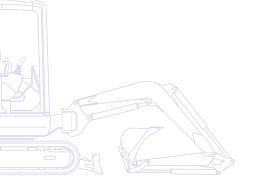
# KOMATSU



Mini-Excavator

### **PC55MR-3**



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

5.160 - 5.350 kg

**BUCKET CAPACITY** 0,07 - 0,175 m<sup>3</sup>

### Walk-Around

The new PC55MR-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





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



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> **OPERATING WEIGHT** 5.160 - 5.350 kg

**BUCKET CAPACITY** 0,07 - 0,175 m<sup>3</sup>

### 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





Komatsu Satellite Monitoring System

# Outstanding Performances



#### Work in tight spaces

The new short-tail PC55MR-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.



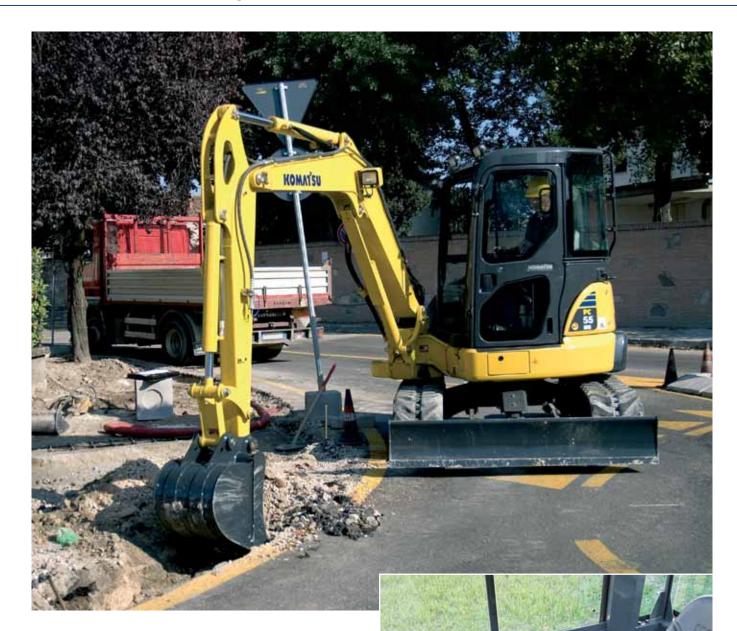
# Cutting-Edge Hydraulic Circuit

#### 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 PC55MR-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.

# Total Versatility



#### 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.

To further enhance the operator's comfort, new optional fingertip controls that act on the first auxiliary hydraulic line now offer improved versatility and controllability and guarantee maximum precision and minimum finger fatigue when working with attachments. The auxiliary oil flow rate can also easily be adjusted through the monitor panel, directly from the operator's seat.



## Easy Serviceability

#### Tilting cab





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.



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.

#### 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

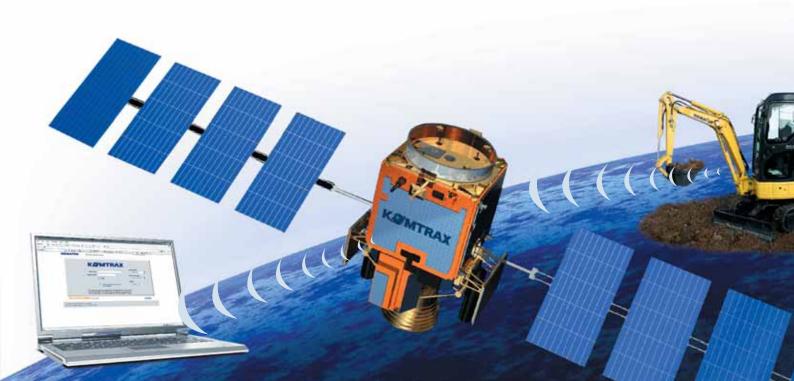
For further details on KOMTRAX<sup>TM</sup>, please ask your Komatsu dealer for the latest KOMTRAX<sup>TM</sup> brochure.



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<sup>TM</sup> 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 <sup>3</sup>
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,  $+75~\mathrm{kg}$  operator (ISO 6016).

Operating	weight	with cab	and rubb	er shoes	5.280 kg
Operating	weight	with cab	and steel	shoes	5.350 kg

#### **HYDRAULIC SYSTEM**

Type	Komatsu CLSS
Main pump2 × variable di	isplacement pump
Max. pump flow53,5	
Max. operating pressure2	26,5 MPa (265 bar)
Hydraulic motors:	
Travel2 × vari	able displacement
Swing1 × f	ixed displacement
Hydraulic cylinders (bore × stroke):	
Boom	90 × 696 mm
Arm	85 × 733 mm
Bucket	75 × 580 mm
Boom swing	95 × 630 mm
Blade	110 × 140 mm
Bucket digging force (ISO 6015) 3.9	900 daN (3.980 kg)
Arm crowd force (ISO 6015):	
1.640 mm arm	392 daN (2.440 kg)
2.000 mm arm	226 daN (2.270 kg)
The digging equipment is fully controlled by PE	C servo-controls

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

#### **TRANSMISSION**

speed hydrostatic transmission, controlled and
steered by means of two levers and two pedals
2 × axial pistons
planetary gear
4.200 daN (4.280 kgf)
2,8 - 4,6 km/h

#### 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.

#### **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	d section.
Track rollers (each side)	4
Shoe width	400 mm
Ground pressure (standard)	0,25 kg/cm <sup>2</sup>

#### **ELECTRIC SYSTEM**

Voltage	12 V
Battery	
Alternator	
Starter motor	

#### **SERVICE CAPACITIES**

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

#### **ENVIRONMENT**

Vibration levels (EN 12096:1997)\*

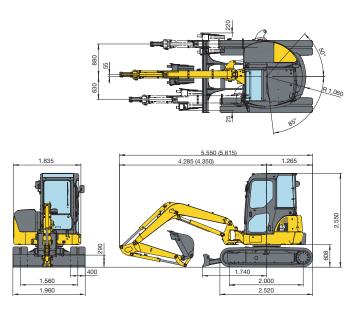
Hand/arm....  $\leq$  2,5 m/s² (uncertainty K = 1,2 m/s²) Body ....  $\leq$  0,5 m/s² (uncertainty K = 0,2 m/s²)

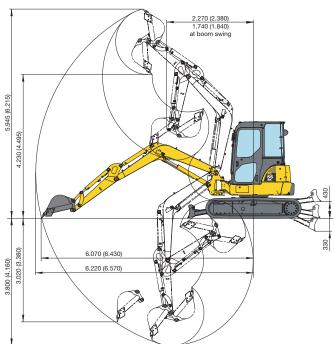
#### **BUCKET RANGE**

Width mm	Capacity m³ (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	

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

# Dimensions & Working Range





#### Cab, rubber shoes, blade down

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

#### ARM LENGTH 1.640 mm

* *								
$\overline{A}$	2 m		3 m		4 m		Max. outreach	
B	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)790	780	(*)835	670
3 m	-	-	-	-	(*)845	775	(*)850	520
2 m	-	-	(*)1.435	1.180	(*)1.050	745	(*)885	460
1 m	-	-	(*)2.030	1.085	(*)1.285	705	(*)930	440
0 m	-	-	(*)2.260	1.040	(*)1.435	680	(*)985	455
-1 m	(*)2.790	2.025	(*)2.170	1.040	(*)1.415	670	(*)1.050	520
-2 m	-	-	-	-	-	-	-	-

Unit: kgf

#### Cab, rubber shoes, blade up

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

#### ARM LENGTH 1.640 mm

11.11.1								
$\overline{A}$	2 m		3 m		4 m		Max. outreach	
В	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)790	780	(*)835	670
3 m	-	-	-	1	(*)845	775	780	520
2 m	-	-	(*)1.435	1.180	(*)1.050	745	695	460
1 m	-	-	1.665	1.085	1.065	705	670	440
0 m	-	-	1.620	1.040	1.035	680	695	455
-1 m	(*)2.790	2.025	1.615	1.040	1.025	670	795	520
-2 m	-	-	-	-	-	-	-	-

Unit: kgf

#### ARM LENGTH 2.000 mm

ARM LENGTH 2:000 IIIII									
$\overline{A}$	2 m		3 m		4 m		Max. outreach		
B	Front	360°	Front	360°	Front	360°	Front	360°	
4 m	-	-	-	-	(*)625	(*)625	(*)730	565	
3 m	-	-	-	-	(*)700	(*)700	(*)750	450	
2 m	-	-	(*)1.160	(*)1.160	(*)915	750	(*)785	400	
1 m	-	-	(*)1.815	1.095	(*)1.175	705	(*)825	385	
0 m	(*)1.285	(*)1.285	(*)2.180	1.030	(*)1.375	670	(*)875	395	
-1 m	(*)2.365	1.975	(*)2.205	1.015	(*)1.420	655	(*)935	445	
-2 m	-	-	-	-	-	-	-	-	

Unit: kgf

#### ARM LENGTH 2.000 mm

BA	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)625	(*)625	(*)730	565
3 m	-	-	-	-	(*)700	(*)700	685	450
2 m	-	-	(*)1.160	(*)1.160	(*)915	750	620	400
1 m	-	-	1.680	1.095	1.065	705	595	385
0 m	(*)1.285	(*)1.285	1.605	1.030	1.025	670	615	395
-1 m	(*)2.365	1.975	1.590	1.015	1.010	655	690	445
-2 m	-	-	-	-	-	-	-	-

Unit: kgf

#### 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  $(\sp{*})$  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.

### **PC55MR-3**

### Standard Equipment

- ROPS (ISO 3471) / FOPS (ISO 10262) tilting cab with heating
- Sliding door
- 400 mm rubber shoes
- 1.640 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
- 2.000 mm digging armAir conditioning
- Bucket range (300 700 mm)
- 1.400 mm ditch cleaning bucket
- 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
- Radio pre-setting
- Rotating beacon
- Cab/canopy working lights
- · Additional cab rear working light
- Auto deceleration
- Proportional controls for attachment on joystick
- Komatsu mechanical quick-coupler
- · Buckets with Kmax teeth

Your Komatsu partner:



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