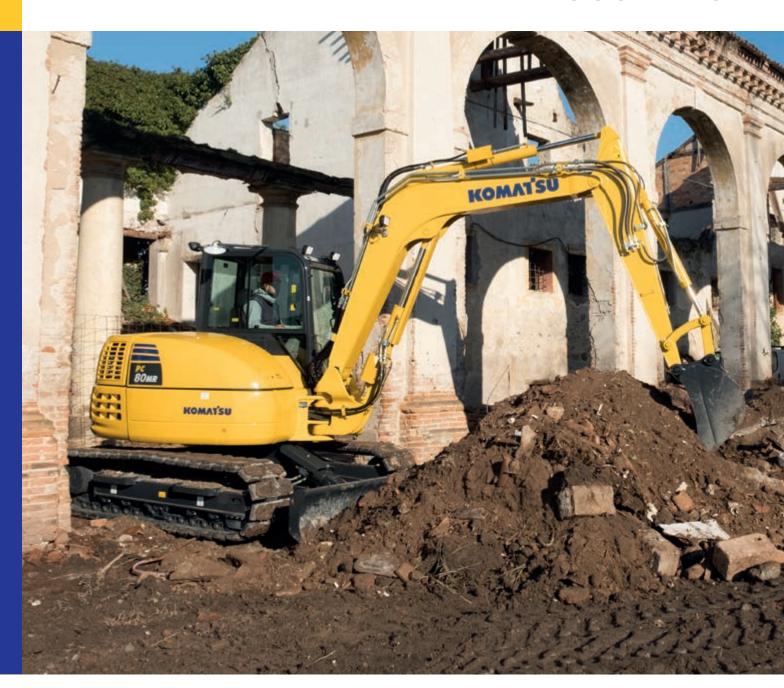
# **KOMATSU**

# PC80MR-5



Midi-excavator

**Engine power** 46.2 kW / 62.0 HP @ 2200 rpm

**Operating weight** 8000 - 8270 kg

Bucket capacity 0.13 - 0.27 m<sup>3</sup>

# 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**

- New, improved blade design
- Standard 1 or 2 way auxiliary line for attachments and hydraulic quick-coupler line
- Second auxiliary circuit (optional)
- Roadliner (optional)

### **Safety first**

- Rear-view camera system
- Neutral position detection system
- Emergency engine stop switch
- Seat belt caution indicator
- Large transport tie down points

### Easy maintenance

- · Wide opening engine hood
- Maintenance information displayed on the monitor

### **Komtrax**

- Komatsu Wireless Monitoring System
- 4G mobile communications
- Integrated communication antenna



### Powerful and environmentally friendly



### Work in tight spaces

The new short-tail PC80MR-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.

### **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 PC80MR-5 is lower by up to 10%. 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.





New, improved blade design



Standard 1 or 2 way auxiliary line for attachments and hydraulic quick-coupler line



A reduced front swing radius and boom swing function make trench digging a cinch

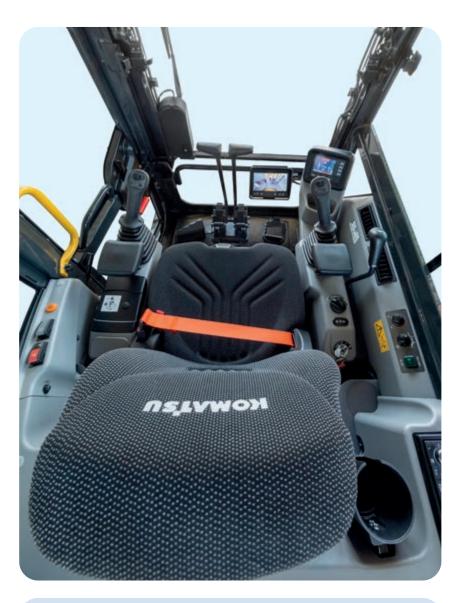
### First-class comfort

# An optimal work environment

Despite its compact size, the PC80MR-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.



### Multi-function and rear-view monitors

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. A separate rear-view monitor gives the operator a constant clear view of the area behind the the machine, greatly improving safety.





### Information & communication technology



# **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 4G 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**

### **Excellent serviceability**

Komatsu designed the PC80MR-5 with an easy access to all service points. Routine maintenance and servicing are less likely to be skipped, which can mean a reduction of costly downtime later on. The radiator, aftercooler and oil cooler are made of aluminium to improve their efficiency and are mounted in parallel for quicker cleaning. The fuel and oil filters as well as the fuel drain valve, are all remote mounted and easily accessible.

### Long-life oil filters

The Komatsu Genuine hydraulic oil filter uses high-performance filtering material for long replacement intervals, which significantly reduces maintenance costs.





The multifunction monitor panel with maintenance and service information



Enhanced service access



Generous storage compartment under the cab

### **Highest reliability and safety**

### **Smallest swing radius**

The extra-small swing radius with minimum rear protrusion from the tracks (270 mm) 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.

### **Powertilt option**

The machine features a dedicated piping for power tilt operation and a double 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.





Secondary engine shutdown switch



Seat belt caution and neutral position detection caution



Hose burst valves on boom and arm cylinders

# **Specifications**

### **PC80MR-5E0**

### **Engine**

-11g1110	
Model	Komatsu 4D98E-5SFB
Туре	Water-cooled, 4-cycle direct injection
Engine power	
at rated engine speed	2200 rpm
ISO 14396	46.2 kW / 62.0 HP
ISO 9249 (net engine power)	44.2 kW / 59.0 HP
No. of cylinders	4
Bore × stroke	98 × 110 mm
Displacement	3319 cm <sup>3</sup>
Max. torque / engine speed	235 Nm / 1400 rpm
Air filter type	Dry
Fuel	Diesel fuel, conforming to EN590 Class 2/ Grade D. Paraffinic fuel capability (HVO, GTL, BTL), conforming to EN 15940:2016

### **Drives and brakes**

Steering control	2 levers with pedals giving full independent control of each track
Drive method	Hydrostatic
Hydraulic motors	Variable displacement, axial piston
Parking brake	Mechanical discs
Max. travel speeds	
Lo / Hi	2.9 / 4.9 km/h
Maximum drawbar pull	7279 daN (7420 kgf)

### Undercarriage

Construction	X-frame centre section with box section track frame	
Rollers		
Track rollers (each side)	5	
Carrier rollers (each side)	1	
Shoes (each side)	39	
Shoe width	450 mm	
Ground pressure (standard)	0.36 kg/cm <sup>2</sup>	

### **Hydraulic system**

Туре	Komatsu CLSS
Main pumps	
Pump for	Boom, arm, bucket and travel
Туре	Variable displacement, axial piston
Max. pump flow	178 l/min
Max. operating pressure	26.5 MPa (270 bar)
Pump for	Swing and blade
Туре	Fixed displacement gear pump
Max. pump flow	72 l/min
Max. operating pressure	20 MPa (204 bar)
Auxiliary hydraulic flow (optional)	125 l/min
Relief valve setting	
Swing and blade	20 MPa (204 kg/cm²)
Travel and work equipment	26.5 MPa (270 kg/cm²)
Bucket digging force (ISO 6015)	5855 daN (5970 kgf)
Arm crowd force (ISO 6015)	3913 daN (3990 kgf)

### Swing system

Driven by	Hydraulic motor
Swing reduction gear	Double epicyclical reduction
Swing circle lubrication	Grease-bathed
Swing brakes	Automatic, with oil immersed discs
Swing speed	10.0 rpm

### **Blade**

Width × height	2250 × 464 mm
Blade, max. lifting height	473 mm
Blade, max. digging depth	470 mm

### Service refill capacities

Fuel tank	1101
Radiator	11.61
Engine oil	9.01
Hydraulic oil tank	651

### **Environment**

Engine emissions	Fully complies with EU Stage V exhaust emission regulations	
Noise levels		
LwA external	98 dB(A) (2000/14/EC Stage II)	
LpA operator ear	73 dB(A) (ISO 6396 dynamic test)	
Vibration levels (EN 12096:1997)		
Hand/arm	$\leq$ 2.5 m/s <sup>2</sup> (uncertainty K = 1.2 m/s <sup>2</sup> )	
Body	$\leq 0.5 \text{ m/s}^2 \text{ (uncertainty K = 0.2 m/s}^2\text{)}$	
Contains fluorinated greenhouse gas HFC-134a (GWP 1430). Quantity of gas 1.1 kg, CO <sub>2</sub> equivalent 1.57 t.		

### Operating weight (appr.)

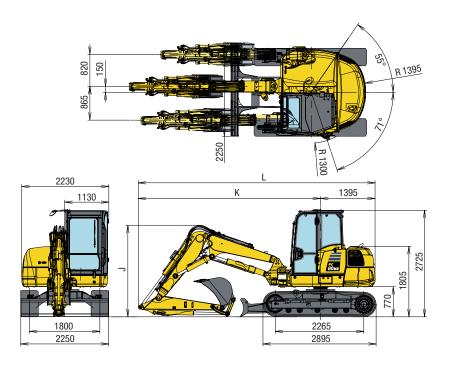
	Mono boom	Two-piece boom
Steel shoes	8090 kg	8270 kg
Rubber shoes	8000 kg	8180 kg
Roadliner shoes	8070 kg	8250 kg

Operating weight, including 1650 mm arm, 0.2 m $^3$  bucket (ISO 7451), blade, operator, liquids, filled tank and standard equipment (ISO 6016).

### **Bucket range**

Bucket capacity	0.128 m <sup>3</sup>	0.171 m <sup>3</sup>	0.2 m <sup>3</sup>	0.232 m <sup>3</sup>	0.265 m <sup>3</sup>
Bucket width	400 mm	500 mm	600 mm	700 mm	800 mm
Bucket weight	130 kg	142 kg	155 kg	168 kg	180 kg

### **Machine dimensions**

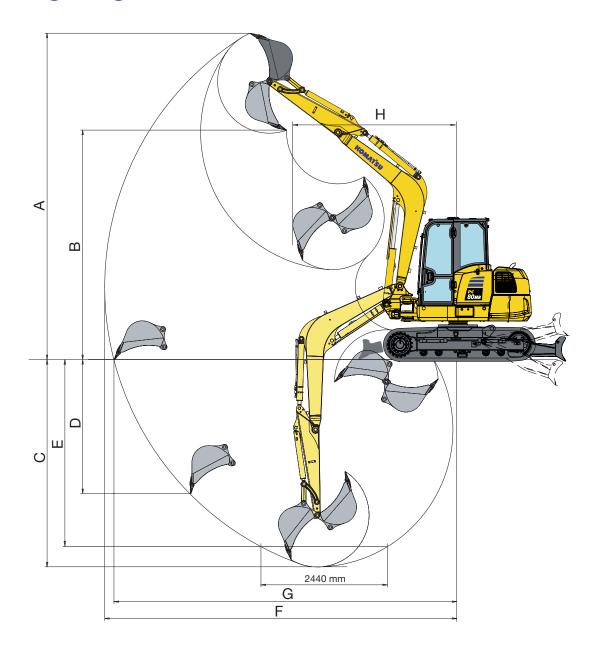


### Mono boom

### Two-piece boom

Arm length 1650 mm		Arm length 2000 mm	Arm length 1650 mm	Arm length 2000 mm	
J	2210 mm	2620 mm	2345 mm	2565 mm	
K	4665 mm	4865 mm	4660 mm	4900 mm	
L	6060 mm	6260 mm	6055 mm	6295 mm	

# **Working range**



W	orking range	Mono	boom	Two-pie	ce boom
	Arm length	1650 mm	2000 mm	1650 mm	2000 mm
Α	Max. digging height	6315 mm	6560 mm	7585 mm	7915 mm
В	Max. dumping height	4390 mm	4620 mm	5600 mm	5925 mm
С	Max. digging depth	3975 mm	4325 mm	3980 mm	4335 mm
D	Max. vertical wall digging depth	2885 mm	3215 mm	3140 mm	3450 mm
Е	Max. digging depth of cut for 2.44 m level	3620 mm	4015 mm	3820 mm	4180 mm
F	Max. digging reach	6775 mm	7120 mm	7380 mm	7725 mm
G	Max. digging reach at ground level	6595 mm	6945 mm	7215 mm	7570 mm
Н	Min. swing radius (at max. boom swing)	2730 (1925) mm	2755 (1945) mm	2565 (1755) mm	2630 (1820) mm

### **Lifting capacity**

A Reach from swing centreB Bucket hook height

Rating over front

Rating over side

Lifting capacities, including bucket, bucket linkage and bucket cylinder

### Mono boom, blade up, 151 kg bucket

	А	N	lax.	5.0	) m	4.0	) m	3.	0 m
Arm length	В	Å	₽	Å	₿	å	∷⊸	Å	∷⊸
	4.5 m kg	1360	1070						
	3.0 m kg	1010	780	1270	990	*1533	1470		
1650 mm	1.5 m kg	910	690	1200	930	1710	1330	2700	2080
1000111111	0.0 m kg	940	710	1150	880	1610	1240	2550	1930
	- 1.5 m kg	1170	890			1600	1020	2550	1940
	- 3.0 m kg	*1970	*1970					*1980	*1980
	4.5 m kg	1170	920	1139	1030				
	3.0 m kg	900	620	1280	1000				
2000 mm	1.5 m kg	820	620	1210	930	1730	1350	2770	2140
2000 111111	0.0 m kg	840	568	1140	812	1610	1230	2275	1728
	- 1.5 m kg	1000	685	1110	794	1570	1200	2248	1701
	- 3.0 m kg	1770	1226					2328	1773

### Two-piece boom, blade up, 151 kg bucket

	Α	N	lax.	5.0	) m	4.0	) m	3.0	0 m
Arm length	В	Å	₽	Å		Å	∷≕	Å	<u></u>
	4.5 m kg	818	608	1103	896	*1103	1354		
	3.0 m kg	630	473	983	795	1504	1223	2860	2210
1650 mm	1.5 m kg	555	375	885	656	1260	1005		
1650 mm	0.0 m kg	584	406	860	651	1279	950	*1960	1660
	- 1.5 m kg	701	496	860	651	1288	950	2320	1700
	- 3.0 m kg					459	*461		
	4.5 m kg	465	630	*1550	980	*1720	1510		
2000 mm	3.0 m kg	341	490	*1710	920	*2100	1380	*2250	*2250
	1.5 m kg	296	430	*1930	810	*2640	1170		
	0.0 m kg	322	440	*1847	730	*2185	1040	*1990	1630
	- 1.5 m kg	380	530	*1519	720	*1766	1020	*2950	1660
	- 3.0 m kg	270	*520			*806	*1000	*1240	*1240

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.

# **Standard and optional equipment**

### **Engine**

Komatsu 4D98E-5SFB water-cooled, 4-cycle direct injection diesel engine	•
EU Stage V compliant	•
Diesel Particulate Filter (DPF)	•
Fuel control dial	•
Auto-deceleration function	•
Auto idle shutdown	•
Engine ignition can be password secured on request	•
Alternator 12 V / 80 A	•
Starter motor 12 V / 3.0 kW	•
Battery 12 V / 110 Ah	•

### Cabin

ROPS (ISO 3471) / OPG (ISO 10262) level 1 cab with skylight, pull-up type front window with locking device, lower window, windscreen-wiper, floor mat , sun roller blind*	•
Adjustable suspension seat with seat belt	•
Monitor panel 3.5" colour display	•
12 Volt power supply	•
Beverage holder and magazine rack	•
Air conditioning	•
Radio equipment	•
Radio	0

### 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, including preparation for hydraulic quick-coupler (HCU-B)	•
Change-over valve on bucket cylinder for clamshell bucket utilization	•
Automatic two-speed travel control	•
Relief valves on service spool	•
2nd auxiliary hydraulic circuit (HCU-D)	0
3rd auxiliary circuit for hydraulic Powertilt	0

### Safety equipment

Rear-view camera system*	•
Travel acoustic alarm	•
Electric horn	•
Rear-view mirrors (left and right side)	•
Hose burst valves on boom and arm cylinders	•
Overload warning device	•
Emergency engine stop switch	•
Neutral position detection system	•
Seat belt caution indicator	•
Anti-slip cabin access	•
Mountings for OPG Level 1 front guard	•
Rotating beacon	•
Bucket linkage with lifting eye	0
OPG Level 2 top guard	0

### Undercarriage

450 mm rubber shoes	•
Track roller guard (not with rubber shoes)	•
450 mm roadliner shoes	0
450 mm steel shoes	0

### **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 (4G)	•

### **LED** lighting system\*

Working light on boom	•
Two front working lights on cab	•
Rear working light on cab	•
Additional working light on boom	0

#### **Attachments**

Bucket range (400 - 800 mm)	0

### Work equipment

Mono boom (3200 mm)	•
Boom cylinder protection guard	•
1650 mm digging arm	•
Blade	•
Blade cylinder safety guard	•
Protection for boom safety valve	•
Protection for arm safety valve	•
Two-piece boom (2240 - 4030 mm)	0
2000 mm digging arm	0

### Other equipment

Standard colour scheme and decals	•
Parts book and operator manual	•
Electric refuelling pump with automatic shut-off function	•
Track frame undercover	0
Special waxing	0

Further equipment on request

standard equipment

 $\bigcirc \ optional \ equipment$ 

 $^{\star}$  only with EN474-1:2022 update



A wide range of buckets and attachments is available. Your Komatsu distributor is ready to assist you with the selection of suitable options.

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.

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