Specifications

ENGINE

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

Model ..... Komatsu 3D76E
Type ..... emissionised 4-cycle diesel engine
Displacement ..... 1.115 cm³
Bore × stroke ..... 76 × 82 mm
No. of cylinders 3
Engine power
at rated engine speed ..... 2.500 rpm
ISO 14396 ..... 15,7 kW / 21,1 HP
ISO 9249 (net engine power) ..... 15,5 kW / 20,8 HP
Max. torque/engine speed ..... 66,7 Nm/1.600 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 ..... 2.425 kg
Operating weight with cab and steel shoes ..... 2.550 kg
Canopy ..... -175 kg (optional)

HYDRAULIC SYSTEM

Type ..... Komatsu CLSS
Main pump ..... variable displacement pump + gear pump
Max. pump flow ..... 55,0 + 16,0 ltr/min
Max. operating pressure ..... 24,5 MPa (245 bar)
Hydraulic motors:
Travel ..... 2 × variable displacement
Swing ..... 1 × fixed displacement
Hydraulic cylinders (bore × stroke):
Boom ..... 70 × 453,5 mm
Arm ..... 65 × 451 mm
Bucket ..... 50 × 469,5 mm
Boom swing ..... 70 × 429,5 mm
Blade ..... 65 × 135 mm
Bucket digging force (ISO 6015) ..... 1.880 daN (1.920 kg)
Arm crowd force (ISO 6015):
970 mm arm ..... 1.363 daN (1.390 kg)
1.320 mm arm ..... 1.127 daN (1.150 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/s² (uncertainty K = 1,2 m/s²)
Body ..... ≤ 0,5 m/s² (uncertainty K = 0,2 m/s²)

* 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 ..... 8,9 rpm

BLADE

Type ..... electro-welded, single unit structure
Width × height ..... 1.450 × 300 mm
Max. lifting above ground level ..... 340 mm
Max. depth below ground level ..... 240 mm

UNDERCARRIAGE

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

Track rollers (each side) 3
Shoe width ..... 250 mm
Ground pressure (standard) ..... 0,25 kg/cm²

ELECTRIC SYSTEM

Voltage ..... 12 V
Battery ..... 45 Ah
Alternator ..... 40 A
Starter motor ..... 1,4 kW

SERVICE CAPACITIES

Fuel tank ..... 28 ltr
Radiator and system ..... 3,0 ltr
Engine oil (refill) ..... 3,4 ltr
Hydraulic system ..... 29 ltr

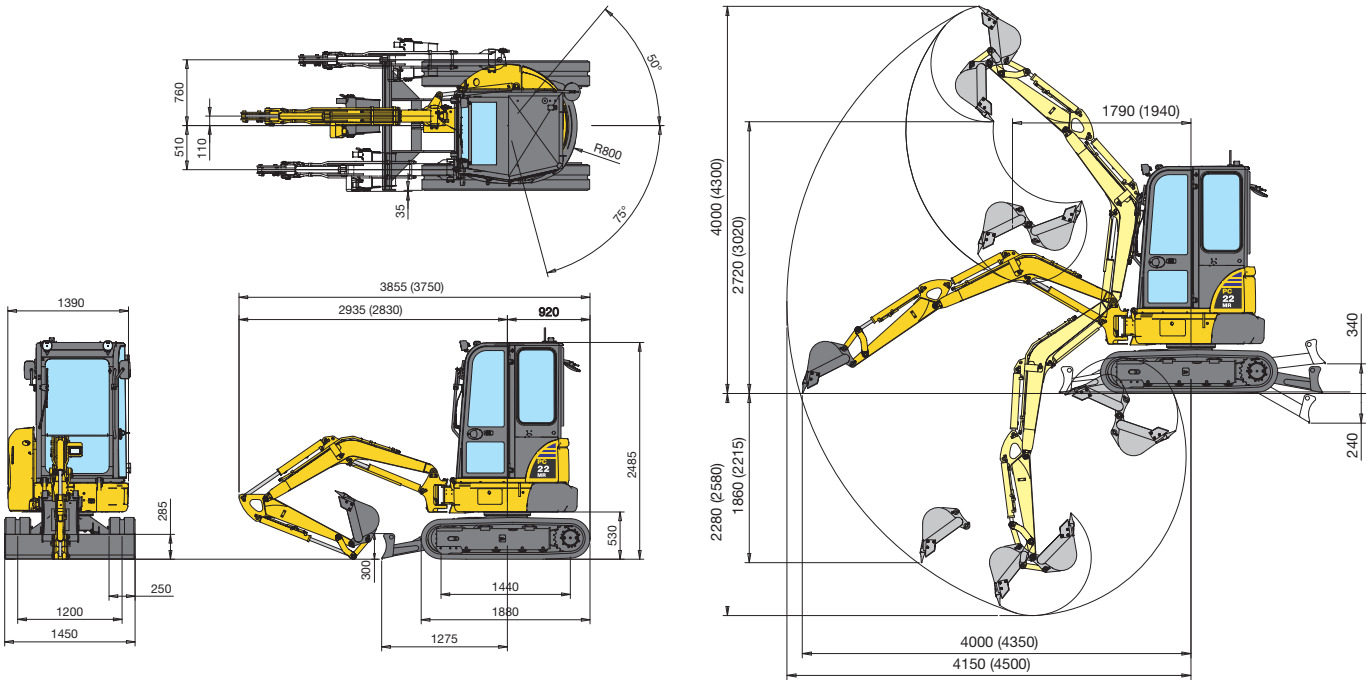
TRANSMISSION

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 ..... 2.020 daN (2.060 kgf)
Travel speed ..... 2,8 - 4,6 km/h

BUCKET RANGE

Width mm	Capacity m³ (ISO 7451)	Weight kg	No. of teeth
250	0,035	30	2
350	0,055	40	3
450	0,07	50	4
550	0,085	60	5

Dimensions & Working Range



LIFTING CAPACITY

Cab, rubber shoes, counterweight, blade down

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

ARM LENGTH 970 mm

B \ A	2 m		3 m		Max. outreach	
	Front	360°	Front	360°	Front	360°
3 m	–	–	–	–	(*)475	360
2 m	–	–	(*)490	340	(*)445	255
1 m	(*)1195	590	(*)665	320	(*)480	230
0 m	(*)1570	560	(*)810	310	(*)605	245
-1 m	(*)1395	570	–	–	(*)755	330

Unit: kgf

ARM LENGTH 1.320 mm

B \ A	2 m		3 m		Max. outreach	
	Front	360°	Front	360°	Front	360°
3 m	–	–	(*)325	(*)325	(*)350	285
2 m	–	–	(*)365	(*)340	(*)320	215
1 m	(*)885	(*)610	(*)565	320	(*)340	195
0 m	(*)1495	(*)555	(*)765	305	(*)410	205
-1 m	(*)1510	550	(*)790	300	(*)625	260

Unit: kgf

Cab, rubber shoes, counterweight, blade up

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

ARM LENGTH 970 mm

B \ A	2 m		3 m		Max. outreach	
	Front	360°	Front	360°	Front	360°
3 m	–	–	–	–	470	360
2 m	–	–	435	340	335	255
1 m	795	590	420	320	300	230
0 m	760	560	405	310	320	245
-1 m	770	570	–	–	435	330

Unit: kgf

ARM LENGTH 1.320 mm

B \ A	2 m		3 m		Max. outreach	
	Front	360°	Front	360°	Front	360°
3 m	–	–	(*)325	(*)325	(*)350	285
2 m	–	–	(*)365	340	280	215
1 m	815	610	420	320	260	195
0 m	755	555	400	305	270	205
-1 m	755	550	400	300	340	260

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.