

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 Interim Tier 4 and EU Stage 3A emission 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.

• Safety enhancement with large side-view and rear-view mirrors added.

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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0.12 – 0.45 yd³

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

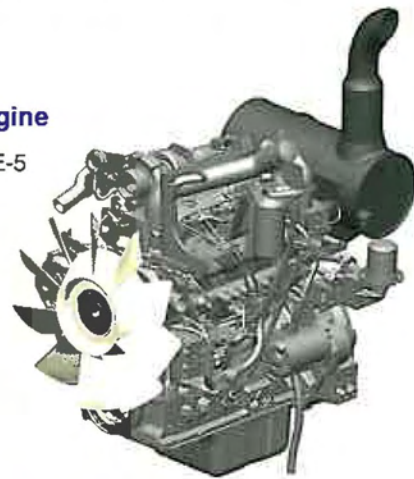
Komatsu Technology



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 Interim Tier 4 and EU Stage 3A emissions ready.



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
- Highly rigid cylinder block

Low noise design

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



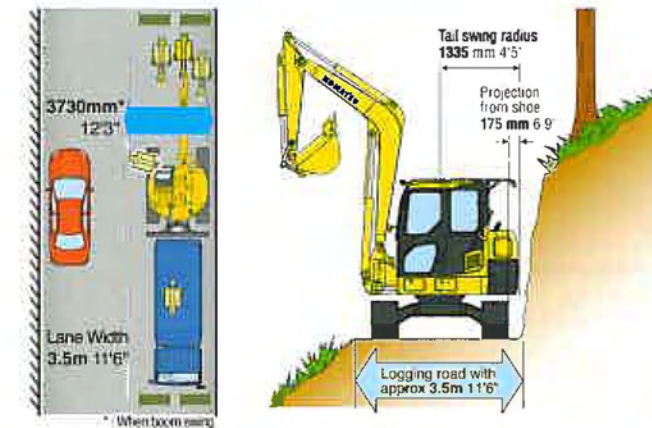
Photo may include optional equipment

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.

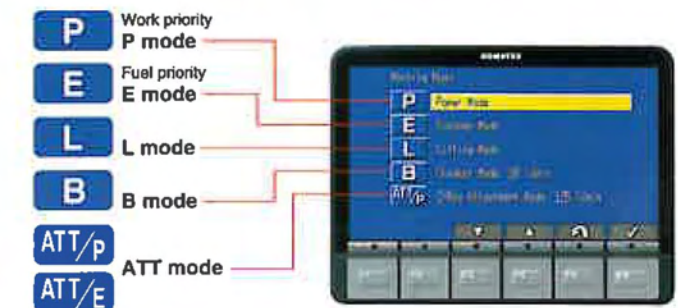
Working Modes Selectable

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"> • 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 safety of the cab in the event of a rollover.



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.

Anti-slip Plates

Highly durable anti-slip 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

Enlarged 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.



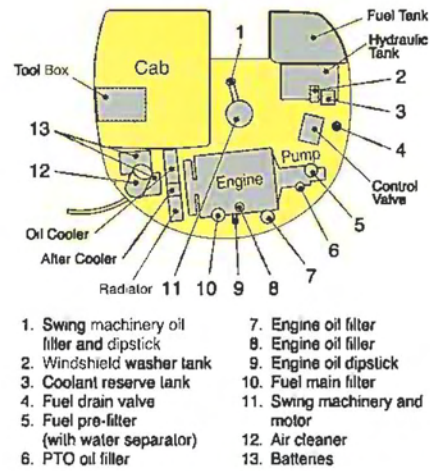
MAINTENANCE FEATURES

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.



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.



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

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
- 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

Advanced X-weight design 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 Net 49 kW 65 HP
 ISO 9249 / SAE J1349 Gross 50.7 kW 68 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
 EPA Interim Tier 4 and EU Stage 3A certified
 Starting motor 4.5 kW/24 V
 Alternator 35 A/24 V
 Battery 55 Ah/2 x 12 V

HYDRAULICS SYSTEM

Type HydraMind (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)
 Boom 1-65 mm x 988 mm 2.6" x 38.9"
 Arm 1-60 mm x 861 mm 2.4" x 33.9"
 Bucket 1-55 mm x 710 mm 2.2" x 28.0"
 Boom swing 1-60 mm x 638 mm 2.4" x 25.1"
 Blade 1-65 mm x 200 mm 2.6" x 7.9"

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)

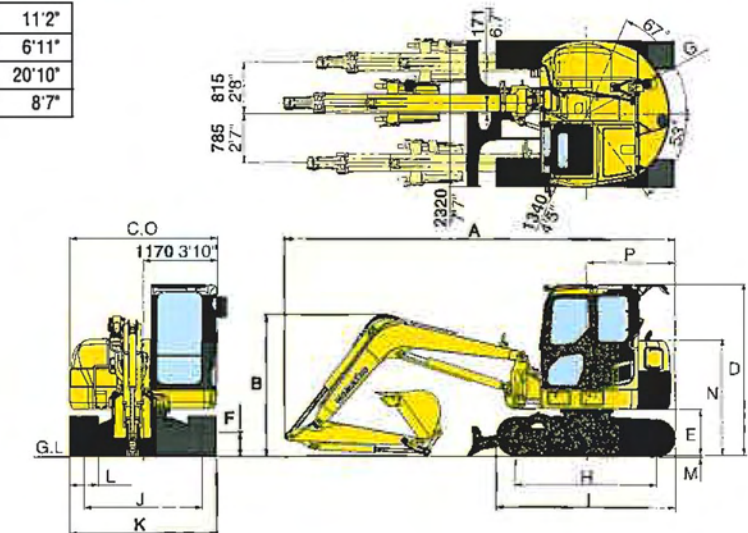
Operating weight including 3405 mm 11'2" one-piece boom, 1650 mm 5'5" arm, SAE heaped 0.28 m³ 0.37 yd³ backhoe bucket, blade, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

Shoes	Operating Weight		Ground Pressure			
	mm	in	kg	lb	kPa	kg/cm ²
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

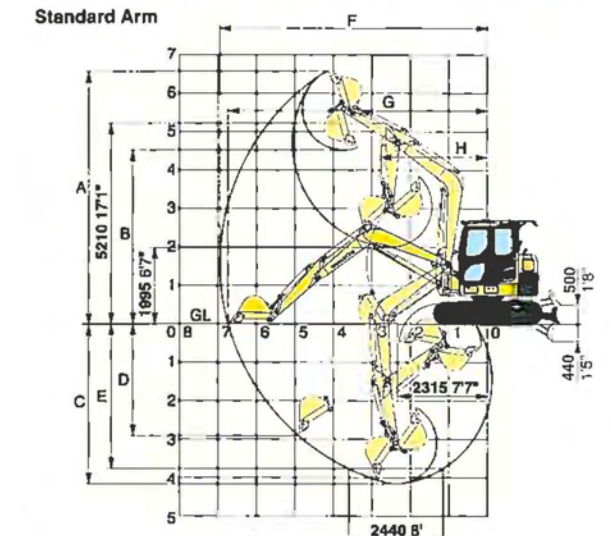
Boom Length	3405 mm 11'2"	3405 mm 11'2"
Arm Length	1650 mm 5'5"	2100 mm 6'11"
A Overall length	6175 mm 20'3"	6350 mm 20'10"
B Overall height (to top of boom)	2240 mm 7'4"	2615 mm 8'7"

C Overall width	2330 mm 7'8"
D Overall height (to top of cab)	2730 mm 8'11"
E Ground clearance, counterweight	755 mm 2'6"
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	1855 mm 6'1"
O Machine cab width	2330 mm 7'8"
P Distance swing center to rear end	1405 mm 4'9"



WORKING RANGE

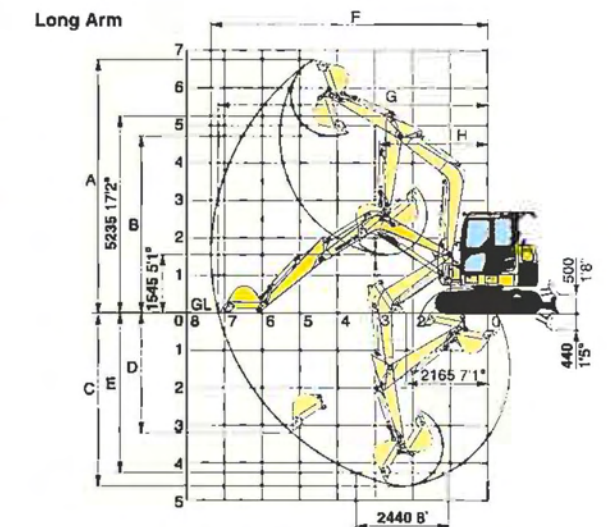
Boom	3405 mm 11'2"	3405 mm 11'2"
Arm	1650 mm 5'5"	2100 mm 6'11"
A Maximum digging height	6570 mm 21'7"	6750 mm 22'2"
B Maximum dumping height	4515 mm 14'10"	4720 mm 15'6"
C Maximum digging depth	4160 mm 13'8"	4615 mm 15'2"
D Maximum vertical wall digging depth	2900 mm 9'6"	3165 mm 10'5"
E Maximum digging 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



BACKHOE BUCKET AND ARM COMBINATION

Bucket Capacity (heaped)	Width	Weight	Number of Teeth	Arm Length	
				1650 mm 5'5"	2100 mm 6'11"
0.09 m ³ 0.12 yd ³	350 mm 14"	145 kg 320 lb	3	○	○
0.12 m ³ 0.16 yd ³	450 mm 18"	160 kg 355 lb	3	○	○
0.20 m ³ 0.26 yd ³	550 mm 22"	185 kg 410 lb	3	○	○
0.28 m ³ 0.37 yd ³	650 mm 26"	210 kg 465 lb	4	○	X
0.34 m ³ 0.45 yd ³	755 mm 29.7"	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
- Seal bell 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	*1460	1320						
		3350	2750	*3230	2910						
3.0m	9'	980	790	1560	1280						
		2160	1760	3450	2820						
0.0m	0'	910	730	1380	1100	2630	2040				
		2010	1610	3040	2440	5810	4510				
-2.0m	-6'	1300	1040	1370	1100	2660	2070	*4930	*4930		
		2860	2290	3030	2420	5880	4570	*10870	*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	*1460	1420								
		*3360	2970	*3230	3140								
3.0m	9'	1060	870	1680	1380								
		2350	1920	3710	3050								
0.0m	0'	990	800	1500	1210	2850	2220						
		2200	1770	3310	2670	6290	4900						
-2.0m	-6'	1410	1130	1490	1200	2880	2250	*4930	*4930				
		3110	2510	3290	2650	6350	4960	*10870	*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'	1270	1040								
		2810	2300								
3.0m	9'	860	690	*1430	1290						
		1900	1530	*3160	2850						
0.0m	0'	790	620	1350	1070	2580	1990				
		1740	1380	2980	2370	5700	4400				
-2.0m	-6'	1060	840	1310	1040	2570	1980	*3950	*3950		
		2340	1850	2900	2290	5670	4370	*8720	*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	1120										
		*2890	2480										
3.0m	9'	930	760	*1430	1390								
		2060	1670	*3160	3060								
0.0m	0'	860	690	1460	1170	2780	2160						
		1910	1520	3220	2580	6140	4770						
-2.0m	-6'	1150	920	1420	1130	2770	2150	*3950	*3950				
		2540	2030	3140	2510	6110	4730	*8720	*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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