

**ON OUTRIGGERS**

ON OUTRIGGERS FULLY EXTENDED 6.3m SPREAD 360° ROTATION (Unit: x1000kg)								
B	A	9.7m		16.8m		24.4m		31.0m
	C	C	C	C	C	C	C	C
3.0		60.6	30.0	74.4	19.2	79.7	12.5	
3.5		57.0	27.2	72.5	19.2	78.5	12.5	
4.0		53.1	23.4	70.9	19.2	77.5	12.5	8.4
4.5		49.2	21.3	68.9	18.3	76.3	12.5	8.4
5.0		44.7	19.6	67.1	17.0	75.0	12.5	8.4
5.5		40.3	18.1	65.1	15.8	74.0	12.5	8.4
6.0		34.9	16.6	63.3	14.7	72.8	12.5	8.4
6.5		28.7	15.2	61.4	13.6	71.5	11.7	8.4
7.0		18.3	14.1	59.4	12.9	70.3	11.0	8.1
8.0				54.9	10.9	67.7	9.75	7.5
9.0				50.5	9.0	65.0	8.75	6.8
10.0				45.8	7.05	62.4	7.9	6.2
11.0				40.3	5.8	59.5	6.6	5.8
12.0				34.3	4.8	56.5	5.6	5.4
13.0				27.0	4.05	53.6	4.75	5.0
14.0				15.7	3.4	50.4	4.15	4.4
15.0						47.0	3.6	3.85
16.0						43.4	3.2	3.45
17.0						39.6	2.75	3.05
18.0						35.5	2.45	2.65
19.0						30.7	2.05	2.4
20.0						25.6	1.8	2.1
22.0								1.7
24.0								1.3
26.0								1.0
28.0								0.5
D					0°			

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS FULLY EXTENDED 6.3m SPREAD 360° ROTATION									
C	A	9.7m		16.8m		24.4m		31.0m	
	B	B	B	B	B	B	B	B	
0°		7.2	13.4	14.3	3.2	21.9	1.2	28.5	0.5

A: Boom length (m)  
 B: Load radius (m)  
 C: Loaded boom angle (°)

**ON OUTRIGGERS**

ON OUTRIGGERS FULLY EXTENDED 6.3m SPREAD 360° ROTATION (Unit: x1000kg)													
C	31.0m Boom + 7.2m Jib						31.0m Boom + 12.8m Jib						
	5°Tilt		25°Tilt		45°Tilt		5°Tilt		25°Tilt		45°Tilt		
	R	W	R	W	R	W	R	W	R	W	R	W	
80°	5.9	3.5	8.1	2.4	9.8	1.7	7.7	2.2	11.7	1.2	14.6	0.8	
77.5°	7.7	3.5	9.8	2.3	11.4	1.65	9.8	2.15	13.5	1.15	16.3	0.78	
75°	9.4	3.5	11.4	2.2	12.9	1.6	11.8	2.1	15.3	1.1	17.9	0.75	
72.5°	11.2	3.23	13.0	2.1	14.4	1.55	13.6	1.93	17.1	1.05	19.4	0.73	
70°	12.7	2.95	14.6	2.0	15.8	1.5	15.5	1.75	18.8	1.0	21.0	0.7	
67.5°	14.3	2.75	16.1	1.93	17.2	1.45	17.2	1.63	20.5	0.95	22.5	0.68	
65°	15.8	2.55	17.5	1.85	18.6	1.4	18.9	1.5	22.0	0.9	23.9	0.65	
62.5°	17.3	2.35	19.0	1.8	19.9	1.38	20.6	1.4	23.6	0.88	25.2	0.65	
60°	18.7	2.15	20.4	1.75	21.2	1.35	22.3	1.3	25.1	0.85	26.6	0.65	
57.5°	20.0	1.95	21.6	1.65	22.4	1.33	23.8	1.23	26.4	0.8	27.8	0.65	
55°	21.4	1.75	22.9	1.55	23.6	1.3	25.4	1.15	27.9	0.75	29.0	0.65	
52.5°	22.6	1.55	24.0	1.38	24.7	1.23	26.8	1.1	29.2	0.73	30.2	0.63	
50°	23.9	1.35	25.2	1.2	25.7	1.15	28.3	1.05	30.5	0.7	31.4	0.6	
47.5°	25.0	1.18	26.3	1.1	26.7	1.1	29.6	0.9	31.7	0.68	32.5	0.6	
45°	26.0	1.0	27.3	1.0	27.7	1.0	30.8	0.75	32.8	0.65	33.5	0.6	
42.5°	27.1	0.9	28.2	0.9			32.0	0.68	33.8	0.6			
40°	28.1	0.8	29.1	0.8			33.1	0.6	34.8	0.55			
37.5°	29.0	0.7	30.0	0.7			34.2	0.53	35.7	0.48			
35°	30.0	0.6	30.8	0.6			35.2	0.45	36.5	0.4			
32.5°	30.8	0.53	31.5	0.53			36.1	0.4					
30°	31.6	0.45	32.2	0.45			37.0	0.35					
27.5°	32.3	0.4	32.8	0.38									
25°	33.0	0.35	33.4	0.3									

C: Boom angle  
 R: Load radius (m)  
 W: Rated lifting capacity

**ON OUTRIGGERS**

ON OUTRIGGERS MID EXTENDED 5.9m SPREAD 360° ROTATION (Unit: x1000kg)								
B	A	9.7m		16.8m		24.4m		31.0m
	C	C	C	C	C	C	C	C
3.0	60.6	30.0	74.4	19.2	79.7	12.5		
3.5	57.0	27.2	72.5	19.2	78.5	12.5		
4.0	53.1	23.4	70.9	19.2	77.5	12.5	80.8	8.4
4.5	49.2	21.3	68.9	18.3	76.3	12.5	80.0	8.4
5.0	44.7	19.6	67.1	17.0	75.0	12.5	79.1	8.4
5.5	40.3	18.1	65.1	15.8	74.0	12.5	78.3	8.4
6.0	34.9	16.6	63.3	14.7	72.8	12.5	77.3	8.4
6.5	28.7	15.2	61.4	13.6	71.5	11.7	76.6	8.4
7.0	18.3	12.9	59.4	12.6	70.3	11.0	75.6	8.1
8.0			54.9	9.65	67.7	9.75	73.7	7.5
9.0			50.5	7.7	65.0	8.75	71.8	6.8
10.0			45.8	6.25	62.1	7.05	69.8	6.2
11.0			40.3	5.15	59.4	5.95	67.6	5.8
12.0			34.3	4.2	56.5	4.95	65.5	5.3
13.0			27.0	3.5	53.4	4.2	63.2	4.5
14.0			15.7	2.9	50.2	3.55	61.1	3.85
15.0					46.9	3.05	58.8	3.35
16.0					43.3	2.6	56.5	2.85
17.0					39.5	2.25	54.0	2.5
18.0					35.2	1.85	51.6	2.2
19.0					30.6	1.6	49.1	1.85
20.0					25.1	1.35	46.4	1.6
22.0							40.4	1.15
24.0							33.6	0.8
26.0							25.6	0.55
D								0°

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS FULLY EXTENDED 5.9m SPREAD 360° ROTATION								
C	A	9.7m		16.8m		24.4m		31.0m
	B	B	B	B	B	B	B	B
0°	7.2	12.0	14.3	2.7	21.9	0.9	28.5	0.3

- A: Boom length (m)
- B: Load radius (m)
- C: Loaded boom angle (°)
- D: Minimum boom angle (°) for indicated boom length (no load)

**ON OUTRIGGERS**

ON OUTRIGGERS MID EXTENDED 5.9m SPREAD 360° ROTATION (Unit: x1000kg)												
C	31.0m Boom + 7.2m Jib						31.0m Boom + 12.8m Jib					
	5°Tilt		25°Tilt		45°Tilt		5°Tilt		25°Tilt		45°Tilt	
	R	W	R	W	R	W	R	W	R	W	R	W
80°	5.9	3.5	8.1	2.4	9.8	1.7	7.7	2.2	11.7	1.2	14.6	0.8
77.5°	7.7	3.5	9.8	2.3	11.4	1.65	9.8	2.15	13.5	1.15	16.3	0.78
75°	9.4	3.5	11.4	2.2	12.9	1.6	11.8	2.1	15.3	1.1	17.9	0.75
72.5°	11.2	3.23	13.0	2.1	14.4	1.55	13.6	1.93	17.1	1.05	19.4	0.73
70°	12.7	2.95	14.6	2.0	15.8	1.5	15.5	1.75	18.8	1.0	21.0	0.7
67.5°	14.3	2.75	16.1	1.93	17.2	1.45	17.2	1.63	20.5	0.95	22.5	0.68
65°	15.8	2.55	17.5	1.85	18.6	1.4	18.9	1.5	22.0	0.9	23.9	0.65
62.5°	17.3	2.35	19.0	1.8	19.9	1.38	20.6	1.4	23.6	0.88	25.2	0.65
60°	18.7	2.15	20.4	1.75	21.2	1.35	22.3	1.3	25.1	0.85	26.6	0.65
57.5°	20.0	1.88	21.6	1.6	22.4	1.33	23.8	1.23	26.4	0.8	27.8	0.65
55°	21.4	1.6	22.9	1.45	23.6	1.3	25.4	1.15	27.9	0.75	29.0	0.65
52.5°	22.6	1.35	24.0	1.25	24.7	1.15	26.8	1.0	29.2	0.73	30.2	0.63
50°	23.9	1.1	25.1	1.05	25.7	1.0	28.2	0.85	30.4	0.7	31.3	0.6
47.5°	25.0	0.95	26.1	0.9	26.7	0.88	29.5	0.73	31.6	0.63	32.3	0.55
45°	26.0	0.8	27.1	0.75	27.7	0.75	30.7	0.6	32.7	0.55	33.3	0.5
42.5°	27.1	0.68	28.1	0.63			31.9	0.48	33.7	0.45		
40°	28.1	0.55	29.0	0.5			33.1	0.35	34.7	0.35		
37.5°	29.0	0.48	29.8	0.43								
35°	30.0	0.4	30.7	0.35								

- C: Boom angle (°)
- R: Load radius (m)
- W: Rated lifting capacity

**ON OUTRIGGERS**

ON OUTRIGGERS MID EXTENDED 5.0m SPREAD 360° ROTATION (Unit: ×1000kg)								
B	A	9.7m		16.8m		24.4m		31.0m
	C	C	C	C	C	C	C	C
3.0	60.6	30.0	74.4	19.2	79.7	12.5		
3.5	57.0	27.2	72.5	19.2	78.5	12.5		
4.0	53.1	23.4	70.9	19.2	77.5	12.5	80.8	8.4
4.5	49.2	21.3	68.9	18.3	76.3	12.5	80.0	8.4
5.0	44.7	19.6	67.1	17.0	75.0	12.5	79.1	8.4
5.5	40.3	15.7	65.1	15.0	74.0	12.5	78.3	8.4
6.0	34.9	13.2	63.3	12.65	72.8	12.5	77.3	8.4
6.5	28.7	11.3	61.4	10.85	71.5	11.7	76.6	8.4
7.0	18.2	9.65	59.4	9.5	70.1	10.4	75.6	8.1
8.0			54.9	7.3	67.5	8.2	73.7	7.5
9.0			50.5	5.8	64.8	6.7	71.8	6.8
10.0			45.8	4.7	62.0	5.5	69.5	5.8
11.0			40.3	3.8	59.3	4.65	67.3	4.9
12.0			34.3	3.1	56.3	3.9	65.2	4.25
13.0			27.0	2.55	53.0	3.25	63.0	3.6
14.0			15.7	1.9	49.9	2.75	60.8	3.1
15.0					46.6	2.3	58.5	2.65
16.0					43.0	1.9	56.1	2.25
17.0					39.4	1.6	53.8	1.95
18.0					35.2	1.35	51.3	1.65
19.0					30.5	1.1	48.7	1.4
20.0					24.9	0.75	46.0	1.2
22.0							40.3	0.8
D			0°					26°

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS FULLY EXTENDED 5.0m SPREAD 360° ROTATION						
C	A	9.7m		16.8m		24.4m
	B	B	B	B	B	B
0°	7.2	9.0	14.3	1.8	21.9	0.5

- A: Boom length (m)
- B: Load radius (m)
- C: Loaded boom angle
- D: Minimum boom angle (°) for indicated boom length (no load)

**ON OUTRIGGERS**

ON OUTRIGGERS MID EXTENDED 5.0m SPREA 360° ROTATION (Unit: ×1000kg)												
C	31.0m Boom + 7.2m Jib						31.0m Boom + 12.8m Jib					
	5°Tilt		25°Tilt		45°Tilt		5°Tilt		25°Tilt		45°Tilt	
	R	W	R	W	R	W	R	W	R	W	R	W
80°	5.9	3.5	8.1	2.4	9.8	1.7	7.7	2.2	11.7	1.2	14.6	0.8
77.5°	7.7	3.5	9.8	2.3	11.4	1.65	9.8	2.15	13.5	1.15	16.3	0.78
75°	9.4	3.5	11.4	2.2	12.9	1.6	11.8	2.1	15.3	1.1	17.9	0.75
72.5°	11.2	3.23	13.0	2.1	14.4	1.55	13.6	1.93	17.1	1.05	19.4	0.73
70°	12.7	2.95	14.6	2.0	15.8	1.5	15.5	1.75	18.8	1.0	21.0	0.7
67.5°	14.3	2.7	16.1	1.93	17.2	1.45	17.2	1.63	20.5	0.95	22.5	0.68
65°	15.8	2.45	17.5	1.85	18.6	1.4	18.9	1.5	22.0	0.9	23.9	0.65
62.5°	17.1	2.05	18.9	1.65	19.9	1.38	20.6	1.38	23.6	0.88	25.2	0.65
60°	18.6	1.65	20.2	1.45	21.1	1.35	22.2	1.25	25.1	0.85	26.6	0.65
57.5°	19.8	1.38	21.5	1.23	22.3	1.15	23.7	1.03	26.5	0.75	27.8	0.65
55°	21.1	1.1	22.7	1.0	23.4	0.95	25.1	0.8	27.7	0.65	29.0	0.65
52.5°	22.4	0.93	23.9	0.83	24.5	0.8	26.5	0.65	29.0	0.55	30.2	0.55
50°	23.6	0.75	25.0	0.65	25.5	0.65	27.9	0.5	30.3	0.45	31.2	0.45
47.5°	24.8	0.6	26.1	0.5	26.6	0.5						
45°	25.9	0.45	27.1	0.35	27.5	0.35						

- C: Boom angle (°)
- R: Load radius (m)
- W :Rated lifting capacity (Unit:×1000kg)

**ON OUTRIGGERS**

ON OUTRIGGERS MIN EXTENDED 2.2m SPREAD 360° ROTATION (Unit: x1000kg)								
B \ A	9.7m		16.8m		24.4m		31.0m	
	C	C	C	C	C	C	C	C
3.0	60.6	13.2	74.2	13.0	79.5	12.5		
3.5	57.0	10.25	72.2	9.8	78.4	10.9		
4.0	53.1	8.0	70.5	7.8	77.2	8.8	79.9	8.0
4.5	49.2	6.7	68.4	6.45	75.9	7.25	79.0	7.2
5.0	44.7	5.7	66.8	5.3	74.6	6.2	77.9	6.05
5.5	40.3	4.7	64.6	4.4	73.3	5.2	77.0	5.45
6.0	34.9	3.85	62.8	3.65	72.0	4.4	76.1	4.8
6.5	28.7	3.3	60.9	3.05	70.6	3.8	75.1	4.25
7.0	18.3	2.7	58.7	2.6	69.5	3.3	74.1	3.65
8.0			54.6	1.85	66.7	2.4	72.3	2.75
9.0			50.2	1.2	64.1	1.75	70.3	2.05
10.0			45.1	0.55	61.3	1.35	68.3	1.5
11.0					58.7	0.95	66.2	1.2
12.0					55.9	0.55	64.3	0.9
13.0							62.2	0.5
D	0°		40°		53°		60°	

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MIN EXTENDED 2.2m SPREAD 360° ROTATION								
C \ A	9.7m							
	B	B						
0°	7.2	2.5						

- A: Boom length (m)
- B: Load radius (m)
- C: Loaded boom angle (°)
- D: Minimum boom angle (°) for indicated boom length (no load)

**NOTES FOR “ON OUTRIGGERS” TABLE**

1. Rated lifting capacities shown in the table are based on condition that crane is set on firm level surface. Those above thick lines are based on crane strength and those below, on its stability.
2. Rated lifting capacities based on crane stability are according to ISO 4305.
3. The mass of the hook (270kg for 30 t capacity, 100kg for 4.0 t capacity), slings and all similarly used load handling devices must be considered as part of the load and must be deducted from the lifting capacities.
4. For rated lifting capacity of single top, reduce the rated lifting capacities of relevant boom according to a weight reduction for auxiliary load handling equipment. Capacities of single top shall not exceed 4,000 kg including main boom hook mass and the net capacity must be so reduced.
5. Standard number of parts of line for each boom length is as shown below. Load per line should not surpass 39.2 kN {4,000 kg} for main winch and auxiliary winch.

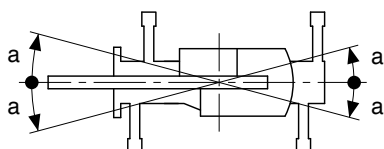
Boom length	9.7m	9.7m to 16.8m	16.8m to 31.0m	Single top / Jib
Number of parts of line	8	6	4	1

The lifting capacity data stored in the AUTOMATIC MOMENT LIMITER (AML-L) is based on the standard number of parts of line listed in the chart.

Maximum lifting capacity is restricted by the number of parts of line of AUTOMATIC MOMENT LIMITER (AML-L).

6. The lifting capacity for over-side area differs depending on the outrigger extension width. Work with the capacity corresponding to the extension width. The lifting capacities for over-front and over-rear areas are for “outriggers fully extended”. However, the areas (angle a) differ depending on the outrigger extension width.

Outriggers extended width	5.9m(middle)	5.0m(middle)	2.2m(minimum)
Angle a°	45	40	15



# RATED LIFTING CAPACITIES ISO4305

SPEC. SHEET NO. GR-300E-2-00102/EX-01

ON RUBBER STATIONARY (Unit: ×1000kg)												
B \ A	Over Front						360° Rotation					
	9.7m		16.8m		24.4m		9.7m		16.8m		24.4m	
	C		C		C		C		C		C	
3.0	60.6	18.0					60.6	11.0				
3.5	56.8	17.0					57.1	9.0				
4.0	53.0	15.0					53.5	7.3				
4.5	49.2	12.7	68.8	11.0			49.7	5.7	68.5	5.5		
5.0	44.9	10.6	66.9	9.5			45.4	4.9	66.3	4.5		
5.5	39.9	9.0	64.9	8.0			40.8	4.0	64.6	3.7		
6.0	34.6	7.7	63.1	7.0			35.3	3.2	62.5	3.1		
6.5	27.7	6.6	61.1	6.1			28.9	2.75	60.9	2.5		
7.0	17.7	5.7	59.0	5.3			20.5	2.27	58.6	2.1		
8.0			54.6	4.25	67.2	5.0			54.6	1.4	66.9	2.2
9.0			50.0	3.45	64.3	3.9			49.9	0.85	64.3	1.6
10.0			45.2	2.65	61.6	3.15					61.6	1.1
11.0			40.1	2.1	58.8	2.55					58.7	0.8
12.0			33.8	1.6	55.9	2.1						
13.0			26.5	1.2	52.9	1.75						
14.0			15.7	0.75	49.7	1.4						
15.0					46.7	1.1						
16.0					43.1	0.85						
17.0					39.4	0.6						
D												
				0°		28°		0°		44°		56°

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON RUBBER STATIONARY											
C \ A	Over Front						360° Rotation				
	9.7m		16.8m				9.7m				
	B		B				B				
0°	7.2	5.4	14.3	0.7			7.2	2.1			

- A: Boom length (m)
- B: Load radius (m)
- C: Loaded boom angle (°)
- D: Minimum boom angle (°) for indicated boom length (no load)

ON RUBBER CREEP (Unit: ×1000kg)												
B \ A	Over Front						360° Rotation					
	9.7m		16.8m		24.4m		9.7m		16.8m		24.4m	
	C		C		C		C		C		C	
3.0	60.6	18.0					60.6	10.0				
3.5	56.8	15.45					57.0	8.0				
4.0	53.0	13.0					53.3	6.5				
4.5	49.0	11.1	68.6	9.7			49.2	5.1	68.6	5.1		
5.0	44.7	9.3	66.6	8.4			44.4	4.3	66.6	4.2		
5.5	39.8	7.95	64.6	7.0			39.6	3.7	64.7	3.5		
6.0	34.7	6.7	62.8	6.0			34.0	3.0	62.7	2.7		
6.5	28.0	5.75	60.8	5.3			27.0	2.5	60.7	2.35		
7.0	18.2	5.0	58.7	4.65			18.1	1.95	58.9	1.85		
8.0			54.4	3.6	67.0	4.3			54.5	1.3	67.0	1.9
9.0			49.9	2.8	64.3	3.4			50.2	0.75	64.3	1.35
10.0			45.1	2.3	61.7	2.8					61.7	0.9
11.0			39.6	1.8	58.8	2.25					58.8	0.6
12.0			33.3	1.35	56.0	1.8						
13.0			26.0	1.0	52.9	1.5						
14.0			14.6	0.6	49.7	1.2						
15.0					46.4	0.95						
16.0					42.9	0.6						
D												
				0°		31°		0°		44°		56°

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON RUBBER CREEP											
C \ A	Over Front						360° Rotation				
	9.7m		16.8m				9.7m				
	B		B				B				
0°	7.2	4.7	14.3	0.5			7.2	1.8			

- A: Boom length (m)
- B: Load radius (m)
- C: Loaded boom angle (°)
- D: Minimum boom angle (°) for indicated boom length (no load)