

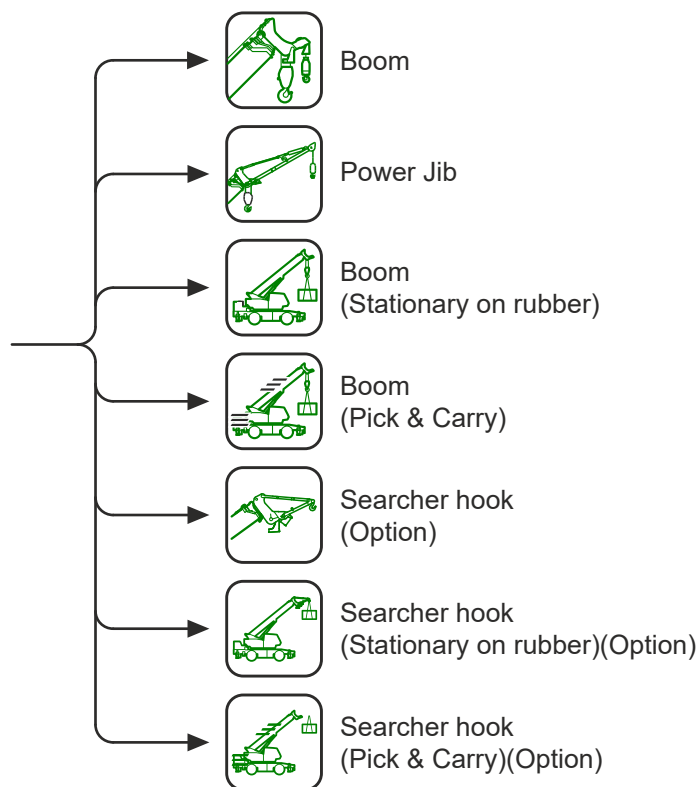
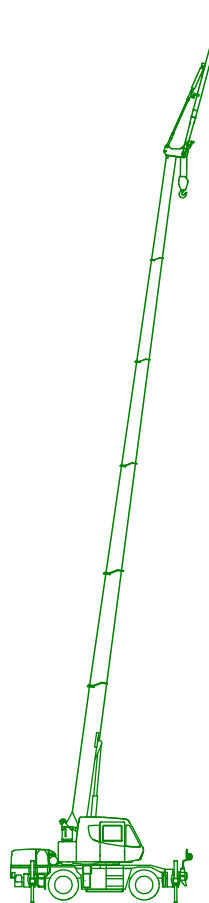


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[SPECIFICATION]

■ CRANE

Description		City range crane with maximum lifting capacity 13 ton	
● Crane specification			
Maximum rated lifting capacity		5.3 m Boom	13,000kg × 1.7 m (Parts of line : 8)
		9.04m Boom	6,000kg × 4.0 m (Parts of line : 4)
		12.78 m Boom	6,000kg × 4.0 m (Parts of line : 4)
		16.52 m Boom	5,000kg × 4.5 m (Parts of line : 4)
		20.26 m Boom	4,700kg × 4.0 m (Parts of line : 4)
		24.0 m Boom	3,200kg × 5.5 m (Parts of line : 4)
		3.6 m Jib	1,600kg × 75° (Parts of line : 1)
		5.5 m Jib	1,000kg × 70° (Parts of line : 1)
		Rooster	1,800kg (Parts of line : 1)
	Searcher hook	3,000kg	
Boom length		5.3m — 24.0m	
Jib length		3.6m — 5.5m	
Searcher hook		0.8m	
Maximum rated lifting height		24.8m (Boom) 30.3m (Jib)	
Hoisting line speed (winch up)	Main winch	118m / min (at 5th layer)	
	Auxiliary winch	106m / min (at 3rd layer)	
Hoisting hook speed (winch up)	Main winch	(Parts of line : 8) 14.75m / min (at 5th layer)	
	Auxiliary winch	(Parts of line : 1) 106.00m / min (at 3rd layer)	
High-speed lowering Rope speed	Main winch	160m / min (at 3rd layer)	
	Auxiliary winch	160m / min (at 3rd layer)	
Boom derricking angle		-7.5° — 82°	
Boom derricking time		29s / -7.5° — 82°	
Boom extending speed		5.3m — 24.0m / 64s	
Slewing speed		2.4min ⁻¹	
Tail slewing radius		1,600mm	

■ CARRIER

●Carrier specification		
Maximum traveling speed	55km/h	
Grade ability	60 % (computed at G.V.W. = 13.745kg)	
Minimum turning radius (center of extreme outer tire)	6.5 m (2 wheel steer) 3.92 m (4 wheel steer)	
●Engine		
Model	HINO J05E-UM (EU Stage 4)	
Type	4 cycle, 4 cylinders, water cooled, direct injection turbo-charged diesel engine with intercooling	
Piston displacement	5.123L	
Max. power	129kW at 2,500min ⁻¹	
Max. torque	540N·m at 1,600min ⁻¹	
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	
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, Service brake lock
Steering	Full hydraulic power steering, Completely independent front and rear steering (with automatic rear wheel steering lock system)	
Tire size	Front	275 / 80 R22.5 151 / 148J
	Rear	275 / 80 R22.5 151 / 148J
Fuel tank capacity	250 L	
Batteries	(12V-100Ah) ×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, Rear view camera on table (wired), Clearance sonar system, Radiator coolant level warning device, Low air warning device, Boom guard,		

■ GENERAL Dimensions

Overall length		7,465mm
Overall width		1,995mm
Overall height		2,870mm
Wheel base		2,750mm
Treads	Front	1,680mm
	Rear	1,680mm
Passenger capacity		One person
Gross vehicle weight	Gross weight	approx. 13,745kg (without Optional equipments)
	Front axle	approx. 6,795kg (without Optional equipments)
	Rear axle	approx. 6,950kg (without Optional equipments)

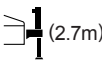
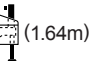
- Stow the hooks in place before traveling.
- Before you use this machine, read the precautions in the instruction manual thoroughly to operate it correctly.
- KATO products and specifications are subject to improvements and changes without notice.



RATED LIFTING CAPACITY

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

5.3m — 24.0m Boom

	 (4.75m)						 (4.3m)						 (3.7m)						 (2.7m)						 (1.64m)					
Working radius (m)	Outriggers fully extended (4.75m) - 360° full range						Outriggers intermediately extended (4.3m) - over side						Outriggers intermediately extended (3.7m) - over side						Outriggers intermediately extended (2.7m) - over side						Outriggers completely retracted (1.64m) - over side (H-type outrigger only)					
	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom
1.5	13.00	6.00	6.00				13.00	6.00	6.00				12.00	6.00	6.00				12.00	6.00	6.00				8.00	6.00	6.00			
1.7	13.00	6.00	6.00				13.00	6.00	6.00				12.00	6.00	6.00				12.00	6.00	6.00				7.00	6.00	6.00			
2.0	12.00	6.00	6.00	5.00			12.00	6.00	6.00	5.00			12.00	6.00	6.00	5.00			12.00	6.00	6.00	5.00			5.60	5.40	5.00	4.70		
2.5	10.00	6.00	6.00	5.00			10.00	6.00	6.00	5.00			10.00	6.00	6.00	5.00			8.50	6.00	6.00	5.00			3.80	3.80	3.60	3.50		
3.0	8.20	6.00	6.00	5.00	4.70		8.20	6.00	6.00	5.00	4.70		8.20	6.00	6.00	5.00	4.70		6.00	6.00	6.00	5.00	4.70		2.80	2.80	2.70	2.70	2.60	
3.5	7.00	6.00	6.00	5.00	4.70	3.20	7.00	6.00	6.00	5.00	4.70	3.20	7.00	6.00	6.00	5.00	4.70	3.20	4.70	4.70	4.60	4.50	4.40	3.20	2.10	2.10	2.00	2.10	2.10	2.10
4.0	6.10	6.00	6.00	5.00	4.70	3.20	6.10	6.00	6.00	5.00	4.70	3.20	6.10	6.00	6.00	5.00	4.70	3.20	3.70	3.70	3.70	3.70	3.70	3.20	1.60	1.60	1.55	1.70	1.70	1.75
4.5		5.50	5.40	5.00	4.50	3.20		5.50	5.40	5.00	4.50	3.20		5.10	5.10	5.00	4.50	3.20		3.00	3.00	3.10	3.10	3.00		1.25	1.20	1.40	1.40	1.45
5.0		5.00	4.90	4.60	4.05	3.20		5.00	4.90	4.60	4.05	3.20		4.40	4.40	4.50	4.05	3.20		2.40	2.40	2.60	2.70	2.70		0.95	0.95	1.10	1.20	1.25
5.5		4.50	4.40	4.20	3.70	3.20		4.50	4.40	4.20	3.70	3.20		3.80	3.70	3.90	3.70	3.20		2.00	2.00	2.20	2.30	2.30		0.75	0.75	0.90	1.00	1.05
6.0		4.10	4.00	3.80	3.40	3.00		4.10	4.00	3.80	3.40	3.00		3.20	3.20	3.40	3.40	3.00		1.70	1.70	1.85	2.00	2.05		0.60	0.55	0.75	0.80	0.90
6.5		3.70	3.65	3.50	3.15	2.80		3.65	3.60	3.50	3.15	2.80		2.80	2.75	2.95	3.05	2.75		1.40	1.40	1.60	1.70	1.75		0.40	0.35	0.60	0.65	0.75
7.0		3.35	3.30	3.20	2.90	2.60		3.20	3.15	3.20	2.90	2.60		2.40	2.35	2.55	2.70	2.50		1.20	1.20	1.40	1.50	1.55		0.25		0.45	0.55	0.60
8.0		2.70 (7.7m)	2.90	2.70	2.50	2.25		2.65 (7.7m)	2.45	2.60	2.50	2.25		1.95 (7.7m)	1.80	2.00	2.10	2.15		0.90 (7.7m)	0.85	1.05	1.15	1.20						
9.0			2.25	2.30	2.20	1.95			1.90	2.10	2.20	1.95			1.40	1.60	1.70	1.75			0.60	0.80	0.90	0.95						
10.0			1.80	2.05	1.95	1.75			1.50	1.70	1.85	1.75			1.05	1.25	1.35	1.45			0.35	0.55	0.65	0.75						
11.0			1.45	1.70	1.75	1.55			1.20	1.40	1.55	1.55			0.80	1.00	1.10	1.20				0.40	0.50	0.60						
12.0			1.35 (11.4m)	1.40	1.50	1.40			1.10 (11.4m)	1.15	1.30	1.35			0.70 (11.4m)	0.80	0.90	1.00				0.25	0.35	0.45						
13.0				1.15	1.30	1.25				0.95	1.10	1.15				0.65	0.75	0.85					0.20	0.30						
14.0				0.95	1.10	1.15				0.80	0.90	1.00				0.50	0.60	0.70					0.20							
15.0				0.80	0.90	1.00				0.65	0.75	0.85				0.40	0.50	0.55												
16.0					0.79	0.85					0.65	0.70					0.40	0.45												
17.0					0.68	0.74					0.55	0.60					0.30	0.35												
18.0					0.58	0.64					0.45	0.50						0.30												
19.0					0.51 (18.8m)	0.55					0.35 (18.8m)	0.40																		
20.0						0.47						0.35																		
21.0						0.41						0.30																		
22.0						0.35						0.25																		
22.5						0.32																								
Critical boom angle	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	23°	36°	—	—	19°	32°	44°	50°	—	—	20°	54°	61°	66°	70°
Standard hook	For 13 ton						For 13 ton						For 13 ton						For 13 ton						For 13 ton					
Hook mass	90kg						90kg						90kg						90kg						90kg					
Parts of line	8	4	4	4	4	4	8	4	4	4	4	4	8	4	4	4	4	4	8	4	4	4	4	4	8	4	4	4	4	4

(Unit: Metric ton)



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

16.52m Boom+3.6m Jib

(4.75m)									(4.3m)									(3.7m)								
Outriggers fully extended (4.75m) - 360° full range									Outriggers intermediately extended (4.3m) over side									Outriggers intermediately extended (3.7m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
82	2.9	1.60	4.1	1.50	4.9	1.00	5.3	0.65	82	2.9	1.60	4.1	1.50	4.9	1.00	5.3	0.65	82	2.9	1.60	4.1	1.50	4.9	1.00	5.3	0.65
80	3.6	1.60	4.7	1.50	5.5	1.00	5.9	0.65	80	3.6	1.60	4.7	1.50	5.5	1.00	5.9	0.65	80	3.6	1.60	4.7	1.50	5.5	1.00	5.9	0.65
75	5.2	1.60	6.3	1.48	7.1	1.00	7.4	0.65	75	5.2	1.60	6.3	1.48	7.1	1.00	7.4	0.65	75	5.2	1.60	6.3	1.48	7.1	1.00	7.4	0.65
70	6.9	1.60	7.9	1.37	8.6	0.98	8.8	0.65	70	6.9	1.60	7.9	1.37	8.6	0.98	8.8	0.65	70	6.9	1.60	7.9	1.37	8.6	0.98	8.8	0.65
65	8.5	1.60	9.4	1.25	9.9	0.96	10.1	0.65	65	8.5	1.60	9.4	1.25	9.9	0.96	10.1	0.65	65	8.5	1.60	9.4	1.25	9.9	0.96	10.1	0.65
60	10.0	1.50	10.8	1.15	11.3	0.95	11.4	0.65	60	10.0	1.50	10.8	1.15	11.3	0.95	11.4	0.65	60	10.0	1.40	10.8	1.15	11.3	0.95	11.4	0.65
55	11.4	1.34	12.1	1.07	12.5	0.94			55	11.4	1.34	12.1	1.07	12.5	0.94			55	11.4	1.04	12.1	0.97	12.5	0.93		
50	12.7	1.22	13.3	1.01	13.6	0.93			50	12.7	1.11	13.3	1.01	13.6	0.93			50	12.7	0.78	13.3	0.75	13.6	0.72		
45	14.0	1.08	14.5	0.95	14.6	0.92			45	13.9	0.88	14.5	0.84	14.6	0.84			45	13.9	0.60	14.5	0.56	14.6	0.57		
40	15.0	0.90	15.5	0.86					40	15.0	0.71	15.5	0.68					40	15.0	0.46	15.5	0.44				
35	16.1	0.74	16.3	0.74					35	16.0	0.58	16.3	0.58					35	16.0	0.34	16.3	0.33				
30	16.8	0.65	17.1	0.64					30	16.8	0.48	17.1	0.47					30	16.8	0.24	17.0	0.24				
25	17.5	0.56	17.7	0.56					25	17.5	0.41	17.7	0.40					25	17.5	0.19	17.7	0.18				
20	18.0	0.50							20	18.0	0.35							Critical boom angle	24°		24°		44°		59°	
15	18.5	0.45							15	18.5	0.31								Standard hook	For 1.8 ton						
10	18.7	0.43							10	18.7	0.29							Hook mass		25kg						
5	18.9	0.41							5	18.9	0.27								Parts of line	1						
Critical boom angle	4° 24° 44° 59°								Critical boom angle	4° 24° 44° 59°																
Standard hook	For 1.8 ton								Standard hook	For 1.8 ton																
Hook mass	25kg								Hook mass	25kg																
Parts of line	1								Parts of line	1																

16.52m Boom+3.6m Jib

 (2.7m)								
Outriggers intermediately extended (2.7m) 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)
82	2.9	1.60	4.1	1.50	4.9	1.00	5.3	0.65
80	3.6	1.60	4.7	1.50	5.5	1.00	5.9	0.65
75	5.2	1.60	6.3	1.48	7.1	1.00	7.4	0.65
70	6.9	1.60	7.9	1.37	8.6	0.98	8.8	0.65
65	8.5	1.08	9.4	0.95	9.9	0.90	10.1	0.65
60	10.0	0.71	10.8	0.64	11.2	0.63	11.4	0.60
55	11.3	0.47	12.1	0.42	12.5	0.41		
50	12.6	0.27	13.3	0.24	13.6	0.24		
Critical boom angle	49°		49°		49°		59°	
Standard hook	For 1.8 ton							
Hook mass	25kg							
Parts of line	1							

16.52m Boom+5.5m Jib

(4.75m)									(4.3m)								
Outriggers fully extended (4.75m) - 360° full range									Outriggers intermediately extended (4.3m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
82	3.3	1.00	5.1	1.00	6.4	0.65	7.0	0.40	82	3.3	1.00	5.1	1.00	6.4	0.65	7.0	0.40
80	4.0	1.00	5.8	1.00	7.1	0.65	7.6	0.40	80	4.0	1.00	5.8	1.00	7.1	0.65	7.6	0.40
75	5.8	1.00	7.6	0.90	8.7	0.63	9.2	0.40	75	5.8	1.00	7.6	0.90	8.7	0.63	9.2	0.40
70	7.7	1.00	9.2	0.81	10.2	0.60	10.6	0.40	70	7.7	1.00	9.2	0.81	10.2	0.60	10.6	0.40
65	9.5	1.00	10.9	0.74	11.7	0.58	11.9	0.40	65	9.5	1.00	10.9	0.74	11.7	0.58	11.9	0.40
60	11.1	0.99	12.3	0.69	13.1	0.56	13.2	0.40	60	11.1	0.99	12.3	0.69	13.1	0.56	13.2	0.40
55	12.7	0.91	13.7	0.64	14.3	0.55			55	12.7	0.91	13.7	0.64	14.3	0.55		
50	14.1	0.81	15.1	0.61	15.5	0.55			50	14.1	0.81	15.1	0.61	15.5	0.55		
45	15.4	0.75	16.3	0.59	16.5	0.55			45	15.4	0.75	16.3	0.59	16.5	0.55		
40	16.6	0.69	17.3	0.57					40	16.6	0.62	17.3	0.57				
35	17.7	0.65	18.2	0.56					35	17.7	0.51	18.2	0.49				
30	18.6	0.56	19.0	0.55					30	18.6	0.42	18.9	0.41				
25	19.4	0.47	19.6	0.47					25	19.4	0.34	19.6	0.34				
20	19.9	0.43							20	19.9	0.29						
15	20.4	0.38							15	20.4	0.25						
10	20.6	0.36							10	20.6	0.23						
5	20.8	0.34							5	20.8	0.21						
Critical boom angle	4°		24°		44°		59°		Critical boom angle	4°		24°		44°		59°	
Standard hook	For 1.8 ton								Standard hook	For 1.8 ton							
Hook mass	25kg								Hook mass	25kg							
Parts of line	1								Parts of line	1							

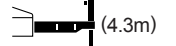
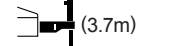
16.52m Boom+5.5m Jib

 (3.7m)									 (2.7m)								
Outriggers intermediately extended (3.7m) over side									Outriggers intermediately extended (2.7m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
82	3.3	1.00	5.1	1.00	6.4	0.65	7.0	0.40	82	3.3	1.00	5.1	1.00	6.4	0.65	7.0	0.40
80	4.0	1.00	5.8	1.00	7.1	0.65	7.6	0.40	80	4.0	1.00	5.8	1.00	7.1	0.65	7.6	0.40
75	5.8	1.00	7.6	0.90	8.7	0.63	9.2	0.40	75	5.8	1.00	7.6	0.90	8.7	0.63	9.2	0.40
70	7.7	1.00	9.2	0.81	10.2	0.60	10.6	0.40	70	7.7	1.00	9.2	0.81	10.2	0.60	10.6	0.40
65	9.5	1.00	10.9	0.74	11.7	0.58	11.9	0.40	65	9.4	0.95	10.9	0.74	11.7	0.58	11.9	0.40
60	11.1	0.99	12.3	0.69	13.1	0.56	13.2	0.40	60	11.1	0.62	12.3	0.55	13.1	0.51	13.2	0.40
55	12.7	0.90	13.7	0.64	14.3	0.55			55	12.6	0.40	13.7	0.36	14.3	0.33		
50	14.1	0.68	15.1	0.61	15.5	0.55			50	14.0	0.23	15.1	0.20	15.5	0.19		
45	15.4	0.52	16.3	0.48	16.5	0.48			Critical boom angle	49°		49°		49°		59°	
40	16.6	0.38	17.3	0.37					Standard hook	For 1.8 ton							
35	17.6	0.28	18.1	0.28					Hook mass	25kg							
30	18.5	0.21	18.9	0.20					Parts of line	1							
Critical boom angle	29°		29°		44°		59°										
Standard hook	For 1.8 ton																
Hook mass	25kg																
Parts of line	1																



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

24.0m Boom + 3.6m Jib

 (4.75m)									 (4.3m)									 (3.7m)								
Outriggers fully extended (4.75m) - 360° full range									Outriggers intermediately extended (4.3m) over side									Outriggers intermediately extended (3.7m) over side								
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65	82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65	82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65
80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65	80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65	80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65
75	7.8	1.60	8.7	1.17	9.5	0.93	9.6	0.65	75	7.8	1.60	8.7	1.17	9.5	0.93	9.6	0.65	75	7.8	1.60	8.7	1.17	9.5	0.93	9.6	0.65
70	10.1	1.25	11.1	0.98	11.6	0.85	11.8	0.65	70	10.1	1.25	11.1	0.98	11.6	0.85	11.8	0.65	70	10.1	1.25	11.1	0.98	11.6	0.85	11.8	0.65
65	12.3	1.05	13.1	0.88	13.6	0.77	13.8	0.65	65	12.3	1.05	13.1	0.88	13.6	0.77	13.8	0.65	65	12.2	0.90	13.1	0.77	13.6	0.77	13.8	0.65
60	14.3	0.90	15.1	0.76	15.6	0.70	15.6	0.65	60	14.3	0.87	15.1	0.76	15.6	0.70	15.6	0.65	60	14.2	0.59	15.0	0.54	15.5	0.54	15.5	0.54
55	16.3	0.72	17.0	0.64	17.4	0.64			55	16.2	0.60	16.9	0.55	17.3	0.53			55	16.0	0.37	16.8	0.33	17.2	0.33		
50	18.1	0.57	18.7	0.51	18.9	0.53			50	18.0	0.43	18.6	0.41	18.8	0.40			50	17.8	0.20	18.5	0.18	18.7	0.18		
45	19.7	0.42	20.4	0.40	20.3	0.40			45	19.6	0.30	20.2	0.27	20.3	0.27			Critical boom angle	49°		49°		49°		59°	
40	21.1	0.30	21.6	0.29					40	21.0	0.19	21.5	0.18						Standard hook	For 1.8 ton						
35	22.3	0.22	22.7	0.20					Critical boom angle	39°		39°		44°		59°		Hook mass		25kg						
										Standard hook	For 1.8 ton						Parts of line		1							
Critical boom angle	34°		34°		44°		59°																			
Standard hook	For 1.8 ton																									
Hook mass	25kg																									
Parts of line	1																									

24.0m Boom + 3.6m Jib

 (2.7m)								
Outriggers intermediately extended (2.7m) 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)
82	4.4	1.60	5.8	1.50	6.5	1.00	6.8	0.65
80	5.2	1.60	6.4	1.50	7.2	1.00	7.4	0.65
75	7.8	1.20	8.7	1.05	9.5	0.93	9.6	0.65
70	10.0	0.72	10.9	0.65	11.5	0.62	11.7	0.56
65	11.9	0.41	12.9	0.35	13.4	0.34	13.6	0.33
Critical boom angle	64°		64°		64°		64°	
Standard hook	For 1.8 ton							
Hook mass	25kg							
Parts of line	1							

24.0m Boom + 5.5m Jib

 (4.75m)								 (4.3m)									
Outriggers fully extended (4.75m) - 360° full range								Outriggers intermediately extended (4.3m) over side									
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)
82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40	82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40
80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40	80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40
75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40	75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40
70	11.1	1.00	12.4	0.72	13.4	0.58	13.6	0.40	70	11.1	1.00	12.4	0.72	13.4	0.58	13.6	0.40
65	13.4	0.81	14.7	0.61	15.6	0.52	15.6	0.40	65	13.4	0.81	14.7	0.61	15.6	0.52	15.6	0.40
60	15.6	0.69	16.8	0.55	17.5	0.48	17.4	0.40	60	15.5	0.69	16.8	0.55	17.5	0.48	17.4	0.40
55	17.7	0.58	18.8	0.49	19.3	0.45			55	17.6	0.54	18.7	0.49	19.2	0.45		
50	19.6	0.49	20.5	0.44	20.8	0.41			50	19.5	0.38	20.4	0.36	20.7	0.35		
45	21.2	0.38	22.0	0.36	22.3	0.36			45	21.0	0.27	21.8	0.25	22.1	0.25		
40	22.9	0.26	23.4	0.26					Critical boom angle	44°		44°		44°		59°	
Critical boom angle	39°		39°		44°		59°		Critical boom angle	44°		44°		44°		59°	
Standard hook	For 1.8 ton								Standard hook	For 1.8 ton							
Hook mass	25kg								Hook mass	25kg							
Parts of line	1								Parts of line	1							

24.0m Boom + 5.5m Jib

 (3.7m)									 (2.7m)									
Outriggers intermediately extended (3.7m) over side									Outriggers intermediately extended (2.7m) over side									
Boom angle (°)	Offset 5°		Offset 25°		Offset 45°		Offset 60°		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)		Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	Working radius (m)	Load (ton)	
82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40	82	4.8	1.00	6.9	1.00	8.2	0.65	8.6	0.40	
80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40	80	5.6	1.00	7.6	1.00	8.9	0.65	9.2	0.40	
75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40	75	8.4	1.00	10.1	0.85	11.2	0.63	11.5	0.40	
70	11.1	1.00	12.4	0.72	13.4	0.58	13.6	0.40	70	10.8	0.66	12.3	0.55	13.3	0.48	13.6	0.40	
65	13.4	0.75	14.7	0.61	15.6	0.52	15.6	0.40	65	12.9	0.36	14.4	0.30	15.3	0.26			
60	15.4	0.52	16.7	0.45	17.5	0.42	17.4	0.40	Critical boom angle	64°		64°		64°		69°		
55	17.4	0.31	18.6	0.28	19.1	0.28			Standard hook	For 1.8 ton								
50	18.5	0.22	19.5	0.21	20.0	0.20			Hook mass	25kg								
Critical boom angle	51°		51°		51°		59°		Parts of line	1								
Standard hook	For 1.8 ton																	
Hook mass	25kg																	
Parts of line	1																	



RATED LIFTING CAPACITY

■ When outriggers are not used

													
Working radius (m)	Stationary on rubber						Pick & carry (less than 2km/h)						Working radius (m)
	5.30m Boom		9.04m Boom		12.78m Boom		5.30m Boom		9.04m Boom		12.78m Boom		
	Over front	360° full range	Over front	360° full range	Over front	360° full range	Over front	360° full range	Over front	360° full range	Over front	360° full range	
1.5	3.60	2.80	3.60	2.80	3.60	2.80	3.20	2.00	3.20	2.00	3.20	2.00	1.5
2.0	3.40	2.80	3.40	2.80	3.40	2.80	3.00	2.00	3.00	2.00	3.00	2.00	2.0
2.5	3.10	2.15	3.10	2.10	3.10	2.05	2.80	1.55	2.75	1.50	2.65	1.45	2.5
3.0	2.65	1.60	2.60	1.55	2.55	1.50	2.40	1.10	2.30	1.05	2.20	1.00	3.0
3.5	2.30	1.25	2.20	1.20	2.10	1.10	2.00	0.85	1.90	0.75	1.80	0.65	3.5
4.0	2.00	0.90	1.90	0.80	1.70	0.70	1.70	0.60	1.65	0.50	1.50	0.40	4.0
4.5			1.60	0.50	1.40	0.40			1.40	0.30	1.25		4.5
5.0			1.30		1.10				1.15		1.00		5.0
5.5			1.10		0.95				0.95		0.85		5.5
6.0			0.90		0.80				0.80		0.70		6.0
7.0			0.50		0.50				0.45		0.45		7.0
Critical boom angle	—	—	26°	54°	52°	66°	—	—	26°	54°	52°	68°	Critical boom angle
Standard hook	For 13 ton						For 13 ton						Standard hook
Hook mass	90kg						90kg						Hook mass
Parts of line	4						4						Parts of line

(Unit: Metric ton)



RATED LIFTING CAPACITY searcher hook are used

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

5.3m — 24.0m Boom

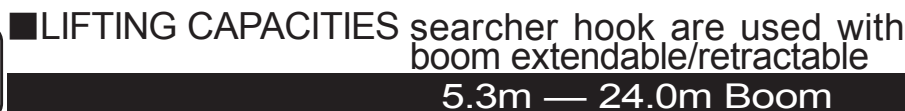
LOW POSITION

	(4.75m)						(4.3m)						(3.7m)						(2.7m)						(1.64m)						
Working radius (m)	Outriggers fully extended (4.75m) - 360° full range						Outriggers intermediately extended (4.3m) - over side						Outriggers intermediately extended (3.7m) - over side						Outriggers intermediately extended (2.7m) - over side						Outriggers completely retracted (1.64m) - over side (H-type outrigger only)						
	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	
1.8	3.00						3.00						3.00						3.00						3.00						
2.0	3.00						3.00						3.00						3.00						3.00						
2.5	3.00						3.00						3.00						3.00						2.77						
3.0	3.00						3.00						3.00						3.00						2.16						
3.5	3.00	3.00					3.00	3.00					3.00	3.00					3.00	3.00					1.72	1.35					
4.0	3.00	3.00					3.00	3.00					3.00	3.00					3.00	2.85					1.41	1.05					
4.5	3.00	3.00	3.00				3.00	3.00	3.00				3.00	3.00	3.00				2.75	2.40	2.05				1.17	0.87	0.65				
5.0	3.00	3.00	3.00				3.00	3.00	3.00				3.00	3.00	3.00				2.29	2.05	1.75				0.99	0.70	0.55				
5.5	3.00 (5.1m)	3.00	3.00				3.00 (5.1m)	3.00	3.00				3.00 (5.1m)	3.00	2.90				2.21 (5.1m)	1.76	1.51				0.95 (5.1m)	0.56	0.42				
6.0		3.00	3.00	3.00				3.00	3.00	3.00				2.84	2.54	2.50			1.52	1.30	1.30				0.44	0.32	0.35				
6.5		3.00	3.00	3.00				3.00	2.95	2.90				2.46	2.23	2.20			1.33	1.12	1.15				0.34	0.22	0.30				
7.0		3.00	3.00	3.00	2.90			2.77	2.62	2.60	2.55			2.15	1.98	1.99	1.95		1.16	0.97	1.02	1.00			0.25						
8.0		2.57	2.49	2.54	2.50			2.17	2.10	2.13	2.10			1.69	1.58	1.62	1.60		0.89	0.73	0.79	0.80									
9.0		2.18 (8.75m)	2.00	2.12	2.10	1.95		1.84 (8.75m)	1.68	1.77	1.77	1.70		1.42 (8.75m)	1.27	1.33	1.34	1.30	0.72 (8.75m)	0.53	0.61	0.65	0.65								
10.0			1.63	1.76	1.78	1.75			1.37	1.49	1.50	1.45			1.02	1.10	1.12	1.10		0.35	0.47	0.50	0.50								
11.0			1.34	1.47	1.53	1.52			1.11	1.24	1.28	1.28			0.80	0.91	0.94	0.95		0.20	0.35	0.39	0.41								
12.0			1.11	1.24	1.31	1.32			0.91	1.04	1.10	1.10			0.63	0.76	0.79	0.81			0.25	0.30	0.32								
13.0			1.01 (12.45m)	1.06	1.13	1.15			0.83 (12.45m)	0.87	0.94	0.96			0.56 (12.45m)	0.62	0.67	0.69				0.20	0.25								
14.0				0.89	0.97	1.02				0.73	0.81	0.83				0.50	0.56	0.58													
15.0				0.76	0.83	0.89				0.61	0.69	0.73				0.40	0.47	0.50													
16.0				0.64	0.72	0.77				0.51	0.58	0.63				0.32	0.39	0.42													
17.0				0.63 (16.1m)	0.62	0.67				0.50 (16.1m)	0.50	0.55				0.31 (16.1m)	0.30	0.35													
18.0					0.54	0.58					0.42	0.47					0.25	0.29													
19.0					0.46	0.50					0.35	0.40					0.20	0.24													
20.0					0.40 (19.8m)	0.44					0.30 (19.8m)	0.34						0.19													
21.0						0.38						0.29																			
22.0						0.33						0.24																			
23.0						0.28						0.20																			
23.5						0.26																									
24.0																															
Critical boom angle	—	—	—	—	—	—	—	—	—	—	13°	—	—	—	—	15°	32°	—	—	26°	41°	48°	56°	—	35°	58°	63°	—	—	—	—

(Unit: Metric ton)

HIGH POSITION

	(4.75m)						(4.3m)						(3.7m)						(2.7m)						(1.64m)						
Working radius (m)	Outriggers fully extended (4.75m) - 360° full range						Outriggers intermediately extended (4.3m) - over side						Outriggers intermediately extended (3.7m) - over side						Outriggers intermediately extended (2.7m) - over side						Outriggers completely retracted (1.64m) - over side (H-type outrigger only)						
	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	5.3m Boom	9.04m Boom	12.78m Boom	16.52m Boom	20.26m Boom	24.0m Boom	
1.8																															
2.0																															
2.5																															
3.0																															
3.5																															
4.0	3.00 (4.2m)						3.00 (4.2m)						3.00 (4.2m)						3.00 (4.2m)								1.25 (4.2m)				
4.5	3.00						3.00						3.00						2.69								1.13				
5.0	3.00 (4.95m)						3.00 (4.95m)						3.00 (4.95m)						2.30 (4.95m)								0.98 (4.95m)				
5.5																															
6.0																															
6.5																															
7.0	3.00 (7.2m)								2.55 (7.2m)						2.00 (7.2m)					1.05 (7.2m)											
8.0	2.54								2.14						1.66					0.86											
9.0		2.19 (8.7m)							1.84 (8.7m)						1.42 (8.7m)					0.71 (8.7m)											
10.0			1.50 (10.3m)						1.25 (10.3m)						0.90 (10.3m)						0.30 (10.3m)										
11.0			1.32						1.09						0.76						0.24										
12.0			1.10						0.89						0.62																
13.0			1.00 (12.45m)	0.95 (13.4m)					0.81 (12.45m)	0.75 (13.4m)					0.55 (12.45m)	0.55 (13.4m)															
14.0				0.87						0.71						0.49															
15.0				0.74						0.60						0.39															
16.0				0.63	0.65 (16.4m)					0.50	0.50 (16.4m)					0.31	0.35 (16.4m)														
17.0				0.61 (16.2m)	0.61					0.48 (16.2m)	0.48					0.29 (16.2m)	0.30														
18.0					0.52						0.41						0.25														
19.0					0.45	0.45 (19.5m)					0.34	0.35 (19.5m)					0.19														
20.0					0.39 (19.9m)	0.43					0.29 (19.9m)	0.33																			
21.0						0.37						0.28																			
22.0						0.32						0.23																			
23.0						0.27						0.19																			
23.5						0.26																									
24.0						0.24 (23.6m)																									
Critical boom angle	—	—	—	—	—	—	—	—	—	—	—	11°	—	—	—	—	13°	—	—	—	23°	—	—	—	—	—	—	—	—	—	—



5.3m — 24.0m Boom

(Unit: Metric ton)

(Unit: Metric ton)



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

RATED LIFTING CAPACITY searcher hook are used

■ When outriggers are not used

LOW POSITION

Working radius (m)	Stationary on rubber					Pick & carry (less than 2km/h)					Working radius (m)
	5.30m Boom		9.04m Boom		12.78m Boom	5.30m Boom		9.04m Boom		12.78m Boom	
	Over front	360° full range	Over front	360° full range	Over front	Over front	360° full range	Over front	360° full range	Over front	
1.8	3.00	3.00				3.00	2.30				1.8
2.0	3.00	3.00				3.00	2.30				2.0
2.5	3.00	2.45				3.00	1.85				2.5
3.0	3.00	1.90				2.65	1.40				3.0
3.5	2.60	1.55	2.40	1.30		2.25	1.10	2.10	0.95		3.5
4.0	2.30	1.20	2.10	1.00		1.95	0.90	1.75	0.70		4.0
4.5	2.00	0.85	1.80	0.70	1.60	1.70	0.65	1.50	0.50	1.35	4.5
5.0	1.70	0.50	1.50		1.30	1.40		1.30		1.10	5.0
5.5			1.30		1.15			1.10		0.95	5.5
6.0			1.10		1.00			0.95		0.80	6.0
7.0			0.70		0.70			0.65		0.55	7.0
8.0											8.0
9.0											9.0
13.0											13.0
16.0											16.0
17.0											17.0
Critical boom angle	—	—	35°	58°	54°	—	26°	35°	58°	54°	Critical boom angle

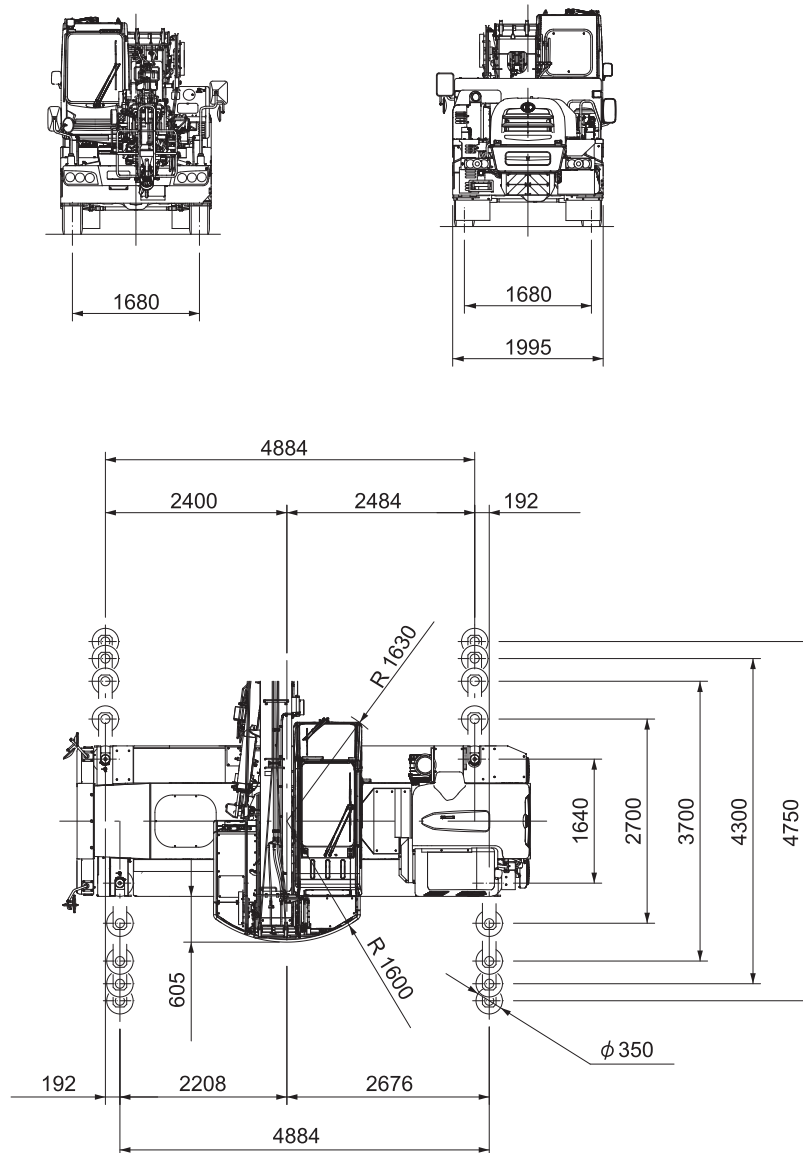
(Unit: Metric ton)

HIGH POSITION

Working radius (m)	Stationary on rubber					Pick & carry (less than 2km/h)					Working radius (m)
	5.30m Boom		9.04m Boom		12.78m Boom	5.30m Boom		9.04m Boom		12.78m Boom	
	Over front	360° full range	Over front	360° full range	Over front	Over front	360° full range	Over front	360° full range	Over front	
1.8											1.8
2.0											2.0
2.5											2.5
3.0											3.0
3.5											3.5
4.0	2.15 (4.2m)	1.05 (4.2m)				1.70 (4.2m)	0.65 (4.2m)				4.0
4.5	2.00	0.85				1.55	0.55				4.5
5.0	1.70 (4.95m)	0.5 (4.95m)				1.40 (4.95m)	0.45 (4.95m)				5.0
5.5											5.5
6.0											6.0
7.0			0.80 (7.2m)					0.55 (7.2m)			7.0
8.0			0.50					0.40			8.0
9.0											9.0
13.0											13.0
16.0											16.0
17.0											17.0
Critical boom angle	—	—	16°			—	—	16°			Critical boom angle

(Unit: Metric ton)

Overall view



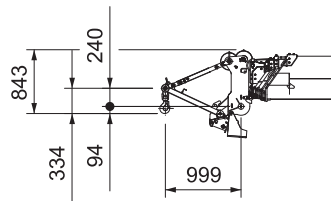
Reduced scale: 1/100 Unit (mm)

* : Indicates the dimension when the boom is horizontal

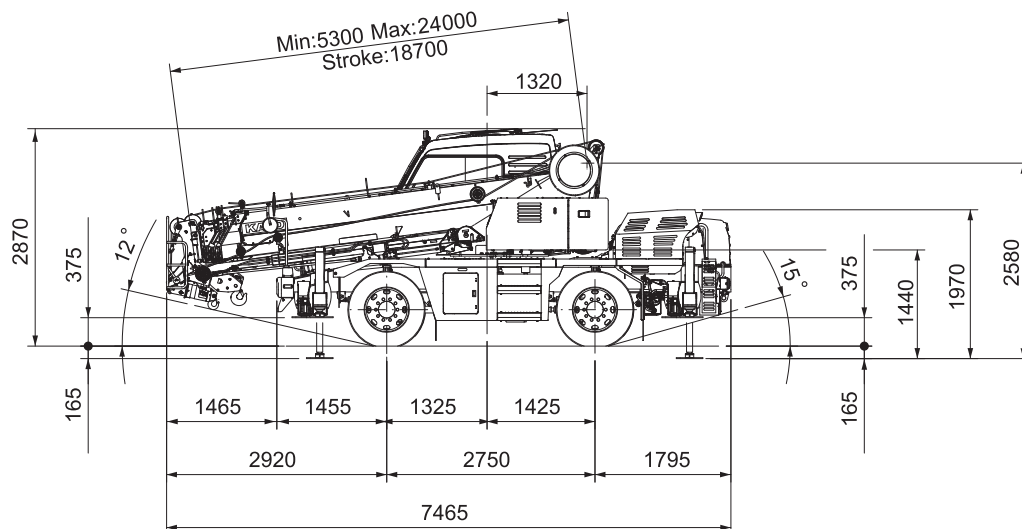
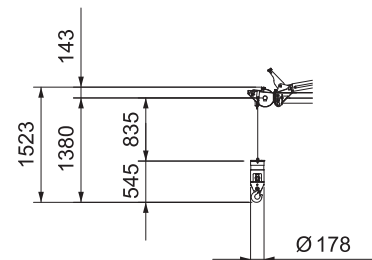
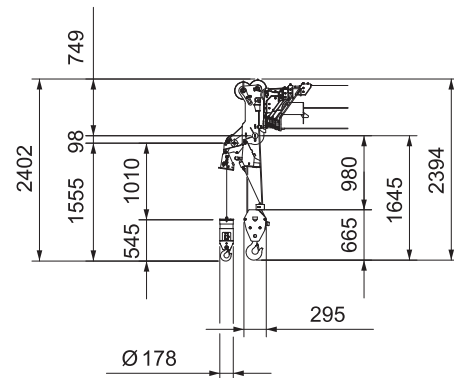
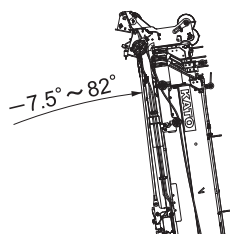
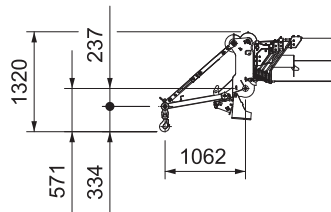
Overall view

Searcher hook (option)

High position



Low position



Ramp break over angle: 23°

When the suspension is locked, the height shall be the overall height: - 30 mm.
(Suspension cylinder completely retracted)

Reduced scale: 1/100 Unit (mm)

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

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