

Mini-Excavator **Zaxis40U** Specifications

Rated Engine Power

DIN 6271, net 29.3 kW (39.8 PS)

SAE J1349, net 29.9 kW (40.1 hp)

Operating Weight

(Rubber shoes) (Grouser shoes)

2-pillar canopy version 4 210 kg 4 350 kg

4-pillar canopy version 4 270 kg 4 410 kg

Cab version 4 330 kg 4 470 kg

Backhoe Buckets

ISO 7451 0.10 – 0.17 m³

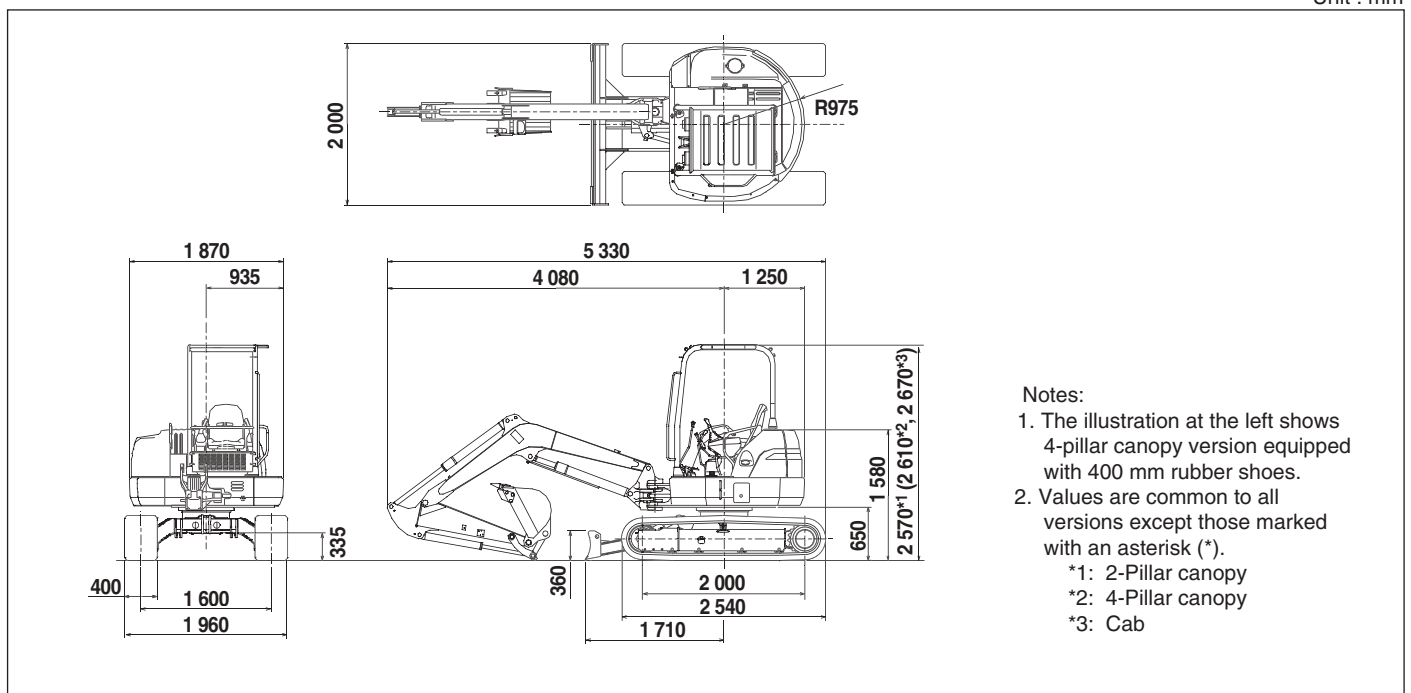
The 2- or 4-pillar canopy, or cab can be mounted on the upper-structure according to job needs and applicable regulations.

The 4-pillar canopy and cab conform to TOPS (ISO 12117) and FOPS (ISO 10262, Level 1) requirements.*

** Cab requires optional top guard.*

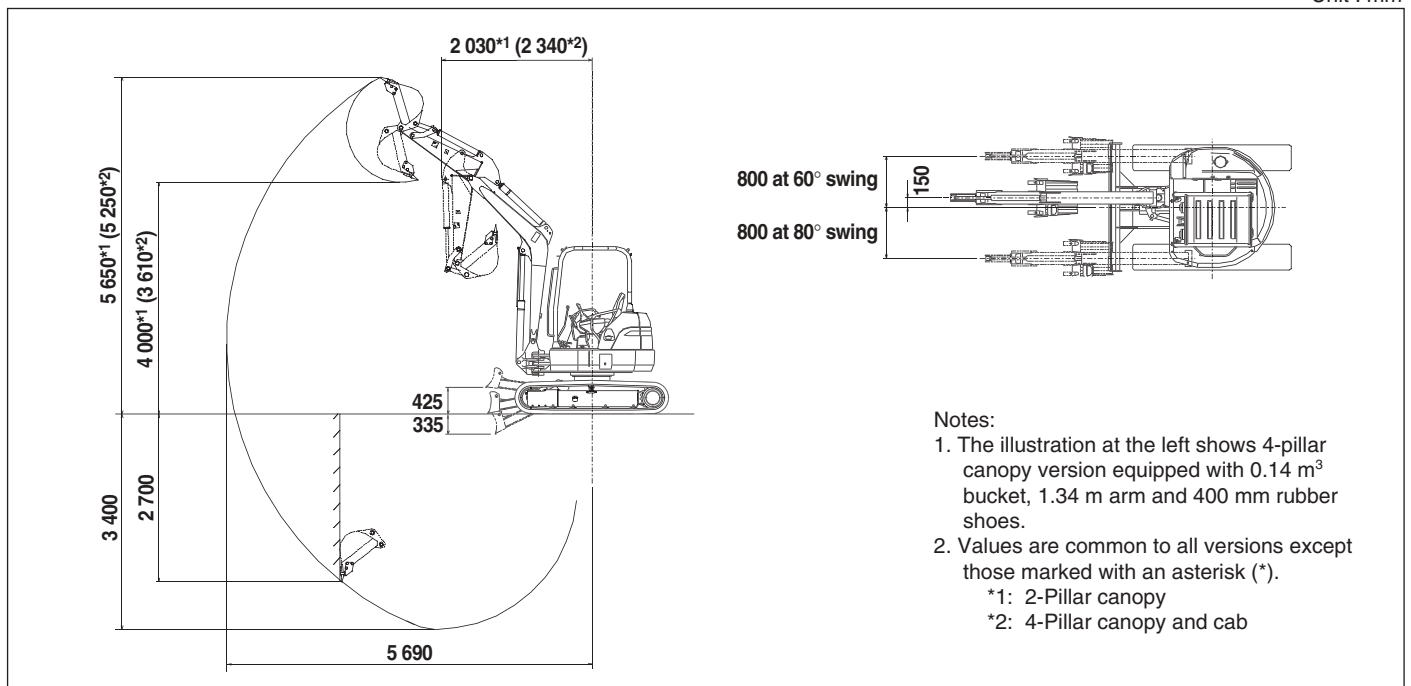
■ DIMENSIONS

Unit : mm



■ WORKING RANGES

Unit : mm





ENGINE

Model..... Isuzu CC4LE2
 Type..... Water-cooled, 4-cycle, 4-cylinder direct injection type diesel engine
 Rated power..... 29.3 kW (39.8 PS)
 at 2 200 min⁻¹ (rpm)
 DIN 6271, net
 Rated power..... 29.9 kW (40.1 hp)
 SAE J1349, net at 2 200 min⁻¹ (rpm)
 Maximum torque.....145 N·m (14.8 kgf·m)
 at 1 600 min⁻¹ (rpm)
 Piston displacement.....2.179 L
 Bore and stroke.....85 mm x 96 mm
 Battery.....1 x 12 V, 52 Ah



HYDRAULIC SYSTEM

The HHH system for job efficiency and smooth combined operations.

Main pump..... One variable displacement axial piston pump
 Maximum oil flow..... 110 L/min
 Pilot pump..... One gear pump
 Maximum oil flow..... 11.0 L/min

Relief Valve Settings

Implement circuit..... 24.5 MPa (250 kgf/cm²)
 Swing circuit..... 19.6 MPa (200 kgf/cm²)
 Travel circuit..... 24.5 MPa (250 kgf/cm²)
 Pilot circuit.....3.9 MPa (40 kgf/cm²)

Hydraulic Cylinders

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

Dimensions

	No.	Bore	Rod dia.	Stroke
Boom.....	1	90 mm	55 mm	707 mm (696 mm)
Arm.....	1	80 mm	50 mm	702 mm
Bucket.....	1	70 mm	40 mm	551 mm
Boom swing... 1	100 mm	50 mm	575 mm	
Blade.....	1	105 mm	50 mm	140 mm

Note: The figure in () shows the stroke for 4-pillar canopy version and cab version.



CONTROLS

Hydraulic pilot control levers for all operations.



SWING MECHANISM

High-torque, axial piston motor with planetary reduction gear. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type. Swing shockless valve built in swing motor absorbs shocks when stopping swing, ensuring smooth stops.

Swing speed..... 9.0 min⁻¹ (9.0 rpm)



UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using carefully selected materials. Side frame welded to track frame.

Numbers of Rollers on Each Side

Upper roller.....1
 Lower rollers.....4

Traction Device

Each track driven by a high-torque, 2-speed axial piston motor through planetary reduction gear, allowing counter-rotation of the tracks. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel, ensuring smooth stops. Parking brake is spring-set / hydraulic-released disc type.

Travel speeds (rubber shoes)..... High : 0 - 4.4 km/h
 Low : 0 - 2.2 km/h

Travel speeds (grouser shoes)..... High : 0 - 4.1 km/h
 Low : 0 - 2.0 km/h

Gradeability.....30 degrees (58%) continuous



WEIGHTS AND GROUND PRESSURE

Equipped with 2.73 m boom, 1.34 m arm and 0.14 m³ (PCSA heaped) bucket

	Operating weight	Ground pressure
2-Pillar canopy version		
400 mm rubber shoes....	4 210 kg	24 kPa (0.24 kgf/cm ²)
400 mm grouser shoes..	4 350 kg	25 kPa (0.25 kgf/cm ²)
4-Pillar canopy version		
400 mm rubber shoes....	4 270 kg	24 kPa (0.24 kgf/cm ²)
400 mm grouser shoes..	4 410 kg	25 kPa (0.26 kgf/cm ²)
Cab version		
400 mm rubber shoes....	4 330 kg	24 kPa (0.25 kgf/cm ²)
400 mm grouser shoes..	4 470 kg	25 kPa (0.26 kgf/cm ²)



FRONT-END ATTACHMENTS

Backhoe Buckets

ISO 7451 capacity	Width		No. of teeth	Weight	Use	
	Without side cutters	With side cutters			1.34 m Std. arm	1.69 m Long arm
0.10 m ³	405 mm	450 mm	3	90 kg	A	A
0.11 m ³	455 mm	500 mm	3	94 kg	A	A
0.13 m ³	505 mm	550 mm	4	103 kg	A	B
0.14 m ³	555 mm	600 mm	4	108 kg	A	C
0.16 m ³	605 mm	650 mm	4	114 kg	C	C
0.17 m ³	655 mm	700 mm	4	117 kg	C	C

Arm crowd force	23.1 kN (2 360 kgf)	20.1 kN (2 050 kgf)
Bucket digging force	32.2 kN (3 280 kgf)	

A: General digging
 B: Light-duty digging
 C: Loading

Boom swing angle.....Left 60°, Right 80°



STANDARD EQUIPMENT

Engine

• Water-separator for engine fuel system

Hydraulic System

- Hydraulic pilot type control levers
- Pilot control shut-off levers
- Anti-drift valve for front attachments
- Two-speed travel system
- Swing parking brake

Operator's Room

- Two work lights
- Heater*²
- Windshield wiper*²
- Evacuation hammer*²
- Seat belt*¹
- Utility box

Notes: *¹ : For 4-pillar canopy and cab versions
 *² : For cab versions

Undercarriage

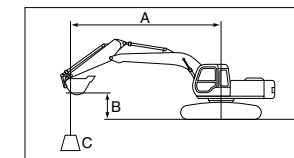
- 400 mm rubber shoes
- Semi-long stay blade

Front Attachments

- 2.73 m boom
- 1.34 m arm
- 0.14 m³ hoe bucket
- Bucket clearance adjusting device
- O-ring type pin-seals for hoe bucket
- HN bushing

LIFTING CAPACITIES

(Equipped with 2-pillar canopy)



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

With dozer blade above ground

Conditions	Load Point Height	Load Radius						Maximum Reach		
		3 m		4 m		5 m				meter
Arm: 1.34 m Bucket: 0.14 m ³ ISO 7451 Rubber shoes: 400 mm	3 m	*0.96	*0.96	0.65	0.79			0.41	0.51	5.12
	2 m	1.01	1.26	0.62	0.77			0.36	0.45	5.42
	1 m	0.91	1.16	0.59	0.73	0.40	0.50	0.35	0.44	5.45
	Ground	0.87	1.11	0.56	0.70	0.39	0.49	0.37	0.46	5.22
	- 1 m	0.87	1.11	0.55	0.69			0.45	0.56	4.66

Rating over-side or 360 degrees Rating over-front Unit: t


With dozer blade on ground

Conditions	Load Point Height	Load Radius						Maximum Reach		
		3 m		4 m		5 m				meter
Arm: 1.34 m Bucket: 0.14 m ³ ISO 7451 Rubber shoes: 400 mm	3 m	*0.96	*0.96	0.65	*0.96			0.41	*0.68	5.12
	2 m	1.01	*1.39	0.62	*1.08			0.36	*0.69	5.42
	1 m	0.91	*1.98	0.59	*1.28	0.40	*1.01	0.35	*0.75	5.45
	Ground	0.87	*2.13	0.56	*1.40	0.39	*1.01	0.37	*0.86	5.22
	- 1 m	0.87	*1.93	0.55	*1.32			0.45	*0.88	4.66

Notes: 1. Rating are based on SAE J1097.
 2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.

3. The load point is a hook (not standard equipment) located on the back of the bucket.
 4. *Load limited by hydraulic capacity.

The Specifications include data that are not applicable to certain areas.
Optional equipment may vary with territory specifications.
Specifications are subject to change without notice.

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