TADANO

GR-250N (III)

4-section boom
2-section power tilt jib
X-type/H-type outrigger

CREVO 250 G3α

SPECIFICATIONS

CRANE

CRANE CAPACITY	9.35-m boom	25,000 kg × 3.5 m	(8 parts of line)
	16.4-m boom	15,000 kg × 6.5 m	(6 parts of line)
	23.45-m boom	12,500 kg × 5.5 m	(4 parts of line)
	30.5-m boom	8,000 kg × 8.0 m	(4 parts of line)
	8.0-m jib	3,300 kg × 72°	(1 part of line)
	13.0-m jib	2,000 kg × 78°	(1 part of line)
	Single top	4,000 kg	(1 part of line)
MAXIMUM LIFTING HEIGHT	Boom	31.3 m	
	Jib	44.2 m	
MAXIMUM LOAD RADIUS	Boom	27.9 m	
	Jib	33.8 m	
BOOM LENGTH		9.35 m-30.5 m	
BOOM TELESCOPING LENGTH		21.15 m	
BOOM EXTENSION SPEED		21.15 m/80 s	
JIB LENGTH		8.0 m, 13.0 m	
WINDING SPEED (Rope speed)	Main winch	120 m/min (4 layers)	
	Auxiliary winch	120 m/min (4 layers)	
HOOK WINDING SPEED	Main winch	15.0 m/min (8 parts of line)	
	Auxiliary winch	120 m/min (1 part of line)	
UNWINDING SPEED (Rope speed) [Reference]	Main winch	Standard: 120 m/min (4 layers)	
		High speed: 160 m/min (4 layers)	
	Auxiliary winch	Standard: 120 m/min (4 layers)	
		High speed: 160 m/min (4 layers)	
BOOM ELEVATION ANGLE		0°-84°	
BOOM ELEVATION SPEED		0°-84°/45 s	
SLEWING ANGLE		360° continuous	
SLEWING SPEED		2.6 min^{-1} {rpm}	
WIRE ROPE	Main winch	Dia. 16 mm × length 170 m rotation-resistant wire rope	
	Auxiliary winch	Dia. 16 mm × length 98 m rotation-resistant wire rope	
BOOM		Box-construction, 4-section, hydraulic synchronized telescoping type	
BOOM TELESCOPING SYSTEM		1 double-acting hydraulic cylinders, 2 wire rope boom telescoping systems	
JIB		Quick-turn type (stored alongside and below boom), 2-section (telescoping 2nd section), offset 5°–60° Hydraulic stepless tilt type	
SINGLE TOP		Fixed on top boom section	
HOISTING SYSTEM		Driven by hydraulic motor and via bevel gear reducer, automatic brake, high-speed unwind function, 2 single winches, pressure compensated flow control valve	
BOOM ELEVATING SYSTEM		1 double-acting hydraulic cylinder, pressure compensated flow control valve	
SLEWING SYSTEM		Driven by hydraulic motor and via bevel gear reducer, ball bearing type, free slewing/lock switchable type, negative brake	
OUTRIGGER		Fully hydraulic X-type or H-type (floats mounted integrally) Slides and jacks each provided with independent operation device Extension width: maximum: 6.5 m, middle: 6.1 m, 5.0 m, 3.6 m, minimum: 3.1 m (X-type), 2.3 m (H-type)	
OPERATION METHOD		Hydraulic pilot operation type	
MAXIMUM LOAD OF OUTRIGGER		26.9 t	
POWER TAKE OFF		PTO wet multiplate clutch type	
HYDRAULIC PUMP		Tandem variable piston pump, triple tandem gear pump	
SAFETY DEVICES		Automatic moment limiter (AML), slewing automatic stop device, elevation slow down and stop device, over-winding cutout device, working area control device, outrigger extension width detector, boom telescoping cylinder hydraulic lock device, boom elevating cylinder hydraulic lock device, power tilt cylinder hydraulic lock device, level gauge, hydraulic safety valve, jack cylinder hydraulic lock device, slewing lock device, hook safety latch	
STANDARD EQUIPMENT		Air conditioner with dehumidifier function, hydraulic oil temperature display lamp, AM/FM radio, oil cooler, visual drum indicator Operation pedals ... ISO arrangement: for telescoping and for auxiliary winch Tadano arrangement: for elevating and for telescoping Mobile communication device (HELLO-NET Owner's Site), fuel consumption monitor, eco mode	
ACCESSORIES		Wood blocks (4), aluminum base blocks (4), loudspeaker	

CARRIER

NAME AND MODEL		Tadano UDS-T007
ENGINE	Name	Mitsubishi 6M60-TLE3BA (with turbocharger and air cooling)
	Model	Water-cooled, 4-cycle, 6-cyclinder, direct injection diesel engine
	Piston displacement	7.545 L
	Maximum output	200 kW/2,600 min^{-1}
	Maximum torque	775 N·m {79.0 kgf·m}/1,600 min^{-1} {rpm}
TORQUE CONVERTER		3-element, 1-section (with automatic lock-up mechanism)
TRANSMISSION		Automatic and manual transmission, power shift type (wet multiplate clutch) 3 forward and 1 reverse speeds (with Hi/Low settings)
SPEED REDUCER		Axle two-stage deceleration
DRIVING METHOD		2WD (4×2)/4WD (4×4) switchable type
FRONT AXLE		Full-floating type
REAR AXLE		Full-floating type
SUSPENSION	Service brake	Hydraulic pneumatic suspension (with hydraulic lock cylinder)
	Parking brake	Hydraulic pneumatic suspension (with hydraulic lock cylinder)
STEERING		Fully hydraulic power steering
BRAKE	Service brake	Hydro-pneumatic disc brake
	Parking brake	Mechanical drive shaft internal expanding type
	Auxiliary brake	Permanent magnetic retarder, exhaust valve type exhaust brake, auxiliary braking device for operations
FRAME		Welded box-shaped structure
BATTERY		Two 12 V, 120 Ah (24 V)
FUEL TANK CAPACITY		300 L
TIRES	Front	385/95 R25 170E ROAD
	Rear	385/95 R25 170E ROAD
CAB		Crew capacity: 1 person, with interior fittings, liquid-sealed rubber mounted type, fully adjustable folding seat (with head rest, arm rest and seat belt), adjustable handle (tilt, telescoping), intermittent front and ceiling wipers (with washers), power windows, side visor
SAFETY DEVICES		Emergency steering device, suspension lock unit, rear wheel steering lock device, engine over-run alarm, over-shift prevention device, parking brake alarm, boom left/right side monitor TV
STANDARD EQUIPMENT		Power retractable mirror, tire chocks

OPTIONS

Winch drum monitor camera, rear monitor camera, AML external warning lamp, road shoulder lamp, marker lamp, external voice alarm, discharge head lamp

DIMENSIONS WHEN TRAVELING

Overall length		11,530 mm
Overall width		2,620 mm
Overall height		3,495 mm
Wheel base		3,880 mm
Track	Front	2,170 mm
	Rear	2,170 mm

TRAVELING CAPABILITY

Maximum traveling speed	49 km/h
Gradeability (tan θ)	0.57
Minimum turning radius	5.1 m (four-wheel steering mode)
	8.5 m (two-wheel steering mode)

WEIGHT

Gross vehicle weight	25,595 kg
Front axle load	12,800 kg
Rear axle load	12,795 kg

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RATED LIFTING CAPACITIES

❶ Using outriggers

[BOOM] Unit: (t)

OUTRIGGER MAXIMUM EXTENSION (6.5 m)				- 360° -
Boom length / Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	15.0	12.5	
3.0 m	25.0	15.0	12.5	
3.5 m	25.0	15.0	12.5	8.0
4.0 m	23.5	15.0	12.5	8.0
4.5 m	21.5	15.0	12.5	8.0
5.0 m	19.6	15.0	12.5	8.0
5.5 m	17.8	15.0	12.5	8.0
6.0 m	16.3	15.0	12.4	8.0
6.5 m	15.1	15.0	11.7	8.0
7.0 m		14.0	11.0	8.0
8.0 m		11.3	9.8	8.0
9.0 m		9.2	8.8	7.6
10.0 m		7.5	7.6	6.9
11.0 m		6.3	6.6	6.3
12.0 m		5.35	5.6	5.6
13.0 m		4.6	4.85	4.9
13.5 m		4.25	4.5	4.6
14.0 m			4.25	4.3
15.0 m			3.7	3.8
16.0 m			3.25	3.4
17.0 m			2.9	3.0
18.0 m			2.55	2.65
19.0 m			2.3	2.4
20.0 m			2.05	2.15
20.5 m			1.95	2.0
21.0 m				1.9
22.0 m				1.7
24.0 m				1.35
26.0 m				1.1
27.9 m				0.9
A (°)	0-84			

A: boom angle range (with no load)

[BOOM] Unit: (t)

OUTRIGGER MIDDLE EXTENSION (6.1 m)				- Over side -
Boom length / Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	15.0	12.5	
3.0 m	25.0	15.0	12.5	
3.5 m	25.0	15.0	12.5	8.0
4.0 m	23.5	15.0	12.5	8.0
4.5 m	21.5	15.0	12.5	8.0
5.0 m	19.6	15.0	12.5	8.0
5.5 m	17.8	15.0	12.5	8.0
6.0 m	16.3	15.0	12.4	8.0
6.5 m	15.0	15.0	11.7	8.0
7.0 m		13.3	11.0	8.0
8.0 m		10.3	9.8	8.0
9.0 m		8.3	8.5	7.6
10.0 m		6.8	7.0	6.9
11.0 m		5.7	5.9	6.0
12.0 m		4.9	5.0	5.15
13.0 m		4.2	4.35	4.45
13.5 m		3.9	4.0	4.15
14.0 m			3.8	3.9
15.0 m			3.3	3.4
16.0 m			2.9	3.0
17.0 m			2.6	2.65
18.0 m			2.3	2.35
19.0 m			2.05	2.1
20.0 m			1.85	1.85
20.5 m			1.75	1.75
21.0 m				1.65
22.0 m				1.5
24.0 m				1.2
26.0 m				0.95
27.8 m				0.75
A (°)	0-84			

A: boom angle range (with no load)

[BOOM] Unit: (t)

OUTRIGGER MIDDLE EXTENSION (5.0 m)				- Over side -
Boom length / Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	15.0	12.5	
3.0 m	25.0	15.0	12.5	
3.5 m	25.0	15.0	12.5	8.0
4.0 m	23.5	15.0	12.5	8.0
4.5 m	21.2	15.0	12.5	8.0
5.0 m	18.0	15.0	12.5	8.0
5.5 m	14.7	15.0	12.5	8.0
6.0 m	12.3	12.7	12.4	8.0
6.5 m	10.5	10.9	11.15	8.0
7.0 m		9.55	9.8	8.0
8.0 m		7.45	7.7	7.6
9.0 m		6.0	6.25	6.4
10.0 m		4.95	5.15	5.3
11.0 m		4.1	4.35	4.45
12.0 m		3.5	3.7	3.8
13.0 m		3.0	3.15	3.25
13.5 m		2.8	2.9	3.0
14.0 m			2.7	2.8
15.0 m			2.35	2.4
16.0 m			2.05	2.1
17.0 m			1.75	1.85
18.0 m			1.55	1.6
19.0 m			1.35	1.4
20.0 m			1.2	1.2
20.5 m			1.1	1.1
21.0 m				1.05
22.0 m				0.9
24.0 m				0.65
A (°)	0-84			32-84

A: boom angle range (with no load)

[BOOM] Unit: (t)

OUTRIGGER MIDDLE EXTENSION (3.6 m)				- Over side -
Boom length / Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	25.0	15.0	12.5	
3.0 m	25.0	15.0	12.5	
3.5 m	20.0	15.0	12.5	8.0
4.0 m	15.4	15.0	12.5	8.0
4.5 m	12.1	12.7	12.5	8.0
5.0 m	9.9	10.6	10.6	8.0
5.5 m	8.25	8.9	9.0	8.0
6.0 m	7.0	7.6	7.8	7.6
6.5 m	6.0	6.55	6.8	6.8
7.0 m		5.75	5.95	6.0
8.0 m		4.5	4.7	4.75
9.0 m		3.6	3.8	3.85
10.0 m		2.9	3.1	3.15
11.0 m		2.4	2.55	2.6
12.0 m		1.95	2.1	2.15
13.0 m		1.6	1.75	1.8
13.5 m		1.45	1.6	1.65
14.0 m			1.45	1.5
15.0 m			1.2	1.25
16.0 m			1.0	1.05
17.0 m			0.8	0.85
18.0 m			0.65	0.7
19.0 m			0.5	0.55
A (°)	0-84		25-84	47-84

A: boom angle range (with no load)

[BOOM] (X-type) Unit: (t)

OUTRIGGER MINIMUM EXTENSION (3.1 m)				- Over side -
Boom length / Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	18.0	15.0	12.5	
3.0 m	18.0	15.0	12.5	
3.5 m	14.5	15.0	12.5	8.0
4.0 m	11.6	12.0	12.5	8.0
4.5 m	9.3	10.0	10.2	8.0
5.0 m	7.6	8.4	8.6	8.0
5.5 m	6.4	7.1	7.3	7.3
6.0 m	5.4	6.1	6.3	6.3
6.5 m	4.7	5.3	5.5	5.5
7.0 m		4.6	4.85	4.9
8.0 m		3.6	3.8	3.8
9.0 m		2.8	3.05	3.05
10.0 m		2.3	2.45	2.5
11.0 m		1.8	2.0	2.05
12.0 m		1.5	1.6	1.65
13.0 m		1.2	1.3	1.35
13.5 m		1.0	1.2	1.25
14.0 m			1.05	1.1
15.0 m			0.85	0.9
16.0 m			0.65	0.7
17.0 m			0.5	0.55
A (°)	0-84		36-84	52-84

A: boom angle range (with no load)

[BOOM] (H-type) Unit: (t)

OUTRIGGER MINIMUM EXTENSION (2.3 m)				- Over side -
Boom length / Load radius	9.35 m	16.4 m	23.45 m	30.5 m
2.5 m	12.2	12.0	10.0	
3.0 m	12.2	12.0	10.0	
3.5 m	9.8	10.0	10.0	6.0
4.0 m	7.6	8.0	8.5	6.0
4.5 m	6.1	6.7	7.0	6.0
5.0 m	5.0	5.5	5.8	5.8
5.5 m	4.1	4.6	4.9	5.0
6.0 m	3.4	4.0	4.25	4.35
6.5 m	2.9	3.4	3.65	3.75
7.0 m		2.95	3.15	3.3
8.0 m		2.2	2.4	2.5
9.0 m		1.65	1.85	1.95
10.0 m		1.2	1.4	1.5
11.0 m		0.9	1.1	1.15
12.0 m		0.65	0.8	0.9
A (°)	0-84	30-84	54-84	64-84

A: boom angle range (with no load)

[JIB] (30.5-m boom)

OUTRIGGER MAXIMUM EXTENSION (6.5 m) - 360° -

Jib length	30.5-m boom + 8.0-m jib								30.5-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	4.1	3.3	6.6	2.3	8.7	1.7	9.6	1.05	5.2	2.0	9.8	1.25	12.8	0.85	14.3	0.55
80°	7.3	3.3	9.5	2.3	11.5	1.7	12.1	1.05	8.9	2.0	13.2	1.25	15.8	0.85	16.9	0.55
78°	8.8	3.3	10.9	2.3	12.8	1.7	13.3	1.05	10.5	2.0	14.7	1.2	17.1	0.85	18.1	0.55
76°	10.2	3.3	12.3	2.3	14.0	1.7	14.4	1.05	12.1	1.9	16.1	1.15	18.4	0.85	19.2	0.55
74°	11.7	3.3	13.6	2.3	15.2	1.65	15.5	1.05	13.7	1.8	17.5	1.1	19.6	0.85	20.3	0.55
72°	13.0	3.3	14.8	2.3	16.3	1.65	16.6	1.05	15.1	1.65	19.0	1.1	20.8	0.85	21.4	0.55
70°	14.4	3.25	16.1	2.3	17.4	1.6	17.7	1.05	16.7	1.6	20.3	1.05	22.0	0.85	22.5	0.55
68°	15.6	3.0	17.2	2.25	18.5	1.55	18.7	1.0	18.1	1.5	21.6	1.0	23.1	0.85	23.5	0.55
65°	17.2	2.55	18.9	2.05	20.0	1.55	20.1	1.0	20.1	1.4	23.5	1.0	24.7	0.84	25.0	0.55
60°	20.0	1.85	21.5	1.65	22.6	1.5	22.5	1.0	23.4	1.25	26.5	0.95	27.4	0.81	27.4	0.54
55°	22.5	1.35	23.9	1.2	24.8	1.2			26.4	1.1	29.2	0.91	29.7	0.79		
53°	23.5	1.2	24.9	1.1	25.6	1.05			27.5	0.98	30.2	0.87	30.5	0.79		
50°	24.9	1.0	26.1	0.92	26.7	0.92			29.0	0.81	31.5	0.72	31.7	0.7		
47°	26.2	0.81	27.4	0.75	27.8	0.75			30.4	0.65	32.7	0.58	32.8	0.57		
45°	27.1	0.7	28.1	0.65	28.5	0.65			31.4	0.56	33.5	0.5	33.4	0.49		
40°	29.1	0.47	29.9	0.43					33.6	0.36						
A (°)	39-84				44-84		59-84		39-84		44-84				59-84	

A: boom angle range (with no load)

[JIB] (30.5-m boom)

OUTRIGGER MIDDLE EXTENSION (6.1 m) - Over side -

Jib length	30.5-m boom + 8.0-m jib								30.5-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	4.1	3.3	6.6	2.3	8.7	1.7	9.6	1.05	5.2	2.0	9.8	1.25	12.8	0.85	14.3	0.55
80°	7.3	3.3	9.5	2.3	11.5	1.7	12.1	1.05	8.9	2.0	13.2	1.25	15.8	0.85	16.9	0.55
78°	8.8	3.3	10.9	2.3	12.8	1.7	13.3	1.05	10.5	2.0	14.7	1.2	17.1	0.85	18.1	0.55
76°	10.2	3.3	12.3	2.3	14.0	1.7	14.4	1.05	12.1	1.9	16.1	1.15	18.4	0.85	19.2	0.55
74°	11.7	3.3	13.6	2.3	15.2	1.65	15.5	1.05	13.7	1.8	17.5	1.1	19.6	0.85	20.3	0.55
72°	13.0	3.3	14.8	2.3	16.3	1.65	16.6	1.05	15.1	1.65	19.0	1.1	20.8	0.85	21.4	0.55
70°	14.4	3.25	16.1	2.3	17.4	1.6	17.7	1.05	16.7	1.6	20.3	1.05	22.0	0.85	22.5	0.55
68°	15.6	3.0	17.2	2.25	18.5	1.55	18.7	1.0	18.1	1.5	21.6	1.0	23.1	0.85	23.5	0.55
65°	17.2	2.4	18.9	2.05	20.0	1.55	20.1	1.0	20.1	1.4	23.5	1.0	24.7	0.84	25.0	0.55
60°	19.9	1.7	21.5	1.5	22.6	1.45	22.5	1.0	23.4	1.25	26.5	0.95	27.4	0.81	27.4	0.54
55°	22.5	1.2	23.9	1.1	24.8	1.1			26.4	1.0	29.2	0.88	29.7	0.79		
53°	23.4	1.05	24.8	0.99	25.6	0.98			27.4	0.88	30.1	0.78	30.5	0.75		
50°	24.9	0.88	26.1	0.8	26.7	0.81			29.0	0.71	31.4	0.62	31.7	0.61		
47°	26.2	0.69	27.3	0.63	27.8	0.64			30.4	0.55	32.6	0.48	32.7	0.48		
45°	27.0	0.58	28.1	0.53	28.4	0.54			31.3	0.46	33.4	0.4	33.4	0.4		
40°	29.0	0.36														
A (°)	39-84				44-84		59-84				44-84				59-84	

A: boom angle range (with no load)

[JIB] (30.5-m boom)

OUTRIGGER MIDDLE EXTENSION (5.0 m) - Over side -

Jib length	30.5-m boom + 8.0-m jib								30.5-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	4.1	3.3	6.6	2.3	8.7	1.7	9.6	1.05	5.2	2.0	9.8	1.25	12.8	0.85	14.3	0.55
80°	7.3	3.3	9.5	2.3	11.5	1.7	12.1	1.05	8.9	2.0	13.2	1.25	15.8	0.85	16.9	0.55
78°	8.8	3.3	10.9	2.3	12.8	1.7	13.3	1.05	10.5	2.0	14.7	1.2	17.1	0.85	18.1	0.55
76°	10.2	3.3	12.3	2.3	14.0	1.7	14.4	1.05	12.1	1.9	16.1	1.15	18.4	0.85	19.2	0.55
74°	11.7	3.3	13.6	2.3	15.2	1.65	15.5	1.05	13.7	1.8	17.5	1.1	19.6	0.85	20.3	0.55
72°	13.0	3.15	14.8	2.3	16.3	1.65	16.6	1.05	15.1	1.65	19.0	1.1	20.8	0.85	21.4	0.55
70°	14.1	2.6	16.0	2.15	17.4	1.6	17.7	1.05	16.7	1.6	20.4	1.05	22.0	0.85	22.5	0.55
68°	15.2	2.2	17.1	1.85	18.5	1.55	18.7	1.0	18.1	1.5	21.6	1.0	23.1	0.85	23.5	0.55
65°	16.9	1.7	18.7	1.45	20.0	1.35	20.1	1.0	20.1	1.35	23.5	1.0	24.7	0.84	25.0	0.55
60°	19.6	1.1	21.3	0.98	22.4	0.94	22.5	0.93	23.2	0.9	26.3	0.74	27.3	0.7	27.4	0.54
55°	22.2	0.71	23.7	0.62	24.6	0.61			26.0	0.55	28.8	0.45	29.6	0.43		
53°	23.2	0.56	24.6	0.49	25.4	0.48			27.1	0.43						
50°	24.6	0.37														
A (°)	49-84		52-84				59-84		52-84		54-84				59-84	

A: boom angle range (with no load)

[JIB] (30.5-m boom)

OUTRIGGER MIDDLE EXTENSION (3.6 m) - Over side -

Jib length	30.5-m boom + 8.0-m jib								30.5-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	4.1	3.3	6.6	2.3	8.7	1.7	9.6	1.05	5.2	2.0	9.8	1.25	12.8	0.85	14.3	0.55
80°	7.3	3.3	9.5	2.3	11.5	1.7	12.1	1.05	8.9	2.0	13.2	1.25	15.8	0.85	16.9	0.55
78°	8.8	3.3	10.9	2.3	12.8	1.7	13.3	1.05	10.5	2.0	14.7	1.2	17.1	0.85	18.1	0.55
76°	10.1	2.9	12.3	2.25	14.0	1.7	14.4	1.05	12.1	1.9	16.1	1.15	18.4	0.85	19.2	0.55
74°	11.3	2.35	13.4	1.85	15.1	1.6	15.5	1.05	13.7	1.8	17.5	1.1	19.6	0.85	20.3	0.55
72°	12.4	1.85	14.5	1.5	16.2	1.3	16.6	1.05	15.0	1.45	19.0	1.1	20.8	0.85	21.4	0.55
70°	13.6	1.45	15.7	1.2	17.2	1.1	17.7	1.05	16.3	1.15	20.2	0.92	21.9	0.82	22.5	0.55
68°	14.8	1.15	16.7	0.98	18.2	0.89	18.6	0.87	17.7	0.95	21.3	0.74	23.0	0.67	23.5	0.55
65°	16.5	0.81	18.4	0.69	19.7	0.63	20.0	0.62	19.6	0.65	23.1	0.51	24.5	0.45	25.0	0.46
60°	19.3	0.35														
A (°)	59-84		64-84						64-84							

A: boom angle range (with no load)

[JIB] (23.45-m boom)

OUTRIGGER MAXIMUM EXTENSION (6.5 m) - 360° -

Jib length	23.45-m boom + 8.0-m jib								23.45-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	3.0	3.3	5.5	2.3	7.6	1.7	8.6	1.05	4.0	2.0	8.4	1.25	11.6	0.85	13.2	0.55
80°	5.3	3.3	7.8	2.3	9.6	1.7	10.5	1.05	6.9	2.0	11.0	1.25	13.8	0.85	15.2	0.55
78°	6.5	3.3	8.8	2.3	10.6	1.7	11.4	1.05	8.2	2.0	12.2	1.2	14.9	0.85	16.1	0.55
76°	7.6	3.3	9.9	2.3	11.6	1.7	12.2	1.05	9.5	1.9	13.4	1.15	16.0	0.85	17.0	0.55
74°	8.7	3.3	10.9	2.3	12.5	1.65	13.1	1.05	10.7	1.8	14.5	1.1	16.9	0.85	17.9	0.55
72°	9.8	3.3	11.8	2.3	13.4	1.65	13.9	1.05	11.9	1.65	15.6	1.1	17.9	0.85	18.8	0.55
70°	10.9	3.3	12.8	2.3	14.2	1.6	14.7	1.05	13.1	1.6	16.7	1.05	18.8	0.85	19.6	0.55
68°	11.9	3.3	13.8	2.3	15.1	1.55	15.5	1.0	14.3	1.5	17.7	1.0	19.8	0.85	20.4	0.55
65°	13.4	3.3	15.2	2.3	16.3	1.55	16.6	1.0	15.9	1.4	19.3	1.0	21.0	0.84	21.6	0.55
60°	15.7	2.9	17.4	2.3	18.4	1.5	18.5	1.0	18.7	1.25	21.7	0.95	23.1	0.81	23.4	0.54
55°	17.9	2.6	19.5	2.15	20.2	1.45			21.2	1.15	24.0	0.91	25.0	0.79		
53°	18.7	2.35	20.3	2.1	21.0	1.45			22.2	1.1	24.8	0.9	25.7	0.79		
50°	19.9	2.05	21.3	1.85	22.0	1.45			23.6	1.05	26.0	0.88	26.7	0.78		
47°	21.0	1.8	22.3	1.65	22.9	1.45			24.9	1.0	27.1	0.87	27.6	0.78		
45°	21.7	1.65	23.0	1.55	23.5	1.45			25.7	1.0	27.8	0.87	28.1	0.78		
40°	23.3	1.35	24.4	1.3					27.7	0.95	29.4	0.86				
35°	24.8	1.15	25.7	1.1					29.4	0.91	30.7	0.85				
30°	26.1	1.0	26.7	0.97					30.8	0.8	31.7	0.74				
25°	27.2	0.88	27.5	0.86					32.0	0.68	32.5	0.64				
20°	28.0	0.79							32.9	0.6						
15°	28.6	0.73							33.5	0.55						
10°	29.0	0.68							33.8	0.53						
5°	29.0	0.68							33.8	0.53						
A (°)	4-84		24-84		44-84		59-84		4-84		24-84		44-84		59-84	

A: boom angle range (with no load)

[JIB] (23.45-m boom)

OUTRIGGER MIDDLE EXTENSION (6.1 m) - Over side -

Jib length	23.45-m boom + 8.0-m jib								23.45-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	3.0	3.3	5.5	2.3	7.6	1.7	8.6	1.05	4.0	2.0	8.4	1.25	11.6	0.85	13.2	0.55
80°	5.3	3.3	7.8	2.3	9.6	1.7	10.5	1.05	6.9	2.0	11.0	1.25	13.8	0.85	15.2	0.55
78°	6.5	3.3	8.8	2.3	10.6	1.7	11.4	1.05	8.2	2.0	12.2	1.2	14.9	0.85	16.1	0.55
76°	7.6	3.3	9.9	2.3	11.6	1.7	12.2	1.05	9.5	1.9	13.4	1.15	16.0	0.85	17.0	0.55
74°	8.7	3.3	10.9	2.3	12.5	1.65	13.1	1.05	10.7	1.8	14.5	1.1	16.9	0.85	17.9	0.55
72°	9.8	3.3	11.8	2.3	13.4	1.65	13.9	1.05	11.9	1.65	15.6	1.1	17.9	0.85	18.8	0.55
70°	10.9	3.3	12.8	2.3	14.2	1.6	14.7	1.05	13.1	1.6	16.7	1.05	18.8	0.85	19.6	0.55
68°	11.9	3.3	13.8	2.3	15.1	1.55	15.5	1.0	14.3	1.5	17.7	1.0	19.8	0.85	20.4	0.55
65°	13.4	3.3	15.2	2.3	16.3	1.55	16.6	1.0	15.9	1.4	19.3	1.0	21.0	0.84	21.6	0.55
60°	15.7	2.85	17.4	2.3	18.4	1.5	18.5	1.0	18.7	1.25	21.7	0.95	23.1	0.81	23.4	0.54
55°	17.9	2.2	19.4	1.95	20.2	1.45			21.2	1.15	24.0	0.91	25.0	0.79		
53°	18.6	2.0	20.2	1.8	21.0	1.45			22.2	1.1	24.8	0.9	25.7	0.79		
50°	19.8	1.75	21.2	1.6	22.0	1.45			23.6	1.05	26.0	0.88	26.7	0.78		
47°	20.9	1.55	22.3	1.4	22.9	1.4			24.9	1.0	27.1	0.87	27.6	0.78		
45°	21.6	1.4	22.9	1.3	23.4	1.3			25.7	1.0	27.8	0.87	28.1	0.78		
40°	23.3	1.15	24.4	1.05					27.7	0.95	29.4	0.86				
35°	24.8	0.95	25.6	0.9					29.4	0.75	30.7	0.7				
30°	26.1	0.8	26.7	0.75					30.8	0.62	31.7	0.6				
25°	27.2	0.7	27.5	0.65					32.0	0.52	32.5	0.5				
20°	28.0	0.6							32.9	0.45						
15°	28.6	0.55							33.5	0.4						
10°	28.9	0.5							33.8	0.38						
5°	29.0	0.5							33.8	0.38						
A (°)	4-84		24-84		44-84		59-84		4-84		24-84		44-84		59-84	

A: boom angle range (with no load)

[JIB] (23.45-m boom)

OUTRIGGER MIDDLE EXTENSION (5.0 m) - Over side -

Jib length	23.45-m boom + 8.0-m jib								23.45-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	3.0	3.3	5.5	2.3	7.6	1.7	8.6	1.05	4.0	2.0	8.4	1.25	11.6	0.85	13.2	0.55
80°	5.3	3.3	7.8	2.3	9.6	1.7	10.5	1.05	6.9	2.0	11.0	1.25	13.8	0.85	15.2	0.55
78°	6.5	3.3	8.8	2.3	10.6	1.7	11.4	1.05	8.2	2.0	12.2	1.2	14.9	0.85	16.1	0.55
76°	7.6	3.3	9.9	2.3	11.6	1.7	12.2	1.05	9.5	1.9	13.4	1.15	16.0	0.85	17.0	0.55
74°	8.7	3.3	10.9	2.3	12.5	1.65	13.1	1.05	10.7	1.8	14.5	1.1	16.9	0.85	17.9	0.55
72°	9.8	3.3	11.8	2.3	13.4	1.65	13.9	1.05	11.9	1.65	15.6	1.1	17.9	0.85	18.8	0.55
70°	10.9	3.3	12.8	2.3	14.2	1.6	14.7	1.05	13.1	1.6	16.7	1.05	18.8	0.85	19.6	0.55
68°	11.9	3.3	13.8	2.3	15.1	1.55	15.5	1.0	14.3	1.5	17.7	1.0	19.8	0.85	20.4	0.55
65°	13.3	3.0	15.2	2.3	16.3	1.55	16.6	1.0	15.9	1.4	19.3	1.0	21.0	0.84	21.6	0.55
60°	15.6	2.2	17.3	1.85	18.4	1.5	18.5	1.0	18.7	1.25	21.7	0.95	23.1	0.81	23.4	0.54
55°	17.7	1.65	19.3	1.42	20.2	1.3			21.2	1.15	24.0	0.91	25.0	0.79		
53°	18.6	1.45	20.1	1.28	20.9	1.2			22.2	1.1	24.8	0.9	25.7	0.79		
50°	19.7	1.2	21.1	1.08	21.9	1.05			23.5	0.95	26.0	0.8	26.7	0.78		
47°	20.8	1.0	22.1	0.92	22.7	0.9			24.8	0.8	27.1	0.68	27.5	0.67		
45°	21.5	0.9	22.8	0.82	23.2	0.8			25.6	0.7	27.7	0.6	28.0	0.6		
40°	23.2	0.7	24.2	0.62					27.5	0.5	29.3	0.44				
35°	24.7	0.5	25.5	0.45					29.2	0.35	30.6	0.3				
30°	26.0	0.35	26.6	0.32												
A (°)	29-84				44-84		59-84		34-84				44-84		59-84	

A: boom angle range (with no load)

[JIB] (23.45-m boom)

OUTRIGGER MIDDLE EXTENSION (3.6 m) - Over side -

Jib length	23.45-m boom + 8.0-m jib								23.45-m boom + 13.0-m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)	Load radius (m)	Rated lifting capacity (t)
84°	3.0	3.3	5.5	2.3	7.6	1.7	8.6	1.05	4.0	2.0	8.4	1.25	11.6	0.85	13.2	0.55
80°	5.3	3.3	7.8	2.3	9.6	1.7	10.5	1.05	6.9	2.0	11.0	1.25	13.8	0.85	15.2	0.55
78°	6.5	3.3	8.8	2.3	10.6	1.7	11.4	1.05	8.2	2.0	12.2	1.2	14.9	0.85	16.1	0.55
76°	7.6	3.3	9.9	2.3	11.6	1.7	12.2	1.05	9.5	1.9	13.4	1.15	16.0	0.85	17.0	0.55
74°	8.7	3.3	10.9	2.3	12.5	1.65	13.1	1.05	10.7	1.8	14.5	1.1	16.9	0.85	17.9	0.55
72°	9.8	3.2	11.8	2.3	13.4	1.65	13.9	1.05	11.9	1.65	15.6	1.1	17.9	0.85	18.8	0.55
70°	10.8	2.7	12.8	2.1	14.2	1.6	14.7	1.05	13.1	1.6	16.7	1.05	18.8	0.85	19.6	0.55
68°	11.7	2.3	13.7	1.85	15.1	1.55	15.5	1.0	14.3	1.5	17.7	1.0	19.8	0.85	20.4	0.55
65°	13.1	1.8	15.0	1.45	16.3	1.3	16.6	1.0	15.9	1.35	19.3	1.0	21.0	0.84	21.6	0.55
60°	15.4	1.15	17.1	0.98	18.2	0.9	18.4	0.85	18.5	0.9	21.6	0.72	23.1	0.65	23.4	0.54
55°	17.6	0.75	19.2	0.62	20.0	0.6			20.9	0.55	23.8	0.45	24.9	0.42		
53°	18.4	0.62	19.9	0.52	20.7	0.5			21.9	0.45	24.6	0.35	25.6	0.35		
50°	19.6	0.45	21.0	0.37	21.6	0.35										
A (°)	49-84						59-84		52-84						59-84	

A: boom angle range (with no load)

❶ Points to remember when using the outriggers

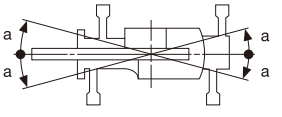
1. The rated lifting capacities are shown for when the crane is set horizontally on firm ground, and include the weight of the slings and main winch hook (220 kg) when working with the boom, and the weight of the slings and auxiliary winch hook (60 kg) when working with the jib. The values above the bold line are based on the crane strength while those below are based on the crane stability factor.
2. The load radius is based on the actual figure including the boom deflection, so always use this as the standard when working with the boom.
3. The jib rated lifting capacity is different when the boom length is 23.45 m or less and when it exceeds 23.45 m.
4. Use the boom angle as the standard when working with the jib. The reference load radii shown are those when the jib is mounted to a 23.45-m and 30.5-m boom.
5. The rated lifting capacity for the single top is the value obtained by subtracting 160 kg from the boom rated lifting capacity, and includes the weight of the slings and auxiliary winch hook (60 kg), but must not exceed 4.0 t.
6. High-speed unwinding should only be used when only the hook is being lowered. Also, sudden lever operations should be avoided at this time.
7. The table below shows the hook wire rope standard number of parts of line for each boom length. However, when using other number of parts of line, the load per line should not exceed 3.6 t for the main winch or 4.0 t for the auxiliary winch.

Boom length	9.35 m	16.4 m	23.45 m	30.5 m	Jib, single top
Number of parts of line	8	6	4	4	1

8. It should be 1 part of line for the hook wire rope on the jib.
9. The over-side lifting capability depends on the extension width of the outriggers.
   Perform work within the capability according to the extension width. Perform work within the capability according to the extension width.
   The lifting capability for the front and rear areas is the rated lifting capacity of the "outrigger maximum extension", but the range (angle a) of the front and rear areas depends on the outrigger extension width.

X-type	Extension width	Middle extension (6.1 m)	Middle extension (5.0 m)	Middle extension (3.6 m)	Minimum extension (3.1 m)
	Angle a°	50	25	10	5

H-type	Extension width	Middle extension (6.1 m)	Middle extension (5.0 m)	Middle extension (3.6 m)	Minimum extension (2.3 m)
	Angle a°	35	25	10	5



❷ Not using outriggers

Unit: (t)

	When stopped						When traveling (1.6 km/h or slower)					
Boom length	9.35 m		16.4 m		23.45 m		9.35 m		16.4 m		23.45 m	
Load radius	Front	360°	Front	360°	Front	360°	Front	360°	Front	360°	Front	360°
3.0 m	14.0	8.3	9.0	7.3			10.0	6.5	7.5	5.1		
3.5 m	14.0	6.8	9.0	7.3	6.5	4.5	10.0	5.2	7.5	5.1	5.5	3.2
4.0 m	12.5	5.3	9.0	5.85	6.5	4.5	9.0	4.2	7.5	4.4	5.5	3.2
4.5 m	10.9	4.3	9.0	4.75	6.5	4.5	8.2	3.4	7.5	3.7	5.5	3.2
5.0 m	9.55	3.5	8.2	4.0	6.5	4.0	7.4	2.8	7.0	3.1	5.5	3.2
5.5 m	8.3	2.8	7.4	3.3	6.1	3.4	6.7	2.4	6.2	2.7	5.15	2.8
6.0 m	7.2	2.3	6.6	2.8	5.65	2.9	5.9	1.9	5.5	2.3	4.8	2.4
6.5 m	6.25	1.8	5.9	2.35	5.25	2.5	5.1	1.5	4.9	1.9	4.45	2.05
7.0 m			5.25	1.95	4.85	2.15			4.35	1.6	4.15	1.8
8.0 m			4.1	1.4	4.1	1.6			3.4	1.1	3.5	1.4
9.0 m			3.25	0.95	3.5	1.2			2.7	0.7	2.95	1.0
10.0 m			2.6	0.6	3.0	0.85			2.15		2.45	0.65
11.0 m			2.1		2.55	0.55			1.7		2.05	
12.0 m			1.7		2.2				1.35		1.7	
13.0 m			1.35		1.85				1.1		1.45	
13.5 m			1.15		1.7				1.0		1.3	
14.0 m					1.55						1.2	
15.0 m					1.3						1.0	
16.0 m					1.05						0.85	
17.0 m					0.85						0.7	
18.0 m					0.65						0.55	
19.0 m					0.5							
A (°)	0-80		42-80		25-80	56-80	0-80		48-80		30-80	59-80

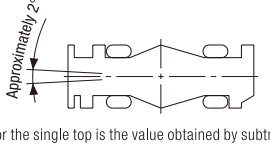
A: boom angle range (with no load)

❷ Points to remember when not using the outriggers

1. The rated lifting capacities are shown for when the crane is set horizontally on firm ground, the tires are at the standard pressure (900 kPa {9.0 kgf/cm2}), the suspension cylinder is fully retracted, and include the weight of the slings and main winch hook (220 kg) when working with the boom. The values above the bold line are based on the crane strength while those below are based on the crane stability factor.
   When performing actual work, use after considering the ground and operating conditions, etc.
2. The load radius is based on the actual figure including the boom and tire deflection, so always use this as the standard.
3. The table below shows the hook wire rope standard number of parts of line for each boom length. However, when using other number of parts of line, the load per line should not exceed 3.6 t for the main winch or 4.0 t for the auxiliary winch.

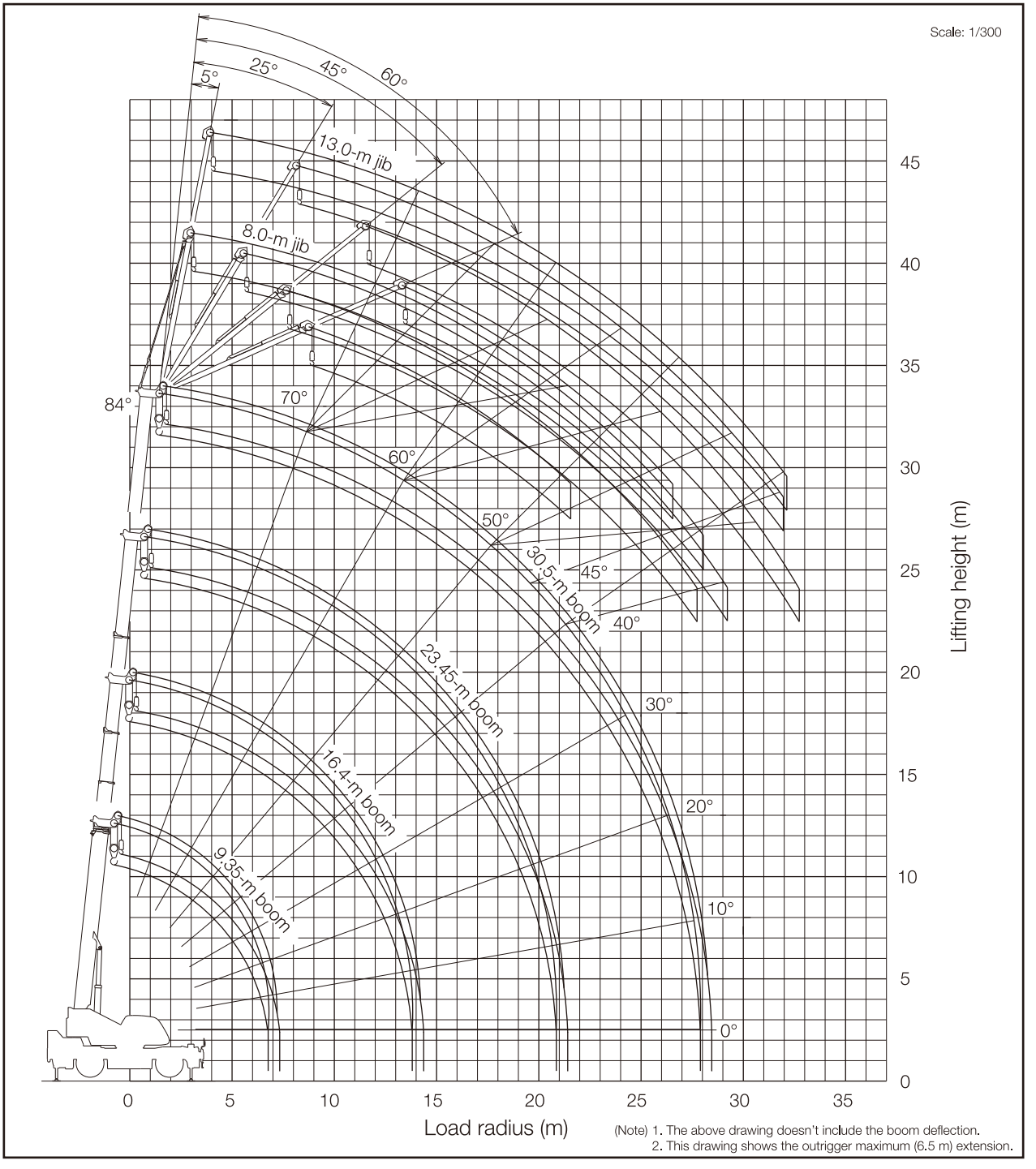
Boom length	9.35 m	16.4 m	23.45 m	Single top
Number of parts of line	4	4	4	1

4. Do not perform high-speed unwinding with a boom longer than 23.45 m or a jib.
5. Only perform "front" crane operations while the AML "front position symbol" is lit. The front range is when the boom is within 2° (1° to either the left or right) of the front of the carrier.



6. The rated lifting capacity for the single top is the value obtained by subtracting 160 kg from the boom rated lifting capacity, and includes the weight of the slings and auxiliary winch hook (60 kg), but must not exceed 4.0 t.
7. Perform pick and carry with the "drive select" switch set to "L/4D" and the shift lever set to first gear.
8. Perform pick and carry with the slewing brake on, the load close to the ground so it will not swing, and at a speed of 1.6 km/h or lower. In particular, abrupt steering, starting or braking must be avoided.
9. Do not perform crane operations while performing pick and carry.

WORKING RANGE

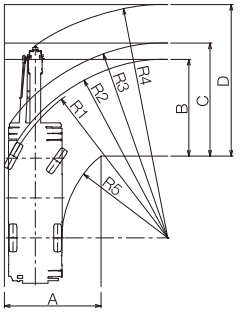


(Note) 1. The above drawing doesn't include the boom deflection.
2. This drawing shows the outrigger maximum (6.5 m) extension.

MINIMUM RIGHT-ANGLE PASSAGE WIDTH

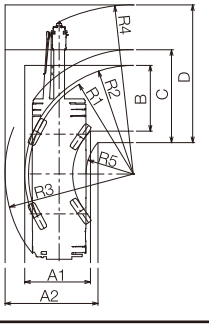
● While turning right in the front two-wheel steering mode

R1 = 8.5 m (minimum turning radius)
R2 = 8.69 m (outside tire edge turning radius)
R3 = 9.49 m (vehicle turning radius)
R4 = 11.36 m (boom edge turning radius)
R5 = 5.14 m (vehicle inside turning radius)
A = 4.71 m (entrance passage width)
B = 4.71 m (tire exit passage width)
C = 5.51 m (vehicle exit passage width)
D = 7.38 m (boom edge exit passage width)



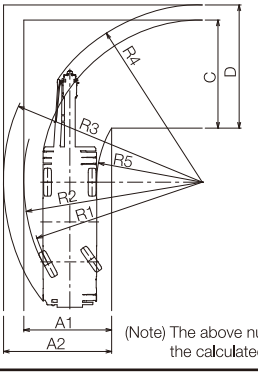
● While turning right in the four-wheel steering mode

R1 = 5.1 m (minimum turning radius)
R2 = 5.29 m (outside tire edge turning radius)
R3 = 6.25 m (vehicle turning radius)
R4 = 8.24 m (boom edge turning radius)
R5 = 2.31 m (vehicle inside turning radius)
A1 = 3.2 m (tire entrance passage width)
A2 = 4.53 m (vehicle entrance passage width)
B = 3.2 m (tire exit passage width)
C = 4.53 m (vehicle exit passage width)
D = 6.71 m (boom edge exit passage width)



● While turning right in the rear two-wheel steering mode

R1 = 8.5 m (minimum turning radius)
R2 = 8.69 m (outside tire edge turning radius)
R3 = 9.68 m (vehicle turning radius)
R4 = 8.63 m (boom edge turning radius)
R5 = 5.14 m (vehicle inside turning radius)
A1 = 4.28 m (tire entrance passage width)
A2 = 5.27 m (vehicle entrance passage width)
C = 5.27 m (vehicle exit passage width)
D = 6.00 m (boom edge exit passage width)



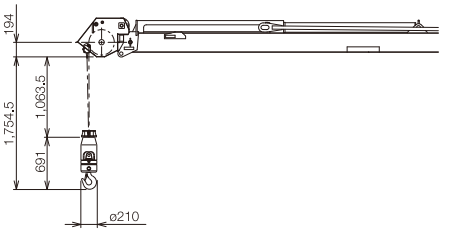
(Note) The above numbers are the calculated values.

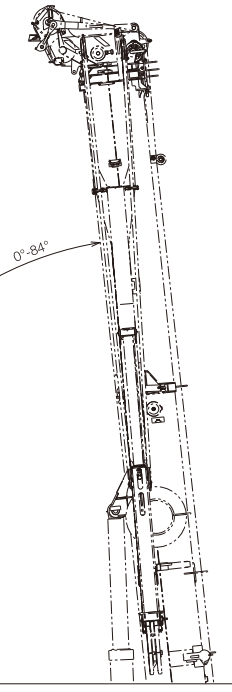
DIMENSIONS

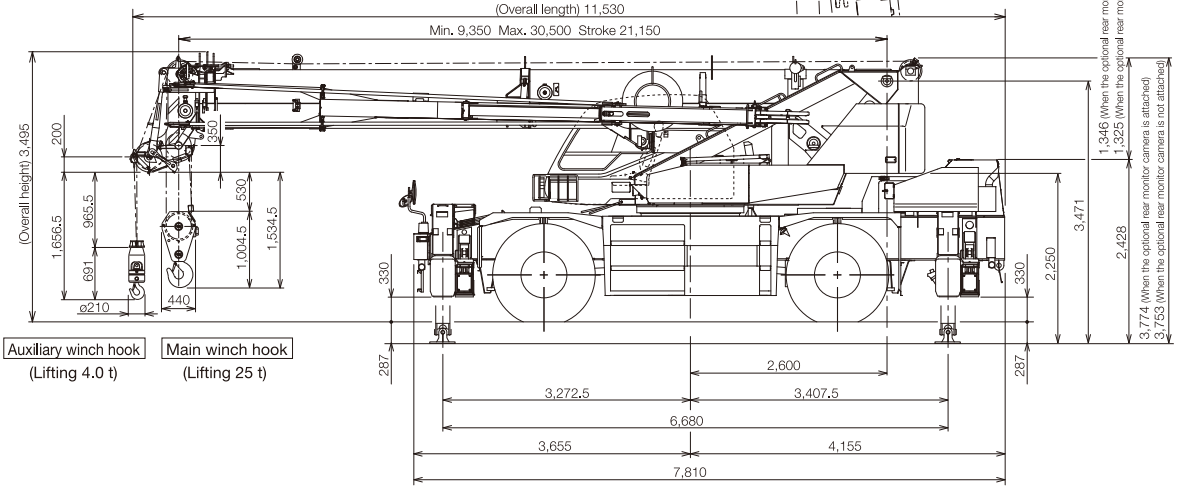
X-type outrigger

Scale: 1/100
(Unit: mm)

2-section power tilt jib

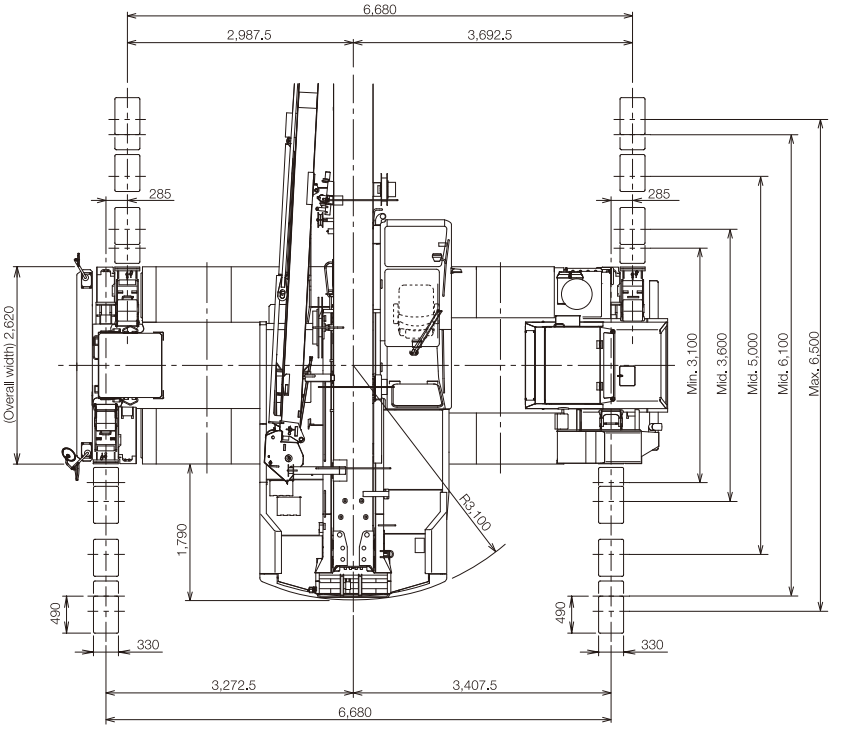






Auxiliary winch hook
(Lifting 4.0 t)

Main winch hook
(Lifting 25 t)

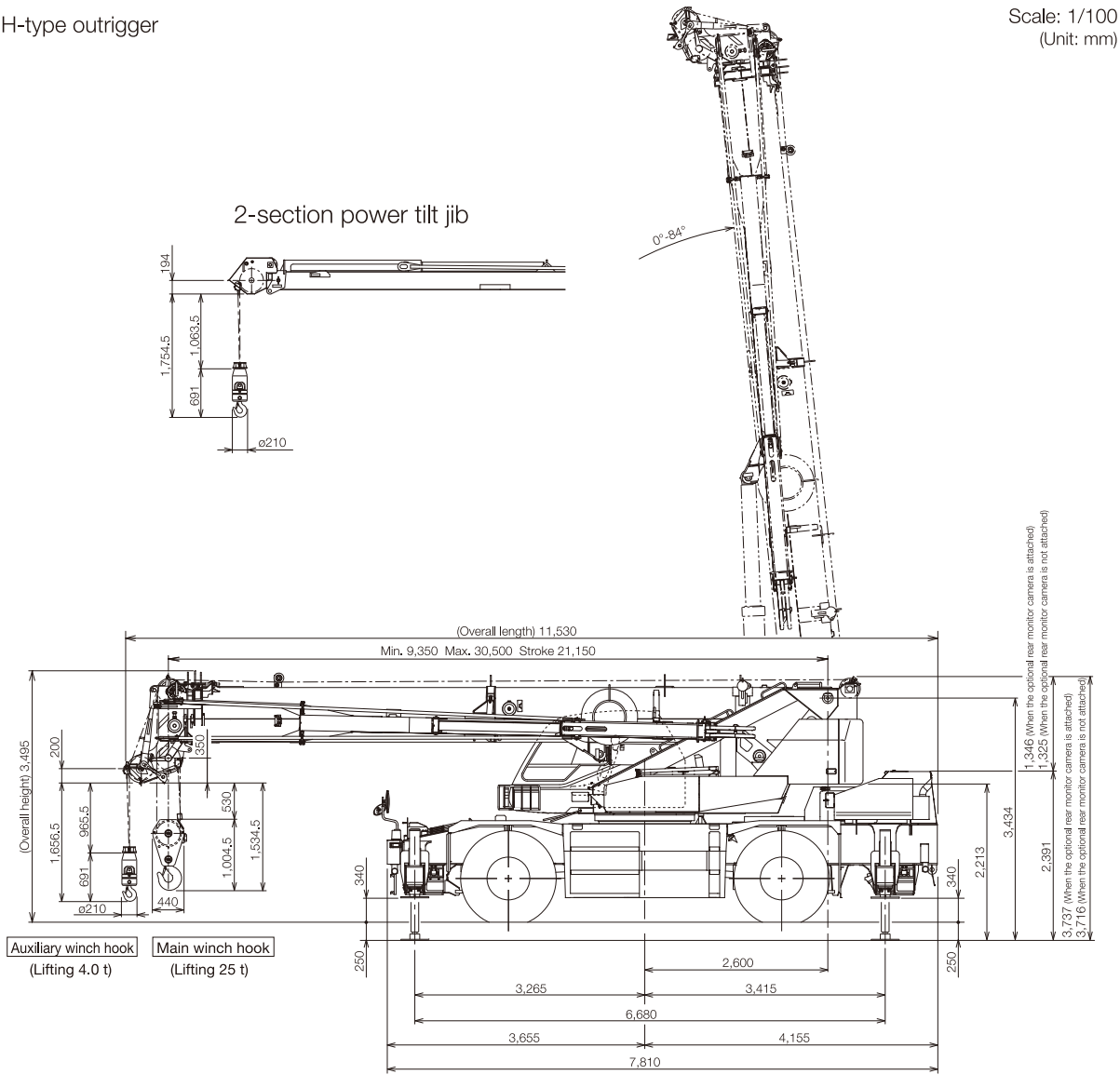


The following items in
the drawing are options.
* AML external warning lamp
* Rear monitor camera
* Marker lamp
* Road shoulder lamp

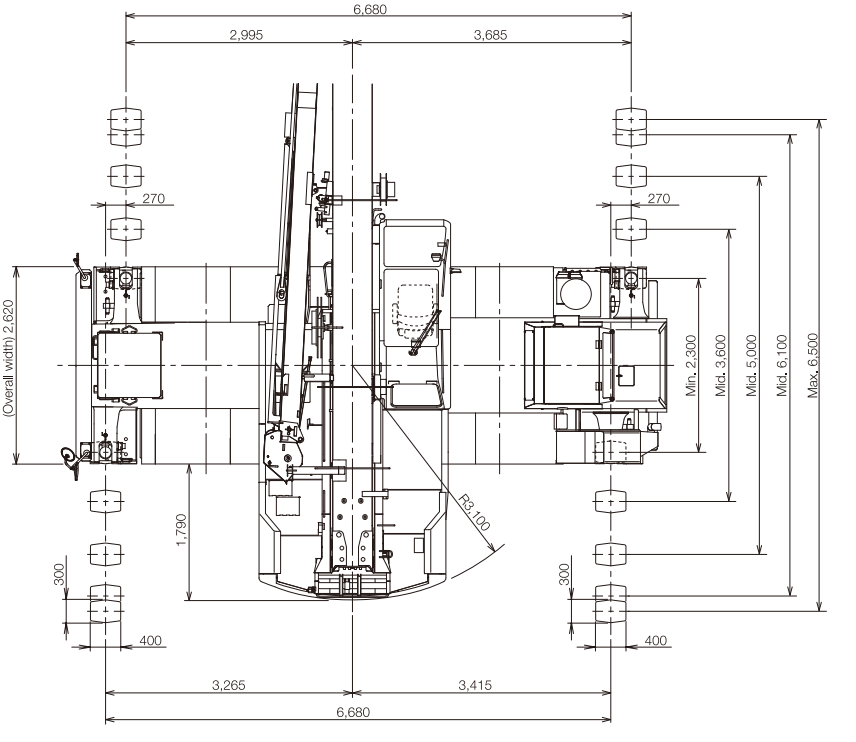
DIMENSIONS

H-type outrigger

Scale: 1/100
(Unit: mm)



2-section power tilt jib

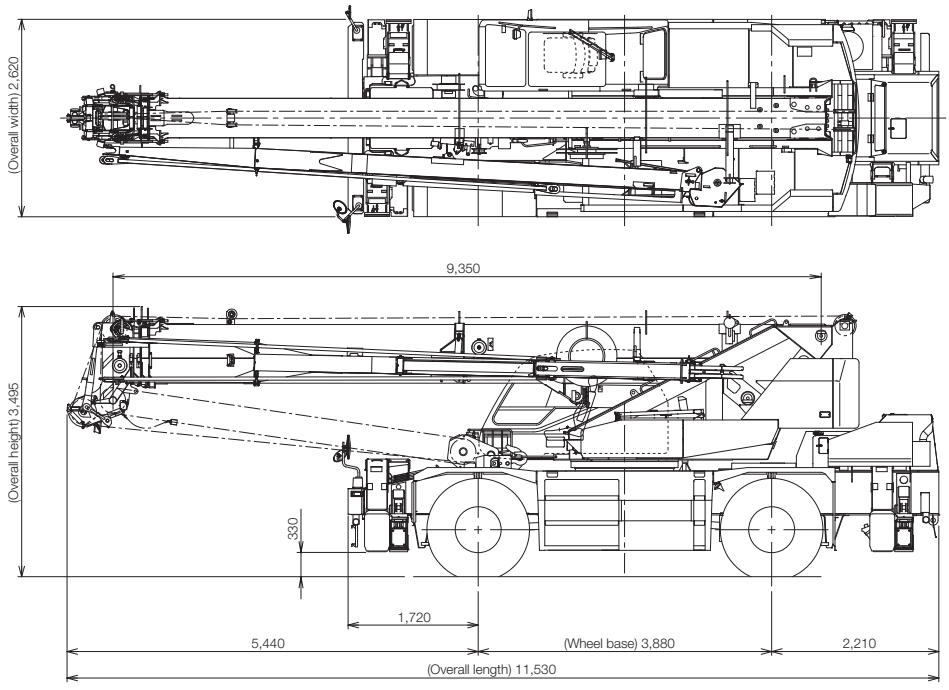


The following items in
the drawing are options.
* AML external warning lamp
* Rear monitor camera
* Marker lamp
* Road shoulder lamp

■ DIMENSIONS

X-type outrigger

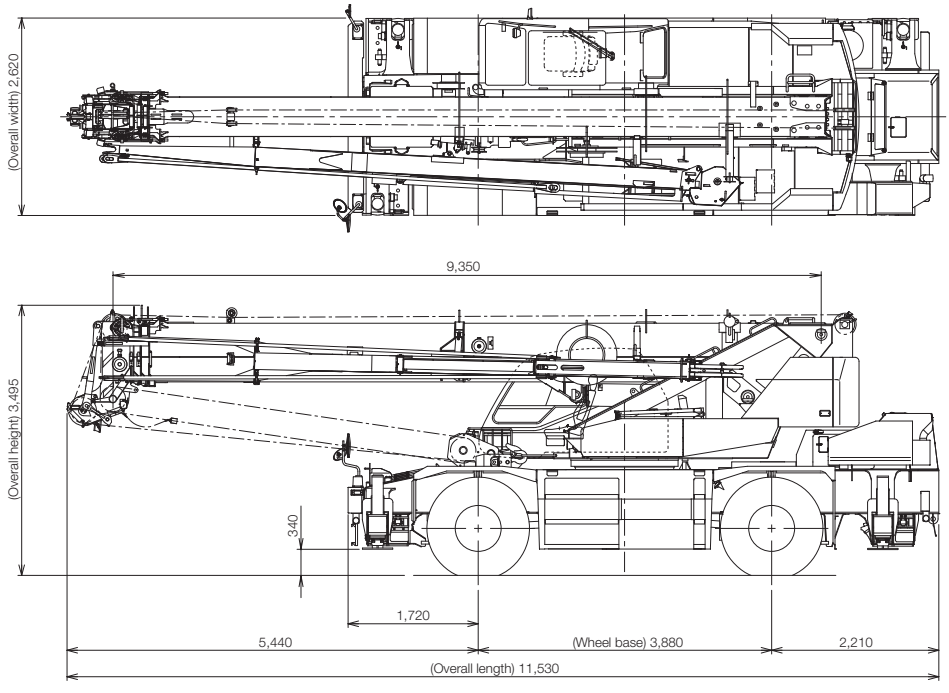
Scale: 1/100
(Unit: mm)



The AML external warning lamp, rear monitor camera, marker lamp, and road shoulder lamp in this drawing are options.

H-type outrigger

Scale: 1/100
(Unit: mm)



The AML external warning lamp, rear monitor camera, marker lamp, and road shoulder lamp in this drawing are options.

● This model has received a “Basic running conditions - weight: A” certificate of conformance under the Newly Developed Vehicle Certificate System, but the actual running conditions will be decided based on the calculations of the road administrator for each route.

Model name	Specifications	Specification no.
GR-250N	Lifting 25 t, 4-section boom, 2-section power tilt jib, X-type outrigger	GR-250N-3-00201
GR-250N	Lifting 25 t, 4-section boom, 2-section power tilt jib, H-type outrigger	GR-250N-3-00202

Note: Due to improvements, the delivered product may have specifications different from these.
201503

TADANO LTD.