# Maximum Allowable Travel Specifications 

Boom No. B85:505-500<br>with Mast No. M11:503 and<br>7,0 m (23.0 ft) Extended Upper Boom Point<br>VPC-MAX at 14,6 m (48.0 ft) Position

## Jobsite Travel

MLC300 VPC-MAX SERIES 1 must be equipped with $135100 \mathrm{~kg}(297,800 \mathrm{lb})$ VPC (Variable Position Counterweight); MLC300 VPC-MAX SERIES 2 must be equipped with 175100 kg (386,000 lb) VPC; MLC300 VPC-MAX SERIES 3 must be equipped with $215000 \mathrm{~kg}(474,100 \mathrm{lb})$ VPC. Refer to Wind Conditions chart for maximum wind speed for various boom lengths and capacity charts for maximum boom lengths lifted unassisted. Travel slowly and smoothly to avoid shock loading boom and rigging. Warning: Maintain adequate clearance between boom and load blocks, hooks, or weight ball while traveling. The boom can buckle and collapse if load blocks, hooks or weight ball contact the boom.

## 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 $7800 \mathrm{~kg}(17,200 \mathrm{lb})$.
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. 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. Adjust boom within boom angle range shown in table with machine in a level position before traveling onto grade. Do not adjust 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 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. Caution: Change in grade must not exceed 3 percent (1.7 degrees) in $9.1 \mathrm{~m}(30 \mathrm{ft})$. Damage could occur.
F. Warning: Travel prohibited for boom angle range not shown in Tables 2 thru 4. Crane could tip.
G. Warning: $14,6 \mathrm{~m}(48.0 \mathrm{ft})$ counterweight position must be selected before traveling on grade greater than 1 percent ( 0.5 degrees). Crane could tip.

Table 1

| Percent Grade Vs. Angle In Degrees |  |
| :---: | :---: |
| Percent Grade | Angle |
| 5 | 2.9 |
| 10 | 5.7 |

## Maximum Allowable

 Travel SpecificationsBoom No. B85:505-500
with Mast No. M11:503 and
$7,0 \mathrm{~m}(23.0 \mathrm{ft})$ Extended Upper Boom Point
VPC-MAX at 14,6 m (48.0 ft) Position
Table 2a: SERIES 1

| MACHINE TRAVEL WITHOUT LOAD |  |  |  |
| :---: | :---: | :---: | :---: |
| Boom Length |  | Boom Angle Range in Degrees |  |
|  | Maximum Percent Grade |  |  |
| Meters | Feet | $5 \%$ | $10 \%$ |
| BOOM FACING DOWNHILL |  |  |  |
| 83,0 | 272.3 | $39-73$ | $42-73$ |
| 86,0 | 282.2 | $38-73$ | $45-73$ |
| 89,0 | 292.0 | $39-73$ | $48-73$ |
| 92,0 | 301.8 | $39-73$ | $53-73$ |
| 95,0 | 311.7 | $39-73$ | $53-73$ |
| 98,0 | 321.5 | $38-73$ | $56-73$ |
| 101,0 | 331.4 | $39-73$ | $58-73$ |
| 104,0 | 341.2 | $42-73$ | $60-73$ |
| 107,0 | 351.0 | $42-73$ | $60-73$ |
| 110,0 | 360.9 | $46-73$ | $62-73$ |
| 113,0 | 370.7 | $48-73$ | $63-73$ |
| 116,0 | 380.6 | $50-73$ | $65-73$ |
| 119,0 | 390.4 | $51-73$ | $66-73$ |
| 122,0 | 400.3 | $54-73$ | $67-73$ |

# Maximum Allowable <br> Travel Specifications 

Boom No. B85:505-500
with Mast No. M11:503 and
7,0 m (23.0 ft) Extended Upper Boom Point
VPC-MAX at 14,6 m (48.0 ft) Position
Table 2b: SERIES 1

| MACHINE TRAVEL WITHOUT LOAD |  |  |  |
| :---: | :---: | :---: | :---: |
| Boom Length |  | Boom Angle Range in Degrees |  |
|  | Maximum Percent Grade |  |  |
| Meters | Feet | $5 \%$ | $10 \%$ |
| BOOM FACING UPHILL |  |  |  |
| 83,0 | 272.3 | $36-70$ | $36-67$ |
| 86,0 | 282.2 | $36-70$ | $36-67$ |
| 89,0 | 292.0 | $36-70$ | $36-67$ |
| 92,0 | 301.8 | $36-70$ | $36-67$ |
| 95,0 | 311.7 | $36-70$ | $36-67$ |
| 98,0 | 321.5 | $35-70$ | $35-67$ |
| 101,0 | 331.4 | $35-70$ | $35-67$ |
| 104,0 | 341.2 | $37-70$ | $37-67$ |
| 107,0 | 351.0 | $38-70$ | $38-67$ |
| 110,0 | 360.9 | $41-70$ | $41-67$ |
| 113,0 | 370.7 | $44-70$ | $44-67$ |
| 116,0 | 380.6 | $46-70$ | $46-67$ |
| 119,0 | 390.4 | $47-70$ | $47-67$ |
| 122,0 | 400.3 | $50-70$ | $50-67$ |

## Maximum Allowable

 Travel SpecificationsBoom No. B85:505-500
with Mast No. M11:503 and
$7,0 \mathrm{~m}(23.0 \mathrm{ft})$ Extended Upper Boom Point VPC-MAX at 14,6 m (48.0 ft) Position

Table 3a: SERIES 2

| MACHINE TRAVEL WITHOUT LOAD |  |  |  |
| :---: | :---: | :---: | :---: |
| Boom Length |  | Boom Angle Range in Degrees |  |
|  | Maximum Percent Grade |  |  |
| Meters | Feet | $5 \%$ | $10 \%$ |
| BOOM FACING DOWNHILL |  |  |  |
| 83,0 | 272.3 | $39-73$ | $41-73$ |
| 86,0 | 282.2 | $38-73$ | $41-73$ |
| 89,0 | 292.0 | $39-73$ | $41-73$ |
| 92,0 | 301.8 | $39-73$ | $41-73$ |
| 95,0 | 311.7 | $39-73$ | $41-73$ |
| 98,0 | 321.5 | $38-73$ | $43-73$ |
| 101,0 | 331.4 | $39-73$ | $41-73$ |
| 104,0 | 341.2 | $39-73$ | $41-73$ |
| 107,0 | 351.0 | $39-73$ | $41-73$ |
| 110,0 | 360.9 | $38-73$ | $41-73$ |
| 113,0 | 370.7 | $38-73$ | $41-73$ |
| 116,0 | 380.6 | $39-73$ | $42-73$ |
| 119,0 | 390.4 | $39-73$ | $43-73$ |
| 122,0 | 400.3 | $42-73$ | $46-73$ |
| 125,0 | 410.1 | $44-73$ | $48-73$ |
| 128,0 | 419.9 | $47-73$ | $51-73$ |
| 131,0 | 429.8 | $47-73$ | $51-73$ |

# Maximum Allowable <br> Travel Specifications 

Boom No. B85:505-500
with Mast No. M11:503 and
7,0 m (23.0 ft) Extended Upper Boom Point
VPC-MAX at 14,6 m (48.0 ft) Position
Table 3b: SERIES 2

| MACHINE TRAVEL WITHOUT LOAD |  |  |  |
| :---: | :---: | :---: | :---: |
| Boom Length |  | Boom Angle Range in Degrees |  |
|  | Maximum Percent Grade |  |  |
| Meters | Feet | $5 \%$ | $10 \%$ |
| BOOM FACING UPHILL |  |  |  |
| 83,0 | 272.3 | $36-70$ | $36-67$ |
| 86,0 | 282.2 | $36-70$ | $36-67$ |
| 89,0 | 292.0 | $36-70$ | $36-67$ |
| 92,0 | 301.8 | $36-70$ | $36-67$ |
| 95,0 | 311.7 | $36-70$ | $36-67$ |
| 98,0 | 321.5 | $35-70$ | $35-67$ |
| 101,0 | 331.4 | $35-70$ | $35-67$ |
| 104,0 | 341.2 | $36-70$ | $36-67$ |
| 107,0 | 351.0 | $36-70$ | $36-67$ |
| 110,0 | 360.9 | $36-70$ | $36-67$ |
| 113,0 | 370.7 | $36-70$ | $36-67$ |
| 116,0 | 380.6 | $36-70$ | $36-67$ |
| 119,0 | 390.4 | $36-70$ | $36-67$ |
| 122,0 | 400.3 | $38-70$ | $38-67$ |
| 125,0 | 410.1 | $40-70$ | $40-67$ |
| 128,0 | 419.9 | $43-70$ | $43-67$ |
| 131,0 | 429.8 | $43-70$ | $43-67$ |

## Maximum Allowable

 Travel SpecificationsBoom No. B85:505-500
with Mast No. M11:503 and
$7,0 \mathrm{~m}(23.0 \mathrm{ft})$ Extended Upper Boom Point VPC-MAX at 14,6 m (48.0 ft) Position

Table 4a: SERIES 3

| MACHINE TRAVEL WITHOUT LOAD |  |  |  |
| :---: | :---: | :---: | :---: |
| Boom Length |  | Boom Angle Range in Degrees |  |
|  | Maximum Percent Grade |  |  |
| Meters | Feet | $5 \%$ | $10 \%$ |
| BOOM FACING DOWNHILL |  |  |  |
| 83,0 | 272.3 | $39-73$ | $41-73$ |
| 86,0 | 282.2 | $38-73$ | $41-73$ |
| 89,0 | 292.0 | $39-73$ | $41-73$ |
| 92,0 | 301.8 | $39-73$ | $41-73$ |
| 95,0 | 311.7 | $39-73$ | $41-73$ |
| 98,0 | 321.5 | $38-73$ | $41-73$ |
| 101,0 | 331.4 | $39-73$ | $41-73$ |
| 104,0 | 341.2 | $39-73$ | $41-73$ |
| 107,0 | 351.0 | $39-73$ | $41-73$ |
| 110,0 | 360.9 | $38-73$ | $41-73$ |
| 113,0 | 370.7 | $38-73$ | $41-73$ |
| 116,0 | 380.6 | $38-73$ | $41-73$ |
| 119,0 | 390.4 | $38-73$ | $41-73$ |
| 122,0 | 400.3 | $39-73$ | $41-73$ |
| 125,0 | 410.1 | $39-73$ | $41-73$ |
| 128,0 | 419.9 | $39-73$ | $41-73$ |
| 131,0 | 429.8 | $39-73$ | $41-73$ |

# Maximum Allowable <br> Travel Specifications 

Boom No. B85:505-500
with Mast No. M11:503 and
7,0 m (23.0 ft) Extended Upper Boom Point
VPC-MAX at 14,6 m (48.0 ft) Position
Table 4b: SERIES 3

| MACHINE TRAVEL WITHOUT LOAD |  |  |  |
| :---: | :---: | :---: | :---: |
| Boom Length |  | Boom Angle Range in Degrees |  |
| Meters |  |  |  |
|  | Feet | $5 \%$ | $10 \%$ |
| 83,0 | 272.3 | $36-70$ | $36-67$ |
| 86,0 | 282.2 | $36-70$ | $36-67$ |
| 89,0 | 292.0 | $36-70$ | $36-67$ |
| 92,0 | 301.8 | $36-70$ | $36-67$ |
| 95,0 | 311.7 | $36-70$ | $36-67$ |
| 98,0 | 321.5 | $35-70$ | $35-67$ |
| 101,0 | 331.4 | $35-70$ | $35-67$ |
| 104,0 | 341.2 | $36-70$ | $36-67$ |
| 107,0 | 351.0 | $36-70$ | $36-67$ |
| 110,0 | 360.9 | $36-70$ | $36-67$ |
| 113,0 | 370.7 | $36-70$ | $36-67$ |
| 116,0 | 380.6 | $36-70$ | $36-67$ |
| 119,0 | 390.4 | $36-70$ | $36-67$ |
| 122,0 | 400.3 | $36-70$ | $36-67$ |
| 125,0 | 410.1 | $36-70$ | $36-67$ |
| 128,0 | 419.9 | $36-70$ | $36-67$ |
| 131,0 | 429.8 | $36-70$ | $36-67$ |

