

SPECIFICATIONS

ENGINE

Model	Yanmar 3TNV70
Type	Water-cooled, 4-cycle, 3-cylinder swirl combustion chamber injection type diesel engine
Rated power	
ISO B249, net	9.5 kW (12.9 PS) at 2 100 min ⁻¹ (rpm)
Maximum torque	50.5 N·m (5.1 kgf·m) at 1 500 min ⁻¹ (rpm)
Piston displacement	0.854 L
Bore and stroke	70 mm x 74 mm
Batteries	1 x 12 V/36 Ah

HYDRAULIC SYSTEM

The proven 2-pump system has been improved to make combined operations and fine control easier and smoother.

Main pumps	2 gear pumps
Maximum oil flow	2 x 10.5 L/min
Plot pump	1 gear pump
Maximum oil flow	5.3 L/min

Relief Valve Settings

Main pumps circuit	17.7 MPa (180 kgf/cm ²)
Plot circuit	3.9 MPa (40 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom raise and arm roll-in circuits to absorb shocks at stroke ends.

Dimensions

	Quantity	Bore	Rod diameter	Stroke
Boom	1	50 mm	30 mm	361 mm
Arm	1	50 mm	30 mm	311 mm
Bucket	1	50 mm	25 mm	243 mm
Boom swing	1	50 mm	25 mm	250 mm
Blade	1	50 mm	25 mm	83 mm

CONTROLS

Control is all mechanical.

SWING MECHANISM

High-torque, orbit motor. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear are immersed in lubricant.

Swing speed	8.5 min ⁻¹ (8.5 rpm)
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UNDERCARRIAGE

Tracks
Tractor-type undercarriage. Welded track frame using carefully selected materials. Side frame extends by span cylinder.

Numbers of Rollers on Each Side

Lower rollers	2
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Travel Device

Each track driven by a high-torque, 2-speed axial piston motor through planetary reduction gear, allowing counter-rotation of the tracks.

Travel speeds	High : 0 to 4.0 km/h
(with rubber shoes)	Low : 0 to 2.0 km/h
Gradeability	58 % (30 degree) continuous

WEIGHTS AND GROUND PRESSURE

Equipped with 0.70 m arm and 0.022 m³ (ISO 7451 capacity) bucket.

	Operating weight	Ground pressure
180 mm rubber shoes	1 100 kg	26 kPa (0.27 kgf/cm ²)

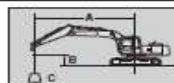
SERVICE REFILL CAPACITIES

Fuel tank	16.0 L
Engine coolant	3.3 L
Engine oil	2.8 L
Travel device (each side)	0.33 L
Hydraulic system	18.0 L
Hydraulic oil tank (Reference oil level)	12.0 L

LIFTING CAPACITIES / EQUIPMENT

Metric measure

- Note: 1. Ratings are based on ISO 10567.
2. Lifting capacity of the ZAXIS Series does not exceed 75 % of tipping load with the machine on firm, level ground or 67 % full hydraulic capacity.
3. The load point is the centre line of the bucket pivot mounting pin on the arm.
4. *Indicates load limited by hydraulic capacity.
5. 0 m = Ground.



- A: Load radius
B: Load point height
C: Lifting capacity

ZX8-2 ROLL BAR VERSION, BLADE ABOVE GROUND

⬆️ Raising over front ⬆️ Raising over side or 360 degrees Unit: 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		⬆️	⬆️	meter
Arm 0.70 m Rubber shoes 180 mm	1.0 m	⬆️	⬆️	⬆️	⬆️	0.21	0.20	2.41
	0 (Ground)	*0.39	*0.39	*0.27	0.25	0.22	0.20	2.35
	-1.0 m	*0.47	*0.47			0.29	0.26	1.57

ZX8-2 ROLL BAR VERSION, BLADE ON GROUND

Unit: 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		⬆️	⬆️	meter
Arm 0.70 m Rubber shoes 180 mm	1.0 m	⬆️	⬆️	⬆️	⬆️	0.47	0.20	2.41
	0 (Ground)	*0.39	*0.39	*0.33	0.25	0.53	0.20	2.35
	-1.0 m	*0.47	*0.47			1.06	0.26	1.57

ZX8-2 ROLL BAR VERSION, BLADE ABOVE GROUND, LONG ARM

Unit: 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		⬆️	⬆️	meter
Arm 0.90 m Rubber shoes 180 mm	1.0 m	⬆️	⬆️	⬆️	⬆️	0.19	0.19	2.58
	0 (Ground)	*0.40	*0.40	0.27	0.25	0.20	0.18	2.51
	-1.0 m	*0.52	*0.52			0.30	0.26	1.65

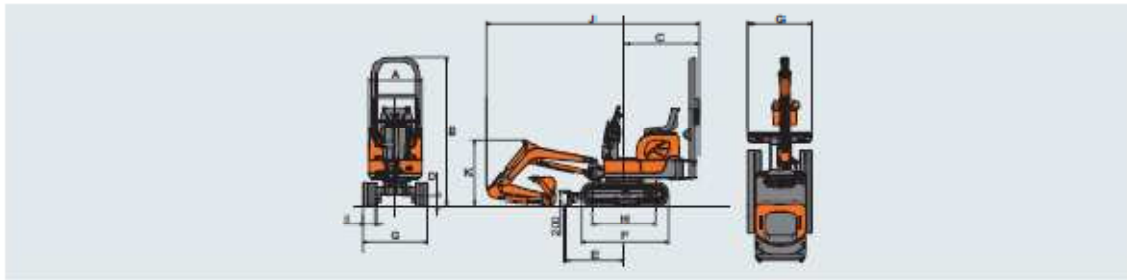
ZX8-2 ROLL BAR VERSION, BLADE ON GROUND, LONG ARM

Unit: 1 000 kg

Conditions	Load point height	Load radius				At max. reach		
		1.0 m		2.0 m		⬆️	⬆️	meter
Arm 0.90 m Rubber shoes 180 mm	1.0 m	⬆️	⬆️	⬆️	⬆️	0.43	0.19	2.58
	0 (Ground)	*0.40	*0.40	*0.33	0.25	0.44	0.18	2.51
	-1.0 m	*0.52	*0.52			0.74	0.26	1.65

SPECIFICATIONS

DIMENSIONS



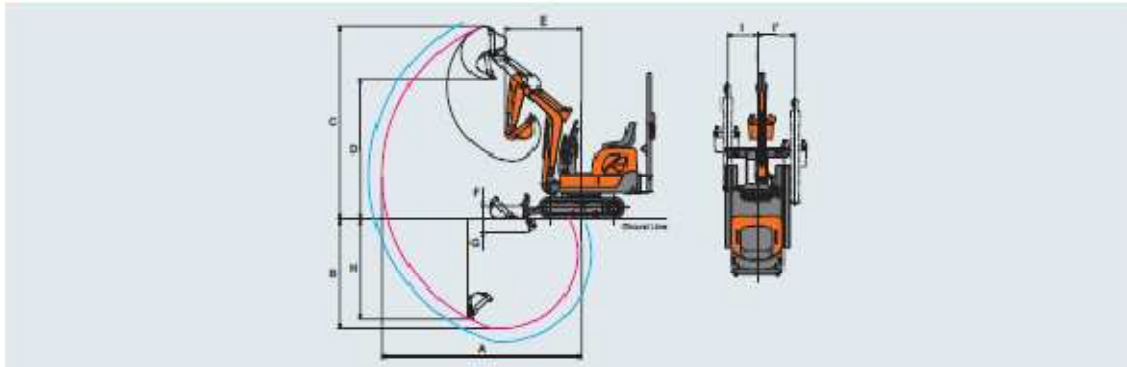
Note:
The illustration shows the ZX8-8 equipped with 0.170 m arm and 180 mm rubber shoes.

Unit: mm

	ZX8-8
A Overall width	740
B Overall height	2 150
C Rear-end swing radius	1 090
D Min. ground clearance	130
E Horizontal distance of blade installation	845
F Undercarriage length	1 220
G Undercarriage width (Extend / Retract)	910 / 720
H Distance between tumbler	900
I Track shoe width	180
J Max. transport length (With long arm)	2 970 (3 030)
K Overall height of boom (With long arm)	955 (1 200)

Sizes shown in parentheses apply when the crawler and blade are contracted.

WORKING RANGES



Note:
The illustration shows the ZX8-8 equipped with 0.022 m³ bucket, 0.70 m arm and 180 mm rubber shoes.

Unit: mm

	ZX8-8	
	0.70 m	0.90 m
A Max. digging reach	2 830	3 000
B Max. digging depth	1 600	1 800
C Max. cutting height	2 840	2 940
D Max. dumping height	2 050	2 150
E Min. swing radius (At max. boom left swing)	1 100 (920)	1 250 (1 060)
F Blade bottom highest position above ground	185	18.5
G Blade bottom lowest position above ground	175	17.5
H Max. vertical wall	1 450	1 600
I / J Offset distance (Max. boom-swing angle)	280 (65) / 380 (55)	280 (65) / 380 (55)

Sizes shown in parentheses apply when the crawler and blade are contracted.