

Tadano Rough Terrain Crane

GR-130NL(2W)

GR-130N(2W)

(Power tilt jib, 2 winches)

Specifications

Model name	Specifications	Spec. No.
GR-130NL(2W)	Lifting 13t, X-type outriggers, 2 winches	GR-130N-2-00201
GR-130NL(2W)	Lifting 13t, H-type outriggers, 2 winches	GR-130N-2-00202
GR-130N(2W)	Lifting 4.9t, X-type outriggers, 2 winches	GR-130N-2-00203
GR-130N(2W)	Lifting 4.9t, H-type outriggers, 2 winches	GR-130N-2-00204

TADANO LTD.

GR-130NL(2W) (II) GR-130N(2W) (II)

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



Specifications

Crane

Crane capacity	5.3m boom	13,000kg×1.5m 4,900kg×4.0m	(8 parts of line) •••GR-130NL(2W) (4 parts of line) •••GR-130N(2W)
	9.0m boom	6,000kg×4.0m 4,900kg×5.0m	(4 parts of line) •••GR-130NL(2W) (4 parts of line) •••GR-130N(2W)
	12.7m boom	6,000kg×4.0m 4,900kg×5.0m	(4 parts of line) •••GR-130NL(2W) (4 parts of line) •••GR-130N(2W)
	16.4m boom	5,000kg×4.5m 4,900kg×4.5m	(4 parts of line) •••GR-130NL(2W) (4 parts of line) •••GR-130N(2W)
	20.1m boom	4,700kg×4.0m	(4 parts of line)
	23.8m boom	3,200kg×5.5m	(4 parts of line)
	3.6m jib	1,600kg×80°	(1 part of line)
	5.5m jib	1,000kg×70°	(1 part of line)
	Single top	1,800kg	(1 part of line)
Maximum lifting height	Boom	24.5m	
	Jib	30.0m	
Maximum load radius	Boom	22.3m	
	Jib	24.1m	
Boom length		5.3m to 23.8m	
Boom telescoping length		18.5m	
Boom extension speed		18.5m/52s	
Jib length		3.6m, 5.5m	
Hoist up speed (wire rope)	Main winch	125m/min (5th layer)	
	Auxiliary winch	110m/min (3rd layer)	
Hook block hoist up speed	Main winch	31.3m/min (4 parts of line)	
	Auxiliary winch	110m/min (1 part of line)	
Hoist down speed (wire rope) [reference]	Main winch	Standard: 110m/min (5th layer), High-speed: 155m/min (5th layer)	
	Auxiliary winch	Standard: 100m/min (3rd layer), High-speed: 145m/min (3rd layer)	
Boom elevating angle		-3° to 82°	
Boom raising speed		-3° to 82°/29s	
Slewing angle		360° continuous	
Slewing speed		2.6min ⁻¹ {rpm}	
Wire rope	Main winch	Dia. 11.2mm × length 137m Spin-resistant wire rope	
	Auxiliary winch	Dia. 11.2mm × length 70m 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	
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, negative brake	
Outriggers		Fully hydraulic X-/H-type (floats mounted integrally), slide and jacks with independent operation device, Extension width: Max. 4.7 m, Mid. 4.3 m, 3.5 m, 2.5 m, Min. 1.7 m (X-type), 1.64 m (H-type)	
Operation method		Electrically operated	
Maximum load of outrigger		13.2t:GR-130NL(2W), 10.7t:GR-130N(2W)	
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, 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, hydraulic oil clogging alarm	
Accessories		Wood blocks (4 pcs.), aluminum pads (4 pcs.)	

Carrier

Vehicle name/model		Tadano YDR-T015	
Engine	Model	Hino J05E (with turbocharger, intake air cooling, DPF/urea SCR system)	
	Type	Water-cooled, 4-cycle, 4-cylinder direct injection diesel engine	
	Displacement	5.123L	
	Maximum output	129kW{175PS}/2,500min ⁻¹ {rpm}	
	Maximum torque	540N·m{55.0kgf·m}/1,600min ⁻¹ {rpm}	
Torque converter		3-element 1-section (with automatic lockup mechanism)	
Transmission		Automatic and manual transmission, power shift type (wet multiplate clutch), 3 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-100Ah×2 (24V)	
Fuel tank capacity		189L	
Urea water tank capacity		19L	
Tires	Front wheels	275/80 R22.5 151/148J	
	Rear wheels	275/80 R22.5 151/148J	
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, front-left camera, rear monitoring camera	
Standard equipment		Manual centralized lubrication system, immobilizer, tire chocks, LED headlamps, human alert	

Option

Electric retractable mirror with heater, halogen headlamp, AML external warning lamp, position lamps, marker lamps, LED marker lamps, LED flood lamp, external auditory alarms, overview video display, rear monitoring camera for work, winch drum monitoring camera, electric centralized lubrication system, radio controller for work preparation

Dimensions when traveling

Overall length	7,590mm
Overall width	2,000mm
Overall height	2,815mm
Wheel base	2,750mm
Wheel track	1,680mm
Front wheels	1,680mm
Rear wheels	1,680mm

Running performance

Maximum speed	49km/h
Gradability (tanθ)	0.36
Minimum turning radius	3.8m (4-wheel steering)
	6.5m (2-wheel steering)

Weight

Gross vehicle load	14,695kg
Front axle load	7,345kg
Rear axle load	7,350kg

Maximum jack reaction force (maximum load of outrigger)

	GR-130NL(2W)	GR-130N(2W)
Boom	13.2t	10.7t
Jib	9.6t	9.6t

■ Rated lifting capacity table

① When using outriggers

[Boom]							Unit: (t)
Outrigger maximum extension (4.7m)							Unit: (t)
Boom length Load radius	5.3m	9.0m	12.7m	16.4m	20.1m	23.8m	
1.0m	13.0 (4.9)	6.0 (4.9)					
1.5m	13.0 (4.9)	6.0 (4.9)	6.0 (4.9)				
2.0m	12.0 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)			
2.5m	10.5 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7		
3.0m	8.95(4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7		
3.5m	7.55(4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7	3.2	
4.0m	6.5 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7	3.2	
4.5m		5.6 (4.9)	5.45(4.9)	5.0 (4.9)	4.5	3.2	
5.0m		4.95(4.9)	4.9	4.6	4.05	3.2	
5.5m		4.4	4.35	4.35	3.7	3.2	
6.0m		3.95	3.95	3.95	3.4	3.0	
7.0m		3.25	3.2	3.3	2.9	2.6	
8.0m		2.85(7.7m)	2.65	2.8	2.5	2.25	
9.0m			2.25	2.4	2.3	1.95	
10.0m			1.9	2.05	2.05	1.75	
11.0m			1.6	1.7	1.85	1.55	
12.0m			1.45(11.4m)	1.45	1.55	1.4	
13.0m				1.25	1.3	1.25	
14.0m				1.05	1.15	1.15	
15.0m				0.9	1.0	1.05	
16.0m					0.86	0.93	
17.0m					0.73	0.82	
18.0m					0.63	0.71	
19.0m					0.56(18.7m)	0.62	
20.0m						0.54	
22.0m						0.39	
22.3m						0.37	
A(°)	0 to 82						

Values in parentheses () are for GR-130N(2W).

A: Boom angle range (without load)

[Boom]							Unit: (t)
Outrigger middle extension (4.3m)							Unit: (t)
Boom length Load radius	5.3m	9.0m	12.7m	16.4m	20.1m	23.8m	
1.0m	13.0 (4.9)	6.0 (4.9)					
1.5m	13.0 (4.9)	6.0 (4.9)	6.0 (4.9)				
2.0m	12.0 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)			
2.5m	10.5 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7		
3.0m	8.95(4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7		
3.5m	7.55(4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7	3.2	
4.0m	6.5 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7	3.2	
4.5m		5.6 (4.9)	5.45(4.9)	5.0 (4.9)	4.5	3.2	
5.0m		4.95(4.9)	4.9	4.6	4.05	3.2	
5.5m		4.4	4.35	4.35	3.7	3.2	
6.0m		3.95	3.95	3.95	3.4	3.0	
7.0m		3.25	3.2	3.3	2.9	2.6	
8.0m		2.85(7.7m)	2.5	2.75	2.5	2.25	
9.0m			1.95	2.15	2.2	1.95	
10.0m			1.6	1.75	1.85	1.75	
11.0m			1.3	1.45	1.55	1.55	
12.0m			1.2(11.4m)	1.2	1.3	1.35	
13.0m				1.0	1.1	1.15	
14.0m				0.8	0.95	1.0	
15.0m				0.7	0.8	0.85	
16.0m					0.65	0.75	
17.0m					0.55	0.65	
18.0m					0.45	0.55	
19.0m					0.4(18.7m)	0.45	
20.0m						0.38	
A(°)	0 to 82						3 to 82

Values in parentheses () are for GR-130N(2W).

A: Boom angle range (without load)

[Boom]							Unit: (t)
Outrigger middle extension (3.5m)							Unit: (t)
Boom length Load radius	5.3m	9.0m	12.7m	16.4m	20.1m	23.8m	
1.0m	12.0 (4.9)	6.0 (4.9)					
1.5m	12.0 (4.9)	6.0 (4.9)	6.0 (4.9)				
2.0m	12.0 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)			
2.5m	10.5 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7		
3.0m	8.95(4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7		
3.5m	7.55(4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7	3.2	
4.0m	6.5 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7	3.2	
4.5m		5.1 (4.9)	5.1 (4.9)	5.0 (4.9)	4.5	3.2	
5.0m		4.2	4.2	4.4	4.05	3.2	
5.5m		3.5	3.5	3.9	3.7	3.2	
6.0m		3.0	2.95	3.3	3.4	3.0	
7.0m		2.25	2.2	2.45	2.6	2.5	
8.0m		1.85(7.7m)	1.65	1.9	2.0	2.05	
9.0m			1.25	1.5	1.6	1.65	
10.0m			0.95	1.15	1.25	1.35	
11.0m			0.7	0.92	1.0	1.1	
12.0m			0.6(11.4m)	0.72	0.82	0.9	
13.0m				0.55	0.66	0.75	
14.0m				0.4	0.51	0.6	
15.0m				0.3	0.4	0.5	
16.0m					0.3	0.4	
17.0m						0.3	
A(°)	0 to 82				28 to 82	39 to 82	

Values in parentheses () are for GR-130N(2W).

A: Boom angle range (without load)

[Boom]							Unit: (t)
Outrigger middle extension (2.5m)							Unit: (t)
Boom length Load radius	5.3m	9.0m	12.7m	16.4m	20.1m	23.8m	
1.0m	12.0 (4.9)	6.0 (4.9)					
1.5m	12.0 (4.9)	6.0 (4.9)	6.0 (4.9)				
2.0m	12.0 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)			
2.5m	8.2 (4.9)	6.0 (4.9)	6.0 (4.9)	5.0 (4.9)	4.7		
3.0m	5.9 (4.9)	5.7 (4.9)	5.8 (4.9)	5.0 (4.9)	4.7		
3.5m	4.45	4.5	4.5	4.6	4.5	3.2	
4.0m	3.65	3.55	3.5	3.7	3.8	3.2	
4.5m		2.8	2.8	3.05	3.2	3.0	
5.0m		2.3	2.3	2.55	2.7	2.7	
5.5m		1.9	1.9	2.1	2.3	2.3	
6.0m		1.6	1.55	1.8	1.9	2.05	
7.0m		1.1	1.1	1.3	1.35	1.5	
8.0m		0.85(7.7m)	0.73	0.93	1.0	1.15	
9.0m			0.48	0.68	0.75	0.9	
10.0m			0.27	0.47	0.55	0.7	
11.0m				0.31	0.4	0.5	
12.0m					0.25	0.35	
13.0m						0.25	
A(°)	0 to 82		19 to 82	39 to 82	46 to 82	53 to 82	

Values in parentheses () are for GR-130N(2W).

A: Boom angle range (without load)

[Boom]							Unit: (t)
Outrigger minimum extension (1.7m: X-type) (1.64m: H-type)							Unit: (t)
Boom length Load radius	5.3m	9.0m	12.7m	16.4m	20.1m	23.8m	
1.0m	8.0 (4.9)	6.0 (4.9)					
1.5m	7.0 (4.9)	6.0 (4.9)	6.0 (4.9)				
2.0m	5.65(4.9)	5.4 (4.9)	5.5 (4.9)	5.0 (4.9)			
2.5m	3.85	3.8	3.6	3.3	3.3		
3.0m	2.85	2.85	2.7	2.7	2.7		
3.5m	2.25	2.1	2.0	2.15	2.2	2.2	
4.0m	1.75	1.65	1.6	1.7	1.8	1.85	
4.5m		1.3	1.3	1.4	1.5	1.55	
5.0m		0.98	1.05	1.1	1.25	1.35	
5.5m		0.78	0.83	0.9	1.05	1.15	
6.0m		0.62	0.63	0.75	0.9	0.97	
7.0m		0.32	0.27	0.47	0.65	0.66	
8.0m						0.41	
A(°)	0 to 82	29 to 82	49 to 82	59 to 82	62 to 82	67 to 82	

Values in parentheses () are for GR-130N(2W).

A: Boom angle range (without load)

[Jib] (23.8m boom)																				
Outrigger maximum extension (4.7m)															-360 degrees-					
Jib length	23.8m boom + 3.6m jib								23.8m boom + 5.5m jib											
Offset	5°		25°		45°		60°		5°		25°		45°		60°					
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)				
82°	3.7	1.6	4.8	1.4	5.7	1.0	6.2	0.65	4.1	1.0	5.8	1.0	7.2	0.65	8.0	0.4				
80°	4.6	1.6	5.7	1.4	6.6	1.0	7.0	0.65	5.1	1.0	6.8	1.0	8.2	0.65	8.8	0.4				
75°	6.9	1.55	8.0	1.2	8.8	0.93	9.2	0.65	7.6	1.0	9.2	0.85	10.4	0.63	11.0	0.4				
70°	9.2	1.25	10.2	1.0	10.9	0.85	11.2	0.65	10.0	1.0	11.5	0.72	12.6	0.58	13.1	0.4				
65°	11.3	1.05	12.3	0.9	12.9	0.77	13.1	0.65	12.3	0.81	13.7	0.61	14.7	0.52	15.0	0.4				
60°	13.4	0.9	14.3	0.8	14.8	0.7	14.9	0.65	14.5	0.69	15.8	0.55	16.6	0.48	16.8	0.4				
55°	15.4	0.72	16.2	0.66	16.6	0.65			16.6	0.58	17.8	0.5	18.5	0.45						
50°	17.2	0.6	17.9	0.58	18.2	0.56			18.5	0.53	19.6	0.44	20.1	0.41						
45°	18.9	0.45	19.5	0.42	19.7	0.44			20.3	0.4	21.3	0.38	21.6	0.39						
40°	20.4	0.33	21.0	0.32					22.0	0.3	22.8	0.3								
35°	21.8	0.25	22.2	0.24					23.5	0.25	24.1	0.23								
30°	23.0	0.21	23.3	0.21																
A(°)	29 to 82				44 to 82				59 to 82				34 to 82				44 to 82		59 to 82	

R: Load radius W: Rated lifting capacity A: Boom angle range (without load)

[Jib] (23.8m boom)																
Outrigger middle extension (4.3m)																
-Side-																
Jib length	23.8m boom + 3.6m jib								23.8m boom + 5.5m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
82°	3.7	1.6	4.8	1.4	5.7	1.0	6.2	0.65	4.1	1.0	5.8	1.0	7.2	0.65	8.0	0.4
80°	4.6	1.6	5.7	1.4	6.6	1.0	7.0	0.65	5.1	1.0	6.8	1.0	8.2	0.65	8.8	0.4
75°	6.9	1.55	8.0	1.2	8.8	0.93	9.2	0.65	7.6	1.0	9.2	0.85	10.4	0.63	11.0	0.4
70°	9.2	1.25	10.2	1.0	10.9	0.85	11.2	0.65	10.0	1.0	11.5	0.72	12.6	0.58	13.1	0.4
65°	11.3	1.05	12.3	0.9	12.9	0.77	13.1	0.65	12.3	0.81	13.7	0.61	14.7	0.52	15.0	0.4
60°	13.4	0.9	14.3	0.8	14.8	0.7	14.9	0.65	14.5	0.69	15.8	0.55	16.6	0.48	16.8	0.4
55°	15.4	0.68	16.2	0.65	16.6	0.64			16.6	0.58	17.8	0.5	18.5	0.45		
50°	17.2	0.51	17.9	0.48	18.2	0.47			18.5	0.44	19.6	0.42	20.1	0.4		
45°	18.9	0.36	19.5	0.34	19.7	0.34			20.3	0.32	21.3	0.3	21.6	0.28		
40°	20.4	0.24	21.0	0.23					22.0	0.23	22.8	0.21				
A(°)	39 to 82				44 to 82				59 to 82				39 to 82			

R: Load radius W: Rated lifting capacity A: Boom angle range (without load)

[Jib] (23.8m boom)																	
Outrigger middle extension (3.5m)																	
-Side-																	
Jib length	23.8m boom + 3.6m jib								23.8m boom + 5.5m jib								
Offset	5°		25°		45°		60°		5°		25°		45°		60°		
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	
82°	3.7	1.6	4.8	1.4	5.7	1.0	6.2	0.65	4.1	1.0	5.8	1.0	7.2	0.65	8.0	0.4	
80°	4.6	1.6	5.7	1.4	6.6	1.0	7.0	0.65	5.1	1.0	6.8	1.0	8.2	0.65	8.8	0.4	
75°	6.9	1.55	8.0	1.2	8.8	0.93	9.2	0.65	7.6	1.0	9.2	0.85	10.4	0.63	11.0	0.4	
70°	9.2	1.25	10.2	1.0	10.9	0.85	11.2	0.65	10.0	1.0	11.5	0.72	12.6	0.58	13.1	0.4	
65°	11.3	0.9	12.3	0.8	12.9	0.77	13.1	0.65	12.3	0.75	13.7	0.61	14.7	0.52	15.0	0.4	
60°	13.4	0.6	14.3	0.57	14.8	0.54	14.9	0.51	14.5	0.53	15.8	0.46	16.6	0.43	16.8	0.4	
55°	15.4	0.38	16.2	0.35	16.6	0.34			16.6	0.34	17.8	0.31	18.5	0.28			
50°	17.2	0.23	17.9	0.21	18.2	0.21											
A(°)	49 to 82						59 to 82		54 to 82						59 to 82		

R: Load radius W: Rated lifting capacity A: Boom angle range (without load)

[Jib] (23.8m boom)																	
Outrigger middle extension (2.5m)																	
-Side-																	
Jib length	23.8m boom + 3.6m jib								23.8m boom + 5.5m jib								
Offset	5°		25°		45°		60°		5°		25°		45°		60°		
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	
82°	3.7	1.6	4.8	1.4	5.7	1.0	6.2	0.65	4.1	1.0	5.8	1.0	7.2	0.65	8.0	0.4	
80°	4.6	1.6	5.7	1.4	6.6	1.0	7.0	0.65	5.1	1.0	6.8	1.0	8.2	0.65	8.8	0.4	
75°	6.9	1.15	8.0	0.98	8.8	0.8	9.2	0.65	7.6	1.0	9.2	0.8	10.4	0.63	11.0	0.4	
70°	9.2	0.64	10.2	0.56	10.9	0.52	11.2	0.51	10.0	0.55	11.5	0.47	12.6	0.41	13.1	0.4	
65°	11.3	0.31	12.3	0.27	12.9	0.25	13.1	0.25	12.3	0.25							
A(°)	64 to 82								64 to 82				69 to 82				

R: Load radius W: Rated lifting capacity A: Boom angle range (without load)

[Jib] (20.1m boom)																
Outrigger maximum extension (4.7m)															-360 degrees-	
Jib length	20.1m boom + 3.6m jib								20.1m boom + 5.5m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
82°	3.1	1.6	4.3	1.4	5.2	1.0	5.7	0.65	3.6	1.0	5.3	1.0	6.7	0.65	7.4	0.4
80°	4.0	1.6	5.1	1.4	6.0	1.0	6.4	0.65	4.4	1.0	6.2	1.0	7.5	0.65	8.2	0.4
75°	6.0	1.6	7.0	1.3	7.8	0.95	8.2	0.65	6.6	1.0	8.3	0.88	9.5	0.63	10.0	0.4
70°	7.9	1.45	8.9	1.15	9.6	0.9	9.9	0.65	8.7	1.0	10.3	0.79	11.3	0.58	11.8	0.4
65°	9.8	1.25	10.7	1.05	11.3	0.86	11.5	0.65	10.7	0.96	12.2	0.72	13.1	0.55	13.4	0.4
60°	11.6	1.1	12.4	0.95	13.0	0.8	13.1	0.65	12.6	0.84	14.0	0.67	14.8	0.52	15.0	0.4
55°	13.2	0.92	14.0	0.81	14.5	0.75			14.5	0.73	15.7	0.62	16.3	0.49		
50°	14.8	0.8	15.5	0.73	15.9	0.67			16.2	0.66	17.3	0.56	17.7	0.45		
45°	16.3	0.62	16.9	0.58	17.1	0.54			17.7	0.51	18.7	0.48	19.0	0.4		
40°	17.6	0.46	18.1	0.45					19.2	0.38	20.0	0.36				
35°	18.8	0.36	19.2	0.33					20.4	0.29	21.1	0.28				
30°	19.8	0.28	20.1	0.27					21.5	0.25	22.0	0.24				
25°	20.7	0.25	20.9	0.22												
A(°)	24 to 82				44 to 82		59 to 82		29 to 82				44 to 82		59 to 82	

[Jib] (20.1m boom)

Outrigger middle extension (4.3m)															-Side-	
Jib length	20.1m boom + 3.6m jib								20.1m boom + 5.5m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
82°	3.1	1.6	4.3	1.4	5.2	1.0	5.7	0.65	3.6	1.0	5.3	1.0	6.7	0.65	7.4	0.4
80°	4.0	1.6	5.1	1.4	6.0	1.0	6.4	0.65	4.4	1.0	6.2	1.0	7.5	0.65	8.2	0.4
75°	6.0	1.6	7.0	1.3	7.8	0.95	8.2	0.65	6.6	1.0	8.3	0.88	9.5	0.63	10.0	0.4
70°	7.9	1.45	8.9	1.15	9.6	0.9	9.9	0.65	8.7	1.0	10.3	0.79	11.3	0.58	11.8	0.4
65°	9.8	1.25	10.7	1.05	11.3	0.86	11.5	0.65	10.7	0.96	12.2	0.72	13.1	0.55	13.4	0.4
60°	11.6	1.1	12.4	0.95	13.0	0.8	13.1	0.65	12.6	0.84	14.0	0.67	14.8	0.52	15.0	0.4
55°	13.2	0.85	14.0	0.78	14.5	0.73			14.5	0.73	15.7	0.62	16.3	0.49		
50°	14.8	0.62	15.5	0.57	15.9	0.55			16.2	0.53	17.3	0.48	17.7	0.45		
45°	16.3	0.45	16.9	0.41	17.1	0.4			17.7	0.38	18.7	0.34	19.0	0.3		
40°	17.6	0.32	18.1	0.3					19.2	0.28	20.0	0.24				
35°	18.8	0.23	19.2	0.21					20.4	0.24						
A(°)	34 to 82				44 to 82				59 to 82				34 to 82			

R: Load radius W: Rated lifting capacity A: Boom angle range (without load)

[Jib] (20.1m boom)

Outrigger middle extension (3.5m)															-Side-	
Jib length	20.1m boom + 3.6m jib								20.1m boom + 5.5m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
82°	3.1	1.6	4.3	1.4	5.2	1.0	5.7	0.65	3.6	1.0	5.3	1.0	6.7	0.65	7.4	0.4
80°	4.0	1.6	5.1	1.4	6.0	1.0	6.4	0.65	4.4	1.0	6.2	1.0	7.5	0.65	8.2	0.4
75°	6.0	1.6	7.0	1.3	7.8	0.95	8.2	0.65	6.6	1.0	8.3	0.88	9.5	0.63	10.0	0.4
70°	7.9	1.45	8.9	1.15	9.6	0.9	9.9	0.65	8.7	1.0	10.3	0.79	11.3	0.58	11.8	0.4
65°	9.8	1.05	10.7	0.95	11.3	0.86	11.5	0.65	10.7	0.96	12.2	0.72	13.1	0.55	13.4	0.4
60°	11.6	0.73	12.4	0.64	13.0	0.6	13.1	0.65	12.6	0.63	14.0	0.53	14.8	0.49	15.0	0.4
55°	13.2	0.47	14.0	0.42	14.5	0.39			14.5	0.39	15.7	0.35	16.3	0.28		
50°	14.8	0.29	15.5	0.26	15.9	0.25			16.2	0.24	17.3	0.22				
45°	16.3	0.21														
A(°)	44 to 82				49 to 82				59 to 82				49 to 82			

R: Load radius W: Rated lifting capacity A: Boom angle range (without load)

[Jib] (20.1m boom)

Outrigger middle extension (2.5m)															-Side-	
Jib length	20.1m boom + 3.6m jib								20.1m boom + 5.5m jib							
Offset	5°		25°		45°		60°		5°		25°		45°		60°	
Boom angle	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)	R(m)	W(t)
82°	3.1	1.6	4.3	1.4	5.2	1.0	5.7	0.65	3.6	1.0	5.3	1.0	6.7	0.65	7.4	0.4
80°	4.0	1.6	5.1	1.4	6.0	1.0	6.4	0.65	4.4	1.0	6.2	1.0	7.5	0.65	8.2	0.4
75°	6.0	1.15	7.0	0.98	7.8	0.8	8.2	0.65	6.6	1.0	8.3	0.8	9.5	0.63	10.0	0.4
70°	7.9	0.64	8.9	0.56	9.6	0.52	9.9	0.51	8.7	0.55	10.3	0.47	11.3	0.41	11.8	0.4
65°	9.8	0.31	10.7	0.27	11.3	0.25	11.5	0.25	10.7	0.25						
A(°)	64 to 82				64 to 82				64 to 82				69 to 82			

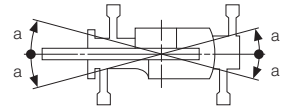
R: Load radius W: Rated lifting capacity A: Boom angle range (without load)

① Precautions when using outriggers

- 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 (90kg) when working with the boom and the weight of the lifting devices and auxiliary winch hook block (25kg) 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.
- The load radius is based on the actual figure including the boom deflection, so always use the load radius as the standard when working with the boom.
- Jib rated lifting capacity differs depending on whether or not boom length exceeds 20.1m.
- When performing jib lift operation, use boom angle as the standard. Furthermore, load radius values are reference values, assuming that the jib is attached to a 20.1 or 23.8m boom.
- The rated lifting capacity for the single top is the value obtained by subtracting 65kg from the boom rated lifting capacity, and includes the weight of the lifting devices and auxiliary winch hook block (25kg), and must not exceed 1.8t.
- High-speed hoist down should only be used when only the hook block is being lowered. Also, sudden lever operations should be avoided.
- The hook block and the standard number of parts of line for each boom length are described in the table below.

However, when using other number of parts of line, the load per line must not exceed 1.8t for main winch wire rope and auxiliary winch wire rope.

Boom length	5.3m	9.0m	12.7m	16.4m	20.1m	23.8m	Jib, single top
Number of parts of line	8 (4)	4	4	4	4	4	1
Hook block type	Lifting 13t (Lifting 4.9t)						Lifting 1.8t
Hook block mass	90kg (90kg)						25kg



Values in parentheses () are for GR-130N(2W).

- When the jib is used, the number of parts of line is 1.
- 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

Extension width	Middle (4.3m)	Middle (3.5m)	Middle (2.5m)	Minimum (※)
Angle a°	45	35	25	15

※ 1.7m·····X-type outriggers
1.64m·····H-type outriggers

② When on-rubber

Unit: (t)

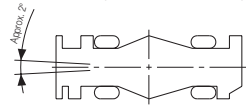
Boom length	Stationary						Traveling (1.6km/h or less)					
	5.3m		9.0m		12.7m		5.3m		9.0m		12.7m	
Load radius	Front	360°	Front	360°	Front	360°	Front	360°	Front	360°	Front	360°
1.0m	3.6	2.8	3.6	2.8			3.2	2.0	3.2	2.0		
1.5m	3.6	2.8	3.6	2.8	3.6	2.8	3.2	2.0	3.2	2.0	3.2	2.0
2.0m	3.4	2.8	3.4	2.8	3.4	2.8	3.0	2.0	3.0	2.0	3.0	2.0
2.5m	3.1	2.15	3.1	2.1	3.1	2.05	2.8	1.55	2.75	1.5	2.65	1.45
3.0m	2.65	1.6	2.6	1.55	2.55	1.5	2.4	1.1	2.3	1.05	2.2	1.0
3.5m	2.3	1.25	2.2	1.2	2.1	1.1	2.0	0.85	1.9	0.75	1.8	0.65
4.0m	2.0	0.9	1.9	0.8	1.7	0.7	1.7	0.6	1.65	0.5	1.5	0.4
4.5m			1.6	0.5	1.4	0.4			1.4	0.3	1.25	
5.0m			1.3		1.1				1.15		1.0	
5.5m			1.1		0.95				0.95		0.85	
6.0m			0.9		0.8				0.8		0.7	
7.0m			0.5		0.5				0.45		0.45	
A(°)	0 to 82		27 to 82		51 to 82		0 to 82		27 to 82		51 to 82	

A: Boom angle range (without load)

②Precautions when on-rubber

- 1. 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 (90kg) 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.
- 2. The load radius is based on the actual figure including boom and tire deflection, so always use the load radius as the standard.
- 3. The hook block and the standard number of parts of line for each boom length are described in the table below. However, when using other number of parts of line, the load per line must not exceed 1.8t for main winch wire rope and auxiliary winch wire rope.

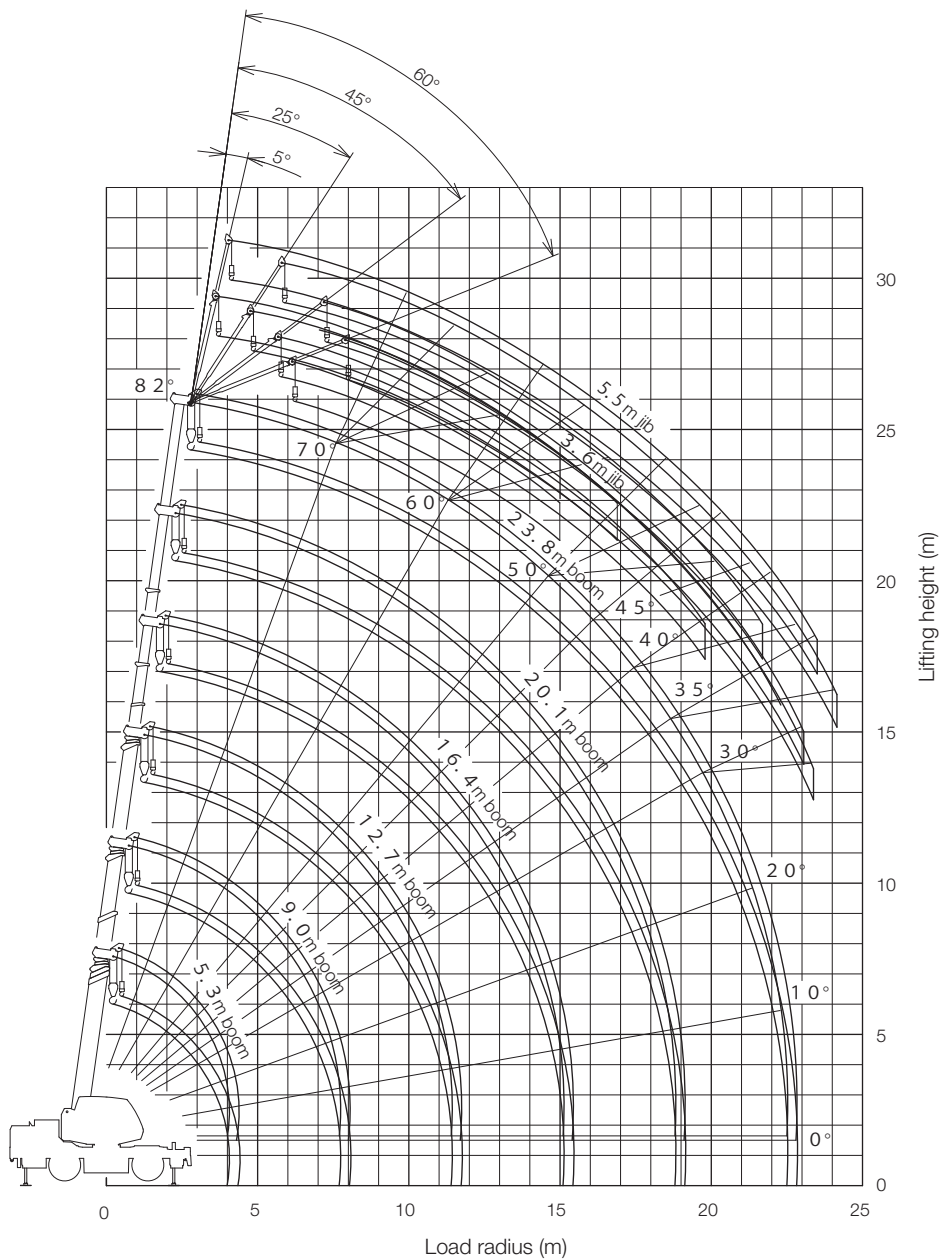
Boom length	5.3m	9.0m	12.7m	Single top
Number of parts of line	4	4	4	1



- 4. Do not perform high-speed hoist down operations, boom lift operations with a boom longer than 12.7 m, or using of the jib.
- 5. 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.
- 6. The rated lifting capacity for the single top is the value obtained by subtracting 65kg from the boom rated lifting capacity, and includes the weight of the lifting devices and auxiliary winch hook block (25kg), and must not exceed 1.8t.
- 7. Perform pick and carry with the "drive mode selector" switch set to "4WD low speed traveling" and the gearshift switch 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 chart

Scale 1/250

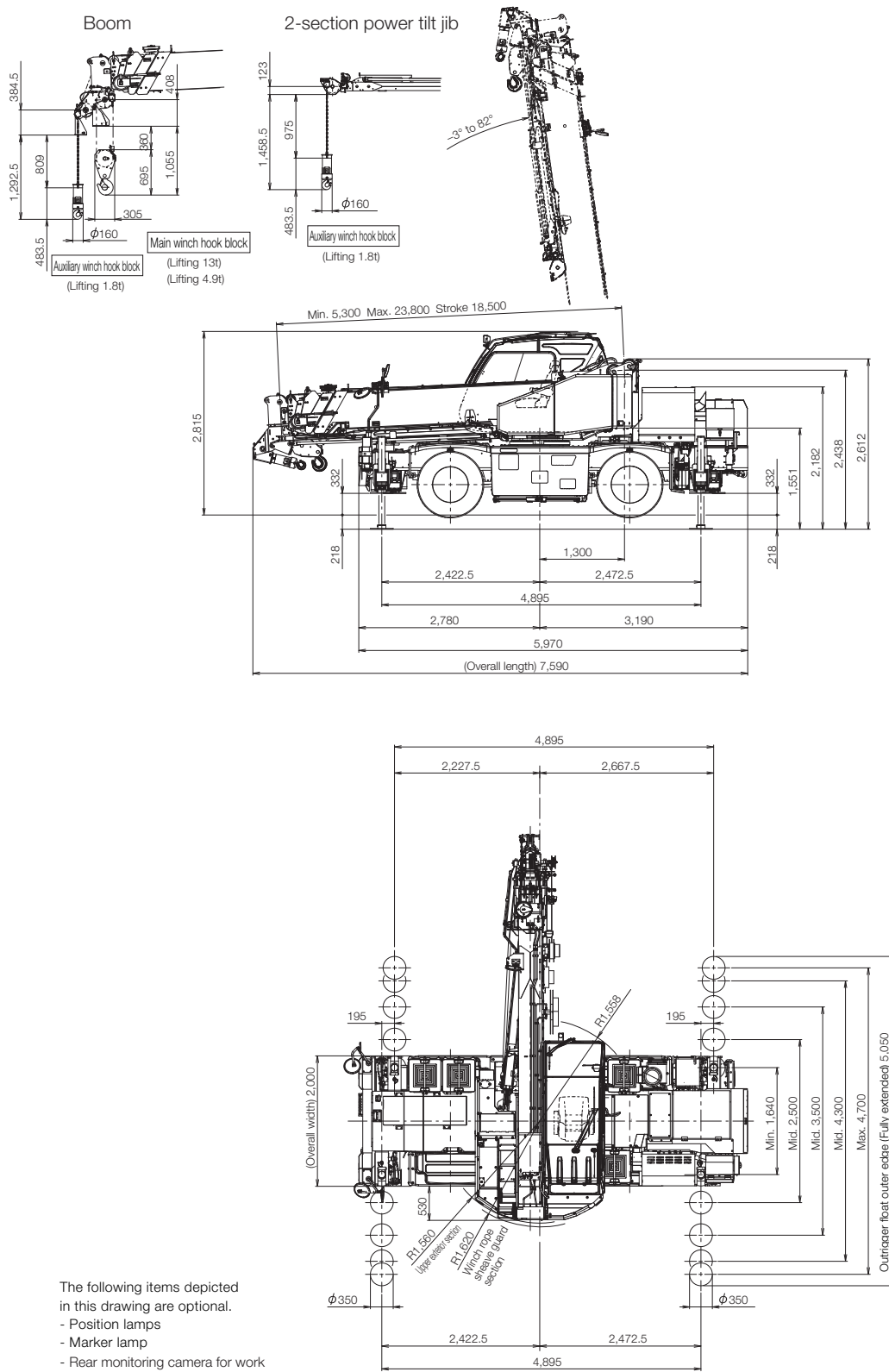


(Note) 1. The above drawing does not include boom deflection.
2. The above drawing shows outrigger maximum (4.7m) extension.

■ Dimensions

H-type outriggers

Scale 1/100
(Unit: mm)



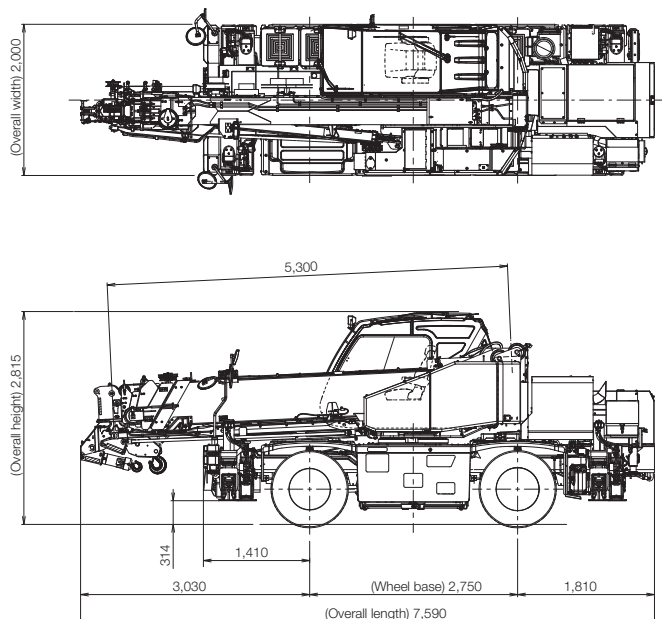
The following items depicted in this drawing are optional.

- Position lamps
- Marker lamp
- Rear monitoring camera for work
- AML external warning lamp
- Overview video display

External view

X-type outriggers

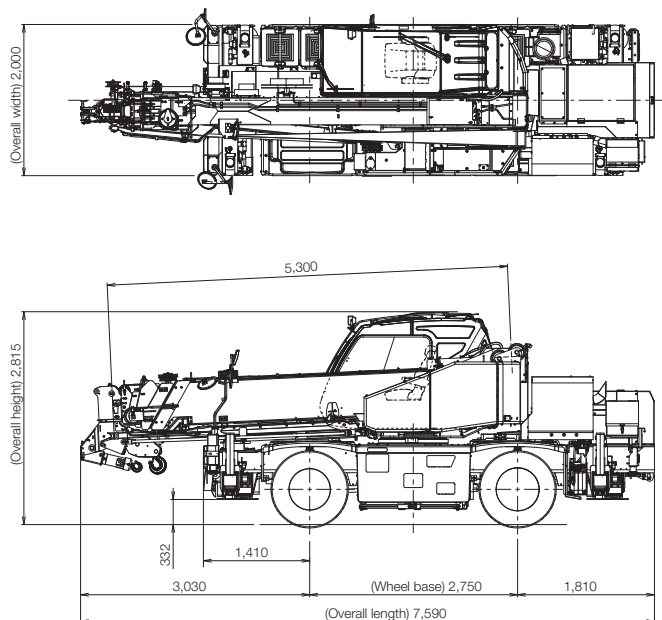
Scale 1/100
(Unit: mm)



The position lamps, marker lamps, rear monitoring camera for works, AML external warning lamp, and overview video display depicted in this drawing are optional.

H-type outriggers

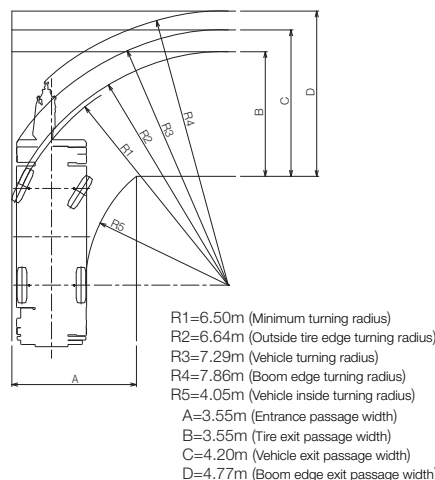
Scale 1/100
(Unit: mm)



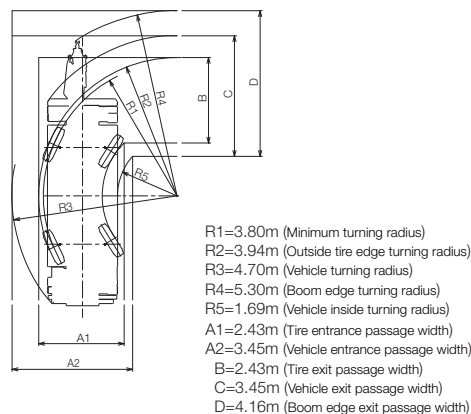
The position lamps, marker lamps, rear monitoring camera for works, AML external warning lamp, and overview video display depicted in this drawing are optional.

Minimum right-angle passage width

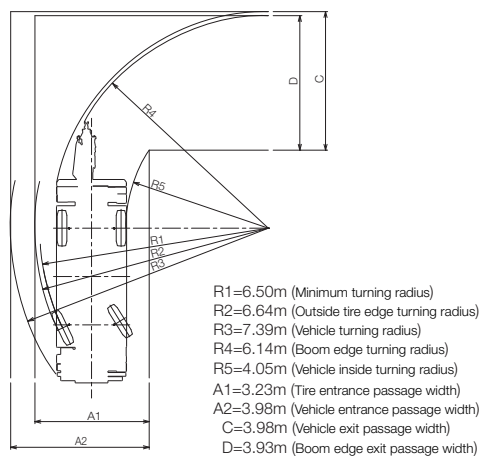
While turning right in the front two-wheel steering mode



While turning right in the four-wheel steering mode



While turning right in the rear two-wheel steering mode



(Note) Values indicated above are calculated values.

Model name	Specifications	Spec. No.
GR-130NLJ(2W)	Lifting 13t, 6-section boom, 2-section power tilt jib, X-type outriggers, 2 winches	GR-130N-2-00201
GR-130NLJ(2W)	Lifting 13t, 6-section boom, 2-section power tilt jib, H-type outriggers, 2 winches	GR-130N-2-00202
GR-130N(2W)	Lifting 4.9t, 6-section boom, 2-section power tilt jib, X-type outriggers, 2 winches	GR-130N-2-00203
GR-130N(2W)	Lifting 4.9t, 6-section boom, 2-section power tilt jib, H-type outriggers, 2 winches	GR-130N-2-00204

Note: Due to improvements, the delivered product may have specifications different from these.
2107-01-04

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