

Tadano Rough Terrain Crane

GR-160N

(6-section boom, 2-section power tilt jib)

Specifications

Spec. No. GR-160N-5-00101 (X-type outriggers)

GR-160N-5-00102 (H-type outriggers)

TADANO LTD.

GR-160N (V)

6-section boom
2-section power tilt jib
X-/H-type outriggers



Specifications

Crane

Crane capacity	6.5m boom	16,000kg × 3.0m (6 parts of line)
	10.7m boom	12,000kg × 4.0m (6 parts of line)
	14.9m boom	9,000kg × 4.5m (4 parts of line)
	19.3m boom	7,000kg × 5.5m (4 parts of line)
	23.6m boom	5,000kg × 6.0m (4 parts of line)
	28.0m boom	3,500kg × 7.0m (4 parts of line)
	4.5m jib	2,000kg × 10.0m (1 part of line)
	6.9m jib	1,500kg × 12.0m (1 part of line)
	Single top	3,200kg (1 part of line)
Maximum lifting height	Boom	28.9m
	Jib	35.8m
Maximum load radius	Boom	24.5m
	Jib	28.0m
Boom length		6.5m to 28.0m
Boom telescoping length		21.5m
Boom extension speed		21.5m/72s
Jib length		4.5m, 6.9m
Hoist up speed (wire rope)	Main winch	125m/min (5th layer)
	Auxiliary winch	110m/min (3rd layer)
Hoist up speed (hook block)	Main winch	31.2m/min (4 parts of line)
	Auxiliary winch	110m/min (1 part of line)
Hoist down speed (wire rope) [Reference]	Main winch	Standard: 125 m/min (5th layer), High-speed: 170 m/min (5th layer)
	Auxiliary winch	Standard: 110 m/min (3rd layer), High-speed: 150 m/min (3rd layer)
Boom elevating angle		-9° to 82.5°
Boom raising speed		-9° to 82.5°/30s
Slewing angle		360° continuous
Slewing speed		2.6min ⁻¹ {rpm}
Wire rope	Main winch	Dia. 14mm × length 156m Spin-resistant wire rope
	Auxiliary winch	Dia. 14mm × length 85m Spin-resistant wire rope
Boom type		Box-shaped 6-section hydraulic telescoping type (2nd/3rd sections synchronized, 4th/5th/6th sections synchronized)
Boom telescoping system		2 double-acting direct-pushing hydraulic cylinders, 3 wire-rope boom telescoping systems, with pressure compensating flow control valve
Jib type		Stowed below boom 2-section (telescoping 2nd section), offset (5° to 60°), hydraulic stepless tilt type
Single top type		Fixed to top boom section
Hoisting system		Hydraulic motor driven planetary gear speed reducer, automatic brake, high-speed hoist down, 2 single winches, with pressure compensating flow control valve
Boom elevating system		1 double-acting direct-pushing hydraulic cylinder, With pressure compensating flow control valve
Slewing system		Hydraulic motor driven planetary gear speed reducer, ball bearing, slewing free/lock interchangeable, negative brake
Outriggers		Fully hydraulic X-/H-type (floats mounted integrally), slide and jacks with independent operation device, Extension width: Max. 5.2m, Mid. 4.8m, 4.4m, 3.2m, Min. 2.7m (X-type), 1.79m (H-type)
Operation method		Electrically operated
Maximum load of outrigger		18.4t
Power take off		PTO wet multiplate clutch type
Hydraulic pump		Tandem variable piston pump, tandem gear pump
Safety devices		Load moment indicator (AML), slewing automatic stop device, elevation slow stop device, anti-two-block device, working range limiter, outrigger extension width detector, boom telescoping cylinder hydraulic lock, boom elevating cylinder hydraulic lock, power tilt cylinder hydraulic lock, level gauge, hydraulic safety valve, jack cylinder hydraulic lock, hook safety latch
Standard equipment		Full automatic air conditioner with dehumidifier, hydraulic oil temperature gauge, loudspeaker, AM/FM radio, oil cooler, visual drum rotation indicator, drum rotation sound device, operating pedals--ISO layout: for boom telescoping and auxiliary winch hook block Tadano layout: for boom elevating and boom telescoping Telematics, wireless LAN communication terminal, fuel consumption monitor, Eco mode, automatic acceleration, automatic pump stop, hydraulic oil clogging alarm
Accessories		Wood blocks (4 pcs.), aluminum pads (4 pcs.), radiator cover

Carrier

Vehicle name/model		Tadano YDS-T018
Engine	Model	Cummins QSB6.7-4E (with turbocharger, intake air cooling, DPF/urea SCR system)
	Type	Water-cooled, 4-cycle, 6-cylinder direct injection diesel engine
	Displacement	6.690L
	Maximum output	Traveling: 179kW{243PS}/2,200min ⁻¹ {rpm} Operating: 149kW{202PS}/1,500min ⁻¹ {rpm}
	Maximum torque	949N·m{96.8kgf·m}/1,500min ⁻¹ {rpm}
Torque converter		3-element 1-section (with automatic lockup mechanism)
Transmission		Automatic and manual transmission, power shift type (wet multiplate clutch), 4 forward and 1 reverse speeds (with Hi/Lo settings)
Speed reducer		Axle two-stage deceleration
Driving method		2WD (4×2) / 4WD (4×4) switching
Front axle system		Full-floating type
Rear axle system		Full-floating type
Suspension	Front wheels	Parallel leaf spring suspension (with hydraulic lock cylinder)
	Rear wheels	Parallel leaf spring suspension (with hydraulic lock cylinder)
Steering		Fully hydraulic power steering
Brakes	Main	Hydro-pneumatic front and rear disk brakes
	Parking	Air drive shaft internal expanding spring brake
	Auxiliary	Exhaust brake, auxiliary operating brake
Frame		Welded box-shaped structure
Batteries		12V-120Ah×2 (24V)
Fuel tank capacity		240L
Urea water tank capacity		38L
Tires	Front wheels	325/95 R24 162/160K (161E ROAD)
	Rear wheels	325/95 R24 162/160K (161E ROAD)
Cab		Crew capacity: 1 person, with interior fittings, rubber mounting type, fully adjustable suspension seat (with headrest, armrest, seat belt), adjustable steering wheel (tilt, telescoping), intermittent front and ceiling wipers (with washers), power windows, side visors
Safety devices		Emergency steering device, suspension lock unit, rear wheel steering lock device, engine over-run alarm, over-shift prevention device, parking brake alarm, radiator fluid level warning device, hydraulic oil leak warning device
Standard equipment		Electromotive retractable mirror with heater, immobilizer, tire chocks, LED headlamps, rear-left camera, slewing table rear-left camera, slewing table rear camera, rear camera, human alert

Option

Winch drum monitoring camera, AML external warning lamp, position lamps, marker lamps, LED marker lamps, LED flood lamps, external auditory alarms, radio controller for work preparation, centralized lubrication system, halogen headlamps
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Dimensions when traveling

Overall length		8,310mm
Overall width		2,200mm
Overall height		3,150mm
Wheel base		3,200mm
Wheel track	Front wheels	1,820mm
	Rear wheels	1,820mm

Running performance

Maximum speed	49km/h
Gradability (tanθ)	0.6
Minimum turning radius	4.8m (4-wheel steering)
	8.5m (2-wheel steering)

Weight

Gross vehicle load	19,795kg
Front axle load	9,940kg
Rear axle load	9,855kg

Maximum jack reaction force (maximum load of outrigger)

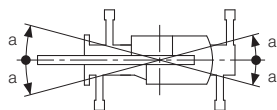
Boom	18.4t
Jib	13.2t

■ Precautions on rated lifting capacity table [when using outriggers]

1. The rated lifting capacities assume that the crane is set horizontally on firm and level ground, and include the weight of the lifting devices and main winch hook block (140kg) when working with the boom and the weight of the lifting devices and auxiliary winch hook block (50kg) when working with the jib.
The values above the bold line are based on the structural strength while those below are based on the crane stability factor.
2. The load radius is based on the actual figure including the boom and jib deflection, so always use the load radius as the standard when working.
3. When the single top is used, the number of parts of line is 1.
The rated lifting capacity for the single top is the value obtained by subtracting 90kg from the boom rated lifting capacity, and includes the weight of the lifting devices and auxiliary winch hook block (50kg), and must not exceed 3.2t.
4. High-speed hoist down should only be used when only the hook block is being lowered. Also, sudden lever operations should be avoided.
5. The standard hook block and the number of parts of line for each boom length are described in the rated lifting capacity table for the corresponding boom.
However, when using other number of parts of line, the load per line must not exceed 2.9t for main winch wire rope or 3.2t for auxiliary winch wire rope.
6. When the jib is used, the number of parts of line is 1.
7. The lifting capacity in the over-side area depends on the extension width of the outriggers. Perform work within the capacity according to the extension width.
The lifting capacity for the over-front and over-rear areas is the rated lifting capacity of the "maximum outriggers extension," but the range (angle α) in the over-front and over-rear areas depends on outrigger extension width in use.

X-type	Ext. width	Middle (4.8m)	Middle (4.4m)	Middle (3.2m)	Minimum (2.7m)
	Angle α°	50	45	20	15

H-type	Ext. width	Middle (4.8m)	Middle (4.4m)	Middle (3.2m)	Minimum (1.79m)
	Angle α°	45	40	20	5



Explanation on symbols and markings in rated lifting capacity table

	Indicates the rated lifting capacity of the boom.		Indicates the boom length.
	Indicates the rated lifting capacity of the power tilt jib (PTJ).		Indicates the load radius.
	Indicates the jib length of the power tilt jib (PTJ).		Indicates the boom telescoping state (telescoping ratio %). The MODE indicates the boom telescoping mode.
	Indicates the outrigger extension width.		Indicates the boom angle range in which no-load operation is enabled.
	Indicates the slewing range in which lifting is enabled.		Indicates the offset angle of the power tilt jib (PTJ), which is an angle formed between the boom centerline and jib centerline.
	Indicates the unit of the rated lifting capacity.		Indicates the standard number of parts of line.
			Indicates the standard hook block.

■ Rated lifting capacity table for boom

					
MB			5.2m	360°	JPN

	m	6.5	10.7	14.9	19.3	23.6	28.0	m
	2.5	16.00	12.00	9.00	7.00			2.5
	3.0	16.00	12.00	9.00	7.00			3.0
	3.5	14.00	12.00	9.00	7.00	5.00	3.50	3.5
	4.0	12.50	12.00	9.00	7.00	5.00	3.50	4.0
	4.5	11.70	11.10	9.00	7.00	5.00	3.50	4.5
	5.0	(4.4m)	10.25	8.90	7.00	5.00	3.50	5.0
	5.5		9.40	8.20	7.00	5.00	3.50	5.5
	6.0		8.80	7.60	6.60	5.00	3.50	6.0
	7.0		6.75	6.50	5.80	4.80	3.50	7.0
	8.0		5.05	4.95	5.25	4.25	3.40	8.0
	9.0		4.35	3.90	4.30	3.75	3.20	9.0
	10.0		(8.6m)	3.10	3.45	3.35	2.90	10.0
	11.0			2.50	2.85	3.05	2.60	11.0
	12.0			2.05	2.40	2.65	2.40	12.0
	13.0			1.75	2.00	2.25	2.25	13.0
	14.0			(12.8m)	1.70	1.95	2.05	14.0
	15.0				1.45	1.65	1.75	15.0
	16.0				1.25	1.45	1.50	16.0
	17.0				1.05	1.25	1.30	17.0
	18.0					1.05	1.15	18.0
	19.0					0.90	1.00	19.0
	20.0					0.75	0.85	20.0
	22.0					0.55	0.60	22.0
	24.5					(21.5m)	0.40	24.5
	1	0	50	100	100	100	100	1
	2	0	50	100	100	100	100	2
	3	0	0	0	33	66	100	3
	4	0	0	0	33	66	100	4
	5	0	0	0	33	66	100	5
	MODE	1	1	1	1	1	1	MODE
	[DEG]	0 to 82.5	0 to 82.5	0 to 82.5	0 to 82.5	0 to 82.5	0 to 82.5	[DEG]
		6	6	4	4	4	4	
		16t	16t	16t	16t	16t	16t	

					
MB			4.8m	360°	JPN

	m	6.5	10.7	14.9	19.3	23.6	28.0	m
	2.5	16.00	12.00	9.00	7.00			2.5
	3.0	16.00	12.00	9.00	7.00			3.0
	3.5	14.00	12.00	9.00	7.00	5.00	3.50	3.5
	4.0	12.50	12.00	9.00	7.00	5.00	3.50	4.0
	4.5	11.70	11.10	9.00	7.00	5.00	3.50	4.5
	5.0	(4.4m)	10.20	8.90	7.00	5.00	3.50	5.0
	5.5		9.05	8.20	7.00	5.00	3.50	5.5
	6.0		7.65	7.45	6.60	5.00	3.50	6.0
	7.0		5.60	5.60	5.80	4.80	3.50	7.0
	8.0		4.30	4.25	4.70	4.25	3.40	8.0
	9.0		3.70	3.35	3.75	3.70	3.20	9.0
	10.0		(8.6m)	2.65	3.05	3.30	2.90	10.0
	11.0			2.10	2.50	2.70	2.60	11.0
	12.0			1.65	2.05	2.25	2.35	12.0
	13.0			1.35	1.65	1.90	2.10	13.0
	14.0			(12.8m)	1.30	1.60	1.75	14.0
	15.0				1.05	1.35	1.50	15.0
	16.0				0.85	1.15	1.30	16.0
	17.0				0.70	0.95	1.10	17.0
	18.0					0.75	0.95	18.0
	19.0					0.60	0.80	19.0
	20.0					0.50	0.65	20.0
	22.0						0.45	22.0
	24.5							24.5
	1	0	50	100	100	100	100	1
	2	0	50	100	100	100	100	2
	3	0	0	0	33	66	100	3
	4	0	0	0	33	66	100	4
	5	0	0	0	33	66	100	5
	MODE	1	1	1	1	1	1	MODE
	[DEG]	0 to 82.5	0 to 82.5	0 to 82.5	0 to 82.5	0 to 82.5	25 to 82.5	[DEG]
		6	6	4	4	4	4	
		16t	16t	16t	16t	16t	16t	

					
MB			4.4m	360°	JPN

	m	6.5	10.7	14.9	19.3	23.6	28.0	m
	2.5	16.00	12.00	9.00	7.00			2.5
	3.0	16.00	12.00	9.00	7.00			3.0
	3.5	14.00	12.00	9.00	7.00	5.00	3.50	3.5
	4.0	12.50	12.00	9.00	7.00	5.00	3.50	4.0
	4.5	11.55	11.10	9.00	7.00	5.00	3.50	4.5
	5.0	(4.4m)	9.00	8.55	7.00	5.00	3.50	5.0
	5.5		7.60	7.60	7.00	5.00	3.50	5.5
	6.0		6.45	6.40	6.60	5.00	3.50	6.0
	7.0		4.75	4.75	5.10	4.80	3.50	7.0
	8.0		3.60	3.65	3.95	4.15	3.40	8.0
	9.0		3.05	2.85	3.15	3.50	3.20	9.0
	10.0		(8.6m)	2.20	2.50	2.85	2.80	10.0
	11.0			1.70	2.00	2.35	2.40	11.0
	12.0			1.35	1.65	1.95	2.00	12.0
	13.0			1.10	1.35	1.60	1.70	13.0
	14.0			(12.8m)	1.05	1.35	1.45	14.0
	15.0				0.85	1.10	1.20	15.0
	16.0				0.65	0.90	1.00	16.0
	17.0				0.55	0.75	0.80	17.0
	18.0					0.60	0.70	18.0
	19.0					0.50	0.55	19.0
	20.0						0.50	20.0
	22.0							22.0
	24.5							24.5
	1	0	50	100	100	100	100	1
	2	0	50	100	100	100	100	2
	3	0	0	0	33	66	100	3
	4	0	0	0	33	66	100	4
	5	0	0	0	33	66	100	5
	MODE	1	1	1	1	1	1	MODE
	[DEG]	0 to 82.5	0 to 82.5	0 to 82.5	0 to 82.5	0 to 82.5	34 to 82.5	[DEG]
		6	6	4	4	4	4	
		16t	16t	16t	16t	16t	16t	

					
MB			3.2m	360°	JPN

	m	6.5	10.7	14.9	19.3	23.6	28.0	m
	2.5	16.00	12.00	9.00	7.00			2.5
	3.0	14.15	12.00	9.00	7.00			3.0
	3.5	10.20	9.90	8.60	7.00	5.00	3.50	3.5
	4.0	7.75	7.85	7.55	7.00	5.00	3.50	4.0
	4.5	6.55	6.25	6.20	6.90	5.00	3.50	4.5
	5.0	(4.4m)	5.15	5.15	5.70	5.00	3.50	5.0
	5.5		4.35	4.30	4.80	4.90	3.50	5.5
	6.0		3.65	3.70	4.10	4.30	3.50	6.0
	7.0		2.70	2.70	3.05	3.20	3.35	7.0
	8.0		1.95	1.95	2.35	2.50	2.65	8.0
	9.0		1.65	1.40	1.80	1.95	2.10	9.0
	10.0		(8.6m)	1.00	1.40	1.60	1.70	10.0
	11.0			0.65	1.05	1.25	1.35	11.0
	12.0			0.40	0.75	0.95	1.05	12.0
	13.0				0.50	0.75	0.85	13.0
	14.0				0.35	0.55	0.65	14.0
	15.0					0.35	0.50	15.0
	16.0							16.0
	17.0							17.0
	18.0							18.0
	19.0							19.0
	20.0							20.0
	22.0							22.0
	24.5							24.5
	1	0	50	100	100	100	100	1
	2	0	50	100	100	100	100	2
	3	0	0	0	33	66	100	3
	4	0	0	0	33	66	100	4
	5	0	0	0	33	66	100	5
	MODE	1	1	1	1	1	1	MODE
	[DEG]	0 to 82.5	0 to 82.5	0 to 82.5	31 to 82.5	42 to 82.5	50 to 82.5	[DEG]
		6	6	4	4	4	4	
		16t	16t	16t	16t	16t	16t	

 MB			 (X-type) 2.7m	 360 °	 JPN
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 m	6.5	10.7	14.9	19.3	23.6	28.0	m
 2.5	12.50	12.00	9.00	7.00			2.5
 3.0	9.85	9.65	8.85	7.00			3.0
 3.5	7.40	7.50	7.55	6.80	5.00	3.50	3.5
 4.0	5.70	5.95	5.95	6.20	5.00	3.50	4.0
 4.5	4.85	4.75	4.75	5.15	4.95	3.50	4.5
 5.0	(4.4m)	3.90	3.85	4.25	4.45	3.50	5.0
 5.5		3.20	3.15	3.55	3.75	3.50	5.5
 6.0		2.65	2.65	2.95	3.25	3.30	6.0
 7.0		1.85	1.80	2.15	2.40	2.50	7.0
 8.0		1.25	1.20	1.55	1.80	1.95	8.0
 9.0		0.95	0.75	1.10	1.35	1.50	9.0
 10.0		(8.6m)	0.45	0.75	1.00	1.15	10.0
 11.0				0.45	0.70	0.85	11.0
 12.0					0.50	0.60	12.0
 13.0							13.0
 14.0							14.0
 15.0							15.0
 16.0							16.0
 17.0							17.0
 18.0							18.0
 19.0							19.0
 20.0							20.0
 22.0							22.0
 24.5							24.5
 1	0	50	100	100	100	100	1
 2	0	50	100	100	100	100	2
 3	0	0	0	33	66	100	3
 4	0	0	0	33	66	100	4
 5	0	0	0	33	66	100	5
 MODE	1	1	1	1	1	1	MODE
 [DEG]	0 to 82.5	0 to 82.5	33 to 82.5	44 to 82.5	50 to 82.5	58 to 82.5	[DEG]
 6	6	6	4	4	4	4	
 16t	16t	16t	16t	16t	16t	16t	

 MB			 (H-type) 1.79m	 360 °	 JPN
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 m	6.5	10.7	14.9	19.3	23.6	28.0	m
 2.5	6.55	6.55	6.85	6.80			2.5
 3.0	5.50	5.25	5.45	5.55			3.0
 3.5	4.15	3.95	4.10	4.45	4.45	3.30	3.5
 4.0	3.15	3.10	3.15	3.50	3.65	3.25	4.0
 4.5	2.60	2.45	2.50	2.85	3.00	2.95	4.5
 5.0	(4.4m)	1.95	1.95	2.30	2.50	2.55	5.0
 5.5		1.55	1.50	1.85	2.05	2.10	5.5
 6.0		1.15	1.15	1.50	1.70	1.75	6.0
 7.0		0.60	0.55	0.95	1.15	1.25	7.0
 8.0							8.0
 9.0							9.0
 10.0							10.0
 11.0							11.0
 12.0							12.0
 13.0							13.0
 14.0							14.0
 15.0							15.0
 16.0							16.0
 17.0							17.0
 18.0							18.0
 19.0							19.0
 20.0							20.0
 22.0							22.0
 24.5							24.5
 1	0	50	100	100	100	100	1
 2	0	50	100	100	100	100	2
3	0	0	0	33	66	100	3
4	0	0	0	33	66	100	4
5	0	0	0	33	66	100	5
MODE	1	1	1	1	1	1	MODE
[DEG]	0 to 82.5	28 to 82.5	53 to 82.5	58 to 82.5	65 to 82.5	70 to 82.5	[DEG]
4	4	4	4	4	4	4	
16t	16t	16t	16t	16t	16t	16t	

■ Rated lifting capacity table for jib

					
PTJ	4.5m		5.2m	360 °	JPN

	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
	3.0	2.00	2.00											3.0
	3.5	2.00	2.00	1.55										3.5
	4.0	2.00	2.00	1.55		2.00								4.0
	4.5	2.00	2.00	1.55	1.18	2.00				2.00				4.5
	5.0	2.00	2.00	1.55	1.15	2.00	2.00			2.00				5.0
	5.5	2.00	2.00	1.55	1.12	2.00	2.00			2.00				5.5
	6.0	2.00	2.00	1.55	1.10	2.00	2.00			2.00	2.00			6.0
	6.5	2.00	2.00	1.50	1.10	2.00	2.00	1.55		2.00	2.00			6.5
	7.0	2.00	2.00	1.45		2.00	2.00	1.55	1.19	2.00	2.00	1.55		7.0
	7.5	2.00	2.00	1.40		2.00	2.00	1.55	1.18	2.00	1.95	1.55	1.20	7.5
	8.0	2.00	1.80			2.00	2.00	1.55	1.17	2.00	1.90	1.55	1.19	8.0
	9.0	1.80				2.00	1.95	1.55	1.16	2.00	1.85	1.55	1.18	9.0
	10.0					2.00	1.90	1.52	1.15	2.00	1.75	1.55	1.17	10.0
	11.0					2.00	1.85	1.50	1.13	1.95	1.70	1.50	1.15	11.0
	12.0					2.00	1.80	1.48	1.10	1.85	1.60	1.45	1.13	12.0
	13.0					1.90	1.75	1.46	1.10	1.75	1.55	1.40	1.11	13.0
	14.0					1.84	1.70	1.44	1.10	1.63	1.45	1.35	1.10	14.0
	15.0					1.60	1.55	1.42	1.10	1.50	1.36	1.30	1.10	15.0
	16.0					1.38	1.40	1.40		1.38	1.28	1.23	1.10	16.0
	17.0					1.20	1.28	1.30		1.22	1.22	1.16	1.10	17.0
	18.0					1.00	1.10	1.17		1.08	1.15	1.10	1.10	18.0
	20.0					0.71	0.79	0.83		0.82	0.90	0.93		20.0
	22.0					0.48	0.54			0.58	0.64	0.66		22.0
	23.0					0.38	0.40			0.47	0.52	0.54		23.0
	24.0					0.30	0.32			0.38	0.42			24.0
	26.0									0.23	0.26			26.0
	28.0													28.0
	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
	[DEG]	0 to 82.5	29 to 82.5	42 to 82.5	56 to 82.5	24 to 82.5	26 to 82.5	45 to 82.5	61 to 82.5	34 to 82.5	35 to 82.5	46 to 82.5	59 to 82.5	[DEG]

					
PTJ	4.5m		4.8m	360 °	JPN

	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
	3.0	2.00	2.00											3.0
	3.5	2.00	2.00	1.55										3.5
	4.0	2.00	2.00	1.55		2.00								4.0
	4.5	2.00	2.00	1.55	1.18	2.00				2.00				4.5
	5.0	2.00	2.00	1.55	1.15	2.00	2.00			2.00				5.0
	5.5	2.00	2.00	1.55	1.12	2.00	2.00			2.00				5.5
	6.0	2.00	2.00	1.55	1.10	2.00	2.00			2.00	2.00			6.0
	6.5	2.00	2.00	1.50	1.10	2.00	2.00	1.55		2.00	2.00			6.5
	7.0	2.00	2.00	1.45		2.00	2.00	1.55	1.19	2.00	2.00	1.55		7.0
	7.5	2.00	2.00	1.40		2.00	2.00	1.55	1.18	2.00	1.95	1.55	1.20	7.5
	8.0	2.00	1.80			2.00	2.00	1.55	1.17	2.00	1.90	1.55	1.19	8.0
	9.0	1.80				2.00	1.95	1.55	1.16	2.00	1.85	1.55	1.18	9.0
	10.0					2.00	1.90	1.52	1.15	2.00	1.75	1.55	1.17	10.0
	11.0					2.00	1.85	1.50	1.13	1.95	1.70	1.50	1.15	11.0
	12.0					2.00	1.80	1.48	1.10	1.85	1.60	1.45	1.13	12.0
	13.0					1.90	1.75	1.46	1.10	1.75	1.55	1.40	1.11	13.0
	14.0					1.65	1.70	1.44	1.10	1.63	1.45	1.35	1.10	14.0
	15.0					1.40	1.50	1.42	1.10	1.45	1.36	1.30	1.10	15.0
	16.0					1.20	1.30	1.30		1.22	1.28	1.23	1.10	16.0
	17.0					1.00	1.10	1.15		1.05	1.18	1.16	1.10	17.0
	18.0					0.84	0.92	0.97		0.90	1.00	1.05	1.00	18.0
	20.0					0.57	0.64	0.67		0.64	0.70	0.75		20.0
	22.0					0.35	0.40			0.43	0.48	0.50		22.0
	23.0					0.25	0.30			0.34	0.38	0.40		23.0
	24.0						0.20			0.24	0.28			24.0
	26.0													26.0
	28.0													28.0
	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
	[DEG]	0 to 82.5	29 to 82.5	42 to 82.5	56 to 82.5	24 to 82.5	25 to 82.5	44 to 82.5	61 to 82.5	40 to 82.5	42 to 82.5	45 to 82.5	59 to 82.5	[DEG]



	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
 m	3.0	2.00	2.00											3.0
	3.5	2.00	2.00	1.55										3.5
	4.0	2.00	2.00	1.55		2.00								4.0
	4.5	2.00	2.00	1.55	1.18	2.00				2.00				4.5
	5.0	2.00	2.00	1.55	1.15	2.00	2.00			2.00				5.0
	5.5	2.00	2.00	1.55	1.12	2.00	2.00			2.00				5.5
	6.0	2.00	2.00	1.55	1.10	2.00	2.00			2.00	2.00			6.0
	6.5	2.00	2.00	1.50	1.10	2.00	2.00	1.55		2.00	2.00			6.5
	7.0	2.00	2.00	1.45		2.00	2.00	1.55	1.19	2.00	2.00	1.55		7.0
	7.5	2.00	2.00	1.40		2.00	2.00	1.55	1.18	2.00	1.95	1.55	1.20	7.5
	8.0	2.00	1.80			2.00	2.00	1.55	1.17	2.00	1.90	1.55	1.19	8.0
	9.0	1.80				2.00	1.95	1.55	1.16	2.00	1.85	1.55	1.18	9.0
	10.0					2.00	1.90	1.52	1.15	2.00	1.75	1.55	1.17	10.0
	11.0					1.90	1.85	1.50	1.13	1.95	1.70	1.50	1.15	11.0
	12.0					1.80	1.80	1.48	1.10	1.85	1.60	1.45	1.13	12.0
	13.0					1.50	1.55	1.46	1.10	1.55	1.55	1.40	1.11	13.0
	14.0					1.25	1.30	1.44	1.10	1.30	1.45	1.35	1.10	14.0
	15.0					1.05	1.10	1.20	1.10	1.10	1.20	1.30	1.10	15.0
	16.0					0.88	0.95	1.00		0.93	1.02	1.10	1.10	16.0
	17.0					0.75	0.80	0.85		0.80	0.85	0.95	0.90	17.0
	18.0					0.62	0.67	0.70		0.67	0.73	0.80	0.75	18.0
	20.0					0.40	0.41	0.45		0.45	0.50	0.55		20.0
	22.0					0.20	0.20			0.25	0.31	0.33		22.0
	23.0										0.22	0.23		23.0
	24.0													24.0
	26.0													26.0
	28.0													28.0
 %	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
 [DEG]	[DEG]	0 to 82.5	29 to 82.5	42 to 82.5	56 to 82.5	34 to 82.5	36 to 82.5	44 to 82.5	61 to 82.5	43 to 82.5	45 to 82.5	45 to 82.5	59 to 82.5	[DEG]



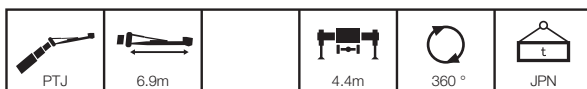
	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
 m	3.0	2.00	2.00											3.0
	3.5	2.00	2.00	1.55										3.5
	4.0	2.00	2.00	1.55		2.00								4.0
	4.5	2.00	2.00	1.55	1.18	2.00				2.00				4.5
	5.0	2.00	2.00	1.55	1.15	2.00	2.00			2.00				5.0
	5.5	2.00	2.00	1.55	1.12	2.00	2.00			2.00				5.5
	6.0	2.00	2.00	1.55	1.10	2.00	2.00			2.00	2.00			6.0
	6.5	2.00	2.00	1.50	1.10	2.00	2.00	1.55		2.00	2.00			6.5
	7.0	2.00	2.00	1.45		2.00	2.00	1.55	1.19	2.00	2.00	1.55		7.0
	7.5	2.00	2.00	1.40		2.00	2.00	1.55	1.18	2.00	1.95	1.55	1.20	7.5
	8.0	2.00	1.80			2.00	2.00	1.55	1.17	2.00	1.90	1.55	1.19	8.0
	9.0	1.80				1.85	1.95	1.55	1.16	2.00	1.85	1.55	1.18	9.0
	10.0					1.60	1.70	1.52	1.15	1.60	1.75	1.55	1.17	10.0
	11.0					1.30	1.40	1.50	1.13	1.30	1.50	1.50	1.15	11.0
	12.0					1.00	1.15	1.25	1.10	1.05	1.20	1.25	1.13	12.0
	13.0					0.80	0.90	1.00	0.95	0.85	0.97	1.05	1.11	13.0
	14.0					0.60	0.72	0.80	0.80	0.67	0.78	0.88	0.90	14.0
	15.0					0.45	0.55	0.60	0.60	0.50	0.62	0.70	0.70	15.0
	16.0					0.31	0.40	0.45		0.37	0.48	0.55	0.54	16.0
	17.0					0.20	0.26	0.30		0.25	0.35	0.40	0.40	17.0
	18.0										0.23	0.27	0.26	18.0
	20.0													20.0
	22.0													22.0
	23.0													23.0
	24.0													24.0
	26.0													26.0
	28.0													28.0
 %	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
 [DEG]	[DEG]	0 to 82.5	29 to 82.5	42 to 82.5	56 to 82.5	50 to 82.5	53 to 82.5	54 to 82.5	60 to 82.5	55 to 82.5	57 to 82.5	59 to 82.5	59 to 82.5	[DEG]

					
PTJ	6.9m		5.2m	360 °	JPN

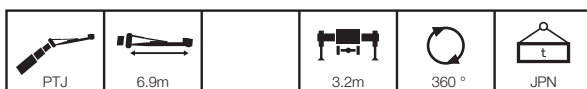
	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
	3.0	1.50												3.0
	3.5	1.50												3.5
	4.0	1.50	1.30			1.50								4.0
	4.5	1.50	1.20			1.50								4.5
	5.0	1.50	1.15			1.50				1.50				5.0
	5.5	1.45	1.10	0.82		1.50				1.50				5.5
	6.0	1.35	1.05	0.82		1.50				1.50				6.0
	6.5	1.25	1.00	0.80	0.69	1.50	1.30			1.50				6.5
	7.0	1.15	0.95	0.78	0.67	1.50	1.30			1.50				7.0
	7.5	1.05	0.90	0.76	0.66	1.50	1.25			1.50	1.30			7.5
	8.0	1.00	0.85	0.74	0.65	1.50	1.20	0.82		1.50	1.30			8.0
	9.0	0.85	0.75	0.70	0.64	1.50	1.15	0.82	0.69	1.50	1.22	0.82		9.0
	10.0	0.75	0.70	0.68		1.50	1.10	0.80	0.68	1.50	1.16	0.82	0.69	10.0
	11.0	0.65	0.70			1.50	1.05	0.78	0.67	1.50	1.11	0.80	0.68	11.0
	12.0					1.45	1.00	0.76	0.66	1.50	1.06	0.78	0.68	12.0
	13.0					1.40	0.95	0.74	0.66	1.45	1.02	0.76	0.67	13.0
	14.0					1.33	0.93	0.73	0.65	1.40	0.99	0.75	0.66	14.0
	15.0					1.23	0.90	0.72	0.65	1.32	0.96	0.74	0.65	15.0
	16.0					1.15	0.87	0.70	0.64	1.25	0.92	0.73	0.64	16.0
	17.0					1.07	0.84	0.69	0.64	1.17	0.90	0.72	0.64	17.0
	18.0					1.03	0.81	0.68		1.08	0.87	0.71	0.64	18.0
	20.0					0.86	0.77	0.67		0.90	0.82	0.69	0.64	20.0
	22.0					0.63	0.74	0.67		0.70	0.77	0.68		22.0
	23.0					0.52	0.62			0.60	0.67	0.67		23.0
	24.0					0.44	0.51			0.50	0.57	0.61		24.0
	26.0					0.28	0.32			0.33	0.39	0.42		26.0
	28.0									0.20	0.24			28.0
	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
	[DEG]	23 to 82.5	30 to 82.5	41 to 82.5	55 to 82.5	26 to 82.5	28 to 82.5	46 to 82.5	62 to 82.5	34 to 82.5	37 to 82.5	44 to 82.5	61 to 82.5	[DEG]

					
PTJ	6.9m		4.8m	360 °	JPN

	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
	3.0	1.50												3.0
	3.5	1.50												3.5
	4.0	1.50	1.30			1.50								4.0
	4.5	1.50	1.20			1.50								4.5
	5.0	1.50	1.15			1.50				1.50				5.0
	5.5	1.45	1.10	0.82		1.50				1.50				5.5
	6.0	1.35	1.05	0.82		1.50				1.50				6.0
	6.5	1.25	1.00	0.80	0.69	1.50	1.30			1.50				6.5
	7.0	1.15	0.95	0.78	0.67	1.50	1.30			1.50				7.0
	7.5	1.05	0.90	0.76	0.66	1.50	1.25			1.50	1.30			7.5
	8.0	1.00	0.85	0.74	0.65	1.50	1.20	0.82		1.50	1.30			8.0
	9.0	0.85	0.75	0.70	0.64	1.50	1.15	0.82	0.69	1.50	1.22	0.82		9.0
	10.0	0.75	0.70	0.68		1.50	1.10	0.80	0.68	1.50	1.16	0.82	0.69	10.0
	11.0	0.65	0.70			1.50	1.05	0.78	0.67	1.50	1.11	0.80	0.68	11.0
	12.0					1.45	1.00	0.76	0.66	1.50	1.06	0.78	0.68	12.0
	13.0					1.40	0.95	0.74	0.66	1.45	1.02	0.76	0.67	13.0
	14.0					1.33	0.93	0.73	0.65	1.40	0.99	0.75	0.66	14.0
	15.0					1.23	0.90	0.72	0.65	1.32	0.96	0.74	0.65	15.0
	16.0					1.15	0.87	0.70	0.64	1.25	0.92	0.73	0.64	16.0
	17.0					1.07	0.84	0.69	0.64	1.17	0.90	0.72	0.64	17.0
	18.0					0.97	0.81	0.68		1.05	0.87	0.71	0.64	18.0
	20.0					0.70	0.77	0.67		0.78	0.82	0.69	0.64	20.0
	22.0					0.49	0.56	0.60		0.55	0.65	0.68		22.0
	23.0					0.40	0.46			0.46	0.54	0.58		23.0
	24.0					0.31	0.35			0.38	0.45	0.48		24.0
	26.0									0.23	0.28	0.29		26.0
	28.0													28.0
	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
	[DEG]	23 to 82.5	30 to 82.5	41 to 82.5	55 to 82.5	35 to 82.5	37 to 82.5	46 to 82.5	62 to 82.5	40 to 82.5	43 to 82.5	43 to 82.5	61 to 82.5	[DEG]



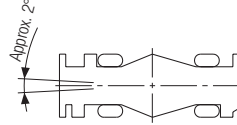
	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
 m	3.0	1.50												3.0
	3.5	1.50												3.5
	4.0	1.50	1.30			1.50								4.0
	4.5	1.50	1.20			1.50								4.5
	5.0	1.50	1.15			1.50				1.50				5.0
	5.5	1.45	1.10	0.82		1.50				1.50				5.5
	6.0	1.35	1.05	0.82		1.50				1.50				6.0
	6.5	1.25	1.00	0.80	0.69	1.50	1.30			1.50				6.5
	7.0	1.15	0.95	0.78	0.67	1.50	1.30			1.50				7.0
	7.5	1.05	0.90	0.76	0.66	1.50	1.25			1.50	1.30			7.5
	8.0	1.00	0.85	0.74	0.65	1.50	1.20	0.82		1.50	1.30			8.0
	9.0	0.85	0.75	0.70	0.64	1.50	1.15	0.82	0.69	1.50	1.22	0.82		9.0
	10.0	0.75	0.70	0.68		1.50	1.10	0.80	0.68	1.50	1.16	0.82	0.69	10.0
	11.0	0.65	0.70			1.50	1.05	0.78	0.67	1.50	1.11	0.80	0.68	11.0
	12.0					1.45	1.00	0.76	0.66	1.50	1.06	0.78	0.68	12.0
	13.0					1.40	0.95	0.74	0.66	1.45	1.02	0.76	0.67	13.0
	14.0					1.33	0.93	0.73	0.65	1.40	0.99	0.75	0.66	14.0
	15.0					1.23	0.90	0.72	0.65	1.32	0.96	0.74	0.65	15.0
	16.0					1.10	0.87	0.70	0.64	1.18	0.92	0.73	0.64	16.0
	17.0					0.90	0.84	0.69	0.64	1.00	0.90	0.72	0.64	17.0
	18.0					0.78	0.81	0.68		0.85	0.87	0.71	0.64	18.0
	20.0					0.55	0.63	0.67		0.58	0.74	0.69	0.64	20.0
	22.0					0.35	0.40	0.42		0.38	0.48	0.54		22.0
	23.0					0.26	0.31			0.30	0.38	0.43		23.0
	24.0						0.22			0.24	0.30	0.34		24.0
	26.0													26.0
	28.0													28.0
 %	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
	[DEG]	23 to 82.5	30 to 82.5	41 to 82.5	55 to 82.5	34 to 82.5	37 to 82.5	46 to 82.5	62 to 82.5	45 to 82.5	48 to 82.5	50 to 82.5	60 to 82.5	[DEG]



	m	6.5	6.5	6.5	6.5	23.6	23.6	23.6	23.6	28.0	28.0	28.0	28.0	m
	°	5	25	45	60	5	25	45	60	5	25	45	60	°
 m	3.0	1.50												3.0
	3.5	1.50												3.5
	4.0	1.50	1.30			1.50								4.0
	4.5	1.50	1.20			1.50								4.5
	5.0	1.50	1.15			1.50				1.50				5.0
	5.5	1.45	1.10	0.82		1.50				1.50				5.5
	6.0	1.35	1.05	0.82		1.50				1.50				6.0
	6.5	1.25	1.00	0.80	0.69	1.50	1.30			1.50				6.5
	7.0	1.15	0.95	0.78	0.67	1.50	1.30			1.50				7.0
	7.5	1.05	0.90	0.76	0.66	1.50	1.25			1.50	1.30			7.5
	8.0	1.00	0.85	0.74	0.65	1.50	1.20	0.82		1.50	1.30			8.0
	9.0	0.85	0.75	0.70	0.64	1.50	1.15	0.82	0.69	1.50	1.22	0.82		9.0
	10.0	0.75	0.70	0.68		1.50	1.10	0.80	0.68	1.50	1.16	0.82	0.69	10.0
	11.0	0.65	0.70			1.40	1.05	0.78	0.67	1.35	1.11	0.80	0.68	11.0
	12.0					1.15	1.00	0.76	0.66	1.20	1.06	0.78	0.68	12.0
	13.0					0.90	0.95	0.74	0.66	1.00	1.02	0.76	0.67	13.0
	14.0					0.73	0.93	0.73	0.65	0.83	0.99	0.75	0.66	14.0
	15.0					0.58	0.75	0.72	0.65	0.65	0.80	0.74	0.65	15.0
	16.0					0.45	0.60	0.68	0.64	0.50	0.65	0.73	0.64	16.0
	17.0					0.32	0.46	0.54	0.52	0.39	0.50	0.60	0.64	17.0
	18.0					0.21	0.34	0.41		0.29	0.39	0.48	0.50	18.0
	20.0											0.27	0.26	20.0
	22.0													22.0
	23.0													23.0
	24.0													24.0
	26.0													26.0
	28.0													28.0
 %	1	0	0	0	0	100	100	100	100	100	100	100	100	1
	2	0	0	0	0	100	100	100	100	100	100	100	100	2
	3	0	0	0	0	66	66	66	66	100	100	100	100	3
	4	0	0	0	0	66	66	66	66	100	100	100	100	4
	5	0	0	0	0	66	66	66	66	100	100	100	100	5
	MODE	1	1	1	1	1	1	1	1	1	1	1	1	MODE
	[DEG]	23 to 82.5	30 to 82.5	41 to 82.5	55 to 82.5	52 to 82.5	56 to 82.5	58 to 82.5	61 to 82.5	54 to 82.5	58 to 82.5	60 to 82.5	60 to 82.5	[DEG]

■ Precautions on rated lifting capacity table [when on-rubber]

- The rated lifting capacities assume that the crane is set horizontally on firm and level ground, the tires are at the standard pressure (900kPa[9.00kgf/cm²]) and the suspension lock is fully engaged, and include the weight of the lifting devices and main winch hook block (140kg) when working with the boom.
The values above the bold line are based on the structural strength while those below are based on the crane stability factor. When performing actual work, use after considering the ground and operating conditions, etc.
- The load radius is based on the actual figure including boom and tire deflection, so always use the load radius as the standard.
- The standard hook block and the number of parts of line for each boom length are described in the rated lifting capacity table for the corresponding boom. However, when using other number of parts of line, the load per line must not exceed 2.9t for main winch wire rope or 3.2t for auxiliary winch wire rope.
- Do not perform high-speed hoist down operations, boom lift operations with a boom longer than 19.3 m, or using of the jib.
- Only perform crane operations in the over-front area while the AML "Over-front symbol" is lit.
"In the over-front area" means the boom is within 2° around the front centerline of the carrier.
- When the single top is used, the number of parts of line is 1.
The rated lifting capacity for the single top is the value obtained by subtracting 90kg from the boom rated lifting capacity, and includes the weight of the lifting devices and auxiliary winch hook block (50kg), and must not exceed 3.2t.
- Perform pick and carry with the "drive mode selector" switch set to "4WD low speed traveling" and the gearshift switch set to first gear.
- 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.
- Do not perform crane operations while performing pick and carry.



Explanation on symbols and markings in rated lifting capacity table

MB	Indicates the rated lifting capacity of the boom.	t JPN	Indicates the unit of the rated lifting capacity.
On-rubber Stationary	Indicates that the crane is stationary.	m	Indicates the boom length.
On-rubber Traveling (1.6km/h or less)	Indicates that the crane is traveling (1.6km/h or less).	m	Indicates the load radius.
360°	Indicates the slewing range in which lifting is enabled.	%	Indicates the boom telescoping state (telescoping ratio %). The MODE indicates the boom telescoping mode.
Over-front	Over-front indicates that operation is limited to over-front.		Indicates the boom angle range in which no-load operation is enabled.
			Indicates the standard number of parts of line.
			Indicates the standard hook block.

■ Rated lifting capacity table when on-rubber

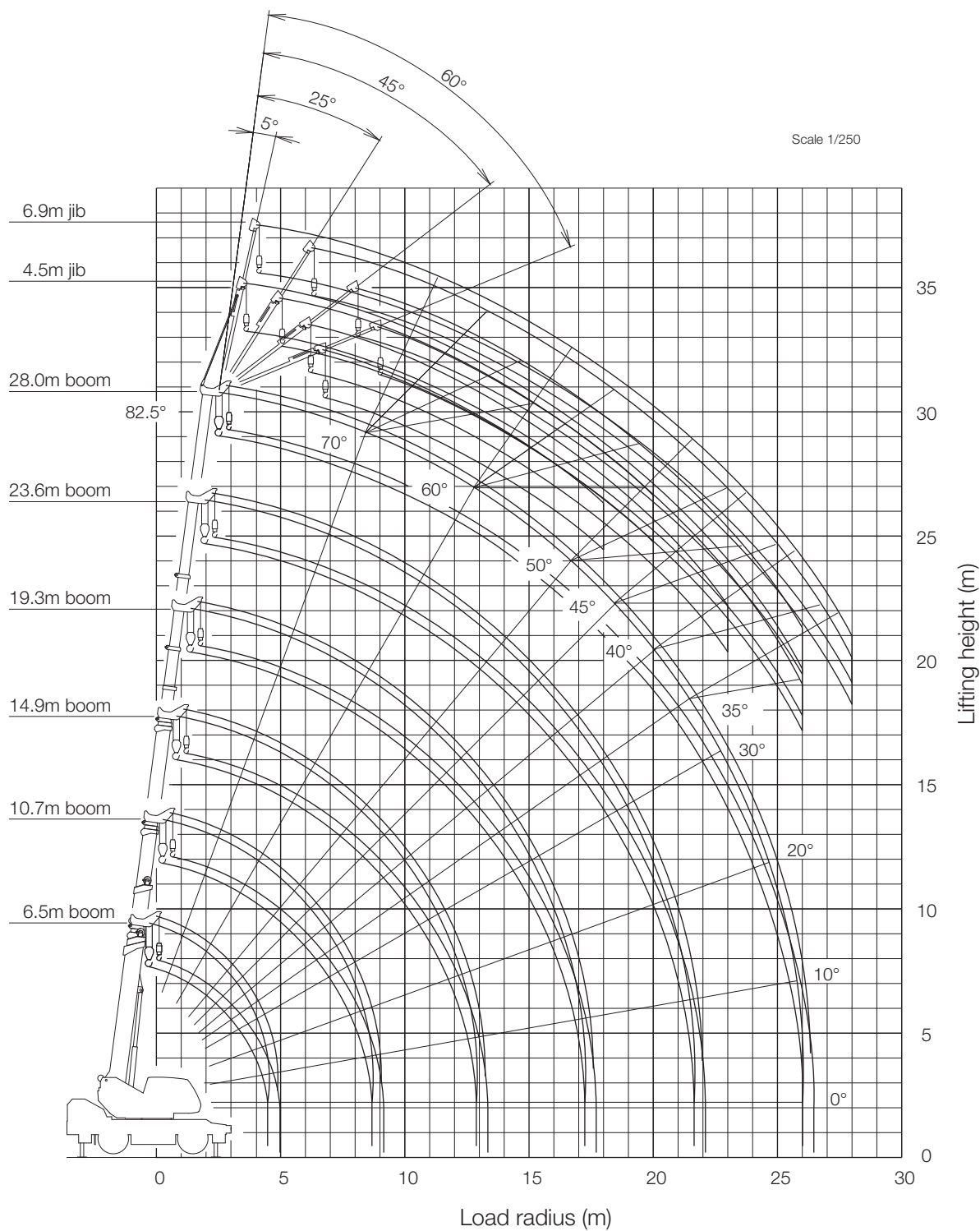
MB		On-rubber Stationary	Over-front	t JPN
m	6.5	10.7	14.9	19.3
m	3.0	3.70	3.60	3.55
	3.5	3.20	3.10	3.10
	4.0	2.80	2.70	2.70
	4.5	2.55	2.40	2.35
	5.0	(4.4m)	2.10	2.05
	5.5		1.85	1.80
	6.0		1.60	1.60
	7.0		1.25	1.25
	8.0		1.00	0.95
	9.0			0.70
	10.0			0.50
	11.0			0.35
	12.0			0.40
	13.0			0.30
m	1	0	50	100
	2	0	50	100
	3	0	0	33
	4	0	0	33
	5	0	0	33
MODE	1	1	1	1
[DEG]	0 to 82.5	0 to 82.5	0 to 82.5	37 to 82.5
t	4	4	4	4
t	16t	16t	16t	16t

MB		On-rubber Stationary	360°	t JPN
m	6.5	10.7	14.9	19.3
m	3.0	2.30	2.30	2.30
	3.5	1.90	1.80	2.00
	4.0	1.60	1.40	1.60
	4.5	1.30	1.10	1.30
	5.0	(4.4m)	0.80	0.75
	5.5		0.50	0.45
	6.0			0.60
	7.0			0.70
	8.0			0.80
	9.0			0.90
	10.0			1.00
	11.0			1.10
	12.0			1.20
	13.0			1.30
m	1	0	50	100
	2	0	50	100
	3	0	0	33
	4	0	0	33
	5	0	0	33
MODE	1	1	1	1
[DEG]	0 to 82.5	39 to 82.5	57 to 82.5	62 to 82.5
t	4	4	4	4
t	16t	16t	16t	16t

MB		On-rubber Traveling (1.6km/h or less)	Over-front	t JPN
m	6.5	10.7	14.9	19.3
m	3.0	2.60	2.60	2.60
	3.5	2.30	2.20	2.30
	4.0	1.90	1.90	2.00
	4.5	1.70	1.60	1.80
	5.0	(4.4m)	1.40	1.60
	5.5		1.20	1.40
	6.0		1.10	1.20
	7.0		0.80	1.00
	8.0		0.60	0.80
	9.0			0.45
	10.0			0.30
	11.0			0.35
	12.0			
	13.0			
m	1	0	50	100
	2	0	50	100
	3	0	0	33
	4	0	0	33
	5	0	0	33
MODE	1	1	1	1
[DEG]	0 to 82.5	0 to 82.5	33 to 82.5	46 to 82.5
t	4	4	4	4
t	16t	16t	16t	16t

MB		On-rubber Traveling (1.6km/h or less)	360°	t JPN
m	6.5	10.7	14.9	19.3
m	3.0	1.60	1.60	1.60
	3.5	1.30	1.20	1.30
	4.0	1.00	0.90	1.10
	4.5	0.90	0.70	0.90
	5.0	(4.4m)	0.60	0.50
	5.5		0.35	0.30
	6.0			0.45
	7.0			0.70
	8.0			0.80
	9.0			0.90
	10.0			1.00
	11.0			1.10
	12.0			1.20
	13.0			1.30
m	1	0	50	100
	2	0	50	100
	3	0	0	33
	4	0	0	33
	5	0	0	33
MODE	1	1	1	1
[DEG]	0 to 82.5	47 to 82.5	61 to 82.5	65 to 82.5
t	4	4	4	4
t	16t	16t	16t	16t

Working range chart



(Note) 1. The above drawing does not include boom and jib deflection.
2. The above drawing shows outrigger maximum (5.2m) extension.

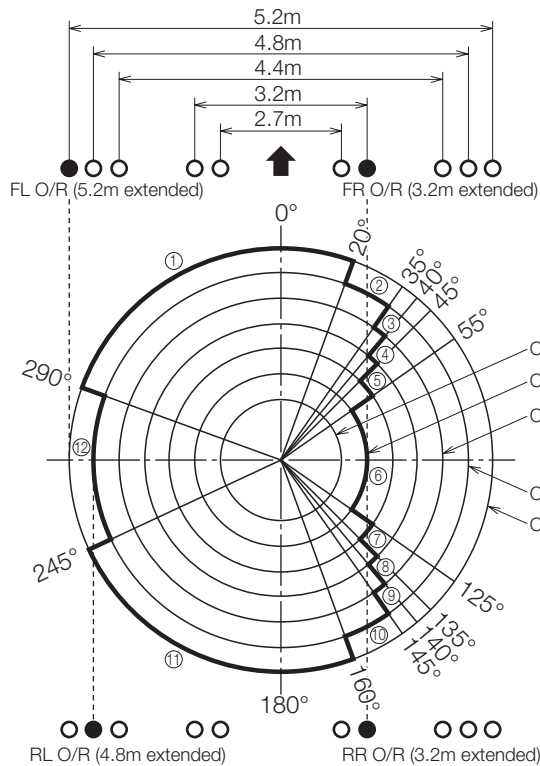
■ How to read working area diagram

The size of the circle in the working area diagram corresponds to the capacity determined by the outrigger extension width.

		Applicable capacity (boom lift)	Applicable capacity (jib lift)
Circle 1	5.2 m	○	○
Circle 2	4.8 m	○	○
Circle 3	4.4 m	○	○
Circle 4	(4.0 m)	○	○
Circle 5	(3.6 m)	○	○

		Applicable capacity (boom lift)	Applicable capacity (jib lift)
Circle 6	3.2 m	○	○
Circle 7	2.7 m (X-type)	○	○
	1.79 m (H-type)	○	○

- Example (X-type outriggers) -

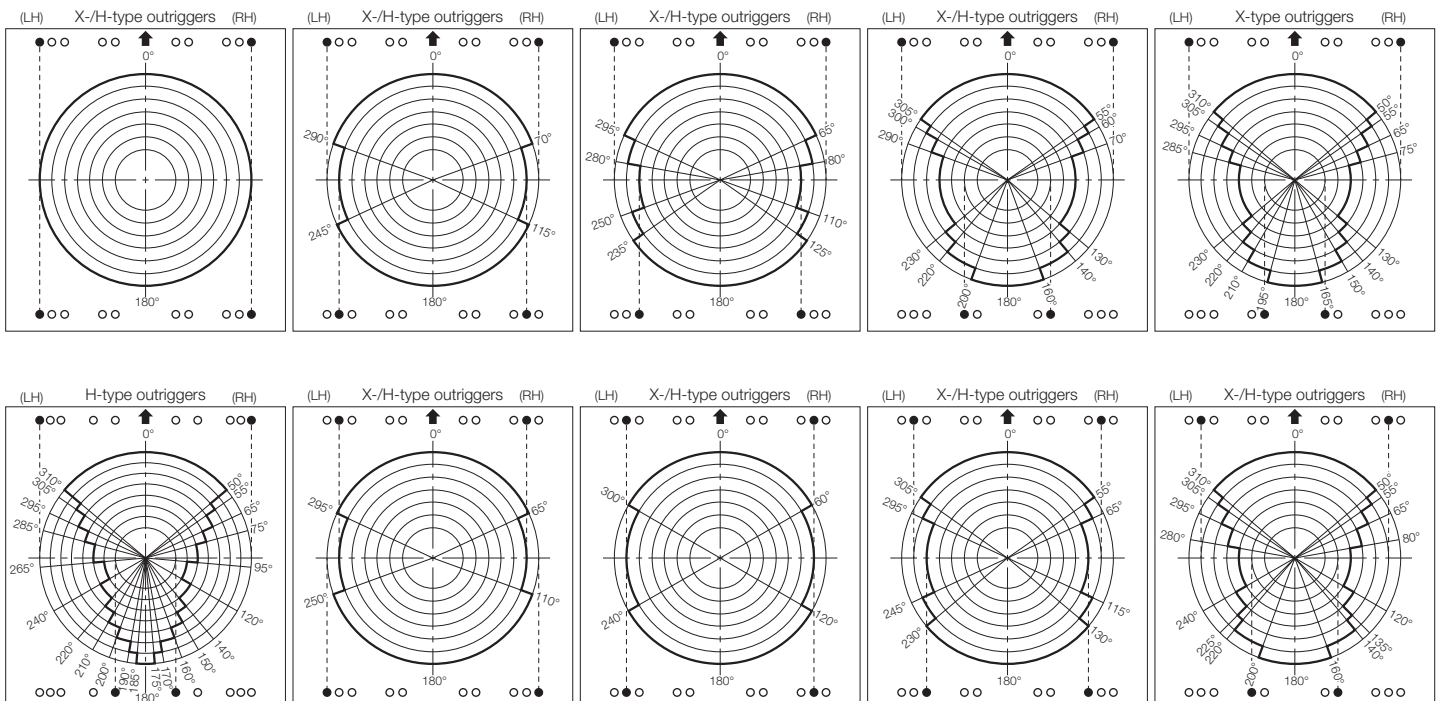


When the boom lift is performed with the outrigger extension width shown in the figure, the capacity and range for each working area will be as follows.

- Area ①: Maximum extension (5.2m) capacity
- Area ②: Middle extension (4.8m) capacity
- Area ③: Middle extension (4.4m) capacity
- Area ④: Capacity calculated by interpolating with outrigger extension width (4.0m)
- Area ⑤: Capacity calculated by interpolating with outrigger extension width (3.6m)
- Area ⑥: Middle extension (3.2m) capacity
- Area ⑦: Capacity calculated by interpolating with outrigger extension width (3.6m)
- Area ⑧: Capacity calculated by interpolating with outrigger extension width (4.0m)
- Area ⑨: Middle extension (4.4m) capacity
- Area ⑩: Middle extension (4.8m) capacity
- Area ⑪: Maximum extension (5.2m) capacity
- Area ⑫: Middle extension (4.8m) capacity

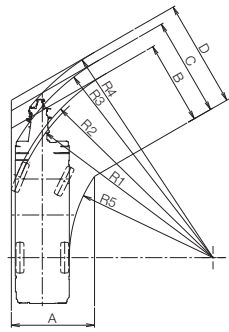
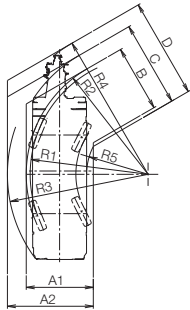
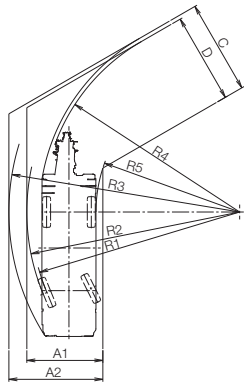
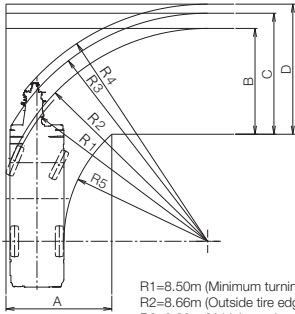
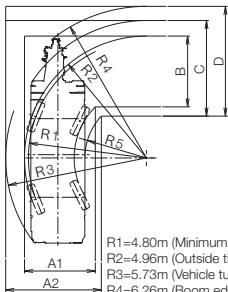
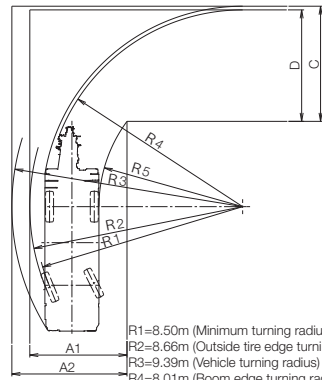
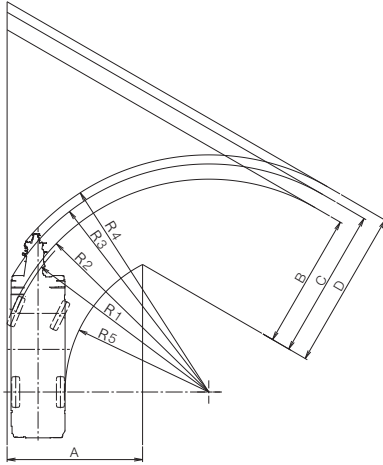
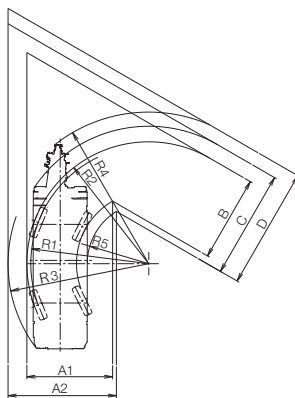
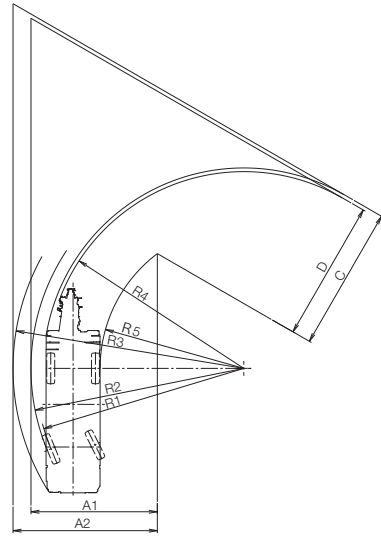
The changeover area between adjacent capacity areas must be 5 degrees, and the capacity area increases or decreases proportionally.

■ Working area diagram



Minimum passage width (60°, 90°, 120°)

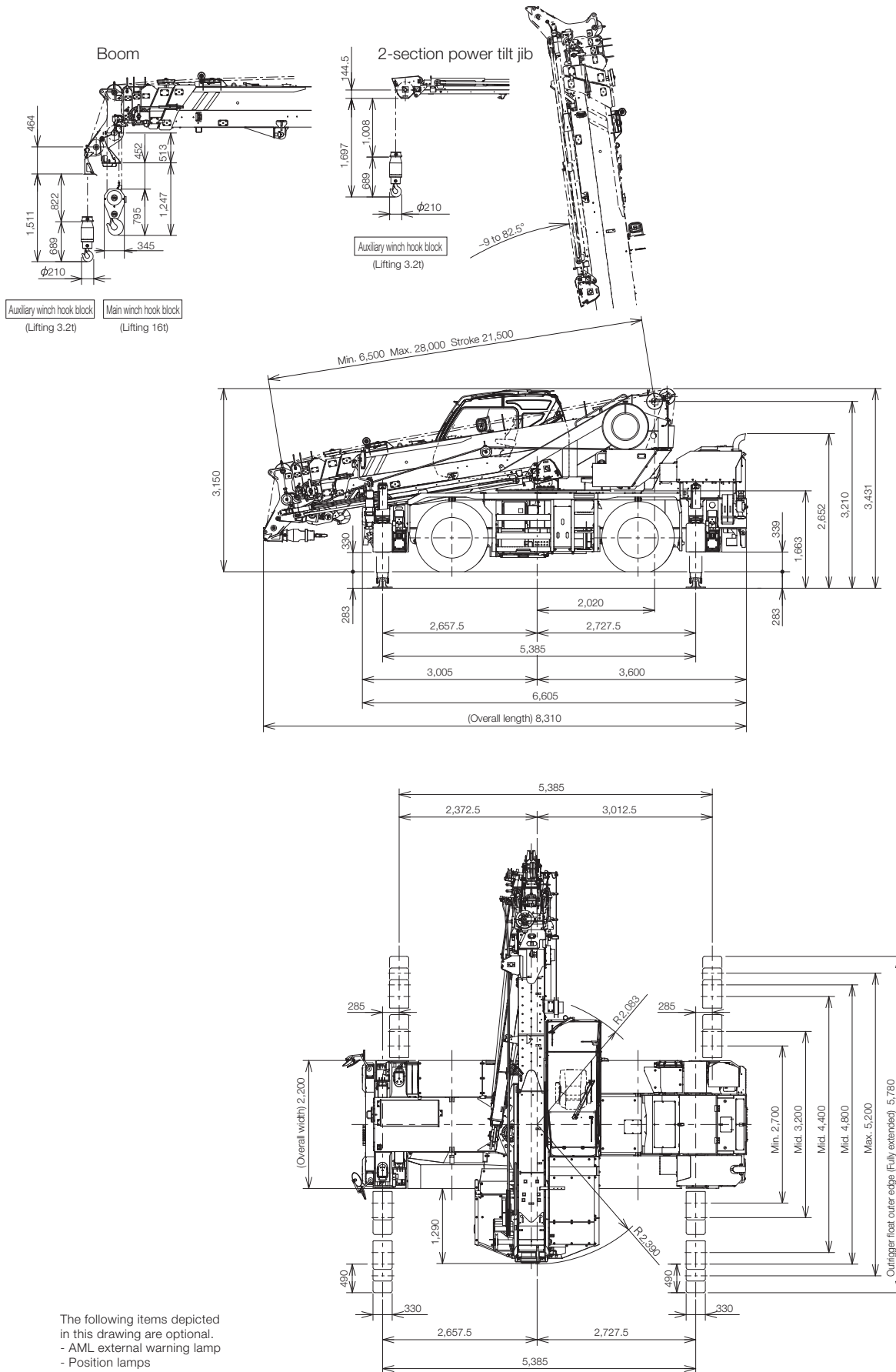
(Note) Indicated values are calculated values.

	While turning right in the front two-wheel steering mode	While turning right in the four-wheel steering mode	While turning right in the rear two-wheel steering mode
60°	 R1=8.50m (Minimum turning radius) R2=8.66m (Outside tire edge turning radius) R3=9.28m (Vehicle turning radius) R4=9.70m (Boom edge turning radius) R5=5.85m (Vehicle inside turning radius) A=3.39m (Entrance passage width) B=3.39m (Tire exit passage width) C=4.00m (Vehicle exit passage width) D=4.37m (Boom edge exit passage width)	 R1=4.80m (Minimum turning radius) R2=4.96m (Outside tire edge turning radius) R3=5.73m (Vehicle turning radius) R4=6.26m (Boom edge turning radius) R5=2.50m (Vehicle inside turning radius) A1=2.73m (Tire entrance passage width) A2=3.50m (Vehicle entrance passage width) B=2.73m (Tire exit passage width) C=3.50m (Vehicle exit passage width) D=4.07m (Boom edge exit passage width)	 R1=8.50m (Minimum turning radius) R2=8.66m (Outside tire edge turning radius) R3=9.39m (Vehicle turning radius) R4=8.01m (Boom edge turning radius) R5=5.85m (Vehicle inside turning radius) A1=3.09m (Tire entrance passage width) A2=3.82m (Vehicle entrance passage width) C=3.82m (Vehicle exit passage width) D=3.68m (Boom edge exit passage width)
90°	 R1=8.50m (Minimum turning radius) R2=8.66m (Outside tire edge turning radius) R3=9.28m (Vehicle turning radius) R4=9.70m (Boom edge turning radius) R5=5.85m (Vehicle inside turning radius) A=4.30m (Entrance passage width) B=4.30m (Tire exit passage width) C=4.92m (Vehicle exit passage width) D=5.35m (Boom edge exit passage width)	 R1=4.80m (Minimum turning radius) R2=4.96m (Outside tire edge turning radius) R3=5.73m (Vehicle turning radius) R4=6.26m (Boom edge turning radius) R5=2.50m (Vehicle inside turning radius) A1=2.88m (Tire entrance passage width) A2=3.89m (Vehicle entrance passage width) B=2.88m (Tire exit passage width) C=3.89m (Vehicle exit passage width) D=4.49m (Boom edge exit passage width)	 R1=8.50m (Minimum turning radius) R2=8.66m (Outside tire edge turning radius) R3=9.39m (Vehicle turning radius) R4=8.01m (Boom edge turning radius) R5=5.85m (Vehicle inside turning radius) A1=3.96m (Tire entrance passage width) A2=4.69m (Vehicle entrance passage width) C=4.69m (Vehicle exit passage width) D=4.56m (Boom edge exit passage width)
120°	 R1=8.50m (Minimum turning radius) R2=8.66m (Outside tire edge turning radius) R3=9.28m (Vehicle turning radius) R4=9.70m (Boom edge turning radius) R5=5.85m (Vehicle inside turning radius) A=5.51m (Entrance passage width) B=5.51m (Tire exit passage width) C=6.13m (Vehicle exit passage width) D=6.50m (Boom edge exit passage width)	 R1=4.80m (Minimum turning radius) R2=4.96m (Outside tire edge turning radius) R3=5.73m (Vehicle turning radius) R4=6.26m (Boom edge turning radius) R5=2.50m (Vehicle inside turning radius) A1=3.49m (Tire entrance passage width) A2=4.41m (Vehicle entrance passage width) B=3.49m (Tire exit passage width) C=4.41m (Vehicle exit passage width) D=4.95m (Boom edge exit passage width)	 R1=8.50m (Minimum turning radius) R2=8.66m (Outside tire edge turning radius) R3=9.39m (Vehicle turning radius) R4=8.01m (Boom edge turning radius) R5=5.85m (Vehicle inside turning radius) A1=5.14m (Tire entrance passage width) A2=5.87m (Vehicle entrance passage width) C=5.87m (Vehicle exit passage width) D=5.72m (Boom edge exit passage width)

■ Dimensions

X-type outriggers

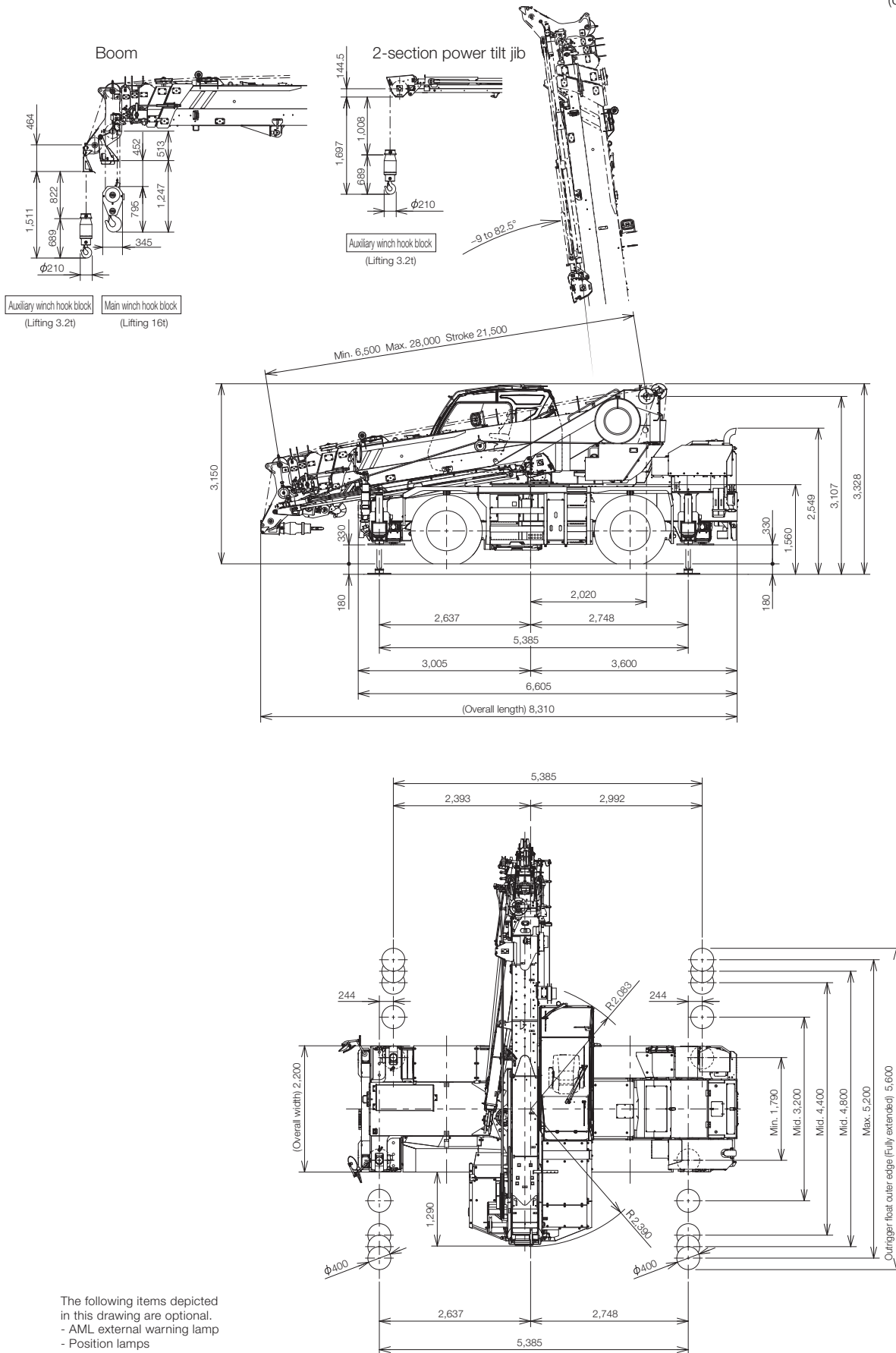
Scale 1/100
(Unit: mm)



■ Dimensions

H-type outriggers

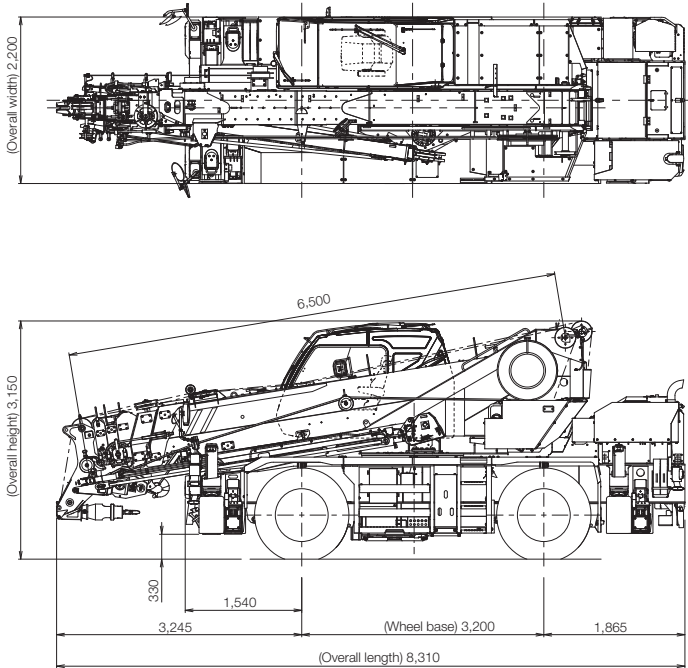
Scale 1/100
(Unit: mm)



■ External view

X-type outriggers

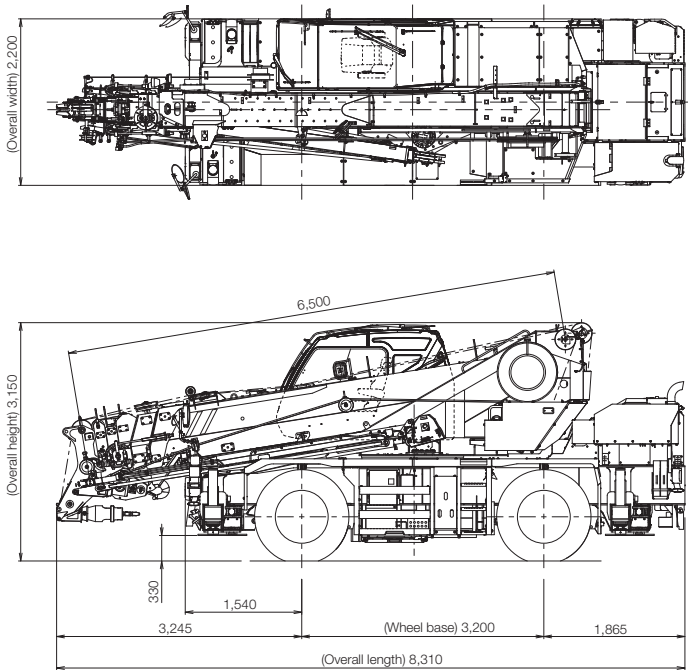
Scale 1/100
(Unit: mm)



The AML external warning lamp, position lamps, and marker lamps depicted in this drawing are optional.

H-type outriggers

Scale 1/100
(Unit: mm)



The AML external warning lamp, position lamps, and marker lamps depicted in this drawing are optional.

Mode name	Specifications	Spec. No.
GR-160N	Lifting 16 t, 6-section boom, 2-section power tilt jib, X-type outriggers	GR-160N-5-00101
GR-160N	Lifting 16 t, 6-section boom, 2-section power tilt jib, H-type outriggers	GR-160N-5-00102

Note: Due to improvements, the delivered product may have specifications different from these.
2205-01-02