KOMATSU

PC30MR-5
PC35MR-5

EU Stage V Engine

PC30/35

MINI-EXCAVATOR



ENGINE POWER
18,2 kW / 24,4 HP @ 2.200 rpm

OPERATING WEIGHT
PC30MR-5: 3.290 kg
PC35MR-5: 3.725 kg

BUCKET CAPACITY
PC30MR-5: 0,03 - 0,10 m³
PC35MR-5: 0,04 - 0,12 m³

Walk-Around

PC30MR / 35MR-5



ENGINE POWER
18,2 kW / 24,4 HP @ 2.200 rpm

OPERATING WEIGHT
PC30MR-5: 3.290 kg
PC35MR-5: 3.725 kg

BUCKET CAPACITY
PC30MR-5: 0,03 - 0,10 m³
PC35MR-5: 0,04 - 0,12 m³





INCREASED FUEL EFFICIENCY AND ENVIRONMENTAL PERFORMANCE

Powerful and Environmentally Friendly
- Low consumption EU Stage V engine
- Komatsu fuel-saving technology
- 6 selectable working modes
- Auto-deceleration and idle shutdown
- Dial type fuel control

First-Class Comfort
- Newly designed cab
- Improved operator convenience
- Multi-function monitor with high resolution 3,5” LCD color display
- Multiple accessories around the operator’s seat

Maximized Efficiency
- Powertilt option (PC35MR-5)
- Many configurations to suit the job at hand

Safety First
- Neutral position detection system
- Emergency engine stop switch
- Seat belt caution indicator
- Large transport tie down points

Easy Maintenance
- Tilting cab
- Wide opening engine hood
- Maintenance information displayed on the monitor

KOMTRAX
- Komatsu Wireless Monitoring System
- 3G mobile communications
- Integrated communication antenna

Powerful and Environmentally Friendly



Work in tight spaces

The new short-tail PC30/35MR-5 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.

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.

6 working modes

Depending on the load, operators can conveniently choose between 6 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.

Maximized Efficiency

Customisation

Many configurations are available, so you can choose the perfect machine for the job: long or short arm, rubber, steel or roadliner 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.

Electronic control system

Fuel consumption on the PC30/35MR-5 is lower by up to 5%. The engine and hydraulic system are optimally controlled according to the operating conditions. The hydraulic loss reductions also help reduce both fuel consumption and environmental impact.

Auto deceleration and auto idle shutdown

Both these functions are provided as standard. Auto-deceleration reduces the engine speed automatically a few seconds after the work equipment lever is moved to the neutral position. The auto idle shutdown automatically stops the engine after a preset time to reduce unnecessary fuel consumption.



Powertilt option (PC35MR-5)

Lehnhoff HARTSTAHL

The machine features a dedicated piping for power tilt operation and a single effect hydraulic quick-coupler line. The powertilt installation enhances the versatility of the machine by providing a flexible tool of proven reliability. Piping is routed over the arm for better protection and long lasting design.



First-Class Comfort

An optimal work environment

Despite its compact size, the PC30/35MR-5 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. A much larger cab door makes cab access a lot easier.



Perfect operator convenience

Proportional controls are fitted as standard for safe and precise operation of attachments. The dial type fuel control makes operation and engine speed adjustment simple. The automatic travel speed shift function allows smooth and efficient operation. Pressing a speed selector button on the blade lever chooses auto 2-speed or fixed 1st speed travel for easy shifting during blade operation. A 12-volt power port is also included in the cab.

New multi-function monitor with more Information

A high-definition 3,5” LCD monitor provides excellent visibility. The high-definition LCD panel is less affected by the viewing angle and surrounding brightness, ensuring excellent visibility. Various alerts and machine information are displayed in a simple format. Useful information such as operation records, machine setting and maintenance data are also provided. The operator can easily switch screens.



KOMTRAX

The way to higher productivity

KOMTRAX uses the latest wireless monitoring technology. Compatible on PC, smartphone or tablet, it delivers insightful and cost saving information about your fleet and equipment, and offers a wealth of information to facilitate peak machine performance. By creating a tightly integrated web of support it allows proactive and preventive maintenance and helps to efficiently run a business.





Knowledge

You get quick answers to basic and critical questions about your machines – what they're doing, when they did it, where they're located, how they can be used more efficiently and when they need to be serviced. Performance data is relayed by wireless communication technology (Satellite, GPRS or 3G depending on model) from the machine to a computer and to the local Komatsu distributor – who's readily available for expert analysis and feedback.

Power

The detailed information that KOMTRAX puts at your fingertips 24 hours a day, 7 days a week gives the power to make better daily and long-term strategic decisions – at no extra cost. Problems can be anticipated, maintenance schedules customised, downtime minimised and machines kept where they belong: working on the jobsite.

Convenience

KOMTRAX enables convenient fleet management on the web, wherever you are. Data is analysed and packaged specifically for effortless and intuitive viewing in maps, lists, graphs and charts. You can foresee eventual maintenance issues and required spare parts, and troubleshoot a problem before Komatsu technicians arrive on site.

Easy Maintenance



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. High durability bushings and a 500 hours engine oil change interval further lower operating costs.



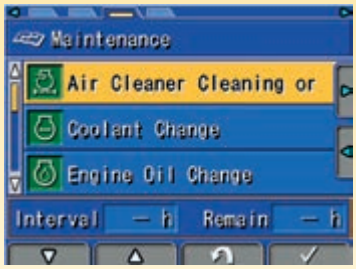
Rear bonnets for quick engine checks, simple inspections, cleaning of the radiators and easy access to the battery



Convenient and save fuel and oil refilling under the front bonnet



Large fuel filter and fuel pre-filter with water separator protect the engine



The multifunction monitor panel provides the operator with maintenance and service information

Highest Reliability and Safety

X-frame

The 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.

Smallest swing radius

The extra-small swing radius with minimum rear protrusion from the tracks (95 mm for PC30MR-5 and 80 mm for PC35MR-5) allows the operator to concentrate on work in confined areas.

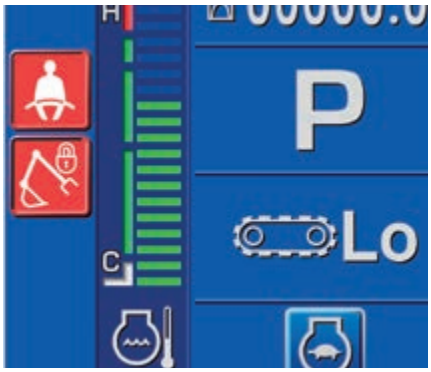
Maintenance monitoring

Maintenance and service activities are tracked on the monitor. When the time before a maintenance interval dips below 30 hours, a maintenance reminder light shows on the display.





Secondary engine shut down switch



Seat belt caution and neutral position detection system caution



Hose burst valves on boom and arm cylinders

Specifications

PC30MR / 35MR-5

ENGINE

Model	Komatsu 3D88E-7
Type	Water-cooled, 4-cycle direct injection
Engine power	
at rated engine speed	2.200 rpm
ISO 14396	18,2 kW / 24,4 HP
ISO 9249 (net engine power)	17,4 kW / 23,3 HP
No. of cylinders	3
Bore × stroke	88 × 90 mm
Displacement	1.642 cm³
Max. torque / engine speed	105,1 Nm / 1.440 rpm
Air filter type	Dry

HYDRAULIC SYSTEM

Type	Komatsu CLSS
Main pump	2 × variable displacement pump
Maximum pump flow	35,7 × 2 + 18,7 + 9,9 l/min
Max. operating pressure	27,0 MPa (270 bar)
Hydraulic motors	
Travel	2 × variable displacement motor
Swing	1 × fixed displacement motor
Hydraulic cylinders (bore × stroke)	
Boom	
PC30MR-5	80 × 550 mm
PC35MR-5	80 × 585 mm
Arm	
PC30MR-5	75 × 495 mm
PC35MR-5	75 × 595 mm
Bucket	65 × 490 mm
Boom swing	
PC30MR-5	80 × 500 mm
PC35MR-5	95 × 482 mm
Blade	95 × 140 mm
Bucket digging force (ISO 6015)	
PC30MR-5	2.942 daN (3.000 kg)
PC35MR-5	2.990 daN (3.050 kg)
Arm crowd force (ISO 6015)	
PC30MR-5	
1.240 mm arm	1.765 daN (1.800 kg)
1.610 mm arm	1.491 daN (1.520 kg)
PC35MR-5	
1.370 mm arm	2.058 daN (2.100 kg)
1.720 mm arm	1.637 daN (1.670 kg)

OPERATING WEIGHT (APPR.)

	PC30MR-5	PC35MR-5
Rubber shoes	3.290 kg	3.725 kg
Roadliner shoes	3.420 kg	3.855 kg
Steel shoes	3.400 kg	3.835 kg

Operating weight, including cabin, specified work equipment, operator, lubricant, coolant, full fuel tank and the standard equipment.
Canopy (optional): -150 kg

DRIVES AND BRAKES

Steering control	2 levers with pedals giving full independent control of each track
Drive method	Hydrostatic
Hydraulic motors	2 × axial piston motor
Reduction system	Planetary gear
Max. travel speeds Lo / Hi	2,6 / 4,6 km/h
Maximum drawbar pull	3.335 daN (3.400 kgf)

UNDERCARRIAGE

Construction	X-frame centre section with box section track frames
Track rollers (each side)	4
Carrier rollers (each side)	1
Shoe width	300 mm
Ground pressure (standard)	
PC30MR-5	0,30 kg/cm²
PC35MR-5	0,36 kg/cm²

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

* Swing speed with optional air condition: 6,6 rpm

BLADE

Type	Electro-welded, single unit structure
Width × height	
PC30MR-5	1.550 × 355 mm
PC35MR-5	1.740 × 355 mm
Blade, max. lifting height	360 mm
Blade, max. digging depth	
PC30MR-5	310 mm
PC35MR-5	390 mm

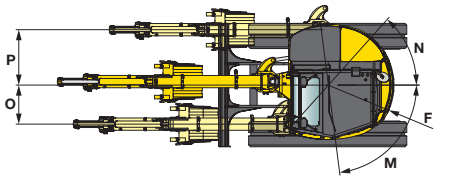
SERVICE REFILL CAPACITIES

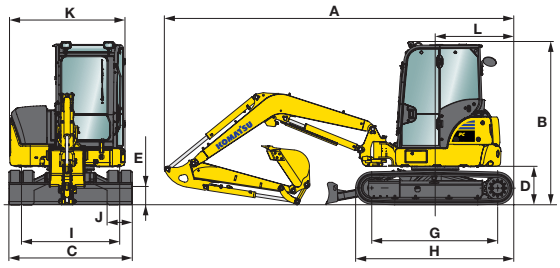
Fuel tank	41 l
Radiator	3,3 l
Engine oil (refill)	7,2 l
Hydraulic system	39 l

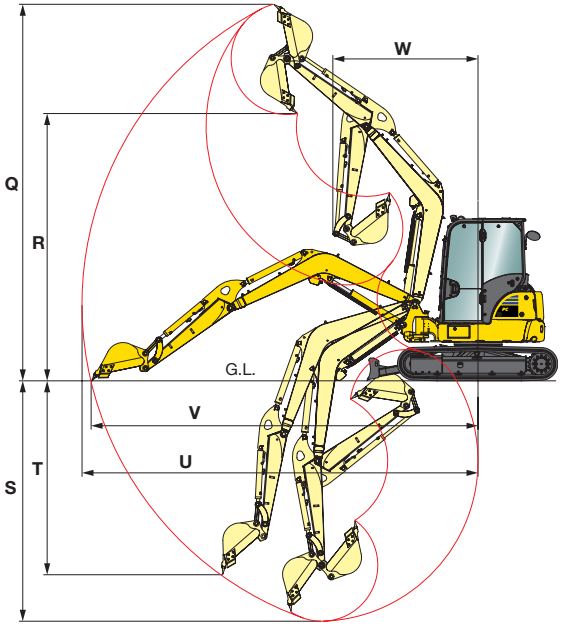
ENVIRONMENT

Engine emissions	Fully complies with EU Stage V exhaust emission regulations
Noise levels - LwA external	
PC30MR-5	94 dB(A) (2000/14/EC Stage II)
PC35MR-5	96 dB(A) (2000/14/EC Stage II)
Noise levels - LpA operator ear	
PC30MR-5	75 dB(A) (ISO 6396 dynamic test)
PC35MR-5	77 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)

Contains fluorinated greenhouse gas HFC-134a (GWP 1430).
Quantity of gas 0,6 kg, CO_2 equivalent 0,86 t.







DIMENSIONS & WORKING RANGE

			PC30MR-5		PC35MR-5	
	Boom length	mm	2.285		2.540	
	Arm length	mm	1.240	1.610	1.370	1.720
A	Overall length	mm	4.560	4.600	4.825	4.905
B	Overall height	mm	2.560		2.560	
C	Overall width	mm	1.550		1.740	
D	Clearance under counterweight	mm	545		545	
E	Ground clearance	mm	305		290	
F	Tail swing radius	mm	870		950	
G	Track length on ground	mm	1.650		1.650	
H	Track length	mm	2.105		2.105	
I	Track gauge	mm	1.250		1.440	
J	Shoe width	mm	300		300	
K	Overall width of upper structure	mm	1.500		1.500	
L	Distance, swing center to rear end	mm	1.050		1.050	
M/N	Boom swing angle	°	80 / 50		75 / 55	
O	Boom offset LH	mm	580		580	
P	Boom offset RH	mm	845		770	
Q	Max. digging height	mm	4.840	5.070	5.000	5.270
R	Max. dumping height	mm	3.350	3.580	3.530	3.790
S	Max. digging depth	mm	2.760	3.130	3.110	3.455
T	Max. vertical wall digging depth	mm	2.400	2.770	2.690	3.210
U	Max. digging reach	mm	5.050	5.390	5.300	5.640
V	Max. digging reach at ground level	mm	4.910	5.215	5.170	5.520
W	Min. swing radius	mm	2.055	2.190	2.030	2.140
	Min. swing radius at boom swing	mm	1.560	1.665	1.600	1.700

LIFTING CAPACITIES

PC30MR-5, with cab, rubber shoes, blade down, 63 kg bucket

Arm length	A / B		Max.		4,0 m		3,0 m		2,0 m	
1.240 mm	3,0 m	kg	760	480			760	670		
	2,0 m	kg	730	370	830	400	920	650		
	1,0 m	kg	790	330	920	390	1.260	610		
	0,0 m	kg	890	330	990	370	1.490	580	1.480	1.070
	- 1,0 m	kg	930	390			1.420	570	2.350	1.070
1.610 mm	3,0 m	kg	590	400	650	410				
	2,0 m	kg	580	320	720	410	730	670		
	1,0 m	kg	620	290	850	390	1.110	620		
	0,0 m	kg	720	290	960	370	1.430	580	1.670	1.080
	- 1,0 m	kg	850	330	950	360	1.480	560	2.320	1.060

A Reach from swing centre
B Bucket hook height
Lifting capacities, including bucket, bucket linkage and bucket cylinder

Rating over front
Rating over side

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.

PC35MR-5, with cab, rubber shoes, blade down, 80 kg bucket

Arm length	A / B		Max.		4,0 m		3,0 m		2,0 m	
1.370 mm	3,0 m	kg	720	530	720	530				
	2,0 m	kg	740	430	760	520	870	840		
	1,0 m	kg	780	390	890	510	1.230	790		
	0,0 m	kg	830	400	990	430	1.480	750	1.540	1.430
	- 1,0 m	kg	890	450	960	480	1.480	740	2.600	1.440
1.720 mm	3,0 m	kg	620	450	590	530				
	2,0 m	kg	620	380	660	520	690	690		
	1,0 m	kg	670	350	810	500	1.080	800		
	0,0 m	kg	740	350	940	480	1.410	750	1.700	1.440
	- 1,0 m	kg	800	390	980	470	1.490	730	2.330	1.430

PC35MR-5, with cab, rubber shoes, blade up, over side, 85 kg bucket

Arm length	A / B		Max.	4,0 m	3,0 m	2,0 m
1.370 mm with Powertilt	3,0 m	kg	470	480		
	2,0 m	kg	390	460	750	
	1,0 m	kg	330	430	700	900
	0,0 m	kg	380	420	670	900
	– 1,0 m	kg	370	390	660	900

Standard and Optional Equipment

PC30MR / 35MR-5

ENGINE

Komatsu 3D88E-7 water-cooled, 4-cycle direct injection diesel engine	●
EU Stage V compliant	●
Fuel control dial	●
Auto-deceleration function	●
Auto idle shutdown	●
Alternator 12 V / 55 A	●
Starter motor 12 V / 2,3 kW	●
Battery 12 V / 75 Ah	●

HYDRAULIC SYSTEM

6-working mode selection system; power mode, economy mode, breaker mode, attachment power and attachment economy mode, and lifting mode	●
Adjustable PPC wrist control levers for arm, boom, bucket and swing, with proportional control for attachments	●
PPC control lever and pedals for steering and travel	●
Hydraulic line for hammer and for 2-way equipment up to boom and arm (HCU-A)	●
Automatic two-speed travel control	●
Relief valves on service spool	○
Preparation for hydraulic quick-coupler	○
2nd auxiliary hydraulic circuit (HCU-C)	○
3rd auxiliary circuit for hydraulic powertilt and 4th line for hydraulic quick-coupler single effect (PC35MR-5)	○

UNDERCARRIAGE

300 mm rubber shoes	●
300 mm roadliner shoes	○
300 mm steel shoes	○

CABIN

ROPS (ISO 3471) / OPG (ISO 10262) level 1 tilting cab with heating, skylight, pull-up type front window with locking device, lower window, front window wiper with intermittent feature, floor mat	●
Adjustable suspension seat with retractable seat belt	●
Monitor panel 3,5” colour display	●
12 Volt power supply	●
Beverage holder and magazine rack	●
Air conditioning	○
Radio equipment + radio	○
Canopy	○

SERVICE AND MAINTENANCE

Multi-function video compatible colour monitor with Equipment Management and Monitoring System (EMMS) and efficiency guidance	●
Battery main switch	●
KOMTRAX – Komatsu wireless monitoring system (3G)	●

WORK EQUIPMENT

Boom	●
Blade	●
1.240 mm digging arm (PC30MR-5)	●
1.370 mm digging arm (PC35MR-5)	●
Boom cylinder protection guard	●
Protection for boom safety valve	●
1.610 mm digging arm (PC30MR-5)	○
1.720 mm digging arm (PC35MR-5)	○

SAFETY EQUIPMENT

Travel acoustic alarm	●
Electric horn	●
Rear-view mirrors (left and right side, right rear)	●
Hose burst valves on boom and arm cylinders	●
Overload warning device	●
Emergency engine stop switch	●
Neutral position detection system	●
Seat belt caution indicator	●
Bucket linkage with lifting eye	○
Blade cylinder safety valve	○

LIGHTING SYSTEM

Working light on boom	●
Two front working lights on cab	●
Rear working light on cab	●
Rotating beacon	○

OTHER EQUIPMENT

Standard colour scheme and decals	●
Parts book and operator manual	●
Grammer adjustable suspension seat (PC35MR-5)	○
Change-over valve on bucket cylinder for clamshell bucket utilization	○
Special waxing	○

ATTACHMENTS

Bucket range (300 - 700 mm)	○
Powertilt unit Lehnhoff (PC35MR-5)	○

The PC30/35MR-5 is equipped in accordance with the safety regulations of the machinery guidelines 89/392 EWG ff and EN474.

● standard equipment
○ optional equipment

Your Komatsu partner:

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

WENSS08203 10/2019

KOMATSU is a trademark of Komatsu Ltd. Japan.

Printed in Europe – This specification sheet may contain attachments and optional equipment that are not available in your area.
Please consult your local Komatsu distributor for those items you may require. Materials and specifications are subject to change without notice.
AdBlue® is a registered trademark of Verband der Automobilindustrie e.V.