

Specifications

ENGINE

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

Model	Komatsu 3D88E
Type	emissionised 4-cycle diesel engine
Displacement.....	1.642 cm ³
Bore × stroke.....	88 × 90 mm
No. of cylinders	3
Engine power	
at rated engine speed	2.400 rpm
ISO 14396	22,0 kW / 29,5 HP
ISO 9249 (net engine power)	21,6 kW / 29,0 HP
Max. torque/engine speed	105,1 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	3.725 kg
Operating weight with cab and steel shoes	3.835 kg
Canopy	-150 kg (optional)

HYDRAULIC SYSTEM

Type	Komatsu CLSS
Main pump	2 × variable displacement pump
Max. pump flow.....	36,1 × 2 + 19,8 ltr/min
Max. operating pressure	26 MPa (260 bar)

Hydraulic motors:

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

Hydraulic cylinders (bore × stroke):

Boom	80 × 585 mm
Arm	75 × 595 mm
Bucket.....	65 × 490 mm
Boom swing.....	95 × 482 mm
Blade.....	95 × 140 mm

Bucket digging force (ISO 6015)

Arm crowd force (ISO 6015):

1.370 mm arm.....	2.058 daN (2.100 kg)
1.720 mm arm.....	1.637 daN (1.670 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 = 0,56 m/s ²)
Body	≤ 0,5 m/s ² (uncertainty K = 0,23 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

Width × height

Max. lifting above ground level

Max. depth below ground level

UNDERCARRIAGE

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

Track rollers (each side).....

Shoe width

Ground pressure (standard).....

ELECTRIC SYSTEM

Voltage.....

Battery

Alternator.....

Starter motor

SERVICE CAPACITIES

Fuel tank

Radiator and system

Engine oil (refill)

Hydraulic system.....

TRANSMISSION

Type

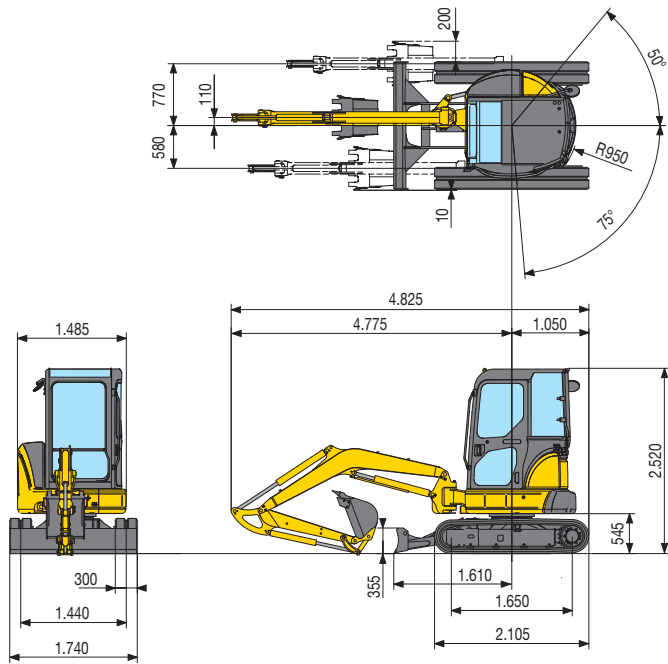
Hydraulic motors

Reduction system.....

Max. drawbar pull.....

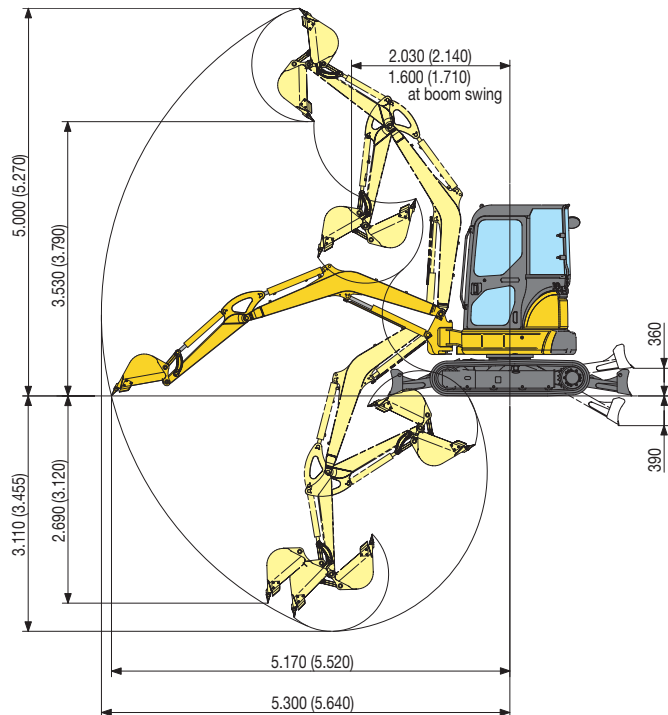
Travel speed

Dimensions & Working Range



BUCKET RANGE

Width mm	Capacity m ³ (ISO 7451)	Weight kg	No. of teeth
300	0,035	55	2
400	0,07	65	3
500	0,095	80	4
600	0,12	90	5
650	0,13	95	5



Cab, rubber shoes, blade down

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

ARM LENGTH 1.370 mm

A	2 m		3 m		4 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	(*)715	(*)715	-	-	(*)705	635
3 m	-	-	(*)710	(*)710	(*)720	440	(*)700	420
2 m	-	-	(*)965	700	(*)775	435	(*)720	350
1 m	-	-	(*)1.300	655	(*)890	420	(*)855	370
0 m	(*)2.630	1.190	(*)1.445	630	(*)945	410	(*)895	385
-1 m	(*)2.260	1.205	(*)1.335	630	-	-	(*)930	455
-2 m	(*)1.455	1.245	-	-	-	-	(*)900	710

Unit: kg

ARM LENGTH 1.720 mm

A	2 m		2,5 m		3 m		Max. outreach	
	Front	360°	Front	360°	Front	360°	Front	360°
4 m	-	-	-	-	-	-	(*)630	535
3 m	-	-	-	-	(*)615	455	(*)640	385
2 m	-	-	(*)820	720	(*)700	445	(*)665	325
1 m	-	-	(*)1.190	670	(*)840	430	(*)700	305
0 m	(*)2.780	1.190	(*)1.420	635	(*)935	415	(*)745	315
-1 m	(*)2.515	1.195	(*)1.400	630	(*)910	410	(*)795	365
-2 m	(*)1.870	1.225	(*)1.085	640	-	-	(*)845	525

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.