

KOMATSU

Utility

PC
35R-8



PC35R-8

PC35R-8

MINI-EXCAVATOR

NET POWER
SAE J1349
21 kW - 28,2 HP

OPERATING WEIGHT
From 3.575 kg
to 3.670 kg

SHAPING TECHNOLOGY

Fruit of KOMATSU technology and experience, the PC35R-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 PC35R-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).

Hidraulic System

The PC35R-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.





“PPC” Proportional Servocontrols

The ease of use that characterizes the PC35R-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 PC35R-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 PC35R-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).

ModelKomatsu 3D84E-3FA
 Typelow emissions 4-cycle diesel engine
 Displacement1.496 cm³
 Cyl. bore x stroke84 x 90 mm
 Number of cylinders3
 Combustiondirect injection
 Aspirationnatural aspiration
 Max power24,6 kW – 33,0 HP
 Rated power:
 (SAE J 1349)21,0 kW – 28,2 HP – 2.500 rpm
 (80/1269/EC)20,6 kW - 27,6 HP – 2.500 rpm
 Max torque90,0 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.....3.575 kg
 Operating weight with steel shoes3.670 kg
 Canopy.....-135 kg (optional)



HYDRAULIC SYSTEM

Type.....Komatsu CLSS
 Main pumpsVariable displacement pump
 + gear pump
 Max delivery81+19,5 l/min
 Operating pressure:
 working equipment.....25,0 MPa (250 bar)
 Hydraulic motors
 travel25,0 MPa (250 bar)
 swing.....16,5 MPa (165 bar)

Hydraulic cylinders	bore x stroke
boom	80 x 540 mm
arm	75 x 595 mm
bucket.....	65 x 490 mm
boom rotation	85 x 635 mm
blade	90 x 120 mm

Bucket breakout force (ISO 6015):
 Arm 1.350 mm.....2.876 daN (2.935 kg)
 Arm 1.750 mm.....2.876 daN (2.935 kg)
 Arm breakout force (ISO 6015):
 Arm 1.350 mm.....1.862 daN (1.900 kg)
 Arm 1.750 mm.....1.555 daN (1.587 kg)

Digging equipment are fully controlled by PPC servo-controls. All movements are stopped by lifting the safety levers on the tiltable 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 speed9,0 rpm



TRANSMISSION

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

Hydraulic motors2 x axial pistons
 Reduction systemepicyclic reduction gear
 Max traction force2.847 daN - (2.905 kg)
 Travel speed2,8 - 4,6 km/h



BLADE

Type.....electrowelded, single unit structure

Width x height1.520 x 355 mm
 Max. lifting above ground level.....350 mm
 Max depth below ground level.....382 mm



UNDERCARRIAGE

Central lower frame and carriage frame with boxed section.

Shoesn. 42 each side
 Track rollersn. 4 each side
 Shoes width300 mm
 Ground pressure (standard).....0,29 kg/cm²



ELECTRIC SYSTEM

Operating voltage12 V
 Battery80 Ah
 Alternator40 A
 Starter1,2 kW

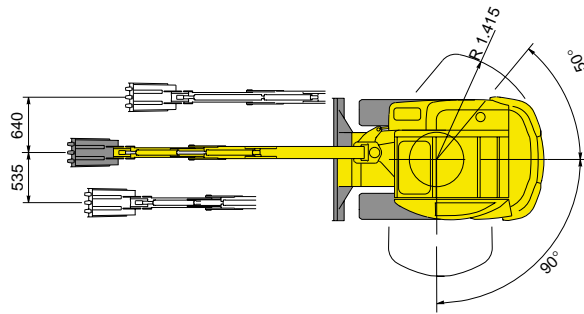


REFILLS

Fuel tank51,5 l
 Radiator and system6,8 l
 Engine oil6,9 l
 Final reduction gears (for each side)1,0 l
 Hydraulic oil tank33 l

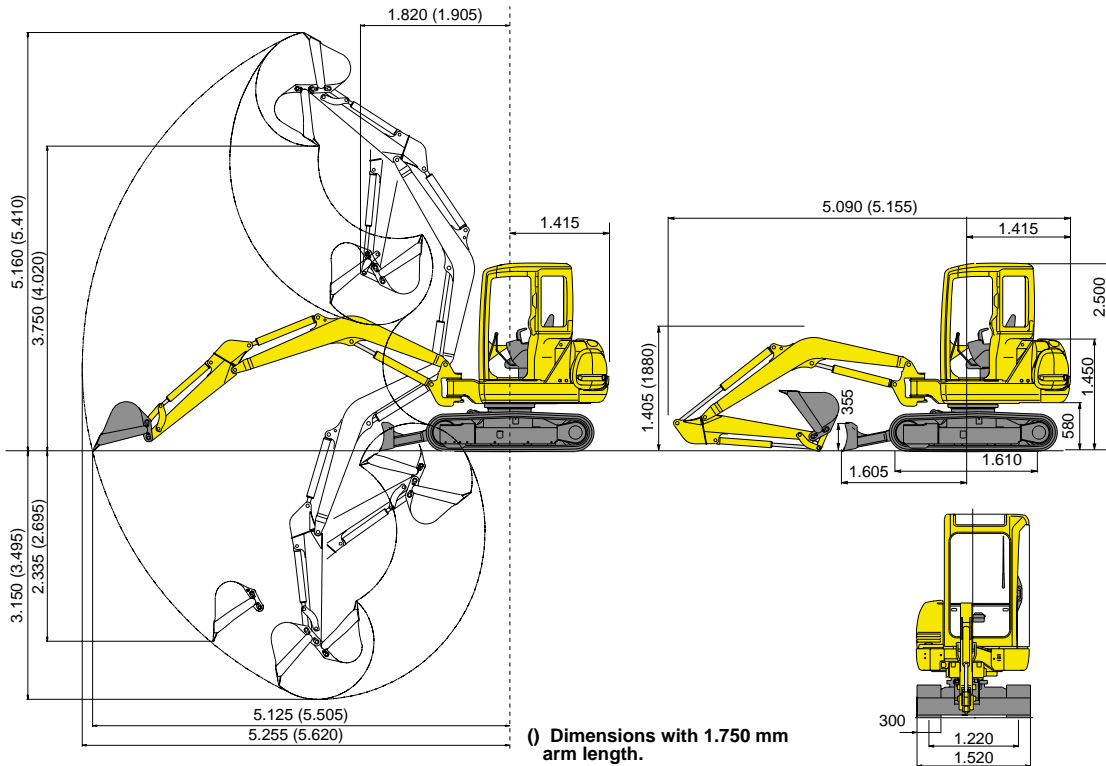
PC35R-8 MINI-EXCAVATOR

DIMENSIONS



FRONT SWING RADIUS WITH OFF-SET BOOM

Arm length	mm	1.350	1.750
Cab/Canopy	mm	1.360	1.420



() Dimensions with 1.750 mm arm length.

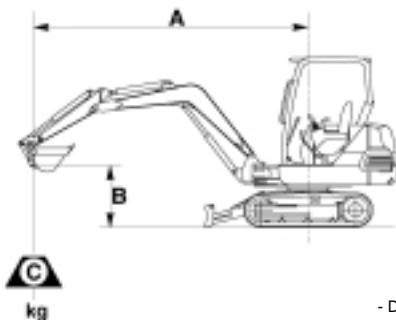
WORKING EQUIPMENT					
Bucket (ISO 7451) m ³	Width mm	Weight kg	Number of teeth	Arm	
				1.350 mm	1.750 mm
0,035	300	55	2	O	O
0,07	400	65	3	O	O
0,095 (std)	500	80	4	O	O
0,12	600	90	5	O	O
0,13	650	95	5	O	X

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

Capacity over front Lateral or 360° capacity



LOWERED BLADE

Arm length	B	2 m		3 m		4 m		Full extended
		360°	Front	360°	Front	360°	Front	
L=1.350 mm	3 m	-	-	580	* 630	440	*600	440
	2 m	1.150	*1.910	580	* 810	390	*620	340
	1m	1.175	*1.960	630	* 920	390	*660	340
	0 m	1.170	*1.900	630	*1.040	390	*710	340
	-1 m	1.100	*1.880	580	*920	390	*650	340
L=1.750 mm	0 m	1.050	*1.750	550	*880	340	*630	290

- 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.

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STANDARD EQUIPMENT

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> • Steel shoes • Two travel speeds • Blade • Swing boom • Boom cylinder protection • 1.350 mm digging arm • Hydraulic hammer circuit and 2-way attachments up to the boom • PPC servocontrols | <ul style="list-style-type: none"> • 2-way equipment circuit • TOPS cab with heat and windshield wipers • One single key • Indicators: <ul style="list-style-type: none"> - hour meter - fuel level - engine oil level - engine oil pressure | <ul style="list-style-type: none"> - cooling system temperature light - 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 • 1.750 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 • Cab front protection • Cab FOPS protection • Super Deluxe seat (only for cab) • Rotating beacon | <ul style="list-style-type: none"> • Biodegradable • Digging buckets range (300 ÷ 650 mm) • Ditch cleaning bucket (1.300 mm) • Hydraulic hammer |
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COMPANY WITH
 ENVIRONMENTAL MANAGEMENT
 SYSTEM CERTIFIED BY DNV
ISO 14001