

# KOMATSU

## PC88MR-6

OPERATING WEIGHT

8.274 - 8.810 kg

NET POWER

51 kW / 68,4 HP @ 2.000 rpm

BUCKET CAPACITY

0,077 - 0,282 m<sup>3</sup>

**PC**  
**88MR-6**

MIDI-EXCAVATOR



**PC88MR-6**

# WALK-AROUND

## *Tradition and innovation*

The new PC88MR-6 compact midi-excavator is the result of expertise and technology that Komatsu has developed from over 80 years' experience. Developed with constant attention to the needs of customers all over the world, the PC88MR-6 is a user-friendly machine that delivers top-class performance. It has a tight tail swing and protrudes over the tracks by just 153 mm. So the operator can concentrate on the work in front, without having to worry about rear-swing impacts.

## **P**RECISION

An advanced hydraulic system guarantees complete control – just what you'd expect from a Komatsu machine.

## **C**OMFORT

Thanks to extensive ergonomic testing, the PC88MR-6 offers an outstanding comfort level that allows the operator to work in the best conditions.

## **V**ERSATILITY

Developed specifically for applications that need compact machines, the PC88MR-6 combines small size with the performance of a bigger size excavator.



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**NET POWER**

51 kW / 68,4 HP @ 2.000 rpm

**BUCKET CAPACITY**0,077 - 0,282 m<sup>3</sup>**R**ELIABILITY

All components are manufactured to the highest quality standards to maximise lifetimes and reduce downtime.

**M**AINTENANCE

Two openable hoods provide quick and easy access to all maintenance points – even in confined spaces.

**S**AFETY

In keeping with the Komatsu philosophy, the PC88MR-6 is designed to guarantee maximum operator safety.

**V**ISIBILITY

From the operator's seat, you have excellent visibility in all directions for total control of the surrounding area.



# KEY FEATURES



## ABSOLUTE CONTROL

The PPC servo controls require very little effort and ensure extremely precise control. Each movement has its own dedicated control, and can be used at the same time as the others. This simplifies and speeds up all working cycles. Smooth, precise movements combined with a perfect view of the working area guarantee maximum productivity in even the toughest jobs.

## OPERATOR'S ENVIRONMENT

The cab provides a spacious and comfortable working environment. Particular attention has been paid to the internal layout including: easy-to-read instruments, a large console in front of the operator and an efficient heating / ventilation system with partial fresh air intake. The new air-condition system, which is available on request, ensures the perfect temperature whatever the weather.

Extensive noise-proofing reduces noise inside the cab, creating a more pleasant and comfortable working environment. Moreover, the strong cab design guarantees maximum safety in the event of a roll-over. Large windows, including an openable side window, and a special panel design provide outstanding 360° visibility. The upper-rail sliding door can be opened even in the most confined spaces and prevents dirt accumulating on the lower parts.



## MAINTENANCE

All periodic inspection points are easily accessible via two bonnets that can be opened even in confined areas. Inspection windows for the battery and fuel system enable quick and easy maintenance. The track frame is sloped to prevent dirt accumulating and can be easily removed. O-ring face seal (ORFS) hydraulic connectors and DT electric connectors improve machine reliability and make repairs simpler and faster.



### HYDRAULIC SYSTEM

The PC88MR-6 is designed to meet all operators' needs in the any job – from the toughest to the most precise, and always in perfect safety. It's CLSS (Closed Load Sensing System) hydraulics ensures excellent control and unbeatable productivity even with less experienced operators. The pressure-compensated CLSS guarantees each actuator works according to its control input, independent of the load or how many actuators are operating simultaneously. This gives the operator precise control in any situation.

### RELIABILITY AND OPERABILITY

The PC88MR-6 is fitted with an engine speed sensor to optimize the use of power. The power of the main pump is automatically adjusted according to the engine speed. This means the computerised system keeps the engine speed constant during high load conditions. With two hydraulic power modes, 'Power' and 'Economy', the operator can conveniently choose between maximum power and minimum fuel consumption.



### VERSATILITY

The PC88MR-6 was specially designed for applications requiring compact machines with high digging force and excellent stability, as highlighted by the front blade fitted as standard. It offers all the features of a traditional excavator but in an extremely small machine. This versatile midi-excavator can be easily customised to satisfy any requirements e.g. with: a mono or two-piece boom; a short, medium or long digging arm; 450 or 600 mm steel tracks, 450 mm rubber tracks or a 450 mm roadliner. An optional additional counterweight can be easily installed to increase the lifting capacity even further.

# SPECIFICATIONS



## ENGINE

Model ..... Komatsu S4D95LE-3  
 Type..... direct injection, water-cooled, emissionised, turbocharged  
 No. of cylinders ..... 4  
 Displacement..... 3.260 cm<sup>3</sup>  
 Rated capacity (SAE J1349).....51 kW / 68,4 HP @ 2.000 rpm  
 Max. torque (80/1269/EC) ..... 271 Nm @ 1.600 rpm



## OPERATING WEIGHT

Operating weight, including 1.650 mm arm, 0,28 m<sup>3</sup> bucket (ISO 7451), blade, operator, liquids, filled tank and standard equipment (ISO 6016).

Shoes	Width	Operating weight	
		Mono boom	Two-piece boom
Steel (450 mm)	2.320 mm	8.340 kg	8.640 kg
Steel (600 mm)	2.470 mm	8.510 kg	8.810 kg
Rubber (450 mm)	2.320 mm	8.274 kg	8.574 kg
Roadliner (450 mm)	2.320 mm	8.490 kg	8.790 kg



## TRANSMISSION

Steering control ..... 2 levers with pedals  
 Transmission ..... hydrostatic  
 Hydraulic motors ..... variable displacement, axial piston  
 Max. drawbar pull.....6.471 daN (6.600 kg)  
 Max. travel speeds Lo / Hi .....2,8 - 4,7 km/h  
 Parking brake ..... mechanical disks



## UNDERCARRIAGE

Track tensioning ..... grease  
 Shoes (each side) ..... 39  
 Carrier rollers (each side)..... 1  
 Track rollers (each side) ..... 5  
 Ground pressure .....0,36 kg/cm<sup>2</sup>



## BLADE

Width x height .....2.320 x 470 mm  
 Max. lifting above ground level..... 500 mm  
 Max. depth below ground level..... 400 mm



## HYDRAULIC SYSTEM

Type..... Komatsu „CLSS“  
 Power modes .....2 (Power/Economy)  
 Main pumps:  
 Pump for..... boom, arm, bucket and travelling  
 Type..... variable displacement, axial piston  
 Maximum flow ..... 165 ltr/min  
 Pump for..... swing and blade  
 Type..... fixed displacement gear pump  
 Maximum flow ..... 66 ltr/min  
 Auxiliary hydraulic flow ..... 145 ltr/min  
 Relief valve settings:  
 Swing and blade.....21,1 MPa (215 kg/cm<sup>2</sup>)  
 Travel and work equipment.....26,5 MPa (270 kg/cm<sup>2</sup>)  
 Bucket breakout force (ISO 6015) .....6.129 daN (6.250 kg)  
 Arm breakout force, 1.650 mm arm (ISO 6015) ... 4.148 daN (4.230 kg)



## SWING SYSTEM

Driven by ..... hydraulic motor  
 Swing reduction gear ..... with double epicyclic reduction  
 Swing circle lubrication .....grease-bathed  
 Swing brakes..... automatic, with oil immersed discs  
 Swing speed..... 10 rpm



## ELECTRIC SYSTEM

Voltage ..... 24 V  
 Battery .....2 x 65 Ah  
 Alternator .....60 A  
 Starter motor ..... 3 kW



## SERVICE CAPACITIES

Fuel tank..... 125 l  
 Cooling system..... 18 l  
 Engine oil ..... 10,5 (10) l  
 Hydraulic oil tank..... 110 (64) l



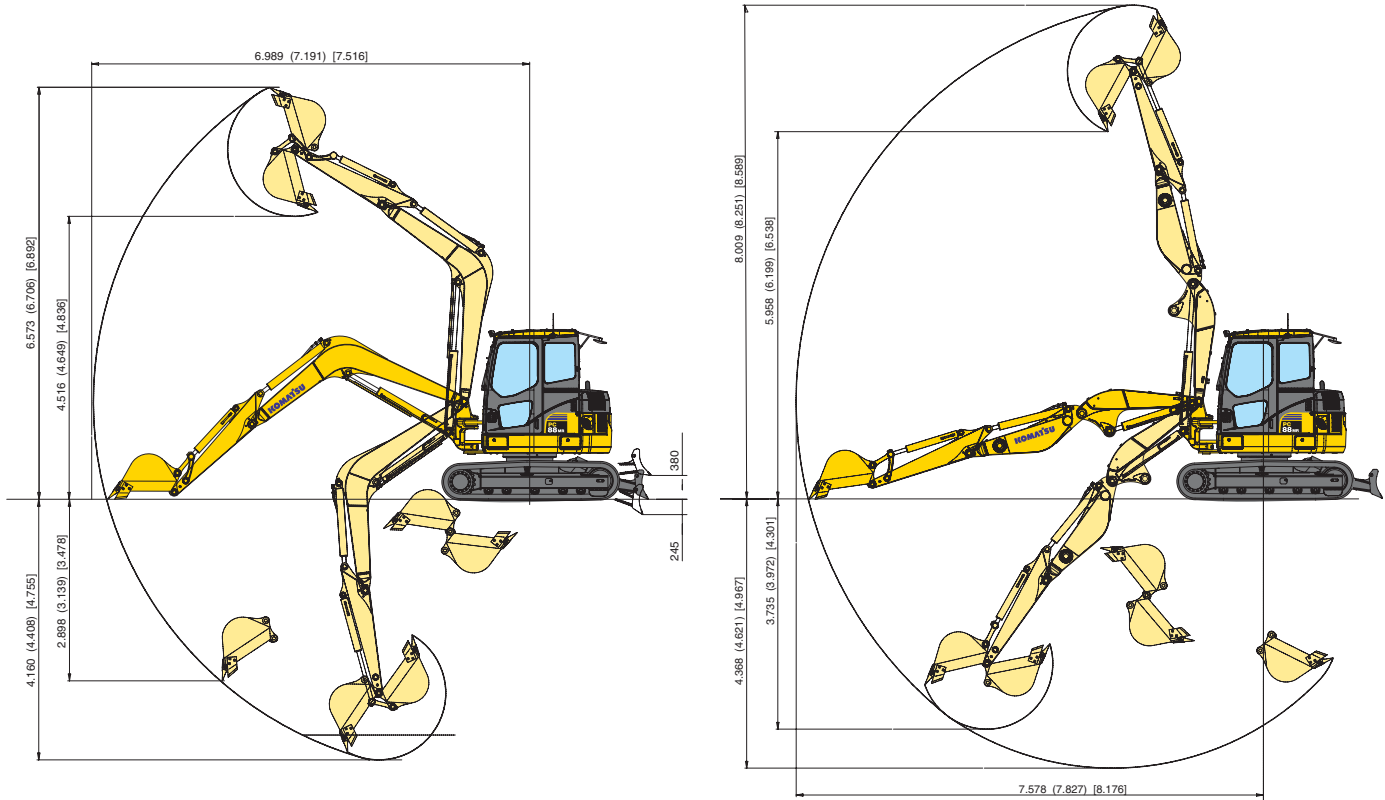
## CAB

Sound-proof cab, provided with safety glasses, liftable windscreen, roof window with protection grid, sliding door with lock, windscreen-wiper, electric horn, adjustable seat with double slide, control system and instrumentation, adjustable joysticks. Outside air inlet.

# SPECIFICATIONS



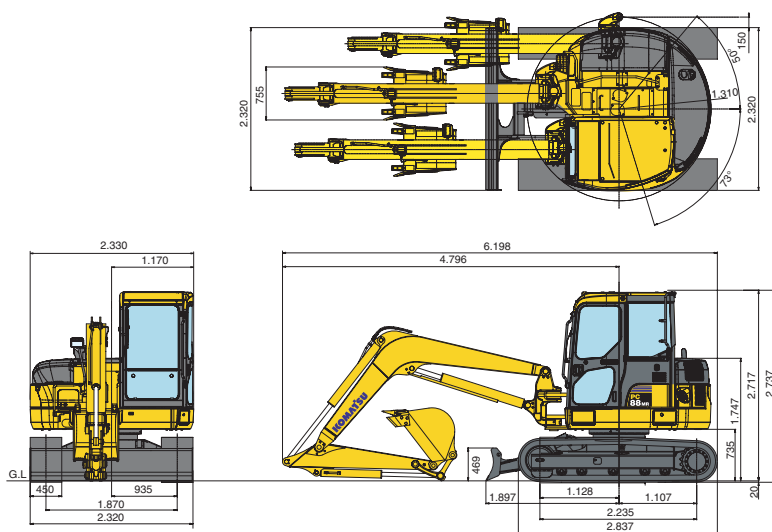
## WORKING RANGE



Arm length: 1,650 mm (1,900 mm) [2,250 mm]



## DIMENSIONS



## BUCKET RANGE

Bucket capacity	m <sup>3</sup>	0,077	0,109	0,181	0,235	0,282
Bucket width (without cutting edge)	mm	350	450	550	650	750
Bucket width (with cutting edge)	mm	450	550	650	750	825

# LIFTING CAPACITY



**MONO BOOM / WITH BLADE UP**

A- Reach from swing centre

B- Height at bucket pin

- Rating over front

- Rating over side

DATAS AND SPECIFICATIONS ARE REFERRING TO THE MACHINE ACCORDING TO 89/392/CE AND EN 474-5 DIRECTIVES.

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

Lifting capacities with 800 mm bucket (236 kg), standard shoes, levers and cylinder.

B \ A	Add. counterweight	3,0 m		4,5 m		5,5 m		Max.		
Arm length 1.650 mm	4,5 m	----	----	----	1.150	1.200	----	----	1.000	1.100
	3,0 m	----	2.300	2.350	1.150	1.200	750	800	750	800
	1,5 m	----	1.950	2.000	1.050	1.100	700	750	650	700
	0,0 m	----	1.850	1.900	1.000	1.050	700	750	700	750
	-1,5 m	----	1.900	1.950	1.000	1.050	---	---	850	950
Arm length 1.900 mm	4,5 m	----	----	----	1.150	1.200	----	----	900	975
	3,0 m	----	----	----	1.100	1.150	725	775	675	725
	1,5 m	----	1.925	1.975	1.025	1.075	675	725	600	650
	0,0 m	----	1.850	1.900	975	1.025	675	725	625	675
	-1,5 m	----	1.875	1.925	975	1.025	----	----	750	850
Arm length 2.250 mm	4,5 m	----	----	----	----	----	----	----	750	850
	3,0 m	----	----	----	1.050	1.100	700	750	600	650
	1,5 m	----	1.900	1.950	1.000	1.050	650	700	550	600
	0,0 m	----	1.850	1.900	950	1.000	650	700	550	600
	-1,5 m	----	1.850	1.900	950	1.000	----	----	650	750
Arm length 1.650 mm	4,5 m	215 kg			1.300	1.350	----	----	1.100	1.200
	3,0 m	215 kg	2.400	2.500	1.250	1.300	850	900	800	850
	1,5 m	215 kg	2.100	2.150	1.150	1.200	800	850	750	800
	0,0 m	215 kg	2.050	2.100	1.100	1.150	750	800	750	800
	-1,5 m	215 kg	2.100	2.150	1.100	1.150	---	---	950	1.050
Arm length 1.900 mm	4,5 m	215 kg	----	----	1.250	1.300	----	----	1.000	1.075
	3,0 m	215 kg	----	----	1.225	1.275	825	875	750	800
	1,5 m	215 kg	2.075	2.125	1.125	1.175	775	825	725	775
	0,0 m	215 kg	2.025	2.075	1.075	1.125	725	775	700	750
	-1,5 m	215 kg	2.050	2.100	1.075	1.125	----	----	850	950
Arm length 2.250 mm	4,5 m	215 kg	----	----	----	----	----	----	850	950
	3,0 m	215 kg	----	----	1.200	1.250	800	850	700	750
	1,5 m	215 kg	2.050	2.100	1.100	1.150	750	800	600	650
	0,0 m	215 kg	2.000	2.050	1.050	1.100	700	750	650	700
	-1,5 m	215 kg	2.000	2.050	1.050	1.100	----	----	750	850

**NOTE:**

Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

- 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.



## LIFTING CAPACITY



## MONO BOOM / WITH BLADE AT GROUND LEVEL

A–Reach from swing centre

B–Height at bucket pin

– Rating over front

– Rating over side

DATAS AND SPECIFICATIONS ARE REFERRING TO THE MACHINE ACCORDING TO 89/392/CE AND EN 474-5 DIRECTIVES.

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

Lifting capacities with 800 mm bucket (236 kg), standard shoes, levers and cylinder.

B \ A	Add. counterweight	3,0 m		4,5 m		5,5 m		Max.		
Arm length 1.650 mm	4,5 m	----	----	----	2.000*	1.230	----	----	1.550*	1.200
	3,0 m	----	2.680*	2.450	1.955*	1.230	1.900*	850	1.865*	820
	1,5 m	----	3.450*	2.200	2.500*	1.150	2.200*	800	2.000*	800
	0,0 m	----	4.725*	2.000	3.140*	1.100	2.700*	800	2.390*	760
	-1,5 m	----	4.750*	2.050	3.200*	1.100	---	---	2.500*	1.000
Arm length 1.900 mm	4,5 m	----	----	----	1.750*	1.250	----	----	1.400*	1.100
	3,0 m	----	----	----	1.700*	1.250	1.700*	825	1.600*	750
	1,5 m	----	3.420*	2.175	2.250*	1.150	2.000*	775	1.850*	700
	0,0 m	----	4.720*	1.975	3.000*	1.075	2.600*	775	2.200*	700
	-1,5 m	----	4.740*	2.000	3.100*	1.075	----	----	2.300*	900
Arm length 2.250 mm	4,5 m	----	----	----	----	----	----	----	1.300*	1.000
	3,0 m	----	----	----	1.530*	1.270	1.500*	800	1.530*	690
	1,5 m	----	3.400*	2.150	2.100*	1.150	1.800*	750	1.750*	660
	0,0 m	----	4.715*	1.960	2.960*	1.050	2.500*	750	2.045*	630
	-1,5 m	----	4.740*	1.960	3.000*	1.050	----	----	2.150*	800
Arm length 1.650 mm	4,5 m	215 kg			2.000*	1.330	----	----	1.550*	1.250
	3,0 m	215 kg	2.680*	2.550	1.955*	1.300	1.900*	900	1.865*	880
	1,5 m	215 kg	3.450*	2.220	2.500*	1.200	2.200*	850	2.000*	850
	0,0 m	215 kg	4.725*	2.090	3.140*	1.135	2.700*	825	2.390*	820
	-1,5 m	215 kg	4.750*	2.150	3.200*	1.150	---	---	2.500*	1.100
Arm length 1.900 mm	4,5 m	215 kg	----	----	1.750*	1.350	----	----	1.400*	1.150
	3,0 m	215 kg	----	----	1.700*	1.350	1.700*	880	1.600*	820
	1,5 m	215 kg	3.420*	2.180	2.250*	1.250	2.000*	830	1.850*	800
	0,0 m	215 kg	4.720*	2.120	3.000*	1.150	2.600*	780	2.200*	770
	-1,5 m	215 kg	4.740*	2.150	3.100*	1.150	----	----	2.300*	1.000
Arm length 2.250 mm	4,5 m	215 kg	----	----	----	----	----	----	1300*	1.130
	3,0 m	215 kg	----	----	1530*	1.380	1500*	850	1530*	760
	1,5 m	215 kg	3400*	2.175	2100*	1.200	1800*	800	1750*	675
	0,0 m	215 kg	4715*	2.150	2960*	1.160	2500*	770	2045*	710
	-1,5 m	215 kg	4740*	2.160	3000*	1.150	----	----	2150*	900

## NOTE:

Ratings are based on ISO standard 10567. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.

- 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.

# LIFTING CAPACITY



**TWO-PIECE BOOM / WITH BLADE UP**

A- Reach from swing centre

B- Height at bucket pin

- Rating over front

- Rating over side

DATAS AND SPECIFICATIONS ARE REFERRING TO THE MACHINE ACCORDING TO 89/392/CE AND EN 474-5 DIRECTIVES.

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

Lifting capacities with 800 mm bucket (236 kg), standard shoes, levers and cylinder.

B \ A	Add. counterweight	3,0 m		4,0 m		5,0 m		6,0 m		Max.	

Arm length 1.650 mm	4,5 m	215 kg	---	---	1.600	1.550	1.050	900	---	---	1.000	950
	3,0 m	215 kg	2.190*	2.190*	1.500	1.450	1.050	850	700	650	850	800
	1,5 m	215 kg	1.740*	1.740*	1.400	1.350	1.100	850	650	600	550	525
	0,0 m	215 kg	3.000*	2.300	1.400	1.350	1.000	825	700	650	500	475
	-1,5 m	215 kg	2.950*	2.250	1.400	1.350	950	800	---	---	850	750

Arm length 1.900 mm	4,5 m	215 kg	---	---	1.500*	1.300	900	800	---	---	700	650
	3,0 m	215 kg	---	---	1.400	1.250	850	700	450	400	450	400
	1,5 m	215 kg	2.400*	2.000	1.200	1.150	800	600	400	350	375	350
	0,0 m	215 kg	2.800*	2.150	1.850*	1.400	750	550	550	400	450	375
	-1,5 m	215 kg	2.750*	2.100	1.800*	1.400	750	550	550	400	550	400

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## LIFTING CAPACITY



## TWO-PIECE BOOM / WITH BLADE AT GROUND LEVEL

A–Reach from swing centre

B–Height at bucket pin

– Rating over front

– Rating over side

DATAS AND SPECIFICATIONS ARE REFERRING TO THE MACHINE ACCORDING TO 89/392/CE AND EN 474-5 DIRECTIVES.

When removing bucket, linkage or cylinder, lifting capacities can be increased by their respective weights.

Lifting capacities with 800 mm bucket (236 kg), standard shoes, levers and cylinder.

B \ A	Add. counterweight	3,0 m		4,0 m		5,0 m		6,0 m		Max.		
Arm length 1.650 mm	4,5 m	215 kg	---	---	1.800*	1.600	1.650*	950	---	---	1.650*	900
	3,0 m	215 kg	2.200*	2.200*	2.300*	1.500	1.800*	900	1.500*	700	1.550*	750
	1,5 m	215 kg	1.750*	1.750*	2.500*	1.400	2.100*	900	1.700*	650	1.500*	500
	0,0 m	215 kg	3.000*	2.350	2.450*	1.400	2.150*	875	1.700*	700	1.500*	450
	-1,5 m	215 kg	2.950*	2.300	2.400*	1.400	2.100*	850	---	---	1.750*	700
Arm length 1.900 mm	4,5 m	215 kg	---	---	1.550*	1.550*	1.500*	1.000	---	---	1.400*	700
	3,0 m	215 kg	---	---	2.200*	1.400	1.750*	950	1.600*	600	1.500*	500
	1,5 m	215 kg	2.400*	2.400*	2.400*	1.250	2.100*	850	1.650*	550	1.500*	450
	0,0 m	215 kg	2.850*	2.300	1.950*	1.400	1.900*	750	1.700*	550	1.500*	450
	-1,5 m	215 kg	2.750*	2.250	1.850*	1.400	1.800*	700	1.650*	500	1.400*	400

## NOTE:

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# MIDI-EXCAVATOR

## STANDARD EQUIPMENT

- Mono boom with cylinder protection
- 1.650 mm digging arm
- 450 mm steel shoes
- 2.320 mm blade
- Cab with heating
- Adjustable seat with safety belt
- Instrumentation including:
  - hour meter
  - LCD fuel level indicator
  - LCD engine water temperature indicator
  - two travel speed
  - working mode selection
  - indicators: air filter clogging, oil pressure, generator, hydraulic oil filter, engine pre-heating, selected speed
- Horn
- 12 V internal electric plug
- Working light on boom
- Automatic parking brake
- Swing lock
- Adjustable element for attachment
- Hose burst valve on boom and blade cylinder
- Overload warning device
- Double element air filter
- Rearview mirror (right side)
- Relieve valve for equipment circuit

## OPTIONAL EQUIPMENT

- Two-piece boom (with positioner)
- Air conditioning
- Digging arm (1.900/2.250 mm)
- 600 mm steel shoes
- Rubber shoes
- Roadliner shoes
- Rear working light on cab
- 1 front working light on cab
- 2 front working lights on cab
- Additional working light on boom
- Radio
- Lateral mirror (left side)
- 2nd and 3rd auxiliary hydraulic line
- Bucket range (350 ÷ 750 mm)
- Ditch cleaning bucket (1.500 mm)
- Ditch digging bucket (1.650 mm / 52°)
- Additional counterweight (215 kg)
- Rotating beacon
- Travel acoustic alarm
- Safety valve for digging arm
- Final cocks on equipment circuit



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