KOMATSU

PW
98MR

Midi-Excavator

PW98MR-8

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

OPERATING WEIGHT
9.800 - 10.300 kg

BUCKET CAPACITY
max. 0,282 m³

Walk-Around

The new PW98MR-8 compact midi-excavator is the result of expertise and technology that Komatsu has developed from over 80 years' experience. Developed with constant attention to the needs of customers all over the world, the PW98MR-8 is a user-friendly machine that delivers top-class performance. It has a tight tail swing and protrudes over the wheels by just 160 mm. So the operator can concentrate on the work in front, without having to worry about rear-swing impacts.

Outstanding performances

- Fast and precise movements
- Wide working range
- Unrivalled controllability
- Excellent mobility in confined work spaces
- CLSS hydraulic system

Powerful and environmentally friendly

- High torque and fuel efficient Komatsu ecot3 engine
- Meets EU Stage IIIA
- Auto-deceleration and eco-gauge for a lower fuel usage
- 5 selectable working modes
- Low operating noise levels

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First-class operator comfort

- Spacious and comfortable cab
  ROPS compliant with ISO12117-2:2008
- Quiet and ergonomic working environment
- Large multifunction colour LCD monitor
- Sliding door for easy entry and exit
- Automatic air conditioner

Total versatility

- Compact design
- 4-wheel steering enabling 3 steering modes
- Proportional control on joystick for auxiliary circuits
- Innovative two-piece boom design
- Second auxiliary circuit and hydraulic
  quick-coupler line (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

KOMTRAX
Komatsu Satellite
Monitoring System

First-Class Operator Comfort

Operator's environment

The PW98MR-8 has a spacious ROPS cab (ISO 12117-2) designed to absorb shocks and offer maximum protection in case of a roll over. It also gives outstanding comfort to this compact machine, even to the most demanding operator. With a double slide mechanism, the seat and PPC 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.

Large multifunction LCD monitor

A large and user-friendly colour monitor makes working in a PW98MR-8 safe, accurate and smooth. Its highly intuitive interface and easy-to-operate switches give the operator access to a huge range of functions and operating information.

Opening skylight for overhead visibility

Wide glass surface for excellent all around visibility

Large multi-lingual monitor

Outstanding Performances

High lift capacity

Along with its class leading compact size, the PW98MR-8 features an unrivalled lifting performance. The combination of power, convenient dimensions and complete control makes the PW98MR-8 the first choice for heavy duty lifting applications or simple excavating tasks in narrow alleys, road-construction sites and for sewer-construction work.

Excellent travel performance

Wheeled excavators are built to move quickly on and between jobsites. To increase its mobility, the PW-98MR-8 features a completely reworked driveline for faster travel and uphill driving speeds. The front oscillating axle, manually lockable through the LCD monitor, further increases the performance on slopes.

Powerful and Environmentally Friendly

Performance and ecology

The PW98MR-8 is fitted with an ecot3 engine that meets EU Stage IIIA regulations. Together with an advanced hydraulic system, this electronically controlled common-rail engine with multi stage 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 5 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 the 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.

Work in tight spaces

The short-tail PW98MR-8 delivers optimal power and digging speed, even in confined spaces where traditional machines can't work: yards, road works, demolition sites, sewers, etc. Sturdy and very stable, it guarantees maximum safety and offers complete operator confidence in any working conditions.

4-wheel steering

It's possible to select between 3 steering modes: 2-wheel steering (for travelling), 4-wheel steering (for fast, agile operation) and crab (for confined areas). This ensures outstanding versatility and manoeuvrability. It's easy and safe to change the steering mode: just push 2 switches at the same time on the new panel, and a green lamp will inform you of the steering mode selected. When working, the front-axle oscillation can be blocked for improved stability.

Easy Maintenance

Excellent serviceability

Komatsu designed the PW98MR-8 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

Komatsu Satellite Monitoring System

KOMTRAX

KOMTRAX™ is a revolutionary machine tracking system designed to save you time and money. You can now monitor your equipment anytime and anywhere. Use valuable machine data received via the KOMTRAX™ web site to optimise your maintenance planning and machine performances.

With KOMTRAX™, you can:

- Check when & where your machines are at work
- Be informed of unauthorized machine use or movement
- Set and receive e-mail notification for security alarms

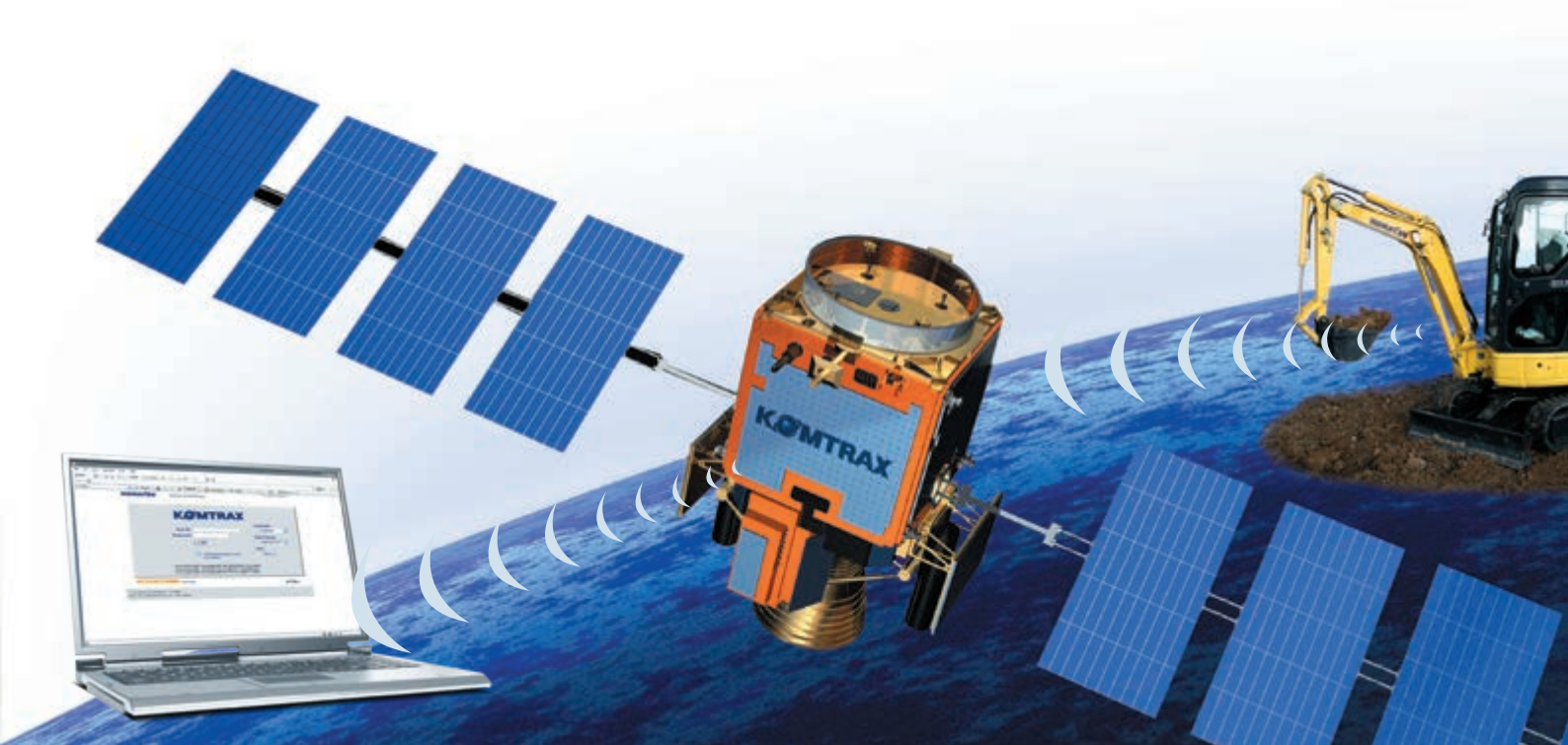
For further details on KOMTRAX™, please ask your Komatsu dealer for the latest KOMTRAX™ brochure.

Machine working time - With the "daily working record" chart, get precise engine running time data: when your machine was started and when it was shut down, as well as total engine running time.

Fleet location - The machine list instantly locates all your machines, even those in other countries.

Alarm notifications - You can receive notification of alarms both via the KOMTRAX™ website and by e-mail.

Added security - The "engine lock" feature allows to program when a machine's engine can be started. And with "geo-fence", KOMTRAX™ sends notification every time your machine moves in or out of a predetermined operating area.



Specifications

ENGINE

Model ..... Komatsu SAA4D95LE-5
Type .....common rail direct injection, water cooled, emissionised, turbocharged, after-cooled, diesel
Displacement.....3.260 cm³
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 .....266 Nm/1.600 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 m³ bucket (ISO 7451), blade, operator, liquids, filled tank and standard equipment (ISO 6016).

	Width	Operating weight with two-piece boom
With rear blade	2.350 mm	10.000 kg
With rear stabilizers	2.330 mm	9.800 kg
With blade and stabilizers	2.350 mm	10.300 kg

TRANSMISSION

Hydrostatic transmission with four driving wheels. The hydraulic motor acts by means of a synchromesh gear that makes for two speed ranges.
Maximum traction force ..... 5.300 daN (5.400 kg)
Working speed ..... 1st 6 km/h - 2nd 10 km/h
Travelling speed.....3rd 23 km/h - 4th 30 km/h

AXLES

Driving and steering axles with epicyclic reduction gears in the hubs. The oscillation of the front axle can be blocked by means of two hydraulic pistons.
Tyres:
Twin tyres (standard)..... 8.25 - 20
Single tyres (option) 18-19.5

STEERING

Hydraulically operated steering system that acts on the front and rear wheels by means of double rod hydraulic cylinders in the axles. The operator can select three kinds of steering by means of an electric switch:
- two steering wheels
- four steering wheels
- crab steering

Steering radius:
Two steering wheels .....6.010 mm
Four steering wheels.....4.040 mm

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.

HYDRAULIC SYSTEM

Type .....HydrauMind. Closed-centre system with load sensing and pressure compensation valves
Main pumps:
Pump for.....boom, arm, bucket, undercarriage and travelling
Type .....variable displacement, axial piston
Max. flow .....160 ltr/min
Pump for..... swing
Type .....fixed displacement gear pump
Max. flow .....70 ltr/min
Hydraulic motors:
Travel .....1 × piston motor with parking brake
Swing..... 1 × piston motor with swing holding brake
Relief valve setting:
Swing ..... 21,1 MPa (215 kg/cm²)
Travel and work equipment..... 26,5 MPa (270 kg/cm²)
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..... 10,0 rpm

BRAKES

Type .....hydraulically controlled, with pedal, by means of two double circuit pumps, acting on oil immersed multiple discs on the four wheels.
Service brakes..... hydraulically controlled by means of a pedal, acting on the four wheels
Parking brake .....negative type brakes, hydraulically controlled by means of an electric push button positioned inside the cab, acting on the rear axle.

ELECTRIC SYSTEM

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

SERVICE REFILL CAPACITIES

Fuel tank.....125 ltr
Cooling system.....10,0 ltr
Engine oil.....11,5 ltr
Differential (each axle) .....9 ltr
Swing drive.....2,8 ltr
Hydraulic oil tank.....100 ltr

ENVIRONMENT

Engine emissions .....Fully complies with EU Stage IIIA exhaust emission regulations
Noise levels
LwA external .....99 dB(A) (2000/14/EC Stage II)
LpA operator ear.....71 dB(A) (ISO 6396 dynamic test)
Vibration levels (EN 12096:1997)*
Hand/arm..... ≤ 2,5 m/s² (uncertainty K = 0,58 m/s²)
Body ..... ≤ 0,5 m/s² (uncertainty K = 0,22 m/s²)
* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

LIFTING CAPACITY

A – Reach from swing centre

B – Height at bucket pin

– Rating over front

– Rating over side

DATAS AND SPECIFICATIONS ARE REFERRING TO THE MACHINE ACCORDING TO 89/392/CE AND EN 474-5 DIRECTIVES.

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

Lifting capacities with additional counterweight (218 kg), 750 mm bucket (200 kg), twin tyres (8.25-20), blade, levers and cylinder.

WITH FRONT BLADE AND REAR STABILISERS UP

B \ A		Max.		6,0 m		5,0 m		4,0 m	
Arm length 1.650 mm	4,5 m			1.005	756	*1.479	1.098	*1.610	*1.610
	3,0 m	848	564	1.005	713	1.403	954	1.988	1.404
	1,5 m	825	540	930	672	1.305	840	1.725	1.176
	0,0 m	867	570	987	683	1.283	882	1.722	1.170
Arm length 1.900 mm	4,5 m			980	731	*1.479	1.073	*1.610	*1.610
	3,0 m	798	514	980	688	1.378	929	1.963	1.379
	1,5 m	800	515	905	647	1.280	815	1.700	1.151
	0,0 m	817	520	962	658	1.258	857	1.697	1.145

WITH REAR BLADE DOWN (LIFTING ON BLADE)

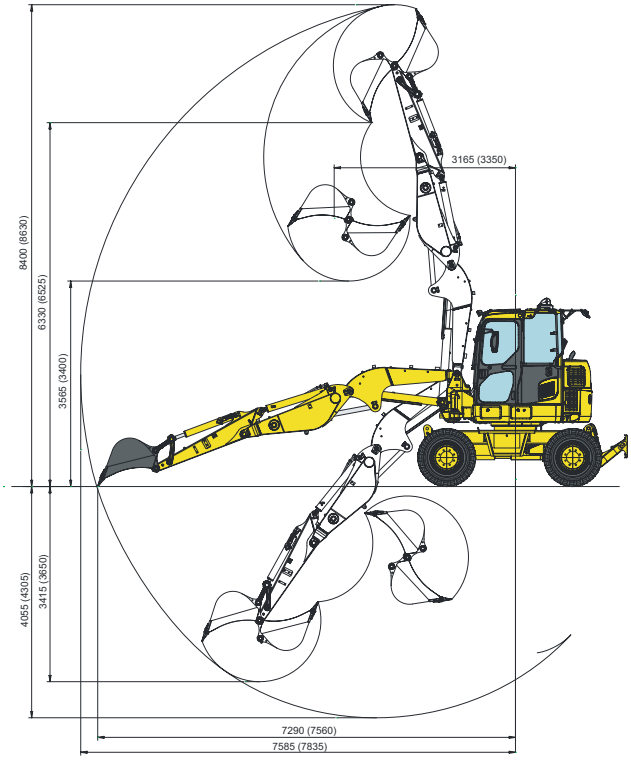
B \ A		Max.		6,0 m		5,0 m		4,0 m	
Arm length 1.650 mm	4,5 m			1.566*	836	1.479*	1.159	1.610*	1.610*
	3,0 m	1.566*	559	1.653*	776	1.940*	1.121	2.471*	1.549
	1,5 m	1.549*	551	1.909*	728	2.249*	965	2.975*	1.253
	0,0 m	1.626*	557	2.004*	728	2.204*	984	2.975*	1.240
Arm length 1.900 mm	4,5 m			1.456*	932	1.479*	1.175	1.610*	1.610*
	3,0 m	1.442*	525	1.618*	789	1.918*	1.136	2.371*	1.616
	1,5 m	1.470*	529	1.792*	686	2.232*	917	2.971*	1.346
	0,0 m	1.470*	534	1.846*	700	2.187*	945	2.971*	1.333

WITH FRONT BLADE AND REAR STABILISERS DOWN

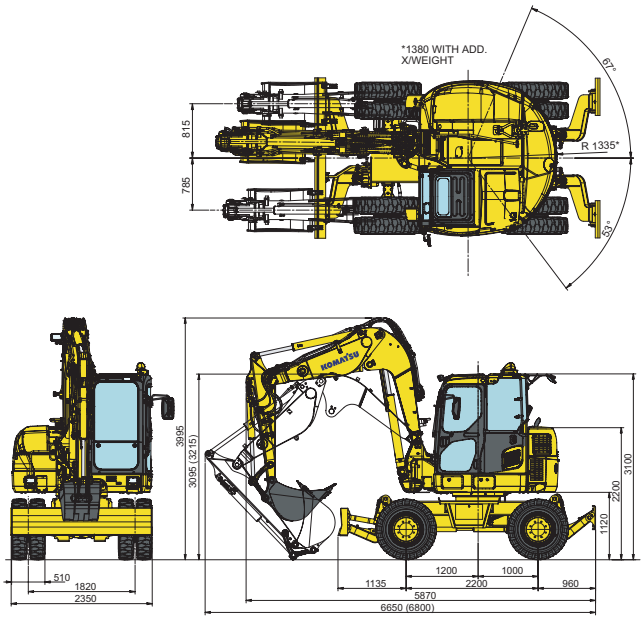
B \ A		Max.		6,0 m		5,0 m		4,0 m	
Arm length 1.650 mm	4,5 m			1.566*	1.118	1.479*	1.479*	1.610*	1.610*
	3,0 m	1.566*	824	1.653*	975	1.940*	1.342	2.471*	2.067
	1,5 m	1.549*	852	1.909*	993	2.249*	1.264	2.975*	1.823
	0,0 m	1.626*	861	2.004*	993	2.204*	1.289	2.975*	1.804
Arm length 1.900 mm	4,5 m			1.456*	1.050	1.479*	1.479*	1.610*	1.610*
	3,0 m	1.442*	746	1.618*	1.058	1.918*	1.422	2.371*	2.371*
	1,5 m	1.470*	795	1.792*	990	2.232*	1.307	2.971*	1.935
	0,0 m	1.470*	803	1.846*	1.010	2.187*	1.346	2.971*	1.916

NOTE:
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



DIMENSIONS



Bucket capacity (ISO 7451)	m³	0,077	0,109	0,181	0,235	0,282
Bucket width (without cutting edge)	mm	350	450	550	650	750
Bucket width (with cutting edge)	mm	450	550	650	750	825

Midi-Excavator

PW98MR-8

Standard and Optional Equipment

ENGINE	
Komatsu SAA4D95LE-5 direct injection, water cooled, turbocharged diesel engine	●
Alternator 24 V/60 A	●

TYRES	
Twin tyres 8.25-20	●
Single tyres 18-19.5	○

HYDRAULIC SYSTEM	
5-working mode selection system; Power mode, economy mode, breaker mode, attachment mode and lifting mode	●
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)	●
Relieve valve on service spool	●
2nd auxiliary hydraulic circuit (HCU-C) + preparation for hydraulic quick-coupler	○
Final lock valves on attachment circuit	○

LIGHTING SYSTEM	
Working light on boom	●
Rear working light on cab	○
1 front working light on cab	○
2 front working lights on cab	○
Additional working light on boom	○

CAB	
Automatic air conditioner	●
Adjustable seat with safety belt	●
Large multi-lingual LCD monitor	●
Radio pre-setting	●
12 V electric plug	●
Radio	○
Rain visor	○

SERVICE AND MAINTENANCE	
Equipment Management and Monitoring System (EMMS)	●
Double-element air filter	●
KOMTRAX™ - Komatsu satellite monitoring system	●
Refuelling pump	○

SAFETY EQUIPMENT	
Hose burst valve on boom cylinder	●
Overload warning device	●
Horn	●
Rearview mirror (right side)	●
Travel acoustic alarm	●
Arm safety valve	●
Lateral mirror (right side)	○
Rotating beacon	○
Bucket linkage with lifting hook	○

ATTACHMENTS	
Stabilisers and/or blade with safety valve	○
Bucket range (350 - 750 mm)	○
1.500 mm ditch cleaning bucket	○
1.650 mm ditch digging bucket (52°)	○

OTHER EQUIPMENT	
Two-piece boom with cylinder protection	●
1.650 mm digging arm	●
4-wheel steering	●
Auto deceleration	●
Proportional roll switch on joystick for equipment circuit	●
Automatic parking brake	●
Swing lock	●
Oscillating front axle with manual cylinder locking	●
Additional counterweight (218 kg)	○
1.900 mm digging arm	○

Further work equipment, accessories and special application arrangements on request

Other attachments on request

● standard equipment
○ optional equipment

Your Komatsu partner:

Komatsu Europe International NV
Mechelsesteenweg 586
B-1800 VILVOORDE (BELGIUM)
Tel. +32-2-255 24 11
Fax +32-2-252 19 81
www.komatsu.eu

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