

SPECIFICATIONS



ENGINE

Model	Komatsu 4D88E-7
Type	Water-cooled, 4-cycle direct injection
Aspiration	Cooled EGR
Number of cylinders	4
Bore	.88 mm
Stroke	.90 mm
Piston displacement	2.189 L
Horsepower:	
SAE J1995	Gross 29.1 kW 39 HP
ISO 9249 / SAE J1349	Net 28.3 kW 38 HP
Rated rpm	2400 min ⁻¹
Fan drive method for radiator cooling	Mechanical
Governor	All-speed control, electronic

U.S. EPA Tier 4 Final and EU Stage 3A emissions certified.



HYDRAULICS

Type. Hydraulic Mechanical Intelligence New Design (HydrauMind)

Number of selectable working modes 2

Main pump:

 Pumps for. Boom, arm, bucket and travel circuits

 Type Variable displacement, axial piston

 Maximum flow 153.3 L/min

 Pumps for. Swing and blade

 Type Fixed displacement gear

 Maximum flow 63 L/min

Hydraulic motors:

 Travel 2 x axial piston motors with parking brake

 Swing 1 x axial piston motor with swing holding brake

Relief valve setting:

 Implement circuits 26.5 MPa 270 kg/cm²

 Travel circuit. 26.5 MPa 270 kg/cm²

 Swing circuit. 21.6 MPa 220 kg/cm²

 Pilot circuit 3.14 MPa 32 kg/cm²

 Blade circuits (Raise, Lower) 21.6 MPa 000 kg/cm²

Hydraulic cylinders:

(Number of cylinders – bore x stroke x rod diameter)

 Boom 1–90 mm x 691 mm x 50 mm

 Arm (PC45MR-5) 1–80 mm x 649 mm x 50 mm

 (PC55MR-5) 1–85 mm x 733 mm x 55 mm

 Bucket (PC45MR-5) 1–70 mm x 580 mm x 45 mm

 (PC55MR-5) 1–75 mm x 580 mm x 50 mm

 Boom swing (PC45MR-5). 1–90 mm x 630 mm x 50 mm

 (PC55MR-5). 1–95 mm x 630 mm x 50 mm

 Blade. 1–110 mm x 140 mm x 50 mm



DRIVES AND BRAKES

Steering control	Two levers with pedals
Drive method	Hydrostatic
Maximum drawbar pull	42 kN 4280 kg
Gradeability	30°
Maximum travel speed: High	4.6 km/h
(Auto-shift) Low	2.6 km/h
Service brake	Hydraulic lock
Parking brake	Mechanical disc brake



SWING SYSTEM

Drive method	Hydrostatic
Swing reduction	Planetary gear
Swing circle lubrication	Grease-bathed
Service brake	Hydraulic lock
Swing lock	Mechanical disc brake
Swing speed	9 min ⁻¹



UNDERCARRIAGE

Center frame	X-frame
Track frame	Box-section
Seal of track	Sealed track
Track adjuster	Hydraulic
Number of shoes (Each side)	39
Number of carrier rollers (Each side)	1
Number of track rollers (Each side).	4



COOLANT AND LUBRICANT CAPACITY (REFILL)

Fuel tank	65 L
Coolant	8.9 L
Engine	8.1(7.5) L
Final drive (Each side)	0.7 L
Hydraulic tank	55(20) L



OPERATING WEIGHT (APPROXIMATE)

Operating weight including 2640 mm (PC45MR-5), 2900 mm (PC55MR-5) one-piece boom, 1375 mm (PC45MR-5), 1640 mm (PC55MR-5) arm, ISO 7451 heaped 0.14 m³ (PC45MR-5), 0.16 m³ (PC55MR-5) bucket, blade, rated capacity of lubricants, coolant, full fuel tank, operator, and standard equipment.

	PC45MR-5			
	ROPS Canopy, Rubber Shoe		ROPS Cab, Rubber Shoe	
Shoes	Operating Weight	Ground Pressure	Operating Weight	Ground Pressure
400 mm	4860 kg	26.4 kPa 0.27 kg/cm ²	4980 kg	27.3 kPa 0.28 kg/cm ²

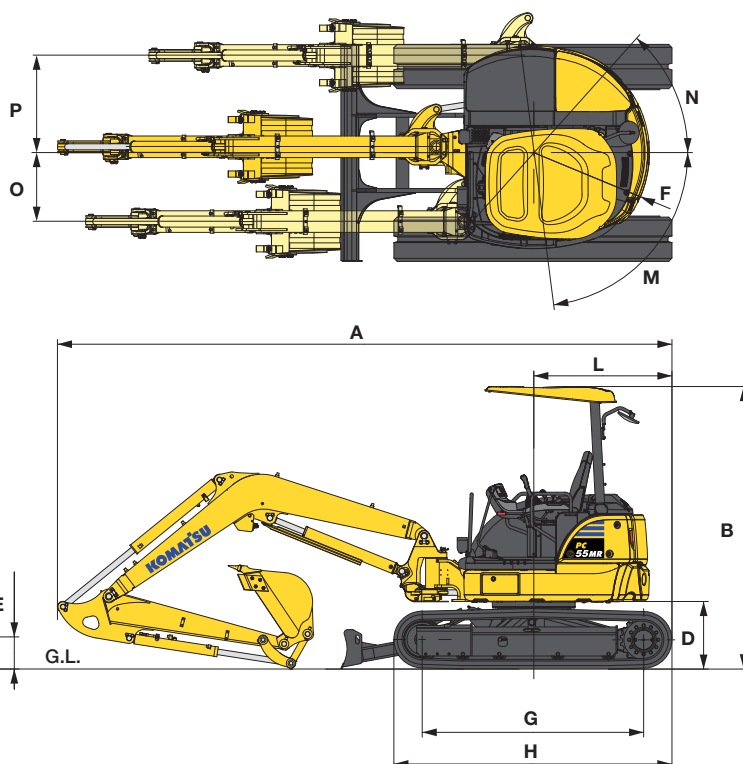
	PC55MR-5			
	ROPS Canopy, Rubber Shoe		ROPS Cab, Rubber Shoe	
Shoes	Operating Weight	Ground Pressure	Operating Weight	Ground Pressure
400 mm	5140 kg	28.9 kPa 0.29 kg/cm ²	5260 kg	29.5 kPa 0.30 kg/cm ²



DIMENSIONS

Model		PC45MR-5	PC55MR-5
Boom Length		2640 mm	2900 mm
Arm Length		1375 mm	1640 mm
A	Overall length	5220 mm	5550 mm
B	Overall height	Canopy	2550 mm
		Cab	2590 mm
C	Overall width	1960 mm	1960 mm
D	Ground clearance, counterweight	610 mm	610 mm
E	Ground clearance (minimum)	290 mm	290 mm
F	Tail swing radius	1040 mm	1120 mm
G	Track length on ground	2000 mm	2000 mm
H	Track length	2520 mm	2520 mm
I	Track gauge	1560 mm	1560 mm
J	Shoe width	400 mm	400 mm
K	Machine upper width	1835 mm	1835 mm
L	Distance, swing center to rear end	1265 mm	1265 mm
M/N	Boom swing angle deg.	LH85/RH50	LH85/RH50
O	Bucket offset LH	630 mm	630 mm
P	Bucket offset RH	880 mm	880 mm

With rubber shoe



BACKHOE BUCKET

Bucket Capacity (Heaped)		Width		Weight	Number of Teeth	PC45MR-5	PC55MR-5
ISO 7451, PCSA	CECE	Without Side Cutters	With Side Cutters	With Side Cutters			
0.055 m ³	0.05 m ³	300 mm	370 mm	89 kg	3	○	○
0.11 m ³	0.10 m ³	425 mm	500 mm	94 kg	3	○	○
0.14 m ³	0.13 m ³	525 mm	600 mm	109 kg	4	●	X
0.16 m ³	0.14 m ³	580 mm	650 mm	110 kg	4	○	●
0.18 m ³	0.16 m ³	625 mm	700 mm	121 kg	5	X	○

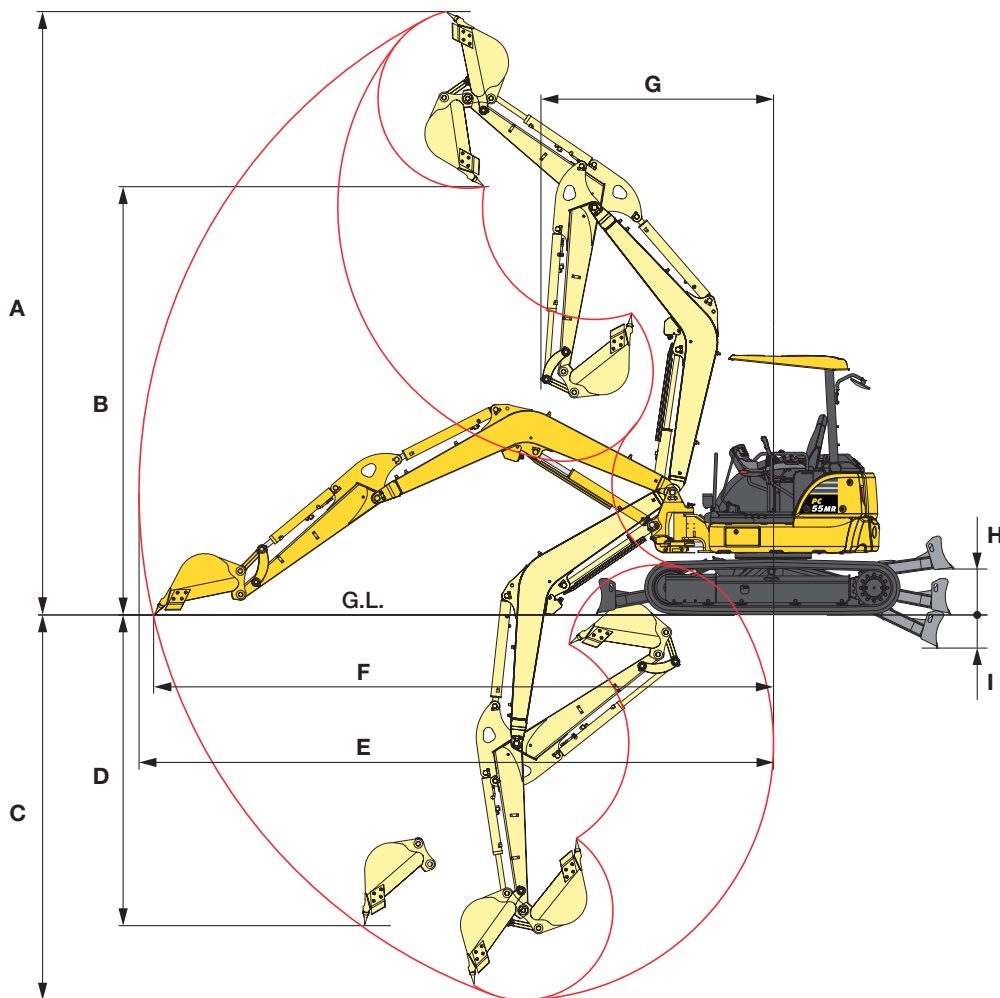
● : Standard equipment ○ : Optional equipment X : Not available



WORKING RANGE

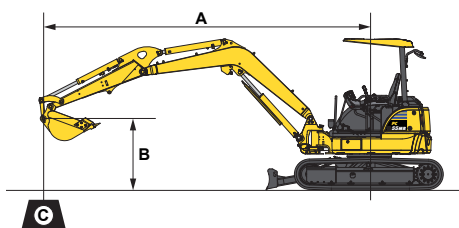
Model		PC45MR-5	PC55MR-5
Boom Length		2640 mm	2900 mm
Arm Length		1375 mm	1640 mm
A	Maximum digging height	5500 mm	5915 mm
B	Maximum dumping height	3775 mm	4200 mm
C	Maximum digging depth	3300 mm	3770 mm
D	Maximum vertical wall digging depth	2730 mm	3030 mm
E	Maximum digging reach	5735 mm	6220 mm
F	Maximum digging reach at ground	5575 mm	6075 mm
G	Minimum swing radius (When boom swing)	2290 (1760) mm	2285 (1760) mm
H	Maximum blade lift	430 mm	430 mm
I	Maximum blade depth	330 mm	330 mm
ISO 6015 Rating	Bucket digging force	33.9 kN 3460 kg	39.0 kN 3980 kg
	Arm crowd force	20.3 kN 2070 kg	23.9 kN 2440 kg

With rubber shoe





LIFTING CAPACITY WITH LIFTING MODE



- A: Reach from swing center
- B: Bucket hook height
- C: Lifting capacity
- Cf: Rating over front
- Cs: Rating over side
- ⊗: Rating at maximum reach

PC45MR-5 Canopy Boom : 2640 mm Arm : 1375 mm Bucket : 0.14 m ³ ISO 7451 heaped Shoe width : 400 mm Rubber shoe Blade on ground						
B \ A	⊗Maximum		3.0 m		2.0 m	
	Cf	Cs	Cf	Cs	Cf	Cs
3.0 m	925 kg	565 kg	—	—	—	—
2.0 m	930 kg	465 kg	1240 kg	1075 kg	—	—
1.0 m	1010 kg	430 kg	1895 kg	975 kg	—	—
0 m	1150 kg	435 kg	2295 kg	915 kg	1205 kg	1205 kg
-1.0 m	1245 kg	495 kg	2305 kg	900 kg	2500 kg	1755 kg

PC55MR-5 Canopy Boom : 2900 mm Arm : 1640 mm Bucket : 0.16 m ³ ISO 7451 heaped Shoe width : 400 mm Rubber shoe Blade on ground						
B \ A	⊗Maximum		3.0 m		2.0 m	
	Cf	Cs	Cf	Cs	Cf	Cs
3.0 m	830 kg	530 kg	—	—	—	—
2.0 m	865 kg	450 kg	1170 kg	1170 kg	—	—
1.0 m	915 kg	420 kg	1825 kg	1095 kg	—	—
0 m	975 kg	425 kg	2225 kg	1020 kg	1265 kg	1265 kg
-1.0 m	1045 kg	465 kg	2265 kg	1000 kg	2445 kg	1945 kg

Load is limited by hydraulic capacity rather than tipping. Ratings are based on SAE standard No.J1097. Rated loads do not exceed 87% of hydraulic lift capacity or 75% of tipping load.



The photo shows Japanese specification.