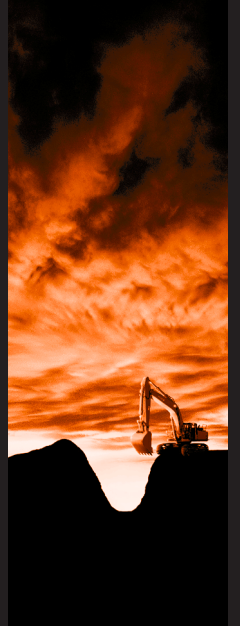
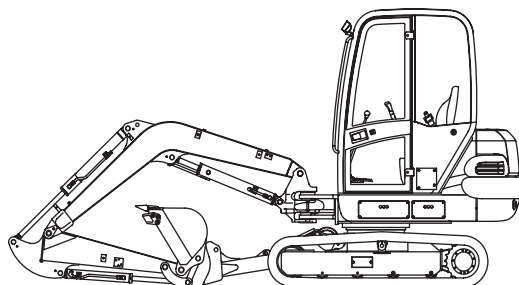


HITACHI ZAXIS35

engine rated power
19.9 kW / 27.1 HP

operating weight
3 110 kg (canopy)
3 190 kg (cabin)

bucket capacity
0.055 - 0.13 m³



HITACHI

Engine

| | |
|----------------------|--|
| Model | Kubota V1505 |
| Type | Water-cooled, 4-cycle, 4-cylinder swirl chamber type diesel engine |
| Rated flywheel power | 19.9 kW (27.1 PS) |
| ISO 3046 | at 2 300 min ⁻¹ (rpm) |
| Rated flywheel power | 19.9 kW (26.7 HP) |
| SAE J1349, net | at 2 300 min ⁻¹ (rpm) |
| Maximum torque | 86.2 Nm (8.8 kgf/m) |
| | at 1 800 min ⁻¹ (rpm) |
| Piston displacement | 1.498 l |
| Bore and stroke | 78 mm x 78.4 mm |
| Battery | 1 x 12 V, 52 Ah |

Hydraulic system

The Optimum Hydraulic System (OHS) uses three pumps for job efficiency and smooth combined operations.

| | |
|------------------|--|
| Main pumps | Two variable displacement axial piston pumps |
| Maximum oil flow | 2 x 39.1 l/min |
| Third pump | One gear pump |
| Maximum oil flow | 1 x 24.2 l/min |
| Pilot pump | One gear pump |
| Maximum oil flow | 1 x 10.4 l/min |

RELIEF VALVE SETTINGS

| | |
|-------------------|-------------------------------------|
| Implement circuit | 20.6 MPa (210 kgf/cm ²) |
| Swing circuit | 16.7 MPa (170 kgf/cm ²) |
| Travel circuit | 20.6 MPa (210 kgf/cm ²) |
| Pilot circuit | 3.9 MPa (40 kgf/cm ²) |

HYDRAULIC CYLINDERS

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

DIMENSIONS

| | Qty. | Bore | Rod diameter | Stroke |
|------------|------|-------|--------------|--------|
| Boom | 1 | 85 mm | 45 mm | 555 mm |
| Arm | 1 | 80 mm | 45 mm | 594 mm |
| Bucket | 1 | 70 mm | 40 mm | 455 mm |
| Boom swing | 1 | 85 mm | 45 mm | 535 mm |
| Blade | 1 | 90 mm | 45 mm | 130 mm |

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. 8.8 min⁻¹ (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 speeds (rubber shoes) High: 0 - 4.3 km/h
Low: 0 - 2.9 km/h

Travel speeds (grouser shoes) High: 0 - 4.3 km/h
Low: 0 - 2.9 km/h

Gradeability 30 degrees (58%) continuous

Weights and ground pressure

Equipped with 1.35 m arm and 0.11 m³ (ISO 7451) bucket.

| | Operating weight | Ground pressure |
|--------------------------------|------------------|------------------------------------|
| 4-Pillar canopy version | | |
| 300 mm rubber shoes | 3 110 kg | 28 kPa (0.29 kgf/cm ²) |
| 300 mm grouser shoes | 3 180 kg | 29 kPa (0.30 kgf/cm ²) |
| Cabin version | | |
| 300 mm rubber shoes | 3 190 kg | 29 kPa (0.30 kgf/cm ²) |
| 300 mm grouser shoes | 3 260 kg | 30 kPa (0.31 kgf/cm ²) |

Front-end attachments

BACKHOE BUCKETS

| ISO 7451 capacity | Width | | No. of teeth | Weight | Use | |
|----------------------|----------------------|-------------------|--------------|--------|---------------------|---------------------|
| | Without side cutters | With side cutters | | | 1.35 m Short arm | 1.70 m Long arm |
| 0.055 m ³ | 300 mm | 350 mm | 3 | 61 kg | A | A |
| 0.065 m ³ | 350 mm | 400 mm | 3 | 64 kg | A | A |
| 0.08 m ³ | 400 mm | 450 mm | 3 | 67 kg | A | A |
| 0.09 m ³ | 450 mm | 500 mm | 4 | 71 kg | A | A |
| 0.10 m ³ | 500 mm | 550 mm | 4 | 74 kg | A | A |
| 0.11 m ³ | 550 mm | 600 mm | 4 | 78 kg | A | B |
| 0.13 m ³ | 600 mm | 650 mm | 4 | 82 kg | B | C |
| Arm crowd force | | | | | 18.1 kN (1 850 kgf) | 16.1 kN (1 640 kgf) |
| Bucket digging force | | | | | 25.9 kN (2 640 kgf) | |

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

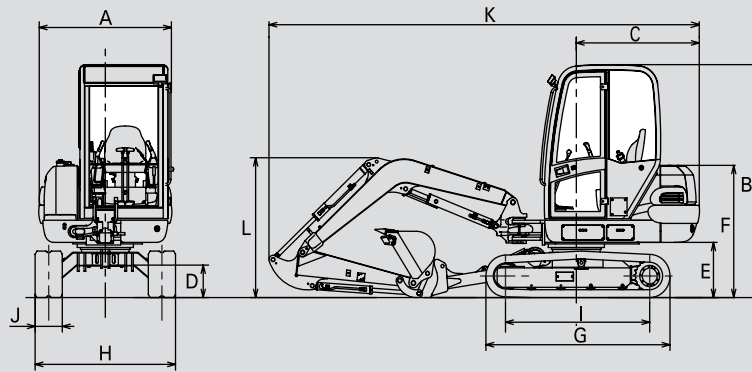
Boom swing angle Left 80°, Right 50°

SPECIFICATIONS

Dimensions

The 4-pillar canopy or cabin can be mounted on the upperstructure according to job needs and applicable regulations.

They conform to TOPS (ISO 12117) and FOPS (ISO 10262, Level 1) requirements.



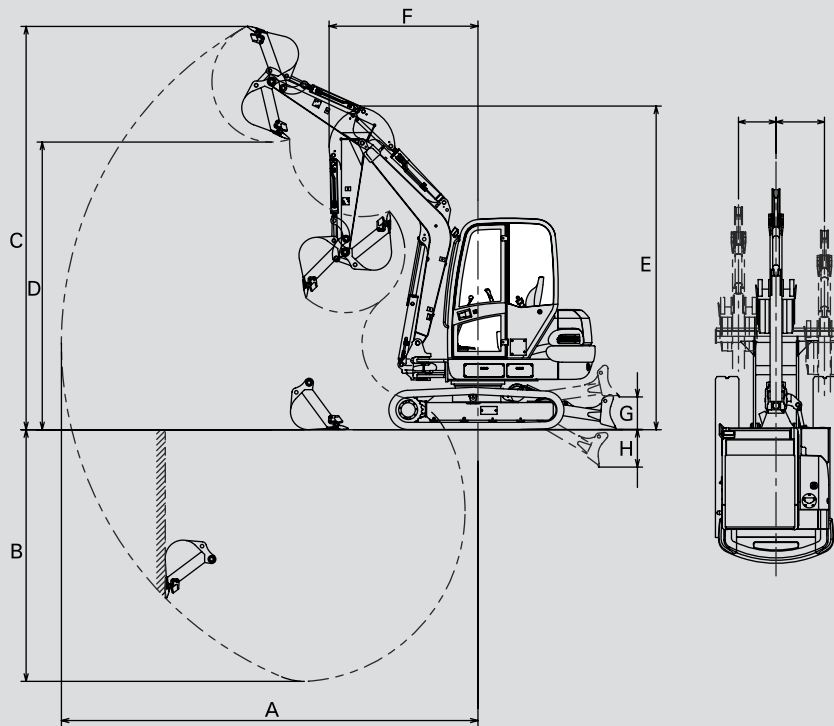
Notes:

1. The illustration shows the cabin version equipped with 300 mm rubber shoes.
2. Values are identical for cabin and canopy versions.

Unit: mm

| | ZAXIS35 |
|-----------------------------------|----------------|
| A Overall width | 1 470 |
| B Canopy / cabin height | 2 420 |
| C Rear-end swing radius | 1 390 |
| D Minimum ground clearance | 330 |
| E Counterweight clearance | 575 |
| F Engine cover height | 1 370 |
| G Undercarriage length | 2 030 |
| H Undercarriage width | 1 550 |
| I Sprocket centre to idler centre | 1 600 |
| J Track shoe width | 300 |
| K Maximum transport length | 4 980 |
| L Overall height of boom | 1 390 |

Working ranges



Notes:

1. The illustration shows the cabin version equipped with 0.11 m³ bucket, 1.35 m arm and 300 mm rubber shoes.
2. Values are identical for cabin and canopy versions.

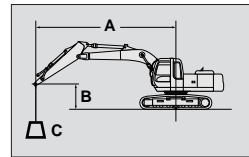
Unit: mm

| | ZAXIS35 | |
|---|----------------|-------------|
| | Canopy & Cabin | |
| | 1.35 m arm | 1.70 m arm |
| A Maximum digging reach | 5 180 | 5 500 |
| B Maximum digging depth | 3 100 | 3 450 |
| C Maximum cutting height | 5 050 | 5 280 |
| D Maximum dumping height | 3 680 | 3 900 |
| E Transport height | 2 420 | 2 420 |
| F Minimum swing radius | 1 730 | 1 760 |
| G Blade bottom highest position (above ground level) | 380 | 380 |
| H Blade bottom lowest position (below ground level) | 430 | 430 |
| Maximum boom-swing angle | L80° / R50° | L80° / R50° |
| Offset Distance | L480 / R620 | L480 / R620 |

LIFTING CAPACITIES

Metric measure

(Equipped with cabin)



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

ZAXIS35 SHORT ARM, DOZER BLADE ABOVE GROUND



Rating over-side or 360 degrees



Rating over-front

Unit: kN

| Conditions | Load point height | Load radius | | | | | | | | At max. reach | | |
|----------------------------|-------------------|-------------|--|--------|--------|-------|-------|------|------|---------------|------|------|
| | | 1 m | | 2 m | | 3 m | | 4 m | | meter | | |
| | | | | | | | | | | | | |
| Arm 1.35 m | 3 m | | | | | *6.07 | *6.07 | 6.04 | 5.24 | 5.09 | 4.42 | 4.50 |
| Bucket 0.11 m ³ | 2 m | | | *10.18 | *10.18 | *7.60 | *7.60 | 5.96 | 5.16 | 4.44 | 3.85 | 4.87 |
| Rubber shoes 300 mm | 1 m | | | | | 8.56 | 7.26 | 5.75 | 4.95 | 4.26 | 3.69 | 4.95 |
| | 0 m | | | | | 8.17 | 6.89 | 5.57 | 4.78 | 4.42 | 3.82 | 4.76 |
| | -1 m | | | 15.16 | 12.22 | 8.10 | 6.83 | 5.50 | 4.73 | 5.14 | 4.42 | 4.25 |
| | -2 m | | | *11.28 | *11.28 | 8.24 | 6.95 | | | | | |

ZAXIS35 SHORT ARM, DOZER BLADE ON GROUND

Unit: kN

| Conditions | Load point height | Load radius | | | | | | | | At max. reach | | |
|----------------------------|-------------------|-------------|--|--------|--------|--------|-------|-------|------|---------------|------|------|
| | | 1 m | | 2 m | | 3 m | | 4 m | | meter | | |
| | | | | | | | | | | | | |
| Arm 1.35 m | 3 m | | | | | *6.07 | *6.07 | *6.36 | 5.24 | *6.05 | 4.42 | 4.50 |
| Bucket 0.11 m ³ | 2 m | | | *10.18 | *10.18 | *7.60 | *7.60 | *6.60 | 5.16 | *6.13 | 3.85 | 4.87 |
| Rubber shoes 300 mm | 1 m | | | | | *10.34 | 7.26 | *7.47 | 4.95 | *6.24 | 3.69 | 4.95 |
| | 0 m | | | | | *11.76 | 6.89 | *8.08 | 4.78 | *6.33 | 3.82 | 4.76 |
| | -1 m | | | *16.55 | 12.22 | *11.06 | 6.83 | *7.68 | 4.73 | *6.21 | 4.42 | 4.25 |
| | -2 m | | | *11.28 | *11.28 | *8.30 | 6.95 | | | | | |

ZAXIS35 LONG ARM, DOZER BLADE ABOVE GROUND

Unit: kN

| Conditions | Load point height | Load radius | | | | | | | | | | At max. reach | | |
|----------------------------|-------------------|-------------|--------|--------|-------|-------|-------|-------|------|------|------|---------------|------|------|
| | | 1 m | | 2 m | | 3 m | | 4 m | | 5 m | | meter | | |
| | | | | | | | | | | | | | | |
| Arm 1.70 m | 3 m | | | | | | | *5.54 | 5.39 | | | 4.62 | 4.02 | 4.86 |
| Bucket 0.11 m ³ | 2 m | | | | | *6.46 | *6.46 | *6.00 | 5.28 | | | 4.11 | 3.58 | 5.20 |
| Rubber shoes 300 mm | 1 m | | | | | 8.77 | 7.46 | 5.85 | 5.05 | 4.27 | 3.70 | 3.95 | 3.43 | 5.28 |
| | 0 m | | | *8.30 | *8.30 | 8.27 | 6.99 | 5.62 | 4.83 | 4.18 | 3.62 | 4.07 | 3.53 | 5.10 |
| | -1 m | *9.79 | *9.79 | 15.03 | 12.10 | 8.09 | 6.83 | 5.51 | 4.73 | | | 4.59 | 3.96 | 4.64 |
| | -2 m | *20.64 | *20.64 | *14.18 | 12.32 | 8.16 | 6.88 | 5.57 | 4.79 | | | 6.17 | 5.30 | 3.74 |
| | -3 m | | | | | | | | | | | | | |

ZAXIS35 LONG ARM, DOZER BLADE ON GROUND

Unit: kN

| Conditions | Load point height | Load radius | | | | | | | | | | At max. reach | | |
|----------------------------|-------------------|-------------|--------|--------|-------|--------|-------|-------|------|-------|------|---------------|------|------|
| | | 1 m | | 2 m | | 3 m | | 4 m | | 5 m | | meter | | |
| | | | | | | | | | | | | | | |
| Arm 1.70 m | 3 m | | | | | | | *5.54 | 5.39 | | | *5.52 | 4.02 | 4.86 |
| Bucket 0.11 m ³ | 2 m | | | | | *6.46 | *6.46 | *6.00 | 5.28 | | | *5.63 | 3.58 | 5.20 |
| Rubber shoes 300 mm | 1 m | | | | | *9.38 | 7.46 | *7.05 | 5.05 | *6.00 | 3.70 | *5.77 | 3.43 | 5.28 |
| | 0 m | | | *8.30 | *8.30 | *11.50 | 6.99 | *7.94 | 4.83 | *6.15 | 3.62 | *5.90 | 3.53 | 5.10 |
| | -1 m | *9.79 | *9.79 | *17.78 | 12.10 | *11.54 | 6.83 | *7.99 | 4.73 | | | *5.95 | 3.96 | 4.64 |
| | -2 m | *20.64 | *20.64 | *14.18 | 12.32 | *9.61 | 6.88 | *6.37 | 4.79 | | | *5.52 | 5.30 | |
| | -3 m | | | | | | | | | | | | | |

- Notes:
1. Rating are based on ISO 10567.
 2. Lifting capacity 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. An asterisk mark (*) indicates load limited by hydraulic capacity.
 5. 0 m = Ground.

Standard Equipment

Standard equipment may vary by country, so please consult your Hitachi dealer for details.

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
- Hydraulic piping for breaker

CANOPY (CABIN)

- One work lamp
- Heater
- Windshield wiper*
- Windshield washer*
- Windshield defroster*
- Evacuation hammer*
- Seat belt
- Wrist rest
- 12 V outlet

Note: * For cabin version

UNDERCARRIAGE

- 300 mm rubber shoes
- Semi-long stay blade

FRONT ATTACHMENTS

- 2.60 m boom
- 1.35 m arm
- 0.11 m³ hoe bucket
- O-ring type pin-seals for hoe bucket
- HN bushing

Optional Equipment

Optional equipment may vary by country, so please consult your Hitachi dealer for details.

CANOPY (CABIN)

- One work lamp

UNDERCARRIAGE

- 300 mm grouser shoes
- 400 mm grouser shoes

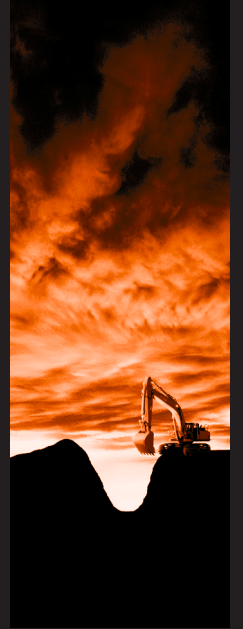
FRONT ATTACHMENTS

- 1.70 m arm
- Backhoe buckets

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