

**Table of contents**

SPECIFICATION ..... 1

LIFTING CAPACITIES

    Boom ..... 2

    Stationary on rubber ..... 2

    Pick & carry ..... 2

    17.5m Boom+6.5m SL Jib ..... 3

    17.5m Boom+10.25m SL Jib ..... 3

    17.5m Boom+14.0m SL Jib ..... 3

    32.5m Boom+6.5m SL Jib ..... 5

    32.5m Boom+10.25m SL Jib ..... 5

    32.5m Boom+14.0m SL Jib ..... 5

    Notes for the lifting capacity chart ..... 7

WORKING RANGE ..... 8

    Minimum path width ..... 9

    Overall view ..... 10

### [SPECIFICATION]

#### ■ CRANE

Description Rough terrain crane with maximum lifting capacity 35 ton

##### ● Crane specification

Maximum rated lifting capacity	7.5 m Boom	35,000kg × 2.6 m (Parts of line : 10)
	12.5 m Boom	19,000kg × 5.0 m (Parts of line : 6)
	17.5 m Boom	17,000kg × 5.0 m (Parts of line : 6)
	22.5 m Boom	12,000kg × 6.5 m (Parts of line : 4)
	27.5 m Boom	9,000kg × 7.0 m (Parts of line : 4)
	32.5 m Boom	7,000kg × 8.0 m (Parts of line : 4)
	6.5 m Jib	3,200kg × 76° (Parts of line : 1)
	10.25 m Jib	2,000kg × 71° (Parts of line : 1)
	14.0 m Jib	1,350kg × 76° (Parts of line : 1)
	Rooster	4,000kg (Parts of line : 1)
Boom length	7.5m — 32.5m	
Jib length	6.5m — 14.0m	
Maximum rated lifting height	33.4m (Boom) 47.3m (jib)	
Hoisting line speed (winch up)	Main winch	125m / min. (at 4th layer)
	Auxiliary winch	125m / min. (at 4th layer)
Hoisting hook speed (winch up)	Main winch	(Parts of line; 10) : 12.5m / min. (at 4th layer)
	Auxiliary winch	(Parts of line; 1) : 125.0m / min. (at 4th layer)
High-speed lowering Rope speed	Main winch	163m / min (at 4th layer)
	Auxiliary winch	163m / min (at 4th layer)
Boom derricking angle	-10° — 83°	
Boom derricking time	44s / -10° — 83°	
Boom extending speed	7.5m — 32.5m / 85s	
Slewing speed	2.6min <sup>-1</sup>	
Tail slewing radius	2,850mm	

##### ● Equipment and structure

Boom type	Round-shaped, 6-section hydraulically telescopic type (the 2nd and 3rd boom sections at the same time, the 4th, 5th and 6th boom sections at the same time)	
Jib type	3-section hydraulically telescopic type (the 2nd and 3rd jib sections at the same time) Hydraulic stepless tilting type (offset angles 5° (6.5m jib: 7° ) to 60° )	
Boom extension/retraction equipment	Two hydraulic cylinders and wire ropes used together	
Boom derricking/lowering equipment	One hydraulic cylinder of direct acting type with pressure-compensated flow control valve	
Jib derricking/lowering equipment	Hydraulic cylinder	
Winch system Main & Auxiliary winches	Two units of Single winch, Planetary gear reduction type (built-in negative brake) with Automatic brake, High/Low speed switching system and Hydraulic compensated flow control valve.	
Slewing equipment	Equipped with Hydraulic motor drive and a planetary gear speed reducer (built-in negative brake), Free / Lock change-over type	
Slewing bearing	Ball bearing type	
Outriggers	Type	Hydraulic H-beam type (with float and vertical cylinder in single unit)
	Extension width	6,800mm (Fully extended)
		6,300mm (Intermediately extended)
		5,200mm (Intermediately extended)
		4,200mm (Intermediately extended)
2,310mm (Completely retracted)		
Wire rope for hoisting	Main winch	Diameter: 16mm × Length: 185m
	Auxiliary winch	Diameter: 16mm × Length: 105m

##### ● Hydraulic equipment

Oil pump	4 pumps, plunger and gear type	
Hydraulic motor	Hoisting motor	Axial plunger type
	Slewing motor	Axial plunger type
Control valve	Double acting with integral check and relief valves (With Hydraulic compensated flow control valve)	
Cylinder	Double acting type	
Oil reservoir capacity	500L	

##### ● Safety devices

ACS (Automatic Crane System with Voice alarm), Slewing automatic stop system, Boom raise / lower dampening function, Boom extension / retraction dampening function, Working range limit mode, Outrigger status detector, Boom derricking / telescoping holding valve, Jib derricking / telescoping holding valve, Overhoist prevention device, Drum lock device (on aux. winch), Winch holding valve, Automatic winch brake, Winch drum roller, Hydraulic safety valves, Outrigger lock pins, Slewing lock, Slewing warning lamp, Hydraulic oil temperature warning device, Hydraulic oil return filter warning device

##### ● Standard equipment

Air conditioner, Working light (on boom, table and cab), Winch drum turning indication device, Hydraulic oil cooler, Hook for 35 ton, Hook for 22 ton, Hook for 4 ton

##### ● Operator's cab

Adjustable steering wheel, Adjustable seat, Power Window (external closing switch), Front windshield wiper & washer (2 speed wiper), Roof window wiper & washer, AM/FM Radio, Step lamp, Floor mat, Accessory socket (24V), Emergency set

##### ● Optional equipment

ACS outside indicator, PA system, Winch view camera, Door visor, Fire extinguisher, Anemometer, Seat suspension

#### ■ CARRIER

##### ● Carrier specification

Maximum traveling speed	49km/h
Grade ability	55% (computed at G.V.W. = 28,055 kg)
Minimum turning radius (center of extreme outer tire)	8.2m (2 wheel steer) 4.9m (4 wheel steer)

##### ● Engine

Model	Mitsubishi 6M60-TLE3BA
Type	4 cycle, 6 cylinders, water cooled, direct injection turbo-charged diesel engine with intercooling
Piston displacement	7,545L
Max. power	200kW at 2,600min <sup>-1</sup>
Max. torque	775N·m at 1,600min <sup>-1</sup>
Diesel Fuel recommended by KATO must be used	

##### ● Equipment and structure

Drive system	Switches between 2 wheel drive (4×2) and 4 wheel drive (4×4)	
Torque converter	Engine mounted 3 elements 1 stage (with lock up clutch)	
Transmission	Remote mounted full automatic	
Number of speeds	4 forward & 1 reverse speed (with High-low selector)	
Axles	Front	Planetary, drive/steer type
	Rear	Planetary, drive/steer type
Suspension	Front	Taper-leaf spring, Hydraulic locking device with suspension cylinder
	Rear	Taper-leaf spring, Hydraulic locking device with suspension cylinder
Brake system	Service	Air-over hydraulic disk brake on 4 wheels (front and rear independent circuit)
	Parking	Spring applied, electrically air released parking brake mounted on front axle, internal expanding type
	Auxiliary	Exhaust brake, Eddy current retarder, Service brake lock
Steering	Full hydraulic power steering, Completely independent front and rear steering (with automatic rear wheel steering lock system)	
Tire size	Front	385 / 95 R25 170E ROAD
	Rear	385 / 95 R25 170E ROAD
Fuel tank capacity	300 L	
Batteries	(12V-120Ah) × 2	

##### ● Safety devices

Emergency steering device, Rear wheel steering lock system (automatic), Brake fluid leak warning device, Service brake lock, Suspension lock, Engine overspeed alarm, Electrically retractable side view mirrors, Left front view camera, Front view camera, Rear view camera, Right side view mirror on boom with defroster, Radiator coolant level warning device, Air filter service warning device, Low air warning device

##### ● Standard equipment

Centralized lubricating system, Aluminum outrigger plate, Discharge head lamp, Electrically adjustable side view mirrors

##### ● Optional equipment

Wheel stopper, Way side lamp, Side marker lamp

#### ■ GENERAL Dimensions

Overall length	9,765mm	
Overall width	2,620mm	
Overall height	3,595mm	
Wheel base	3,650mm	
Treads	Front	2,170mm
	Rear	2,170mm
Passenger capacity	One person	
Gross vehicle weight	Gross weight	approx. 28,055kg
	Front weight	approx. 14,040kg
	Rear weight	approx. 14,015kg

##### ● Stow the hooks in place before traveling.

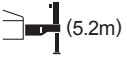
● Before you use this machine, read the precautions in the instruction manual thoroughly to operate it correctly.

● KATO products and specifications are subject to improvements and changes without notice.






## 17.5m Boom+6.5m SL Jib



(5.2m)

Outriggers intermediately extended (5.2m) over side								
Boom angle (°)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	2.7	3.20	4.5	3.20	6.2	2.20	7.0	1.60
80	3.8	3.20	5.7	3.20	7.2	2.20	8.1	1.60
75	5.8	3.20	7.7	3.18	9.1	2.20	9.6	1.60
70	7.8	3.20	9.6	2.97	10.8	2.13	11.1	1.60
66	9.4	3.20	11.0	2.82	12.1	2.09	12.3	1.59
63	10.4	3.20	12.0	2.72	13.0	2.06	13.2	1.58
60	11.6	3.20	13.1	2.63	13.8	2.04		
55	13.3	2.61	14.6	2.27	15.3	1.87		
50	14.7	1.95	16.0	1.65	16.4	1.36		
46	16.0	1.42	16.9	1.29	17.2	1.08		
40	17.4	0.92	18.2	0.84				
35	18.5	0.57	19.2	0.54				
30	19.5	0.33	20.0	0.30				
Critical boom angle	29°		29°		45°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

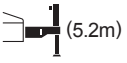
731-75102000



(4.2m)

Outriggers intermediately extended (4.2m) over side								
Boom angle (°)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	2.7	3.20	4.5	3.20	6.2	2.20	7.0	1.60
80	3.8	3.20	5.7	3.20	7.2	2.20	8.1	1.60
75	5.8	3.20	7.7	3.18	9.1	2.20	9.6	1.60
70	7.8	3.20	9.6	2.97	10.8	2.13	11.1	1.60
66	9.4	3.20	11.0	2.82	12.1	2.09	12.3	1.59
63	10.4	2.98	12.0	2.35	13.0	2.06	13.2	1.58
60	11.6	2.35	13.1	1.91	13.8	1.73		
55	13.3	1.51	14.6	1.31	15.2	1.17		
50	14.7	0.92	16.0	0.75	16.3	0.73		
46	16.0	0.45	16.9	0.39	17.1	0.38		
Critical boom angle	45°		45°		45°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

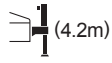
## 17.5m Boom+10.25m SL Jib



(5.2m)

Outriggers intermediately extended (5.2m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	3.1	2.00	6.5	1.90	9.1	1.20	10.4	0.90
80	4.5	2.00	8.0	1.90	10.4	1.20	11.5	0.90
75	7.0	2.00	10.2	1.67	12.3	1.17	13.2	0.90
70	9.2	2.00	12.3	1.50	14.1	1.12	15.0	0.89
66	11.0	2.00	13.8	1.39	15.5	1.08	16.1	0.88
63	12.3	2.00	14.9	1.33	16.5	1.06	16.8	0.87
60	13.6	1.92	16.0	1.27	17.4	1.04		
55	15.5	1.69	17.5	1.20	18.8	1.02		
50	17.4	1.42	19.2	1.09	20.0	1.01		
46	18.7	1.08	20.3	0.81	20.9	0.73		
40	20.4	0.65	21.8	0.49				
35	21.7	0.36						
Critical boom angle	34°		39°		45°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

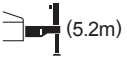
731-75102000



(4.2m)

Outriggers intermediately extended (4.2m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	3.1	2.00	6.5	1.90	9.1	1.20	10.4	0.90
80	4.5	2.00	8.0	1.90	10.4	1.20	11.5	0.90
75	7.0	2.00	10.2	1.67	12.3	1.17	13.2	0.90
70	9.2	2.00	12.3	1.50	14.1	1.12	15.0	0.89
66	11.0	2.00	13.8	1.39	15.5	1.08	16.1	0.88
63	12.3	2.00	14.9	1.33	16.5	1.06	16.8	0.87
60	13.6	1.79	16.0	1.27	17.4	1.04		
55	15.5	1.15	17.5	0.85	18.8	0.73		
50	17.4	0.60	19.2	0.42	20.0	0.35		
46	18.5	0.33						
Critical boom angle	45°		49°		49°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

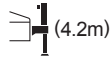
## 17.5m Boom+14.0m SL Jib



(5.2m)

Outriggers intermediately extended (5.2m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	4.0	1.35	8.7	0.80	12.1	0.50	14.0	0.40
80	6.8	1.35	10.2	0.80	13.5	0.50	15.3	0.40
75	8.5	1.35	12.7	0.71	15.6	0.48	17.1	0.40
70	11.1	1.22	15.0	0.63	17.6	0.45	18.5	0.40
66	13.0	1.03	16.7	0.59	19.0	0.44	19.7	0.40
63	14.5	0.92	18.0	0.55	20.1	0.43	20.0	0.40
60	15.8	0.83	19.1	0.53	20.9	0.42		
55	18.0	0.72	21.0	0.49	22.3	0.42		
50	20.0	0.64	22.7	0.46	23.8	0.41		
46	21.5	0.59	24.0	0.45	25.0	0.41		
40	23.4	0.49	25.5	0.37				
Critical boom angle	39°		39°		45°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

731-75103000



(4.2m)

Outriggers intermediately extended (4.2m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	4.0	1.35	8.7	0.80	12.1	0.50	14.0	0.40
80	6.8	1.35	10.2	0.80	13.5	0.50	15.3	0.40
75	8.5	1.35	12.7	0.71	15.6	0.48	17.1	0.40
70	11.1	1.22	15.0	0.63	17.6	0.45	18.5	0.40
66	13.0	1.03	16.7	0.59	19.0	0.44	19.7	0.40
63	14.5	0.92	18.0	0.55	20.1	0.43	20.0	0.40
60	15.8	0.83	19.1	0.53	20.9	0.42		
55	18.0	0.72	21.0	0.49	22.3	0.42		
50	20.0	0.48	22.7	0.35				
Critical boom angle	49°		49°		54°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							



Based on ISO 4305  
Not exceed 75% of static tipping loads

## 32.5m Boom + 6.5m SL Jib

(6.8m)

Outriggers fully extended (6.8m) 360° full range

Boom angle (°)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60
70	14.6	2.52	16.0	2.02	17.0	1.74	17.5	1.58
65	17.7	1.98	18.9	1.65	19.8	1.46	20.1	1.41
63	18.8	1.83	20.1	1.53	20.9	1.36	21.0	1.34
58	21.6	1.49	22.7	1.29	23.4	1.18		
56	22.7	1.26	23.7	1.20	24.3	1.11		
50	25.5	0.68	26.3	0.66	26.9	0.63		
45	27.7	0.32	28.4	0.32				
Critical boom angle	44°		44°		47°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

731-75103000

(6.3m)

Outriggers intermediately extended (6.3m) over side

Boom angle (°)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60
70	14.6	2.52	16.0	2.02	17.0	1.74	17.5	1.58
65	17.7	1.98	18.9	1.65	19.8	1.46	20.1	1.41
63	18.8	1.83	20.1	1.53	20.9	1.36	21.0	1.34
62	19.4	1.73	20.6	1.48	21.4	1.32		
60	20.5	1.44	21.7	1.33	22.4	1.25		
59	21.0	1.32	22.2	1.21	22.8	1.19		
55	23.0	0.89	24.1	0.83	24.6	0.82		
51	24.9	0.54	25.8	0.52	26.3	0.50		
48	26.2	0.31	27.1	0.31	27.4	0.30		
Critical boom angle	47°		47°		47°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

## 32.5m Boom + 10.25m SL Jib

(6.8m)

Outriggers fully extended (6.8m) 360° full range

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88
71	15.7	2.00	18.4	1.45	20.0	1.09	20.6	0.87
69	17.1	1.89	19.7	1.38	21.2	1.07	21.7	0.86
65	19.7	1.57	22.2	1.19	23.6	1.02	23.7	0.86
63	21.0	1.43	23.4	1.10	24.7	0.97	24.7	0.86
57	24.6	1.11	26.8	0.90	27.6	0.82		
56	25.3	1.02	27.3	0.87	28.1	0.79		
55	25.8	0.93	27.8	0.82	28.5	0.78		
50	28.4	0.52	30.1	0.47	30.6	0.47		
48	29.3	0.39	30.9	0.36				
Critical boom angle	47°		47°		49°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

731-75104000

(6.3m)

Outriggers intermediately extended (6.3m) over side

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88
71	15.7	2.00	18.4	1.45	20.0	1.09	20.6	0.87
69	17.1	1.89	19.7	1.38	21.2	1.07	21.7	0.86
65	19.7	1.57	22.2	1.19	23.6	1.02	23.7	0.86
63	21.0	1.43	23.4	1.10	24.7	0.97	24.7	0.86
61	22.3	1.30	24.5	1.03	25.7	0.91		
59	23.4	1.08	25.6	0.95	26.7	0.86		
58	24.0	0.97	26.1	0.86	27.2	0.82		
53	26.7	0.54	28.6	0.48	29.4	0.46		
51	27.7	0.40	29.4	0.36	30.2	0.34		
Critical boom angle	50°		50°		50°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

## 32.5m Boom + 14.0m SL Jib

(6.8m)

Outriggers fully extended (6.8m) 360° full range

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39
70	18.2	1.09	21.7	0.59	24.0	0.43	24.8	0.39
64	22.6	0.86	25.6	0.52	27.5	0.41	27.8	0.39
60	25.3	0.76	28.3	0.49	29.8	0.40		
54	29.2	0.64	31.7	0.46	32.7	0.40		
52	30.3	0.52	32.7	0.45	33.6	0.40		
51	30.8	0.46	33.1	0.42	34.0	0.40		
50	31.4	0.40	33.7	0.35	34.4	0.35		
49	31.9	0.34	34.1	0.31				
Critical boom angle	48°		48°		49°		63°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

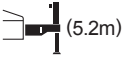
731-75104000

(6.3m)

Outriggers intermediately extended (6.3m) over side

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39
70	18.2	1.09	21.7	0.59	24.0	0.43	24.8	0.39
64	22.6	0.86	25.6	0.52	27.5	0.41	27.8	0.39
60	25.3	0.76	28.3	0.49	29.8	0.40		
57	27.2	0.70	30.0	0.48	31.3	0.40		
55	28.4	0.56	31.1	0.47	32.1	0.40		
54	29.0	0.48	31.7	0.40	32.6	0.40		
53	29.6	0.40	32.2	0.34	33.1	0.34		
Critical boom angle	52°		52°		52°		63°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

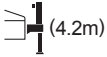
### 32.5m Boom+6.5m SL Jib



Outriggers intermediately extended (5.2m) over side

Boom angle (°)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60
70	14.6	2.52	16.0	2.02	17.0	1.74	17.5	1.58
67	16.3	1.86	17.8	1.62	18.7	1.54	19.1	1.47
63	18.5	1.20	19.9	1.06	20.7	1.02	20.9	1.01
61	19.6	0.93	20.9	0.84	21.7	0.80		
59	20.6	0.72	21.8	0.66	22.8	0.57		
Critical boom angle	58°		58°		58°		62°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							


731-75103000



Outriggers intermediately extended (4.2m) over side

Boom angle (°)	Offset 7°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	5.4	3.20	7.7	3.20	9.2	2.20	9.8	1.60
81	6.8	3.20	8.8	3.20	10.3	2.20	10.8	1.60
76	10.6	3.20	12.2	2.64	13.5	2.07	14.0	1.60
73	12.4	2.47	14.0	2.09	15.3	1.85	15.7	1.59
72	13.0	2.20	14.6	1.87	15.9	1.66	16.3	1.58
70	14.1	1.78	15.7	1.52	17.0	1.34	17.4	1.30
67	15.8	1.22	17.4	1.03	18.8	0.85	18.8	0.85
Critical boom angle	66°		66°		66°		66°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

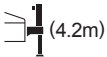
### 32.5m Boom+10.25m SL Jib



Outriggers intermediately extended (5.2m) over side

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88
71	15.7	2.00	18.4	1.45	20.0	1.09	20.6	0.87
69	17.1	1.87	19.7	1.38	21.2	1.06	21.7	0.86
67	18.3	1.52	21.0	1.23	22.4	1.04	22.7	0.86
66	18.9	1.37	21.5	1.12	23.0	1.03	23.2	0.86
64	20.1	1.09	22.7	0.88	24.0	0.84	24.3	0.84
60	22.4	0.65	24.8	0.52	25.8	0.52		
Critical boom angle	59°		59°		59°		63°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

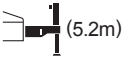
731-75104000



Outriggers intermediately extended (4.2m) over side

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	6.0	2.00	9.8	1.90	12.2	1.20	13.3	0.90
80	8.4	2.00	12.0	1.81	14.1	1.20	15.1	0.90
75	12.6	2.00	15.6	1.58	17.5	1.13	18.2	0.88
73	14.2	1.98	17.1	1.50	18.8	1.11	19.4	0.87
71	15.3	1.63	18.2	1.26	20.0	1.09	20.6	0.87
68	17.0	1.16	19.9	0.87	21.8	0.73	22.2	0.73
Critical boom angle	67°		67°		67°		67°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

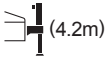
### 32.5m Boom+14.0m SL Jib



Outriggers intermediately extended (5.2m) over side

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39
70	18.2	1.09	21.7	0.59	24.0	0.43	24.8	0.39
64	22.5	0.86	25.6	0.52	27.5	0.41	27.8	0.39
61	24.3	0.59	27.6	0.45	29.3	0.40		
Critical boom angle	60°		60°		60°		63°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

731-75104000



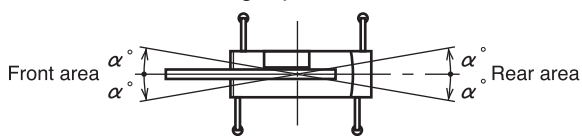
Outriggers intermediately extended (4.2m) over side

Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°	
	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
83	7.2	1.35	12.0	0.80	15.1	0.50	16.7	0.40
80	9.9	1.35	14.2	0.77	17.2	0.48	18.4	0.40
76	13.5	1.35	17.3	0.69	20.0	0.46	21.1	0.39
72	16.7	1.20	20.2	0.62	22.7	0.44	23.6	0.39
69	18.9	0.96	22.3	0.58	24.5	0.43	25.3	0.39
Critical boom angle	68°		68°		68°		68°	
Standard hook	For 4 ton							
Hook mass	60kg							
Parts of line	1							

## Notes for the lifting capacity chart

### When the outriggers are used

- The lifting capacity chart indicates the maximum load which can be lifted by this crane provided it is level and standing on firm level ground. The values in the chart include the mass of the main hook and slings for boom operation, and auxiliary hook and slings for jib operation.  
[35 ton hook (mass: 310 kg), 22 ton hook (mass: 215 kg), 4 ton hook (mass: 60 kg)]  
Within the chart the figures in the area bordered with a thick line are based on structural limitations while other figures are determined by stability limitations.
- The working radii are the actual values allowing for boom and jib deflection. Therefore you must always operate the crane on the basis of working radius.
- The jib working radii are based on the jib mounted on the end of the 17.5m or 32.5m boom. If the boom is at any other length (more than 17.5m and less than 32.5m), use the boom angle for the 32.5m boom alone as the criterion.  
If the boom length is less than 17.5m, use the boom angle for the 17.5m boom alone as the criterion.
- Do not operate the jib when the outriggers are completely retracted.
- The lifting capacities for the over sides vary with the outriggers extension width. Therefore for each outriggers extension condition you should work according the lifting capacity chart. Use the lifting capacity chart of outriggers full extension for both front and rear areas lifting capacities.

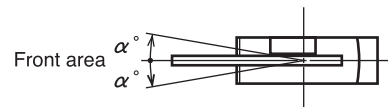


Outrigger extension status	Intermediate extension (6.3m)	Intermediate extension (5.2m)	Intermediate extension (4.2m)	Complete retraction
Area $\alpha^\circ$	30	30	15	3

- The lifting capacity of the rooster sheave is the lifting capacity of the boom minus the mass of all attached hook, slings etc. to the boom, with an upper limit of 4,000 kg.  
[The hook for use with the rooster sheave is the 4 ton hook (mass: 60 kg) with one part of line.]
- If the boom length, boom angle, working radius, jib length and/or jib angle exceeds the rated value, use the lifting capacity for the rated value or for the next one, whichever gives the smaller lifting capacity.
- If you are working with the boom while the jib is rigged, subtract 3500 kg plus the mass of all attached hook, slings, etc. to the boom from the each lifting capacity of the boom.  
Do not use the rooster sheave in this situation. And do not operate the boom while the jib is rigged, when the outriggers are completely retracted.  
[The main hook for use with the jib rigged is the 22 ton hook (mass: 215 kg)]
- In whatever working conditions the corresponding boom critical angle is shown in the chart. The crane can tip over if the boom is lowered below the critical angle even if unloaded. Therefore, never lower the boom below these angles.
- The standard parts of line for each boom length are as indicated in the chart. If you work with a non-standard number of parts of line, do not exceed 36.3 kN (3.7 tf) per wire rope respectively.
- If you work with 10 parts of line on the hook (with \* marked in the lifting capacity chart), use the rooster sheave.
- High-speed lowering operation should only be performed to allow descent of the hook alone. Avoid sudden lever operation.
- Crane operation is permissible up to a wind speed of 10 m/s. Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- If you work with a load in excess of the lifting capacity or use incorrect working procedures, you are risking damaging the crane or tipping it over. In such cases, the crane will not be guaranteed.

### When the outriggers are not used

- The lifting capacity chart indicates the maximum load the crane can lift when its body is level on firm level ground with all tires inflated to the rated pressure and the suspension cylinder completely retracted. The values in the chart include the mass of the main hook and slings.  
Within the chart the figures in the area bordered with a thick line are based on structural limitations while other figures are determined by stability limitations.  
[Rated tire pressure: 900 kPa (9.00 kgf/cm<sup>2</sup>)]
- The working radii are the actual values allowing for boom deflection. Therefore you must always operate the crane on the basis of the working radius.
- The lifting capacity differs between the front area capacity and the full range capacity. When slewing from the front to the side, take care that the crane could not be over loaded.

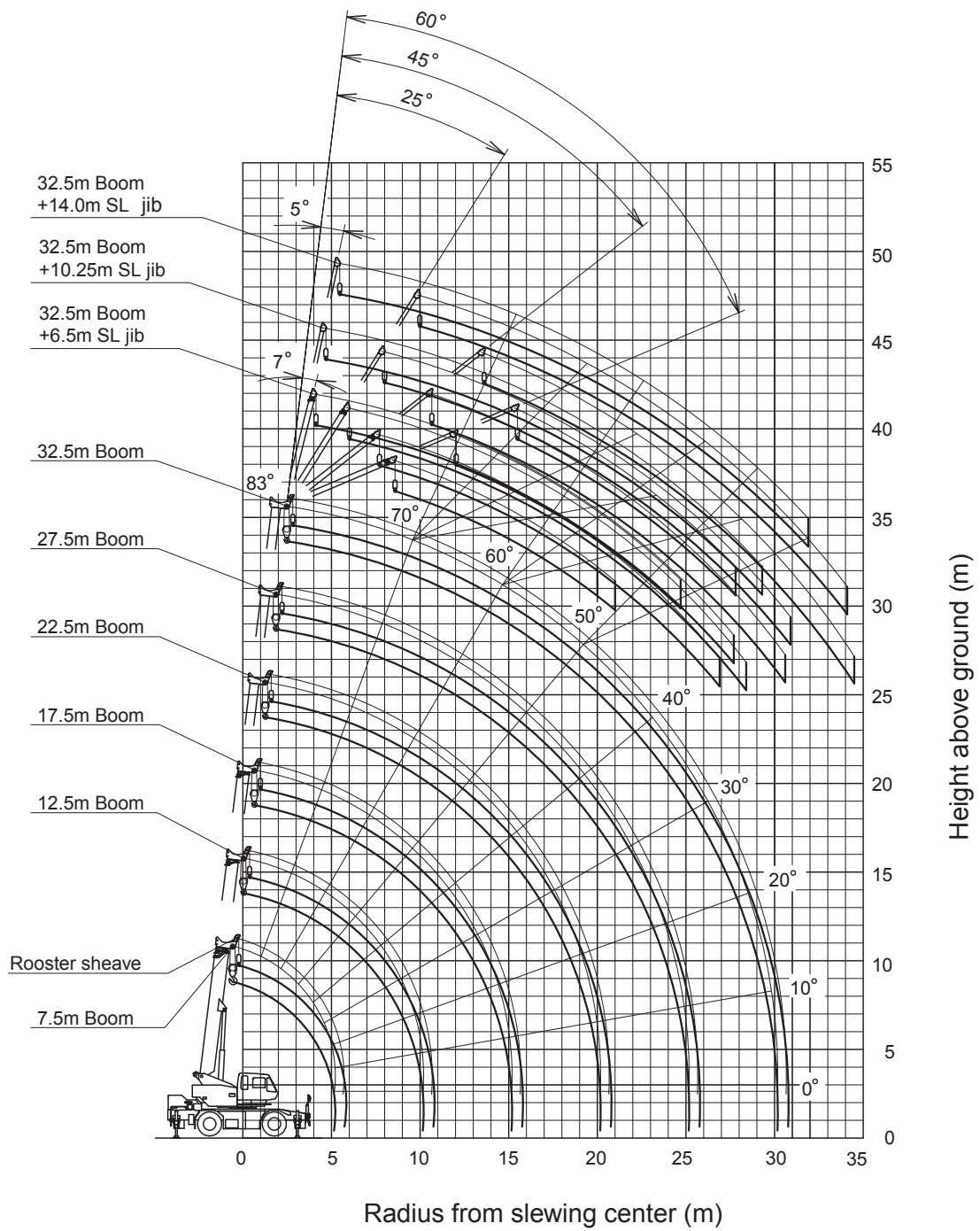


Crane operation	Stationary crane-on-rubber operation	Pick and carry operation
Area $\alpha^\circ$	1	1

- The lifting capacity of the rooster sheave is the lifting capacity of the boom minus the mass of all attached hook, slings etc. to the boom, with an upper limit of 4,000 kg.  
[The hook for use with the rooster sheave is the 4 ton hook (mass: 60 kg) with one part of line.]
- Do not perform boom operation with a boom length of more than 22.5m, jib operation, or winch lowering operation at high speed.
- For stationary crane-on-rubber operation, the parking brake and service brake lock device must be engaged.
- For pick and carry operation, the high/low speed switch must be switched to "ON" (low range) and the shift lever set to speed 1.
- For pick and carry operation, lower the load to just above the ground and keep your speed strictly below 2 km/h to avoid swinging the load.  
Take particular care to avoid sharp turns, sudden starts and stops.
- Never operate the crane during pick and carry operation. The slewing brake must be applied.
- If the boom length, boom angle and/or working radius exceeds the rated value, use the lifting capacity for the rated value or for the next one, whichever gives the smaller lifting capacity.
- In whatever working conditions the corresponding boom critical angle is shown in the chart. The crane can tip over if the boom is lowered below the critical angle even if unloaded. Therefore, never lower the boom below these angles.
- The standard parts of line for each boom length are as indicated in the chart. If you work with a non-standard number of parts of line, do not exceed 36.3 kN (3.7 tf) per wire rope respectively.
- Crane operation is permissible up to a wind speed of 10 m/s. Even in relatively light wind conditions, extra care should be taken when handling loads presenting large wind catching areas.
- If you work with a load in excess of the rated lifting capacity or use incorrect working procedures, you are risking damaging the crane or tipping it over. In such cases, the crane will not be guaranteed.



# WORKING RANGE



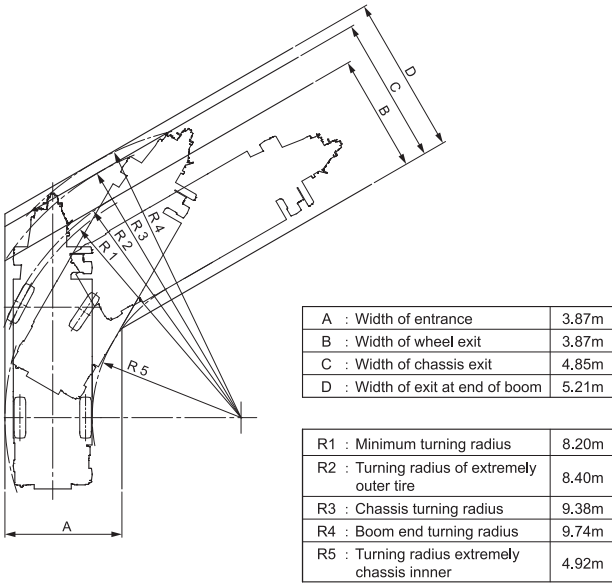
**Notes:**

1. This diagram does not include deflection of Boom and Jib.
2. The outriggers are fully extended.

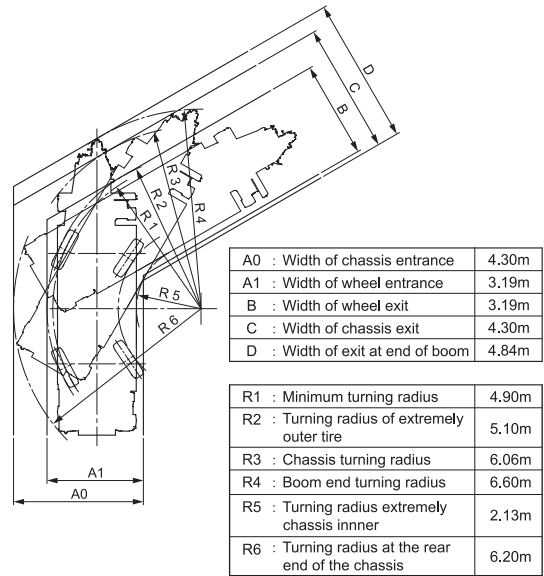
# Minimum path width

Right turn in two-wheel steering mode

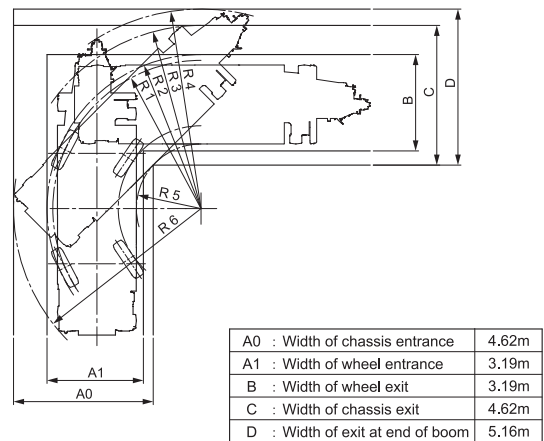
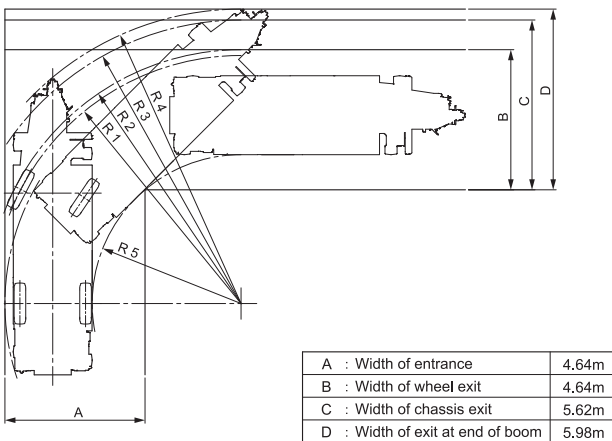
● 60°



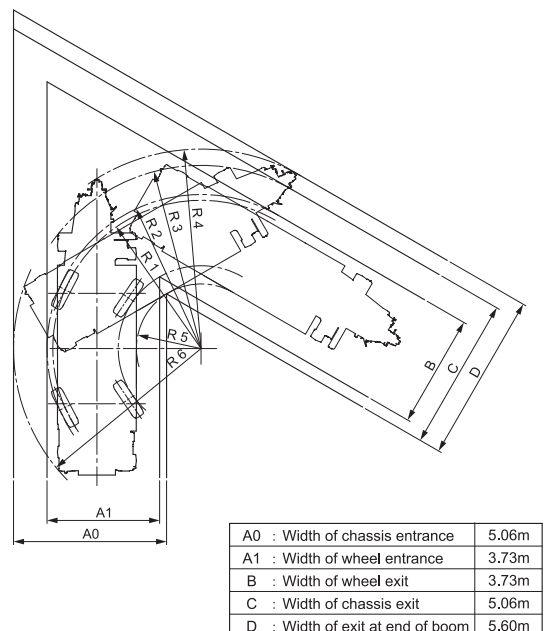
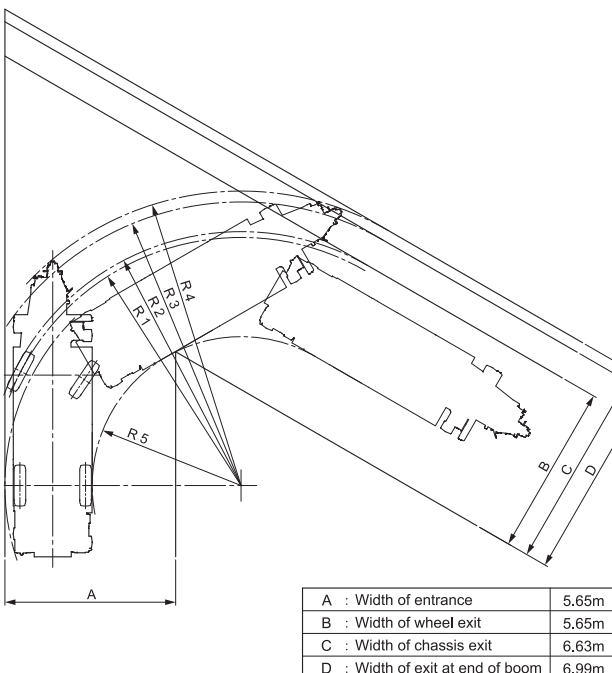
Right turn in 4-wheel steering mode



● 90°

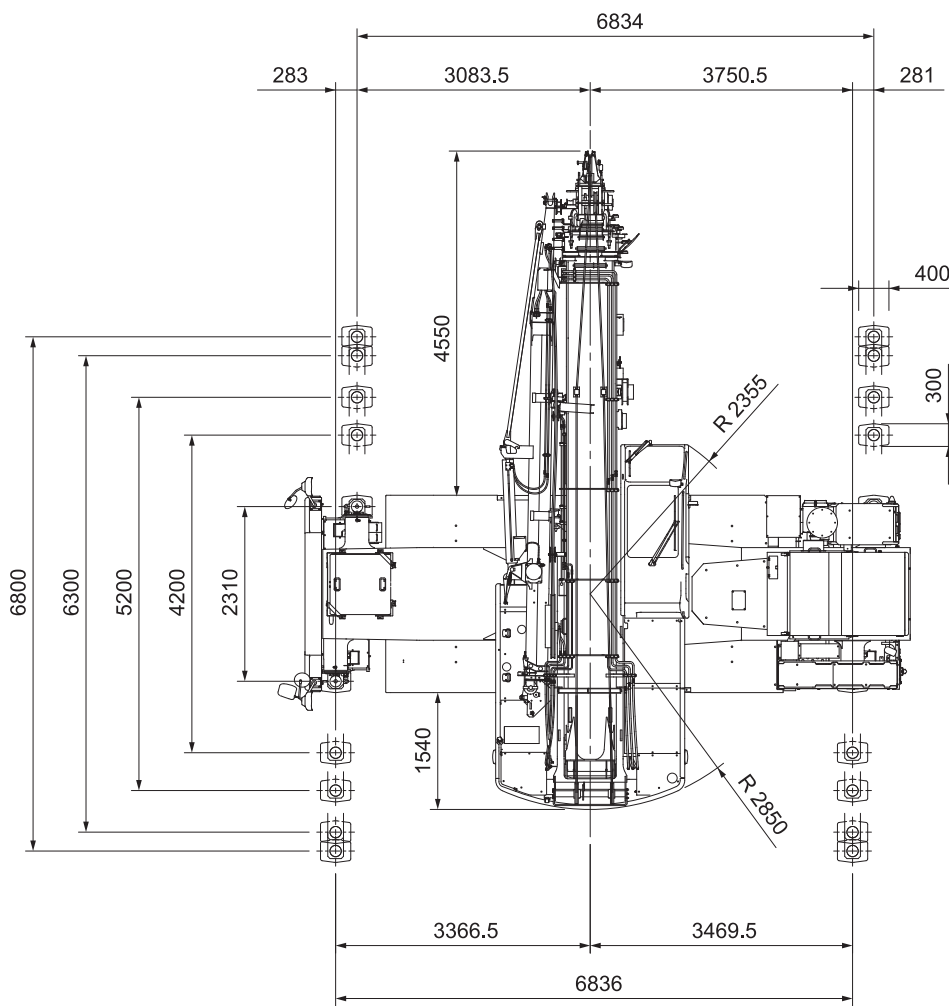
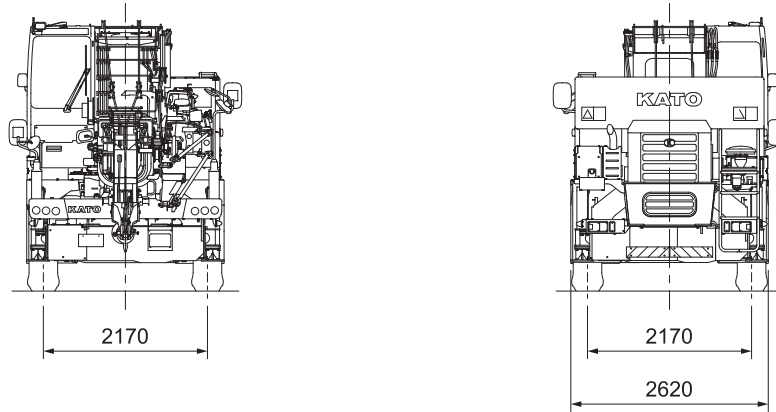


● 120°



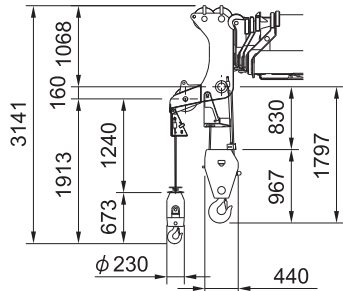
Note : The above values are based on calculations.

Overall view

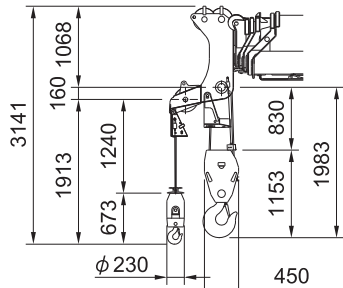
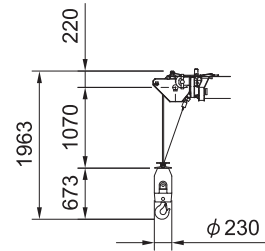


Reduced scale: 1/100 Unit (mm)

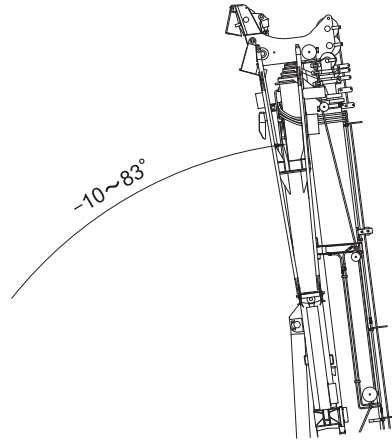
# Overall view



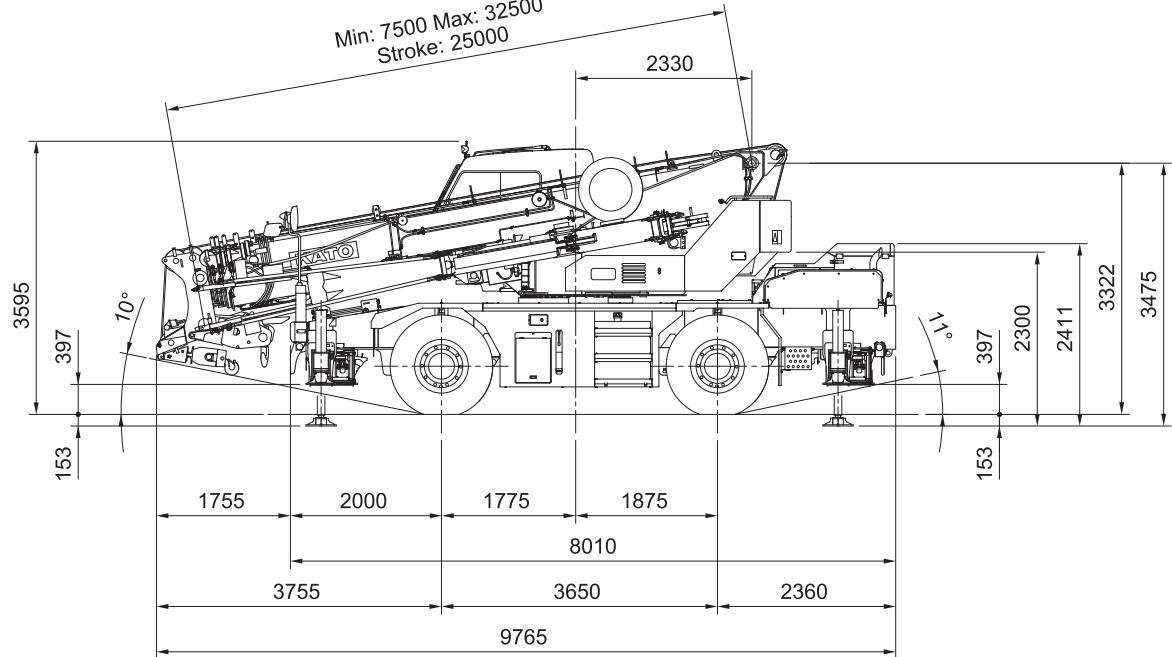
22ton hook



35ton hook



Min: 7500 Max: 32500  
Stroke: 25000



Ramp break over angle: 25°  
When the suspension is locked, the height shall be the overall height: - 40 mm.  
(Suspension cylinder completely retracted)

Reduced scale: 1/100 Unit (mm)

\* KATO products and specifications are subject to improvements and changes without notice.

Address inquiries to:

**KATO**  
**KATO WORKS CO.,LTD.**

9-37, Higashi-ohi 1-chome, Shinagawa-ku, Tokyo, 140-0011, Japan  
Tel. : Head Office Tokyo (03) 3458-1111  
Overseas Marketing Department. Tokyo (03) 3458-1115  
Fax. : Tokyo (03) 3458-1152  
URL : <http://www.kato-works.co.jp>



**C04151**  
11.2015-1000 (TI) 1

We acquired the "ISO 9001" certification which is an international standard for quality assurance.