

Specifications

ENGINE

The new generation engine has been developed to comply with the strictest emission controls.

Model	Komatsu 4D88E-6
Type	emissionised 4-cycle diesel engine
Displacement.....	2.189 cm ³
Bore × stroke.....	88 × 90 mm
No. of cylinders	4
Engine power	
at rated engine speed	2.400 rpm
ISO 14396	29,5 kW / 39,6 HP
ISO 9249 (net engine power)	28,5 kW / 38,2 HP
Max. torque/engine speed	137 Nm/1.440 rpm
Cooling system.....	water
Air filter type	dry
Starter motor	electric motor with pre-heating air system for cold climate

OPERATING WEIGHT

Operating weight with standard bucket, fully serviced, +75 kg operator (ISO 6016).

Operating weight with cab and rubber shoes	4.715 kg
Operating weight with cab and steel shoes	4.780 kg
Canopy	-150 kg (optional)

HYDRAULIC SYSTEM

Type	Komatsu CLSS
Main pump	2 × variable displacement pump
Max. pump flow.....	53,5 × 2 + 33,8 ltr/min
Max. operating pressure	26,5 MPa (265 bar)

Hydraulic motors:

Travel.....	2 × variable displacement
Swing	1 × fixed displacement

Hydraulic cylinders (bore × stroke):

Boom	90 × 696 mm
Arm	80 × 649 mm
Bucket.....	70 × 580 mm
Boom swing.....	90 × 630 mm
Blade.....	110 × 140 mm

Bucket digging force (ISO 6015)

3.393 daN (3.460 kg)	
Arm crowd force (ISO 6015):	
1.375 mm arm.....	2.157 daN (2.200 kg)
1.770 mm arm.....	1.961 daN (2.000 kg)

The digging equipment is fully controlled by PPC servo-controls. All movements are stopped by lifting the safety levers on the tilting case.

ENVIRONMENT

Vibration levels (EN 12096:1997)*

Hand/arm	≤ 2,5 m/s ² (uncertainty K = 1,2 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,2 m/s ²)

* for the purpose of risk assessment under directive 2002/44/EC, please refer to ISO/TR 25398:2006.

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

BLADE

Type	electro-welded, single unit structure
Width × height	1.960 × 355 mm
Max. lifting above ground level	430 mm
Max. depth below ground level	330 mm

UNDERCARRIAGE

Central lower X-frame and carriage frame with boxed section.

Track rollers (each side).....	4
Shoe width	400 mm
Ground pressure (standard).....	0,25 kg/cm ²

ELECTRIC SYSTEM

Voltage.....	12 V
Battery	72 Ah
Alternator.....	40 A
Starter motor	2,3 kW

SERVICE CAPACITIES

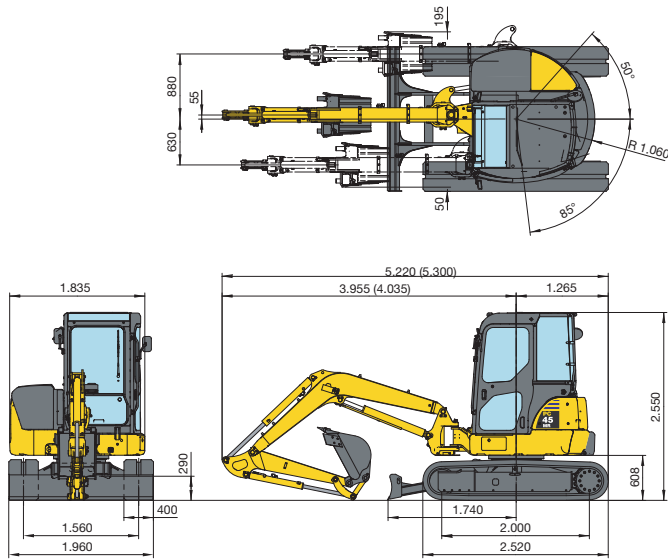
Fuel tank	65 ltr
Radiator and system	8,5 ltr
Engine oil (refill)	7,5 ltr
Hydraulic system.....	55 ltr

TRANSMISSION

Type

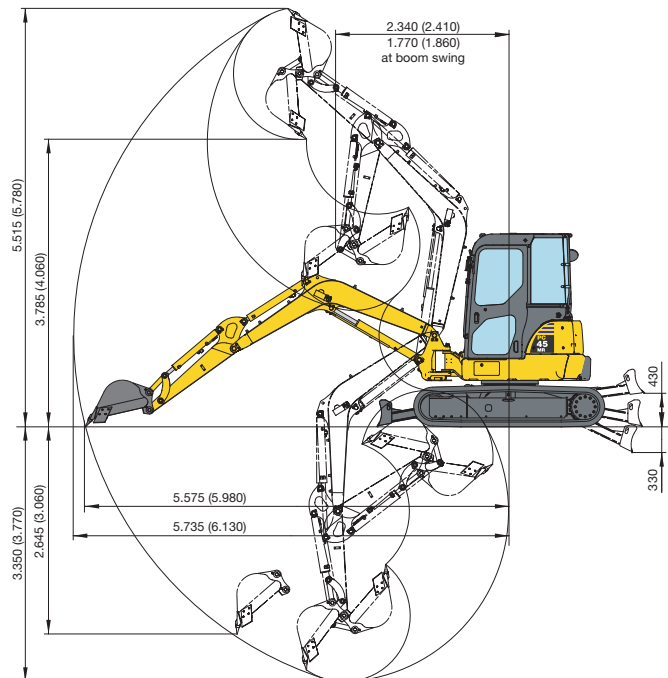
2 speed hydrostatic transmission, controlled and steered by means of two levers and two pedals	
Hydraulic motors	2 × axial pistons
Reduction system.....	planetary gear
Max. drawbar pull.....	4.197 daN (4.280 kgf)
Travel speed	2,8 - 4,6 km/h

Dimensions & Working Range



BUCKET RANGE

Width mm	Capacity m ³ (ISO 7451)	Weight kg	No. of teeth
300	0,07	75	2
400	0,1	90	3
500	0,125	100	4
600	0,15	115	5
700	0,175	125	5



Cab, rubber shoes, blade down

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

ARM LENGTH 1.375 mm

A	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	-	-	(*)1.005	775
3 m	-	-	(*)990	(*)990	(*)990	670	(*)1.020	555
2 m	-	-	(*)1.530	1.050	(*)1.165	655	(*)1.060	475
1 m	-	-	(*)2.125	975	(*)1.380	625	(*)1.120	450
0 m	-	-	(*)2.345	940	(*)1.505	605	(*)1.195	475
-1 m	(*)3.010	1.875	(*)2.195	945	(*)1.400	605	(*)1.280	570
-2 m	(*)2.635	1.935	(*)1.505	975	-	-	(*)1.340	900

Unit: kg

ARM LENGTH 1.770 mm

A	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)805	675	(*)855	615
3 m	-	-	-	-	(*)810	680	(*)880	465
2 m	-	-	(*)1.220	1.070	(*)1.000	655	(*)925	405
1 m	-	-	(*)1.895	985	(*)1.260	625	(*)980	385
0 m	(*)1.250	(*)1.250	(*)2.275	930	(*)1.450	595	(*)1.045	405
-1 m	(*)2.410	(*)2.410	(*)2.275	920	(*)1.465	585	(*)1.125	470
-2 m	(*)3.355	1.870	(*)1.865	935	-	-	(*)1.215	655

Unit: kg

NOTE:

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.