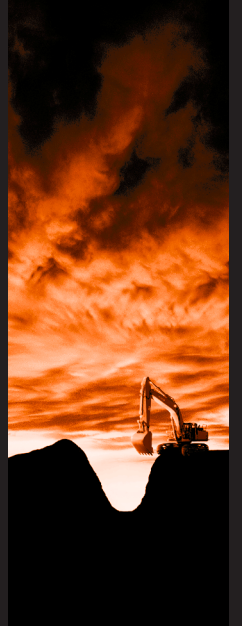
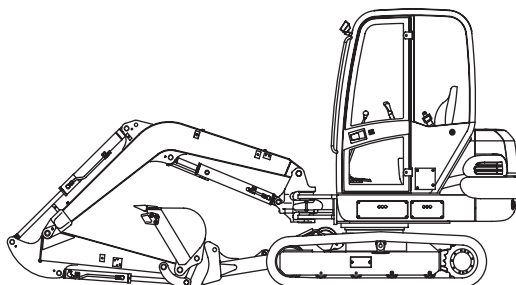


HITACHI ZAXIS30

engine rated power
19.9 kW / 27.1 HP

operating weight
2 880 kg (canopy)
2 960 kg (cabin)

bucket capacity
0.055 - 0.11 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	80 mm	45 mm	558 mm
Arm	1	75 mm	40 mm	560 mm
Bucket	1	65 mm	40 mm	440 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 1.27 m arm and 0.09 m³ (ISO 7451) bucket.

	Operating weight	Ground pressure
4-Pillar canopy version		
300 mm rubber shoes	2 880 kg	26 kPa (0.27 kgf/cm ²)
300 mm grouser shoes	2 950 kg	27 kPa (0.28 kgf/cm ²)
Cabin version		
300 mm rubber shoes	2 960 kg	27 kPa (0.28 kgf/cm ²)
300 mm grouser shoes	3 030 kg	28 kPa (0.29 kgf/cm ²)

Front-end attachments

BACKHOE BUCKETS

ISO 7451 capacity	Width		No. of teeth	Weight	Use	
	Without side cutters	With side cutters			1.27 m Short arm	1.57 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	B
0.10 m ³	500 mm	550 mm	4	74 kg	B	C
0.11 m ³	550 mm	600 mm	4	78 kg	C	C
Arm crowd force					16.1 kN (1 640 kgf)	14.1 kN (1 440 kgf)
Bucket digging force					22.4 kN (2 290 kgf)	

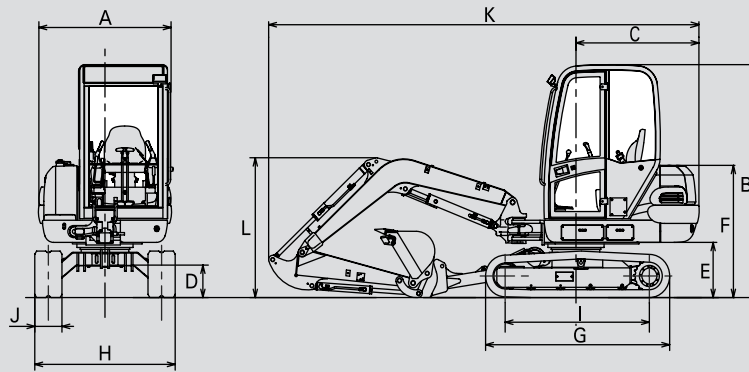
A: General digging B: Light-duty digging C: Loading

Boom swing angle. Left 80°, Right 50°

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.



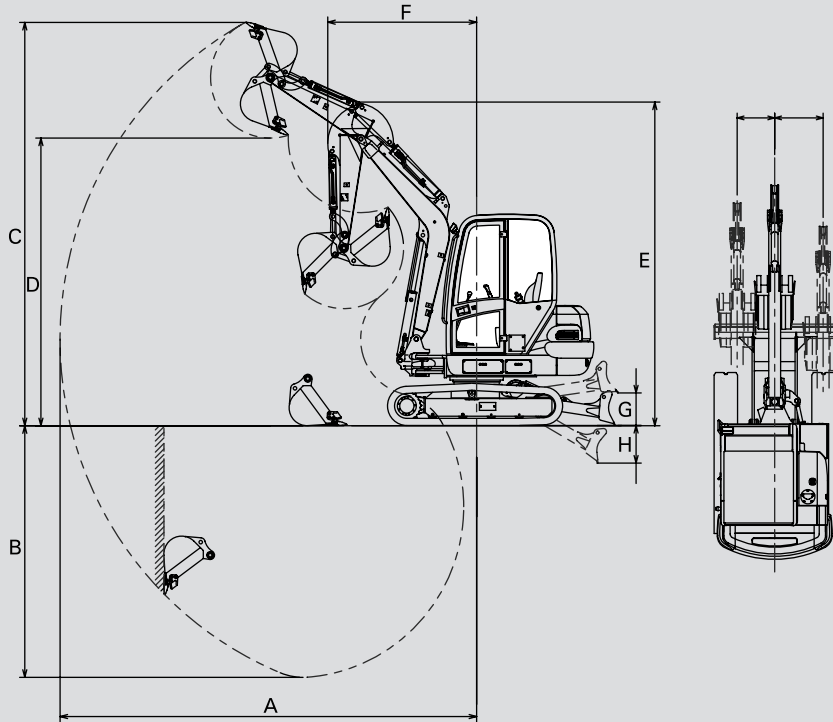
Notes:

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

Unit: mm

	ZAXIS30
A Overall width	1 470
B Canopy / Cabin height	2 420
C Rear-end swing radius	1 370
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	4 760
L Overall height of boom	1 450

Working ranges



Notes:

1. The illustration shows the cabin version equipped with 0.09 m³ bucket, 1.27 m arm and 300 mm rubber shoes.
2. Values are identical for cabin and canopy versions.

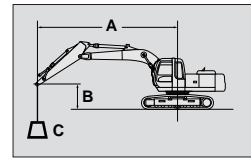
Unit: mm

	ZAXIS30	
	Canopy & Cabin	
	1.27 m arm	1.57 m arm
A Maximum digging reach	4 840	5 100
B Maximum digging depth	2 890	3 190
C Maximum cutting height	4 620	4 770
D Maximum dumping height	3 300	3 440
E Transport height	2 420	2 420
F Minimum swing radius	1 730	1 800
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

ZAXIS30 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 1.27 m	3 m					*5.34	*5.34			5.19	4.74	4.11
Bucket 0.09 m ³	2 m					*6.36	*6.36	5.31	4.82	4.42	4.04	4.53
Rubber shoes 300 mm	1 m					7.72	6.92	5.16	4.69	4.21	3.83	4.62
	0 m					7.39	6.61	5.02	4.56	4.40	4.01	4.42
	-1 m	*13.33	*13.33	13.65	11.77	7.32	6.54			5.29	4.79	3.85
	-2 m			*10.77	*10.77	*7.27	6.68					

ZAXIS30 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 1.27 m	3 m					*5.34	*5.34			*5.59	4.74	4.11
Bucket 0.09 m ³	2 m					*6.36	*6.36	*5.98	4.82	*5.83	4.04	4.53
Rubber shoes 300 mm	1 m					*8.84	6.92	*6.69	4.69	*6.09	3.83	4.62
	0 m					*10.51	6.61	*7.30	4.56	*6.37	4.01	4.42
	-1 m	*13.33	*13.33	*14.36	11.77	*10.17	6.54			*6.51	4.79	3.85
	-2 m			*10.77	*10.77	*7.27	6.68					

ZAXIS30 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		meter		
Arm 1.57 m	3 m									4.74	4.33	4.41
Bucket 0.09 m ³	2 m					*5.42	*5.42	5.39	4.91	4.12	3.78	4.80
Rubber shoes 300 mm	1 m					7.86	7.06	5.23	4.76	3.93	3.60	4.89
	0 m			*11.87	11.69	7.46	6.68	5.06	4.60	4.08	3.73	4.70
	-1 m	*11.77	*11.77	13.56	11.69	7.32	6.54	4.98	4.52	4.74	4.31	4.18
	-2 m			*13.15	11.88	7.38	6.61					

ZAXIS30 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		meter		
Arm 1.57 m	3 m									*5.12	4.33	4.41
Bucket 0.09 m ³	2 m					*5.42	*5.42	*5.43	4.91	*5.37	3.78	4.80
Rubber shoes 300 mm	1 m					*8.02	7.06	*6.31	4.76	*5.66	3.60	4.89
	0 m			*11.87	11.69	*10.21	6.68	*7.15	4.60	*5.97	3.73	4.70
	-1 m	*11.77	*11.77	*15.22	11.69	*10.49	6.54	*7.19	4.52	*6.25	4.31	4.18
	-2 m			*13.15	11.88	*8.57	6.61					

- 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

- 2.38 m boom
- 1.27 m arm
- 0.09 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

- 1.57 m arm
- Backhoe buckets

Hitachi Construction Machinery (Europe) NV

Souvereinstraat 16, 4903 RH Oosterhout, P.O. Box 404, 4900 AK Oosterhout, The Netherlands
T +31-(0)162 48 44 00, F +31-(0)162 45 74 53, www.hcme.com

Siciliëweg 5, Haven 5112, 1045 AT Amsterdam, P.O. Box 59239, 1040 KE Amsterdam, The Netherlands
T +31-(0)20 44 76 700, F +31-(0)20 33 44 045, www.hcme.com



**Breaking
new
ground**

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