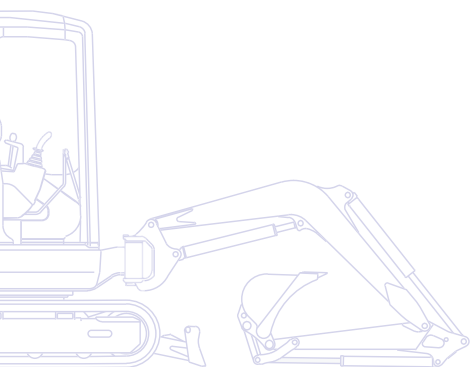


KOMATSU

PC
45MR



Mini-Excavator **PC45MR-3**



ENGINE POWER
29,5 kW / 39,6 HP @ 2.400 rpm

OPERATING WEIGHT
4.595 - 4.780 kg

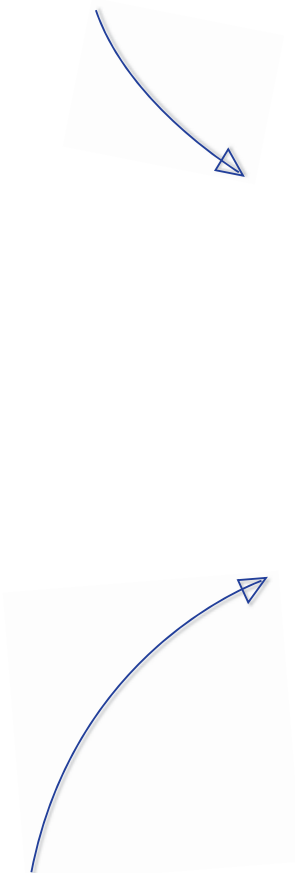
BUCKET CAPACITY
0,07 - 0,175 m³

Walk-Around

The new PC45MR-3 compact mini-excavator is the result of the competence and technology that Komatsu has acquired over the past 80 years. It was 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.

Total versatility

- Customised configurations
- Standard 1 or 2 way auxiliary line for attachments
- Ideal for a wide range of applications



Cutting-edge hydraulic circuit

- CLSS (Closed-centre Load Sensing System)
- Perfect control even during combined operations
- Fast and precise movements

PC45MR-3

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29,5 kW / 39,6 HP @ 2.400 rpm

OPERATING WEIGHT
4.595 - 4.780 kg

BUCKET CAPACITY
0,07 - 0,175 m³

First-class operator comfort

- Spacious working environment
- Sliding door
- Pressure Proportional Control (PPC) servo-controls



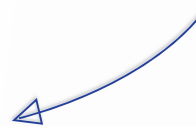
Outstanding performances

- Optimal power and digging speed
- Superior stability and safety in any conditions
- Fast and precise movements



Easy maintenance

- Quick access to all daily inspection points
- Tilting cab for maintenance jobs
- Extended 500-hour service interval



KOMTRAX

Komatsu Satellite
Monitoring System

Outstanding Performances



Work in tight spaces

The new short-tail PC45MR-3 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.

Automatic down-shift

This feature automatically adjusts the hydraulic travel motor for the job at hand: maximum displacement for faster movement, or minimum displacement for high drawbar pull. This process requires no attention from the operator. The two-speed tracking is operated via a switch on the blade lever.

X-frame

The new X-frame ensures maximum stress resistance and optimal stress distribution. Its shape makes the machine a lot more rigid and reliable. In addition, it facilitates the regular undercarriage cleaning operations and the spoils removal process.



Cutting-Edge Hydraulic Circuit

Komatsu CLSS

The CLSS (Closed-centre Load Sensing System) hydraulic circuit guarantees power, speed and perfect control to all movements, including simultaneous ones. The combination of the variable displacement pump and of CLSS allows operators to perform all

required movements with maximum efficiency, regardless of the load or rpm. The unique CLSS characteristics are perfectly complemented by the hydraulic servo-controls, which are, by far, the easiest to use and that allow extremely precise manoeuvres with minimal effort.



First-Class Operator Comfort



An optimal work environment

Despite its compact size, the PC45MR-3 offers unequalled comfort. The spacious cab was developed with exceptional care to details, and the work environment is quiet and comfortable. Special attention is given to the operator: ergonomic and dedicated PPC controls, and, in option, an efficient air conditioning and ventilation system to guarantee optimal thermal comfort. Last, but not least, the upper rail sliding door makes getting in and out of the machine very easy and safe in any situation.





Customisation

Many configurations are available, so you can choose the perfect machine for the job: long or short arm, cab or canopy, rubber, steel or road liner shoes. The 1 / 2 way auxiliary hydraulic circuit allows the use of a wide range of working tools such as a hammer, a clamshell bucket, an auger etc.

The switch between the two options is simply done by means of a valve located under a little bonnet on the side of the machine.



Easy Serviceability

Tilting cab

The wide opening engine bonnets provide a quick access to daily inspection points. The fuel and the hydraulic oil tanks are located under the side bonnet, in a safe and easy-to-reach position. In addition, the cab easily tilts back for major maintenance tasks.

Easier repairs

ORFS hydraulic face seal connectors and DT electrical connectors enhance the machine's reliability and make repairs faster and easier. Special technical solutions allow the interval for most ordinary maintenance operations - such as pin greasing and engine oil changes - to be extended up to 500 hours.



Rear bonnets for quick engine checks, simple inspections, cleaning of the radiators and easy access to the battery



Front bonnet: fuel tank refilling

Komatsu Satellite Monitoring System



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.



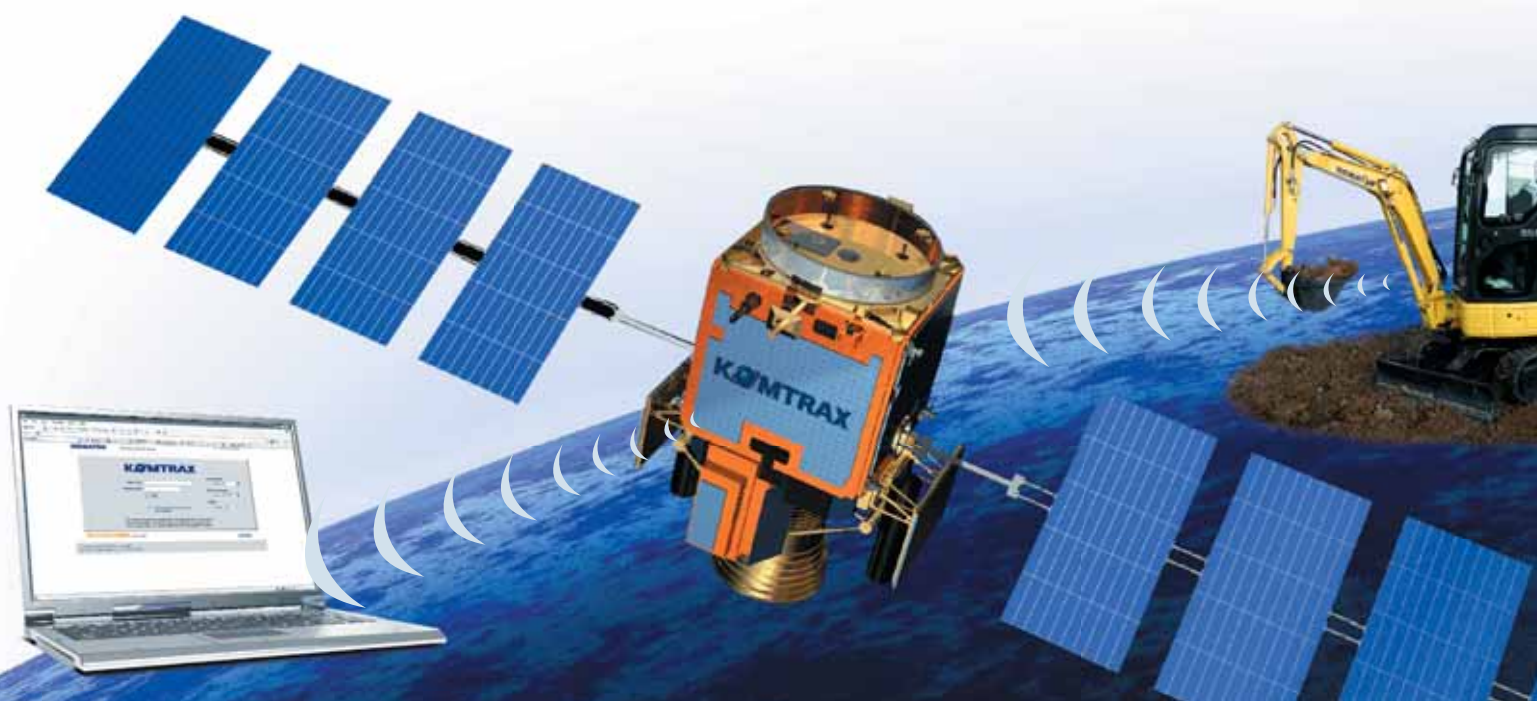
Fleet location - The machine list instantly locates all your machines, even those in other countries.



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

The new generation engine has been developed to comply with the strictest emission controls.

Model	Komatsu 4D88E-6
Type	emissionised 4-cycle diesel engine
Displacement	2.189 cm ³
Bore × stroke	88 × 90 mm
No. of cylinders	4
Engine power	
at rated engine speed	2.400 rpm
ISO 14396	29,5 kW / 39,6 HP
ISO 9249 (net engine power)	28,5 kW / 38,2 HP
Max. torque/engine speed	137 Nm/1.440 rpm
Cooling system	water
Air filter type	dry
Starter motor	electric motor with pre-heating air system for cold climate

OPERATING WEIGHT

Operating weight with standard bucket, fully serviced, +75 kg operator (ISO 6016).

Operating weight with cab and rubber shoes	4.715 kg
Operating weight with cab and steel shoes	4.780 kg
Canopy	-150 kg (optional)

HYDRAULIC SYSTEM

Type	Komatsu CLSS
Main pump	2 × variable displacement pump
Max. pump flow	53,5 × 2 + 33,8 ltr/min
Max. operating pressure	26,5 MPa (265 bar)

Hydraulic motors:

Travel	2 × variable displacement
Swing	1 × fixed displacement

Hydraulic cylinders (bore × stroke):

Boom	90 × 696 mm
Arm	80 × 649 mm
Bucket	70 × 580 mm
Boom swing	90 × 630 mm
Blade	110 × 140 mm

Bucket digging force (ISO 6015)

3.393 daN (3.460 kg)	
Arm crowd force (ISO 6015):	
1.375 mm arm	2.157 daN (2.200 kg)
1.770 mm arm	1.961 daN (2.000 kg)

The digging equipment is fully controlled by PPC servo-controls. All movements are stopped by lifting the safety levers on the tilting case.

ENVIRONMENT

Vibration levels (EN 12096:1997)*

Hand/arm	≤ 2,5 m/s ² (uncertainty K = 1,2 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,2 m/s ²)

* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

SWING SYSTEM

The rotation is operated by means of an orbital hydraulic motor. Single ball-bearing ring with internal, induction hardened toothring.

Centralised lubrication of the unit.

Swing speed	9,0 rpm
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BLADE

Type

electro-welded, single unit structure	
Width × height	1.960 × 355 mm
Max. lifting above ground level	430 mm
Max. depth below ground level	330 mm

UNDERCARRIAGE

Central lower X-frame and carriage frame with boxed section.

Track rollers (each side)	4
Shoe width	400 mm
Ground pressure (standard)	0,25 kg/cm ²

ELECTRIC SYSTEM

Voltage	12 V
Battery	72 Ah
Alternator	40 A
Starter motor	2,3 kW

SERVICE CAPACITIES

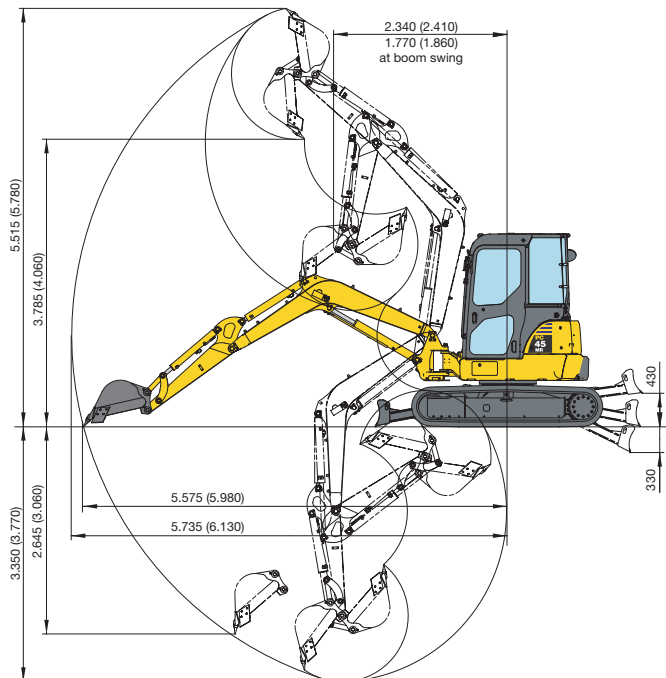
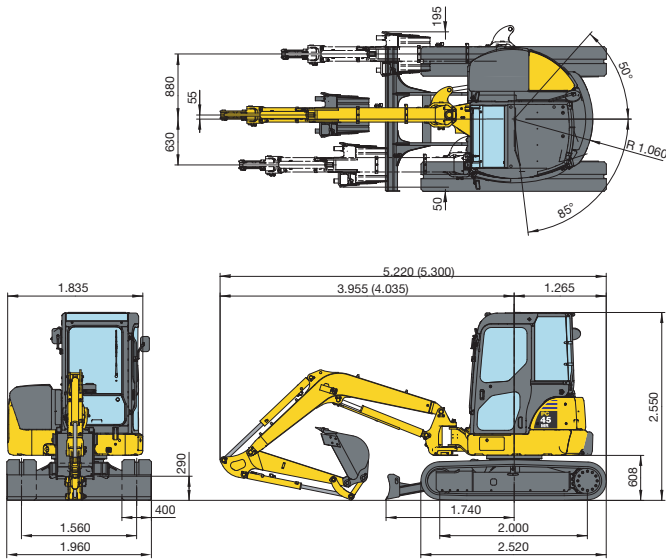
Fuel tank	65 ltr
Radiator and system	8,5 ltr
Engine oil (refill)	7,5 ltr
Hydraulic system	55 ltr

TRANSMISSION

Type

2 speed hydrostatic transmission, controlled and steered by means of two levers and two pedals	
Hydraulic motors	2 × axial pistons
Reduction system	planetary gear
Max. drawbar pull	4.197 daN (4.280 kgf)
Travel speed	2,8 - 4,6 km/h

Dimensions & Working Range



BUCKET RANGE

Width mm	Capacity m ³ (ISO 7451)	Weight kg	No. of teeth
300	0,07	75	2
400	0,1	90	3
500	0,125	100	4
600	0,15	115	5
700	0,175	125	5

Cab, rubber shoes, blade down

A - Distance from machine's center B - Height at bucket pin

ARM LENGTH 1.375 mm

A	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	-	-	(*)1.005	775
3 m	-	-	(*)990	(*)990	(*)990	670	(*)1.020	555
2 m	-	-	(*)1.530	1.050	(*)1.165	655	(*)1.060	475
1 m	-	-	(*)2.125	975	(*)1.380	625	(*)1.120	450
0 m	-	-	(*)2.345	940	(*)1.505	605	(*)1.195	475
-1 m	(*)3.010	1.875	(*)2.195	945	(*)1.400	605	(*)1.280	570
-2 m	(*)2.635	1.935	(*)1.505	975	-	-	(*)1.340	900

Unit: kg

ARM LENGTH 1.770 mm

A	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)805	675	(*)855	615
3 m	-	-	-	-	(*)810	680	(*)880	465
2 m	-	-	(*)1.220	1.070	(*)1.000	655	(*)925	405
1 m	-	-	(*)1.895	985	(*)1.260	625	(*)980	385
0 m	(*)1.250	(*)1.250	(*)2.275	930	(*)1.450	595	(*)1.045	405
-1 m	(*)2.410	(*)2.410	(*)2.275	920	(*)1.465	585	(*)1.125	470
-2 m	(*)3.355	1.870	(*)1.865	935	-	-	(*)1.215	655

Unit: kg

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.

Mini-Excavator

PC45MR-3

Standard Equipment

- ROPS (ISO 3471) / FOPS (ISO 10262) tilting cab with heating
- Sliding door
- 400 mm rubber shoes
- 1.375 mm digging arm
- Two speeds with "Automatic Shift Down"
- 1 / 2 way auxiliary hydraulic circuit up to the arm
- Blade
- Adjustable suspension seat
- Lifting cylinder guard
- Working light on boom
- 2 rear-view mirrors
- Travel acoustic alarm
- KOMTRAX™ - Komatsu satellite monitoring system
- Boom and arm safety valves, overload warning device (for EU countries only)

Optional Equipment

- ROPS (ISO 3471) / FOPS (ISO 10262) canopy
- 400 mm steel shoes
- 400 mm road liners
- 1.770 mm digging arm
- Air conditioning
- Bucket range (300 - 700 mm)
- 1.400 mm ditch cleaning bucket
- Valves on bucket cylinder
- Bucket linkage with lifting eye
- Boom and arm safety valves, overload warning device (for non-EU countries only)
- Blade safety valve
- Relieve valves for attachments
- Rotating beacon
- Cab/canopy working lights
- Additional cab rear working light
- Radio pre-setting
- Proportional controls for attachment on joystick
- Komatsu mechanical quick-coupler
- Buckets with Kmax teeth

Your Komatsu partner:

KOMATSU

**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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