

Liftcrane Luffing Jib Capacities

Luffing Jib No. 135 on Boom No. 74
99,500 lb Crane Counterweight
0 lb Carbody Counterweight
360 Degree Rating



MLC165 SERIES 1



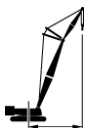
LIFTING CAPACITIES: Lifting capacities for various boom lengths, boom angles, luffing jib lengths, and luffing jib operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*).

Luffing Jib Backward Stability: Capacities indicated by (b) require 2,825 lb minimum weight suspended beneath luffing jib point. Capacities indicated by (c) require 6,000 lb minimum weight suspended beneath luffing jib point. Capacities indicated by (d) require 11,000 lb minimum weight suspended beneath luffing jib point. **Caution: Do not luff into areas indicated by (b), (c), or (d) without required minimum weights.** Luffing jib will not luff down and luffing hoist wire rope may overhaul luffing jib and cause luffing hoist to go slack causing wire rope damage or failure.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and luffing jib point sheaves is considered part of luffing jib load. Boom and luffing jib are 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 uniformly supporting surface and bearing turntable level within a tolerance of 1/2 in. in 10 ft and properly supported. During operation, boom must be maintained at one of the selected angles shown in chart. Refer to Luffing Jib Assembly **No. 81022481**, Wire Rope Specification chart **No. 9313-A**, Luffing Jib Raising Procedure chart **No. 9304-A**, and Wind Conditions chart **No. 9289-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 Operator's 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 Specification chart **No. 9312-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 ($^{\circ}$) is angle between horizontal and centerline of boom butt and inserts.



LUFFING JIB ANGLE: Luffing jib angle in degrees ($^{\circ}$) is angle between horizontal and centerline of luffing jib butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



LUFFING JIB POINT ELEVATION: Luffing jib point elevation is vertical distance from ground level to centerline of luffing jib point shaft.



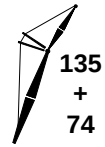
MACHINE EQUIPMENT: Machine equipped with 26 ft 2 in. crawlers, 43 in. treads, 23 ft 7 in. live mast, 18 part boom hoist reeving, four 28 mm boom pendants, 8 part luffing jib hoist reeving, two 1-1/2 in. luffing jib pendants and backstays, 99,500 lb crane counterweight, and 0 lb carbody counterweight.



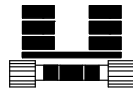
99,500 lb Crane Counterweight
6 Side Boxes

WARNING: Free fall operation is limited to 13,000 lb per part of line when lowering load with free fall clutch/brake pedal. Hydraulic power must be used for full line pull.

Explanation of Symbols



Luffing Jib No. 135
+
Boom No. 74



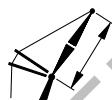
Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



Boom Length

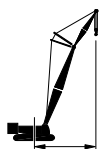


Luffing Jib Length



Boom Angle
(see page 1)

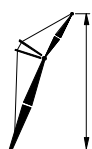
Explanation of Symbols (continued)



Operating Radius
(see page 1)



Luffing Jib Angle
(see page 1)

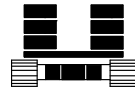
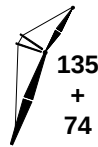


Luffing Jib Point Elevation
(see page 1)

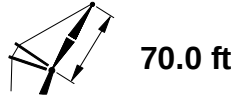
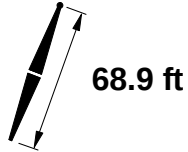


Lifting Capacities
(see page 1)

REFERENCE ONLY!



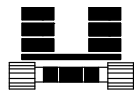
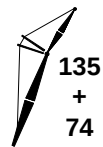
99,500 lb
+
0 lb



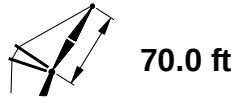
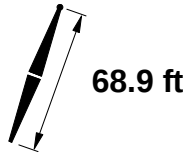
	87°			83°			80°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
30	73.8	142.8	110,300 *d							30
32	72.1	142.2	110,300 *d							32
34	70.4	141.5	110,300 *d							34
36	68.6	140.7	110,300 *d							36
38	66.9	139.9	106,400 *c							38
40	65.1	139.0	99,600 c	69.3	140.4	96,400 c				40
45	60.5	136.4	85,000 c	64.9	138.3	82,200 b				45
50	55.7	133.3	73,900 b	60.3	135.7	71,500 b	63.6	137.0	69,700 b	50
55	50.5	129.6	65,300 b	55.4	132.6	63,200 b	58.9	134.2	61,600 b	55
60	45.0	125.0	58,300 b	50.3	128.8	56,400	54.0	130.9	55,000	60
65	38.9	119.5	52,600 b	44.8	124.2	50,900	48.7	126.9	49,600	65
70	31.8	112.4	47,800	38.6	118.6	46,300	43.0	122.1	45,100	70
75	22.9	102.8	43,700	31.5	111.5	42,300	36.7	116.1	41,200	75
80	6.9	84.0	40,000	22.4	101.6	38,800	29.1	108.4	37,900	80
85				5.2	81.3	35,700	19.1	97.2	34,900	85
90										90
95										95
100										100
105										105

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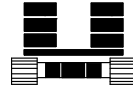
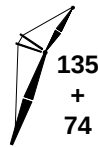
ASME B30.5



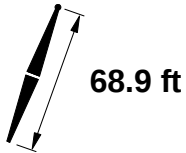
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
30										30
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60	59.7	133.2	52,600 b							60
65	54.8	130.0	47,400							65
70	49.6	126.1	43,100	55.5	128.5	41,200				70
75	44.0	121.5	39,400	50.4	124.7	37,600				75
80	37.8	115.7	36,200	44.8	120.2	34,600	50.9	122.6	33,000	80
85	30.5	108.3	33,500	38.7	114.5	31,900	45.4	118.1	30,400	85
90	21.0	97.9	31,000	31.5	107.4	29,600	39.3	112.7	28,200	90
95				22.5	97.6	27,500	32.3	105.7	26,200	95
100				5.6	77.7	25,500	23.5	96.3	24,400	100
105							8.7	79.0	22,700	105



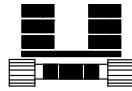
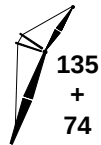
99,500 lb
+
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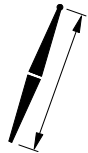
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32	74.4	152.6	103,600 *d							32
34	72.9	152.0	103,600 *d							34
36	71.4	151.4	102,500 *d							36
38	69.9	150.7	100,500 *c							38
40	68.4	149.9	98,400 *c							40
45	64.5	147.7	84,800 c	68.2	149.2	82,000 b				45
50	60.4	145.1	73,700 b	64.3	147.0	71,300 b	67.1	148.0	69,400 b	50
55	56.2	142.0	65,100 b	60.2	144.4	62,900 b	63.1	145.7	61,300 b	55
60	51.8	138.4	58,200 b	56.0	141.3	56,200	59.0	142.9	54,700	60
65	47.1	134.1	52,500	51.6	137.6	50,700	54.8	139.6	49,300	65
70	42.0	129.0	47,700	46.9	133.3	46,100	50.2	135.8	44,800	70
75	36.3	122.9	43,600	41.7	128.2	42,100	45.4	131.3	41,000	75
80	29.7	115.2	40,100	36.0	122.0	38,700	40.1	125.9	37,700	80
85	21.4	104.7	37,000	29.4	114.2	35,800	34.2	119.3	34,800	85
90	6.5	84.5	34,200	20.9	103.6	33,100	27.2	110.9	32,300	90
95				4.9	81.7	30,700	17.8	98.8	30,000	95
100										100
105										105
110										110
115										115

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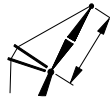
ASME B30.5



99,500 lb
+
0 lb

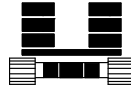
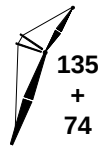


68.9 ft

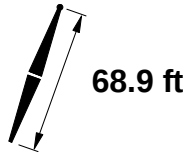


80.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65	59.7	141.9	47,100							65
70	55.5	138.7	42,800							70
75	51.0	135.0	39,100	56.1	137.2	37,300				75
80	46.2	130.6	36,000	51.6	133.5	34,300				80
85	41.0	125.3	33,200	46.9	129.2	31,600	52.1	131.4	30,100	85
90	35.2	119.0	30,800	41.8	124.1	29,300	47.4	127.2	27,900	90
95	28.5	110.9	28,600	36.1	117.9	27,300	42.3	122.2	25,900	95
100	19.7	99.7	26,700	29.5	110.2	25,400	36.7	116.1	24,200	100
105				21.0	99.5	23,700	30.1	108.5	22,600	105
110				5.3	78.1	22,100	22.0	98.3	21,100	110
115							8.2	79.7	19,700	115



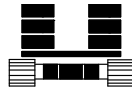
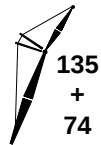
99,500 lb
+
0 lb



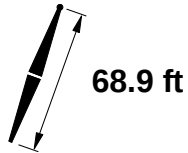
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34	74.9	162.4	93,500 *d							34
36	73.6	161.8	92,400 *d							36
38	72.2	161.2	90,500 *c							38
40	70.9	160.6	88,800 *c							40
45	67.5	158.7	84,600 *c	70.7	159.9	81,800 b				45
50	64.0	156.4	73,600 b	67.3	158.0	71,100 b				50
55	60.4	153.8	65,000 b	63.8	155.7	62,700 b	66.3	156.7	61,100 b	55
60	56.6	150.7	58,000 b	60.2	153.1	56,000	62.8	154.3	54,500	60
65	52.7	147.2	52,300 b	56.5	150.0	50,500	59.1	151.6	49,200	65
70	48.6	143.1	47,600	52.6	146.4	45,900	55.4	148.3	44,700	70
75	44.2	138.3	43,500	48.4	142.3	42,000	51.4	144.6	40,900	75
80	39.5	132.7	40,000	44.0	137.5	38,600	47.2	140.3	37,600	80
85	34.1	126.0	37,000	39.2	131.9	35,700	42.7	135.3	34,700	85
90	28.0	117.7	34,300	33.9	125.1	33,100	37.8	129.4	32,200	90
95	20.2	106.5	31,900	27.7	116.7	30,800	32.2	122.3	30,000	95
100	6.1	85.1	29,700	19.7	105.3	28,700	25.6	113.2	27,900	100
105				4.6	82.1	26,800	16.8	100.3	26,100	105
110										110
115										115
120										120
125										125

MLC165 S-1

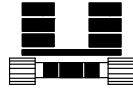
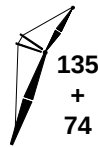
ASME B30.5



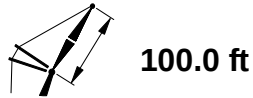
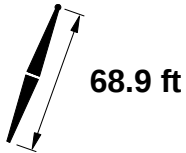
99,500 lb
+
0 lb

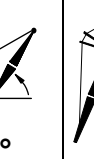


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70	59.8	150.6	42,600							70
75	56.0	147.4	39,000							75
80	52.1	143.8	35,800	56.5	145.9	34,100				80
85	47.9	139.6	33,100	52.6	142.3	31,500				85
90	43.5	134.7	30,700	48.5	138.2	29,200	53.0	140.2	27,700	90
95	38.6	129.0	28,500	44.1	133.4	27,100	48.9	136.1	25,700	95
100	33.2	122.1	26,600	39.3	127.8	25,300	44.5	131.4	24,000	100
105	26.8	113.4	24,900	33.9	121.1	23,700	39.8	125.9	22,400	105
110	18.5	101.4	23,300	27.7	112.7	22,200	34.5	119.3	21,000	110
115				19.8	101.3	20,800	28.4	111.1	19,700	115
120				5.0	78.6	19,400	20.7	100.2	18,500	120
125							7.7	80.4	17,300	125



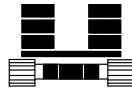
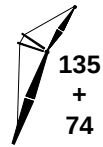
99,500 lb
+
0 lb



	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38	74.0	171.7	82,300 *d							38
40	72.9	171.1	80,700 *c							40
45	69.8	169.4	76,800 *c							45
50	66.7	167.4	73,200 *b	69.7	168.7	70,800 b				50
55	63.6	165.1	64,700 b	66.6	166.7	62,500 b				55
60	60.3	162.4	57,800 b	63.4	164.4	55,800	65.7	165.4	54,200	60
65	57.0	159.4	52,100 b	60.2	161.7	50,300	62.5	163.0	48,900	65
70	53.5	155.9	47,300	56.8	158.7	45,700	59.2	160.2	44,400	70
75	49.8	152.0	43,300	53.3	155.2	41,700	55.8	157.0	40,600	75
80	46.0	147.4	39,800	49.7	151.2	38,400	52.3	153.4	37,300	80
85	41.9	142.2	36,800	45.8	146.7	35,400	48.6	149.3	34,400	85
90	37.4	136.2	34,100	41.7	141.4	32,900	44.6	144.6	31,900	90
95	32.3	129.0	31,800	37.1	135.3	30,600	40.4	139.1	29,700	95
100	26.5	120.2	29,600	32.1	128.1	28,600	35.7	132.7	27,700	100
105	19.1	108.3	27,700	26.2	119.1	26,700	30.5	125.1	25,900	105
110	5.8	85.6	25,900	18.7	107.0	25,000	24.3	115.4	24,300	110
115				4.3	82.5	23,400	15.9	101.7	22,800	115
120										120
125										125
130										130
135										135

MLC165 S-1

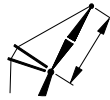
ASME B30.5



99,500 lb
+
0 lb

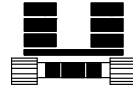
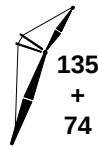


68.9 ft

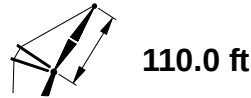
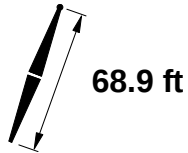


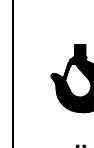
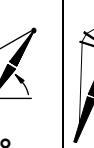
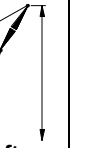
100.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	59.8	159.2	38,600							75
80	56.4	156.1	35,500							80
85	52.9	152.6	32,800	56.9	154.6	31,100				85
90	49.2	148.5	30,400	53.4	151.1	28,800				90
95	45.3	143.9	28,200	49.7	147.1	26,800				95
100	41.1	138.6	26,400	45.8	142.6	25,000	50.1	145.0	23,600	100
105	36.6	132.4	24,600	41.7	137.3	23,400	46.2	140.5	22,100	105
110	31.4	124.9	23,100	37.2	131.3	21,900	42.1	135.4	20,700	110
115	25.4	115.7	21,700	32.2	124.0	20,600	37.6	129.4	19,400	115
120	17.6	103.0	20,400	26.3	115.1	19,300	32.7	122.3	18,300	120
125				18.8	103.0	18,200	26.9	113.6	17,200	125
130				4.7	79.0	17,000	19.6	101.9	16,200	130
135							7.3	81.1	15,200	135



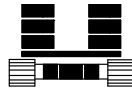
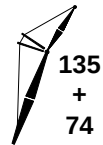
99,500 lb
+
0 lb



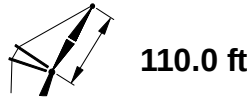
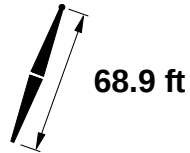
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40	74.5	181.5	75,000 *c							40
45	71.7	180.0	72,100 *c							45
50	69.0	178.2	69,200 *b							50
55	66.1	176.1	64,600 b	68.8	177.5	62,400				55
60	63.3	173.8	57,700 b	66.0	175.5	55,700				60
65	60.3	171.1	52,000	63.1	173.1	50,200	65.2	174.2	48,800	65
70	57.3	168.1	47,300	60.2	170.4	45,600	62.3	171.7	44,300	70
75	54.1	164.6	43,200	57.1	167.3	41,700	59.3	168.9	40,500	75
80	50.8	160.8	39,800	54.0	163.9	38,300	56.2	165.7	37,200	80
85	47.4	156.5	36,800	50.7	160.0	35,400	53.0	162.2	34,400	85
90	43.7	151.6	34,100	47.2	155.7	32,800	49.7	158.2	31,900	90
95	39.8	146.0	31,800	43.6	150.8	30,600	46.2	153.7	29,700	95
100	35.6	139.5	29,700	39.6	145.1	28,600	42.5	148.6	27,700	100
105	30.8	131.8	27,800	35.4	138.6	26,700	38.4	142.7	25,900	105
110	25.3	122.5	26,100	30.6	130.9	25,100	34.0	135.9	24,300	110
115	18.2	109.9	24,500	25.0	121.4	23,600	29.1	127.7	22,900	115
120	5.5	86.1	23,000	17.8	108.6	22,200	23.1	117.5	21,600	120
125				4.1	82.9	20,900	15.2	103.1	20,300	125
130										130
135										135
140										140
145										145

MLC165 S-1

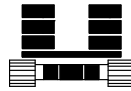
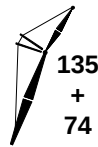
ASME B30.5



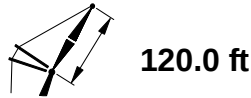
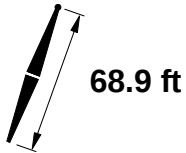
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	62.8	170.6	38,500							75
80	59.8	167.9	35,400							80
85	56.7	164.8	32,700							85
90	53.6	161.3	30,300	57.2	163.2	28,800				90
95	50.3	157.4	28,200	54.0	159.8	26,700				95
100	46.8	153.0	26,300	50.7	155.9	24,900				100
105	43.1	148.0	24,600	47.3	151.6	23,300	51.0	153.9	22,100	105
110	39.1	142.2	23,100	43.6	146.7	21,900	47.6	149.6	20,700	110
115	34.8	135.6	21,700	39.7	141.0	20,500	44.0	144.7	19,400	115
120	29.9	127.7	20,400	35.4	134.5	19,300	40.1	139.1	18,200	120
125	24.2	117.9	19,300	30.6	126.8	18,200	35.8	132.7	17,200	125
130	16.7	104.5	18,200	25.0	117.4	17,200	31.1	125.2	16,200	130
135				17.9	104.7	16,200	25.6	115.9	15,300	135
140				4.5	79.4	15,300	18.7	103.6	14,400	140
145							7.0	81.7	13,600	145



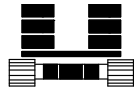
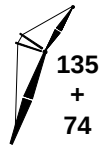
99,500 lb
+
0 lb



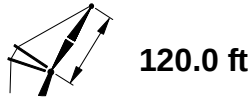
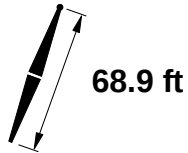
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	73.3	190.5	66,700 *c							45
50	70.8	188.8	64,000 *b							50
55	68.2	187.0	61,400 *b	70.7	188.2	62,100				55
60	65.6	184.9	57,500 b	68.1	186.3	55,400				60
65	63.0	182.4	51,800	65.5	184.2	49,900	67.4	185.1	48,500	65
70	60.3	179.7	47,000	62.9	181.8	45,300	64.8	182.9	44,000	70
75	57.5	176.7	43,000	60.2	179.0	41,400	62.1	180.4	40,200	75
80	54.6	173.4	39,500	57.4	176.0	38,100	59.4	177.6	36,900	80
85	51.6	169.6	36,500	54.5	172.6	35,100	56.5	174.4	34,100	85
90	48.5	165.4	33,900	51.5	168.9	32,600	53.6	170.9	31,600	90
95	45.2	160.7	31,500	48.4	164.7	30,300	50.6	167.0	29,400	95
100	41.8	155.5	29,500	45.1	159.9	28,300	47.4	162.7	27,400	100
105	38.1	149.5	27,600	41.6	154.7	26,500	44.1	157.8	25,700	105
110	34.0	142.6	25,900	37.9	148.6	24,900	40.6	152.3	24,100	110
115	29.5	134.5	24,300	33.8	141.7	23,400	36.7	146.1	22,600	115
120	24.2	124.6	22,900	29.2	133.6	22,000	32.5	138.9	21,300	120
125	17.4	111.5	21,600	23.9	123.6	20,800	27.8	130.2	20,100	125
130	5.3	86.6	20,400	17.1	110.2	19,600	22.1	119.5	19,000	130
135				4.0	83.2	18,400	14.5	104.4	17,900	135
140										140
145										145
150										150
155										155

MLC165 S-1

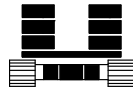
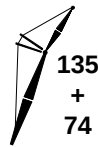
ASME B30.5



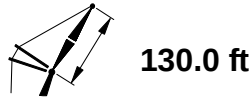
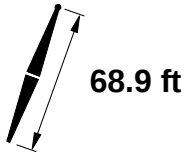
99,500 lb
+
0 lb

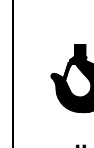
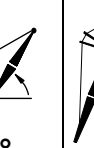
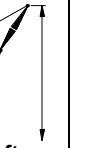


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	62.5	179.3	35,100							80
85	59.8	176.5	32,400							85
90	57.0	173.5	30,000							90
95	54.1	170.0	27,900	57.4	171.9	26,400				95
100	51.1	166.2	26,000	54.5	168.5	24,600				100
105	48.0	162.0	24,300	51.5	164.8	23,000				105
110	44.7	157.2	22,800	48.4	160.6	21,600	51.8	162.7	20,300	110
115	41.2	151.8	21,400	45.1	155.9	20,200	48.7	158.5	19,100	115
120	37.4	145.7	20,200	41.7	150.6	19,000	45.5	153.9	17,900	120
125	33.3	138.6	19,000	37.9	144.6	17,900	42.0	148.6	16,900	125
130	28.6	130.3	18,000	33.9	137.7	16,900	38.3	142.7	15,900	130
135	23.2	120.0	17,000	29.3	129.5	16,000	34.3	135.9	15,000	135
140	16.0	105.9	16,000	24.0	119.5	15,100	29.8	127.9	14,200	140
145				17.2	106.2	14,300	24.5	118.1	13,400	145
150				4.3	79.8	13,400	17.9	105.2	12,600	150
155							6.7	82.3	11,900	155



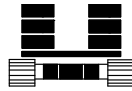
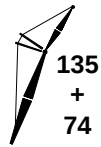
99,500 lb
+
0 lb



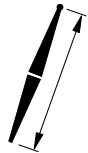
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	ft
45	74.6	200.9	51,900 *c							45
50	72.3	199.4	50,900 *b							50
55	70.0	197.7	49,800 *b							55
60	67.6	195.7	48,900 *b	69.9	197.0	50,100 *				60
65	65.2	193.6	48,000 *	67.5	195.1	49,300 *				65
70	62.8	191.1	46,500 *	65.1	192.9	45,100	66.8	193.8	43,800	70
75	60.3	188.4	42,800	62.7	190.4	41,200	64.4	191.5	40,000	75
80	57.7	185.4	39,300	60.2	187.7	37,800	61.9	189.0	36,700	80
85	55.0	182.1	36,300	57.6	184.7	34,900	59.4	186.2	33,900	85
90	52.3	178.4	33,700	54.9	181.3	32,400	56.8	183.1	31,400	90
95	49.5	174.3	31,400	52.2	177.6	30,100	54.1	179.7	29,200	95
100	46.5	169.8	29,300	49.3	173.6	28,100	51.4	175.9	27,200	100
105	43.4	164.8	27,400	46.4	169.0	26,300	48.5	171.7	25,500	105
110	40.1	159.2	25,700	43.2	164.0	24,700	45.5	167.0	23,900	110
115	36.5	152.9	24,200	39.9	158.4	23,200	42.3	161.8	22,500	115
120	32.6	145.6	22,800	36.3	152.0	21,900	38.9	156.0	21,100	120
125	28.3	137.1	21,500	32.4	144.7	20,600	35.3	149.3	19,900	125
130	23.2	126.7	20,300	28.1	136.1	19,500	31.2	141.7	18,800	130
135	16.7	113.0	19,200	23.0	125.6	18,400	26.7	132.7	17,800	135
140	5.1	87.0	18,100	16.4	111.7	17,400	21.3	121.4	16,800	140
145				3.8	83.6	16,400	14.0	105.7	15,900	145
150										150
155										155
160										160
165										165

MLC165 S-1

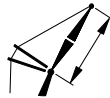
ASME B30.5



99,500 lb
+
0 lb

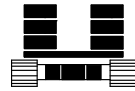
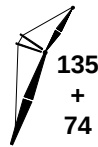


68.9 ft

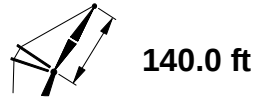
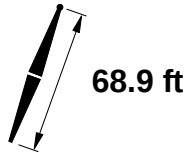


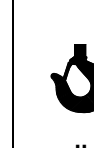
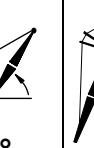
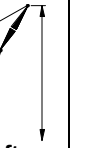
130.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	62.4	188.0	32,100							85
90	59.8	185.2	29,800							90
95	57.2	182.1	27,700							95
100	54.6	178.8	25,800	57.6	180.6	24,400				100
105	51.8	175.0	24,100	55.0	177.2	22,800				105
110	49.0	170.9	22,600	52.2	173.6	21,300				110
115	46.0	166.3	21,200	49.4	169.5	20,000	52.5	171.4	18,800	115
120	42.8	161.2	20,000	46.4	164.9	18,800	49.6	167.4	17,700	120
125	39.5	155.5	18,800	43.3	159.9	17,700	46.7	162.9	16,600	125
130	35.9	149.0	17,800	40.0	154.3	16,700	43.6	157.9	15,700	130
135	31.9	141.6	16,800	36.4	147.9	15,800	40.3	152.4	14,800	135
140	27.5	132.8	15,900	32.5	140.6	14,900	36.7	146.1	14,000	140
145	22.2	122.0	15,000	28.1	132.1	14,100	32.9	138.9	13,200	145
150	15.4	107.3	14,200	23.0	121.6	13,400	28.6	130.5	12,500	150
155				16.5	107.7	12,600	23.5	120.2	11,800	155
160				4.1	80.1	11,900	17.2	106.8	11,200	160
165							6.4	82.9	10,500	165



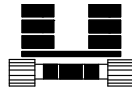
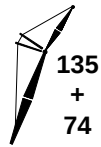
99,500 lb
+
0 lb



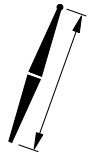
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	73.6	209.8	47,700 *b							50
55	71.5	208.3	46,700 *b							55
60	69.3	206.5	45,900 *b							60
65	67.1	204.5	44,500 *	69.2	205.8	46,100 *				65
70	64.9	202.3	42,700 *	67.0	203.8	44,600 *				70
75	62.6	199.8	40,900 *	64.8	201.6	40,900	66.4	202.5	39,700	75
80	60.2	197.1	39,100	62.5	199.1	37,600	64.1	200.2	36,400	80
85	57.9	194.1	36,100	60.1	196.4	34,700	61.8	197.7	33,600	85
90	55.4	190.8	33,400	57.8	193.4	32,100	59.5	194.9	31,100	90
95	52.9	187.2	31,100	55.3	190.0	29,900	57.0	191.8	28,900	95
100	50.3	183.2	29,000	52.8	186.4	27,800	54.6	188.4	27,000	100
105	47.6	178.8	27,200	50.2	182.4	26,000	52.0	184.7	25,200	105
110	44.7	174.0	25,500	47.4	178.1	24,400	49.4	180.6	23,600	110
115	41.7	168.7	24,000	44.6	173.2	22,900	46.6	176.1	22,200	115
120	38.6	162.8	22,600	41.6	167.9	21,600	43.7	171.1	20,900	120
125	35.1	156.1	21,300	38.4	161.9	20,400	40.7	165.6	19,700	125
130	31.4	148.5	20,100	35.0	155.2	19,200	37.4	159.4	18,600	130
135	27.2	139.6	19,000	31.2	147.5	18,200	33.9	152.4	17,600	135
140	22.3	128.7	18,000	27.0	138.6	17,200	30.1	144.4	16,600	140
145	16.1	114.4	17,100	22.1	127.6	16,300	25.7	135.0	15,700	145
150	4.9	87.5	16,100	15.8	113.1	15,400	20.5	123.3	14,900	150
155				3.7	83.9	14,600	13.4	106.9	14,100	155
160										160
165										165
170										170
175										175

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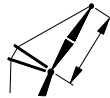
ASME B30.5



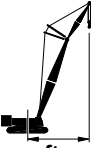
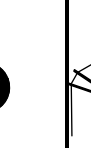
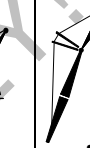
99,500 lb
+
0 lb

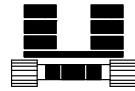
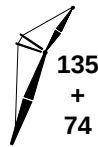


68.9 ft

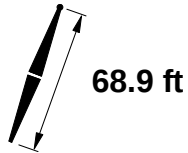


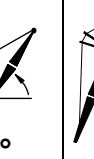
140.0 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	62.2	196.6	29,400							90
95	59.8	193.9	27,300							95
100	57.4	190.8	25,500							100
105	55.0	187.5	23,800	57.8	189.2	22,400				105
110	52.4	183.8	22,300	55.3	185.9	21,000				110
115	49.8	179.8	20,900	52.8	182.3	19,700				115
120	47.1	175.3	19,700	50.2	178.3	18,500				120
125	44.2	170.4	18,500	47.5	174.0	17,400	50.4	176.3	16,300	125
130	41.2	165.0	17,500	44.6	169.1	16,400	47.7	171.9	15,300	130
135	38.0	159.0	16,500	41.6	163.8	15,500	44.9	167.1	14,500	135
140	34.5	152.2	15,600	38.4	157.8	14,600	41.9	161.9	13,600	140
145	30.7	144.4	14,800	35.0	151.1	13,800	38.8	156.0	12,900	145
150	26.5	135.2	14,000	31.3	143.5	13,100	35.4	149.3	12,200	150
155	21.4	123.9	13,300	27.1	134.5	12,400	31.6	141.8	11,500	155
160	14.8	108.6	12,500	22.2	123.6	11,700	27.5	133.0	10,900	160
165				15.9	109.1	11,100	22.7	122.3	10,300	165
170				4.0	80.5	10,400	16.6	108.3	9,700	170
175							6.2	83.4	9,200	175



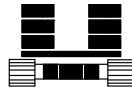
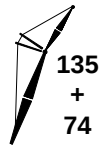
99,500 lb
+
0 lb



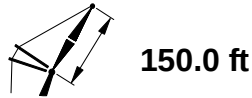
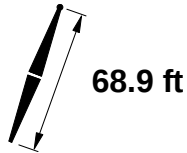
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	74.7	220.2	44,600 *b							50
55	72.8	218.8	43,700 *b							55
60	70.7	217.1	42,900 *b							60
65	68.7	215.3	41,100 *	70.6	216.5	42,800 *				65
70	66.6	213.2	39,400 *	68.6	214.6	41,100 *				70
75	64.5	211.0	37,700 *	66.5	212.6	39,400 *				75
80	62.4	208.5	36,100 *	64.4	210.3	37,400	65.9	211.3	36,300	80
85	60.2	205.7	34,500 *	62.3	207.8	34,500	63.8	208.9	33,500	85
90	58.0	202.7	33,000 *	60.1	205.0	32,000	61.7	206.4	31,000	90
95	55.7	199.5	31,000	57.9	202.0	29,700	59.5	203.5	28,800	95
100	53.4	195.9	28,900	55.6	198.7	27,700	57.2	200.5	26,800	100
105	51.0	192.0	27,100	53.3	195.2	25,900	54.9	197.1	25,100	105
110	48.5	187.8	25,400	50.8	191.3	24,300	52.6	193.4	23,500	110
115	45.8	183.2	23,900	48.3	187.0	22,800	50.1	189.4	22,100	115
120	43.1	178.1	22,500	45.7	182.4	21,500	47.6	185.1	20,800	120
125	40.3	172.4	21,200	43.0	177.2	20,300	45.0	180.3	19,600	125
130	37.2	166.2	20,000	40.1	171.6	19,200	42.2	175.0	18,500	130
135	33.9	159.2	19,000	37.1	165.3	18,100	39.3	169.2	17,500	135
140	30.3	151.2	18,000	33.8	158.3	17,200	36.1	162.7	16,500	140
145	26.3	142.0	17,000	30.1	150.3	16,300	32.7	155.4	15,700	145
150	21.6	130.7	16,200	26.1	140.9	15,400	29.0	147.1	14,900	150
155	15.6	115.8	15,300	21.3	129.5	14,600	24.8	137.2	14,100	155
160	4.7	87.9	14,500	15.3	114.4	13,900	19.8	125.0	13,400	160
165				3.5	84.2	13,100	13.0	108.0	12,700	165
170										170
175										175
180										180
185										185

MLC165 S-1

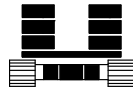
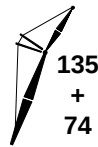
ASME B30.5



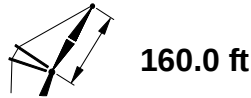
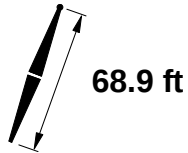
99,500 lb
+
0 lb

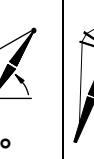


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95	62.0	205.3	27,200							95
100	59.9	202.5	25,400							100
105	57.6	199.5	23,700							105
110	55.3	196.2	22,200	57.9	197.9	20,900				110
115	53.0	192.6	20,800	55.6	194.6	19,600				115
120	50.5	188.6	19,600	53.3	191.1	18,400				120
125	48.0	184.3	18,400	50.9	187.2	17,300				125
130	45.4	179.6	17,400	48.4	182.9	16,300	51.1	185.1	15,200	130
135	42.6	174.4	16,400	45.8	178.3	15,400	48.6	180.9	14,400	135
140	39.7	168.7	15,500	43.0	173.2	14,500	46.0	176.3	13,600	140
145	36.7	162.4	14,700	40.1	167.5	13,700	43.3	171.2	12,800	145
150	33.3	155.2	13,900	37.1	161.3	13,000	40.4	165.6	12,100	150
155	29.7	147.1	13,200	33.8	154.2	12,300	37.4	159.4	11,400	155
160	25.5	137.5	12,500	30.2	146.2	11,700	34.1	152.5	10,800	160
165	20.7	125.8	11,900	26.1	136.9	11,100	30.5	144.6	10,200	165
170	14.3	109.9	11,300	21.4	125.5	10,500	26.6	135.4	9,700	170
175				15.3	110.5	9,900	21.9	124.3	9,200	175
180				3.8	80.8	9,300	16.0	109.7	8,700	180
185							6.0	83.9	8,200	185



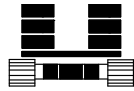
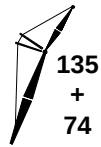
99,500 lb
+
0 lb



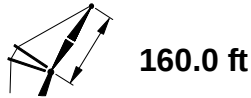
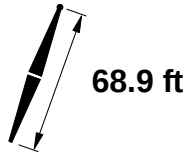
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55	73.9	229.2	40,700 *b							55
60	72.0	227.7	39,300 *b							60
65	70.1	226.0	37,700 *							65
70	68.2	224.1	36,000 *	70.0	225.3	37,600 *				70
75	66.2	222.0	34,400 *	68.1	223.4	36,000 *				75
80	64.3	219.7	32,800 *	66.1	221.3	34,400 *	67.5	222.2	35,400 *	80
85	62.3	217.1	31,300 *	64.2	219.0	32,900 *	65.6	220.0	33,200	85
90	60.2	214.4	29,900 *	62.2	216.4	31,400 *	63.6	217.6	30,700	90
95	58.1	211.4	28,400 *	60.1	213.7	29,500	61.6	215.0	28,500	95
100	56.0	208.2	27,100 *	58.0	210.7	27,500	59.5	212.2	26,600	100
105	53.8	204.7	25,800 *	55.9	207.4	25,700	57.4	209.1	24,800	105
110	51.6	200.8	24,600 *	53.7	203.9	24,100	55.3	205.8	23,200	110
115	49.2	196.7	23,400 *	51.5	200.1	22,600	53.1	202.2	21,800	115
120	46.8	192.2	22,200 *	49.1	195.9	21,200	50.8	198.3	20,500	120
125	44.3	187.3	21,000	46.7	191.4	20,000	48.4	194.0	19,300	125
130	41.7	181.9	19,800	44.2	186.5	18,900	46.0	189.4	18,200	130
135	38.9	176.0	18,700	41.6	181.1	17,900	43.5	184.3	17,200	135
140	36.0	169.5	17,700	38.8	175.2	16,900	40.8	178.8	16,300	140
145	32.8	162.2	16,800	35.8	168.6	16,000	38.0	172.7	15,400	145
150	29.3	153.9	16,000	32.7	161.3	15,200	34.9	165.9	14,600	150
155	25.4	144.3	15,100	29.2	152.9	14,400	31.7	158.3	13,900	155
160	20.9	132.6	14,400	25.3	143.2	13,700	28.1	149.6	13,100	160
165	15.1	117.2	13,700	20.7	131.4	13,000	24.0	139.4	12,500	165
170	4.6	88.3	12,900	14.8	115.7	12,300	19.1	126.7	11,800	170
175				3.4	84.5	11,600	12.6	109.1	11,200	175
180										180
185										185
190										190
195										195

MLC165 S-1

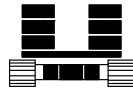
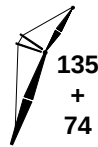
ASME B30.5



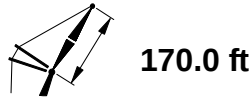
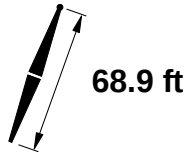
99,500 lb
+
0 lb

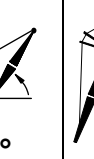


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	61.9	214.0	25,100							100
105	59.9	211.2	23,400							105
110	57.8	208.2	21,900							110
115	55.6	204.9	20,500							115
120	53.4	201.3	19,300	55.9	203.3	18,100				120
125	51.2	197.4	18,100	53.7	199.8	17,000				125
130	48.8	193.2	17,100	51.5	196.0	16,000				130
135	46.4	188.7	16,100	49.1	191.8	15,100	51.7	193.9	14,000	135
140	43.9	183.7	15,200	46.7	187.3	14,200	49.4	189.8	13,200	140
145	41.2	178.3	14,400	44.2	182.4	13,400	47.0	185.3	12,500	145
150	38.4	172.3	13,600	41.6	177.0	12,700	44.5	180.4	11,800	150
155	35.5	165.6	12,900	38.8	171.1	12,000	41.9	175.1	11,100	155
160	32.2	158.2	12,300	35.9	164.6	11,400	39.1	169.2	10,500	160
165	28.7	149.7	11,600	32.7	157.2	10,800	36.2	162.7	9,900	165
170	24.7	139.7	11,000	29.2	148.9	10,200	33.0	155.5	9,400	170
175	20.0	127.6	10,400	25.3	139.2	9,700	29.6	147.3	8,900	175
180	13.9	111.2	9,900	20.7	127.4	9,200	25.7	137.7	8,400	180
185				14.8	111.8	8,700	21.2	126.2	7,900	185
190				3.7	81.2	8,100	15.5	111.1	7,500	190
195							5.8	84.4	7,000	195



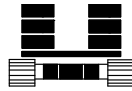
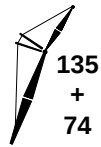
99,500 lb
+
0 lb



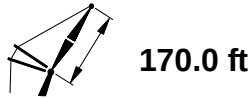
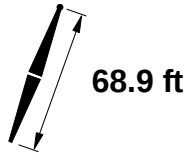
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
55	74.8	239.6	37,800 *b							55
60	73.1	238.2	36,300 *b							60
65	71.3	236.6	34,700 *							65
70	69.5	234.8	33,100 *							70
75	67.7	232.8	31,700 *	69.4	234.1	33,100 *				75
80	65.9	230.7	30,200 *	67.6	232.2	31,600 *				80
85	64.0	228.3	28,700 *	65.8	230.0	30,100 *	67.1	230.9	31,000 *	85
90	62.1	225.8	27,300 *	63.9	227.7	28,700 *	65.3	228.7	29,600 *	90
95	60.2	223.0	26,000 *	62.0	225.1	27,400 *	63.4	226.3	28,300	95
100	58.2	220.1	24,700 *	60.1	222.3	26,100 *	61.5	223.7	26,300	100
105	56.2	216.9	23,400 *	58.2	219.4	24,700 *	59.6	220.9	24,600	105
110	54.2	213.4	22,200 *	56.1	216.1	23,500 *	57.6	217.8	23,000	110
115	52.1	209.6	21,100 *	54.1	212.6	22,300 *	55.6	214.5	21,600	115
120	49.9	205.6	20,000 *	52.0	208.9	21,000	53.5	210.9	20,300	120
125	47.7	201.2	19,000 *	49.8	204.8	19,800	51.4	207.1	19,100	125
130	45.3	196.5	18,000 *	47.6	200.4	18,700	49.2	202.9	18,000	130
135	42.9	191.3	17,000 *	45.2	195.7	17,700	46.9	198.4	17,000	135
140	40.4	185.7	16,100 *	42.8	190.5	16,700	44.5	193.6	16,100	140
145	37.7	179.5	15,300 *	40.3	184.8	15,800	42.1	188.2	15,200	145
150	34.9	172.7	14,400 *	37.6	178.6	15,000	39.5	182.5	14,400	150
155	31.8	165.1	13,600 *	34.7	171.8	14,200	36.8	176.1	13,600	155
160	28.4	156.5	12,700 *	31.7	164.2	13,500	33.9	169.0	12,900	160
165	24.7	146.5	11,800 *	28.3	155.5	12,700 *	30.7	161.1	12,300	165
170	20.3	134.4	11,000 *	24.5	145.4	11,800 *	27.2	152.1	11,700	170
175	14.6	118.5	10,300 *	20.0	133.2	11,000 *	23.3	141.5	11,100	175
180	4.4	88.7	9,600 *	14.3	117.0	10,200 *	18.6	128.4	10,500	180
185				3.3	84.8	9,600 *	12.2	110.2	10,000	185
190										190
195										195
200										200
205										205

MLC165 S-1

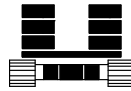
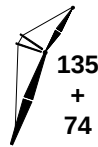
ASME B30.5



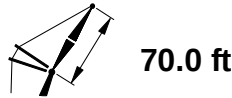
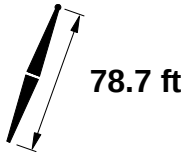
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105	61.8	222.6	23,100							105
110	59.9	219.8	21,600							110
115	57.9	216.8	20,300							115
120	55.9	213.6	19,000							120
125	53.8	210.0	17,900	56.2	212.0	16,700				125
130	51.7	206.2	16,900	54.1	208.5	15,700				130
135	49.5	202.1	15,900	52.0	204.8	14,800				135
140	47.3	197.7	15,000	49.8	200.7	14,000	52.2	202.7	13,000	140
145	44.9	192.9	14,200	47.6	196.3	13,200	50.0	198.6	12,200	145
150	42.5	187.7	13,400	45.3	191.6	12,500	47.8	194.3	11,500	150
155	39.9	182.0	12,700	42.8	186.4	11,800	45.5	189.6	10,900	155
160	37.2	175.7	12,000	40.3	180.8	11,200	43.1	184.4	10,300	160
165	34.4	168.8	11,400	37.6	174.6	10,600	40.5	178.8	9,700	165
170	31.3	161.0	10,800	34.8	167.7	10,000	37.9	172.7	9,200	170
175	27.8	152.2	10,300	31.7	160.1	9,500	35.0	165.9	8,700	175
180	24.0	141.9	9,700	28.3	151.4	9,000	32.0	158.4	8,200	180
185	19.4	129.3	9,200	24.5	141.4	8,500	28.7	149.8	7,700	185
190	13.5	112.4	8,700	20.1	129.2	8,000	24.9	139.9	7,300	190
195				14.4	113.1	7,600	20.6	128.0	6,900	195
200				3.6	81.5	7,100	15.0	112.4	6,500	200
205							5.6	84.9	6,100	205



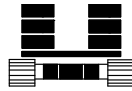
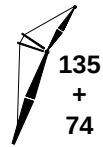
99,500 lb
+
0 lb



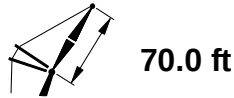
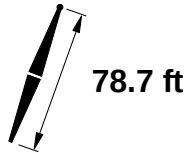
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
30	74.3	152.7	109,800 *d							30
32	72.6	152.1	109,800 *d							32
34	70.8	151.5	109,800 *d							34
36	69.1	150.8	109,800 *d							36
38	67.3	150.0	106,800 c							38
40	65.6	149.1	99,600 c	70.4	150.7	95,800 c				40
45	61.0	146.6	85,000 c	66.0	148.7	81,800 b				45
50	56.2	143.5	73,900 b	61.4	146.2	71,100 b	65.1	147.5	69,000 b	50
55	51.1	139.8	65,300 b	56.6	143.2	62,800 b	60.5	144.9	61,000 b	55
60	45.6	135.4	58,300 b	51.6	139.6	56,100	55.7	141.8	54,500 b	60
65	39.6	129.9	52,600 b	46.1	135.2	50,600	50.6	138.1	49,100	65
70	32.6	123.1	47,800	40.1	129.9	46,000	45.1	133.5	44,600	70
75	23.9	113.8	43,700	33.3	123.1	42,100	38.9	128.0	40,800	75
80	9.8	97.3	40,000	24.9	114.2	38,600	31.9	120.9	37,500	80
85				11.8	99.1	35,600	23.0	111.3	34,600	85
90							7.2	92.7	31,900	90
95										95
100										100
105										105

MLC165 S-1

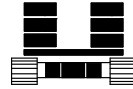
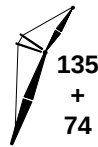
ASME B30.5



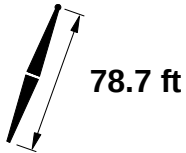
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
30										30
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60	62.1	144.2	51,700 b							60
65	57.3	141.2	46,600 b							65
70	52.3	137.7	42,300							70
75	46.9	133.5	38,700	53.8	136.6	36,600				75
80	41.1	128.3	35,600	48.6	132.6	33,700				80
85	34.4	121.8	32,900	42.9	127.7	31,100	50.0	130.9	29,300	85
90	26.2	113.3	30,400	36.5	121.7	28,800	44.4	126.2	27,200	90
95	14.4	99.8	28,200	28.9	113.9	26,800	38.2	120.5	25,300	95
100				18.7	102.5	24,900	31.0	113.3	23,500	100
105							21.7	103.2	22,000	105



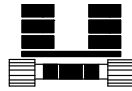
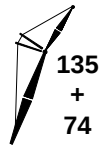
99,500 lb
+
0 lb



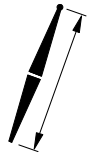
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32	74.8	162.6	100,300 *d							32
34	73.3	162.0	100,200 *d							34
36	71.8	161.4	100,200 *d							36
38	70.3	160.7	100,100 *c							38
40	68.8	159.9	98,100 *c							40
45	64.9	157.8	84,800 c	69.1	159.5	81,500 b				45
50	60.8	155.2	73,700 b	65.2	157.4	70,900 b				50
55	56.7	152.2	65,100 b	61.2	154.8	62,600 b	64.5	156.2	60,700 b	55
60	52.3	148.6	58,200 b	57.1	151.9	55,900	60.5	153.6	54,200 b	60
65	47.6	144.4	52,400 b	52.7	148.3	50,400	56.2	150.5	48,800	65
70	42.5	139.4	47,700	48.0	144.2	45,800	51.8	146.9	44,400	70
75	36.9	133.4	43,600	43.0	139.3	41,900	47.1	142.6	40,600	75
80	30.4	125.9	40,100	37.5	133.4	38,500	42.0	137.5	37,300	80
85	22.4	115.8	37,000	31.1	126.0	35,600	36.3	131.4	34,500	85
90	9.2	98.1	34,200	23.2	116.3	32,900	29.8	123.7	31,900	90
95				11.1	100.1	30,600	21.5	113.3	29,700	95
100							6.7	93.3	27,600	100
105										105
110										110
115										115

MLC165 S-1

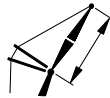
ASME B30.5



99,500 lb
+
0 lb

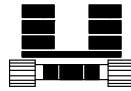
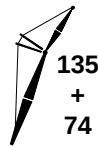


78.7 ft

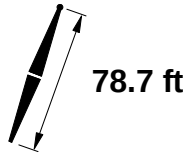


80.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65	61.8	152.8	46,300 b							65
70	57.7	149.9	42,000							70
75	53.3	146.5	38,400							75
80	48.7	142.4	35,300	54.6	145.3	33,300				80
85	43.8	137.6	32,600	50.1	141.5	30,800				85
90	38.3	131.9	30,200	45.3	136.9	28,500	51.3	139.7	26,800	90
95	32.1	124.8	28,100	40.0	131.5	26,500	46.5	135.3	24,900	95
100	24.5	115.5	26,200	34.0	124.8	24,700	41.4	130.1	23,200	100
105	13.5	101.0	24,400	27.0	116.4	23,100	35.6	123.9	21,700	105
110				17.5	104.1	21,600	28.9	115.9	20,300	110
115							20.3	105.0	19,000	115



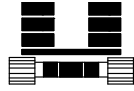
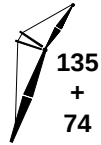
99,500 lb
+
0 lb



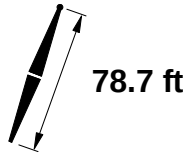
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36	73.9	171.8	90,600 *d							36
38	72.6	171.2	90,000 *d							38
40	71.2	170.6	88,400 *c							40
45	67.8	168.7	84,300 *c							45
50	64.3	166.5	73,600 b	68.1	168.3	70,700 b				50
55	60.8	163.9	64,900 b	64.7	166.1	62,400 b	67.5	167.1	60,400 b	55
60	57.0	160.9	58,000 b	61.1	163.5	55,700	64.0	164.9	54,000 b	60
65	53.2	157.4	52,300 b	57.4	160.5	50,200	60.4	162.3	48,600	65
70	49.1	153.3	47,600	53.5	157.1	45,600	56.7	159.2	44,200	70
75	44.7	148.7	43,500	49.5	153.1	41,700	52.8	155.7	40,400	75
80	40.0	143.2	40,000	45.1	148.5	38,400	48.7	151.6	37,200	80
85	34.7	136.6	37,000	40.4	143.1	35,500	44.3	146.8	34,300	85
90	28.7	128.5	34,300	35.2	136.6	32,900	39.5	141.2	31,800	90
95	21.1	117.7	31,900	29.3	128.7	30,600	34.2	134.6	29,600	95
100	8.7	98.9	29,700	21.9	118.3	28,600	28.0	126.3	27,600	100
105				10.4	101.0	26,600	20.2	115.1	25,800	105
110							6.3	93.9	24,100	110
115										115
120										120
125										125

MLC165 S-1

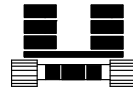
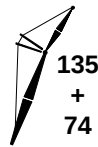
ASME B30.5



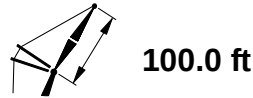
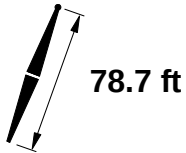
99,500 lb
+
0 lb

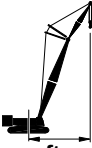
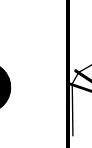


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70	61.6	161.5	41,800							70
75	57.9	158.6	38,200							75
80	54.1	155.2	35,100							80
85	50.1	151.3	32,400	55.3	154.0	30,600				85
90	45.8	146.8	30,100	51.3	150.3	28,300				90
95	41.1	141.5	28,000	47.1	146.0	26,300	52.3	148.5	24,700	95
100	36.0	135.3	26,100	42.6	140.9	24,600	48.2	144.3	23,000	100
105	30.2	127.6	24,400	37.6	135.0	23,000	43.7	139.5	21,500	105
110	23.1	117.6	22,900	32.0	127.8	21,500	38.9	133.8	20,200	110
115	12.7	102.1	21,400	25.4	118.7	20,200	33.5	127.0	18,900	115
120				16.5	105.6	18,900	27.2	118.4	17,800	120
125							19.1	106.8	16,700	125



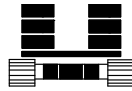
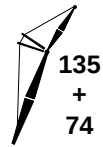
99,500 lb
+
0 lb



	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38	74.4	181.7	81,800 *d							38
40	73.2	181.1	80,300 *c							40
45	70.1	179.4	76,600 *c							45
50	67.1	177.5	73,100 *b	70.4	178.9	70,400 b				50
55	63.9	175.2	64,700 b	67.4	177.0	62,100 b				55
60	60.7	172.5	57,800 b	64.2	174.8	55,400	66.8	175.9	53,600 b	60
65	57.3	169.5	52,100 b	61.0	172.2	49,900	63.6	173.6	48,300	65
70	53.9	166.1	47,300	57.7	169.2	45,400	60.4	170.9	43,900	70
75	50.2	162.2	43,300	54.2	165.8	41,500	57.0	167.9	40,100	75
80	46.4	157.8	39,800	50.6	162.0	38,100	53.5	164.4	36,900	80
85	42.3	152.6	36,800	46.8	157.6	35,200	49.9	160.5	34,000	85
90	37.8	146.7	34,100	42.7	152.5	32,700	46.0	155.9	31,600	90
95	32.9	139.7	31,800	38.3	146.7	30,400	41.9	150.8	29,400	95
100	27.2	131.0	29,600	33.4	139.7	28,400	37.4	144.7	27,400	100
105	20.0	119.5	27,700	27.7	131.3	26,500	32.4	137.5	25,600	105
110	8.2	99.6	25,900	20.8	120.2	24,900	26.6	128.7	24,000	110
115				9.9	101.9	23,300	19.2	116.8	22,600	115
120							6.0	94.4	21,100	120
125										125
130										130
135										135

MLC165 S-1

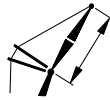
ASME B30.5



99,500 lb
+
0 lb

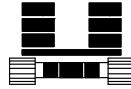
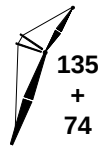


78.7 ft

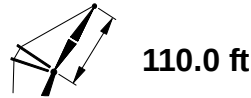
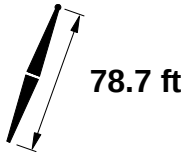


100.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	61.5	170.2	37,900							75
80	58.1	167.3	34,800							80
85	54.7	163.9	32,100							85
90	51.1	160.2	29,800	55.7	162.7	28,000				90
95	47.3	155.8	27,700	52.2	159.1	26,000				95
100	43.3	150.9	25,800	48.5	154.9	24,200				100
105	38.9	145.2	24,100	44.5	150.2	22,600	49.4	153.2	21,200	105
110	34.1	138.4	22,600	40.3	144.7	21,200	45.6	148.6	19,800	110
115	28.6	130.2	21,200	35.6	138.3	19,900	41.4	143.4	18,600	115
120	21.9	119.6	20,000	30.4	130.6	18,700	36.8	137.2	17,500	120
125	12.1	103.2	18,800	24.1	120.9	17,600	31.8	129.9	16,400	125
130				15.6	107.0	16,600	25.8	120.8	15,500	130
135							18.1	108.4	14,600	135



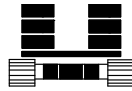
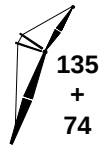
99,500 lb
+
0 lb



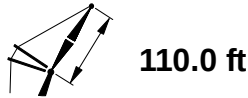
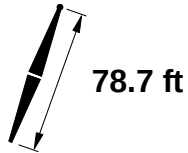
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40	74.7	191.5	74,400 *c							40
45	72.0	190.0	71,600 *c							45
50	69.3	188.2	68,800 *b							50
55	66.4	186.2	64,600 b	69.5	187.8	62,000 b				55
60	63.6	183.9	57,700 b	66.7	185.8	55,300				60
65	60.6	181.2	52,000 b	63.8	183.5	49,900	66.2	184.6	48,200	65
70	57.6	178.2	47,300	60.9	180.8	45,300	63.3	182.3	43,800	70
75	54.4	174.8	43,200	57.9	177.9	41,400	60.3	179.6	40,000	75
80	51.2	171.0	39,800	54.7	174.5	38,100	57.3	176.5	36,800	80
85	47.7	166.8	36,700	51.5	170.8	35,200	54.1	173.1	34,000	85
90	44.1	161.9	34,100	48.1	166.6	32,600	50.9	169.3	31,500	90
95	40.2	156.4	31,800	44.5	161.8	30,400	47.4	165.0	29,300	95
100	36.0	150.0	29,700	40.6	156.3	28,400	43.8	160.1	27,400	100
105	31.3	142.5	27,800	36.4	150.0	26,600	39.9	154.5	25,600	105
110	25.9	133.4	26,100	31.8	142.6	24,900	35.6	148.0	24,100	110
115	19.1	121.3	24,500	26.4	133.7	23,400	30.8	140.4	22,600	115
120	7.8	100.3	23,000	19.8	121.9	22,100	25.3	131.0	21,300	120
125				9.4	102.7	20,800	18.3	118.5	20,100	125
130							5.7	94.9	18,900	130
135										135
140										140
145										145

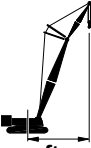
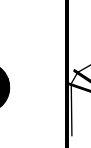
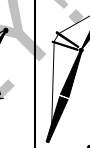
MLC165 S-1

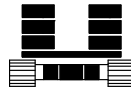
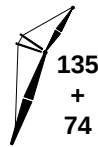
ASME B30.5



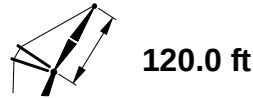
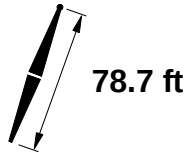
99,500 lb
+
0 lb



	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	61.3	178.8	34,700							80
85	58.3	175.9	32,000							85
90	55.2	172.6	29,700							90
95	52.0	169.0	27,600	56.1	171.4	25,900				95
100	48.6	164.8	25,800	52.9	167.8	24,200				100
105	45.0	160.1	24,100	49.6	163.8	22,600				105
110	41.2	154.7	22,600	46.1	159.3	21,200	50.5	162.1	19,800	110
115	37.1	148.6	21,300	42.4	154.2	19,900	47.0	157.7	18,600	115
120	32.5	141.4	20,000	38.3	148.3	18,700	43.3	152.7	17,500	120
125	27.3	132.7	18,900	33.9	141.4	17,600	39.4	147.0	16,400	125
130	20.9	121.5	17,800	28.9	133.2	16,600	35.1	140.5	15,500	130
135	11.5	104.3	16,800	22.9	122.9	15,700	30.2	132.7	14,600	135
140				14.9	108.4	14,800	24.6	123.0	13,800	140
145							17.3	110.0	13,000	145



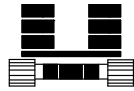
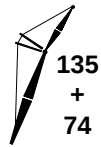
99,500 lb
+
0 lb



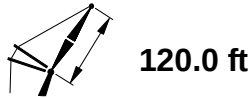
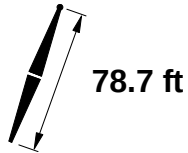
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	73.6	200.5	66,200 *c							45
50	71.1	198.9	63,600 *b							50
55	68.5	197.0	61,100 *b							55
60	65.9	194.9	57,500 b	68.7	196.6	55,000				60
65	63.3	192.5	51,800	66.2	194.5	49,600				65
70	60.6	189.9	47,000	63.5	192.1	45,000	65.7	193.3	43,500	70
75	57.8	186.9	43,000	60.8	189.5	41,100	63.0	190.9	39,700	75
80	54.9	183.6	39,500	58.0	186.5	37,800	60.3	188.2	36,500	80
85	51.9	179.8	36,500	55.2	183.2	34,900	57.5	185.2	33,700	85
90	48.8	175.7	33,900	52.2	179.6	32,400	54.6	181.9	31,200	90
95	45.6	171.1	31,500	49.1	175.5	30,100	51.7	178.1	29,100	95
100	42.1	165.9	29,400	45.9	170.9	28,100	48.5	173.9	27,100	100
105	38.5	160.0	27,600	42.5	165.8	26,300	45.3	169.2	25,400	105
110	34.4	153.2	25,900	38.8	159.9	24,700	41.8	164.0	23,800	110
115	30.0	145.3	24,300	34.8	153.2	23,200	38.1	158.0	22,400	115
120	24.8	135.6	22,900	30.4	145.4	21,900	34.0	151.1	21,100	120
125	18.2	122.9	21,600	25.3	136.0	20,600	29.5	143.1	19,900	125
130	7.5	101.0	20,400	18.9	123.6	19,500	24.2	133.2	18,700	130
135				9.0	103.5	18,400	17.5	120.1	17,700	135
140							5.5	95.4	16,700	140
145										145
150										150
155										155

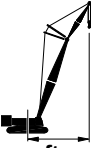
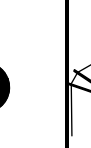
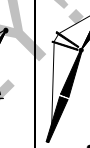
MLC165 S-1

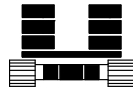
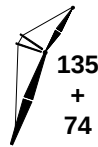
ASME B30.5



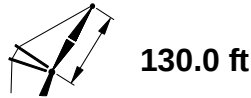
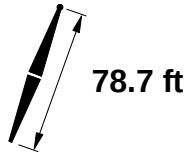
99,500 lb
+
0 lb

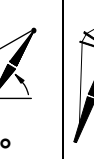


	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	61.2	187.5	31,700							85
90	58.5	184.6	29,400							90
95	55.6	181.3	27,300							95
100	52.7	177.7	25,500	56.5	180.1	23,800				100
105	49.6	173.7	23,800	53.6	176.6	22,300				105
110	46.4	169.2	22,300	50.5	172.7	20,800				110
115	43.0	164.1	21,000	47.4	168.3	19,600	51.3	170.9	18,200	115
120	39.4	158.4	19,700	44.0	163.5	18,400	48.2	166.7	17,100	120
125	35.4	151.9	18,600	40.5	157.9	17,300	44.9	161.9	16,100	125
130	31.1	144.2	17,500	36.6	151.7	16,300	41.4	156.6	15,200	130
135	26.1	135.1	16,600	32.4	144.4	15,400	37.6	150.5	14,300	135
140	20.0	123.3	15,700	27.7	135.8	14,600	33.5	143.6	13,500	140
145	11.0	105.2	14,800	22.0	124.9	13,800	28.9	135.3	12,700	145
150				14.3	109.6	13,000	23.5	125.2	12,000	150
155							16.6	111.4	11,400	155



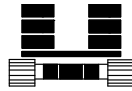
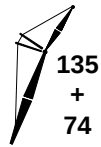
99,500 lb
+
0 lb



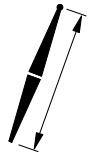
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	ft	lb	ft	lb	ft
45	74.9	210.8	51,200 *c							45
50	72.6	209.4	50,200 *b							50
55	70.2	207.7	49,200 *b							55
60	67.9	205.8	48,300 *b	70.4	207.2	49,600 *				60
65	65.5	203.6	47,400 *b	68.1	205.3	48,800 *				65
70	63.0	201.2	46,500 *	65.7	203.2	44,800	67.6	204.2	43,300	70
75	60.5	198.5	42,800	63.3	200.8	40,900	65.2	202.0	39,500	75
80	58.0	195.6	39,300	60.8	198.2	37,600	62.8	199.6	36,300	80
85	55.3	192.3	36,300	58.2	195.2	34,700	60.3	196.9	33,500	85
90	52.6	188.6	33,700	55.6	191.9	32,200	57.7	193.9	31,000	90
95	49.8	184.6	31,300	52.9	188.3	29,900	55.1	190.6	28,800	95
100	46.8	180.1	29,300	50.0	184.4	27,900	52.3	186.9	26,900	100
105	43.7	175.2	27,400	47.1	179.9	26,100	49.5	182.8	25,200	105
110	40.4	169.6	25,700	44.0	175.0	24,500	46.5	178.3	23,600	110
115	36.9	163.4	24,200	40.7	169.5	23,000	43.4	173.3	22,200	115
120	33.0	156.2	22,800	37.2	163.4	21,700	40.1	167.7	20,900	120
125	28.8	147.9	21,500	33.4	156.3	20,500	36.5	161.4	19,700	125
130	23.8	137.8	20,300	29.2	148.1	19,300	32.7	154.1	18,600	130
135	17.5	124.5	19,200	24.3	138.2	18,300	28.3	145.6	17,600	135
140	7.2	101.6	18,100	18.2	125.3	17,300	23.2	135.3	16,600	140
145				8.7	104.3	16,300	16.8	121.6	15,700	145
150							5.3	95.9	14,800	150
155										155
160										160
165										165

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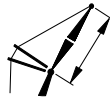
ASME B30.5



99,500 lb
+
0 lb

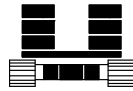
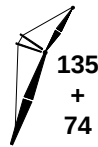


78.7 ft

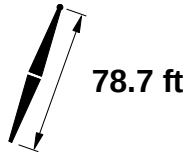


130.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	61.1	196.2	29,100							90
95	58.6	193.2	27,100							95
100	56.0	190.0	25,200							100
105	53.3	186.5	23,600	56.7	188.8	22,000				105
110	50.4	182.6	22,100	54.1	185.3	20,600				110
115	47.5	178.2	20,700	51.3	181.5	19,300				115
120	44.5	173.4	19,500	48.4	177.3	18,200	52.0	179.7	16,900	120
125	41.2	168.0	18,400	45.4	172.6	17,100	49.2	175.6	15,900	125
130	37.8	161.9	17,400	42.2	167.4	16,100	46.2	171.0	14,900	130
135	34.0	155.0	16,400	38.8	161.5	15,200	43.0	166.0	14,100	135
140	29.8	147.0	15,500	35.2	154.9	14,400	39.7	160.3	13,300	140
145	25.0	137.3	14,700	31.1	147.2	13,600	36.1	153.9	12,500	145
150	19.2	125.0	13,900	26.5	138.2	12,900	32.2	146.5	11,900	150
155	10.6	106.2	13,100	21.1	126.8	12,200	27.8	137.8	11,200	155
160				13.7	110.9	11,500	22.6	127.2	10,600	160
165							15.9	112.9	10,000	165



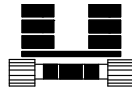
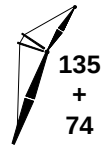
99,500 lb
+
0 lb



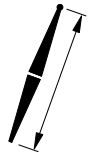
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	73.8	219.8	47,000 *c							50
55	71.7	218.3	46,100 *b							55
60	69.5	216.5	45,300 *b							60
65	67.3	214.5	44,400 *	69.7	216.1	45,600 *				65
70	65.1	212.3	42,600 *	67.5	214.1	44,500				70
75	62.8	209.9	40,900 *	65.3	211.9	40,600	67.1	213.0	39,200	75
80	60.5	207.2	39,100	63.0	209.5	37,300	64.9	210.7	36,000	80
85	58.1	204.2	36,100	60.7	206.8	34,400	62.6	208.3	33,200	85
90	55.7	201.0	33,400	58.3	203.9	31,900	60.3	205.6	30,700	90
95	53.1	197.4	31,100	55.9	200.6	29,600	57.9	202.6	28,500	95
100	50.5	193.5	29,000	53.4	197.1	27,600	55.4	199.3	26,600	100
105	47.8	189.1	27,100	50.8	193.2	25,800	52.9	195.7	24,900	105
110	45.0	184.4	25,500	48.1	188.9	24,200	50.3	191.7	23,300	110
115	42.0	179.1	23,900	45.3	184.2	22,800	47.6	187.3	21,900	115
120	38.9	173.2	22,600	42.3	179.0	21,400	44.7	182.5	20,600	120
125	35.5	166.7	21,300	39.2	173.2	20,200	41.8	177.2	19,400	125
130	31.8	159.2	20,100	35.8	166.7	19,100	38.6	171.3	18,300	130
135	27.7	150.4	19,000	32.2	159.3	18,000	35.2	164.6	17,300	135
140	22.9	139.8	18,000	28.1	150.6	17,100	31.4	157.0	16,400	140
145	16.9	126.0	17,000	23.4	140.3	16,200	27.3	148.1	15,500	145
150	6.9	102.3	16,100	17.5	126.8	15,300	22.4	137.3	14,700	150
155				8.4	105.1	14,500	16.2	123.0	13,900	155
160							5.1	96.3	13,100	160
165										165
170										170
175										175

MLC165 S-1

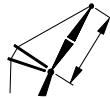
ASME B30.5



99,500 lb
+
0 lb

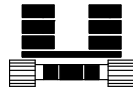
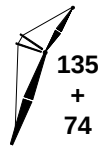


78.7 ft

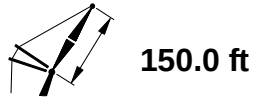
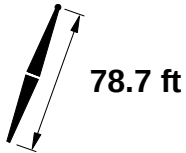


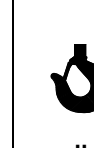
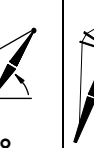
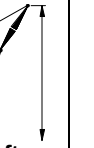
140.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95	61.0	204.8	26,700							95
100	58.7	201.9	24,900							100
105	56.2	198.7	23,300							105
110	53.8	195.2	21,800	57.0	197.5	20,300				110
115	51.2	191.4	20,400	54.5	194.0	19,000				115
120	48.5	187.2	19,200	51.9	190.3	17,800				120
125	45.7	182.5	18,100	49.3	186.2	16,800	52.6	188.5	15,500	125
130	42.8	177.4	17,100	46.5	181.7	15,800	50.0	184.5	14,600	130
135	39.7	171.7	16,100	43.7	176.7	14,900	47.3	180.1	13,700	135
140	36.3	165.3	15,200	40.6	171.2	14,100	44.4	175.2	12,900	140
145	32.7	158.0	14,400	37.4	165.0	13,300	41.4	169.8	12,200	145
150	28.7	149.6	13,600	33.8	158.0	12,600	38.2	163.8	11,500	150
155	24.1	139.5	12,900	30.0	150.0	11,900	34.8	157.1	10,900	155
160	18.5	126.7	12,200	25.6	140.5	11,300	31.0	149.3	10,300	160
165	10.2	107.1	11,500	20.3	128.7	10,600	26.7	140.3	9,700	165
170				13.2	112.0	10,100	21.8	129.2	9,200	170
175							15.3	114.2	8,700	175



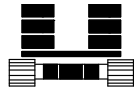
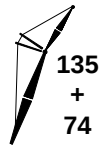
99,500 lb
+
0 lb



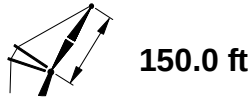
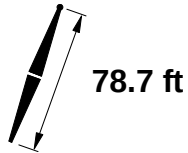
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	74.9	230.2	44,000 *c							50
55	73.0	228.8	43,100 *b							55
60	70.9	227.1	42,400 *b							60
65	68.9	225.3	41,100 *							65
70	66.9	223.3	39,400 *	69.1	224.9	41,200 *				70
75	64.8	221.0	37,700 *	67.0	222.8	39,600 *				75
80	62.6	218.6	36,200 *	65.0	220.6	37,200	66.7	221.7	35,800	80
85	60.5	215.9	34,600 *	62.8	218.2	34,300	64.6	219.4	33,000	85
90	58.2	212.9	33,100 *	60.7	215.5	31,800	62.4	217.0	30,600	90
95	56.0	209.7	31,000	58.4	212.5	29,500	60.2	214.2	28,400	95
100	53.6	206.1	28,900	56.2	209.3	27,500	58.0	211.2	26,500	100
105	51.2	202.3	27,100	53.8	205.8	25,700	55.7	208.0	24,800	105
110	48.7	198.1	25,400	51.4	202.0	24,100	53.4	204.4	23,200	110
115	46.1	193.5	23,900	49.0	197.8	22,700	51.0	200.5	21,800	115
120	43.4	188.4	22,500	46.4	193.3	21,300	48.5	196.3	20,500	120
125	40.6	182.9	21,200	43.7	188.3	20,100	45.9	191.7	19,300	125
130	37.5	176.7	20,000	40.8	182.8	19,000	43.1	186.6	18,200	130
135	34.3	169.8	19,000	37.8	176.7	18,000	40.3	181.0	17,200	135
140	30.7	161.9	18,000	34.6	169.8	17,000	37.2	174.7	16,300	140
145	26.7	152.8	17,000	31.0	162.1	16,100	33.9	167.7	15,400	145
150	22.1	141.8	16,200	27.1	153.1	15,300	30.3	159.8	14,600	150
155	16.3	127.4	15,300	22.6	142.3	14,500	26.3	150.5	13,900	155
160	6.7	102.9	14,500	16.9	128.4	13,800	21.6	139.2	13,200	160
165				8.1	105.8	13,000	15.6	124.4	12,500	165
170							4.9	96.8	11,800	170
175										175
180										180
185										185

MLC165 S-1

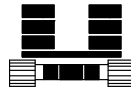
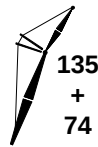
ASME B30.5



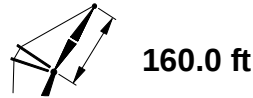
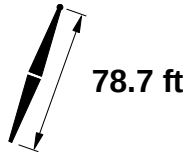
99,500 lb
+
0 lb

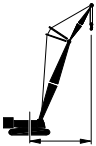
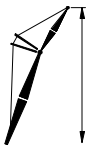
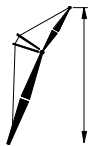
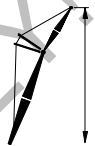
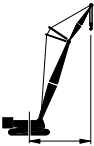


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	61.0	213.5	24,800							100
105	58.8	210.6	23,100							105
110	56.5	207.4	21,700							110
115	54.2	203.9	20,300	57.2	206.1	18,900				115
120	51.8	200.2	19,100	54.9	202.8	17,700				120
125	49.3	196.1	18,000	52.5	199.1	16,700				125
130	46.7	191.6	17,000	50.1	195.1	15,700				130
135	44.1	186.6	16,000	47.5	190.7	14,800	50.7	193.3	13,600	135
140	41.2	181.2	15,100	44.9	185.9	14,000	48.2	189.0	12,800	140
145	38.3	175.2	14,300	42.1	180.6	13,200	45.6	184.4	12,100	145
150	35.1	168.5	13,600	39.2	174.8	12,500	42.8	179.2	11,400	150
155	31.6	160.9	12,800	36.0	168.3	11,800	39.9	173.5	10,800	155
160	27.7	152.1	12,200	32.7	161.0	11,200	36.9	167.2	10,200	160
165	23.3	141.6	11,500	28.9	152.6	10,600	33.5	160.1	9,700	165
170	17.8	128.3	10,900	24.7	142.7	10,000	29.9	152.0	9,100	170
175	9.9	108.0	10,400	19.6	130.4	9,500	25.8	142.6	8,600	175
180				12.8	113.2	9,000	21.0	131.0	8,200	180
185							14.8	115.6	7,700	185



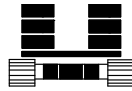
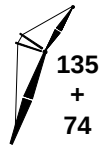
99,500 lb
+
0 lb



	 87°			 83°			 80°				
	 ft	 ft	 ft	 lb	 ft	 ft	 lb	 ft	 ft	 lb	 ft
55		74.1	239.2	40,200 *b							55
60		72.2	237.7	39,100 *b							60
65		70.3	236.0	37,600 *							65
70		68.4	234.1	35,900 *	70.5	235.5	37,600 *				70
75		66.4	232.0	34,400 *	68.6	233.6	36,100 *				75
80		64.5	229.7	32,900 *	66.6	231.6	34,600 *				80
85		62.5	227.2	31,400 *	64.7	229.3	33,100 *	66.2	230.4	32,700	85
90		60.4	224.5	30,000 *	62.7	226.8	31,500	64.3	228.1	30,300	90
95		58.3	221.6	28,600 *	60.6	224.1	29,200	62.3	225.6	28,100	95
100		56.2	218.3	27,200 *	58.5	221.2	27,300	60.2	222.9	26,200	100
105		54.0	214.9	25,900 *	56.4	218.0	25,500	58.1	219.9	24,500	105
110		51.8	211.1	24,700 *	54.2	214.6	23,900	56.0	216.7	22,900	110
115		49.5	207.0	23,500 *	52.0	210.8	22,400	53.8	213.1	21,500	115
120		47.1	202.5	22,200	49.7	206.7	21,100	51.6	209.3	20,200	120
125		44.6	197.7	21,000	47.3	202.3	19,900	49.2	205.2	19,000	125
130		42.0	192.3	19,800	44.8	197.5	18,700	46.8	200.7	18,000	130
135		39.2	186.5	18,700	42.2	192.2	17,700	44.3	195.8	17,000	135
140		36.3	180.0	17,700	39.5	186.4	16,800	41.7	190.4	16,000	140
145		33.1	172.8	16,800	36.6	180.0	15,900	38.9	184.6	15,200	145
150		29.7	164.6	15,900	33.4	172.9	15,000	36.0	178.0	14,400	150
155		25.9	155.2	15,100	30.0	164.8	14,300	32.8	170.7	13,600	155
160		21.4	143.7	14,400	26.2	155.5	13,600	29.4	162.4	12,900	160
165		15.8	128.9	13,600	21.8	144.3	12,900	25.5	152.8	12,300	165
170		6.5	103.4	12,900	16.4	129.8	12,200	20.9	141.1	11,600	170
175					7.8	106.5	11,600	15.1	125.8	11,000	175
180								4.7	97.2	10,400	180
185											185
190											190
195											195

MLC165 S-1

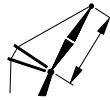
ASME B30.5



99,500 lb
+
0 lb

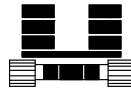
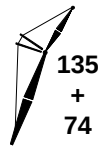


78.7 ft

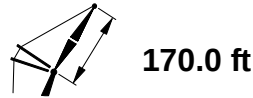
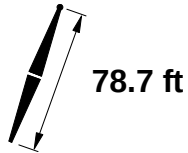


160.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	62.9	224.8	24,500							100
105	60.9	222.1	22,800							105
110	58.8	219.2	21,300							110
115	56.7	216.1	20,000							115
120	54.6	212.7	18,800	57.4	214.8	17,400				120
125	52.3	209.0	17,700	55.2	211.5	16,300				125
130	50.0	204.9	16,700	53.0	207.8	15,400				130
135	47.7	200.6	15,700	50.7	203.9	14,500				135
140	45.2	195.8	14,800	48.4	199.7	13,700	51.3	202.1	12,500	140
145	42.6	190.6	14,000	45.9	195.0	12,900	49.0	198.0	11,800	145
150	39.9	184.9	13,300	43.4	190.0	12,200	46.6	193.4	11,100	150
155	37.0	178.6	12,600	40.7	184.4	11,500	44.0	188.5	10,500	155
160	33.9	171.6	11,900	37.9	178.3	10,900	41.4	183.1	9,900	160
165	30.6	163.6	11,300	34.9	171.5	10,300	38.6	177.1	9,300	165
170	26.8	154.5	10,700	31.6	163.9	9,700	35.6	170.5	8,800	170
175	22.5	143.6	10,100	28.0	155.1	9,200	32.4	163.1	8,300	175
180	17.3	129.8	9,600	23.9	144.9	8,700	28.9	154.7	7,900	180
185	9.5	108.8	9,100	19.0	132.1	8,300	25.0	144.8	7,400	185
190				12.4	114.3	7,800	20.3	132.9	7,000	190
195							14.3	116.8	6,600	195



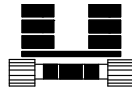
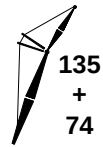
99,500 lb
+
0 lb



	87°			83°			80°			
	ft	ft	lb	ft	lb	ft	lb	ft	lb	ft
60	73.3	248.2	36,100 *b							60
65	71.5	246.6	34,700 *							65
70	69.7	244.8	33,100 *							70
75	67.9	242.9	31,600 *	69.9	244.3	33,200 *				75
80	66.1	240.7	30,200 *	68.1	242.4	31,800 *				80
85	64.2	238.4	28,800 *	66.2	240.3	30,400 *	67.7	241.3	31,300 *	85
90	62.3	235.9	27,400 *	64.4	238.0	29,000 *	65.9	239.2	30,000 *	90
95	60.4	233.2	26,100 *	62.5	235.5	27,600 *	64.0	236.8	27,900	95
100	58.4	230.2	24,800 *	60.6	232.8	26,300 *	62.1	234.3	26,000	100
105	56.4	227.0	23,600 *	58.6	229.9	25,000 *	60.2	231.5	24,200	105
110	54.4	223.6	22,400 *	56.6	226.7	23,600	58.3	228.6	22,700	110
115	52.3	219.9	21,300 *	54.6	223.3	22,200	56.3	225.3	21,300	115
120	50.1	215.8	20,100 *	52.5	219.6	20,900	54.2	221.9	20,000	120
125	47.9	211.5	19,100 *	50.3	215.6	19,600	52.1	218.1	18,800	125
130	45.6	206.8	18,100 *	48.1	211.3	18,500	49.9	214.1	17,700	130
135	43.2	201.7	17,200 *	45.8	206.6	17,500	47.7	209.7	16,700	135
140	40.7	196.1	16,300 *	43.4	201.5	16,500	45.4	205.0	15,800	140
145	38.0	190.0	15,400 *	40.9	196.0	15,700	42.9	199.8	15,000	145
150	35.2	183.3	14,600 *	38.2	190.0	14,800	40.4	194.2	14,200	150
155	32.1	175.8	13,800 *	35.4	183.3	14,100	37.7	188.0	13,400	155
160	28.8	167.3	12,800 *	32.4	175.9	13,400	34.9	181.2	12,700	160
165	25.1	157.4	11,900 *	29.1	167.5	12,700	31.8	173.6	12,100	165
170	20.8	145.6	11,100 *	25.4	157.8	12,000	28.5	165.0	11,500	170
175	15.3	130.2	10,300 *	21.2	146.2	11,200 *	24.7	155.0	10,900	175
180	6.3	104.0	9,700 *	15.9	131.2	10,400 *	20.3	142.9	10,300	180
185				7.6	107.2	9,800 *	14.7	127.1	9,800	185
190							4.6	97.6	9,200	190
195										195
200										200
205										205

MLC165 S-1

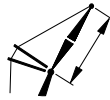
ASME B30.5



99,500 lb
+
0 lb

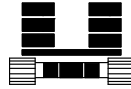
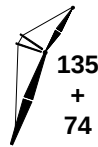


78.7 ft

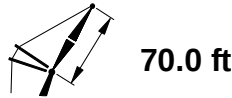
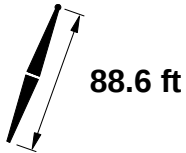


170.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105	62.8	233.5	22,600							105
110	60.9	230.8	21,100							110
115	58.9	227.9	19,800							115
120	56.9	224.8	18,500							120
125	54.9	221.4	17,400	57.5	223.5	16,100				125
130	52.8	217.7	16,400	55.5	220.2	15,100				130
135	50.7	213.8	15,500	53.4	216.6	14,200				135
140	48.4	209.5	14,600	51.3	212.7	13,400				140
145	46.1	204.9	13,800	49.1	208.6	12,600	51.8	210.9	11,500	145
150	43.8	199.9	13,000	46.8	204.1	11,900	49.7	206.9	10,900	150
155	41.3	194.4	12,300	44.5	199.2	11,300	47.4	202.4	10,200	155
160	38.6	188.5	11,700	42.0	193.9	10,700	45.1	197.6	9,600	160
165	35.9	181.9	11,100	39.4	188.1	10,100	42.7	192.4	9,100	165
170	32.9	174.6	10,500	36.7	181.7	9,500	40.1	186.8	8,600	170
175	29.6	166.3	9,900	33.8	174.6	9,000	37.4	180.5	8,100	175
180	26.0	156.9	9,400	30.6	166.7	8,500	34.5	173.7	7,600	180
185	21.9	145.6	8,900	27.1	157.6	8,100	31.5	166.0	7,200	185
190	16.8	131.3	8,400	23.2	146.9	7,600	28.1	157.2	6,800	190
195	9.3	109.6	8,000	18.4	133.8	7,200	24.2	147.0	6,400	195
200				12.0	115.4	6,800	19.7	134.6	6,000	200
205							13.9	118.1	5,600	205



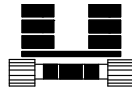
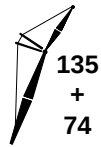
99,500 lb
+
0 lb



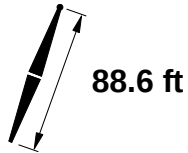
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
30	74.7	162.7	105,800 *d							30
32	73.0	162.1	105,800 *d							32
34	71.3	161.5	105,800 *d							34
36	69.6	160.8	105,800 *d							36
38	67.8	160.0	105,800 *c							38
40	66.0	159.1	99,400 c							40
45	61.4	156.7	84,800 c	67.0	158.9	81,200 c				45
50	56.7	153.7	73,800 b	62.5	156.6	70,700 b	66.7	158.0	68,300 c	50
55	51.6	150.1	65,200 b	57.8	153.7	62,400 b	62.1	155.6	60,300 b	55
60	46.2	145.7	58,200 b	52.8	150.3	55,700	57.4	152.6	53,900 b	60
65	40.2	140.4	52,500 b	47.5	146.1	50,300	52.4	149.1	48,600	65
70	33.4	133.7	47,700	41.6	141.0	45,700	47.0	144.9	44,100	70
75	25.0	124.7	43,600	35.0	134.7	41,800	41.1	139.7	40,400	75
80	12.0	109.8	40,000	27.1	126.4	38,400	34.4	133.3	37,100	80
85				15.9	113.7	35,400	26.3	124.7	34,200	85
90							14.6	111.3	31,700	90
95										95
100										100
105										105
110										110

MLC165 S-1

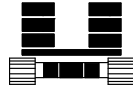
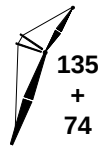
ASME B30.5



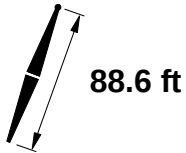
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
30										30
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65	59.8	152.3	45,700 b							65
70	54.9	149.1	41,500 b							70
75	49.7	145.2	38,000	57.2	148.2	35,600 b				75
80	44.1	140.6	34,900	52.2	144.6	32,700				80
85	37.9	134.8	32,200	46.8	140.3	30,200				85
90	30.6	127.5	29,900	40.9	135.1	28,000	49.1	139.1	26,200	90
95	21.2	117.2	27,700	34.2	128.6	26,000	43.4	134.3	24,300	95
100				26.0	120.0	24,200	37.1	128.4	22,700	100
105				14.0	106.2	22,600	29.6	120.8	21,100	105
110							19.8	109.9	19,800	110



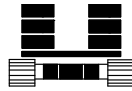
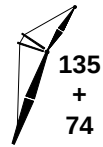
99,500 lb
+
0 lb



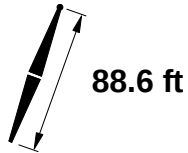
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34	73.7	172.0	96,800 *d							34
36	72.2	171.4	96,800 *d							36
38	70.7	170.7	96,800 *d							38
40	69.2	170.0	96,800 *c							40
45	65.3	167.9	84,600 c	70.0	169.7	80,900 c				45
50	61.3	165.3	73,600 b	66.2	167.7	70,400 b				50
55	57.1	162.4	65,000 b	62.2	165.3	62,100 b	65.8	166.7	60,000 b	55
60	52.7	158.8	58,100 b	58.1	162.4	55,500	61.9	164.2	53,500 b	60
65	48.1	154.7	52,400 b	53.7	159.0	50,000	57.7	161.3	48,300	65
70	43.1	149.8	47,600	49.2	155.0	45,500	53.4	157.9	43,900	70
75	37.5	143.9	43,500	44.2	150.3	41,600	48.8	153.8	40,100	75
80	31.2	136.6	40,000	38.8	144.7	38,200	43.8	149.1	36,900	80
85	23.3	126.9	36,900	32.7	137.7	35,300	38.3	143.3	34,000	85
90	11.3	110.8	34,200	25.3	128.7	32,700	32.1	136.2	31,600	90
95				14.9	115.0	30,400	24.6	127.0	29,300	95
100							13.6	112.6	27,300	100
105										105
110										110
115										115
120										120

MLC165 S-1

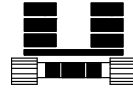
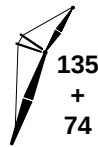
ASME B30.5



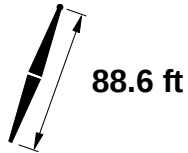
99,500 lb
+
0 lb

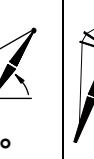


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70	59.8	161.0	41,200 b							70
75	55.6	157.8	37,600							75
80	51.1	154.1	34,600	57.5	156.8	32,400				80
85	46.3	149.7	32,000	53.2	153.4	29,900				85
90	41.2	144.5	29,600	48.6	149.3	27,700				90
95	35.4	138.1	27,500	43.6	144.5	25,700	50.5	147.9	23,900	95
100	28.6	130.1	25,700	38.1	138.7	24,000	45.7	143.4	22,300	100
105	19.9	119.0	24,000	31.9	131.6	22,400	40.5	138.1	20,800	105
110				24.3	122.2	21,000	34.6	131.6	19,500	110
115				13.1	107.4	19,600	27.6	123.3	18,300	115
120							18.5	111.6	17,100	120



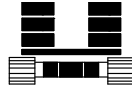
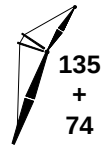
99,500 lb
+
0 lb



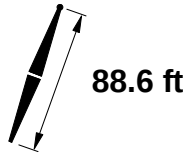
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
36	74.2	181.8	87,700 *d							36
38	72.9	181.2	87,600 *d							38
40	71.6	180.6	87,500 *c							40
45	68.2	178.7	83,900 *c							45
50	64.7	176.6	73,400 b	69.0	178.5	70,200 b				50
55	61.1	174.0	64,800 b	65.5	176.4	61,900 b				55
60	57.4	171.0	57,900 b	62.0	173.9	55,300	65.2	175.4	53,300 b	60
65	53.6	167.6	52,200 b	58.3	171.1	49,900	61.6	172.9	48,100	65
70	49.5	163.6	47,500	54.5	167.7	45,300	58.0	170.0	43,700	70
75	45.2	159.0	43,400	50.4	163.9	41,400	54.1	166.6	39,900	75
80	40.5	153.6	39,900	46.2	159.4	38,100	50.1	162.7	36,700	80
85	35.3	147.2	36,900	41.6	154.2	35,200	45.8	158.2	33,900	85
90	29.3	139.3	34,200	36.5	148.1	32,700	41.2	152.9	31,400	90
95	22.0	128.9	31,900	30.8	140.6	30,400	36.1	146.7	29,300	95
100	10.6	111.8	29,700	23.9	130.9	28,300	30.3	139.0	27,300	100
105				14.0	116.3	26,500	23.2	129.1	25,500	105
110							12.9	113.7	23,900	110
115										115
120										120
125										125
130										130

MLC165 S-1

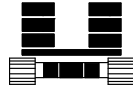
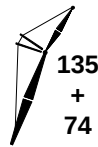
ASME B30.5



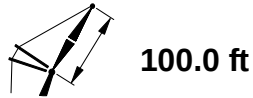
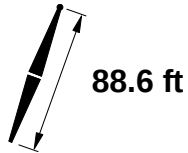
99,500 lb
+
0 lb

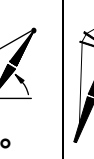


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	59.8	169.6	37,400							75
80	56.1	166.5	34,400							80
85	52.1	162.9	31,800	57.8	165.5	29,600				85
90	48.0	158.7	29,400	54.0	162.1	27,500				90
95	43.5	153.8	27,400	49.9	158.2	25,500				95
100	38.7	148.1	25,600	45.6	153.7	23,800	51.6	156.7	22,100	100
105	33.3	141.2	23,900	41.0	148.4	22,300	47.4	152.5	20,600	105
110	26.9	132.6	22,400	35.9	142.1	20,800	43.0	147.5	19,300	110
115	18.7	120.7	21,000	30.0	134.3	19,600	38.1	141.7	18,100	115
120				22.9	124.3	18,400	32.5	134.6	17,000	120
125				12.3	108.5	17,200	26.0	125.7	16,000	125
130							17.4	113.1	15,000	130



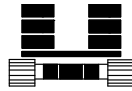
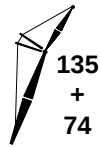
99,500 lb
+
0 lb



	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38	74.7	191.6	79,300 *d							38
40	73.5	191.1	79,200 *c							40
45	70.5	189.4	76,300 *c							45
50	67.4	187.5	72,900 *b							50
55	64.2	185.3	64,600 b	68.1	187.3	61,600 b				55
60	61.0	182.7	57,700 b	65.0	185.1	55,000	67.8	186.3	53,000 b	60
65	57.7	179.7	52,000 b	61.8	182.6	49,600	64.7	184.1	47,700	65
70	54.2	176.3	47,200	58.5	179.7	45,000	61.5	181.6	43,300	70
75	50.6	172.5	43,200	55.0	176.4	41,200	58.2	178.7	39,600	75
80	46.8	168.1	39,700	51.5	172.7	37,800	54.7	175.3	36,400	80
85	42.7	163.0	36,700	47.7	168.4	34,900	51.1	171.6	33,600	85
90	38.3	157.2	34,100	43.7	163.6	32,400	47.4	167.3	31,200	90
95	33.4	150.3	31,700	39.4	157.9	30,200	43.3	162.3	29,000	95
100	27.8	141.8	29,600	34.6	151.3	28,100	39.0	156.6	27,100	100
105	20.8	130.8	27,700	29.2	143.2	26,300	34.2	149.8	25,300	105
110	10.1	112.7	25,900	22.6	132.9	24,700	28.7	141.7	23,700	110
115				13.3	117.5	23,200	22.0	131.1	22,300	115
120							12.2	114.8	20,900	120
125										125
130										130
135										135
140										140

MLC165 S-1

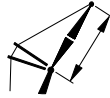
ASME B30.5



99,500 lb
+
0 lb

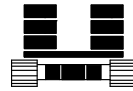
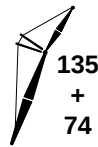


88.6 ft

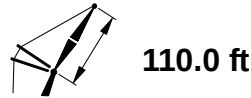
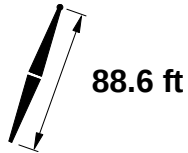


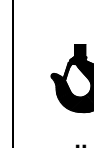
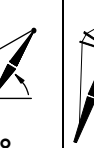
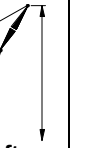
100.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	59.8	178.3	34,000							80
85	56.5	175.2	31,400							85
90	53.0	171.6	29,100							90
95	49.3	167.6	27,100	54.6	170.8	25,200				95
100	45.4	163.0	25,200	51.0	167.0	23,500				100
105	41.2	157.7	23,600	47.2	162.7	21,900	52.5	165.5	20,300	105
110	36.6	151.5	22,100	43.2	157.7	20,500	48.8	161.4	19,000	110
115	31.5	144.1	20,800	38.8	152.0	19,300	44.9	156.7	17,800	115
120	25.5	134.9	19,500	34.0	145.2	18,100	40.7	151.3	16,700	120
125	17.7	122.3	18,400	28.4	136.9	17,000	36.0	145.0	15,700	125
130				21.7	126.2	16,000	30.8	137.4	14,800	130
135				11.7	109.5	15,100	24.7	127.9	13,900	135
140							16.5	114.6	13,100	140



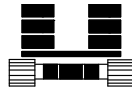
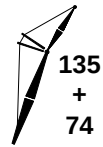
99,500 lb
+
0 lb



	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
45	72.3	200.0	70,900 *c							45
50	69.5	198.2	68,300 *b							50
55	66.7	196.2	64,500 b	70.2	198.0	61,500 b				55
60	63.9	193.9	57,600 b	67.4	196.0	54,900				60
65	60.9	191.3	51,900 b	64.5	193.8	49,500	67.1	195.0	47,700	65
70	57.9	188.4	47,200	61.6	191.3	44,900	64.3	192.8	43,300	70
75	54.8	185.0	43,100	58.6	188.4	41,100	61.4	190.2	39,500	75
80	51.5	181.3	39,700	55.5	185.1	37,800	58.3	187.3	36,300	80
85	48.1	177.1	36,700	52.3	181.5	34,900	55.2	184.0	33,600	85
90	44.5	172.3	34,000	48.9	177.4	32,400	52.0	180.4	31,100	90
95	40.7	166.8	31,700	45.3	172.7	30,100	48.6	176.2	29,000	95
100	36.5	160.6	29,600	41.6	167.5	28,100	45.0	171.5	27,000	100
105	31.8	153.2	27,700	37.5	161.4	26,300	41.2	166.2	25,300	105
110	26.5	144.2	26,000	32.9	154.3	24,700	37.1	160.0	23,700	110
115	19.9	132.6	24,500	27.8	145.8	23,200	32.5	152.8	22,300	115
120	9.6	113.5	23,000	21.5	134.9	21,900	27.3	144.1	21,000	120
125				12.7	118.7	20,600	20.9	133.0	19,800	125
130							11.6	115.8	18,700	130
135										135
140										140
145										145
150										150

MLC165 S-1

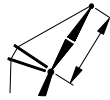
ASME B30.5



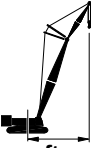
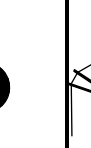
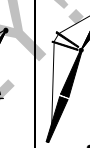
99,500 lb
+
0 lb

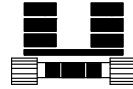
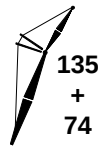


88.6 ft

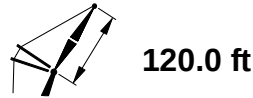
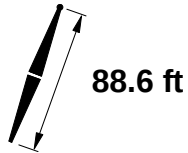


110.0 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	62.8	189.7	34,000							80
85	59.9	187.0	31,400							85
90	56.8	183.9	29,100							90
95	53.6	180.4	27,000							95
100	50.3	176.5	25,200	55.1	179.5	23,400				100
105	46.8	172.1	23,600	51.9	175.8	21,900				105
110	43.2	167.1	22,100	48.5	171.7	20,500				110
115	39.2	161.4	20,800	44.9	166.9	19,200	49.9	170.3	17,700	115
120	34.9	154.7	19,500	41.1	161.6	18,100	46.4	165.8	16,700	120
125	30.0	146.9	18,400	36.9	155.4	17,000	42.7	160.7	15,700	125
130	24.3	137.1	17,400	32.4	148.2	16,100	38.7	154.9	14,800	130
135	16.9	123.8	16,400	27.1	139.4	15,200	34.3	148.2	13,900	135
140				20.7	128.1	14,300	29.4	140.1	13,100	140
145				11.1	110.5	13,500	23.5	130.1	12,400	145
150							15.8	116.0	11,700	150



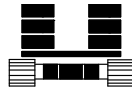
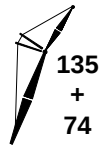
99,500 lb
+
0 lb



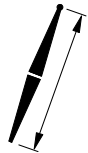
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	73.8	210.4	65,600 *c							45
50	71.3	208.9	63,100 *b							50
55	68.8	207.0	60,700 *b							55
60	66.2	205.0	57,300 b	69.4	206.8	54,600				60
65	63.5	202.6	51,700 b	66.8	204.8	49,200				65
70	60.9	200.0	46,900	64.2	202.5	44,700	66.6	203.8	42,900	70
75	58.1	197.0	42,900	61.5	199.9	40,800	63.9	201.5	39,200	75
80	55.2	193.7	39,400	58.7	197.0	37,500	61.2	198.9	36,000	80
85	52.3	190.1	36,400	55.9	193.8	34,600	58.5	196.0	33,300	85
90	49.2	186.0	33,800	52.9	190.3	32,100	55.6	192.7	30,800	90
95	45.9	181.4	31,500	49.9	186.3	29,900	52.7	189.1	28,700	95
100	42.5	176.3	29,400	46.7	181.8	27,900	49.6	185.1	26,700	100
105	38.9	170.5	27,500	43.3	176.8	26,100	46.4	180.6	25,000	105
110	34.9	163.8	25,800	39.7	171.2	24,500	43.0	175.6	23,500	110
115	30.4	156.0	24,300	35.8	164.7	23,000	39.4	169.8	22,100	115
120	25.3	146.5	22,900	31.5	157.2	21,700	35.5	163.3	20,800	120
125	19.0	134.3	21,600	26.6	148.2	20,400	31.1	155.7	19,600	125
130	9.2	114.3	20,300	20.6	136.7	19,300	26.1	146.5	18,500	130
135				12.1	119.7	18,200	20.0	134.8	17,500	135
140							11.1	116.8	16,500	140
145										145
150										150
155										155
160										160

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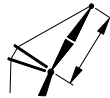
ASME B30.5



99,500 lb
+
0 lb

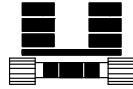
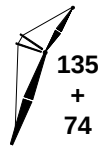


88.6 ft

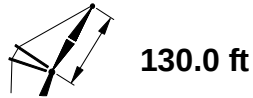
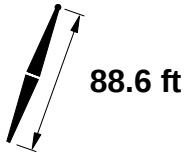


120.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	62.6	198.4	31,000							85
90	59.9	195.6	28,700							90
95	57.1	192.5	26,700							95
100	54.2	189.1	24,900							100
105	51.2	185.3	23,300	55.5	188.2	21,500				105
110	48.0	181.1	21,800	52.6	184.6	20,100				110
115	44.7	176.3	20,500	49.5	180.6	18,900				115
120	41.2	170.9	19,200	46.3	176.0	17,800	50.8	179.2	16,300	120
125	37.5	164.8	18,100	42.9	171.0	16,700	47.6	174.8	15,300	125
130	33.4	157.8	17,100	39.3	165.2	15,800	44.3	170.0	14,400	130
135	28.7	149.5	16,200	35.3	158.7	14,900	40.8	164.6	13,600	135
140	23.3	139.2	15,300	30.9	151.0	14,000	37.0	158.4	12,800	140
145	16.2	125.3	14,400	25.9	141.8	13,300	32.8	151.2	12,100	145
150				19.8	129.9	12,500	28.1	142.7	11,400	150
155				10.7	111.5	11,800	22.5	132.1	10,800	155
160							15.1	117.4	10,200	160



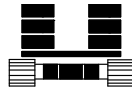
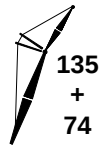
99,500 lb
+
0 lb



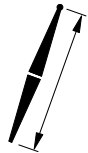
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	72.8	219.4	49,400 *c							50
55	70.5	217.7	48,500 *b							55
60	68.1	215.8	47,600 *b							60
65	65.7	213.7	46,800 *b	68.7	215.6	48,200 *				65
70	63.3	211.3	46,000 *	66.3	213.5	44,400				70
75	60.8	208.6	42,700	63.8	211.2	40,600	66.1	212.5	39,000	75
80	58.2	205.7	39,200	61.4	208.6	37,300	63.6	210.2	35,800	80
85	55.6	202.4	36,200	58.8	205.7	34,400	61.1	207.5	33,000	85
90	52.9	198.8	33,600	56.2	202.5	31,900	58.6	204.6	30,600	90
95	50.1	194.9	31,300	53.5	199.0	29,700	56.0	201.4	28,400	95
100	47.1	190.5	29,200	50.7	195.1	27,700	53.3	197.9	26,500	100
105	44.0	185.6	27,300	47.8	190.8	25,900	50.5	194.0	24,800	105
110	40.8	180.1	25,700	44.8	186.0	24,300	47.6	189.6	23,300	110
115	37.3	173.9	24,100	41.5	180.7	22,800	44.5	184.8	21,900	115
120	33.5	166.9	22,700	38.1	174.7	21,500	41.3	179.4	20,600	120
125	29.2	158.6	21,500	34.4	167.9	20,300	37.8	173.3	19,400	125
130	24.3	148.7	20,300	30.2	160.0	19,200	34.0	166.4	18,300	130
135	18.3	135.9	19,200	25.5	150.5	18,100	29.9	158.4	17,300	135
140	8.8	115.1	18,100	19.8	138.5	17,100	25.1	148.8	16,400	140
145				11.7	120.8	16,200	19.2	136.5	15,500	145
150							10.7	117.8	14,700	150
155										155
160										160
165										165
170										170

MLC165 S-1

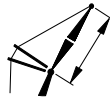
ASME B30.5



99,500 lb
+
0 lb

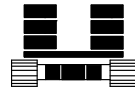
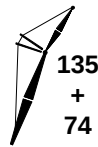


88.6 ft

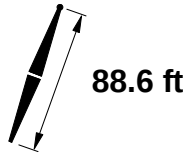


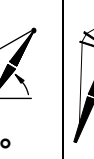
130.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	62.4	207.0	28,500							90
95	59.9	204.3	26,400							95
100	57.3	201.2	24,600							100
105	54.6	197.8	23,000							105
110	51.9	194.1	21,600	55.9	196.9	19,900				110
115	49.0	190.0	20,200	53.2	193.4	18,600				115
120	46.0	185.4	19,000	50.4	189.4	17,500				120
125	42.9	180.3	17,900	47.4	185.1	16,500	51.5	188.0	15,100	125
130	39.6	174.6	16,900	44.4	180.2	15,500	48.7	183.8	14,200	130
135	36.0	168.1	16,000	41.1	174.8	14,600	45.7	179.1	13,400	135
140	32.0	160.7	15,100	37.7	168.7	13,800	42.5	174.0	12,600	140
145	27.6	152.0	14,300	33.9	161.8	13,100	39.1	168.2	11,900	145
150	22.3	141.2	13,500	29.7	153.7	12,400	35.5	161.6	11,200	150
155	15.6	126.7	12,800	24.9	144.0	11,700	31.5	154.1	10,600	155
160				19.0	131.6	11,100	27.0	145.1	10,000	160
165				10.2	112.4	10,400	21.6	134.0	9,500	165
170							14.5	118.7	8,900	170



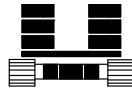
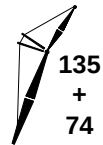
99,500 lb
+
0 lb



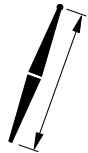
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	74.1	229.8	46,300 *c							50
55	71.9	228.3	45,400 *b							55
60	69.8	226.5	44,600 *b							60
65	67.6	224.6	43,900 *b	70.3	226.3	45,000 *				65
70	65.3	222.4	42,600 *	68.1	224.4	44,100				70
75	63.0	220.0	40,900 *	65.8	222.2	40,300	67.9	223.4	38,700	75
80	60.7	217.3	39,000	63.6	219.9	37,000	65.6	221.2	35,500	80
85	58.4	214.4	36,000	61.3	217.3	34,100	63.4	218.8	32,700	85
90	55.9	211.1	33,400	58.9	214.4	31,600	61.1	216.2	30,300	90
95	53.4	207.6	31,000	56.5	211.2	29,400	58.7	213.3	28,100	95
100	50.8	203.7	28,900	54.0	207.7	27,400	56.3	210.1	26,200	100
105	48.1	199.4	27,100	51.4	203.9	25,600	53.8	206.6	24,500	105
110	45.3	194.7	25,400	48.8	199.7	24,000	51.2	202.8	23,000	110
115	42.4	189.5	23,900	46.0	195.1	22,600	48.5	198.6	21,600	115
120	39.2	183.7	22,500	43.0	190.1	21,200	45.7	193.9	20,300	120
125	35.9	177.2	21,200	40.0	184.4	20,000	42.8	188.8	19,100	125
130	32.2	169.8	20,100	36.7	178.1	18,900	39.7	183.1	18,000	130
135	28.1	161.2	19,000	33.1	170.9	17,900	36.4	176.7	17,000	135
140	23.4	150.8	18,000	29.1	162.6	16,900	32.8	169.4	16,100	140
145	17.6	137.5	17,000	24.6	152.7	16,000	28.8	161.0	15,300	145
150	8.5	115.9	16,100	19.1	140.2	15,200	24.2	151.0	14,500	150
155				11.2	121.8	14,400	18.5	138.2	13,700	155
160							10.3	118.7	13,000	160
165										165
170										170
175										175
180										180

MLC165 S-1

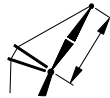
ASME B30.5



99,500 lb
+
0 lb

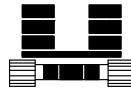
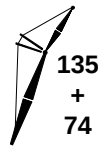


88.6 ft

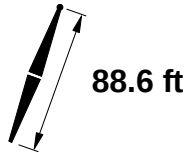


140.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95	62.2	215.7	26,100							95
100	59.9	212.9	24,300							100
105	57.5	209.9	22,700							105
110	55.0	206.6	21,200							110
115	52.5	202.9	19,900	56.2	205.6	18,300				115
120	49.9	198.9	18,700	53.7	202.1	17,200				120
125	47.1	194.4	17,600	51.1	198.3	16,100				125
130	44.3	189.6	16,600	48.4	194.0	15,200	52.2	196.8	13,800	130
135	41.3	184.2	15,700	45.6	189.4	14,300	49.5	192.7	13,000	135
140	38.1	178.1	14,800	42.7	184.2	13,500	46.8	188.2	12,200	140
145	34.6	171.3	14,000	39.6	178.5	12,800	43.9	183.3	11,500	145
150	30.8	163.5	13,200	36.2	172.1	12,100	40.9	177.8	10,900	150
155	26.5	154.4	12,500	32.6	164.8	11,400	37.6	171.7	10,300	155
160	21.5	143.2	11,900	28.6	156.3	10,800	34.1	164.8	9,700	160
165	15.0	128.0	11,200	24.0	146.2	10,200	30.3	156.8	9,100	165
170				18.3	133.2	9,600	26.0	147.5	8,600	170
175				9.9	113.3	9,100	20.8	135.9	8,100	175
180							14.0	119.9	7,700	180



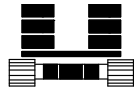
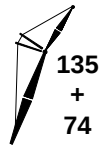
99,500 lb
+
0 lb



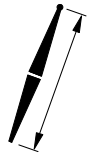
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55	73.2	238.8	42,500 *b							55
60	71.2	237.1	41,800 *b							60
65	69.1	235.3	40,900 *b							65
70	67.1	233.3	39,200 *	69.6	235.1	41,200 *				70
75	65.0	231.1	37,700 *	67.5	233.1	39,700 *				75
80	62.8	228.7	36,200 *	65.5	230.9	36,900	67.4	232.1	35,400	80
85	60.7	226.0	34,600 *	63.3	228.5	34,000	65.3	229.9	32,600	85
90	58.5	223.0	33,100 *	61.2	225.9	31,500	63.2	227.5	30,200	90
95	56.2	219.8	30,900	59.0	223.0	29,300	61.0	224.9	28,000	95
100	53.9	216.3	28,800	56.7	219.9	27,300	58.8	222.0	26,100	100
105	51.5	212.5	27,000	54.4	216.5	25,500	56.5	218.8	24,400	105
110	49.0	208.4	25,300	52.0	212.7	23,900	54.2	215.4	22,900	110
115	46.4	203.8	23,800	49.6	208.6	22,500	51.8	211.6	21,500	115
120	43.7	198.8	22,400	47.0	204.2	21,100	49.3	207.5	20,200	120
125	40.9	193.3	21,100	44.3	199.3	19,900	46.8	203.0	19,000	125
130	37.8	187.2	20,000	41.5	193.9	18,800	44.1	198.1	17,900	130
135	34.6	180.4	18,900	38.6	188.0	17,800	41.3	192.6	17,000	135
140	31.1	172.6	17,900	35.4	181.3	16,800	38.3	186.6	16,000	140
145	27.2	163.7	17,000	31.9	173.8	16,000	35.1	179.9	15,200	145
150	22.6	152.9	16,100	28.1	165.2	15,100	31.6	172.3	14,400	150
155	17.0	139.0	15,300	23.7	154.9	14,400	27.8	163.5	13,700	155
160	8.2	116.6	14,500	18.4	141.9	13,600	23.3	153.1	13,000	160
165				10.9	122.7	12,900	17.9	139.8	12,300	165
170							10.0	119.6	11,600	170
175										175
180										180
185										185
190										190

MLC165 S-1

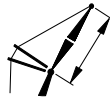
ASME B30.5



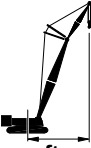
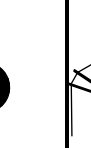
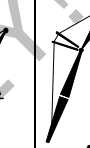
99,500 lb
+
0 lb

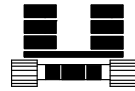
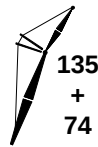


88.6 ft

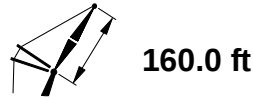
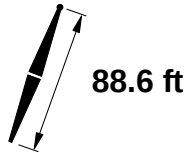


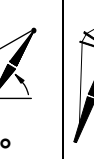
150.0 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	62.1	224.4	24,200							100
105	59.9	221.6	22,600							105
110	57.7	218.6	21,100							110
115	55.4	215.3	19,800							115
120	53.0	211.6	18,600	56.4	214.3	17,100				120
125	50.6	207.7	17,500	54.1	210.8	16,000				125
130	48.1	203.4	16,500	51.7	207.1	15,100				130
135	45.4	198.7	15,600	49.2	202.9	14,200	52.7	205.5	12,900	135
140	42.7	193.5	14,700	46.7	198.4	13,400	50.3	201.5	12,100	140
145	39.8	187.8	13,900	44.0	193.5	12,700	47.7	197.2	11,400	145
150	36.7	181.5	13,200	41.2	188.0	12,000	45.1	192.4	10,800	150
155	33.4	174.4	12,500	38.2	182.0	11,300	42.3	187.2	10,200	155
160	29.7	166.2	11,800	35.0	175.3	10,700	39.4	181.4	9,600	160
165	25.6	156.7	11,200	31.5	167.6	10,100	36.3	175.0	9,100	165
170	20.8	145.0	10,600	27.6	158.8	9,600	33.0	167.8	8,600	170
175	14.5	129.3	10,100	23.1	148.3	9,100	29.3	159.5	8,100	175
180				17.7	134.8	8,600	25.1	149.7	7,600	180
185				9.5	114.1	8,100	20.1	137.7	7,200	185
190							13.5	121.1	6,800	190



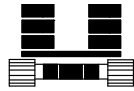
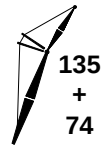
99,500 lb
+
0 lb



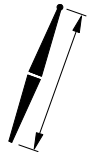
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	ft
55	74.2	249.2	39,500 *b							55
60	72.4	247.7	38,800 *b							60
65	70.5	246.0	37,400 *							65
70	68.6	244.1	35,800 *	70.9	245.7	37,700 *				70
75	66.6	242.1	34,400 *	69.0	243.9	36,200 *				75
80	64.7	239.8	32,900 *	67.1	241.9	34,800 *				80
85	62.7	237.3	31,400 *	65.1	239.6	33,300 *	66.9	240.9	32,300	85
90	60.6	234.6	30,000 *	63.1	237.2	31,200	65.0	238.6	29,900	90
95	58.6	231.7	28,600 *	61.1	234.6	29,000	63.0	236.2	27,700	95
100	56.4	228.5	27,300 *	59.0	231.7	27,000	60.9	233.5	25,800	100
105	54.3	225.1	26,000 *	56.9	228.6	25,200	58.9	230.6	24,100	105
110	52.0	221.3	24,800 *	54.8	225.2	23,600	56.7	227.5	22,600	110
115	49.7	217.2	23,600	52.5	221.5	22,200	54.6	224.1	21,200	115
120	47.3	212.8	22,200	50.3	217.5	20,900	52.3	220.4	19,900	120
125	44.8	208.0	20,900	47.9	213.2	19,700	50.1	216.3	18,700	125
130	42.2	202.7	19,700	45.4	208.4	18,600	47.7	212.0	17,700	130
135	39.5	197.0	18,700	42.8	203.3	17,500	45.2	207.2	16,700	135
140	36.6	190.6	17,700	40.1	197.6	16,600	42.6	202.0	15,800	140
145	33.5	183.4	16,800	37.3	191.4	15,700	39.9	196.3	14,900	145
150	30.1	175.4	15,900	34.2	184.5	14,900	37.0	190.0	14,100	150
155	26.3	166.0	15,100	30.9	176.6	14,100	33.9	183.0	13,400	155
160	21.9	154.9	14,300	27.2	167.6	13,400	30.6	175.1	12,700	160
165	16.4	140.5	13,600	23.0	156.9	12,700	26.9	166.0	12,100	165
170	8.0	117.3	12,900	17.8	143.5	12,100	22.6	155.1	11,400	170
175				10.5	123.7	11,400	17.3	141.3	10,800	175
180							9.6	120.5	10,300	180
185										185
190										190
195										195
200										200

MLC165 S-1

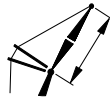
ASME B30.5



99,500 lb
+
0 lb

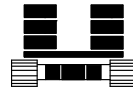
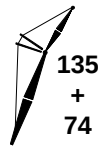


88.6 ft

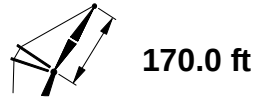
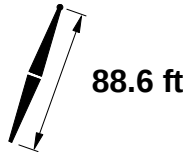


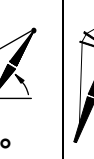
160.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105	62.0	233.0	22,200							105
110	59.9	230.3	20,800							110
115	57.8	227.2	19,500							115
120	55.7	224.0	18,300							120
125	53.5	220.4	17,200	56.7	223.0	15,700				125
130	51.2	216.5	16,200	54.5	219.6	14,700				130
135	48.9	212.3	15,300	52.3	215.8	13,900				135
140	46.5	207.8	14,400	50.0	211.8	13,100				140
145	43.9	202.8	13,600	47.6	207.4	12,300	50.9	210.4	11,100	145
150	41.3	197.4	12,900	45.1	202.7	11,600	48.6	206.1	10,400	150
155	38.5	191.4	12,200	42.5	197.4	11,000	46.1	201.5	9,800	155
160	35.5	184.8	11,500	39.8	191.7	10,400	43.6	196.5	9,300	160
165	32.3	177.3	10,900	36.9	185.4	9,800	40.9	191.0	8,700	165
170	28.8	168.8	10,400	33.8	178.4	9,300	38.1	185.0	8,200	170
175	24.8	158.9	9,800	30.5	170.4	8,800	35.1	178.2	7,800	175
180	20.1	146.8	9,300	26.7	161.2	8,300	31.9	170.7	7,300	180
185	14.0	130.6	8,800	22.4	150.3	7,800	28.3	162.1	6,900	185
190				17.1	136.3	7,400	24.3	151.9	6,500	190
195				9.2	115.0	7,000	19.5	139.5	6,100	195
200							13.1	122.3	5,700	200



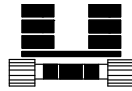
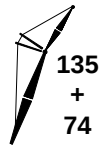
99,500 lb
+
0 lb



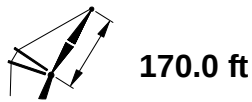
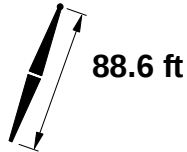
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	ft
60	73.4	258.1	35,900 *b							60
65	71.7	256.6	34,500 *b							65
70	69.9	254.8	33,000 *							70
75	68.1	252.9	31,600 *	70.3	254.5	33,300 *				75
80	66.3	250.8	30,200 *	68.5	252.7	31,900 *				80
85	64.4	248.5	28,800 *	66.7	250.6	30,600 *				85
90	62.5	246.0	27,500 *	64.8	248.3	29,200 *	66.5	249.6	29,600	90
95	60.6	243.3	26,200 *	63.0	245.9	27,900 *	64.7	247.3	27,500	95
100	58.6	240.4	24,900 *	61.0	243.2	26,600 *	62.8	244.9	25,600	100
105	56.7	237.2	23,700 *	59.1	240.4	25,000	60.9	242.2	23,900	105
110	54.6	233.8	22,500 *	57.1	237.2	23,400	58.9	239.3	22,300	110
115	52.5	230.1	21,400 *	55.1	233.9	22,000	56.9	236.2	20,900	115
120	50.4	226.1	20,300 *	53.0	230.3	20,600	54.9	232.8	19,700	120
125	48.1	221.8	19,200 *	50.9	226.3	19,400	52.8	229.1	18,500	125
130	45.8	217.1	18,300 *	48.7	222.1	18,300	50.7	225.2	17,400	130
135	43.4	212.1	17,300 *	46.4	217.5	17,300	48.5	220.9	16,500	135
140	40.9	206.5	16,400 *	44.0	212.6	16,400	46.2	216.3	15,500	140
145	38.3	200.5	15,500 *	41.5	207.1	15,500	43.8	211.3	14,700	145
150	35.5	193.8	14,800 *	38.9	201.2	14,700	41.3	205.9	13,900	150
155	32.5	186.4	13,900 *	36.1	194.7	13,900	38.7	199.9	13,200	155
160	29.2	178.0	13,000 *	33.2	187.5	13,200	35.9	193.3	12,500	160
165	25.5	168.3	12,100 *	29.9	179.3	12,500	32.9	186.0	11,900	165
170	21.2	156.8	11,200 *	26.4	170.0	11,900	29.7	177.8	11,200	170
175	15.9	141.9	10,400 *	22.3	158.9	11,300	26.0	168.3	10,700	175
180	7.7	118.0	9,700 *	17.3	145.0	10,700 *	21.9	157.1	10,100	180
185				10.2	124.6	9,900 *	16.8	142.8	9,600	185
190							9.3	121.3	9,100	190
195										195
200										200
205										205

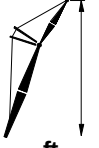
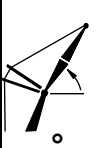
MLC165 S-1

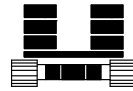
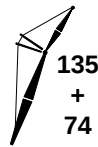
ASME B30.5



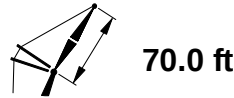
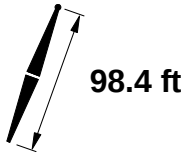
99,500 lb
+
0 lb



	75°			70°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100							100
105							105
110	61.8	241.7	20,500				110
115	59.9	238.9	19,200				115
120	57.9	235.9	18,000				120
125	55.9	232.6	16,900				125
130	53.9	229.1	15,900	56.9	231.7	14,500	130
135	51.8	225.3	15,000	54.8	228.3	13,600	135
140	49.6	221.2	14,200	52.7	224.6	12,800	140
145	47.3	216.8	13,400	50.6	220.7	12,100	145
150	45.0	212.0	12,600	48.4	216.4	11,400	150
155	42.6	206.8	12,000	46.1	211.8	10,800	155
160	40.0	201.1	11,300	43.7	206.7	10,200	160
165	37.3	194.8	10,700	41.2	201.3	9,600	165
170	34.4	187.9	10,100	38.6	195.3	9,100	170
175	31.3	180.2	9,600	35.8	188.7	8,600	175
180	27.9	171.4	9,100	32.8	181.4	8,100	180
185	24.1	161.1	8,600	29.5	173.1	7,600	185
190	19.5	148.6	8,100	25.9	163.6	7,200	190
195	13.6	131.8	7,700	21.7	152.2	6,800	195
200				16.6	137.8	6,400	200
205				9.0	115.8	6,000	205



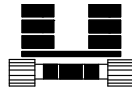
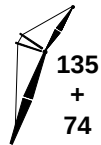
99,500 lb
+
0 lb



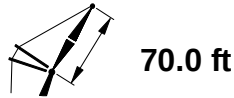
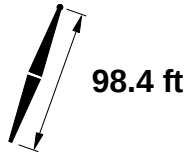
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
32	73.4	172.1	102,000 *d							32
34	71.7	171.5	102,000 *d							34
36	70.0	170.8	102,000 *d							36
38	68.2	170.0	102,000 *d							38
40	66.5	169.2	99,300 c							40
45	61.9	166.8	84,800 c	68.1	169.2	80,700 c				45
50	57.2	163.8	73,800 b	63.6	167.0	70,200 b				50
55	52.2	160.3	65,100 b	58.9	164.2	62,000 b	63.7	166.1	59,600 b	55
60	46.8	156.0	58,200 b	54.0	160.9	55,400 b	59.0	163.4	53,200 b	60
65	40.9	150.8	52,500 b	48.8	156.9	49,900	54.1	160.1	48,000 b	65
70	34.1	144.3	47,700	43.1	152.1	45,400	48.9	156.1	43,600	70
75	25.9	135.6	43,600	36.7	146.1	41,500	43.2	151.3	39,900	75
80	13.9	121.9	40,000	29.2	138.4	38,100	36.8	145.3	36,700	80
85				19.2	127.3	35,200	29.3	137.7	33,800	85
90							19.4	126.6	31,300	90
95										95
100										100
105										105
110										110
115										115

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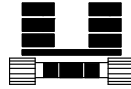
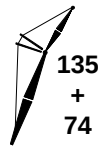
ASME B30.5



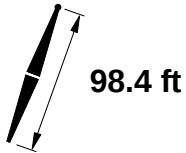
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65	62.2	163.2	44,800 b							65
70	57.4	160.3	40,700 b							70
75	52.4	156.8	37,200							75
80	47.1	152.6	34,200	55.6	156.3	31,700 b				80
85	41.2	147.4	31,600	50.5	152.5	29,300				85
90	34.5	141.0	29,300	44.9	148.0	27,100				90
95	26.4	132.5	27,200	38.8	142.4	25,200	48.1	147.2	23,300	95
100	14.7	119.1	25,300	31.7	135.3	23,500	42.4	142.3	21,700	100
105				22.7	125.6	21,900	35.9	136.1	20,200	105
110				6.4	106.4	20,400	28.2	128.1	18,900	110
115							17.6	116.3	17,700	115



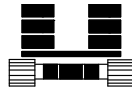
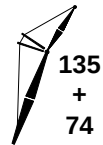
99,500 lb
+
0 lb



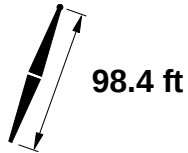
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34	74.1	182.0	93,400 *d							34
36	72.6	181.4	93,300 *d							36
38	71.1	180.7	93,300 *d							38
40	69.6	180.0	93,300 *c							40
45	65.7	177.9	84,600 c	71.0	179.9	80,400 c				45
50	61.7	175.4	73,500 b	67.1	178.0	69,900 b				50
55	57.5	172.5	64,900 b	63.2	175.6	61,700 b	67.2	177.1	59,200 b	55
60	53.2	169.1	58,000 b	59.1	172.9	55,100 b	63.2	174.8	52,900 b	60
65	48.6	165.0	52,300 b	54.8	169.6	49,700	59.1	172.1	47,700 b	65
70	43.6	160.2	47,500	50.3	165.8	45,100	54.9	168.8	43,300	70
75	38.1	154.4	43,500	45.5	161.3	41,300	50.4	165.0	39,600	75
80	31.9	147.2	40,000	40.2	155.9	38,000	45.5	160.5	36,400	80
85	24.2	137.9	36,900	34.3	149.3	35,100	40.3	155.1	33,600	85
90	13.0	123.0	34,200	27.3	140.9	32,500	34.4	148.5	31,200	90
95				17.9	128.9	30,200	27.4	140.2	29,000	95
100							18.1	128.3	27,000	100
105										105
110										110
115										115
120										120
125										125

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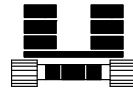
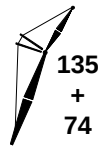
ASME B30.5



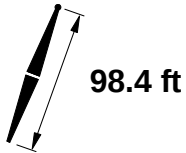
99,500 lb
+
0 lb

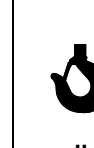
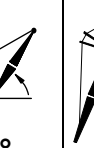
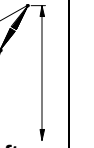


	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70	61.9	171.9	40,300 b							70
75	57.7	169.0	36,800							75
80	53.4	165.6	33,900							80
85	48.8	161.5	31,300	56.2	165.0	28,900				85
90	43.9	156.8	29,000	51.7	161.4	26,800				90
95	38.4	151.0	26,900	47.0	157.1	24,900				95
100	32.2	144.0	25,100	41.9	152.0	23,200	49.7	156.1	21,300	100
105	24.7	134.7	23,500	36.2	145.8	21,700	44.9	151.5	19,900	105
110	13.8	120.4	21,900	29.6	138.1	20,300	39.5	146.0	18,600	110
115				21.2	127.5	19,000	33.5	139.3	17,400	115
120				6.0	106.9	17,700	26.3	130.6	16,300	120
125							16.5	117.8	15,300	125



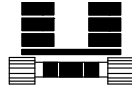
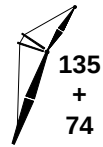
99,500 lb
+
0 lb



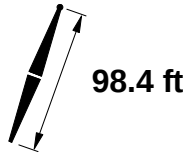
	87°			83°			80°			
										
	ft	ft	lb	ft	lb	ft	lb	ft	lb	ft
36	74.6	191.8	84,800 *d							36
38	73.2	191.2	84,600 *d							38
40	71.9	190.6	84,600 *c							40
45	68.5	188.8	83,300 *c							45
50	65.1	186.6	73,400 c	69.8	188.7	69,700 b				50
55	61.5	184.1	64,800 b	66.3	186.7	61,500 b				55
60	57.8	181.2	57,900 b	62.8	184.3	54,900 b	66.4	185.9	52,700 b	60
65	54.0	177.8	52,200 b	59.2	181.6	49,500	62.9	183.5	47,500 b	65
70	49.9	173.9	47,400	55.4	178.3	45,000	59.2	180.7	43,100	70
75	45.6	169.3	43,400	51.4	174.6	41,100	55.5	177.5	39,400	75
80	41.0	164.0	39,900	47.2	170.3	37,800	51.5	173.8	36,200	80
85	35.9	157.7	36,900	42.7	165.3	34,900	47.3	169.5	33,500	85
90	30.0	150.0	34,200	37.8	159.4	32,400	42.8	164.5	31,000	90
95	22.8	139.9	31,800	32.3	152.3	30,200	37.9	158.6	28,900	95
100	12.3	124.1	29,700	25.7	143.3	28,100	32.3	151.5	27,000	100
105				16.9	130.4	26,300	25.8	142.5	25,200	105
110							17.1	129.8	23,600	110
115										115
120										120
125										125
130										130
135										135

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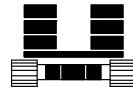
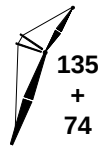
ASME B30.5



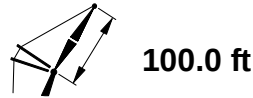
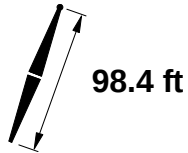
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	61.7	180.6	36,600							75
80	58.0	177.7	33,600							80
85	54.2	174.3	31,100							85
90	50.1	170.4	28,800	56.6	173.7	26,500				90
95	45.8	165.9	26,800	52.7	170.1	24,700				95
100	41.2	160.6	25,000	48.6	166.0	23,000				100
105	36.1	154.4	23,300	44.2	161.3	21,500	50.9	165.0	19,700	105
110	30.3	146.8	21,900	39.4	155.7	20,100	46.7	160.6	18,400	110
115	23.2	136.9	20,500	34.1	149.0	18,900	42.2	155.5	17,200	115
120	13.0	121.6	19,300	27.9	140.6	17,700	37.2	149.5	16,200	120
125				20.0	129.4	16,700	31.5	142.2	15,200	125
130				5.6	107.4	15,600	24.8	132.8	14,300	130
135							15.5	119.2	13,400	135



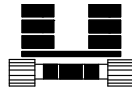
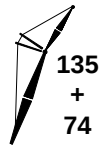
99,500 lb
+
0 lb



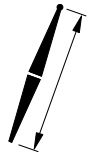
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38	75.0	201.6	76,900 *d							38
40	73.8	201.0	76,800 *c							40
45	70.8	199.4	75,800 *c							45
50	67.7	197.5	72,500 *c							50
55	64.6	195.3	64,500 b	68.8	197.5	61,200 b				55
60	61.4	192.8	57,600 b	65.7	195.4	54,600 b				60
65	58.0	189.9	51,900 b	62.5	193.0	49,200	65.8	194.6	47,100 b	65
70	54.6	186.5	47,200	59.3	190.2	44,700	62.6	192.2	42,800	70
75	51.0	182.7	43,200	55.9	187.0	40,800	59.3	189.4	39,100	75
80	47.2	178.4	39,700	52.3	183.4	37,500	55.9	186.2	35,900	80
85	43.2	173.4	36,700	48.6	179.3	34,700	52.4	182.6	33,200	85
90	38.8	167.7	34,000	44.7	174.6	32,200	48.7	178.5	30,800	90
95	34.0	160.9	31,700	40.4	169.1	29,900	44.7	173.8	28,600	95
100	28.4	152.6	29,600	35.8	162.7	27,900	40.5	168.3	26,700	100
105	21.7	141.9	27,700	30.6	155.1	26,100	35.9	162.0	25,000	105
110	11.6	125.2	25,900	24.3	145.5	24,500	30.6	154.4	23,400	110
115				16.0	131.9	23,000	24.4	144.8	22,000	115
120							16.2	131.3	20,700	120
125										125
130										130
135										135
140										140
145										145

MLC165 S-1

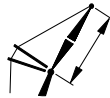
ASME B30.5



99,500 lb
+
0 lb

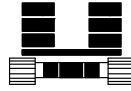
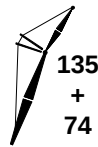


98.4 ft

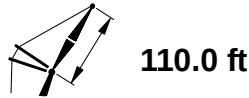
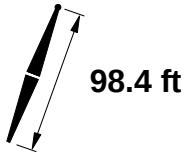


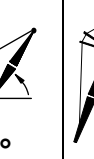
100.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	61.5	189.2	33,300							80
85	58.2	186.3	30,700							85
90	54.8	183.0	28,400							90
95	51.2	179.2	26,400	56.9	182.4	24,300				95
100	47.4	174.9	24,600	53.4	178.9	22,600				100
105	43.4	170.0	23,000	49.8	174.9	21,100				105
110	39.0	164.3	21,600	45.9	170.4	19,800	51.9	173.8	18,000	110
115	34.2	157.6	20,300	41.8	165.2	18,600	48.2	169.6	16,900	115
120	28.7	149.4	19,100	37.3	159.1	17,400	44.2	164.8	15,800	120
125	22.0	138.9	17,900	32.3	151.9	16,400	39.9	159.3	14,900	125
130	12.3	122.7	16,900	26.4	143.0	15,400	35.2	152.8	14,000	130
135				19.0	131.1	14,500	29.9	144.9	13,200	135
140				5.3	107.9	13,600	23.5	135.0	12,400	140
145							14.7	120.5	11,700	145



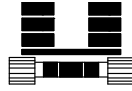
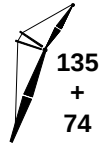
99,500 lb
+
0 lb



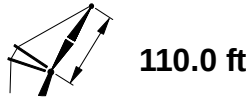
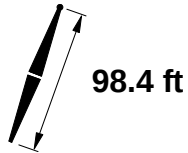
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	72.6	210.0	70,100 *c							45
50	69.8	208.3	67,700 *c							50
55	67.0	206.3	64,400 b	70.8	208.2	61,100 b				55
60	64.2	204.0	57,500 b	68.1	206.3	54,500 b				60
65	61.2	201.4	51,900 b	65.2	204.1	49,100				65
70	58.2	198.5	47,100	62.3	201.7	44,600	65.3	203.3	42,700	70
75	55.1	195.2	43,100	59.3	198.9	40,800	62.4	200.8	39,000	75
80	51.9	191.5	39,600	56.3	195.7	37,500	59.4	198.0	35,900	80
85	48.5	187.4	36,600	53.1	192.2	34,600	56.3	194.9	33,100	85
90	44.9	182.6	34,000	49.7	188.2	32,100	53.1	191.4	30,700	90
95	41.1	177.3	31,700	46.2	183.7	29,900	49.8	187.4	28,600	95
100	36.9	171.1	29,600	42.5	178.6	27,900	46.3	182.9	26,700	100
105	32.3	163.9	27,700	38.5	172.7	26,100	42.6	177.8	25,000	105
110	27.1	155.1	26,000	34.1	165.9	24,500	38.5	171.9	23,400	110
115	20.6	143.8	24,400	29.1	157.8	23,100	34.2	165.1	22,000	115
120	11.1	126.2	23,000	23.2	147.6	21,700	29.2	157.0	20,700	120
125				15.3	133.2	20,500	23.3	146.9	19,500	125
130							15.4	132.6	18,400	130
135										135
140										140
145										145
150										150
155										155

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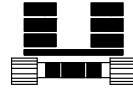
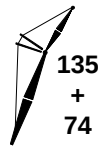
ASME B30.5



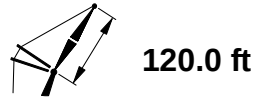
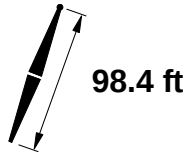
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	61.4	197.9	30,600							85
90	58.4	195.0	28,400							90
95	55.3	191.7	26,400							95
100	52.0	188.0	24,600	57.2	191.0	22,600				100
105	48.6	183.9	23,000	54.1	187.6	21,100				105
110	45.1	179.2	21,600	50.8	183.8	19,700				110
115	41.3	173.9	20,300	47.3	179.4	18,500	52.7	182.6	16,800	115
120	37.1	167.7	19,100	43.7	174.5	17,400	49.3	178.5	15,800	120
125	32.6	160.6	18,000	39.8	168.9	16,400	45.8	173.9	14,900	125
130	27.4	151.9	16,900	35.5	162.4	15,500	42.0	168.7	14,000	130
135	21.0	140.8	16,000	30.7	154.8	14,600	38.0	162.8	13,200	135
140	11.8	123.7	15,100	25.2	145.3	13,800	33.5	155.8	12,400	140
145				18.1	132.7	13,000	28.5	147.5	11,700	145
150				5.1	108.3	12,200	22.4	137.0	11,100	150
155							14.1	121.8	10,400	155



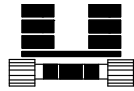
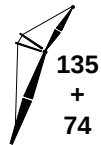
99,500 lb
+
0 lb



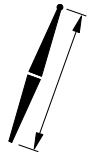
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	74.1	220.4	64,100 *c							45
50	71.6	218.9	62,600 *c							50
55	69.0	217.1	60,300 *b							55
60	66.5	215.0	57,300 b	70.0	217.0	54,200 b				60
65	63.8	212.7	51,600 b	67.4	215.0	48,800				65
70	61.1	210.1	46,900	64.8	212.8	44,300	67.4	214.2	42,400	70
75	58.4	207.2	42,900	62.1	210.3	40,500	64.8	212.0	38,700	75
80	55.5	203.9	39,400	59.4	207.5	37,200	62.2	209.5	35,500	80
85	52.6	200.3	36,400	56.6	204.4	34,300	59.4	206.7	32,800	85
90	49.5	196.3	33,800	53.7	200.9	31,800	56.6	203.6	30,400	90
95	46.3	191.7	31,400	50.6	197.0	29,600	53.7	200.1	28,300	95
100	42.9	186.7	29,300	47.5	192.7	27,600	50.7	196.2	26,400	100
105	39.2	180.9	27,500	44.1	187.8	25,900	47.5	191.9	24,700	105
110	35.3	174.3	25,800	40.6	182.4	24,300	44.2	187.0	23,100	110
115	30.9	166.7	24,300	36.8	176.1	22,800	40.7	181.6	21,700	115
120	25.9	157.4	22,900	32.6	168.9	21,500	36.8	175.3	20,500	120
125	19.7	145.6	21,600	27.8	160.3	20,300	32.7	168.1	19,300	125
130	10.6	127.1	20,300	22.2	149.6	19,100	27.9	159.6	18,200	130
135				14.6	134.5	18,100	22.3	148.9	17,200	135
140							14.8	134.0	16,200	140
145										145
150										150
155										155
160										160
165										165

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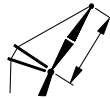
ASME B30.5



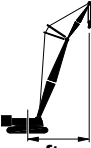
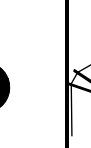
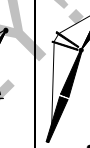
99,500 lb
+
0 lb

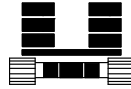
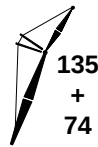


98.4 ft

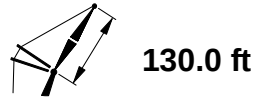
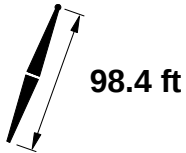


120.0 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	61.3	206.6	28,000							90
95	58.5	203.7	26,000							95
100	55.7	200.4	24,300							100
105	52.7	196.8	22,700	57.5	199.7	20,700				105
110	49.7	192.8	21,200	54.6	196.3	19,400				110
115	46.4	188.3	19,900	51.6	192.6	18,200				115
120	43.1	183.2	18,700	48.5	188.4	17,100				120
125	39.4	177.5	17,700	45.2	183.7	16,000	50.3	187.4	14,500	125
130	35.5	171.0	16,700	41.7	178.4	15,100	47.1	183.0	13,600	130
135	31.2	163.4	15,700	38.0	172.4	14,300	43.7	178.1	12,800	135
140	26.2	154.3	14,900	33.9	165.6	13,500	40.2	172.5	12,100	140
145	20.1	142.6	14,000	29.4	157.4	12,700	36.3	166.1	11,400	145
150	11.3	124.7	13,300	24.1	147.5	12,000	32.1	158.8	10,700	150
155				17.3	134.3	11,300	27.2	150.0	10,100	155
160				4.9	108.8	10,700	21.4	138.9	9,600	160
165							13.5	123.0	9,000	165



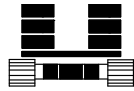
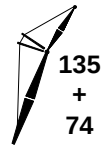
99,500 lb
+
0 lb



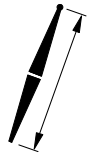
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	73.0	229.4	48,600 *c							50
55	70.7	227.7	47,700 *b							55
60	68.4	225.9	46,900 *b							60
65	66.0	223.7	46,100 *b	69.2	225.8	47,600 *				65
70	63.5	221.4	45,300 *	66.9	223.8	44,100				70
75	61.0	218.8	42,700	64.4	221.5	40,300	66.9	222.9	38,500	75
80	58.5	215.9	39,200	62.0	219.0	37,000	64.5	220.7	35,300	80
85	55.9	212.6	36,200	59.4	216.2	34,100	62.0	218.2	32,600	85
90	53.2	209.1	33,600	56.8	213.1	31,600	59.5	215.4	30,200	90
95	50.4	205.1	31,200	54.2	209.7	29,400	56.9	212.3	28,000	95
100	47.4	200.8	29,200	51.4	205.9	27,400	54.2	208.8	26,100	100
105	44.4	195.9	27,300	48.5	201.7	25,700	51.4	205.0	24,500	105
110	41.1	190.5	25,600	45.5	197.0	24,100	48.6	200.8	22,900	110
115	37.6	184.4	24,100	42.3	191.8	22,600	45.6	196.2	21,500	115
120	33.9	177.5	22,700	38.9	186.0	21,300	42.4	191.0	20,300	120
125	29.7	169.4	21,400	35.3	179.4	20,100	39.0	185.2	19,100	125
130	24.9	159.7	20,200	31.3	171.7	19,000	35.4	178.6	18,000	130
135	19.0	147.3	19,100	26.7	162.7	18,000	31.3	171.0	17,000	135
140	10.2	128.0	18,100	21.3	151.5	17,000	26.8	162.0	16,100	140
145				14.0	135.8	16,100	21.4	150.8	15,300	145
150							14.2	135.2	14,400	150
155										155
160										160
165										165
170										170
175										175

MLC165 S-1

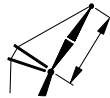
ASME B30.5



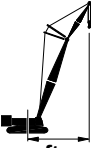
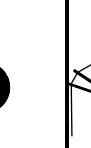
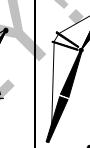
99,500 lb
+
0 lb

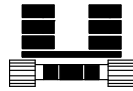
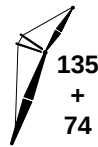


98.4 ft

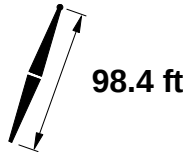


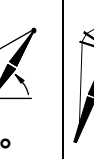
130.0 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95	61.2	215.2	25,800							95
100	58.6	212.3	24,000							100
105	56.0	209.1	22,400							105
110	53.3	205.6	21,000	57.7	208.4	19,100				110
115	50.5	201.6	19,700	55.0	205.1	17,900				115
120	47.6	197.3	18,500	52.3	201.4	16,800				120
125	44.5	192.5	17,400	49.4	197.3	15,800				125
130	41.3	187.1	16,400	46.5	192.8	14,900	51.1	196.2	13,400	130
135	37.8	181.0	15,500	43.3	187.8	14,000	48.2	192.0	12,600	135
140	34.1	174.1	14,700	40.0	182.2	13,200	45.1	187.2	11,800	140
145	29.9	166.1	13,900	36.5	175.8	12,500	41.9	182.0	11,200	145
150	25.1	156.5	13,100	32.6	168.5	11,800	38.5	176.1	10,500	150
155	19.3	144.3	12,400	28.2	160.0	11,200	34.8	169.4	9,900	155
160	10.8	125.7	11,700	23.1	149.6	10,600	30.8	161.6	9,400	160
165				16.6	135.8	10,000	26.1	152.4	8,800	165
170				4.7	109.2	9,400	20.6	140.8	8,300	170
175							12.9	124.2	7,800	175



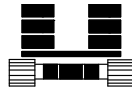
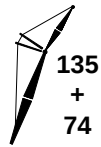
99,500 lb
+
0 lb



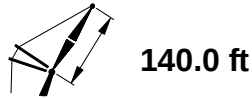
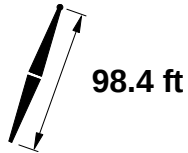
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	74.3	239.8	45,500 *c							50
55	72.1	238.3	44,700 *b							55
60	70.0	236.6	44,000 *b							60
65	67.8	234.6	43,200 *b	70.8	236.5	44,300 *				65
70	65.6	232.5	42,500 *	68.6	234.6	43,800 *				70
75	63.3	230.1	40,800 *	66.4	232.5	40,000				75
80	61.0	227.4	38,900	64.1	230.2	36,700	66.4	231.7	35,000	80
85	58.6	224.5	35,900	61.8	227.7	33,800	64.2	229.4	32,200	85
90	56.2	221.3	33,300	59.5	224.9	31,300	61.9	226.8	29,800	90
95	53.7	217.8	31,000	57.1	221.8	29,100	59.5	224.0	27,700	95
100	51.1	213.9	28,900	54.6	218.4	27,200	57.1	220.9	25,800	100
105	48.4	209.7	27,100	52.0	214.6	25,400	54.6	217.5	24,100	105
110	45.6	205.1	25,400	49.4	210.6	23,800	52.1	213.8	22,600	110
115	42.7	199.9	23,900	46.6	206.1	22,400	49.4	209.7	21,200	115
120	39.6	194.2	22,500	43.8	201.1	21,000	46.7	205.3	20,000	120
125	36.2	187.7	21,200	40.7	195.6	19,800	43.8	200.3	18,800	125
130	32.6	180.4	20,000	37.5	189.4	18,700	40.8	194.8	17,700	130
135	28.6	172.0	18,900	34.0	182.5	17,700	37.5	188.7	16,800	135
140	24.0	161.9	17,900	30.1	174.5	16,800	34.0	181.7	15,900	140
145	18.3	148.9	17,000	25.7	165.1	15,900	30.2	173.7	15,000	145
150	9.8	128.9	16,100	20.5	153.3	15,000	25.8	164.3	14,200	150
155				13.5	137.0	14,200	20.6	152.7	13,500	155
160							13.7	136.5	12,700	160
165										165
170										170
175										175
180										180
185										185

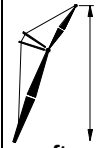
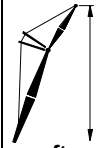
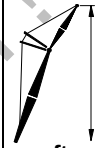
MLC165 S-1

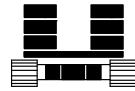
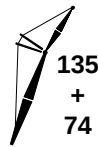
ASME B30.5



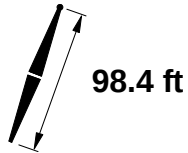
99,500 lb
+
0 lb



	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	61.1	223.9	23,700							100
105	58.7	221.0	22,100							105
110	56.3	217.8	20,700							110
115	53.8	214.3	19,400	57.8	217.1	17,500				115
120	51.2	210.5	18,200	55.4	213.8	16,400				120
125	48.5	206.3	17,100	52.8	210.1	15,400				125
130	45.8	201.6	16,100	50.2	206.2	14,500				130
135	42.8	196.5	15,200	47.5	201.8	13,700	51.7	205.0	12,200	135
140	39.7	190.8	14,400	44.7	197.0	12,900	49.1	200.9	11,500	140
145	36.4	184.4	13,600	41.7	191.7	12,200	46.3	196.3	10,800	145
150	32.8	177.2	12,800	38.5	185.7	11,500	43.4	191.3	10,200	150
155	28.8	168.8	12,200	35.1	179.0	10,900	40.3	185.7	9,600	155
160	24.2	158.7	11,500	31.4	171.4	10,300	37.1	179.5	9,000	160
165	18.6	146.0	10,900	27.2	162.5	9,700	33.5	172.4	8,500	165
170	10.4	126.6	10,300	22.3	151.6	9,200	29.6	164.3	8,000	170
175				16.0	137.2	8,600	25.2	154.6	7,600	175
180				4.5	109.6	8,100	19.8	142.6	7,100	180
185							12.5	125.3	6,700	185



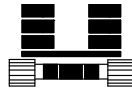
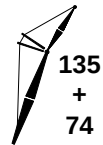
99,500 lb
+
0 lb



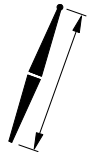
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55	73.4	248.7	41,900 *b							55
60	71.4	247.2	41,200 *b							60
65	69.3	245.4	40,500 *b							65
70	67.3	243.4	39,100 *	70.1	245.3	40,700 *				70
75	65.2	241.2	37,600 *	68.0	243.4	39,800 *				75
80	63.1	238.7	36,100 *	66.0	241.2	36,600				80
85	60.9	236.1	34,600 *	63.9	238.9	33,700	66.0	240.4	32,100	85
90	58.7	233.2	33,200 *	61.7	236.3	31,200	63.9	238.1	29,700	90
95	56.4	230.0	30,900	59.5	233.5	29,000	61.7	235.5	27,600	95
100	54.1	226.5	28,800	57.3	230.4	27,000	59.5	232.7	25,700	100
105	51.7	222.8	27,000	55.0	227.1	25,300	57.3	229.6	24,000	105
110	49.2	218.6	25,300	52.6	223.4	23,700	55.0	226.3	22,500	110
115	46.7	214.1	23,800	50.2	219.4	22,300	52.6	222.6	21,100	115
120	44.0	209.2	22,400	47.6	215.1	20,900	50.2	218.6	19,900	120
125	41.2	203.7	21,100	45.0	210.3	19,700	47.7	214.3	18,700	125
130	38.2	197.7	20,000	42.2	205.0	18,600	45.0	209.5	17,700	130
135	35.0	191.0	18,900	39.3	199.2	17,600	42.3	204.2	16,700	135
140	31.5	183.3	17,900	36.2	192.8	16,700	39.3	198.4	15,800	140
145	27.6	174.5	17,000	32.8	185.5	15,800	36.2	192.0	14,900	145
150	23.1	163.9	16,100	29.1	177.1	15,000	32.8	184.7	14,200	150
155	17.6	150.5	15,300	24.9	167.3	14,200	29.1	176.4	13,400	155
160	9.5	129.8	14,500	19.8	155.1	13,500	24.9	166.6	12,700	160
165				13.1	138.2	12,800	19.9	154.5	12,100	165
170							13.2	137.6	11,400	170
175										175
180										180
185										185
190										190
195										195

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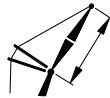
ASME B30.5



99,500 lb
+
0 lb

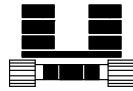
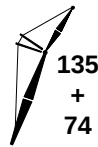


98.4 ft

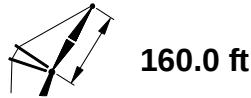
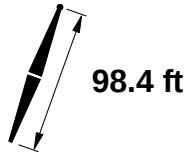


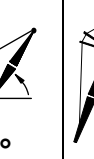
150.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100										100
105	61.0	232.5	22,000							105
110	58.8	229.6	20,500							110
115	56.5	226.5	19,300							115
120	54.2	223.0	18,100	58.0	225.7	16,300				120
125	51.8	219.3	17,000	55.7	222.5	15,300				125
130	49.4	215.2	16,000	53.3	218.9	14,400				130
135	46.8	210.7	15,100	50.9	215.0	13,600				135
140	44.1	205.7	14,300	48.4	210.8	12,800	52.3	213.8	11,400	140
145	41.3	200.3	13,500	45.8	206.1	12,100	49.9	209.8	10,700	145
150	38.3	194.3	12,800	43.1	201.0	11,400	47.3	205.4	10,100	150
155	35.1	187.6	12,100	40.2	195.4	10,800	44.7	200.5	9,500	155
160	31.7	180.0	11,500	37.2	189.1	10,200	41.9	195.2	8,900	160
165	27.8	171.3	10,800	33.9	182.1	9,600	38.9	189.3	8,400	165
170	23.4	160.8	10,300	30.3	174.2	9,100	35.8	182.8	7,900	170
175	18.0	147.6	9,700	26.2	164.8	8,600	32.4	175.4	7,500	175
180	10.1	127.5	9,200	21.5	153.5	8,100	28.6	166.9	7,100	180
185				15.5	138.6	7,700	24.3	156.8	6,600	185
190				4.4	110.0	7,200	19.1	144.3	6,200	190
195							12.0	126.4	5,800	195



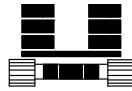
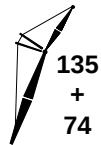
99,500 lb
+
0 lb



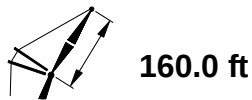
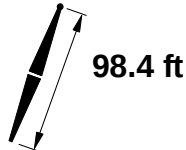
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	ft
55	74.4	259.1	38,900 *b							55
60	72.6	257.7	38,200 *b							60
65	70.7	256.0	37,200 *b							65
70	68.8	254.2	35,700 *							70
75	66.8	252.1	34,300 *	69.5	254.1	36,200 *				75
80	64.9	249.9	32,900 *	67.5	252.1	34,800 *				80
85	62.9	247.4	31,500 *	65.6	250.0	33,400	67.6	251.3	31,800	85
90	60.9	244.7	30,100 *	63.6	247.6	30,900	65.6	249.1	29,400	90
95	58.8	241.8	28,700 *	61.6	245.0	28,700	63.6	246.8	27,300	95
100	56.7	238.7	27,400 *	59.5	242.2	26,800	61.6	244.2	25,400	100
105	54.5	235.3	26,200 *	57.4	239.1	25,000	59.6	241.3	23,700	105
110	52.3	231.5	24,900 *	55.3	235.8	23,400	57.5	238.3	22,200	110
115	50.0	227.5	23,500	53.1	232.2	22,000	55.3	235.0	20,800	115
120	47.6	223.1	22,100	50.8	228.3	20,700	53.1	231.4	19,600	120
125	45.1	218.3	20,900	48.5	224.0	19,500	50.8	227.4	18,400	125
130	42.5	213.1	19,700	46.0	219.4	18,400	48.5	223.2	17,400	130
135	39.8	207.4	18,600	43.5	214.3	17,400	46.1	218.6	16,400	135
140	36.9	201.1	17,700	40.8	208.8	16,400	43.5	213.5	15,500	140
145	33.8	194.0	16,700	38.0	202.7	15,500	40.9	208.0	14,700	145
150	30.4	186.1	15,900	35.0	196.0	14,700	38.0	202.0	13,900	150
155	26.7	176.9	15,100	31.7	188.4	14,000	35.0	195.2	13,200	155
160	22.4	165.9	14,300	28.1	179.7	13,300	31.8	187.6	12,500	160
165	17.1	152.0	13,600	24.1	169.5	12,600	28.2	178.9	11,800	165
170	9.2	130.6	12,900	19.2	156.8	11,900	24.1	168.8	11,200	170
175				12.7	139.3	11,300	19.3	156.2	10,600	175
180							12.8	138.8	10,100	180
185										185
190										190
195										195
200										200

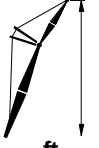
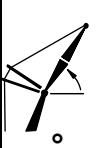
MLC165 S-1

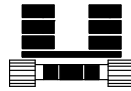
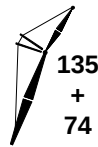
ASME B30.5



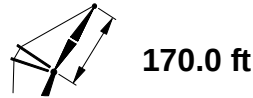
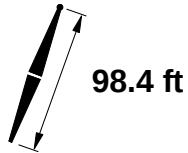
99,500 lb
+
0 lb



	75°			70°			
							
	ft	ft	lb	ft	lb	lb	ft
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100							100
105	63.0	243.9	21,600				105
110	61.0	241.2	20,200				110
115	58.9	238.3	18,900				115
120	56.8	235.2	17,800				120
125	54.6	231.7	16,700				125
130	52.4	228.0	15,700	56.0	231.1	14,100	130
135	50.1	224.0	14,800	53.8	227.6	13,200	135
140	47.7	219.7	14,000	51.5	223.8	12,500	140
145	45.2	214.9	13,200	49.2	219.7	11,700	145
150	42.6	209.7	12,500	46.8	215.2	11,100	150
155	39.9	204.0	11,800	44.3	210.3	10,400	155
160	37.1	197.7	11,200	41.6	204.9	9,900	160
165	34.0	190.7	10,600	38.9	199.0	9,300	165
170	30.6	182.8	10,000	35.9	192.4	8,800	170
175	26.9	173.7	9,500	32.8	185.1	8,300	175
180	22.6	162.9	9,000	29.3	176.8	7,800	180
185	17.4	149.1	8,500	25.4	167.1	7,400	185
190	9.7	128.4	8,000	20.8	155.4	7,000	190
195				15.0	139.9	6,600	195
200				4.2	110.3	6,100	200



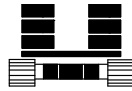
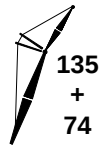
99,500 lb
+
0 lb



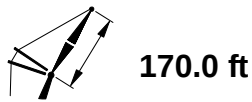
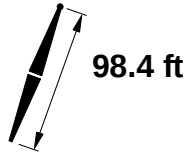
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60	73.6	268.1	35,500 *b							60
65	71.9	266.6	34,300 *b							65
70	70.1	264.8	32,900 *							70
75	68.3	262.9	31,500 *	70.7	264.7	33,300 *				75
80	66.4	260.9	30,200 *	68.9	262.9	32,000 *				80
85	64.6	258.6	28,800 *	67.1	260.9	30,700 *				85
90	62.7	256.1	27,500 *	65.3	258.7	29,400 *	67.1	260.0	29,200	90
95	60.8	253.4	26,300 *	63.4	256.3	28,100 *	65.3	257.8	27,000	95
100	58.9	250.5	25,000 *	61.5	253.7	26,500	63.4	255.4	25,200	100
105	56.9	247.4	23,800 *	59.6	250.8	24,800	61.5	252.8	23,500	105
110	54.8	244.0	22,600 *	57.6	247.8	23,200	59.6	250.0	22,000	110
115	52.7	240.3	21,500 *	55.6	244.5	21,700	57.6	247.0	20,600	115
120	50.6	236.4	20,400 *	53.5	240.9	20,400	55.6	243.7	19,300	120
125	48.4	232.1	19,400 *	51.4	237.1	19,200	53.5	240.1	18,200	125
130	46.1	227.4	18,400 *	49.2	232.9	18,100	51.4	236.3	17,100	130
135	43.7	222.4	17,500 *	46.9	228.4	17,100	49.2	232.1	16,200	135
140	41.2	217.0	16,600 *	44.6	223.6	16,200	47.0	227.6	15,300	140
145	38.6	211.0	15,700 *	42.1	218.3	15,300	44.6	222.8	14,400	145
150	35.8	204.4	14,800 *	39.5	212.5	14,500	42.2	217.5	13,700	150
155	32.8	197.0	14,000 *	36.8	206.1	13,800	39.6	211.7	12,900	155
160	29.5	188.8	13,100 *	33.9	199.1	13,100	36.9	205.3	12,300	160
165	25.9	179.2	12,200 *	30.7	191.2	12,400	33.9	198.3	11,600	165
170	21.7	167.9	11,300 *	27.3	182.1	11,800	30.8	190.4	11,000	170
175	16.6	153.5	10,500 *	23.3	171.6	11,200	27.3	181.4	10,500	175
180	8.9	131.4	9,900 *	18.6	158.5	10,600	23.4	170.9	9,900	180
185				12.3	140.4	10,100	18.7	157.9	9,400	185
190							12.4	139.9	8,900	190
195										195
200										200
205										205
210										210

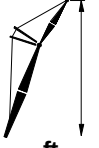
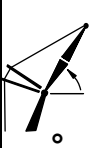
MLC165 S-1

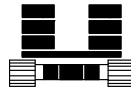
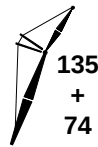
ASME B30.5



99,500 lb
+
0 lb



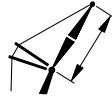
	75°			70°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100							100
105							105
110	62.8	252.5	19,900				110
115	60.9	249.9	18,700				115
120	59.0	247.0	17,500				120
125	57.0	243.8	16,400				125
130	54.9	240.5	15,500				130
135	52.8	236.8	14,600	56.2	239.8	13,000	135
140	50.7	232.9	13,700	54.2	236.4	12,200	140
145	48.5	228.6	12,900	52.0	232.6	11,500	145
150	46.2	224.0	12,200	49.9	228.5	10,800	150
155	43.8	219.0	11,600	47.6	224.2	10,200	155
160	41.3	213.6	10,900	45.3	219.4	9,600	160
165	38.7	207.6	10,300	42.9	214.3	9,100	165
170	35.9	201.0	9,800	40.4	208.6	8,600	170
175	32.9	193.7	9,300	37.7	202.5	8,100	175
180	29.7	185.5	8,800	34.8	195.6	7,600	180
185	26.1	176.1	8,300	31.8	188.0	7,200	185
190	21.9	164.8	7,800	28.4	179.4	6,800	190
195	16.9	150.6	7,400	24.6	169.3	6,400	195
200	9.4	129.2	7,000	20.2	157.2	6,000	200
205				14.5	141.2	5,600	205
210				4.1	110.7	5,200	210



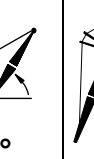
99,500 lb
+
0 lb



108.3 ft

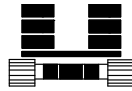
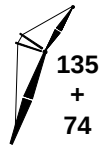


70.0 ft

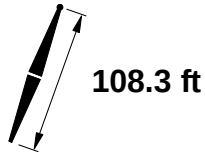
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	ft	lb	ft	ft	ft
32		73.9	182.1	97,900 *d						32
34		72.2	181.5	97,900 *d						34
36		70.4	180.8	97,900 *d						36
38		68.7	180.1	97,900 *d						38
40		66.9	179.3	97,900 *c						40
45		62.4	176.9	84,500 c	69.2	179.4	80,000 c			45
50		57.7	174.0	73,500 b	64.7	177.3	69,600 b			50
55		52.7	170.5	64,900 b	60.1	174.7	61,400 b	65.2	176.6	55
60		47.4	166.3	58,000 b	55.2	171.5	54,900 b	60.6	174.1	60
65		41.5	161.2	52,300 b	50.1	167.7	49,500	55.8	171.0	65
70		34.9	154.9	47,600	44.5	163.1	45,000	50.7	167.3	70
75		26.9	146.5	43,500	38.3	157.4	41,100	45.2	162.7	75
80		15.6	133.6	39,900	31.1	150.2	37,800	39.1	157.2	80
85					22.0	140.2	34,900	32.1	150.2	85
90					2.8	117.5	32,100	23.2	140.7	90
95								8.0	122.8	95
100										100
105										105
110										110
115										115
120										120

MLC165 S-1

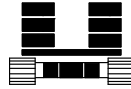
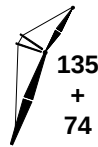
ASME B30.5



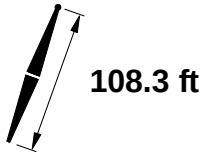
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70	59.9	171.4	39,800 b							70
75	55.0	168.2	36,400 b							75
80	49.8	164.3	33,400							80
85	44.2	159.7	30,900	53.9	164.4	28,300 b				85
90	38.0	154.0	28,600	48.7	160.4	26,300				90
95	30.8	146.7	26,600	43.0	155.6	24,400	52.6	159.6	22,200	95
100	21.5	136.4	24,800	36.6	149.5	22,700	47.2	155.4	20,700	100
105				29.0	141.8	21,200	41.4	150.3	19,300	105
110				19.0	130.6	19,800	34.7	143.9	18,100	110
115							26.7	135.4	16,900	115
120							15.2	122.4	15,800	120



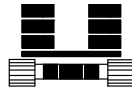
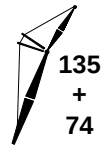
99,500 lb
+
0 lb



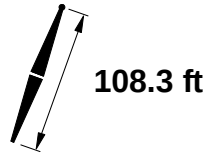
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34	74.5	191.9	89,900 *d							34
36	73.0	191.3	89,800 *d							36
38	71.5	190.7	89,800 *d							38
40	70.0	190.0	89,700 *c							40
45	66.1	188.0	84,300 c							45
50	62.1	185.6	73,300 b	68.0	188.2	69,300 b				50
55	58.0	182.7	64,700 b	64.1	186.0	61,100 b				55
60	53.6	179.3	57,800 b	60.1	183.4	54,600 b	64.6	185.3	52,200 b	60
65	49.1	175.3	52,100 b	55.8	180.2	49,200	60.6	182.7	47,000 b	65
70	44.1	170.5	47,400	51.4	176.6	44,700	56.4	179.7	42,700	70
75	38.7	164.9	43,300	46.7	172.2	40,900	51.9	176.1	39,100	75
80	32.6	157.9	39,900	41.5	167.0	37,600	47.2	171.8	35,900	80
85	25.1	148.8	36,800	35.8	160.8	34,700	42.1	166.7	33,200	85
90	14.6	135.0	34,100	29.1	152.9	32,200	36.5	160.6	30,700	90
95				20.5	142.1	29,900	29.9	153.0	28,600	95
100				2.6	117.7	27,800	21.7	142.7	26,600	100
105							7.4	123.4	24,800	105
110										110
115										115
120										120
125										125
130										130

MLC165 S-1

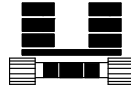
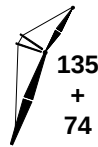
ASME B30.5



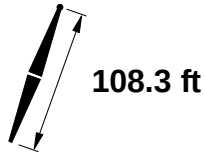
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	59.9	180.0	36,000 b							75
80	55.6	176.9	33,100							80
85	51.2	173.2	30,500							85
90	46.4	168.8	28,300	54.7	173.1	25,900				90
95	41.3	163.6	26,300	50.2	169.3	24,000				95
100	35.5	157.3	24,500	45.4	164.8	22,400				100
105	28.7	149.3	22,900	40.1	159.3	20,900	48.9	164.3	19,000	105
110	20.1	138.3	21,400	34.2	152.7	19,600	44.0	159.6	17,700	110
115				27.1	144.3	18,400	38.6	153.9	16,600	115
120				17.7	132.2	17,200	32.4	146.9	15,600	120
125							24.9	137.7	14,600	125
130							14.2	123.7	13,700	130



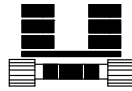
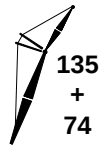
99,500 lb
+
0 lb



	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36	74.9	201.7	81,200 *d							36
38	73.6	201.2	81,000 *d							38
40	72.3	200.6	81,000 *c							40
45	68.9	198.8	80,500 *c							45
50	65.4	196.7	73,100 c	70.6	198.9	69,000 b				50
55	61.9	194.2	64,600 b	67.2	197.0	60,900 b				55
60	58.2	191.3	57,700 b	63.7	194.7	54,400 b	67.6	196.3	52,000 b	60
65	54.4	188.0	52,000 b	60.1	192.0	49,000	64.1	194.0	46,800 b	65
70	50.4	184.1	47,300	56.3	188.9	44,600	60.5	191.4	42,500	70
75	46.1	179.7	43,200	52.4	185.3	40,700	56.8	188.4	38,900	75
80	41.5	174.5	39,800	48.3	181.2	37,500	52.9	184.8	35,700	80
85	36.4	168.3	36,800	43.8	176.4	34,600	48.8	180.8	33,000	85
90	30.7	160.7	34,100	39.0	170.7	32,100	44.4	176.0	30,600	90
95	23.7	151.0	31,700	33.7	163.9	29,900	39.6	170.5	28,500	95
100	13.7	136.2	29,600	27.4	155.4	27,900	34.3	163.8	26,600	100
105				19.4	143.9	26,100	28.2	155.6	24,800	105
110				2.5	117.9	24,300	20.5	144.5	23,300	110
115							7.0	124.1	21,800	115
120										120
125										125
130										130
135										135
140										140

MLC165 S-1

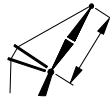
ASME B30.5



99,500 lb
+
0 lb

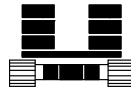
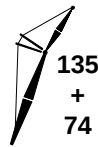


108.3 ft

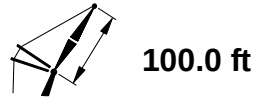
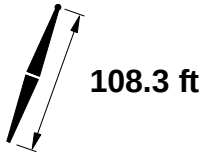


90.0 ft

	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	59.9	188.7	32,900							80
85	56.1	185.6	30,300							85
90	52.2	182.0	28,100							90
95	48.1	177.8	26,100	55.3	181.8	23,800				95
100	43.6	172.9	24,400	51.4	178.1	22,200				100
105	38.8	167.2	22,800	47.2	173.8	20,700				105
110	33.4	160.4	21,300	42.7	168.8	19,400	50.3	173.2	17,500	110
115	27.1	151.8	20,000	37.7	162.9	18,200	46.0	168.7	16,400	115
120	18.9	140.0	18,800	32.2	155.7	17,100	41.4	163.5	15,400	120
125				25.6	146.6	16,100	36.3	157.3	14,500	125
130				16.7	133.7	15,100	30.5	149.7	13,600	130
135							23.5	139.9	12,800	135
140							13.4	124.9	12,000	140



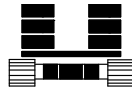
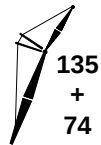
99,500 lb
+
0 lb



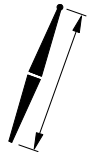
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40	74.1	211.0	74,200 *d							40
45	71.1	209.4	73,900 *c							45
50	68.0	207.6	72,000 *c							50
55	64.9	205.4	64,300 b	69.6	207.7	60,600 b				55
60	61.7	202.9	57,400 b	66.5	205.7	54,100 b				60
65	58.4	200.0	51,800 b	63.3	203.4	48,700	66.8	205.0	46,500 b	65
70	55.0	196.7	47,000	60.1	200.7	44,300	63.7	202.7	42,200	70
75	51.4	193.0	43,000	56.7	197.6	40,500	60.4	200.1	38,500	75
80	47.6	188.7	39,500	53.2	194.1	37,200	57.1	197.0	35,400	80
85	43.6	183.8	36,500	49.5	190.1	34,300	53.6	193.6	32,700	85
90	39.3	178.1	33,900	45.6	185.5	31,800	50.0	189.6	30,300	90
95	34.5	171.5	31,600	41.5	180.3	29,600	46.1	185.1	28,200	95
100	29.0	163.4	29,500	37.0	174.1	27,700	42.0	180.0	26,300	100
105	22.4	153.0	27,600	31.9	166.8	25,900	37.5	174.0	24,600	105
110	13.0	137.4	25,800	26.0	157.8	24,300	32.5	166.8	23,100	110
115				18.4	145.5	22,800	26.7	158.0	21,600	115
120				2.4	118.1	21,300	19.4	146.3	20,300	120
125							6.7	124.7	19,100	125
130										130
135										135
140										140
145										145
150										150

MLC165 S-1

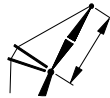
ASME B30.5



99,500 lb
+
0 lb

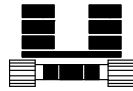
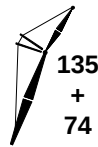


108.3 ft

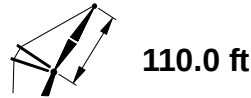
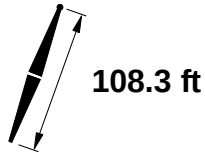


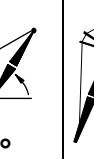
100.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	59.9	197.4	29,900							85
90	56.5	194.3	27,700							90
95	53.0	190.7	25,800							95
100	49.4	186.7	24,000	55.8	190.5	21,800				100
105	45.5	182.1	22,500	52.3	186.9	20,300				105
110	41.3	176.8	21,000	48.6	182.8	19,000				110
115	36.7	170.6	19,700	44.6	178.0	17,900	51.3	182.0	16,000	115
120	31.6	163.3	18,600	40.4	172.6	16,800	47.5	177.8	15,000	120
125	25.7	154.1	17,500	35.7	166.2	15,800	43.5	172.8	14,100	125
130	17.9	141.6	16,400	30.5	158.5	14,800	39.2	167.2	13,200	130
135				24.2	148.8	14,000	34.4	160.5	12,500	135
140				15.9	135.1	13,100	28.9	152.3	11,700	140
145							22.3	141.9	11,000	145
150							12.7	126.0	10,400	150



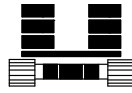
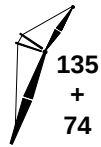
99,500 lb
+
0 lb



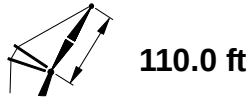
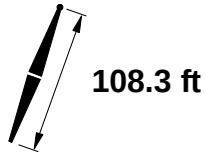
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	72.9	220.0	68,000 *c							45
50	70.1	218.3	66,900 *c							50
55	67.3	216.3	64,200 b							55
60	64.5	214.1	57,300 b	68.7	216.5	54,000 b				60
65	61.5	211.5	51,700 b	65.9	214.4	48,600				65
70	58.5	208.7	47,000	63.0	212.1	44,200	66.2	213.8	42,100	70
75	55.4	205.4	42,900	60.1	209.3	40,400	63.4	211.4	38,500	75
80	52.2	201.8	39,500	57.0	206.3	37,100	60.4	208.7	35,300	80
85	48.8	197.6	36,500	53.8	202.8	34,300	57.4	205.7	32,600	85
90	45.3	193.0	33,900	50.5	199.0	31,800	54.2	202.3	30,200	90
95	41.5	187.7	31,500	47.1	194.6	29,600	50.9	198.5	28,100	95
100	37.4	181.6	29,500	43.4	189.6	27,600	47.5	194.2	26,300	100
105	32.8	174.5	27,600	39.5	184.0	25,900	43.9	189.3	24,600	105
110	27.7	165.9	25,900	35.2	177.4	24,300	40.0	183.7	23,000	110
115	21.4	154.9	24,400	30.4	169.6	22,800	35.7	177.3	21,700	115
120	12.4	138.5	22,900	24.7	160.0	21,500	31.0	169.7	20,400	120
125				17.5	147.1	20,300	25.5	160.3	19,200	125
130				2.2	118.3	19,000	18.5	147.9	18,100	130
135							6.3	125.2	17,100	135
140										140
145										145
150										150
155										155
160										160

MLC165 S-1

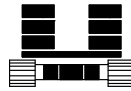
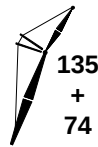
ASME B30.5



99,500 lb
+
0 lb



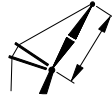
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	62.9	208.7	29,900							85
90	59.9	206.0	27,700							90
95	56.9	202.9	25,700							95
100	53.7	199.5	24,000							100
105	50.4	195.6	22,400	56.2	199.2	20,300				105
110	46.9	191.2	21,000	53.0	195.7	19,000				110
115	43.2	186.2	19,700	49.7	191.7	17,800				115
120	39.3	180.5	18,600	46.2	187.1	16,700	52.1	190.8	15,000	120
125	35.0	173.9	17,500	42.4	182.0	15,800	48.7	186.7	14,100	125
130	30.1	166.0	16,500	38.4	176.2	14,800	45.2	182.0	13,200	130
135	24.4	156.3	15,600	34.0	169.3	14,000	41.4	176.7	12,400	135
140	17.1	143.2	14,700	29.0	161.2	13,200	37.3	170.6	11,700	140
145				23.1	150.9	12,500	32.7	163.5	11,100	145
150				15.1	136.5	11,800	27.5	154.9	10,400	150
155							21.2	143.8	9,800	155
160							12.1	127.1	9,200	160



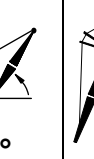
99,500 lb
+
0 lb



108.3 ft

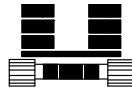
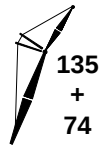


120.0 ft

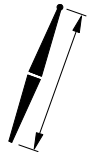
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
45	74.3	230.4	62,300 *c							45
50	71.8	228.9	61,800 *c							50
55	69.3	227.1	59,700 *b							55
60	66.7	225.1	57,100 b	70.6	227.2	53,700 b				60
65	64.1	222.8	51,400 b	68.0	225.3	48,300				65
70	61.4	220.2	46,700	65.4	223.2	43,900				70
75	58.7	217.3	42,700	62.8	220.7	40,100	65.7	222.5	38,100	75
80	55.8	214.1	39,300	60.1	218.0	36,800	63.1	220.1	35,000	80
85	52.9	210.5	36,300	57.3	215.0	34,000	60.4	217.4	32,300	85
90	49.8	206.5	33,600	54.4	211.6	31,500	57.6	214.4	29,900	90
95	46.6	202.1	31,300	51.4	207.8	29,300	54.7	211.0	27,800	95
100	43.2	197.0	29,200	48.2	203.6	27,400	51.7	207.3	26,000	100
105	39.6	191.4	27,400	45.0	198.8	25,600	48.6	203.1	24,300	105
110	35.7	184.9	25,700	41.5	193.5	24,000	45.4	198.5	22,800	110
115	31.4	177.4	24,200	37.7	187.5	22,600	41.9	193.2	21,400	115
120	26.5	168.3	22,800	33.6	180.5	21,300	38.2	187.3	20,100	120
125	20.5	156.8	21,500	29.0	172.3	20,000	34.1	180.4	19,000	125
130	11.9	139.5	20,300	23.7	162.2	18,900	29.6	172.4	17,900	130
135				16.7	148.6	17,900	24.4	162.6	16,900	135
140				2.1	118.5	16,800	17.7	149.5	16,000	140
145							6.1	125.8	15,100	145
150										150
155										155
160										160
165										165
170										170

MLC165 S-1

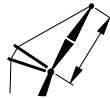
ASME B30.5



99,500 lb
+
0 lb

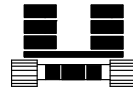
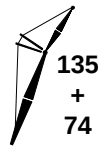


108.3 ft

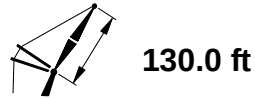
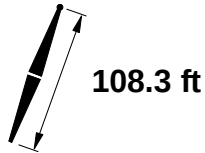


120.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	62.6	217.4	27,300							90
95	59.9	214.7	25,400							95
100	57.1	211.6	23,600							100
105	54.2	208.2	22,100							105
110	51.2	204.4	20,700	56.5	207.9	18,600				110
115	48.1	200.2	19,400	53.6	204.4	17,400				115
120	44.8	195.4	18,200	50.6	200.5	16,400				120
125	41.3	190.0	17,200	47.4	196.2	15,400	52.8	199.6	13,700	125
130	37.5	184.0	16,200	44.1	191.3	14,500	49.7	195.6	12,800	130
135	33.4	177.0	15,300	40.5	185.8	13,700	46.5	191.1	12,100	135
140	28.8	168.7	14,400	36.7	179.5	12,900	43.2	186.1	11,400	140
145	23.4	158.5	13,600	32.5	172.3	12,200	39.5	180.4	10,700	145
150	16.4	144.6	12,900	27.8	163.7	11,500	35.6	173.9	10,100	150
155				22.1	152.9	10,800	31.3	166.3	9,500	155
160				14.5	137.8	10,200	26.3	157.3	9,000	160
165							20.3	145.6	8,400	165
170							11.6	128.2	7,900	170



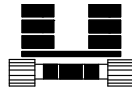
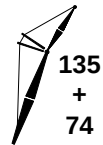
99,500 lb
+
0 lb



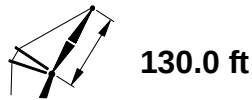
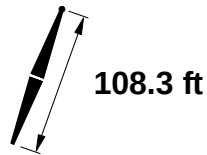
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	73.3	239.3	47,700 *c							50
55	71.0	237.7	46,900 *b							55
60	68.6	235.9	46,100 *b							60
65	66.2	233.8	45,300 *b	69.8	236.0	46,800 *				65
70	63.8	231.5	44,600 *	67.4	234.1	43,600				70
75	61.3	228.9	42,500	65.0	231.9	39,800	67.7	233.4	37,900	75
80	58.8	226.0	39,000	62.6	229.4	36,600	65.3	231.2	34,800	80
85	56.1	222.8	36,100	60.0	226.7	33,800	62.9	228.8	32,100	85
90	53.4	219.3	33,400	57.5	223.6	31,300	60.3	226.0	29,700	90
95	50.7	215.4	31,100	54.8	220.3	29,100	57.8	223.1	27,600	95
100	47.7	211.1	29,000	52.1	216.6	27,100	55.1	219.7	25,700	100
105	44.7	206.3	27,200	49.2	212.5	25,400	52.4	216.1	24,000	105
110	41.5	200.9	25,500	46.2	207.9	23,800	49.6	212.0	22,500	110
115	38.0	194.9	24,000	43.1	202.9	22,400	46.6	207.5	21,200	115
120	34.3	188.1	22,600	39.8	197.2	21,100	43.5	202.5	19,900	120
125	30.1	180.1	21,300	36.2	190.8	19,900	40.2	196.9	18,800	125
130	25.4	170.6	20,200	32.3	183.4	18,800	36.6	190.6	17,700	130
135	19.7	158.6	19,100	27.9	174.8	17,700	32.8	183.4	16,700	135
140	11.4	140.6	18,000	22.7	164.2	16,800	28.4	175.0	15,800	140
145				16.1	150.0	15,900	23.4	164.7	15,000	145
150				2.1	118.7	15,000	17.0	151.1	14,200	150
155							5.8	126.3	13,400	155
160										160
165										165
170										170
175										175
180										180

MLC165 S-1

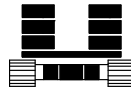
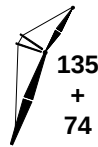
ASME B30.5



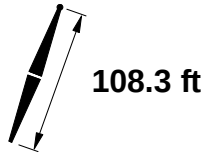
99,500 lb
+
0 lb



	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95	62.4	226.1	25,100							95
100	59.9	223.3	23,400							100
105	57.3	220.3	21,800							105
110	54.7	216.9	20,400							110
115	51.9	213.2	19,200	56.8	216.6	17,200				115
120	49.1	209.1	18,000	54.1	213.1	16,100				120
125	46.1	204.5	16,900	51.4	209.3	15,100				125
130	43.0	199.4	16,000	48.5	205.1	14,300				130
135	39.6	193.7	15,100	45.5	200.5	13,400	50.6	204.4	11,800	135
140	36.0	187.3	14,200	42.3	195.3	12,700	47.7	200.1	11,100	140
145	32.1	179.9	13,500	38.9	189.4	11,900	44.6	195.3	10,500	145
150	27.7	171.2	12,700	35.2	182.8	11,300	41.4	190.0	9,900	150
155	22.5	160.5	12,000	31.2	175.2	10,700	37.9	183.9	9,300	155
160	15.7	146.0	11,400	26.6	166.1	10,100	34.2	177.1	8,800	160
165				21.2	154.8	9,500	30.0	169.1	8,200	165
170				13.9	139.0	9,000	25.3	159.5	7,800	170
175							19.5	147.4	7,300	175
180							11.1	129.1	6,800	180



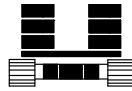
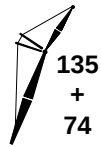
99,500 lb
+
0 lb



	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	74.5	249.8	44,700 *c							50
55	72.4	248.3	43,900 *b							55
60	70.2	246.6	43,200 *b							60
65	68.0	244.7	42,500 *b							65
70	65.8	242.5	41,900 *	69.1	244.8	43,100 *				70
75	63.5	240.2	40,700 *	66.9	242.8	39,500				75
80	61.2	237.5	38,800	64.7	240.6	36,300	67.2	242.1	34,400	80
85	58.8	234.7	35,800	62.4	238.1	33,500	64.9	239.9	31,700	85
90	56.4	231.5	33,200	60.0	235.3	31,000	62.7	237.4	29,400	90
95	53.9	228.0	30,900	57.7	232.3	28,800	60.3	234.7	27,300	95
100	51.4	224.2	28,800	55.2	229.0	26,900	57.9	231.7	25,400	100
105	48.7	220.0	26,900	52.7	225.3	25,100	55.5	228.4	23,700	105
110	45.9	215.4	25,300	50.0	221.3	23,500	53.0	224.8	22,200	110
115	43.0	210.3	23,800	47.3	216.9	22,100	50.4	220.9	20,900	115
120	39.9	204.6	22,400	44.5	212.1	20,800	47.6	216.5	19,600	120
125	36.6	198.3	21,100	41.5	206.7	19,600	44.8	211.7	18,500	125
130	33.0	191.1	19,900	38.3	200.7	18,500	41.8	206.4	17,400	130
135	29.0	182.8	18,900	34.8	194.0	17,500	38.7	200.5	16,500	135
140	24.5	172.8	17,900	31.1	186.3	16,500	35.3	193.9	15,600	140
145	18.9	160.3	16,900	26.8	177.2	15,700	31.5	186.3	14,700	145
150	11.0	141.5	16,000	21.9	166.2	14,800	27.4	177.4	13,900	150
155				15.5	151.4	14,100	22.5	166.7	13,200	155
160				2.0	118.9	13,300	16.4	152.5	12,500	160
165							5.6	126.8	11,800	165
170										170
175										175
180										180
185										185
190										190

MLC165 S-1

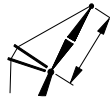
ASME B30.5



99,500 lb
+
0 lb

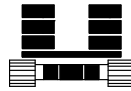
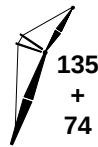


108.3 ft



140.0 ft

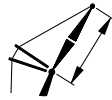
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95										95
100	62.3	234.8	23,000							100
105	59.9	232.0	21,500							105
110	57.5	229.0	20,100							110
115	55.1	225.6	18,800							115
120	52.5	222.0	17,700	57.0	225.3	15,700				120
125	49.9	218.0	16,600	54.6	221.9	14,800				125
130	47.2	213.5	15,600	52.0	218.1	13,900				130
135	44.3	208.7	14,700	49.4	214.0	13,100				135
140	41.3	203.3	13,900	46.6	209.5	12,300	51.3	213.3	10,700	140
145	38.1	197.3	13,200	43.7	204.6	11,600	48.6	209.1	10,100	145
150	34.7	190.5	12,400	40.7	199.0	10,900	45.8	204.4	9,500	150
155	30.9	182.7	11,800	37.4	192.9	10,300	42.9	199.3	8,900	155
160	26.6	173.6	11,100	33.9	185.9	9,700	39.8	193.7	8,400	160
165	21.6	162.4	10,500	30.0	177.9	9,200	36.5	187.3	7,900	165
170	15.1	147.4	9,900	25.7	168.4	8,700	32.9	180.1	7,400	170
175				20.4	156.7	8,200	28.9	171.7	7,000	175
180				13.4	140.2	7,700	24.4	161.7	6,600	180
185							18.8	149.1	6,100	185
190							10.7	130.1	5,700	190



99,500 lb
+
0 lb

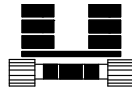
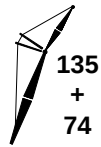


108.3 ft

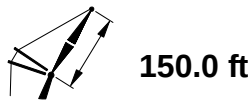
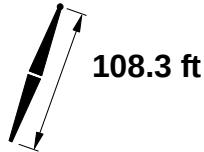


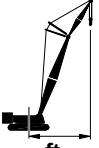
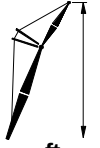
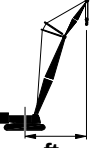
150.0 ft

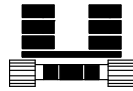
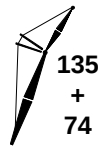
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55	73.6	258.7	41,000 *b							55
60	71.6	257.2	40,400 *b							60
65	69.5	255.4	39,800 *b							65
70	67.5	253.4	38,900 *	70.6	255.5	40,100 *				70
75	65.4	251.2	37,500 *	68.5	253.6	39,400				75
80	63.3	248.8	36,000 *	66.5	251.5	36,200				80
85	61.1	246.2	34,600 *	64.4	249.3	33,300	66.7	250.8	31,600	85
90	58.9	243.3	33,100	62.2	246.7	30,900	64.6	248.6	29,200	90
95	56.7	240.2	30,800	60.0	244.0	28,700	62.5	246.1	27,100	95
100	54.4	236.7	28,700	57.8	241.0	26,700	60.3	243.4	25,300	100
105	52.0	233.0	26,800	55.5	237.7	25,000	58.1	240.4	23,600	105
110	49.5	228.9	25,200	53.2	234.1	23,400	55.8	237.1	22,100	110
115	46.9	224.4	23,700	50.7	230.2	22,000	53.5	233.6	20,800	115
120	44.3	219.5	22,300	48.2	225.9	20,700	51.0	229.7	19,500	120
125	41.5	214.1	21,000	45.6	221.2	19,500	48.5	225.5	18,400	125
130	38.5	208.2	19,900	42.9	216.1	18,400	45.9	220.9	17,300	130
135	35.3	201.5	18,800	40.0	210.4	17,400	43.2	215.8	16,400	135
140	31.8	194.0	17,800	36.9	204.1	16,500	40.3	210.2	15,500	140
145	28.0	185.3	16,900	33.6	197.1	15,600	37.3	204.0	14,700	145
150	23.6	175.0	16,000	30.0	189.0	14,800	34.0	197.0	13,900	150
155	18.3	161.9	15,200	25.9	179.6	14,000	30.4	189.1	13,200	155
160	10.6	142.5	14,400	21.1	168.1	13,300	26.4	179.8	12,500	160
165				15.0	152.8	12,600	21.7	168.6	11,800	165
170				1.9	119.1	11,900	15.8	153.9	11,200	170
175							5.4	127.3	10,600	175
180										180
185										185
190										190



99,500 lb
+
0 lb



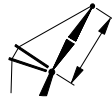
	75°			70°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100							100
105	62.1	243.4	21,300				105
110	59.9	240.7	20,000				110
115	57.7	237.6	18,700				115
120	55.4	234.3	17,600				120
125	53.1	230.7	16,500	57.2	233.9	14,700	125
130	50.6	226.8	15,500	54.9	230.6	13,800	130
135	48.1	222.5	14,700	52.6	226.9	13,000	135
140	45.5	217.8	13,800	50.1	222.9	12,200	140
145	42.8	212.7	13,100	47.6	218.5	11,500	145
150	39.9	207.0	12,400	44.9	213.7	10,800	150
155	36.8	200.6	11,700	42.2	208.5	10,200	155
160	33.5	193.5	11,100	39.2	202.7	9,700	160
165	29.8	185.4	10,500	36.1	196.2	9,100	165
170	25.7	175.9	9,900	32.7	188.9	8,600	170
175	20.9	164.3	9,400	29.0	180.5	8,100	175
180	14.6	148.7	8,900	24.8	170.7	7,700	180
185				19.7	158.4	7,200	185
190				12.9	141.4	6,800	190



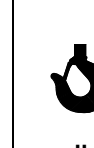
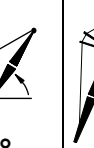
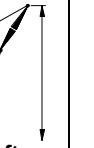
99,500 lb
+
0 lb



108.3 ft

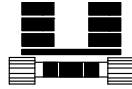
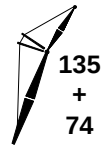


160.0 ft

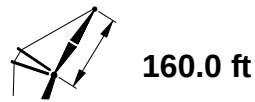
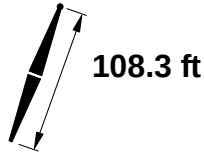
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
55	74.6	269.1	38,200 *b							55
60	72.8	267.7	37,600 *b							60
65	70.9	266.0	37,000 *b							65
70	69.0	264.2	35,500 *							70
75	67.0	262.2	34,200 *	69.9	264.3	36,200 *				75
80	65.1	259.9	32,800 *	68.0	262.4	34,800 *				80
85	63.1	257.5	31,400 *	66.1	260.3	33,100				85
90	61.1	254.9	30,100 *	64.1	257.9	30,600	66.3	259.6	28,900	90
95	59.0	252.0	28,800 *	62.1	255.4	28,400	64.3	257.3	26,800	95
100	56.9	248.8	27,500 *	60.0	252.6	26,500	62.3	254.8	25,000	100
105	54.7	245.4	26,300 *	58.0	249.6	24,700	60.3	252.0	23,300	105
110	52.5	241.8	24,900	55.8	246.4	23,100	58.2	249.1	21,800	110
115	50.2	237.8	23,400	53.6	242.8	21,700	56.1	245.8	20,400	115
120	47.8	233.4	22,000	51.4	239.0	20,400	53.9	242.3	19,200	120
125	45.4	228.7	20,800	49.0	234.8	19,200	51.6	238.5	18,100	125
130	42.8	223.5	19,600	46.6	230.3	18,100	49.3	234.4	17,000	130
135	40.1	217.9	18,600	44.1	225.4	17,100	46.9	229.9	16,100	135
140	37.2	211.6	17,600	41.5	220.0	16,200	44.4	225.0	15,200	140
145	34.1	204.6	16,700	38.7	214.0	15,300	41.8	219.7	14,400	145
150	30.8	196.8	15,800	35.7	207.4	14,500	39.0	213.8	13,600	150
155	27.1	187.7	15,000	32.5	200.0	13,800	36.1	207.3	12,900	155
160	22.9	177.0	14,200	29.0	191.6	13,100	32.9	200.0	12,200	160
165	17.7	163.5	13,500	25.1	181.9	12,400	29.5	191.7	11,600	165
170	10.3	143.4	12,800	20.5	169.9	11,800	25.6	182.1	11,000	170
175				14.5	154.0	11,200	21.1	170.5	10,400	175
180				1.9	119.2	10,500	15.3	155.3	9,900	180
185							5.3	127.7	9,300	185
190										190
195										195
200										200

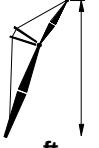
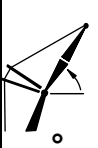
MLC165 S-1

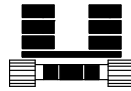
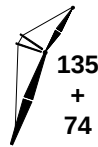
ASME B30.5



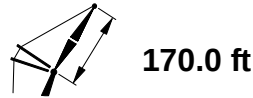
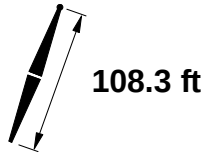
99,500 lb
+
0 lb



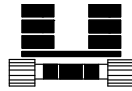
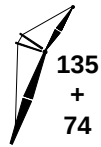
	75°			70°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100							100
105							105
110	62.0	252.1	19,600				110
115	59.9	249.3	18,400				115
120	57.9	246.3	17,200				120
125	55.7	243.0	16,200				125
130	53.5	239.5	15,200	57.4	242.6	13,400	130
135	51.3	235.6	14,300	55.3	239.3	12,600	135
140	48.9	231.4	13,500	53.0	235.7	11,800	140
145	46.5	226.9	12,700	50.8	231.7	11,100	145
150	44.0	221.9	12,000	48.4	227.5	10,500	150
155	41.3	216.5	11,400	46.0	222.9	9,900	155
160	38.5	210.5	10,800	43.4	217.8	9,300	160
165	35.6	203.9	10,200	40.8	212.3	8,800	165
170	32.4	196.5	9,600	37.9	206.2	8,300	170
175	28.8	188.0	9,100	34.9	199.4	7,800	175
180	24.9	178.2	8,600	31.7	191.8	7,400	180
185	20.2	166.1	8,100	28.1	183.1	6,900	185
190	14.2	149.9	7,700	24.0	172.8	6,500	190
195				19.1	160.1	6,100	195
200				12.5	142.5	5,800	200



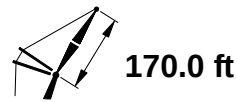
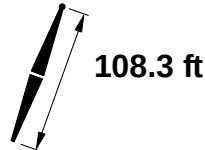
99,500 lb
+
0 lb



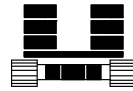
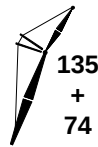
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60	73.8	278.1	34,900 *b							60
65	72.0	276.6	34,100 *b							65
70	70.3	274.9	32,800 *							70
75	68.5	273.0	31,400 *							75
80	66.6	270.9	30,100 *	69.4	273.1	32,000 *				80
85	64.8	268.6	28,800 *	67.6	271.2	30,800 *				85
90	62.9	266.2	27,500 *	65.7	269.0	29,500 *	67.8	270.4	28,700	90
95	61.0	263.5	26,300 *	63.9	266.6	28,200	65.9	268.3	26,600	95
100	59.1	260.6	25,000 *	62.0	264.1	26,200	64.1	266.0	24,700	100
105	57.1	257.5	23,900 *	60.0	261.3	24,500	62.2	263.4	23,100	105
110	55.0	254.2	22,700 *	58.1	258.3	22,900	60.3	260.7	21,600	110
115	53.0	250.5	21,600 *	56.1	255.1	21,500	58.3	257.7	20,200	115
120	50.8	246.6	20,600 *	54.0	251.6	20,200	56.3	254.5	19,000	120
125	48.6	242.4	19,500 *	51.9	247.8	19,000	54.3	251.0	17,800	125
130	46.3	237.8	18,500 *	49.7	243.7	17,900	52.1	247.3	16,800	130
135	43.9	232.8	17,600 *	47.5	239.3	16,900	50.0	243.3	15,800	135
140	41.5	227.4	16,600 *	45.1	234.5	16,000	47.7	238.9	15,000	140
145	38.8	221.4	15,900 *	42.7	229.3	15,100	45.4	234.2	14,100	145
150	36.1	214.9	15,000 *	40.2	223.7	14,300	43.0	229.0	13,400	150
155	33.1	207.7	14,200 *	37.5	217.5	13,600	40.5	223.4	12,700	155
160	29.9	199.5	13,200 *	34.6	210.6	12,900	37.8	217.3	12,000	160
165	26.3	190.1	12,300 *	31.5	202.9	12,200	35.0	210.5	11,400	165
170	22.2	179.0	11,400 *	28.1	194.2	11,600	31.9	202.9	10,800	170
175	17.2	165.0	10,700 *	24.3	184.0	11,000	28.6	194.3	10,200	175
180	10.0	144.3	9,900 *	19.8	171.7	10,500	24.8	184.4	9,700	180
185				14.1	155.3	9,900	20.4	172.4	9,200	185
190				1.8	119.4	9,300	14.8	156.6	8,700	190
195							5.1	128.2	8,200	195
200										200



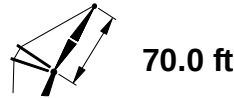
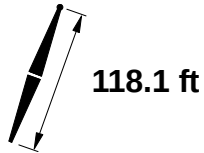
99,500 lb
+
0 lb



	75°		
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110			
115	61.9	260.8	18,100
120	59.9	258.0	16,900
125	58.0	255.0	15,900
130	56.0	251.7	15,000
135	53.9	248.2	14,100
140	51.8	244.4	13,300
145	49.6	240.3	12,500
150	47.4	235.9	11,800
155	45.0	231.1	11,100
160	42.6	225.9	10,500
165	40.0	220.2	9,900
170	37.4	214.0	9,400
175	34.5	207.1	8,900
180	31.4	199.3	8,400
185	28.0	190.6	7,900
190	24.1	180.3	7,500
195	19.6	167.9	7,100
200	13.7	151.2	6,700



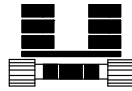
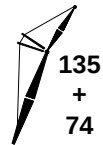
99,500 lb
+
0 lb



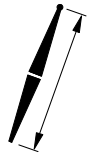
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
32	74.3	192.1	93,900 *d							32
34	72.6	191.5	93,900 *d							34
36	70.9	190.8	93,900 *d							36
38	69.2	190.1	93,900 *d							38
40	67.4	189.3	93,800 *c							40
45	62.9	187.0	84,400 c	70.2	189.7	79,400 c				45
50	58.2	184.2	73,400 c	65.8	187.6	69,100 c				50
55	53.2	180.7	64,900 b	61.2	185.1	61,000 b	66.8	187.1	58,000 c	55
60	47.9	176.6	58,000 b	56.4	182.1	54,500 b	62.2	184.7	51,800 b	60
65	42.1	171.6	52,300 b	51.4	178.5	49,100	57.5	181.8	46,700 b	65
70	35.6	165.4	47,500	45.9	174.1	44,600	52.5	178.3	42,500 b	70
75	27.8	157.3	43,400	39.9	168.7	40,800	47.1	174.1	38,800	75
80	17.1	145.2	39,900	33.0	161.9	37,500	41.3	168.9	35,700	80
85				24.5	152.8	34,600	34.6	162.5	33,000	85
90				11.0	137.1	32,000	26.6	154.1	30,500	90
95							15.0	140.9	28,300	95
100										100
105										105
110										110
115										115
120										120
125										125

MLC165 S-1

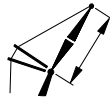
ASME B30.5



99,500 lb
+
0 lb

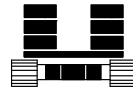
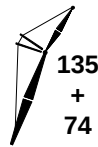


118.1 ft

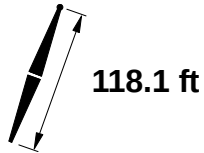


70.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70	62.2	182.3	38,900 b							70
75	57.5	179.4	35,500 b							75
80	52.5	175.9	32,600 b							80
85	47.2	171.7	30,100	57.3	176.0	27,300 b				85
90	41.3	166.5	27,900	52.3	172.4	25,300				90
95	34.6	160.1	26,000	46.9	168.2	23,500				95
100	26.6	151.7	24,200	41.0	163.0	21,900	51.7	167.9	19,600	100
105	15.0	138.5	22,500	34.3	156.5	20,400	46.3	163.5	18,300	105
110				26.2	147.9	19,100	40.3	158.2	17,100	110
115				14.3	134.3	17,900	33.5	151.6	16,000	115
120							25.1	142.6	15,000	120
125							12.3	127.9	14,000	125



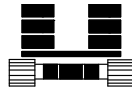
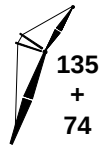
99,500 lb
+
0 lb



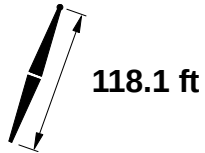
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34	74.8	201.9	86,400 *d							34
36	73.4	201.3	86,300 *d							36
38	71.9	200.7	86,300 *d							38
40	70.3	200.0	86,200 *c							40
45	66.5	198.0	84,200 c							45
50	62.5	195.7	73,200 c	69.0	198.5	68,700 c				50
55	58.4	192.8	64,600 b	65.1	196.4	60,700 b				55
60	54.1	189.5	57,800 b	61.1	193.8	54,200 b	65.9	195.8	51,500 b	60
65	49.5	185.5	52,100 b	56.9	190.8	48,800	62.0	193.4	46,400 b	65
70	44.7	180.9	47,300	52.5	187.3	44,400	57.8	190.5	42,100 b	70
75	39.3	175.3	43,300	47.8	183.1	40,600	53.5	187.1	38,500	75
80	33.2	168.5	39,800	42.8	178.1	37,300	48.9	183.0	35,400	80
85	26.0	159.7	36,800	37.2	172.2	34,500	43.9	178.3	32,700	85
90	16.0	146.7	34,000	30.8	164.8	31,900	38.5	172.6	30,300	90
95				22.9	154.9	29,700	32.3	165.5	28,200	95
100				10.3	138.1	27,600	24.8	156.3	26,300	100
105							14.0	142.1	24,500	105
110										110
115										115
120										120
125										125
130										130
135										135

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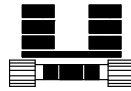
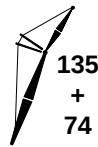
ASME B30.5



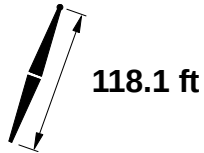
99,500 lb
+
0 lb



	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	62.0	191.0	35,100 b							75
80	57.8	188.1	32,300							80
85	53.5	184.6	29,800							85
90	48.9	180.6	27,600	57.6	184.6	24,900				90
95	43.9	175.9	25,600	53.3	181.2	23,100				95
100	38.5	170.2	23,900	48.7	177.1	21,500				100
105	32.3	163.1	22,300	43.7	172.3	20,100	52.8	176.6	17,900	105
110	24.8	154.0	20,900	38.2	166.6	18,800	48.1	172.5	16,700	110
115	14.1	139.8	19,600	32.0	159.5	17,600	43.1	167.6	15,700	115
120				24.4	150.2	16,500	37.6	161.7	14,700	120
125				13.4	135.6	15,500	31.3	154.5	13,800	125
130							23.5	144.8	12,900	130
135							11.5	128.9	12,100	135



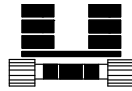
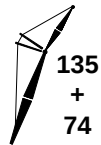
99,500 lb
+
0 lb



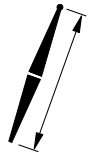
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38	73.9	211.2	78,100 *d							38
40	72.6	210.6	78,000 *d							40
45	69.2	208.8	77,800 *c							45
50	65.8	206.8	73,000 c							50
55	62.2	204.3	64,500 b	68.0	207.2	60,400 b				55
60	58.6	201.5	57,600 b	64.5	205.0	54,000 b				60
65	54.8	198.2	51,900 b	60.9	202.5	48,600 b	65.3	204.5	46,200 b	65
70	50.8	194.4	47,200	57.2	199.5	44,200	61.7	202.0	41,900 b	70
75	46.5	190.0	43,200	53.4	196.0	40,400	58.1	199.1	38,300	75
80	42.0	184.9	39,700	49.3	192.0	37,200	54.2	195.8	35,200	80
85	37.0	178.8	36,700	44.9	187.4	34,300	50.2	191.9	32,500	85
90	31.3	171.4	34,100	40.2	181.9	31,800	45.9	187.4	30,200	90
95	24.5	162.0	31,700	35.0	175.4	29,600	41.3	182.2	28,100	95
100	15.0	148.0	29,500	29.0	167.4	27,600	36.2	175.9	26,200	100
105				21.5	156.8	25,800	30.4	168.3	24,500	105
110				9.7	138.9	24,200	23.4	158.5	22,900	110
115							13.2	143.3	21,500	115
120										120
125										125
130										130
135										135
140										140
145										145

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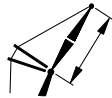
ASME B30.5



99,500 lb
+
0 lb

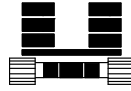
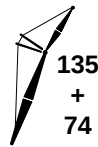


118.1 ft



90.0 ft

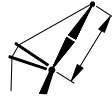
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	61.8	199.6	32,000 b							80
85	58.1	196.7	29,500							85
90	54.2	193.4	27,400							90
95	50.2	189.5	25,400	57.9	193.3	22,900				95
100	45.9	185.0	23,700	54.1	189.9	21,300				100
105	41.3	179.8	22,200	50.0	186.0	19,900				105
110	36.2	173.5	20,800	45.7	181.5	18,600				110
115	30.4	165.9	19,500	41.1	176.2	17,500	49.6	181.4	15,400	115
120	23.4	156.1	18,300	36.0	169.9	16,400	45.2	176.8	14,500	120
125	13.3	141.0	17,200	30.1	162.3	15,400	40.6	171.4	13,600	125
130				23.0	152.3	14,500	35.4	165.0	12,800	130
135				12.6	136.7	13,600	29.4	157.2	12,000	135
140							22.1	146.8	11,300	140
145							10.9	129.9	10,600	145



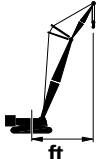
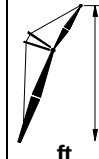
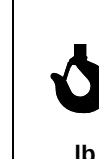
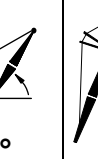
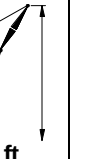
99,500 lb
+
0 lb



118.1 ft

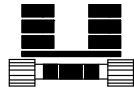
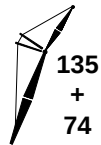


100.0 ft

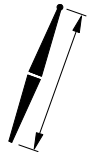
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40	74.4	221.0	71,700 *d							40
45	71.4	219.4	71,300 *c							45
50	68.3	217.6	71,000 *c							50
55	65.2	215.5	64,200 b	70.3	217.9	60,100 b				55
60	62.0	213.0	57,300 b	67.2	216.0	53,600 b				60
65	58.7	210.1	51,700 b	64.1	213.7	48,300	67.9	215.4	45,800 b	65
70	55.3	206.9	47,000	60.9	211.1	43,900	64.8	213.2	41,600 b	70
75	51.8	203.2	43,000	57.5	208.2	40,100	61.6	210.7	38,000	75
80	48.0	199.0	39,500	54.0	204.7	36,900	58.3	207.8	34,900	80
85	44.0	194.2	36,500	50.4	200.9	34,000	54.8	204.5	32,200	85
90	39.7	188.6	33,900	46.6	196.5	31,600	51.2	200.7	29,800	90
95	35.0	182.0	31,500	42.5	191.4	29,400	47.5	196.4	27,800	95
100	29.6	174.1	29,400	38.1	185.5	27,400	43.4	191.5	25,900	100
105	23.2	164.1	27,500	33.2	178.5	25,600	39.1	185.8	24,200	105
110	14.3	149.3	25,800	27.5	169.9	24,000	34.3	179.1	22,700	110
115				20.4	158.7	22,600	28.8	171.0	21,300	115
120				9.2	139.8	21,200	22.2	160.5	20,000	120
125							12.5	144.5	18,800	125
130										130
135										135
140										140
145										145
150										150
155										155

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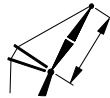
ASME B30.5



99,500 lb
+
0 lb

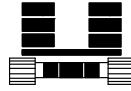
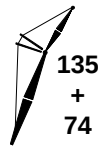


118.1 ft

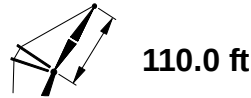
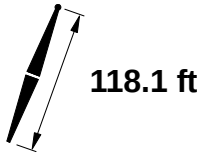


100.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	61.6	208.3	29,200							85
90	58.3	205.4	27,000							90
95	54.8	202.1	25,100							95
100	51.2	198.3	23,400							100
105	47.5	194.0	21,800	54.7	198.6	19,500				105
110	43.5	189.1	20,500	51.1	194.9	18,200				110
115	39.1	183.4	19,200	47.3	190.5	17,100				115
120	34.3	176.7	18,000	43.3	185.6	16,000	50.7	190.3	14,100	120
125	28.8	168.6	17,000	38.9	179.9	15,100	46.9	185.9	13,200	125
130	22.2	158.1	16,000	34.1	173.1	14,200	42.8	180.9	12,400	130
135	12.6	142.1	15,000	28.6	164.9	13,300	38.4	175.0	11,600	135
140				21.8	154.2	12,600	33.5	168.1	11,000	140
145				12.0	137.8	11,800	27.9	159.7	10,300	145
150							21.0	148.7	9,700	150
155							10.3	130.8	9,100	155



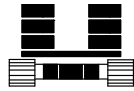
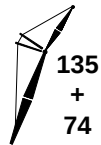
99,500 lb
+
0 lb



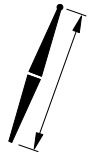
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	73.1	229.9	65,700 *c							45
50	70.4	228.3	65,400 *c							50
55	67.6	226.4	63,900 *b							55
60	64.8	224.2	57,300 b	69.4	226.8	53,500 b				60
65	61.8	221.7	51,600 b	66.6	224.7	48,200				65
70	58.8	218.8	46,900	63.7	222.4	43,800	67.2	224.2	41,500	70
75	55.8	215.6	42,900	60.8	219.8	40,000	64.4	221.9	37,900	75
80	52.5	212.0	39,400	57.7	216.8	36,800	61.4	219.4	34,800	80
85	49.2	207.9	36,500	54.6	213.5	34,000	58.4	216.5	32,100	85
90	45.6	203.3	33,800	51.3	209.7	31,500	55.3	213.2	29,800	90
95	41.9	198.1	31,500	47.9	205.4	29,300	52.1	209.5	27,700	95
100	37.8	192.1	29,400	44.3	200.6	27,400	48.7	205.4	25,900	100
105	33.3	185.1	27,600	40.4	195.2	25,600	45.1	200.7	24,200	105
110	28.2	176.7	25,900	36.2	188.8	24,100	41.3	195.4	22,700	110
115	22.1	166.1	24,300	31.6	181.4	22,600	37.2	189.3	21,300	115
120	13.6	150.5	22,900	26.2	172.3	21,300	32.7	182.1	20,100	120
125				19.5	160.4	20,100	27.5	173.5	18,900	125
130				8.8	140.6	18,900	21.1	162.4	17,800	130
135							11.9	145.5	16,800	135
140										140
145										145
150										150
155										155
160										160
165										165

MLC165 S-1

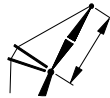
ASME B30.5



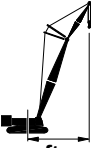
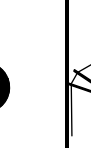
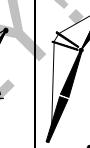
99,500 lb
+
0 lb

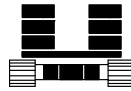
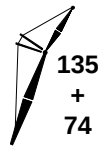


118.1 ft

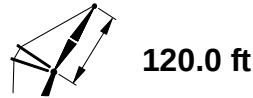
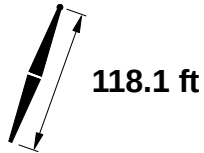


110.0 ft

	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	61.4	217.0	26,900							90
95	58.4	214.1	25,000							95
100	55.3	210.8	23,300							100
105	52.1	207.1	21,800							105
110	48.7	203.0	20,400	55.2	207.4	18,200				110
115	45.1	198.3	19,200	51.9	203.7	17,000				115
120	41.3	193.0	18,000	48.5	199.5	16,000				120
125	37.2	186.9	17,000	45.0	194.8	15,000	51.6	199.1	13,200	125
130	32.7	179.7	16,000	41.2	189.4	14,200	48.2	194.9	12,400	130
135	27.5	171.1	15,100	37.0	183.3	13,400	44.6	190.1	11,600	135
140	21.1	160.0	14,300	32.4	176.1	12,600	40.7	184.7	10,900	140
145	12.0	143.2	13,400	27.2	167.4	11,900	36.5	178.4	10,300	145
150				20.8	156.1	11,200	31.9	171.1	9,700	150
155				11.4	138.8	10,500	26.6	162.1	9,100	155
160							20.0	150.5	8,600	160
165							9.8	131.7	8,100	165



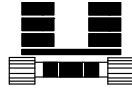
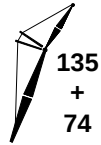
99,500 lb
+
0 lb



	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45	74.6	240.4	50,700 *c							45
50	72.1	238.9	49,700 *c							50
55	69.6	237.1	48,900 *b							55
60	67.0	235.1	48,000 *b							60
65	64.4	232.9	47,200 *b	68.6	235.6	47,900				65
70	61.7	230.3	46,400 *	66.1	233.5	43,500				70
75	58.9	227.5	42,600	63.4	231.1	39,700	66.6	232.9	37,600	75
80	56.1	224.3	39,200	60.7	228.5	36,500	64.0	230.6	34,500	80
85	53.2	220.7	36,200	57.9	225.5	33,700	61.3	228.0	31,800	85
90	50.1	216.8	33,600	55.1	222.2	31,200	58.6	225.1	29,500	90
95	47.0	212.4	31,300	52.1	218.5	29,000	55.7	221.9	27,400	95
100	43.6	207.4	29,200	49.0	214.4	27,100	52.8	218.3	25,500	100
105	40.0	201.8	27,300	45.8	209.8	25,400	49.7	214.3	23,900	105
110	36.1	195.4	25,700	42.3	204.6	23,800	46.5	209.8	22,400	110
115	31.9	188.0	24,100	38.7	198.8	22,400	43.1	204.8	21,000	115
120	27.0	179.2	22,700	34.7	192.0	21,100	39.5	199.1	19,800	120
125	21.2	168.0	21,400	30.2	184.2	19,900	35.6	192.6	18,600	125
130	13.0	151.7	20,200	25.1	174.6	18,700	31.2	185.0	17,600	130
135				18.6	162.1	17,700	26.3	175.9	16,600	135
140				8.4	141.3	16,700	20.2	164.2	15,700	140
145							11.4	146.6	14,800	145
150										150
155										155
160										160
165										165
170										170
175										175

MLC165 S-1

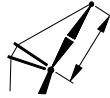
ASME B30.5



99,500 lb
+
0 lb

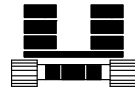
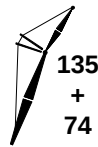


118.1 ft



120.0 ft

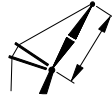
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90										90
95	61.3	225.6	24,600							95
100	58.6	222.7	23,000							100
105	55.7	219.5	21,400							105
110	52.8	215.9	20,100							110
115	49.7	211.9	18,800	55.6	216.1	16,600				115
120	46.5	207.4	17,700	52.6	212.4	15,600				120
125	43.1	202.4	16,600	49.6	208.4	14,700				125
130	39.5	196.7	15,700	46.4	203.9	13,800	52.3	207.9	12,000	130
135	35.6	190.2	14,800	43.0	198.8	13,000	49.2	203.8	11,200	135
140	31.2	182.6	14,000	39.3	193.1	12,300	46.0	199.2	10,600	140
145	26.3	173.5	13,200	35.4	186.6	11,600	42.6	194.1	9,900	145
150	20.2	161.8	12,500	31.0	178.9	10,900	38.9	188.3	9,300	150
155	11.5	144.2	11,800	26.0	169.7	10,300	34.9	181.6	8,800	155
160				19.9	157.9	9,700	30.5	173.9	8,300	160
165				10.9	139.8	9,100	25.4	164.4	7,800	165
170							19.1	152.2	7,300	170
175							9.4	132.5	6,800	175



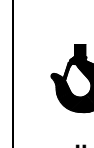
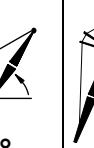
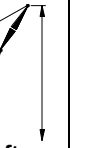
99,500 lb
+
0 lb



118.1 ft

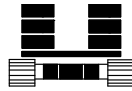
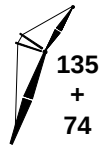


130.0 ft

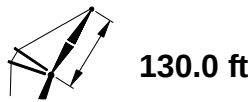
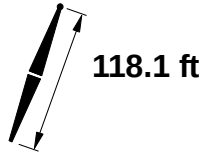
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	ft
50	73.5	249.3	46,800 *c							50
55	71.2	247.7	46,000 *b							55
60	68.9	245.9	45,300 *b							60
65	66.5	243.9	44,500 *b	70.4	246.2	46,000 *				65
70	64.0	241.6	43,800 *	68.0	244.3	43,200				70
75	61.6	239.0	42,400	65.6	242.2	39,500				75
80	59.0	236.1	39,000	63.2	239.8	36,300	66.1	241.6	34,200	80
85	56.4	233.0	36,000	60.7	237.1	33,500	63.7	239.3	31,600	85
90	53.7	229.5	33,400	58.1	234.2	31,000	61.2	236.7	29,200	90
95	50.9	225.6	31,100	55.5	230.9	28,800	58.7	233.8	27,100	95
100	48.0	221.4	29,000	52.7	227.3	26,900	56.0	230.6	25,300	100
105	45.0	216.6	27,200	49.9	223.3	25,200	53.3	227.1	23,700	105
110	41.8	211.3	25,500	47.0	218.8	23,600	50.5	223.1	22,200	110
115	38.4	205.4	24,000	43.9	213.9	22,200	47.6	218.8	20,800	115
120	34.7	198.6	22,600	40.6	208.4	20,900	44.6	214.0	19,600	120
125	30.6	190.8	21,300	37.1	202.2	19,700	41.3	208.6	18,400	125
130	25.9	181.5	20,100	33.3	195.1	18,600	37.9	202.6	17,400	130
135	20.3	169.8	19,000	29.0	186.8	17,600	34.1	195.7	16,400	135
140	12.5	152.8	18,000	24.1	176.8	16,600	30.0	187.7	15,600	140
145				17.9	163.7	15,700	25.2	178.1	14,700	145
150				8.1	142.0	14,900	19.4	166.0	13,900	150
155							11.0	147.5	13,200	155
160										160
165										165
170										170
175										175

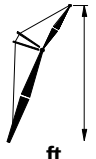
MLC165 S-1

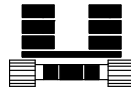
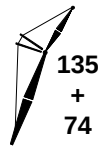
ASME B30.5



99,500 lb
+
0 lb



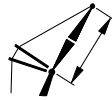
	75°			70°			
							
	ft	ft	lb	ft	ft	lb	ft
50							50
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100	61.2	234.3	22,700				100
105	58.7	231.4	21,200				105
110	56.1	228.2	19,800				110
115	53.4	224.6	18,600				115
120	50.6	220.7	17,400	55.9	224.7	15,400	120
125	47.6	216.4	16,400	53.2	221.2	14,400	125
130	44.6	211.6	15,500	50.4	217.3	13,600	130
135	41.3	206.2	14,600	47.5	212.9	12,800	135
140	37.9	200.2	13,800	44.4	208.1	12,000	140
145	34.1	193.3	13,000	41.2	202.7	11,300	145
150	30.0	185.3	12,300	37.7	196.6	10,700	150
155	25.2	175.8	11,600	34.0	189.7	10,100	155
160	19.4	163.6	11,000	29.8	181.6	9,500	160
165	11.0	145.2	10,400	25.0	172.0	9,000	165
170				19.1	159.6	8,500	170
175				10.5	140.7	8,000	175



99,500 lb
+
0 lb

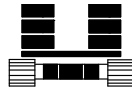
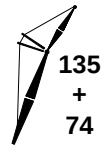


118.1 ft



140.0 ft

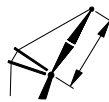
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	74.7	259.7	43,800 *c							50
55	72.6	258.3	43,100 *b							55
60	70.4	256.6	42,300 *b							60
65	68.2	254.7	41,700 *b							65
70	66.0	252.6	41,100 *	69.6	255.1	42,300 *				70
75	63.8	250.2	40,500 *	67.4	253.1	39,200				75
80	61.5	247.7	38,700	65.2	250.9	36,000	67.9	252.5	33,900	80
85	59.1	244.8	35,700	62.9	248.5	33,200	65.7	250.4	31,200	85
90	56.7	241.7	33,100	60.6	245.8	30,700	63.4	248.0	28,900	90
95	54.2	238.2	30,800	58.2	242.8	28,500	61.1	245.4	26,800	95
100	51.6	234.4	28,700	55.8	239.6	26,600	58.8	242.5	25,000	100
105	49.0	230.3	26,900	53.3	236.0	24,900	56.3	239.3	23,300	105
110	46.2	225.7	25,200	50.7	232.1	23,300	53.8	235.8	21,800	110
115	43.3	220.7	23,700	48.0	227.8	21,900	51.3	232.0	20,500	115
120	40.2	215.1	22,300	45.2	223.1	20,600	48.6	227.8	19,300	120
125	36.9	208.8	21,100	42.2	217.8	19,400	45.8	223.1	18,100	125
130	33.4	201.7	19,900	39.1	212.0	18,300	42.9	218.0	17,100	130
135	29.5	193.5	18,800	35.7	205.5	17,300	39.8	212.3	16,200	135
140	25.0	183.8	17,800	32.0	198.0	16,400	36.5	205.9	15,300	140
145	19.6	171.6	16,900	27.9	189.3	15,500	32.9	198.7	14,400	145
150	12.1	153.9	16,000	23.2	178.9	14,700	28.9	190.3	13,700	150
155				17.2	165.3	13,900	24.3	180.3	13,000	155
160				7.8	142.7	13,200	18.7	167.6	12,300	160
165							10.6	148.5	11,600	165
170										170
175										175
180										180
185										185



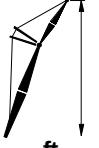
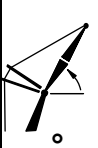
99,500 lb
+
0 lb

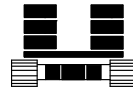
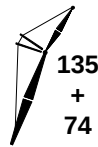


118.1 ft

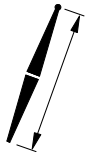


140.0 ft

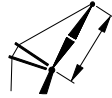
	75°			70°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft
50							50
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100							100
105	61.1	242.9	20,800				105
110	58.8	240.1	19,400				110
115	56.3	236.9	18,200				115
120	53.8	233.4	17,100				120
125	51.3	229.6	16,100	56.2	233.4	14,000	125
130	48.6	225.4	15,100	53.7	229.9	13,200	130
135	45.8	220.7	14,300	51.1	226.1	12,400	135
140	42.9	215.6	13,400	48.5	221.9	11,600	140
145	39.8	209.9	12,700	45.7	217.2	11,000	145
150	36.5	203.5	12,000	42.7	212.1	10,300	150
155	32.9	196.3	11,300	39.6	206.4	9,700	155
160	28.9	187.9	10,700	36.3	199.9	9,200	160
165	24.3	178.0	10,100	32.7	192.7	8,700	165
170	18.7	165.3	9,600	28.7	184.2	8,200	170
175	10.6	146.2	9,000	24.1	174.2	7,700	175
180				18.4	161.3	7,200	180
185				10.1	141.6	6,800	185



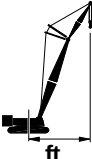
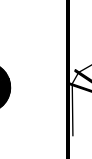
99,500 lb
+
0 lb



118.1 ft

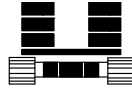
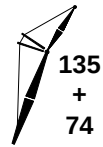


150.0 ft

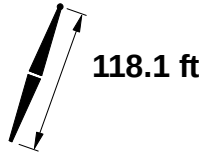
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
55	73.8	268.7	40,300 *b							55
60	71.8	267.2	39,700 *b							60
65	69.8	265.4	39,000 *b							65
70	67.7	263.5	38,500 *							70
75	65.6	261.3	37,300 *	69.0	263.9	38,900 *				75
80	63.5	258.9	35,900 *	67.0	261.8	35,800				80
85	61.4	256.3	34,500 *	64.9	259.6	33,000	67.4	261.3	31,100	85
90	59.2	253.5	33,000	62.7	257.1	30,600	65.3	259.1	28,800	90
95	56.9	250.3	30,700	60.6	254.4	28,400	63.2	256.7	26,700	95
100	54.6	246.9	28,600	58.4	251.5	26,500	61.1	254.0	24,900	100
105	52.2	243.2	26,800	56.1	248.3	24,700	58.8	251.1	23,200	105
110	49.8	239.2	25,100	53.7	244.8	23,200	56.6	248.0	21,700	110
115	47.2	234.7	23,600	51.3	240.9	21,800	54.3	244.5	20,400	115
120	44.5	229.9	22,300	48.8	236.7	20,500	51.9	240.8	19,200	120
125	41.8	224.6	21,000	46.3	232.2	19,300	49.4	236.7	18,000	125
130	38.8	218.7	19,800	43.6	227.2	18,200	46.8	232.2	17,000	130
135	35.6	212.1	18,800	40.7	221.6	17,200	44.2	227.3	16,100	135
140	32.2	204.6	17,800	37.7	215.5	16,300	41.3	221.9	15,200	140
145	28.4	196.1	16,900	34.4	208.6	15,400	38.4	215.9	14,400	145
150	24.1	185.9	16,000	30.9	200.8	14,600	35.2	209.2	13,600	150
155	18.9	173.3	15,200	26.9	191.8	13,900	31.7	201.6	12,900	155
160	11.6	154.9	14,400	22.4	180.9	13,200	27.9	192.9	12,200	160
165				16.6	166.8	12,500	23.4	182.4	11,600	165
170				7.5	143.4	11,800	18.1	169.2	11,000	170
175							10.2	149.4	10,400	175
180										180
185										185
190										190
195										195

MLC165 S-1

ASME B30.5



99,500 lb
+
0 lb

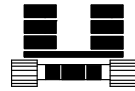
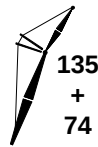


118.1 ft



150.0 ft

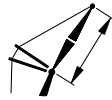
	75°			70°			
ft	ft	ft	lb	ft	lb	ft	ft
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100							100
105							105
110	61.1	251.6	19,300				110
115	58.9	248.7	18,100				115
120	56.6	245.6	17,000				120
125	54.3	242.1	16,000				125
130	51.9	238.4	15,000	56.5	242.1	13,100	130
135	49.4	234.3	14,200	54.2	238.7	12,300	135
140	46.8	229.8	13,400	51.8	234.9	11,500	140
145	44.2	224.9	12,600	49.3	230.8	10,900	145
150	41.4	219.5	11,900	46.7	226.3	10,200	150
155	38.4	213.5	11,300	44.0	221.3	9,600	155
160	35.2	206.8	10,700	41.2	215.9	9,100	160
165	31.7	199.2	10,100	38.2	209.9	8,600	165
170	27.9	190.5	9,500	35.0	203.2	8,100	170
175	23.5	180.1	9,000	31.6	195.5	7,600	175
180	18.1	166.9	8,500	27.7	186.7	7,200	180
185	10.3	147.1	8,000	23.2	176.2	6,800	185
190				17.8	162.9	6,400	190
195				9.8	142.5	6,000	195



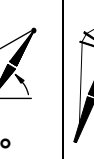
99,500 lb
+
0 lb

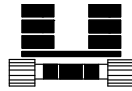
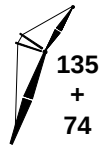


118.1 ft

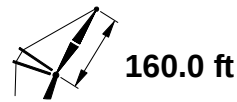
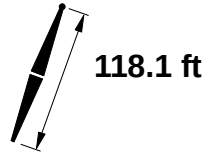


160.0 ft

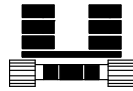
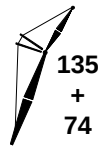
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
55	74.8	279.1	37,500 *b							55
60	73.0	277.6	36,900 *b							60
65	71.1	276.0	36,300 *b							65
70	69.2	274.2	35,300 *							70
75	67.2	272.2	34,000 *	70.4	274.5	36,000 *				75
80	65.3	270.0	32,700 *	68.5	272.6	34,800 *				80
85	63.3	267.6	31,400 *	66.5	270.6	32,700				85
90	61.3	265.0	30,000 *	64.6	268.3	30,300	67.0	270.0	28,400	90
95	59.2	262.1	28,800 *	62.6	265.8	28,100	65.0	267.8	26,400	95
100	57.1	259.0	27,600 *	60.5	263.1	26,200	63.0	265.3	24,500	100
105	54.9	255.6	26,400 *	58.5	260.2	24,500	61.0	262.7	22,900	105
110	52.7	252.0	24,900	56.3	257.0	22,900	58.9	259.8	21,400	110
115	50.4	248.0	23,400	54.2	253.5	21,500	56.8	256.6	20,100	115
120	48.1	243.7	22,000	51.9	249.7	20,200	54.6	253.2	18,900	120
125	45.6	239.0	20,700	49.6	245.6	19,000	52.4	249.5	17,700	125
130	43.1	233.9	19,600	47.2	241.2	17,900	50.1	245.5	16,700	130
135	40.4	228.3	18,500	44.7	236.4	16,900	47.7	241.2	15,800	135
140	37.5	222.1	17,500	42.1	231.1	16,000	45.3	236.4	14,900	140
145	34.5	215.2	16,600	39.4	225.3	15,200	42.7	231.2	14,100	145
150	31.2	207.5	15,800	36.4	218.8	14,400	40.0	225.6	13,300	150
155	27.5	198.6	15,000	33.3	211.7	13,600	37.1	219.3	12,600	155
160	23.3	188.0	14,200	29.9	203.5	12,900	34.0	212.3	12,000	160
165	18.3	174.9	13,500	26.1	194.1	12,300	30.7	204.4	11,300	165
170	11.3	155.9	12,800	21.7	182.8	11,600	27.0	195.3	10,700	170
175				16.1	168.2	11,000	22.7	184.5	10,200	175
180				7.3	144.0	10,400	17.5	170.8	9,600	180
185							9.9	150.3	9,100	185
190										190
195										195



99,500 lb
+
0 lb



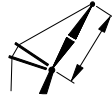
	75°		
	ft	ft	lb
55			
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110			
115	61.0	260.3	17,700
120	58.9	257.4	16,600
125	56.8	254.2	15,600
130	54.6	250.8	14,700
135	52.4	247.1	13,800
140	50.1	243.1	13,000
145	47.7	238.8	12,300
150	45.3	234.0	11,600
155	42.7	228.8	10,900
160	40.0	223.2	10,300
165	37.1	216.9	9,800
170	34.0	209.9	9,200
175	30.7	202.0	8,700
180	27.0	192.9	8,300
185	22.7	182.1	7,800
190	17.5	168.4	7,400
195	9.9	148.0	6,900



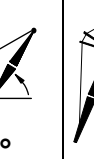
99,500 lb
+
0 lb

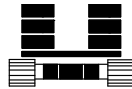
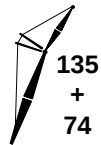


118.1 ft

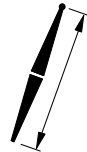


170.0 ft

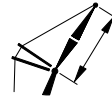
	87°			83°			80°			
										
	ft	ft	lb	ft	lb	ft	lb	ft	lb	ft
60	74.0	288.1	33,900 *b							60
65	72.2	286.6	33,300 *b							65
70	70.4	284.9	32,500 *							70
75	68.6	283.0	31,300 *							75
80	66.8	281.0	30,000 *	69.8	283.3	31,900 *				80
85	65.0	278.7	28,700 *	68.0	281.4	30,800 *				85
90	63.1	276.3	27,500 *	66.2	279.3	29,600 *				90
95	61.2	273.6	26,300 *	64.3	277.0	27,900	66.6	278.7	26,100	95
100	59.3	270.8	25,100 *	62.4	274.5	25,900	64.7	276.5	24,300	100
105	57.3	267.7	23,900 *	60.5	271.8	24,200	62.8	274.0	22,600	105
110	55.2	264.3	22,800 *	58.5	268.8	22,700	60.9	271.3	21,200	110
115	53.2	260.7	21,700 *	56.6	265.6	21,300	59.0	268.5	19,800	115
120	51.0	256.8	20,600 *	54.5	262.2	20,000	57.0	265.3	18,600	120
125	48.8	252.6	19,700 *	52.4	258.5	18,800	55.0	262.0	17,500	125
130	46.6	248.1	18,700 *	50.2	254.5	17,700	52.9	258.3	16,500	130
135	44.2	243.2	17,700 *	48.0	250.2	16,700	50.7	254.4	15,500	135
140	41.7	237.8	16,800 *	45.7	245.5	15,800	48.5	250.1	14,700	140
145	39.1	231.9	16,000 *	43.3	240.4	14,900	46.2	245.5	13,800	145
150	36.4	225.4	15,100 *	40.8	234.9	14,200	43.8	240.5	13,100	150
155	33.4	218.3	14,300 *	38.1	228.8	13,400	41.4	235.1	12,400	155
160	30.2	210.2	13,400 *	35.3	222.1	12,700	38.7	229.1	11,700	160
165	26.7	201.0	12,400 *	32.3	214.6	12,100	36.0	222.6	11,100	165
170	22.6	190.1	11,600 *	29.0	206.2	11,500	33.0	215.3	10,500	170
175	17.7	176.5	10,700 *	25.3	196.4	10,900	29.7	207.1	10,000	175
180	10.9	156.9	10,000 *	21.0	184.7	10,300	26.1	197.7	9,500	180
185				15.6	169.6	9,800	22.0	186.5	9,000	185
190				7.1	144.7	9,200	17.0	172.3	8,500	190
195							9.6	151.1	8,000	195
200										200
205										205



99,500 lb
+
0 lb

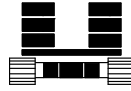
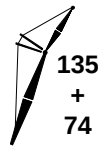


118.1 ft

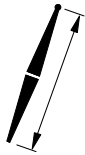


170.0 ft

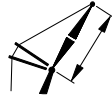
	75°		
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110			
115	62.8	271.6	17,500
120	60.9	268.9	16,400
125	59.0	266.0	15,400
130	57.0	262.9	14,400
135	55.0	259.5	13,600
140	52.9	255.9	12,800
145	50.7	252.0	12,000
150	48.5	247.7	11,300
155	46.2	243.1	10,700
160	43.9	238.1	10,100
165	41.4	232.7	9,500
170	38.7	226.7	9,000
175	36.0	220.2	8,500
180	33.0	212.9	8,000
185	29.8	204.7	7,600
190	26.2	195.3	7,200
195	22.0	184.1	6,800
200	17.0	170.0	6,400
205	9.6	148.8	6,000



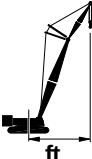
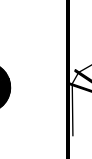
99,500 lb
+
0 lb



128.0 ft

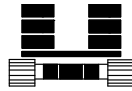
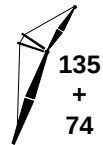


70.0 ft

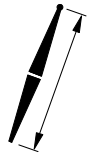
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
32		74.8	202.0	89,900 *d						32
34		73.1	201.5	89,900 *d						34
36		71.3	200.8	89,900 *d						36
38		69.6	200.1	89,800 *d						38
40		67.8	199.3	89,800 *c						40
45		63.4	197.1	83,500 *c						45
50		58.7	194.3	73,300 c	66.9	197.9	68,400 c			50
55		53.7	191.0	64,700 b	62.3	195.6	60,400 b			55
60		48.5	186.9	57,800 b	57.6	192.7	54,000 b	63.8	195.3	51,100 b
65		42.8	182.0	52,100 b	52.6	189.2	48,700 b	59.1	192.6	46,100 b
70		36.3	176.0	47,400	47.3	185.0	44,200	54.2	189.3	41,800 b
75		28.7	168.1	43,300	41.4	179.9	40,500	49.0	185.3	38,300
80		18.5	156.7	39,800	34.8	173.5	37,200	43.3	180.5	35,200
85					26.7	165.1	34,300	37.0	174.6	32,500
90					15.3	152.1	31,800	29.5	167.0	30,100
95								19.7	156.0	27,900
100										
105										
110										
115										
120										
125										
130										

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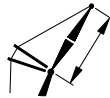
ASME B30.5



99,500 lb
+
0 lb

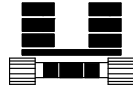
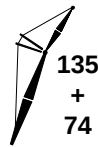


128.0 ft

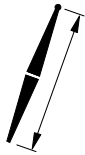


70.0 ft

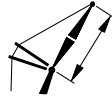
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
32										32
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	60.0	190.4	34,600 b							75
80	55.1	187.3	31,800 b							80
85	49.9	183.4	29,400							85
90	44.4	178.8	27,200	55.7	184.1	24,300 b				90
95	38.1	173.1	25,300	50.6	180.4	22,600				95
100	30.9	165.8	23,600	45.0	175.8	21,000				100
105	21.7	155.7	22,000	38.9	170.3	19,600	50.8	176.1	17,300	105
110				31.8	163.2	18,400	45.3	171.6	16,200	110
115				22.9	153.6	17,200	39.2	166.1	15,100	115
120				7.1	134.9	16,000	32.2	159.2	14,200	120
125							23.4	149.7	13,300	125
130							8.5	132.2	12,300	130



99,500 lb
+
0 lb



128.0 ft

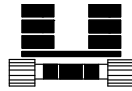
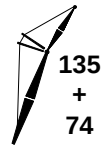


80.0 ft

	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36	73.7	211.3	82,200 *d							36
38	72.2	210.7	82,200 *d							38
40	70.7	210.0	82,100 *d							40
45	66.9	208.1	79,600 *c							45
50	62.9	205.7	73,000 c	69.9	208.7	68,100 c				50
55	58.8	203.0	64,500 b	66.0	206.7	60,100 b				55
60	54.6	199.7	57,600 b	62.0	204.2	53,700 b	67.3	206.3	50,700 b	60
65	50.0	195.8	52,000 b	57.9	201.3	48,400 b	63.3	204.0	45,700 b	65
70	45.2	191.2	47,200	53.6	197.9	44,000	59.3	201.2	41,500 b	70
75	39.9	185.8	43,200	49.0	193.9	40,200	55.0	198.0	37,900	75
80	33.9	179.1	39,700	44.0	189.2	37,000	50.5	194.2	34,900	80
85	26.8	170.6	36,700	38.6	183.5	34,100	45.7	189.7	32,200	85
90	17.3	158.2	34,000	32.4	176.5	31,600	40.4	184.3	29,800	90
95				25.0	167.4	29,400	34.5	177.8	27,800	95
100				14.3	153.3	27,400	27.6	169.5	25,900	100
105							18.4	157.7	24,200	105
110										110
115										115
120										120
125										125
130										130
135										135
140										140

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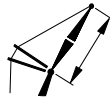
ASME B30.5



99,500 lb
+
0 lb

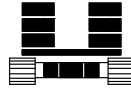
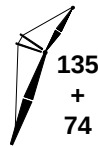


128.0 ft

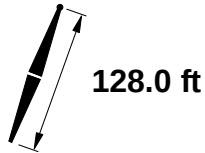


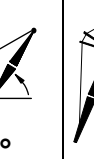
80.0 ft

	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	60.0	199.1	31,400 b							80
85	55.7	196.0	29,000							85
90	51.3	192.3	26,800							90
95	46.5	187.9	25,000	56.2	192.8	22,200				95
100	41.4	182.7	23,300	51.8	189.2	20,600				100
105	35.6	176.4	21,700	47.1	184.9	19,300				105
110	28.9	168.5	20,300	42.0	179.8	18,000	52.0	184.9	15,700	110
115	20.3	157.6	19,000	36.3	173.7	16,900	47.3	180.7	14,700	115
120				29.7	166.0	15,800	42.2	175.6	13,800	120
125				21.4	155.5	14,800	36.6	169.6	12,900	125
130				6.6	135.5	13,900	30.1	162.0	12,100	130
135							21.9	151.7	11,400	135
140							8.0	132.9	10,600	140



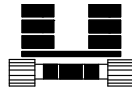
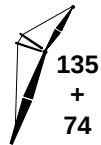
99,500 lb
+
0 lb



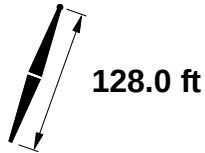
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	ft	lb	ft	ft	ft
38	74.3	221.1	75,100 *d							38
40	72.9	220.5	75,100 *d							40
45	69.6	218.9	74,700 *c							45
50	66.1	216.8	72,100 *c							50
55	62.6	214.4	64,300 b							55
60	59.0	211.6	57,400 b	68.8	217.5	59,900 b				60
65	55.2	208.4	51,800 b	65.4	215.4	53,500 b				65
70	51.2	204.6	47,100	61.8	212.9	48,200 b	66.5	215.0	45,500 b	70
75	47.0	200.3	43,100	58.1	210.0	43,800	63.0	212.6	41,300 b	75
80	42.5	195.3	39,600	54.3	206.7	40,000	59.3	209.9	37,700	80
85	37.5	189.3	36,600	50.3	202.8	36,800	55.6	206.7	34,700	85
90	31.9	182.1	34,000	46.0	198.3	34,000	51.6	203.0	32,000	90
95	25.3	172.9	31,600	41.4	193.1	31,500	47.4	198.7	29,700	95
100	16.3	159.7	29,500	36.3	186.9	29,300	42.9	193.8	27,600	100
105				30.5	179.3	27,400	38.0	187.9	25,800	105
110				23.5	169.5	25,600	32.5	180.8	24,100	110
115				13.5	154.6	24,000	26.0	171.9	22,600	115
120							17.3	159.3	21,200	120
125										125
130										130
135										135
140										140
145										145
150										150

MLC165 S-1

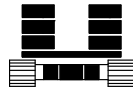
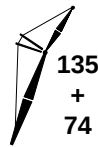
ASME B30.5



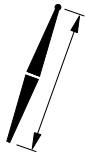
99,500 lb
+
0 lb



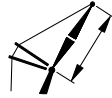
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	60.0	207.8	28,700							85
90	56.2	204.7	26,600							90
95	52.3	201.1	24,700							95
100	48.1	196.9	23,100	56.7	201.5	20,400				100
105	43.7	192.1	21,600	52.8	198.0	19,000				105
110	38.9	186.4	20,200	48.6	193.9	17,800				110
115	33.5	179.5	18,900	44.3	189.1	16,700	53.0	193.7	14,500	115
120	27.2	171.0	17,800	39.5	183.5	15,700	48.8	189.6	13,600	120
125	19.1	159.3	16,700	34.2	176.9	14,700	44.5	184.9	12,700	125
130				28.0	168.6	13,800	39.7	179.4	11,900	130
135				20.2	157.4	13,000	34.4	172.8	11,200	135
140				6.2	136.1	12,200	28.3	164.6	10,500	140
145							20.6	153.6	9,900	145
150							7.5	133.6	9,200	150



99,500 lb
+
0 lb



128.0 ft

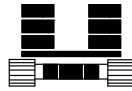
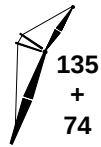


100.0 ft

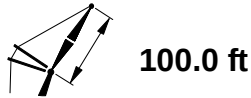
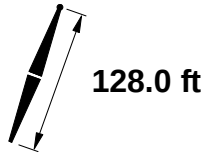
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40	74.7	231.0	69,100 *d							40
45	71.7	229.4	68,700 *c							45
50	68.7	227.6	68,400 *c							50
55	65.5	225.5	64,100 b							55
60	62.4	223.1	57,200 b	68.0	226.3	53,100 b				60
65	59.1	220.3	51,600 b	64.8	224.1	47,900 b				65
70	55.7	217.1	46,800	61.6	221.6	43,400	65.9	223.7	40,900 b	70
75	52.1	213.4	42,800	58.3	218.7	39,700	62.7	221.3	37,400	75
80	48.4	209.3	39,400	54.9	215.4	36,500	59.4	218.5	34,300	80
85	44.4	204.5	36,400	51.3	211.6	33,700	56.0	215.4	31,700	85
90	40.2	199.0	33,800	47.5	207.3	31,200	52.5	211.8	29,400	90
95	35.5	192.6	31,400	43.5	202.4	29,100	48.8	207.7	27,300	95
100	30.2	184.9	29,300	39.2	196.7	27,100	44.8	203.0	25,500	100
105	23.9	175.1	27,400	34.4	190.1	25,400	40.6	197.6	23,800	105
110	15.4	161.1	25,700	28.9	182.0	23,800	36.0	191.2	22,300	110
115				22.3	171.5	22,300	30.8	183.6	20,900	115
120				12.8	155.7	21,000	24.6	174.1	19,700	120
125							16.5	160.8	18,500	125
130										130
135										135
140										140
145										145
150										150
155										155
160										160

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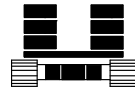
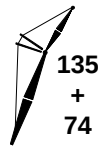
ASME B30.5



99,500 lb
+
0 lb



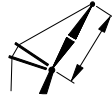
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	60.0	216.4	26,200							90
95	56.6	213.3	24,400							95
100	53.1	209.8	22,700							100
105	49.4	205.8	21,200	57.0	210.2	18,600				105
110	45.5	201.2	19,800	53.5	206.7	17,400				110
115	41.4	195.9	18,600	49.9	202.8	16,300				115
120	36.8	189.8	17,500	46.0	198.2	15,300				120
125	31.7	182.4	16,400	41.9	193.1	14,400	50.0	198.5	12,300	125
130	25.8	173.3	15,500	37.4	187.0	13,500	46.2	194.0	11,500	130
135	18.1	160.9	14,600	32.4	179.8	12,700	42.1	188.9	10,800	135
140				26.5	171.0	12,000	37.6	182.9	10,200	140
145				19.2	159.1	11,200	32.6	175.8	9,600	145
150				5.9	136.6	10,500	26.8	167.0	9,000	150
155							19.6	155.3	8,400	155
160							7.1	134.3	7,800	160



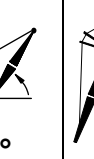
99,500 lb
+
0 lb



128.0 ft

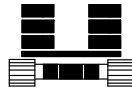
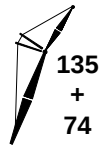


110.0 ft

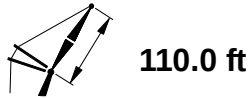
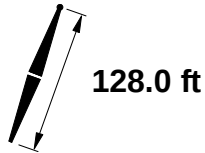
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
45		73.4	239.9	63,500 *c						45
50		70.7	238.3	63,100 *c						50
55		67.9	236.4	61,900 *b						55
60		65.1	234.2	57,100 b	70.1	237.0	53,000 b			60
65		62.1	231.8	51,500 b	67.3	235.0	47,800 b			65
70		59.2	228.9	46,800	64.4	232.8	43,400			70
75		56.1	225.8	42,800	61.5	230.2	39,600	65.3	232.4	37,300
80		52.9	222.2	39,300	58.5	227.3	36,400	62.4	230.0	34,300
85		49.5	218.2	36,400	55.4	224.1	33,600	59.5	227.2	31,600
90		46.0	213.6	33,700	52.1	220.4	31,200	56.4	224.1	29,300
95		42.3	208.5	31,400	48.8	216.3	29,000	53.2	220.5	27,200
100		38.2	202.6	29,300	45.2	211.6	27,100	49.9	216.6	25,400
105		33.8	195.7	27,500	41.4	206.3	25,400	46.4	212.1	23,800
110		28.8	187.5	25,800	37.3	200.2	23,800	42.7	207.0	22,300
115		22.8	177.1	24,300	32.8	193.1	22,400	38.7	201.2	21,000
120		14.7	162.4	22,800	27.6	184.5	21,100	34.3	194.4	19,700
125					21.3	173.5	19,900	29.3	186.3	18,600
130					12.2	156.8	18,700	23.5	176.3	17,500
135								15.7	162.2	16,500
140										140
145										145
150										150
155										155
160										160
165										165
170										170

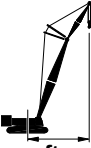
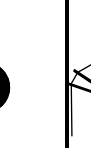
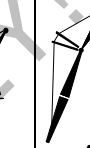
MLC165 S-1

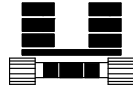
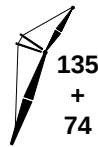
ASME B30.5



99,500 lb
+
0 lb



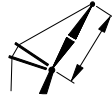
	75°			70°			65°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85										85
90	62.9	227.8	26,200							90
95	60.0	225.1	24,300							95
100	56.9	222.0	22,600							100
105	53.7	218.6	21,100							105
110	50.4	214.7	19,800	57.3	218.9	17,300				110
115	47.0	210.3	18,600	54.1	215.4	16,200				115
120	43.3	205.3	17,500	50.8	211.6	15,200				120
125	39.4	199.6	16,400	47.4	207.3	14,300				125
130	35.1	193.0	15,500	43.7	202.4	13,500	51.0	207.3	11,500	130
135	30.2	185.2	14,600	39.8	196.8	12,700	47.6	203.0	10,800	135
140	24.6	175.6	13,800	35.6	190.3	12,000	43.9	198.2	10,100	140
145	17.3	162.5	13,000	30.8	182.7	11,300	40.0	192.6	9,500	145
150				25.3	173.3	10,600	35.8	186.2	9,000	150
155				18.3	160.8	10,000	31.1	178.6	8,400	155
160				5.6	137.1	9,400	25.6	169.3	7,900	160
165							18.6	157.0	7,400	165
170							6.8	134.9	6,900	170



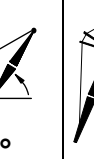
99,500 lb
+
0 lb



128.0 ft

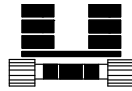
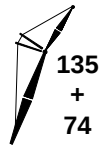


120.0 ft

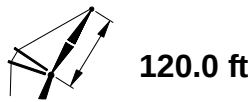
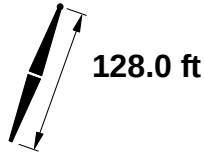
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
45	74.8	250.3	49,600 *c							45
50	72.3	248.9	48,700 *c							50
55	69.8	247.1	47,900 *b							55
60	67.3	245.2	47,000 *b							60
65	64.6	242.9	46,300 *b	69.3	245.8	47,400				65
70	62.0	240.4	45,500 *	66.7	243.8	43,000				70
75	59.2	237.6	42,500	64.1	241.5	39,300	67.5	243.3	36,900	75
80	56.4	234.5	39,100	61.4	238.9	36,100	64.9	241.1	33,900	80
85	53.5	231.0	36,100	58.6	236.0	33,300	62.2	238.6	31,300	85
90	50.5	227.0	33,500	55.8	232.8	30,900	59.5	235.9	29,000	90
95	47.3	222.7	31,200	52.8	229.2	28,700	56.7	232.7	26,900	95
100	44.0	217.8	29,100	49.8	225.2	26,800	53.8	229.3	25,100	100
105	40.4	212.3	27,300	46.6	220.7	25,100	50.8	225.4	23,500	105
110	36.6	206.0	25,600	43.2	215.7	23,500	47.6	221.1	22,000	110
115	32.3	198.7	24,100	39.6	210.0	22,100	44.3	216.2	20,600	115
120	27.5	190.0	22,700	35.7	203.5	20,800	40.8	210.8	19,400	120
125	21.8	179.1	21,400	31.3	195.9	19,600	36.9	204.6	18,300	125
130	14.1	163.7	20,200	26.4	186.9	18,500	32.8	197.4	17,300	130
135				20.3	175.3	17,500	28.1	188.9	16,300	135
140				11.7	157.9	16,500	22.5	178.3	15,400	140
145							15.0	163.5	14,600	145
150										150
155										155
160										160
165										165
170										170

MLC165 S-1

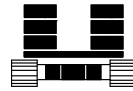
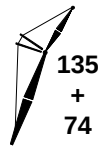
ASME B30.5



99,500 lb
+
0 lb



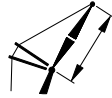
	75°			70°			
ft	ft	ft	lb	ft	lb	ft	ft
45							45
50							50
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95	62.7	236.5	23,900				95
100	60.0	233.8	22,300				100
105	57.2	230.7	20,800				105
110	54.3	227.3	19,400				110
115	51.3	223.5	18,200	57.5	227.5	15,800	115
120	48.2	219.3	17,100	54.6	224.2	14,800	120
125	44.9	214.5	16,100	51.6	220.4	13,900	125
130	41.4	209.2	15,200	48.5	216.2	13,100	130
135	37.6	203.1	14,300	45.3	211.6	12,300	135
140	33.5	196.1	13,500	41.8	206.3	11,600	140
145	28.9	187.9	12,800	38.1	200.3	10,900	145
150	23.5	177.7	12,100	34.0	193.4	10,300	150
155	16.5	164.0	11,400	29.5	185.4	9,700	155
160				24.2	175.5	9,200	160
165				17.5	162.3	8,600	165
170				5.4	137.6	8,100	170



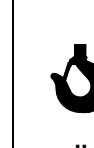
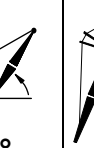
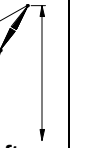
99,500 lb
+
0 lb

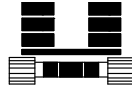
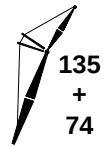


128.0 ft



130.0 ft

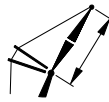
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
50	73.7	259.3	45,800 *c							50
55	71.4	257.7	45,100 *b							55
60	69.1	255.9	44,400 *b							60
65	66.7	253.9	43,700 *b							65
70	64.3	251.6	43,000 *	70.9	256.4	45,000 *				70
75	61.8	249.1	42,300	68.6	254.6	42,800				75
80	59.3	246.3	38,900	66.2	252.5	39,100				80
85	56.7	243.1	35,900	63.7	250.2	35,900	67.0	252.1	33,600	85
90	54.0	239.7	33,300	61.3	247.6	33,100	64.5	249.8	31,000	90
95	51.2	235.9	31,000	58.7	244.7	30,700	62.1	247.3	28,700	95
100	48.4	231.6	28,900	56.1	241.5	28,500	59.5	244.5	26,700	100
105	45.3	227.0	27,100	53.4	237.9	26,600	56.9	241.4	24,900	105
110	42.1	221.7	25,400	50.6	234.0	24,900	54.3	238.0	23,200	110
115	38.7	215.9	23,900	47.7	229.7	23,300	51.5	234.2	21,800	115
120	35.1	209.2	22,500	44.6	224.9	21,900	48.6	230.0	20,400	120
125	31.0	201.5	21,200	41.4	219.5	20,600	45.6	225.4	19,200	125
130	26.4	192.4	20,100	38.0	213.5	19,400	42.5	220.2	18,100	130
135	21.0	181.0	19,000	34.2	206.6	18,400	39.1	214.4	17,100	135
140	13.5	164.9	18,000	30.1	198.7	17,400	35.4	207.9	16,100	140
145				25.3	189.2	16,400	31.4	200.3	15,300	145
150				19.5	177.0	15,500	26.9	191.3	14,400	150
155				11.2	158.9	14,700	21.6	180.2	13,700	155
160							14.4	164.8	12,900	160
165										165
170										170
175										175
180										180



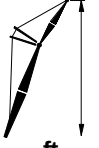
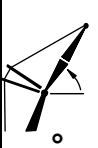
99,500 lb
+
0 lb

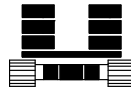
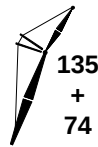


128.0 ft

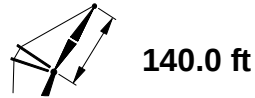
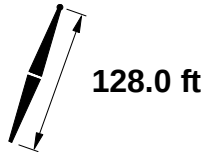


130.0 ft

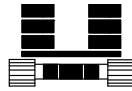
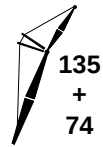
	75°			70°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft
50							50
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100	62.5	245.2	22,000				100
105	60.0	242.4	20,500				105
110	57.4	239.4	19,200				110
115	54.7	236.0	18,000				115
120	52.0	232.3	16,900	57.7	236.2	14,600	120
125	49.1	228.2	15,900	55.1	232.9	13,700	125
130	46.2	223.6	14,900	52.3	229.2	12,800	130
135	43.0	218.5	14,100	49.5	225.1	12,100	135
140	39.7	212.9	13,300	46.5	220.6	11,400	140
145	36.1	206.4	12,600	43.4	215.6	10,700	145
150	32.2	199.1	11,900	40.1	210.0	10,100	150
155	27.7	190.4	11,200	36.5	203.7	9,500	155
160	22.6	179.7	10,600	32.6	196.4	9,000	160
165	15.9	165.4	10,000	28.3	187.9	8,400	165
170				23.2	177.6	8,000	170
175				16.8	163.8	7,500	175
180				5.2	138.1	7,000	180



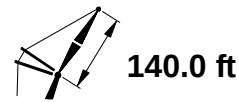
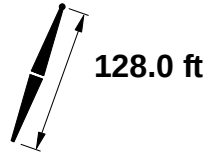
99,500 lb
+
0 lb



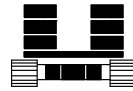
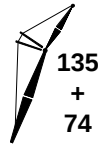
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
50	74.9	269.7	42,900 *c							50
55	72.8	268.2	42,200 *b							55
60	70.6	266.6	41,500 *b							60
65	68.5	264.7	40,900 *b							65
70	66.2	262.6	40,300 *	70.2	265.3	41,400 *				70
75	64.0	260.3	39,800 *	68.0	263.3	38,800				75
80	61.7	257.8	38,300 *	65.7	261.2	35,600				80
85	59.3	254.9	35,600	63.5	258.8	32,800	66.5	260.8	30,700	85
90	56.9	251.8	33,000	61.2	256.2	30,400	64.2	258.5	28,400	90
95	54.5	248.4	30,700	58.8	253.3	28,200	61.9	256.0	26,300	95
100	51.9	244.7	28,700	56.4	250.2	26,300	59.6	253.2	24,500	100
105	49.2	240.6	26,800	53.9	246.7	24,600	57.2	250.1	22,900	105
110	46.5	236.0	25,100	51.3	242.8	23,000	54.7	246.7	21,400	110
115	43.6	231.0	23,600	48.6	238.6	21,600	52.2	243.0	20,100	115
120	40.5	225.5	22,300	45.9	234.0	20,300	49.5	238.9	18,900	120
125	37.3	219.3	21,000	42.9	228.9	19,200	46.8	234.5	17,800	125
130	33.8	212.3	19,800	39.8	223.2	18,100	43.9	229.5	16,800	130
135	29.9	204.2	18,800	36.5	216.9	17,100	40.8	224.0	15,800	135
140	25.5	194.7	17,800	32.9	209.7	16,200	37.6	217.9	15,000	140
145	20.2	182.8	16,800	28.9	201.3	15,300	34.1	211.0	14,100	145
150	13.0	166.0	15,900	24.4	191.4	14,500	30.3	203.0	13,400	150
155				18.8	178.7	13,700	25.9	193.7	12,700	155
160				10.8	159.8	13,000	20.8	182.1	12,000	160
165							13.9	166.1	11,400	165
170										170
175										175



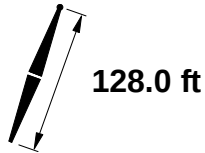
99,500 lb
+
0 lb



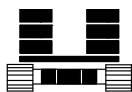
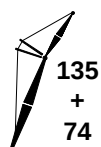
	75°		
50			
55			
60			
65			
70			
75			
80			
85			
90			
95			
100			
105	62.3	253.8	20,100
110	60.0	251.1	18,800
115	57.6	248.0	17,600
120	55.1	244.7	16,500
125	52.6	241.1	15,500
130	50.0	237.1	14,600
135	47.2	232.6	13,700
140	44.4	227.8	13,000
145	41.4	222.4	12,200
150	38.2	216.4	11,500
155	34.7	209.6	10,900
160	31.0	201.9	10,300
165	26.7	192.8	9,700
170	21.7	181.7	9,200
175	15.3	166.7	8,700



99,500 lb
+
0 lb



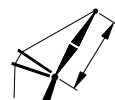
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
55	74.0	278.7	39,400 *b							55
60	72.0	277.1	38,900 *b							60
65	70.0	275.4	38,300 *b							65
70	67.9	273.5	37,700 *							70
75	65.8	271.4	36,600 *	69.5	274.1	38,200 *				75
80	63.7	269.0	35,500 *	67.5	272.1	35,400				80
85	61.6	266.4	34,300 *	65.4	269.9	32,700				85
90	59.4	263.6	32,900	63.3	267.5	30,200	66.0	269.5	28,200	90
95	57.1	260.5	30,600	61.1	264.9	28,100	63.9	267.2	26,200	95
100	54.8	257.1	28,600	58.9	262.0	26,200	61.8	264.6	24,400	100
105	52.5	253.4	26,700	56.6	258.8	24,500	59.6	261.8	22,800	105
110	50.0	249.4	25,100	54.3	255.4	22,900	57.4	258.8	21,300	110
115	47.5	245.0	23,500	51.9	251.6	21,500	55.1	255.4	20,000	115
120	44.8	240.2	22,200	49.5	247.5	20,200	52.7	251.8	18,800	120
125	42.0	235.0	20,900	46.9	243.1	19,100	50.3	247.8	17,700	125
130	39.1	229.1	19,800	44.2	238.2	18,000	47.7	243.4	16,700	130
135	36.0	222.6	18,700	41.4	232.8	17,000	45.1	238.7	15,700	135
140	32.6	215.3	17,700	38.4	226.8	16,100	42.3	233.5	14,900	140
145	28.8	206.9	16,800	35.2	220.1	15,200	39.4	227.7	14,100	145
150	24.6	196.9	15,900	31.8	212.6	14,400	36.3	221.2	13,300	150
155	19.5	184.6	15,100	27.9	203.9	13,700	32.9	214.0	12,600	155
160	12.6	167.2	14,400	23.5	193.5	13,000	29.2	205.7	12,000	160
165				18.2	180.4	12,300	25.0	195.9	11,300	165
170				10.4	160.8	11,700	20.1	183.9	10,700	170
175							13.4	167.3	10,200	175
180										180
185										185



99,500 lb
+
0 lb

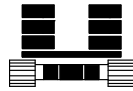
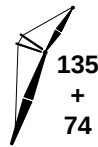


128.0 ft



150.0 ft

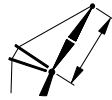
	75°		
	ft	ft	lb
55			
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110	62.2	262.5	18,700
115	60.0	259.7	17,500
120	57.7	256.7	16,400
125	55.5	253.4	15,400
130	53.1	249.8	14,500
135	50.7	245.9	13,600
140	48.2	241.6	12,900
145	45.5	236.9	12,100
150	42.8	231.8	11,500
155	39.9	226.1	10,800
160	36.8	219.8	10,200
165	33.5	212.7	9,700
170	29.9	204.6	9,100
175	25.8	195.1	8,600
180	21.0	183.6	8,200
185	14.8	168.1	7,700



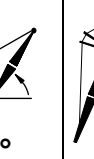
99,500 lb
+
0 lb

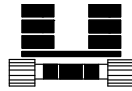
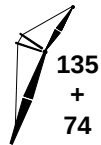


128.0 ft

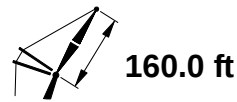
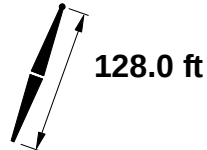


160.0 ft

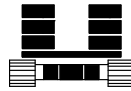
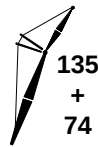
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60	73.1	287.6	36,000 *b							60
65	71.3	286.0	35,200 *b							65
70	69.4	284.2	34,400 *							70
75	67.4	282.3	33,500 *	70.8	284.7	35,300 *				75
80	65.5	280.1	32,500 *	68.9	282.9	34,700 *				80
85	63.5	277.7	31,200 *	67.0	280.9	32,400				85
90	61.5	275.1	30,000 *	65.0	278.6	29,900	67.6	280.4	27,900	90
95	59.4	272.3	28,800 *	63.1	276.2	27,800	65.7	278.3	25,900	95
100	57.3	269.2	27,500 *	61.0	273.5	25,900	63.7	275.9	24,100	100
105	55.2	265.8	26,400 *	59.0	270.7	24,200	61.7	273.3	22,500	105
110	53.0	262.2	24,800	56.8	267.5	22,600	59.6	270.5	21,000	110
115	50.7	258.3	23,300	54.7	264.1	21,200	57.5	267.4	19,700	115
120	48.3	254.0	21,900	52.5	260.4	19,900	55.4	264.1	18,500	120
125	45.9	249.4	20,700	50.2	256.4	18,800	53.2	260.5	17,400	125
130	43.3	244.3	19,500	47.8	252.1	17,700	50.9	256.6	16,400	130
135	40.7	238.7	18,500	45.3	247.3	16,700	48.6	252.4	15,400	135
140	37.8	232.6	17,500	42.7	242.2	15,800	46.1	247.8	14,600	140
145	34.8	225.8	16,600	40.0	236.5	15,000	43.6	242.8	13,800	145
150	31.5	218.1	15,700	37.2	230.2	14,200	40.9	237.3	13,000	150
155	27.9	209.4	14,900	34.1	223.2	13,400	38.1	231.2	12,300	155
160	23.8	199.1	14,200	30.7	215.4	12,700	35.1	224.5	11,700	160
165	18.9	186.3	13,400	27.0	206.3	12,100	31.9	216.9	11,100	165
170	12.2	168.3	12,800	22.8	195.5	11,500	28.3	208.3	10,500	170
175				17.6	181.9	10,900	24.2	198.1	9,900	175
180				10.1	161.7	10,300	19.4	185.6	9,400	180
185							13.0	168.4	8,900	185
190										190
195										195



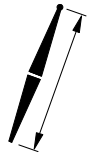
99,500 lb
+
0 lb



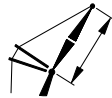
	75°		
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110			
115	62.0	271.2	17,100
120	60.0	268.4	16,000
125	57.9	265.4	15,000
130	55.8	262.1	14,100
135	53.6	258.6	13,300
140	51.3	254.7	12,500
145	49.0	250.5	11,800
150	46.5	246.0	11,100
155	44.0	241.0	10,500
160	41.4	235.6	9,900
165	38.6	229.7	9,400
170	35.6	223.1	8,800
175	32.4	215.7	8,300
180	28.9	207.2	7,900
185	25.0	197.4	7,400
190	20.3	185.4	7,000
195	14.3	169.3	6,600



99,500 lb
+
0 lb

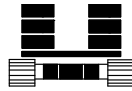
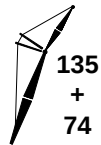


128.0 ft

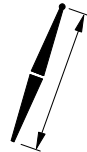


170.0 ft

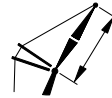
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60	74.2	298.1	32,500 *b							60
65	72.4	296.6	31,900 *b							65
70	70.6	294.9	31,300 *							70
75	68.8	293.0	30,600 *							75
80	67.0	291.0	29,800 *	70.2	293.5	30,900 *				80
85	65.2	288.8	28,600 *	68.4	291.7	30,600 *				85
90	63.3	286.4	27,400 *	66.6	289.6	29,600 *				90
95	61.4	283.8	26,300 *	64.8	287.3	27,500	67.2	289.2	25,600	95
100	59.5	280.9	25,200 *	62.9	284.9	25,600	65.4	287.0	23,800	100
105	57.5	277.8	24,000 *	61.0	282.2	23,900	63.5	284.6	22,200	105
110	55.5	274.5	22,900 *	59.0	279.3	22,400	61.6	282.0	20,700	110
115	53.4	271.0	21,800 *	57.0	276.2	21,000	59.7	279.2	19,400	115
120	51.3	267.1	20,800 *	55.0	272.8	19,700	57.7	276.1	18,200	120
125	49.1	262.9	19,700 *	52.9	269.2	18,500	55.7	272.8	17,100	125
130	46.8	258.4	18,800 *	50.8	265.3	17,500	53.6	269.3	16,100	130
135	44.4	253.5	17,900 *	48.6	261.0	16,500	51.5	265.4	15,200	135
140	42.0	248.2	16,900 *	46.3	256.4	15,600	49.3	261.3	14,300	140
145	39.4	242.4	16,100 *	43.9	251.4	14,700	47.0	256.8	13,500	145
150	36.6	236.0	15,200 *	41.4	246.0	14,000	44.7	252.0	12,800	150
155	33.7	228.9	14,400 *	38.8	240.1	13,200	42.2	246.7	12,100	155
160	30.6	220.9	13,500 *	36.0	233.5	12,500	39.6	240.9	11,500	160
165	27.1	211.8	12,600 *	33.0	226.2	11,900	36.9	234.6	10,800	165
170	23.1	201.1	11,700 *	29.8	218.1	11,300	34.0	227.6	10,300	170
175	18.3	187.9	10,800 *	26.2	208.7	10,700	30.9	219.7	9,700	175
180	11.8	169.3	10,100 *	22.1	197.5	10,200	27.4	210.7	9,200	180
185				17.1	183.5	9,600	23.5	200.2	8,700	185
190				9.8	162.5	9,100	18.8	187.3	8,300	190
195							12.6	169.5	7,800	195
200										200
205										205



99,500 lb
+
0 lb

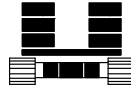
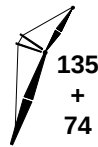


128.0 ft



170.0 ft

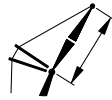
	75°		
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110			
115			
120	61.9	279.8	15,800
125	60.0	277.1	14,800
130	58.0	274.0	13,900
135	56.0	270.8	13,000
140	54.0	267.3	12,300
145	51.8	263.5	11,500
150	49.7	259.4	10,900
155	47.4	255.0	10,200
160	45.1	250.2	9,700
165	42.6	245.0	9,100
170	40.1	239.3	8,600
175	37.4	233.1	8,100
180	34.5	226.2	7,700
185	31.4	218.5	7,200
190	28.0	209.8	6,800
195	24.2	199.6	6,400
200	19.7	187.2	6,000
205	13.9	170.6	5,600



99,500 lb
+
0 lb



137.8 ft

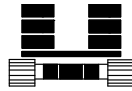
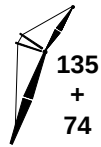


70.0 ft

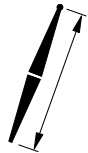
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34	73.5	211.5	85,900 *d							34
36	71.8	210.8	85,900 *d							36
38	70.1	210.1	85,800 *d							38
40	68.3	209.4	85,700 *d							40
45	63.8	207.2	81,100 *c							45
50	59.2	204.4	73,200 c	67.9	208.2	67,800 c				50
55	54.3	201.2	64,600 b	63.4	205.9	59,900 b				55
60	49.0	197.2	57,700 b	58.8	203.2	53,500 b	65.4	205.8	50,300 c	60
65	43.4	192.4	52,100 b	53.8	199.8	48,300 b	60.8	203.2	45,400 b	65
70	37.0	186.5	47,300	48.6	195.8	43,800	55.9	200.2	41,200 b	70
75	29.6	178.9	43,300	42.9	190.9	40,100	50.8	196.4	37,700 b	75
80	19.7	168.0	39,700	36.4	184.9	36,900	45.3	192.0	34,600	80
85				28.8	177.1	34,000	39.3	186.5	32,000	85
90				18.7	165.7	31,500	32.3	179.5	29,600	90
95							23.5	170.1	27,500	95
100							8.7	152.7	25,600	100
105										105
110										110
115										115
120										120
125										125
130										130

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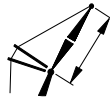
ASME B30.5



99,500 lb
+
0 lb

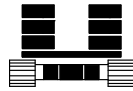
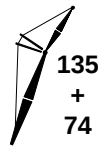


137.8 ft



70.0 ft

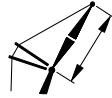
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
34										34
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75	62.3	201.4	33,700 b							75
80	57.6	198.5	30,900 b							80
85	52.6	195.0	28,500 b							85
90	47.3	190.8	26,400							90
95	41.4	185.7	24,600	54.0	192.2	21,600 b				95
100	34.8	179.3	22,900	48.8	188.2	20,100				100
105	26.8	170.9	21,400	43.1	183.4	18,800				105
110	15.3	157.9	19,900	36.7	177.4	17,500	49.9	184.3	15,100	110
115				29.2	169.7	16,400	44.3	179.7	14,100	115
120				19.2	158.6	15,400	38.1	174.0	13,200	120
125							30.9	166.7	12,400	125
130							21.6	156.6	11,600	130



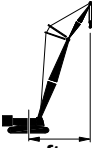
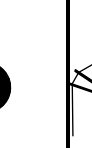
99,500 lb
+
0 lb



137.8 ft

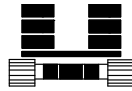
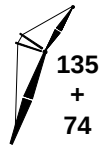


80.0 ft

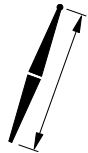
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	ft	lb	ft	ft	ft
36	74.1	221.3	78,800 *d							36
38	72.6	220.7	78,700 *d							38
40	71.1	220.0	78,600 *d							40
45	67.3	218.1	77,200 *c							45
50	63.4	215.8	72,300 *c	70.8	218.9	67,500 c				50
55	59.3	213.1	64,400 b	67.0	217.0	59,600 b				55
60	55.0	209.9	57,500 b	63.0	214.6	53,200 b				60
65	50.5	206.1	51,900 b	58.9	211.8	47,900 b	64.7	214.5	45,000 b	65
70	45.7	201.6	47,100	54.6	208.6	43,600	60.7	211.9	40,900 b	70
75	40.4	196.2	43,100	50.1	204.7	39,800	56.5	208.8	37,300 b	75
80	34.6	189.7	39,700	45.3	200.2	36,600	52.1	205.2	34,300	80
85	27.6	181.4	36,600	40.0	194.7	33,800	47.4	201.0	31,700	85
90	18.5	169.7	33,900	34.0	188.1	31,400	42.3	196.0	29,400	90
95				26.9	179.6	29,200	36.6	189.9	27,300	95
100				17.5	167.3	27,200	30.1	182.3	25,500	100
105							22.0	172.1	23,800	105
110							8.1	153.4	22,200	110
115										115
120										120
125										125
130										130
135										135
140										140

MLC165 S-1

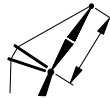
ASME B30.5



99,500 lb
+
0 lb

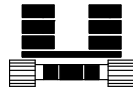
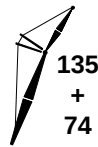


137.8 ft

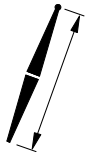


80.0 ft

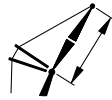
	75°			70°			65°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
36										36
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80	62.0	210.0	30,500 b							80
85	57.9	207.1	28,100 b							85
90	53.6	203.7	26,100							90
95	49.0	199.7	24,200							95
100	44.0	195.0	22,600	54.8	200.9	19,700				100
105	38.6	189.3	21,100	50.3	197.1	18,400				105
110	32.5	182.3	19,700	45.5	192.6	17,200				110
115	25.0	173.2	18,500	40.2	187.2	16,100	51.3	193.2	13,700	115
120	14.3	159.2	17,300	34.3	180.6	15,100	46.5	188.8	12,800	120
125				27.3	172.2	14,100	41.3	183.6	12,000	125
130				18.0	160.2	13,200	35.6	177.3	11,200	130
135							28.9	169.4	10,500	135
140							20.2	158.4	9,900	140



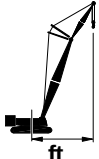
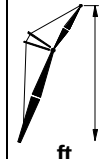
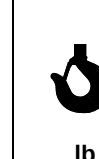
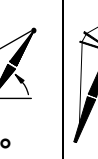
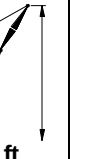
99,500 lb
+
0 lb



137.8 ft

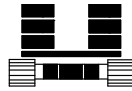
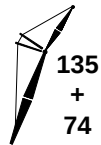


90.0 ft

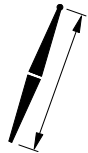
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38	74.6	231.1	72,200 *d							38
40	73.3	230.5	72,000 *d							40
45	69.9	228.9	71,700 *c							45
50	66.5	226.9	69,900 *c							50
55	63.0	224.5	64,200 b	69.6	227.7	59,300 c				55
60	59.4	221.8	57,400 b	66.2	225.7	53,000 b				60
65	55.6	218.6	51,700 b	62.7	223.3	47,700 b	67.7	225.4	44,800 b	65
70	51.6	214.9	47,000 b	59.0	220.5	43,400	64.2	223.2	40,600 b	70
75	47.4	210.6	43,000	55.2	217.3	39,600	60.6	220.6	37,100 b	75
80	42.9	205.6	39,600	51.3	213.5	36,500	56.9	217.5	34,100	80
85	38.0	199.8	36,600	47.1	209.2	33,700	53.0	214.0	31,500	85
90	32.5	192.7	33,900	42.5	204.2	31,200	48.9	209.9	29,200	90
95	26.0	183.8	31,600	37.6	198.2	29,100	44.5	205.2	27,200	95
100	17.4	171.2	29,400	32.0	191.0	27,100	39.8	199.7	25,300	100
105				25.4	181.9	25,400	34.5	193.1	23,700	105
110				16.5	168.8	23,700	28.4	184.9	22,200	110
115							20.7	173.9	20,800	115
120							7.7	154.1	19,500	120
125										125
130										130
135										135
140										140
145										145
150										150

MLC165 S-1

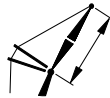
ASME B30.5



99,500 lb
+
0 lb

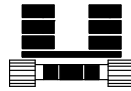
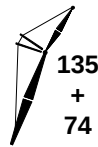


137.8 ft

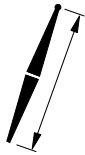


90.0 ft

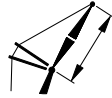
	75°			70°			65°			
ft	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
38										38
40										40
45										45
50										50
55										55
60										60
65										65
70										70
75										75
80										80
85	61.8	218.7	27,900 b							85
90	58.1	215.8	25,800							90
95	54.3	212.5	24,000							95
100	50.3	208.6	22,400							100
105	46.0	204.1	20,900	55.4	209.6	18,100				105
110	41.4	198.9	19,600	51.4	205.9	16,900				110
115	36.3	192.7	18,300	47.2	201.6	15,900				115
120	30.6	185.1	17,200	42.7	196.6	14,900	52.3	202.0	12,600	120
125	23.6	175.3	16,200	37.8	190.7	14,000	48.1	197.8	11,800	125
130	13.5	160.4	15,200	32.3	183.6	13,100	43.7	193.0	11,000	130
135				25.7	174.6	12,300	38.9	187.3	10,300	135
140				16.9	161.8	11,600	33.5	180.4	9,700	140
145							27.2	171.9	9,100	145
150							19.1	160.2	8,500	150



99,500 lb
+
0 lb

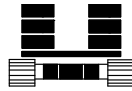
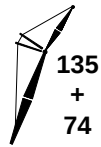


137.8 ft



100.0 ft

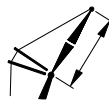
	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
40	75.0	240.9	66,400 *d							40
45	72.0	239.4	66,100 *c							45
50	69.0	237.7	65,600 *c							50
55	65.9	235.6	62,400 *b							55
60	62.7	233.2	57,100 b	68.7	236.5	52,600 b				60
65	59.4	230.4	51,500 b	65.6	234.4	47,400 b				65
70	56.0	227.3	46,800 b	62.4	232.0	43,000	66.9	234.2	40,200 b	70
75	52.5	223.7	42,800	59.1	229.2	39,300	63.8	231.9	36,800 b	75
80	48.8	219.6	39,300	55.7	226.0	36,100	60.5	229.2	33,800	80
85	44.9	214.9	36,300	52.2	222.3	33,400	57.2	226.2	31,100	85
90	40.6	209.5	33,700	48.5	218.2	30,900	53.7	222.8	28,900	90
95	36.0	203.1	31,400	44.5	213.4	28,800	50.1	218.8	26,800	95
100	30.8	195.6	29,300	40.3	208.0	26,900	46.2	214.3	25,000	100
105	24.7	186.0	27,400	35.6	201.5	25,100	42.1	209.2	23,400	105
110	16.5	172.7	25,700	30.3	193.8	23,600	37.6	203.2	21,900	110
115				24.1	184.1	22,100	32.7	196.1	20,600	115
120				15.6	170.2	20,800	26.9	187.4	19,300	120
125							19.6	175.7	18,200	125
130							7.3	154.8	17,100	130
135										135
140										140
145										145
150										150



99,500 lb
+
0 lb

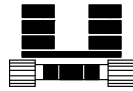
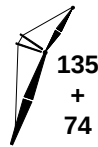


137.8 ft



100.0 ft

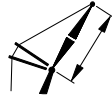
	75°			70°			
ft	ft	ft	lb	ft	ft	lb	ft
40							40
45							45
50							50
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90	61.6	227.4	25,400				90
95	58.3	224.5	23,600				95
100	54.9	221.2	22,000				100
105	51.3	217.4	20,500				105
110	47.5	213.1	19,200	55.9	218.3	16,500	110
115	43.5	208.2	18,000	52.3	214.7	15,500	115
120	39.2	202.6	16,900	48.6	210.6	14,500	120
125	34.4	195.9	15,900	44.7	205.9	13,600	125
130	29.0	187.8	15,000	40.5	200.4	12,800	130
135	22.3	177.3	14,100	35.8	194.1	12,000	135
140	12.8	161.6	13,200	30.6	186.4	11,300	140
145				24.4	176.8	10,600	145
150				16.1	163.2	10,000	150



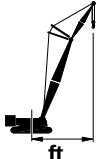
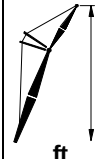
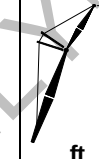
99,500 lb
+
0 lb

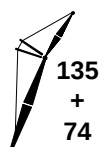


137.8 ft



110.0 ft

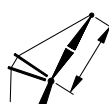
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	ft	lb	ft	lb	ft
45		73.7	249.9	61,200 *c						45
50		71.0	248.3	60,100 *c						50
55		68.2	246.5	57,700 *b						55
60		65.4	244.3	55,200 *b	70.7	247.2	52,500 b			60
65		62.5	241.9	51,400 b	67.9	245.3	47,300 b			65
70		59.5	239.1	46,700 b	65.1	243.1	43,000			70
75		56.4	235.9	42,700	62.2	240.6	39,300	66.3	242.9	36,700
80		53.2	232.4	39,300	59.2	237.8	36,100	63.4	240.5	33,700
85		49.9	228.5	36,300	56.1	234.7	33,300	60.5	237.9	31,100
90		46.4	224.0	33,700	52.9	231.1	30,900	57.4	234.9	28,800
95		42.7	218.9	31,400	49.6	227.1	28,700	54.3	231.5	26,800
100		38.7	213.1	29,300	46.1	222.6	26,800	51.0	227.7	25,000
105		34.3	206.3	27,400	42.3	217.4	25,100	47.6	223.4	23,400
110		29.4	198.2	25,800	38.3	211.5	23,600	44.0	218.5	21,900
115		23.5	188.2	24,200	33.9	204.7	22,100	40.1	212.9	20,600
120		15.7	174.1	22,800	28.9	196.5	20,800	35.8	206.5	19,400
125					22.9	186.2	19,700	31.1	199.0	18,200
130					14.9	171.6	18,500	25.6	189.7	17,200
135								18.7	177.4	16,200
140								6.9	155.4	15,300
145										145
150										150
155										155
160										160



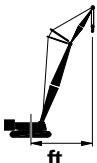
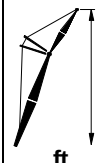
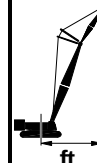
99,500 lb
+
0 lb

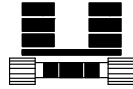
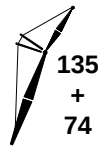


137.8 ft

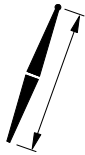


110.0 ft

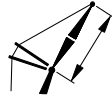
	75°			70°			
 ft	 °	 ft	 lb	 °	 ft	 lb	 ft
45							45
50							50
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95	61.5	236.0	23,500				95
100	58.5	233.1	21,900				100
105	55.4	229.9	20,500				105
110	52.1	226.2	19,200				110
115	48.8	222.1	18,000	56.3	227.0	15,400	115
120	45.2	217.4	16,900	53.1	223.5	14,400	120
125	41.4	212.1	15,900	49.7	219.5	13,600	125
130	37.3	206.0	15,000	46.2	215.0	12,700	130
135	32.8	198.9	14,100	42.5	209.9	12,000	135
140	27.6	190.3	13,300	38.5	204.0	11,300	140
145	21.3	179.3	12,600	34.1	197.2	10,600	145
150	12.2	162.7	11,800	29.1	189.1	10,000	150
155				23.2	178.9	9,400	155
160				15.3	164.6	8,900	160



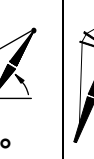
99,500 lb
+
0 lb



137.8 ft

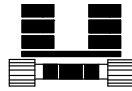
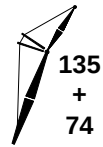


120.0 ft

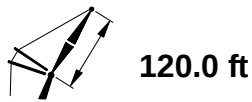
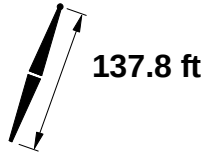
	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	
50	72.6	258.8	47,600 *c							50
55	70.1	257.2	46,800 *b							55
60	67.5	255.2	46,000 *b							60
65	64.9	253.0	45,300 *b	69.9	256.0	47,000 b				65
70	62.2	250.5	44,600 *	67.3	254.0	42,600				70
75	59.5	247.7	42,400	64.7	251.8	38,900				75
80	56.7	244.6	39,000	62.0	249.3	35,800	65.8	251.6	33,300	80
85	53.8	241.2	36,000	59.3	246.5	33,000	63.2	249.2	30,700	85
90	50.8	237.3	33,400	56.5	243.4	30,600	60.4	246.5	28,500	90
95	47.6	233.0	31,100	53.5	239.8	28,400	57.7	243.5	26,400	95
100	44.3	228.1	29,100	50.5	235.9	26,500	54.8	240.2	24,600	100
105	40.8	222.7	27,200	47.3	231.6	24,800	51.8	236.5	23,000	105
110	37.0	216.5	25,500	44.0	226.7	23,300	48.7	232.3	21,600	110
115	32.8	209.3	24,000	40.5	221.2	21,900	45.4	227.7	20,300	115
120	28.1	200.8	22,600	36.6	214.9	20,600	42.0	222.4	19,100	120
125	22.5	190.2	21,300	32.4	207.6	19,400	38.3	216.5	18,000	125
130	15.1	175.5	20,100	27.6	199.0	18,300	34.2	209.7	16,900	130
135				21.9	188.2	17,300	29.7	201.7	16,000	135
140				14.2	172.8	16,400	24.5	191.9	15,100	140
145							17.9	179.0	14,300	145
150							6.6	156.0	13,500	150
155										155
160										160
165										165
170										170

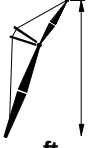
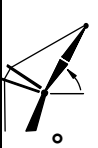
MLC165 S-1

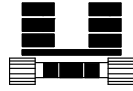
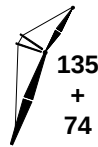
ASME B30.5



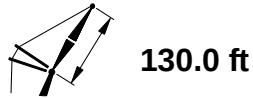
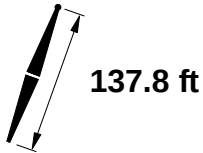
99,500 lb
+
0 lb

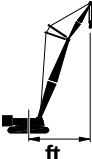
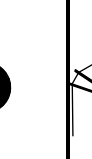


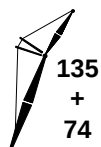
	75°			70°			
	 ft	 ft	 lb	 ft	 ft	 lb	 ft
50							50
55							55
60							60
65							65
70							70
75							75
80							80
85							85
90							90
95							95
100	61.4	244.7	21,500				100
105	58.6	241.8	20,100				105
110	55.8	238.6	18,800				110
115	52.8	235.0	17,600				115
120	49.8	231.0	16,500	56.6	235.7	14,000	120
125	46.6	226.5	15,500	53.7	232.2	13,200	125
130	43.2	221.5	14,600	50.6	228.3	12,300	130
135	39.6	215.8	13,800	47.5	224.0	11,600	135
140	35.7	209.3	13,000	44.2	219.2	10,900	140
145	31.3	201.8	12,300	40.6	213.7	10,300	145
150	26.4	192.7	11,600	36.8	207.4	9,700	150
155	20.4	181.1	10,900	32.6	200.2	9,100	155
160	11.7	163.7	10,300	27.9	191.6	8,600	160
165				22.2	180.9	8,100	165
170				14.7	165.9	7,600	170



99,500 lb
+
0 lb



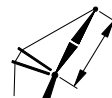
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
50	74.0	269.3	44,700 *c							50
55	71.7	267.7	44,000 *b							55
60	69.3	266.0	43,400 *b							60
65	67.0	264.0	42,700 *b							65
70	64.5	261.7	42,100 *b	69.1	264.8	42,400				70
75	62.1	259.2	40,600 *	66.8	262.8	38,700				75
80	59.6	256.4	38,800	64.3	260.5	35,500	67.8	262.5	33,100	80
85	57.0	253.3	35,800	61.9	258.0	32,800	65.4	260.3	30,500	85
90	54.3	249.9	33,200	59.3	255.2	30,300	62.9	257.9	28,200	90
95	51.5	246.1	30,900	56.7	252.0	28,200	60.4	255.2	26,200	95
100	48.7	241.9	28,900	54.1	248.6	26,300	57.8	252.2	24,400	100
105	45.6	237.3	27,000	51.3	244.8	24,600	55.2	248.9	22,800	105
110	42.5	232.1	25,400	48.4	240.5	23,100	52.5	245.2	21,400	110
115	39.1	226.3	23,800	45.4	235.9	21,700	49.6	241.2	20,000	115
120	35.5	219.8	22,500	42.2	230.7	20,400	46.7	236.7	18,800	120
125	31.5	212.2	21,200	38.8	224.8	19,200	43.6	231.7	17,700	125
130	27.0	203.2	20,000	35.1	218.2	18,200	40.3	226.2	16,700	130
135	21.6	192.2	18,900	31.1	210.5	17,200	36.7	219.9	15,800	135
140	14.5	176.8	17,900	26.5	201.4	16,200	32.9	212.7	14,900	140
145				21.1	190.1	15,400	28.5	204.3	14,100	145
150				13.7	174.1	14,500	23.5	194.0	13,400	150
155							17.2	180.6	12,700	155
160							6.4	156.6	11,900	160
165										165
170										170



99,500 lb
+
0 lb

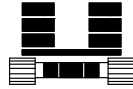
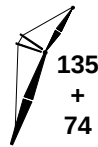


137.8 ft

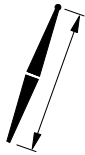


130.0 ft

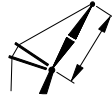
	75°		
50			
55			
60			
65			
70			
75			
80			
85			
90			
95			
100			
105	61.3	253.4	19,800
110	58.7	250.5	18,500
115	56.1	247.3	17,300
120	53.4	243.7	16,300
125	50.6	239.8	15,300
130	47.7	235.5	14,400
135	44.6	230.7	13,600
140	41.4	225.3	12,800
145	38.0	219.3	12,100
150	34.2	212.5	11,400
155	30.1	204.5	10,800
160	25.3	195.0	10,200
165	19.6	182.9	9,600
170	11.2	164.7	9,000



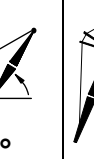
99,500 lb
+
0 lb

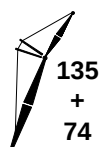


137.8 ft



140.0 ft

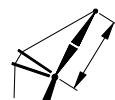
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	lb	ft	lb	ft	ft
55		73.0	278.2	41,200 *b						55
60		70.9	276.6	40,600 *b						60
65		68.7	274.8	40,000 *b						65
70		66.5	272.7	39,000 *b	70.7	275.5	40,500 *			70
75		64.2	270.4	37,600 *	68.5	273.6	38,400			75
80		61.9	267.9	36,300 *	66.3	271.5	35,200			80
85		59.6	265.1	34,800 *	64.0	269.2	32,400	67.2	271.2	85
90		57.2	262.0	33,000	61.7	266.6	30,000	65.0	269.0	90
95		54.7	258.6	30,700	59.4	263.8	27,900	62.7	266.6	95
100		52.2	254.9	28,600	57.0	260.7	26,000	60.4	263.9	100
105		49.5	250.8	26,800	54.5	257.3	24,300	58.0	260.9	105
110		46.8	246.3	25,100	51.9	253.6	22,800	55.6	257.6	110
115		43.9	241.4	23,600	49.3	249.5	21,400	53.0	254.0	115
120		40.9	235.9	22,200	46.5	244.9	20,100	50.4	250.1	120
125		37.6	229.8	21,000	43.6	240.0	18,900	47.7	245.7	125
130		34.1	222.9	19,800	40.6	234.4	17,900	44.9	240.9	130
135		30.3	215.0	18,700	37.3	228.2	16,900	41.9	235.7	135
140		26.0	205.6	17,700	33.8	221.3	16,000	38.7	229.8	140
145		20.8	194.0	16,800	29.9	213.2	15,100	35.3	223.1	145
150		13.9	178.0	15,900	25.5	203.7	14,300	31.6	215.6	150
155					20.3	191.9	13,600	27.5	206.8	155
160					13.2	175.2	12,800	22.7	196.1	160
165								16.6	182.0	165
170								6.1	157.1	170
175										175
180										180



99,500 lb
+
0 lb

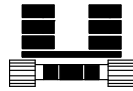
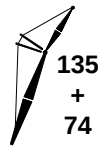


137.8 ft

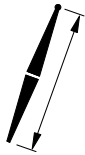


140.0 ft

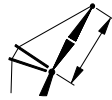
	75°		
55			
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110	61.2	262.0	18,100
115	58.8	259.1	17,000
120	56.4	256.0	15,900
125	53.9	252.5	14,900
130	51.3	248.6	14,000
135	48.6	244.4	13,200
140	45.9	239.8	12,400
145	42.9	234.7	11,700
150	39.8	229.0	11,100
155	36.5	222.7	10,400
160	32.9	215.5	9,900
165	29.0	207.1	9,300
170	24.4	197.2	8,800
175	18.8	184.6	8,300
180	10.8	165.7	7,800



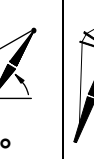
99,500 lb
+
0 lb

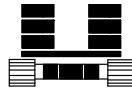
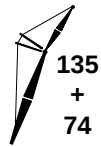


137.8 ft

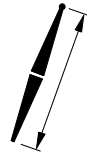


150.0 ft

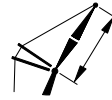
	87°			83°			80°			
										
	ft	ft	ft	lb	ft	ft	lb	ft	lb	ft
55	74.2	288.7	38,600 *c							55
60	72.2	287.1	37,800 *b							60
65	70.2	285.4	36,900 *b							65
70	68.1	283.5	35,800 *b							70
75	66.1	281.4	34,800 *	70.0	284.3	37,300 *				75
80	63.9	279.1	33,700 *	68.0	282.4	35,100				80
85	61.8	276.5	32,500 *	65.9	280.2	32,300				85
90	59.6	273.7	31,300 *	63.8	277.9	29,900	66.8	280.0	27,700	90
95	57.4	270.7	30,100 *	61.6	275.3	27,800	64.7	277.7	25,700	95
100	55.1	267.3	28,500	59.4	272.5	25,900	62.5	275.2	23,900	100
105	52.7	263.7	26,700	57.2	269.4	24,200	60.4	272.5	22,300	105
110	50.3	259.7	25,000	54.9	266.0	22,700	58.1	269.5	20,900	110
115	47.7	255.3	23,500	52.5	262.3	21,300	55.9	266.3	19,600	115
120	45.1	250.6	22,100	50.1	258.3	20,000	53.5	262.8	18,400	120
125	42.3	245.4	20,900	47.5	254.0	18,800	51.1	258.9	17,300	125
130	39.4	239.6	19,700	44.9	249.2	17,800	48.6	254.7	16,300	130
135	36.3	233.1	18,700	42.1	243.9	16,800	46.0	250.1	15,400	135
140	32.9	225.9	17,700	39.2	238.1	15,900	43.3	245.0	14,600	140
145	29.2	217.6	16,800	36.0	231.6	15,000	40.4	239.4	13,800	145
150	25.1	207.9	15,900	32.6	224.2	14,300	37.4	233.2	13,000	150
155	20.1	195.8	15,100	28.9	215.8	13,500	34.1	226.3	12,300	155
160	13.5	179.2	14,300	24.7	205.9	12,800	30.5	218.4	11,700	160
165				19.6	193.6	12,200	26.5	209.2	11,100	165
170				12.7	176.4	11,500	21.9	198.0	10,500	170
175							16.0	183.5	9,900	175
180							5.9	157.6	9,400	180
185										185
190										190



99,500 lb
+
0 lb

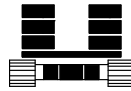
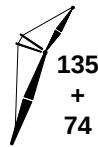


137.8 ft

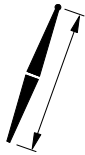


150.0 ft

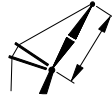
	75°		
	ft	ft	lb
55			
60			
65			
70			
75			
80			
85			
90			
95			
100			
105			
110			
115	61.1	270.7	16,800
120	58.9	267.8	15,800
125	56.6	264.6	14,800
130	54.3	261.2	13,900
135	51.9	257.4	13,100
140	49.5	253.4	12,300
145	46.9	248.9	11,600
150	44.2	244.0	11,000
155	41.4	238.6	10,400
160	38.4	232.6	9,800
165	35.2	225.9	9,200
170	31.8	218.4	8,700
175	28.0	209.7	8,200
180	23.6	199.3	7,800
185	18.2	186.2	7,300
190	10.5	166.6	6,900



99,500 lb
+
0 lb

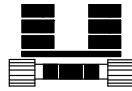
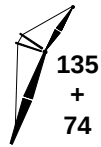


137.8 ft



160.0 ft

	87°			83°			80°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	ft
60	73.3	297.6	34,200 *b							60
65	71.5	296.0	33,500 *b							65
70	69.6	294.3	32,700 *b							70
75	67.6	292.3	31,900 *							75
80	65.7	290.1	31,000 *	69.4	293.1	33,900 *				80
85	63.7	287.8	30,100 *	67.5	291.1	32,000				85
90	61.7	285.2	29,100 *	65.5	289.0	29,600				90
95	59.6	282.4	28,200 *	63.5	286.6	27,500	66.3	288.7	25,400	95
100	57.5	279.3	27,100 *	61.5	284.0	25,600	64.4	286.4	23,600	100
105	55.4	276.0	26,100 *	59.5	281.1	23,900	62.4	283.9	22,000	105
110	53.2	272.4	24,700	57.4	278.1	22,400	60.3	281.2	20,600	110
115	50.9	268.5	23,200	55.2	274.7	21,000	58.3	278.2	19,300	115
120	48.6	264.3	21,900	53.0	271.1	19,700	56.1	275.0	18,100	120
125	46.1	259.7	20,600	50.7	267.2	18,500	53.9	271.5	17,000	125
130	43.6	254.7	19,500	48.4	262.9	17,500	51.7	267.7	16,000	130
135	40.9	249.2	18,400	45.9	258.3	16,500	49.4	263.6	15,100	135
140	38.1	243.1	17,400	43.4	253.2	15,600	47.0	259.1	14,200	140
145	35.1	236.4	16,500	40.7	247.7	14,800	44.5	254.2	13,500	145
150	31.9	228.8	15,700	37.9	241.5	14,000	41.8	248.9	12,700	150
155	28.3	220.2	14,900	34.8	234.8	13,300	39.1	243.0	12,000	155
160	24.3	210.0	14,100	31.6	227.1	12,600	36.2	236.5	11,400	160
165	19.4	197.6	13,400	28.0	218.4	11,900	33.0	229.3	10,800	165
170	13.0	180.4	12,700	23.9	208.1	11,300	29.5	221.0	10,200	170
175				19.0	195.3	10,700	25.7	211.5	9,700	175
180				12.3	177.5	10,200	21.2	199.9	9,200	180
185							15.5	184.8	8,700	185
190							5.7	158.1	8,200	190

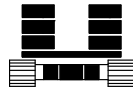
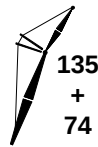


99,500 lb
+
0 lb



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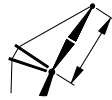
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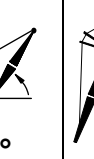
99,500 lb
+
0 lb

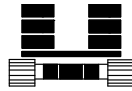
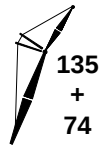


137.8 ft



170.0 ft

	87°			83°			80°			
										
	ft	ft	lb	ft	ft	lb	ft	lb	ft	ft
60	74.3	308.0	31,000 *b							60
65	72.6	306.5	30,400 *b							65
70	70.8	304.9	29,800 *b							70
75	69.0	303.1	29,200 *							75
80	67.2	301.0	28,500 *	70.7	303.7	29,900 *				80
85	65.4	298.9	27,700 *	68.9	301.9	29,600 *				85
90	63.5	296.5	27,000 *	67.0	299.9	29,300				90
95	61.6	293.9	26,100 *	65.2	297.7	27,200	67.8	299.6	25,100	95
100	59.7	291.0	25,200 *	63.3	295.2	25,300	66.0	297.4	23,300	100
105	57.7	288.0	24,000 *	61.4	292.6	23,600	64.1	295.1	21,700	105
110	55.7	284.7	23,000 *	59.5	289.8	22,100	62.2	292.6	20,300	110
115	53.6	281.2	21,900 *	57.5	286.7	20,700	60.3	289.8	19,000	115
120	51.5	277.3	20,900 *	55.5	283.4	19,500	58.4	286.9	17,800	120
125	49.3	273.2	19,900 *	53.4	279.9	18,300	56.4	283.7	16,800	125
130	47.0	268.7	18,900 *	51.3	276.0	17,300	54.3	280.2	15,800	130
135	44.7	263.9	17,900 *	49.1	271.8	16,300	52.2	276.5	14,800	135
140	42.2	258.6	17,000 *	46.8	267.3	15,400	50.0	272.4	14,000	140
145	39.7	252.8	16,200 *	44.5	262.4	14,500	47.8	268.1	13,200	145
150	36.9	246.5	15,400 *	42.0	257.1	13,800	45.5	263.4	12,500	150
155	34.0	239.5	14,600 *	39.4	251.3	13,000	43.1	258.2	11,800	155
160	30.9	231.6	13,600 *	36.7	244.9	12,400	40.5	252.6	11,200	160
165	27.4	222.7	12,700 *	33.8	237.8	11,700	37.9	246.5	10,600	165
170	23.5	212.2	11,800 *	30.6	229.9	11,100	35.0	239.7	10,000	170
175	18.9	199.3	11,000 *	27.1	220.8	10,500	32.0	232.2	9,500	175
180	12.6	181.5	10,200 *	23.1	210.2	10,000	28.6	223.6	9,000	180
185				18.4	197.0	9,500	24.9	213.7	8,500	185
190				12.0	178.5	9,000	20.5	201.8	8,000	190
195							15.0	186.2	7,600	195
200							5.6	158.6	7,100	200



99,500 lb
+
0 lb



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REFERENCE ONLY!