

# Hydraulic Excavators SK200SR SK200SRLC

Bucket Capacity: 0.51-0.80 m<sup>3</sup> SAE Heaped Engine Power: 91.9 kW (125 PS) at 2,200 min<sup>-1</sup> Operating Weight: 19,900 kg-SK200SR 20,400 kg-SK200SRLC

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KOBELCO

200SRLC



# The SR Series: The Standard for Operation Within a Small Rear Swing Radius

KOBELIK

Imagine a full-performance hydraulic excavator series with an ultra-small rear swing radius that allows the operator to focus on the job in front of him, even in narrow spaces. The KOBELCO SR Series is designed with precisely that in mind, and has won the unqualified approval of operators and owners on work sites throughout the world. SR Series machines offer all the benefits of small rear swing, but also do the same work as conventional models, providing optimal versatility. Carrying on the proud tradition of their predecessors, the new SK200SR/SK200SRLC machines represent a new standard in small rear-swing radius operation.

200**SR** 

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## Full-sized Performance With a Tiny Rear Swing Radius

#### Ultra-small Rear Swing Radius Lets You Concentrate on the Job

The rear of the upper carriage stays nearly within the crawler width which provides you safer and more efficient operations during swinging.

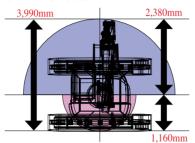
### Utilization boosted, with two benefits

There's less chance of colliding with onsite obstacles, and operations are possible at previously inaccessible locations such as tight up against walls or on forest, without constant worry about the rear. And owners win twice over, with a machine that does the same work as a conventional model, yet has the small rear swing advantage.



### An Operating Radius of Less Than 4 m

When swinging 180°, the SK200SR/ SK200SRLC takes up less than four meters of operating space, making continuous digging, swinging, and loading operations possible on worksites such as forest roads and crowded streets.



### **Power Boost System**

When a large rock or tree roots are encountered, this feature maximizes performance by providing a temporary 10% increase in digging power to the bucket and arm.

#### Bucket digging force: 111 kN to 122 kN Arm crowding force: 79.3 kN to 87.2 kN

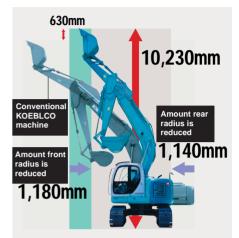
### **Three ITCS Operating Modes**

Three operating modes are available with the simple flick of a switch. **H-Mode** for heavy digging **S-Mode** for energy-efficient operation **FC-Mode** for fine control.



### Higher Digging Height and Smaller Rear Swing

Max. digging reach is higher than other machines in its class, making it well suited for demolition work.



### Excellent Stability and Performance

The floor of the upper frame is



constructed with a single, thick steel plate that provides sure-footed stability.

### Automatic Two-speed Travel System

An automatic shift function ensures smoother, more efficient travel on the worksite.

High mode: 5.0 km/h Low mode: 3.5 km/h



## An Industry First! Auto Idling Stop (Option)

### Reduces air pollution by cutting exhaust emissions

Auto Idling Stop eliminates wasteful and unnecessary engine idling. It cuts emissions of nitrogen oxide and



carbon dioxide, minimizing the machine's effect on atmospheric pollution and global warming.

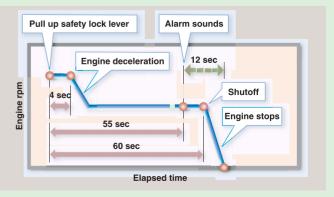
Auto Idling Stop (AIS) control switch

### Reduces fuel consumption by approx. 20% (KOBELCO comparisons)

A big boost to energy saving! Fuel consumption is cut by approx. 20% compared with conventional machines. Significant savings can be made on fuel costs. Note: May vary, according to operating conditions.

### **AIS System**

The AIS system is activated whenever the safety lock lever is pulled up.



### Spacious, Quiet, and Comfortable Cab Ma

### **Spacious Comfort Cab Provides Plenty of Room**

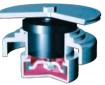
Though compact on the outside, the cab provides a comfortable and spacious working environment on the inside.

- · High head clearance for easy entry.
- Cab width and foot space comparable to conventional machines.
- Double-slide seat ensures optimal operating posture.



### Low-noise, Low-vibration Design

Cab noise is a quiet 73dB(A), thanks to an insulation panel with deep



grooves installed in the back. Vibration is also minimized with the help of sealed viscous cab mounts.



### **Automatic Climate Control** System Provides Simple **Environmental Control**



The powerful, automatic climate control system introduces outside air, and comes equipped with a defroster.

4,100 kcal/h in cooling mode 4,900 kcal/h in heating mode



### Greener Generation

### Additional mirrors fitted to ensure on-site safety



• A rearview mirror sets to eliminate the usual dead angle behind the counterweight





Side mirror



### Wide-view Ensures Safe Operation



 The area of the front window covered by the wiper has been increased by approximately 11%.

#### Many Features That Ensure Comfort

- Cup holder
- Storage for small articles
- Large-capacity luggage box
- Door-activated cab light



### **Broad Versatility Makes It Easy to Choose** the Ideal Configuration

### **Additional Service** Valves

Optional double-action valves can easily to the control valve to meet Add-on segment versatile applications.

### **Optional Dozer Blade**

The large dozer blade is very efficient at piling up earth and filling holes, and the dozer hose is jointed to make blade changes easy.

### **Optional Rubber-padded Shoes**

The steel shoes have holes that hold specially designed rubber pads to protect the surface under the machine.



Cab side mirror

### **SPECIFICATIONS**

### SK200SR•SK200SRLC



### **ENGINE**

Model Type:

No. of cylinders: Bore and stroke: **Displacement:** Rated power output:

Max. torque:

HYDRAULIC SYSTEM

Pump: Max. discharge flow: Max. discharge pressure: Power boost: **Propel circuit:** Swing circuit: **Control circuit: Pilot control pump: Control valves:** Oil cooler:

ISUZU AA-4BG1TC Direct injection, water-cooled, 4-cycle diesel engine with intercooled turbocharger 4

 $105 \text{ mm} \times 125 \text{ mm}$ 4.329 cc 91.9 kW NET at 2.200 min<sup>-1</sup> 125 PS NET at 2.200 rpm 417 N·m at 1.800 min<sup>-1</sup> 42.5 kgf•m at 1,800 rpm

Two variable displacement pumps  $2 \times 176$  liters/min

Boom, arm and bucket (main): 34.3 MPa (350 kg/cm<sup>2</sup>) 37.8 MPa (385 kg/cm<sup>2</sup>) 34.3 MPa (350 kg/cm<sup>2</sup>) 28.0 MPa (285 kg/cm<sup>2</sup>) 5.0 MPa (50 kg/cm<sup>2</sup>) Gear type 6-spool Air cooled type (Finned tube, forced ventilation)



All-weather, sound suppressed steel cab is mounted on the silicon-sealed viscous mount. Large, tinted safety-glass windows, with pull type upper front window and removable lower front windows. Seven-way adjustable dual-slide seat with wristaction levers, electric rotary-type engine throttle, safety-lock lever, and easy-to-read multi-display monitor. Ventilated, pressurized climate control system, floor mat, intermittent windshield wiper with two-jet washer, light-action cab door, skylight, ashtray, cab light (interior), coat hook, cup holder, and utility box.



### ATTACHMENTS



### TRAVEL SYSTEM

Drive motors:	Independent, axial-piston, two-step
	motor for each side
Brakes:	Independent, disc parking brakes for
	each side
Track shoes:	46 each side -SK200SR
	49 each side -SK200SRLC
Travel speed:	5.0/3.5 km/h
Drawbar pulling force:	199 kN (20,380 kgf)
	(SAE J1309 MAY 91)
Gradeability:	35° (70%)
Ground clearance:	450 mm



### SWING SYSTEM

Brake:

Parking brake: Swing speed: Tail swing radius: Min. front swing raius: 2.380 mm

Hydraulic, locking automatically when the swing control lever is in neutral position Hydraulic disc brake 11.0 min<sup>-1</sup> (rpm) 1.610 mm



### **BOOM, ARM AND BUCKET**

Boom cylinders (2): Arm cylinder: **Bucket cylinder:** 

 $115 \text{ mm} \times 1,200 \text{ mm}$ 125 mm × 1,290 mm  $105 \text{ mm} \times 1,055 \text{ mm}$ 

### **REFILLING CAPACITIES AND** LUBRICATIONS

Fuel tank: Cooling system: Engine oil: Track drives: Swing drives: Hydraulic oil: Tank (oil level): Hydraulic systm: 270 liters 18.5 liters 13 liters  $2 \times 5.5$  liters 7.5 liters 167 liters

215 liters

	Backhoe bucket								
Use				Light digging					
Bucket capacity (SAE heaped)		m³	0.51	0.63	0.70	0.75	0.8		
Bucket capacity (CECE heaped)		m³	0.45	0.56	0.61	0.66	0.70		
Opening width	With side cutters	mm	870	990	1,080	1,120	1,160		
	Without side cutters	mm	770	890	980	1,020	1,060		
No. of teeth	No. of teeth		3	5	5	5	5		
Combinations	2.60 m arm		0	0	0	0	Δ		
COMDINATIONS	3.0 m arm		0	0	Δ	×	×		

○ Recommended △ Loading only × Not recommended



### WORKING RANGES

		Unit: m
Arm	Standard 2.60 m	3.0m
a - Max. digging reach	9.00	9.38
b- Max. digging reach at ground level	8.80	9.19
c - Max. digging depth	6.15	6.55
c'- Max depth of bucket hinge pin	4.71	5.11
d- Max.digging height	10.23	10.53
d'- Max. height of bucket hinge pin	8.79	9.09
e - Max dumping clearance	7.36	7.66
f - Min. dumping clearance	2.88	2.57
g- Max. vertical wall digging depth	5.40	5.80
h- Min. front swing radius	2.38	2.73
i - Horizontaldigging stroke at ground level	4.43	4.82
j - Diging depth for 2.4 m flat bottom	5.93	6.36
Bucket capacity SAE heaped m <sup>3</sup>	0.75	0.63

#### **Digging Force**

Digging Force		Unit: kN (kgf)				
Arm length	2.60m 3.0m					
Bucket digging force	111 (1 122 (1	,300) 2,400)*				
Arm crawding force	79.3 (8,100) 87.2 (8,900)*	73.8 (7,500) 81.2 (8,300)*				

\*Power Boost engaged.

 $\Delta$ 

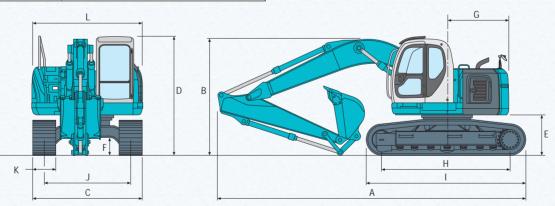
### DIMENSIONS

	Arm length		2.60 m 3.0 m							
A	Overall length	SK200SR	8,050	8,040						
A		SK200SRLC	8,190	8,180						
В	Overall height (to top of boom)		3,060 2,980							
с	Overall width	SK200SR	2,8	300						
	(600 mm shoe)	SK200SRLC	2,9	990						
D	Overall height (	to top of cab)	3,060							
Ε	Ground clearan	ce of rear end*	1,030							
F	Ground clearan	ce*	450							

#### Unit: m а b 11 h 10 9 8 7 f d ď е f 2 g c' c j 3 5 6 24 7 10 9 8 7 6 5 4 3 2 0 1

			Unit. mini
G	Tail swing radius		1,610
н	Tumbler distance	SK200SR	3,370
П	Tumpler distance	SK200SRLC	3,660
	Overall length	SK200SR	4,170
<b>'</b>	of crawler	SK200SRLC	4,450
	Track gauge	SK200SR	2,200
J	Hack yauge	SK200SRLC	2,390
Κ	Shoe width		600/700/800
L	Overall width of su	perstructure	2,800

\* Without including height of shoe lug.



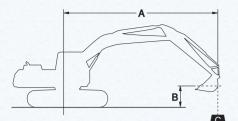
### **OPERATING WEIGHT AND GROUND PRESSURE**

In standard trim, with standars boom, 2.60 m arm, and 0.75 m<sup>3</sup> SAE heaped bucket.

Shape			Triple grouser shoe (even height)					
Shoe width	mm		600	700	800			
Overall width	mm	SK200SR	2,800	2,900	3,000			
		SK200SRLC	2,990	3,090	3,190			
Ground pressure	kPa (kgf/cm <sup>2</sup> )	SK200SR	45 (0.45)	39 (0.40)	34 (0.35)			
Ground pressure	kra (kyi/ciii )	SK200SRLC	42 (0.43)	37 (0.37)	33 (0.33)			
Operating weight	ka	SK200SR	19,900	20,200	20,400			
Operating weight	kg	SK200SRLC	20,400	20,600	20,900			

### SK200SR•SK200SRLC

### LIFTING CAPACITIES



Rating over front

- 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/cm<sup>2</sup>)

		SK200SR Standard Arm: 2.60 m Bucket: 0.75 m <sup>3</sup> SAE heaped 640 kg Shoe: 600 mm										
	А	1.5	m	3.0	m	4.5	m	6.0	m	7.5 m		
В		ł	<b>-</b>	Ľ	<b>-</b>		<b>-</b>		<b>-</b>	Ľ	<b>-</b>	
7.5 m	kg					*2,610	*2,610					
6.0 m	kg					*2,590	*2,590	*2,740	*2,740			
4.5 m	kg					*3,340	*3,340	*3,250	3,100			
3.0 m	kg			*6,900	*6,900	*4,660	*4,660	*3,850	2,930	*2,210	1,940	
1.5 m	kg			*9,310	8,280	*6,090	4,340	*4,550	2,740	*2,800	1,860	
G. L.	kg			*8,660	7,890	*7,070	4,080	4,720	2,600	*2,070	1,800	
-1.5 m	kg	*6,530	*6,530	*11,460	7,860	7,410	3,990	4,660	2,540			
-3.0 m	kg	*9,860	*9,860	*10,580	8,030	*7,020	4,040					
-4.5 m	kg	*14,290	*14,290	*8,200	*8,200							

Rating over side or 360 degrees

		SK200SR	SK200SR Standard Arm: 2.60 m Bucket: 0.75 m <sup>3</sup> SAE heaped 640 kg Shoe: 600 mm (with additional counterweight										
	Α	1.5 m		3.0	m	4.5	m	6.0	m	7.5 m			
В			<b></b>		<b></b>		<b></b>		<b>-</b>		<b></b>		
7.5 m	kg					*2,610	*2,610						
6.0 m	kg					*2,590	*2,590	*2,740	*2,740				
4.5 m	kg					*3,340	*3,340	*3,250	*3,250				
3.0 m	kg			*6,900	*6,900	*4,660	*4,660	*3,850	3,350	*2,210	*2,210		
1.5 m	kg			*9,310	*9,310	*6,090	4,960	*4,550	3,170	*2,800	2,180		
G. L.	kg			*8,660	*8,660	*7,070	4,690	*5,110	3,020	*2,070	*2,070		
-1.5 m	kg	*6,530	*6,530	*11,460	8,990	*7,410	4,600	5,220	2,970				
-3.0 m	kg	*9,860	*9,860	*10,580	9,150	*7,020	4,660						
-4.5 m	kg	*14,290	*14,290	*8,200	*8,200								

	SK200SRLC Standard Arm: 2.60 m Bucket: 0.75 m3 SAE heaped 640 kg Shoe: 600 mm											
$\geq$	А	1.5	m	3.0	m	4.5 m		6.0 m		7.5 m		
В		ł	<b>-</b>	-	<b>-</b>	ł	<b>-</b>		<b>#-</b>		<b>-</b>	
7.5 m	kg					*2,610	*2,610					
6.0 m	kg					*2,590	*2,590	*2,740	*2,740			
4.5 m	kg					*3,340	*3,340	*3,250	3,250			
3.0 m	kg			*6,900	*6,900	*4,660	4,660	*3,850	3,380	*2,210	*2,210	
1.5 m	kg			*9,310	*9,310	*6,090	5,050	*4,550	3,190	*2,800	2,190	
G. L.	kg			*8,660	*8,660	*7,070	4,780	*5,110	3,050	*2,070	*2,070	
-1.5 m	kg	*6,530	*6,530	*11,460	9,390	*7,410	4,680	*5,330	2,990			
-3.0 m	kg	*9,860	*9,860	*10,580	9,560	*7,020	4,740					
-4.5 m	kg	*14,290	*14,290	*8,200	*8,200							

		SK200SR	K200SRLC Standard Arm: 2.60 m Bucket: 0.75 m3 SAE heaped 640 kg Shoe: 600 mm (with additional counterweight)											
	A 1.5 m		m	3.0	m	4.5	m	6.0	m	7.5 m				
В		L	<b></b>		<b>.</b>		<b>.</b>		<b>~</b> -		<b>-</b>			
7.5 m	kg					*2,610	*2,610							
6.0 m	kg					*2,590	*2,590	*2,740	*2,740					
4.5 m	kg					*3,340	*3,340	*3,250	3,250					
3.0 m	kg			*6,900	*6,900	*4,660	4,660	*3,850	3,830	*2,210	*2,210			
1.5 m	kg			*9,310	*9,310	*6,090	5,710	*4,550	3,640	*2,800	2,530			
G. L.	kg			*8,660	*8,660	*7,070	5,440	*5,110	3,500	*2,070	*2,070			
-1.5 m	kg	*6,530	*6,530	*11,460	10,620	*7,410	5,340	*5,330	3,440					
-3.0 m	kg	*9,860	*9,860	*10,580	*10,580	*7,020	5,400							
-4.5 m	kg	*14,290	*14,290	*8,200	*8,200									

#### Notes:

1. Do not attempt to lift or hold any load that exceeds these rated values at their specified load radii and heights.

 Lifting capacities assume a machine standing on a level, firm, and uniform supporting surface.Operator must make allowance for job conditions such as soft or uneven ground, out of level conditions, side loads, sudden stopping of loads, hazardous conditions, insurance large negative to university of the levels.

inexperienced personnel, weight of various other buckets, lifting slings, attachments, etc. 3. Ratings at bucket lift hook.

4. The above rated loads are in compliance with SAE J1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Rated loads marked with an asterisk(\*) are limited by hydraulic capacity rather than tipping load.

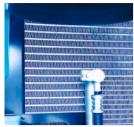
 Operator should be fully acquainted with the operators' manual before operating this machine. Rules for safe operation of equipment should be followed at all times.

6. Capacities apply only to the machine as originally manufactured and normally equipped by KOBELCO Construction Machinery, Ltd.

### Reliable, Safe, and Easy to Maintain

#### Aluminum Oil Cooler Resists Corrosion and Is Easy to Clean

#### The oil cooler's can be easily



disassembled and removed to simplify cleaning. (The photo shows the cooler with the left side removed.)

#### **Reliable Brake and Lock Functions Enhance Safety**



Safety lever-lock prevents accidental operation during cab entry and exit. Swing and parking brakes keep the machine immobilized when stopped.

- Optional boom and arm safety valves keep the attachment from drifting.
- Emergency engine stop overides all other functions to shut the angine down
- other functions to shut the engine down.

5 Lower spring cover protects spring of idler.

Ø Modified shape of motor cover keeps out

6 Three-piece crawler frame provides excellent

### Simple, Rugged Design Ensures That the Machine Retains Its Long-term Value

- 1 High-quality urethane paint resists wear.
- 2 Steel-sheet cover is easy to repair.

KOBELCO

- 6 The floor of the upper body is a single steel
- plate for added strength.Tough, X-frame chassis can handle uneven terrain with ease.



mud and gravel.

rigidity.

Service bonnet has gas damper cylinder for easy opening.



Hydraulic oil gauge shown against white background for easier reading.



#### **KOBELCO CONSTRUCTION MACHINERY CO., LTD.**

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Inquiries To:

#### Multifunctional Check & Safety Monitor Is Easy to Read



- The list of visually checked items has been reduced to 11 to simplify daily maintenance.
- The 29-item selfdiagnostic function pinpoints malfunctions before a serious problem develops and provides emergency back-up.

• The service diagnostic function (23 items) supports quick and accurate repair servicing.

### **Easy to Maintain**





- Easy access to the drain cock
  Introduced flangetime final tenk for
- type fuel tank for easy cleaning • The front panels of
- The foll pares of the oil cooler and radiator are designed with spaces that allow a hand to be inserted.
- Wavy-finned radiator resists clogging.
  - The floor mat is designed for easy washing with water.



Filter life extended to 1,000 hours



Large capacity Super Fine Filter is made of high performance filter medium. It requires changing only once in 1,000 hours double the life of conventional filters. It saves on lifelong operating costs.