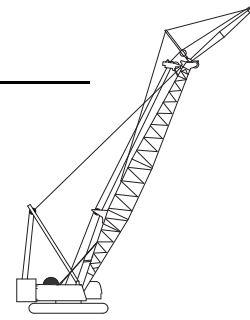


Liftcrane Jib Capacities

Jib No. 134 with 12 ft 6 in. Strut on
Boom No. 74

121,500 lb Crane Counterweight
35,300 lb Carbody Counterweight
360 Degree Rating



MLC165 SERIES 2



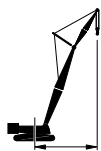
LIFTING CAPACITIES: Chart supplements boom capacity chart No. 9287-A. Lifting capacities for various boom lengths, jib lengths, and jib operating radii are for freely suspended loads and do not exceed 75% of a static tipping load. Capacities based on structural competence are denoted by an asterisk (*).

206.7 ft thru 275.6 ft boom lengths require only the middle three sheaves in lower boom point. All other sheaves must be removed from lower boom point.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves, is considered part of jib load. Boom and 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 in a level position on a firm uniformly supporting surface. Refer to Boom Rigging No. 81019793 or No. 83004083, Jib Assembly No. 81022482 or No. 83009103, Wire Rope Specification chart No. 9292-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 must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specification chart No. 9290-A.



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



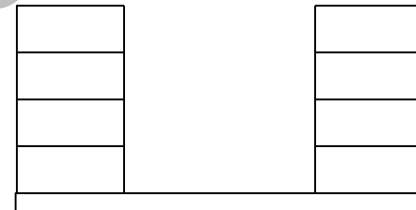
BOOM ANGLE: Boom angle in degrees (°) is angle between horizontal and centerline of boom butt and inserts, and is an indication of operating radius. In all cases, operating radius shall govern capacity.



JIB POINT ELEVATION: Jib point elevation is vertical distance from ground level to centerline of 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, 121,500 lb crane counterweight, and two 17,650 lb carbody counterweights.

Maximum capacity on 26 mm wire rope is 27,558 lb per line (20,000 lb per line when auxiliary drum is used).



121,500 lb Crane Counterweight
8 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.

Auxiliary Drum Deduct

Deduct 1,300 lb from capacities when boom butt is equipped with auxiliary drum, and 6,0 m (19.7 ft) insert is equipped with wire rope guide sheaves.

Lower Boom Point Sheave Deduct

Deduct 600 lb from capacities for boom lengths 147.6 ft thru 196.9 ft when lower boom point is equipped with outer sheave clusters.

Refer to **Tables 1 and 2** for raising ability with the maximum weight of all load blocks, hooks, weight balls, slings, and hoist lines beneath lower and/or upper boom point and jib point sheaves. For block weights shown with #, a, or b, load blocks, hooks, weight balls, and slings must remain on ground until combined weights are within rated capacity of chart. For block weights shown with (a), auxiliary drum mounted in boom butt, wire rope guide sheaves in 6,0 m (19.7 ft) insert, and boom lights must be removed. For block weights shown with (b), upper boom point must be removed. Raising is not permitted in shaded areas of table.

Caution: Combined weight beneath lower and/or upper boom point and jib point sheaves must not exceed block weight shown. Total weight beneath jib point must not exceed 4,000 lb.

Table 1

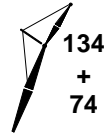
Raising Ability Over End or Side of Crawlers						
Boom Length (ft)	Fixed Jib No. 134					
	30.0 ft	40.0 ft	50.0 ft	60.0 ft	70.0 ft	80.0 ft
	Block Weight (lb)					
88.6 - 137.8	7,700	7,700	7,700	7,700	7,700	7,700
147.6	7,700	7,700	7,700	7,700	7,700	5,800
157.5	7,700	7,700	7,700	7,700	5,800	5,800
167.3	7,700	7,700	5,800	5,800	1,600	1,600
177.2	5,800	5,800	1,600	1,600	1,600	1,600
187.0	1,600	1,600	1,600	1,600	1,600	1,600
196.9	1,600	1,600	1,600	1,600	1,600	#
206.7	1,600	1,600	#	#	#	#
216.5	#	#	#	a	RAISING NOT PERMITTED	
226.4	#	a				
236.2 - 246.1						

Table 2

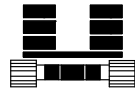
Raising Ability Over Front of Blocked Crawlers						
Boom Length (ft)	Fixed Jib No. 134					
	30.0 ft	40.0 ft	50.0 ft	60.0 ft	70.0 ft	80.0 ft
	Block Weight (lb)					
88.6 - 137.8	7,700	7,700	7,700	7,700	7,700	7,700
147.6	7,700	7,700	7,700	7,700	7,700	5,800
157.5	7,700	7,700	7,700	7,700	5,800	5,800
167.3	7,700	7,700	5,800	5,800	1,600	1,600
177.2	5,800	5,800	1,600	1,600	1,600	1,600
187.0	1,600	1,600	1,600	1,600	1,600	1,600
196.9	1,600	1,600	1,600	1,600	1,600	#
206.7	1,600	1,600	#	#	#	#
216.5	#	#	#	#	#	#
226.4	#	#	#	#	#	#
236.2	#	#	#	a	RAISING NOT PERMITTED	
246.1	#	a				

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius and crane configuration is within 360 degree chart.

Explanation of Symbols



Jib No. 134
+
Boom No. 74



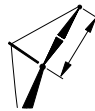
Crane Counterweight
+
Carbody Counterweight



360 Degree Rating



Boom Length



Jib Length



Boom Angle
(see page 1)



Operating Radius
(see page 1)



Jib Offset Angle



Jib Point Elevation
(see page 1)

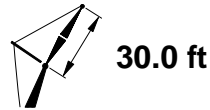
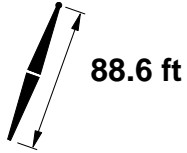
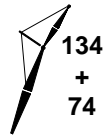


Lifting Capacities
(see page 1)

REFERENCE ONLY!

MLC165 S-2

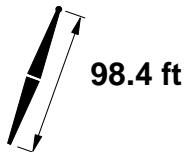
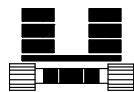
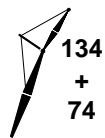
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
30	79.1		122.6	55,100*						30	
35	76.6		121.4	55,100*	79.1		120.6	55,100*		35	
40	74.1		120.0	55,100*	76.6		119.2	55,100*	79.2	117.4	46,400*
45	71.5		118.3	55,100*	74.0		117.5	55,100*	76.6	115.6	43,800*
50	68.9		116.4	55,100*	71.4		115.5	55,100*	73.9	113.6	41,600*
55	66.3		114.2	55,100*	68.8		113.3	54,900*	71.2	111.4	39,700*
60	63.6		111.7	55,100*	66.0		110.8	54,100*	68.4	108.8	37,900*
65	60.8		108.9	55,100*	63.3		108.0	53,300*	65.6	105.9	36,300*
70	58.0		105.7	52,900	60.4		104.8	52,000*	62.7	102.7	34,900*
75	55.0		102.2	48,200	57.4		101.3	48,700	59.6	99.1	33,700*
80	52.0		98.3	44,100	54.3		97.3	44,500	56.4	95.1	32,600*
85	48.7		94.0	40,600	51.1		92.9	41,000	53.1	90.5	31,600*
90	45.4		89.1	37,500	47.6		88.0	37,800	49.6	85.4	30,700*
95	41.8		83.6	34,700	44.0		82.4	35,000	45.8	79.6	29,900*
100	37.9		77.3	32,200	40.0		75.9	32,500			
105	33.6		69.9	30,000	35.6		68.4	30,200			
110	28.7		61.2	28,000							
115	22.8		50.1	26,200							

MLC165 S-2

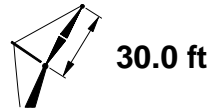
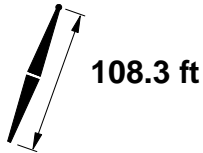
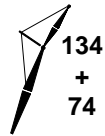
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
35	77.6		131.6	55,100*						35
40	75.3		130.3	55,100*	77.7		129.4	55,100*		40
45	73.0		128.7	55,100*	75.3		127.9	55,100*	77.7	45
50	70.6		126.9	55,100*	72.9		126.1	55,100*	75.3	50
55	68.2		124.9	55,100*	70.5		124.1	55,100*	72.8	55
60	65.8		122.7	55,100*	68.1		121.8	54,400*	70.3	60
65	63.3		120.1	55,100*	65.5		119.2	53,700*	67.7	65
70	60.7		117.3	52,600	63.0		116.4	53,000*	65.1	70
75	58.1		114.2	47,900	60.3		113.3	48,400	62.4	75
80	55.4		110.8	43,800	57.6		109.8	44,300	59.6	80
85	52.6		107.0	40,200	54.7		105.9	40,700	56.7	85
90	49.6		102.7	37,100	51.8		101.7	37,500	53.7	90
95	46.6		98.0	34,400	48.7		96.9	34,700	50.5	95
100	43.3		92.8	31,900	45.4		91.6	32,200	47.1	100
105	39.9		86.9	29,700	41.9		85.6	30,000	43.5	105
110	36.2		80.2	27,700	38.1		78.8	27,900		110
115	32.0		72.4	25,900	33.9		70.9	26,100		115
120	27.3		63.2	24,200						120
125	21.7		51.5	22,700						125

MLC165 S-2

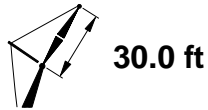
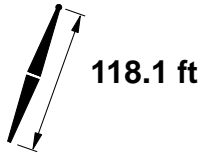
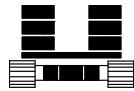
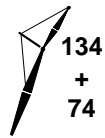
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
35	78.5		141.7	55,100*						35
40	76.4		140.5	55,100*	78.6	139.6	55,100*			40
45	74.2		139.0	55,100*	76.4	138.2	55,100*	78.6	136.3	45,800*
50	72.1		137.4	55,100*	74.2	136.5	55,100*	76.4	134.6	43,700*
55	69.9		135.6	55,100*	72.0	134.7	55,100*	74.1	132.7	41,800*
60	67.6		133.5	55,100*	69.7	132.6	54,800*	71.8	130.6	40,100*
65	65.3		131.2	55,100*	67.4	130.3	54,000*	69.5	128.3	38,500*
70	63.0		128.6	52,100	65.1	127.7	52,800	67.1	125.6	37,200*
75	60.6		125.8	47,400	62.7	124.9	48,000	64.7	122.8	35,900*
80	58.2		122.7	43,300	60.2	121.7	43,800	62.2	119.6	34,700*
85	55.7		119.3	39,800	57.7	118.3	40,200	59.6	116.1	33,700*
90	53.1		115.6	36,700	55.1	114.5	37,100	56.9	112.2	32,700*
95	50.4		111.4	33,900	52.4	110.4	34,300	54.1	107.9	31,900*
100	47.6		106.9	31,500	49.6	105.8	31,800	51.2	103.2	31,100*
105	44.7		101.9	29,300	46.6	100.7	29,600	48.2	98.0	29,800
110	41.6		96.3	27,300	43.4	95.0	27,500	44.9	92.2	27,800
115	38.2		90.1	25,500	40.1	88.7	25,700			
120	34.6		83.0	23,800	36.4	81.5	24,000			
125	30.7		74.8	22,300	32.3	73.1	22,400			
130	26.1		65.1	20,900						

MLC165 S-2

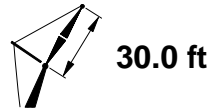
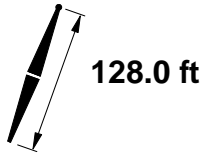
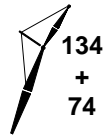
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
35	79.3	151.8	55,100*							35
40	77.3	150.6	55,100*	79.4	149.8	55,100*				40
45	75.3	149.3	55,100*	77.4	148.4	55,100*	79.4	146.5	46,600*	45
50	73.3	147.8	55,100*	75.3	146.9	55,100*	77.4	145.0	44,600*	50
55	71.3	146.1	55,100*	73.3	145.2	55,100*	75.3	143.2	42,700*	55
60	69.2	144.2	55,100*	71.2	143.3	55,000*	73.2	141.3	41,000*	60
65	67.1	142.0	55,100*	69.1	141.1	54,200*	71.0	139.1	39,500*	65
70	64.9	139.7	51,800	66.9	138.8	52,500	68.8	136.7	38,100*	70
75	62.8	137.1	47,000	64.7	136.2	47,700	66.6	134.1	36,900*	75
80	60.5	134.3	43,000	62.5	133.3	43,500	64.3	131.2	35,700*	80
85	58.3	131.2	39,400	60.2	130.2	39,900	62.0	128.0	34,600*	85
90	55.9	127.8	36,300	57.8	126.8	36,800	59.6	124.5	33,700*	90
95	53.5	124.1	33,600	55.4	123.1	34,000	57.1	120.7	32,800*	95
100	51.0	120.1	31,100	52.9	119.0	31,500	54.5	116.6	31,800	100
105	48.5	115.7	28,900	50.3	114.6	29,200	51.9	112.0	29,500	105
110	45.8	110.9	26,900	47.6	109.7	27,200	49.1	107.0	27,500	110
115	43.0	105.6	25,100	44.7	104.3	25,400	46.2	101.5	25,600	115
120	40.0	99.7	23,500	41.7	98.3	23,700	43.0	95.3	23,900	120
125	36.8	93.1	22,000	38.4	91.6	22,200				125
130	33.3	85.6	20,600	34.9	84.0	20,700				130
135	29.4	77.1	19,300							135
140	25.1	66.9	18,100							140

MLC165 S-2

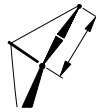
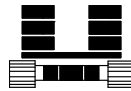
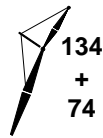
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
40	78.1		160.7	55,100*						40
45	76.3		159.5	55,100*	78.2	158.6	55,100*			45
50	74.4		158.1	55,100*	76.3	157.2	55,100*	78.2	155.2	45,300*
55	72.5		156.5	55,100*	74.4	155.6	55,100*	76.2	153.6	43,500*
60	70.5		154.7	55,100*	72.4	153.8	55,100*	74.3	151.8	41,900*
65	68.6		152.8	55,100*	70.5	151.8	54,400*	72.3	149.8	40,400*
70	66.6		150.6	51,500	68.5	149.6	52,200	70.3	147.6	39,000*
75	64.6		148.2	46,700	66.4	147.2	47,400	68.2	145.2	37,800*
80	62.6		145.6	42,700	64.4	144.6	43,300	66.1	142.5	36,600*
85	60.5		142.8	39,100	62.3	141.8	39,700	64.0	139.6	35,600*
90	58.3		139.7	36,000	60.1	138.7	36,500	61.8	136.4	34,600*
95	56.2		136.3	33,300	57.9	135.3	33,700	59.6	133.0	33,700*
100	53.9		132.7	30,800	55.7	131.6	31,200	57.3	129.3	31,600
105	51.6		128.8	28,600	53.3	127.6	29,000	54.9	125.2	29,300
110	49.2		124.5	26,600	50.9	123.3	27,000	52.4	120.8	27,300
115	46.7		119.8	24,800	48.4	118.6	25,100	49.9	116.0	25,400
120	44.1		114.7	23,200	45.8	113.4	23,500	47.2	110.7	23,700
125	41.4		109.1	21,700	43.0	107.7	21,900	44.3	104.8	22,100
130	38.5		102.9	20,300	40.1	101.5	20,500			
135	35.4		96.0	19,000	37.0	94.4	19,200			
140	32.1		88.2	17,800	33.5	86.5	18,000			
145	28.3		79.2	16,700						
150	24.1		68.5	15,700						

MLC165 S-2

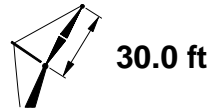
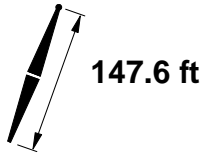
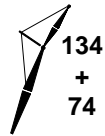
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
40	78.8		170.8	55,100*						40
45	77.1		169.7	55,100*	78.9	168.8	55,100*			45
50	75.3		168.3	55,100*	77.1	167.4	55,100*	78.9	165.5	46,100*
55	73.5		166.8	55,100*	75.3	165.9	55,100*	77.1	164.0	44,300*
60	71.7		165.2	55,100*	73.5	164.3	55,100*	75.3	162.3	42,700*
65	69.9		163.3	55,100*	71.7	162.4	54,400*	73.4	160.4	41,200*
70	68.1		161.3	51,100	69.8	160.4	51,900	71.5	158.3	39,900*
75	66.2		159.1	46,400	67.9	158.2	47,100	69.6	156.1	38,600*
80	64.3		156.7	42,300	66.0	155.7	42,900	67.7	153.6	37,500*
85	62.4		154.1	38,700	64.1	153.1	39,300	65.7	150.9	36,400*
90	60.4		151.2	35,600	62.1	150.2	36,200	63.7	148.0	35,400*
95	58.4		148.2	32,900	60.1	147.1	33,400	61.7	144.9	33,800
100	56.4		144.8	30,400	58.0	143.8	30,900	59.6	141.5	31,300
105	54.3		141.3	28,200	55.9	140.2	28,600	57.4	137.8	29,000
110	52.1		137.4	26,200	53.7	136.3	26,600	55.2	133.8	27,000
115	49.9		133.2	24,400	51.5	132.0	24,800	52.9	129.5	25,100
120	47.6		128.6	22,800	49.2	127.4	23,100	50.5	124.8	23,400
125	45.2		123.7	21,300	46.7	122.4	21,600	48.0	119.7	21,800
130	42.6		118.3	19,900	44.2	117.0	20,200	45.4	114.1	20,400
135	40.0		112.4	18,600	41.5	111.0	18,900			
140	37.2		105.9	17,500	38.7	104.5	17,700			
145	34.2		98.7	16,400	35.6	97.1	16,500			
150	30.9		90.6	15,300	32.3	88.8	15,500			
155	27.3		81.2	14,400						
160	23.2		70.1	13,500						

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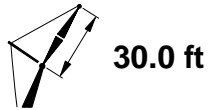
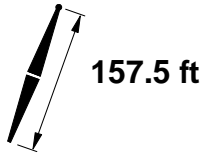
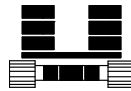
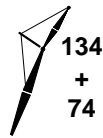
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
40	79.5	180.9	55,100*							40
45	77.8	179.8	55,100*	79.5	178.9	55,100*				45
50	76.2	178.5	55,100*	77.9	177.6	55,100*	79.6	175.7	46,700*	50
55	74.5	177.1	55,100*	76.2	176.2	55,100*	77.9	174.2	45,000*	55
60	72.8	175.6	55,100*	74.5	174.7	55,100*	76.1	172.6	43,400*	60
65	71.1	173.9	55,100*	72.8	172.9	54,400*	74.4	170.9	42,000*	65
70	69.4	172.0	51,200	71.0	171.0	52,000	72.6	169.0	40,700*	70
75	67.6	169.9	46,500	69.3	168.9	47,200	70.9	166.9	39,400*	75
80	65.8	167.6	42,400	67.5	166.7	43,000	69.1	164.6	38,300*	80
85	64.0	165.2	38,900	65.7	164.2	39,400	67.2	162.1	37,200*	85
90	62.2	162.6	35,800	63.8	161.6	36,300	65.4	159.4	36,200*	90
95	60.4	159.7	33,000	62.0	158.7	33,500	63.5	156.5	34,000	95
100	58.5	156.7	30,600	60.1	155.6	31,000	61.5	153.3	31,400	100
105	56.5	153.4	28,400	58.1	152.3	28,800	59.6	150.0	29,200	105
110	54.6	149.8	26,400	56.1	148.7	26,800	57.5	146.3	27,100	110
115	52.5	146.0	24,600	54.1	144.9	24,900	55.5	142.4	25,300	115
120	50.4	141.9	23,000	52.0	140.7	23,300	53.3	138.2	23,600	120
125	48.3	137.4	21,500	49.8	136.2	21,700	51.1	133.6	22,000	125
130	46.1	132.6	20,100	47.5	131.4	20,300	48.8	128.7	20,600	130
135	43.7	127.4	18,800	45.2	126.1	19,100	46.4	123.3	19,200	135
140	41.3	121.8	17,600	42.7	120.4	17,900	43.9	117.5	18,000	140
145	38.7	115.6	16,500	40.1	114.2	16,700				145
150	36.0	108.9	15,500	37.4	107.3	15,700				150
155	33.1	101.3	14,600	34.4	99.7	14,700				155
160	29.9	92.9	13,700							160
165	26.4	83.2	12,800							165
170	22.3	71.6	12,000							170

MLC165 S-2

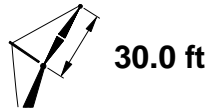
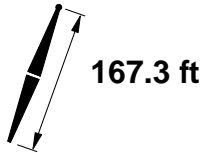
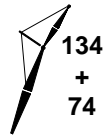
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	78.5	189.9	55,100*							45
50	76.9	188.7	55,100*	78.5	187.8	55,100*				50
55	75.3	187.4	55,100*	76.9	186.5	55,100*	78.5	184.5	45,700*	55
60	73.7	185.9	55,100*	75.3	185.0	54,900*	76.9	183.0	44,100*	60
65	72.1	184.3	55,100*	73.7	183.3	54,300*	75.3	181.3	42,700*	65
70	70.5	182.5	50,900	72.1	181.6	51,700	73.6	179.5	41,400*	70
75	68.9	180.6	46,100	70.4	179.6	46,900	72.0	177.5	40,200*	75
80	67.2	178.4	42,000	68.8	177.5	42,700	70.3	175.4	39,000*	80
85	65.5	176.2	38,500	67.1	175.2	39,100	68.6	173.0	38,000*	85
90	63.8	173.7	35,400	65.3	172.7	36,000	66.8	170.5	36,500	90
95	62.1	171.0	32,600	63.6	170.0	33,200	65.1	167.8	33,700	95
100	60.3	168.2	30,200	61.8	167.2	30,700	63.3	164.9	31,100	100
105	58.5	165.1	28,000	60.0	164.1	28,400	61.4	161.8	28,900	105
110	56.7	161.9	26,000	58.2	160.8	26,400	59.6	158.4	26,800	110
115	54.8	158.3	24,200	56.3	157.2	24,600	57.6	154.8	24,900	115
120	52.9	154.6	22,600	54.4	153.4	22,900	55.7	151.0	23,200	120
125	51.0	150.5	21,100	52.4	149.4	21,400	53.7	146.8	21,700	125
130	48.9	146.2	19,700	50.4	145.0	20,000	51.6	142.4	20,300	130
135	46.8	141.5	18,400	48.2	140.3	18,700	49.4	137.6	18,900	135
140	44.7	136.5	17,300	46.1	135.2	17,500	47.2	132.4	17,700	140
145	42.4	131.1	16,200	43.8	129.7	16,400	44.9	126.8	16,600	145
150	40.0	125.2	15,200	41.4	123.8	15,400				150
155	37.6	118.7	14,200	38.9	117.3	14,400				155
160	34.9	111.7	13,300	36.2	110.1	13,500				160
165	32.1	103.9	12,500	33.3	102.2	12,600				165
170	29.0	95.1	11,700							170
175	25.5	85.0	10,900							175
180	21.6	73.0	10,200							180

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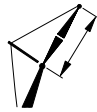
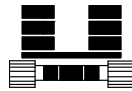
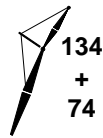
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.1	199.9	55,100*							45
50	77.6	198.8	55,100*	79.1	197.9	55,100*				50
55	76.1	197.6	55,100*	77.6	196.6	55,100*	79.1	194.6	46,300*	55
60	74.6	196.2	55,100*	76.1	195.2	54,700*	77.6	193.2	44,800*	60
65	73.0	194.6	55,100*	74.6	193.7	54,100*	76.1	191.7	43,400*	65
70	71.5	193.0	50,600	73.0	192.0	51,400	74.5	190.0	42,100*	70
75	70.0	191.1	45,800	71.5	190.2	46,600	72.9	188.1	40,900*	75
80	68.4	189.1	41,700	69.9	188.2	42,400	71.3	186.1	39,700*	80
85	66.8	187.0	38,200	68.3	186.0	38,800	69.7	183.9	38,700*	85
90	65.2	184.7	35,100	66.7	183.7	35,700	68.1	181.5	36,300	90
95	63.6	182.2	32,300	65.1	181.2	32,900	66.4	179.0	33,400	95
100	62.0	179.5	29,900	63.4	178.5	30,400	64.8	176.3	30,900	100
105	60.3	176.7	27,700	61.7	175.6	28,100	63.1	173.4	28,600	105
110	58.6	173.6	25,700	60.0	172.6	26,100	61.3	170.3	26,500	110
115	56.8	170.4	23,900	58.3	169.3	24,300	59.6	166.9	24,700	115
120	55.1	166.9	22,300	56.5	165.8	22,600	57.7	163.4	23,000	120
125	53.3	163.1	20,800	54.7	162.0	21,100	55.9	159.5	21,400	125
130	51.4	159.2	19,400	52.8	158.0	19,700	54.0	155.5	20,000	130
135	49.5	154.9	18,100	50.9	153.7	18,400	52.0	151.1	18,700	135
140	47.5	150.3	17,000	48.9	149.1	17,200	50.0	146.4	17,400	140
145	45.5	145.5	15,900	46.8	144.2	16,100	47.9	141.4	16,300	145
150	43.4	140.2	14,900	44.7	138.9	15,100	45.8	136.0	15,300	150
155	41.2	134.5	13,900	42.5	133.2	14,100	43.5	130.1	14,300	155
160	38.9	128.4	13,000	40.2	127.0	13,200				160
165	36.5	121.7	12,200	37.7	120.2	12,300				165
170	33.9	114.4	11,400	35.1	112.8	11,500				170
175	31.1	106.3	10,700	32.3	104.5	10,800				175
180	28.1	97.2	10,000							180
185	24.8	86.8	9,300							185
190	20.9	74.4	8,700							190

MLC165 S-2

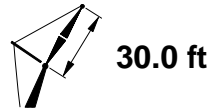
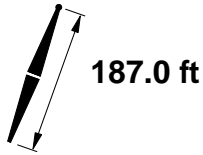
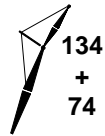
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.6	210.0	55,100*							45
50	78.2	208.9	55,100*	79.6	208.0	55,100*				50
55	76.7	207.7	55,100*	78.2	206.8	54,900*	79.7	204.8	46,900*	55
60	75.3	206.4	55,100*	76.8	205.5	54,300*	78.2	203.4	45,400*	60
65	73.9	205.0	55,100*	75.3	204.0	53,800*	76.7	202.0	44,000*	65
70	72.4	203.4	50,200	73.9	202.4	51,100	75.3	200.3	42,700*	70
75	71.0	201.6	45,500	72.4	200.7	46,300	73.8	198.6	41,500*	75
80	69.5	199.8	41,400	70.9	198.8	42,100	72.3	196.7	40,400*	80
85	68.0	197.7	37,800	69.4	196.7	38,500	70.8	194.6	39,200	85
90	66.5	195.5	34,700	67.9	194.6	35,300	69.2	192.4	36,000	90
95	65.0	193.2	31,900	66.3	192.2	32,500	67.7	190.0	33,100	95
100	63.4	190.7	29,500	64.8	189.7	30,000	66.1	187.5	30,600	100
105	61.8	188.0	27,300	63.2	187.0	27,800	64.5	184.7	28,300	105
110	60.2	185.1	25,300	61.6	184.1	25,800	62.9	181.8	26,200	110
115	58.6	182.1	23,500	60.0	181.0	23,900	61.2	178.7	24,300	115
120	57.0	178.8	21,900	58.3	177.8	22,300	59.5	175.4	22,600	120
125	55.3	175.4	20,400	56.6	174.3	20,800	57.8	171.9	21,100	125
130	53.6	171.7	19,000	54.9	170.6	19,300	56.1	168.1	19,700	130
135	51.8	167.8	17,700	53.1	166.6	18,100	54.3	164.1	18,300	135
140	50.0	163.6	16,600	51.3	162.4	16,900	52.4	159.8	17,100	140
145	48.2	159.1	15,500	49.4	157.9	15,800	50.5	155.2	16,000	145
150	46.2	154.4	14,500	47.5	153.1	14,700	48.6	150.3	14,900	150
155	44.3	149.3	13,500	45.5	148.0	13,800	46.5	145.1	13,900	155
160	42.2	143.8	12,600	43.4	142.4	12,800	44.4	139.4	13,000	160
165	40.1	137.9	11,800	41.3	136.5	12,000				165
170	37.8	131.5	11,000	39.0	130.1	11,200				170
175	35.5	124.6	10,300	36.6	123.0	10,400				175
180	33.0	117.0	9,600	34.1	115.3	9,700				180
185	30.3	108.7	8,900	31.3	106.8	9,000				185
190	27.3	99.2	8,300							190
195	24.0	88.4	7,700							195

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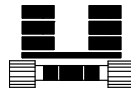
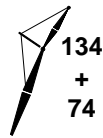
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	78.7	219.0	55,100*							50
55	77.4	217.9	55,100*	78.8	216.9	54,400*				55
60	76.0	216.6	55,100*	77.4	215.7	53,900*	78.8	213.6	45,900*	60
65	74.6	215.2	55,100*	76.0	214.3	53,400*	77.4	212.2	44,600*	65
70	73.2	213.7	50,000	74.6	212.8	50,900	76.0	210.7	43,300*	70
75	71.9	212.1	45,200	73.2	211.1	46,000	74.6	209.0	42,100*	75
80	70.5	210.3	41,100	71.8	209.3	41,900	73.1	207.2	41,000*	80
85	69.0	208.4	37,500	70.4	207.4	38,300	71.7	205.3	39,000	85
90	67.6	206.3	34,400	69.0	205.3	35,100	70.3	203.2	35,700	90
95	66.2	204.1	31,700	67.5	203.1	32,300	68.8	200.9	32,900	95
100	64.7	201.7	29,200	66.0	200.7	29,800	67.3	198.5	30,300	100
105	63.2	199.2	27,000	64.5	198.2	27,500	65.8	195.9	28,000	105
110	61.7	196.5	25,000	63.0	195.5	25,500	64.3	193.2	26,000	110
115	60.2	193.6	23,200	61.5	192.6	23,700	62.7	190.3	24,100	115
120	58.7	190.6	21,600	60.0	189.5	22,000	61.1	187.2	22,400	120
125	57.1	187.3	20,100	58.4	186.3	20,500	59.5	183.9	20,900	125
130	55.5	183.9	18,700	56.8	182.8	19,100	57.9	180.4	19,400	130
135	53.8	180.3	17,500	55.1	179.1	17,800	56.2	176.6	18,100	135
140	52.2	176.4	16,300	53.4	175.2	16,600	54.5	172.7	16,900	140
145	50.5	172.3	15,200	51.7	171.1	15,500	52.8	168.5	15,800	145
150	48.7	167.9	14,200	49.9	166.7	14,500	51.0	164.0	14,700	150
155	46.9	163.2	13,300	48.1	162.0	13,500	49.1	159.2	13,700	155
160	45.0	158.3	12,400	46.2	157.0	12,600	47.2	154.1	12,800	160
165	43.1	153.0	11,600	44.3	151.6	11,800	45.2	148.7	11,900	165
170	41.1	147.3	10,800	42.3	145.9	11,000	43.2	142.8	11,100	170
175	39.0	141.2	10,100	40.2	139.7	10,200				175
180	36.9	134.6	9,400	38.0	133.0	9,500				180
185	34.5	127.4	8,700	35.6	125.8	8,800				185
190	32.1	119.6	8,100	33.1	117.8	8,200				190
195	29.4	110.9	7,500							195
200	26.6	101.2	6,900							200
205	23.3	90.1	6,400							205

MLC165 S-2

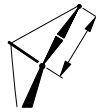
ASME B30.5



121,500 lb
+
35,300 lb



196.9 ft

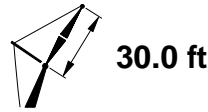
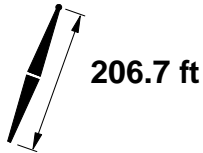
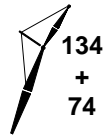


30.0 ft

ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	79.2	229.0	55,100*							50
55	77.9	228.0	55,100*	79.3	227.0	53,900*				55
60	76.6	226.8	55,100*	77.9	225.8	53,400*	79.3	223.8	46,400*	60
65	75.3	225.5	55,100*	76.6	224.5	52,900*	78.0	222.4	45,100*	65
70	74.0	224.0	49,600	75.3	223.1	50,600	76.6	221.0	43,900*	70
75	72.7	222.4	44,800	74.0	221.5	45,700	75.3	219.4	42,700*	75
80	71.3	220.7	40,700	72.6	219.8	41,600	73.9	217.7	41,600*	80
85	70.0	218.9	37,200	71.3	217.9	37,900	72.6	215.8	38,700	85
90	68.6	217.0	34,100	69.9	216.0	34,800	71.2	213.8	35,400	90
95	67.3	214.9	31,300	68.6	213.9	31,900	69.8	211.7	32,600	95
100	65.9	212.6	28,900	67.2	211.6	29,400	68.4	209.4	30,000	100
105	64.5	210.2	26,700	65.8	209.2	27,200	67.0	207.0	27,700	105
110	63.1	207.7	24,700	64.3	206.6	25,200	65.5	204.4	25,700	110
115	61.6	205.0	22,900	62.9	203.9	23,300	64.1	201.6	23,800	115
120	60.2	202.1	21,200	61.4	201.0	21,700	62.6	198.7	22,100	120
125	58.7	199.1	19,700	59.9	198.0	20,200	61.1	195.6	20,500	125
130	57.2	195.8	18,400	58.4	194.7	18,800	59.5	192.3	19,100	130
135	55.7	192.4	17,100	56.9	191.3	17,500	58.0	188.9	17,800	135
140	54.1	188.8	15,900	55.3	187.7	16,300	56.4	185.2	16,600	140
145	52.5	185.0	14,800	53.7	183.8	15,200	54.8	181.3	15,400	145
150	50.9	180.9	13,800	52.1	179.7	14,100	53.1	177.1	14,400	150
155	49.2	176.6	12,900	50.4	175.4	13,200	51.4	172.7	13,400	155
160	47.5	172.1	12,000	48.7	170.8	12,300	49.7	168.1	12,500	160
165	45.8	167.2	11,200	46.9	165.9	11,400	47.8	163.1	11,600	165
170	43.9	162.1	10,400	45.1	160.7	10,600	46.0	157.8	10,800	170
175	42.1	156.6	9,700	43.2	155.2	9,900	44.0	152.1	10,000	175
180	40.1	150.7	9,000	41.2	149.2	9,200				180
185	38.1	144.3	8,300	39.1	142.8	8,500				185
190	35.9	137.5	7,700	37.0	135.9	7,900				190
195	33.7	130.1	7,100	34.7	128.4	7,300				195
200	31.3	122.0	6,600	32.3	120.2	6,700				200
205	28.7	113.1	6,000							205
210	25.9	103.1	5,500							210
215	22.7	91.6	5,000							215

MLC165 S-2

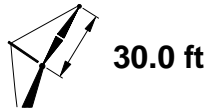
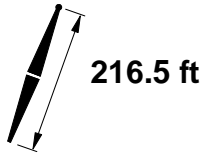
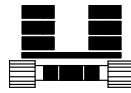
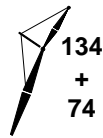
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
50	79.7		239.1	55,100*						50	
55	78.4		238.1	55,100*						55	
60	77.2		236.9	55,100*	78.5	236.0	52,700*			60	
65	75.9		235.6	54,900	77.2	234.7	52,300*	78.5	232.6	45,600*	65
70	74.7		234.3	49,300	75.9	233.3	50,300	77.2	231.2	44,400*	70
75	73.4		232.8	44,500	74.7	231.8	45,400	75.9	229.7	43,300*	75
80	72.1		231.2	40,400	73.4	230.2	41,300	74.6	228.1	42,100	80
85	70.9		229.4	36,900	72.1	228.4	37,600	73.3	226.3	38,400	85
90	69.6		227.5	33,700	70.8	226.6	34,500	72.0	224.4	35,200	90
95	68.3		225.5	31,000	69.5	224.5	31,600	70.7	222.4	32,300	95
100	67.0		223.4	28,500	68.2	222.4	29,100	69.4	220.2	29,700	100
105	65.6		221.1	26,300	66.8	220.1	26,900	68.0	217.9	27,400	105
110	64.3		218.7	24,300	65.5	217.7	24,900	66.6	215.5	25,400	110
115	62.9		216.2	22,500	64.1	215.1	23,000	65.3	212.9	23,500	115
120	61.5		213.5	20,900	62.7	212.4	21,400	63.9	210.1	21,800	120
125	60.1		210.6	19,400	61.3	209.5	19,800	62.4	207.2	20,300	125
130	58.7		207.5	18,000	59.9	206.5	18,400	61.0	204.1	18,800	130
135	57.3		204.3	16,800	58.5	203.2	17,100	59.5	200.8	17,500	135
140	55.8		200.9	15,600	57.0	199.8	16,000	58.0	197.4	16,300	140
145	54.3		197.4	14,500	55.5	196.2	14,800	56.5	193.7	15,100	145
150	52.8		193.6	13,500	54.0	192.4	13,800	55.0	189.9	14,100	150
155	51.3		189.6	12,600	52.4	188.4	12,900	53.4	185.8	13,100	155
160	49.7		185.3	11,700	50.8	184.1	12,000	51.8	181.4	12,200	160
165	48.1		180.9	10,900	49.2	179.6	11,100	50.1	176.9	11,300	165
170	46.4		176.1	10,100	47.5	174.8	10,300	48.4	172.0	10,500	170
175	44.7		171.1	9,400	45.8	169.8	9,600	46.6	166.8	9,700	175
180	42.9		165.7	8,700	44.0	164.4	8,900	44.8	161.4	9,000	180
185	41.1		160.0	8,000	42.1	158.6	8,200	42.9	155.5	8,300	185
190	39.2		153.9	7,400	40.2	152.5	7,600				190
195	37.2		147.4	6,800	38.2	145.9	7,000				195
200	35.1		140.4	6,300	36.1	138.7	6,400				200
205	32.9		132.8	5,700	33.8	131.0	5,800				205
210	30.5		124.4	5,200	31.4	122.6	5,300				210
215	28.0		115.2	4,700							215
220	25.2		104.9	4,300							220

MLC165 S-2

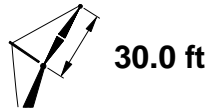
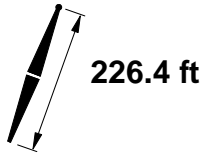
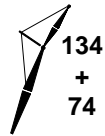
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	78.9	248.1	55,100*							55
60	77.7	247.0	54,900*	78.9	246.1	52,000*				60
65	76.5	245.8	54,300*	77.7	244.9	51,500*	79.0	242.8	46,100*	65
70	75.3	244.5	49,000	76.5	243.5	50,000	77.7	241.4	44,900*	70
75	74.1	243.1	44,200	75.3	242.1	45,100	76.5	240.0	43,800*	75
80	72.9	241.5	40,100	74.1	240.5	40,900	75.3	238.4	41,800	80
85	71.7	239.8	36,500	72.9	238.9	37,300	74.0	236.7	38,100	85
90	70.4	238.1	33,400	71.6	237.1	34,100	72.8	234.9	34,900	90
95	69.2	236.2	30,600	70.4	235.2	31,300	71.5	233.0	32,000	95
100	67.9	234.1	28,200	69.1	233.1	28,800	70.3	230.9	29,400	100
105	66.7	232.0	25,900	67.8	230.9	26,500	69.0	228.7	27,100	105
110	65.4	229.7	24,000	66.6	228.6	24,500	67.7	226.4	25,100	110
115	64.1	227.2	22,200	65.3	226.2	22,700	66.4	223.9	23,200	115
120	62.8	224.7	20,500	63.9	223.6	21,000	65.0	221.3	21,500	120
125	61.5	221.9	19,000	62.6	220.9	19,500	63.7	218.6	19,900	125
130	60.1	219.1	17,600	61.3	218.0	18,100	62.3	215.6	18,500	130
135	58.8	216.0	16,400	59.9	214.9	16,800	60.9	212.6	17,200	135
140	57.4	212.8	15,200	58.5	211.7	15,600	59.5	209.3	15,900	140
145	56.0	209.5	14,100	57.1	208.3	14,500	58.1	205.9	14,800	145
150	54.5	205.9	13,100	55.7	204.8	13,400	56.7	202.2	13,700	150
155	53.1	202.1	12,200	54.2	201.0	12,500	55.2	198.4	12,800	155
160	51.6	198.2	11,300	52.7	197.0	11,600	53.7	194.4	11,800	160
165	50.1	194.0	10,500	51.2	192.8	10,700	52.1	190.1	11,000	165
170	48.6	189.6	9,700	49.6	188.4	9,900	50.5	185.6	10,200	170
175	47.0	185.0	9,000	48.0	183.7	9,200	48.9	180.9	9,400	175
180	45.3	180.0	8,300	46.4	178.7	8,500	47.2	175.8	8,700	180
185	43.7	174.8	7,600	44.7	173.5	7,800	45.5	170.5	8,000	185
190	41.9	169.3	7,000	42.9	167.9	7,200	43.7	164.8	7,300	190
195	40.1	163.4	6,400	41.1	162.0	6,600				195
200	38.3	157.1	5,900	39.3	155.6	6,000				200
205	36.3	150.4	5,300	37.3	148.8	5,500				205
210	34.3	143.2	4,800	35.2	141.5	5,000				210
215	32.1	135.3	4,400	33.0	133.5	4,500				215

MLC165 S-2

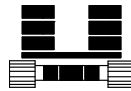
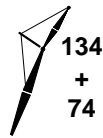
ASME B30.5



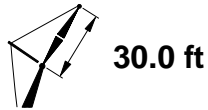
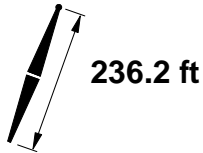
	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
55	79.3		258.2	53,800*						55
60	78.2		257.1	53,300*	79.4	256.2	51,100*			60
65	77.0		255.9	52,700*	78.2	255.0	50,700*	79.4	252.9	46,600*
70	75.9		254.7	48,700	77.1	253.7	49,700	78.2	251.6	45,400*
75	74.7		253.3	43,900	75.9	252.3	44,900	77.1	250.2	44,300*
80	73.6		251.8	39,800	74.7	250.9	40,700	75.9	248.7	41,600
85	72.4		250.2	36,200	73.5	249.3	37,000	74.7	247.1	37,900
90	71.2		248.5	33,100	72.4	247.5	33,800	73.5	245.4	34,600
95	70.0		246.7	30,300	71.2	245.7	31,000	72.3	243.5	31,700
100	68.8		244.8	27,900	70.0	243.8	28,500	71.1	241.6	29,200
105	67.6		242.7	25,600	68.7	241.7	26,300	69.8	239.5	26,900
110	66.4		240.5	23,700	67.5	239.5	24,200	68.6	237.3	24,800
115	65.2		238.2	21,900	66.3	237.2	22,400	67.4	234.9	22,900
120	63.9		235.7	20,200	65.0	234.7	20,700	66.1	232.4	21,200
125	62.7		233.1	18,700	63.8	232.1	19,200	64.8	229.8	19,700
130	61.4		230.4	17,400	62.5	229.3	17,800	63.5	227.0	18,200
135	60.1		227.5	16,100	61.2	226.5	16,500	62.2	224.1	16,900
140	58.8		224.5	14,900	59.9	223.4	15,300	60.9	221.0	15,700
145	57.5		221.3	13,800	58.5	220.2	14,200	59.5	217.8	14,600
150	56.1		218.0	12,800	57.2	216.8	13,200	58.2	214.4	13,500
155	54.7		214.4	11,900	55.8	213.3	12,200	56.8	210.8	12,500
160	53.4		210.7	11,000	54.4	209.5	11,300	55.4	207.0	11,600
165	51.9		206.8	10,200	53.0	205.6	10,500	53.9	203.0	10,700
170	50.5		202.7	9,400	51.5	201.5	9,700	52.4	198.8	9,900
175	49.0		198.4	8,700	50.0	197.1	8,900	50.9	194.4	9,200
180	47.5		193.8	8,000	48.5	192.5	8,200	49.4	189.7	8,400
185	45.9		189.0	7,300	47.0	187.7	7,600	47.8	184.8	7,800
190	44.3		183.9	6,700	45.4	182.5	6,900	46.2	179.6	7,100
195	42.7		178.5	6,200	43.7	177.1	6,300	44.5	174.1	6,500
200	41.0		172.8	5,600	42.0	171.3	5,800			200
205	39.2		166.7	5,100	40.2	165.2	5,200			205
210	37.4		160.2	4,600	38.4	158.7	4,700			210
215	35.5		153.3	4,100	36.4	151.7	4,200			215

MLC165 S-2

ASME B30.5



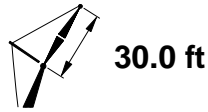
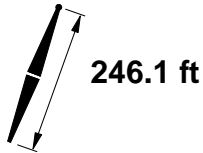
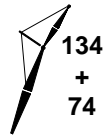
121,500 lb
+
35,300 lb



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
60	78.6		267.2							60
65	77.5		266.1							65
70	76.4		264.8							70
75	75.3		263.5							75
80	74.2		262.1							80
85	73.1		260.6							85
90	71.9		258.9							90
95	70.8		257.2							95
100	69.6		255.3							100
105	68.5		253.4							105
110	67.3		251.3							110
115	66.1		249.0							115
120	65.0		246.7							120
125	63.8		244.2							125
130	62.5		241.6							130
135	61.3		238.9							135
140	60.1		236.0							140
145	58.8		233.0							145
150	57.5		229.8							150
155	56.2		226.5							155
160	54.9		223.0							160
165	53.6		219.3							165
170	52.2		215.4							170
175	50.8		211.3							175
180	49.4		207.1							180
185	48.0		202.6							185
190	46.5		197.9							190
195	45.0		192.9							195
200	43.4		187.6							200
205	41.8		182.1							205
210	40.1		176.2							210

MLC165 S-2

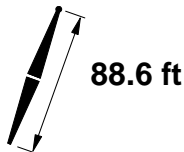
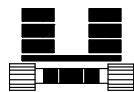
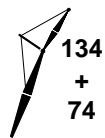
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	79.0		277.2	48,000*						60	
65	78.0		276.2	47,700*	79.1	275.2	48,200*			65	
70	76.9		275.0	47,500*	78.0	274.0	48,000*	79.1	271.9	46,300*	70
75	75.8		273.7	43,100	76.9	272.8	44,200	78.0	270.6	45,200*	75
80	74.8		272.4	39,000	75.9	271.4	39,900	76.9	269.3	40,900	80
85	73.7		270.9	35,400	74.8	269.9	36,300	75.8	267.8	37,200	85
90	72.6		269.3	32,200	73.7	268.3	33,100	74.7	266.2	33,900	90
95	71.5		267.6	29,500	72.6	266.6	30,300	73.6	264.5	31,000	95
100	70.4		265.8	27,000	71.5	264.8	27,700	72.5	262.7	28,400	100
105	69.3		263.9	24,800	70.4	262.9	25,500	71.4	260.8	26,100	105
110	68.2		261.9	22,800	69.2	260.9	23,400	70.2	258.7	24,100	110
115	67.0		259.8	21,000	68.1	258.8	21,600	69.1	256.6	22,200	115
120	65.9		257.6	19,300	67.0	256.5	19,900	68.0	254.3	20,500	120
125	64.8		255.2	17,800	65.8	254.2	18,400	66.8	251.9	18,900	125
130	63.6		252.7	16,500	64.6	251.7	17,000	65.6	249.4	17,400	130
135	62.4		250.1	15,200	63.5	249.1	15,700	64.4	246.7	16,100	135
140	61.2		247.4	14,000	62.3	246.3	14,500	63.2	244.0	14,900	140
145	60.0		244.5	12,900	61.1	243.4	13,400	62.0	241.0	13,700	145
150	58.8		241.5	11,900	59.9	240.4	12,300	60.8	238.0	12,700	150
155	57.6		238.3	11,000	58.6	237.2	11,400	59.5	234.7	11,700	155
160	56.4		235.0	10,100	57.4	233.8	10,500	58.3	231.4	10,800	160
165	55.1		231.5	9,300	56.1	230.3	9,600	57.0	227.8	9,900	165
170	53.8		227.8	8,500	54.8	226.7	8,800	55.7	224.1	9,100	170
175	52.5		224.0	7,800	53.5	222.8	8,100	54.3	220.2	8,300	175
180	51.2		220.0	7,100	52.1	218.8	7,400	53.0	216.1	7,600	180
185	49.8		215.8	6,400	50.8	214.5	6,700	51.6	211.8	6,900	185
190	48.4		211.3	5,800	49.4	210.1	6,100	50.2	207.3	6,300	190
195	47.0		206.7	5,200	48.0	205.4	5,500	48.7	202.6	5,700	195
200	45.6		201.8	4,700	46.5	200.5	4,900	47.3	197.6	5,100	200
205	44.1		196.7	4,200	45.0	195.3	4,400	45.7	192.3	4,500	205
210								44.2	186.8	4,000	210

MLC165 S-2

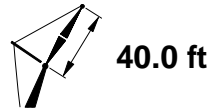
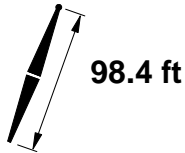
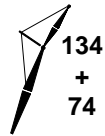
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
35	78.4	131.7	52,700*							35
40	76.1	130.3	51,400*	79.2	129.2	47,900*				40
45	73.8	128.8	50,100*	76.9	127.7	47,000*				45
50	71.4	127.0	48,800*	74.5	125.9	46,200*	77.6	123.5	35,400*	50
55	69.0	125.0	47,700*	72.1	123.9	45,500*	75.1	121.5	33,700*	55
60	66.6	122.8	46,700*	69.6	121.6	44,800*	72.6	119.1	32,100*	60
65	64.1	120.2	45,700*	67.1	119.0	43,700*	70.0	116.5	30,800*	65
70	61.5	117.4	44,800*	64.5	116.2	41,200*	67.4	113.6	29,600*	70
75	58.9	114.3	44,000*	61.8	113.1	39,000*	64.7	110.4	28,400*	75
80	56.2	110.9	43,300*	59.1	109.6	37,100*	61.9	106.8	27,400*	80
85	53.4	107.1	41,100	56.2	105.7	35,300*	58.9	102.8	26,500*	85
90	50.5	102.8	38,000	53.3	101.4	33,800*	55.9	98.4	25,700*	90
95	47.4	98.2	35,200	50.2	96.7	32,400*	52.7	93.5	25,000*	95
100	44.2	92.9	32,800	46.9	91.3	31,100*	49.3	88.0	24,400*	100
105	40.7	87.0	30,500	43.4	85.3	30,000*	45.6	81.7	23,800*	105
110	37.0	80.3	28,500	39.6	78.5	28,800				110
115	32.9	72.6	26,700	35.3	70.5	26,900				115
120	28.2	63.4	25,000							120
125	22.6	51.8	23,500							125

MLC165 S-2

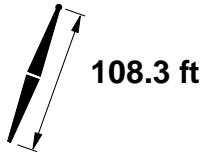
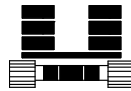
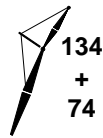
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
35	79.3	141.8	53,000*							35
40	77.1	140.5	51,700*							40
45	75.0	139.1	50,500*	77.9	138.0	47,200*				45
50	72.8	137.5	49,300*	75.7	136.3	46,500*	78.6	133.9	36,100*	50
55	70.6	135.6	48,300*	73.4	134.5	45,800*	76.3	132.0	34,400*	55
60	68.3	133.6	47,300*	71.2	132.4	45,200*	74.0	129.9	32,900*	60
65	66.1	131.3	46,400*	68.9	130.1	44,600*	71.6	127.5	31,600*	65
70	63.7	128.7	45,500*	66.5	127.5	43,100*	69.2	124.9	30,400*	70
75	61.4	125.9	44,700*	64.1	124.6	40,900*	66.8	122.0	29,300*	75
80	58.9	122.8	44,000*	61.6	121.5	38,900*	64.3	118.8	28,300*	80
85	56.4	119.4	40,700	59.1	118.1	37,100*	61.7	115.2	27,400*	85
90	53.8	115.7	37,600	56.5	114.3	35,500*	59.0	111.3	26,600*	90
95	51.1	111.5	34,900	53.8	110.1	34,000*	56.2	107.0	25,800*	95
100	48.4	107.0	32,400	50.9	105.5	32,700*	53.3	102.3	25,100*	100
105	45.4	102.0	30,200	48.0	100.4	30,600	50.2	97.0	24,500*	105
110	42.3	96.4	28,200	44.8	94.8	28,500	46.9	91.1	24,000*	110
115	39.0	90.2	26,400	41.4	88.4	26,700				115
120	35.4	83.1	24,700	37.7	81.1	25,000				120
125	31.5	75.0	23,200	33.7	72.7	23,400				125
130	26.9	65.3	21,800							130

MLC165 S-2

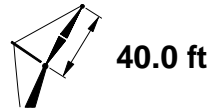
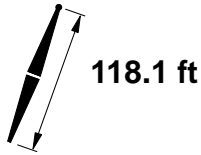
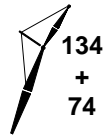
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
40	78.0	150.7	51,900*							40
45	76.0	149.4	50,800*	78.7	148.2	47,400*				45
50	74.0	147.9	49,700*	76.7	146.7	46,800*	79.4	144.2	36,700*	50
55	71.9	146.2	48,700*	74.6	145.0	46,100*	77.3	142.5	35,100*	55
60	69.9	144.2	47,800*	72.5	143.0	45,500*	75.2	140.5	33,700*	60
65	67.8	142.1	46,900*	70.4	140.9	44,900*	73.0	138.3	32,400*	65
70	65.6	139.8	46,100*	68.2	138.5	44,400*	70.8	135.9	31,200*	70
75	63.5	137.2	45,200*	66.0	135.9	42,700*	68.6	133.3	30,100*	75
80	61.2	134.4	43,800	63.8	133.1	40,600*	66.3	130.3	29,100*	80
85	59.0	131.3	40,300	61.5	130.0	38,800*	63.9	127.1	28,200*	85
90	56.6	127.9	37,200	59.1	126.5	37,100*	61.5	123.7	27,300*	90
95	54.2	124.2	34,400	56.7	122.8	34,900	59.0	119.8	26,600*	95
100	51.7	120.2	31,900	54.2	118.7	32,400	56.4	115.6	25,900*	100
105	49.2	115.8	29,700	51.6	114.3	30,200	53.7	111.1	25,200*	105
110	46.5	111.0	27,700	48.8	109.4	28,100	50.9	106.0	24,700*	110
115	43.7	105.7	25,900	46.0	104.0	26,300	48.0	100.4	24,100*	115
120	40.7	99.8	24,300	42.9	98.0	24,600	44.8	94.2	23,700*	120
125	37.5	93.2	22,800	39.7	91.3	23,000				125
130	34.0	85.8	21,400	36.1	83.7	21,600				130
135	30.2	77.2	20,100							135
140	25.8	67.0	18,900							140

MLC165 S-2

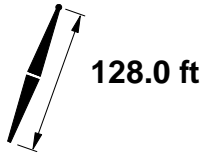
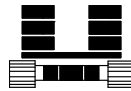
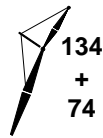
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
40	78.8		160.8	52,000*						40	
45	76.9		159.6	50,900*	79.4	158.4	47,500*			45	
50	75.0		158.2	49,900*	77.5	157.0	46,900*			50	
55	73.1		156.6	49,000*	75.6	155.4	46,300*	78.1	152.8	35,700*	55
60	71.2		154.8	48,100*	73.7	153.6	45,700*	76.2	151.0	34,300*	60
65	69.2		152.8	47,300*	71.7	151.6	45,200*	74.2	149.0	33,000*	65
70	67.3		150.7	46,500*	69.7	149.4	44,800*	72.1	146.8	31,900*	70
75	65.3		148.3	45,700*	67.7	147.0	44,300*	70.1	144.3	30,800*	75
80	63.2		145.7	43,500	65.6	144.4	42,300*	68.0	141.6	29,800*	80
85	61.1		142.8	39,900	63.5	141.5	40,400*	65.8	138.7	28,900*	85
90	59.0		139.8	36,800	61.4	138.4	37,400	63.6	135.5	28,100*	90
95	56.8		136.4	34,000	59.2	135.0	34,600	61.4	132.1	27,300*	95
100	54.6		132.8	31,600	56.9	131.4	32,100	59.0	128.3	26,600*	100
105	52.3		128.8	29,400	54.6	127.4	29,800	56.6	124.2	25,900*	105
110	49.9		124.6	27,400	52.1	123.0	27,800	54.2	119.8	25,300*	110
115	47.4		119.9	25,600	49.6	118.3	25,900	51.6	114.9	24,800*	115
120	44.8		114.8	23,900	47.0	113.1	24,300	48.8	109.5	24,300*	120
125	42.1		109.2	22,400	44.2	107.4	22,700	46.0	103.6	23,000	125
130	39.2		103.0	21,000	41.3	101.1	21,300				130
135	36.1		96.1	19,700	38.1	94.0	20,000				135
140	32.7		88.3	18,500	34.7	86.1	18,700				140
145	29.0		79.3	17,400							145
150	24.8		68.7	16,400							150

MLC165 S-2

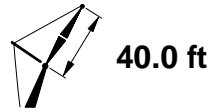
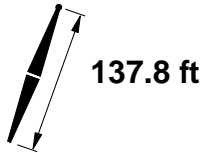
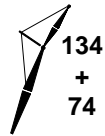
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
40	79.4	170.9	52,000*							40
45	77.7	169.7	51,000*							45
50	75.9	168.4	50,100*	78.3	167.2	46,900*				50
55	74.1	166.9	49,200*	76.5	165.7	46,400*	78.9	163.1	36,300*	55
60	72.3	165.3	48,400*	74.7	164.0	45,900*	77.0	161.4	34,900*	60
65	70.5	163.4	47,600*	72.8	162.2	45,400*	75.2	159.5	33,700*	65
70	68.7	161.4	46,800*	71.0	160.1	44,900*	73.3	157.5	32,500*	70
75	66.8	159.2	46,100*	69.1	157.9	44,500*	71.4	155.2	31,500*	75
80	64.9	156.8	43,200	67.2	155.5	43,800*	69.4	152.7	30,500*	80
85	63.0	154.2	39,600	65.3	152.8	40,300	67.4	150.0	29,600*	85
90	61.0	151.3	36,500	63.3	150.0	37,100	65.4	147.1	28,700*	90
95	59.0	148.2	33,700	61.2	146.9	34,300	63.4	144.0	28,000*	95
100	57.0	144.9	31,300	59.2	143.5	31,800	61.2	140.5	27,200*	100
105	54.9	141.3	29,000	57.1	139.9	29,600	59.1	136.8	26,600*	105
110	52.7	137.5	27,100	54.9	136.0	27,500	56.8	132.8	26,000*	110
115	50.5	133.3	25,300	52.6	131.7	25,700	54.5	128.4	25,400*	115
120	48.2	128.7	23,600	50.3	127.1	24,000	52.1	123.7	24,300	120
125	45.8	123.8	22,100	47.8	122.1	22,400	49.6	118.5	22,700	125
130	43.3	118.4	20,700	45.3	116.7	21,000	47.0	112.9	21,300	130
135	40.6	112.5	19,400	42.6	110.7	19,700	44.2	106.7	19,900	135
140	37.8	106.0	18,200	39.8	104.1	18,500				140
145	34.8	98.8	17,100	36.7	96.7	17,400				145
150	31.6	90.7	16,100	33.4	88.4	16,300				150
155	28.0	81.4	15,100							155
160	23.8	70.3	14,200							160

MLC165 S-2

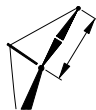
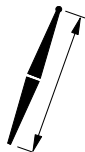
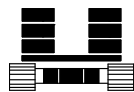
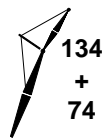
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
45	78.4		179.8	51,000*						45
50	76.7		178.6	50,100*	79.0	177.4	46,900*			50
55	75.0		177.2	49,300*	77.3	176.0	46,400*	79.5	173.4	55
60	73.4		175.6	48,500*	75.6	174.4	45,900*	77.8	171.8	60
65	71.7		173.9	47,800*	73.9	172.7	45,500*	76.1	170.0	65
70	69.9		172.0	47,000*	72.1	170.8	45,100*	74.3	168.1	70
75	68.2		170.0	46,400*	70.4	168.7	44,700*	72.5	166.0	75
80	66.4		167.7	42,800	68.6	166.4	43,600	70.7	163.7	80
85	64.6		165.3	39,200	66.8	164.0	40,000	68.9	161.2	85
90	62.8		162.6	36,100	64.9	161.3	36,800	67.0	158.4	90
95	60.9		159.8	33,300	63.1	158.4	34,000	65.1	155.5	95
100	59.0		156.7	30,900	61.1	155.3	31,500	63.1	152.4	100
105	57.1		153.4	28,700	59.2	152.0	29,200	61.1	149.0	105
110	55.1		149.9	26,700	57.2	148.4	27,200	59.1	145.3	110
115	53.1		146.1	24,900	55.1	144.5	25,300	57.0	141.3	115
120	51.0		141.9	23,200	53.0	140.4	23,600	54.8	137.1	120
125	48.9		137.5	21,700	50.8	135.9	22,100	52.6	132.5	125
130	46.6		132.7	20,300	48.6	131.0	20,700	50.3	127.5	130
135	44.3		127.5	19,000	46.2	125.8	19,400	47.8	122.1	135
140	41.9		121.9	17,900	43.8	120.1	18,200	45.3	116.2	140
145	39.3		115.7	16,800	41.2	113.8	17,000			145
150	36.6		109.0	15,700	38.4	106.9	16,000			150
155	33.7		101.5	14,800	35.4	99.2	15,000			155
160	30.5		93.0	13,900						160
165	27.0		83.3	13,000						165
170	23.0		71.8	12,200						170

MLC165 S-2

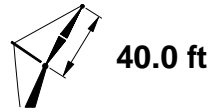
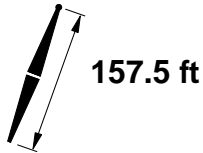
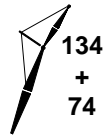
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.0	189.9	50,900*							45
50	77.4	188.8	50,100*	79.6	187.5	46,800*				50
55	75.9	187.4	49,300*	78.0	186.2	46,400*				55
60	74.3	186.0	48,500*	76.4	184.7	45,900*	78.5	182.1	36,000*	60
65	72.7	184.3	47,800*	74.7	183.1	45,500*	76.9	180.4	34,800*	65
70	71.0	182.6	47,200*	73.1	181.3	45,200*	75.2	178.6	33,700*	70
75	69.4	180.6	46,500*	71.5	179.3	44,700*	73.5	176.6	32,600*	75
80	67.7	178.5	42,900	69.8	177.2	43,700	71.8	174.4	31,700*	80
85	66.1	176.2	39,300	68.1	174.9	40,100	70.1	172.1	30,800*	85
90	64.4	173.8	36,200	66.4	172.4	36,900	68.4	169.6	30,000*	90
95	62.6	171.1	33,400	64.6	169.8	34,100	66.6	166.9	29,200*	95
100	60.9	168.3	31,000	62.9	166.9	31,600	64.8	163.9	28,500*	100
105	59.1	165.2	28,800	61.1	163.8	29,300	62.9	160.8	27,800*	105
110	57.2	161.9	26,800	59.2	160.5	27,300	61.0	157.4	27,200*	110
115	55.4	158.4	25,000	57.3	156.9	25,400	59.1	153.8	25,900	115
120	53.5	154.6	23,300	55.4	153.1	23,800	57.1	149.9	24,200	120
125	51.5	150.6	21,800	53.4	149.0	22,200	55.1	145.7	22,600	125
130	49.5	146.3	20,400	51.4	144.6	20,800	53.0	141.2	21,100	130
135	47.4	141.6	19,200	49.2	139.9	19,500	50.8	136.4	19,800	135
140	45.2	136.6	18,000	47.0	134.8	18,300	48.6	131.1	18,600	140
145	43.0	131.2	16,900	44.8	129.3	17,200	46.2	125.5	17,400	145
150	40.6	125.3	15,900	42.4	123.4	16,100				150
155	38.1	118.8	14,900	39.8	116.8	15,100				155
160	35.5	111.8	14,000	37.1	109.6	14,200				160
165	32.6	104.0	13,200	34.2	101.7	13,300				165
170	29.6	95.2	12,400							170
175	26.1	85.1	11,600							175
180	22.2	73.2	10,900							180

MLC165 S-2

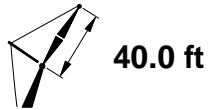
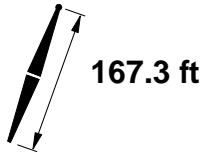
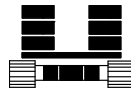
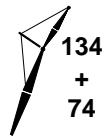
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.6	200.0	50,700*							45
50	78.1	198.9	49,900*							50
55	76.6	197.6	49,200*	78.6	196.4	46,300*				55
60	75.1	196.2	48,500*	77.1	195.0	45,900*	79.1	192.3	36,500*	60
65	73.6	194.7	47,800*	75.5	193.4	45,500*	77.6	190.7	35,300*	65
70	72.0	193.0	47,200*	74.0	191.7	45,100*	76.0	189.0	34,200*	70
75	70.5	191.2	46,600*	72.4	189.9	44,600*	74.4	187.2	33,200*	75
80	68.9	189.2	42,500	70.9	187.9	43,400	72.8	185.1	32,200*	80
85	67.3	187.1	38,900	69.3	185.7	39,800	71.2	182.9	31,400*	85
90	65.7	184.8	35,800	67.7	183.4	36,600	69.6	180.6	30,500*	90
95	64.1	182.3	33,000	66.0	180.9	33,700	67.9	178.0	29,800*	95
100	62.5	179.6	30,600	64.4	178.2	31,200	66.2	175.3	29,000*	100
105	60.8	176.7	28,400	62.7	175.3	29,000	64.5	172.4	28,400*	105
110	59.1	173.7	26,400	61.0	172.3	26,900	62.7	169.2	27,500	110
115	57.4	170.4	24,600	59.2	169.0	25,100	61.0	165.9	25,600	115
120	55.6	166.9	22,900	57.4	165.4	23,400	59.1	162.3	23,900	120
125	53.8	163.2	21,400	55.6	161.7	21,900	57.3	158.4	22,300	125
130	51.9	159.2	20,100	53.7	157.7	20,500	55.4	154.3	20,800	130
135	50.0	155.0	18,800	51.8	153.4	19,200	53.4	149.9	19,500	135
140	48.1	150.4	17,600	49.8	148.8	18,000	51.4	145.2	18,300	140
145	46.0	145.5	16,500	47.8	143.8	16,800	49.2	140.1	17,100	145
150	43.9	140.3	15,500	45.6	138.5	15,800	47.0	134.7	16,000	150
155	41.7	134.6	14,500	43.4	132.8	14,800	44.8	128.7	15,000	155
160	39.4	128.5	13,700	41.1	126.5	13,900				160
165	37.0	121.8	12,800	38.6	119.7	13,000				165
170	34.4	114.5	12,000	36.0	112.3	12,200				170
175	31.7	106.4	11,300	33.2	104.0	11,400				175
180	28.7	97.3	10,600							180
185	25.3	86.9	9,900							185

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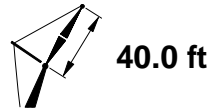
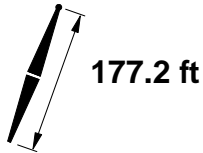
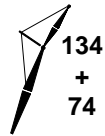
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	78.7	209.0	49,600*							50
55	77.2	207.8	49,000*	79.1	206.5	46,100*				55
60	75.8	206.5	48,300*	77.7	205.2	45,700*	79.7	202.5	36,900*	60
65	74.4	205.0	47,700*	76.3	203.7	45,400*	78.2	201.0	35,800*	65
70	72.9	203.4	47,100*	74.8	202.1	44,900*	76.7	199.4	34,700*	70
75	71.4	201.7	46,300	73.3	200.4	44,500*	75.2	197.6	33,700*	75
80	70.0	199.8	42,200	71.8	198.5	43,100	73.7	195.7	32,800*	80
85	68.5	197.8	38,600	70.3	196.5	39,500	72.2	193.6	31,900*	85
90	67.0	195.6	35,500	68.8	194.3	36,300	70.6	191.4	31,100*	90
95	65.4	193.3	32,700	67.3	191.9	33,500	69.1	189.0	30,300*	95
100	63.9	190.8	30,300	65.7	189.4	30,900	67.5	186.5	29,600*	100
105	62.3	188.1	28,100	64.1	186.7	28,700	65.9	183.7	28,900*	105
110	60.7	185.2	26,100	62.5	183.8	26,600	64.2	180.8	27,200	110
115	59.1	182.2	24,300	60.9	180.7	24,800	62.6	177.6	25,300	115
120	57.5	178.9	22,600	59.2	177.4	23,100	60.9	174.3	23,600	120
125	55.8	175.5	21,100	57.5	174.0	21,600	59.2	170.8	22,000	125
130	54.1	171.8	19,700	55.8	170.2	20,200	57.4	167.0	20,600	130
135	52.3	167.9	18,500	54.0	166.3	18,900	55.6	162.9	19,200	135
140	50.5	163.7	17,300	52.2	162.1	17,700	53.7	158.6	18,000	140
145	48.6	159.2	16,200	50.3	157.5	16,500	51.8	154.0	16,800	145
150	46.7	154.5	15,200	48.4	152.7	15,500	49.8	149.1	15,800	150
155	44.8	149.4	14,200	46.4	147.6	14,500	47.8	143.8	14,800	155
160	42.7	143.9	13,300	44.3	142.0	13,600	45.6	138.1	13,800	160
165	40.6	138.0	12,500	42.2	136.1	12,700				165
170	38.3	131.6	11,700	39.9	129.6	11,900				170
175	36.0	124.7	11,000	37.5	122.6	11,200				175
180	33.5	117.2	10,300	34.9	114.8	10,400				180
185	30.8	108.8	9,600							185
190	27.8	99.4	9,000							190
195	24.5	88.6	8,400							195

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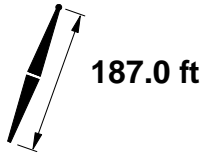
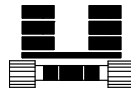
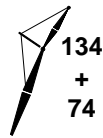
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
50	79.2		219.1	49,300*						50	
55	77.8		217.9	48,600*	79.7	216.6	45,800*			55	
60	76.5		216.7	48,000*	78.3	215.4	45,500*			60	
65	75.1		215.3	47,400*	76.9	214.0	45,000*	78.7	211.3	36,200*	65
70	73.7		213.8	46,900*	75.5	212.5	44,700*	77.3	209.7	35,100*	70
75	72.3		212.1	46,000	74.1	210.8	44,300*	75.9	208.0	34,200*	75
80	70.9		210.3	41,800	72.7	209.0	42,800	74.5	206.2	33,200*	80
85	69.5		208.4	38,300	71.3	207.1	39,200	73.0	204.3	32,400*	85
90	68.1		206.4	35,100	69.8	205.0	36,000	71.6	202.2	31,600*	90
95	66.6		204.1	32,400	68.4	202.8	33,100	70.1	199.9	30,800*	95
100	65.2		201.8	29,900	66.9	200.4	30,600	68.6	197.5	30,100*	100
105	63.7		199.2	27,700	65.4	197.8	28,300	67.1	194.9	29,000	105
110	62.2		196.6	25,700	63.9	195.1	26,300	65.6	192.1	26,900	110
115	60.7		193.7	23,900	62.4	192.3	24,500	64.0	189.2	25,000	115
120	59.1		190.6	22,200	60.8	189.2	22,800	62.4	186.1	23,300	120
125	57.6		187.4	20,700	59.2	185.9	21,200	60.8	182.8	21,700	125
130	56.0		184.0	19,300	57.6	182.5	19,800	59.2	179.2	20,300	130
135	54.3		180.3	18,100	56.0	178.8	18,500	57.5	175.5	18,900	135
140	52.7		176.5	16,900	54.3	174.9	17,300	55.8	171.5	17,700	140
145	50.9		172.3	15,800	52.6	170.7	16,200	54.0	167.3	16,500	145
150	49.2		168.0	14,800	50.8	166.3	15,100	52.2	162.8	15,400	150
155	47.4		163.3	13,800	49.0	161.6	14,200	50.3	157.9	14,400	155
160	45.5		158.4	13,000	47.1	156.6	13,200	48.4	152.8	13,500	160
165	43.6		153.1	12,100	45.1	151.2	12,400	46.4	147.3	12,600	165
170	41.6		147.4	11,300	43.1	145.5	11,600	44.3	141.4	11,800	170
175	39.5		141.3	10,600	41.0	139.3	10,800				175
180	37.3		134.7	9,900	38.8	132.6	10,100				180
185	35.0		127.5	9,200	36.4	125.3	9,400				185
190	32.6		119.7	8,600	33.9	117.3	8,800				190
195	29.9		111.0	8,000							195
200	27.1		101.3	7,400							200
205	23.8		90.2	6,900							205

MLC165 S-2

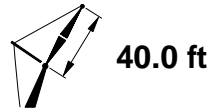
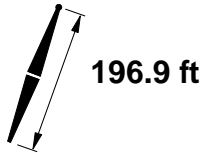
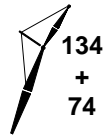
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
50	79.7		229.1	48,800*						50
55	78.4		228.0	48,200*						55
60	77.1		226.8	47,600*	78.8	225.5	45,100*			60
65	75.8		225.5	47,100*	77.5	224.2	44,700*	79.3	221.5	36,600*
70	74.4		224.1	46,500*	76.2	222.8	44,300*	77.9	220.0	35,600*
75	73.1		222.5	45,700	74.8	221.2	43,900*	76.6	218.4	34,600*
80	71.8		220.8	41,600	73.5	219.5	42,600	75.2	216.7	33,700*
85	70.4		219.0	38,000	72.1	217.6	38,900	73.8	214.8	32,800*
90	69.1		217.0	34,800	70.8	215.7	35,700	72.5	212.8	32,000*
95	67.7		214.9	32,100	69.4	213.5	32,900	71.1	210.7	31,300*
100	66.3		212.7	29,600	68.0	211.3	30,400	69.6	208.4	30,600*
105	64.9		210.3	27,400	66.6	208.9	28,100	68.2	205.9	28,800
110	63.5		207.7	25,400	65.2	206.3	26,100	66.8	203.3	26,700
115	62.1		205.0	23,600	63.7	203.6	24,200	65.3	200.6	24,800
120	60.6		202.2	22,000	62.3	200.7	22,500	63.8	197.6	23,100
125	59.1		199.1	20,500	60.8	197.6	21,000	62.3	194.5	21,500
130	57.6		195.9	19,100	59.3	194.4	19,600	60.8	191.2	20,000
135	56.1		192.5	17,800	57.7	191.0	18,300	59.2	187.7	18,700
140	54.6		188.9	16,600	56.1	187.3	17,100	57.6	184.0	17,500
145	53.0		185.1	15,500	54.5	183.5	15,900	56.0	180.1	16,300
150	51.3		181.0	14,500	52.9	179.4	14,900	54.3	175.9	15,200
155	49.7		176.7	13,600	51.2	175.0	13,900	52.6	171.5	14,200
160	48.0		172.1	12,700	49.5	170.4	13,000	50.8	166.8	13,300
165	46.2		167.3	11,900	47.7	165.5	12,200	49.0	161.8	12,400
170	44.4		162.1	11,100	45.9	160.3	11,400	47.1	156.4	11,600
175	42.5		156.6	10,300	44.0	154.7	10,600	45.1	150.7	10,800
180	40.6		150.8	9,700	42.0	148.8	9,900			
185	38.5		144.4	9,000	39.9	142.4	9,200			
190	36.4		137.6	8,400	37.8	135.4	8,600			
195	34.1		130.2	7,800	35.5	127.9	7,900			
200	31.7		122.2	7,200	33.0	119.7	7,400			
205	29.2		113.2	6,700						
210	26.3		103.2	6,200						
215	23.2		91.8	5,700						

MLC165 S-2

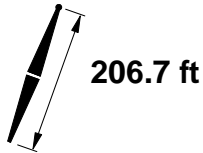
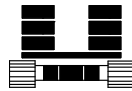
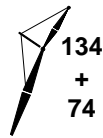
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
55	78.9		238.1	47,700*						55
60	77.6		237.0	47,100*	79.3	235.7	44,700*			60
65	76.4		235.7	46,600*	78.0	234.4	44,300*			65
70	75.1		234.3	46,100*	76.8	233.0	43,900*	78.5	230.2	36,000*
75	73.8		232.8	45,300	75.5	231.5	43,500*	77.2	228.7	35,000*
80	72.6		231.2	41,200	74.2	229.9	42,300	75.9	227.1	34,100*
85	71.3		229.5	37,600	72.9	228.1	38,600	74.6	225.3	33,300*
90	70.0		227.6	34,500	71.6	226.2	35,400	73.2	223.4	32,500*
95	68.7		225.6	31,700	70.3	224.2	32,600	71.9	221.4	31,700*
100	67.4		223.5	29,200	69.0	222.1	30,000	70.6	219.2	30,800
105	66.0		221.2	27,000	67.7	219.8	27,800	69.2	216.9	28,500
110	64.7		218.8	25,000	66.3	217.4	25,700	67.8	214.4	26,400
115	63.3		216.2	23,200	64.9	214.8	23,900	66.5	211.8	24,500
120	62.0		213.5	21,600	63.5	212.1	22,200	65.0	209.0	22,800
125	60.6		210.6	20,100	62.1	209.2	20,600	63.6	206.1	21,200
130	59.2		207.6	18,700	60.7	206.1	19,200	62.2	203.0	19,700
135	57.7		204.4	17,400	59.3	202.9	17,900	60.7	199.7	18,400
140	56.3		201.0	16,200	57.8	199.5	16,700	59.2	196.2	17,100
145	54.8		197.4	15,200	56.3	195.9	15,600	57.7	192.5	16,000
150	53.2		193.6	14,100	54.8	192.0	14,500	56.1	188.6	14,900
155	51.7		189.6	13,200	53.2	188.0	13,600	54.5	184.5	13,900
160	50.1		185.4	12,300	51.6	183.7	12,700	52.9	180.2	13,000
165	48.5		180.9	11,500	50.0	179.2	11,800	51.2	175.6	12,100
170	46.8		176.2	10,700	48.3	174.4	11,000	49.5	170.7	11,300
175	45.1		171.2	10,000	46.5	169.3	10,200	47.7	165.5	10,500
180	43.3		165.8	9,300	44.7	163.9	9,500	45.9	159.9	9,700
185	41.5		160.1	8,600	42.9	158.2	8,900	44.0	154.0	9,000
190	39.6		154.0	8,000	41.0	152.0	8,200			
195	37.6		147.5	7,400	38.9	145.4	7,600			
200	35.5		140.5	6,800	36.8	138.2	7,000			
205	33.3		132.9	6,300	34.6	130.5	6,500			
210	31.0		124.5	5,800						
215	28.4		115.3	5,300						
220	25.6		105.0	4,800						
225	22.5		93.2	4,400						

MLC165 S-2

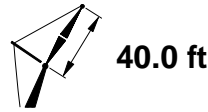
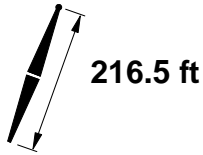
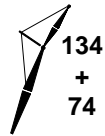
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	79.3	248.2	47,000*							55
60	78.1	247.1	46,500*							60
65	76.9	245.9	46,000*	78.5	244.5	43,700*				65
70	75.7	244.5	45,500*	77.3	243.2	43,400*	78.9	240.4	36,300*	70
75	74.5	243.1	45,000	76.1	241.8	43,000*	77.7	239.0	35,400*	75
80	73.3	241.6	40,900	74.9	240.2	42,000	76.5	237.4	34,500*	80
85	72.1	239.9	37,300	73.6	238.6	38,300	75.2	235.7	33,700*	85
90	70.8	238.1	34,200	72.4	236.8	35,100	74.0	233.9	32,900*	90
95	69.6	236.2	31,400	71.2	234.8	32,300	72.7	232.0	32,200*	95
100	68.3	234.2	28,900	69.9	232.8	29,700	71.4	229.9	30,500	100
105	67.1	232.0	26,700	68.6	230.6	27,500	70.1	227.7	28,200	105
110	65.8	229.7	24,700	67.3	228.3	25,400	68.8	225.3	26,100	110
115	64.5	227.3	22,900	66.0	225.9	23,600	67.5	222.9	24,200	115
120	63.2	224.7	21,200	64.7	223.3	21,900	66.2	220.2	22,500	120
125	61.9	222.0	19,700	63.4	220.5	20,300	64.8	217.5	20,900	125
130	60.5	219.1	18,400	62.0	217.6	18,900	63.4	214.5	19,400	130
135	59.2	216.1	17,100	60.7	214.6	17,600	62.1	211.4	18,100	135
140	57.8	212.9	15,900	59.3	211.4	16,400	60.6	208.1	16,900	140
145	56.4	209.5	14,800	57.9	208.0	15,300	59.2	204.7	15,700	145
150	55.0	206.0	13,800	56.4	204.4	14,200	57.7	201.0	14,600	150
155	53.5	202.2	12,900	55.0	200.6	13,300	56.3	197.2	13,600	155
160	52.0	198.3	12,000	53.5	196.6	12,300	54.7	193.1	12,700	160
165	50.5	194.1	11,100	51.9	192.4	11,500	53.2	188.9	11,800	165
170	49.0	189.7	10,400	50.4	188.0	10,700	51.6	184.3	11,000	170
175	47.4	185.0	9,600	48.8	183.3	9,900	50.0	179.5	10,200	175
180	45.8	180.1	8,900	47.1	178.3	9,200	48.3	174.5	9,500	180
185	44.1	174.9	8,300	45.4	173.0	8,500	46.5	169.1	8,800	185
190	42.3	169.4	7,700	43.7	167.4	7,900	44.7	163.3	8,100	190
195	40.5	163.5	7,100	41.9	161.5	7,300				195
200	38.7	157.2	6,500	40.0	155.1	6,700				200
205	36.7	150.5	6,000	38.0	148.3	6,200				205
210	34.7	143.2	5,500	35.9	140.9	5,600				210
215	32.5	135.4	5,000	33.7	132.9	5,100				215
220	30.2	126.8	4,500							220
225	27.7	117.4	4,100							225

MLC165 S-2

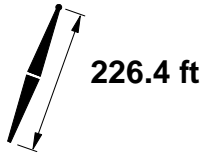
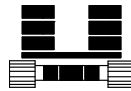
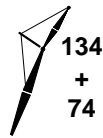
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	78.6		257.2	45,700*						60	
65	77.4		256.0	45,300*	79.0	254.7	43,100*			65	
70	76.3		254.7	44,800*	77.8	253.4	42,800*	79.4	250.6	36,700*	70
75	75.1		253.4	44,400*	76.7	252.0	42,500*	78.2	249.2	35,800*	75
80	74.0		251.9	40,500	75.5	250.5	41,700	77.0	247.7	34,900*	80
85	72.8		250.3	37,000	74.3	248.9	38,000	75.8	246.1	34,100*	85
90	71.6		248.6	33,800	73.1	247.2	34,800	74.6	244.4	33,300*	90
95	70.4		246.8	31,000	71.9	245.4	31,900	73.4	242.5	32,600*	95
100	69.2		244.8	28,500	70.7	243.4	29,400	72.2	240.5	30,300	100
105	68.0		242.8	26,300	69.5	241.4	27,100	71.0	238.4	27,900	105
110	66.8		240.6	24,300	68.3	239.2	25,100	69.7	236.2	25,800	110
115	65.6		238.2	22,500	67.0	236.8	23,200	68.5	233.8	23,900	115
120	64.3		235.8	20,900	65.8	234.4	21,500	67.2	231.3	22,200	120
125	63.1		233.2	19,400	64.5	231.7	20,000	65.9	228.7	20,600	125
130	61.8		230.5	18,000	63.2	229.0	18,600	64.6	225.9	19,100	130
135	60.5		227.6	16,700	61.9	226.1	17,200	63.3	223.0	17,800	135
140	59.2		224.6	15,500	60.6	223.1	16,000	62.0	219.9	16,500	140
145	57.9		221.4	14,400	59.3	219.8	14,900	60.6	216.6	15,400	145
150	56.5		218.0	13,400	57.9	216.5	13,900	59.2	213.2	14,300	150
155	55.1		214.5	12,500	56.5	212.9	12,900	57.8	209.6	13,300	155
160	53.8		210.8	11,600	55.1	209.2	12,000	56.4	205.8	12,400	160
165	52.3		206.9	10,800	53.7	205.2	11,100	54.9	201.7	11,500	165
170	50.9		202.8	10,000	52.3	201.1	10,300	53.5	197.5	10,600	170
175	49.4		198.4	9,200	50.8	196.7	9,600	51.9	193.1	9,900	175
180	47.9		193.9	8,500	49.2	192.1	8,900	50.4	188.4	9,100	180
185	46.3		189.0	7,900	47.7	187.2	8,200	48.8	183.4	8,400	185
190	44.7		184.0	7,300	46.1	182.1	7,500	47.1	178.1	7,800	190
195	43.1		178.6	6,700	44.4	176.6	6,900	45.4	172.6	7,100	195
200	41.4		172.9	6,100	42.7	170.9	6,400				200
205	39.7		166.8	5,600	40.9	164.7	5,800				205
210	37.8		160.3	5,100	39.0	158.2	5,300				210
215	35.9		153.4	4,600	37.1	151.1	4,800				215
220	33.9		145.9	4,200	35.1	143.6	4,300				220

MLC165 S-2

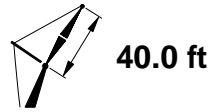
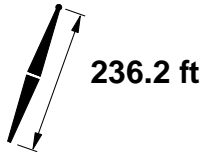
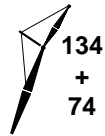
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
60	79.0	267.2	44,900*							60
65	77.9	266.1	44,500*	79.4	264.8	42,400*				65
70	76.8	264.9	44,000*	78.3	263.6	42,100*				70
75	75.7	263.6	43,600*	77.2	262.2	41,800*	78.7	259.4	36,100*	75
80	74.6	262.2	40,200	76.0	260.8	41,400	77.5	258.0	35,300*	80
85	73.4	260.6	36,600	74.9	259.3	37,700	76.4	256.4	34,500*	85
90	72.3	259.0	33,500	73.8	257.6	34,500	75.2	254.8	33,700*	90
95	71.2	257.2	30,700	72.6	255.9	31,700	74.1	253.0	32,600	95
100	70.0	255.4	28,200	71.5	254.0	29,100	72.9	251.1	30,000	100
105	68.9	253.4	26,000	70.3	252.0	26,900	71.7	249.1	27,700	105
110	67.7	251.3	24,000	69.1	249.9	24,800	70.5	246.9	25,600	110
115	66.5	249.1	22,200	67.9	247.7	22,900	69.3	244.7	23,700	115
120	65.3	246.8	20,600	66.8	245.3	21,300	68.1	242.3	21,900	120
125	64.1	244.3	19,100	65.5	242.8	19,700	66.9	239.8	20,300	125
130	62.9	241.7	17,700	64.3	240.2	18,300	65.7	237.1	18,900	130
135	61.7	239.0	16,400	63.1	237.5	17,000	64.4	234.3	17,500	135
140	60.5	236.1	15,200	61.8	234.6	15,800	63.1	231.4	16,300	140
145	59.2	233.0	14,100	60.6	231.5	14,600	61.9	228.3	15,100	145
150	57.9	229.9	13,100	59.3	228.3	13,600	60.6	225.1	14,000	150
155	56.6	226.5	12,200	58.0	225.0	12,600	59.2	221.7	13,000	155
160	55.3	223.0	11,300	56.7	221.4	11,700	57.9	218.1	12,100	160
165	54.0	219.3	10,500	55.3	217.7	10,900	56.5	214.3	11,200	165
170	52.6	215.5	9,700	53.9	213.8	10,100	55.1	210.3	10,400	170
175	51.2	211.4	9,000	52.5	209.7	9,300	53.7	206.2	9,600	175
180	49.8	207.1	8,300	51.1	205.4	8,600	52.2	201.8	8,900	180
185	48.4	202.6	7,600	49.7	200.9	7,900	50.8	197.2	8,200	185
190	46.9	197.9	7,000	48.2	196.1	7,300	49.2	192.3	7,500	190
195	45.4	192.9	6,400	46.6	191.1	6,700	47.7	187.2	6,900	195
200	43.8	187.7	5,900	45.1	185.8	6,100	46.1	181.7	6,300	200
205	42.2	182.1	5,300	43.4	180.2	5,600	44.4	176.0	5,700	205
210	40.5	176.2	4,800	41.7	174.2	5,000				210
215	38.8	170.0	4,300	40.0	167.9	4,500				215
220				38.2	161.1	4,100				220

MLC165 S-2

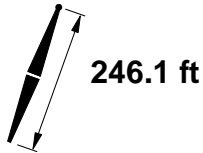
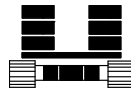
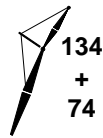
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	79.4		277.3	44,400*						60	
65	78.3		276.2	43,900*						65	
70	77.3		275.0	43,500*	78.7	273.7	41,700*			70	
75	76.2		273.8	43,000*	77.6	272.4	41,400*	79.1	269.6	35,600*	75
80	75.1		272.4	39,800	76.6	271.1	41,000	78.0	268.2	35,000*	80
85	74.1		270.9	36,200	75.5	269.6	37,300	76.9	266.7	34,500*	85
90	73.0		269.4	33,000	74.4	268.0	34,100	75.8	265.1	34,000*	90
95	71.9		267.7	30,200	73.3	266.3	31,200	74.7	263.4	32,200	95
100	70.8		265.9	27,800	72.2	264.5	28,700	73.5	261.6	29,600	100
105	69.7		264.0	25,500	71.1	262.6	26,400	72.4	259.7	27,300	105
110	68.5		262.0	23,500	69.9	260.6	24,300	71.3	257.6	25,100	110
115	67.4		259.9	21,700	68.8	258.5	22,500	70.1	255.5	23,200	115
120	66.3		257.6	20,100	67.6	256.2	20,800	69.0	253.2	21,500	120
125	65.1		255.3	18,500	66.5	253.8	19,200	67.8	250.8	19,900	125
130	64.0		252.8	17,200	65.3	251.3	17,800	66.6	248.3	18,400	130
135	62.8		250.2	15,900	64.2	248.7	16,500	65.4	245.6	17,100	135
140	61.6		247.4	14,700	63.0	245.9	15,300	64.2	242.8	15,800	140
145	60.4		244.5	13,600	61.8	243.0	14,100	63.0	239.9	14,700	145
150	59.2		241.5	12,600	60.5	240.0	13,100	61.8	236.8	13,600	150
155	58.0		238.4	11,600	59.3	236.8	12,100	60.5	233.5	12,600	155
160	56.7		235.0	10,700	58.0	233.5	11,200	59.2	230.1	11,600	160
165	55.5		231.5	9,900	56.8	229.9	10,300	57.9	226.6	10,700	165
170	54.2		227.9	9,100	55.5	226.3	9,500	56.6	222.8	9,900	170
175	52.9		224.1	8,400	54.2	222.4	8,800	55.3	218.9	9,100	175
180	51.5		220.0	7,700	52.8	218.4	8,100	53.9	214.8	8,400	180
185	50.2		215.8	7,100	51.4	214.1	7,400	52.5	210.5	7,700	185
190	48.8		211.4	6,400	50.0	209.7	6,800	51.1	205.9	7,000	190
195	47.4		206.8	5,900	48.6	205.0	6,200	49.7	201.2	6,400	195
200	45.9		201.9	5,300	47.2	200.0	5,600	48.2	196.1	5,800	200
205	44.4		196.7	4,800	45.7	194.8	5,000	46.6	190.8	5,200	205
210	42.9		191.3	4,300	44.1	189.4	4,500	45.1	185.2	4,700	210
215					42.5	183.6	4,000				215

MLC165 S-2

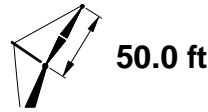
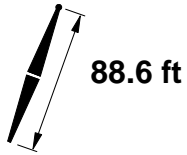
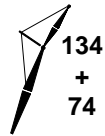
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
65	78.8		286.3							65
70	77.7		285.2		79.1	283.8				70
75	76.7		283.9		78.1	282.6		79.5	279.8	75
80	75.7		282.6		77.0	281.3		78.4	278.4	80
85	74.6		281.2		76.0	279.8		77.4	277.0	85
90	73.6		279.7		74.9	278.3		76.3	275.4	90
95	72.5		278.1		73.9	276.7		75.2	273.8	95
100	71.5		276.4		72.8	275.0		74.2	272.1	100
105	70.4		274.5		71.7	273.1		73.1	270.2	105
110	69.3		272.6		70.7	271.2		72.0	268.2	110
115	68.2		270.6		69.6	269.2		70.9	266.2	115
120	67.1		268.4		68.5	267.0		69.8	264.0	120
125	66.0		266.2		67.4	264.7		68.6	261.7	125
130	64.9		263.8		66.3	262.3		67.5	259.3	130
135	63.8		261.3		65.1	259.8		66.4	256.7	135
140	62.7		258.7		64.0	257.2		65.2	254.1	140
145	61.5		255.9		62.8	254.4		64.1	251.2	145
150	60.4		253.0		61.7	251.5		62.9	248.3	150
155	59.2		250.0		60.5	248.5		61.7	245.2	155
160	58.0		246.8		59.3	245.3		60.5	242.0	160
165	56.8		243.5		58.1	241.9		59.2	238.6	165
170	55.6		240.1		56.9	238.5		58.0	235.1	170
175	54.4		236.4		55.6	234.8		56.7	231.4	175
180	53.1		232.6		54.4	231.0		55.5	227.5	180
185	51.8		228.7		53.1	227.0		54.1	223.4	185
190	50.5		224.5		51.7	222.8		52.8	219.2	190
195	49.2		220.1		50.4	218.4		51.4	214.7	195
200	47.8		215.6		49.0	213.8		50.0	210.0	200
205	46.5		210.8		47.6	208.9		48.6	205.1	205
210					46.2	203.9		47.2	199.9	210

MLC165 S-2

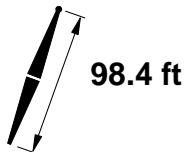
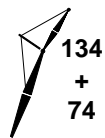
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
35	79.7		141.9							35	
40	77.5		140.7							40	
45	75.4		139.3							45	
50	73.2		137.6	41,100*	79.0	138.0	39,300*			50	
55	71.0		135.8	40,100*	76.8	136.4	38,500*			55	
60	68.7		133.7	39,100*	74.6	134.5	37,500*	78.3	131.8	29,600*	60
65	66.5		131.4	38,100*	72.3	132.4	36,700*	76.0	129.6	28,100*	65
70	64.1		128.9	37,000*	70.0	130.1	35,900*	73.6	127.3	26,800*	70
75	61.8		126.1	36,100*	67.7	127.5	34,400*	71.2	124.6	25,600*	75
80	59.3		123.0	35,200*	65.3	124.7	32,500*	68.8	121.7	24,500*	80
85	56.8		119.6	34,500*	62.8	121.5	30,900*	66.2	118.5	23,500*	85
90	54.3		115.8	33,700*	60.3	118.1	29,400*	63.6	114.9	22,600*	90
95	51.6		111.7	32,900*	57.7	114.3	28,000*	60.9	111.0	21,800*	95
100	48.8		107.2	31,200*	54.9	110.1	26,800*	58.1	106.7	21,100*	100
105	45.9		102.2	29,700*	52.1	105.6	25,700*	55.2	102.0	20,400*	105
110	42.8		96.7	28,300*	49.1	100.5	24,700*	52.1	96.7	19,800*	110
115	39.5		90.4	27,100*	46.0	94.8	23,800*	48.8	90.8	19,300*	115
120	35.9		83.4	25,400	42.6	88.4	23,000*	45.2	84.1	18,800*	120
125	31.9		75.3	23,900	38.9	81.2	22,200*				125
130	27.4		65.6	22,500	34.8	72.8	21,600*				130
135	22.0		53.5	21,200							135

MLC165 S-2

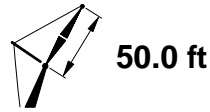
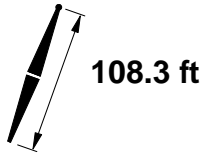
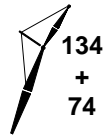
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
40	78.4	150.8	43,500*							40
45	76.4	149.5	42,400*							45
50	74.4	148.0	41,400*	77.7	146.7	38,700*				50
55	72.3	146.3	40,500*	75.7	145.0	37,900*	79.1	142.2	30,200*	55
60	70.2	144.4	39,600*	73.6	143.1	37,100*	77.0	140.2	28,800*	60
65	68.1	142.3	38,700*	71.5	140.9	36,400*	74.8	138.0	27,400*	65
70	66.0	139.9	37,800*	69.3	138.6	35,700*	72.6	135.6	26,200*	70
75	63.8	137.4	36,800*	67.1	135.9	33,900*	70.4	132.9	25,200*	75
80	61.6	134.5	35,900*	64.9	133.1	32,200*	68.1	130.0	24,200*	80
85	59.3	131.5	35,200*	62.6	130.0	30,700*	65.7	126.8	23,300*	85
90	57.0	128.1	34,400*	60.2	126.6	29,300*	63.3	123.3	22,500*	90
95	54.6	124.4	33,700*	57.8	122.8	28,100*	60.8	119.5	21,800*	95
100	52.1	120.4	32,800	55.3	118.8	26,900*	58.2	115.3	21,100*	100
105	49.6	116.0	30,600	52.7	114.3	25,900*	55.5	110.7	20,500*	105
110	46.9	111.2	28,600	49.9	109.4	25,000*	52.7	105.6	19,900*	110
115	44.1	105.9	26,700	47.1	104.0	24,100*	49.7	100.0	19,400*	115
120	41.1	100.0	25,100	44.0	98.0	23,300*	46.5	93.7	19,000*	120
125	37.9	93.5	23,600	40.8	91.3	22,600*				125
130	34.4	86.1	22,200	37.2	83.7	21,900*				130
135	30.6	77.5	20,900	33.3	74.9	21,100				135
140	26.3	67.4	19,700							140

MLC165 S-2

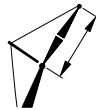
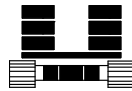
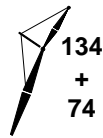
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
40	79.1		161.0							40
45	77.2		159.7							45
50	75.4		158.3							50
55	73.5		156.7	78.5	157.0					55
60	71.5		155.0	76.6	155.4	38,900*				60
				74.7	153.6	37,400*	77.9	150.7	29,300*	
65	69.6		153.0	72.7	151.6	36,700*	75.9	148.6	28,100*	65
70	67.6		150.8	70.7	149.4	36,100*	73.9	146.4	26,900*	70
75	65.6		148.4	68.7	147.0	35,300*	71.8	143.9	25,800*	75
80	63.6		145.8	66.6	144.4	33,500*	69.7	141.3	24,900*	80
85	61.5		143.0	64.5	141.5	32,000*	67.5	138.3	24,000*	85
90	59.4		139.9	62.4	138.4	30,600*	65.3	135.1	23,200*	90
95	57.2		136.6	60.2	135.0	29,300*	63.0	131.7	22,400*	95
100	54.9		133.0	57.9	131.4	28,100*	60.7	127.9	21,700*	100
105	52.6		129.0	55.6	127.4	27,100*	58.3	123.8	21,100*	105
110	50.2		124.7	53.2	123.0	26,100*	55.8	119.3	20,500*	110
115	47.8		120.1	50.6	118.3	25,200*	53.2	114.4	20,000*	115
120	45.2		115.0	48.0	113.1	24,400*	50.5	109.0	19,500*	120
125	42.5		109.4	45.2	107.4	23,500*	47.6	103.1	19,100*	125
130	39.6		103.2	42.3	101.1	22,000*	44.5	96.5	18,700*	130
135	36.5		96.3	39.1	94.0	20,700*				135
140	33.2		88.6	35.7	86.1	19,500*				140
145	29.4		79.7							145
150	25.2		69.1							150

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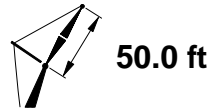
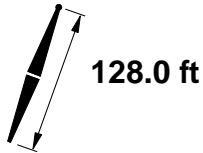
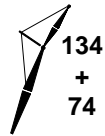
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	78.0	169.9	42,800*							45
50	76.2	168.6	41,900*	79.2	167.2	39,100*				50
55	74.5	167.1	41,000*	77.5	165.7	38,400*				55
60	72.7	165.4	40,200*	75.6	164.0	37,700*	78.7	161.0	29,900*	60
65	70.8	163.6	39,500*	73.8	162.2	37,000*	76.8	159.1	28,600*	65
70	69.0	161.6	38,700*	71.9	160.1	36,400*	74.9	157.1	27,500*	70
75	67.1	159.4	37,900*	70.1	157.9	35,800*	73.0	154.8	26,400*	75
80	65.3	156.9	37,100*	68.2	155.5	34,800*	71.0	152.3	25,500*	80
85	63.3	154.3	36,300*	66.2	152.8	33,200*	69.0	149.6	24,600*	85
90	61.4	151.5	35,600*	64.2	150.0	31,800*	67.0	146.7	23,800*	90
95	59.4	148.4	34,400	62.2	146.9	30,500*	64.9	143.5	23,000*	95
100	57.3	145.1	31,900	60.1	143.5	29,300*	62.8	140.1	22,300*	100
105	55.2	141.5	29,700	58.0	139.9	28,200*	60.6	136.3	21,700*	105
110	53.1	137.6	27,700	55.8	135.9	27,200*	58.4	132.3	21,100*	110
115	50.8	133.5	25,900	53.6	131.7	26,200*	56.1	127.9	20,600*	115
120	48.5	128.9	24,200	51.2	127.1	24,700	53.7	123.2	20,100*	120
125	46.1	124.0	22,700	48.8	122.1	23,100	51.1	118.0	19,600*	125
130	43.6	118.6	21,300	46.3	116.6	21,700	48.5	112.3	19,200*	130
135	41.0	112.8	20,100	43.6	110.6	20,400	45.7	106.1	18,900*	135
140	38.2	106.3	18,900	40.7	104.0	19,200				140
145	35.2	99.1	17,800	37.7	96.7	18,000				145
150	32.0	91.0	16,700	34.3	88.3	16,900				150
155	28.4	81.7	15,800							155
160	24.2	70.7	14,800							160

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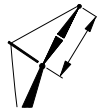
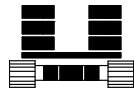
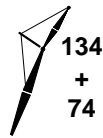
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
45	78.7		180.0							45	
50	77.0		178.7							50	
55	75.4		177.4							55	
60	73.7		175.8	78.2	175.9		38,500*			60	
65	72.0		174.1	76.5	174.4		37,900*	79.3	171.4	30,400*	65
				74.8	172.6		37,200*	77.6	169.6	29,100*	
70	70.2		172.2	73.0	170.7		36,600*	75.8	167.6	28,000*	70
75	68.5		170.1	71.3	168.6		36,100*	74.0	165.5	27,000*	75
80	66.7		167.9	69.5	166.4		35,500*	72.2	163.2	26,000*	80
85	64.9		165.4	67.7	163.9		34,400*	70.4	160.7	25,200*	85
90	63.1		162.8	65.8	161.3		32,900*	68.5	158.0	24,400*	90
95	61.3		160.0	64.0	158.4		31,600*	66.6	155.0	23,600*	95
100	59.4		156.9	62.0	155.3		30,400*	64.6	151.9	22,900*	100
105	57.4		153.6	60.1	152.0		29,300*	62.6	148.5	22,300*	105
110	55.5		150.1	58.1	148.4		28,000	60.6	144.8	21,700*	110
115	53.4		146.2	56.0	144.5		26,100	58.5	140.8	21,100*	115
120	51.4		142.1	53.9	140.3		24,400	56.3	136.5	20,600*	120
125	49.2		137.7	51.7	135.9		22,900	54.0	131.9	20,200*	125
130	47.0		132.9	49.5	131.0		21,400	51.7	126.9	19,700*	130
135	44.6		127.7	47.1	125.7		20,100	49.3	121.5	19,300*	135
140	42.2		122.1	44.7	120.0		18,900	46.7	115.5	19,000*	140
145	39.7		116.0	42.1	113.8		17,800	44.0	109.0	18,000	145
150	37.0		109.2	39.3	106.9		16,700				150
155	34.1		101.7	36.3	99.2		15,700				155
160	30.9		93.3	33.1	90.5		14,800				160
165	27.4		83.6								165
170	23.4		72.2								170

MLC165 S-2

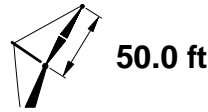
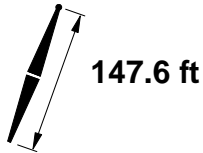
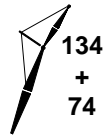
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.3	190.1	42,800*							45
50	77.7	188.9	42,000*							50
55	76.1	187.6	41,200*	78.8	186.2	38,700*				55
60	74.6	186.1	40,500*	77.2	184.7	38,000*				60
65	72.9	184.5	39,800*	75.6	183.0	37,400*	78.3	179.9	29,600*	65
70	71.3	182.7	39,200*	74.0	181.2	36,800*	76.6	178.1	28,500*	70
75	69.7	180.8	38,500*	72.3	179.3	36,200*	74.9	176.1	27,500*	75
80	68.0	178.7	37,900*	70.6	177.2	35,800*	73.2	174.0	26,600*	80
85	66.4	176.4	37,200*	69.0	174.9	35,200*	71.5	171.6	25,700*	85
90	64.7	173.9	36,400	67.2	172.4	34,000*	69.8	169.1	24,900*	90
95	62.9	171.3	33,700	65.5	169.7	32,700*	68.0	166.4	24,200*	95
100	61.2	168.4	31,200	63.7	166.8	31,400*	66.2	163.4	23,500*	100
105	59.4	165.4	29,000	61.9	163.7	29,700	64.3	160.3	22,800*	105
110	57.6	162.1	27,000	60.1	160.4	27,600	62.4	156.9	22,200*	110
115	55.7	158.6	25,200	58.2	156.9	25,800	60.5	153.2	21,700*	115
120	53.8	154.8	23,500	56.2	153.1	24,100	58.5	149.3	21,200*	120
125	51.8	150.8	22,000	54.3	149.0	22,500	56.5	145.1	20,700*	125
130	49.8	146.5	20,600	52.2	144.6	21,100	54.4	140.6	20,200*	130
135	47.7	141.8	19,300	50.1	139.9	19,800	52.2	135.8	19,800*	135
140	45.5	136.8	18,200	47.9	134.8	18,600	49.9	130.5	18,900	140
145	43.3	131.4	17,100	45.6	129.3	17,400	47.5	124.8	17,700	145
150	40.9	125.5	16,000	43.2	123.3	16,400	45.1	118.6	16,600	150
155	38.5	119.1	15,100	40.7	116.8	15,400				155
160	35.8	112.1	14,200	38.0	109.6	14,400				160
165	33.0	104.3	13,300	35.1	101.6	13,600				165
170	29.9	95.5	12,500							170
175	26.5	85.5	11,800							175
180	22.6	73.6	11,100							180

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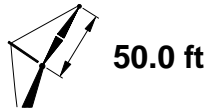
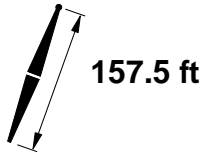
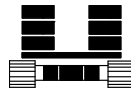
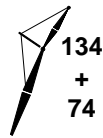
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
50	78.3		199.0	41,900*						50
55	76.9		197.8	41,200*	79.4	196.3				55
60	75.3		196.4	40,500*	77.9	194.9				60
65	73.8		194.9	39,900*	76.4	193.4	78.9	190.3	30,100*	65
70	72.3		193.2	39,200*	74.8	191.7	77.3	188.5	29,000*	70
75	70.8		191.4	38,700*	73.3	189.8	75.8	186.7	28,000*	75
80	69.2		189.4	38,100*	71.7	187.8	74.2	184.6	27,100*	80
85	67.6		187.2	37,500*	70.1	185.7	72.5	182.4	26,200*	85
90	66.0		184.9	36,500	68.5	183.3	70.9	180.0	25,400*	90
95	64.4		182.4	33,700	66.8	180.8	69.2	177.5	24,700*	95
100	62.8		179.8	31,200	65.2	178.2	67.5	174.7	24,000*	100
105	61.1		176.9	29,000	63.5	175.3	65.8	171.8	23,300*	105
110	59.4		173.9	27,000	61.8	172.2	64.1	168.7	22,700*	110
115	57.6		170.6	25,200	60.0	168.9	62.3	165.3	22,200*	115
120	55.9		167.1	23,600	58.2	165.4	60.4	161.7	21,700*	120
125	54.1		163.4	22,100	56.4	161.6	58.6	157.8	21,200*	125
130	52.2		159.4	20,700	54.5	157.6	56.6	153.7	20,700*	130
135	50.3		155.2	19,400	52.6	153.3	54.7	149.3	20,300	135
140	48.4		150.6	18,200	50.6	148.7	52.6	144.6	19,000	140
145	46.3		145.7	17,200	48.6	143.7	50.5	139.5	17,900	145
150	44.2		140.5	16,100	46.4	138.4	48.3	134.0	16,800	150
155	42.0		134.9	15,200	44.2	132.7	46.0	128.0	15,800	155
160	39.7		128.7	14,300	41.9	126.5				160
165	37.3		122.1	13,400	39.4	119.7				165
170	34.8		114.8	12,700	36.8	112.2				170
175	32.0		106.7	11,900	34.0	103.9				175
180	29.0		97.6	11,200						180
185	25.7		87.3	10,500						185
190	21.8		75.0	9,900						190

MLC165 S-2

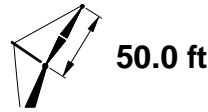
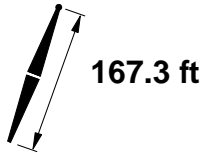
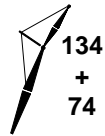
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	78.9	209.1	41,800*							50
55	77.5	207.9	41,100*							55
60	76.1	206.6	40,500*	78.5	205.1	38,100*				60
65	74.6	205.2	39,900*	77.0	203.7	37,600*	79.5	200.5	30,500*	65
70	73.2	203.6	39,300*	75.6	202.1	37,000*	78.0	198.9	29,400*	70
75	71.7	201.8	38,700*	74.1	200.3	36,500*	76.5	197.1	28,400*	75
80	70.2	200.0	38,200*	72.6	198.4	36,100*	75.0	195.2	27,500*	80
85	68.7	197.9	37,700*	71.1	196.4	35,600*	73.4	193.1	26,700*	85
90	67.2	195.8	36,100	69.6	194.2	35,200*	71.9	190.9	25,900*	90
95	65.7	193.4	33,300	68.0	191.8	34,200	70.3	188.5	25,100*	95
100	64.2	190.9	30,900	66.5	189.3	31,700	68.7	185.9	24,500*	100
105	62.6	188.2	28,700	64.9	186.6	29,400	67.1	183.1	23,800*	105
110	61.0	185.4	26,700	63.3	183.7	27,400	65.5	180.2	23,200*	110
115	59.4	182.3	24,900	61.7	180.6	25,500	63.8	177.1	22,700*	115
120	57.7	179.1	23,200	60.0	177.4	23,800	62.1	173.7	22,100*	120
125	56.1	175.6	21,700	58.3	173.9	22,300	60.4	170.1	21,600*	125
130	54.3	172.0	20,300	56.6	170.2	20,800	58.6	166.3	21,200*	130
135	52.6	168.0	19,000	54.8	166.2	19,500	56.8	162.3	20,000	135
140	50.8	163.9	17,900	53.0	162.0	18,300	54.9	157.9	18,700	140
145	48.9	159.4	16,800	51.1	157.5	17,200	53.0	153.3	17,600	145
150	47.0	154.7	15,700	49.2	152.6	16,100	51.0	148.4	16,500	150
155	45.1	149.6	14,800	47.2	147.5	15,200	49.0	143.0	15,500	155
160	43.0	144.1	13,900	45.1	141.9	14,200	46.8	137.3	14,500	160
165	40.9	138.2	13,100	42.9	136.0	13,400	44.6	131.1	13,600	165
170	38.6	131.9	12,300	40.6	129.5	12,600				170
175	36.3	125.0	11,500	38.2	122.5	11,800				175
180	33.8	117.4	10,800	35.7	114.7	11,100				180
185	31.1	109.1	10,200	32.9	106.1	10,400				185
190	28.2	99.7	9,500							190
195	24.9	89.0	8,900							195

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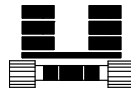
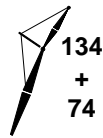
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	79.4	219.2	41,600*							50
55	78.1	218.1	41,000*							55
60	76.7	216.8	40,400*	79.0	215.3	38,100*				60
65	75.3	215.4	39,800*	77.6	213.9	37,600*				65
70	74.0	213.9	39,300*	76.3	212.4	37,100*	78.6	209.2	29,800*	70
75	72.6	212.3	38,700*	74.9	210.7	36,600*	77.1	207.5	28,800*	75
80	71.2	210.5	38,200*	73.4	208.9	36,200*	75.7	205.7	27,900*	80
85	69.8	208.6	37,700*	72.0	207.0	35,800*	74.3	203.7	27,100*	85
90	68.3	206.5	35,800	70.6	204.9	35,300*	72.8	201.6	26,300*	90
95	66.9	204.3	33,000	69.1	202.7	33,900	71.3	199.3	25,600*	95
100	65.4	201.9	30,500	67.7	200.3	31,400	69.8	196.9	24,900*	100
105	64.0	199.4	28,300	66.2	197.8	29,100	68.3	194.3	24,300*	105
110	62.5	196.7	26,300	64.7	195.1	27,100	66.8	191.5	23,700*	110
115	60.9	193.9	24,500	63.1	192.2	25,200	65.2	188.6	23,100*	115
120	59.4	190.8	22,900	61.6	189.1	23,500	63.6	185.5	22,600*	120
125	57.8	187.6	21,400	60.0	185.8	22,000	62.0	182.1	22,100*	125
130	56.2	184.2	20,000	58.4	182.4	20,500	60.3	178.6	21,100	130
135	54.6	180.5	18,700	56.7	178.7	19,200	58.7	174.8	19,700	135
140	52.9	176.6	17,500	55.0	174.8	18,000	56.9	170.8	18,500	140
145	51.2	172.5	16,400	53.3	170.6	16,900	55.2	166.6	17,300	145
150	49.5	168.2	15,400	51.5	166.2	15,800	53.3	162.0	16,200	150
155	47.7	163.5	14,500	49.7	161.5	14,900	51.5	157.2	15,200	155
160	45.8	158.6	13,600	47.8	156.5	13,900	49.5	152.0	14,300	160
165	43.9	153.3	12,700	45.9	151.1	13,100	47.5	146.5	13,400	165
170	41.9	147.6	12,000	43.8	145.3	12,300	45.4	140.5	12,500	170
175	39.8	141.5	11,200	41.7	139.2	11,500				175
180	37.6	134.9	10,500	39.5	132.5	10,800				180
185	35.3	127.8	9,900	37.2	125.2	10,100				185
190	32.9	120.0	9,200	34.7	117.2	9,400				190
195	30.2	111.3	8,600							195
200	27.4	101.7	8,100							200
205	24.2	90.6	7,500							205

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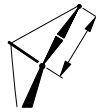
ASME B30.5



121,500 lb
+
35,300 lb



177.2 ft

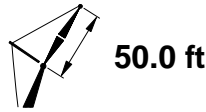
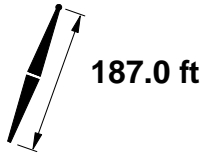
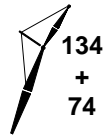


50.0 ft

	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
55	78.6		228.2	40,700*						55
60	77.3		227.0	40,200*	79.5	225.5	38,000*			60
65	76.0		225.7	39,700*	78.2	224.1	37,500*			65
70	74.7		224.2	39,200*	76.9	222.7	37,100*	79.1	219.4	30,200*
75	73.4		222.6	38,700*	75.5	221.1	36,700*	77.7	217.8	29,200*
80	72.0		221.0	38,200*	74.2	219.4	36,200*	76.4	216.1	28,400*
85	70.7		219.1	37,700*	72.9	217.6	35,800*	75.0	214.2	27,500*
90	69.3		217.2	35,400	71.5	215.6	35,400*	73.6	212.2	26,800*
95	68.0		215.1	32,600	70.1	213.5	33,600	72.2	210.1	26,000*
100	66.6		212.8	30,200	68.7	211.2	31,100	70.8	207.8	25,400*
105	65.2		210.4	27,900	67.3	208.8	28,800	69.4	205.3	24,700*
110	63.8		207.9	25,900	65.9	206.2	26,700	67.9	202.7	24,100*
115	62.3		205.2	24,100	64.4	203.5	24,900	66.4	200.0	23,600*
120	60.9		202.3	22,500	63.0	200.6	23,200	64.9	197.0	23,000*
125	59.4		199.3	21,000	61.5	197.6	21,600	63.4	193.9	22,200
130	57.9		196.1	19,600	60.0	194.3	20,200	61.9	190.6	20,800
135	56.4		192.7	18,300	58.4	190.9	18,900	60.3	187.1	19,400
140	54.8		189.1	17,100	56.8	187.2	17,700	58.7	183.3	18,200
145	53.2		185.2	16,000	55.2	183.4	16,500	57.1	179.4	17,000
150	51.6		181.2	15,000	53.6	179.3	15,500	55.4	175.2	15,900
155	49.9		176.9	14,100	51.9	174.9	14,500	53.7	170.7	14,900
160	48.2		172.3	13,200	50.2	170.3	13,600	51.9	166.0	13,900
165	46.5		167.5	12,400	48.4	165.4	12,700	50.1	161.0	13,100
170	44.7		162.3	11,600	46.6	160.2	11,900	48.2	155.6	12,200
175	42.8		156.9	10,800	44.7	154.6	11,100	46.2	149.8	11,400
180	40.8		151.0	10,100	42.7	148.7	10,400	44.1	143.7	10,700
185	38.8		144.7	9,500	40.6	142.2	9,700			
190	36.7		137.9	8,900	38.4	135.3	9,100			
195	34.4		130.5	8,300	36.2	127.8	8,500			
200	32.0		122.4	7,700	33.7	119.5	7,900			
205	29.4		113.5	7,100						
210	26.6		103.6	6,600						
215	23.5		92.1	6,100						

MLC165 S-2

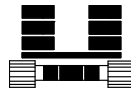
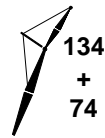
ASME B30.5



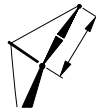
	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	79.1	238.2	40,400*							55
60	77.8	237.1	39,900*							60
65	76.6	235.8	39,400*	78.7	234.3	37,400*				65
70	75.3	234.5	38,900*	77.4	232.9	37,000*	79.6	229.7	30,500*	70
75	74.1	233.0	38,400*	76.2	231.4	36,600*	78.3	228.1	29,600*	75
80	72.8	231.4	38,000*	74.9	229.8	36,100*	77.0	226.5	28,700*	80
85	71.5	229.6	37,600*	73.6	228.0	35,800*	75.7	224.7	27,900*	85
90	70.2	227.7	35,100	72.3	226.2	35,400*	74.4	222.8	27,200*	90
95	68.9	225.8	32,300	71.0	224.1	33,400	73.0	220.7	26,400*	95
100	67.6	223.6	29,900	69.7	222.0	30,800	71.7	218.6	25,800*	100
105	66.3	221.4	27,700	68.3	219.7	28,500	70.3	216.2	25,100*	105
110	64.9	218.9	25,700	67.0	217.3	26,500	68.9	213.8	24,500*	110
115	63.6	216.4	23,800	65.6	214.7	24,600	67.5	211.2	24,000*	115
120	62.2	213.7	22,200	64.2	212.0	22,900	66.1	208.4	23,500*	120
125	60.8	210.8	20,700	62.8	209.1	21,400	64.7	205.4	22,000	125
130	59.4	207.8	19,300	61.4	206.0	19,900	63.3	202.3	20,600	130
135	58.0	204.6	18,000	59.9	202.8	18,600	61.8	199.0	19,200	135
140	56.5	201.2	16,900	58.5	199.8	17,400	60.3	195.5	17,900	140
145	55.0	197.6	15,800	57.0	195.8	16,300	58.7	191.8	16,800	145
150	53.5	193.8	14,700	55.4	191.9	15,200	57.2	187.9	15,700	150
155	51.9	189.8	13,800	53.9	187.9	14,300	55.6	183.8	14,700	155
160	50.4	185.6	12,900	52.3	183.6	13,300	53.9	179.4	13,700	160
165	48.7	181.1	12,100	50.6	179.1	12,500	52.2	174.8	12,800	165
170	47.1	176.4	11,300	48.9	174.3	11,700	50.5	169.9	12,000	170
175	45.4	171.4	10,600	47.2	169.2	10,900	48.7	164.6	11,200	175
180	43.6	166.0	9,900	45.4	163.8	10,200	46.9	159.1	10,500	180
185	41.8	160.3	9,200	43.5	158.0	9,500	45.0	153.1	9,800	185
190	39.9	154.3	8,600	41.6	151.9	8,900				190
195	37.9	147.7	8,000	39.6	145.2	8,300				195
200	35.8	140.7	7,400	37.5	138.1	7,700				200
205	33.6	133.1	6,900	35.2	130.3	7,100				205
210	31.2	124.8	6,400	32.8	121.8	6,600				210
215	28.7	115.6	5,900							215
220	25.9	105.4	5,400							220
225	22.9	93.6	5,000							225

MLC165 S-2

ASME B30.5



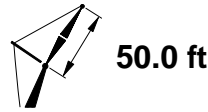
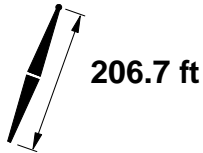
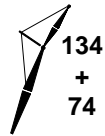
121,500 lb
+
35,300 lb



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	79.5	248.3	40,000*							55
60	78.3	247.2	39,500*							60
65	77.1	246.0	39,000*	79.2	244.5	37,100*				65
70	75.9	244.7	38,600*	78.0	243.1	36,800*				70
75	74.7	243.3	38,200*	76.7	241.7	36,400*	78.8	238.4	30,000*	75
80	73.5	241.7	37,800*	75.5	240.1	36,000*	77.5	236.8	29,100*	80
85	72.3	240.1	37,300*	74.3	238.5	35,700*	76.3	235.1	28,300*	85
90	71.1	238.3	34,800	73.1	236.7	35,400*	75.0	233.3	27,500*	90
95	69.8	236.4	32,000	71.8	234.7	33,000	73.8	231.3	26,800*	95
100	68.6	234.3	29,500	70.5	232.7	30,500	72.5	229.3	26,200*	100
105	67.3	232.2	27,300	69.3	230.5	28,200	71.2	227.1	25,500*	105
110	66.0	229.9	25,300	68.0	228.2	26,200	69.9	224.7	24,900*	110
115	64.7	227.4	23,500	66.7	225.8	24,300	68.6	222.2	24,400*	115
120	63.4	224.9	21,800	65.4	223.2	22,600	67.2	219.6	23,300	120
125	62.1	222.2	20,300	64.0	220.4	21,000	65.9	216.8	21,700	125
130	60.8	219.3	18,900	62.7	217.5	19,600	64.5	213.8	20,200	130
135	59.4	216.2	17,700	61.3	214.5	18,300	63.1	210.7	18,900	135
140	58.0	213.1	16,500	59.9	211.3	17,100	61.7	207.4	17,600	140
145	56.6	209.7	15,400	58.5	207.9	15,900	60.2	204.0	16,500	145
150	55.2	206.1	14,400	57.1	204.3	14,900	58.8	200.3	15,400	150
155	53.7	202.4	13,400	55.6	200.5	13,900	57.3	196.5	14,400	155
160	52.3	198.4	12,500	54.1	196.5	13,000	55.7	192.4	13,400	160
165	50.8	194.3	11,700	52.6	192.3	12,100	54.2	188.1	12,500	165
170	49.2	189.9	10,900	51.0	187.9	11,300	52.6	183.5	11,700	170
175	47.6	185.2	10,200	49.4	183.2	10,600	50.9	178.7	10,900	175
180	46.0	180.3	9,500	47.8	178.2	9,800	49.2	173.6	10,100	180
185	44.3	175.1	8,800	46.1	172.9	9,200	47.5	168.2	9,400	185
190	42.6	169.6	8,200	44.3	167.3	8,500	45.7	162.4	8,800	190
195	40.8	163.7	7,600	42.5	161.3	7,900	43.8	156.3	8,100	195
200	38.9	157.4	7,100	40.6	155.0	7,300				200
205	37.0	150.7	6,500	38.6	148.1	6,800				205
210	34.9	143.5	6,000	36.5	140.8	6,200				210
215	32.8	135.7	5,500	34.3	132.8	5,700				215
220	30.5	127.1	5,100							220
225	28.0	117.7	4,600							225
230	25.3	107.1	4,200							230

MLC165 S-2

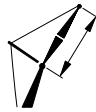
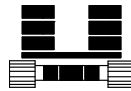
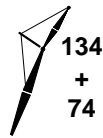
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
60	78.8		257.3	39,100*						60
65	77.6		256.1	38,700*	79.6	254.6				65
70	76.5		254.9	38,200*	78.4	253.3				70
75	75.3		253.5	37,800*	77.3	251.9	79.2	248.6	30,300*	75
80	74.2		252.0	37,400*	76.1	250.4	78.0	247.1	29,400*	80
85	73.0		250.4	37,000*	74.9	248.8	76.9	245.5	28,600*	85
90	71.8		248.7	34,400	73.7	247.1	75.6	243.7	27,900*	90
95	70.6		246.9	31,700	72.5	245.3	74.4	241.9	27,200*	95
100	69.4		245.0	29,200	71.3	243.3	73.2	239.9	26,500*	100
105	68.2		242.9	27,000	70.1	241.3	72.0	237.8	25,900*	105
110	67.0		240.7	25,000	68.9	239.0	70.7	235.5	25,300*	110
115	65.8		238.4	23,100	67.6	236.7	69.5	233.2	24,800*	115
120	64.5		235.9	21,500	66.4	234.2	68.2	230.7	23,100	120
125	63.3		233.4	20,000	65.1	231.6	66.9	228.0	21,400	125
130	62.0		230.6	18,600	63.8	228.9	65.6	225.2	20,000	130
135	60.7		227.8	17,300	62.5	226.0	64.3	222.3	18,600	135
140	59.4		224.7	16,100	61.2	222.9	62.9	219.2	17,400	140
145	58.1		221.5	15,000	59.9	219.7	61.6	215.9	16,200	145
150	56.7		218.2	14,000	58.5	216.3	60.2	212.4	15,100	150
155	55.4		214.7	13,100	57.2	212.8	58.8	208.8	14,100	155
160	54.0		211.0	12,200	55.8	209.0	57.4	205.0	13,100	160
165	52.6		207.0	11,400	54.3	205.1	55.9	201.0	12,200	165
170	51.1		202.9	10,600	52.9	201.0	54.4	196.7	11,400	170
175	49.6		198.6	9,800	51.4	196.6	52.9	192.3	10,600	175
180	48.1		194.0	9,100	49.8	192.0	51.3	187.5	9,900	180
185	46.6		189.2	8,500	48.3	187.1	49.7	182.6	9,200	185
190	45.0		184.2	7,900	46.7	182.0	48.1	177.3	8,500	190
195	43.3		178.8	7,300	45.0	176.5	46.3	171.7	7,900	195
200	41.6		173.1	6,700	43.3	170.7	44.6	165.7	7,200	200
205	39.9		167.0	6,200	41.5	164.6				205
210	38.1		160.5	5,700	39.7	158.0				210
215	36.2		153.6	5,200	37.7	151.0				215
220	34.2		146.2	4,700	35.7	143.4				220
225	32.0		138.1	4,300	33.5	135.2				225

MLC165 S-2

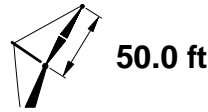
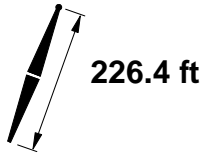
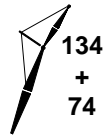
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	79.2		267.4	38,500*						60	
65	78.1		266.3	38,200*						65	
70	77.0		265.0	37,800*	78.9	263.5	36,100*			70	
75	75.9		263.7	37,400*	77.8	262.1	35,900*	79.7	258.8	30,600*	
80	74.8		262.3	37,000*	76.6	260.7	35,600*	78.5	257.3	29,800*	
85	73.6		260.8	36,700*	75.5	259.2	35,300*	77.4	255.8	29,000*	
90	72.5		259.1	34,100	74.4	257.5	35,100*	76.2	254.1	28,200*	
95	71.4		257.4	31,300	73.2	255.8	32,400	75.1	252.3	27,600*	
100	70.2		255.5	28,800	72.1	253.9	29,900	73.9	250.4	26,900*	
105	69.1		253.6	26,600	70.9	251.9	27,600	72.7	248.4	26,300*	
110	67.9		251.5	24,600	69.7	249.8	25,500	71.5	246.3	25,700*	
115	66.7		249.2	22,800	68.5	247.6	23,600	70.3	244.0	24,500	
120	65.5		246.9	21,100	67.3	245.2	21,900	69.1	241.6	22,800	
125	64.3		244.4	19,600	66.1	242.7	20,400	67.9	239.1	21,100	
130	63.1		241.8	18,200	64.9	240.1	18,900	66.6	236.4	19,700	
135	61.9		239.1	16,900	63.7	237.4	17,600	65.4	233.6	18,300	
140	60.7		236.2	15,700	62.4	234.5	16,400	64.1	230.7	17,000	
145	59.4		233.2	14,700	61.2	231.4	15,300	62.8	227.6	15,900	
150	58.1		230.0	13,600	59.9	228.2	14,200	61.5	224.3	14,800	
155	56.8		226.7	12,700	58.6	224.8	13,200	60.2	220.9	13,800	
160	55.5		223.2	11,800	57.3	221.3	12,300	58.8	217.3	12,800	
165	54.2		219.5	11,000	55.9	217.6	11,500	57.5	213.5	11,900	
170	52.8		215.6	10,200	54.5	213.7	10,600	56.1	209.6	11,100	
175	51.4		211.6	9,400	53.1	209.6	9,900	54.6	205.4	10,300	
180	50.0		207.3	8,800	51.7	205.3	9,200	53.2	201.0	9,500	
185	48.6		202.8	8,100	50.2	200.8	8,500	51.7	196.3	8,800	
190	47.1		198.1	7,500	48.7	196.0	7,800	50.1	191.4	8,200	
195	45.6		193.1	6,900	47.2	190.9	7,200	48.6	186.3	7,500	
200	44.0		187.9	6,300	45.6	185.6	6,700	46.9	180.8	6,900	
205	42.4		182.3	5,800	44.0	180.0	6,100	45.3	175.0	6,300	
210	40.8		176.5	5,300	42.3	174.1	5,600				210
215	39.0		170.2	4,800	40.6	167.7	5,100				215
220	37.3		163.6	4,400	38.8	161.0	4,600				220
225					36.9	153.7	4,100				225

MLC165 S-2

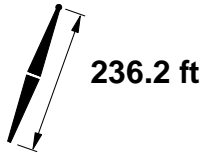
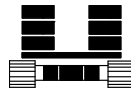
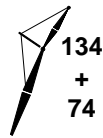
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
60	79.6		277.4							60
65	78.5		276.3							65
70	77.5		275.2							70
75	76.4		273.9	79.3	273.6					75
80	75.3		272.5	78.2	272.3	35,700*				80
85	74.2		271.1	77.1	270.9	35,500*	78.9	267.6	29,800*	85
90	73.2		269.5	76.0	269.5	34,900*	77.8	266.1	29,300*	90
95	72.1		267.8	75.0	267.9	34,700*	76.7	264.5	28,600*	95
100	71.0		266.0	73.9	266.2	32,200	75.6	262.8	27,900*	100
105	69.9		264.1	72.7	264.4	29,600	74.5	260.9	27,200*	105
110	68.7		262.1	71.6	262.5	27,300	73.4	259.0	26,600*	110
115	67.6		260.0	70.5	260.5	25,200	72.2	257.0	26,000*	115
120	66.5		257.8	69.4	258.3	23,400	71.1	254.8	24,300	120
125	65.3		255.4	68.2	256.1	21,700	69.9	252.5	22,500	125
130	64.2		252.9	67.1	253.7	20,100	68.7	250.1	20,900	130
135	63.0		250.3	65.9	251.2	18,700	67.6	247.6	19,400	135
140	61.8		247.6	64.7	248.6	17,400	66.4	244.9	18,100	140
145	60.6		244.7	63.5	245.8	16,100	65.2	242.1	16,800	145
150	59.4		241.7	62.3	242.9	15,000	63.9	239.1	15,600	150
155	58.2		238.5	61.1	239.9	13,900	62.7	236.0	14,500	155
160	56.9		235.2	59.9	236.7	13,000	61.4	232.8	13,500	160
165	55.7		231.7	58.6	233.3	12,000	60.1	229.4	12,600	165
170	54.4		228.1	57.3	229.8	11,200	58.8	225.8	11,700	170
175	53.1		224.2	56.0	226.1	10,400	57.5	222.1	10,800	175
180	51.7		220.2	54.7	222.3	9,600	56.2	218.1	10,000	180
185	50.4		216.0	53.4	218.2	8,900	54.8	214.0	9,300	185
190	49.0		211.6	52.0	214.0	8,200	53.4	209.6	8,600	190
195	47.6		207.0	50.6	209.5	7,600	52.0	205.1	7,900	195
200	46.1		202.1	49.2	204.8	7,000	50.5	200.3	7,300	200
205	44.7		196.9	47.7	199.9	6,400	49.0	195.2	6,700	205
210	43.1		191.5	46.2	194.7	5,800	47.5	189.9	6,100	210
215	41.6		185.8	44.7	189.2	5,300	45.9	184.3	5,600	215
220	39.9		179.8	43.1	183.4	4,800	44.3	178.3	5,000	220
				41.4	177.3	4,300				220

MLC165 S-2

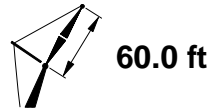
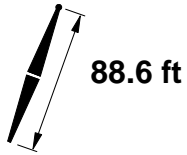
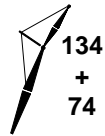
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
65	78.9	286.4	37,100*							65
70	77.9	285.3	36,800*	79.7	283.7	35,400*				70
75	76.9	284.1	36,400*	78.6	282.5	35,100*				75
80	75.8	282.8	36,000*	77.6	281.2	34,800*	79.3	277.8	29,300*	80
85	74.8	281.3	35,700*	76.5	279.7	34,500*	78.3	276.3	28,800*	85
90	73.8	279.8	33,300	75.5	278.2	34,300*	77.2	274.8	28,400*	90
95	72.7	278.2	30,500	74.4	276.6	31,800	76.1	273.1	28,100*	95
100	71.6	276.5	28,000	73.4	274.9	29,200	75.1	271.4	27,600*	100
105	70.6	274.7	25,800	72.3	273.0	26,900	74.0	269.5	27,000*	105
110	69.5	272.8	23,800	71.2	271.1	24,800	72.9	267.6	25,800	110
115	68.4	270.7	22,000	70.1	269.0	22,900	71.8	265.5	23,900	115
120	67.3	268.6	20,300	69.0	266.9	21,200	70.7	263.3	22,100	120
125	66.2	266.3	18,800	67.9	264.6	19,600	69.5	261.0	20,500	125
130	65.1	263.9	17,400	66.8	262.2	18,200	68.4	258.6	19,000	130
135	64.0	261.4	16,100	65.7	259.7	16,900	67.3	256.0	17,600	135
140	62.9	258.8	14,900	64.5	257.1	15,700	66.1	253.3	16,400	140
145	61.7	256.1	13,800	63.4	254.3	14,500	64.9	250.5	15,200	145
150	60.6	253.2	12,800	62.2	251.4	13,500	63.8	247.6	14,100	150
155	59.4	250.2	11,900	61.0	248.3	12,500	62.6	244.5	13,100	155
160	58.2	247.0	11,000	59.9	245.2	11,500	61.4	241.2	12,100	160
165	57.0	243.7	10,100	58.6	241.8	10,700	60.1	237.8	11,200	165
170	55.8	240.2	9,300	57.4	238.3	9,900	58.9	234.3	10,400	170
175	54.6	236.6	8,600	56.2	234.7	9,100	57.6	230.6	9,600	175
180	53.3	232.8	7,900	54.9	230.8	8,400	56.3	226.7	8,800	180
185	52.0	228.8	7,300	53.6	226.8	7,700	55.0	222.6	8,100	185
190	50.7	224.7	6,600	52.3	222.6	7,100	53.7	218.3	7,400	190
195	49.4	220.3	6,100	51.0	218.2	6,500	52.3	213.8	6,800	195
200	48.0	215.8	5,500	49.6	213.6	5,900	50.9	209.1	6,200	200
205	46.7	211.0	5,000	48.2	208.8	5,300	49.5	204.2	5,600	205
210	45.2	205.9	4,500	46.7	203.7	4,800	48.0	199.0	5,100	210
215	43.8	200.7	4,000	45.3	198.4	4,300	46.5	193.5	4,600	215
220							44.9	187.7	4,000	220

MLC165 S-2

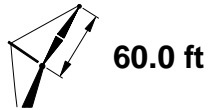
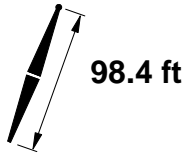
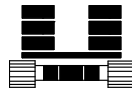
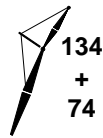
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
40	78.5		151.0	37,200*						40	
45	76.5		149.7	36,100*						45	
50	74.5		148.2	35,100*	78.6	146.9	32,600*			50	
55	72.4		146.5	34,000*	76.5	145.2	31,800*			55	
60	70.4		144.6	33,000*	74.5	143.3	31,100*	79.0	140.6	25,700*	60
65	68.3		142.5	32,100*	72.3	141.1	30,400*	76.9	138.5	24,400*	65
70	66.2		140.2	31,200*	70.2	138.8	29,700*	74.7	136.1	23,200*	70
75	64.0		137.6	30,400*	68.0	136.2	28,500*	72.4	133.5	22,100*	75
80	61.8		134.8	29,700*	65.8	133.3	27,000*	70.2	130.6	21,100*	80
85	59.5		131.7	28,900*	63.5	130.2	25,600*	67.8	127.5	20,200*	85
90	57.2		128.3	28,200*	61.1	126.8	24,400*	65.4	124.1	19,400*	90
95	54.8		124.7	27,500*	58.7	123.1	23,300*	62.9	120.3	18,700*	95
100	52.3		120.7	26,900*	56.2	119.0	22,300*	60.4	116.2	18,000*	100
105	49.7		116.3	26,000*	53.6	114.6	21,400*	57.7	111.6	17,400*	105
110	47.1		111.5	24,800*	50.8	109.7	20,500*	54.9	106.6	16,800*	110
115	44.3		106.2	23,600*	48.0	104.3	19,700*	51.9	101.1	16,300*	115
120	41.3		100.3	22,600*	44.9	98.3	19,000*	48.8	95.0	15,900*	120
125	38.1		93.8	21,600*	41.7	91.6	18,400*	45.4	88.1	15,500*	125
130	34.7		86.4	20,700*	38.2	84.0	17,800*				130
135	30.9		77.9	19,900*	34.2	75.3	17,300*				135
140	26.5		67.9	19,200*							140
145	21.3		55.3	18,500*							145

MLC165 S-2

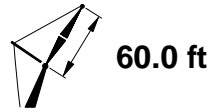
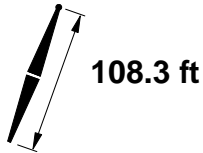
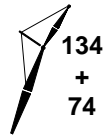
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
40	79.2	161.2	37,300*							40
45	77.4	159.9	36,400*							45
50	75.5	158.5	35,400*	79.3	157.1	32,900*				50
55	73.6	156.9	34,500*	77.4	155.5	32,100*				55
60	71.7	155.2	33,500*	75.5	153.8	31,400*				60
65	69.7	153.2	32,600*	73.5	151.8	30,700*	77.8	149.0	24,900*	65
70	67.7	151.0	31,800*	71.5	149.6	30,100*	75.8	146.9	23,700*	70
75	65.7	148.7	31,000*	69.5	147.2	29,400*	73.7	144.4	22,700*	75
80	63.7	146.1	30,200*	67.4	144.6	28,100*	71.6	141.8	21,700*	80
85	61.6	143.2	29,500*	65.3	141.7	26,700*	69.4	138.9	20,800*	85
90	59.5	140.2	28,800*	63.2	138.6	25,500*	67.3	135.8	20,000*	90
95	57.3	136.8	28,100*	61.0	135.2	24,400*	65.0	132.4	19,300*	95
100	55.1	133.2	27,600*	58.7	131.6	23,300*	62.7	128.6	18,600*	100
105	52.8	129.3	26,900*	56.4	127.6	22,400*	60.3	124.6	18,000*	105
110	50.4	125.0	26,300*	54.0	123.2	21,500*	57.8	120.2	17,400*	110
115	47.9	120.4	25,200*	51.5	118.5	20,700*	55.2	115.4	16,900*	115
120	45.4	115.3	24,100*	48.8	113.3	20,000*	52.5	110.1	16,400*	120
125	42.6	109.7	23,000*	46.1	107.7	19,300*	49.7	104.3	16,000*	125
130	39.8	103.5	22,100*	43.1	101.4	18,700*	46.6	97.8	15,600*	130
135	36.7	96.7	21,200*	40.0	94.4	18,100*	43.3	90.5	15,300*	135
140	33.4	89.0	20,000	36.6	86.4	17,600*				140
145	29.7	80.1	18,900	32.8	77.2	17,100*				145
150	25.5	69.6	17,800							150

MLC165 S-2

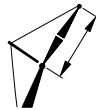
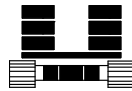
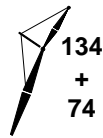
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
45	78.1		170.1	36,500*						45	
50	76.4		168.8	35,700*						50	
55	74.6		167.3	34,800*	78.2	165.8	32,300*			55	
60	72.8		165.6	33,900*	76.4	164.2	31,600*			60	
65	71.0		163.8	33,000*	74.6	162.3	31,000*	78.6	159.5	25,400*	65
70	69.1		161.8	32,200*	72.7	160.3	30,400*	76.7	157.4	24,300*	70
75	67.3		159.6	31,500*	70.8	158.1	29,800*	74.8	155.2	23,200*	75
80	65.4		157.2	30,700*	68.9	155.6	29,200*	72.8	152.8	22,300*	80
85	63.5		154.5	30,000*	67.0	153.0	27,800*	70.8	150.1	21,400*	85
90	61.5		151.7	29,300*	65.0	150.1	26,500*	68.8	147.2	20,600*	90
95	59.5		148.7	28,700*	63.0	147.0	25,400*	66.8	144.1	19,800*	95
100	57.5		145.3	28,100*	60.9	143.7	24,300*	64.6	140.7	19,200*	100
105	55.4		141.8	27,500*	58.8	140.1	23,300*	62.5	137.0	18,500*	105
110	53.2		137.9	27,000*	56.6	136.1	22,400*	60.2	133.0	18,000*	110
115	51.0		133.7	26,400*	54.3	131.9	21,600*	57.9	128.7	17,400*	115
120	48.7		129.2	24,900	52.0	127.3	20,900*	55.5	124.1	17,000*	120
125	46.3		124.3	23,400	49.6	122.3	20,200*	53.0	119.0	16,500*	125
130	43.8		118.9	22,000	47.0	116.9	19,500*	50.4	113.4	16,100*	130
135	41.2		113.1	20,700	44.4	110.9	18,900*	47.6	107.3	15,700*	135
140	38.4		106.6	19,500	41.5	104.3	18,400*	44.7	100.5	15,400*	140
145	35.4		99.4	18,400	38.5	97.0	17,900*				145
150	32.2		91.4	17,400	35.1	88.6	17,400*				150
155	28.6		82.1	16,400	31.4	79.0	16,600				155
160	24.5		71.2	15,500							160

MLC165 S-2

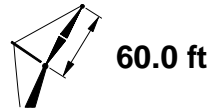
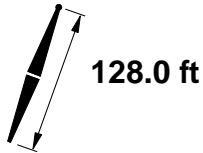
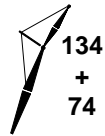
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	78.8	180.2	36,600*							45
50	77.1	178.9	35,800*							50
55	75.5	177.6	35,000*	78.9	176.1	32,400*				55
60	73.8	176.0	34,100*	77.2	174.5	31,800*				60
65	72.1	174.3	33,400*	75.5	172.8	31,200*	79.3	169.9	25,900*	65
70	70.4	172.4	32,600*	73.7	170.9	30,600*	77.5	168.0	24,700*	70
75	68.6	170.3	31,800*	72.0	168.8	30,000*	75.7	165.9	23,700*	75
80	66.8	168.1	31,100*	70.2	166.5	29,500*	73.9	163.6	22,800*	80
85	65.1	165.7	30,400*	68.4	164.1	28,800*	72.0	161.1	21,900*	85
90	63.2	163.0	29,800*	66.5	161.4	27,500*	70.2	158.4	21,100*	90
95	61.4	160.2	29,200*	64.7	158.6	26,300*	68.3	155.5	20,400*	95
100	59.5	157.1	28,600*	62.8	155.5	25,300*	66.3	152.4	19,700*	100
105	57.6	153.8	28,000*	60.8	152.1	24,300*	64.3	149.0	19,100*	105
110	55.6	150.3	27,500*	58.8	148.6	23,400*	62.3	145.4	18,500*	110
115	53.6	146.5	26,100	56.8	144.7	22,500*	60.2	141.5	18,000*	115
120	51.5	142.4	24,500	54.7	140.5	21,700*	58.0	137.3	17,500*	120
125	49.3	138.0	23,000	52.5	136.1	21,000*	55.8	132.7	17,000*	125
130	47.1	133.2	21,600	50.2	131.2	20,300*	53.5	127.8	16,600*	130
135	44.8	128.0	20,300	47.9	126.0	19,700*	51.0	122.4	16,200*	135
140	42.4	122.4	19,100	45.4	120.3	19,100*	48.5	116.6	15,800*	140
145	39.8	116.3	18,000	42.8	114.0	18,400	45.8	110.1	15,500*	145
150	37.1	109.6	17,000	40.0	107.1	17,300	42.9	103.0	15,200*	150
155	34.2	102.1	16,000	37.1	99.5	16,300				155
160	31.1	93.7	15,100	33.8	90.8	15,400				160
165	27.6	84.1	14,300							165
170	23.6	72.7	13,500							170

MLC165 S-2

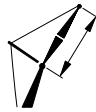
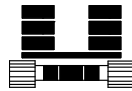
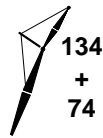
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.4	190.3	36,600*							45
50	77.8	189.1	35,800*							50
55	76.2	187.8	35,100*	79.5	186.3	32,600*				55
60	74.7	186.3	34,400*	77.9	184.8	31,900*				60
65	73.1	184.7	33,600*	76.3	183.2	31,400*				65
70	71.4	182.9	32,800*	74.6	181.4	30,800*	78.2	178.4	25,200*	70
75	69.8	181.0	32,200*	73.0	179.4	30,200*	76.5	176.4	24,200*	75
80	68.1	178.9	31,400*	71.3	177.3	29,800*	74.8	174.3	23,200*	80
85	66.5	176.6	30,800*	69.6	175.0	29,300*	73.1	172.0	22,400*	85
90	64.8	174.1	30,200*	67.9	172.5	28,500*	71.4	169.5	21,600*	90
95	63.0	171.5	29,600*	66.2	169.9	27,300*	69.6	166.8	20,900*	95
100	61.3	168.7	29,000*	64.4	167.0	26,200*	67.8	163.9	20,200*	100
105	59.5	165.6	28,400*	62.6	163.9	25,200*	65.9	160.8	19,600*	105
110	57.7	162.3	27,600	60.7	160.6	24,200*	64.0	157.4	19,000*	110
115	55.8	158.8	25,800	58.9	157.0	23,400*	62.1	153.8	18,400*	115
120	53.9	155.1	24,100	56.9	153.2	22,600*	60.1	150.0	17,900*	120
125	51.9	151.0	22,600	54.9	149.2	21,800*	58.1	145.8	17,500*	125
130	49.9	146.7	21,200	52.9	144.8	21,100*	56.0	141.4	17,000*	130
135	47.8	142.1	20,000	50.8	140.1	20,500	53.9	136.5	16,600*	135
140	45.7	137.1	18,800	48.6	135.0	19,200	51.6	131.4	16,300*	140
145	43.4	131.7	17,700	46.3	129.5	18,100	49.2	125.7	15,900*	145
150	41.1	125.8	16,700	43.9	123.5	17,000	46.8	119.6	15,600*	150
155	38.6	119.4	15,700	41.4	117.0	16,100	44.2	112.9	15,300*	155
160	36.0	112.4	14,800	38.7	109.8	15,100				160
165	33.2	104.6	14,000	35.8	101.9	14,200				165
170	30.1	95.9	13,200	32.6	92.9	13,400				170
175	26.7	85.9	12,400							175
180	22.8	74.1	11,700							180

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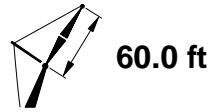
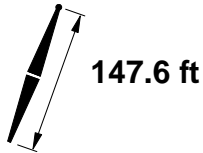
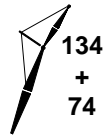
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	78.4	199.2	35,800*							50
55	76.9	198.0	35,200*							55
60	75.4	196.6	34,500*	78.5	195.1	32,000*				60
65	73.9	195.1	33,800*	77.0	193.5	31,500*				65
70	72.4	193.4	33,100*	75.4	191.8	30,900*	78.8	188.7	25,600*	70
75	70.9	191.6	32,400*	73.9	190.0	30,500*	77.3	186.9	24,600*	75
80	69.3	189.6	31,700*	72.3	188.0	30,000*	75.7	184.9	23,700*	80
85	67.7	187.4	31,100*	70.7	185.8	29,500*	74.0	182.7	22,800*	85
90	66.1	185.1	30,500*	69.1	183.5	29,000*	72.4	180.4	22,100*	90
95	64.5	182.6	30,000*	67.5	181.0	28,200*	70.7	177.8	21,300*	95
100	62.9	180.0	29,400*	65.8	178.3	27,000*	69.0	175.1	20,700*	100
105	61.2	177.1	28,800*	64.1	175.4	26,000*	67.3	172.2	20,000*	105
110	59.5	174.1	27,200	62.4	172.3	25,100*	65.6	169.1	19,500*	110
115	57.8	170.8	25,400	60.7	169.1	24,200*	63.8	165.8	18,900*	115
120	56.0	167.4	23,700	58.9	165.5	23,400*	62.0	162.2	18,400*	120
125	54.2	163.6	22,200	57.1	161.8	22,600*	60.1	158.4	17,900*	125
130	52.3	159.7	20,800	55.2	157.8	21,400	58.2	154.3	17,500*	130
135	50.4	155.4	19,600	53.3	153.5	20,100	56.2	150.0	17,100*	135
140	48.5	150.9	18,400	51.3	148.9	18,900	54.2	145.3	16,700*	140
145	46.5	146.0	17,300	49.2	143.9	17,800	52.1	140.2	16,400*	145
150	44.4	140.8	16,300	47.1	138.6	16,700	49.9	134.8	16,000*	150
155	42.2	135.2	15,300	44.9	132.9	15,700	47.6	128.9	15,700*	155
160	39.9	129.1	14,400	42.5	126.7	14,800	45.2	122.6	15,200	160
165	37.5	122.4	13,600	40.1	119.9	13,900				165
170	34.9	115.1	12,800	37.5	112.4	13,100				170
175	32.2	107.1	12,000	34.6	104.2	12,300				175
180	29.2	98.1	11,300	31.5	94.8	11,500				180
185	25.9	87.7	10,700							185
190	22.0	75.5	10,000							190

MLC165 S-2

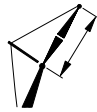
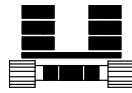
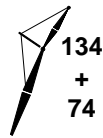
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	79.0	209.3	35,800*							50
55	77.6	208.1	35,200*							55
60	76.2	206.8	34,500*	79.1	205.3	32,000*				60
65	74.7	205.4	33,900*	77.6	203.8	31,500*				65
70	73.3	203.8	33,300*	76.2	202.2	31,100*	79.4	199.0	26,000*	70
75	71.8	202.0	32,600*	74.7	200.5	30,600*	77.9	197.3	25,000*	75
80	70.3	200.2	32,000*	73.2	198.6	30,100*	76.4	195.4	24,100*	80
85	68.8	198.1	31,400*	71.7	196.5	29,700*	74.9	193.3	23,300*	85
90	67.3	196.0	30,800*	70.2	194.3	29,300*	73.3	191.1	22,500*	90
95	65.8	193.6	30,200*	68.7	192.0	28,900*	71.8	188.8	21,800*	95
100	64.3	191.1	29,700*	67.1	189.4	27,900*	70.2	186.2	21,100*	100
105	62.7	188.5	29,200*	65.5	186.7	26,900*	68.6	183.5	20,500*	105
110	61.1	185.6	27,200	63.9	183.9	25,900*	66.9	180.6	19,900*	110
115	59.5	182.6	25,400	62.3	180.8	25,000*	65.3	177.5	19,400*	115
120	57.8	179.3	23,800	60.6	177.5	24,200*	63.6	174.2	18,800*	120
125	56.2	175.9	22,300	58.9	174.0	22,900	61.8	170.6	18,400*	125
130	54.5	172.2	20,900	57.2	170.3	21,500	60.1	166.9	17,900*	130
135	52.7	168.3	19,600	55.4	166.4	20,200	58.3	162.9	17,500*	135
140	50.9	164.1	18,400	53.6	162.1	18,900	56.4	158.6	17,100*	140
145	49.1	159.7	17,300	51.7	157.6	17,800	54.5	154.0	16,800*	145
150	47.2	154.9	16,300	49.8	152.8	16,800	52.5	149.1	16,400*	150
155	45.2	149.8	15,400	47.8	147.7	15,800	50.5	143.8	16,100*	155
160	43.1	144.4	14,500	45.7	142.1	14,900	48.3	138.2	15,300	160
165	41.0	138.5	13,600	43.6	136.2	14,000	46.1	132.0	14,400	165
170	38.8	132.2	12,900	41.3	129.7	13,200	43.7	125.4	13,500	170
175	36.4	125.3	12,100	38.9	122.7	12,400				175
180	33.9	117.8	11,400	36.3	115.0	11,700				180
185	31.3	109.5	10,800	33.6	106.4	11,000				185
190	28.3	100.1	10,100							190
195	25.1	89.4	9,500							195
200	21.3	76.8	8,900							200

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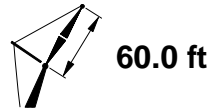
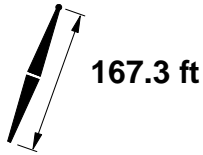
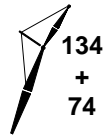
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	79.5	219.4	35,600*							50
55	78.2	218.3	35,000*							55
60	76.8	217.0	34,500*	79.6	215.4	32,100*				60
65	75.4	215.6	33,900*	78.2	214.0	31,600*				65
70	74.1	214.1	33,300*	76.8	212.5	31,100*				70
75	72.7	212.5	32,700*	75.4	210.9	30,700*	78.5	207.6	25,400*	75
80	71.3	210.7	32,100*	74.0	209.1	30,200*	77.1	205.8	24,500*	80
85	69.9	208.8	31,600*	72.6	207.1	29,800*	75.6	203.9	23,700*	85
90	68.4	206.7	31,000*	71.2	205.1	29,500*	74.2	201.8	22,900*	90
95	67.0	204.5	30,500*	69.7	202.8	29,000*	72.7	199.6	22,200*	95
100	65.5	202.1	29,900*	68.2	200.4	28,700*	71.2	197.2	21,500*	100
105	64.1	199.6	28,800	66.7	197.9	27,700*	69.7	194.6	20,900*	105
110	62.6	196.9	26,800	65.2	195.2	26,700*	68.1	191.9	20,300*	110
115	61.0	194.1	25,000	63.7	192.3	25,800*	66.6	189.0	19,800*	115
120	59.5	191.0	23,400	62.1	189.2	24,100	65.0	185.9	19,300*	120
125	57.9	187.8	21,900	60.6	186.0	22,600	63.4	182.6	18,800*	125
130	56.3	184.4	20,500	58.9	182.5	21,100	61.7	179.1	18,300*	130
135	54.7	180.7	19,200	57.3	178.8	19,800	60.0	175.3	17,900*	135
140	53.0	176.9	18,000	55.6	174.9	18,600	58.3	171.4	17,500*	140
145	51.3	172.8	16,900	53.9	170.8	17,500	56.6	167.2	17,200*	145
150	49.6	168.4	15,900	52.1	166.4	16,400	54.7	162.7	16,800*	150
155	47.8	163.8	15,000	50.3	161.7	15,400	52.9	157.9	15,900	155
160	45.9	158.8	14,100	48.4	156.6	14,500	51.0	152.8	15,000	160
165	44.0	153.5	13,300	46.5	151.3	13,600	49.0	147.3	14,100	165
170	42.0	147.9	12,500	44.4	145.5	12,800	46.9	141.4	13,200	170
175	39.9	141.8	11,700	42.3	139.3	12,100	44.7	135.0	12,400	175
180	37.8	135.2	11,000	40.1	132.6	11,300				180
185	35.5	128.1	10,400	37.8	125.4	10,600				185
190	33.0	120.3	9,700	35.3	117.4	10,000				190
195	30.4	111.7	9,100	32.6	108.5	9,400				195
200	27.5	102.1	8,600							200
205	24.4	91.1	8,000							205
210	20.7	78.0	7,500							210

MLC165 S-2

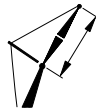
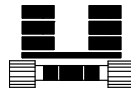
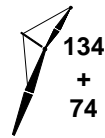
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
55	78.7		228.4	34,900*						55	
60	77.4		227.2	34,400*						60	
65	76.1		225.9	33,800*	78.7	224.2	31,500*			65	
70	74.8		224.4	33,300*	77.4	222.8	31,200*			70	
75	73.4		222.8	32,800*	76.1	221.2	30,700*	79.0	217.9	25,700*	75
80	72.1		221.2	32,200*	74.8	219.5	30,300*	77.7	216.2	24,900*	80
85	70.8		219.3	31,700*	73.4	217.7	29,900*	76.3	214.4	24,000*	85
90	69.4		217.4	31,200*	72.0	215.7	29,500*	74.9	212.4	23,300*	90
95	68.0		215.3	30,600*	70.7	213.6	29,200*	73.5	210.3	22,600*	95
100	66.7		213.0	30,100*	69.3	211.3	28,800*	72.1	208.0	21,900*	100
105	65.3		210.6	28,500	67.9	208.9	28,400*	70.7	205.6	21,300*	105
110	63.9		208.1	26,500	66.4	206.4	27,400	69.2	203.0	20,700*	110
115	62.4		205.4	24,700	65.0	203.6	25,500	67.7	200.3	20,200*	115
120	61.0		202.6	23,000	63.5	200.8	23,800	66.2	197.3	19,700*	120
125	59.5		199.5	21,500	62.0	197.7	22,300	64.7	194.2	19,200*	125
130	58.0		196.3	20,100	60.5	194.4	20,800	63.2	191.0	18,700*	130
135	56.5		192.9	18,900	59.0	191.0	19,500	61.6	187.5	18,300*	135
140	54.9		189.3	17,700	57.4	187.4	18,300	60.0	183.8	17,900*	140
145	53.3		185.5	16,600	55.8	183.5	17,200	58.4	179.9	17,500*	145
150	51.7		181.4	15,600	54.2	179.4	16,100	56.7	175.7	16,700	150
155	50.0		177.1	14,600	52.5	175.1	15,100	55.0	171.3	15,700	155
160	48.3		172.6	13,700	50.7	170.5	14,200	53.2	166.6	14,700	160
165	46.6		167.8	12,900	49.0	165.6	13,400	51.4	161.7	13,800	165
170	44.8		162.6	12,100	47.1	160.4	12,500	49.5	156.3	13,000	170
175	42.9		157.1	11,400	45.2	154.8	11,800	47.6	150.6	12,200	175
180	41.0		151.3	10,700	43.3	148.8	11,000	45.5	144.5	11,400	180
185	38.9		145.0	10,000	41.2	142.4	10,400	43.4	138.0	10,700	185
190	36.8		138.2	9,400	39.0	135.5	9,700				190
195	34.6		130.8	8,800	36.7	128.0	9,100				195
200	32.2		122.8	8,300	34.3	119.7	8,500				200
205	29.6		113.9	7,700	31.6	110.6	7,900				205
210	26.8		104.0	7,200							210
215	23.7		92.6	6,700							215

MLC165 S-2

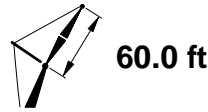
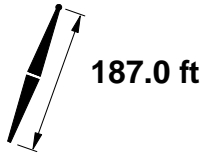
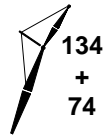
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	79.2	238.4	34,700*							55
60	77.9	237.3	34,200*							60
65	76.7	236.0	33,700*	79.2	234.4	31,500*				65
70	75.4	234.7	33,300*	78.0	233.0	31,100*				70
75	74.2	233.2	32,700*	76.7	231.5	30,700*	79.5	228.2	26,100*	75
80	72.9	231.6	32,300*	75.4	229.9	30,300*	78.2	226.6	25,200*	80
85	71.6	229.8	31,700*	74.1	228.1	30,000*	76.9	224.8	24,400*	85
90	70.3	228.0	31,200*	72.8	226.3	29,600*	75.6	222.9	23,700*	90
95	69.0	226.0	30,700*	71.5	224.3	29,300*	74.3	220.9	23,000*	95
100	67.7	223.8	30,300*	70.2	222.1	28,900*	72.9	218.7	22,300*	100
105	66.4	221.6	28,100	68.9	219.8	28,600*	71.6	216.4	21,700*	105
110	65.0	219.2	26,100	67.5	217.4	27,100	70.2	214.0	21,100*	110
115	63.7	216.6	24,300	66.1	214.8	25,200	68.8	211.4	20,600*	115
120	62.3	213.9	22,600	64.7	212.1	23,500	67.4	208.7	20,100*	120
125	60.9	211.0	21,100	63.3	209.2	21,900	65.9	205.7	19,600*	125
130	59.5	208.0	19,800	61.9	206.1	20,500	64.5	202.6	19,100*	130
135	58.1	204.8	18,500	60.5	202.9	19,200	63.0	199.4	18,700*	135
140	56.6	201.4	17,300	59.0	199.5	18,000	61.5	195.9	18,300*	140
145	55.1	197.8	16,200	57.5	195.9	16,800	60.0	192.3	17,500	145
150	53.6	194.1	15,200	56.0	192.1	15,800	58.4	188.4	16,400	150
155	52.0	190.1	14,200	54.4	188.0	14,800	56.8	184.3	15,400	155
160	50.5	185.8	13,400	52.8	183.8	13,900	55.2	180.0	14,400	160
165	48.8	181.4	12,500	51.2	179.2	13,000	53.5	175.4	13,500	165
170	47.2	176.7	11,700	49.5	174.4	12,200	51.8	170.5	12,700	170
175	45.5	171.6	11,000	47.7	169.4	11,400	50.0	165.3	11,900	175
180	43.7	166.3	10,300	45.9	164.0	10,700	48.2	159.8	11,100	180
185	41.9	160.6	9,600	44.1	158.2	10,000	46.3	153.9	10,400	185
190	40.0	154.6	9,000	42.2	152.0	9,400	44.3	147.6	9,700	190
195	38.0	148.1	8,400	40.1	145.4	8,700				195
200	35.9	141.1	7,900	38.0	138.3	8,100				200
205	33.7	133.5	7,300	35.8	130.5	7,600				205
210	31.4	125.2	6,800	33.4	122.0	7,000				210
215	28.9	116.1	6,300							215
220	26.1	105.8	5,900							220
225	23.0	94.1	5,400							225

MLC165 S-2

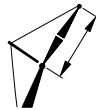
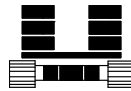
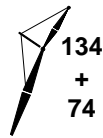
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	79.6	248.5	34,400*							55
60	78.4	247.4	34,000*							60
65	77.2	246.2	33,500*	79.7	244.6	31,400*				65
70	76.0	244.9	33,100*	78.5	243.2	31,000*				70
75	74.8	243.5	32,600*	77.3	241.8	30,600*				75
80	73.6	241.9	32,200*	76.0	240.2	30,300*	78.7	236.9	25,500*	80
85	72.4	240.3	31,800*	74.8	238.6	29,900*	77.5	235.2	24,700*	85
90	71.1	238.5	31,300*	73.6	236.8	29,600*	76.2	233.4	24,000*	90
95	69.9	236.6	30,800*	72.3	234.9	29,300*	74.9	231.5	23,300*	95
100	68.6	234.5	30,000	71.0	232.8	28,900*	73.7	229.4	22,700*	100
105	67.4	232.4	27,800	69.8	230.6	28,600*	72.4	227.2	22,000*	105
110	66.1	230.1	25,800	68.5	228.3	26,800	71.1	224.9	21,500*	110
115	64.8	227.7	24,000	67.2	225.9	24,900	69.7	222.4	20,900*	115
120	63.5	225.1	22,400	65.9	223.3	23,200	68.4	219.8	20,400*	120
125	62.2	222.4	20,800	64.5	220.5	21,700	67.0	217.1	19,900*	125
130	60.8	219.5	19,500	63.2	217.6	20,200	65.7	214.1	19,500*	130
135	59.5	216.5	18,200	61.8	214.6	18,900	64.3	211.0	19,100*	135
140	58.1	213.3	17,000	60.4	211.4	17,700	62.9	207.8	18,500	140
145	56.7	209.9	15,900	59.0	208.0	16,600	61.4	204.4	17,300	145
150	55.3	206.4	14,900	57.6	204.4	15,500	60.0	200.7	16,200	150
155	53.8	202.6	14,000	56.1	200.6	14,500	58.5	196.9	15,200	155
160	52.4	198.7	13,100	54.6	196.6	13,600	57.0	192.9	14,200	160
165	50.9	194.5	12,200	53.1	192.4	12,700	55.4	188.6	13,300	165
170	49.3	190.1	11,500	51.5	188.0	11,900	53.8	184.1	12,400	170
175	47.7	185.5	10,700	49.9	183.3	11,200	52.2	179.3	11,700	175
180	46.1	180.6	10,000	48.3	178.3	10,400	50.5	174.3	10,900	180
185	44.4	175.4	9,400	46.6	173.1	9,800	48.7	168.9	10,200	185
190	42.7	169.9	8,800	44.8	167.5	9,100	46.9	163.2	9,500	190
195	40.9	164.0	8,200	43.0	161.5	8,500	45.1	157.1	8,900	195
200	39.1	157.8	7,600	41.1	155.1	7,900	43.1	150.5	8,200	200
205	37.1	151.1	7,100	39.1	148.3	7,400				205
210	35.1	143.8	6,600	37.1	140.9	6,800				210
215	32.9	136.0	6,100	34.9	133.0	6,300				215
220	30.6	127.5	5,600	32.5	124.2	5,800				220
225	28.2	118.1	5,200							225
230	25.5	107.6	4,700							230
235	22.4	95.6	4,300							235

MLC165 S-2

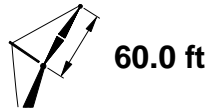
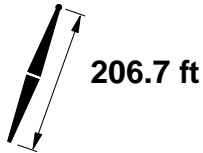
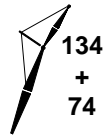
ASME B30.5



ft	5°			15°			25°			ft
	ft	lb	ft	ft	lb	ft	lb	ft		
60	78.9	257.5	33,700*						60	
65	77.7	256.3	33,300*						65	
70	76.6	255.1	32,800*	78.9	253.4	30,900*			70	
75	75.4	253.7	32,500*	77.8	252.0	30,500*			75	
80	74.2	252.2	32,000*	76.6	250.5	30,200*	79.2	247.1	25,800*	80
85	73.1	250.6	31,600*	75.4	248.9	29,900*	78.0	245.5	25,100*	85
90	71.9	248.9	31,200*	74.2	247.2	29,600*	76.8	243.8	24,300*	90
95	70.7	247.1	30,800*	73.0	245.4	29,300*	75.6	242.0	23,600*	95
100	69.5	245.2	29,700	71.8	243.4	29,000*	74.3	240.0	23,000*	100
105	68.3	243.1	27,400	70.6	241.4	28,600	73.1	237.9	22,400*	105
110	67.1	240.9	25,400	69.4	239.1	26,500	71.9	235.7	21,800*	110
115	65.9	238.6	23,600	68.1	236.8	24,600	70.6	233.3	21,300*	115
120	64.6	236.2	22,000	66.9	234.3	22,900	69.3	230.9	20,800*	120
125	63.4	233.6	20,500	65.6	231.7	21,300	68.0	228.2	20,300*	125
130	62.1	230.8	19,100	64.3	229.0	19,900	66.7	225.5	19,800*	130
135	60.8	228.0	17,800	63.0	226.1	18,600	65.4	222.5	19,400*	135
140	59.5	225.0	16,600	61.7	223.0	17,400	64.1	219.5	18,200	140
145	58.2	221.8	15,500	60.4	219.8	16,200	62.7	216.2	17,000	145
150	56.8	218.4	14,500	59.0	216.5	15,200	61.4	212.8	15,900	150
155	55.5	214.9	13,600	57.7	212.9	14,200	59.9	209.2	14,800	155
160	54.1	211.2	12,700	56.2	209.2	13,300	58.5	205.4	13,900	160
165	52.7	207.3	11,800	54.8	205.2	12,400	57.1	201.4	13,000	165
170	51.2	203.2	11,100	53.4	201.1	11,600	55.6	197.2	12,100	170
175	49.7	198.9	10,300	51.9	196.7	10,800	54.1	192.8	11,300	175
180	48.2	194.3	9,600	50.3	192.1	10,100	52.5	188.1	10,600	180
185	46.7	189.5	9,000	48.8	187.2	9,400	50.9	183.1	9,900	185
190	45.1	184.4	8,400	47.2	182.1	8,800	49.2	177.9	9,200	190
195	43.4	179.1	7,800	45.5	176.6	8,100	47.5	172.3	8,500	195
200	41.8	173.4	7,200	43.8	170.9	7,600	45.8	166.4	7,900	200
205	40.0	167.3	6,700	42.0	164.7	7,000	43.9	160.2	7,300	205
210	38.2	160.9	6,200	40.2	158.2	6,500				210
215	36.3	154.0	5,700	38.2	151.1	6,000				215
220	34.3	146.5	5,200	36.2	143.6	5,500				220
225	32.2	138.5	4,800	34.0	135.3	5,000				225
230	29.9	129.8	4,400	31.7	126.4	4,600				230
235	27.5	120.1	4,000							235

MLC165 S-2

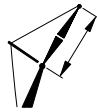
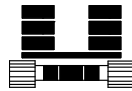
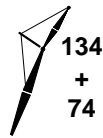
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	79.3		267.6	33,300*						60	
65	78.2		266.4	33,000*						65	
70	77.1		265.2	32,600*	79.3	263.6	30,700*			70	
75	76.0		263.9	32,200*	78.2	262.2	30,400*			75	
80	74.8		262.5	31,800*	77.1	260.8	30,100*	79.6	257.3	26,100*	80
85	73.7		261.0	31,400*	76.0	259.3	29,800*	78.5	255.8	25,400*	85
90	72.6		259.3	31,000*	74.8	257.6	29,400*	77.3	254.2	24,600*	90
95	71.5		257.6	30,700*	73.7	255.9	29,200*	76.1	252.4	24,000*	95
100	70.3		255.7	29,300	72.5	254.0	28,900*	75.0	250.5	23,300*	100
105	69.1		253.8	27,100	71.4	252.0	28,300	73.8	248.5	22,700*	105
110	68.0		251.7	25,100	70.2	249.9	26,200	72.6	246.4	22,200*	110
115	66.8		249.5	23,300	69.0	247.7	24,300	71.4	244.2	21,600*	115
120	65.6		247.1	21,600	67.8	245.3	22,600	70.2	241.8	21,100*	120
125	64.4		244.7	20,100	66.6	242.8	21,000	69.0	239.3	20,600*	125
130	63.2		242.1	18,700	65.4	240.2	19,600	67.7	236.6	20,200*	130
135	62.0		239.3	17,500	64.2	237.5	18,300	66.5	233.9	19,200	135
140	60.7		236.4	16,300	62.9	234.6	17,000	65.2	230.9	17,900	140
145	59.5		233.4	15,200	61.6	231.5	15,900	63.9	227.9	16,700	145
150	58.2		230.3	14,200	60.4	228.3	14,800	62.6	224.6	15,600	150
155	56.9		226.9	13,200	59.0	224.9	13,900	61.3	221.2	14,600	155
160	55.6		223.4	12,300	57.7	221.4	12,900	59.9	217.7	13,600	160
165	54.3		219.7	11,500	56.4	217.7	12,100	58.6	213.9	12,700	165
170	52.9		215.9	10,700	55.0	213.8	11,300	57.2	210.0	11,900	170
175	51.5		211.8	10,000	53.6	209.7	10,500	55.7	205.8	11,100	175
180	50.1		207.6	9,300	52.2	205.4	9,800	54.3	201.4	10,300	180
185	48.7		203.1	8,600	50.7	200.9	9,100	52.8	196.8	9,600	185
190	47.2		198.4	8,000	49.2	196.1	8,400	51.3	192.0	8,900	190
195	45.7		193.4	7,400	47.7	191.1	7,800	49.7	186.9	8,300	195
200	44.1		188.2	6,900	46.1	185.8	7,300	48.1	181.5	7,700	200
205	42.5		182.6	6,300	44.5	180.1	6,700	46.4	175.7	7,100	205
210	40.9		176.8	5,800	42.8	174.2	6,200	44.7	169.6	6,500	210
215	39.2		170.5	5,400	41.1	167.9	5,700	42.9	163.2	6,000	215
220	37.4		163.9	4,900	39.2	161.1	5,200				220
225	35.5		156.8	4,500	37.3	153.9	4,700				225
230	33.5		149.2	4,000	35.3	146.1	4,300				230

MLC165 S-2

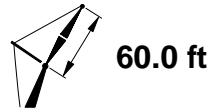
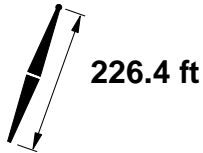
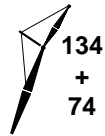
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	79.7		277.6	32,900*						60	
65	78.6		276.5	32,600*						65	
70	77.5		275.4	32,200*						70	
75	76.5		274.1	31,800*	78.7	272.4	30,200*			75	
80	75.4		272.7	31,500*	77.6	271.0	29,900*			80	
85	74.3		271.3	31,100*	76.5	269.6	29,600*	78.9	266.1	25,600*	85
90	73.2		269.7	30,800*	75.4	268.0	29,300*	77.8	264.5	24,900*	90
95	72.1		268.0	30,400*	74.3	266.3	29,000*	76.7	262.8	24,300*	95
100	71.0		266.2	29,000	73.2	264.5	28,800*	75.5	261.0	23,600*	100
105	69.9		264.4	26,700	72.1	262.6	27,900	74.4	259.1	23,000*	105
110	68.8		262.3	24,700	71.0	260.6	25,900	73.3	257.0	22,500*	110
115	67.7		260.2	22,900	69.8	258.4	24,000	72.1	254.9	21,900*	115
120	66.6		258.0	21,300	68.7	256.2	22,300	71.0	252.6	21,400*	120
125	65.4		255.6	19,700	67.5	253.8	20,700	69.8	250.2	21,000*	125
130	64.2		253.2	18,400	66.4	251.3	19,200	68.6	247.7	20,200	130
135	63.1		250.5	17,100	65.2	248.7	17,900	67.4	245.1	18,900	135
140	61.9		247.8	15,900	64.0	245.9	16,700	66.2	242.3	17,600	140
145	60.7		244.9	14,800	62.8	243.0	15,600	65.0	239.4	16,400	145
150	59.5		241.9	13,800	61.6	240.0	14,500	63.7	236.3	15,300	150
155	58.3		238.7	12,800	60.3	236.8	13,500	62.5	233.1	14,300	155
160	57.0		235.4	11,900	59.1	233.4	12,600	61.2	229.7	13,300	160
165	55.8		231.9	11,100	57.8	229.9	11,700	59.9	226.1	12,400	165
170	54.5		228.3	10,300	56.5	226.2	10,900	58.6	222.4	11,500	170
175	53.2		224.5	9,600	55.2	222.4	10,100	57.3	218.5	10,700	175
180	51.8		220.5	8,900	53.8	218.3	9,400	55.9	214.4	10,000	180
185	50.5		216.3	8,200	52.5	214.1	8,700	54.5	210.1	9,300	185
190	49.1		211.8	7,600	51.1	209.6	8,100	53.1	205.6	8,600	190
195	47.7		207.2	7,000	49.6	204.9	7,500	51.6	200.8	7,900	195
200	46.2		202.3	6,500	48.2	200.0	6,900	50.1	195.8	7,300	200
205	44.8		197.2	5,900	46.7	194.8	6,300	48.6	190.5	6,700	205
210	43.2		191.8	5,400	45.1	189.3	5,800	47.0	184.9	6,200	210
215	41.7		186.1	5,000	43.5	183.6	5,300	45.4	179.0	5,700	215
220	40.0		180.1	4,500	41.9	177.4	4,800	43.7	172.7	5,100	220
225	38.3		173.7	4,100	40.2	170.9	4,400				225

MLC165 S-2

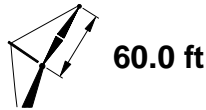
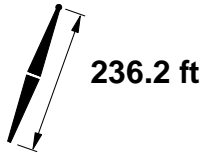
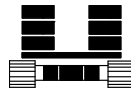
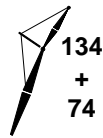
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
65	79.0	286.6	32,100*							65
70	78.0	285.5	31,800*							70
75	76.9	284.3	31,400*	79.1	282.6	29,900*				75
80	75.9	283.0	31,100*	78.0	281.2	29,600*				80
85	74.9	281.5	30,800*	77.0	279.8	29,400*	79.3	276.3	25,900*	85
90	73.8	280.0	30,500*	75.9	278.3	29,100*	78.2	274.8	25,200*	90
95	72.8	278.4	30,000*	74.9	276.7	28,800*	77.2	273.1	24,500*	95
100	71.7	276.7	28,700	73.8	274.9	28,600*	76.1	271.4	23,900*	100
105	70.7	274.9	26,400	72.7	273.1	27,700	75.0	269.6	23,300*	105
110	69.6	273.0	24,400	71.6	271.2	25,600	73.9	267.6	22,800*	110
115	68.5	270.9	22,600	70.6	269.1	23,700	72.8	265.6	22,200*	115
120	67.4	268.8	20,900	69.5	267.0	22,000	71.7	263.4	21,700*	120
125	66.3	266.5	19,400	68.4	264.7	20,400	70.6	261.1	21,300*	125
130	65.2	264.1	18,000	67.2	262.3	19,000	69.4	258.7	20,000	130
135	64.1	261.6	16,800	66.1	259.8	17,600	68.3	256.2	18,600	135
140	63.0	259.0	15,600	65.0	257.1	16,400	67.1	253.5	17,300	140
145	61.8	256.3	14,500	63.8	254.4	15,300	66.0	250.7	16,200	145
150	60.7	253.4	13,500	62.7	251.5	14,200	64.8	247.8	15,000	150
155	59.5	250.4	12,500	61.5	248.4	13,200	63.6	244.7	14,000	155
160	58.3	247.2	11,600	60.3	245.2	12,300	62.4	241.5	13,100	160
165	57.1	243.9	10,800	59.1	241.9	11,400	61.1	238.1	12,100	165
170	55.9	240.5	10,000	57.9	238.4	10,600	59.9	234.6	11,300	170
175	54.7	236.8	9,300	56.6	234.8	9,900	58.6	230.9	10,500	175
180	53.4	233.1	8,600	55.3	230.9	9,100	57.3	227.0	9,700	180
185	52.1	229.1	7,900	54.0	226.9	8,500	56.0	223.0	9,000	185
190	50.8	224.9	7,300	52.7	222.7	7,800	54.7	218.7	8,300	190
195	49.5	220.6	6,700	51.4	218.4	7,200	53.3	214.3	7,700	195
200	48.1	216.0	6,200	50.0	213.7	6,600	51.9	209.6	7,100	200
205	46.8	211.2	5,700	48.6	208.9	6,100	50.5	204.7	6,500	205
210	45.3	206.2	5,200	47.2	203.8	5,500	49.0	199.5	6,000	210
215	43.9	200.9	4,700	45.7	198.5	5,000	47.5	194.1	5,400	215
220	42.4	195.4	4,200	44.2	192.8	4,600	46.0	188.3	4,900	220
225				42.6	186.9	4,100	44.4	182.2	4,400	225

MLC165 S-2

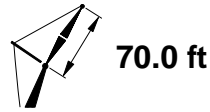
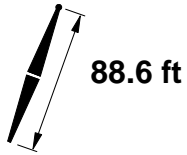
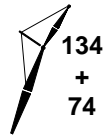
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
65	79.4	296.7	31,800*							65
70	78.4	295.6	31,400*							70
75	77.4	294.4	31,100*	79.4	292.7	29,800*				75
80	76.4	293.1	30,700*	78.4	291.4	29,500*				80
85	75.4	291.8	30,300*	77.4	290.0	29,200*	79.7	286.5	25,500*	85
90	74.4	290.3	29,800*	76.4	288.6	28,900*	78.6	285.0	25,200*	90
95	73.4	288.8	29,400*	75.4	287.0	28,700*	77.6	283.4	24,800*	95
100	72.4	287.1	28,200	74.4	285.3	28,400*	76.6	281.8	24,200*	100
105	71.3	285.4	25,900	73.3	283.6	27,300	75.5	280.0	23,600*	105
110	70.3	283.5	23,900	72.3	281.7	25,200	74.5	278.1	23,100*	110
115	69.3	281.6	22,100	71.3	279.8	23,300	73.4	276.2	22,500*	115
120	68.2	279.5	20,400	70.2	277.7	21,500	72.3	274.1	22,000*	120
125	67.2	277.3	18,900	69.1	275.5	20,000	71.3	271.9	21,100	125
130	66.1	275.0	17,500	68.1	273.2	18,500	70.2	269.6	19,600	130
135	65.0	272.7	16,200	67.0	270.8	17,200	69.1	267.1	18,200	135
140	63.9	270.1	15,100	65.9	268.3	15,900	68.0	264.6	16,900	140
145	62.8	267.5	14,000	64.8	265.6	14,800	66.9	261.9	15,700	145
150	61.7	264.8	12,900	63.7	262.8	13,700	65.7	259.1	14,600	150
155	60.6	261.9	12,000	62.6	259.9	12,700	64.6	256.2	13,600	155
160	59.5	258.9	11,100	61.4	256.9	11,800	63.4	253.1	12,600	160
165	58.3	255.7	10,300	60.3	253.7	11,000	62.3	249.9	11,700	165
170	57.2	252.4	9,500	59.1	250.4	10,100	61.1	246.6	10,800	170
175	56.0	249.0	8,700	57.9	246.9	9,400	59.9	243.1	10,000	175
180	54.8	245.4	8,100	56.7	243.3	8,600	58.7	239.4	9,300	180
185	53.6	241.6	7,400	55.5	239.5	8,000	57.4	235.6	8,600	185
190	52.4	237.7	6,800	54.2	235.5	7,300	56.2	231.6	7,900	190
195	51.1	233.6	6,200	53.0	231.4	6,700	54.9	227.4	7,200	195
200	49.9	229.3	5,600	51.7	227.1	6,100	53.6	223.0	6,600	200
205	48.5	224.8	5,100	50.4	222.5	5,600	52.2	218.4	6,000	205
210	47.2	220.1	4,600	49.0	217.8	5,000	50.8	213.5	5,500	210
215	45.9	215.2	4,100	47.7	212.8	4,500	49.4	208.5	5,000	215
220				46.2	207.5	4,000	48.0	203.1	4,400	220
225							46.5	197.5	4,000	225

MLC165 S-2

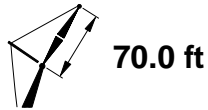
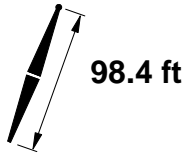
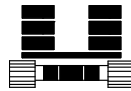
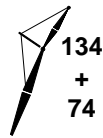
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
40	79.1		161.4	31,500*						40
45	77.2		160.1	30,500*						45
50	75.3		158.7	29,600*						50
55	73.4		157.2	28,800*	78.3		156.2	26,500*		55
60	71.5		155.4	27,900*	76.4		154.4	25,800*		60
65	69.6		153.4	27,100*	74.4		152.5	25,200*	79.1	65
70	67.6		151.3	26,300*	72.4		150.3	24,700*	77.1	70
75	65.6		148.9	25,600*	70.4		148.0	24,100*	75.0	75
80	63.6		146.3	24,900*	68.4		145.4	23,600*	72.9	80
85	61.5		143.5	24,300*	66.3		142.6	23,100*	70.8	85
90	59.4		140.4	23,600*	64.2		139.6	22,600*	68.6	90
95	57.2		137.1	23,000*	62.0		136.3	21,900*	66.3	95
100	55.0		133.5	22,400*	59.7		132.7	20,800*	64.0	100
105	52.7		129.6	21,900*	57.4		128.7	19,900*	61.6	105
110	50.3		125.3	21,300*	55.0		124.5	19,000*	59.2	110
115	47.8		120.7	20,800*	52.5		119.8	18,200*	56.6	115
120	45.3		115.6	20,300*	49.9		114.8	17,500*	53.9	120
125	42.6		110.0	19,500*	47.2		109.2	16,800*	51.1	125
130	39.7		103.9	18,700*	44.3		103.1	16,200*	48.0	130
135	36.6		97.1	17,900*	41.3		96.2	15,700*	44.8	135
140	33.3		89.4	17,200*	37.9		88.5	15,200*		140
145	29.7		80.6	16,500*	34.2		79.7	14,700*		145
150	25.5		70.1	15,900*						150
155	20.4		57.1	15,400*						155

MLC165 S-2

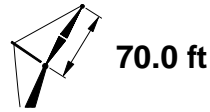
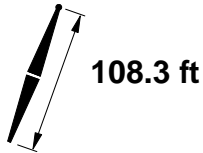
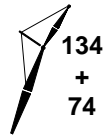
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	78.0	170.3	30,800*							45
50	76.2	169.0	29,900*							50
55	74.4	167.5	29,000*	79.0	166.4	26,600*				55
60	72.6	165.8	28,200*	77.2	164.8	26,000*				60
65	70.8	164.0	27,500*	75.4	163.0	25,500*				65
70	69.0	162.0	26,700*	73.5	161.0	24,900*	77.9	157.8	21,300*	70
75	67.1	159.8	26,000*	71.7	158.8	24,400*	76.0	155.5	20,300*	75
80	65.2	157.4	25,400*	69.8	156.4	23,900*	74.0	153.1	19,400*	80
85	63.3	154.8	24,700*	67.8	153.8	23,500*	72.1	150.4	18,500*	85
90	61.4	152.0	24,100*	65.9	151.0	22,900*	70.1	147.6	17,800*	90
95	59.4	148.9	23,500*	63.9	148.0	22,400*	68.0	144.4	17,100*	95
100	57.3	145.6	22,900*	61.8	144.7	21,800*	65.9	141.0	16,400*	100
105	55.2	142.0	22,400*	59.7	141.1	20,800*	63.7	137.4	15,800*	105
110	53.1	138.2	21,800*	57.5	137.3	19,900*	61.5	133.4	15,300*	110
115	50.9	134.0	21,300*	55.3	133.1	19,100*	59.2	129.1	14,800*	115
120	48.6	129.5	20,900*	53.0	128.6	18,400*	56.8	124.5	14,300*	120
125	46.2	124.6	20,400*	50.6	123.7	17,700*	54.3	119.4	13,900*	125
130	43.7	119.2	19,900*	48.1	118.4	17,100*	51.7	113.8	13,500*	130
135	41.1	113.4	19,100*	45.5	112.5	16,500*	48.9	107.7	13,100*	135
140	38.3	107.0	18,300*	42.7	106.1	15,900*	46.0	101.0	12,800*	140
145	35.4	99.8	17,600*	39.7	98.9	15,400*	42.8	93.4	12,500*	145
150	32.1	91.8	17,000*	36.4	90.9	15,000*				150
155	28.6	82.6	16,400*	32.8	81.6	14,600*				155
160	24.5	71.8	15,800*							160
165	19.6	58.2	15,300*							165

MLC165 S-2

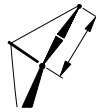
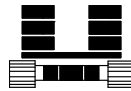
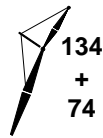
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
45	78.6		180.4	31,000*						45	
50	77.0		179.2	30,100*						50	
55	75.3		177.8	29,300*	79.7	176.7	26,700*			55	
60	73.6		176.2	28,500*	78.0	175.1	26,200*			60	
65	71.9		174.5	27,800*	76.3	173.4	25,700*			65	
70	70.2		172.6	27,000*	74.5	171.6	25,100*	78.6	168.2	21,700*	70
75	68.5		170.6	26,400*	72.8	169.5	24,600*	76.8	166.1	20,700*	75
80	66.7		168.3	25,700*	71.0	167.3	24,200*	75.0	163.9	19,800*	80
85	64.9		165.9	25,200*	69.2	164.9	23,700*	73.2	161.4	19,000*	85
90	63.1		163.3	24,500*	67.4	162.3	23,300*	71.3	158.7	18,200*	90
95	61.3		160.4	24,000*	65.5	159.4	22,800*	69.4	155.8	17,500*	95
100	59.4		157.4	23,400*	63.6	156.4	22,400*	67.5	152.7	16,900*	100
105	57.5		154.1	22,800*	61.7	153.1	21,700*	65.5	149.4	16,300*	105
110	55.5		150.6	22,400*	59.7	149.6	20,800*	63.5	145.7	15,800*	110
115	53.5		146.8	21,800*	57.7	145.8	20,000*	61.4	141.8	15,300*	115
120	51.4		142.7	21,400*	55.6	141.7	19,200*	59.2	137.6	14,800*	120
125	49.3		138.3	20,900*	53.4	137.3	18,500*	57.0	133.1	14,400*	125
130	47.0		133.5	20,500*	51.2	132.5	17,800*	54.7	128.1	14,000*	130
135	44.7		128.4	20,100*	48.9	127.4	17,200*	52.3	122.8	13,600*	135
140	42.3		122.8	19,400*	46.4	121.8	16,700*	49.7	117.0	13,200*	140
145	39.8		116.7	18,700*	43.9	115.7	16,100*	47.0	110.5	12,900*	145
150	37.1		109.9	17,700	41.1	108.9	15,700*	44.2	103.5	12,600*	150
155	34.2		102.5	16,700	38.2	101.5	15,200*				155
160	31.1		94.2	15,800	35.1	93.1	14,800*				160
165	27.6		84.6	15,000	31.5	83.4	14,400*				165
170	23.6		73.3	14,200							170

MLC165 S-2

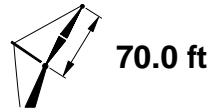
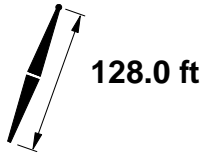
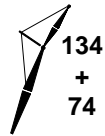
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.3	190.5	31,000*							45
50	77.7	189.3	30,200*							50
55	76.1	188.0	29,500*							55
60	74.5	186.6	28,700*	78.6	185.4	26,300*				60
65	72.9	184.9	28,000*	77.0	183.8	25,800*				65
70	71.3	183.2	27,300*	75.4	182.0	25,300*	79.3	178.6	22,100*	70
75	69.7	181.2	26,700*	73.7	180.1	24,900*	77.6	176.7	21,100*	75
80	68.0	179.1	26,100*	72.1	178.0	24,400*	75.9	174.5	20,200*	80
85	66.3	176.9	25,500*	70.4	175.8	23,900*	74.2	172.2	19,400*	85
90	64.6	174.4	24,900*	68.7	173.3	23,500*	72.4	169.7	18,700*	90
95	62.9	171.8	24,400*	66.9	170.7	23,100*	70.7	167.0	18,000*	95
100	61.2	168.9	23,900*	65.2	167.9	22,700*	68.9	164.1	17,300*	100
105	59.4	165.9	23,300*	63.4	164.8	22,300*	67.0	161.0	16,800*	105
110	57.6	162.6	22,800*	61.6	161.6	21,700*	65.1	157.7	16,200*	110
115	55.7	159.1	22,300*	59.7	158.1	20,800*	63.2	154.1	15,700*	115
120	53.8	155.3	21,900*	57.8	154.3	20,000*	61.3	150.2	15,200*	120
125	51.8	151.3	21,400*	55.8	150.3	19,300*	59.2	146.1	14,800*	125
130	49.8	147.0	21,000*	53.8	146.0	18,600*	57.1	141.7	14,400*	130
135	47.8	142.4	20,500*	51.7	141.4	18,000*	55.0	136.9	14,000*	135
140	45.6	137.4	19,400	49.5	136.4	17,400*	52.7	131.7	13,700*	140
145	43.4	132.0	18,300	47.2	131.0	16,900*	50.4	126.1	13,300*	145
150	41.0	126.1	17,300	44.9	125.1	16,300*	47.9	120.0	13,000*	150
155	38.6	119.8	16,300	42.4	118.7	15,900*	45.3	113.3	12,800*	155
160	35.9	112.8	15,400	39.8	111.7	15,400*	42.5	105.9	12,500*	160
165	33.1	105.1	14,600	36.9	103.9	14,900				165
170	30.1	96.4	13,800	33.8	95.2	14,100				170
175	26.7	86.5	13,100	30.4	85.2	13,300				175
180	22.8	74.8	12,300							180

MLC165 S-2

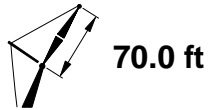
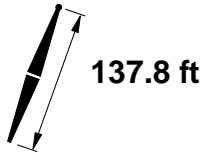
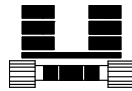
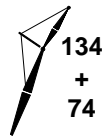
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
50	78.3		199.5	30,300*						50	
55	76.8		198.2	29,600*						55	
60	75.3		196.8	28,900*	79.2	195.6	26,400*			60	
65	73.8		195.3	28,200*	77.7	194.1	25,900*			65	
70	72.3		193.6	27,600*	76.2	192.4	25,400*			70	
75	70.7		191.8	27,000*	74.6	190.6	25,000*	78.3	187.1	21,500*	75
80	69.2		189.8	26,400*	73.0	188.7	24,500*	76.7	185.1	20,600*	80
85	67.6		187.7	25,800*	71.5	186.5	24,200*	75.1	182.9	19,800*	85
90	66.0		185.4	25,200*	69.8	184.2	23,800*	73.4	180.6	19,100*	90
95	64.4		182.9	24,700*	68.2	181.8	23,400*	71.8	178.1	18,400*	95
100	62.8		180.2	24,200*	66.6	179.1	23,000*	70.1	175.4	17,800*	100
105	61.1		177.4	23,700*	64.9	176.3	22,500*	68.4	172.4	17,200*	105
110	59.4		174.3	23,200*	63.2	173.3	22,300*	66.6	169.3	16,600*	110
115	57.7		171.1	22,700*	61.4	170.0	21,600*	64.8	166.0	16,100*	115
120	55.9		167.6	22,300*	59.7	166.5	20,800*	63.0	162.5	15,600*	120
125	54.1		163.9	21,800*	57.9	162.8	20,000*	61.2	158.7	15,200*	125
130	52.3		160.0	21,400*	56.0	158.9	19,400*	59.2	154.6	14,800*	130
135	50.4		155.7	20,200	54.1	154.6	18,700*	57.3	150.2	14,400*	135
140	48.4		151.2	19,100	52.1	150.1	18,100*	55.2	145.6	14,000*	140
145	46.4		146.3	18,000	50.1	145.3	17,500*	53.1	140.5	13,700*	145
150	44.3		141.1	17,000	48.0	140.0	17,000*	51.0	135.1	13,400*	150
155	42.1		135.5	16,000	45.8	134.4	16,500	48.7	129.2	13,100*	155
160	39.8		129.4	15,100	43.5	128.3	15,500	46.3	122.9	12,800*	160
165	37.4		122.8	14,300	41.1	121.6	14,700	43.7	115.9	12,600*	165
170	34.9		115.5	13,500	38.5	114.4	13,800				170
175	32.1		107.5	12,700	35.7	106.3	13,100				175
180	29.2		98.5	12,000	32.7	97.2	12,300				180
185	25.9		88.3	11,400							185
190	22.1		76.1	10,700							190

MLC165 S-2

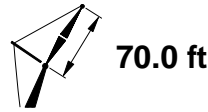
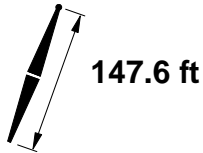
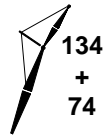
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	78.9	209.5	30,400*							50
55	77.5	208.4	29,700*							55
60	76.0	207.0	29,000*							60
65	74.6	205.6	28,400*	78.3	204.4	26,000*				65
70	73.2	204.0	27,700*	76.8	202.8	25,500*				70
75	71.7	202.3	27,100*	75.4	201.1	25,100*	78.9	197.5	21,800*	75
80	70.2	200.4	26,600*	73.9	199.2	24,700*	77.4	195.6	21,000*	80
85	68.7	198.4	26,000*	72.4	197.2	24,300*	75.8	193.5	20,200*	85
90	67.2	196.2	25,300*	70.9	195.0	23,900*	74.3	191.3	19,500*	90
95	65.7	193.9	24,700*	69.4	192.7	23,600*	72.7	188.9	18,800*	95
100	64.2	191.4	24,200*	67.8	190.2	23,200*	71.2	186.4	18,200*	100
105	62.6	188.7	23,700*	66.2	187.6	22,800*	69.5	183.7	17,600*	105
110	61.0	185.9	23,300*	64.6	184.7	22,500*	67.9	180.8	17,000*	110
115	59.4	182.8	22,700*	63.0	181.7	22,200*	66.3	177.7	16,500*	115
120	57.8	179.6	22,300*	61.4	178.5	21,600*	64.6	174.4	16,000*	120
125	56.1	176.1	21,800*	59.7	175.0	20,800*	62.8	170.8	15,600*	125
130	54.4	172.5	21,100	57.9	171.4	20,100*	61.1	167.1	15,200*	130
135	52.6	168.6	19,800	56.2	167.4	19,400*	59.3	163.1	14,800*	135
140	50.8	164.4	18,600	54.4	163.3	18,800*	57.4	158.8	14,400*	140
145	49.0	160.0	17,600	52.5	158.8	18,200	55.5	154.2	14,100*	145
150	47.1	155.2	16,500	50.6	154.1	17,100	53.5	149.3	13,800*	150
155	45.1	150.2	15,600	48.6	149.0	16,100	51.5	144.1	13,500*	155
160	43.1	144.7	14,700	46.6	143.6	15,200	49.3	138.4	13,200*	160
165	41.0	138.9	13,900	44.4	137.7	14,300	47.1	132.3	12,900*	165
170	38.7	132.6	13,100	42.2	131.4	13,500	44.8	125.7	12,700*	170
175	36.4	125.7	12,300	39.8	124.5	12,700	42.3	118.4	12,500*	175
180	33.9	118.2	11,600	37.3	116.9	12,000				180
185	31.2	109.9	11,000	34.6	108.6	11,300				185
190	28.3	100.6	10,400	31.6	99.2	10,600				190
195	25.1	90.0	9,700							195
200	21.4	77.5	9,200							200

MLC165 S-2

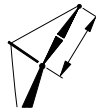
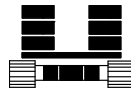
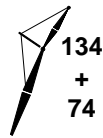
ASME B30.5



	5°			15°			25°					
	ft	°	ft	lb	ft	°	ft	lb	ft			
50	79.4		219.6	30,400*						50		
55	78.0		218.5	29,700*						55		
60	76.7		217.2	29,000*						60		
65	75.3		215.9	28,400*	78.9		214.6	26,000*		65		
70	73.9		214.4	27,700*	77.5		213.1	25,600*		70		
75	72.6		212.7	27,100*	76.1		211.5	25,200*	79.4	207.8	22,200*	75
80	71.2		210.9	26,500*	74.7		209.7	24,800*	78.0	206.0	21,300*	80
85	69.7		209.0	26,000*	73.2		207.8	24,500*	76.5	204.1	20,600*	85
90	68.3		207.0	25,300*	71.8		205.7	24,100*	75.1	202.0	19,800*	90
95	66.9		204.8	24,700*	70.4		203.5	23,700*	73.6	199.7	19,200*	95
100	65.4		202.4	24,200*	68.9		201.2	23,400*	72.1	197.3	18,500*	100
105	64.0		199.9	23,800*	67.4		198.7	23,000*	70.6	194.8	18,000*	105
110	62.5		197.2	23,200*	65.9		196.0	22,700*	69.1	192.0	17,400*	110
115	60.9		194.3	22,800*	64.4		193.2	22,400*	67.5	189.1	16,900*	115
120	59.4		191.3	22,400*	62.8		190.1	22,100*	65.9	186.0	16,400*	120
125	57.8		188.1	21,900*	61.3		186.9	21,500*	64.3	182.7	16,000*	125
130	56.2		184.7	21,100	59.7		183.5	20,800*	62.7	179.2	15,600*	130
135	54.6		181.0	19,800	58.0		179.9	20,100*	61.0	175.5	15,200*	135
140	52.9		177.2	18,700	56.3		176.0	19,300	59.3	171.6	14,800*	140
145	51.2		173.1	17,600	54.6		171.9	18,200	57.5	167.4	14,500*	145
150	49.5		168.7	16,600	52.9		167.6	17,100	55.7	162.9	14,100*	150
155	47.7		164.1	15,600	51.1		162.9	16,200	53.8	158.1	13,800*	155
160	45.9		159.2	14,700	49.2		158.0	15,200	51.9	153.0	13,500*	160
165	43.9		153.9	13,900	47.3		152.7	14,400	49.9	147.5	13,300*	165
170	42.0		148.2	13,100	45.3		147.0	13,600	47.8	141.6	13,000*	170
175	39.9		142.2	12,400	43.2		140.9	12,800	45.6	135.3	12,800*	175
180	37.7		135.6	11,700	41.0		134.4	12,100	43.4	128.4	12,300	180
185	35.4		128.5	11,000	38.7		127.2	11,400				185
190	33.0		120.8	10,400	36.2		119.4	10,700				190
195	30.4		112.2	9,800	33.6		110.8	10,100				195
200	27.5		102.6	9,200	30.7		101.1	9,500				200
205	24.4		91.7	8,700								205
210	20.7		78.7	8,200								210

MLC165 S-2

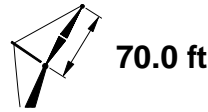
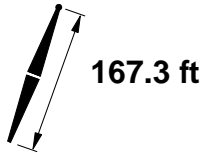
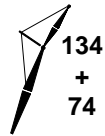
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	78.6	228.6	29,500*							55
60	77.3	227.4	28,900*							60
65	76.0	226.1	28,200*	79.4	224.8	26,000*				65
70	74.7	224.6	27,600*	78.0	223.3	25,700*				70
75	73.3	223.1	26,900*	76.7	221.8	25,300*				75
80	72.0	221.4	26,400*	75.4	220.1	24,900*	78.6	216.4	21,700*	80
85	70.7	219.6	25,900*	74.0	218.3	24,500*	77.2	214.5	20,900*	85
90	69.3	217.6	25,400*	72.7	216.4	24,200*	75.8	212.5	20,200*	90
95	67.9	215.5	24,800*	71.3	214.3	23,800*	74.4	210.4	19,500*	95
100	66.6	213.3	24,200*	69.9	212.0	23,500*	73.0	208.1	18,900*	100
105	65.2	210.9	23,700*	68.5	209.7	23,200*	71.5	205.7	18,300*	105
110	63.8	208.4	23,200*	67.1	207.1	22,900*	70.1	203.1	17,800*	110
115	62.3	205.7	22,700*	65.6	204.4	22,600*	68.6	200.4	17,300*	115
120	60.9	202.8	22,400*	64.2	201.6	22,200*	67.1	197.5	16,800*	120
125	59.4	199.8	21,900*	62.7	198.6	22,000*	65.6	194.4	16,300*	125
130	57.9	196.6	20,700	61.2	195.4	21,500*	64.1	191.1	15,900*	130
135	56.4	193.2	19,400	59.6	192.0	20,200	62.5	187.6	15,500*	135
140	54.8	189.6	18,300	58.1	188.4	19,000	60.9	184.0	15,100*	140
145	53.2	185.8	17,200	56.5	184.6	17,800	59.3	180.0	14,800*	145
150	51.6	181.7	16,200	54.9	180.5	16,800	57.6	175.9	14,500*	150
155	50.0	177.4	15,200	53.2	176.2	15,800	55.9	171.5	14,200*	155
160	48.3	172.9	14,300	51.5	171.7	14,900	54.1	166.8	13,900*	160
165	46.5	168.1	13,500	49.7	166.9	14,000	52.3	161.8	13,600*	165
170	44.7	163.0	12,700	47.9	161.7	13,200	50.4	156.5	13,300*	170
175	42.8	157.5	12,000	46.0	156.2	12,400	48.5	150.8	12,800	175
180	40.9	151.6	11,300	44.1	150.4	11,700	46.4	144.7	12,000	180
185	38.9	145.4	10,600	42.0	144.1	11,000	44.3	138.2	11,300	185
190	36.8	138.6	10,000	39.9	137.3	10,400	42.1	131.0	10,600	190
195	34.5	131.3	9,400	37.6	129.9	9,700				195
200	32.1	123.2	8,900	35.2	121.8	9,100				200
205	29.6	114.4	8,300	32.6	112.9	8,600				205
210	26.8	104.5	7,800							210
215	23.7	93.2	7,300							215
220	20.1	79.9	6,800							220

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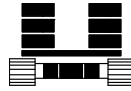
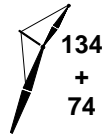
ASME B30.5



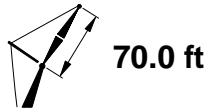
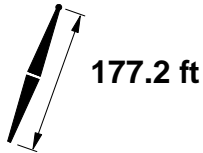
	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
55	79.1		238.7	29,300*						55
60	77.8		237.5	28,700*						60
65	76.6		236.3	28,100*						65
70	75.3		234.9	27,500*	78.6		233.6	25,600*		70
75	74.1		233.4	26,800*	77.3		232.1	25,300*		75
80	72.8		231.8	26,300*	76.0		230.5	24,900*	79.1	80
85	71.5		230.1	25,700*	74.7		228.7	24,600*	77.8	85
90	70.2		228.2	25,300*	73.4		226.9	24,300*	76.4	90
95	68.9		226.2	24,700*	72.1		224.9	24,000*	75.1	95
100	67.6		224.1	24,200*	70.8		222.8	23,600*	73.8	100
105	66.3		221.8	23,800*	69.5		220.5	23,300*	72.4	105
110	64.9		219.4	23,200*	68.1		218.1	23,000*	71.0	110
115	63.6		216.9	22,800*	66.8		215.6	22,700*	69.6	115
120	62.2		214.1	22,300*	65.4		212.9	22,400*	68.2	120
125	60.8		211.3	21,700*	64.0		210.0	22,100*	66.8	125
130	59.4		208.3	20,400	62.5		207.0	21,200	65.3	130
135	58.0		205.1	19,100	61.1		203.8	19,900	63.9	135
140	56.5		201.7	17,900	59.6		200.4	18,700	62.4	140
145	55.0		198.1	16,800	58.1		196.9	17,500	60.8	145
150	53.5		194.3	15,800	56.6		193.1	16,500	59.3	150
155	52.0		190.4	14,900	55.1		189.1	15,500	57.7	155
160	50.4		186.1	14,000	53.5		184.9	14,600	56.1	160
165	48.8		181.7	13,200	51.8		180.4	13,700	54.4	165
170	47.1		177.0	12,400	50.2		175.7	12,900	52.7	170
175	45.4		172.0	11,600	48.5		170.7	12,100	50.9	175
180	43.6		166.6	11,000	46.7		165.4	11,400	49.0	180
185	41.8		161.0	10,300	44.8		159.7	10,700	47.1	185
190	39.9		154.9	9,700	42.9		153.6	10,100	45.1	190
195	37.9		148.4	9,100	40.9		147.1	9,500	43.1	195
200	35.9		141.5	8,500	38.8		140.1	8,900		200
205	33.7		133.9	8,000	36.6		132.5	8,300		205
210	31.4		125.6	7,500	34.3		124.1	7,800		210
215	28.8		116.5	7,000	31.7		115.0	7,200		215
220	26.1		106.4	6,500						220
225	23.1		94.8	6,100						225
230	19.5		81.0	5,600						230

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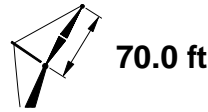
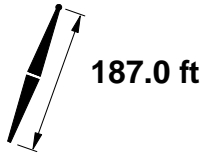
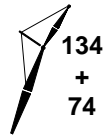
121,500 lb
+
35,300 lb



	5°			15°			25°			
	ft	°	ft	lb	ft	lb	ft	lb		
55	79.5		248.7							55
60	78.3		247.6							60
65	77.1		246.4							65
70	75.9		245.1							70
75	74.7		243.7							75
80	73.5		242.1							80
85	72.3		240.5							85
90	71.0		238.7							90
95	69.8		236.8							95
100	68.6		234.8							100
105	67.3		232.6							105
110	66.0		230.3							110
115	64.7		227.9							115
120	63.4		225.3							120
125	62.1		222.6							125
130	60.8		219.8							130
135	59.4		216.7							135
140	58.0		213.6							140
145	56.6		210.2							145
150	55.2		206.6							150
155	53.8		202.9							155
160	52.3		199.0							160
165	50.8		194.8							165
170	49.2		190.4							170
175	47.7		185.8							175
180	46.0		180.9							180
185	44.4		175.7							185
190	42.6		170.2							190
195	40.9		164.4							195
200	39.0		158.1							200
205	37.1		151.4							205
210	35.0		144.2							210
215	32.9		136.5							215
220	30.6		128.0							220
225	28.1		118.6							225
230	25.5		108.2							230
235	22.5		96.2							235

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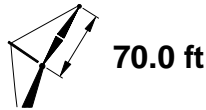
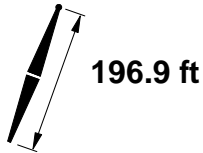
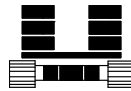
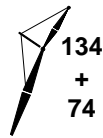
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	78.8		257.7	28,100*						60	
65	77.6		256.6	27,500*						65	
70	76.5		255.3	27,000*	79.5	253.9	25,500*			70	
75	75.3		253.9	26,500*	78.3	252.5	25,200*			75	
80	74.1		252.5	26,100*	77.1	251.1	24,900*			80	
85	73.0		250.9	25,500*	76.0	249.5	24,600*	78.8	245.6	21,800*	85
90	71.8		249.2	24,900*	74.8	247.8	24,300*	77.6	243.9	21,100*	90
95	70.6		247.3	24,400*	73.6	246.0	24,000*	76.3	242.0	20,400*	95
100	69.4		245.4	24,000*	72.4	244.1	23,700*	75.1	240.1	19,800*	100
105	68.2		243.4	23,700*	71.2	242.0	23,400*	73.9	238.0	19,300*	105
110	67.0		241.2	23,200*	69.9	239.8	23,200*	72.6	235.8	18,700*	110
115	65.8		238.9	22,600*	68.7	237.5	22,900*	71.4	233.4	18,200*	115
120	64.5		236.4	22,200*	67.4	235.1	22,600*	70.1	230.9	17,800*	120
125	63.3		233.8	21,000	66.2	232.5	22,100	68.8	228.3	17,300*	125
130	62.0		231.1	19,700	64.9	229.8	20,600	67.5	225.5	16,900*	130
135	60.7		228.2	18,400	63.6	226.9	19,300	66.2	222.6	16,500*	135
140	59.4		225.2	17,200	62.3	223.9	18,100	64.9	219.5	16,100*	140
145	58.1		222.0	16,100	61.0	220.7	16,900	63.5	216.3	15,800*	145
150	56.7		218.7	15,100	59.6	217.4	15,900	62.1	212.9	15,400*	150
155	55.4		215.2	14,200	58.3	213.9	14,900	60.7	209.3	15,100*	155
160	54.0		211.5	13,300	56.9	210.2	14,000	59.3	205.5	14,600	160
165	52.6		207.6	12,500	55.4	206.3	13,100	57.8	201.5	13,700	165
170	51.1		203.5	11,700	54.0	202.2	12,300	56.4	197.3	12,800	170
175	49.7		199.2	11,000	52.5	197.9	11,500	54.8	192.9	12,000	175
180	48.2		194.6	10,300	51.0	193.3	10,800	53.3	188.2	11,300	180
185	46.6		189.8	9,600	49.4	188.5	10,100	51.7	183.2	10,500	185
190	45.0		184.8	9,000	47.8	183.4	9,500	50.0	178.0	9,900	190
195	43.4		179.4	8,400	46.2	178.0	8,900	48.3	172.5	9,200	195
200	41.7		173.7	7,900	44.5	172.3	8,300	46.6	166.6	8,600	200
205	40.0		167.7	7,300	42.7	166.3	7,700	44.7	160.3	8,000	205
210	38.1		161.2	6,800	40.9	159.8	7,200	42.8	153.5	7,400	210
215	36.2		154.4	6,300	39.0	152.9	6,700				215
220	34.3		147.0	5,900	37.0	145.4	6,200				220
225	32.1		139.0	5,400	34.8	137.4	5,700				225
230	29.9		130.2	5,000	32.6	128.6	5,300				230
235	27.5		120.6	4,600	30.1	118.9	4,800				235
240	24.8		109.9	4,200							240

MLC165 S-2

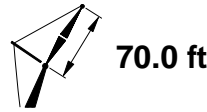
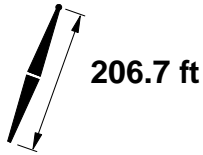
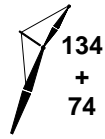
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
60	79.2		267.8							60
65	78.1		266.7							65
70	77.0		265.5							70
75	75.9		264.2							75
80	74.8		262.7							80
85	73.6		261.2							85
90	72.5		259.6							90
95	71.4		257.8							95
100	70.2		256.0							100
105	69.1		254.0							105
110	67.9		251.9							110
115	66.7		249.7							115
120	65.5		247.4							120
125	64.3		244.9							125
130	63.1		242.3							130
135	61.9		239.6							135
140	60.7		236.7							140
145	59.4		233.7							145
150	58.1		230.5							150
155	56.9		227.2							155
160	55.5		223.7							160
165	54.2		220.0							165
170	52.9		216.2							170
175	51.5		212.1							175
180	50.1		207.9							180
185	48.6		203.4							185
190	47.1		198.7							190
195	45.6		193.7							195
200	44.1		188.5							200
205	42.5		183.0							205
210	40.8		177.1							210
215	39.1		170.9							215
220	37.3		164.3							220
225	35.5		157.2							225
230	33.5		149.6							230
235	31.4		141.4							235
240										240

MLC165 S-2

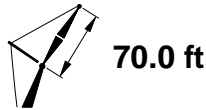
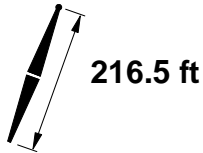
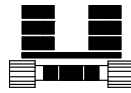
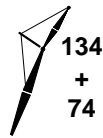
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
60	79.6		277.8	27,200*						60
65	78.5		276.8	26,800*						65
70	77.5		275.6	26,400*						70
75	76.4		274.3	25,900*	79.2		272.9	25,000*		75
80	75.3		273.0	25,400*	78.1		271.5	24,800*		80
85	74.2		271.5	25,000*	77.0		270.1	24,400*	79.6	85
90	73.1		269.9	24,700*	75.9		268.5	24,200*	78.5	90
95	72.1		268.3	24,200*	74.8		266.9	24,000*	77.4	95
100	71.0		266.5	23,600*	73.7		265.1	23,600*	76.3	100
105	69.8		264.6	23,400*	72.6		263.2	23,400*	75.1	105
110	68.7		262.6	23,000*	71.5		261.2	23,200*	74.0	110
115	67.6		260.5	22,600*	70.3		259.1	23,000*	72.8	115
120	66.5		258.2	21,800	69.2		256.9	22,700*	71.7	120
125	65.3		255.9	20,300	68.0		254.5	21,400	70.5	125
130	64.2		253.4	18,900	66.9		252.0	20,000	69.3	130
135	63.0		250.8	17,700	65.7		249.4	18,700	68.1	135
140	61.8		248.1	16,500	64.5		246.7	17,400	66.9	140
145	60.6		245.2	15,400	63.3		243.8	16,300	65.7	145
150	59.4		242.2	14,400	62.1		240.8	15,200	64.5	150
155	58.2		239.0	13,400	60.9		237.7	14,200	63.2	155
160	56.9		235.7	12,500	59.6		234.3	13,300	61.9	160
165	55.7		232.2	11,700	58.3		230.9	12,400	60.6	165
170	54.4		228.6	10,900	57.1		227.2	11,600	59.3	170
175	53.1		224.8	10,200	55.7		223.4	10,900	58.0	175
180	51.8		220.8	9,500	54.4		219.4	10,100	56.6	180
185	50.4		216.6	8,900	53.0		215.2	9,400	55.2	185
190	49.0		212.2	8,200	51.7		210.8	8,800	53.8	190
195	47.6		207.5	7,700	50.2		206.1	8,200	52.3	195
200	46.2		202.7	7,100	48.8		201.3	7,600	50.8	200
205	44.7		197.5	6,600	47.3		196.1	7,000	49.3	205
210	43.2		192.2	6,100	45.8		190.7	6,500	47.7	210
215	41.6		186.5	5,600	44.2		185.0	6,000	46.1	215
220	40.0		180.4	5,100	42.5		179.0	5,500	44.4	220
225	38.3		174.0	4,700	40.8		172.5	5,100	42.6	225
230	36.6		167.2	4,300	39.1		165.7	4,600		230
235					37.2		158.4	4,200		235

MLC165 S-2

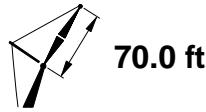
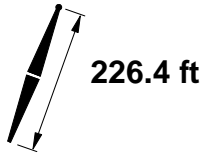
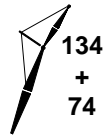
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
65	78.9	286.9	26,300*							65
70	77.9	285.7	25,900*							70
75	76.9	284.5	25,500*	79.5	283.0	24,800*				75
80	75.8	283.2	25,000*	78.5	281.7	24,500*				80
85	74.8	281.8	24,600*	77.5	280.3	24,300*				85
90	73.7	280.3	24,200*	76.4	278.8	24,100*	78.9	274.8	21,900*	90
95	72.7	278.7	23,800*	75.4	277.2	23,900*	77.9	273.2	21,200*	95
100	71.6	276.9	23,400*	74.3	275.5	23,600*	76.8	271.4	20,700*	100
105	70.6	275.1	23,100*	73.2	273.7	23,400*	75.7	269.6	20,100*	105
110	69.5	273.2	22,700*	72.1	271.8	23,100*	74.6	267.7	19,600*	110
115	68.4	271.2	22,400*	71.1	269.8	22,900*	73.5	265.6	19,100*	115
120	67.3	269.0	21,400	70.0	267.6	22,700*	72.4	263.4	18,600*	120
125	66.2	266.8	19,900	68.9	265.4	21,100	71.3	261.1	18,200*	125
130	65.1	264.4	18,500	67.7	263.0	19,700	70.1	258.7	17,800*	130
135	64.0	261.9	17,300	66.6	260.5	18,300	69.0	256.2	17,400*	135
140	62.9	259.3	16,100	65.5	257.9	17,100	67.8	253.5	17,000*	140
145	61.7	256.5	15,000	64.3	255.2	15,900	66.7	250.7	16,600*	145
150	60.6	253.7	14,000	63.2	252.3	14,900	65.5	247.8	15,700	150
155	59.4	250.7	13,000	62.0	249.3	13,900	64.3	244.7	14,700	155
160	58.2	247.5	12,100	60.8	246.1	13,000	63.1	241.5	13,700	160
165	57.0	244.2	11,300	59.6	242.8	12,100	61.8	238.2	12,800	165
170	55.8	240.7	10,500	58.4	239.4	11,300	60.6	234.6	11,900	170
175	54.6	237.1	9,800	57.1	235.7	10,500	59.3	230.9	11,100	175
180	53.3	233.3	9,100	55.9	232.0	9,800	58.0	227.1	10,300	180
185	52.1	229.4	8,500	54.6	228.0	9,100	56.7	223.0	9,600	185
190	50.8	225.2	7,800	53.3	223.8	8,400	55.4	218.8	8,900	190
195	49.4	220.9	7,300	52.0	219.5	7,800	54.0	214.3	8,300	195
200	48.1	216.3	6,700	50.6	214.9	7,200	52.6	209.6	7,700	200
205	46.7	211.6	6,200	49.2	210.1	6,700	51.2	204.7	7,100	205
210	45.3	206.5	5,700	47.8	205.1	6,100	49.7	199.5	6,500	210
215	43.8	201.3	5,200	46.3	199.8	5,600	48.2	194.1	6,000	215
220	42.3	195.7	4,700	44.8	194.3	5,200	46.7	188.4	5,500	220
225	40.8	189.9	4,300	43.3	188.4	4,700	45.1	182.3	5,000	225
230				41.6	182.2	4,200	43.4	175.8	4,500	230
235							41.7	169.0	4,100	235

MLC165 S-2

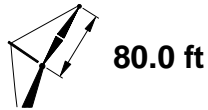
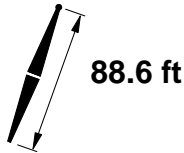
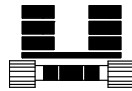
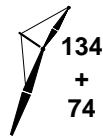
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
65	79.3	296.9	25,700*							65
70	78.3	295.8	25,400*							70
75	77.3	294.6	25,000*							75
80	76.3	293.4	24,600*	78.9	291.9	24,300*				80
85	75.3	292.0	24,200*	77.9	290.5	24,100*				85
90	74.3	290.6	23,800*	76.9	289.1	23,900*	79.3	285.0	22,100*	90
95	73.3	289.0	23,400*	75.9	287.6	23,700*	78.3	283.5	21,500*	95
100	72.3	287.4	23,200*	74.8	285.9	23,500*	77.2	281.8	20,900*	100
105	71.2	285.6	22,700*	73.8	284.2	23,100*	76.2	280.0	20,400*	105
110	70.2	283.8	22,400*	72.8	282.3	23,000*	75.1	278.2	19,900*	110
115	69.2	281.8	22,100*	71.7	280.4	22,700*	74.1	276.2	19,400*	115
120	68.1	279.7	21,100	70.7	278.3	22,300*	73.0	274.1	18,900*	120
125	67.1	277.6	19,600	69.6	276.2	20,800	71.9	271.9	18,500*	125
130	66.0	275.3	18,200	68.5	273.9	19,400	70.9	269.6	18,000*	130
135	64.9	272.9	17,000	67.5	271.5	18,000	69.8	267.2	17,600*	135
140	63.9	270.4	15,800	66.4	269.0	16,800	68.7	264.6	17,300*	140
145	62.8	267.8	14,700	65.3	266.4	15,700	67.5	261.9	16,600	145
150	61.7	265.0	13,700	64.2	263.6	14,600	66.4	259.2	15,500	150
155	60.6	262.1	12,700	63.1	260.7	13,600	65.3	256.2	14,400	155
160	59.4	259.1	11,800	61.9	257.7	12,700	64.1	253.2	13,400	160
165	58.3	256.0	11,000	60.8	254.6	11,800	62.9	250.0	12,500	165
170	57.1	252.7	10,200	59.6	251.3	11,000	61.8	246.6	11,700	170
175	55.9	249.3	9,500	58.4	247.9	10,200	60.5	243.1	10,900	175
180	54.8	245.7	8,800	57.2	244.3	9,500	59.3	239.4	10,100	180
185	53.5	241.9	8,200	56.0	240.5	8,800	58.1	235.6	9,400	185
190	52.3	238.0	7,500	54.8	236.6	8,200	56.8	231.6	8,700	190
195	51.1	233.9	7,000	53.5	232.5	7,500	55.5	227.4	8,100	195
200	49.8	229.6	6,400	52.2	228.2	7,000	54.2	223.0	7,400	200
205	48.5	225.1	5,900	50.9	223.7	6,400	52.9	218.4	6,900	205
210	47.2	220.4	5,400	49.6	219.0	5,900	51.5	213.6	6,300	210
215	45.8	215.5	4,900	48.2	214.0	5,400	50.1	208.5	5,800	215
220	44.4	210.3	4,400	46.8	208.9	4,900	48.7	203.2	5,300	220
225	43.0	204.9	4,000	45.4	203.4	4,400	47.2	197.6	4,800	225
230				43.9	197.7	4,000	45.7	191.6	4,300	230

MLC165 S-2

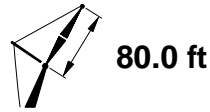
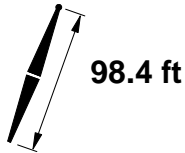
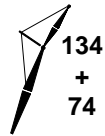
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
40	79.6	171.9	23,700*							40
45	77.9	170.8	23,200*							45
50	76.1	169.5	22,600*							50
55	74.4	168.0	22,000*	79.3	166.8	22,200*				55
60	72.6	166.4	21,400*	77.5	165.2	21,700*				60
65	70.8	164.6	20,900*	75.7	163.4	21,300*				65
70	69.0	162.6	20,400*	73.8	161.4	20,800*	78.9	158.3	19,100*	70
75	67.1	160.5	19,900*	72.0	159.2	20,300*	77.0	156.1	18,100*	75
80	65.2	158.1	19,400*	70.1	156.9	19,900*	75.1	153.6	17,200*	80
85	63.3	155.5	18,900*	68.1	154.3	19,500*	73.1	151.0	16,400*	85
90	61.4	152.8	18,500*	66.2	151.5	19,000*	71.1	148.1	15,600*	90
95	59.4	149.8	18,100*	64.2	148.4	18,500*	69.0	145.0	15,000*	95
100	57.4	146.5	17,700*	62.1	145.1	18,100*	66.9	141.7	14,300*	100
105	55.3	143.0	17,300*	60.0	141.6	17,600*	64.8	138.0	13,800*	105
110	53.2	139.2	17,000*	57.9	137.8	17,200*	62.6	134.1	13,200*	110
115	51.0	135.1	16,600*	55.7	133.6	16,600*	60.3	129.8	12,700*	115
120	48.7	130.6	16,400*	53.4	129.1	15,900*	57.9	125.1	12,300*	120
125	46.3	125.8	16,200*	51.0	124.2	15,200*	55.4	120.1	11,900*	125
130	43.9	120.6	15,900*	48.5	118.9	14,600*	52.8	114.6	11,500*	130
135	41.3	114.9	15,500*	45.8	113.1	14,100*	50.1	108.5	11,200*	135
140	38.5	108.6	15,200*	43.1	106.7	13,600*	47.2	101.8	10,800*	140
145	35.6	101.6	14,800*	40.1	99.6	13,100*	44.0	94.3	10,500*	145
150	32.5	93.8	14,500*	36.9	91.6	12,700*	40.6	85.8	10,300*	150
155	29.0	84.9	14,200*	33.3	82.4	12,300*				155
160	25.1	74.5	13,700*	29.2	71.6	11,900*				160
165	20.4	61.6	13,200*							165

MLC165 S-2

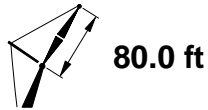
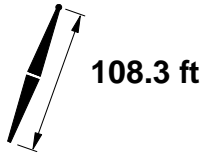
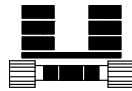
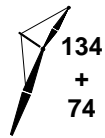
ASME B30.5



	5°			15°			25°					
	ft	°	ft	lb	ft	°	ft	lb	ft			
45	78.6		180.9	23,100*						45		
50	76.9		179.6	22,600*						50		
55	75.3		178.3	22,000*						55		
60	73.6		176.8	21,500*	78.2		175.5	21,700*		60		
65	71.9		175.1	20,900*	76.5		173.8	21,300*		65		
70	70.2		173.2	20,400*	74.8		172.0	20,800*	79.6	168.7	19,500*	70
75	68.5		171.2	19,900*	73.0		169.9	20,400*	77.8	166.6	18,500*	75
80	66.7		169.0	19,400*	71.3		167.7	20,000*	76.0	164.4	17,600*	80
85	64.9		166.6	19,000*	69.5		165.3	19,600*	74.2	161.9	16,800*	85
90	63.1		164.0	18,500*	67.7		162.7	19,200*	72.3	159.3	16,100*	90
95	61.3		161.2	18,100*	65.8		159.9	18,900*	70.4	156.4	15,400*	95
100	59.4		158.2	17,700*	63.9		156.8	18,400*	68.5	153.3	14,800*	100
105	57.5		155.0	17,500*	62.0		153.6	18,000*	66.5	149.9	14,200*	105
110	55.5		151.5	17,100*	60.0		150.1	17,500*	64.5	146.3	13,700*	110
115	53.5		147.8	16,800*	58.0		146.3	17,200*	62.4	142.4	13,200*	115
120	51.5		143.7	16,500*	55.9		142.2	16,600*	60.2	138.2	12,700*	120
125	49.3		139.4	16,100*	53.7		137.8	16,000*	58.0	133.7	12,300*	125
130	47.1		134.7	15,900*	51.5		133.1	15,300*	55.7	128.8	11,900*	130
135	44.8		129.7	15,600*	49.2		127.9	14,800*	53.3	123.5	11,600*	135
140	42.5		124.2	15,400*	46.8		122.4	14,300*	50.8	117.7	11,200*	140
145	40.0		118.2	15,100*	44.2		116.3	13,800*	48.1	111.3	10,900*	145
150	37.3		111.6	15,000*	41.5		109.6	13,300*	45.3	104.3	10,600*	150
155	34.5		104.3	14,600*	38.6		102.2	12,900*	42.2	96.4	10,400*	155
160	31.4		96.2	14,400*	35.5		93.8	12,500*				160
165	28.0		87.0	14,100*	32.0		84.3	12,100*				165
170	24.2		76.1	13,600*								170
175	19.6		62.8	13,100*								175

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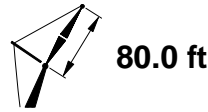
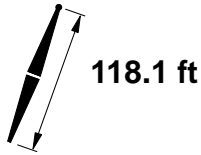
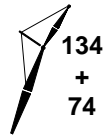
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
45	79.2	190.9	23,100*							45
50	77.6	189.8	22,600*							50
55	76.1	188.5	22,000*							55
60	74.5	187.1	21,500*	78.9	185.8	21,700*				60
65	72.9	185.5	21,000*	77.3	184.2	21,300*				65
70	71.3	183.7	20,500*	75.6	182.4	20,800*				70
75	69.6	181.8	20,000*	74.0	180.5	20,400*	78.5	177.1	18,900*	75
80	68.0	179.8	19,500*	72.3	178.4	20,000*	76.8	175.0	18,000*	80
85	66.3	177.5	19,100*	70.6	176.2	19,600*	75.1	172.7	17,200*	85
90	64.6	175.1	18,600*	68.9	173.7	19,300*	73.4	170.2	16,500*	90
95	62.9	172.5	18,200*	67.2	171.1	18,900*	71.6	167.5	15,800*	95
100	61.2	169.7	17,800*	65.5	168.3	18,600*	69.8	164.6	15,200*	100
105	59.4	166.7	17,500*	63.7	165.3	18,300*	68.0	161.5	14,600*	105
110	57.6	163.5	17,200*	61.8	162.0	17,900*	66.1	158.2	14,100*	110
115	55.7	160.0	16,800*	60.0	158.5	17,500*	64.2	154.6	13,600*	115
120	53.8	156.3	16,400*	58.1	154.8	17,100*	62.2	150.8	13,100*	120
125	51.9	152.4	16,200*	56.1	150.8	16,700*	60.2	146.7	12,700*	125
130	49.9	148.1	16,000*	54.1	146.5	16,100*	58.1	142.2	12,300*	130
135	47.8	143.6	15,700*	52.0	141.9	15,500*	55.9	137.5	12,000*	135
140	45.7	138.6	15,400*	49.8	136.9	14,900*	53.7	132.3	11,600*	140
145	43.5	133.3	15,100*	47.6	131.5	14,400*	51.4	126.7	11,300*	145
150	41.2	127.6	14,900*	45.2	125.7	13,900*	48.9	120.7	11,000*	150
155	38.7	121.4	14,800*	42.7	119.3	13,500*	46.3	114.0	10,700*	155
160	36.2	114.5	14,700*	40.1	112.4	13,100*	43.6	106.7	10,500*	160
165	33.4	107.0	14,500*	37.3	104.6	12,700*	40.6	98.5	10,300*	165
170	30.4	98.5	14,200*	34.2	96.0	12,400*				170
175	27.1	88.9	13,600	30.8	86.1	12,000*				175
180	23.4	77.7	12,900							180
185	18.9	63.8	12,200							185

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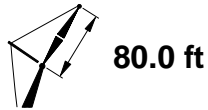
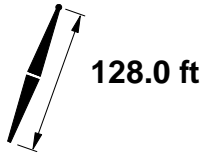
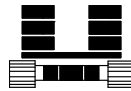
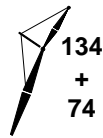
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	78.3	199.9	22,500*							50
55	76.8	198.7	22,000*							55
60	75.3	197.3	21,500*	79.4	196.0	21,700*				60
65	73.8	195.8	21,000*	77.9	194.5	21,300*				65
70	72.2	194.2	20,600*	76.4	192.8	20,800*				70
75	70.7	192.4	20,000*	74.8	191.0	20,400*	79.1	187.5	19,200*	75
80	69.1	190.4	19,500*	73.3	189.1	20,000*	77.5	185.5	18,400*	80
85	67.6	188.3	19,100*	71.7	186.9	19,700*	75.9	183.4	17,600*	85
90	66.0	186.1	18,700*	70.1	184.6	19,300*	74.3	181.0	16,900*	90
95	64.4	183.6	18,300*	68.5	182.2	18,900*	72.6	178.5	16,200*	95
100	62.7	181.0	17,900*	66.8	179.5	18,600*	70.9	175.8	15,600*	100
105	61.1	178.2	17,500*	65.1	176.7	18,400*	69.2	172.9	15,000*	105
110	59.4	175.2	17,200*	63.4	173.7	18,100*	67.5	169.8	14,500*	110
115	57.7	172.0	16,900*	61.7	170.4	17,700*	65.7	166.5	14,000*	115
120	55.9	168.6	16,600*	59.9	167.0	17,500*	63.9	163.0	13,500*	120
125	54.1	164.9	16,300*	58.1	163.3	17,100*	62.0	159.2	13,100*	125
130	52.3	161.0	15,900*	56.3	159.4	16,800*	60.1	155.1	12,700*	130
135	50.4	156.8	15,700*	54.4	155.1	16,200*	58.2	150.8	12,300*	135
140	48.5	152.4	15,500*	52.4	150.6	15,600*	56.2	146.1	12,000*	140
145	46.5	147.6	15,100*	50.4	145.8	15,100*	54.1	141.1	11,700*	145
150	44.4	142.4	14,900*	48.3	140.6	14,600*	51.9	135.7	11,400*	150
155	42.3	136.9	14,700*	46.1	135.0	14,100*	49.6	129.9	11,100*	155
160	40.0	130.9	14,500*	43.8	128.9	13,700*	47.2	123.6	10,800*	160
165	37.6	124.4	14,400*	41.4	122.3	13,300*	44.7	116.6	10,600*	165
170	35.1	117.3	14,000	38.8	115.0	12,900*	42.0	109.0	10,400*	170
175	32.4	109.5	13,200	36.1	107.0	12,600*				175
180	29.5	100.8	12,500	33.1	98.0	12,200*				180
185	26.3	90.8	11,800	29.8	87.8	11,900*				185
190	22.6	79.2	11,200							190
195	18.2	64.8	10,600							195

MLC165 S-2

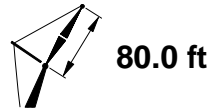
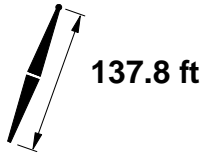
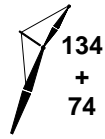
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
50	78.8	210.0	22,400*							50
55	77.4	208.8	21,900*							55
60	76.0	207.5	21,400*							60
65	74.6	206.1	21,000*	78.5	204.7	21,300*				65
70	73.1	204.6	20,500*	77.1	203.2	20,900*				70
75	71.7	202.9	20,000*	75.6	201.5	20,500*	79.7	197.9	19,500*	75
80	70.2	201.0	19,600*	74.1	199.6	20,100*	78.2	196.0	18,700*	80
85	68.7	199.0	19,100*	72.6	197.6	19,700*	76.7	194.0	17,900*	85
90	67.2	196.9	18,700*	71.1	195.4	19,300*	75.1	191.8	17,200*	90
95	65.7	194.6	18,300*	69.6	193.1	19,000*	73.6	189.4	16,600*	95
100	64.2	192.1	17,900*	68.0	190.6	18,700*	72.0	186.9	15,900*	100
105	62.6	189.5	17,700*	66.5	188.0	18,400*	70.4	184.1	15,400*	105
110	61.0	186.7	17,200*	64.9	185.1	18,100*	68.7	181.2	14,900*	110
115	59.4	183.7	17,000*	63.3	182.1	17,900*	67.1	178.1	14,400*	115
120	57.8	180.5	16,700*	61.6	178.9	17,500*	65.4	174.8	13,900*	120
125	56.1	177.1	16,400*	59.9	175.5	17,400*	63.7	171.3	13,500*	125
130	54.4	173.5	16,100*	58.2	171.8	17,100*	61.9	167.6	13,100*	130
135	52.7	169.6	15,800*	56.4	167.9	16,800*	60.1	163.6	12,700*	135
140	50.9	165.5	15,500*	54.6	163.8	16,200*	58.3	159.3	12,400*	140
145	49.1	161.1	15,300*	52.8	159.3	15,700*	56.3	154.8	12,000*	145
150	47.2	156.4	15,100*	50.9	154.6	15,200*	54.4	149.9	11,700*	150
155	45.2	151.5	14,800*	48.9	149.6	14,700*	52.3	144.6	11,400*	155
160	43.2	146.1	14,600*	46.9	144.1	14,300*	50.2	139.0	11,200*	160
165	41.1	140.3	14,400	44.7	138.3	13,900*	48.0	132.9	10,900*	165
170	38.9	134.1	13,600	42.5	132.0	13,500*	45.7	126.4	10,700*	170
175	36.6	127.4	12,900	40.1	125.1	13,100*	43.2	119.2	10,500*	175
180	34.1	120.0	12,200	37.6	117.6	12,500	40.5	111.2	10,300*	180
185	31.5	111.9	11,500	35.0	109.3	11,800				185
190	28.7	102.9	10,900	32.0	100.0	11,200				190
195	25.5	92.6	10,300	28.8	89.4	10,500				195
200	21.9	80.6	9,700							200

MLC165 S-2

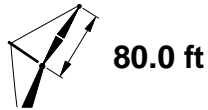
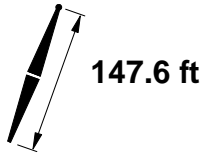
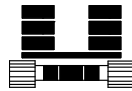
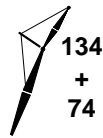
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
50	79.3		220.0	22,300*						50	
55	78.0		218.9	21,900*						55	
60	76.6		217.7	21,400*						60	
65	75.3		216.4	21,000*	79.1	215.0	21,200*			65	
70	73.9		214.9	20,500*	77.7	213.5	20,900*			70	
75	72.5		213.3	20,000*	76.3	211.8	20,400*			75	
80	71.1		211.5	19,600*	74.9	210.1	20,200*	78.8	206.4	19,000*	80
85	69.7		209.6	19,200*	73.5	208.2	19,700*	77.3	204.5	18,300*	85
90	68.3		207.6	18,700*	72.0	206.1	19,400*	75.9	202.4	17,600*	90
95	66.9		205.4	18,300*	70.6	203.9	19,000*	74.4	200.1	16,900*	95
100	65.4		203.1	18,000*	69.1	201.6	18,700*	72.9	197.7	16,300*	100
105	63.9		200.6	17,600*	67.6	199.1	18,400*	71.4	195.2	15,700*	105
110	62.5		198.0	17,300*	66.1	196.4	18,200*	69.8	192.5	15,200*	110
115	60.9		195.1	17,000*	64.6	193.6	17,900*	68.3	189.6	14,700*	115
120	59.4		192.1	16,700*	63.1	190.5	17,500*	66.7	186.5	14,300*	120
125	57.9		189.0	16,400*	61.5	187.3	17,300*	65.1	183.2	13,800*	125
130	56.3		185.6	16,000*	59.9	183.9	17,100*	63.5	179.7	13,400*	130
135	54.6		182.0	15,800*	58.3	180.3	16,900*	61.8	176.0	13,100*	135
140	53.0		178.2	15,400*	56.6	176.5	16,700*	60.1	172.0	12,700*	140
145	51.3		174.1	15,300*	54.9	172.4	16,300*	58.3	167.8	12,400*	145
150	49.6		169.8	15,100*	53.1	168.0	15,800*	56.5	163.4	12,100*	150
155	47.8		165.3	14,800*	51.3	163.4	15,300*	54.7	158.6	11,800*	155
160	45.9		160.4	14,600*	49.5	158.5	14,800*	52.7	153.5	11,500*	160
165	44.0		155.2	14,000	47.5	153.2	14,400*	50.7	148.1	11,200*	165
170	42.1		149.6	13,200	45.6	147.6	13,700	48.7	142.2	11,000*	170
175	40.0		143.7	12,500	43.5	141.5	12,900	46.5	135.9	10,800*	175
180	37.9		137.2	11,800	41.3	135.0	12,200	44.2	129.1	10,600*	180
185	35.6		130.3	11,100	39.0	127.9	11,500	41.8	121.6	10,400*	185
190	33.2		122.7	10,500	36.5	120.1	10,800				190
195	30.7		114.3	9,900	33.9	111.5	10,200				195
200	27.9		105.0	9,300	31.0	101.9	9,600				200
205	24.8		94.4	8,800							205
210	21.3		81.9	8,300							210

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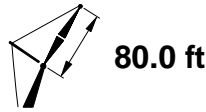
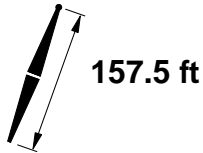
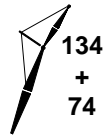
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
55	78.5		229.0	21,800*						55	
60	77.2		227.9	21,300*						60	
65	75.9		226.6	20,900*	79.5	225.1	21,200*			65	
70	74.6		225.2	20,400*	78.2	223.7	20,800*			70	
75	73.3		223.6	20,000*	76.9	222.2	20,400*			75	
80	72.0		222.0	19,600*	75.6	220.5	20,100*	79.3	216.7	19,300*	80
85	70.6		220.2	19,200*	74.2	218.7	19,700*	77.9	214.9	18,600*	85
90	69.3		218.2	18,800*	72.9	216.7	19,400*	76.5	212.9	17,900*	90
95	67.9		216.2	18,400*	71.5	214.7	19,000*	75.1	210.8	17,200*	95
100	66.6		214.0	18,000*	70.1	212.4	18,700*	73.7	208.5	16,600*	100
105	65.2		211.6	17,700*	68.7	210.1	18,400*	72.3	206.1	16,100*	105
110	63.8		209.1	17,300*	67.3	207.5	18,200*	70.8	203.5	15,500*	110
115	62.3		206.4	17,000*	65.8	204.9	17,800*	69.4	200.8	15,100*	115
120	60.9		203.6	16,600*	64.4	202.0	17,700*	67.9	197.9	14,600*	120
125	59.4		200.6	16,300*	62.9	199.0	17,300*	66.4	194.8	14,200*	125
130	57.9		197.4	16,200*	61.4	195.8	17,000*	64.8	191.5	13,800*	130
135	56.4		194.1	15,800*	59.9	192.4	17,000*	63.3	188.1	13,400*	135
140	54.9		190.5	15,600*	58.3	188.8	16,700*	61.7	184.4	13,000*	140
145	53.3		186.8	15,200*	56.7	185.0	16,500*	60.0	180.5	12,700*	145
150	51.7		182.8	15,100*	55.1	181.0	16,300*	58.4	176.4	12,400*	150
155	50.0		178.6	14,900*	53.4	176.7	15,900*	56.7	172.0	12,100*	155
160	48.3		174.1	14,700*	51.7	172.2	15,400	54.9	167.3	11,800*	160
165	46.6		169.3	14,000	50.0	167.4	14,500	53.1	162.3	11,500*	165
170	44.8		164.2	13,200	48.2	162.2	13,700	51.2	157.0	11,300*	170
175	43.0		158.9	12,500	46.3	156.8	12,900	49.3	151.4	11,100*	175
180	41.0		153.1	11,800	44.3	150.9	12,200	47.2	145.3	10,800*	180
185	39.0		146.9	11,100	42.3	144.6	11,500	45.1	138.8	10,600*	185
190	36.9		140.3	10,500	40.2	137.9	10,900	42.9	131.7	10,400*	190
195	34.7		133.1	9,900	37.9	130.5	10,300	40.5	123.9	10,300*	195
200	32.4		125.2	9,400	35.5	122.5	9,700				200
205	29.9		116.6	8,800	33.0	113.7	9,100				205
210	27.2		107.0	8,300	30.1	103.8	8,600				210
215	24.1		96.0	7,800							215
220	20.7		83.2	7,300							220

MLC165 S-2

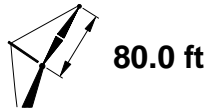
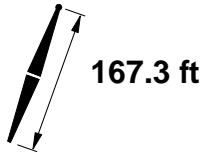
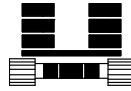
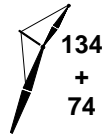
ASME B30.5



	5°			15°			25°			
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	79.0	239.1	21,600*							55
60	77.8	238.0	21,200*							60
65	76.5	236.8	20,800*							65
70	75.3	235.4	20,300*	78.7	233.9	20,700*				70
75	74.0	233.9	19,900*	77.5	232.4	20,400*				75
80	72.8	232.3	19,500*	76.2	230.8	20,000*				80
85	71.5	230.6	19,100*	74.9	229.1	19,700*	78.5	225.3	18,800*	85
90	70.2	228.8	18,700*	73.6	227.3	19,300*	77.1	223.4	18,200*	90
95	68.9	226.8	18,400*	72.3	225.3	19,000*	75.8	221.4	17,500*	95
100	67.6	224.7	18,000*	71.0	223.2	18,700*	74.5	219.2	16,900*	100
105	66.3	222.5	17,700*	69.7	220.9	18,400*	73.1	216.9	16,400*	105
110	64.9	220.1	17,300*	68.3	218.5	18,200*	71.7	214.5	15,900*	110
115	63.6	217.6	17,000*	67.0	216.0	17,800*	70.3	211.9	15,400*	115
120	62.2	214.9	16,700*	65.6	213.3	17,700*	68.9	209.2	14,900*	120
125	60.8	212.1	16,400*	64.2	210.4	17,300*	67.5	206.2	14,500*	125
130	59.4	209.1	16,200*	62.8	207.4	17,100*	66.1	203.2	14,100*	130
135	58.0	205.9	15,800*	61.3	204.2	16,800*	64.6	199.9	13,700*	135
140	56.5	202.6	15,600*	59.9	200.9	16,700*	63.1	196.5	13,300*	140
145	55.1	199.1	15,400*	58.4	197.3	16,500*	61.6	192.8	13,000*	145
150	53.6	195.3	15,000*	56.9	193.5	16,300*	60.0	189.0	12,700*	150
155	52.0	191.4	14,900*	55.3	189.6	15,900	58.4	184.9	12,400*	155
160	50.5	187.2	14,400	53.7	185.4	15,000	56.8	180.6	12,100*	160
165	48.8	182.8	13,600	52.1	180.9	14,200	55.1	176.0	11,800*	165
170	47.2	178.2	12,800	50.4	176.2	13,400	53.4	171.1	11,600*	170
175	45.5	173.2	12,100	48.7	171.2	12,600	51.6	166.0	11,300*	175
180	43.7	168.0	11,400	46.9	165.9	11,900	49.8	160.5	11,100*	180
185	41.9	162.4	10,700	45.1	160.2	11,200	47.9	154.6	10,900*	185
190	40.1	156.4	10,100	43.2	154.2	10,500	45.9	148.3	10,700*	190
195	38.1	150.0	9,500	41.2	147.7	9,900	43.8	141.5	10,200	195
200	36.1	143.2	9,000	39.1	140.7	9,300	41.7	134.2	9,600	200
205	33.9	135.8	8,400	36.9	133.1	8,800				205
210	31.6	127.7	7,900	34.6	124.9	8,200				210
215	29.1	118.8	7,400	32.0	115.7	7,700				215
220	26.5	108.9	7,000	29.3	105.5	7,200				220
225	23.5	97.6	6,500							225
230	20.1	84.4	6,100							230

MLC165 S-2

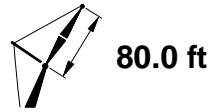
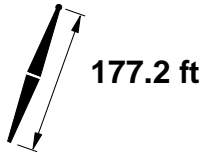
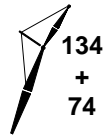
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
55	79.4	249.2	21,500*							55
60	78.3	248.1	21,100*							60
65	77.1	246.9	20,700*							65
70	75.9	245.6	20,300*	79.2	244.1	20,700*				70
75	74.7	244.2	19,900*	78.0	242.7	20,300*				75
80	73.5	242.7	19,500*	76.8	241.2	20,000*				80
85	72.2	241.0	19,100*	75.5	239.5	19,700*	78.9	235.6	19,100*	85
90	71.0	239.3	18,700*	74.3	237.8	19,300*	77.7	233.8	18,400*	90
95	69.8	237.4	18,400*	73.1	235.9	19,000*	76.4	231.9	17,800*	95
100	68.5	235.4	18,000*	71.8	233.8	18,700*	75.1	229.8	17,200*	100
105	67.3	233.3	17,700*	70.5	231.7	18,400*	73.9	227.7	16,700*	105
110	66.0	231.0	17,300*	69.3	229.4	18,100*	72.5	225.3	16,200*	110
115	64.7	228.6	17,000*	68.0	227.0	18,000*	71.2	222.9	15,700*	115
120	63.4	226.1	16,800*	66.7	224.4	17,600*	69.9	220.3	15,200*	120
125	62.1	223.4	16,500*	65.3	221.7	17,500*	68.5	217.5	14,800*	125
130	60.8	220.6	16,100*	64.0	218.9	17,100*	67.2	214.6	14,400*	130
135	59.4	217.6	15,900*	62.6	215.9	16,900*	65.8	211.5	14,000*	135
140	58.0	214.4	15,500*	61.2	212.7	16,600*	64.4	208.3	13,700*	140
145	56.7	211.1	15,400*	59.8	209.3	16,400*	62.9	204.9	13,300*	145
150	55.2	207.6	15,200*	58.4	205.8	16,200*	61.5	201.2	13,000*	150
155	53.8	203.9	14,900	57.0	202.1	15,600	60.0	197.4	12,700*	155
160	52.3	200.0	14,000	55.5	198.2	14,700	58.5	193.4	12,400*	160
165	50.8	195.9	13,200	54.0	194.0	13,900	56.9	189.1	12,100*	165
170	49.3	191.6	12,400	52.4	189.6	13,000	55.3	184.6	11,900*	170
175	47.7	187.0	11,700	50.8	185.0	12,300	53.7	179.9	11,600*	175
180	46.1	182.2	11,000	49.2	180.1	11,600	52.0	174.8	11,400*	180
185	44.5	177.0	10,400	47.5	174.9	10,900	50.3	169.5	11,200*	185
190	42.8	171.6	9,800	45.8	169.4	10,200	48.5	163.8	10,600	190
195	41.0	165.8	9,200	44.0	163.6	9,600	46.6	157.7	10,000	195
200	39.1	159.7	8,600	42.1	157.3	9,000	44.7	151.2	9,400	200
205	37.2	153.1	8,100	40.2	150.6	8,500	42.7	144.2	8,800	205
210	35.2	146.0	7,600	38.1	143.4	7,900	40.5	136.7	8,200	210
215	33.1	138.4	7,100	36.0	135.6	7,400				215
220	30.9	130.1	6,600	33.7	127.1	6,900				220
225	28.4	120.9	6,200	31.2	117.7	6,400				225
230	25.8	110.7	5,800							230
235	22.9	99.2	5,400							235
240	19.5	85.6	5,000							240

MLC165 S-2

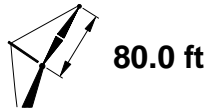
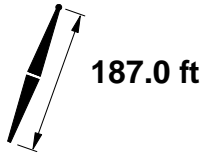
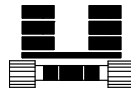
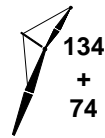
ASME B30.5



	5°			15°			25°				
	ft	°	ft	lb	ft	°	ft	lb	ft		
60	78.7		258.2	21,000*						60	
65	77.6		257.0	20,600*						65	
70	76.4		255.8	20,200*	79.6	254.3	20,600*			70	
75	75.3		254.4	19,800*	78.5	252.9	20,200*			75	
80	74.1		253.0	19,400*	77.3	251.4	19,900*			80	
85	72.9		251.4	19,100*	76.1	249.9	19,600*	79.4	245.9	19,400*	85
90	71.8		249.7	18,700*	74.9	248.2	19,300*	78.2	244.2	18,700*	90
95	70.6		247.9	18,300*	73.8	246.4	19,000*	77.0	242.4	18,100*	95
100	69.4		246.0	18,000*	72.6	244.4	18,700*	75.8	240.4	17,500*	100
105	68.2		244.0	17,600*	71.3	242.4	18,400*	74.5	238.3	17,000*	105
110	67.0		241.8	17,300*	70.1	240.2	18,200*	73.3	236.1	16,500*	110
115	65.8		239.5	17,100*	68.9	237.9	17,800*	72.0	233.8	16,000*	115
120	64.5		237.1	16,800*	67.6	235.5	17,700*	70.8	231.3	15,500*	120
125	63.3		234.6	16,500*	66.4	232.9	17,500*	69.5	228.7	15,100*	125
130	62.0		231.9	16,100*	65.1	230.2	17,100*	68.2	225.9	14,700*	130
135	60.7		229.0	15,900*	63.8	227.3	16,800*	66.9	223.0	14,300*	135
140	59.4		226.1	15,500*	62.5	224.3	16,600*	65.5	219.9	13,900*	140
145	58.1		222.9	15,400*	61.2	221.2	16,400*	64.2	216.7	13,600*	145
150	56.8		219.6	15,200*	59.8	217.8	16,200*	62.8	213.3	13,300*	150
155	55.4		216.1	14,500	58.5	214.3	15,300	61.4	209.7	13,000*	155
160	54.0		212.5	13,600	57.1	210.6	14,400	60.0	205.9	12,700*	160
165	52.6		208.6	12,800	55.6	206.7	13,500	58.5	201.9	12,400*	165
170	51.2		204.6	12,000	54.2	202.6	12,700	57.0	197.7	12,100*	170
175	49.7		200.3	11,300	52.7	198.3	11,900	55.5	193.3	11,900*	175
180	48.2		195.8	10,600	51.2	193.8	11,200	54.0	188.6	11,700*	180
185	46.7		191.0	10,000	49.7	189.0	10,500	52.4	183.7	11,000	185
190	45.1		186.0	9,300	48.1	183.9	9,900	50.7	178.5	10,300	190
195	43.5		180.7	8,800	46.4	178.6	9,200	49.0	172.9	9,700	195
200	41.8		175.1	8,200	44.7	172.9	8,700	47.3	167.0	9,100	200
205	40.1		169.2	7,700	43.0	166.8	8,100	45.4	160.8	8,500	205
210	38.3		162.8	7,200	41.1	160.4	7,600	43.5	154.1	7,900	210
215	36.4		156.1	6,700	39.2	153.5	7,100	41.5	146.9	7,400	215
220	34.4		148.8	6,200	37.2	146.1	6,600				220
225	32.4		140.9	5,800	35.1	138.1	6,100				225
230	30.2		132.4	5,400	32.8	129.3	5,600				230
235	27.8		123.0	5,000	30.4	119.7	5,200				235
240	25.2		112.5	4,600							240
245	22.3		100.6	4,200							245

MLC165 S-2

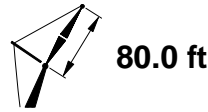
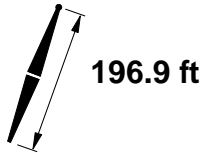
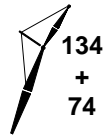
ASME B30.5



ft	5°			15°			25°			ft
	ft	ft	lb	ft	ft	lb	ft	ft	lb	
60	79.1	268.2	20,800*							60
65	78.0	267.1	20,400*							65
70	76.9	265.9	20,100*							70
75	75.8	264.6	19,700*	78.9	263.1	20,100*				75
80	74.7	263.2	19,300*	77.8	261.7	19,800*				80
85	73.6	261.7	19,000*	76.7	260.2	19,500*				85
90	72.5	260.1	18,600*	75.5	258.6	19,200*	78.7	254.5	19,000*	90
95	71.3	258.4	18,200*	74.4	256.8	18,900*	77.5	252.8	18,300*	95
100	70.2	256.6	17,900*	73.2	255.0	18,600*	76.3	250.9	17,800*	100
105	69.0	254.6	17,600*	72.1	253.0	18,300*	75.2	248.9	17,200*	105
110	67.9	252.6	17,300*	70.9	250.9	18,100*	74.0	246.8	16,700*	110
115	66.7	250.4	17,000*	69.7	248.7	17,800*	72.8	244.5	16,200*	115
120	65.5	248.1	16,700*	68.5	246.4	17,700*	71.6	242.2	15,800*	120
125	64.3	245.6	16,500*	67.3	244.0	17,300*	70.3	239.7	15,400*	125
130	63.1	243.1	16,100*	66.1	241.4	17,100*	69.1	237.0	15,000*	130
135	61.9	240.4	15,900*	64.9	238.6	16,800*	67.8	234.3	14,600*	135
140	60.7	237.5	15,500*	63.6	235.8	16,600*	66.6	231.4	14,200*	140
145	59.4	234.5	15,400*	62.4	232.8	16,400*	65.3	228.3	13,900*	145
150	58.2	231.4	15,200	61.1	229.6	16,000	64.0	225.1	13,600*	150
155	56.9	228.1	14,200	59.8	226.3	15,000	62.7	221.7	13,200*	155
160	55.6	224.6	13,300	58.5	222.8	14,100	61.3	218.1	13,000*	160
165	54.2	221.0	12,500	57.2	219.1	13,200	59.9	214.3	12,700*	165
170	52.9	217.2	11,700	55.8	215.3	12,400	58.6	210.4	12,400*	170
175	51.5	213.2	11,000	54.4	211.2	11,700	57.1	206.3	12,200*	175
180	50.1	209.0	10,300	53.0	207.0	10,900	55.7	201.9	11,500	180
185	48.7	204.6	9,700	51.5	202.5	10,200	54.2	197.3	10,800	185
190	47.2	199.9	9,000	50.1	197.8	9,600	52.7	192.5	10,100	190
195	45.7	195.0	8,500	48.5	192.9	9,000	51.1	187.4	9,500	195
200	44.2	189.8	7,900	47.0	187.6	8,400	49.5	182.0	8,800	200
205	42.6	184.4	7,400	45.4	182.1	7,800	47.8	176.3	8,300	205
210	40.9	178.6	6,900	43.7	176.2	7,300	46.1	170.2	7,700	210
215	39.2	172.4	6,400	42.0	170.0	6,800	44.3	163.7	7,100	215
220	37.5	165.9	6,000	40.2	163.4	6,300	42.5	156.8	6,600	220
225	35.6	158.9	5,500	38.3	156.3	5,900	40.5	149.4	6,100	225
230	33.7	151.5	5,100	36.4	148.7	5,400				230
235	31.7	143.4	4,700	34.3	140.4	5,000				235
240	29.5	134.6	4,300	32.1	131.5	4,600				240
245				29.7	121.6	4,200				245

MLC165 S-2

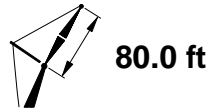
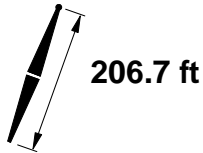
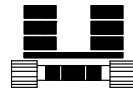
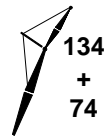
ASME B30.5



	5°			15°			25°					
	ft	°	ft	lb	ft	°	ft	lb	ft			
60	79.5		278.3	20,500*						60		
65	78.5		277.2	20,200*						65		
70	77.4		276.1	19,900*						70		
75	76.3		274.8	19,500*	79.3		273.3	20,000*		75		
80	75.3		273.5	19,200*	78.2		271.9	19,800*		80		
85	74.2		272.0	18,900*	77.2		270.4	19,400*		85		
90	73.1		270.5	18,500*	76.1		268.9	19,100*	79.1	264.8	19,200*	90
95	72.0		268.8	18,200*	75.0		267.2	18,800*	78.0	263.1	18,600*	95
100	70.9		267.1	17,900*	73.9		265.5	18,600*	76.9	261.3	18,000*	100
105	69.8		265.2	17,600*	72.8		263.6	18,300*	75.7	259.4	17,500*	105
110	68.7		263.2	17,200*	71.6		261.6	18,000*	74.6	257.4	17,000*	110
115	67.6		261.1	17,000*	70.5		259.5	17,900*	73.4	255.2	16,500*	115
120	66.5		258.9	16,700*	69.4		257.2	17,500*	72.3	253.0	16,100*	120
125	65.3		256.6	16,300*	68.2		254.9	17,300*	71.1	250.6	15,600*	125
130	64.2		254.1	16,200*	67.1		252.4	17,000*	69.9	248.1	15,200*	130
135	63.0		251.6	15,800*	65.9		249.8	17,000*	68.7	245.4	14,900*	135
140	61.8		248.8	15,600*	64.7		247.1	16,700*	67.5	242.7	14,500*	140
145	60.6		246.0	15,400*	63.5		244.2	16,400*	66.3	239.7	14,200*	145
150	59.4		243.0	14,800	62.3		241.2	15,700	65.1	236.7	13,800*	150
155	58.2		239.9	13,800	61.1		238.1	14,700	63.8	233.5	13,500*	155
160	57.0		236.6	12,900	59.8		234.8	13,700	62.5	230.1	13,200*	160
165	55.7		233.2	12,100	58.5		231.3	12,900	61.2	226.5	12,900*	165
170	54.4		229.6	11,300	57.3		227.7	12,100	59.9	222.8	12,700*	170
175	53.1		225.8	10,600	55.9		223.8	11,300	58.6	218.9	12,000	175
180	51.8		221.8	9,900	54.6		219.8	10,600	57.2	214.8	11,200	180
185	50.5		217.7	9,300	53.3		215.7	9,900	55.8	210.5	10,500	185
190	49.1		213.3	8,600	51.9		211.2	9,200	54.4	206.0	9,800	190
195	47.7		208.7	8,100	50.4		206.6	8,600	53.0	201.3	9,100	195
200	46.3		203.9	7,500	49.0		201.8	8,000	51.5	196.3	8,500	200
205	44.8		198.8	7,000	47.5		196.6	7,500	49.9	191.0	7,900	205
210	43.3		193.5	6,500	46.0		191.2	7,000	48.4	185.4	7,400	210
215	41.7		187.9	6,000	44.4		185.5	6,500	46.7	179.5	6,800	215
220	40.1		181.9	5,600	42.8		179.5	6,000	45.0	173.3	6,300	220
225	38.4		175.6	5,100	41.1		173.1	5,500	43.3	166.6	5,800	225
230	36.7		168.9	4,700	39.3		166.3	5,100	41.4	159.5	5,300	230
235	34.9		161.8	4,300	37.5		159.0	4,600				235
240					35.5		151.2	4,200				240

MLC165 S-2

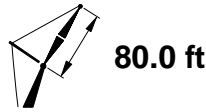
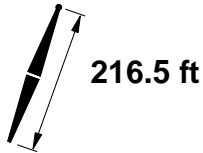
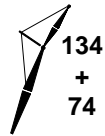
ASME B30.5



	5°			15°			25°			
	ft	°	ft	lb	ft	°	ft	lb	ft	
65	78.9		287.3							65
70	77.9		286.2							70
75	76.8		285.0							75
80	75.8		283.7							80
85	74.8		282.3							85
90	73.7		280.8							90
95	72.7		279.2							95
100	71.6		277.5							100
105	70.5		275.7							105
110	69.5		273.8							110
115	68.4		271.8							115
120	67.3		269.7							120
125	66.2		267.5							125
130	65.1		265.1							130
135	64.0		262.6							135
140	62.9		260.0							140
145	61.7		257.3							145
150	60.6		254.5							150
155	59.4		251.5							155
160	58.2		248.4							160
165	57.1		245.1							165
170	55.8		241.7							170
175	54.6		238.1							175
180	53.4		234.3							180
185	52.1		230.4							185
190	50.8		226.3							190
195	49.5		222.0							195
200	48.1		217.5							200
205	46.8		212.8							205
210	45.4		207.8							210
215	43.9		202.6							215
220	42.4		197.1							220
225	40.9		191.3							225
230	39.3		185.2							230
235										235
240										240

MLC165 S-2

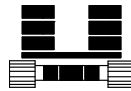
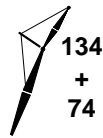
ASME B30.5



	5°			15°			25°					
	ft	°	ft	lb	ft	°	ft	lb	ft			
65	79.3		297.3	19,700*						65		
70	78.3		296.3	19,400*						70		
75	77.3		295.1	19,100*						75		
80	76.3		293.9	18,800*	79.0		292.2	19,500*		80		
85	75.3		292.5	18,500*	78.0		290.9	19,100*		85		
90	74.3		291.1	18,200*	77.0		289.5	18,900*		90		
95	73.3		289.5	17,900*	76.0		287.9	18,600*	78.8	283.7	18,900*	95
100	72.2		287.9	17,600*	75.0		286.3	18,400*	77.8	282.1	18,500*	100
105	71.2		286.2	17,300*	74.0		284.5	18,100*	76.7	280.3	18,000*	105
110	70.2		284.4	17,000*	72.9		282.7	17,800*	75.7	278.4	17,500*	110
115	69.2		282.4	16,800*	71.9		280.7	17,600*	74.6	276.5	17,000*	115
120	68.1		280.4	16,400*	70.8		278.7	17,400*	73.6	274.4	16,600*	120
125	67.1		278.2	16,300*	69.8		276.5	17,100*	72.5	272.2	16,100*	125
130	66.0		276.0	16,000*	68.7		274.3	17,000*	71.4	269.9	15,700*	130
135	64.9		273.6	15,700*	67.6		271.9	16,700*	70.3	267.5	15,400*	135
140	63.9		271.1	15,500*	66.5		269.4	16,500*	69.2	264.9	15,000*	140
145	62.8		268.5	15,000	65.5		266.8	16,100	68.1	262.2	14,700*	145
150	61.7		265.8	14,000	64.3		264.0	15,000	67.0	259.4	14,300*	150
155	60.6		263.0	13,100	63.2		261.1	14,000	65.8	256.5	14,000*	155
160	59.4		260.0	12,200	62.1		258.1	13,100	64.7	253.5	13,700*	160
165	58.3		256.8	11,300	60.9		255.0	12,200	63.5	250.3	13,000	165
170	57.1		253.6	10,600	59.8		251.7	11,400	62.3	246.9	12,200	170
175	56.0		250.2	9,800	58.6		248.3	10,600	61.1	243.4	11,400	175
180	54.8		246.6	9,200	57.4		244.7	9,900	59.9	239.7	10,600	180
185	53.6		242.9	8,500	56.2		240.9	9,200	58.7	235.9	9,900	185
190	52.4		239.0	7,900	55.0		237.0	8,600	57.4	231.9	9,200	190
195	51.1		235.0	7,300	53.7		232.9	7,900	56.1	227.7	8,500	195
200	49.8		230.7	6,700	52.4		228.6	7,400	54.8	223.3	7,900	200
205	48.5		226.3	6,200	51.1		224.2	6,800	53.5	218.7	7,300	205
210	47.2		221.6	5,700	49.8		219.5	6,300	52.1	213.9	6,800	210
215	45.9		216.7	5,200	48.4		214.5	5,800	50.7	208.9	6,200	215
220	44.5		211.6	4,800	47.0		209.4	5,300	49.3	203.5	5,700	220
225	43.1		206.3	4,400	45.6		203.9	4,800	47.8	197.9	5,200	225
230					44.1		198.2	4,400	46.3	192.1	4,800	230
235					42.6		192.2	4,000	44.7	185.8	4,300	235

MLC165 S-2

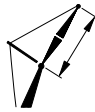
ASME B30.5



121,500 lb
+
35,300 lb



226.4 ft



80.0 ft

	5°			15°			25°					
	ft	°	ft	lb	ft	°	ft	lb	ft			
65	79.6		307.4	19,400*						65		
70	78.6		306.3	19,100*						70		
75	77.7		305.2	18,900*						75		
80	76.7		304.0	18,600*	79.4		302.4	19,200*		80		
85	75.8		302.7	18,300*	78.4		301.1	18,900*		85		
90	74.8		301.3	18,000*	77.5		299.7	18,700*		90		
95	73.8		299.9	17,700*	76.5		298.2	18,400*	79.2	294.0	18,600*	95
100	72.8		298.3	17,400*	75.5		296.6	18,200*	78.2	292.4	18,600*	100
105	71.9		296.6	17,200*	74.5		294.9	17,900*	77.2	290.7	18,200*	105
110	70.9		294.9	16,900*	73.5		293.2	17,700*	76.2	288.9	17,700*	110
115	69.9		293.0	16,700*	72.5		291.3	17,500*	75.2	287.0	17,200*	115
120	68.9		291.0	16,400*	71.5		289.3	17,300*	74.1	285.0	16,800*	120
125	67.8		289.0	16,200*	70.5		287.2	17,000*	73.1	282.9	16,400*	125
130	66.8		286.8	15,900*	69.4		285.1	16,800*	72.1	280.7	16,000*	130
135	65.8		284.5	15,600*	68.4		282.8	16,600*	71.0	278.3	15,600*	135
140	64.8		282.1	15,300*	67.4		280.4	16,400*	70.0	275.9	15,200*	140
145	63.7		279.6	14,700	66.3		277.9	15,800	68.9	273.3	14,900*	145
150	62.7		277.0	13,700	65.3		275.2	14,700	67.8	270.7	14,600*	150
155	61.6		274.3	12,700	64.2		272.5	13,700	66.7	267.9	14,300*	155
160	60.5		271.4	11,900	63.1		269.6	12,800	65.6	264.9	13,700	160
165	59.4		268.4	11,000	62.0		266.6	11,900	64.5	261.9	12,800	165
170	58.3		265.3	10,300	60.9		263.5	11,100	63.4	258.7	11,900	170
175	57.2		262.1	9,500	59.8		260.2	10,300	62.2	255.3	11,100	175
180	56.1		258.7	8,800	58.6		256.8	9,600	61.1	251.9	10,400	180
185	54.9		255.2	8,200	57.5		253.2	8,900	59.9	248.2	9,600	185
190	53.8		251.5	7,600	56.3		249.5	8,300	58.7	244.4	8,900	190
195	52.6		247.6	7,000	55.1		245.6	7,700	57.5	240.5	8,300	195
200	51.4		243.6	6,400	53.9		241.5	7,100	56.2	236.3	7,700	200
205	50.2		239.4	5,900	52.7		237.3	6,500	55.0	232.0	7,100	205
210	48.9		235.0	5,400	51.4		232.9	6,000	53.7	227.4	6,500	210
215	47.7		230.4	4,900	50.1		228.3	5,500	52.4	222.7	6,000	215
220	46.4		225.6	4,500	48.8		223.4	5,000	51.0	217.7	5,500	220
225	45.0		220.6	4,100	47.5		218.4	4,600	49.7	212.5	5,000	225
230					46.1		213.0	4,100	48.2	207.1	4,500	230
235									46.8	201.3	4,100	235