

ZAXIS-6 series

HITACHI

Reliable solutions

ZAXIS135us



HYDRAULIC EXCAVATOR

Model code : ZX135US-6

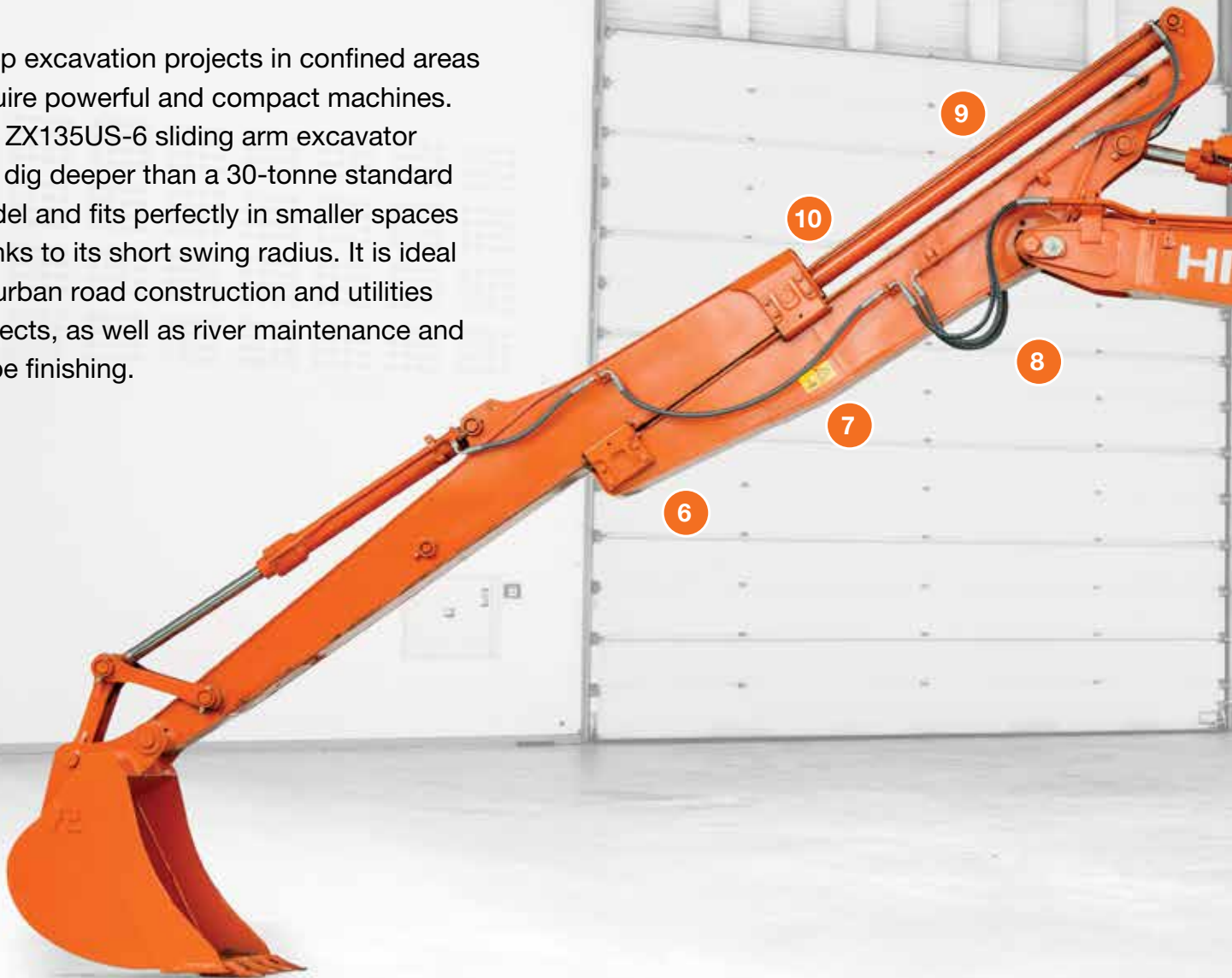
Engine rated power : 78.5 kW (ISO 14396)

Operating weight : 15 000 – 15 600 kg

Bucket ISO heaped : 0.36 m³

Reaching further

Deep excavation projects in confined areas require powerful and compact machines. The ZX135US-6 sliding arm excavator can dig deeper than a 30-tonne standard model and fits perfectly in smaller spaces thanks to its short swing radius. It is ideal for urban road construction and utilities projects, as well as river maintenance and slope finishing.



1. Excellent efficiency
HIOS IV hydraulic system reduces total hydraulic loss.



3. Compact design
The 1.49m short swing radius is perfect for working in tight spaces.



5. Enhanced visibility
Three cameras to the rear, left and right side improve safety.



2. Superior stability
The counterweight is 780kg heavier than the standard ZX135US-6.



4. Low fuel consumption
7% fuel saving in PWR mode (5% in ECO mode).



6. Easy maintenance

Sliding plates are easy to replace.



7. Reduced wear

Robust sliding structure resists wear and also prevents jolting.



8. Smooth operation

Combined operation of the boom and arm, and exclusive Hitachi hydraulic circuit, give exceptional control.



9. Powerful versatility

The upper arm's built-in sliding cylinder has a 2,000mm stroke; maximum digging depth is 7,790mm.



10. Exceptional reliability

Lubrication points on the sliding structure increase reliability.

SPECIFICATIONS

ENGINE

Model	Isuzu AR-4JJ1X
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC and SCR system
No. of cylinders	4
Rated power	
ISO 14396	78.5 kW at 2 000 min ⁻¹
ISO 9249, net	74.9 kW at 2 000 min ⁻¹
SAE J1349, net	74.9 kW at 2 000 min ⁻¹
Maximum torque	375 Nm at 1 800 min ⁻¹
Piston displacement	2.999 L
Bore and stroke	95.4 mm x 104.9 mm
Batteries	2 x 12 V / 58 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 117 L/min
Pilot pump	1 gear pump
Maximum oil flow	33.6 L/min

Hydraulic Motors

Travel	2 variable displacement axial piston motors
Swing	1 axial piston motor

Relief Valve Settings

Implement circuit	34.3 MPa
Swing circuit	32.3 MPa
Travel circuit	34.3 MPa
Pilot circuit	3.9 MPa
Power boost	36.3 MPa
Sliding arm (bottom)	27.9 MPa

Hydraulic Cylinders

	Quantity	Bore	Rod diameter
Boom	2	105 mm	70 mm
Arm	1	115 mm	80 mm
Bucket	1	100 mm	70 mm
Sliding arm	1	75 mm	50 mm

UPPERSTRUCTURE

Revolving Frame

D-section frame for resistance to deformation.

Swing Device

Axial piston motor with planetary reduction gear is bathed in oil. Swing circle is single-row. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	13.7 min ⁻¹
Swing torque	33 kNm

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards.

* International Organization for Standardization

UNDERCARRIAGE

Tracks

Tractor-type undercarriage. Welded track frame using selected materials. Side frame welded to track frame. Lubricated track rollers, idlers, and sprockets with floating seals.

Track shoes with triple grousers made of induction-hardened rolled alloy. Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.

Numbers of Rollers and Shoes on Each Side

Upper roller	1
Lower rollers	7
Track shoes	44
Track guard	1

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 5.5 km/h
	Low : 0 to 3.3 km/h

Maximum traction force	117 kN
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Gradeability	70% (35 degree) continuous
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SOUND LEVEL

Sound level in cab according to ISO 6396 LpA 69 dB(A)

External sound level according to ISO 6395 and

EU Directive 2000/14/EC LwA 99 dB(A)

SERVICE REFILL CAPACITIES

Fuel tank	220.0 L
Engine coolant	21.0 L
Engine oil	17.0 L
Swing device	3.2 L
Travel device (each side)	4.0 L
Hydraulic system	155.0 L
Hydraulic oil tank	60.0 L
DEF/AdBlue® tank	13.0 L

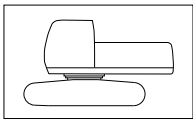
WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

		ZAXIS 135US	
Boom type		Monoblock	
Shoe type	Shoe width	kg	kPa
Triple grouser	500 mm	15 100	48
	600 mm	15 300	41
	700 mm	15 600	36
Pad	500 mm	15 000	48

Including 0.36 m³ (ISO heaped) bucket weight (345 kg) and counterweight (4 300 kg).

Basic Machine Weight and Overall Width



Excluding front end attachment, fuel, hydraulic oil and coolant etc. Including counterweight.

ZAXIS 135US

		ZAXIS 135US	
Shoe type	Shoe width	Weight	Overall width
Triple grouser	500 mm	12 000 kg	2 490 mm
	600 mm	12 200 kg	2 590 mm
	700 mm	12 500 kg	2 690 mm
Pad	500 mm	11 900 kg	2 490 mm

Components Weight

	Weight
Counterweight	4 300 kg
Monoblock boom (with arm cylinder and boom cylinder)	1 320 kg
Sliding Arm (with bucket cylinder, A-rink and B-rink)	1 290 kg
Bucket 0.36 m ³	345 kg

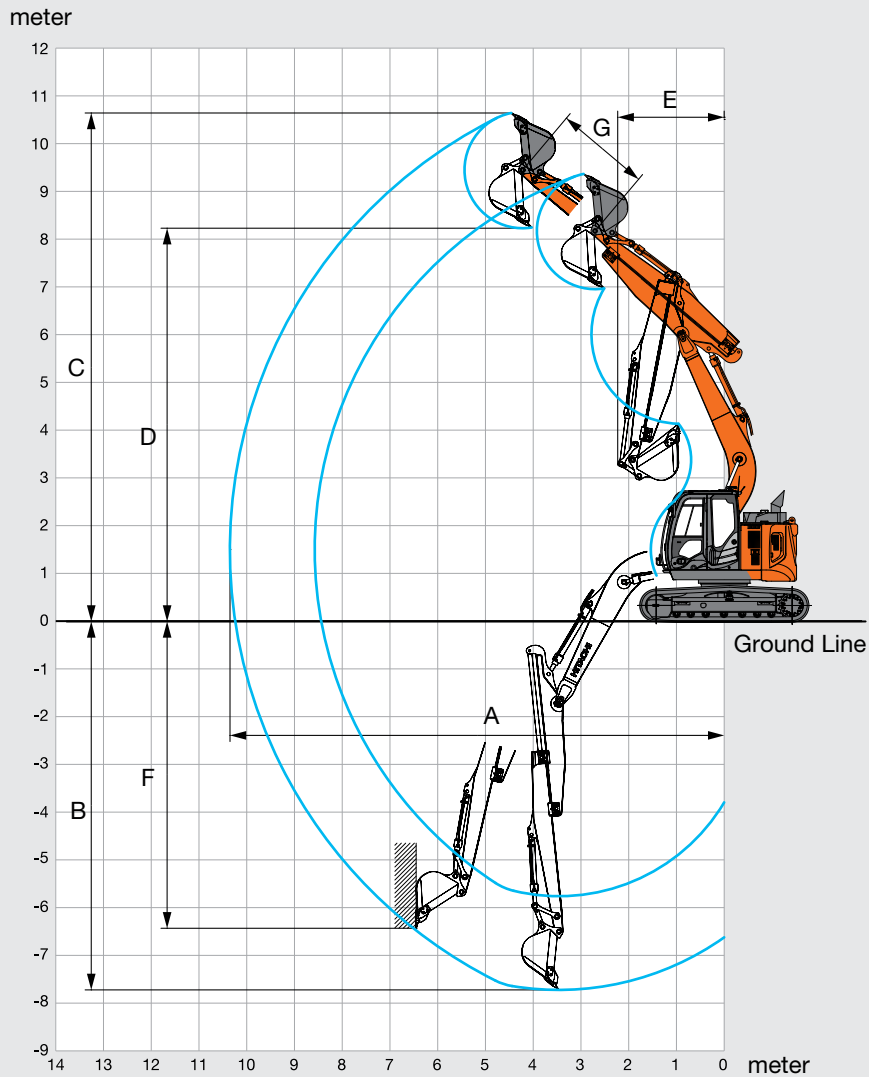
BUCKET AND ARM DIGGING FORCE

		ZAXIS 135US	
Arm length	2.84 m (Sliding minimum)	4.84 m (Sliding maximum)	
Bucket digging force ISO	99 kN		
Bucket digging force SAE : PCSA	86 kN		
Arm crowd force ISO	61 kN	40 kN	
Arm crowd force SAE : PCSA	59 kN	39 kN	

Sliding arm can not be used at power boost.

SPECIFICATIONS

WORKING RANGES: MONOBLOCK BOOM

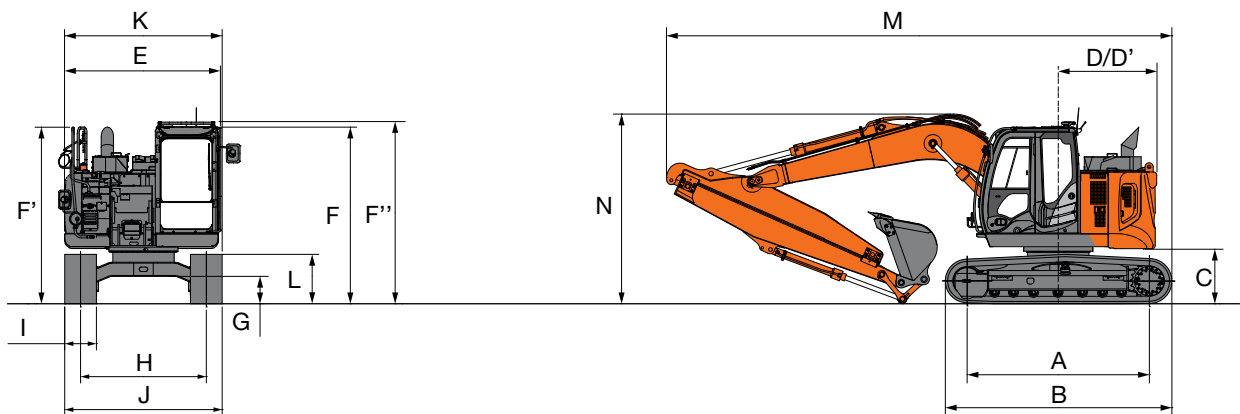


Unit: mm

	ZAXIS 135US
	Monoblock boom
Arm length	4.84 m (Sliding maximum)
A Max. digging reach	10 450
B Max. digging depth	7 790
C Max. cutting height	10 750
D Max. dumping height	8 310
E Min. swing radius	2 250
F Max. vertical wall digging depth	6 490
G Slide stroke	2 000

Excluding track shoe lug

DIMENSIONS



Unit: mm

	ZAXIS 135US
A Distance between tumblers	2 880
B Undercarriage length	3 580
* C Counterweight clearance	840
D Rear-end swing radius	1 490
D' Rear-end length	1 490
E Overall width of upperstructure	2 480
F Overall height of cab	2 790
F' Overall height of handrail	2 870
F'' Overall height of handrail (on cab)	2 870
* G Min. ground clearance	410
H Track gauge	1 990
I Track shoe width	500 (Grouser Shoe)
J Undercarriage width	2 490
K Overall width	2 490
* L Track height with triple grouser shoes	790
M Overall length	7 970
N Overall height of boom	2 990

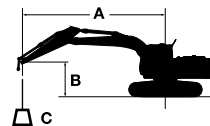
* Excluding track shoe lug

LIFTING 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.
6. Never attempt to carry out lifting operation with extending the sliding arm.

For lifting capacities, subtract bucket and quick hitch weight from lifting capacities.



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

ZAXIS 135US MONOBLOCK BOOM

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

Conditions	Load point height m	Load radius										At max. reach		
		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m				meter
Boom 4.60 m	6.0					*2 870	*2 870					*2 140	*2 140	5.86
Sliding arm 2.84 m (minimum reach)	4.5					*3 070	*3 070	*2 920	2 230			*1 990	1 750	6.78
Counterweight 4 300 kg	3.0			*5 070	*5 070	*3 730	3 400	*3 150	2 100			*1 970	1 470	7.27
Shoe 500 mm	1.5			*7 310	5 500	*4 550	3 010	3 040	1 930			*2 070	1 350	7.43
	0 (Ground)			*6 730	4 970	4 480	2 720	2 900	1 790			2 190	1 350	7.26
	-1.5			*7 770	4 900	4 360	2 620	2 840	1 740			2 420	1 490	6.76
	-3.0	*7 750	*7 750	*6 500	5 060	*4 400	2 680					*3 000	1 900	5.83
	-4.5			*3 830	*3 830									

EQUIPMENT

● : Standard equipment

○ : Optional equipment

ENGINE

Aftertreatment device	●
Air cleaner double filters	●
Alternator 50 A	●
Auto idle system	●
Auto shut-down control	●
Cartridge-type engine oil filter	●
Cartridge-type fuel main filter	●
Cold fuel resistance valve	○
DEF/AdBlue® tank inlet strainer and extension filler	●
DEF/AdBlue® tank with ISO magnet adapter	●
Dry-type air filter with evacuator valve (with air filter restriction indicator)	●
Dust-proof indoor net	●
ECO/PWR mode control	●
Electrical fuel feed pump	●
Engine oil drain coupler	●
Expansion tank	●
Fan guard	●
Fuel cooler	●
Fuel pre-filter with water separator	●
Isolation-mounted engine	●
Maintenance free pre-cleaner	○
Radiator, oil cooler and intercooler	●

HYDRAULIC SYSTEM

Auto power lift	●
Control valve with main relief valve	●
Extra port for control valve	●
Full-flow filter	●
High mesh full flow filter with restriction indicator	○
Hose rupture valve for arm	●
Hose rupture valve for boom	●
Pilot filter	●
Suction filter	●

CAB

All-weather sound suppressed steel cab	●
AM-FM radio	●
Ashtray	●
Auto control air conditioner	●
AUX terminal and storage	●
Cigarette lighter 24 V	●
CRES V (Center pillar reinforced structure) cab	●
Drink holder with hot & cool function	●
Electric double horn	●
Engine shut-off switch	●
Equipped with reinforced, tinted (green color) glass windows	●
Evacuation hammer	●
Floor mat	●
Footrest	●
Front window washer	●
Glove compartment	●
Hot & cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
Laminated round glass window	○
OPG front guard Level II (ISO10262) compliant cab	○
OPG top guard Level I (ISO10262) compliant cab	●
OPG top guard Level II (ISO10262) compliant cab	○
Pilot control shut-off lever	●
Power outlet 12 V	○
Rain guard	○
Retractable seat belt	●
ROPS (ISO12117-2) compliant cab	●
Rubber radio antenna	●
Seat : air suspension seat with heater	●
Seat adjustment part : backrest, armrest, height and angle, slide forward / back	●
Short wrist control levers	●
Sun visor (front window/side window)	○
Transparent roof with slide curtain	●
Windows on front, upper, lower and left side can be opened	●
2 speakers	●
4 fluid-filled elastic mounts	●

MONITOR SYSTEM

Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	●
Alarm buzzers: overheat, engine oil pressure, overload, SCR system trouble	●
Display of meters: water temperature, hour, fuel rate, clock, DEF/AdBlue® rate	●
Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc	●
Side view monitor	●
32 languages selection	●

LIGHTS

Additional boom light with cover	○
Additional cab roof front lights	○
Additional cab roof rear lights	○
Rotating lamp	○
2 working lights	●

UPPER STRUCTURE

Batteries 2 x 58 Ah	●
Battery disconnect switch	●
Body top handrail	●
Counterweight 4 300 kg	●
Electric fuel refilling pump with auto stop and filter	●
Fuel level float	●
Hydraulic oil level gauge	●
Lockable fuel refilling cap	●
Lockable machine covers	●
Lockable tool box	●
Platform handrail	●
Rear view camera	●
Rear view mirror (right & left side)	●
Side view camera	●
Skid-resistant plates and handrails	●
Swing parking brake	●
Undercover	●

UNDERCARRIAGE

Bolt-on sprocket	●
Reinforced track links with pin seals	●
Shoe: 500 mm triple grouser	●
Track undercover	○
Travel direction mark on track frame	●
Travel motor covers	●
Travel parking brake	●
Upper and lower rollers	●
1 track guard (each side) and hydraulic track adjuster	●
2 track guards (each side) and hydraulic track adjuster	○
4 tie down brackets	●

FRONT ATTACHMENTS

Casted bucket link A	●
Centralized lubrication system	●
Dirt seal on all bucket pins	●
Flanged pin	●
HN bushing	●
Reinforced resin thrust plate	●
WC (tungsten-carbide) thermal spraying	●
Welded bucket link A with welded hook	○

ATTACHMENTS

Sliding arm piping	●
Pilot accumulator	○

MISCELLANEOUS

Global e-Service	●
Onboard information controller	●
Standard tool kit	●

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 colour and features. Before use, read and understand the Operator's Manual for proper operation.

