## HITACHI

**Reliable solutions** 

# **ZAXIS17U/19U**



#### HYDRAULIC EXCAVATOR

Model code : ZX17U-6 / ZX19U-6 Engine rated power : 11.5 kW (ISO14396) Operating weight : ZX17U-6 : 1 760 kg ZX19U-6 : 1 880 kg Bucket ISO heaped : 0.02-0.05 m<sup>3</sup>

# The user-friendly excavator



6. Efficient performance



8. Exceptional comfort



10. Easy to maintain

## No compromise









#### Comfortable cab

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Wide adjustable suspension seat, folding foot pedals and adjustable armrest.

# **Perfect fit**

Lightweight and compact, the ZX17U-6 and ZX19U-6 are easy to transport from one job site to another, and offer high levels of productivity, comfort and versatility. Easy to operate, they are ideal for rental, utilities, foundation work, landscaping, and indoor demolition and construction projects.



#### **Greater versatility** Adjustable crawler track is

ideal in confined areas or if greater stability is required.



#### Short-tail swing radius

The short-tail swing radius is ideal for urban areas, where space is limited.





#### Added durability

Boom cylinder guard, V-shaped cylinder cover and D-frame enhance durability.

# Efficient performance

The Stage V-compliant engine and Hitachi hydraulic system ensure the ZX17U-6 and ZX19U-6 work productively and efficiently on any job site. They are exceptionally versatile for working in small spaces, thanks to their compact size, short-tail swing and adjustable tracks.

#### **High productivity**

The ZX17U-6 and ZX19U-6 deliver high levels of productivity, quick cycle time and an efficient hydraulic system.

#### **Outstanding versatility**

The crawler tracks can be retracted or widened – depending on the requirements of the job site – from 980mm, for working in small spaces or being loaded on to a truck, to 1,280mm for greater stability.

#### **Built to last**

Durable features of the ZX17U-6 and ZX19U-6 – such as a reinforced D-frame, V-shaped cylinder cover and boom cylinder guard – ensure a reliable performance, helping you to get the job done on time and on budget.





Quick cycle time and efficient hydraulics ensure high productivity.

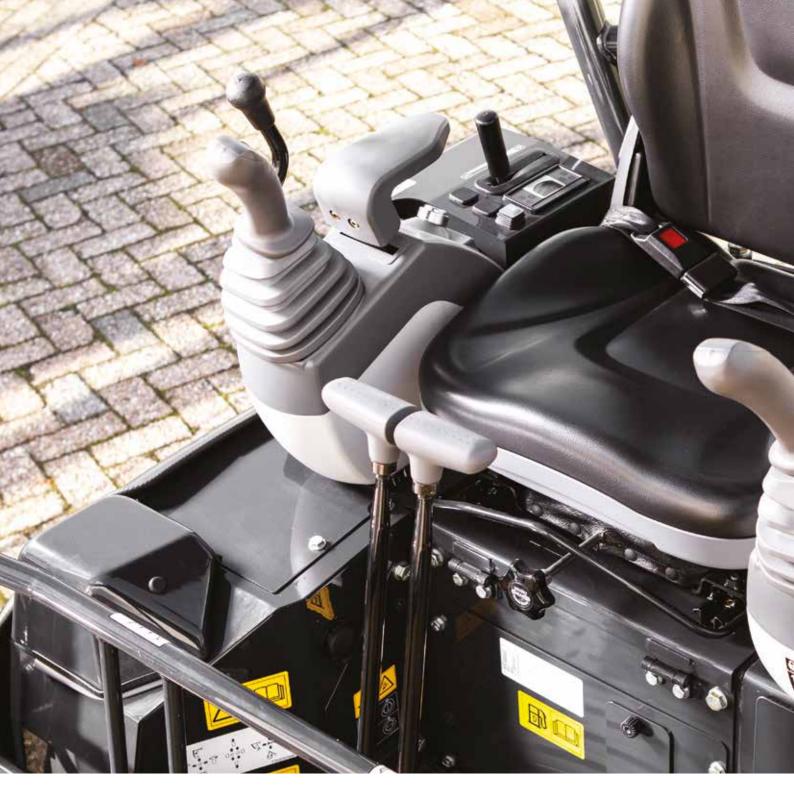




Expandable crawler tracks enhance versatility and stability.



Short-tail swing radius is ideal for working in narrow spaces.





Controls are within easy reach.



Three-post canopy design enhances visibility.





Wide adjustable suspension seat is comfortable for operators.

# Exceptional comfort

The ZX17U-6 and ZX19U-6 provide a spacious working environment for operators. They have also been designed to be easy to operate, even for first-time users.

#### **Spacious workspace**

Fitted with a wide and adjustable sliding suspension seat, folding foot pedals and adjustable arm rest, the ZX17U-6 and ZX19U-6 provide a high level of comfort for operators. The three-post canopy design enhances visibility of the job site and is compatible with ROPS and OPG top guard (Level 1).

#### **Easy operation**

User-friendly controls are in easy reach of the operator and the hydraulic pilot control levers ensure a smooth operation. Low noise levels, even with the canopy design, allow operators to work more comfortably.

#### **Enhanced design**

The ZX17U-6 and ZX19U-6 are equipped with new LED lights on the boom. These have a longer lifetime than halogen alternatives for efficient energy use.

# Easy to maintain

To guarantee a seamless operation, the ZX17U-6 and ZX19U-6 have been designed with several easy maintenance features that allow you to carry out cleaning and servicing quickly and effortlessly.

#### **Convenient access**

The engine and radiator covers have been designed to allow easy access. More space around the fuel tank opening makes the new mini excavators easier to refuel.

#### **Quick cleaning**

The back of the blade is slanted, and shaped to minimise the buildup of dirt and make it easier to remove.

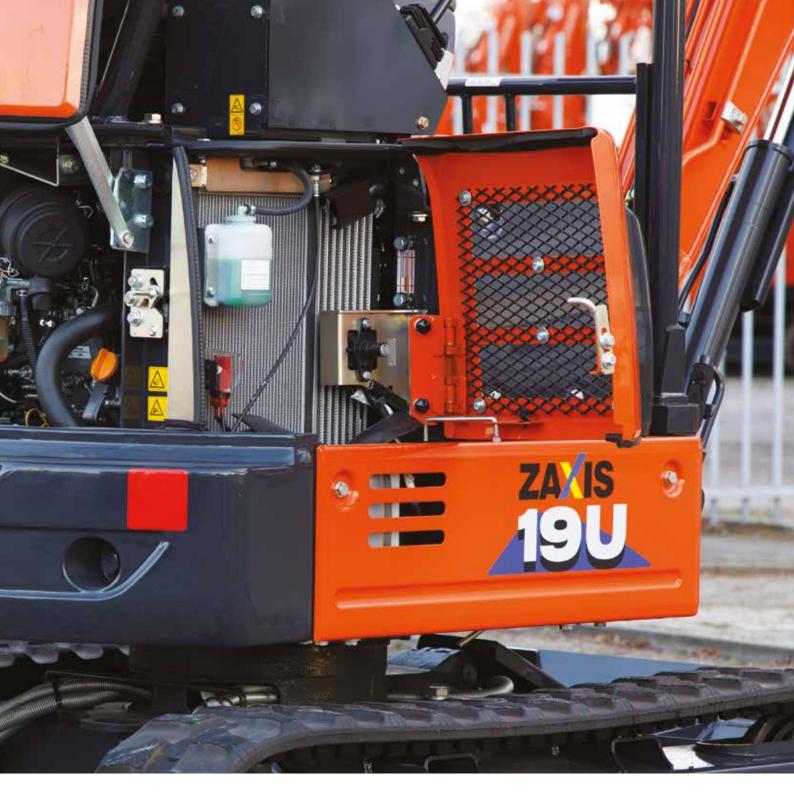
#### Safety first

The battery disconnect switch is now available as standard for safer and easier maintenance.





Daily inspection points are grouped together for convenience.





Easy to open covers provide quick access.



Sufficient space around the fuel tank opening for easy refuelling.

## **SPECIFICATIONS**

#### ENGINE

Model		3TNV70
Туре		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, ne	t	10.6 kW at 2 400 min <sup>-1</sup>
Maximum torque	ə	48.8 Nm at 1 800 min <sup>-1</sup>
Piston displacem	nent	0.854 L
Bore and stroke		70 mm x 74 mm
Battery		1 × 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 ZAXIS 17U

	Quantity	Bore	Rod diameter	Stroke
Boom (3-Pillar canopy)	1	60 mm	35 mm	435 mm
Arm	1	55 mm	30 mm	406 mm
Bucket	1	55 mm	30 mm	311 mm
Blade	1	65 mm	35 mm	94 mm
Boom swing	1	60 mm	30 mm	298 mm
Span	1	50 mm	30 mm	312 mm

#### ZAXIS 19U

	Quantity	Bore	Rod diameter	Stroke
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Span	1	50 mm	30 mm	312 mm

#### UPPERSTRUCTURE

#### **Swing Device**

Swing torque ..... 1.4 kNm

#### UNDERCARRIAGE

#### Tracks

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

#### Numbers of Rollers on Each Side

Lower rollers ...... 3

#### Operator's Cab

Each track driven by 2-speed axial piston motor. Parking brake is spring-set/hydraulic-released disc type.

Travel speeds	High : 0 to 4.2 km/h
	Low : 0 to 2.4 km/h
Maximum traction force	11.4 kN (1 160 kgf)
Gradeability	47% (25 degree) continuous

SOUND LEVEL

Sound level canopy according to ISO 6396 ..... LpA 76 dB(A) External sound level according to ISO 6395 and EU Directive 2000/14/EC ..... LwA 93 dB(A)

#### SERVICE REFILL CAPACITIES

Fuel tank	20.0 L
Engine coolant	2.7 L
Engine oil	3.1 L
Travel device (each side)	0.25 L
Hydraulic system	26.0 L
Hydraulic oil tank	
-	

#### WEIGHTS AND GROUND PRESSURE

#### Operating Weight and Ground Pressure ZAXIS 17U

#### 3-PILLAR CANOPY

Shoe type	Shoe width	Arm length	kg	kPa (kgf/cm²)
Rubber shoe	230 mm	0.93 m	1 760 *	26.6 (0.27)

Including 1.82 m boom and 0.044 m<sup>3</sup> bucket (ISO heaped). \* (Operating weight with 0.044 m<sup>3</sup> bucket, fully serviced, +80 kg operator

ISO 6016).

#### ZAXIS 19U

3-PILLAR CANOPY

Shoe type	Shoe width	Arm length	kg	kPa (kgf/cm2)
Rubber shoe	230 mm	1.13 m	1 880 *	28.3 (0.29)

Including 1.82 m boom and 0.044 m³ bucket (ISO heaped).

\* (Operating weight with 0.044 m<sup>3</sup> bucket, fully serviced, +80 kg operator ISO 6016).

#### BUCKET AND ARM DIGGING FORCE

#### ZAXIS 17U

0,5 mm	0.93 m
Bucket digging force ISO	16.0 kN (1 630 kgf)
Bucket digging force SAE : PCSA	12.5 kN (1 270 kgf)
Arm crowd force ISO	8.6 kN (880 kgf)
Arm crowd force SAE : PCSA	7.9 kN (810 kgf)

#### ZAXIS 19U

0,5 mm	1.13 m	
Bucket digging force ISO	16.0 kN (1 630 kgf)	
Bucket digging force SAE : PCSA	12.6 kN (1 280 kgf)	
Arm crowd force ISO	9.2 kN (940 kgf)	
Arm crowd force SAE : PCSA	8.5 kN (870 kgf)	

#### BACKHOE ATTACHMENTS

#### ZAXIS 17U

Boom and arms are of welded, box-section design. 1.82 m boom, 0.93 m arm is available.

#### **Buckets**

Wi	dth	No. of tooth	\\/sight	Recommendation	
Without side cutters	With side cutters		vveignt	Arm 0.93 m	
250 mm	300 mm	3	32.0 kg	0	
300 mm	350 mm	3	34.6 kg	0	
350 mm	400 mm	3	36.6 kg	0	
400 mm	450 mm	3	38.6 kg	0	
450 mm	500 mm	3	40.9 kg		
	Without side cutters 250 mm 300 mm 350 mm 400 mm	250 mm     300 mm       300 mm     350 mm       350 mm     400 mm       400 mm     450 mm	Without side cuttersWith side cuttersNo. of teeth250 mm300 mm3300 mm350 mm3350 mm400 mm3400 mm3	Without side cutters     With side cutters     No. of teeth     Weight       250 mm     300 mm     3     32.0 kg       300 mm     350 mm     34.6 kg       350 mm     400 mm     3     36.6 kg       400 mm     3     38.6 kg	

O Suitable for materials with density of 2 000 kg/m<sup>3</sup> or less □ Suitable for materials with density of 1 600 kg/m³ or less

ZAXIS 19U Boom and arms are of welded, box-section design. 1.82 m boom, 1.13 m arm is available.

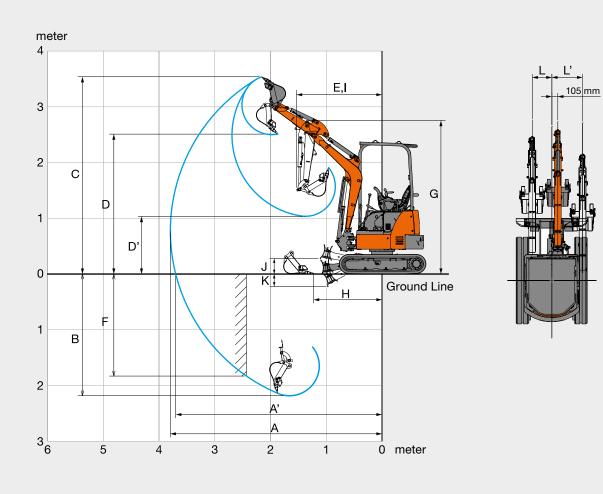
#### Buckets

Capacity	Wi	dth	No. of tooth	\\/sight	Recommendation	
ISO heaped	Without side cutters	With side cutters	No. of teeth	Weight	Arm 1.13 m	
0.020 m <sup>3</sup>	250 mm	300 mm	3	32.0 kg	0	
0.035 m <sup>3</sup>	300 mm	350 mm	3	34.6 kg	0	
0.040 m <sup>3</sup>	350 mm	400 mm	3	36.6 kg	0	
0.044 m <sup>3</sup>	400 mm	450 mm	3	38.6 kg		
0.050 m <sup>3</sup>	450 mm	500 mm	3	40.9 kg	Δ	

○ Suitable for materials with density of 2 000 kg/m<sup>3</sup> or less
□ Suitable for materials with density of 1 600 kg/m<sup>3</sup> or less
△ Suitable for materials with density of 1 100 kg/m<sup>3</sup> or less

### **SPECIFICATIONS**

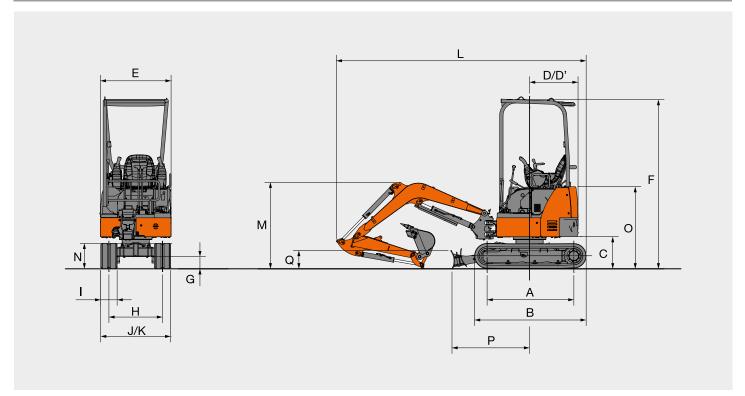
#### WORKING RANGES



This illustration shows with 0.93 m arm, 0.044  $\mathrm{m^3}$  bucket and 230 mm rubber shoes.

	Unit: mm
	ZAXIS 17U
	0.93 m arm
	3-Pillar Canopy
A Max. digging reach	3 810
A' Max. digging reach (on ground)	3 720
B Max. digging depth	2 190
C Max. cutting height	3 540
D Max. dumping height	2 510
D' Min. dumping height	1 040
E Min. swing radius	1 530
F Max. vertical wall digging depth	1 840
G Front height at Min. swing radius	2 770
H Min. level crowding distance	1 230
I Working radius at Min. swing radius (Max. boom-swing angle)	1 060
J Blade bottom highest position above ground	230
K Blade bottom lowest position above ground	260
L/L' Offset distance	355 / 555
Max. boom-swing angle (deg.)	70 / 50

#### DIMENSIONS

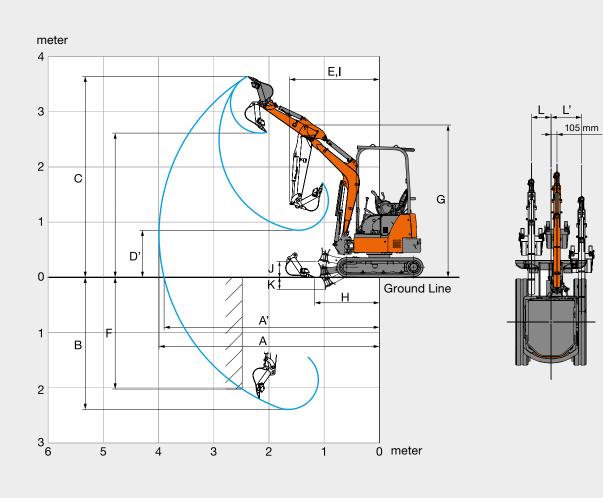


This illustration shows with 0.93 m arm, 0.044  $\ensuremath{m^{\scriptscriptstyle 3}}$  bucket and 230 mm rubber shoes.

	Unit: mm
	ZAXIS 17U
	3-Pillar Canopy
A Distance between tumblers	1 210
B Undercarriage length	1 570
C Counterweight clearance	450
D Rear-end swing radius	680
D' Rear-end length	680
E Overall width of upperstructure	990
F Overall height of cab	2 380
G Min. ground clearance	165
H Track gauge (Retract / Extend)	750 / 1 050
I Track shoe width	230
J Undercarriage (Blade) width (Retract / Extend)	980 / 1 280
K Overall width (Retract / Extend)	990 / 1 280
L Overall length	3 500
M Overall height of boom	1 210
N Track height	360
O Engine cover-height	1 150
P Horizontal distance to blade	1 090
Q Blade height	220

### **SPECIFICATIONS**

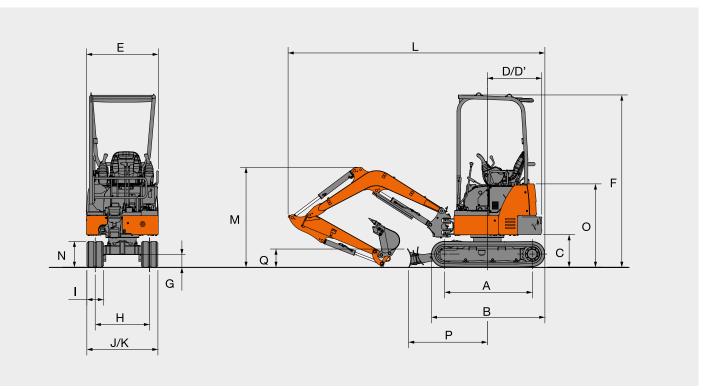
#### WORKING RANGES



This illustration shows with 1.13 m arm, 0.044 m<sup>3</sup> bucket and 230 mm rubber shoes.

	Unit: mm
	ZAXIS 19U
	1.13 m arm
	3-Pillar Canopy
A Max. digging reach	3 990
A' Max. digging reach (on ground)	3 900
B Max. digging depth	2 390
C Max. cutting height	3 640
D Max. dumping height	2 610
D' Min. dumping height	850
E Min. swing radius	1 620
F Max. vertical wall digging depth	2 020
G Front height at Min. swing radius	2 770
H Min. level crowding distance	1 170
I Working radius at Min. swing radius (Max. boom-swing angle)	1 060
J Blade bottom highest position above ground	230
K Blade bottom lowest position above ground	260
L/L' Offset distance	355 / 555
Max. boom-swing angle (deg.)	70 / 50

#### DIMENSIONS



This illustration shows with 1.13 m arm, 0.044  $\ensuremath{m^{\scriptscriptstyle 3}}$  bucket and 230 mm rubber shoes.

	Unit: mm_
	ZAXIS 19U
	3-Pillar Canopy
A Distance between tumblers	1 210
B Undercarriage length	1 570
C Counterweight clearance	450
D Rear-end swing radius	755
D' Rear-end length	755
E Overall width of upperstructure	990
F Overall height of cab	2 380
G Min. ground clearance	165
H Track gauge (Retract / Extend)	750 / 1 050
I Track shoe width	230
J Undercarriage (Blade) width (Retract / Extend)	980 / 1 280
K Overall width (Retract / Extend)	990 / 1 280
L Overall length	3 540
M Overall height of boom	1 390
N Track height	360
O Engine cover-height	1 150
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.

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.

A	
В	
Ьc	I

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

ZAXIS 17U 3-Pil	ZAXIS 17U 3-Pillar Canopy Version, Blade above Ground					🖞 Rating over-front 🛛 💮 Rating over-side or 360 degrees				Unit : 1 000 kg
	Load			Load	radius				At max. reach	
Conditions	point	1.0	) m	2.0	) m	3.0	) m		At max. reach	
height m	U U	ů	÷	ů	<b>O</b>	ů	<b>O</b>	ů	Ð	meter
Boom 1.82 m Arm 0.93 m Counterweight 120 kg Rubber shoe	2.0							0.26	0.24	2.98
	1.0			0.45	0.42	0.25	0.23	0.22	0.2	3.27
	0 (Ground)			0.42	0.39	0.24	0.22	0.22	0.21	3.15
230 mm	-1.0	*1.12	*1.12	0.42	0.39			0.29	0.28	2.58

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#### ZAXIS 17U 3-Pillar Canopy Version, Blade on Ground

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

	Load	Load radius							At max. reach			
Conditions	point	1.0 m		2.0 m		3.0 m		At max. reach				
	height m	ů	÷	Ů	÷	ů	÷	Ů	<b>O</b>	meter		
Boom 1.82 m Arm 0.93 m	2.0							*0.40	0.24	2.98		
Counterweight 120 kg Rubber shoe	1.0			*0.70	0.42	*0.44	0.23	*0.41	0.2	3.27		
	0 (Ground)			*0.81	0.39	*0.46	0.22	*0.42	0.21	3.15		
230 mm	-1.0	*1.12	*1.12	*0.63	0.39			*0.42	0.28	2.58		

ZAXIS 19U 3-Pillar Canopy	Version, Blade	above Ground
	Version, Diaue	

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

	Load	Load radius							At max. reach		
Conditions I '	point			.0 m 2.0 m		3.0 m		At max. reach			
	height m	ů	÷	ů	÷	ů	÷	ů	÷	meter	
Boom 1.82 m Arm 1.13 m	2.0					0.3	0.28	0.27	0.26	3.18	
Counterweight 240 kg Rubber shoe	1.0			0.53	0.49	0.29	0.27	0.24	0.22	3.44	
	0 (Ground)			0.49	0.46	0.28	0.26	0.24	0.23	3.34	
230 mm	-1.0	*0.94	*0.94	0.49	0.46			0.3	0.29	2.81	

#### ZAXIS 19U 3-Pillar Canopy Version, Blade on Ground

Rating over-front Rating over-side or 360 degrees

Unit : 1 000 kg

	Load			Load	radius				At max. reach	
Conditions	point	1.0	) m	2.0	) m	3.0	) m		At max. reach	
he	height m	ů	<b>O</b>	ů	<b>O</b>	ů	<b>O</b>	ů	<b>O</b>	meter
Boom 1.82 m Arm 1.13 m	2.0					*0.36	0.28	*0.36	0.26	3.18
Counterweight	1.0			*0.64	0.49	*0.42	0.27	*0.38	0.22	3.44
240 kg Rubber shoe	0 (Ground)			*0.81	0.46	*0.46	0.26	*0.39	0.23	3.34
230 mm	-1.0	*0.94	*0.94	*0.69	0.46			*0.41	0.29	2.81

## **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

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HYDRAULIC SYSTEM	
Full-flow filter	•
Hydraulic pilot type control levers	٠
Pilot control shut-off lever with neutralengine start system	•
Pilot filter	٠
Suction filter	٠
Swing parking brake	٠
Travel parking brake	٠
Two-speed travel system	٠
Valve for extra piping	٠

3-PILLAR CANOPY	
Anti-slip plate	•
Arm rests	•
Electric horn	•
Floor mat	
Power outlet 12V	
ROPS/OPG canopy	•
Seat belt	•
Suspension seat	•
LIGHTS	
Working light	•
Working LED light	C

UPPERSTRUCTURE	FROM
Batteries 1 x 36 Ah	Extra pip
Battery disconnect switch	HN bush
Counterweight 120 kg: ZAXIS 17U	0.93 m a
Counterweight 240 kg: ZAXIS 19U	● 1.13 m a
	1.82 m l
UNDERCARRIAGE	
Retractable undercarriage	MISC
Rubber shoe 230 mm	Theft de

• : Standard equipment

0:	Optional	equipment
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Extra piping	
HN bushing	
0.93 m arm: ZAXIS 17U	
1.13 m arm: ZAXIS 19U	
1.82 m boom	
MISCELLANEOUS	
Theft deterrent system*	

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.

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