



PC
45R-8



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MINI-EXCAVATOR

NET POWER
SAE J1349
28,9 kW - 38,8 HP

OPERATING WEIGHT
From 4.750 kg
to 4.860 kg

SHAPING TECHNOLOGY

Fruit of KOMATSU technology and experience, the PC45R-8 miniexcavator responds perfectly to all requirements for compactness, easy handling and high performance. Ruggedness and excellent stability guarantee safety and confidence in all conditions. The design of the frame and the undercarriage enhance the machine's high resistance to stress. A wide range of possible configurations and the possibility to use the machine with various different attachments make it the best and indeed often the only solution for many difficult applications.

Engine

The PC45R-8 miniexcavator is fitted with a KOMATSU engine that guarantees all the power required and low fuel consumption. The advanced technology applied means minimum levels of noise and emissions (STAGE 2).

Hydraulic system

The PC45R-8 uses the famous **CLSS (Closed Load Sensing System)** hydraulic circuit, that is, a closed-centre circuit with load sensing, fed by a main, variable delivery pump that ensures smooth and perfectly synchronized combined movements. All this guarantees maximum productivity and minimum consumption.



Total Comfort

Designed with the utmost care in every minimum detail, the driving position offers the maximum operating comfort. Easy access, comfort, ergonomic controls, an efficient monitor for controlling the main functions and visibility in all directions. The cab offers excellent comfort and visibility on the work area. The innovative design of the sliding door permits operation in all conditions, minimizing the risks of accidental contact.





Proportional servocontrols "PPC"

The ease of use that characterizes the PC45R-8 allows even less expert operators to get the most out of their work. The dedicated controls for every movement are easy to understand and ergonomic. A smooth and constant response of the hydraulic system and perfect visibility on the work area are the features that ensure maximum output even in the most difficult situations.

Versatility

The PC45R-8 features two forward gears for faster transfers, to be selected using a special pedal in the cab. At the same time, the considerable traction force ensures that the machine can move easily even in the most demanding conditions. The wide boom swing angle allows the PC45R-8 to work without difficulty even in the presence of obstacles or along walls. Large rear guards protect the body of the machine from accidental impacts and improve stability during work. The hydraulic hoses are protected inside the structure of the arms and are screwed onto the jacks to simplify replacement.

Maintenance

Routine maintenance takes just a few minutes and is extremely simple to perform, without requiring any special tool. The design of the engine allows all the maintenance operations to be performed from one side only. The counterweight can be easily opened to clean the radiators. The use of special bushings on the arms has made it possible to extend the greasing intervals.



SPECIFICATIONS



ENGINE

New generation engine developed to comply with the strictest emission controls (STAGE 2).

Model	Komatsu 4D84E-3FA
Type	low emissions 4-cycle diesel engine
Displacement	1.995 cm ³
Cyl. bore x stroke	84 x 90 mm
Number of cylinders	4
Combustion	direct injection
Aspiration	natural aspiration
Max power	32,9 kW – 44,1 HP
Rated power:	
(SAE J 1349)	28,9 kW – 38,8 HP – 2.500 rpm
(80/1269/EC)	28,3 kW – 38,0 HP – 2.500 rpm
Max torque	118,0 Nm – 1.800 rpm
Cooling system	water
Dry system	dry
Starting	electric motor with pre-heating air system for cold climate



OPERATING WEIGHT

Operational mass with standard bucket, fully serviced + 80 kg operator (ISO 6016).

Operating weight with rubber shoes	4.750 kg
Operating weight with steel shoes	4.860 kg
Canopy	-135 kg (optional)



HYDRAULIC SYSTEM

Type	Komatsu CLSS
Main pumps	Variable displacement pump +1 gear pump
Max delivery	105 + 24,5 l/min
Operating pressure:	
working equipment	MPa 25,5 (255 bar)
Hydraulic motors	
travel	MPa 25,5 (255 bar)
swing	MPa 20,0 (200 bar)

Hydraulic cylinders	bore x stroke
boom	90 x 665 mm
arm	85 x 695 mm
bucket	75 x 580 mm
boom rotation	95 x 635 mm
blade	100 x 140 mm

Bucket breakout force (ISO 6015):	
Arm 1.480 mm	4.145 daN (4.230 kg)
Arm 1.900 mm	4.145 daN (4.230 kg)
Arm breakout force (ISO 6015):	
Arm 1.480 mm	2.450 daN (2.500 kg)
Arm 1.900 mm	2.064 daN (2.106 kg)

Digging equipment are fully controlled by PPC servo-controls. All movements are stopped by lifting the safety levers on the tilttable cases.



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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TRANSMISSION

Type

hydrostatic transmission with 2 speeds, controlled and steered by means of two levers with two pedals

Hydraulic motors	2 x axial pistons
Reduction system	epicyclic reduction gear
Max traction force	4.021 daN - (4.100 kg)
Travel speed	2,8 - 4,6 km/h



BLADE

Type

electrowelded, single unit structure

Width x height	1.900 x 355 mm
Max. lifting above ground level	385 mm
Max depth below ground level	440 mm



UNDERCARRIAGE

Central lower frame and carriage frame with boxed section.

Shoes	n. 38 each side
Track rollers	n. 5 each side
Shoes width	400 mm
Ground pressure (standard)	0,29 kg/cm ²



ELECTRIC SYSTEM

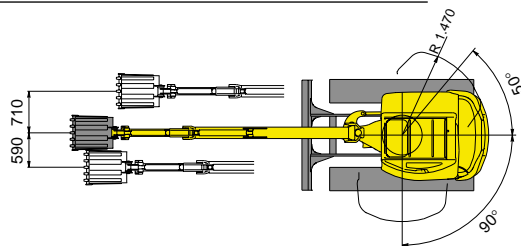
Operating voltage	12 V
Battery	80 Ah
Alternator	40 A
Starter	1,2 kW



REFILLS

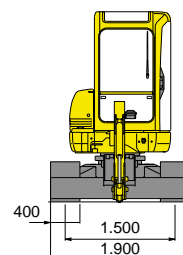
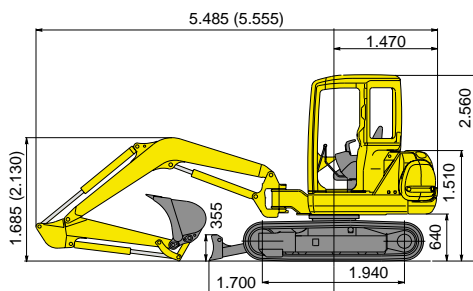
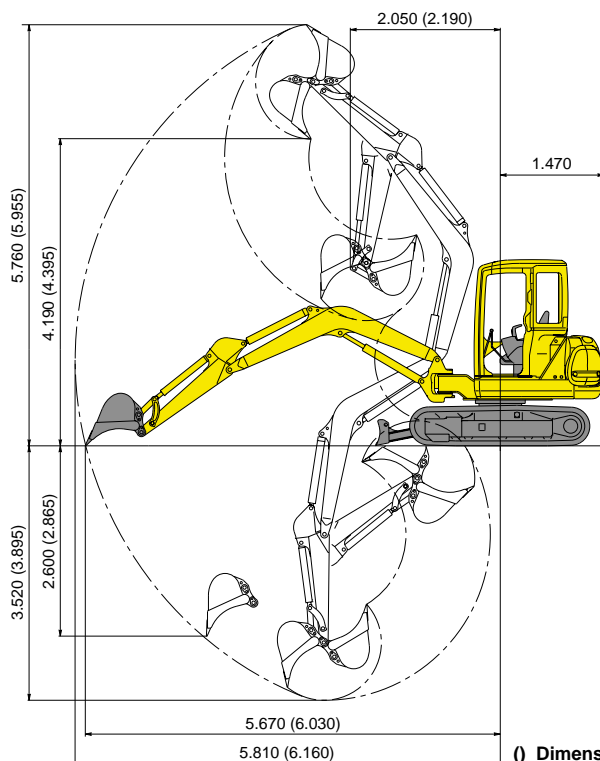
Fuel tank	51,5 l
Radiator and system	7,5 l
Engine oil	8,0 l
Final reduction gears (for each side)	1,3 l
Hydraulic oil tank	33 l

DIMENSIONS



FRONT SWING RADIUS WITH OFF-SET BOOM

Arm length	mm	1.480	1.900
Canopy/Cab	mm	1.530	1.645



() Dimensions with 1.900 mm arm length.

WORKING EQUIPMENT

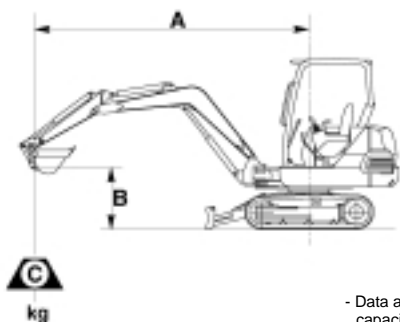
Bucket (ISO 7451) m ³	Width mm	Weight kg	Number of teeth	Arm	
				1.480 mm	1.900 mm
0,07	300	75	2	O	O
0,10	400	90	3	O	O
0,125 (std)	500	100	4	O	O
0,15	600	115	5	O	O
0,175	700	125	5	O	X

This table is based on the lateral stability at the maximum outreach with full bucket.
- O with material density up to 1,8 t/m³; - X non usable.

LIFTING CAPACITY

Machine with canopy, rubber shoes and 115 kg bucket
A- Distance from machine's center B- Height at bucket pin

Capacity over front Lateral or 360° capacity



LOWERED BLADE

Arm length	A	2 m		3 m		4 m		Full extended
		360°	Front	360°	Front	360°	Front	
L=1.480 mm	3 m	-	-	700	*760	610	*720	480
	2 m	-	-	1.100	*1.550	660	*830	430
	1 m	1.875	*2.650	1.025	*1.510	610	*880	430
	0 m	1.900	*2.660	1.050	*1.525	610	*920	430
	-1 m	1.880	*2.600	1.050	*1.500	610	*920	480
L=1.900 mm	0 m	1.800	*2.400	800	*1.250	510	*830	330

- Data are based on ISO 10567 standard. Above lifting capacities include a 25% safety margin and don't exceed 87% of the actual capacity. Values with asterisk (*) are referred to hydraulic capacities.
- In accordance with European norm EN 474-5, the machine is not qualified to lift loads heavier than 1.000 kg, unless it is equipped with appropriate safety devices. Lifting operations with lowered blade are allowed only with safety valve on blade cylinder.

STANDARD EQUIPMENT

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • Steel shoes • Two travel speeds • Blade • Swing boom • Boom cylinder protection • 1.480 mm digging arm • Hydraulic hammer circuit and 2-way attachments up to the boom • 2-way equipment circuit | <ul style="list-style-type: none"> • PPC servocontrols • TOPS-FOPS canopy • One single key • Indicators: <ul style="list-style-type: none"> - hour meter - fuel level - engine oil level - engine oil pressure - cooling system temperature light | <ul style="list-style-type: none"> - engine pre-heating • Independent boom-swing control • Swing lock pin • Internal storage compartment • Working light on boom • External electric plug |
|---|---|---|

OPTIONAL EQUIPMENT

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • Rubber shoes • 1.900 mm digging arm • Completion of attachment's hydraulic circuit up to the arm with quick coupler • Clamshell bucket | <ul style="list-style-type: none"> • TOPS-FOPS canopy • Canopy front guard • Cab FOPS protection • Super De Luxe seat (only for cab) • Rotating beacon | <ul style="list-style-type: none"> • Biodegradable oil • Digging buckets range (300 ÷ 700 mm) • Ditch cleaning bucket 1.400 mm • Hydraulic hammer |
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COMPANY WITH
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