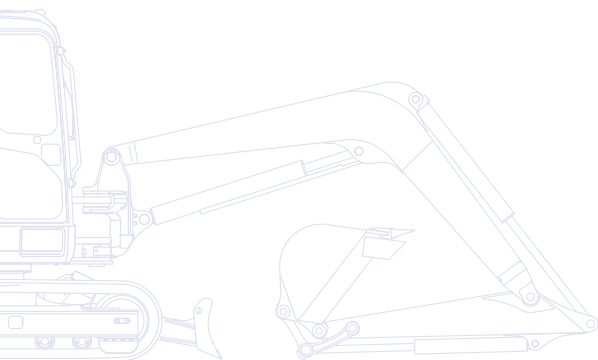


# KOMATSU



**PC**  
**88MR**

## Midi-Excavator **PC88MR-10**



**ENGINE POWER**  
50,7 kW / 68,0 HP @ 1.950 rpm

**OPERATING WEIGHT**  
8.500 - 9.130 kg

**BUCKET CAPACITY**  
0,09 - 0,34 m<sup>3</sup>

# Walk-Around

The new PC88MR-10 compact midi-excavator is the result of the competence and technology that Komatsu has acquired in more than 90 years. Designed and developed with constant attention to the needs of customers from all over the world, the end product is a user-friendly machine with top-class performances and a tight tail swing that protrudes over the tracks by just 325 mm. The operator can concentrate on his work, without having to worry about rear-swing impacts.



## Outstanding performances

- Fast and precise
- Large drawbar pull
- Excellent controllability
- 2 automatic travel speeds
- CLSS hydraulic system

## Powerful and environmentally friendly

- Low consumption EU Stage IIIB engine
- Fuel-saving hydraulic technology
- Auto-deceleration and eco-gauge
- 6 working modes
- Low operating noise levels

**KOMTRAX**

Komatsu Wireless  
Monitoring System

# PC88MR-10

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50,7 kW / 68,0 HP @ 1.950 rpm

**OPERATING WEIGHT**  
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**BUCKET CAPACITY**  
0,09 - 0,34 m<sup>3</sup>



## First-class operator comfort

- Spacious and comfortable cab with multiposition controls
- Quiet and ergonomic working environment
- Large multifunction colour LCD monitor
- Sliding door for easy entry and exit
- Automatic air conditioner



## Total versatility

- Proportional control on joystick for auxiliary circuits
- Hydraulic pump oil flow adjustable on the LCD monitor
- Standard hammer line
- Second auxiliary circuit and hydraulic quick-coupler line (optional)
- Road liner (optional)
- Rear-view camera system (optional)



## Easy maintenance

- Optimal maintenance layout
- Side-by-side coolers
- Equipment Management and Monitoring System (EMMS)
- Standard fuel pre-filter with water separator
- Long maintenance intervals

# First-Class Operator Comfort



## Operator's environment

Thanks to its spacious cab, this compact machine ensures superior comfort even to the most demanding operator. With a double slide mechanism, the seat and control levers can be conveniently adjusted for maximum productivity and minimum fatigue. Wide front and side windows – and an opening skylight – enable better visibility in any situation. The standard automatic air conditioner completes a comfortable work environment by maintaining a perfect temperature in the cab, no matter the weather outside.

## Widescreen monitor

Conveniently customisable and with a choice of 25 languages, the widescreen monitor with simple switches and multifunction keys gives you fingertip access to a large range of functions and operating info. The view from the optional rear camera is incorporated into the default main screen.



Overhead visibility and opening skylight



Wide glass surface for excellent all around visibility



The upgraded monitor interface gives easy access to information

# Outstanding Performances

## Performance and controllability

The PC88MR-10 offers outstanding performances coupled with excellent controllability for even the toughest job. It has a powerful swing force, can efficiently work on slopes, and it delivers exceptional drawbar pull. In conjunction with automatic down-shift, this machine is ideal on any terrain or for any application. The Closed Load Sensing System (CLSS) ensures unbeatable speed and control to all combined movements, no matter the load.



# Powerful and Environmentally Friendly



## Performance and ecology

The PC88MR-10 is fitted with an engine that meets EU Stage IIIB regulations. Together with an advanced hydraulic system, this electronically controlled common-rail engine with multistage injection achieves a superior level of productivity. Drastically reduced NOx emissions and noise levels make this compact excavator perfect for confined areas and urban jobsites.

## High productivity and fuel saving

Depending on the load, operators can conveniently choose between 6 working modes designed to match engine speed, pump delivery and system pressure. Priority can be given either to speed, for more productivity, or to fuel consumption for lighter applications. Fuel efficiency is further improved with auto-deceleration, a standard feature that automatically slows down engine speed when levers are in neutral position, and with the eco-gauge, visible on the LCD monitor.



*Eco-gauge, Eco guidance, idle caution and an adjustable idle shutdown all contribute to further reduce fuel consumption*



*Eco guidance menu*



## Versatility

Great care went into the design of the PC88MR-10, to give it exceptional versatility and mobility for work in confined areas. It offers outstanding visibility and a reduced tail overhang that lets the operator work without worrying about rear impacts. A reduced front swing radius and a left side swing cylinder make trench digging a cinch, and with its compact size the PC88MR-10 is perfect for urban or road-building jobsites. A wide range of options – such as road liners or an additional counterweight – are available to let customers perfectly match the machine to their needs.

## Maximum flexibility

Thanks to auxiliary hydraulic lines, the PC88MR-10 can use a wide range of attachments. For breaking, crushing and all other applications, the optimal oil flow from the hydraulic pump can be selected directly on the LCD monitor. On the joystick, proportional controls for auxiliary circuits guarantee precision work with any tool.



# Easy Maintenance

## Excellent serviceability

Komatsu designed the PC88MR-10 with an easy access to all service points. Routine maintenance and servicing are less likely to be skipped, which can mean a reduction of costly downtime later on. The radiator, aftercooler and oil cooler are made of aluminium to improve their efficiency and are mounted in parallel for quicker cleaning. The fuel and oil filters as well as the fuel drain valve, are all remote mounted and easily accessible.

## EMMS (Equipment Management and Monitoring System)

Komatsu's EMMS can prevent a small problem from becoming a major service issue. The controller monitors all critical systems and key engine features such as engine oil pressure, coolant temperature, battery charge, air clogging etc. If an abnormality occurs, it is displayed on the LCD. The monitor also indicates when the oil or the filters must be replaced.



All major maintenance points can be easily reached from ground level



Fuel pre-filter with water separator



The LCD monitor informs about abnormalities and replacement times





## The way to higher productivity

KOMTRAX™ uses the latest wireless monitoring technology. Compatible on PC, smartphone or tablet, it delivers insightful and cost saving information about your fleet and equipment, and offers a wealth of information to facilitate peak machine performance. By creating a tightly integrated web of support it allows proactive and preventive maintenance and helps to efficiently run a business.



## Knowledge

You get quick answers to basic and critical questions about your machines – what they’re doing, when they did it, where they’re located, how they can be used more efficiently, and when they need to be serviced. Performance data is relayed by wireless communication technology (Satellite, GPRS or 3G depending on model) from the machine to a computer and to the local Komatsu distributor – who’s readily available for expert analysis and feedback.

## Power

The detailed information that KOMTRAX™ puts at your fingertips 24 hours a day, 7 days a week gives the power to make better daily and long-term strategic decisions – at no extra cost. Problems can be anticipated, maintenance schedules customised, downtime minimised and machines kept where they belong: working on the jobsite.

## Convenience

KOMTRAX™ enables convenient fleet management on the web, wherever you are. Data is analysed and packaged specifically for effortless and intuitive viewing in maps, lists, graphs and charts. You can foresee eventual maintenance issues and required spare parts, and troubleshoot a problem before Komatsu technicians arrive on site.



# Specifications

## ENGINE

Model ..... Komatsu SAA4D95LE-6  
 Type ..... Common rail, multi-injection, water cooled, turbocharged  
 Displacement ..... 3.260 cm<sup>3</sup>  
 Bore × stroke ..... 95 mm × 115 mm  
 No. of cylinders ..... 4  
 Engine power  
   at engine speed ..... 1.950 rpm  
   ISO 14396 ..... 50,7 kW / 68,0 HP  
   SAE J1349 ..... 49,0 kW / 65,7 HP  
 Max. torque/engine speed ..... 319 Nm/1.400 rpm  
 Air cleaner ..... dry, double element type air cleaner with dust indicator and auto-dust evacuator

## OPERATING WEIGHT

Operating weight, including 1.650 mm arm, 0,28 m<sup>3</sup> bucket (ISO 7451), blade, operator, liquids, filled tank and standard equipment (ISO 6016).

Shoes	Mono boom	Ground pressure	Two-piece boom
Steel (450 mm)	8.580 kg	0,39 kg/cm <sup>2</sup>	8.960 kg
Steel (600 mm)	8.750 kg	0,30 kg/cm <sup>2</sup>	9.130 kg
Rubber (450 mm)	8.500 kg	0,38 kg/cm <sup>2</sup>	8.880 kg
Road liner (450 mm)	8.720 kg	0,39 kg/cm <sup>2</sup>	9.100 kg

## DRIVES AND BRAKES

Steering control ..... 2 levers with pedals  
 Transmission ..... hydrostatic  
 Hydraulic motors ..... variable displacement, axial piston  
 Max. drawbar pull ..... 66,9 kN (6.820 kgf)  
 Max. travel speeds Lo / Hi ..... 2,9 km/h - 5,1 km/h  
 Service brake ..... hydraulic lock  
 Parking brake ..... mechanical discs

## UNDERCARRIAGE

Construction ..... X-frame centre section with box section track-frames  
 Type ..... fully sealed  
 Track adjuster ..... hydraulic  
 Shoes (each side) ..... 39  
 Carrier rollers (each side) ..... 1  
 Track rollers (each side) ..... 5  
 Ground pressure ..... 0,37 kg/cm<sup>2</sup>

## BLADE

Width × height ..... 2.320 × 470 mm  
 Max. lifting above ground level ..... 500 mm  
 Max. depth below ground level ..... 440 mm

## HYDRAULIC SYSTEM

Type ..... HydrauMind. Closed-centre system with load sensing and pressure compensation valves  
 Main pumps:  
 Pump for ..... boom, arm, bucket and travelling  
   Type ..... variable displacement, axial piston  
   Max. flow ..... 160 l/min  
 Pump for ..... swing and blade  
   Type ..... fixed displacement gear pump  
   Max. flow ..... 70 l/min  
 Hydraulic motors:  
 Travel ..... 2 × piston motor with parking brake  
 Swing ..... 1 × piston motor with swing holding brake  
 Relief valve setting:  
   Swing and blade ..... 21,1 MPa (215 kg/cm<sup>2</sup>)  
   Travel and work equipment ..... 26,5 MPa (270 kg/cm<sup>2</sup>)  
 Bucket breakout force (ISO 6015) ..... 6.130 daN (6.250 kgf)  
 Arm crowd force, 1.650 mm arm (ISO 6015) ..... 4.150 daN (4.230 kgf)

## SWING SYSTEM

Driven by ..... hydraulic motor  
 Swing reduction gear ..... planetary gear  
 Swing circle lubrication ..... grease-bathed  
 Swing brakes ..... automatic, with oil immersed disks  
 Swing speed ..... 10 rpm

## ELECTRIC SYSTEM

Voltage ..... 24 V  
 Battery ..... 55 Ah  
 Alternator ..... 60 A  
 Starter motor ..... 4,5 kW

## SERVICE CAPACITIES

Fuel tank ..... 125 l  
 Cooling system ..... 10 l  
 Engine oil ..... 11,5 l  
 Final drive (each side) ..... 1,1 l  
 Swing drive ..... 2,8 l  
 Hydraulic oil tank ..... 100 l

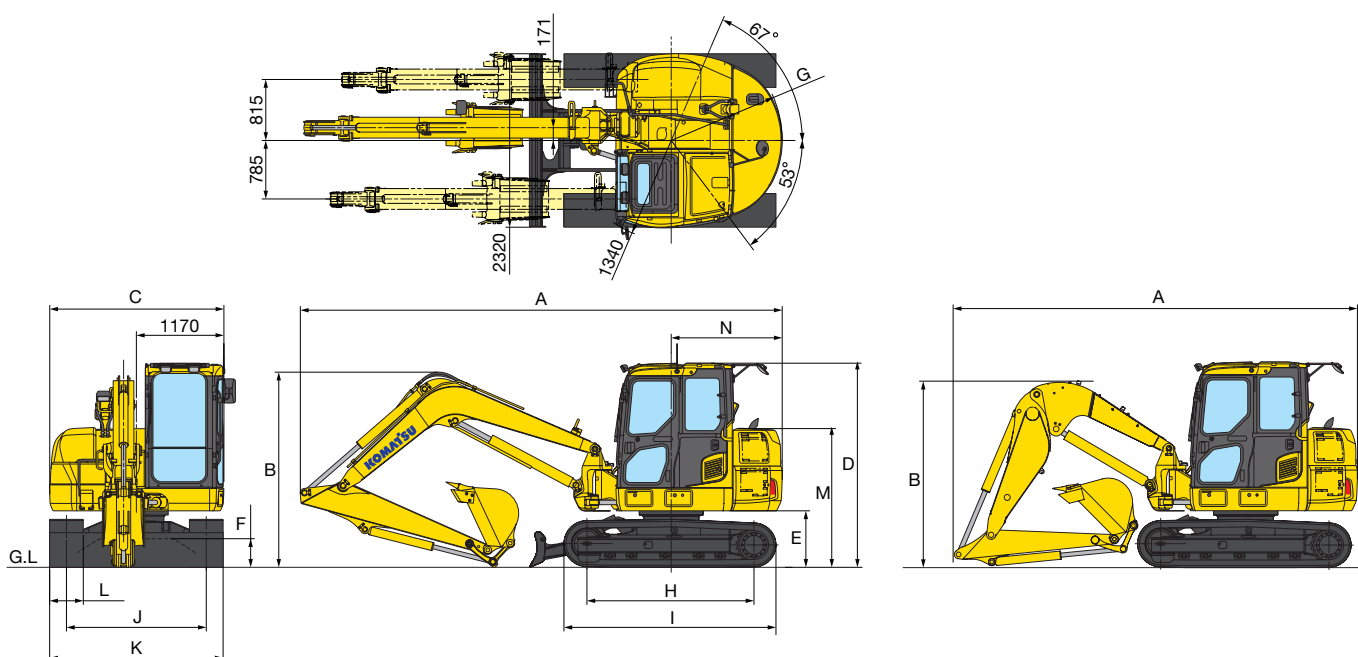
## CAB

Sound-proof cab, provided with safety glasses, liftable windscreen, roof window, sliding door with lock, windscreen-wiper, electric horn, adjustable seat with double slide, control system and instrumentation, adjustable joysticks, outside air inlet.

## ENVIRONMENT

Vibration levels (EN 12096:1997)\*  
   Hand/arm ..... ≤ 2,5 m/s<sup>2</sup> (uncertainty K = 1,2 m/s<sup>2</sup>)  
   Body ..... ≤ 0,5 m/s<sup>2</sup> (uncertainty K = 0,2 m/s<sup>2</sup>)  
 \* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

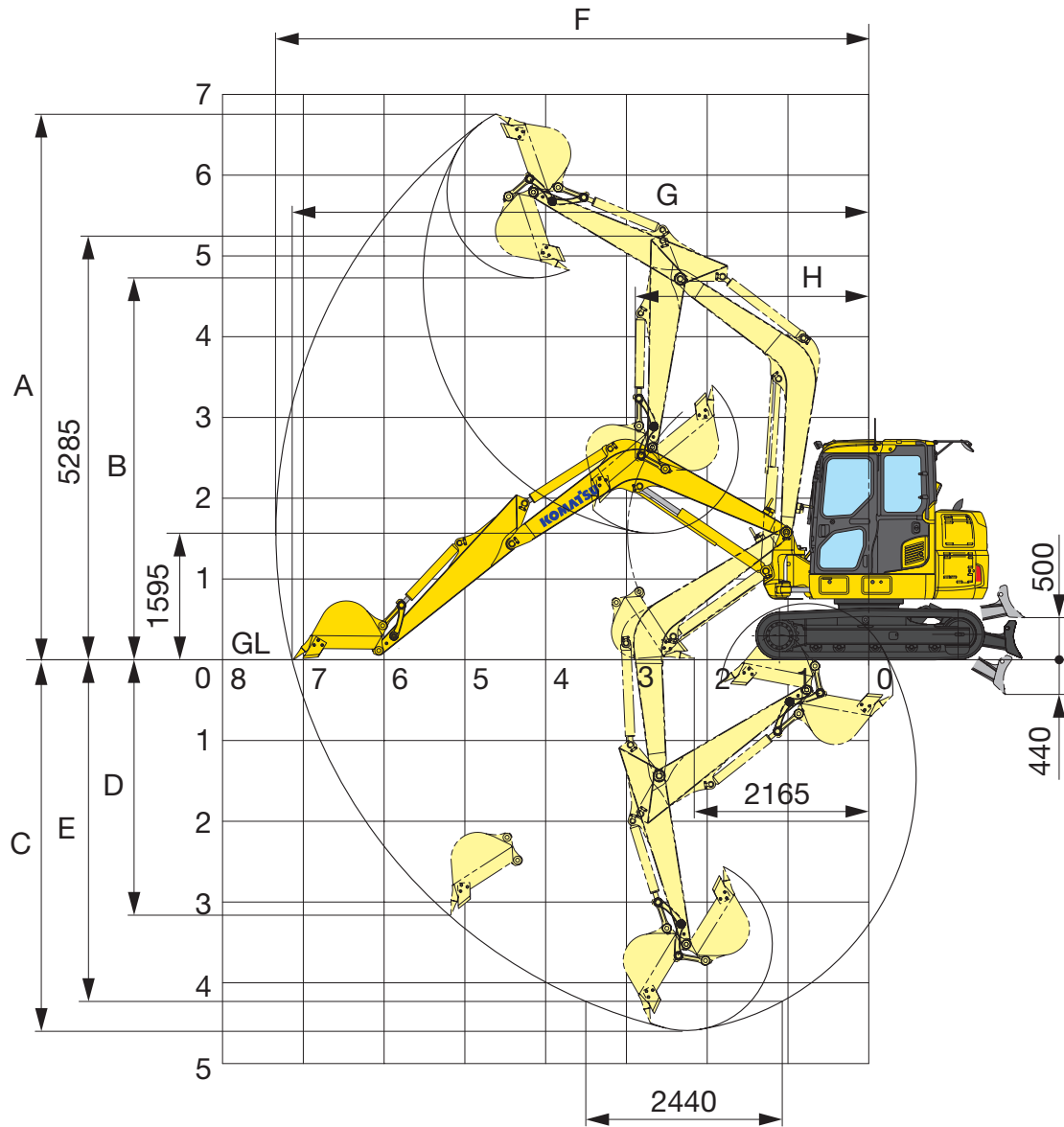
MACHINE DIMENSIONS	MONO BOOM	TWO-PIECE BOOM
A Transport length with 2.100 mm arm	6.430 mm	–
Transport length with 1.650 mm arm	6.255 mm	5.790 mm
Transport length with 1.900 mm arm	–	6.105 mm
B Overall height (to top of boom)	2.615 mm	2.600 mm
C Overall width of upper structure	2.330 mm	2.330 mm
D Overall height of cab	2.760 mm	2.760 mm
E Clearance under counterweight	785 mm	785 mm
F Ground clearance	410 mm	410 mm
G Tail swing radius	1.485 mm	1.485 mm
H Tumbler centre distance	2.235 mm	2.235 mm
I Track length	2.890 mm	2.890 mm
J Track gauge	1.870 mm	1.870 mm
K Overall track width with 450 mm shoes	2.320 mm	2.320 mm
Overall track width with 600 mm shoes	2.470 mm	2.470 mm
L Track shoe width	450 mm, 600 mm	450 mm, 600 mm
M Machine tail height (top of engine cover)	1.885 mm	1.885 mm
N Tail length	1.485 mm	1.485 mm



Bucket capacity (ISO 7451)	m <sup>3</sup>	0,107	0,171	0,181	0,235	0,282
Bucket width (with cutting edge)	mm	350	450	550	650	750

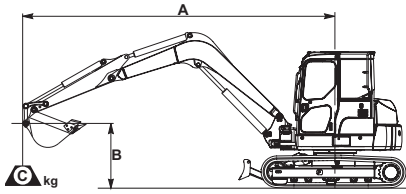
# Working Range

## MONO BOOM



ARM LENGTH	1.650 mm	2.100 mm
A Max. digging height	6.570 mm	6.750 mm
B Max. dumping height	4.515 mm	4.720 mm
C Max. digging depth	4.160 mm	4.615 mm
D Max. vertical wall digging depth	2.900 mm	3.165 mm
E Max. digging depth of cut for 2,44 m level	3.765 mm	4.250 mm
F Max. digging reach	6.935 mm	7.345 mm
G Max. digging reach at ground level	6.725 mm	7.150 mm
H Min. swing radius	2.755 mm	2.900 mm
Min. swing radius with boom swing	2.395 mm	2.545 mm

## MONO BOOM



A – Reach from swing centre

B – Bucket hook height

C – Lifting capacities, including bucket, bucket linkage and bucket cylinder

– Rating over front

– Rating over side

– Rating at maximum reach

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

Arm length	A		5,5 m		4,5 m		3,0 m		2,0 m	
	B									

	4,5 m	kg	1.200	990	1.210	990						
	3,0 m	kg	940	760	1.190	970	*1.420	1.400				
	1,5 m	kg	850	680	1.130	910	1.580	1.280	3.070	2.410		
	0,0 m	kg	870	690	1.070	860	1.470	1.180	2.800	2.170		
	-1,5 m	kg	1.040	830	1.050	840	1.430	1.140	2.770	2.140	*3.800	*3.800
	-4,5 m	kg	1.730	1.380					2.850	2.220	6.530	4.630

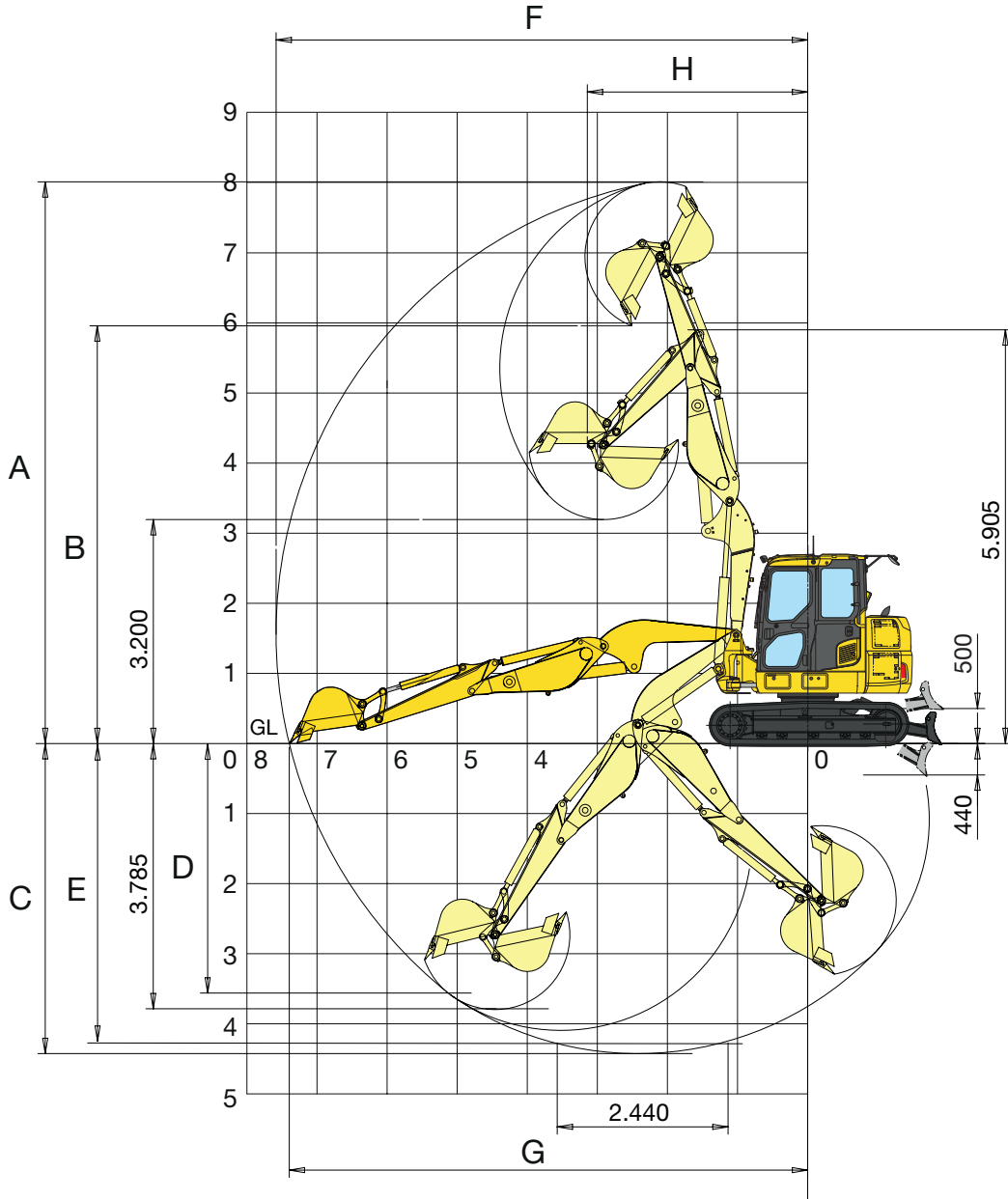
	4,5 m	kg	1.390	1.150			*1.400	*1.400				
	3,0 m	kg	1.060	870	1.190	970	1.680	1.380				
	1,5 m	kg	960	780	1.140	920	1.580	1.280				
	0,0 m	kg	990	800	1.090	880	1.500	1.200	2.850	2.220		
	-1,5 m	kg	1.220	990			1.480	1.180	2.860	2.230	*4.620	*4.620
	-4,5 m	kg	2.490	1.970					2.970	2.320	*6.710	4.820

Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Excavators used in object handling operations must comply with the related local regulations and must be equipped with hose burst valves (boom & arm) and an overload warning device in compliance with EN474-5.

- The values marked with an asterisk (\*) are limited by the hydraulic capacities.
- Calculations are based on the machine resting on a uniform and firm surface.
- The lifting point is a hypothetical hook placed behind the bucket.

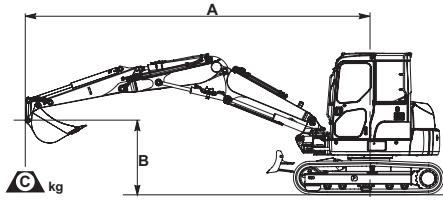
# Working Range

## TWO-PIECE BOOM



ARM LENGTH	1.650 mm	1.900 mm
A Max. digging height	8.020 mm	8.260 mm
B Max. dumping height	5.960 mm	6.155 mm
C Max. digging depth	4.425 mm	4.675 mm
D Max. vertical wall digging depth	4.020 mm	3.785 mm
E Max. digging depth of cut for 2,44 m level	4.265 mm	4.525 mm
F Max. digging reach	7.785 mm	7.835 mm
G Max. digging reach at ground level	7.400 mm	7.655 mm
H Min. swing radius	3.145 mm	3.330 mm

## TWO-PIECE BOOM



A – Reach from swing centre

B – Bucket hook height

C – Lifting capacities, including bucket, bucket linkage and bucket cylinder

– Rating over front

– Rating over side

– Rating at maximum reach

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

Arm length	A				4,5 m		3,0 m	
	B							

	5,0 m	kg	600	910				
	3,0 m	kg	420	630	1.200	1.340		
	0,0 m	kg	390	600	840	1.220		
	-2,0 m	kg	580	820	860	1.250	2.300	2.450

	5,0 m	kg	680	990				
	3,0 m	kg	470	680	1.190	1.330		
	0,0 m	kg	440	640	850	1.240		
	-2,0 m	kg	640	880	890	1.280	2.350	2.500

Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load. Excavators used in object handling operations must comply with the related local regulations and must be equipped with hose burst valves (boom & arm) and an overload warning device in compliance with EN474-5.

- The values marked with an asterisk (\*) are limited by the hydraulic capacities.
- Calculations are based on the machine resting on a uniform and firm surface.
- The lifting point is a hypothetical hook placed behind the bucket.

# Midi-Excavator

## PC88MR-10

### Standard and Optional Equipment

#### ENGINE

Komatsu SAA4D95LE-6 turbocharged common rail direct injection diesel engine	●
EU Stage IIIB compliant	●
Alternator 24 V / 60 A	●

#### UNDERCARRIAGE

450 mm steel shoes	●
600 mm steel shoes	○
450 mm road liner shoes	○
450 mm rubber shoes	○
Track roller guard (not with rubber shoes)	●

#### HYDRAULIC SYSTEM

6-working mode selection system; power mode, economy mode, breaker mode, attachment power and attachment economy mode, and lifting mode	●
Adjustable PPC wrist control levers for arm, boom, bucket and swing, with sliding proportional control for attachments and 3 auxiliary buttons	●
Relieve valves on service spool	●
One additional 2-way full-flow service valve with hydraulic line for attachment on boom and arm (HCU-A)	●
Additional auxiliary hydraulic circuit (HCU-B)	●
2nd auxiliary hydraulic circuit (HCU-C) + preparation for hydraulic quick-coupler	○

#### LIGHTING SYSTEM

Working light on boom	●
Additional working light on boom	○
Front working light on cab	○
4 front working lights on cab	○
Rear working light on cab	○
Rotating beacon	○

#### CABIN

Reinforced safety SpaceCab™; highly pressurised and tightly sealed hyper viscous mounted cab with tinted safety glass windows, opening skylight, pull-up type front window with locking device, removable lower window, front window wiper with intermittent feature, cigarette lighter, ashtray, floor mat	●
Retractable seat belt	●
Automatic climate control system	●
24 Volt power supply	●
Beverage holder and magazine rack	●
Radio pre-setting	●
Radio	○
Rain visor (not with OPG)	○

#### SERVICE AND MAINTENANCE

Multifunction video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	●
Battery main switch	●
KOMTRAX™ – Komatsu wireless monitoring system	●
Refuelling pump	○

#### ATTACHMENTS

2.320 mm blade (with 450 mm shoes)	●
2.470 mm blade (with 600 mm shoes)	●
Bucket range (350 - 750 mm)	○
1.500 mm ditch cleaning bucket	○
1.650 mm ditch digging bucket (52°)	○

#### OTHER EQUIPMENT

Mono boom	●
1.650 mm digging arm	●
2-speed travel	●
Auto deceleration	●
Proportional roll switch on joystick for equipment circuit	●
Two-piece boom (with positioner)	○
1.900 mm digging arm	○
2.100 mm digging arm (mono boom only)	○
OPG Level II front guard	○
OPG Level II top guard (FOPS)	○

#### SAFETY EQUIPMENT

Overload warning device	●
Travel acoustic alarm	●
Horn	●
Rear-view mirrors (left side, rear)	●
Hose burst valves on boom and arm cylinders	●
Emergency engine stop switch	●
Neutral position detection system	●
Seat belt caution indicator	●
Rear-view camera system	○

Further work equipment, accessories and special application arrangements on request

Other attachments on request

- standard equipment
- optional equipment

Your Komatsu partner:

# KOMATSU

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