

Specifications

Engine

Model	HINO JO5E
Type:	Direct injection, water-cooled, 4-cycle diesel engine with turbocharger, intercooler (Complies with EU (NRMM) Stage IIIA, US EPA Tier III, and Japanese latest Exhaust Emission Regulations)
No. of cylinders:	4
Bore and stroke:	112 mm X 130 mm
Displacement:	5.123 L
Rated power output:	114 kW {155 PS}/2,000 min ⁻¹ {rpm}
Max. torque:	572 N·m /1,600 min ⁻¹ {rpm}

Hydraulic System







Pump	
Type:	Two variable displacement pumps + 1 gear pump
Max. discharge flow:	2 X 220 L/min, 1 X 20 L/min
Max. discharge pressure	
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
Oil cooler:	Air cooled type

Swing System

Swing motor:	Axial-piston motor
Brake:	Hydraulic; locking automatically when the swing control lever is in the neutral position
Parking brake:	Hydraulic disc brake
Swing speed:	12.5 min ⁻¹ {rpm}
Tail swing radius:	2,750 mm
Min. front swing radius:	3,540 mm

Attachments

Backhoe bucket and arm combination

Use		Backhoe bucket						Slope finishing bucket		
		Normal digging			Light-duty		Heavy digging			
										
Bucket capacity	m ³	0.51	0.7	0.8	0.93	1.05	1.3	0.8	—	
Bucket capacity (CECE heaped)	m ³	0.39	0.52	0.59	0.67	0.75	0.9	0.59	—	
Opening width or X-section	With side cutters	mm	870	1,080	1,160	1,330	1,460	—	1,180	—
	Without side cutters	mm	770	980	1,060	1,230	1,360	1,630	1,060	2,200 X 1,100
No. of bucket teeth		3	5	5	5	6	6	4	—	
Bucket weight	kg	520	630	640	710	770	820	750	890	
Combinations	2.40 m short arm	○	○	○	○	△	△	○	△	
	2.94 m standard arm	○	○	○	△	×	×	○	△	
	3.50 m long arm	○	○	△	×	×	×	×	△	

○ Recommended △ Loading only × Not recommended

Travel System

Travel motors:	2 X axial-piston, two-step motors
Travel brakes:	Hydraulic disc brake
Parking brakes:	Oil disc brake per motor
Travel shoes:	46 each side (SK200)
	49 each side (SK210LC)
Travel speed:	6.0/3.6 km/h
Drawbar pulling force:	229 kN {23.3 tf} (J. 1349 MAY 91)
Gradeability:	70 % {35°}
Ground clearance:	450 mm

Cab & Control

Cab

All-weather, sound-suppressed steel cab mounted on the silicon-sealed viscous mounts 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:	370 L
Cooling system:	22 L
Engine oil:	22 L
Travel reduction gear:	2 X 5.3 L
Swing reduction gear:	3.0 L
Hydraulic oil tank:	146 L tank oil level 230 L hydraulic system

Working Ranges

Unit: m

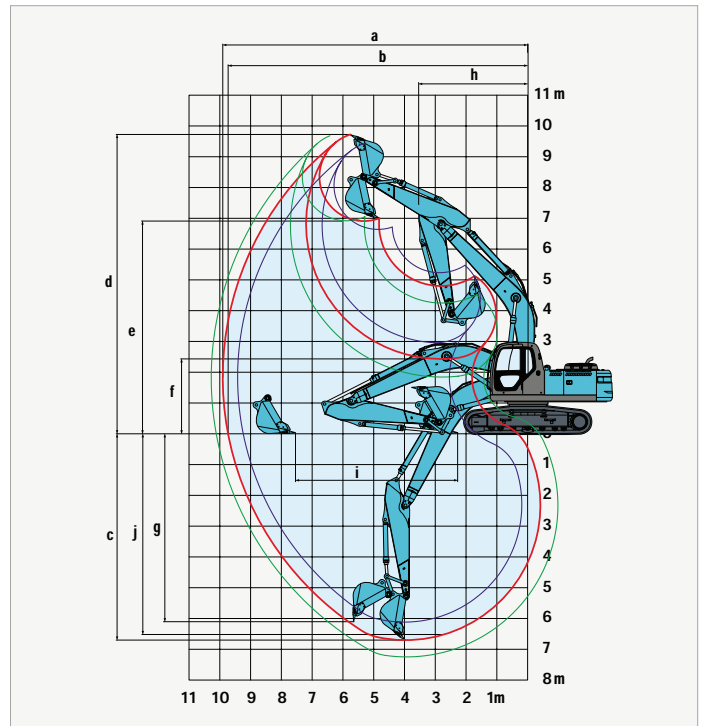
Range	Arm	Short 2.4 m	Standard 2.94 m	Long 3.5 m
a - Max. digging reach		9.42	9.9	10.34
b - Max. digging reach at ground level		9.24	9.73	10.17
c - Max. digging depth		6.16	6.7	7.26
d - Max. digging height		9.51	9.72	9.75
e - Max. dumping clearance		6.68	6.91	6.97
f - Min. dumping clearance		2.98	2.43	1.87
g - Max. vertical wall digging depth		5.57	6.1	6.47
h - Min. swing radius		3.56	3.54	3.48
i - Horizontal digging stroke at ground level		4.08	5.27	6.08
j - Digging depth for 2.4 m (8') flat bottom		5.95	6.52	7.08
Bucket capacity SAE heaped m ³		0.93	0.8	0.7

Digging Force (ISO 6015)

Unit: kN (tf)

Arm length	Short 2.4 m	Standard 2.94 m	Long 3.5 m
Bucket digging force	143 (14.6) 157 (16.0)*	143 (14.6) 157 (16.0)*	143 (14.6) 157 (16.0)*
Arm crowding force	121 (12.3)* 133 (13.6)*	102 (10.4) 112 (11.4)*	91.8 (9.36) 101 (10.3)*

* Power Boost engaged.



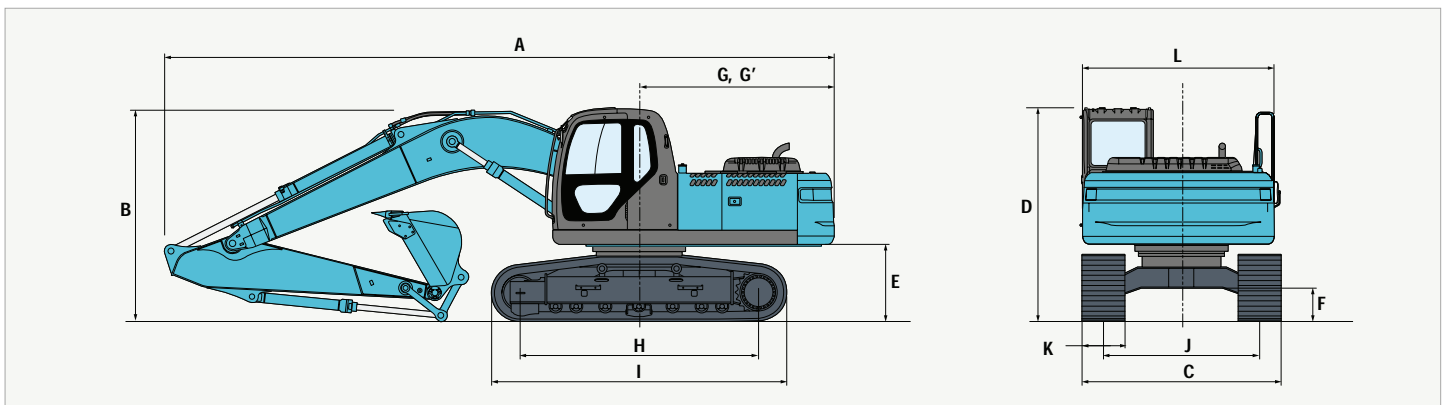
— Short Arm
— Standard Arm
— Long Arm

Dimensions

Arm length	Short 2.4 m	Standard 2.94 m	Long 3.5 m
A Overall length	9,530	9,450	9,520
B Overall height (to top of boom)	3,160	2,980	3,180
C Overall width	SK200	2,800	2,800
	SK210LC	2,990	2,990
D Overall height (to top of cab)	3,030	3,030	3,030
E Ground clearance of rear end*	1,060	1,060	1,060
F Ground clearance*	450	450	450

		Unit: mm		
G Tail swing radius		2,750	2,750	2,750
G' Distance from center of swing to rear end		2,750	2,750	2,750
H Tumbler distance	SK200	3,370	3,370	3,370
	SK210LC	3,660	3,660	3,660
I Overall length of crawler	SK200	4,170	4,170	4,170
	SK210LC	4,450	4,450	4,450
J Track gauge	SK200	2,200	2,200	2,200
	SK210LC	2,390	2,390	2,390
K Shoe width		600/700/800/900		
L Overall width of upperstructure		2,710	2,710	2,710

* Without including height of shoe lug.

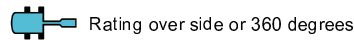
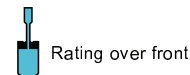
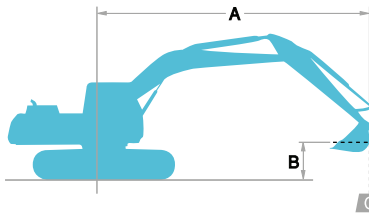


Operating Weight & Ground Pressure

In standard trim, with standard boom, 2.94 m arm, and 0.8 m³ SAE heaped bucket

Shaped	Triple grouser shoes (even height)					Triagle shoe
	Shoe width	mm	600	700	800	900
Overall width	mm	SK200	2,800	2,900	3,000	3,100
		SK210LC	2,990	3,090	3,190	3,290
Ground pressure	kPa (kgf/cm ²)	SK200	45 (0.46)	40 (0.40)	35 (0.36)	32 (0.32)
		SK210LC	43 (0.44)	38 (0.38)	33 (0.34)	30 (0.31)
Operating weight	kg	SK200	20,200	20,600	20,900	21,300
		SK210LC	20,600	21,100	21,400	21,800

Lifting Capacities















- A - Reach from swing centerline to bucket hook
- B - Bucket hook height above/below ground
- C - Lifting capacities in kilograms
 - Max. discharge pressure: 37.8 MPa (385 kg/cm²)













SK200		Standard Arm: 2.94 m Bucket: 0.8 m ³ SAE heaped 640 kg Shoe: 600 mm													
B	A	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
7.5 m	kg												* 2,860	* 2,860	6.33 m
6.0 m	kg							* 4,610	4,540				* 2,710	* 2,710	7.42 m
4.5 m	kg							* 5,130	4,350	* 4,520	2,930		* 2,720	2,530	8.09 m
3.0 m	kg				* 12,070	* 12,070	* 7,620	6,420	* 5,930	4,070	4,450	2,800	* 2,850	2,260	8.44 m
1.5 m	kg				* 6,670	* 6,670	* 9,260	5,850	6,140	3,800	4,300	2,670	* 3,140	2,150	8.51 m
G. L.	kg				* 7,690	* 7,690	9,410	5,520	5,910	3,600	4,180	2,560	* 3,570	2,170	8.30 m
-1.5 m	kg	* 6,890	* 6,890	* 10,910	10,520	9,270	5,400	5,810	3,510	4,130	2,510		3,890	2,370	7.81 m
-3.0 m	kg	* 10,460	* 10,460	* 13,520	10,690	9,320	5,440	5,820	3,520				4,660	2,850	6.96 m
-4.5 m	kg			* 10,440	* 10,440	* 7,450	5,630						* 5,670	4,080	5.59 m













SK200		Standard Arm: 2.94 m Bucket: 0.8 m ³ SAE heaped 640 kg Shoe: 800 mm													
B	A	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
7.5 m	kg												* 2,860	* 2,860	6.33 m
6.0 m	kg							* 4,610	* 4,610				* 2,710	* 2,710	7.42 m
4.5 m	kg							* 5,130	4,470	* 4,520	3,030		* 2,720	2,620	8.09 m
3.0 m	kg				* 12,070	* 12,070	* 7,620	6,600	* 5,930	4,200	4,600	2,900	* 2,850	2,340	8.44 m
1.5 m	kg				* 6,670	* 6,670	* 9,260	6,040	6,350	3,930	4,450	2,760	* 3,140	2,230	8.51 m
G. L.	kg				* 7,690	* 7,690	9,730	5,700	6,120	3,730	4,340	2,650	* 3,630	2,260	8.30 m
-1.5 m	kg	* 6,890	* 6,890	* 10,910	10,850	9,590	5,580	6,020	3,630	4,290	2,610		4,040	2,460	7.81 m
-3.0 m	kg	* 10,460	* 10,460	* 13,520	11,020	* 9,410	5,620	6,030	3,650				4,830	2,950	6.96 m
-4.5 m	kg			* 10,440	* 10,440	* 7,450	5,820						* 5,670	4,220	5.59 m













SK200		Short Arm: 2.4 m Bucket: 0.93 m ³ SAE heaped 710 kg Shoe: 600 mm													
B	A	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
7.5 m	kg												* 4,190	* 4,190	5.66 m
6.0 m	kg							* 5,050	4,390				* 3,950	3,420	6.86 m
4.5 m	kg					* 6,550	* 6,550	* 5,510	4,210	* 4,420	2,830		* 3,990	2,770	7.58 m
3.0 m	kg					* 8,220	6,180	* 6,250	3,950	4,360	2,720		3,940	2,440	7.95 m
1.5 m	kg					9,590	5,660	6,020	3,700	4,230	2,600		3,790	2,320	8.02 m
G. L.	kg				* 6,870	* 6,870	9,280	5,410	5,830	3,530	4,140	2,510	3,890	2,360	7.81 m
-1.5 m	kg	* 7,710	* 7,710	* 11,810	10,530	9,220	5,350	5,770	3,470				4,310	2,610	7.28 m
-3.0 m	kg	* 12,470	* 12,470	* 12,240	10,750	* 8,820	5,450	5,850	3,540				5,360	3,260	6.36 m
-4.5 m	kg			* 8,600	* 8,600	* 6,210	5,730						* 5,690	5,190	4.81 m

SK200		SK200 Long Arm: 3.5 m Bucket: 0.70 m ³ SAE heaped 630 kg Shoe: 600 mm													
B	A	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
7.5 m	kg												* 2,460	* 2,460	6.89 m
6.0 m	kg										* 3,200	3,000	* 2,350	* 2,350	7.90 m
4.5 m	kg							* 4,530	4,360	* 4,240	2,910		* 2,370	2,240	8.53 m
3.0 m	kg				* 10,000	* 10,000	* 6,720	6,510	* 5,360	4,060	4,410	2,750	* 2,490	1,990	8.86 m
1.5 m	kg				* 10,400	* 10,400	* 8,520	5,860	6,090	3,750	4,230	2,590	* 2,740	1,880	8.92 m
G. L.	kg	* 3,630	* 3,630	* 8,600	* 8,600	9,310	5,420	5,820	3,500	4,080	2,450		* 3,170	1,800	8.73 m
-1.5 m	kg	* 6,370	* 6,370	* 10,620	10,170	9,080	5,220	5,660	3,360	3,990	2,370		3,440	2,030	8.26 m
-3.0 m	kg	* 9,310	* 9,310	* 14,170	10,270	9,060	5,200	5,630	3,330				4,030	2,400	7.47 m
-4.5 m	kg	* 12,890	* 12,890	* 11,730	10,580	* 8,160	5,340	5,760	3,450				5,460	3,280	6.21 m
-6.0 m	kg												* 5,350	* 5,350	4.08 m

SK210 _{LC}		Standard Arm: 2.94 m Bucket: 0.8 m ³ SAE heaped 640 kg Shoe: 600 mm													
B \ A		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
															
7.5 m	kg												* 2,860	* 2,860	6.33 m
6.0 m	kg							* 4,610	* 4,610				* 2,710	* 2,710	7.42 m
4.5 m	kg							* 5,130	4,820	* 4,520	3,270		* 2,720	* 2,720	8.09 m
3.0 m	kg			* 12,070	* 12,070	* 7,620	7,180	* 5,930	4,540	5,040	3,140		* 2,850	2,540	8.44 m
1.5 m	kg			* 6,670	* 6,670	* 9,260	6,600	* 6,750	4,270	4,880	3,000		* 3,140	2,430	8.51 m
G. L.	kg			* 7,690	* 7,690	* 10,160	6,250	* 6,760	4,060	4,760	2,890		* 3,630	2,680	8.30 m
-1.5 m	kg	* 6,890	* 6,890	* 10,910	* 10,910	* 10,200	6,130	6,650	3,970	4,710	2,850		4,430	2,220	7.81 m
-3.0 m	kg	* 10,460	* 10,460	* 13,520	12,340	* 9,410	6,170	6,670	3,980				5,320	3,220	6.96 m
-4.5 m	kg			* 10,440	* 10,440	* 7,450	6,370						* 5,670	4,600	5.59 m

SK210 _{LC}		Standard Arm: 2.94 m Bucket: 0.8 m ³ SAE heaped 640 kg Shoe: 800 mm													
B \ A		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
															
7.5 m	kg												* 2,860	* 2,860	6.33 m
6.0 m	kg												* 2,710	* 2,710	7.42 m
4.5 m	kg							* 5,130	4,970	* 4,520	3,380		* 2,720	* 2,720	8.09 m
3.0 m	kg			* 12,070	* 12,070	* 7,620	7,390	* 5,930	4,690	* 5,070	3,250		* 2,850	2,640	8.44 m
1.5 m	kg			* 6,670	* 6,670	* 9,260	6,810	* 6,750	4,410	5,070	3,110		* 3,140	2,520	8.51 m
G. L.	kg			* 7,690	* 7,690	* 10,160	6,470	* 7,010	4,210	4,950	3,000		* 3,630	2,560	8.30 m
-1.5 m	kg	* 6,890	* 6,890	* 10,910	* 10,910	* 10,200	6,350	6,900	4,110	4,900	2,960		* 4,530	2,790	7.81 m
-3.0 m	kg	* 10,460	* 10,460	* 13,520	12,740	* 9,410	6,390	* 6,880	4,130				5,520	3,340	6.96 m
-4.5 m	kg			* 10,440	* 10,440	* 7,450	6,580						* 5,670	4,760	5.59 m

SK210 _{LC}		Short Arm: 2.4 m Bucket: 0.93 m ³ SAE heaped 710 kg Shoe: 600 mm													
B \ A		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
															
7.5 m	kg												* 4,190	* 4,190	5.66 m
6.0 m	kg							* 5,050	4,870				* 3,950	3,810	6.86 m
4.5 m	kg					* 6,550	* 6,550	* 5,510	4,690	* 4,420	3,160		* 3,990	3,100	7.58 m
3.0 m	kg					* 8,220	6,930	* 6,250	4,420	4,940	3,050		* 4,220	2,750	7.95 m
1.5 m	kg					* 9,640	6,400	6,880	4,160	4,810	2,930		4,310	2,620	8.02 m
G. L.	kg			* 6,870	* 6,870	* 10,220	6,140	6,680	3,990	4,720	2,850		4,430	2,680	7.81 m
-1.5 m	kg	* 7,710	* 7,710	* 11,810	* 11,810	* 9,950	6,080	6,610	3,930				4,920	2,960	7.28 m
-3.0 m	kg	* 12,470	* 12,470	* 12,240	* 12,240	* 8,820	6,180	* 6,410	4,000				* 5,870	3,680	6.36 m
-4.5 m	kg			* 8,600	* 8,600	* 6,210	* 6,210						* 5,690	* 5,690	4.81 m

SK210 _{LC}		Long Arm: 3.5 m Bucket: 0.70 m ³ SAE heaped 630 kg Shoe: 600 mm													
B \ A		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		At Max. Reach		Radius	
															
7.5 m	kg												* 2,460	* 2,460	6.89 m
6.0 m	kg									* 3,200	* 3,200		* 2,350	* 2,350	7.90 m
4.5 m	kg							* 4,530	* 4,530	* 4,240	3,250		* 2,370	* 2,370	8.53 m
3.0 m	kg			* 10,000	* 10,000	* 6,720	* 6,720	* 5,360	4,530	* 4,650	3,090		* 2,490	2,260	8.86 m
1.5 m	kg			* 10,400	* 10,400	* 8,520	6,600	* 6,260	4,210	4,810	2,920		* 2,740	2,140	8.92 m
G. L.	kg	* 3,630	* 3,630	* 8,600	* 8,600	* 9,700	6,150	6,670	3,960	4,660	2,780		* 3,170	2,160	8.73 m
-1.5 m	kg	* 6,370	* 6,370	* 10,620	* 10,620	* 10,060	5,950	6,500	3,820	4,570	2,700		* 3,910	2,320	8.26 m
-3.0 m	kg	* 9,310	* 9,310	* 14,170	11,910	* 9,600	5,930	6,480	3,790				4,610	2,730	7.47 m
-4.5 m	kg	* 12,890	* 12,890	* 11,730	* 11,730	* 8,160	6,070	* 5,790	3,910				* 5,480	3,710	6.21 m
-6.0 m	kg												* 5,350	* 5,350	4.08 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.
- Bucket lift hook defined as lift point
- The above lifting capacities are in compliance with SAE J150 10567. They do not exceed

- 87% of hydraulic lifting capacity or 75% of tipping load. Lifting 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.