

Engine

Model	HINO J05ETG
Type	Four-stroke liquid-cooled direct injection diesel turbo charged with intercooler
No. of cylinders	4
Bore and stroke	112 mm X 130 mm
Displacement	5.123 L
Rated power output	114 kW/2,000 min ⁻¹ (ISO9249)
	118 kW/2,000 min ⁻¹ (ISO14396)
Max. torque	569 N•m/1,600 min ⁻¹ (ISO9249)
	592 N•m/1,600 min ⁻¹ (ISO14396)

Hydraulic System

Pump	
Type	Two Variable displacement piston pumps + one gear pump
Max. discharge flow	2 X 220 L/min, 1 X 20 L/min
Relief valve setting	
Boom, arm and bucket	34.3 MPa {350 kgf/cm ² }
Power Boost	37.8 MPa {385 kgf/cm ² }
Travel circuit	34.3 MPa {350 kgf/cm ² }
Swing circuit	29.0 MPa {296 kgf/cm ² }
Control circuit	5.0 MPa {50 kgf/cm ² }
Pilot control pump	Gear type
Main control valves	8-spool valve
Oil cooler	Air cooled type

Swing System

Swing motor	One fixed displacement piston pump
Brake	Hydraulic; locking automatically when the swing control lever is in the neutral position
Parking brake	Wet multiple plate
Swing speed	13.3 min ⁻¹ {rpm}

Attachments

Backhoe bucket and arm combination

Type	Backhoe bucket				
Bucket capacity	ISO heaped	m ³	0.80 Side pin type	0.93 Side pin type	1.0 Side pin type
	ISO struck	m ³	0.59	0.67	0.74
Opening width	With side cutter	mm	1,160	1,390	1,340
	Without side cutter	mm	1,140	1,230	1,240
No. of teeth			5	5	5
Bucket weight		kg	780	870	880
Combination	2.40 m arm		○	○	◎
	2.94 m arm		◎	○	×

◎ Standard ○ Recommended △ Loading only × Not recommended

Travel System

Travel motors	2 X axial-piston. Two-step motors	
Travel brakes	Hydraulic	
Parking brakes	Wet multiple plate	
Travel shoes	SK220XD	46 each side
	SK220XDLC	49 each side
Travel speed	6.0/3.6 km/h	
Drawbar pulling force	228 kN (SAE)	
Gradeability	70 % {35°}	
Ground clearance	435 mm	

Cab & Control

Cab
All-weather, sound-suppressed steel cab mounted on the high suspension mounts filled with silicone oil and equipped with a heavy, insulated floor mat.
Control
Two hand levers and two foot pedals for travel
Two hand levers for excavating and swing
Electric rotary-type engine throttle

Boom, Arm & Bucket

Boom cylinders	120 mm X 1,355 mm
Arm cylinder	135 mm X 1,558 mm
Bucket cylinder	120 mm X 1,080 mm

Refilling Capacities & Lubrications

Fuel tank	320 L
Cooling system	18 L
Engine oil	20.5 L
Travel reduction gear	2 X 5 L
Swing reduction gear	3 L
Hydraulic oil tank	140 L tank oil level
	244 L hydraulic system



Working Ranges

Unit: m

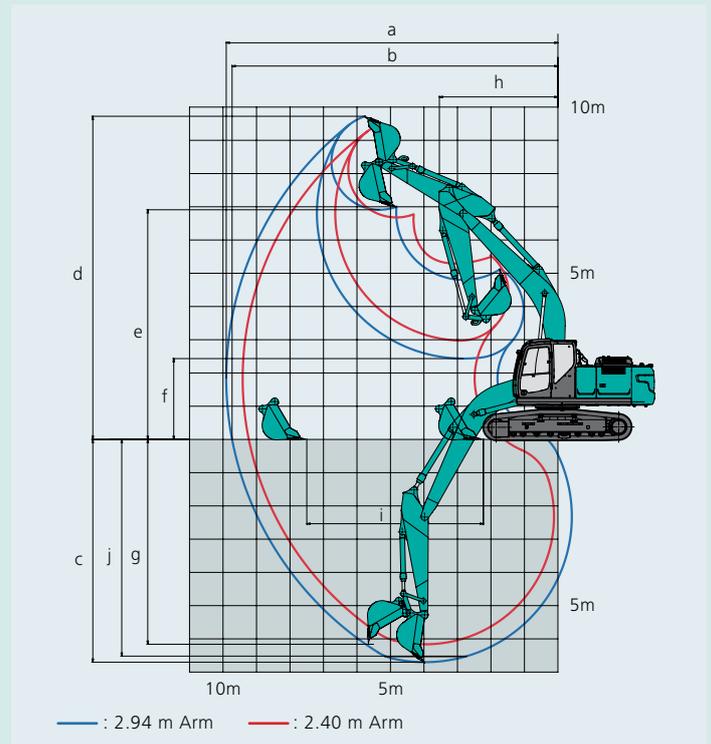
Boom	5.65 m		
Range	Arm	2.94 m	2.40 m
a- Max. digging reach		9.9	9.42
b- Max. digging reach at ground level		9.73	9.24
c- Max. digging depth		6.7	6.16
d- Max. digging height		9.72	9.51
e- Max. dumping clearance		6.91	6.68
f- Min. dumping clearance		2.43	2.98
g- Max. vertical wall digging depth		6.1	5.57
h- Min. swing radius		3.54	3.56
i- Horizontal digging stroke at ground level		5.27	4.08
j- Digging depth for 2.4 m (8') flat bottom		6.52	5.95
Bucket capacity ISO heaped m ³		0.80	1.10

Digging Force (ISO 6015)

Unit: kN

Arm length	2.94 m	2.40 m
Bucket digging force	143 157*	143 157*
Arm crowding force	102 112*	121 133*

*Power Boost engaged



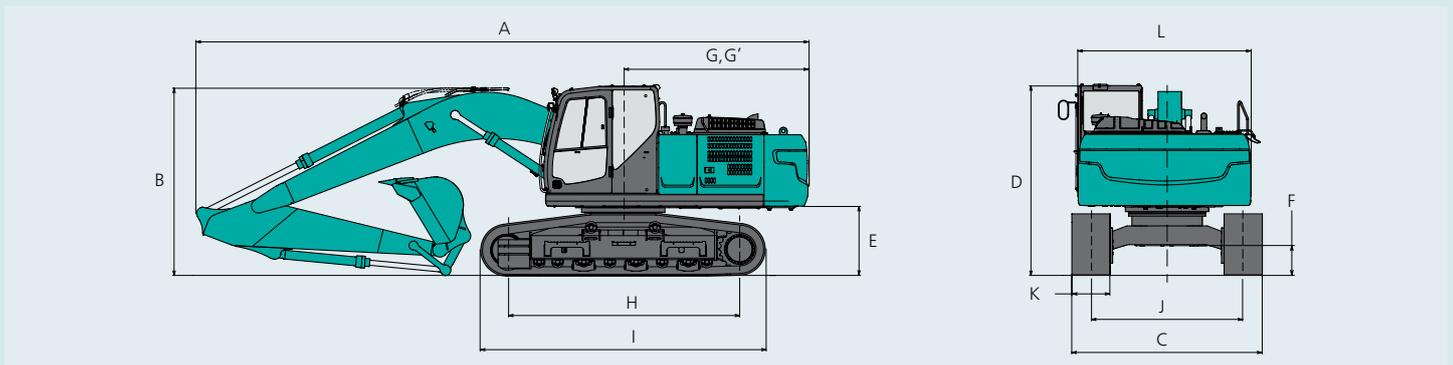
Dimensions

Arm length	2.94 m	2.40 m
A Overall length	9,600	9,680
B Overall height (to top of boom)	2,980	3,220
C Overall width	SK220XD	2,800
	SK220XDLC	2,990
D Overall height (to top of cab)	SK220XD	3,020
	SK220XDLC	3,020
E Ground clearance of rear end*	SK220XD	1,070
	SK220XDLC	1,070
F Ground clearance*	SK220XD	435
	SK220XDLC	435

Unit: mm

G Tail swing radius		2,910
G' Distance from center of swing to rear end		2,900
H Tumbler distance	SK220XD	3,370
	SK220XDLC	3,660
I Overall length of crawler	SK220XD	4,180
	SK220XDLC	4,460
J Track gauge	SK220XD	2,200
	SK220XDLC	2,390
K Shoe width		600
L Overall width of upperstructure		2,710

*Without including height of shoe lug



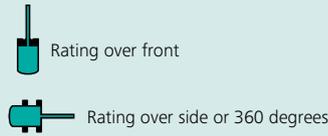
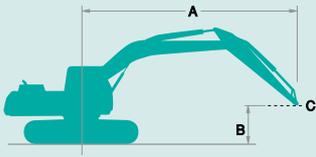
Operating Weight & Ground Pressure

In standard trim, with standard boom, 2.40 m arm, and 1.0 m³ ISO heaped bucket

Shaped	Triple grouser shoes (even height)	
Model		SK220XD
Shoe width	mm	600
Overall width	mm	2,800
Ground pressure	kPa	49
Operating weight	kg	21,800

In standard trim, with standard boom, 2.94 m arm, and 0.80 m³ ISO heaped bucket

Shaped	Triple grouser shoes (even height)	
Model		SK220XDLC
Shoe width	mm	600
Overall width	mm	2,990
Ground pressure	kPa	46
Operating weight	kg	22,000



A: Reach from swing centerline to arm top
 B: Arm top height above/below ground
 C: Lift point
 Bucket: Without bucket
 Relief valve setting: 34.3MPa (350kgf/cm²)

SK220XD Boom: 5.65 m, Arm: 2.40 m, Bucket: without, Shoe: 600 mm												
A \ B		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius
7.5 m	kg									*5,730	5,320	5.59 m
6.0 m	kg					*5,820	4,760			*5,210	3,830	6.80 m
4.5 m	kg			*7,440	7,150	*6,220	4,600	4,900	3,200	4,870	3,180	7.52 m
3.0 m	kg			*9,080	6,540	6,770	4,350	4,810	3,120	4,430	2,870	7.89 m
1.5 m	kg			10,110	6,070	6,510	4,110	4,700	3,010	4,300	2,760	7.97 m
G.L.	kg			9,870	5,870	6,350	3,970	4,630	2,950	4,420	2,820	7.75 m
-1.5 m	kg	*10,410	*10,410	9,850	5,860	6,310	3,930			4,890	3,110	7.22 m
-3.0 m	kg	*11,750	11,440	*8,830	5,990	*6,420	4,040			*5,880	3,830	6.28 m
-4.5 m	kg			*5,510	*5,510					*5,050	*5,050	4.71 m

SK220XD Boom: 5.65 m, Arm: 2.94 m, Bucket: without, Shoe: 600 mm														
A \ B		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius
7.5 m	kg							*4,810	*4,810			*3,850	*3,850	6.26 m
6.0 m	kg							*5,260	4,830			*3,560	3,370	7.36 m
4.5 m	kg							*5,740	4,650	4,940	3,230	*3,480	2,850	8.03 m
3.0 m	kg					*8,370	6,670	*6,490	4,370	4,810	3,110	*3,550	2,590	8.38 m
1.5 m	kg					*9,860	6,120	6,510	4,100	4,670	2,980	*3,760	2,490	8.45 m
G.L.	kg			*5,750	*5,750	9,830	5,820	6,310	3,920	4,560	2,880	3,990	2,530	8.25 m
-1.5 m	kg	*6,080	*6,080	*10,050	*10,050	9,740	5,750	6,220	3,840	4,540	2,860	4,350	2,750	7.75 m
-3.0 m	kg	*10,650	*10,650	*13,030	11,150	*9,380	5,820	6,280	3,890			5,190	3,270	6.89 m
-4.5 m	kg			*9,600	*9,600	*7,030	6,080					*5,280	4,630	5.49 m

SK220XDLC Boom: 5.65 m, Arm: 2.40 m, Bucket: without, Shoe: 600 mm												
A \ B		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius
7.5 m	kg									*5,730	*5,730	5.59 m
6.0 m	kg					*5,820	5,270			*5,210	4,240	6.80 m
4.5 m	kg			*7,440	*7,440	*6,220	5,100	*5,310	3,560	*5,080	3,540	7.52 m
3.0 m	kg			*9,080	7,330	*6,910	4,840	5,430	3,470	5,000	3,200	7.89 m
1.5 m	kg			*10,340	6,850	7,410	4,600	5,310	3,370	4,860	3,090	7.97 m
G.L.	kg			*10,680	6,640	7,240	4,450	5,240	3,300	5,010	3,160	7.75 m
-1.5 m	kg	*10,410	*10,410	*10,200	6,630	7,210	4,420			5,550	3,490	7.22 m
-3.0 m	kg	*11,750	*11,750	*8,830	6,760	*6,420	4,530			*5,880	4,290	6.28 m
-4.5 m	kg			*5,510	*5,510					*5,050	*5,050	4.71 m

SK220XDLC Boom: 5.65 m, Arm: 2.94 m, Bucket: without, Shoe: 600 mm														
A \ B		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius
7.5 m	kg							*4,810	*4,810			*3,850	*3,850	6.26 m
6.0 m	kg							*5,260	*5,260			*3,560	*3,560	7.36 m
4.5 m	kg							*5,740	5,150	*5,270	3,590	*3,480	3,180	8.03 m
3.0 m	kg					*8,370	7,470	*6,490	4,870	5,430	3,470	*3,550	2,890	8.38 m
1.5 m	kg					*9,860	6,900	*7,240	4,600	5,280	3,330	*3,760	2,790	8.45 m
G.L.	kg			*5,750	*5,750	*10,540	6,600	7,200	4,410	5,180	3,240	*4,150	2,840	8.25 m
-1.5 m	kg	*6,080	*6,080	*10,050	*10,050	*10,380	6,510	7,110	4,330	5,150	3,210	*4,880	3,090	7.75 m
-3.0 m	kg	*10,650	*10,650	*13,030	12,880	*9,380	6,590	*6,940	4,380			*5,620	3,670	6.89 m
-4.5 m	kg			*9,600	*9,600	*7,030	6,860					*5,280	5,190	5.49 m

- Notes:**
- Do not attempt to lift or hold any load that is greater than these lift capacities at their specified lift point radius and heights. Weight of all accessories must be deducted from the above lift capacities.
 - Lift capacities are based on machine standing on level, firm, and uniform ground. User must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
 - Arm top defined as lift point.
 - The above lift capacities are in compliance with ISO 10567. They do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Lift capacities marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load.
 - Operator should be fully acquainted with the Operator's and Maintenance Instructions before operating this machine. Rules for safe operation of equipment should be adhered to at all times.
 - Lift capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.