

SR-5 SERIES MINI EXCAVATORS

Note: This catalog may contain attachments and optional equipment that are not available in your area. And it may contain photographs of machines with specifications that differ from those of machines sold in your areas. Please consult your nearest KOBELCO distributor for those items you require. Due to our policy of continuous product improvements all designs and specifications are subject to change without advance notice.

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MINI EXCAVATORS

KOBELCO

SR-5 Series

SK20SR SK27SR
SK30SR SK35SR
SK40SR SK50SR
SK55SR



That's KOBELCO!
Your First Choice

An Evolutionary Leap: The Ultra-Compact Yet Tough SR-5 Series

Mini excavators are the machine of choice for small jobs where space is limited, like garden construction and pipe laying. In addition to their minimized tail swing radius, minis have also developed excellent performance characteristics and maneuverability that have broadened their usefulness for many different types of jobs. Now KOBELCO has taken the next evolutionary step by packing even more digging power and practical performance features into the new SR-5 Series while maintaining zero tail swing. No matter what the operation—digging, swinging, loading or dozing—these machines deliver unprecedented performance that will be profitable for owners while fully satisfying the most demanding operator. The SR-5 Series offers further refinement of the reliable mechanisms that have earned KOBELCO a reputation for excellence around the world. But that's not all. Our engineers have also kept the environment in mind when developing their designs, ensuring that the SR-5 machines clear all of the latest exhaust-gas regulations. Thanks to KOBELCO, mini excavators have just taken an evolutionary leap forward, with more powerful performance packed into less space than ever before.



- 1 Ample Performance: Capacity, Power and Speed**
Operability, ability to work well in small spaces, excellent side-ditch digging performance
- 2 Profitable Operation**
Zero swing radius means safe operation to the rear, minimizing repair costs and allowing the operator to concentrate efficiently on the job at hand
- 3 Highly Reliable Construction**
Construction that supports high-level performance
- 4 Easy Maintenance**
Quick and easy daily machine care
- 5 Comfortable Work Environment**
Long hours of operation without fatigue

Fast, Full-Powered Digging and Leveling

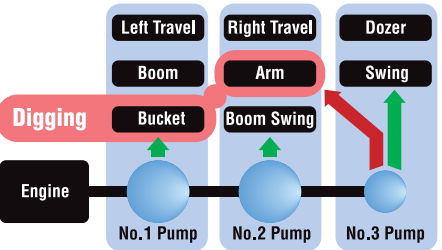
Powerful Digging Performance

The SR-5 mini excavators are built for hard work. Thanks to IFPS (Integrated-Flow Pump System) and a large-capacity engine, the hydraulic flow is more efficient than ever before, with a sensitive responsiveness that reduces cycle times. This combination of tough power and speed greatly increases hourly digging capacity.



Integrated-Flow Pump System (Three Pumps)

The instant the machine begins to dig, extra output from the third pump (which otherwise powers the swing and dozer circuit) is directed to the arm circuit for added power. This ensures fast and smooth arm operation even under heavy loads.



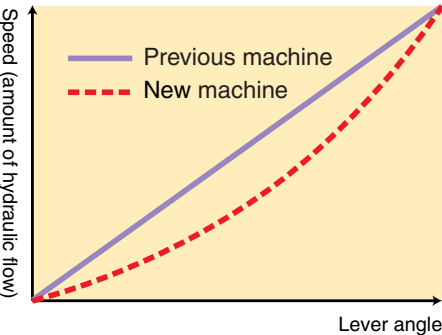
Large-Capacity Engine

The large-capacity engine meets Tier III requirements and packs plenty power for outstanding hydraulic performance.

Smooth, Precise Lever Control

The control valves are carefully adjusted to precisely regulate hydraulic flow when the attachment and other systems begin moving, providing the operator with smooth, pinpoint control.

Attachment lever touch



Powerful and Efficient Dozer Performance

Dozer operations are an indispensable part of pipe laying, ditch digging, and other jobs that require leveling, compacting and refilling. To meet this need, the SR-5 mini excavators combine a powerful travel system with a highly efficient dozer blade that moves earth with less waste. The result: more work completed in less time.



Optimized Bucket/Blade Positioning

The distance between the bucket and dozer blade has been minimized to make surface sweeping more convenient.



New Dozer-Blade Shape

KOBELCO's unique blade design solves this problem by forming the earth into an arc that always falls forward. Because this prevents earth from falling behind the blade, only "one pass" is needed. (Patent pending)



Maximum Approach Angle of 38°

The dozer blade can be raised much higher than before. With a maximum approach angle 38°, it's easy to ride the machine up over mounds of earth, or to load the machine onto a truck for transport.



Hydraulic Pilot-Controlled Dozer Operation Lever



More Travel Power

Larger-capacity travel motors provide more travel torque (an increase of 25% in the SK30SR), resulting in powerful travel.

Automatic Two-Speed Travel

An automatic shift function ensures smoother, more efficient travel on the worksite. The large capacity travel torque enables the machine to perform spin turn in low mode even when the dozer is pushing a heavy load.



The travel lever is fitted with a button for easy switching to Hi-Mode travel.

Optional Steel Shoes/Rubber-padded Shoes

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



Excellent Stability

The front crawler idlers have been adjusted to increase the area of contact between the crawler shoes and the ground. This reduces vibration when traveling. On the SK30SR and SK40SR, stability is enhanced even more by longer crawlers equivalent to what would be used on machines the upper class.



Stability Further Improved

SK55SR is the SK50SR with additional 'add-on' counterweight. Increased stability bolsters working performance. (Specifications vary with region)



Zero tail Swing and Excellent Side-Ditch Digging

Excellent Safety and Operating Efficiency

The zero tail swing means that the operator doesn't have to worry about the rear of the machine when swinging. He can concentrate instead on the job in front of him, which increases performance efficiency.

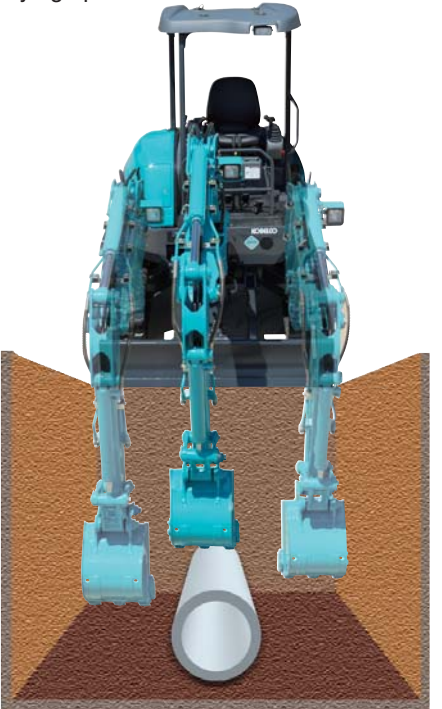
Tail overhang: 0 mm*



* Except SK20SR, SK55SR

Boom Offset Function

The boom offset function makes it possible to do parallel digging without moving the undercarriage, resulting in precise and safe ditch digging and pipe laying operations.



Small Operating Footprint

The combination of the side-ditch digging function and zero tail radius makes it easy to dig next to walls, with a compact operating footprint that makes digging, swinging and dumping possible in very limited spaces.




Exceptional Endurance

Highly Reliable Construction

The boom, arm and swing bracket all have large cross-section areas that provide added strength to the attachment. This mechanical strength is complemented by a high-strength power line and enhanced cooling function for even more solid power.


Stronger Boom and Arm

1. Forged boom top
2. Self-locking pins firmly lock the boom and arm to prevent the boom top from opening laterally.
3. Stronger box-section boom
4. Reinforced arm handles diverse applications.

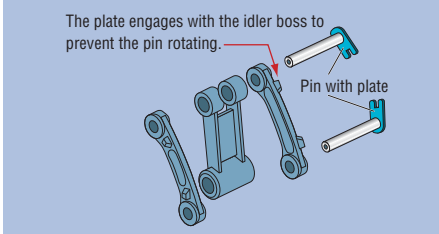


Bucket

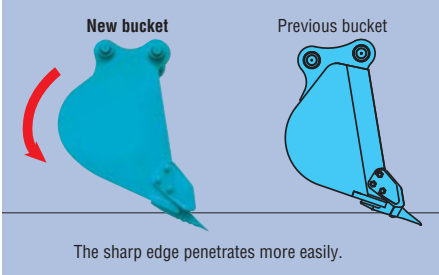
1. Cast idler links provide greater strength.
2. The bucket's hydraulic piping passes through the arm bracket for added protection.



3. Plate pins prevent idler-pin rotation.




4. Newly shaped bucket



The sharp edge penetrates more easily.


Dozer

1. Increased torsional strength in dozer arms
2. Dozer's hydraulic piping is easily replaced
3. Dozer cylinder cover




Swing Bracket

1. Large, thick cast-iron swing bracket
2. Plate-type pin prevents unwanted rotation




Reinforced Lower Structure



Outstanding Cooling Performance

The high-performance, high-capacity radiator and oil cooler, coupled with larger engine-oil capacity, deliver a heat balance that's comparable to a full-size machine.




Highly Reliable Power Plant

The size of many of the engine components has been increased for improved reliability, including: a large battery, large-capacity radiator, large-capacity oil cooler, and increased starter-motor and alternator capacities.

Large-Size Components

1. Breather prevents malfunctions in hydraulic components.
2. Large battery and large-capacity radiator
3. Large-capacity oil cooler
4. Increased starter-motor capacity
5. Increased alternator capacity



Easy Maintenance

Easy Daily Maintenance

Start-up checks are essential for safe and reliable machine operation. With the SR-5 machines, all start-up checks can be performed at ground level, with an easy-to-understand layout and cover design that simplify access and reduce check times.

Routine Maintenance

Ground-level start-up checks



1. Hour meter can be checked from the ground.
2. Fuel tank can be filled from the ground.
3. Right cover has a small window that makes N&B selection easily.



4. A compartment cover under the seat provides easy access to electrical components.



5. Wider opening cover provides easy access to valves.





Easy Cleaning



6. Radiator is easy to clean.
7. Two-piece floor mats for easy washing.
8. No tools needed for fuel-tank drain cock.
9. Oil pan for engine oil filter.



• Quick drain for engine oil provided as standard.

Exclusive Super-Fine Filter

This exclusive super-fine filter is environmentally friendly, lasts 1,000 hours, and is easy to replace.



Conventional filter (X 250) Super fine filter (X 250)

Comfortable Work Environment

Spacious Work Environment

Broader floor space and a greater sliding range for the seat give operators plenty of foot room. Wide operational space is provided with more room between the left and right control consoles.



Photo includes optional wrist rests.

Easy Access

A wide-opening door and a left-hand control box with safety lever that rises higher than before, make it much easier for operators to enter and exit the cab.

Wide Cab Entryway

1. Wider door opening
2. Front-window link does not obstruct cab entryway
3. Large, sturdy door handle



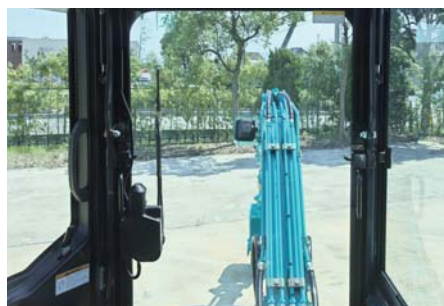
door handle

The Most Foot Room in Its Class

The seat has ample space for sliding forward and back.

Visibility

Wider front window ensures an open, panoramic view.



Work Lights

Work lights have been added on both sides to provide a clear view during nighttime operations.



Operator Safety

Newly Developed ROPS Cab

Deformed pipe is used in the cab frame to increase rigidity, resulting in a 50% increase in durability and service life.



Exclusive, Newly Designed TOPS/FOPS Canopy

The newly designed three-support TOPS/FOPS canopy ensures easy access, and provides an open view of digging operations when swinging.



Note: Specifications for the cab and canopy differ depending on the region.

Amenities

Levers, instruments, and accoutrements have been laid out with a priority placed on ease of use, straightforward access, ergonomic positioning, and clear visibility.



Monitor display panel set at an easy-to-read angle
Storage compartment for personal items



Easy-access, easy-turn ignition with rubber boots for protection against moisture and freezing



Cup holder



Easy-access grease-gun holder



Front window features gas damper cylinders for smooth and easy opening.



Room light, coat hook and safety hammer



Retractable seat belt

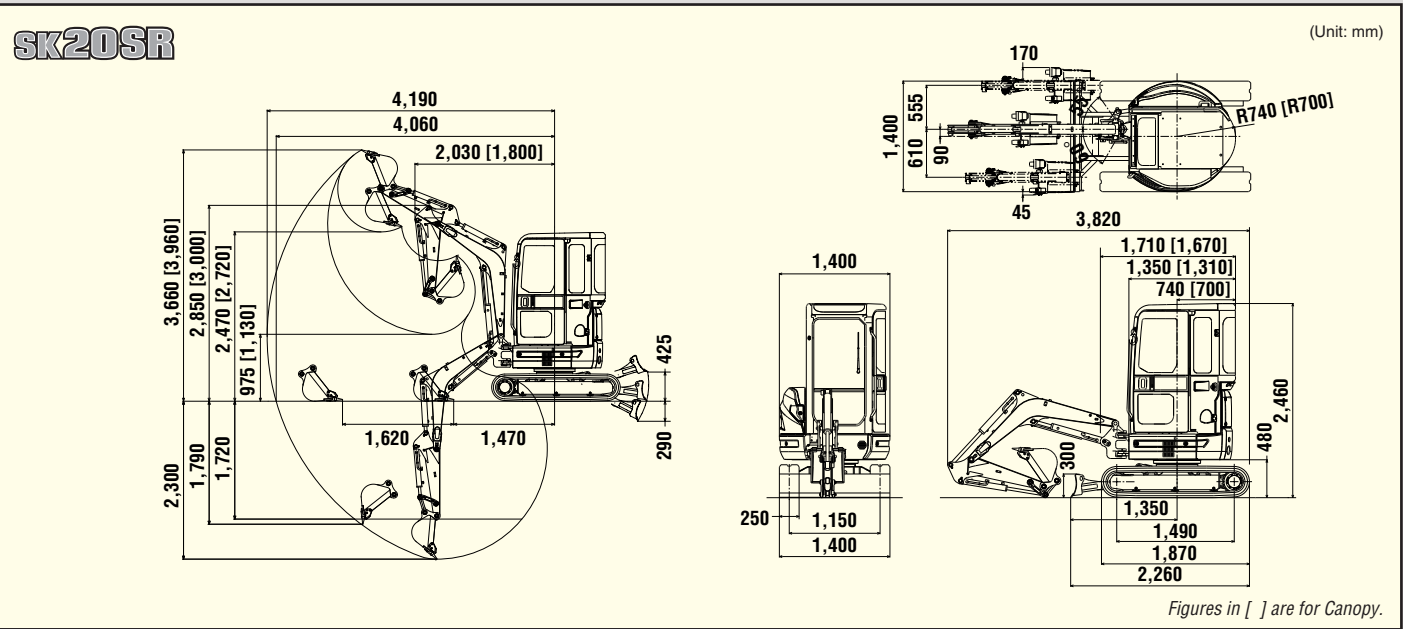


Optional wrist rest

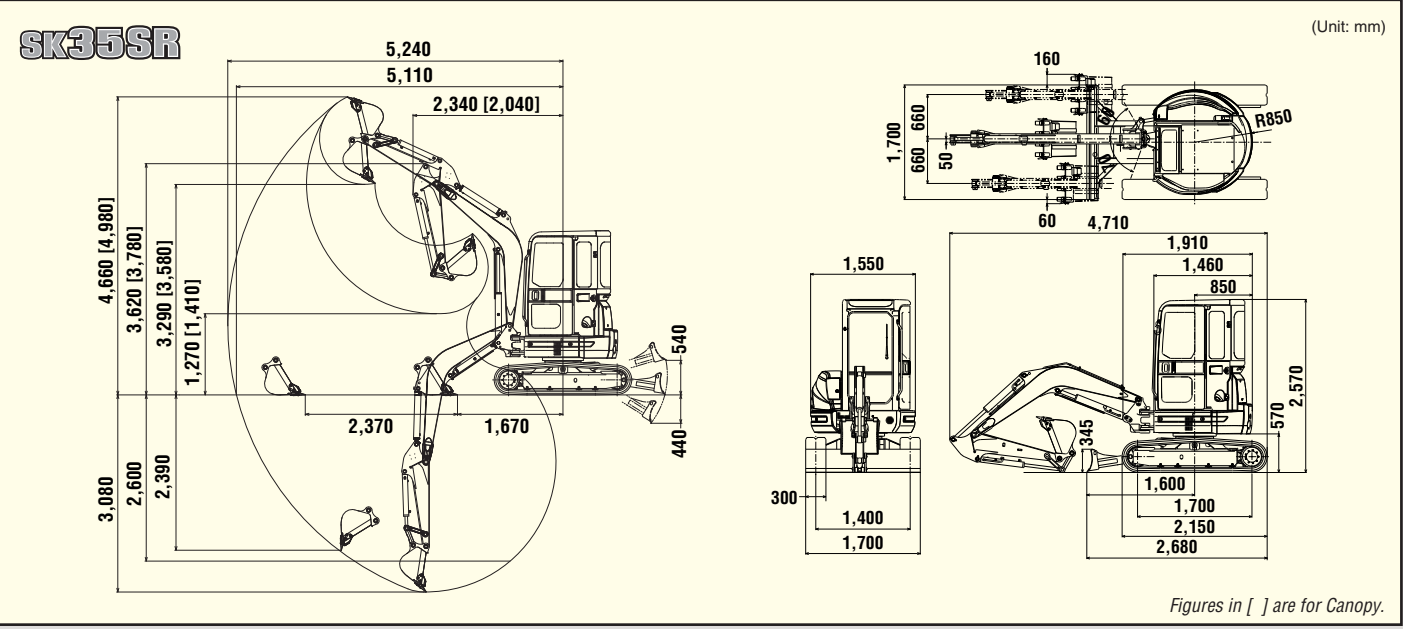
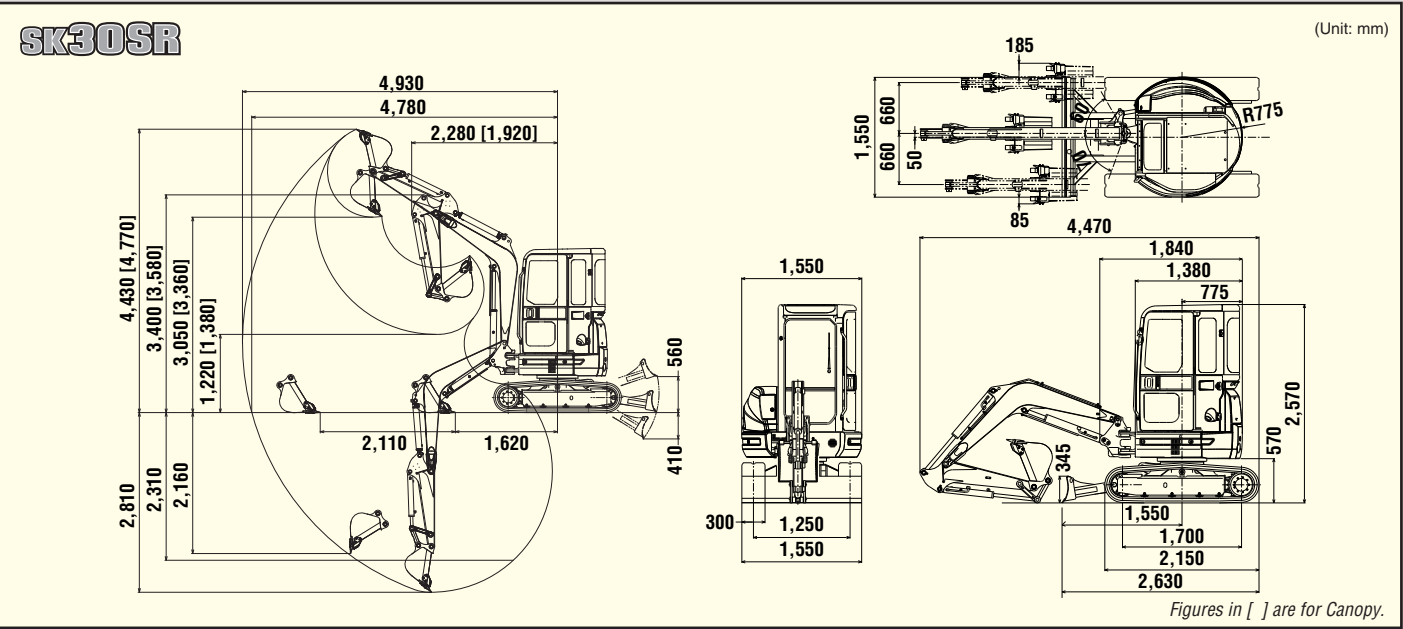
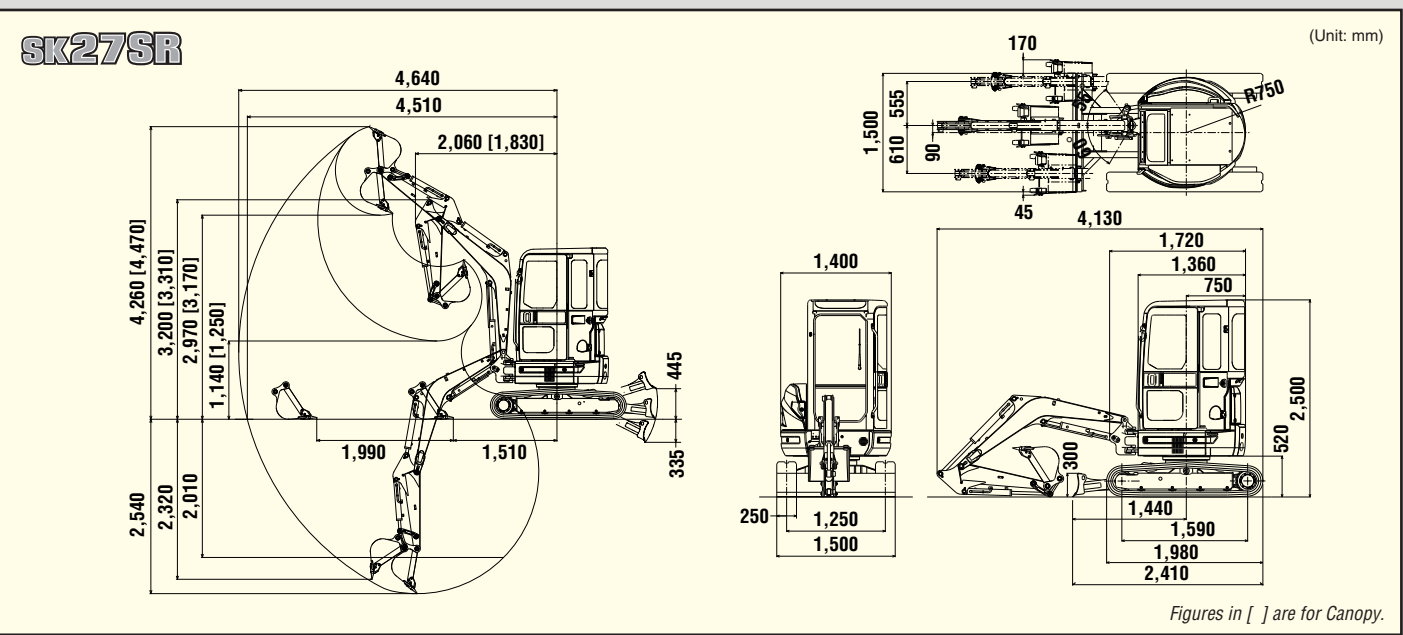
SPECIFICATIONS

GENERAL									
MODEL			SK20SR	SK27SR	SK30SR	SK35SR	SK40SR	SK50SR	SK55SR
Type			SK20SR-5	SK27SR-5	SK30SR-5	SK35SR-5	SK40SR-5	SK50SR-5	SK55SR-5
Machine Mass	Cab	kg	2,240	2,630	3,140	3,720	4,340	4,770	5,260
	Canopy	kg	2,100	2,490	3,000	3,580	4,200	4,630	4,980
Bucket Capacity		m³	0.066	0.08	0.09	0.11	0.14	0.16	0.21
Bucket Width (With Side Cutter)		mm	450	500	500	600	600	650	750
Arm Length		m	0.98	1.12	1.18	1.32	1.43	1.56	
Bucket Digging Force		kN {kgf}	19.3 {1,970}	22 {2,240}	27.4 {2,790}	27.4 {2,790}	35.3 {3,600}	35.3 {3,600}	
Arm Crowding Force		kN {kgf}	13.7 {1,400}	14.8 {1,510}	17.2 {1,760}	18.7 {1,910}	22.0 {2,250}	26.3 {2,680}	
ENGINE									
Model			YANMAR 3TNV82A		YANMAR 3TNV88		YANMAR 4TNV88		
Type			Water-cooled, 4 cycle, 3 cylinder, direct injection, diesel				Water-cooled, 4 cycle, 4 cylinder, direct injection, diesel		
Power Output		kW/min ⁻¹ {PS/rpm}	15.9/2,200 {21.6/2,200}		21.2/2,400 {28.8/2,400}		29.3/2,400 {41.3/2,400}		
Max. Torque		N·m/min ⁻¹	79/1,320		98.0/1,440		131.3/1,440		
Displacement		L	1.33		1.642		2.189		
Fuel Tank		L	28		38		53		
HYDRAULIC SYSTEM									
Pumps			Two variable displacement pumps						
Max. Flow		L/min	2 × 26.4		2 × 38.4		2 × 57.1		
Relief Valve Setting		MPa {kgf/cm²}	23 {235}						
Hydraulic Oil Tank (System)		L	20 (25)		38 (48)		42 (63)		
TRAVEL SYSTEM									
Travel Motor			2 × Axial piston motor						
Travel Brake			Hydraulic motor per motor						
Parking Brake			Oil disk brake per motor						
Travel Speed (High /Low)		km/h	4.1 /2.3		4.5 /2.5		4.6 /2.8		
CRAWLER									
Shoe Width		mm	250		300		400		
Ground Pressure	Cab	kPa {kgf/cm²}	27.0 {0.28}	30.0 {0.31}	28.0 {0.29}	33.0 {0.34}	25.0 {0.26}	27.0 {0.28}	30.0 {0.31}
	Canopy	kPa {kgf/cm²}	26.0 {0.27}	28.0 {0.29}	27.0 {0.28}	32.0 {0.33}	24.0 {0.25}	26.0 {0.27}	28.4 {0.29}
DOZER BLADE									
Width × Height		mm	1,400 × 300	1,500 × 300	1,550 × 345	1,700 × 345	1,960 × 345		
Working Ranges (Height/Depth)		mm	425/290	445/335	560/410	540/440	505/325	495/375	
SWING SYSTEM									
Swing Motor			Axial piston motor						
Swing Brake			Hydraulic brake						
Parking Brake			Oil disk brake						
Swing Speed		min ⁻¹ {rpm}	8.7 {8.7}		8.9 {8.9}		8.8 {8.8}		
Tail Swing Radius		mm	740/700: Canopy	750	775	850	980	980	1,080
Min. Front Swing Radius	Over The Front	Cab	mm	2,030	2,060	2,280	2,340	2,290	2,340
		Canopy	mm	1,800	1,830	1,920	2,040	2,100	2,150
Swing Radius	At Full Boom Swing	Cab	mm	1,750	1,780	2,100	2,170	2,010	2,130
		Canopy	mm	1,560	1,570	1,590	1,690	1,740	1,770
SIDE DIGGING MECHANISM									
Type			Boom swing						
Offset Angle	To The Left	degree	60	60	70	70	70	70	
	To The Right	degree	55	55	60	60	60	60	

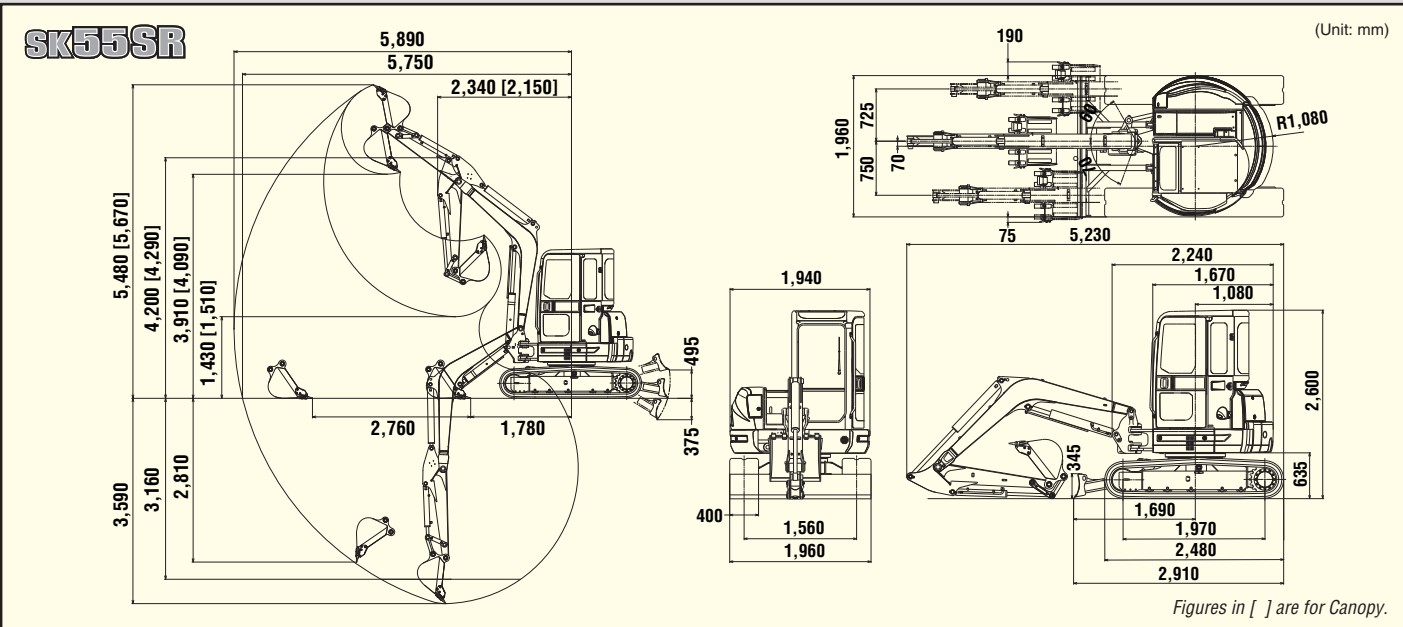
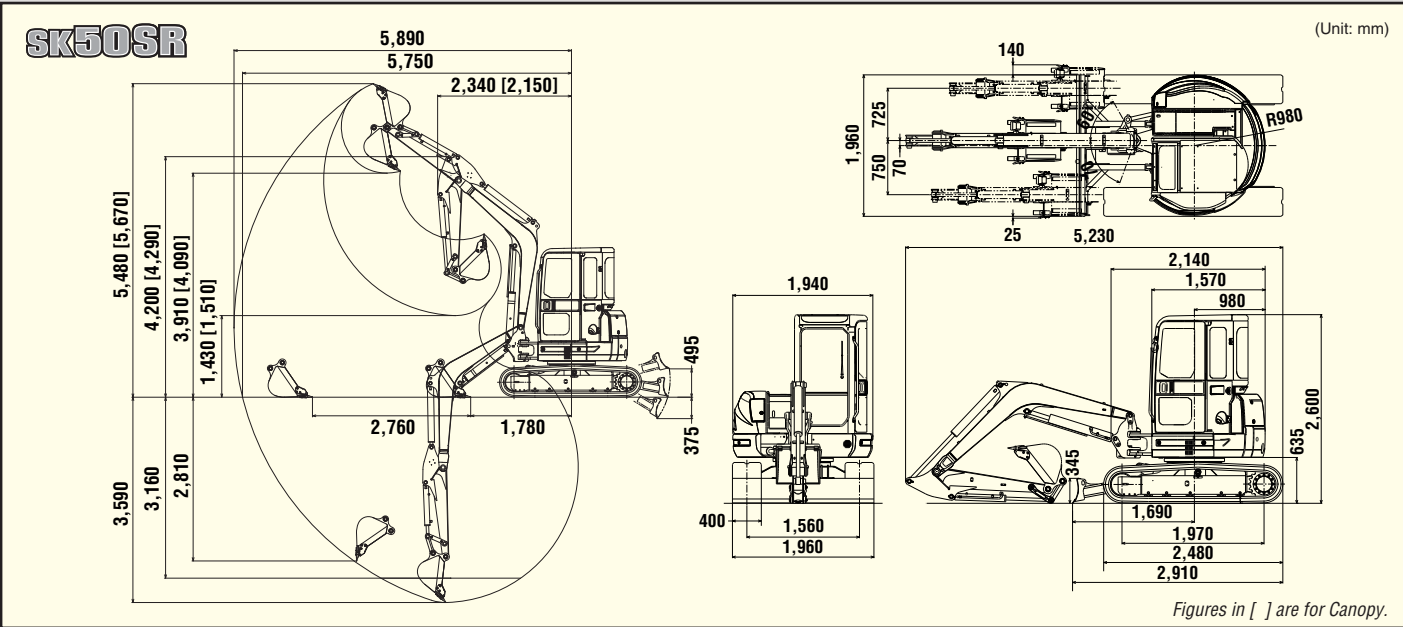
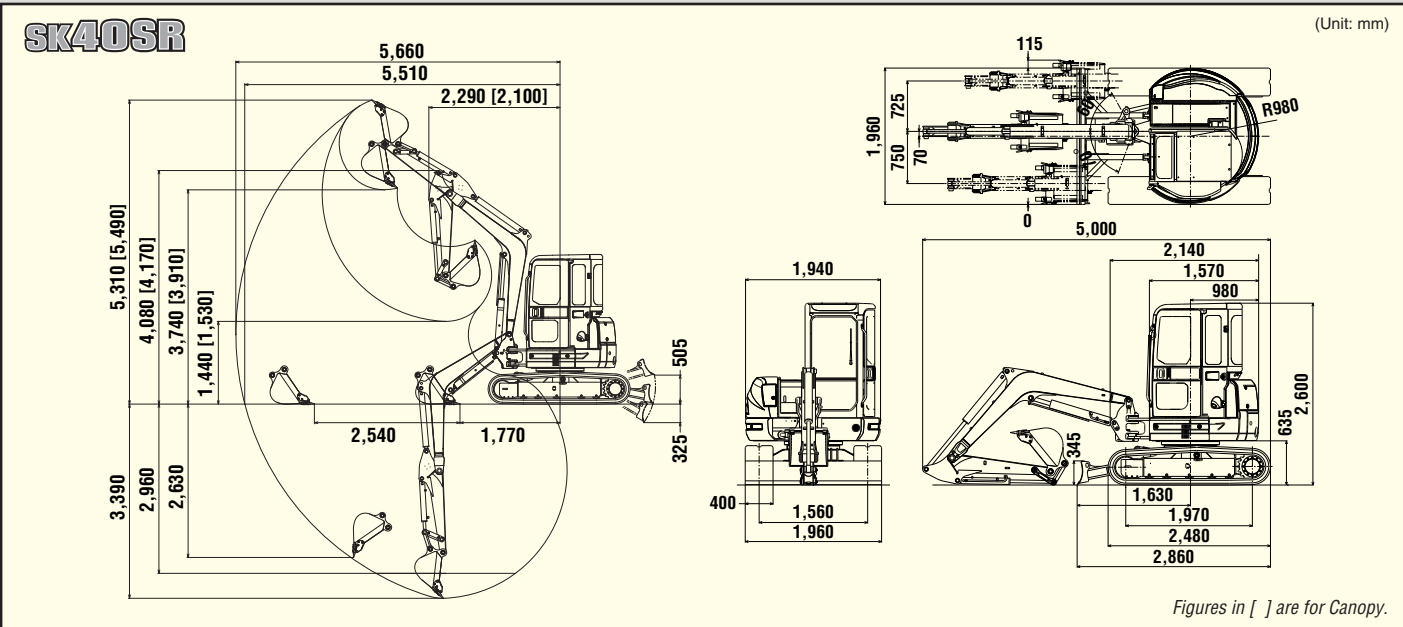
WORKING RANGES & DIMENSIONS



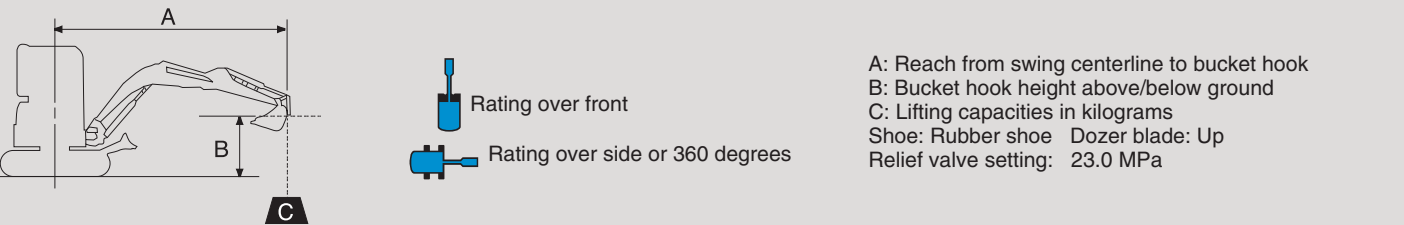
WORKING RANGES & DIMENSIONS

















WORKING RANGES & DIMENSIONS



LIFTING CAPACITIES



SK20SR		Standard arm: 0.98 m Shoe: 250 mm					
B	A	1.0 m		2.0 m		3.0 m	
							
2.0 m	kg					*440	330
1.0 m	kg			820	570	420	300
G. L.	kg	*1,040	*1,040	780	530	400	290
-1.0 m	kg	*1,770	*1,770	780	540		

SK27SR		Standard arm: 1.12 m Shoe: 250 mm							
B	A	1.0m		2.0 m		3.0 m		4.0 m	
									
3.0 m	kg					*410	*410		
2.0 m	kg					*470	450		
1.0 m	kg			*1,090	770	560	420	350	260
G. L.	kg			1,040	730	530	390		
-1.0 m	kg	*1,620	*1,620	1,050	740	530	390		
-2.0 m	kg			*550	*550				

SK30SR		Standard arm: 1.18 m Shoe: 300 mm							
B	A	1.0m		2.0 m		3.0 m		4.0 m	
2.0 m	kg							370	310
1.0 m	kg							350	300
G. L.	kg	*1,170	*1,170	1,080	880	570	480	340	280
-1.0 m	kg	*1,810	*1,810	1,050	850	530	440		
-2.0 m	kg			1,100	900				

SK35SR		Standard arm: 1.32 m Shoe: 300 mm							
B	A	1.0m		2.0 m		3.0 m		4.0 m	
3.0 m	kg							*550	490
2.0 m	kg							550	480
1.0 m	kg							520	450
G. L.	kg			*1,360	1,300	820	710	500	430
-1.0 m	kg	*1,820	*1,820	1,550	1,270	780	670		
-2.0 m	kg	*2,590	*2,590	*1,430	1,320	780	660		

SK40SR		Standard arm: 1.43 m Shoe: 400 mm							
B	A	1.0m		2.0 m		3.0 m		4.0 m	
3.0 m	kg							670	590
2.0 m	kg							640	560
1.0 m	kg			*1,980	1,870	1,060	930	600	530
G. L.	kg	*1,540	*1,540	1,750	1,550	960	830	570	500
-1.0 m	kg	*2,110	*2,110	1,880	1,570	900	780	570	490
-2.0 m	kg	*3,050	*3,050	1,940	1,630	930	810		

SK50SR		Standard arm: 1.56 m Shoe: 400 mm									
B	A	1.0m		2.0 m		3.0 m		4.0 m		5.0 m	
4.0 m	kg							910	720		
3.0 m	kg							910	710		
2.0 m	kg					*1,420	1,090	870	670	580	450
1.0 m	kg					1,300	980	820	630	570	430
G. L.	kg			*2,000	1,810	1,240	930	790	600		
-1.0 m	kg	*2,410	*2,410	2,630	1,830	1,230	920	780	590		
-2.0 m	kg	*3,430	*3,430	2,690	1,890	1,260	940				

SK55SR		Standard arm: 1.56 m Shoe: 400 mm									
B	A	1.0m		2.0 m		3.0 m		4.0 m		5.0 m	
4.0 m	kg							1,010	850		
3.0 m	kg							1,000	860		
2.0 m	kg					1,560	1,320	980	830	670	560
1.0 m	kg					1,480	1,230	940	790	650	550
G. L.	kg			1,640	1,640	1,430	1,180	910	770		
-1.0 m	kg	2,420	2,420	2,980	2,320	1,420	1,180	910	760		
-2.0 m	kg	3,780	3,780	3,030	2,380	1,460	1,210				

Notes:

- Do not attempt to lift or hold any load that is greater than these rated values at their specified load radius and height. Weight of all accessories must be deducted from the above lifting capacities.
- Lifting 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, sudden stopping of loads, hazardous conditions, experience of personnel, etc.
- Ratings at bucket lift hook.
- The above rated loads are in compliance with SAE Hydraulic Excavator Lift Capacity Rating Standard J 1097. They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Rated loads marked with 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 and rules for safe operation of equipment should be adhered to at all times.
- Capacities apply to only machine as originally manufactured and normally equipped by KOBELCO CONSTRUCTION MACHINERY CO., LTD.