

Maximum Allowable Travel Specifications

MLC300

Boom No. B45:505-500
with 7,0 m (23.0 ft) Extended Upper Boom Point

Jobsite Travel

MLC300 SERIES 1 must be equipped with 135 200 kg (298,100 lb) VPC (Variable Position Counterweight); MLC300 SERIES 2 must be equipped with 175 200 kg (386,200 lb) VPC; MLC300 Series 3 must be equipped with 215 200 kg (474,400 lb) VPC. Refer to Wind Conditions chart for maximum wind speed for various boom lengths. Refer to capacity chart for maximum boom lengths lifted unassisted. Travel slowly and smoothly to avoid shock loading boom and rigging.

1. Machine Travel With Load

- A. Machine can swing and travel with 360 degree rating.
- B. Grade in any direction must not exceed 1 percent (0.5 degrees).
- C. Travel surface must be firm, level and uniformly supporting. Capacity charts are based on static conditions; therefore judgment must be used to allow for dynamic effects of traveling with load. Carry load as close to ground as possible. Stabilize load with taglines.

2. Machine Travel Without Load

- A. Load blocks, hooks, weight ball, slings, hoist lines, etc., may be suspended beneath points or tied off to machine. Total combined suspended weight beneath points must not exceed 5 440 kg (12,000 lb).
- B. Machine to travel on a firm and uniformly supporting surface. Travel allowed with 360 degree swing up to 1 percent (0.5 degrees) grade; crane upperworks must be in-line with crawlers and grade when grade exceeds 1 percent (0.5 degrees). Side-to-side grade must not exceed 2 percent (1.1 degrees) measured at boom hinge pins.
- C. Refer to Tables 2 thru 4 for boom angle, boom length, and direction for various grades.
 Before traveling onto grade:
 - Position machine on a level surface with grade in any direction not to exceed 1 percent (0.5 degrees).
 - Unlock the VPC
 - Adjust boom within boom angle range shown in table
 - Lock the VPC
 VPC must be locked before traveling onto grade. Do not change boom angle after crane has been traveled onto grade. Boom angle is angle between horizontal and centerline of boom butt and inserts. Refer to Table 1 below for grade vs. angle when traveling.
- D. Do not exceed 2 percent (1.1 degrees) side-to-side grade at boom hinge pins when cutting (turning on grade).
- E. **Warning:** Refer to Section 3 of the Operator Manual for setting of VPC Lockout Key Switch prior to traveling on grade. *Crane could tip.*
- F. **Warning:** Travel prohibited for boom angle range not shown in Tables 2 thru 4. *Crane could tip.*

Table 1

Percent Grade Vs. Angle In Degrees	
Percent Grade	Angle
5	2.9
10	5.7
20	11.3
30	16.7

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Table 2a: SERIES 1

MACHINE TRAVEL WITHOUT LOAD					
Boom Length		Boom Angle Range in Degrees			
		Maximum Percent Grade			
Meters	Feet	5%	10%	20%	30%
BOOM FACING DOWNHILL					
35,0	114.8	42 - 73	46 - 73	49 - 73	52 - 73
41,0	134.5	42 - 73	45 - 73	48 - 73	52 - 73
47,0	154.2	40 - 73	42 - 73	47 - 73	52 - 73
53,0	173.9	40 - 73	42 - 73	47 - 73	52 - 73
59,0	193.6	42 - 73	44 - 73	48 - 73	55 - 73
65,0	213.3	42 - 73	45 - 73	54 - 73	64 - 73
71,0	232.9	48 - 73	52 - 73	60 - 73	—
77,0	252.6	55 - 73	58 - 73	66 - 73	—
83,0	272.3	59 - 73	62 - 73	70 - 73	—

Table 2b: SERIES 1

MACHINE TRAVEL WITHOUT LOAD					
Boom Length		Boom Angle Range in Degrees			
		Maximum Percent Grade			
Meters	Feet	5%	10%	20%	30%
BOOM FACING UPHILL					
35,0	114.8	40 - 70	40 - 67	40 - 61	—
41,0	134.5	40 - 70	40 - 67	40 - 61	—
47,0	154.2	40 - 70	40 - 67	40 - 61	—
53,0	173.9	40 - 70	40 - 67	40 - 56	—
59,0	193.6	40 - 70	40 - 67	40 - 54	40 - 45
65,0	213.3	40 - 70	40 - 67	40 - 58	40 - 50
71,0	232.9	43 - 70	43 - 67	43 - 61	43 - 52
77,0	252.6	51 - 70	51 - 67	51 - 61	51 - 55
83,0	272.3	54 - 70	54 - 67	54 - 61	54 - 56

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Table 3a: SERIES 2

MACHINE TRAVEL WITHOUT LOAD					
Boom Length		Boom Angle Range in Degrees			
		Percent Grade			
Meters	Feet	1-5%	6-10%	11-20%	21-30%
BOOM FACING DOWNHILL					
35,0	114.8	42 - 73	46 - 73	49 - 73	52 - 73
38,0	124.7	42 - 73	44 - 73	47 - 73	52 - 73
41,0	134.5	42 - 73	45 - 73	48 - 73	52 - 73
44,0	144.4	42 - 73	43 - 73	46 - 73	52 - 73
47,0	154.2	40 - 73	42 - 73	47 - 73	52 - 73
50,0	164.0	41 - 73	43 - 73	48 - 73	52 - 73
53,0	173.9	40 - 73	42 - 73	46 - 73	52 - 73
56,0	183.7	41 - 73	41 - 73	46 - 73	52 - 73
59,0	193.6	42 - 73	44 - 73	46 - 73	52 - 73
62,0	203.4	41 - 73	43 - 73	46 - 73	52 - 73
65,0	213.3	42 - 73	44 - 73	47 - 73	52 - 73
68,0	223.1	41 - 73	43 - 73	48 - 73	54 - 73
71,0	232.9	40 - 73	42 - 73	48 - 73	64 - 73
74,0	242.8	41 - 73	44 - 73	53 - 73	71 - 73
77,0	252.6	43 - 73	46 - 73	56 - 73	—
80,0	262.5	47 - 73	51 - 73	60 - 73	—
83,0	272.3	49 - 73	53 - 73	61 - 73	—
86,0	282.2	52 - 73	55 - 73	64 - 73	—
89,0	292.0	54 - 73	58 - 73	66 - 73	—

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Table 3b: SERIES 2

MACHINE TRAVEL WITHOUT LOAD					
Boom Length		Boom Angle Range in Degrees			
		Percent Grade			
Meters	Feet	1-5%	6-10%	11-20%	21-30%
BOOM FACING UPHILL					
35,0	114.8	40 - 70	40 - 67	40 - 61	—
38,0	124.7	40 - 70	40 - 67	40 - 61	—
41,0	134.5	40 - 70	40 - 67	40 - 61	—
44,0	144.4	40 - 70	40 - 67	40 - 61	—
47,0	154.2	40 - 70	40 - 67	40 - 61	—
50,0	164.0	40 - 70	40 - 67	40 - 61	—
53,0	173.9	40 - 70	40 - 67	40 - 61	—
56,0	183.7	40 - 70	40 - 67	40 - 52	—
59,0	193.6	40 - 70	40 - 67	40 - 47	—
62,0	203.4	40 - 70	40 - 67	40 - 46	—
65,0	213.3	40 - 70	40 - 67	40 - 48	—
68,0	223.1	40 - 70	40 - 67	40 - 50	40 - 42
71,0	232.9	40 - 70	40 - 67	40 - 51	40 - 42
74,0	242.8	40 - 70	40 - 67	40 - 54	40 - 46
77,0	252.6	40 - 70	40 - 67	40 - 55	40 - 47
80,0	262.5	44 - 70	44 - 67	44 - 58	44 - 50
83,0	272.3	45 - 70	45 - 67	45 - 58	45 - 51
86,0	282.2	48 - 70	48 - 67	48 - 59	48 - 52
89,0	292.0	50 - 70	50 - 67	50 - 60	50 - 54

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Table 4a: SERIES 3

MACHINE TRAVEL WITHOUT LOAD			
Boom Length		Boom Angle Range in Degrees	
		Percent Grade	
Meters	Feet	1-5%	6-10%
BOOM FACING DOWNHILL			
35,0	114.8	42 - 73	46 - 73
38,0	124.7	40 - 73	44 - 73
41,0	134.5	42 - 73	45 - 73
44,0	144.4	41 - 73	43 - 73
47,0	154.2	40 - 73	42 - 73
50,0	164.0	41 - 73	43 - 73
53,0	173.9	40 - 73	42 - 73
56,0	183.7	41 - 73	41 - 73
59,0	193.6	42 - 73	44 - 73
62,0	203.4	41 - 73	43 - 73
65,0	213.3	42 - 73	44 - 73
68,0	223.1	41 - 73	43 - 73
71,0	232.9	40 - 73	42 - 73
74,0	242.8	41 - 73	42 - 73
77,0	252.6	40 - 73	42 - 73
80,0	262.5	42 - 73	45 - 73
83,0	272.3	45 - 73	47 - 73
86,0	282.2	48 - 73	50 - 73
89,0	292.0	51 - 73	53 - 73

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Table 4b: SERIES 3

MACHINE TRAVEL WITHOUT LOAD			
Boom Length		Boom Angle Range in Degrees	
		Percent Grade	
Meters	Feet	1-5%	6-10%
BOOM FACING UPHILL			
35,0	114.8	40 - 70	40 - 67
38,0	124.7	40 - 70	40 - 67
41,0	134.5	40 - 70	40 - 67
44,0	144.4	40 - 70	40 - 67
47,0	154.2	40 - 70	40 - 67
50,0	164.0	40 - 70	40 - 67
53,0	173.9	40 - 70	40 - 67
56,0	183.7	40 - 70	40 - 67
59,0	193.6	40 - 70	40 - 67
62,0	203.4	40 - 70	40 - 67
65,0	213.3	40 - 70	40 - 67
68,0	223.1	40 - 70	40 - 67
71,0	232.9	40 - 70	40 - 67
74,0	242.8	40 - 70	40 - 67
77,0	252.6	40 - 70	40 - 67
80,0	262.5	40 - 70	40 - 67
83,0	272.3	41 - 70	41 - 67
86,0	282.2	45 - 70	45 - 67
89,0	292.0	47 - 70	47 - 67