

EX25

- Rated engine HP 18.4 kW (25.0 PS)
- Operating weight Canopy: 2 400 kg (5 290 lb)
Cabin: 2 530 kg (5 580 lb)
- Backhoe bucket PCSA heaped: 0.04 — 0.087 m³
(0.05 — 0.11 cu yd)
CECE heaped: 0.035 — 0.075 m³



TWO-SPEED TRAVEL ENSURING HIGHER JOB EFFICIENCY

- OHS for smooth combined operations.
- The maximum speed in this class realized by two-speed travel.
- Light and easily controllable hydraulic pilot-type control lever.
- Low noise design best-suited for work in urban areas.
- Small turning radius suited for narrow space.
- Bucket clearance adjustment device.
- Gate lock lever to be never left unlocked.

ENGINE

Model	Isuzu 3KR1
Type	Water-cooled, 4 cycle, 3 cylinder swirl combustion chamber type diesel engine
Rated flywheel horsepower (DIN 6271, net)	18.4 kW (25.0 PS) at 2 400 rpm
Rated flywheel horsepower (SAE J1349, net)	18.4 kW (24.6 HP) at 2 400 rpm
Maximum torque	78.5 N·m (8.0 kgf·m, 57.9 lbf·ft) at 1 800 rpm
Piston displacement	1.422 l (86.7 cu in)
Bore and stroke	81 mm x 92 mm (3.2" x 3.6")
Batteries	1 x 12 V, 52 AH

HYDRAULIC SYSTEM

OHS (Optimum Hydraulic System)

This system with two main pumps gives high independence to each actuator for easy and smooth combined operations, such as travel and arm operation, or travel and boom. Here, straight travel can be achieved without swerving.

Main pumps	2-Gear pump
Maximum oil flow	2 x 26.0 l/min (2 x 6.9 US gpm, 2 x 5.7 Imp gpm)
Pilot pump	1-Gear pump
Maximum oil flow	12.0 l/min. (3.2 US gpm, 2.6 Imp gpm)

Relief Valve Settings

Implement circuit	17.2 MPa (175 kgf/cm ² , 2 489 psi)
Swing circuit	10.8 MPa (110 kgf/cm ² , 1 564 psi)
Travel circuit	17.2 MPa (175 kgf/cm ² , 2 489 psi)
Pilot circuit	3.9 MPa (40 kgf/cm ² , 569 psi)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom, arm and boom swing cylinders to absorb shocks at stroke ends.

Dimensions

	Quan.	Bore	Stroke
Boom	1	80 mm (3.1")	570 mm (1'10")
Arm	1	75 mm (3.0")	560 mm (1'10")
Bucket	1	65 mm (2.6")	440 mm (1'5")
Boom swing	1	75 mm (3.0")	435 mm (1'5")
Blade	1	80 mm (3.1")	150 mm (5'9")

CONTROLS

Pilot controls (for front and swing operations), light touch and excellent controllability

UPPERSTRUCTURE

Swing Mechanism

High-torque, axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing shockless valve built in swing motor absorbs shocks when stopping swing, ensuring smooth stops. Also counter balanceless system is employed for smooth operation when starting and stopping swing. Swing lock (pin lock type) is provided for transporting.

Swing speed	10.0 min ⁻¹ (10.0 rpm)
Boom swing angle	Canopy Left: 90°, Right: 50° Cabin Left: 80°, Right: 50°

Operator's Cab (Factory Option)

Independent roomy cab, conforming to ISO* Standards. Reinforced glass windows on all 4 sides for all-round visibility. Front window (upper side), fully openable, are spring-assisted for easy storing in the cab and for absorbing shocks during lowering.

*International Standard Organization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Heavy-duty track frame of all welded structure. Top-grade materials employed for heavy-duty operation. Side frames are rigidly welded to the track frame. Rugged track frame and sloped side frames for easy mud removal.

Numbers of Guide plates, Rollers and Shoes on Each Side

Guide plates	2
Lower rollers	4
Track shoes	39

Traction Device

Each track driven by a high-torque, axial piston 2 speed travel motor through planetary reduction gear, allowing counterrotation of the tracks. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel, ensuring smooth stops.

Travel speeds	High: 0 to 3.2 km/h (1.99 mph) Low: 0 to 2.0 km/h (1.24 mph)
Maximum traction force	16.7 kN (1 700 kgf, 3 748 lbf)
Gradeability	30° (58%) continuous

WEIGHTS AND GROUND PRESSURE

Equipped with 2.28 m (7'6") boom, 1.2 m (3'11") arm and 0.08 m³ (0.10 cu yd: PCSA heaped) bucket.

Shoe type	Shoe width	Standard undercarriage	
		Operating weight	Ground pressure
*Double grouser (canopy) (cabin)	300 mm (12")	2 400 kg (5 290 lb)	25.5 kPa (0.26 kgf/cm ² , 3.70 psi)
	300 mm (12")	2 530 kg (5 580 lb)	26.5 kPa (0.27 kgf/cm ² , 3.84 psi)
*Rubber (canopy) (cabin)	300 mm (12")	2 330 kg (5 140 lb)	22.6 kPa (0.23 kgf/cm ² , 3.27 psi)
	300 mm (12")	2 460 kg (5 420 lb)	24.5 kPa (0.25 kgf/cm ² , 3.56 psi)
Double grouser (canopy) (cabin)	400 mm (16")	2 460 kg (5 420 lb)	18.6 kPa (0.19 kgf/cm ² , 2.70 psi)
	400 mm (16")	2 590 kg (5 710 lb)	19.6 kPa (0.20 kgf/cm ² , 2.84 psi)
Triangular (canopy) (cabin)	400 mm (16")	2 515 kg (5 550 lb)	18.6 kPa (0.19 kgf/cm ² , 2.70 psi)
	400 mm (16")	2 645 kg (5 830 lb)	19.6 kPa (0.20 kgf/cm ² , 2.84 psi)

*Standard specifications.

SERVICE REFILL CAPACITIES

	liters	US gal	Imp gal
Fuel tank	50	13.2	11.0
Engine coolant	5.7	1.5	1.3
Engine oil	5.5	1.5	1.2
Travel final device (each side)	0.5	0.13	0.11
Hydraulic tank	40	10.6	8.8

Buckets

Capacity m ³ (cu yd)		Width mm (ft in)		No. of teeth	Weight kg (lb)	Recommendation	
		Without side cutters	With side cutters			2.28 m (7'6") boom	1.2 m (3'11") arm (4'11") arm
0.04 (0.05)	PCSA heaped	0.035	260(10")	300(12")	2	40(90)	○ ○
0.048(0.06)	CECE heaped	0.042	310(12")	350(14")	3	43(95)	○ ○
*0.08 (0.10)		0.07	440(17")	480(19")	3	51(112)	○ ○ □
0.087(0.11)		0.075	510(20")	550(22")	4	66(146)	□ △
A B	A: Arm crowd force			kN (kgf, lbf)		13.7 (1 400, 3 086)	12.5 (1 270, 2 800)
	B: Bucket digging force			kN (kgf, lbf)		19.2(1 960, 4 321)	

*Standard specifications

- Suitable for materials with density of 2 000 kg/m³ (3 370 lb/cu yd) or less
- Suitable for materials with density of 1 600 kg/m³ (2 700 lb/cu yd) or less
- △ Suitable for materials with density of 1 100 kg/m³ (1 850 lb/cu yd) or less

CANOPY TYPE

LIFTING CAPACITIES

Side: Rating over-side or 360 degrees

Front: Rating over-front

With dozer blade above ground

Unit: 1 000 kg (lb)

Condition	Load point height m (ft in)	Load radius m (ft in)						At max. reach		
		2 m (6'7")		3 m (9'10")		4 m (13'2")		Side	Front	@m (ft in)
		Side	Front	Side	Front	Side	Front			
Boom: 2.28 m (7'6") Arm: 1.20 m (3'11") Bucket	3 (9'10")			*0.42 (930)	*0.42 (930)			0.30 (660)	0.34 (750)	3.85 (12'8")
	2 (6'7")			0.45 (990)	*0.48 (1 060)	0.27 (600)	0.31 (680)	0.23 (150)	0.27 (600)	4.31 (14'2")
	1 (3'3")			0.41 (900)	0.47 (1 040)	0.26 (570)	0.30 (660)	0.22 (490)	0.25 (550)	4.42 (14'6")
Bucket PCSA: 0.08 m ³ (0.10 cu yd) CECE: 0.07 m ³ Grouser shoe 300 mm (12")	0	0.70 (1 540)	0.83 (1 830)	0.38 (840)	0.44 (970)	0.25 (550)	0.28 (620)	0.23 (150)	0.26 (570)	4.22 (13'10")
	-1 (-3'3")	0.71 (1 570)	0.83 (1 830)	0.38 (840)	0.43 (950)			0.29 (640)	0.33 (730)	3.64 (11'11")
	-2 (-6'7")	0.73 (1 610)	*0.83 (1 830)							

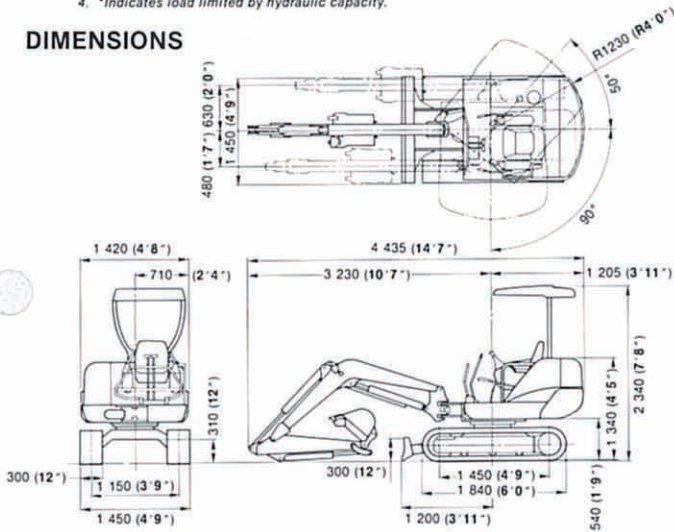
With dozer blade on ground

Unit: 1 000 kg (lb)

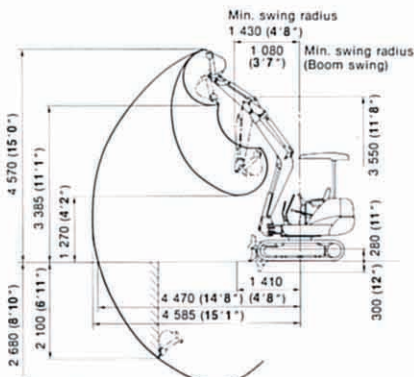
Condition	Load point height m (ft in)	Load radius m (ft in)						At max. reach		
		2 m (6'7")		3 m (9'10")		4 m (13'2")		Side	Front	@m (ft in)
		Side	Front	Side	Front	Side	Front			
Boom: 2.28 m (7'6") Arm: 1.20 m (3'11") Bucket	3 (9'10")			*0.42 (930)	*0.42 (930)			0.30 (660)	*0.43 (950)	3.85 (12'8")
	2 (6'7")			0.45 (990)	*0.48 (1 060)	0.27 (600)	*0.47 (1 040)	0.23 (150)	*0.46 (1 010)	4.31 (14'2")
	1 (3'3")			0.41 (900)	*0.68 (1 500)	0.26 (570)	*0.52 (1 150)	0.22 (490)	*0.48 (1 060)	4.42 (14'6")
Bucket PCSA: 0.08 m ³ (0.10 cu yd) CECE: 0.07 m ³ Grouser shoe 300 mm (12")	0	0.70 (1 540)	*0.94 (2 070)	0.38 (840)	*0.83 (1 830)	0.25 (550)	*0.56 (1 230)	0.23 (150)	*0.51 (1 120)	4.22 (13'10")
	-1 (-3'3")	0.71 (1 570)	*1.29 (2 840)	0.38 (840)	*0.80 (1 760)			0.29 (640)	*0.53 (1 170)	3.64 (11'11")
	-2 (-6'7")	0.73 (1 610)	*0.83 (1 830)							

- Notes: 1. Rating are based on SAE J1097.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.

DIMENSIONS



WORKING RANGES



CABIN TYPE

LIFTING CAPACITIES

Side: Rating over-side or 360 degrees

Front: Rating over-front

With dozer blade above ground

Unit: 1 000 kg (lb)

Condition	Load point height m (ft in)	Load radius m (ft in)						At max. reach		
		2 m (6'7")		3 m (9'10")		4 m (13'2")		Side	Front	@m (ft in)
		Side	Front	Side	Front	Side	Front			
Boom: 2.28 m (7'6") Arm: 1.20 m (3'11") Bucket	3 (9'10")			*0.42 (930)	*0.42 (930)			0.32 (710)	0.37 (820)	3.85 (12'8")
	2 (6'7")			0.48 (1 060)	*0.48 (1 060)	0.29 (640)	0.34 (750)	0.26 (570)	0.29 (640)	4.31 (14'2")
	1 (3'3")			0.45 (990)	0.51 (1 120)	0.28 (620)	0.32 (710)	0.24 (530)	0.27 (600)	4.42 (14'6")
Bucket PCSA: 0.08 m ³ (0.10 cu yd) CECE: 0.07 m ³ Grouser shoe 300 mm (12")	0	0.76 (1 680)	0.90 (1 980)	0.42 (930)	0.48 (1 060)	0.27 (600)	0.31 (680)	0.25 (550)	0.29 (640)	4.22 (13'10")
	-1 (-3'3")	0.77 (1 700)	0.91 (2 010)	0.41 (900)	0.48 (1 060)			0.32 (710)	0.36 (790)	3.64 (11'11")
	-2 (-6'7")	0.80 (1 760)	*0.83 (1 830)							

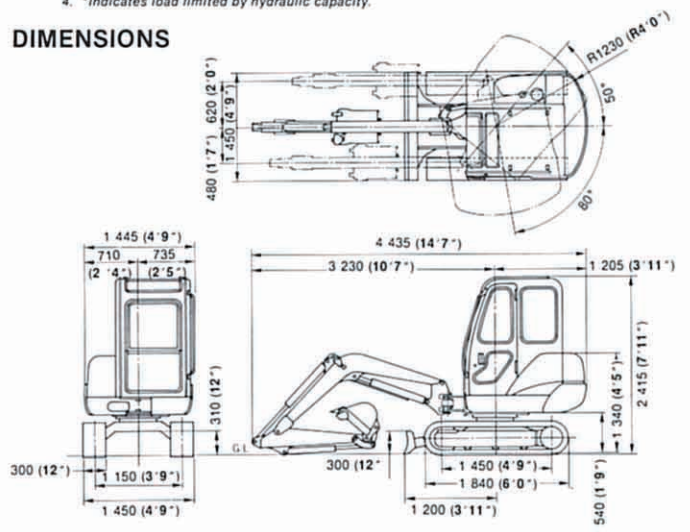
With dozer blade on ground

Unit: 1 000 kg (lb)

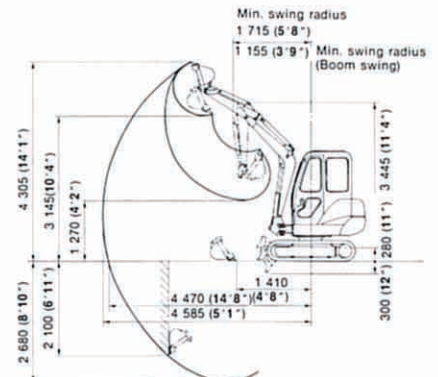
Condition	Load point height m (ft in)	Load radius m (ft in)						At max. reach		
		2 m (6'7")		3 m (9'10")		4 m (13'2")		Side	Front	@m (ft in)
		Side	Front	Side	Front	Side	Front			
Boom: 2.28 m (7'6") Arm: 1.20 m (3'11") Bucket	3 (9'10")			*0.42 (930)	*0.42 (930)			0.32 (710)	*0.43 (950)	3.85 (12'8")
	2 (6'7")			0.48 (1 060)	*0.48 (1 060)	0.29 (640)	*0.47 (1 040)	0.26 (570)	*0.46 (1 010)	4.31 (14'2")
	1 (3'3")			0.45 (990)	*0.68 (1 500)	0.28 (620)	*0.52 (1 150)	0.24 (530)	*0.48 (1 060)	4.42 (14'6")
Bucket PCSA: 0.08 m ³ (0.10 cu yd) CECE: 0.07 m ³ Grouser shoe 300 mm (12")	0	0.76 (1 680)	*0.94 (2 070)	0.42 (930)	*0.83 (1 830)	0.27 (600)	*0.56 (1 230)	0.25 (550)	*0.51 (1 120)	4.22 (13'10")
	-1 (-3'3")	0.77 (1 700)	*1.29 (2 840)	0.41 (900)	*0.80 (1 760)			0.32 (710)	*0.53 (1 170)	3.64 (11'11")
	-2 (-6'7")	0.80 (1 760)	*0.83 (1 830)							

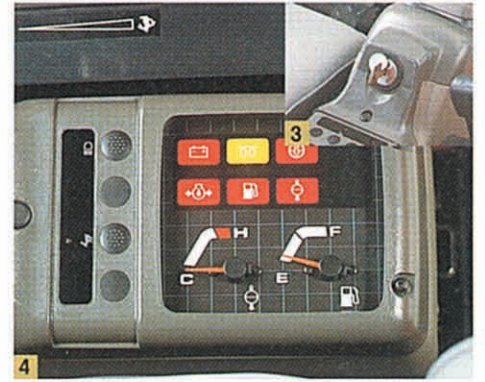
- Notes: 1. Rating are based on SAE J1097.
2. Lifting capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% of full hydraulic capacity.
3. The load point is a hook (not standard equipment) located on the back of the bucket.
4. *Indicates load limited by hydraulic capacity.

DIMENSIONS

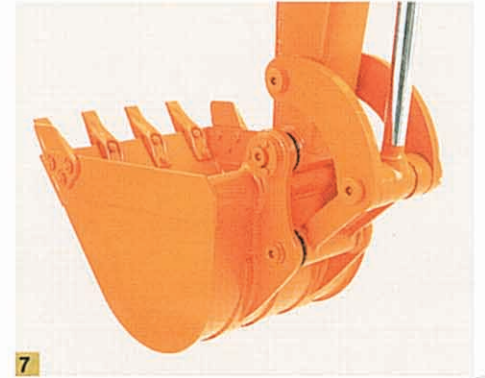
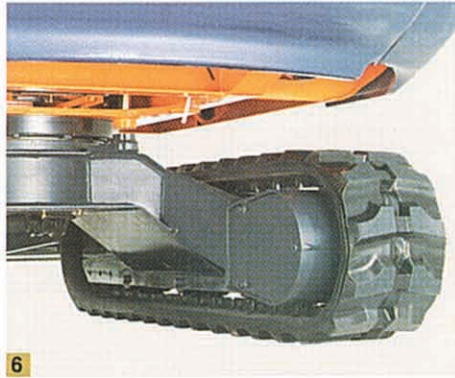
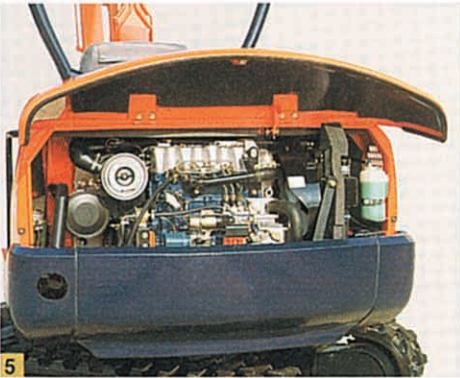


WORKING RANGES





- 1 Fail-safe gate lock lever**
With the fail-safe gate lock levers, the control levers can be locked without fail, allowing access to the operator's seat.
- 2 Hydraulic pilot control levers**
Front and swing control levers are hydraulically pilot-controlled for light and comfortable operation. What's more, ergonomically designed lever grip enhances operating ease and comfort.
- 3 Body protector weight**
The body is protected from damage from external shock during operation.
- 4 Car-like engine key stop**
With the adoption of stop motor, an engine may be stopped only by turning the key off. Moreover the engine hood or fuel cap can be locked and unlocked with the engine key.
- 5 Easy-to-read monitor panel**
With the monitor panel, the operator can check machine conditions at a glance from his seat.



- 5 Easy engine access**
The engine cover opens completely to allow easy access during engine maintenance.
- 6 Compact traction mechanism**
Compact yet sturdy travel mechanism, with travel piping provided within track frame.
- 7 Bucket clearance adjust mechanism**
It can easily eliminate loose movement of the bucket by merely replacing the shim. O-ring seal is provided at the pin, located at the arm top, to seal out dirt, extending lubricating intervals.

These specifications are subject to change without notice.

Hitachi Construction Machinery Co., Ltd.

Head Office: Nippon Bldg., 6-2, 2-chome, Ohtemachi,
Chiyoda-ku, Tokyo 100, Japan

Telephone: Tokyo (03) 3245-6377

Facsimile: Tokyo (03) 3246-2609

Telex: J32539 HITACONJ

Cable Address: "TOKHITACHIKENKI"