

ZAXIS-6 series

HITACHI

Reliable solutions

ZAXIS19



## HYDRAULIC EXCAVATOR

Model code : ZX19-6

Engine rated power : 11.5 kW (ISO14396)

Operating weight : 1 920 kg

Bucket ISO heaped : 0.02-0.05 m<sup>3</sup>

# ZX19-6

## The user-friendly excavator



6. Efficient performance



8. Exceptional comfort



10. Easy to maintain

## No compromise







### Added protection

The boom cylinder positioned on top of the boom is protected from potential damage.

# Perfect fit

The ZX19-6 offers outstanding versatility, stability and user-friendly operation. Its distinctive square-shaped cab provides exceptional comfort and safety. Thanks to the small front minimum turning radius, the ZX19-6 can fit perfectly in confined spaces on projects involving utilities, foundation work, landscaping, and indoor demolition and construction sites.



### Improved durability

High-strength steel blade and large cylinder guard enhance durability.



### Greater versatility

Reduced minimum front swing radius improves efficiency in confined spaces.



**Smooth operation**

The auxiliary function lever ensures excellent control of attachments.



**Comfortable cab**

Square design offers enhanced visibility and comfort.



**Energy efficient**

LED lights on the boom have a longer lifetime than halogen alternatives.



**Easy maintenance**

Engine cover slides open vertically for access in tight spaces.

# Efficient performance

The ZX19-6 is exceptionally versatile for working in small spaces, and highly durable for challenging conditions. It performs productively with excellent fuel efficiency.

## High productivity

The ZX19-6 delivers high levels of productivity with reduced running costs.

## Outstanding versatility

The ZX19-6 is highly efficient when working in confined spaces thanks to a small front minimum turning radius. The boom cylinder is positioned on top of the boom, which protects it from potential damage.

## Built to last

Durable features of the ZX19-6 – such as the high-strength steel blade and large cylinder guard – ensure a reliable performance, helping you to get the job done on time and on budget.



The boom cylinder on top of the boom minimises downtime due to reduced contact with the cylinder.



Hydraulic hose on the front attachment is inside the boom for added protection.



Small front minimum turning radius is ideal for narrow spaces.



Large right-hand window slides back to provide excellent visibility.



Easy access via the large door space.





# Exceptional comfort

The square cab of the ZX19-6 utilises every inch of space to create a spacious and comfortable working environment. It offers excellent all-round visibility, which enhances safety on the job site, and the interior features user-friendly controls for easy operation.

## Spacious cab

The design of the cab offers ample legroom and increased all-round visibility. The large right-hand window slides back to make it easier for the operator to see the ground below. The front window also opens easily, and there is ample space between the operator and the glass.

## Easy operation

User-friendly controls are in easy reach of the operator. The folding travel pedal can be used instead of the hand lever to improve the speed of operation.

## Enhanced design

The ZX19-6 is equipped with new LED lights on the cab and boom. These have a longer lifetime than halogen alternatives for efficient energy use.



Folding travel pedals can be used instead of a hand lever.

# Easy to maintain

Routine maintenance and cleaning are quick and easy on the ZX19-6 thanks to several features. The mini excavator also has long service intervals, which enable you to benefit from reduced running costs and maximum uptime.

## Convenient access

The engine, fuel tank and radiator covers have been designed to allow easy access. The ZX19-6 is also easy to refuel as the tank opening has been relocated for convenience, and includes a cap holder and large strainer.

## Quick cleaning

The radiator and oil cooler are positioned in parallel for efficient cleaning, and the dozer blade has been designed to minimise the build-up of dirt. The floor mat inside the cab can be removed and cleaned easily.

## Reduced repair costs

Flat panes of glass in the cab window are easier and less expensive to repair or replace than curved panes.



Daily inspection points are grouped together for convenience.



The engine cover opens vertically, which is ideal for tight spaces.



Relocated fuel tank opening allows for easy refuelling.

# SPECIFICATIONS

## ENGINE

Model .....	3TNV70
Type .....	Water-cooled, 4-cycle, swirl combustion chamber injection type diesel engine
No. of cylinders .....	3
Rated power	
ISO 14396 .....	11.5 kW at 2 400 min <sup>-1</sup>
ISO 9249, net .....	10.6 kW at 2 400 min <sup>-1</sup>
SAE J1349, net .....	10.6 kW at 2 400 min <sup>-1</sup>
Maximum torque .....	48.8 Nm at 1 800 min <sup>-1</sup>
Piston displacement .....	0.854 L
Bore and stroke .....	70 mm x 74 mm
Battery .....	1 x 12 V / 36 Ah

## HYDRAULIC SYSTEM

### Hydraulic Pumps

Main pumps .....	2 variable displacement axial piston pumps 1 gear pump
Maximum oil flow .....	2 x 19.2 L/min 1 x 10.8 L/min
Pilot pump .....	1 gear pump
Maximum oil flow .....	6.5 L/min

### Hydraulic Motors

Travel .....	2 variable displacement axial piston motors
Swing .....	1 gear pump

### Relief Valve Settings

Implement circuit .....	20.6 Mpa
Swing circuit .....	13.7 Mpa
Travel circuit .....	20.6 Mpa
Pilot circuit .....	3.9 Mpa

### Hydraulic Cylinders

	Quantity	Bore	Rod diameter	Stroke
Boom	1	65 mm	35 mm	490 mm
Arm	1	60 mm	35 mm	368 mm
Bucket	1	55 mm	30 mm	311 mm
Blade	1	70 mm	40 mm	94 mm
Boom swing	1	60 mm	30 mm	298 mm
Span	1	50 mm	30 mm	312 mm

## UPPERSTRUCTURE

### Swing Device

Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed .....	9.4 min <sup>-1</sup>
Swing torque .....	1.4 kNm

### Operator's Cab

An independent spacious cab, 1 016 mm wide by 1 610 mm high, conforming to ISO\* Standards. Reinforced glass windows on 4 sides for visibility. Front windows (upper) can be opened.

\* International Organization for Standardization

## UNDERCARRIAGE

### Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame extended by cylinder span.

### Numbers of Rollers and Shoes on Each Side

Lower rollers .....	3
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### Travel Device

Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system : High-Low.

Travel speeds .....	High : 0 to 4.2 km/h Low : 0 to 2.4 km/h
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Maximum traction force...	11.4 kN
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Gradeability .....	47% (25 degree) continuous
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## SOUND LEVEL

Sound level in cab according to ISO 6396 ..... LpA 78 dB(A)

External sound level according to ISO 6395 and

EU Directive 2000/14/EC ..... LwA 93 dB(A)

## SERVICE REFILL CAPACITIES

Fuel tank .....	22.0 L
Engine coolant .....	3.5 L
Engine oil .....	3.1 L
Travel device (each side) .....	0.25 L
Hydraulic system .....	26.0 L
Hydraulic oil tank .....	14.0 L

## WEIGHTS AND GROUND PRESSURE

### Operating Weight and Ground Pressure

Shoe type	Shoe width	Arm length	kg	kPa (kgf/cm <sup>2</sup> )
Rubber shoe	230 mm	1.08 m	1 920	30.6 (0.31)

Including 1.70 m boom and 0.044 m<sup>3</sup> bucket (ISO heaped).

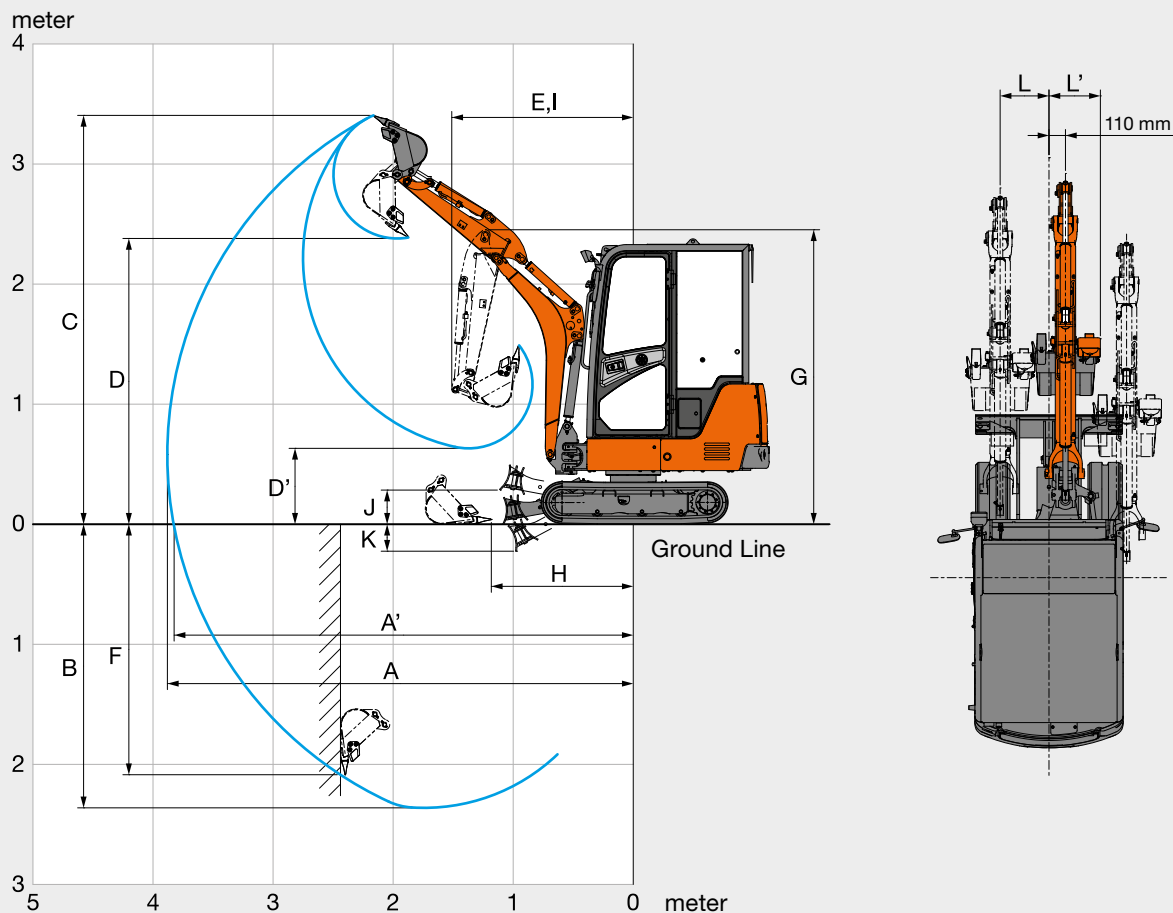
\* (Operating weight with 0.044 m<sup>3</sup> bucket, fully serviced, +75 kg operator ISO 6016).

## BUCKET AND ARM DIGGING FORCE

Arm length	1.08 m
Bucket digging force ISO	16.0 kN
Bucket digging force SAE	12.6 kN
Arm crowd force ISO	8.4 kN
Arm crowd force SAE	7.8 kN

# SPECIFICATIONS

## WORKING RANGES

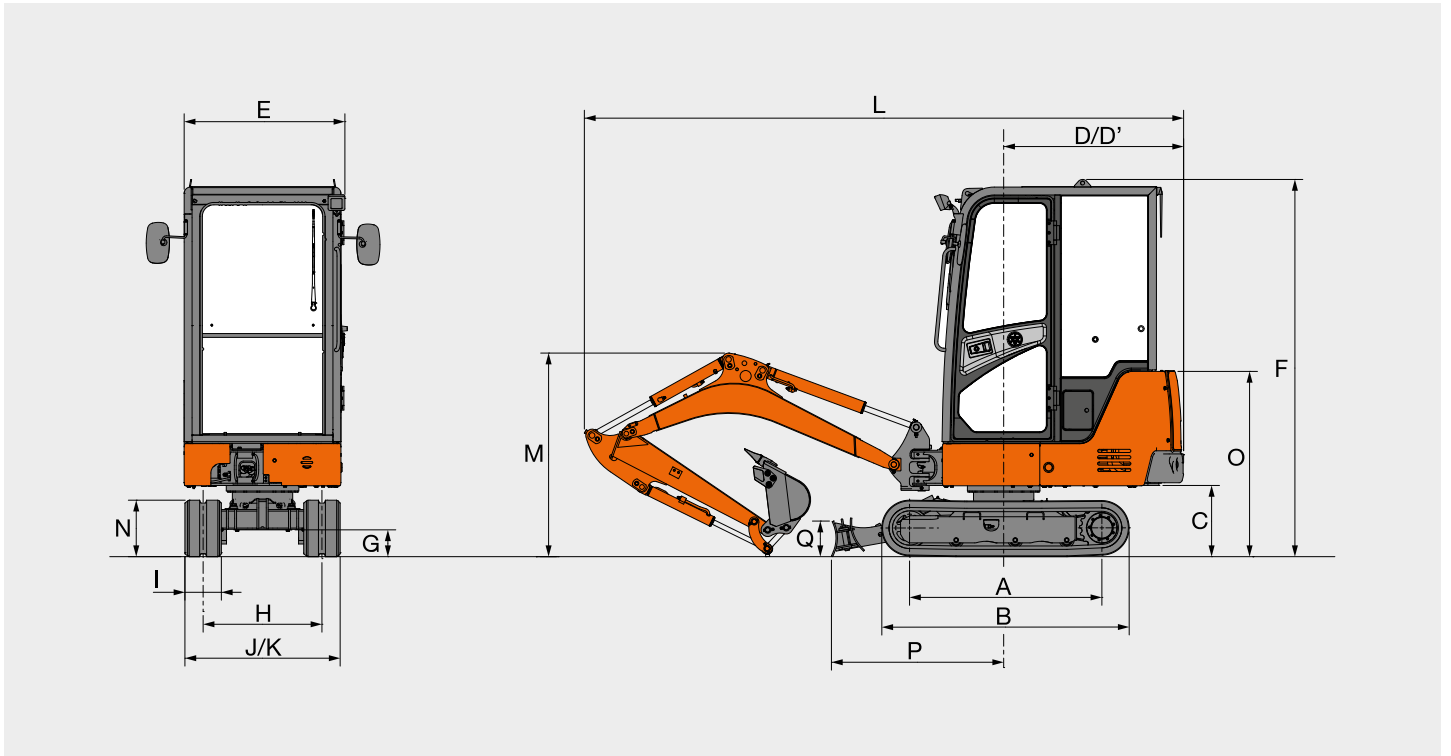


This illustration shows with 1.08 m arm, 0.044 m<sup>3</sup> bucket and 230 mm rubber shoes.

Unit: mm

	ZAXIS 19
	1.08 m arm
	CAB
A Max. digging reach	3 900
A' Max. digging reach (on ground)	3 840
B Max. digging depth	2 380
C Max. cutting height	3 430
D Max. dumping height	2 380
D' Min. dumping height	630
E Min. swing radius	1 540
F Max. vertical wall digging depth	2 090
G Front height at Min. swing radius	2 470
H Min. level crowding distance	1 160
I Working radius at Min. swing radius (Max. boom-swing angle)	1 250
J Blade bottom highest position above ground	230
K Blade bottom lowest position above ground	260
L/L' Offset distance	330 / 520
Max. boom-swing angle (deg.)	70 / 50

## DIMENSIONS



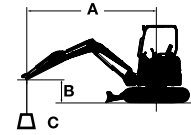
This illustration shows with 1.08 m arm, 0.044 m<sup>3</sup> bucket and 230 mm rubber shoes.

Unit: mm

	ZAXIS 19
	CAB
A Distance between tumblers	1 210
B Undercarriage length	1 570
C Counterweight clearance	450
D Rear-end swing radius	1 140
D' Rear-end length	1 140
E Overall width of upperstructure	1 020
F Overall height of cab	2 380
G Min. ground clearance	165
H Track gauge (Retract / Extend)	750 / 1050
I Track shoe width	230
J Undercarriage (Blade) width (Retract / Extend)	980 / 1 280
K Overall width (Retract / Extend)	1 020 / 1 280
L Overall length	3 790
M Overall height of boom	1 290
N Track height	360
O Engine cover-height	1 170
P Horizontal distance to blade	1 090
Q Blade height	220

# MACHINE CAPACITIES

- Notes:
1. Ratings 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 the center-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

To determine lifting capacities, apply "Rating over-side or 360 degrees" machine capacities from table with "Blade above Ground" and deduct weight of installed attachment and quick hitch.

## ZAXIS 19 Blade above Ground

Rating over-front Rating over-side or 360 degrees Unit : 1 000 kg

Conditions	Load point height m	Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m				meter
Boom 1.70 m Arm 1.08 m Rubber shoe	1.0			*0.581	0.475	0.389	0.270	0.335	0.233	3.33
	0 (Ground)			0.440	0.300	0.378	0.259	0.333	0.230	3.29
	-1.0	*1.317	1.079	*0.354	0.278			*0.355	0.278	2.83

## ZAXIS 19 Blade on Ground

Rating over-front Rating over-side or 360 degrees Unit : 1 000 kg

Conditions	Load point height m	Load radius						At max. reach		
		1.0 m		2.0 m		3.0 m				meter
Boom 1.70 m Arm 1.08 m Rubber shoe	1.0			*0.581	0.475	*0.419	0.270	*0.380	0.233	3.33
	0 (Ground)			*0.497	0.300	*0.429	0.259	*0.362	0.230	3.29
	-1.0	*1.317	1.079	*0.354	0.278			*0.355	0.278	2.83

# EQUIPMENT

● : Standard equipment

○ : Optional equipment

### ENGINE

Alternator 12V - 40 A	●
Cartridge-type engine oil filter	●
Electrical fuel feed pump	●
Fuel main filter	●
Radiator reserve tank	●
Water-separator for engine fuel	●

### HYDRAULIC SYSTEM

Full-flow filter	●
Hydraulic pilot type control levers	●
Pilot control shut-off lever with neutral engine start system	●
Pilot filter	●
Suction filter	●
Swing parking brake	●
Travel parking brake	●
Two-speed travel system with automatic shift	●
Valve for extra piping	●

### CAB

AM/FM radio	○
Anti-slip plate	●
Arm rests	●
Auxiliary function lever (AFL)	●
Console pocket (AM/FM radio non-attached)	●
Defroster	●
Drink holder	●
Electric horn	●
Floor mat	●
Front window power-assisted with gas damper	●
Heater	●
Power outlet 12V	●
Rear View Mirror (right, left side)	●
ROPS/OPG CAB	●
Seat belt	●
Suspension seat with reclining	●
Switch and harness for beacon light	●
Tool box	●
Travel pedal	●
Window washer	●
Wiper	●

### LIGHTS

2 Working lights on the cab and 1 light on the boom	●
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### UPPERSTRUCTURE

Batteries 1 x 36 Ah	●
Battery disconnect switch	●
Counterweight	●
Pilot accumulator	●

### UNDERCARRIAGE

Retractable undercarriage	●
Rubber shoe 230 mm	●

### FRONT ATTACHMENTS

Arm 1.08 m	●
Boom 1.70 m	●
Extra piping	●
HN bushing	●

### MISCELLANEOUS

Theft deterrent system*	○
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Standard and optional equipment may vary by country, so please consult your Hitachi dealer for details.

\* Hitachi Construction Machinery cannot be held liable for theft, any system will just minimize the risk of theft.

Prior to operating this machine, including satellite communication system, in a country other than a country of its intended use, it may be necessary to make modifications to it so that it complies with the local regulatory standards (including safety standards) and legal requirements of that particular country. Please do not export or operate this machine outside the country of its intended use until such compliance has been confirmed. Please contact your Hitachi dealer in case of questions about compliance.

These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional equipment, accessories, and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.

