

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	5.280 kg
Operating weight with cab and steel shoes	5.350 kg

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	85 × 733 mm
Bucket.....	75 × 580 mm
Boom swing.....	95 × 630 mm
Blade.....	110 × 140 mm
Bucket digging force (ISO 6015)	3.900 daN (3.980 kg)
Arm crowd force (ISO 6015):	
1.640 mm arm.....	2.392 daN (2.440 kg)
2.000 mm arm.....	2.226 daN (2.270 kg)
The digging equipment is fully controlled by PPC servo-controls. All movements are stopped by lifting the safety levers on the tilting case.	

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.....	4.200 daN (4.280 kgf)
Travel speed	2,8 - 4,6 km/h

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

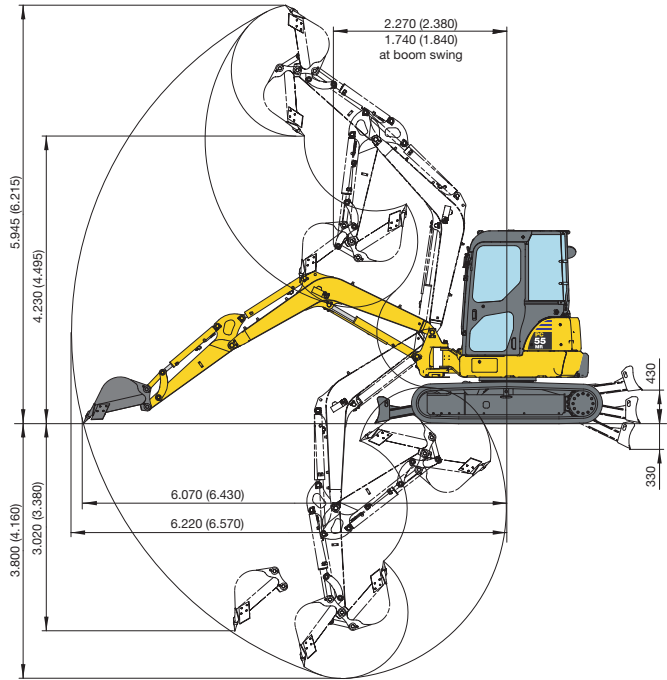
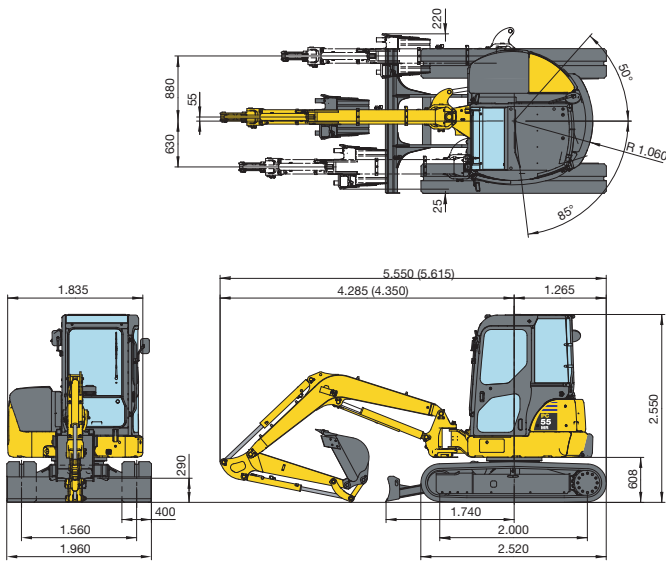
ENVIRONMENT

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.	

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

Dimensions & Working Range



Cab, rubber shoes, blade down

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

ARM LENGTH 1.640 mm

A \ B	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)790	780	(*)835	670
3 m	-	-	-	-	(*)845	775	(*)850	520
2 m	-	-	(*)1.435	1.180	(*)1.050	745	(*)885	460
1 m	-	-	(*)2.030	1.085	(*)1.285	705	(*)930	440
0 m	-	-	(*)2.260	1.040	(*)1.435	680	(*)985	455
-1 m	(*)2.790	2.025	(*)2.170	1.040	(*)1.415	670	(*)1.050	520
-2 m	-	-	-	-	-	-	-	-

Unit: kgf

Cab, rubber shoes, blade up

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

ARM LENGTH 1.640 mm

A \ B	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)790	780	(*)835	670
3 m	-	-	-	-	(*)845	775	780	520
2 m	-	-	(*)1.435	1.180	(*)1.050	745	695	460
1 m	-	-	1.665	1.085	1.065	705	670	440
0 m	-	-	1.620	1.040	1.035	680	695	455
-1 m	(*)2.790	2.025	1.615	1.040	1.025	670	795	520
-2 m	-	-	-	-	-	-	-	-

Unit: kgf

ARM LENGTH 2.000 mm

A \ B	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)625	(*)625	(*)730	565
3 m	-	-	-	-	(*)700	(*)700	(*)750	450
2 m	-	-	(*)1.160	(*)1.160	(*)915	750	(*)785	400
1 m	-	-	(*)1.815	1.095	(*)1.175	705	(*)825	385
0 m	(*)1.285	(*)1.285	(*)2.180	1.030	(*)1.375	670	(*)875	395
-1 m	(*)2.365	1.975	(*)2.205	1.015	(*)1.420	655	(*)935	445
-2 m	-	-	-	-	-	-	-	-

Unit: kgf

ARM LENGTH 2.000 mm

A \ B	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	(*)625	(*)625	(*)730	565
3 m	-	-	-	-	(*)700	(*)700	685	450
2 m	-	-	(*)1.160	(*)1.160	(*)915	750	620	400
1 m	-	-	1.680	1.095	1.065	705	595	385
0 m	(*)1.285	(*)1.285	1.605	1.030	1.025	670	615	395
-1 m	(*)2.365	1.975	1.590	1.015	1.010	655	690	445
-2 m	-	-	-	-	-	-	-	-

Unit: kgf

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.