8	146.1	17,500	68,800
120	50.7	142.0	10,900	61,000
125	48.5	137.5		53,900
130	46.3	132.7		47,400
135	44.0	127.6		41,400
140	41.5	121.9		35,900
145	39.0	115.8		30,800
150	36.2	109.0		26,100
155	33.3	101.5		21,100
160	30.1	93.0		16,100
165	26.6	83.3		11,500

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	484,300	484,300
28	84.3	202.7	483,400	483,400
30	83.7	202.4	482,400	482,400
32	83.2	202.2	481,500	481,500
34	82.6	201.9	445,100	480,500
36	82.0	201.6	407,700	479,600
38	81.4	201.2	374,700	478,700
40	80.8	200.9	345,600	477,600
45	79.3	199.9	285,500	425,300
50	77.8	198.8	238,700	356,900
55	76.3	197.6	201,300	304,300
60	74.8	196.2	170,700	262,500
65	73.3	194.7	145,100	228,500
70	71.8	193.0	123,600	200,300
75	70.2	191.2	105,100	176,600
80	68.6	189.2	89,000	156,300
85	67.1	187.0	75,000	138,800
90	65.5	184.7	62,600	123,500
95	63.8	182.3	51,600	110,000
100	62.2	179.6	41,800	98,100
105	60.5	176.7	32,900	87,400
110	58.8	173.7	24,900	77,800
115	57.1	170.4	17,600	69,200
120	55.3	167.0	11,000	61,300
125	53.5	163.2		54,200
130	51.6	159.3		47,600
135	49.7	155.0		41,600
140	47.7	150.5		36,100
145	45.7	145.6		30,900
150	43.6	140.3		25,900
155	41.4	134.7		20,600
160	39.1	128.5		15,500
165	36.7	121.9		10,800

# MLC300 VPC-MAX S-1

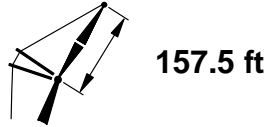
ASME B30.5



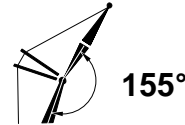
ft	°	ft	lb	lb
28	84.8	222.5	433,200	433,200
30	84.3	222.3	433,200	433,200
32	83.8	222.0	433,200	433,200
34	83.2	221.8	432,500	432,500
36	82.7	221.5	408,200	431,600
38	82.2	221.2	375,200	430,600
40	81.6	220.9	346,000	429,700
45	80.3	220.0	285,700	418,000
50	79.0	219.0	238,900	357,700
55	77.6	217.9	201,400	304,900
60	76.2	216.6	170,700	263,000
65	74.9	215.2	145,100	229,000
70	73.5	213.7	123,500	200,700
75	72.1	212.1	105,000	176,900
80	70.7	210.3	88,900	156,600
85	69.3	208.4	74,800	139,000
90	67.8	206.3	62,400	123,600
95	66.4	204.1	51,400	110,100
100	64.9	201.8	41,500	98,200
105	63.4	199.2	32,600	87,500
110	61.9	196.6	24,600	77,900
115	60.4	193.7	17,300	69,200
120	58.9	190.7	10,600	61,300
125	57.3	187.4		54,100
130	55.7	184.0		47,500
135	54.1	180.4		41,500
140	52.4	176.5		35,900
145	50.7	172.4		30,700
150	48.9	168.0		25,200
155	47.1	163.4		19,800
160	45.2	158.4		14,700
165	43.3	153.1		10,000

# MLC300 VPC-MAX S-1

ASME B30.5



157.5 ft



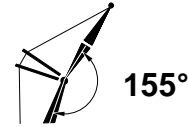
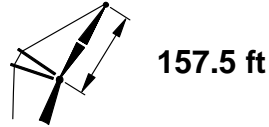
155°

177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	523,200	523,200
26	84.3	183.1	522,100	522,100
28	83.7	182.8	521,000	521,000
30	83.0	182.6	508,000	520,000
32	82.4	182.3	459,500	519,000
34	81.7	182.0	417,700	518,100
36	81.1	181.6	381,300	517,100
38	80.4	181.2	349,300	500,300
40	79.8	180.9	321,000	474,900
45	78.1	179.8	262,500	404,900
50	76.4	178.5	217,100	338,100
55	74.8	177.1	180,700	286,700
60	73.1	175.6	151,000	245,900
65	71.4	173.9	126,200	212,700
70	69.6	172.0	105,300	185,200
75	67.9	169.9	87,400	162,000
80	66.1	167.7	71,800	142,200
85	64.3	165.3	58,200	125,100
90	62.5	162.6	46,200	110,200
95	60.6	159.8	35,600	97,100
100	58.7	156.7	26,100	85,500
105	56.8	153.4	17,500	75,100
110	54.8	149.9		65,800
115	52.8	146.1		57,400
120	50.7	142.0		49,800
125	48.5	137.5		42,800
130	46.3	132.7		36,500
135	44.0	127.6		30,700
140	41.5	121.9		24,400
145	39.0	115.8		18,400
150	36.2	109.0		12,800

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	472,300	472,300
28	84.3	202.7	471,500	471,500
30	83.7	202.4	470,800	470,800
32	83.2	202.2	461,400	470,100
34	82.6	201.9	419,500	469,400
36	82.0	201.6	383,000	468,700
38	81.4	201.2	350,900	468,000
40	80.8	200.9	322,500	465,100
45	79.3	199.9	264,000	406,900
50	77.8	198.8	218,400	339,900
55	76.3	197.6	181,900	288,300
60	74.8	196.2	152,100	247,400
65	73.3	194.7	127,300	214,000
70	71.8	193.0	106,300	186,400
75	70.2	191.2	88,300	163,200
80	68.6	189.2	72,700	143,300
85	67.1	187.0	59,000	126,200
90	65.5	184.7	47,000	111,200
95	63.8	182.3	36,300	98,000
100	62.2	179.6	26,800	86,300
105	60.5	176.7	18,200	75,900
110	58.8	173.7	10,400	66,500
115	57.1	170.4		58,100
120	55.3	167.0		50,400
125	53.5	163.2		43,400
130	51.6	159.3		37,000
135	49.7	155.0		30,900
140	47.7	150.5		24,300
145	45.7	145.6		18,300
150	43.6	140.3		12,700

# MLC300 VPC-MAX S-1

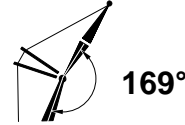
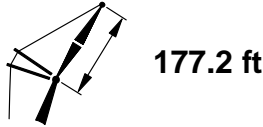
ASME B30.5



ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	424,800	424,800
30	84.3	222.3	424,500	424,500
32	83.8	222.0	423,800	423,800
34	83.2	221.8	420,500	423,000
36	82.7	221.5	383,900	422,400
38	82.2	221.2	351,800	421,600
40	81.6	220.9	323,300	420,700
45	80.3	220.0	264,600	402,900
50	79.0	219.0	219,000	341,000
55	77.6	217.9	182,400	289,300
60	76.2	216.6	152,600	248,200
65	74.9	215.2	127,700	214,800
70	73.5	213.7	106,600	187,100
75	72.1	212.1	88,600	163,800
80	70.7	210.3	72,900	143,900
85	69.3	208.4	59,200	126,700
90	67.8	206.3	47,200	111,600
95	66.4	204.1	36,500	98,400
100	64.9	201.8	26,900	86,700
105	63.4	199.2	18,200	76,200
110	61.9	196.6	10,400	66,800
115	60.4	193.7		58,300
120	58.9	190.7		50,600
125	57.3	187.4		43,600
130	55.7	184.0		37,200
135	54.1	180.4		30,500
140	52.4	176.5		23,900
145	50.7	172.4		17,800
150	48.9	168.0		12,200

# MLC300 VPC-MAX S-1

ASME B30.5

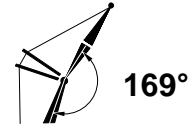
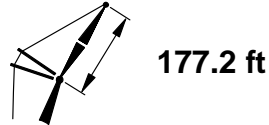


177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	533,600	533,600
26	84.3	183.1	532,300	532,300
28	83.7	182.8	531,000	531,000
30	83.0	182.6	529,600	529,600
32	82.4	182.3	491,700	528,200
34	81.7	182.0	447,000	526,800
36	81.1	181.6	408,000	525,500
38	80.4	181.2	373,700	516,800
40	79.8	180.9	343,400	490,300
45	78.1	179.8	280,700	421,600
50	76.4	178.5	232,000	351,600
55	74.8	177.1	193,100	297,700
60	73.1	175.6	161,200	254,800
65	71.4	173.9	134,600	220,000
70	69.6	172.0	112,100	191,100
75	67.9	169.9	92,800	166,700
80	66.1	167.7	76,000	145,900
85	64.3	165.3	61,400	127,900
90	62.5	162.6	48,400	112,200
95	60.6	159.8	36,900	98,400
100	58.7	156.7	26,600	86,100
105	56.8	153.4	17,400	75,200
110	54.8	149.9		65,300
115	52.8	146.1		56,400
120	50.7	142.0		48,300
125	48.5	137.5		40,900
130	46.3	132.7		34,200
135	44.0	127.6		27,000
140	41.5	121.9		20,000
145	39.0	115.8		13,600

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	478,300	478,300
28	84.3	202.7	477,300	477,300
30	83.7	202.4	476,200	476,200
32	83.2	202.2	475,200	475,200
34	82.6	201.9	449,500	474,000
36	82.0	201.6	410,400	472,700
38	81.4	201.2	376,100	471,400
40	80.8	200.9	345,700	470,100
45	79.3	199.9	282,900	424,300
50	77.8	198.8	234,100	354,100
55	76.3	197.6	195,100	300,000
60	74.8	196.2	163,100	257,000
65	73.3	194.7	136,500	222,000
70	71.8	193.0	113,900	193,100
75	70.2	191.2	94,600	168,600
80	68.6	189.2	77,800	147,700
85	67.1	187.0	63,100	129,700
90	65.5	184.7	50,200	114,000
95	63.8	182.3	38,700	100,100
100	62.2	179.6	28,300	87,800
105	60.5	176.7	19,100	76,800
110	58.8	173.7	10,600	66,900
115	57.1	170.4		58,000
120	55.3	167.0		49,800
125	53.5	163.2		42,400
130	51.6	159.3		35,700
135	49.7	155.0		28,300
140	47.7	150.5		21,300
145	45.7	145.6		14,900

# MLC300 VPC-MAX S-1

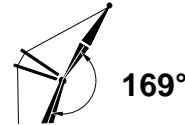
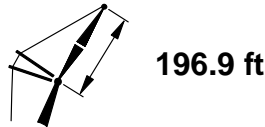
ASME B30.5



 216.5 ft				
ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	425,700	425,700
30	84.3	222.3	425,700	425,700
32	83.8	222.0	425,700	425,700
34	83.2	221.8	424,800	424,800
36	82.7	221.5	411,900	423,700
38	82.2	221.2	377,500	422,800
40	81.6	220.9	347,000	421,700
45	80.3	220.0	284,200	416,400
50	79.0	219.0	235,300	355,800
55	77.6	217.9	196,200	301,500
60	76.2	216.6	164,200	258,400
65	74.9	215.2	137,500	223,400
70	73.5	213.7	114,900	194,300
75	72.1	212.1	95,600	169,800
80	70.7	210.3	78,800	148,900
85	69.3	208.4	64,100	130,800
90	67.8	206.3	51,100	115,000
95	66.4	204.1	39,600	101,100
100	64.9	201.8	29,300	88,800
105	63.4	199.2	20,000	77,800
110	61.9	196.6	11,500	67,900
115	60.4	193.7		58,900
120	58.9	190.7		50,800
125	57.3	187.4		43,300
130	55.7	184.0		36,300
135	54.1	180.4		28,800
140	52.4	176.5		21,900
145	50.7	172.4		15,400

# MLC300 VPC-MAX S-1

ASME B30.5



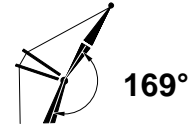
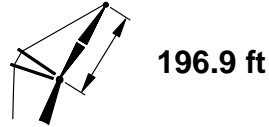
177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	521,700	521,700
26	84.3	183.1	520,300	520,300
28	83.7	182.8	518,900	518,900
30	83.0	182.6	517,500	517,500
32	82.4	182.3	469,900	516,200
34	81.7	182.0	425,700	514,900
36	81.1	181.6	387,200	513,600
38	80.4	181.2	353,300	502,100
40	79.8	180.9	323,400	475,600
45	78.1	179.8	261,500	405,400
50	76.4	178.5	213,400	336,100
55	74.8	177.1	174,900	282,800
60	73.1	175.6	143,400	240,400
65	71.4	173.9	117,200	205,900
70	69.6	172.0	95,000	177,400
75	67.9	169.9	75,900	153,300
80	66.1	167.7	59,400	132,700
85	64.3	165.3	44,900	114,900
90	62.5	162.6	32,200	99,400
95	60.6	159.8	20,800	85,800
100	58.7	156.7	10,700	73,600
105	56.8	153.4		62,800
110	54.8	149.9		53,100
115	52.8	146.1		44,300
120	50.7	142.0		35,800
125	48.5	137.5		27,000
130	46.3	132.7		19,000
135	44.0	127.6		11,500

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	468,300	468,300
28	84.3	202.7	467,200	467,200
30	83.7	202.4	466,100	466,100
32	83.2	202.2	465,000	465,000
34	82.6	201.9	428,900	463,800
36	82.0	201.6	390,300	462,700
38	81.4	201.2	356,400	461,700
40	80.8	200.9	326,300	460,600
45	79.3	199.9	264,400	408,600
50	77.8	198.8	216,200	339,200
55	76.3	197.6	177,600	285,700
60	74.8	196.2	146,100	243,200
65	73.3	194.7	119,800	208,600
70	71.8	193.0	97,500	179,900
75	70.2	191.2	78,400	155,800
80	68.6	189.2	61,900	135,100
85	67.1	187.0	47,400	117,300
90	65.5	184.7	34,600	101,700
95	63.8	182.3	23,200	88,000
100	62.2	179.6	13,100	75,800
105	60.5	176.7		65,000
110	58.8	173.7		55,200
115	57.1	170.4		46,400
120	55.3	167.0		37,700
125	53.5	163.2		29,000
130	51.6	159.3		20,900
135	49.7	155.0		13,500



# MLC300 VPC-MAX S-1

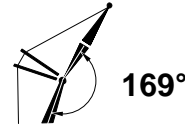
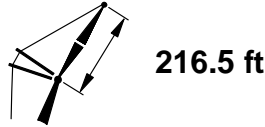
ASME B30.5



 216.5 ft				
ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	417,100	417,100
30	84.3	222.3	417,100	417,100
32	83.8	222.0	416,600	416,600
34	83.2	221.8	415,700	415,700
36	82.7	221.5	392,300	414,700
38	82.2	221.2	358,300	413,700
40	81.6	220.9	328,200	412,700
45	80.3	220.0	266,200	403,300
50	79.0	219.0	217,900	341,300
55	77.6	217.9	179,300	287,700
60	76.2	216.6	147,700	245,100
65	74.9	215.2	121,400	210,400
70	73.5	213.7	99,100	181,700
75	72.1	212.1	80,000	157,400
80	70.7	210.3	63,400	136,700
85	69.3	208.4	48,900	118,900
90	67.8	206.3	36,100	103,200
95	66.4	204.1	24,700	89,500
100	64.9	201.8	14,500	77,300
105	63.4	199.2		66,400
110	61.9	196.6		56,600
115	60.4	193.7		47,800
120	58.9	190.7		38,800
125	57.3	187.4		30,000
130	55.7	184.0		22,000
135	54.1	180.4		14,600

# MLC300 VPC-MAX S-1

ASME B30.5

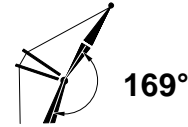
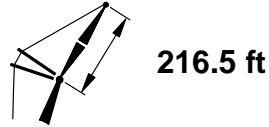


ft	°	ft	34.8 ft lb	48.0 ft lb
24	85.0	183.3	512,400	512,400
26	84.3	183.1	510,800	510,800
28	83.7	182.8	509,300	509,300
30	83.0	182.6	504,100	507,800
32	82.4	182.3	453,300	506,300
34	81.7	182.0	409,500	504,800
36	81.1	181.6	371,400	503,300
38	80.4	181.2	337,900	491,100
40	79.8	180.9	308,200	464,500
45	78.1	179.8	247,000	392,900
50	76.4	178.5	199,400	324,300
55	74.8	177.1	161,300	271,400
60	73.1	175.6	130,100	229,500
65	71.4	173.9	104,100	195,300
70	69.6	172.0	82,100	167,000
75	67.9	169.9	63,300	143,200
80	66.1	167.7	47,000	122,800
85	64.3	165.3	32,700	105,200
90	62.5	162.6	20,000	89,800
95	60.6	159.8		76,300
100	58.7	156.7		64,300
105	56.8	153.4		53,600
110	54.8	149.9		43,900
115	52.8	146.1		33,500
120	50.7	142.0		24,000
125	48.5	137.5		15,300

ft	°	ft	34.8 ft lb	48.0 ft lb
26	84.9	202.9	459,900	459,900
28	84.3	202.7	458,800	458,800
30	83.7	202.4	457,800	457,800
32	83.2	202.2	456,700	456,700
34	82.6	201.9	413,200	455,700
36	82.0	201.6	375,000	454,600
38	81.4	201.2	341,500	453,500
40	80.8	200.9	311,700	452,300
45	79.3	199.9	250,400	396,700
50	77.8	198.8	202,700	327,900
55	76.3	197.6	164,500	274,800
60	74.8	196.2	133,300	232,700
65	73.3	194.7	107,300	198,500
70	71.8	193.0	85,300	170,000
75	70.2	191.2	66,400	146,100
80	68.6	189.2	50,000	125,700
85	67.1	187.0	35,700	108,000
90	65.5	184.7	23,000	92,600
95	63.8	182.3	11,800	79,000
100	62.2	179.6		66,900
105	60.5	176.7		56,200
110	58.8	173.7		46,400
115	57.1	170.4		36,000
120	55.3	167.0		26,500
125	53.5	163.2		17,800

# MLC300 VPC-MAX S-1

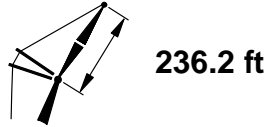
ASME B30.5



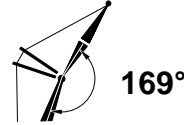
ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	410,600	410,600
30	84.3	222.3	410,100	410,100
32	83.8	222.0	409,300	409,300
34	83.2	221.8	408,500	408,500
36	82.7	221.5	377,500	407,700
38	82.2	221.2	343,900	406,600
40	81.6	220.9	314,100	405,700
45	80.3	220.0	252,700	393,500
50	79.0	219.0	204,900	330,400
55	77.6	217.9	166,700	277,300
60	76.2	216.6	135,400	235,000
65	74.9	215.2	109,400	200,700
70	73.5	213.7	87,300	172,200
75	72.1	212.1	68,400	148,200
80	70.7	210.3	52,000	127,700
85	69.3	208.4	37,700	109,900
90	67.8	206.3	25,000	94,500
95	66.4	204.1	13,700	80,900
100	64.9	201.8		68,800
105	63.4	199.2		58,000
110	61.9	196.6		47,800
115	60.4	193.7		37,400
120	58.9	190.7		28,000
125	57.3	187.4		19,300
130	55.7	184.0		11,400

# MLC300 VPC-MAX S-1

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236.2 ft



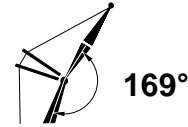
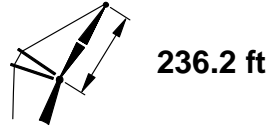
169°


177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	505,400	505,400
26	84.3	183.1	503,800	503,800
28	83.7	182.8	502,100	502,100
30	83.0	182.6	490,600	500,400
32	82.4	182.3	440,300	498,800
34	81.7	182.0	396,900	497,200
36	81.1	181.6	359,100	495,600
38	80.4	181.2	325,900	482,700
40	79.8	180.9	296,500	456,100
45	78.1	179.8	235,800	383,300
50	76.4	178.5	188,600	315,200
55	74.8	177.1	150,900	262,700
60	73.1	175.6	120,000	221,100
65	71.4	173.9	94,200	187,200
70	69.6	172.0	72,500	159,200
75	67.9	169.9	53,800	135,500
80	66.1	167.7	37,600	115,300
85	64.3	165.3	23,500	97,800
90	62.5	162.6	11,000	82,600
95	60.6	159.8		69,200
100	58.7	156.7		57,300
105	56.8	153.4		46,300
110	54.8	149.9		34,900
115	52.8	146.1		24,600
120	50.7	142.0		15,200

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	453,400	453,400
28	84.3	202.7	452,200	452,200
30	83.7	202.4	451,100	451,100
32	83.2	202.2	444,500	449,900
34	82.6	201.9	401,100	448,800
36	82.0	201.6	363,200	447,700
38	81.4	201.2	329,900	446,600
40	80.8	200.9	300,500	445,500
45	79.3	199.9	239,700	387,500
50	77.8	198.8	192,400	319,200
55	76.3	197.6	154,600	266,500
60	74.8	196.2	123,700	224,700
65	73.3	194.7	97,900	190,800
70	71.8	193.0	76,100	162,600
75	70.2	191.2	57,300	138,800
80	68.6	189.2	41,100	118,500
85	67.1	187.0	26,900	101,000
90	65.5	184.7	14,400	85,700
95	63.8	182.3		72,200
100	62.2	179.6		60,300
105	60.5	176.7		49,200
110	58.8	173.7		37,800
115	57.1	170.4		27,500
120	55.3	167.0		18,100

# MLC300 VPC-MAX S-1

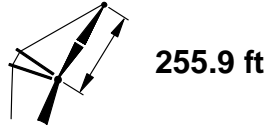
ASME B30.5



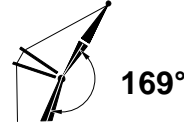
 216.5 ft				
ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	405,400	405,400
30	84.3	222.3	404,600	404,600
32	83.8	222.0	403,800	403,800
34	83.2	221.8	402,900	402,900
36	82.7	221.5	366,000	402,000
38	82.2	221.2	332,700	401,100
40	81.6	220.9	303,200	400,300
45	80.3	220.0	242,400	386,200
50	79.0	219.0	195,000	322,100
55	77.6	217.9	157,200	269,300
60	76.2	216.6	126,200	227,400
65	74.9	215.2	100,300	193,300
70	73.5	213.7	78,500	165,000
75	72.1	212.1	59,800	141,200
80	70.7	210.3	43,500	120,900
85	69.3	208.4	29,300	103,300
90	67.8	206.3	16,800	87,900
95	66.4	204.1		74,400
100	64.9	201.8		62,400
105	63.4	199.2		51,000
110	61.9	196.6		39,700
115	60.4	193.7		29,400
120	58.9	190.7		20,000
125	57.3	187.4		11,400

# MLC300 VPC-MAX S-1

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255.9 ft



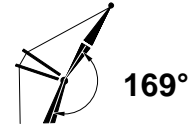
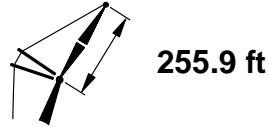
169°


177.2 ft				
ft	°	ft	lb	lb
24	85.0	183.3	496,600	496,600
26	84.3	183.1	494,800	494,800
28	83.7	182.8	493,000	493,000
30	83.0	182.6	474,000	491,200
32	82.4	182.3	424,200	489,500
34	81.7	182.0	381,300	487,700
36	81.1	181.6	343,900	486,000
38	80.4	181.2	311,000	472,100
40	79.8	180.9	281,900	445,600
45	78.1	179.8	221,900	371,300
50	76.4	178.5	175,300	303,900
55	74.8	177.1	137,900	251,900
60	73.1	175.6	107,400	210,700
65	71.4	173.9	81,900	177,200
70	69.6	172.0	60,400	149,400
75	67.9	169.9	41,900	125,900
80	66.1	167.7	25,900	105,900
85	64.3	165.3	11,900	88,600
90	62.5	162.6		73,600
95	60.6	159.8		60,300
100	58.7	156.7		47,300
105	56.8	153.4		34,900
110	54.8	149.9		23,600
115	52.8	146.1		13,400

196.9 ft				
ft	°	ft	lb	lb
26	84.9	202.9	445,000	445,000
28	84.3	202.7	443,800	443,800
30	83.7	202.4	442,600	442,600
32	83.2	202.2	429,000	441,400
34	82.6	201.9	386,000	440,100
36	82.0	201.6	348,500	438,900
38	81.4	201.2	315,600	437,700
40	80.8	200.9	286,500	436,600
45	79.3	199.9	226,400	376,000
50	77.8	198.8	179,600	308,300
55	76.3	197.6	142,200	256,200
60	74.8	196.2	111,600	214,800
65	73.3	194.7	86,100	181,200
70	71.8	193.0	64,500	153,200
75	70.2	191.2	46,000	129,700
80	68.6	189.2	30,000	109,600
85	67.1	187.0	16,000	92,300
90	65.5	184.7		77,100
95	63.8	182.3		63,800
100	62.2	179.6		50,800
105	60.5	176.7		38,400
110	58.8	173.7		27,100
115	57.1	170.4		16,900

# MLC300 VPC-MAX S-1

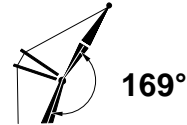
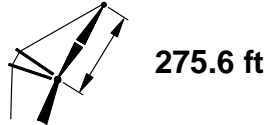
ASME B30.5



 216.5 ft				
ft	°	ft	34.8 ft lb	48.0 ft lb
28	84.8	222.5	397,800	397,800
30	84.3	222.3	397,000	397,000
32	83.8	222.0	396,200	396,200
34	83.2	221.8	389,300	395,400
36	82.7	221.5	351,800	394,600
38	82.2	221.2	318,900	393,800
40	81.6	220.9	289,700	393,000
45	80.3	220.0	229,500	377,000
50	79.0	219.0	182,700	311,600
55	77.6	217.9	145,200	259,400
60	76.2	216.6	114,600	217,800
65	74.9	215.2	89,100	184,100
70	73.5	213.7	67,400	156,100
75	72.1	212.1	48,900	132,500
80	70.7	210.3	32,900	112,300
85	69.3	208.4	18,800	94,900
90	67.8	206.3		79,700
95	66.4	204.1		66,400
100	64.9	201.8		53,100
105	63.4	199.2		40,700
110	61.9	196.6		29,500
115	60.4	193.7		19,300
120	58.9	190.7		10,000

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ft	°	ft	lb	lb
28	84.8	222.5	390,800	390,800
30	84.3	222.3	390,000	390,000
32	83.8	222.0	389,200	389,200
34	83.2	221.8	376,400	388,300
36	82.7	221.5	339,300	387,500
38	82.2	221.2	306,700	386,600
40	81.6	220.9	277,800	385,800
45	80.3	220.0	218,300	369,000
50	79.0	219.0	172,000	302,500
55	77.6	217.9	134,900	250,700
60	76.2	216.6	104,600	209,600
65	74.9	215.2	79,300	176,100
70	73.5	213.7	57,900	148,300
75	72.1	212.1	39,600	125,000
80	70.7	210.3	23,700	105,000
85	69.3	208.4		87,700
90	67.8	206.3		72,700
95	66.4	204.1		57,800
100	64.9	201.8		44,100
105	63.4	199.2		31,800
110	61.9	196.6		20,700
115	60.4	193.7		10,600