

# Specifications

## ENGINE

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

Model .....	Komatsu 3D67E-2A
Type .....	emissionised 4-cycle diesel engine
Displacement.....	778 cm <sup>3</sup>
No. of cylinders .....	3
Engine power	
at rated engine speed.....	2.600 rpm
ISO 14396 .....	11,6 kW/15,6 HP
ISO 9249 (net engine power) .....	11,2 kW/15,0 HP
Max. torque/engine speed .....	44,1 Nm/1.800 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 rubber shoes .....	1.840 kg
Operating weight with steel shoes .....	1.910 kg
Heated cab weight .....	+120 kg (optional)
Variable undercarriage.....	+110 kg

## HYDRAULIC SYSTEM

Type .....	Komatsu CLSS
Main pump .....	1 × variable displacement pump
Max. pump flow.....	40,8 ltr/min
Max. operating pressure .....	23 MPa (230 bar)
Bucket digging force (ISO 6015) .....	1.590 daN (1.620 kg)
Arm crowd force (ISO 6015):	
965 mm arm.....	990 daN (1.010 kg)
1.215 mm arm.....	785 daN (865 kg)

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

## TRANSMISSION

Type .....	double speed hydrostatic transmission, controlled and steered by means of two levers or two pedals
Hydraulic motors .....	2 × axial pistons
Reduction system.....	planetary gear
Max. drawbar pull.....	1.770 daN (1.805 kgf)
Travel speed .....	2,3 / 4,3 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.....	8,9 rpm
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## BLADE

Type .....	electro-welded, single unit structure with extensions
Width × height .....	1.300 (980) × 250 mm
Max. lifting above ground level .....	280 mm
Max. depth below ground level .....	255 mm

## UNDERCARRIAGE

Track rollers (each side).....	3
Shoe width .....	230 mm
Ground pressure (standard).....	0,28 kg/cm <sup>2</sup>

## ELECTRIC SYSTEM

Voltage.....	12 V
Battery .....	41 Ah
Alternator.....	40 A
Starter motor .....	1,2 kW

## SERVICE CAPACITIES

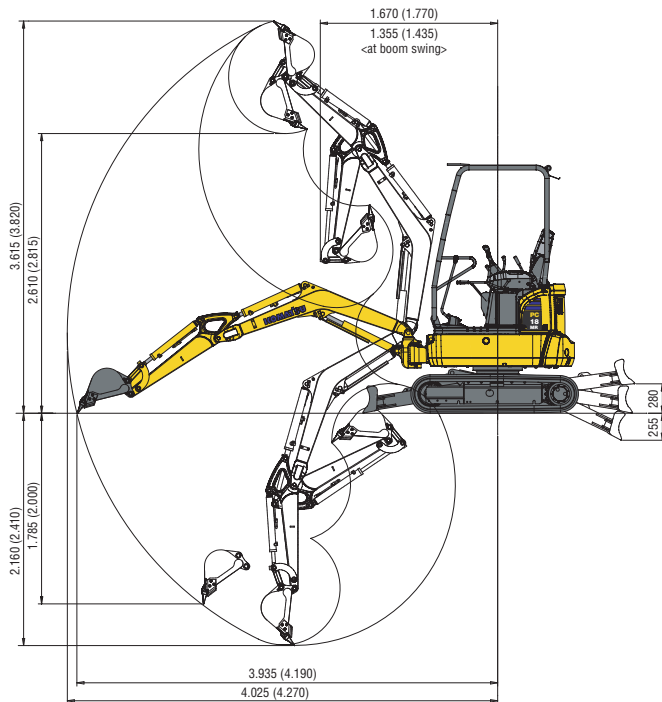
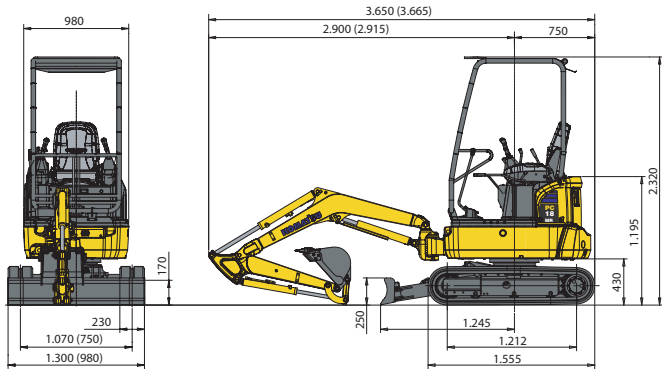
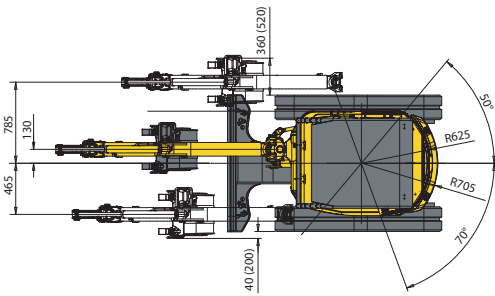
Fuel tank.....	19 ltr
Radiator and system .....	3,1 ltr
Engine oil (refill) .....	3,3 ltr
Hydraulic system (refill) .....	1,2 ltr

## ENVIRONMENT

Vibration levels (EN 12096:1997)*	
Hand/arm.....	≤ 2,5 m/s <sup>2</sup> (uncertainty K = 1,2 m/s <sup>2</sup> )
Body .....	≤ 0,5 m/s <sup>2</sup> (uncertainty K = 0,2 m/s <sup>2</sup> )

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

# Dimensions & Working Range



## BUCKET RANGE

Width mm	Capacity m <sup>3</sup> (ISO 7451)	Weight kg	No. of teeth
250	0,03	19	2
300	0,035	20	3
350	0,04	22	3
400	0,05	23	3
450	0,06	25	4

## Canopy, standard arm, counterweight, 400 mm bucket, HS version

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

### ARM LENGTH 965 mm

B \ A	2 m		2,5 m		3 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
2 m	-	-	(*)318	282	(*)314	205	(*)318	188
1 m	(*)653	370	(*)454	265	(*)367	199	(*)324	156
0 m	(*)806	345	(*)551	249	(*)412	190	(*)338	160
-1 m	(*)635	350	(*)446	251	-	-	(*)342	213

Unit: kg

### ARM LENGTH 1.215 mm

B \ A	2 m		2,5 m		3 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
2 m	-	-	(*)257	(*)257	(*)268	209	(*)280	162
1 m	(*)548	378	(*)404	267	(*)336	199	(*)287	138
0 m	(*)798	343	(*)535	248	(*)404	188	(*)300	141
-1 m	(*)704	342	(*)493	245	(*)350	188	(*)310	177

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.

- 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.