

# 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.



## 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.

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8225 – 8395 kg

18,140 – 18,510 lb

## BUCKET CAPACITY

0.09 – 0.34 m<sup>3</sup>

0.12 – 0.45 yd<sup>3</sup>



## 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.

Photo may include optional equipment.

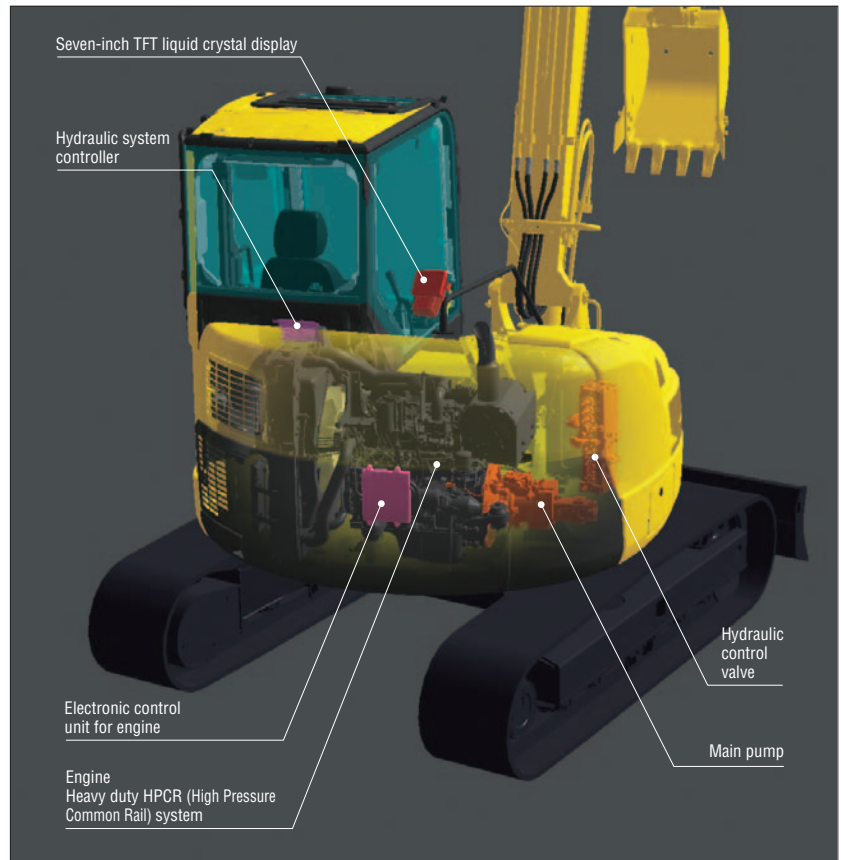


# PRODUCTIVITY & ECOLOGY FEATURES

### Komatsu Technology

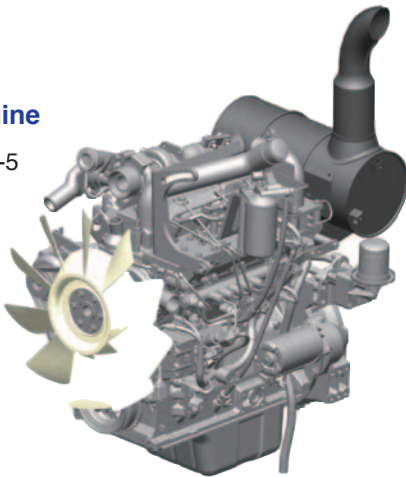


Komatsu develops and produces all major components in house such as engines, electronics and hydraulic components. Combining “Komatsu Technology”, and customer feedback, Komatsu is achieving great advancements in technology. To achieve both high levels of productivity and economical performance, Komatsu 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



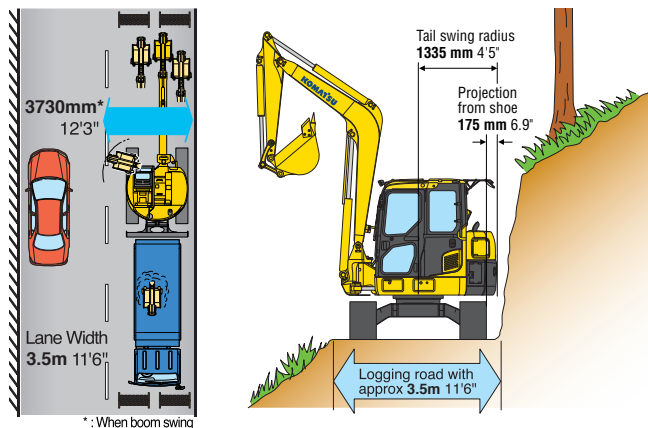
Photo may include optional equipment

## 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

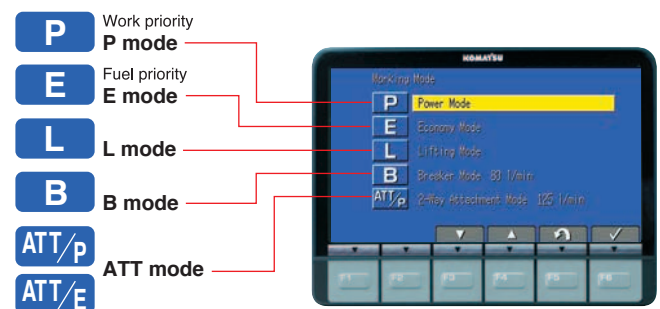
The PC88MR-8 excavator is equipped with five working modes (P, E, L, B and ATT mode). Each mode is designed to match engine speed and pump speed with the current application. This provides the flexibility to match equipment performance to the job at hand.

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

\*: 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 CO<sub>2</sub> emissions and efficient fuel consumption.



### 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

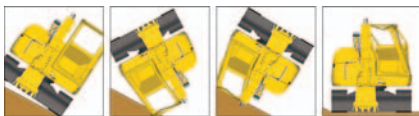
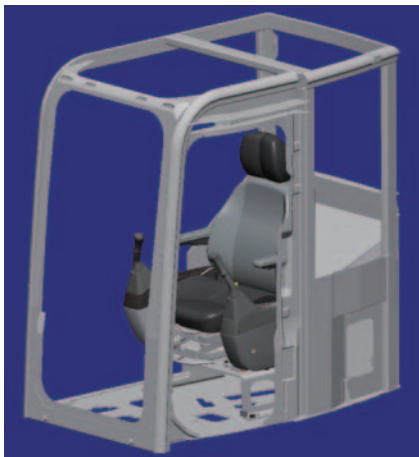
The sliding convex door facilitates easy entrance in confined areas.



## Safety Features

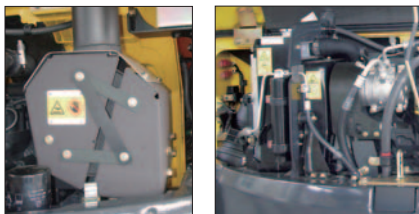
### New Cab Design for Hydraulic Excavators

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.





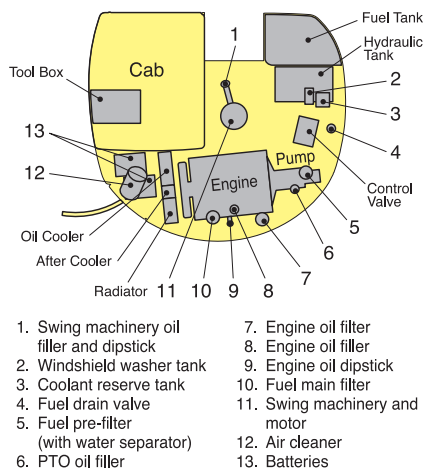
## MAINTENANCE FEATURES

### 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

Function switches

Basic operation switches

Air conditioner operation switches

### 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



## HYDRAULICS SYSTEM

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"



- 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



## DRIVES AND BRAKES

## UNDERCARRIAGE

## COOLANT AND LUBRICANT CAPACITY (REFILLING)

### OPERATING WEIGHT (APPROXIMATE)

Operating weight including **3405 mm** 11'2" one-piece boom, **1650 mm** 5'5" arm, SAE heaped **0.28 m<sup>3</sup>** 0.37 yd<sup>3</sup> 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 <sup>2</sup>	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

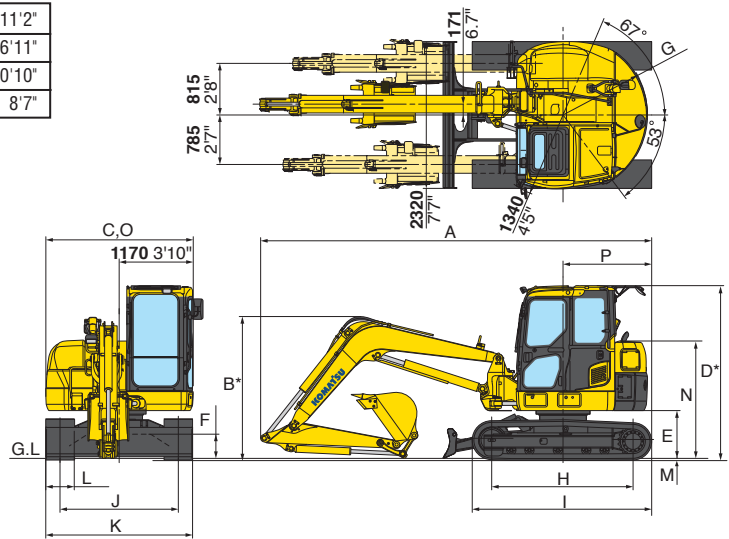


## DIMENSIONS

	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"

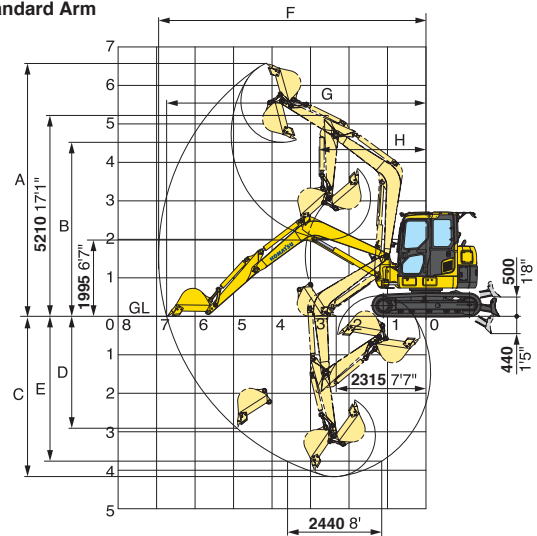
\* : Including grouser height



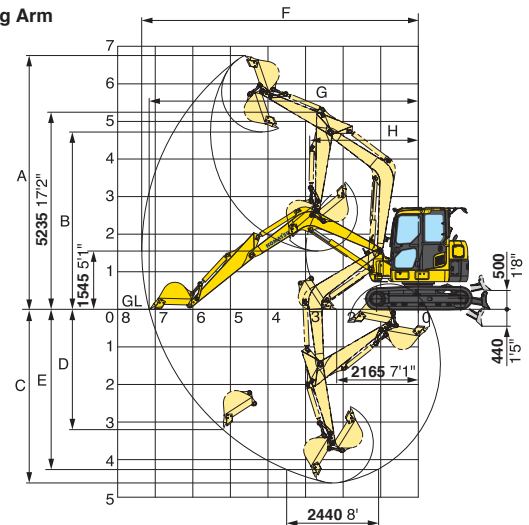
## WORKING RANGE

	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"	2900 mm	9'6"
		(2395 mm	7'10")	(2545 mm	8'4")
ISO	Bucket digging force	61.3 kN		61.3 kN	
		6250 kgf	13,780 lbf	6250 kgf	13,780 lbf
	Arm crowd force	41.5 kN		36.3 kN	
		4230 kgf	9,330 lbf	3700 kgf	8,160 lbf
SAE	Bucket digging force	53.3 kN		53.3 kN	
		5440 kgf	12,000 lbf	5440 kgf	12,000 lbf
	Arm crowd force	38.1 kN		34.3 kN	
		3890 kgf	8,580 lbf	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	2100 mm
0.09 m <sup>3</sup> 0.12 yd <sup>3</sup>	0.08 m <sup>3</sup> 0.10 yd <sup>3</sup>	350 mm 14"	450 mm 18"	145 kg 320 lb	3	○	○
0.12 m <sup>3</sup> 0.16 yd <sup>3</sup>	0.11 m <sup>3</sup> 0.14 yd <sup>3</sup>	450 mm 18"	550 mm 22"	160 kg 355 lb	3	○	○
0.20 m <sup>3</sup> 0.26 yd <sup>3</sup>	0.18 m <sup>3</sup> 0.24 yd <sup>3</sup>	550 mm 22"	650 mm 26"	185 kg 410 lb	3	○	○
0.28 m <sup>3</sup> 0.37 yd <sup>3</sup>	0.25 m <sup>3</sup> 0.33 yd <sup>3</sup>	650 mm 26"	750 mm 30"	210 kg 465 lb	4	○	X
0.34 m <sup>3</sup> 0.45 yd <sup>3</sup>	0.30 m <sup>3</sup> 0.39 yd <sup>3</sup>	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 m³ 0.37 yd³ 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
5.0m 16'	*1520 *3360	1250 2750						
3.0m 9'	*1650 *3630	790 1760	*1760 *3890	1280 2820				
0.0m 0'	*2210 *4890	730 1610	*3060 *6740	1100 2440	*3520 *7760	2040 4510		
-2.0m -6'	*2770 *6110	1040 2290	*2960 *6530	1100 2420	*5210 *11490	2070 4570	*6110 *13480	*4930 *10870

PC88MR-8 Arm : 1650mm 5'5" Bucket : 0.28 m³ 0.37 yd³ 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
5.0m 16'	*1520 *3360	1340 2970						
3.0m 9'	*1640 *3630	870 1920	*1760 *3880	1380 3050				
0.0m 0'	*2210 *4880	800 1770	*3060 *6740	1210 2670	*3520 *7760	2220 4900		
-2.0m -6'	*2770 *6100	1130 2510	*2960 *6530	1200 2650	*5210 *11490	2250 4960	*6110 *13480	*4930 *10870

PC88MR-8 Arm : 2100mm 6'11" Bucket : 0.20 m³ 0.26 yd³ 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
5.0m 16'	*1310 *2890	1040 2300						
3.0m 9'	*1430 *3170	690 1530	*1430 *3160	1290 2850				
0.0m 0'	*1940 *4280	620 1380	*2860 *6300	1070 2370	*3980 *8770	1990 4400		
-2.0m -6'	*2460 *5430	840 1850	*3060 *6750	1040 2290	*5440 *12000	1980 4370	*4870 *10730	*3950 *8720

PC88MR-8 Arm : 2100mm 6'11" Bucket : 0.20 m³ 0.26 yd³ 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
5.0m 16'	*1310 *2890	1130 2490						
3.0m 9'	*1430 *3170	760 1680	*1430 *3160	1390 3080				
0.0m 0'	*1940 *4280	690 1530	*2860 *6300	1180 2600	*3980 *8770	2170 4790		
-2.0m -6'	*2460 *5430	920 2040	*3060 *6750	1140 2520	*5440 *12000	2160 4760	*4870 *10730	*3950 *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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