

KOMATSU®

PC88MR-8

HORSEPOWER

Gross: 50.7 kW 68 HP @ 1950 rpm

Net: 49 kW 65 HP @ 1950 rpm

OPERATING WEIGHT

8225–8395 kg 18,140–18,510 lb

BUCKET CAPACITY

0.09–0.34 m³ 0.12–0.45 yd³

ecot3

PC
88MR



Photo may include optional equipment.

COMPACT
HYDRAULIC EXCAVATOR

WALK-AROUND

Ecology and Economy Features

● **Low emission engine**

A powerful, turbocharged and air-to-air aftercooled Komatsu SAA4D95LE-5 provides **49 kW** 65 HP. This engine is EPA Tier 4 Interim and EU Stage 3A emissions certified without sacrificing power or machine productivity.

● **Low operation noise**

The dynamic noise is reduced providing low noise operation.

See page 4.

Productivity Features

● **Tight tail swing**

- Excellent operation in tight tail swing radius design
Tail swing radius: **1335 mm** 4'5"

● **High mobility**

- Large drawbar pull and swing force are evident when operating on a slope or other rough terrain.
Max. drawbar pull: **66.9 kN** 6820 kgf
15,050 lb
- The machine travel speed changes automatically to Hi or Lo at optimal points according to the travel load.

● **Mode selection**

- Economy mode improves fuel consumption.
- Attachment mode for optimum engine rpm, hydraulic flow, 2way
- Eco-gauge for energy-saving operations
- Extended idling caution for fuel conservation

See pages 4 and 5.

Safety Features

- Cab dedicated to hydraulic excavator for protecting the operator in the event of a roll over accident.
- Safety enhancement with large side-view and rear-view mirrors.

See page 7.



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BUCKET CAPACITY

0.09 – 0.34 m³

0.12 – 0.45 yd³

Large Comfortable Cab

- Low noise design cab
- Sliding convex door facilitates easy entrance in confined areas.
- Large cab improves working space.

See page 6.

Large TFT LCD Monitor

- Easy-to-see and use 7" large multi-function color monitor
- Can be displayed in 12 languages for global support.

TFT : Thin Film Transistor
LCD : Liquid Crystal Display

See page 9.



Easy Maintenance

- Side-by-side cooling function enables only the cooling unit to be attached and detached.
- Easy access to engine oil filter, engine main fuel filter and fuel drain valve
- Equipped with the fuel pre-filter (with water separator)
- Equipped with the Equipment Management Monitoring System (EMMS) monitoring system.

See page 8.

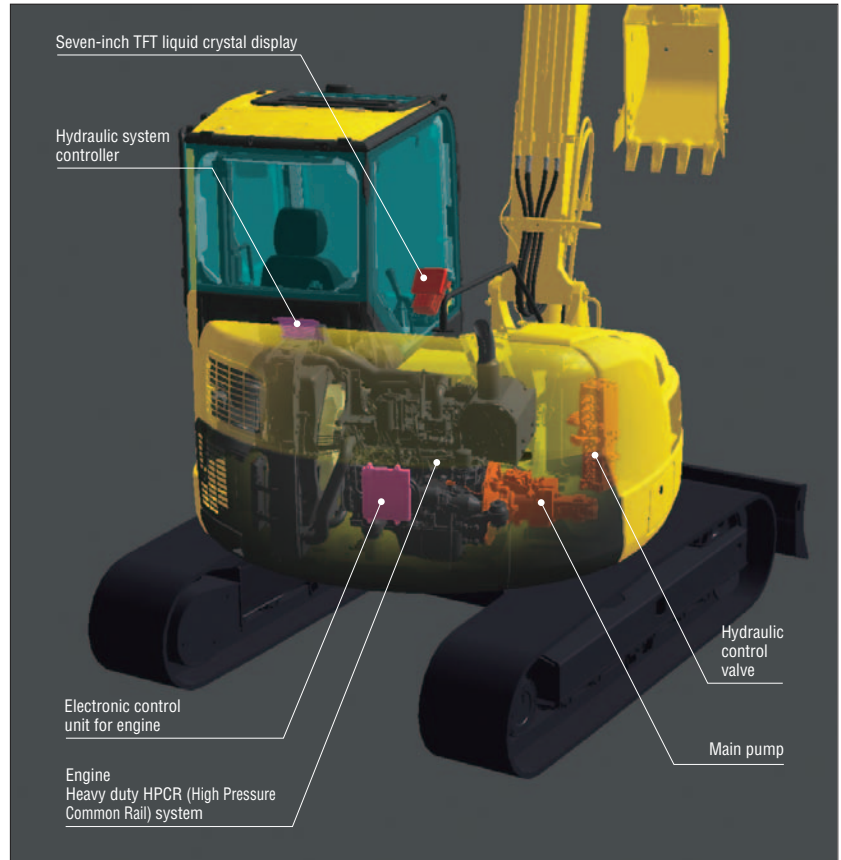
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PRODUCTIVITY & ECOLOGY FEATURES

Komatsu Technology

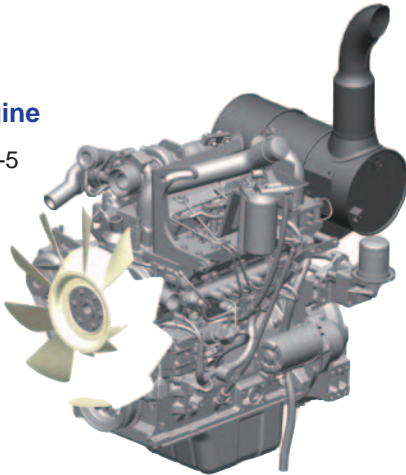


Komatsu develops and produces all major components in house such as engines, electronics and hydraulic components. Combining “Komatsu Technology”, and customer feedback, Komatsu is achieving great advancements in technology. To achieve both high levels of productivity and economical performance, Komatsu has developed the main components with a total control system. The result is a new generation of high performance and environment-friendly excavators.



Low Emission Engine

Komatsu SAA4D95LE-5 is EPA Tier 4 Interim and EU Stage 3A emissions certified.



Low Operation Noise

Enables low noise operation using the low-noise engine and methods to cut noise at source.

Electronically controlled common rail type engine

- Multi-staged injection

Low noise design

- Optimal arrangement of sound absorbing materials
- Partition between the cab and engine room



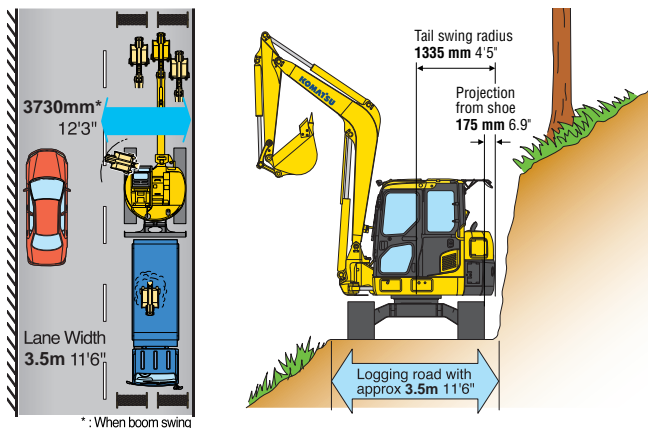
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Advantage even in Confined Job Site

Tight Tail Swing

The narrow swing area is well suited for operation in confined areas with only a **175mm (6.9 inch)** protrusion over the tracks.

Road & bridge work Road construction



Against wall

PC88MR-8 can efficiently work by using swing boom.



High Mobility

The PC88MR-8 exceptional travel performance is provided by large drawbar pull and single pump with double flow, and it demonstrates superb maneuverability while operating at its optimum travel speed. It exhibits a large drawbar pull for moving on job sites, traveling in rough terrain and climbing steep slopes.

Maximum drawbar pull: 66.9 kN 6820 kgf 15050 lb

Improved Swing Performance

Powerful swing force increases work efficiency on slopes.

Auto-decel

Engine speed automatically slows down when all control levers are set in neutral to minimize fuel consumption.

Two Automatic Travel Speeds

High or low—whichever speed suits the ground and job conditions—can be selected with one touch. As terrain changes, travel speed will automatically shift up or down within the selected speed range.

Working Modes Selectable

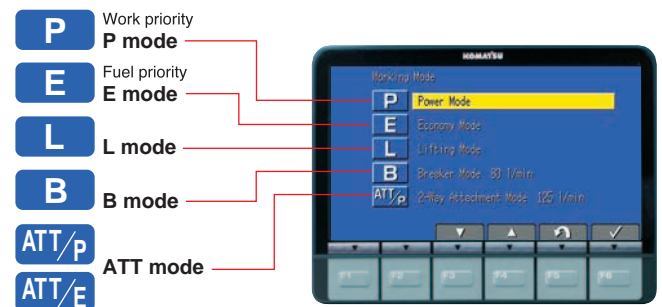
The PC88MR-8 excavator is equipped with five working modes (P, E, L, B and ATT mode). Each mode is designed to match engine speed and pump speed with the current application. This provides the flexibility to match equipment performance to the job at hand.

Working Mode	Application	Advantage
P	Power mode	<ul style="list-style-type: none"> Maximum production/power Fast cycle times
E	Economy mode	<ul style="list-style-type: none"> Good cycle times Better fuel economy
L	Lifting mode	<ul style="list-style-type: none"> Engine rpm reduction
B	Breaker mode	<ul style="list-style-type: none"> Optimum engine rpm, hydraulic flow
*ATT/P or ATT/E	Attachment mode	<ul style="list-style-type: none"> Optimum engine rpm, hydraulic flow, 2way

*: It is possible to set ATT/P mode or ATT/E mode.

ATT/P Power mode for attachment mode

ATT/E Economy mode for attachment mode



Eco-gauge that Assists Energy-saving Operations

The Eco-gauge on the right side of the multi-function color monitor provides environment-friendly energy-saving operation. Allows focus on operation in the green range with reduced CO₂ emissions and efficient fuel consumption.



Eco-gauge

Idling Caution

To prevent unnecessary fuel consumption, an idling caution is displayed on the monitor, if the engine idles for 5 minutes or more.



WORKING ENVIRONMENT

Large Comfortable Cab



Multi-position Controls

The multi-position, PPC (pressure proportional control) levers allow the operator to work in comfort while maintaining precise control.

A double-slide mechanism allows the seat and controllers to move together or independently, allowing the operator to position the seat and controllers for maximum productivity and comfort.

Low Cab Noise

Cab is highly rigid and has excellent sound absorption ability. Thorough improvement of noise source reduction and use of low noise engine, hydraulic equipment, and air conditioner allows this machine to generate a low level of noise.

Large Cab

Large cab provides ample operation space. The cab has wide doorway for easy access.



Automatic Air Conditioner

Automatic air conditioner is utilized. The bi-level control function keeps the operator's head and feet cool and warm respectively. This improved air flow function keeps the inside of the cab comfortable throughout the year. Defroster function keeps cab glass clear.



Sliding Convex Door

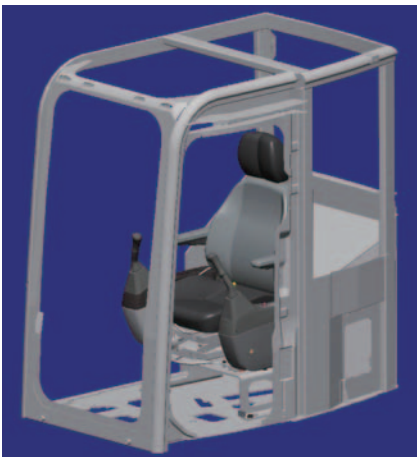
The sliding convex door facilitates easy entrance in confined areas.



Safety Features

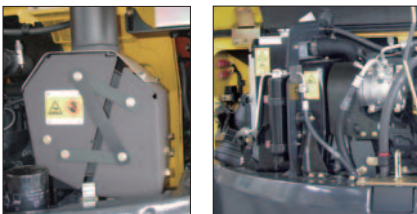
New Cab Design for Hydraulic Excavators

The cab is designed specifically for hydraulic excavators and gains reinforced strength from the pipe-structured cab framework. The cab framework provides the high durability and impact resistance with very high impact absorbency. The seat belt keeps the operator in the seat of the cab in the event of a roll over.



Thermal and Fan Guards

Thermal and fan guards are placed around high-temperature parts of the engine and fan drive.



Pump/engine Room Partition

Pump/engine room partition prevents oil from spraying onto the engine if a hydraulic hose should burst.

Slip-resistant Plates

Highly durable slip-resistant plates maintain superior traction performance for the long term.



Lock Lever

When lock lever is placed in lock position all hydraulic controls (travel, swing, boom, arm, bucket, boom swing and blade) are inoperable.



Lever shown in lock position

Side-view and Rear-view Mirrors

Large side mirror and rear mirror allow the PC88MR-8 to meet the new ISO visibility requirements.



Travel Alarm

An alarm is installed as standard equipment to give other workers a warning when the machine travels in forward or reverse.

Retractable Seat Belt

Easy-to-use retractable seat belt is employed.

Emergency Escape Hammer

The cab is equipped with an emergency escape hammer for breaking the rear window glass in case of an emergency.



Wide Visibility

Large cab and extended front glass enable operator to get better visibility.



Skylight

Skylight with window can be opened for overhead visibility.



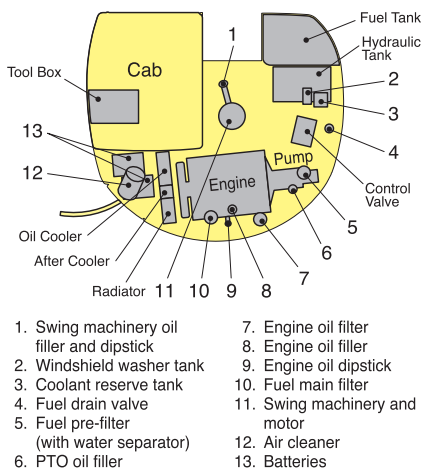
MAINTENANCE FEATURES

Easy Maintenance

Komatsu designed the PC88MR-8 to have easy service access. By doing so, routine maintenance and servicing are less likely to be skipped, which can mean a reduction in costly downtime later on. Here are some of the many service features found on the PC88MR-8.

Optimum Maintenance Layout

With the engine hood, right side hood and side service doors, it is possible to access the major maintenance points from ground level. Furthermore, the fuel drain valve, engine oil filter and swing machinery oil filler are remote mounted, facilitating easy maintenance.



Side-by-side Cooling

Since radiator, aftercooler and oil cooler are arranged in parallel, it is easy to clean, remove and install them. Radiator, aftercooler, and oil cooler made of aluminum have high cooling efficiency and are easily recycled.



Equipped with the Fuel Pre-filter (with Water Separator)

Removes water and contaminants in the fuel to prevent fuel problems. (with built-in priming pump)



Air Conditioner Filter

The air conditioner filter is removed and installed without the use of tools facilitating filter maintenance.



External air conditioner filter

Easy Access to Engine Oil Filter, Engine Main Fuel Filter and Fuel Drain Valve

Engine oil filter, engine main fuel filter and fuel drain valve are remote mounted to improve accessibility.



Long Greasing Interval

All bushing lubrication intervals of work equipment except arm top bushings are 500 hours, reducing maintenance cost.

Large TFT LCD Monitor

Large Multi-lingual LCD Monitor

A large user-friendly color monitor enables safe, accurate and smooth work. Improved screen visibility is achieved by the use of TFT liquid crystal display that can easily be read at various angles and lighting conditions. Simple and easy to operate switches. Industry first function keys facilitate multi-function operations. Displays data in 12 languages to globally support operators around the world.



Indicators

- 1 Auto-decelerator
- 2 Working mode
- 3 Travel speed
- 4 Engine water temperature gauge
- 5 Hydraulic oil temperature gauge
- 6 Fuel gauge
- 7 Eco-gauge
- 8 Function switches menu

Basic operation switches

- 1 Auto-decelerator
- 2 Working mode selector
- 3 Traveling selector
- 4 Buzzer cancel
- 5 Wiper
- 6 Windshield washer

EMMS (Equipment Management Monitoring System)

Monitor function

Controller monitors engine oil pressure, coolant temperature and battery charge etc. If controller finds any abnormality, it is displayed on the LCD.



Maintenance function

Monitor informs replacement time of oil and filters on LCD when the replacement interval is reached.



Trouble data memory function

Monitor stores abnormalities for effective troubleshooting.

Option

Roadliner

Ideal performance has been achieved with combining the merits of rubber and the strengths of steel in the new Road Liner shoes.



Optional Blade

Bolt-on cutting edge type



Additional Counter Weight

Additional weight is designed for increased lift capacity and easy installation.



SPECIFICATIONS



ENGINE

Model Komatsu SAA4D95LE-5
 Type Water-cooled, 4-cycle
 Aspiration Turbocharged, and air-to-air aftercooled
 Number of cylinders 4
 Bore x stroke **95 mm x 115 mm** 3.74" x 4.53"
 Piston displacement **3.26 ltr** 199 in³
 Governor All-speed control, electronic
 Horsepower
 SAE J1995 Gross **50.7 kW** 68 HP
 ISO 9249 / SAE J1349 Net **49 kW** 65 HP
 Rated rpm 1950 rpm
 Fuel system Direct injection
 Lubrication system
 Method Gear pump, force-lubrication
 Filter Full-flow
 Air cleaner Dry-type with double elements
 and auto dust evacuator, plus dust indicator
 Starting motor **4.5 kW/24 V**
 Alternator **35 A/24 V**
 Battery **55 Ah/2 x 12 V**
 EPA Tier 4 Interim and EU Stage 3A emissions certified



HYDRAULICS SYSTEM

Type HydrauMind (Hydraulic Mechanical Intelligence New Design) system, Closed-center system with load-sensing valve and pressure-compensated valve
 Main pumps:
 Pump for Boom, arm, bucket and travel circuits
 Type Variable displacement, axial piston
 Maximum flow **160 ltr/min** 42.3 U.S. gal/min
 Pump for Swing and blade
 Type Fixed displacement gear
 Maximum flow **70 ltr/min** 18.5 U.S. gal/min
 Hydraulic motors:
 Travel 2 x piston motor with parking brake
 Swing 1 x piston motor with swing holding brake
 Relief valve setting:
 Implement, travel circuit **26.5 MPa** 270 kgf/cm² 3,840 psi
 Swing and blade circuit **21.1 MPa** 215 kgf/cm² 3,060 psi

Hydraulic cylinders:
 (Number of cylinders – bore x stroke x rod diameter)
 Boom 1–**115 mm x 988 mm x 65 mm** 4.5" x 38.9" x 2.6"
 Arm 1–**100 mm x 861 mm x 60 mm** 3.9" x 33.9" x 2.4"
 Bucket 1– **90 mm x 710 mm x 55 mm** 3.5" x 28.0" x 2.2"
 Boom swing 1–**120 mm x 638 mm x 60 mm** 4.7" x 25.1" x 2.4"
 Blade 1–**130 mm x 200 mm x 65 mm** 5.1" x 7.9" x 2.6"



STANDARD EQUIPMENT

- Air cleaner, double element with auto dust evacuator
- Alternator, 35Ampere, 24V
- Automatic air conditioner
- Auto deceleration
- Batteries, 55Ah/2 x 12V
- Blade
- Cab which includes: floor mat, intermittent front windshield wiper and washer, large ceiling hatch, pull-up front window, removable lower windshield
- Cooling fan, suction type
- Monitor panel
- Rear view mirrors (LH, rear)
- Seat belt **50mm 2"**
- Shoes, —**450mm** 17.7" Triple grouser
- Starting motor 4.5kW
- Suspension seat
- Travel alarm
- Working light on boom



SWING SYSTEM

Driven by Hydraulic motor
 Swing reduction Planetary gear
 Swing circle lubrication Grease-bathed
 Swing lock Mechanical disc brake
 Swing speed 10 rpm



DRIVES AND BRAKES

Steering control Two levers with pedals
 Drive method. Hydrostatic
 Maximum drawbar pull. **66.9 kN** 6820 kgf 15,050 lbf
 Maximum travel speed: High **5.1 km/h** 3.2 mph
 Low **2.9 km/h** 1.8 mph
 Service brake Hydraulic lock
 Parking brake Mechanical disc



UNDERCARRIAGE

Center frame X-frame
 Track frame Box-section
 Seal of track Sealed track
 Track adjuster Hydraulic
 Number of shoes 39 each side
 Number of carrier rollers 1 each side
 Number of track rollers 5 each side



COOLANT AND LUBRICANT CAPACITY (REFILLING)

Fuel tank **125 ltr** 33.0 U.S. gal
 Radiator **10 ltr** 2.6 U.S. gal
 Engine **11.5 (11.0) ltr** 3.0 (2.9) U.S. gal
 Final drive, each side **1.1 ltr** 0.3 U.S. gal
 Swing drive **2.8 ltr** 0.7 U.S. gal
 Hydraulic tank **100 (56) ltr** 26.4 (14.8) U.S. gal



OPERATING WEIGHT (APPROXIMATE)

Operating weight including **3405 mm** 11'2" one-piece boom, **1650 mm** 5'5" arm, SAE heaped **0.28 m³** 0.37 yd³ backhoe bucket, blade, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Shoes		Operating Weight		Ground Pressure		
mm	in	kg	lb	kPa	kg/cm ²	psi
450	17.7"	8225	18,140	36.3	0.37	5.26
600	23.6"	8395	18,510	27.5	0.28	3.98

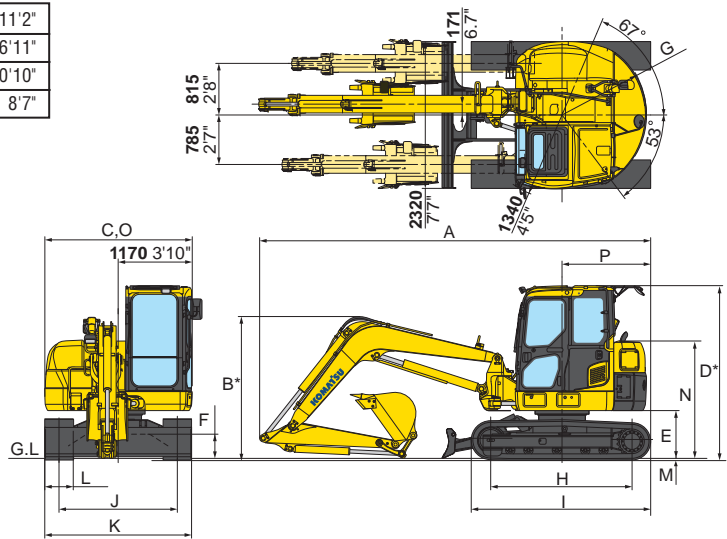


DIMENSIONS

	Boom Length	3405 mm 11'2"	3405 mm 11'2"
	Arm Length	1650 mm 5'5"	2100 mm 6'11"
A	Overall length	6175 mm 20'3"	6350 mm 20'10"
B	Overall height (to top of boom)*	2240 mm 7'4"	2615 mm 8'7"

C	Overall width	2330 mm 7'8"
D	Overall height (to top of cab)*	2730 mm 8'11"
E	Ground clearance, counterweight	735 mm 2'5"
F	Minimum ground clearance	360 mm 14.2"
G	Tail swing radius	1335 mm 4'5"
H	Length of track on ground	2235 mm 7'4"
I	Track length	2840 mm 9'4"
J	Track gauge	1870 mm 6'2"
K	Width of crawler	2320 mm 7'7"
L	Shoe width	450 mm 17.7"
M	Grouser height	20 mm 0.8"
N	Machine cab height	1835 mm 6'0"
O	Machine cab width	2330 mm 7'8"
P	Distance swing center to rear end	1405 mm 4'9"

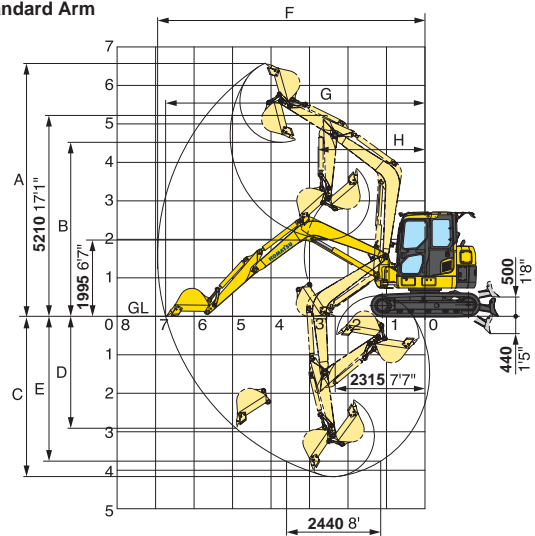
* : Including grouser height



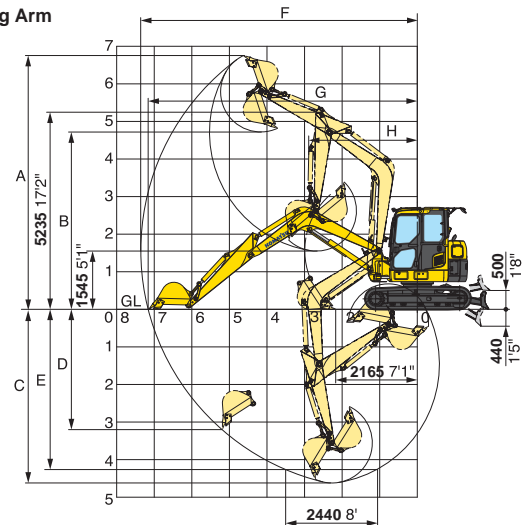
WORKING RANGE

	Boom	3405 mm 11'2"	3405 mm 11'2"
	Arm	1650 mm 5'5"	2100 mm 6'11"
A	Maximum digging height	6570 mm 21'7"	6750 mm 22'2"
B	Maximum dumping height	4515 mm 14'10"	4720 mm 15'6"
C	Maximum digging depth	4160 mm 13'8"	4615 mm 15'2"
D	Maximum vertical wall digging depth	2900 mm 9'6"	3165 mm 10'5"
E	Maximum digging depth of cut for 2440 mm 8' level	3765 mm 12'4"	4250 mm 13'11"
F	Maximum digging reach	6935 mm 22'9"	7345 mm 24'1"
G	Maximum digging reach at ground	6725 mm 22'1"	7150 mm 23'5"
H	Minimum swing radius (When boom swing)	2755 mm 9'0" (2395 mm 7'10")	2900 mm 9'6" (2545 mm 8'4")
ISO	Bucket digging force	61.3 kN 6250 kgf 13,780 lbf	61.3 kN 6250 kgf 13,780 lbf
	Arm crowd force	41.5 kN 4230 kgf 9,330 lbf	36.3 kN 3700 kgf 8,160 lbf
SAE	Bucket digging force	53.3 kN 5440 kgf 12,000 lbf	53.3 kN 5440 kgf 12,000 lbf
	Arm crowd force	38.1 kN 3890 kgf 8,580 lbf	34.3 kN 3500 kgf 7,720 lbf

Standard Arm



Long Arm



BACKHOE BUCKET AND ARM COMBINATION

Bucket Capacity (heaped)		Width		Weight	Number of Teeth	Arm Length	
SAE, PCSA	CECE	Without Side Cutters	With Side Cutters			1650 mm 5'5"	2100 mm 6'11"
0.09 m ³ 0.12 yd ³	0.08 m ³ 0.10 yd ³	350 mm 14"	450 mm 18"	145 kg 320 lb	3	○	○
0.12 m ³ 0.16 yd ³	0.11 m ³ 0.14 yd ³	450 mm 18"	550 mm 22"	160 kg 355 lb	3	○	○
0.20 m ³ 0.26 yd ³	0.18 m ³ 0.24 yd ³	550 mm 22"	650 mm 26"	185 kg 410 lb	3	○	○
0.28 m ³ 0.37 yd ³	0.25 m ³ 0.33 yd ³	650 mm 26"	750 mm 30"	210 kg 465 lb	4	○	X
0.34 m ³ 0.45 yd ³	0.30 m ³ 0.39 yd ³	755 mm 29.7"	NA	210 kg 465 lb	4	□	X

○—General digging □—Light-duty operation X—Not available



OPTIONAL EQUIPMENT

- Additional counter weight
- Arm, —1650mm 5'5" arm assembly
- Boom, —3405mm 11'2"
- Hydraulic control unit —1 additional actuator
- Long arm, —2100mm 6'11" arm assembly
- Reinforced blade with BOC
- Seat belt 78mm 3"
- Shoes, —450mm 17.7" Road Liner —600mm 23.6" Triple grouser —450mm 17.7" Rubber shoe
- Wide blade
- Working light on cab



LIFTING CAPACITY

PC88MR-8		Arm : 1650mm 5'5"		Bucket : 0.28 m ³ 0.37 yd ³ SAE heaped		Shoe width : 450mm 17.7" triple grouser		Blade on ground		Unit : kg lb	
		Maximum		4.5m 14'		3.0m 9'		1.5m 4'		Cf	Cs
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs		
5.0m	16'	*1520	1250								
		*3360	2750								
3.0m	9'	*1650	790	*1760	1280						
		*3630	1760	*3890	2820						
0.0m	0'	*2210	730	*3060	1100	*3520	2040				
		*4890	1610	*6740	2440	*7760	4510				
-2.0m	-6'	*2770	1040	*2960	1100	*5210	2070	*6110	*4930		
		*6110	2290	*6530	2420	*11490	4570	*13480	*10870		

PC88MR-8		Arm : 1650mm 5'5"		Bucket : 0.28 m ³ 0.37 yd ³ SAE heaped		Shoe width : 450mm 17.7" triple grouser		Blade on ground		Additional counter weight		Unit : kg lb	
		Maximum		4.5m 14'		3.0m 9'		1.5m 4'		Cf	Cs	Cf	Cs
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs				
5.0m	16'	*1520	1340										
		*3360	2970										
3.0m	9'	*1640	870	*1760	1380								
		*3630	1920	*3880	3050								
0.0m	0'	*2210	800	*3060	1210	*3520	2220						
		*4880	1770	*6740	2670	*7760	4900						
-2.0m	-6'	*2770	1130	*2960	1200	*5210	2250	*6110	*4930				
		*6100	2510	*6530	2650	*11490	4960	*13480	*10870				

PC88MR-8		Arm : 2100mm 6'11"		Bucket : 0.20 m ³ 0.26 yd ³ SAE heaped		Shoe width : 450mm 17.7" triple grouser		Blade on ground		Unit : kg lb	
		Maximum		4.5m 14'		3.0m 9'		1.5m 4'		Cf	Cs
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs		
5.0m	16'	*1310	1040								
		*2890	2300								
3.0m	9'	*1430	690	*1430	1290						
		*3170	1530	*3160	2850						
0.0m	0'	*1940	620	*2860	1070	*3980	1990				
		*4280	1380	*6300	2370	*8770	4400				
-2.0m	-6'	*2460	840	*3060	1040	*5440	1980	*4870	*3950		
		*5430	1850	*6750	2290	*12000	4370	*10730	*8720		

PC88MR-8		Arm : 2100mm 6'11"		Bucket : 0.20 m ³ 0.26 yd ³ SAE heaped		Shoe width : 450mm 17.7" triple grouser		Blade on ground		Additional counter weight		Unit : kg lb	
		Maximum		4.5m 14'		3.0m 9'		1.5m 4'		Cf	Cs	Cf	Cs
		Cf	Cs	Cf	Cs	Cf	Cs	Cf	Cs				
5.0m	16'	*1310	1130										
		*2890	2490										
3.0m	9'	*1430	760	*1430	1390								
		*3170	1680	*3160	3080								
0.0m	0'	*1940	690	*2860	1180	*3980	2170						
		*4280	1530	*6300	2600	*8770	4790						
-2.0m	-6'	*2460	920	*3060	1140	*5440	2160	*4870	*3950				
		*5430	2040	*6750	2520	*12000	4760	*10730	*8720				

* Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE Standard No. J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

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