

Liftcrane Jib Capacities

Jib No. 148 on
 Boom No. B10:500
 135 200 kg VPC (Variable Position Counterweight)
 360 Degree Rating

MLC300 SERIES 1



LIFTING CAPACITIES: Chart supplements Boom Capacity chart **No. 9338-AM**. Lifting capacities for various boom lengths, jib lengths, and jib operating radii are for freely suspended loads and may be based on percent of static tipping or strength of structural components. Capacities must be reduced by applicable deducts.

Weight of all load blocks, hooks, weight ball, slings, hoist lines, etc., beneath boom and jib point sheaves is considered part of the 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 on a firm, level, and uniformly supporting surface. Refer to Boom Rigging **No. 81023380**, Jib Rigging **No. 81023385**, Wire Rope Specifications chart **No. 9471-A**, Counterweight Arrangements chart **No. 9345-A**, and Wind Conditions chart **No. 9472-A**. Crane operator judgment must be used to allow for dynamic load effects of swinging, hoisting or lowering, travel, wind conditions, as well as adverse operating conditions and physical machine depreciation. Refer to the Operator Manual for operating guidelines.

MACHINE TRAVEL: Machine to travel on a firm, level, and uniformly supporting surface. Boom must be within boom angle range shown in capacity chart. Refer to Maximum Allowable Travel Specifications chart **No. 9629-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 9 700 mm crawlers, 1 219 mm or 1 524 mm treads, 9 144 mm live mast, 24 part boom hoist reeving, boom support straps, and 135 200 kg VPC.

Luffing Jib Backstay Deduct	
Boom Length (m)	Deduct (kg)
30,0	1 400
36,0	1 600
42,0	1 900
48,0	2 100
54,0	2 400
60,0	2 700
66,0	3 000
72,0	3 200

Deduct the appropriate value from capacities when luffing jib backstays are stored on boom.

Refer to Table 1 (with luffing jib backstays stored) and Table 2 (without luffing jib backstays stored) for raising ability with the maximum weight of all load blocks, hooks, weight ball, slings, and hoist lines beneath boom and jib point sheaves. For block weights shown with #, load blocks, hooks, weight ball, and slings must remain on ground until combined weights are within rated capacity of chart. Raising is not permitted in shaded areas of table.

Combined weight beneath boom and jib point sheaves must not exceed block weight shown. Total weight beneath jib point must not exceed 2 800 kg.

Table 1a: With Luffing Jib Backstays

Over End or Side of Crawlers						
Boom Length (m)	Jib No. 148					
	12,0 m	18,0 m	24,0 m	30,0 m	36,0 m	42,0 m
	Block Weight (kg)					
30,0	10 300	10 300	10 300	10 300	10 300	10 300
36,0	10 300	10 300	10 300	10 300	10 300	10 300
42,0	10 300	10 300	10 300	10 300	10 300	10 300
48,0	10 300	10 300	10 300	7 100	7 100	3 700
54,0	7 100	7 100	3 700	3 700	3 700	#
60,0	3 700	#	#	#	#	#
66,0	#	#	#	Raising Not Permitted		
72,0						

Table 1b: With Luffing Jib Backstays

Over End of Blocked Crawlers						
Boom Length (m)	Jib No. 148					
	12,0 m	18,0 m	24,0 m	30,0 m	36,0 m	42,0 m
	Block Weight (kg)					
30,0	10 300	10 300	10 300	10 300	10 300	10 300
36,0	10 300	10 300	10 300	10 300	10 300	10 300
42,0	10 300	10 300	10 300	10 300	10 300	10 300
48,0	10 300	10 300	10 300	7 100	7 100	3 700
54,0	7 100	7 100	3 700	3 700	3 700	#
60,0	3 700	#	#	#	#	#
66,0	#	#	#	#	#	#
72,0	#	#	Raising Not Permitted			

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. Crane tipping or structural damage can occur.

Table 2a: Without Luffing Jib Backstays

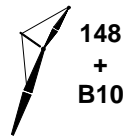
Over End or Side of Crawlers						
Boom Length (m)	Jib No. 148					
	12,0 m	18,0 m	24,0 m	30,0 m	36,0 m	42,0 m
	Block Weight (kg)					
30,0	10 300	10 300	10 300	10 300	10 300	10 300
36,0	10 300	10 300	10 300	10 300	10 300	10 300
42,0	10 300	10 300	10 300	10 300	10 300	10 300
48,0	10 300	10 300	10 300	10 300	7 100	7 100
54,0	7 100	7 100	7 100	3 700	3 700	#
60,0	3 700	3 700	#	#	#	#
66,0	#	#	#	#	#	#
72,0	Raising Not Permitted					

Table 2b: Without Luffing Jib Backstays

Over End of Blocked Crawlers						
Boom Length (m)	Jib No. 148					
	12,0 m	18,0 m	24,0 m	30,0 m	36,0 m	42,0 m
	Block Weight (kg)					
30,0	10 300	10 300	10 300	10 300	10 300	10 300
36,0	10 300	10 300	10 300	10 300	10 300	10 300
42,0	10 300	10 300	10 300	10 300	10 300	10 300
48,0	10 300	10 300	10 300	10 300	7 100	7 100
54,0	7 100	7 100	7 100	3 700	3 700	#
60,0	3 700	3 700	#	#	#	#
66,0	#	#	#	#	#	#
72,0	#	#	#	#	#	Raising Not Permitted

Warning: Crane must remain in-line with crawlers when raising over end of blocked crawlers until operating radius is within 360 degree chart. *Crane tipping or structural damage can occur.*

Explanation of Symbols



Jib No. 148
+
Boom No. B10:500



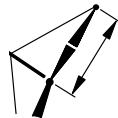
VPC (Variable Position Counterweight)



360 Degree Rating



Boom Length



Jib Length



Jib Offset Angle



Operating Radius
(see page 1)



Boom Angle
(see page 1)



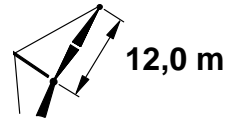
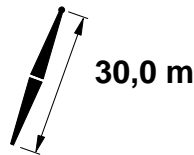
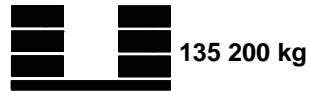
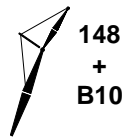
Jib Point Elevation
(see page 1)



Lifting Capacities
(see page 1)

MLC300 S-1

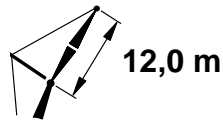
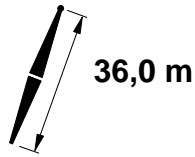
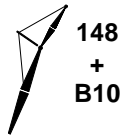
ASME B30.5



	10°			20°			
	m	o	m	kg	o	m	
8,5	84,3	43,9	65 000				8,5
9,0	83,6	43,8	65 000				9,0
10,0	82,2	43,6	65 000				10,0
11,0	80,8	43,4	65 000	83,4	43,0	64 300	11,0
12,0	79,5	43,1	65 000	82,0	42,7	61 400	12,0
13,0	78,0	42,9	65 000	80,6	42,4	58 800	13,0
14,0	76,6	42,6	65 000	79,1	42,1	56 400	14,0
15,0	75,2	42,3	65 000	77,7	41,8	54 200	15,0
16,0	73,8	41,9	65 000	76,2	41,5	52 100	16,0
17,0	72,3	41,5	64 400	74,8	41,1	50 200	17,0
18,0	70,9	41,1	62 100	73,3	40,7	48 500	18,0
19,0	69,4	40,7	59 600	71,8	40,2	46 900	19,0
20,0	67,9	40,2	57 200	70,3	39,7	45 400	20,0
22,0	64,8	39,2	53 000	67,2	38,7	42 700	22,0
24,0	61,7	38,0	49 000	64,0	37,5	40 300	24,0
26,0	58,4	36,7	44 500	60,7	36,1	38 200	26,0
28,0	55,0	35,1	40 400	57,2	34,6	36 400	28,0
30,0	51,5	33,4	37 000	53,6	32,9	34 800	30,0
32,0	47,7	31,5	34 000	49,7	30,9	33 300	32,0
34,0	43,6	29,3	31 400	45,6	28,6	31 500	34,0
36,0	39,2	26,7	29 100	41,0	25,9	29 200	36,0
38,0	34,2	23,6	27 100	35,9	22,7	27 200	38,0
40,0	28,3	19,7	25 300				40,0
42,0	20,6	14,4	23 700				42,0

MLC300 S-1

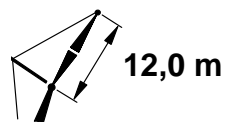
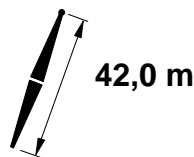
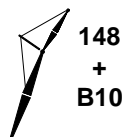
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
8,5	85,0	49,9	65 000				8,5
9,0	84,4	49,9	65 000				9,0
10,0	83,2	49,7	65 000				10,0
11,0	82,0	49,5	65 000	84,2	49,1	64 900	11,0
12,0	80,8	49,3	65 000	83,0	48,9	63 300	12,0
13,0	79,6	49,1	65 000	81,8	48,6	60 900	13,0
14,0	78,3	48,8	65 000	80,5	48,4	58 600	14,0
15,0	77,1	48,5	65 000	79,3	48,1	56 500	15,0
16,0	75,9	48,2	65 000	78,0	47,8	54 600	16,0
17,0	74,6	47,9	65 000	76,8	47,4	52 700	17,0
18,0	73,4	47,6	65 000	75,5	47,1	51 100	18,0
19,0	72,1	47,2	63 800	74,2	46,7	49 500	19,0
20,0	70,8	46,8	61 900	72,9	46,3	48 000	20,0
22,0	68,2	45,9	55 900	70,3	45,4	45 400	22,0
24,0	65,6	44,9	49 900	67,6	44,4	43 000	24,0
26,0	62,9	43,8	45 000	64,9	43,3	40 900	26,0
28,0	60,1	42,5	40 900	62,0	42,0	39 000	28,0
30,0	57,2	41,2	37 500	59,1	40,6	37 300	30,0
32,0	54,2	39,6	34 400	56,1	39,1	34 600	32,0
34,0	51,0	37,9	31 900	52,9	37,3	32 000	34,0
36,0	47,7	36,0	29 600	49,5	35,3	29 700	36,0
38,0	44,2	33,8	27 500	46,0	33,1	27 600	38,0
40,0	40,5	31,3	25 700	42,1	30,6	25 800	40,0
42,0	36,3	28,5	24 100	37,9	27,7	24 200	42,0
44,0	31,7	25,1	22 500	33,0	24,2	22 700	44,0
46,0	26,2	21,0	20 800				46,0

MLC300 S-1

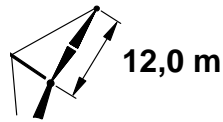
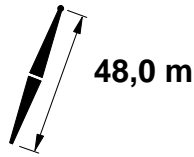
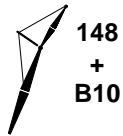
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
9,1	84,9	55,9	65 000				9,1
10,0	84,0	55,8	65 000				10,0
11,0	82,9	55,6	65 000	84,9	55,1	65 000	11,0
12,0	81,8	55,4	65 000	83,8	55,0	64 600	12,0
13,0	80,7	55,2	65 000	82,7	54,8	62 600	13,0
14,0	79,7	55,0	65 000	81,6	54,5	60 500	14,0
15,0	78,6	54,7	65 000	80,5	54,3	58 500	15,0
16,0	77,5	54,5	65 000	79,4	54,0	56 600	16,0
17,0	76,4	54,2	65 000	78,3	53,7	54 900	17,0
18,0	75,3	53,9	65 000	77,2	53,4	53 300	18,0
19,0	74,2	53,6	64 600	76,1	53,1	51 700	19,0
20,0	73,1	53,2	63 500	74,9	52,7	50 300	20,0
22,0	70,8	52,4	56 100	72,7	51,9	47 700	22,0
24,0	68,5	51,6	50 100	70,3	51,1	45 300	24,0
26,0	66,1	50,6	45 200	68,0	50,1	43 200	26,0
28,0	63,8	49,6	41 100	65,6	49,0	41 000	28,0
30,0	61,3	48,4	37 600	63,1	47,8	37 800	30,0
32,0	58,8	47,1	34 500	60,5	46,5	34 700	32,0
34,0	56,2	45,7	31 900	57,9	45,1	32 100	34,0
36,0	53,5	44,1	29 600	55,2	43,5	29 800	36,0
38,0	50,7	42,4	27 600	52,4	41,7	27 700	38,0
40,0	47,8	40,5	25 800	49,4	39,8	25 900	40,0
42,0	44,7	38,3	24 000	46,3	37,6	24 200	42,0
44,0	41,5	36,0	22 100	42,9	35,2	22 400	44,0
46,0	37,9	33,3	20 400	39,3	32,5	20 600	46,0
48,0	34,0	30,2	18 900	35,3	29,3	19 000	48,0
50,0	29,7	26,6	17 400	30,8	25,6	17 500	50,0
52,0	24,5	22,1	16 100				52,0

MLC300 S-1

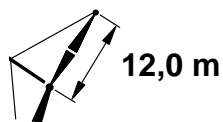
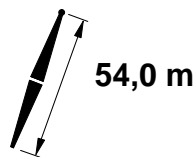
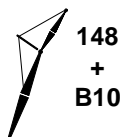
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
9,8	84,8	61,9	65 000				9,8
10,0	84,6	61,8	65 000				10,0
11,0	83,6	61,7	65 000				11,0
12,0	82,7	61,5	65 000	84,4	61,1	64 800	12,0
13,0	81,7	61,3	65 000	83,5	60,9	63 600	13,0
14,0	80,7	61,1	65 000	82,5	60,7	62 000	14,0
15,0	79,7	60,9	65 000	81,5	60,4	60 100	15,0
16,0	78,8	60,7	65 000	80,5	60,2	58 300	16,0
17,0	77,8	60,4	65 000	79,5	59,9	56 700	17,0
18,0	76,8	60,2	65 000	78,5	59,7	55 100	18,0
19,0	75,8	59,9	65 000	77,5	59,4	53 600	19,0
20,0	74,8	59,5	64 200	76,5	59,1	52 200	20,0
22,0	72,8	58,9	56 800	74,5	58,4	49 700	22,0
24,0	70,8	58,1	50 700	72,4	57,6	47 400	24,0
26,0	68,7	57,3	45 700	70,4	56,7	45 200	26,0
28,0	66,6	56,3	41 600	68,2	55,8	41 800	28,0
30,0	64,5	55,3	38 000	66,1	54,8	38 200	30,0
32,0	62,3	54,2	34 900	63,9	53,6	35 100	32,0
34,0	60,1	52,9	32 300	61,6	52,4	32 500	34,0
36,0	57,8	51,6	30 000	59,3	51,0	30 200	36,0
38,0	55,4	50,2	27 700	56,9	49,6	28 100	38,0
40,0	53,0	48,6	25 400	54,5	48,0	25 800	40,0
42,0	50,5	46,8	23 400	51,9	46,2	23 700	42,0
44,0	47,8	44,9	21 500	49,3	44,3	21 800	44,0
46,0	45,1	42,8	19 800	46,5	42,2	20 100	46,0
48,0	42,2	40,5	18 300	43,5	39,8	18 500	48,0
50,0	39,1	38,0	16 900	40,4	37,2	17 100	50,0
52,0	35,8	35,1	15 500	36,9	34,2	15 700	52,0
54,0	32,1	31,8	14 300	33,2	30,9	14 500	54,0
56,0	28,0	28,0	13 200	28,9	26,8	13 300	56,0
58,0	23,1	23,2	12 100				58,0

MLC300 S-1

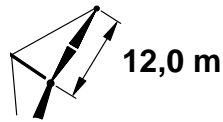
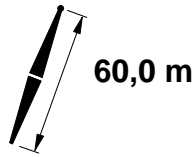
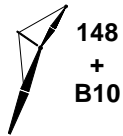
ASME B30.5



	10°			20°				
	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram		
	m	°	m	kg	°	m	kg	m
10,4	84,8	67,8	65 000					10,4
11,0	84,2	67,8	65 000					11,0
12,0	83,3	67,6	65 000					12,0
13,0	82,4	67,4	65 000	84,1	67,0	64 000		13,0
14,0	81,6	67,3	65 000	83,2	66,8	63 200		14,0
15,0	80,7	67,1	65 000	82,3	66,6	61 400		15,0
16,0	79,8	66,8	65 000	81,4	66,4	59 800		16,0
17,0	78,9	66,6	65 000	80,5	66,1	58 200		17,0
18,0	78,0	66,4	65 000	79,6	65,9	56 700		18,0
19,0	77,1	66,1	65 000	78,7	65,6	55 300		19,0
20,0	76,2	65,8	64 300	77,8	65,3	53 900		20,0
22,0	74,4	65,2	57 200	76,0	64,7	51 500		22,0
24,0	72,6	64,5	51 100	74,1	64,0	49 200		24,0
26,0	70,7	63,8	46 000	72,3	63,2	46 300		26,0
28,0	68,9	62,9	41 900	70,4	62,4	42 100		28,0
30,0	67,0	62,0	38 300	68,5	61,5	38 500		30,0
32,0	65,0	61,0	35 200	66,5	60,5	35 400		32,0
34,0	63,1	59,9	32 600	64,5	59,4	32 800		34,0
36,0	61,1	58,8	30 000	62,5	58,2	30 400		36,0
38,0	59,0	57,5	27 400	60,4	56,9	27 900		38,0
40,0	56,9	56,1	25 100	58,3	55,5	25 600		40,0
42,0	54,8	54,6	23 100	56,1	54,0	23 500		42,0
44,0	52,6	53,0	21 200	53,9	52,4	21 600		44,0
46,0	50,3	51,3	19 500	51,6	50,7	19 900		46,0
48,0	47,9	49,4	18 000	49,2	48,7	18 300		48,0
50,0	45,4	47,4	16 600	46,6	46,7	16 800		50,0
52,0	42,8	45,1	15 300	44,0	44,4	15 500		52,0
54,0	40,1	42,6	14 100	41,2	41,9	14 300		54,0
56,0	37,1	39,9	13 000	38,2	39,1	13 100		56,0
58,0	34,0	36,8	11 900	35,0	35,9	12 100		58,0
60,0	30,5	33,4	10 900	31,4	32,3	11 100		60,0
62,0	26,6	29,3	10 000					62,0
64,0	21,9	24,3	9 100					64,0

MLC300 S-1

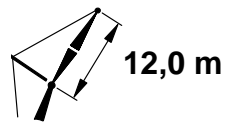
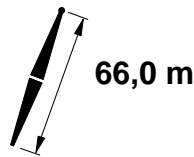
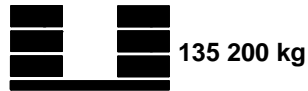
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
11,0	84,7	73,8	65 000				11,0
12,0	83,9	73,7	65 000				12,0
13,0	83,1	73,5	65 000				13,0
14,0	82,3	73,4	65 000	83,8	72,9	63 300	14,0
15,0	81,5	73,2	65 000	82,9	72,7	62 400	15,0
16,0	80,7	73,0	65 000	82,1	72,5	61 000	16,0
17,0	79,9	72,8	65 000	81,3	72,3	59 500	17,0
18,0	79,0	72,5	65 000	80,5	72,0	58 100	18,0
19,0	78,2	72,3	65 000	79,7	71,8	56 700	19,0
20,0	77,4	72,0	64 300	78,8	71,5	55 400	20,0
22,0	75,8	71,5	57 800	77,2	71,0	53 000	22,0
24,0	74,1	70,9	51 600	75,5	70,3	50 800	24,0
26,0	72,4	70,2	46 500	73,8	69,7	46 800	26,0
28,0	70,7	69,4	42 300	72,1	68,9	42 600	28,0
30,0	69,0	68,6	38 700	70,4	68,1	38 900	30,0
32,0	67,3	67,7	35 400	68,6	67,2	35 800	32,0
34,0	65,5	66,7	32 200	66,9	66,2	32 800	34,0
36,0	63,7	65,7	29 200	65,1	65,1	29 900	36,0
38,0	61,9	64,6	26 700	63,2	64,0	27 200	38,0
40,0	60,1	63,4	24 400	61,3	62,8	24 900	40,0
42,0	58,2	62,0	22 300	59,4	61,5	22 800	42,0
44,0	56,2	60,6	20 500	57,5	60,0	20 900	44,0
46,0	54,2	59,1	18 800	55,5	58,5	19 200	46,0
48,0	52,2	57,5	17 200	53,4	56,9	17 600	48,0
50,0	50,1	55,8	15 800	51,3	55,1	16 200	50,0
52,0	47,9	53,9	14 500	49,1	53,2	14 800	52,0
54,0	45,7	51,9	13 300	46,8	51,2	13 600	54,0
56,0	43,3	49,7	12 200	44,4	48,9	12 500	56,0
58,0	40,8	47,3	11 200	41,9	46,5	11 400	58,0
60,0	38,2	44,6	10 200	39,2	43,8	10 400	60,0
62,0	35,4	41,7	9 300	36,4	40,8	9 500	62,0
64,0	32,4	38,5	8 500	33,3	37,5	8 600	64,0
66,0	29,1	34,8	7 700	29,8	33,7	7 800	66,0
68,0	25,3	30,5	6 900				68,0
70,0	20,9	25,3	6 200				70,0

MLC300 S-1

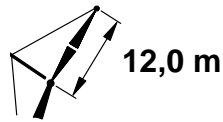
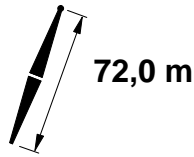
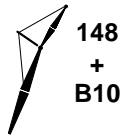
ASME B30.5



	10°			20°				
	Diagram	Diagram	Diagram	Diagram	Diagram	Diagram		
	m	°	m	kg	°	m	kg	m
11,6	84,7	79,8	65 000					11,6
12,0	84,4	79,7	65 000					12,0
13,0	83,6	79,6	65 000					13,0
14,0	82,9	79,4	65 000	84,2	78,9	62 800		14,0
15,0	82,1	79,2	65 000	83,5	78,7	62 500		15,0
16,0	81,4	79,1	65 000	82,7	78,6	61 700		16,0
17,0	80,6	78,9	64 900	82,0	78,4	60 600		17,0
18,0	79,9	78,7	64 900	81,2	78,2	59 200		18,0
19,0	79,1	78,4	64 700	80,5	77,9	57 900		19,0
20,0	78,4	78,2	64 000	79,7	77,7	56 700		20,0
22,0	76,9	77,7	58 200	78,2	77,2	54 400		22,0
24,0	75,4	77,1	51 900	76,7	76,6	51 700		24,0
26,0	73,8	76,5	46 800	75,1	76,0	47 100		26,0
28,0	72,3	75,8	42 600	73,6	75,3	42 900		28,0
30,0	70,7	75,0	38 800	72,0	74,5	39 200		30,0
32,0	69,1	74,2	35 100	70,4	73,7	35 900		32,0
34,0	67,5	73,4	31 800	68,8	72,8	32 500		34,0
36,0	65,9	72,4	28 900	67,1	71,9	29 600		36,0
38,0	64,3	71,4	26 300	65,5	70,8	26 900		38,0
40,0	62,6	70,3	24 000	63,8	69,7	24 600		40,0
42,0	60,9	69,1	22 000	62,1	68,6	22 500		42,0
44,0	59,2	67,9	20 100	60,4	67,3	20 600		44,0
46,0	57,4	66,5	18 400	58,6	65,9	18 900		46,0
48,0	55,6	65,1	16 900	56,8	64,5	17 300		48,0
50,0	53,8	63,6	15 500	54,9	63,0	15 800		50,0
52,0	51,9	62,0	14 200	53,0	61,3	14 500		52,0
54,0	49,9	60,2	13 000	51,0	59,5	13 300		54,0
56,0	47,9	58,3	11 900	49,0	57,6	12 200		56,0
58,0	45,8	56,3	10 900	46,9	55,6	11 100		58,0
60,0	43,7	54,2	9 900	44,7	53,4	10 100		60,0
62,0	41,4	51,8	9 000	42,4	51,0	9 200		62,0
64,0	39,1	49,3	8 200	40,0	48,4	8 400		64,0
66,0	36,6	46,5	7 400	37,4	45,6	7 500		66,0
68,0	33,9	43,4	6 600	34,7	42,5	6 800		68,0
70,0	31,0	40,0	5 900	31,7	39,0	6 000		70,0
72,0	27,8	36,2	5 300	28,4	35,0	5 300		72,0
74,0	24,2	31,6	4 600					74,0
76,0	19,9	26,1	3 800					76,0

MLC300 S-1

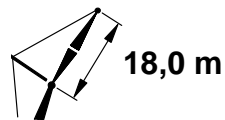
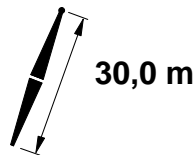
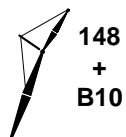
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
12,2	84,6	85,7	65 000				12,2
13,0	84,1	85,6	65 000				13,0
14,0	83,4	85,5	64 900	84,7	85,0	60 800	14,0
15,0	82,7	85,3	64 700	84,0	84,8	60 500	15,0
16,0	82,0	85,2	64 600	83,3	84,7	60 100	16,0
17,0	81,3	85,0	64 400	82,6	84,5	59 800	17,0
18,0	80,6	84,8	64 200	81,9	84,3	59 500	18,0
19,0	79,9	84,6	64 000	81,2	84,1	58 800	19,0
20,0	79,2	84,4	63 500	80,5	83,9	57 800	20,0
22,0	77,8	83,9	58 700	79,1	83,4	55 600	22,0
24,0	76,4	83,4	52 500	77,7	82,8	52 400	24,0
26,0	75,0	82,8	47 300	76,2	82,3	47 600	26,0
28,0	73,6	82,1	42 700	74,8	81,6	43 300	28,0
30,0	72,1	81,5	38 200	73,3	80,9	39 100	30,0
32,0	70,7	80,7	34 300	71,9	80,2	35 200	32,0
34,0	69,2	79,9	31 000	70,4	79,4	31 800	34,0
36,0	67,7	79,0	28 100	68,9	78,5	28 800	36,0
38,0	66,2	78,1	25 500	67,4	77,6	26 200	38,0
40,0	64,7	77,1	23 200	65,9	76,6	23 800	40,0
42,0	63,2	76,1	21 200	64,3	75,5	21 700	42,0
44,0	61,6	74,9	19 300	62,7	74,3	19 800	44,0
46,0	60,0	73,7	17 600	61,1	73,1	18 100	46,0
48,0	58,4	72,4	16 100	59,5	71,8	16 500	48,0
50,0	56,8	71,1	14 700	57,9	70,5	15 100	50,0
52,0	55,1	69,6	13 400	56,2	69,0	13 800	52,0
54,0	53,4	68,1	12 200	54,4	67,4	12 500	54,0
56,0	51,6	66,4	11 100	52,6	65,8	11 400	56,0
58,0	49,8	64,7	10 000	50,8	64,0	10 300	58,0
60,0	47,9	62,8	9 100	48,9	62,1	9 400	60,0
62,0	46,0	60,8	8 200	47,0	60,1	8 500	62,0
64,0	44,0	58,7	7 400	45,0	57,9	7 600	64,0
66,0	42,0	56,4	6 600	42,9	55,6	6 800	66,0
68,0	39,8	53,9	5 800	40,7	53,1	6 000	68,0
70,0	37,5	51,2	5 000	38,4	50,4	5 200	70,0
72,0	35,1	48,3	4 200	35,9	47,4	4 400	72,0
74,0	32,5	45,1	3 500	33,3	44,1	3 600	74,0

MLC300 S-1

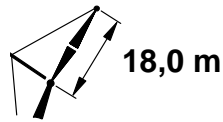
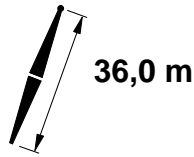
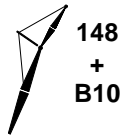
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
10,4	84,7	49,5	52 900				10,4
11,0	83,9	49,4	52 100				11,0
12,0	82,7	49,2	50 900				12,0
13,0	81,5	49,0	49 700				13,0
14,0	80,2	48,7	48 600				14,0
15,0	79,0	48,4	47 600	83,6	48,1	40 400	15,0
16,0	77,8	48,1	46 500	81,1	47,5	38 800	16,0
17,0	76,5	47,8	45 600	79,8	47,2	37 300	17,0
18,0	75,2	47,5	44 600	78,5	46,8	35 900	18,0
19,0	74,0	47,1	43 700	77,2	46,5	34 700	19,0
20,0	72,7	46,7	42 600	75,9	46,1	33 500	20,0
22,0	70,1	45,8	39 500	73,3	45,2	32 400	22,0
24,0	67,4	44,8	36 800	70,6	44,1	30 400	24,0
26,0	64,7	43,7	34 400	67,8	43,0	28 700	26,0
28,0	61,9	42,4	32 300	65,0	41,7	27 200	28,0
30,0	59,0	41,0	30 500	62,0	40,3	25 800	30,0
32,0	56,0	39,5	28 800	59,0	38,7	24 600	32,0
34,0	52,9	37,8	27 400	55,7	37,0	23 500	34,0
36,0	49,5	35,8	26 100	52,4	35,0	22 500	36,0
38,0	46,0	33,7	24 900	48,7	32,8	21 600	38,0
40,0	42,2	31,2	23 800	44,8	30,2	20 800	40,0
42,0	38,1	28,3	22 900	40,5	27,2	20 100	42,0
44,0	33,4	24,9	22 000	35,6	23,7	19 500	44,0
46,0	27,9	20,7	21 200			19 000	46,0

MLC300 S-1

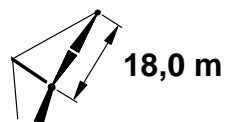
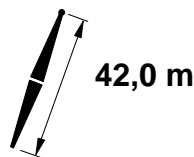
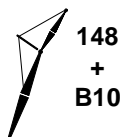
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
11,0	84,6	55,5	52 500				11,0
12,0	83,5	55,3	51 400				12,0
13,0	82,4	55,1	50 400				13,0
14,0	81,3	54,9	49 400	84,3	54,3	41 200	14,0
15,0	80,3	54,6	48 400	83,2	54,0	39 800	15,0
16,0	79,2	54,4	47 500	82,1	53,7	38 400	16,0
17,0	78,1	54,1	46 600	81,0	53,4	37 100	17,0
18,0	76,9	53,8	45 700	79,9	53,1	35 900	18,0
19,0	75,8	53,4	44 900	78,7	52,8	34 800	19,0
20,0	74,7	53,1	44 100	77,6	52,4	33 800	20,0
22,0	72,4	52,3	42 200	75,3	51,7	31 900	22,0
24,0	70,1	51,5	39 400	73,0	50,8	30 200	24,0
26,0	67,8	50,5	37 000	70,6	49,8	28 700	26,0
28,0	65,4	49,4	34 900	68,1	48,7	27 300	28,0
30,0	62,9	48,3	33 000	65,7	47,5	26 100	30,0
32,0	60,4	47,0	31 300	63,1	46,2	25 000	32,0
34,0	57,8	45,5	29 800	60,4	44,8	24 000	34,0
36,0	55,1	44,0	28 400	57,7	43,1	23 100	36,0
38,0	52,3	42,2	27 100	54,8	41,4	22 200	38,0
40,0	49,4	40,3	25 900	51,8	39,4	21 500	40,0
42,0	46,3	38,2	24 300	48,7	37,2	20 800	42,0
44,0	43,0	35,8	22 800	45,3	34,8	20 200	44,0
46,0	39,5	33,1	21 500	41,6	32,0	19 600	46,0
48,0	35,6	30,0	20 300	37,6	28,8	19 100	48,0
50,0	31,2	26,3	19 000	32,9	24,9	18 700	50,0
52,0	25,9	21,8	17 700				52,0

MLC300 S-1

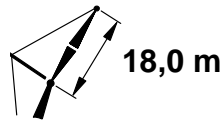
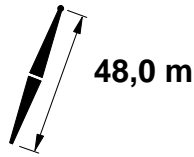
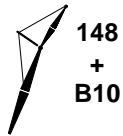
ASME B30.5



	10°			20°			
	m	°	m	kg	°	m	
11,6	84,6	61,5	52 200				11,6
12,0	84,2	61,4	51 800				12,0
13,0	83,2	61,2	50 800				13,0
14,0	82,2	61,0	49 900				14,0
15,0	81,2	60,8	49 000				15,0
16,0	80,3	60,6	48 200	82,9	59,9	39 300	16,0
17,0	79,3	60,3	47 400	81,9	59,6	38 100	17,0
18,0	78,3	60,0	46 600	80,9	59,4	37 000	18,0
19,0	77,3	59,7	45 800	79,9	59,1	35 900	19,0
20,0	76,3	59,4	45 100	78,9	58,7	34 900	20,0
22,0	74,3	58,7	43 700	76,9	58,0	33 100	22,0
24,0	72,2	58,0	41 800	74,8	57,3	31 400	24,0
26,0	70,2	57,1	39 400	72,7	56,4	30 000	26,0
28,0	68,1	56,2	37 300	70,6	55,5	28 600	28,0
30,0	65,9	55,2	35 300	68,4	54,4	27 400	30,0
32,0	63,7	54,0	33 500	66,2	53,3	26 300	32,0
34,0	61,5	52,8	31 900	63,9	52,0	25 300	34,0
36,0	59,2	51,5	29 800	61,6	50,7	24 400	36,0
38,0	56,9	50,0	27 700	59,2	49,2	23 500	38,0
40,0	54,4	48,4	25 900	56,7	47,6	22 700	40,0
42,0	51,9	46,7	24 300	54,1	45,8	22 000	42,0
44,0	49,3	44,8	22 800	51,4	43,8	21 400	44,0
46,0	46,5	42,7	21 500	48,6	41,7	20 800	46,0
48,0	43,6	40,4	20 000	45,6	39,3	20 100	48,0
50,0	40,5	37,8	18 600	42,4	36,7	18 900	50,0
52,0	37,1	34,9	17 200	39,0	33,7	17 500	52,0
54,0	33,5	31,6	16 000	35,1	30,2	16 200	54,0
56,0	29,3	27,7	14 900	30,7	26,1	15 000	56,0
58,0	24,3	22,9	13 800				58,0

MLC300 S-1

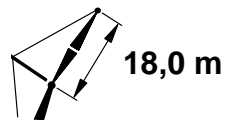
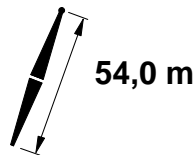
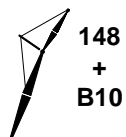
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
12,2	84,5	67,4	51 700				12,2
13,0	83,8	67,3	51 000				13,0
14,0	82,9	67,1	50 200				14,0
15,0	82,1	66,9	49 400				15,0
16,0	81,2	66,7	48 600				16,0
17,0	80,3	66,5	47 900	83,6	66,0	40 100	17,0
18,0	79,4	66,2	47 200	81,8	65,5	37 900	18,0
19,0	78,5	66,0	46 500	80,9	65,3	36 800	19,0
20,0	77,6	65,7	45 800	80,0	65,0	35 900	20,0
22,0	75,8	65,1	44 500	78,1	64,4	34 100	22,0
24,0	73,9	64,4	43 300	76,3	63,7	32 500	24,0
26,0	72,1	63,6	41 600	74,4	62,9	31 100	26,0
28,0	70,2	62,8	39 400	72,5	62,1	29 800	28,0
30,0	68,3	61,9	37 400	70,6	61,1	28 600	30,0
32,0	66,4	60,9	35 100	68,6	60,1	27 500	32,0
34,0	64,4	59,8	32 500	66,6	59,0	26 500	34,0
36,0	62,4	58,6	30 100	64,6	57,8	25 600	36,0
38,0	60,3	57,4	28 100	62,5	56,5	24 700	38,0
40,0	58,2	56,0	26 200	60,4	55,1	23 900	40,0
42,0	56,1	54,5	24 500	58,2	53,6	23 200	42,0
44,0	53,9	52,9	22 600	55,9	52,0	22 500	44,0
46,0	51,6	51,1	20 900	53,6	50,2	21 400	46,0
48,0	49,2	49,2	19 400	51,1	48,3	19 800	48,0
50,0	46,7	47,2	17 900	48,6	46,2	18 300	50,0
52,0	44,1	44,9	16 600	45,9	43,9	17 000	52,0
54,0	41,3	42,4	15 400	43,1	41,3	15 700	54,0
56,0	38,4	39,7	14 300	40,0	38,5	14 500	56,0
58,0	35,2	36,6	13 200	36,7	35,3	13 400	58,0
60,0	31,7	33,1	12 200	33,1	31,6	12 400	60,0
62,0	27,7	29,0	11 300				62,0
64,0	23,0	23,9	10 400				64,0

MLC300 S-1

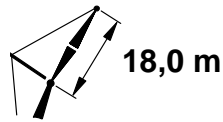
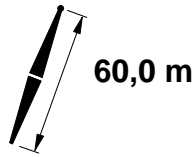
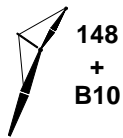
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
12,2	85,0	73,5	51 400				12,2
13,0	84,3	73,4	50 900				13,0
14,0	83,5	73,2	50 300				14,0
15,0	82,7	73,0	49 600				15,0
16,0	81,9	72,8	48 900			40 700	16,0
17,0	81,1	72,6	48 200	84,1	72,1	39 600	17,0
18,0	80,3	72,4	47 600	82,5	71,7	38 600	18,0
19,0	79,5	72,2	46 900	81,7	71,4	37 600	19,0
20,0	78,7	71,9	46 300	80,8	71,2	36 700	20,0
22,0	77,0	71,3	45 100	79,2	70,6	35 000	22,0
24,0	75,3	70,7	44 000	77,5	70,0	33 500	24,0
26,0	73,7	70,0	42 900	75,8	69,3	32 100	26,0
28,0	72,0	69,3	41 300	74,1	68,5	30 800	28,0
30,0	70,2	68,5	38 500	72,3	67,7	29 600	30,0
32,0	68,5	67,6	35 300	70,6	66,8	28 600	32,0
34,0	66,7	66,6	32 700	68,8	65,8	27 600	34,0
36,0	64,9	65,5	30 400	67,0	64,7	26 600	36,0
38,0	63,1	64,4	28 300	65,1	63,6	25 800	38,0
40,0	61,3	63,2	26 200	63,2	62,4	25 000	40,0
42,0	59,4	61,9	24 100	61,3	61,0	24 200	42,0
44,0	57,4	60,5	22 300	59,3	59,6	22 800	44,0
46,0	55,4	59,0	20 600	57,3	58,1	21 100	46,0
48,0	53,4	57,3	19 000	55,2	56,4	19 500	48,0
50,0	51,3	55,6	17 600	53,1	54,6	18 000	50,0
52,0	49,1	53,7	16 300	50,9	52,7	16 700	52,0
54,0	46,8	51,7	15 100	48,6	50,6	15 400	54,0
56,0	44,5	49,5	13 900	46,1	48,4	14 300	56,0
58,0	42,0	47,1	12 900	43,6	45,9	13 200	58,0
60,0	39,3	44,4	11 900	40,9	43,2	12 200	60,0
62,0	36,5	41,5	11 000	38,0	40,2	11 200	62,0
64,0	33,5	38,2	10 100	34,8	36,8	10 300	64,0
66,0	30,1	34,5	9 300	31,3	32,9	9 500	66,0
68,0	26,3	30,2	8 500				68,0
70,0	21,8	24,9	7 800				70,0

MLC300 S-1

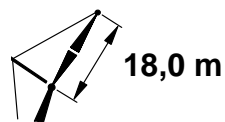
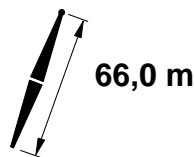
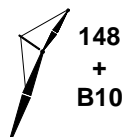
ASME B30.5



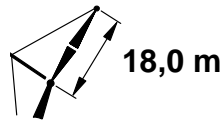
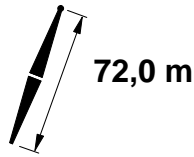
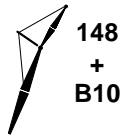
m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	84,2	79,3	50 400				13,7
14,0	84,0	79,3	50 200				14,0
15,0	83,3	79,1	49 600				15,0
16,0	82,5	79,0	48 900				16,0
17,0	81,8	78,8	48 300				17,0
18,0	81,1	78,5	47 800	83,8	78,0	40 200	18,0
19,0	80,3	78,3	47 200	82,3	77,6	38 300	19,0
20,0	79,5	78,1	46 600	81,6	77,4	37 400	20,0
22,0	78,0	77,6	45 500	80,0	76,8	35 800	22,0
24,0	76,5	77,0	44 500	78,5	76,3	34 300	24,0
26,0	75,0	76,4	43 500	76,9	75,6	33 000	26,0
28,0	73,4	75,7	42 000	75,4	74,9	31 700	28,0
30,0	71,9	74,9	38 800	73,8	74,2	30 600	30,0
32,0	70,3	74,1	35 700	72,2	73,3	29 500	32,0
34,0	68,7	73,2	33 000	70,6	72,4	28 500	34,0
36,0	67,0	72,3	30 400	68,9	71,5	27 600	36,0
38,0	65,4	71,3	27 800	67,3	70,5	26 800	38,0
40,0	63,7	70,2	25 500	65,6	69,4	25 900	40,0
42,0	62,0	69,0	23 400	63,8	68,2	24 100	42,0
44,0	60,3	67,8	21 500	62,1	66,9	22 200	44,0
46,0	58,5	66,4	19 800	60,3	65,5	20 400	46,0
48,0	56,7	65,0	18 300	58,5	64,1	18 800	48,0
50,0	54,9	63,4	16 800	56,6	62,5	17 400	50,0
52,0	53,0	61,8	15 500	54,7	60,9	16 000	52,0
54,0	51,0	60,1	14 300	52,7	59,1	14 800	54,0
56,0	49,0	58,2	13 200	50,6	57,2	13 600	56,0
58,0	46,9	56,2	12 200	48,5	55,1	12 500	58,0
60,0	44,8	54,0	11 200	46,3	52,9	11 500	60,0
62,0	42,5	51,6	10 300	44,0	50,5	10 600	62,0
64,0	40,1	49,1	9 400	41,6	47,9	9 700	64,0
66,0	37,6	46,3	8 600	39,0	45,0	8 900	66,0
68,0	34,9	43,2	7 900	36,2	41,8	8 100	68,0
70,0	32,0	39,8	7 100	33,2	38,3	7 300	70,0
72,0	28,8	35,9	6 500				72,0
74,0	25,2	31,4	5 800				74,0
76,0	20,8	25,8	5 200				76,0

MLC300 S-1

ASME B30.5



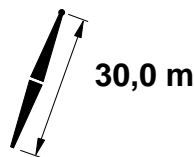
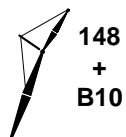
m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	84,7	85,4	50 100				13,7
14,0	84,5	85,3	50 000				14,0
15,0	83,8	85,2	49 400				15,0
16,0	83,1	85,0	48 800				16,0
17,0	82,4	84,8	48 300				17,0
18,0	81,7	84,6	47 700	84,3	84,1	40 700	18,0
19,0	81,0	84,4	47 200	83,6	83,9	39 700	19,0
20,0	80,3	84,2	46 700	82,9	83,7	38 900	20,0
22,0	78,9	83,7	45 700	82,2	83,5	38 000	22,0
24,0	77,5	83,2	44 800	80,8	83,0	36 500	24,0
26,0	76,1	82,6	43 900	79,3	82,5	35 100	26,0
28,0	74,6	82,0	42 400	77,9	81,9	33 800	28,0
30,0	73,2	81,3	39 100	76,5	81,2	32 600	30,0
32,0	71,8	80,6	35 900	75,0	80,5	31 400	32,0
34,0	70,3	79,7	33 000	73,5	79,8	30 400	34,0
36,0	68,8	78,9	30 100	72,1	79,0	29 400	36,0
38,0	67,3	77,9	27 500	70,6	78,1	28 500	38,0
40,0	65,8	77,0	25 100	69,0	77,1	27 700	40,0
42,0	64,2	75,9	23 000	67,5	76,1	26 000	42,0
44,0	62,7	74,8	21 200	65,9	75,1	23 800	44,0
46,0	61,1	73,5	19 400	64,4	73,9	21 900	46,0
48,0	59,4	72,3	17 900	62,7	72,7	20 100	48,0
50,0	57,8	70,9	16 500	61,1	71,4	18 500	50,0
52,0	56,1	69,4	15 200	59,4	70,0	17 000	52,0
54,0	54,4	67,9	13 900	57,7	68,5	15 700	54,0
56,0	52,6	66,2	12 800	56,0	67,0	14 400	56,0
58,0	50,8	64,5	11 800	54,2	65,3	13 300	58,0
60,0	48,9	62,6	10 800	52,3	63,5	12 200	60,0
62,0	47,0	60,6	9 900	50,4	61,6	11 200	62,0
64,0	45,0	58,5	9 100	48,5	59,6	10 300	64,0
66,0	42,9	56,2	8 300	46,4	57,4	9 400	66,0
68,0	40,8	53,7	7 500	44,3	55,0	8 600	68,0
70,0	38,5	51,0	6 800	42,1	52,5	7 800	70,0
72,0	36,1	48,1	6 100	39,8	49,7	7 000	72,0
74,0	33,5	44,8	5 500	37,3	46,7	6 300	74,0
76,0	30,7	41,2	4 900	34,6	43,4	5 700	76,0
80,0	24,1	32,4	3 500	31,7	39,6	5 000	80,0



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	84,0	91,2	47 400				15,2
16,0	83,6	91,1	47 000				16,0
17,0	82,9	90,9	46 500	84,7	90,2	41 000	17,0
18,0	82,3	90,7	46 100	84,0	90,0	40 500	18,0
19,0	81,6	90,6	45 600	83,4	89,8	39 800	19,0
20,0	81,0	90,4	45 200	82,7	89,6	39 000	20,0
22,0	79,7	89,9	44 300	81,4	89,1	37 500	22,0
24,0	78,4	89,4	43 500	80,1	88,7	36 100	24,0
26,0	77,0	88,9	42 700	78,8	88,1	34 800	26,0
28,0	75,7	88,3	41 800	77,4	87,5	33 600	28,0
30,0	74,4	87,6	39 400	76,1	86,9	32 500	30,0
32,0	73,0	87,0	35 700	74,7	86,2	31 400	32,0
34,0	71,7	86,2	32 300	73,3	85,4	30 500	34,0
36,0	70,3	85,4	29 300	72,0	84,6	29 600	36,0
38,0	68,9	84,6	26 700	70,6	83,7	27 700	38,0
40,0	67,5	83,6	24 400	69,1	82,8	25 300	40,0
42,0	66,1	82,7	22 300	67,7	81,8	23 100	42,0
44,0	64,7	81,6	20 400	66,3	80,8	21 200	44,0
46,0	63,2	80,5	18 700	64,8	79,7	19 400	46,0
48,0	61,7	79,4	17 100	63,3	78,5	17 800	48,0
50,0	60,2	78,1	15 700	61,8	77,2	16 300	50,0
52,0	58,7	76,8	14 400	60,3	75,9	15 000	52,0
54,0	57,2	75,4	13 100	58,7	74,5	13 700	54,0
56,0	55,6	73,9	12 000	57,1	73,0	12 500	56,0
58,0	54,0	72,4	11 000	55,4	71,4	11 500	58,0
60,0	52,3	70,7	10 000	53,8	69,7	10 500	60,0
62,0	50,6	69,0	9 100	52,1	67,9	9 500	62,0
64,0	48,9	67,1	8 300	50,3	66,0	8 600	64,0
66,0	47,1	65,1	7 500	48,5	64,0	7 800	66,0
68,0	45,2	63,0	6 700	46,6	61,9	7 000	68,0
70,0	43,3	60,7	6 000	44,6	59,6	6 300	70,0
72,0	41,3	58,3	5 300	42,6	57,1	5 600	72,0
74,0	39,2	55,7	4 500	40,4	54,4	4 800	74,0
76,0	37,0	52,9	3 800	38,2	51,5	4 100	76,0

MLC300 S-1

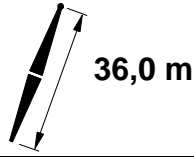
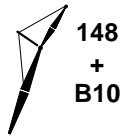
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
12,2	84,4	55,3	38 800				12,2
13,0	83,5	55,1	38 200				13,0
14,0	82,4	54,9	37 300				14,0
15,0	81,3	54,6	36 600				15,0
16,0	80,2	54,4	35 800				16,0
17,0	79,1	54,1	35 100	83,1	53,4	29 900	17,0
18,0	78,0	53,8	34 400	82,0	53,1	28 800	18,0
19,0	76,9	53,4	33 800	80,9	52,7	27 800	19,0
20,0	75,8	53,1	33 100	79,7	52,4	26 800	20,0
22,0	73,5	52,3	31 900	77,4	51,6	25 100	22,0
24,0	71,2	51,4	30 500	75,1	50,7	23 600	24,0
26,0	68,9	50,5	28 500	72,7	49,7	22 200	26,0
28,0	66,5	49,4	26 800	70,3	48,7	21 000	28,0
30,0	64,0	48,2	25 100	67,8	47,5	19 900	30,0
32,0	61,5	46,9	23 700	65,2	46,1	19 000	32,0
34,0	58,9	45,5	22 400	62,6	44,7	18 100	34,0
36,0	56,2	43,9	21 300	59,8	43,1	17 300	36,0
38,0	53,4	42,2	20 200	56,9	41,3	16 600	38,0
40,0	50,5	40,3	19 300	53,9	39,3	15 900	40,0
42,0	47,4	38,1	18 400	50,8	37,2	15 300	42,0
44,0	44,1	35,8	17 700	47,4	34,7	14 800	44,0
46,0	40,5	33,1	16 900	43,7	31,9	14 300	46,0
48,0	36,6	30,0	16 300	39,6	28,7	13 800	48,0
50,0	32,2	26,3	15 700	35,0	24,8	13 500	50,0
52,0	27,0	21,8	15 200				52,0

MLC300 S-1

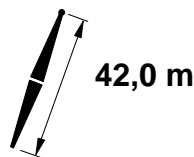
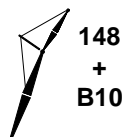
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
12,2	85,0	61,4	39 000				12,2
13,0	84,2	61,2	38 400				13,0
14,0	83,2	61,0	37 700				14,0
15,0	82,2	60,8	37 000				15,0
16,0	81,2	60,5	36 300				16,0
17,0	80,3	60,3	35 700	83,8	59,5	30 600	17,0
18,0	79,3	60,0	35 000	82,8	59,3	29 600	18,0
19,0	78,3	59,7	34 400	81,8	59,0	28 600	19,0
20,0	77,3	59,4	33 800	80,8	58,7	27 700	20,0
22,0	75,3	58,7	32 700	78,8	58,0	26 000	22,0
24,0	73,2	57,9	31 700	76,7	57,2	24 600	24,0
26,0	71,2	57,1	30 500	74,6	56,3	23 300	26,0
28,0	69,0	56,2	28 600	72,5	55,4	22 100	28,0
30,0	66,9	55,1	27 000	70,3	54,3	21 000	30,0
32,0	64,7	54,0	25 500	68,1	53,2	20 100	32,0
34,0	62,5	52,8	24 200	65,8	51,9	19 200	34,0
36,0	60,2	51,4	23 000	63,5	50,6	18 400	36,0
38,0	57,8	50,0	21 900	61,1	49,1	17 600	38,0
40,0	55,4	48,4	20 900	58,6	47,5	17 000	40,0
42,0	52,9	46,6	20 000	56,0	45,7	16 400	42,0
44,0	50,2	44,7	19 200	53,3	43,7	15 800	44,0
46,0	47,5	42,6	18 500	50,5	41,6	15 300	46,0
48,0	44,5	40,3	17 700	47,5	39,2	14 800	48,0
50,0	41,4	37,7	17 100	44,3	36,5	14 400	50,0
52,0	38,1	34,8	16 500	40,8	33,5	14 000	52,0
54,0	34,4	31,5	16 000	36,9	30,0	13 600	54,0
56,0	30,2	27,6	15 500	32,5	25,9	13 300	56,0
58,0	25,2	22,8	15 000				58,0

MLC300 S-1

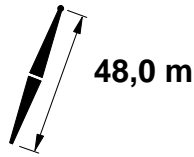
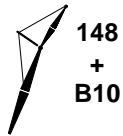
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	84,1	67,2	38 100				13,7
14,0	83,8	67,1	37 900				14,0
15,0	82,9	66,9	37 300				15,0
16,0	82,1	66,7	36 700				16,0
17,0	81,2	66,4	36 100	84,4	65,7	31 200	17,0
18,0	80,3	66,2	35 500	83,5	65,4	30 200	18,0
19,0	79,4	65,9	34 900	82,6	65,2	29 300	19,0
20,0	78,5	65,6	34 400	81,7	64,9	28 400	20,0
22,0	76,7	65,0	33 400	79,9	64,2	26 900	22,0
24,0	74,8	64,3	32 400	78,0	63,5	25 400	24,0
26,0	73,0	63,6	31 500	76,1	62,8	24 200	26,0
28,0	71,1	62,8	30 300	74,2	61,9	23 000	28,0
30,0	69,2	61,8	28 700	72,3	61,0	22 000	30,0
32,0	67,3	60,8	27 200	70,3	60,0	21 000	32,0
34,0	65,3	59,8	25 900	68,3	58,9	20 100	34,0
36,0	63,3	58,6	24 600	66,3	57,7	19 300	36,0
38,0	61,2	57,3	23 500	64,2	56,4	18 600	38,0
40,0	59,1	55,9	22 500	62,1	55,0	17 900	40,0
42,0	56,9	54,4	21 500	59,9	53,5	17 300	42,0
44,0	54,7	52,8	20 700	57,6	51,8	16 700	44,0
46,0	52,4	51,1	19 900	55,2	50,1	16 200	46,0
48,0	50,0	49,2	19 100	52,8	48,1	15 700	48,0
50,0	47,5	47,1	18 500	50,2	46,0	15 200	50,0
52,0	44,9	44,9	17 800	47,6	43,7	14 800	52,0
54,0	42,2	42,4	16 900	44,7	41,1	14 400	54,0
56,0	39,2	39,6	15 700	41,7	38,3	14 100	56,0
58,0	36,0	36,5	14 700	38,3	35,1	13 700	58,0
60,0	32,5	33,0	13 700	34,6	31,4	13 400	60,0
62,0	28,5	28,9	12 700	30,4	27,0	12 900	62,0
64,0	23,8	23,8	11 800				64,0

MLC300 S-1

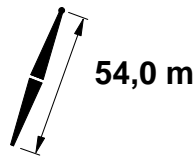
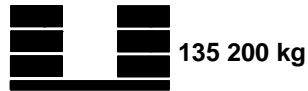
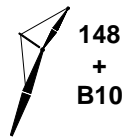
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	84,6	73,2	38 100				13,7
14,0	84,3	73,2	38 000				14,0
15,0	83,5	73,0	37 400				15,0
16,0	82,7	72,8	36 800				16,0
17,0	81,9	72,6	36 300				17,0
18,0	81,1	72,4	35 800				18,0
19,0	80,3	72,1	35 300	83,3	71,3	29 900	19,0
20,0	79,5	71,9	34 800	82,4	71,0	29 000	20,0
22,0	77,8	71,3	33 800	80,8	70,5	27 500	22,0
24,0	76,1	70,7	32 900	79,1	69,8	26 200	24,0
26,0	74,5	70,0	32 100	77,4	69,2	24 900	26,0
28,0	72,8	69,2	31 200	75,6	68,4	23 800	28,0
30,0	71,0	68,4	30 200	73,9	67,6	22 800	30,0
32,0	69,3	67,5	28 700	72,1	66,6	21 900	32,0
34,0	67,5	66,5	27 400	70,3	65,7	21 000	34,0
36,0	65,7	65,5	26 100	68,5	64,6	20 200	36,0
38,0	63,9	64,4	25 000	66,7	63,4	19 400	38,0
40,0	62,1	63,1	23 900	64,8	62,2	18 800	40,0
42,0	60,2	61,8	22 900	62,9	60,9	18 100	42,0
44,0	58,2	60,4	22 100	60,9	59,5	17 600	44,0
46,0	56,2	58,9	21 200	58,8	57,9	17 000	46,0
48,0	54,2	57,3	20 200	56,8	56,3	16 500	48,0
50,0	52,1	55,5	18 700	54,6	54,5	16 000	50,0
52,0	49,9	53,7	17 400	52,4	52,5	15 600	52,0
54,0	47,6	51,6	16 200	50,1	50,5	15 200	54,0
56,0	45,2	49,4	15 100	47,6	48,2	14 800	56,0
58,0	42,7	47,0	14 000	45,1	45,7	14 400	58,0
60,0	40,1	44,3	13 000	42,3	43,0	13 400	60,0
62,0	37,3	41,4	12 100	39,4	40,0	12 400	62,0
64,0	34,2	38,2	11 300	36,3	36,5	11 500	64,0
66,0	30,9	34,4	10 400	32,7	32,6	10 600	66,0
68,0	27,1	30,1	9 700				68,0
70,0	22,5	24,7	8 900				70,0

MLC300 S-1

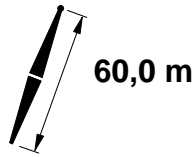
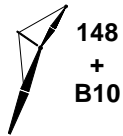
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	85,0	79,3	38 100				13,7
14,0	84,8	79,3	37 900				14,0
15,0	84,0	79,1	37 400				15,0
16,0	83,3	78,9	36 900				16,0
17,0	82,5	78,7	36 400				17,0
18,0	81,8	78,5	36 000				18,0
19,0	81,0	78,3	35 500	83,8	77,4	30 300	19,0
20,0	80,3	78,0	35 000	83,0	77,2	29 500	20,0
22,0	78,8	77,5	34 200	81,5	76,7	28 100	22,0
24,0	77,3	77,0	33 300	80,0	76,1	26 800	24,0
26,0	75,7	76,3	32 500	78,4	75,5	25 600	26,0
28,0	74,2	75,6	31 800	76,8	74,8	24 500	28,0
30,0	72,6	74,9	31 000	75,2	74,0	23 500	30,0
32,0	71,0	74,1	30 200	73,6	73,2	22 600	32,0
34,0	69,4	73,2	28 800	72,0	72,3	21 700	34,0
36,0	67,8	72,2	27 500	70,4	71,3	21 000	36,0
38,0	66,1	71,2	26 300	68,7	70,3	20 200	38,0
40,0	64,5	70,1	25 300	67,0	69,2	19 600	40,0
42,0	62,8	68,9	24 300	65,3	68,0	18 900	42,0
44,0	61,0	67,7	23 000	63,5	66,7	18 400	44,0
46,0	59,3	66,4	21 300	61,7	65,4	17 800	46,0
48,0	57,5	64,9	19 800	59,9	63,9	17 300	48,0
50,0	55,6	63,4	18 300	58,0	62,3	16 800	50,0
52,0	53,7	61,8	17 000	56,1	60,7	16 300	52,0
54,0	51,8	60,0	15 800	54,1	58,9	15 900	54,0
56,0	49,7	58,1	14 700	52,0	57,0	15 200	56,0
58,0	47,7	56,1	13 600	49,9	54,9	14 100	58,0
60,0	45,5	53,9	12 700	47,7	52,7	13 100	60,0
62,0	43,2	51,6	11 800	45,4	50,3	12 100	62,0
64,0	40,8	49,0	10 900	42,9	47,6	11 200	64,0
66,0	38,3	46,2	10 100	40,3	44,7	10 400	66,0
68,0	35,6	43,1	9 300	37,5	41,6	9 600	68,0
70,0	32,7	39,7	8 600	34,5	38,0	8 800	70,0
72,0	29,5	35,8	7 900	31,1	33,8	8 100	72,0
74,0	25,8	31,2	7 300				74,0
76,0	21,5	25,6	6 600				76,0

MLC300 S-1

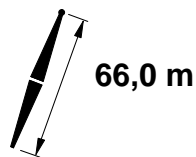
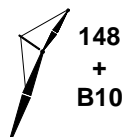
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	84,3	85,1	37 200				15,2
16,0	83,8	85,0	36 900				16,0
17,0	83,1	84,8	36 400				17,0
18,0	82,4	84,6	36 000				18,0
19,0	81,7	84,4	35 600	84,2	83,6	30 700	19,0
20,0	81,0	84,2	35 200	83,5	83,3	30 000	20,0
22,0	79,6	83,7	34 400	82,1	82,8	28 600	22,0
24,0	78,2	83,2	33 600	80,7	82,3	27 400	24,0
26,0	76,8	82,6	32 800	79,3	81,7	26 200	26,0
28,0	75,3	82,0	32 100	77,8	81,1	25 200	28,0
30,0	73,9	81,3	31 400	76,4	80,4	24 200	30,0
32,0	72,4	80,5	30 800	74,9	79,6	23 300	32,0
34,0	71,0	79,7	30 000	73,4	78,8	22 400	34,0
36,0	69,5	78,9	28 800	71,9	77,9	21 700	36,0
38,0	68,0	77,9	27 600	70,4	77,0	21 000	38,0
40,0	66,5	76,9	26 300	68,8	76,0	20 300	40,0
42,0	64,9	75,9	24 200	67,3	74,9	19 700	42,0
44,0	63,4	74,7	22 300	65,7	73,8	19 100	44,0
46,0	61,8	73,5	20 600	64,1	72,5	18 500	46,0
48,0	60,1	72,2	19 000	62,4	71,2	18 000	48,0
50,0	58,5	70,9	17 600	60,7	69,8	17 500	50,0
52,0	56,8	69,4	16 300	59,0	68,4	17 000	52,0
54,0	55,1	67,9	15 100	57,3	66,8	15 700	54,0
56,0	53,3	66,2	13 900	55,5	65,1	14 500	56,0
58,0	51,5	64,5	12 900	53,6	63,3	13 400	58,0
60,0	49,6	62,6	11 900	51,7	61,4	12 400	60,0
62,0	47,7	60,6	11 000	49,8	59,4	11 500	62,0
64,0	45,7	58,4	10 200	47,7	57,2	10 600	64,0
66,0	43,6	56,1	9 400	45,6	54,8	9 700	66,0
68,0	41,4	53,6	8 600	43,4	52,3	9 000	68,0
70,0	39,2	51,0	7 900	41,0	49,5	8 200	70,0
72,0	36,7	48,0	7 200	38,5	46,5	7 500	72,0
74,0	34,1	44,8	6 600	35,8	43,1	6 800	74,0
76,0	31,3	41,2	5 900	32,9	39,3	6 100	76,0
80,0	24,7	32,3	4 800				80,0

MLC300 S-1

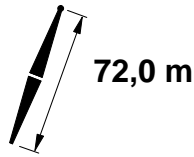
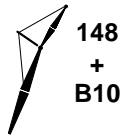
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	84,7	91,2	37 000				15,2
16,0	84,2	91,0	36 700				16,0
17,0	83,6	90,9	36 300				17,0
18,0	82,9	90,7	35 900				18,0
19,0	82,3	90,5	35 600				19,0
20,0	81,6	90,3	35 200	84,0	89,4	30 300	20,0
22,0	80,3	89,9	34 400	82,7	89,0	29 000	22,0
24,0	79,0	89,4	33 700	81,3	88,5	27 900	24,0
26,0	77,7	88,8	33 000	80,0	87,9	26 700	26,0
28,0	76,4	88,2	32 400	78,7	87,3	25 700	28,0
30,0	75,0	87,6	31 800	77,3	86,7	24 800	30,0
32,0	73,7	86,9	31 100	76,0	86,0	23 900	32,0
34,0	72,3	86,2	30 600	74,6	85,2	23 100	34,0
36,0	70,9	85,4	29 900	73,2	84,4	22 300	36,0
38,0	69,6	84,5	28 200	71,8	83,5	21 600	38,0
40,0	68,2	83,6	25 900	70,4	82,6	21 000	40,0
42,0	66,7	82,6	23 800	68,9	81,6	20 300	42,0
44,0	65,3	81,6	21 900	67,5	80,6	19 700	44,0
46,0	63,8	80,5	20 200	66,0	79,5	19 200	46,0
48,0	62,4	79,3	18 600	64,5	78,3	18 700	48,0
50,0	60,9	78,0	17 200	63,0	77,0	17 900	50,0
52,0	59,4	76,7	15 900	61,5	75,7	16 600	52,0
54,0	57,8	75,3	14 700	59,9	74,3	15 300	54,0
56,0	56,2	73,9	13 500	58,3	72,8	14 200	56,0
58,0	54,6	72,3	12 500	56,6	71,2	13 100	58,0
60,0	52,9	70,6	11 500	55,0	69,5	12 100	60,0
62,0	51,3	68,9	10 600	53,2	67,7	11 100	62,0
64,0	49,5	67,0	9 800	51,5	65,8	10 200	64,0
66,0	47,7	65,0	9 000	49,6	63,8	9 400	66,0
68,0	45,9	62,9	8 200	47,7	61,6	8 600	68,0
70,0	43,9	60,6	7 500	45,8	59,3	7 900	70,0
72,0	41,9	58,2	6 800	43,7	56,8	7 200	72,0
74,0	39,8	55,6	6 200	41,6	54,1	6 500	74,0
76,0	37,6	52,8	5 600	39,3	51,2	5 900	76,0
80,0	32,8	46,3	4 400	34,3	44,5	4 600	80,0

MLC300 S-1

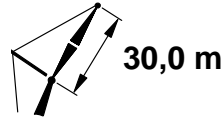
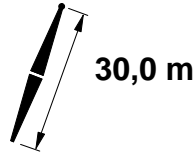
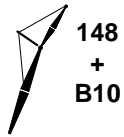
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	84,1	97,0	36 200				16,8
17,0	84,0	97,0	36 100				17,0
18,0	83,4	96,8	35 700				18,0
19,0	82,8	96,6	35 400				19,0
20,0	82,1	96,4	35 100				20,0
22,0	80,9	96,0	34 400	84,4	95,5	30 700	22,0
24,0	79,7	95,5	33 700	81,9	94,6	28 300	24,0
26,0	78,5	95,0	33 100	80,7	94,1	27 200	26,0
28,0	77,2	94,5	32 500	79,4	93,6	26 200	28,0
30,0	76,0	93,9	31 900	78,2	93,0	25 300	30,0
32,0	74,7	93,2	31 400	76,9	92,3	24 500	32,0
34,0	73,5	92,5	30 800	75,6	91,6	23 700	34,0
36,0	72,2	91,8	29 800	74,3	90,9	22 900	36,0
38,0	70,9	91,0	27 500	73,0	90,1	22 200	38,0
40,0	69,6	90,2	25 200	71,7	89,2	21 600	40,0
42,0	68,3	89,3	23 100	70,4	88,3	21 000	42,0
44,0	67,0	88,3	21 200	69,1	87,3	20 400	44,0
46,0	65,6	87,3	19 400	67,7	86,3	19 800	46,0
48,0	64,3	86,2	17 900	66,3	85,2	18 800	48,0
50,0	62,9	85,1	16 400	64,9	84,0	17 300	50,0
52,0	61,5	83,9	15 100	63,5	82,8	15 900	52,0
54,0	60,1	82,6	13 900	62,1	81,5	14 600	54,0
56,0	58,7	81,3	12 700	60,6	80,2	13 500	56,0
58,0	57,2	79,8	11 700	59,2	78,7	12 400	58,0
60,0	55,7	78,3	10 700	57,6	77,2	11 400	60,0
62,0	54,2	76,8	9 800	56,1	75,6	10 400	62,0
64,0	52,7	75,1	9 000	54,5	73,9	9 500	64,0
66,0	51,1	73,3	8 200	52,9	72,1	8 700	66,0
68,0	49,4	71,5	7 400	51,2	70,2	7 900	68,0
70,0	47,8	69,5	6 700	49,5	68,2	7 100	70,0
72,0	46,0	67,4	6 000	47,8	66,1	6 400	72,0
74,0	44,2	65,2	5 400	45,9	63,8	5 800	74,0
76,0	42,4	62,8	4 700	44,1	61,4	5 100	76,0
80,0	38,4	57,5	3 300	40,0	56,0	3 700	80,0

MLC300 S-1

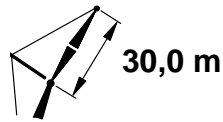
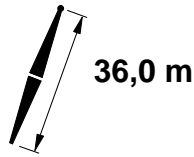
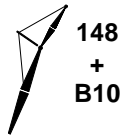
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	83,9	61,1	30 100				13,7
14,0	83,6	61,1	30 000				14,0
15,0	82,6	60,8	29 400				15,0
16,0	81,7	60,6	28 800				16,0
17,0	80,7	60,4	28 300				17,0
18,0	79,7	60,1	27 700				18,0
19,0	78,7	59,8	27 200	83,2	59,1	24 300	19,0
20,0	77,7	59,5	26 600	82,2	58,8	23 700	20,0
22,0	75,7	58,8	25 400	80,2	58,1	22 300	22,0
24,0	73,7	58,0	24 300	78,1	57,3	20 900	24,0
26,0	71,6	57,2	23 300	76,0	56,5	19 600	26,0
28,0	69,5	56,2	22 400	73,9	55,5	18 400	28,0
30,0	67,4	55,2	21 500	71,7	54,5	17 400	30,0
32,0	65,2	54,1	20 600	69,5	53,3	16 500	32,0
34,0	62,9	52,9	19 700	67,3	52,1	15 600	34,0
36,0	60,6	51,5	18 600	64,9	50,7	14 900	36,0
38,0	58,3	50,1	17 600	62,5	49,2	14 200	38,0
40,0	55,9	48,5	16 700	60,1	47,6	13 500	40,0
42,0	53,3	46,7	15 900	57,5	45,8	13 000	42,0
44,0	50,7	44,8	15 200	54,8	43,9	12 400	44,0
46,0	48,0	42,7	14 500	52,0	41,8	11 900	46,0
48,0	45,0	40,4	13 900	49,0	39,4	11 500	48,0
50,0	41,9	37,9	13 300	45,8	36,7	11 100	50,0
52,0	38,6	35,0	12 800	42,3	33,8	10 700	52,0
54,0	34,9	31,7	12 300	38,5	30,3	10 400	54,0
56,0	30,8	27,8	11 800	34,1	26,2	10 100	56,0
58,0	25,8	23,0	11 400				58,0

MLC300 S-1

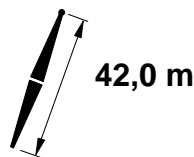
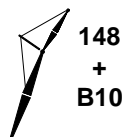
ASME B30.5



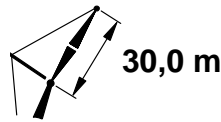
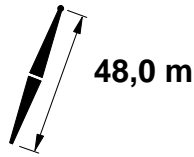
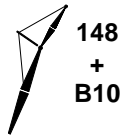
m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	84,5	67,2	30 300				13,7
14,0	84,2	67,2	30 100				14,0
15,0	83,3	67,0	29 600				15,0
16,0	82,4	66,8	29 100				16,0
17,0	81,6	66,5	28 600				17,0
18,0	80,7	66,3	28 100				18,0
19,0	79,8	66,0	27 600	83,9	65,3	24 500	19,0
20,0	78,9	65,7	27 100	83,0	65,0	24 100	20,0
22,0	77,1	65,1	26 100	81,1	64,3	23 000	22,0
24,0	75,2	64,4	25 100	79,3	63,7	21 600	24,0
26,0	73,4	63,7	24 100	77,4	62,9	20 400	26,0
28,0	71,5	62,8	23 200	75,5	62,0	19 200	28,0
30,0	69,6	61,9	22 400	73,6	61,1	18 200	30,0
32,0	67,7	60,9	21 500	71,6	60,1	17 300	32,0
34,0	65,7	59,8	20 800	69,6	59,0	16 500	34,0
36,0	63,7	58,7	20 000	67,6	57,8	15 700	36,0
38,0	61,6	57,4	19 000	65,5	56,5	15 000	38,0
40,0	59,5	56,0	18 100	63,4	55,1	14 400	40,0
42,0	57,4	54,5	17 300	61,2	53,6	13 800	42,0
44,0	55,1	52,9	16 500	58,9	52,0	13 300	44,0
46,0	52,9	51,2	15 800	56,6	50,2	12 800	46,0
48,0	50,5	49,3	15 100	54,1	48,3	12 300	48,0
50,0	48,0	47,2	14 500	51,6	46,2	11 900	50,0
52,0	45,4	45,0	13 900	48,9	43,8	11 500	52,0
54,0	42,6	42,5	13 400	46,1	41,3	11 100	54,0
56,0	39,7	39,8	12 900	43,0	38,5	10 800	56,0
58,0	36,5	36,7	12 500	39,7	35,3	10 500	58,0
60,0	33,0	33,2	12 100	36,1	31,6	10 200	60,0
62,0	29,0	29,1	11 700	31,9	27,2	9 900	62,0
64,0	24,3	24,0	11 300	26,7	21,7	9 700	64,0

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ASME B30.5



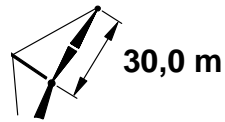
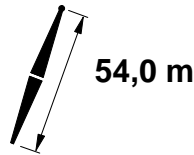
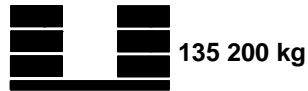
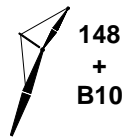
m	10°			20°			m
	°	m	kg	°	m	kg	
13,7	84,9	73,3	30 400				13,7
14,0	84,7	73,3	30 200				14,0
15,0	83,9	73,1	29 700				15,0
16,0	83,1	72,9	29 300				16,0
17,0	82,3	72,7	28 800				17,0
18,0	81,5	72,4	28 400				18,0
19,0	80,6	72,2	27 900				19,0
20,0	79,8	71,9	27 500	83,6	71,1	24 300	20,0
22,0	78,2	71,4	26 600	81,9	70,6	23 400	22,0
24,0	76,5	70,7	25 700	80,2	69,9	22 200	24,0
26,0	74,8	70,1	24 800	78,5	69,2	21 000	26,0
28,0	73,1	69,3	23 900	76,8	68,5	19 900	28,0
30,0	71,4	68,5	23 100	75,1	67,6	19 000	30,0
32,0	69,7	67,6	22 300	73,3	66,7	18 100	32,0
34,0	67,9	66,6	21 600	71,5	65,7	17 200	34,0
36,0	66,1	65,6	20 900	69,7	64,7	16 500	36,0
38,0	64,3	64,4	20 200	67,9	63,5	15 800	38,0
40,0	62,4	63,2	19 400	66,0	62,3	15 200	40,0
42,0	60,5	61,9	18 500	64,0	61,0	14 600	42,0
44,0	58,6	60,5	17 700	62,1	59,6	14 000	44,0
46,0	56,6	59,0	17 000	60,1	58,0	13 500	46,0
48,0	54,6	57,4	16 300	58,0	56,4	13 100	48,0
50,0	52,5	55,6	15 600	55,8	54,6	12 600	50,0
52,0	50,3	53,7	15 000	53,6	52,7	12 200	52,0
54,0	48,0	51,7	14 500	51,3	50,6	11 800	54,0
56,0	45,6	49,5	14 000	48,9	48,3	11 500	56,0
58,0	43,2	47,1	13 500	46,3	45,8	11 100	58,0
60,0	40,5	44,5	13 100	43,6	43,1	10 800	60,0
62,0	37,7	41,5	12 600	40,7	40,1	10 600	62,0
64,0	34,7	38,3	12 200	37,5	36,7	10 300	64,0
66,0	31,3	34,6	11 700	34,0	32,8	10 100	66,0
68,0	27,6	30,3	10 900	30,0	28,2	9 900	68,0
70,0	23,0	24,9	10 200				70,0



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	84,2	79,1	29 700				15,2
16,0	83,6	79,0	29 400				16,0
17,0	82,9	78,8	28 900				17,0
18,0	82,1	78,6	28 500				18,0
19,0	81,4	78,3	28 100				19,0
20,0	80,6	78,1	27 700	84,1	77,3	24 400	20,0
22,0	79,1	77,6	27 000	82,6	76,7	23 700	22,0
24,0	77,6	77,0	26 200	81,0	76,2	22 800	24,0
26,0	76,0	76,4	25 300	79,5	75,5	21 600	26,0
28,0	74,5	75,7	24 500	77,9	74,8	20 600	28,0
30,0	72,9	75,0	23 700	76,3	74,1	19 600	30,0
32,0	71,3	74,1	23 000	74,7	73,2	18 700	32,0
34,0	69,7	73,3	22 300	73,1	72,4	17 900	34,0
36,0	68,1	72,3	21 600	71,4	71,4	17 200	36,0
38,0	66,5	71,3	21 000	69,8	70,4	16 500	38,0
40,0	64,8	70,2	20 400	68,1	69,3	15 900	40,0
42,0	63,1	69,0	19 700	66,4	68,1	15 300	42,0
44,0	61,4	67,8	18 900	64,6	66,8	14 700	44,0
46,0	59,6	66,4	18 100	62,8	65,4	14 200	46,0
48,0	57,8	65,0	17 400	61,0	64,0	13 700	48,0
50,0	56,0	63,5	16 700	59,1	62,4	13 300	50,0
52,0	54,1	61,8	16 100	57,2	60,8	12 900	52,0
54,0	52,1	60,1	15 500	55,2	59,0	12 500	54,0
56,0	50,1	58,2	15 000	53,1	57,1	12 100	56,0
58,0	48,0	56,2	14 500	51,0	55,0	11 800	58,0
60,0	45,9	54,0	13 600	48,8	52,8	11 500	60,0
62,0	43,6	51,7	12 700	46,5	50,4	11 200	62,0
64,0	41,2	49,1	11 900	44,0	47,7	10 900	64,0
66,0	38,7	46,3	11 100	41,4	44,9	10 600	66,0
68,0	36,0	43,3	10 300	38,6	41,7	10 400	68,0
70,0	33,1	39,8	9 600	35,6	38,1	9 900	70,0
72,0	29,9	35,9	8 900	32,2	34,0	9 100	72,0
74,0	26,3	31,4	8 200	28,3	29,1	8 400	74,0
76,0	21,9	25,8	7 600				76,0

MLC300 S-1

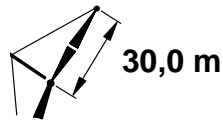
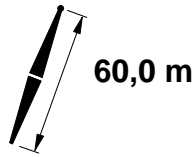
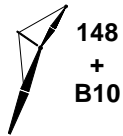
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	84,6	85,2	29 700				15,2
16,0	84,1	85,1	29 400				16,0
17,0	83,4	84,9	29 000				17,0
18,0	82,7	84,7	28 600				18,0
19,0	82,0	84,5	28 200				19,0
20,0	81,3	84,3	27 900	84,5	83,4	24 500	20,0
22,0	79,9	83,8	27 200	83,1	82,9	23 900	22,0
24,0	78,5	83,3	26 500	81,7	82,4	23 200	24,0
26,0	77,1	82,7	25 800	80,3	81,8	22 100	26,0
28,0	75,7	82,0	25 000	78,8	81,1	21 100	28,0
30,0	74,2	81,3	24 300	77,4	80,4	20 200	30,0
32,0	72,8	80,6	23 500	75,9	79,7	19 300	32,0
34,0	71,3	79,8	22 900	74,4	78,9	18 600	34,0
36,0	69,8	78,9	22 200	72,9	78,0	17 800	36,0
38,0	68,3	78,0	21 600	71,4	77,0	17 100	38,0
40,0	66,8	77,0	21 100	69,8	76,0	16 500	40,0
42,0	65,2	75,9	20 500	68,3	75,0	15 900	42,0
44,0	63,7	74,8	19 900	66,7	73,8	15 400	44,0
46,0	62,1	73,6	19 200	65,1	72,6	14 900	46,0
48,0	60,5	72,3	18 400	63,4	71,3	14 400	48,0
50,0	58,8	70,9	17 800	61,8	69,9	13 900	50,0
52,0	57,1	69,5	17 100	60,0	68,4	13 500	52,0
54,0	55,4	67,9	16 300	58,3	66,8	13 100	54,0
56,0	53,6	66,3	15 200	56,5	65,2	12 700	56,0
58,0	51,8	64,5	14 200	54,7	63,4	12 400	58,0
60,0	50,0	62,7	13 200	52,8	61,5	12 000	60,0
62,0	48,0	60,7	12 300	50,8	59,4	11 700	62,0
64,0	46,0	58,5	11 400	48,7	57,2	11 500	64,0
66,0	44,0	56,2	10 600	46,6	54,9	11 100	66,0
68,0	41,8	53,8	9 900	44,4	52,3	10 300	68,0
70,0	39,5	51,1	9 200	42,0	49,6	9 600	70,0
72,0	37,1	48,1	8 500	39,5	46,5	8 800	72,0
74,0	34,5	44,9	7 900	36,9	43,2	8 200	74,0
76,0	31,7	41,3	7 300	33,9	39,4	7 500	76,0
80,0	25,1	32,5	6 100				80,0

MLC300 S-1

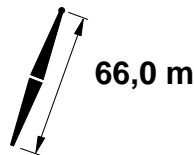
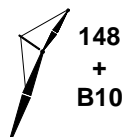
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	85,0	91,2	29 500				15,2
16,0	84,5	91,1	29 300				16,0
17,0	83,8	91,0	28 900				17,0
18,0	83,2	90,8	28 600				18,0
19,0	82,5	90,6	28 300				19,0
20,0	81,9	90,4	27 900				20,0
22,0	80,6	89,9	27 300	83,6	89,0	24 000	22,0
24,0	79,3	89,5	26 700	82,3	88,5	23 400	24,0
26,0	78,0	88,9	26 000	80,9	88,0	22 600	26,0
28,0	76,6	88,3	25 400	79,6	87,4	21 600	28,0
30,0	75,3	87,7	24 700	78,3	86,7	20 700	30,0
32,0	74,0	87,0	24 000	76,9	86,0	19 900	32,0
34,0	72,6	86,3	23 400	75,5	85,3	19 100	34,0
36,0	71,2	85,5	22 800	74,1	84,5	18 400	36,0
38,0	69,9	84,6	22 200	72,7	83,6	17 700	38,0
40,0	68,5	83,7	21 600	71,3	82,7	17 100	40,0
42,0	67,0	82,7	21 100	69,9	81,7	16 500	42,0
44,0	65,6	81,7	20 600	68,4	80,7	16 000	44,0
46,0	64,2	80,6	20 100	67,0	79,5	15 500	46,0
48,0	62,7	79,4	19 400	65,5	78,4	15 000	48,0
50,0	61,2	78,2	18 100	64,0	77,1	14 500	50,0
52,0	59,7	76,8	16 800	62,4	75,8	14 100	52,0
54,0	58,1	75,5	15 600	60,8	74,4	13 700	54,0
56,0	56,5	74,0	14 500	59,2	72,9	13 300	56,0
58,0	54,9	72,4	13 400	57,6	71,3	13 000	58,0
60,0	53,3	70,8	12 500	55,9	69,6	12 600	60,0
62,0	51,6	69,0	11 500	54,2	67,8	12 100	62,0
64,0	49,8	67,1	10 700	52,4	65,9	11 300	64,0
66,0	48,1	65,2	9 900	50,6	63,9	10 400	66,0
68,0	46,2	63,0	9 100	48,7	61,7	9 700	68,0
70,0	44,3	60,8	8 400	46,7	59,4	8 900	70,0
72,0	42,3	58,4	7 800	44,7	56,9	8 200	72,0
74,0	40,2	55,8	7 100	42,6	54,2	7 500	74,0
76,0	38,0	52,9	6 500	40,3	51,3	6 900	76,0
80,0	33,2	46,5	5 400	35,3	44,7	5 700	80,0
84,0	27,5	38,5	4 400	29,3	36,2	4 600	84,0
88,0	20,1	27,6	3 200				88,0

MLC300 S-1

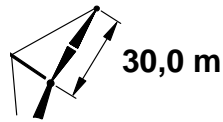
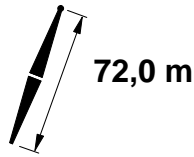
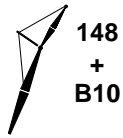
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	84,4	97,1	28 900				16,8
17,0	84,2	97,0	28 800				17,0
18,0	83,6	96,8	28 500				18,0
19,0	83,0	96,7	28 200				19,0
20,0	82,4	96,5	27 900				20,0
22,0	81,2	96,1	27 300	84,0	95,1	24 000	22,0
24,0	80,0	95,6	26 800	82,8	94,7	23 500	24,0
26,0	78,7	95,1	26 200	81,5	94,1	22 900	26,0
28,0	77,5	94,5	25 600	80,3	93,6	22 100	28,0
30,0	76,3	94,0	25 000	79,0	93,0	21 200	30,0
32,0	75,0	93,3	24 400	77,8	92,3	20 400	32,0
34,0	73,7	92,6	23 800	76,5	91,6	19 600	34,0
36,0	72,5	91,9	23 200	75,2	90,9	18 900	36,0
38,0	71,2	91,1	22 600	73,9	90,1	18 200	38,0
40,0	69,9	90,2	22 100	72,6	89,2	17 600	40,0
42,0	68,6	89,3	21 600	71,3	88,3	17 100	42,0
44,0	67,3	88,4	21 100	69,9	87,3	16 500	44,0
46,0	65,9	87,4	20 500	68,6	86,3	16 000	46,0
48,0	64,6	86,3	19 100	67,2	85,2	15 500	48,0
50,0	63,2	85,1	17 700	65,8	84,1	15 100	50,0
52,0	61,8	83,9	16 400	64,4	82,9	14 600	52,0
54,0	60,4	82,7	15 200	63,0	81,6	14 300	54,0
56,0	59,0	81,3	14 000	61,5	80,2	13 900	56,0
58,0	57,5	79,9	13 000	60,0	78,8	13 500	58,0
60,0	56,0	78,4	12 000	58,5	77,3	12 800	60,0
62,0	54,5	76,8	11 100	57,0	75,7	11 800	62,0
64,0	52,9	75,2	10 300	55,4	74,0	10 900	64,0
66,0	51,4	73,4	9 500	53,8	72,2	10 100	66,0
68,0	49,7	71,6	8 700	52,1	70,3	9 300	68,0
70,0	48,0	69,6	8 000	50,4	68,3	8 500	70,0
72,0	46,3	67,5	7 300	48,7	66,1	7 800	72,0
74,0	44,5	65,3	6 700	46,8	63,9	7 200	74,0
76,0	42,7	62,9	6 100	44,9	61,4	6 500	76,0
80,0	38,7	57,6	5 000	40,9	56,0	5 400	80,0
84,0	34,4	51,5	3 800	36,4	49,7	4 200	84,0

MLC300 S-1

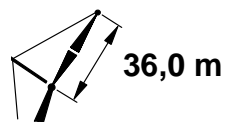
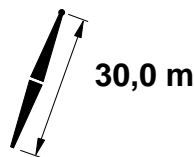
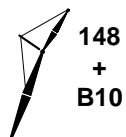
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	84,7	103,1	28 700				16,8
17,0	84,6	103,1	28 600				17,0
18,0	84,0	102,9	28 300				18,0
19,0	83,4	102,8	28 100				19,0
20,0	82,9	102,6	27 800				20,0
22,0	81,7	102,2	27 300	84,4	101,2	24 000	22,0
24,0	80,6	101,8	26 700	83,2	100,8	23 500	24,0
26,0	79,4	101,3	26 200	82,0	100,3	23 000	26,0
28,0	78,3	100,8	25 700	80,9	99,8	22 400	28,0
30,0	77,1	100,2	25 200	79,7	99,2	21 600	30,0
32,0	75,9	99,6	24 700	78,5	98,6	20 800	32,0
34,0	74,7	99,0	24 100	77,3	98,0	20 100	34,0
36,0	73,6	98,3	23 500	76,1	97,3	19 400	36,0
38,0	72,4	97,5	23 000	74,9	96,5	18 700	38,0
40,0	71,1	96,7	22 500	73,7	95,7	18 100	40,0
42,0	69,9	95,9	22 000	72,5	94,9	17 600	42,0
44,0	68,7	95,0	21 500	71,2	94,0	17 000	44,0
46,0	67,5	94,1	20 000	70,0	93,0	16 500	46,0
48,0	66,2	93,1	18 400	68,7	92,0	16 000	48,0
50,0	64,9	92,0	16 900	67,4	90,9	15 600	50,0
52,0	63,7	90,9	15 600	66,1	89,8	15 200	52,0
54,0	62,4	89,7	14 400	64,8	88,6	14 800	54,0
56,0	61,0	88,5	13 300	63,5	87,4	14 100	56,0
58,0	59,7	87,2	12 200	62,1	86,1	13 100	58,0
60,0	58,3	85,9	11 200	60,7	84,7	12 100	60,0
62,0	57,0	84,4	10 300	59,3	83,2	11 100	62,0
64,0	55,6	82,9	9 500	57,9	81,7	10 200	64,0
66,0	54,1	81,3	8 700	56,4	80,1	9 400	66,0
68,0	52,7	79,7	7 900	55,0	78,4	8 600	68,0
70,0	51,2	77,9	7 200	53,4	76,6	7 800	70,0
72,0	49,6	76,0	6 500	51,9	74,7	7 100	72,0
74,0	48,1	74,1	5 900	50,3	72,7	6 400	74,0
76,0	46,4	72,0	5 300	48,6	70,6	5 800	76,0
80,0	43,0	67,5	3 900	45,2	66,0	4 500	80,0

MLC300 S-1

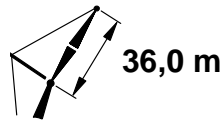
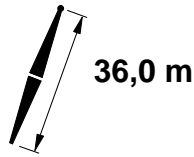
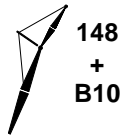
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	84,5	66,9	23 500				15,2
16,0	83,8	66,7	23 200				16,0
17,0	82,9	66,5	22 700				17,0
18,0	82,1	66,2	22 200				18,0
19,0	81,2	66,0	21 700				19,0
20,0	80,3	65,7	21 200				20,0
22,0	78,4	65,1	20 300	83,4	64,3	18 000	22,0
24,0	76,6	64,4	19 400	81,6	63,6	17 300	24,0
26,0	74,8	63,6	18 500	79,7	62,8	16 500	26,0
28,0	72,9	62,8	17 700	77,8	62,0	15 800	28,0
30,0	71,0	61,9	16 900	75,8	61,0	15 000	30,0
32,0	69,0	60,9	16 200	73,9	60,0	14 200	32,0
34,0	67,1	59,8	15 500	71,9	58,9	13 500	34,0
36,0	65,1	58,6	14 800	69,8	57,7	12 800	36,0
38,0	63,0	57,3	14 200	67,7	56,4	12 200	38,0
40,0	60,9	56,0	13 600	65,6	55,0	11 600	40,0
42,0	58,7	54,5	13 100	63,4	53,5	11 100	42,0
44,0	56,5	52,9	12 500	61,1	51,9	10 600	44,0
46,0	54,2	51,1	12 100	58,8	50,1	10 200	46,0
48,0	51,8	49,2	11 600	56,4	48,2	9 700	48,0
50,0	49,3	47,2	11 200	53,8	46,0	9 300	50,0
52,0	46,7	44,9	10 800	51,1	43,7	9 000	52,0
54,0	44,0	42,4	10 400	48,3	41,2	8 700	54,0
56,0	41,0	39,7	10 100	45,2	38,3	8 400	56,0
58,0	37,8	36,6	9 700	41,9	35,1	8 100	58,0
60,0	34,3	33,1	9 400	38,2	31,4	7 800	60,0
62,0	30,4	29,0	9 000	34,0	27,0	7 600	62,0
64,0	25,6	23,9	8 700	28,8	21,4	7 400	64,0

MLC300 S-1

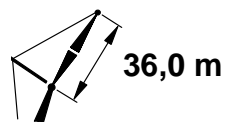
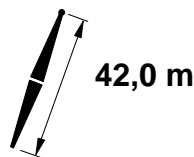
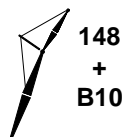
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	85,0	73,0	23 700				15,2
16,0	84,4	72,8	23 300				16,0
17,0	83,5	72,6	22 900				17,0
18,0	82,7	72,4	22 400				18,0
19,0	81,9	72,1	22 000				19,0
20,0	81,1	71,9	21 600				20,0
22,0	79,4	71,3	20 700	84,0	70,4	18 200	22,0
24,0	77,8	70,7	19 900	82,3	69,8	17 500	24,0
26,0	76,1	70,0	19 100	80,6	69,1	16 800	26,0
28,0	74,4	69,3	18 300	78,9	68,3	16 200	28,0
30,0	72,7	68,4	17 500	77,1	67,5	15 600	30,0
32,0	70,9	67,5	16 800	75,4	66,6	14 800	32,0
34,0	69,2	66,6	16 200	73,6	65,6	14 100	34,0
36,0	67,4	65,5	15 500	71,7	64,6	13 400	36,0
38,0	65,5	64,4	14 900	69,9	63,4	12 800	38,0
40,0	63,7	63,2	14 400	68,0	62,2	12 200	40,0
42,0	61,8	61,9	13 800	66,1	60,8	11 700	42,0
44,0	59,8	60,4	13 300	64,1	59,4	11 200	44,0
46,0	57,9	58,9	12 800	62,1	57,9	10 800	46,0
48,0	55,8	57,3	12 400	60,0	56,2	10 400	48,0
50,0	53,7	55,6	12 000	57,8	54,4	10 000	50,0
52,0	51,5	53,7	11 600	55,6	52,5	9 600	52,0
54,0	49,2	51,6	11 200	53,3	50,4	9 300	54,0
56,0	46,9	49,4	10 800	50,8	48,1	9 000	56,0
58,0	44,4	47,0	10 500	48,3	45,7	8 700	58,0
60,0	41,7	44,4	10 200	45,5	42,9	8 400	60,0
62,0	38,9	41,5	9 800	42,6	39,9	8 200	62,0
64,0	35,9	38,2	9 500	39,4	36,5	7 900	64,0
66,0	32,5	34,5	9 200	35,9	32,6	7 700	66,0
68,0	28,7	30,1	8 900	31,8	27,9	7 500	68,0
70,0	24,2	24,8	8 600				70,0

MLC300 S-1

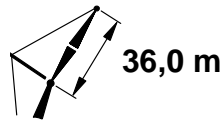
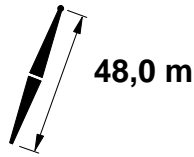
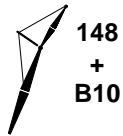
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	84,2	78,8	23 100				16,8
17,0	84,1	78,7	23 000				17,0
18,0	83,3	78,5	22 600				18,0
19,0	82,5	78,3	22 200				19,0
20,0	81,8	78,0	21 800				20,0
22,0	80,3	77,5	21 000	84,5	76,6	18 400	22,0
24,0	78,8	77,0	20 300	82,9	76,0	17 700	24,0
26,0	77,2	76,3	19 500	81,4	75,4	17 100	26,0
28,0	75,7	75,6	18 800	79,8	74,7	16 500	28,0
30,0	74,1	74,9	18 100	78,2	73,9	16 000	30,0
32,0	72,5	74,1	17 400	76,6	73,1	15 300	32,0
34,0	70,9	73,2	16 800	75,0	72,2	14 600	34,0
36,0	69,3	72,2	16 200	73,3	71,2	14 000	36,0
38,0	67,6	71,2	15 600	71,6	70,2	13 300	38,0
40,0	66,0	70,1	15 100	69,9	69,1	12 800	40,0
42,0	64,3	69,0	14 500	68,2	67,9	12 300	42,0
44,0	62,5	67,7	14 000	66,5	66,6	11 800	44,0
46,0	60,8	66,4	13 500	64,7	65,3	11 300	46,0
48,0	59,0	64,9	13 100	62,8	63,8	10 900	48,0
50,0	57,1	63,4	12 700	60,9	62,2	10 500	50,0
52,0	55,2	61,8	12 300	59,0	60,6	10 200	52,0
54,0	53,3	60,0	11 900	57,0	58,8	9 800	54,0
56,0	51,2	58,1	11 500	55,0	56,9	9 500	56,0
58,0	49,2	56,1	11 100	52,8	54,8	9 200	58,0
60,0	47,0	53,9	10 800	50,6	52,6	8 900	60,0
62,0	44,7	51,6	10 500	48,3	50,1	8 700	62,0
64,0	42,3	49,0	10 200	45,8	47,5	8 400	64,0
66,0	39,8	46,2	9 900	43,2	44,6	8 200	66,0
68,0	37,1	43,1	9 600	40,4	41,4	8 000	68,0
70,0	34,2	39,7	9 300	37,3	37,8	7 800	70,0
72,0	31,0	35,8	9 100	33,9	33,6	7 600	72,0
74,0	27,3	31,2	8 800	30,0	28,7	7 500	74,0
76,0	23,0	25,6	8 600				76,0

MLC300 S-1

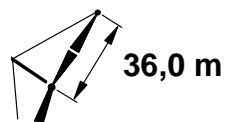
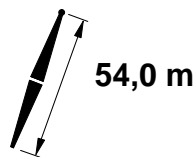
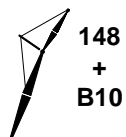
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	84,7	84,8	23 200				16,8
17,0	84,5	84,8	23 100				17,0
18,0	83,8	84,6	22 700				18,0
19,0	83,1	84,4	22 400				19,0
20,0	82,4	84,2	22 000				20,0
22,0	81,0	83,7	21 300				22,0
24,0	79,6	83,2	20 600	83,5	82,2	17 900	24,0
26,0	78,2	82,6	19 900	82,0	81,6	17 300	26,0
28,0	76,7	82,0	19 200	80,6	80,9	16 800	28,0
30,0	75,3	81,3	18 500	79,1	80,2	16 200	30,0
32,0	73,8	80,5	17 900	77,6	79,5	15 700	32,0
34,0	72,4	79,7	17 300	76,1	78,7	15 100	34,0
36,0	70,9	78,8	16 700	74,6	77,8	14 500	36,0
38,0	69,4	77,9	16 200	73,1	76,8	13 800	38,0
40,0	67,9	76,9	15 700	71,6	75,8	13 300	40,0
42,0	66,3	75,9	15 100	70,0	74,8	12 800	42,0
44,0	64,7	74,7	14 600	68,4	73,6	12 300	44,0
46,0	63,1	73,5	14 200	66,8	72,4	11 900	46,0
48,0	61,5	72,2	13 700	65,1	71,1	11 500	48,0
50,0	59,9	70,9	13 300	63,5	69,7	11 100	50,0
52,0	58,2	69,4	12 900	61,7	68,2	10 700	52,0
54,0	56,5	67,8	12 500	60,0	66,6	10 400	54,0
56,0	54,7	66,2	12 100	58,2	64,9	10 000	56,0
58,0	52,9	64,4	11 800	56,3	63,1	9 700	58,0
60,0	51,0	62,6	11 500	54,4	61,2	9 400	60,0
62,0	49,1	60,6	11 100	52,4	59,2	9 200	62,0
64,0	47,1	58,4	10 800	50,4	57,0	8 900	64,0
66,0	45,0	56,1	10 500	48,3	54,6	8 700	66,0
68,0	42,8	53,6	10 300	46,0	52,0	8 500	68,0
70,0	40,5	50,9	10 000	43,7	49,3	8 200	70,0
72,0	38,1	48,0	9 600	41,1	46,2	8 000	72,0
74,0	35,5	44,8	8 900	38,4	42,8	7 900	74,0
76,0	32,7	41,2	8 300	35,5	39,0	7 700	76,0
80,0	26,1	32,3	7 200				80,0

MLC300 S-1

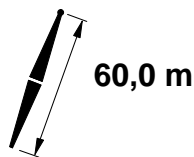
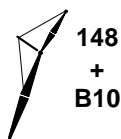
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
18,3	84,0	90,6	22 700				18,3
19,0	83,6	90,5	22 500				19,0
20,0	82,9	90,3	22 100				20,0
22,0	81,6	89,9	21 500				22,0
24,0	80,3	89,4	20 800			18 000	24,0
26,0	79,0	88,8	20 200	83,9	88,3	17 500	26,0
28,0	77,7	88,2	19 500	81,2	87,2	17 000	28,0
30,0	76,3	87,6	18 900	79,9	86,5	16 500	30,0
32,0	75,0	86,9	18 300	78,5	85,8	16 000	32,0
34,0	73,6	86,2	17 700	77,1	85,1	15 500	34,0
36,0	72,2	85,4	17 200	75,8	84,3	14 900	36,0
38,0	70,9	84,5	16 700	74,3	83,4	14 300	38,0
40,0	69,5	83,6	16 200	72,9	82,5	13 800	40,0
42,0	68,0	82,6	15 700	71,5	81,5	13 300	42,0
44,0	66,6	81,6	15 200	70,0	80,4	12 800	44,0
46,0	65,2	80,5	14 800	68,6	79,3	12 300	46,0
48,0	63,7	79,3	14 300	67,1	78,1	11 900	48,0
50,0	62,2	78,1	13 900	65,5	76,9	11 500	50,0
52,0	60,7	76,7	13 500	64,0	75,5	11 200	52,0
54,0	59,1	75,4	13 100	62,4	74,1	10 800	54,0
56,0	57,5	73,9	12 700	60,8	72,6	10 500	56,0
58,0	55,9	72,3	12 400	59,2	71,0	10 200	58,0
60,0	54,3	70,7	12 000	57,5	69,3	9 900	60,0
62,0	52,6	68,9	11 700	55,7	67,5	9 600	62,0
64,0	50,8	67,0	11 400	54,0	65,6	9 400	64,0
66,0	49,0	65,0	11 100	52,1	63,6	9 100	66,0
68,0	47,2	62,9	10 500	50,2	61,4	8 900	68,0
70,0	45,2	60,7	9 800	48,3	59,1	8 700	70,0
72,0	43,2	58,2	9 200	46,2	56,6	8 500	72,0
74,0	41,2	55,6	8 500	44,0	53,9	8 300	74,0
76,0	39,0	52,8	7 900	41,8	51,0	8 100	76,0
80,0	34,1	46,3	6 800	36,7	44,2	7 100	80,0
84,0	28,4	38,3	5 700	30,7	35,7	5 900	84,0
88,0	20,9	27,3	4 700				88,0

MLC300 S-1

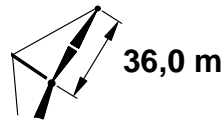
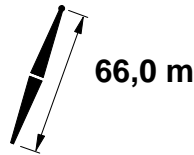
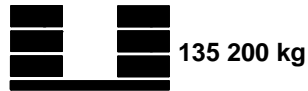
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
18,3	84,4	96,7	22 700				18,3
19,0	84,0	96,6	22 500				19,0
20,0	83,4	96,4	22 200				20,0
22,0	82,1	96,0	21 600				22,0
24,0	80,9	95,5	21 000				24,0
26,0	79,7	95,0	20 400	83,1	93,9	17 600	26,0
28,0	78,5	94,5	19 800	81,8	93,4	17 100	28,0
30,0	77,2	93,9	19 200	80,5	92,8	16 600	30,0
32,0	76,0	93,2	18 700	79,3	92,1	16 200	32,0
34,0	74,7	92,6	18 100	78,0	91,4	15 800	34,0
36,0	73,4	91,8	17 600	76,7	90,7	15 300	36,0
38,0	72,1	91,0	17 100	75,4	89,9	14 700	38,0
40,0	70,8	90,2	16 600	74,1	89,0	14 200	40,0
42,0	69,5	89,3	16 100	72,8	88,1	13 700	42,0
44,0	68,2	88,3	15 700	71,4	87,1	13 200	44,0
46,0	66,9	87,3	15 200	70,1	86,1	12 800	46,0
48,0	65,5	86,2	14 800	68,7	85,0	12 400	48,0
50,0	64,1	85,1	14 400	67,3	83,9	12 000	50,0
52,0	62,7	83,9	14 000	65,9	82,6	11 600	52,0
54,0	61,3	82,6	13 600	64,5	81,3	11 300	54,0
56,0	59,9	81,3	13 300	63,0	80,0	10 900	56,0
58,0	58,4	79,8	12 900	61,5	78,5	10 600	58,0
60,0	56,9	78,4	12 600	60,0	77,0	10 300	60,0
62,0	55,4	76,8	12 100	58,4	75,4	10 100	62,0
64,0	53,9	75,1	11 400	56,9	73,7	9 800	64,0
66,0	52,3	73,3	10 600	55,2	71,9	9 500	66,0
68,0	50,6	71,5	9 800	53,6	70,0	9 300	68,0
70,0	49,0	69,5	9 100	51,9	68,0	9 100	70,0
72,0	47,2	67,4	8 400	50,1	65,8	8 800	72,0
74,0	45,5	65,2	7 800	48,3	63,6	8 300	74,0
76,0	43,6	62,8	7 200	46,4	61,1	7 700	76,0
80,0	39,6	57,5	6 100	42,3	55,7	6 500	80,0
84,0	35,3	51,4	5 000	37,7	49,3	5 400	84,0
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MLC300 S-1

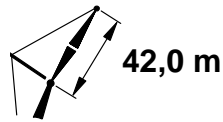
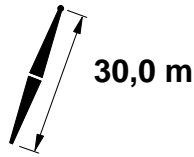
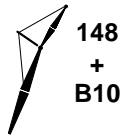
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
18,3	84,7	102,8	22 600				18,3
19,0	84,3	102,7	22 400				19,0
20,0	83,8	102,5	22 200				20,0
22,0	82,6	102,1	21 600				22,0
24,0	81,5	101,7	21 100				24,0
26,0	80,3	101,2	20 500	83,5	100,1	17 700	26,0
28,0	79,1	100,7	20 000	82,3	99,5	17 200	28,0
30,0	78,0	100,1	19 500	81,1	99,0	16 800	30,0
32,0	76,8	99,5	19 000	79,9	98,4	16 400	32,0
34,0	75,6	98,9	18 400	78,7	97,7	16 000	34,0
36,0	74,4	98,2	17 900	77,5	97,0	15 600	36,0
38,0	73,2	97,4	17 500	76,3	96,3	15 100	38,0
40,0	72,0	96,6	17 000	75,1	95,5	14 600	40,0
42,0	70,8	95,8	16 500	73,9	94,6	14 100	42,0
44,0	69,6	94,9	16 100	72,6	93,7	13 600	44,0
46,0	68,3	94,0	15 700	71,4	92,7	13 200	46,0
48,0	67,1	93,0	15 300	70,1	91,7	12 800	48,0
50,0	65,8	91,9	14 900	68,8	90,7	12 400	50,0
52,0	64,5	90,8	14 500	67,5	89,5	12 000	52,0
54,0	63,2	89,6	14 100	66,2	88,4	11 700	54,0
56,0	61,9	88,4	13 800	64,8	87,1	11 400	56,0
58,0	60,6	87,1	13 400	63,5	85,8	11 100	58,0
60,0	59,2	85,7	12 700	62,1	84,4	10 800	60,0
62,0	57,8	84,3	11 800	60,7	82,9	10 500	62,0
64,0	56,4	82,8	10 900	59,3	81,4	10 200	64,0
66,0	55,0	81,2	10 100	57,8	79,8	10 000	66,0
68,0	53,5	79,5	9 400	56,3	78,1	9 700	68,0
70,0	52,0	77,8	8 700	54,8	76,3	9 300	70,0
72,0	50,5	75,9	8 000	53,2	74,4	8 600	72,0
74,0	48,9	73,9	7 400	51,6	72,4	7 900	74,0
76,0	47,3	71,9	6 700	49,9	70,2	7 300	76,0
80,0	43,9	67,3	5 600	46,5	65,6	6 100	80,0
84,0	40,2	62,2	4 600	42,7	60,3	5 000	84,0
88,0	36,2	56,2	3 500	38,5	54,2	3 900	88,0

MLC300 S-1

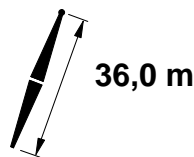
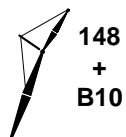
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
15,2	84,6	73,1	19 800				15,2
16,0	84,0	73,0	19 500				16,0
17,0	83,2	72,7	19 000				17,0
18,0	82,4	72,5	18 600				18,0
19,0	81,6	72,3	18 100				19,0
20,0	80,7	72,0	17 700				20,0
22,0	79,1	71,5	16 800				22,0
24,0	77,4	70,8	16 000	82,8	70,1	14 100	24,0
26,0	75,7	70,2	15 200	81,1	69,4	13 400	26,0
28,0	74,1	69,4	14 400	79,4	68,7	12 800	28,0
30,0	72,3	68,6	13 700	77,6	67,8	12 200	30,0
32,0	70,6	67,7	13 000	75,9	66,9	11 600	32,0
34,0	68,8	66,7	12 400	74,1	65,9	11 100	34,0
36,0	67,0	65,7	11 800	72,3	64,9	10 600	36,0
38,0	65,2	64,5	11 200	70,5	63,7	10 100	38,0
40,0	63,4	63,3	10 700	68,6	62,5	9 600	40,0
42,0	61,5	62,0	10 200	66,6	61,2	9 200	42,0
44,0	59,5	60,6	9 700	64,7	59,8	8 800	44,0
46,0	57,6	59,1	9 200	62,7	58,2	8 400	46,0
48,0	55,5	57,5	8 800	60,6	56,6	8 100	48,0
50,0	53,4	55,7	8 500	58,5	54,8	7 700	50,0
52,0	51,2	53,9	8 000	56,2	52,9	7 400	52,0
54,0	49,0	51,8	7 700	53,9	50,8	7 100	54,0
56,0	46,6	49,6	7 400	51,5	48,6	6 800	56,0
58,0	44,1	47,2	7 100	49,0	46,1	6 600	58,0
60,0	41,5	44,6	6 800	46,3	43,4	6 400	60,0
62,0	38,7	41,7	6 500	43,4	40,4	6 100	62,0
64,0	35,7	38,5	6 200	40,3	37,1	5 900	64,0
66,0	32,4	34,8	6 000	36,8	33,2	5 700	66,0
68,0	28,6	30,5	5 800	32,8	28,6	5 600	68,0
70,0	24,1	25,2	5 600	28,0	22,9	5 500	70,0

MLC300 S-1

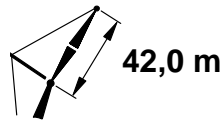
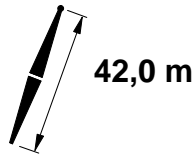
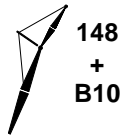
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	83,9	78,9	19 300				16,8
17,0	83,7	78,9	19 200				17,0
18,0	83,0	78,6	18 800				18,0
19,0	82,2	78,4	18 400				19,0
20,0	81,5	78,2	18 000				20,0
22,0	80,0	77,7	17 200				22,0
24,0	78,4	77,1	16 400	83,4	76,3	14 300	24,0
26,0	76,9	76,5	15 700	81,8	75,7	13 700	26,0
28,0	75,3	75,8	15 000	80,3	75,0	13 100	28,0
30,0	73,8	75,0	14 300	78,7	74,2	12 500	30,0
32,0	72,2	74,2	13 600	77,1	73,4	12 000	32,0
34,0	70,6	73,3	13 000	75,4	72,5	11 400	34,0
36,0	69,0	72,4	12 400	73,8	71,5	11 000	36,0
38,0	67,3	71,4	11 800	72,1	70,5	10 500	38,0
40,0	65,7	70,3	11 300	70,5	69,4	10 100	40,0
42,0	64,0	69,1	10 800	68,7	68,2	9 700	42,0
44,0	62,2	67,9	10 400	67,0	66,9	9 300	44,0
46,0	60,5	66,5	9 900	65,2	65,6	8 900	46,0
48,0	58,7	65,1	9 500	63,4	64,1	8 500	48,0
50,0	56,8	63,6	9 100	61,5	62,6	8 200	50,0
52,0	54,9	61,9	8 700	59,6	60,9	7 900	52,0
54,0	53,0	60,2	8 400	57,6	59,1	7 600	54,0
56,0	51,0	58,3	8 000	55,5	57,2	7 300	56,0
58,0	48,9	56,3	7 700	53,4	55,2	7 100	58,0
60,0	46,7	54,1	7 400	51,2	53,0	6 800	60,0
62,0	44,5	51,8	7 100	48,9	50,6	6 600	62,0
64,0	42,1	49,3	6 800	46,5	48,0	6 400	64,0
66,0	39,6	46,5	6 600	43,9	45,1	6 200	66,0
68,0	36,9	43,4	6 300	41,1	41,9	6 000	68,0
70,0	34,0	40,0	6 100	38,1	38,4	5 800	70,0
72,0	30,8	36,1	5 900	34,7	34,3	5 700	72,0
74,0	27,2	31,6	5 700	30,9	29,5	5 600	74,0
76,0	22,9	26,1	5 600	26,2	23,4	5 500	76,0

MLC300 S-1

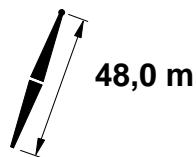
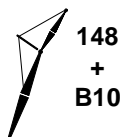
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	84,3	85,0	19 400				16,8
17,0	84,2	84,9	19 300				17,0
18,0	83,5	84,8	19 000				18,0
19,0	82,8	84,6	18 600				19,0
20,0	82,1	84,3	18 200				20,0
22,0	80,7	83,9	17 500				22,0
24,0	79,3	83,3	16 800	83,9	82,5	14 500	24,0
26,0	77,9	82,7	16 100	82,4	81,9	13 900	26,0
28,0	76,4	82,1	15 400	81,0	81,2	13 300	28,0
30,0	75,0	81,4	14 800	79,5	80,5	12 800	30,0
32,0	73,5	80,7	14 100	78,1	79,8	12 300	32,0
34,0	72,1	79,9	13 500	76,6	79,0	11 800	34,0
36,0	70,6	79,0	13 000	75,1	78,1	11 300	36,0
38,0	69,1	78,1	12 400	73,6	77,1	10 900	38,0
40,0	67,6	77,1	11 900	72,0	76,1	10 500	40,0
42,0	66,0	76,0	11 400	70,5	75,1	10 100	42,0
44,0	64,5	74,9	10 900	68,9	73,9	9 700	44,0
46,0	62,9	73,7	10 500	67,3	72,7	9 300	46,0
48,0	61,3	72,4	10 100	65,6	71,4	9 000	48,0
50,0	59,6	71,0	9 700	64,0	70,0	8 600	50,0
52,0	57,9	69,6	9 300	62,2	68,5	8 300	52,0
54,0	56,2	68,0	8 900	60,5	67,0	8 100	54,0
56,0	54,5	66,4	8 600	58,7	65,3	7 800	56,0
58,0	52,6	64,6	8 300	56,9	63,5	7 500	58,0
60,0	50,8	62,8	8 000	55,0	61,6	7 300	60,0
62,0	48,9	60,8	7 700	53,0	59,6	7 000	62,0
64,0	46,9	58,6	7 400	51,0	57,4	6 800	64,0
66,0	44,8	56,3	7 100	48,9	55,0	6 600	66,0
68,0	42,6	53,9	6 900	46,6	52,5	6 400	68,0
70,0	40,4	51,2	6 600	44,3	49,7	6 200	70,0
72,0	37,9	48,3	6 400	41,8	46,7	6 000	72,0
74,0	35,4	45,0	6 200	39,1	43,4	5 900	74,0
76,0	32,6	41,5	6 000	36,2	39,6	5 700	76,0
80,0	26,0	32,7	5 700	29,2	30,3	5 500	80,0

MLC300 S-1

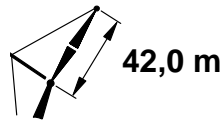
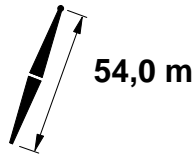
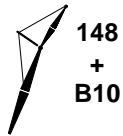
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
16,8	84,7	91,1	19 500				16,8
17,0	84,6	91,0	19 400				17,0
18,0	83,9	90,9	19 100				18,0
19,0	83,3	90,7	18 800				19,0
20,0	82,6	90,5	18 400				20,0
22,0	81,3	90,0	17 700				22,0
24,0	80,0	89,5	17 100				24,0
26,0	78,7	89,0	16 400	83,0	88,1	14 000	26,0
28,0	77,4	88,4	15 800	81,6	87,5	13 500	28,0
30,0	76,0	87,8	15 100	80,3	86,8	13 000	30,0
32,0	74,7	87,1	14 600	78,9	86,1	12 500	32,0
34,0	73,3	86,3	14 000	77,5	85,4	12 100	34,0
36,0	72,0	85,5	13 400	76,2	84,5	11 600	36,0
38,0	70,6	84,7	12 900	74,8	83,7	11 200	38,0
40,0	69,2	83,8	12 400	73,4	82,8	10 800	40,0
42,0	67,8	82,8	11 900	71,9	81,8	10 400	42,0
44,0	66,3	81,7	11 500	70,5	80,7	10 100	44,0
46,0	64,9	80,6	11 000	69,0	79,6	9 700	46,0
48,0	63,4	79,5	10 600	67,5	78,4	9 400	48,0
50,0	61,9	78,2	10 200	66,0	77,2	9 100	50,0
52,0	60,4	76,9	9 900	64,5	75,8	8 700	52,0
54,0	58,9	75,5	9 500	62,9	74,4	8 500	54,0
56,0	57,3	74,1	9 200	61,3	72,9	8 200	56,0
58,0	55,7	72,5	8 800	59,6	71,3	7 900	58,0
60,0	54,0	70,8	8 500	58,0	69,7	7 700	60,0
62,0	52,3	69,1	8 200	56,2	67,9	7 400	62,0
64,0	50,6	67,2	8 000	54,5	66,0	7 200	64,0
66,0	48,8	65,2	7 700	52,6	64,0	7 000	66,0
68,0	47,0	63,1	7 400	50,8	61,8	6 800	68,0
70,0	45,0	60,9	7 200	48,8	59,5	6 600	70,0
72,0	43,1	58,5	6 900	46,8	57,0	6 400	72,0
74,0	41,0	55,9	6 700	44,6	54,3	6 200	74,0
76,0	38,8	53,0	6 500	42,4	51,4	6 100	76,0
80,0	34,0	46,6	6 100	37,4	44,8	5 800	80,0
84,0	28,3	38,7	5 700	31,4	36,4	5 600	84,0
88,0	20,9	27,8	5 500				88,0

MLC300 S-1

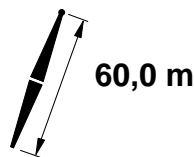
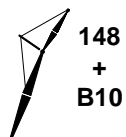
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
18,3	84,1	96,9	19 100				18,3
19,0	83,7	96,8	18 800				19,0
20,0	83,1	96,6	18 500				20,0
22,0	81,9	96,2	17 900				22,0
24,0	80,7	95,7	17 300				24,0
26,0	79,4	95,2	16 700	83,4	94,2	14 200	26,0
28,0	78,2	94,6	16 100	82,2	93,7	13 700	28,0
30,0	76,9	94,0	15 500	80,9	93,1	13 200	30,0
32,0	75,7	93,4	14 900	79,7	92,4	12 800	32,0
34,0	74,4	92,7	14 400	78,4	91,7	12 300	34,0
36,0	73,2	92,0	13 900	77,1	91,0	11 900	36,0
38,0	71,9	91,2	13 400	75,8	90,1	11 500	38,0
40,0	70,6	90,3	12 900	74,5	89,3	11 100	40,0
42,0	69,3	89,4	12 400	73,2	88,4	10 700	42,0
44,0	68,0	88,5	12 000	71,8	87,4	10 400	44,0
46,0	66,6	87,5	11 500	70,5	86,4	10 000	46,0
48,0	65,3	86,4	11 100	69,1	85,3	9 700	48,0
50,0	63,9	85,2	10 700	67,7	84,1	9 400	50,0
52,0	62,5	84,0	10 400	66,3	82,9	9 100	52,0
54,0	61,1	82,8	10 000	64,9	81,6	8 800	54,0
56,0	59,7	81,4	9 700	63,4	80,3	8 600	56,0
58,0	58,2	80,0	9 300	61,9	78,9	8 300	58,0
60,0	56,7	78,5	9 000	60,4	77,3	8 000	60,0
62,0	55,2	77,0	8 700	58,9	75,7	7 800	62,0
64,0	53,7	75,3	8 500	57,3	74,1	7 600	64,0
66,0	52,1	73,5	8 200	55,7	72,3	7 400	66,0
68,0	50,4	71,7	7 900	54,0	70,4	7 100	68,0
70,0	48,8	69,7	7 700	52,3	68,4	6 900	70,0
72,0	47,1	67,6	7 400	50,6	66,2	6 800	72,0
74,0	45,3	65,4	7 200	48,8	64,0	6 600	74,0
76,0	43,4	63,0	7 000	46,9	61,5	6 400	76,0
80,0	39,5	57,8	6 600	42,8	56,1	6 100	80,0
84,0	35,1	51,7	6 100	38,3	49,8	5 900	84,0
88,0	30,1	44,3	5 200	33,1	42,1	5 400	88,0
92,0	24,0	34,8	4 300				92,0

MLC300 S-1

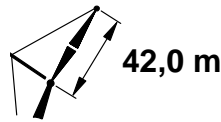
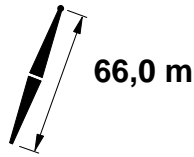
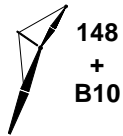
ASME B30.5



m	10°			20°			m
	°	m	kg	°	m	kg	
18,3	84,5	102,9	19 100				18,3
19,0	84,1	102,8	18 900				19,0
20,0	83,5	102,7	18 600				20,0
22,0	82,4	102,3	18 000				22,0
24,0	81,2	101,8	17 400				24,0
26,0	80,1	101,4	16 900	83,8	100,4	14 300	26,0
28,0	78,9	100,9	16 300	82,7	99,8	13 800	28,0
30,0	77,7	100,3	15 800	81,5	99,3	13 400	30,0
32,0	76,6	99,7	15 300	80,3	98,7	13 000	32,0
34,0	75,4	99,0	14 700	79,1	98,0	12 500	34,0
36,0	74,2	98,4	14 200	77,9	97,3	12 100	36,0
38,0	73,0	97,6	13 700	76,7	96,6	11 700	38,0
40,0	71,8	96,8	13 300	75,5	95,8	11 400	40,0
42,0	70,6	96,0	12 800	74,2	94,9	11 000	42,0
44,0	69,4	95,1	12 400	73,0	94,0	10 700	44,0
46,0	68,1	94,2	12 000	71,7	93,1	10 300	46,0
48,0	66,9	93,2	11 600	70,5	92,1	10 000	48,0
50,0	65,6	92,1	11 200	69,2	91,0	9 700	50,0
52,0	64,3	91,0	10 800	67,9	89,9	9 400	52,0
54,0	63,0	89,8	10 500	66,6	88,7	9 200	54,0
56,0	61,7	88,6	10 100	65,2	87,4	8 900	56,0
58,0	60,4	87,3	9 800	63,9	86,1	8 700	58,0
60,0	59,0	86,0	9 500	62,5	84,7	8 400	60,0
62,0	57,6	84,5	9 200	61,1	83,3	8 100	62,0
64,0	56,2	83,0	8 900	59,7	81,8	7 900	64,0
66,0	54,8	81,4	8 700	58,2	80,2	7 700	66,0
68,0	53,3	79,8	8 400	56,7	78,5	7 500	68,0
70,0	51,8	78,0	8 100	55,2	76,7	7 300	70,0
72,0	50,3	76,1	7 900	53,7	74,8	7 100	72,0
74,0	48,7	74,2	7 600	52,1	72,8	6 900	74,0
76,0	47,1	72,1	7 400	50,4	70,7	6 800	76,0
80,0	43,7	67,6	6 400	47,0	66,0	6 500	80,0
84,0	40,1	62,5	5 400	43,2	60,8	5 800	84,0
88,0	36,1	56,6	4 400	39,1	54,7	4 800	88,0
92,0	31,6	49,6	3 500	34,4	47,5	3 900	92,0

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m	10°			20°			m
	°	m	kg	°	m	kg	
18,3	84,8	109,0	18 900				18,3
19,0	84,4	108,9	18 800				19,0
20,0	83,9	108,7	18 600				20,0
22,0	82,8	108,4	18 100				22,0
24,0	81,7	107,9	17 500				24,0
26,0	80,6	107,5	17 000	84,2	106,4	14 400	26,0
28,0	79,5	107,0	16 500	83,1	106,0	13 900	28,0
30,0	78,4	106,5	16 000	82,0	105,4	13 500	30,0
32,0	77,3	105,9	15 500	80,9	104,8	13 100	32,0
34,0	76,2	105,3	15 000	79,7	104,2	12 700	34,0
36,0	75,1	104,7	14 500	78,6	103,6	12 300	36,0
38,0	74,0	104,0	14 100	77,5	102,9	12 000	38,0
40,0	72,9	103,2	13 600	76,3	102,1	11 600	40,0
42,0	71,7	102,4	13 200	75,2	101,3	11 300	42,0
44,0	70,6	101,6	12 800	74,0	100,5	11 000	44,0
46,0	69,4	100,7	12 400	72,9	99,6	10 600	46,0
48,0	68,3	99,8	12 000	71,7	98,7	10 300	48,0
50,0	67,1	98,8	11 600	70,5	97,7	10 000	50,0
52,0	65,9	97,8	11 300	69,3	96,6	9 700	52,0
54,0	64,7	96,7	10 900	68,1	95,5	9 500	54,0
56,0	63,5	95,6	10 600	66,8	94,4	9 200	56,0
58,0	62,2	94,4	10 300	65,6	93,2	8 900	58,0
60,0	61,0	93,1	10 000	64,3	91,9	8 700	60,0
62,0	59,7	91,8	9 700	63,0	90,6	8 500	62,0
64,0	58,4	90,4	9 400	61,7	89,2	8 200	64,0
66,0	57,1	89,0	9 100	60,4	87,7	8 000	66,0
68,0	55,8	87,5	8 800	59,0	86,1	7 800	68,0
70,0	54,4	85,9	8 600	57,6	84,5	7 600	70,0
72,0	53,0	84,2	8 200	56,2	82,8	7 400	72,0
74,0	51,6	82,4	7 600	54,8	81,0	7 200	74,0
76,0	50,2	80,6	7 000	53,3	79,1	7 100	76,0
80,0	47,2	76,6	5 900	50,3	75,1	6 500	80,0
84,0	44,0	72,1	4 900	47,0	70,5	5 400	84,0
88,0	40,6	67,1	3 900	43,5	65,4	4 500	88,0
92,0				39,7	59,5	3 400	92,0