

MATERIAL HANDLING MACHINE

ZAXIS 210LC/250LC/350LC/470LCH

A P P L I C A T I O N & A T T A C H M E N T

Model Code : ZX210LC-3
Engine Rated Power : 122 kW (164 HP)
Operating Weight : 23 000 - 25 000 kg

Model Code: ZX250LC-3
Engine Rated Power : 132 kW (177 HP)
Operating Weight : 26 100 - 28 100 kg

Model Code: ZX350LC-3
Engine Rated Power : 202 kW (271 HP)
Operating Weight : 35 600 - 38 600 kg

Model Code: ZX470LCH-3
Engine Rated Power : 260 kW (349 HP)
Operating Weight : 51 300 - 55 000 kg



The Hitachi Material-Handling Long Front Boosts Production and Widens Working Ranges

The Hitachi material-handling long front is built for higher job efficiency and goes green. An assortment of front attachments are available.

● Side mounted double-arm cylinder

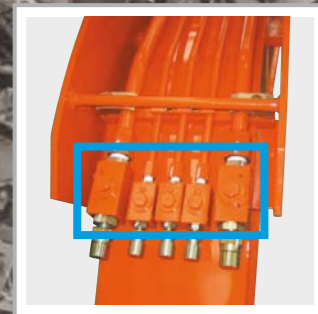
Help widen working ranges, and facilitate operation next to the machine.

● Arm-Top Pipping Guard

Protects the piping on the arm top.

● Stop Valves

Reduce oil flow-out during the replacement of the front attachment for cost-saving maintenance. Stop valves are built in the piping on the arm top.



● Work Lights

Help increase job efficiency in night shift. They are provided on left side of the boom, and on both sides of the arm.

● Under View Mirror

● Arm Cylinder Hose Rupture Valves

Prevent the free-fall of the arm even if the arm cylinder hose is ruptured.



● Additional Cab Roof Front Lights (Optional)

● High-Mount Cab

Gives higher visibility. Single linkage and fixed types are available.

● Heavier Counterweight

The counterweight is further weighted for higher stability.

● Environmentally Friendly Design

- The engine complies with the Emission Regulations: EU Stage III A and U.S. EPA Tier 3.
- Low noise design complies with the EU Noise Regulation 2000/14/EC Stage II.

● Pre Cleaner (Optional)

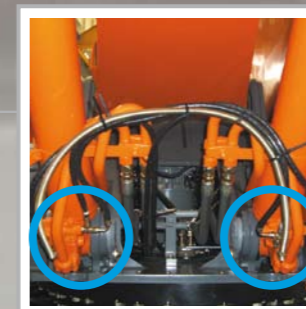
● Cab Front Window Guards (Upper / Lower)

Protect the cab front window from falling objects. The upper guard can be swung open for easy cleaning of the cab front window.



● Boom Cylinder Hose Rupture Valves

Prevent the free-fall of the boom even if the boom cylinder hose is ruptured.



Rear view camera

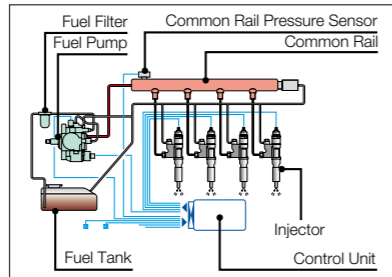
Note: Photos in this brochure may include optional equipment. They may also include custom-made options to meet specific user needs.

Boosted Productivity

A combination of the new hydraulic system and new engine allows the efficient use of hydraulic pressure to increase speeds of actuators and boost production with higher fuel efficiency.

Common Rail Type Fuel Injection System

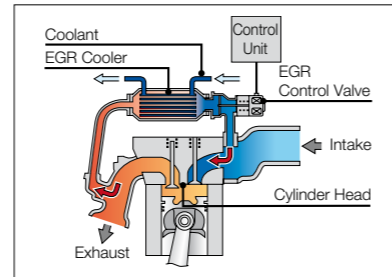
Electronic control common rail type fuel injection system drives an integrated fuel pump at an ultrahigh pressure to distribute fuel to each injector per cylinder through a common rail. This enables optimum combustion to generate big horsepower, and reduce PM* (diesel plume) and fuel consumption.



Cooled EGR** System

Exhaust gas is partially mixed with intake air to lower combustion temperature for reducing NOx and fuel consumption. What's more, the EGR cooler cools down exhaust gas to increase air concentration for complete combustion, reducing PM* (diesel plume).

*Particulate Matter
**Exhaust Gas Recirculation

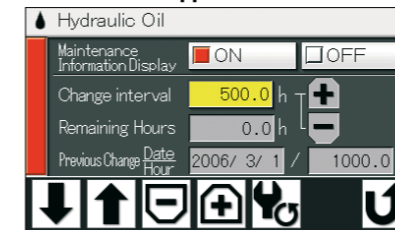


Embedded Information Technology

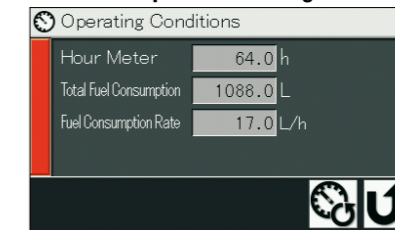
The ZAXIS-3 series is equipped with a widescreen color LCD monitor with adjustable contrast for day and night shifts. With the monitor the operator can check maintenance intervals, select work modes, monitor fuel consumption, and connect to the rear-view camera. A theft deterrent system and multi-12 languages selection are also available. The machine does the job in the digging mode.



Maintenance support



Fuel consumption monitoring



Multi-language selection



A New Standard in Operator Comfort



The ZAXIS-3 series cab has been redesigned to meet demands of customers. From the operator's seat the operator has an excellent view of the jobsite. On the widescreen color LCD monitor the operator can see machine conditions and with the rear view camera, what is behind the machine. Ample legroom, short stroke levers and a suspension seat with heating ensure optimum working conditions. The seat features horizontal, vertical adjustments and has a backrest contoured for comfort, with a HITACHI logo.

Full auto air conditioner/ AM/FM radio



Easy-to-control switches panel



Drink holder



Wide adjustable armrests and a retractable seat belt are included. Three switches on the lever (optional) can be set to operate attachments other than buckets. The cab is pressurized to keep out dust. Noise and vibrations are kept to a minimum due to the elastic mounts, filled with silicone oil, the cab rests on. Visibility is improved especially for the right downward view. A flat floor allows for easy cleaning. Ergonomic controls and switches, fully automatic air conditioner and a radio complete the package.

Drink holder / Hot & cool box



Personal storage space



Generous storage space box



Additional Features

Cab right protection bars



Evacuation hammer



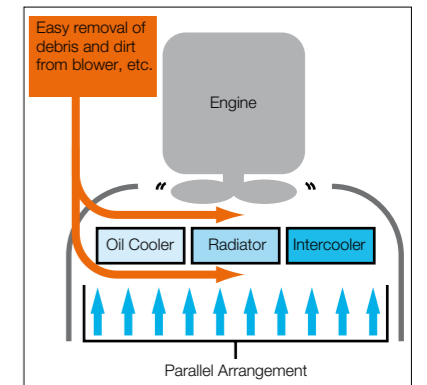
Pilot control shut-off lever



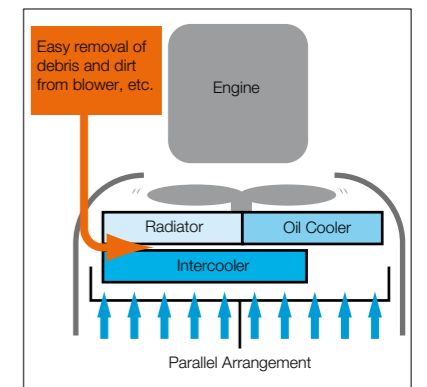
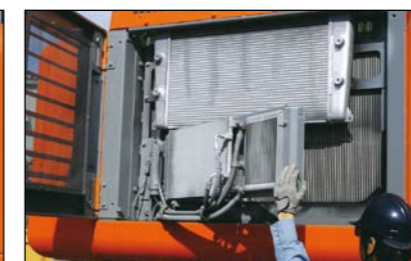
Simplified Maintenance

The ZAXIS-3 series meet customer demands for simplified maintenance. Regular maintenance is the key for keeping equipment in top condition, which can help to prevent costly downtime. In addition, a regularly serviced machine has higher residual value. There are many service features to be found on the ZAXIS-3 series.

ZX210LC-3 / 250LC-3 / 350LC-3



ZX470LCH-3



The oil cooler, radiator and intercooler (except for ZX470LCH-3) are laid out in a parallel arrangement, instead of the conventional in-line arrangement. This parallel arrangement is significantly easier to clean around the radiator. The air conditioner condenser can be opened for easy cleaning of the condenser and the radiator located behind.

SPECIFICATIONS

ZX210LC-3

ENGINE

Model.....	Isuzu AI-4HK1X
Type.....	4-cycle water-cooled, direct injection
Aspiration.....	Turbocharged, intercooled
No. of cylinders.....	4
Rated power	
ISO 9249, net	122 kW (164 HP) at 2 000 min ⁻¹ (rpm)
EEC 80/1269, net.....	122 kW (164 HP) at 2 000 min ⁻¹ (rpm)
SAE J1349, net	122 kW (164 HP) at 2 000 min ⁻¹ (rpm)
Maximum torque.....	655 N·m (67 kgf·m) at 1 500 min ⁻¹ (rpm)
Piston displacement.....	5.193 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 88 Ah

HYDRAULIC SYSTEM

- Work mode selector
 - Digging mode / Attachment mode
- Hydraulic control
 - Engine speed sensing system

Main pumps.....	2 variable displacement axial piston pumps
Maximum oil flow ..	2 x 212 L/min
Additional pump.....	1 gear pump
Maximum oil flow ..	30 L/min
Pilot pump.....	1 gear pump
Maximum oil flow ..	30 L/min

Hydraulic Motors

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

Relief Valve Settings

Implement circuit	34.3 MPa (350 kgf/cm ²)
Swing circuit	34.3 MPa (350 kgf/cm ²)
Travel circuit.....	34.3 MPa (350 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	36.3 MPa (370 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. Hitachi's original shockless valve.

Implement levers..... 2

Travel levers with pedals 2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. 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, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed..... 13.3 min⁻¹ (rpm)

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for good visibility. Openable front windows (upper and lower). Reclining seat with armrests; adjustable with or without control levers.
* International Standardization Organization

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 rollers	2
Lower rollers	8
Track shoes	49
Track guard.....	1

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.

Automatic transmission system: High-Low.

Travel speeds.....	High : 0 to 5.5 km/h
	Low : 0 to 3.5 km/h

Maximum traction force..... 203 kN (20 710 kgf)

Gradeability..... 18% (10 degree) continuous

WEIGHTS AND GROUND PRESSURE

ZX210LC-3:

Equipped with 6.50 m boom, 4.95 m arm and 600 mm triple grouser shoe.

Cab type	Height	Step type	Operating weight	Ground pressure
Standard	–	–	23 000 kg	48.0 kPa (0.49 kgf/cm ²)
Fixed	1.0 m	Ladder	23 800 kg	49.0 kPa (0.50 kgf/cm ²)
	1.5 m	Stair	24 100 kg	50.0 kPa (0.51 kgf/cm ²)
	2.0 m	Stair	24 300 kg	50.0 kPa (0.51 kgf/cm ²)
Linkage	2.5 m	–	25 000 kg	52.0 kPa (0.53 kgf/cm ²)

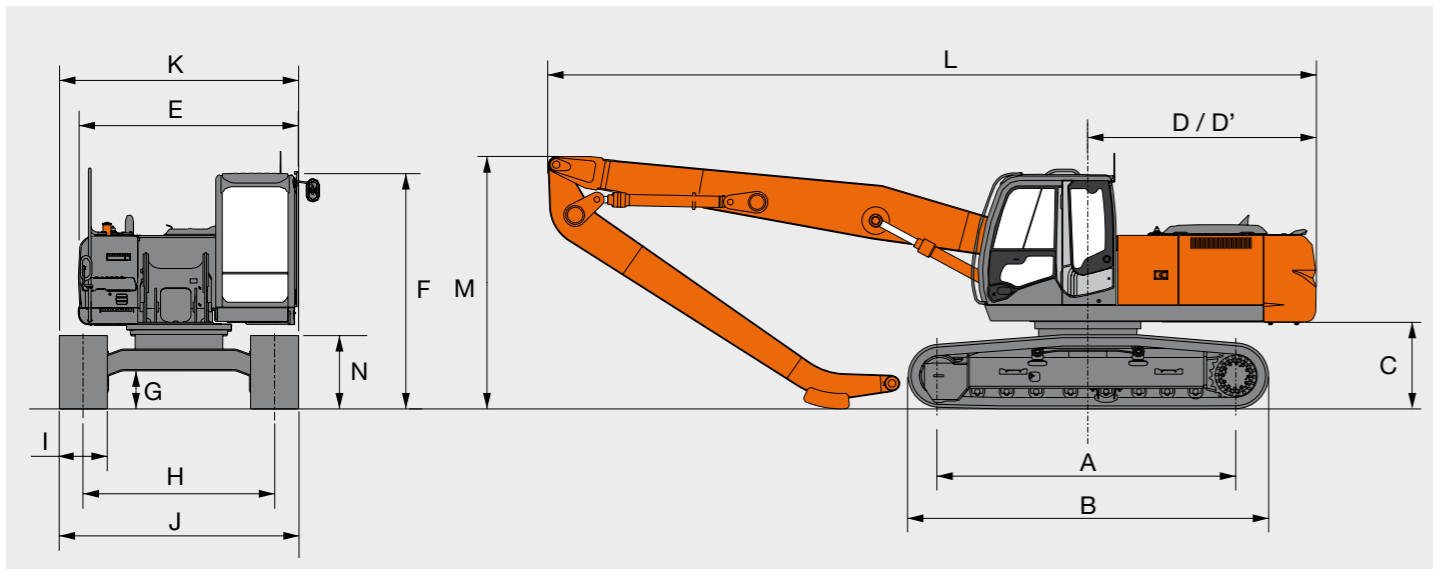
SERVICE REFILL CAPACITIES

Fuel tank	400.0 L
Engine coolant	26.0 L
Engine oil	23.0 L
Swing device	6.2 L
Travel device	6.8 L
(each side)	
Hydraulic system	240.0 L
Hydraulic oil tank	135.0 L

DIMENSIONS

ZX210LC-3

STANDARD CAB

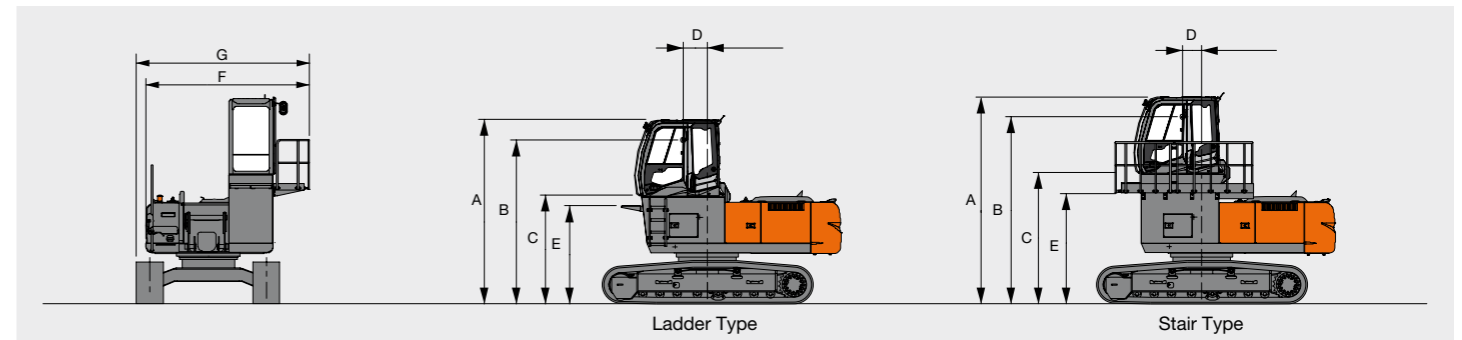


Unit: mm

	ZX210LC-3
A Distance between tumblers	3 660
B Undercarriage length	4 470
* C Counterweight clearance	1 030
D Rear-end swing radius	2 750
D' Rear-end length	2 750
E Overall width of upperstructure	2 710
F Overall height of cab	2 950
* G Min. ground clearance	450
H Track gauge	2 390
I Track shoe width with triple grouser shoes	600
J Undercarriage width	2 990
K Overall width	2 990
L Overall length	9 520 (with 6.50 m boom, 4.95 m arm)
M Overall height of boom	3 270 (with 6.50 m boom, 4.95 m arm)
N Track height with triple grouser shoes	920

*Excluding track shoe lug.

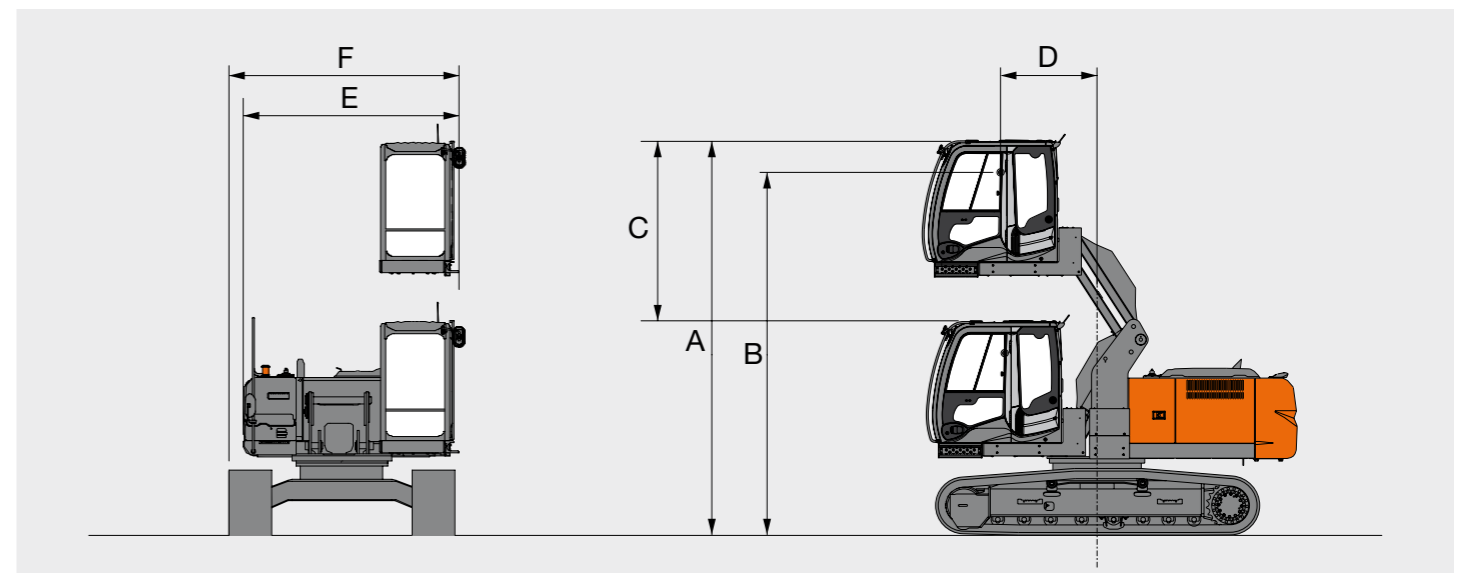
FIXED CAB



Unit: mm

	ZX210LC-3		
	1.0 m	1.5 m	2.0 m
Height	Ladder Type		Stair Type
A Overall height of cab	3 950	4 490	4 990
B Operator's view point	3 530	4 030	4 530
C Floor height	2 330	2 830	3 330
D Operator's view between swing center	480	370	370
E Step height	2 090	2 470	2 470
F Overall width of upperstructure	2 890	3 480	
G Overall width	3 130	3 720	

LINKAGE CAB



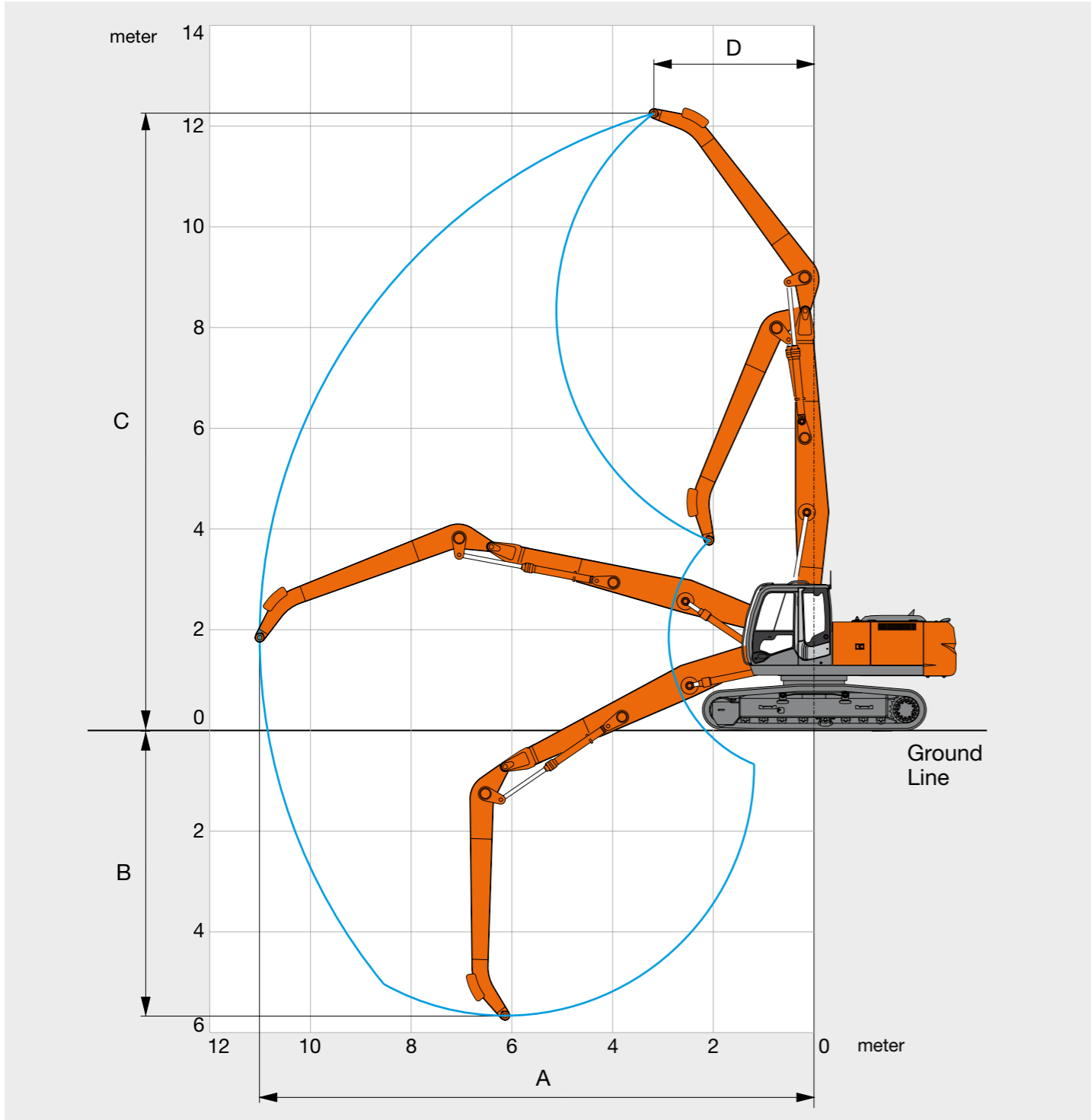
Unit: mm

	ZX210LC-3
A Overall height of cab	2 950 to 5 450
B Operator's view point	2 500 to 5 000
C Lift stroke	2 500
D Operator's view between swing center	1 270 to 1 330
E Overall width upperstructure (Including step)	2 820
F Overall width (Including step)	3 060

WORKING RANGES

ZX210LC-3

WORKING RANGES

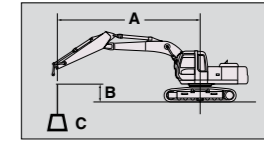


Unit: mm

	ZX210LC-3
Boom length	6.50 m
Arm length	4.95 m
A Max. working reach (arm point)	11 000
B Max. working depth (arm point)	5 680
C Max. working height (arm point)	12 280
D Min. swing radius at max. height (arm point)	3 190

LIFTING CAPACITIES

1. Ratings are based on ISO 10567.
2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of 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

ZX210LC-3

Rating over-front

Rating over-side or 360 degrees

Unit: 1 000kg

Conditions	Load point height	Load radius																At max. reach						
		3 m		4 m		5 m		6 m		7 m		8 m		9 m		10 m		11 m		Rating over-front	Rating over-side or 360 degrees	Meters		
Boom: 6.50 m Arm: 4.95 m Counterweight: 6 300 kg Shoe: 600 mm	11 m					*4.2	*4.2														*3.1	*3.1	6.0	
	10 m					*5.0	*5.0	*4.3	*4.3	*3.3	*3.3											*2.8	*2.8	7.3
	9 m							*4.8	*4.8	*4.3	*4.3	*3.1	*3.1									*2.6	*2.6	8.3
	8 m							*4.7	*4.7	*4.5	*4.5	*4.1	*4.1	*2.7	*2.7							*2.5	*2.5	9.1
	7 m					*5.1	*5.1	*4.8	*4.8	*4.5	*4.5	*4.3	4.1	*3.7	3.4							*2.4	*2.4	9.7
	6 m					*5.4	*5.4	*5.0	*5.0	*4.7	*4.7	*4.4	4.1	*4.1	3.4	*2.8	2.8					*2.4	*2.4	10.2
	5 m				*6.6	*6.6	*5.9	*5.9	*5.3	*5.3	*4.9	*4.9	*4.5	4.0	*4.2	3.3	*3.6	2.8				*2.4	*2.4	10.6
	4 m	*9.4	*9.4	*7.7	*7.7	*6.5	*6.5	*5.7	*5.7	*5.1	4.8	*4.7	3.9	*4.3	3.3	*4.0	2.8					*2.4	2.4	10.8
	3 m	*11.8	*11.8	*8.9	*8.9	*7.2	*7.2	*6.2	5.8	*5.4	4.6	*4.8	3.8	*4.4	3.2	*4.0	2.7					*2.5	2.3	11.0
	2 m	*6.3	*6.3	*10.0	*10.0	*7.9	7.2	*6.6	5.6	*5.7	4.5	*5.0	3.7	*4.5	3.1	4.0	2.7	*2.7	2.3			*2.6	2.3	11.0
	1 m	*3.1	*3.1	*8.6	*8.6	*8.3	6.9	*6.8	5.4	*5.8	4.3	*5.1	3.6	*4.5	3.0	3.9	2.6					*2.7	2.3	11.0
0 m	*2.8	*2.8	*5.6	*5.6	*8.5	6.6	*7.0	5.2	*5.9	4.2	*5.1	3.5	*4.5	3.0	3.9	2.6					*2.8	2.3	10.9	
-1 m	*3.0	*3.0	*4.9	*4.9	*8.4	6.5	*6.9	5.0	*5.9	4.1	*5.0	3.4	*4.4	2.9	*3.7	2.5					*3.0	2.3	10.7	
-2 m	*3.3	*3.3	*4.8	*4.8	*8.0	6.4	*6.7	5.0	*5.6	4.0	*4.8	3.4	*4.1	2.9	*3.4	2.5					*3.2	2.4	10.3	
-3 m	*3.6	*3.6	*5.0	*5.0	*7.4	6.4	*6.2	4.9	*5.2	4.0	*4.5	3.4	*3.7	2.9							*3.0	2.6	9.9	
-4 m	*3.9	*3.9	*5.3	*5.3	*6.5	6.4	*5.5	5.0	*4.6	4.0	*3.9	3.4	*3.1	2.9							*2.8	*2.8	9.3	
-5 m			*5.8	*5.8	*5.2	*5.2	*4.5	*4.5	*3.8	*3.8	*3.0	*3.0									*2.4	*2.4	8.6	

EQUIPMENT

ZX210LC-3

STANDARD EQUIPMENT

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

ENGINE	CAB	MONITOR SYSTEM	UNDERCARRIAGE
<ul style="list-style-type: none"> - H/P mode control - E mode control - 50 A alternator - Dry-type air filter with evacuator valve (with air filter restriction switch for monitor) - Cartridge-type engine oil filter - Cartridge-type fuel double filters - Air cleaner double filters - Radiator, oil cooler and intercooler with dust protective net - Radiator reserve tank - Fan guard - Isolation-mounted engine - Auto-idle system - Fuel cooler - Electrical fuel feed pump - Engine oil drain coupler 	<ul style="list-style-type: none"> - CRES II (Center pillar reinforced structure) cab - OPG top guard fitted Level I (ISO10262) compliant cab - All-weather sound suppressed steel cab - Equipped with reinforced, tinted (green color) glass windows - Upper front window can be opened - 4 fluid-filled elastic mounts - Intermittent windshield wipers - Front window washer - Adjustable reclining seat with adjustable armrests - Footrest - Electric double horn - AM-FM radio with digital clock - Auto control air conditioner - Retractable seat belt - Drink holder - Cigarette lighter - Ashtray - Storage box - Glove compartment - Floor mat - Short wrist control levers - Pilot control shut-off lever - Engine shut-off switch - Alarm: Overload warning device - Front window lower guard - Front window upper guard 	<ul style="list-style-type: none"> - Display of meters: water temperature, hour, fuel rate, clock - Other displays: work mode, auto-idle, glow, rearview monitor (when optional rear view camera is equipped), operating conditions, etc - Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc - Alarm buzzers: overheat, engine oil pressure, overload 	<ul style="list-style-type: none"> - Travel parking brake - Travel motor covers - 1 track guard (each side) and hydraulic track adjuster - Bolt-on sprocket - Upper and lower rollers - Reinforced track links with pin seals - 4 tie down hooks - 600 mm triple grouser shoes
		LIGHTS	
		<ul style="list-style-type: none"> - 4 working lights Base machine x 1 Boom left side x 1 Arm x 2 (with covers) 	
		UPPERSTRUCTURE	
		<ul style="list-style-type: none"> - Undercover - 6 300 kg counterweight - Fuel level float - Hydraulic oil level gauge - Tool box - Utility space - Rear view mirror (right & left side) - Swing parking brake - Electric fuel refilling pump with auto stop - Rear view camera - 150 Ah batteries 	
		FRONT ATTACHMENTS	
		<ul style="list-style-type: none"> - HN bushing - Reinforced resin thrust plate - Flanged pin - Centralized lubrication system - Dirt seal on all bucket pins - 6.50 m boom and 4.95 m arm - Arm top piping stop valve - Arm top piping guard 	
		MISCELLANEOUS	
		<ul style="list-style-type: none"> - Standard tool kit - Lockable machine covers - Lockable fuel refilling cap - Skid-resistant tapes, plates and handrails - Travel direction mark on track frame - Onboard information controller - Theft deterrent system 	

OPTIONAL EQUIPMENT

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

CAB	UNDERCARRIAGE	OTHERS
<ul style="list-style-type: none"> - Laminated round glass window - FOPS guard - Air suspension seat with heater - Rain guard - Sun visor - 12 V power source 	<ul style="list-style-type: none"> - 2 track guards - Track undercover 	<ul style="list-style-type: none"> - Fixed cab - Linkage cab (With under view mirror) - Alarm: Swing motion alarm device with lamps, Travel motion alarm device
	ATTACHMENTS	
	<ul style="list-style-type: none"> - Pilot accumulator - High mesh full flow filter with restriction indicator 	
LIGHTS		
<ul style="list-style-type: none"> - Additional cab roof front lights - Additional cab roof rear light - Boom right side light with cover 		

SPECIFICATIONS

ZX250LC-3

ENGINE

Model.....	Isuzu AH-4HK1X
Type	4-cycle water-cooled, direct injection
Aspiration.....	Turbocharged, intercooled
No. of cylinders	4
Rated power	
ISO 9249, net	132 kW (177 HP) at 2 000 min ⁻¹ (rpm)
ECC 80/1269, net	132 kW (177 HP) at 2 000 min ⁻¹ (rpm)
SAE J1349, net	132 kW (177 HP) at 2 000 min ⁻¹ (rpm)
Maximum torque.....	673 N·m (69 kgf·m) at 1 500 min ⁻¹ (rpm)
Piston displacement.....	5.193 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 88 Ah

HYDRAULIC SYSTEM

- Work mode selector
 - Digging mode / Attachment mode
- Hydraulic control
 - Engine speed sensing system

Main pumps.....	2 variable displacement axial piston pumps
Maximum oil flow ..	2 x 224 L/min
Additional pump.....	1 gear pump
Maximum oil flow ..	34 L/min
Pilot pump.....	1 gear pump
Maximum oil flow ..	34 L/min

Hydraulic Motors

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

Relief Valve Settings

Implement circuit	34.3 MPa (350 kgf/cm ²)
Swing circuit	32.4 MPa (330 kgf/cm ²)
Travel circuit.....	34.3 MPa (350 kgf/cm ²)
Pilot circuit	3.9 MPa (40 kgf/cm ²)
Power boost	36.3 MPa (370 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls.	Hitachi's original shockless valve.
Implement levers.....	2
Travel levers with pedals	2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. 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, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed..... 13.5 min⁻¹ (rpm)

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for good visibility. Openable front windows (upper and lower). Reclining seat with armrests; adjustable with or without control levers.

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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 rollers	2
Lower rollers	9
Track shoes	51
Track guard.....	1

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable.

Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel.

Automatic transmission system: High-Low.

Travel speeds.....	High : 0 to 5.5 km/h
	Low : 0 to 3.4 km/h

Maximum traction force

222 kN (22 650 kgf)

Gradeability..... 18% (10 degree) continuous

WEIGHTS AND GROUND PRESSURE

ZX250LC-3:

Equipped with 7.00 m boom, 6.00 m arm and 600 mm triple grouser shoe.

Cab type	Height	Step type	Operating weight	Ground pressure
Standard	–	–	26 100 kg	52.0 kPa (0.53 kgf/cm ²)
Fixed	1.0 m	Ladder	26 900 kg	54.0 kPa (0.55 kgf/cm ²)
	1.5 m	Stair	27 200 kg	54.0 kPa (0.55 kgf/cm ²)
	2.0 m	Stair	27 400 kg	55.0 kPa (0.56 kgf/cm ²)
Linkage	2.5 m	–	28 100 kg	56.0 kPa (0.57 kgf/cm ²)

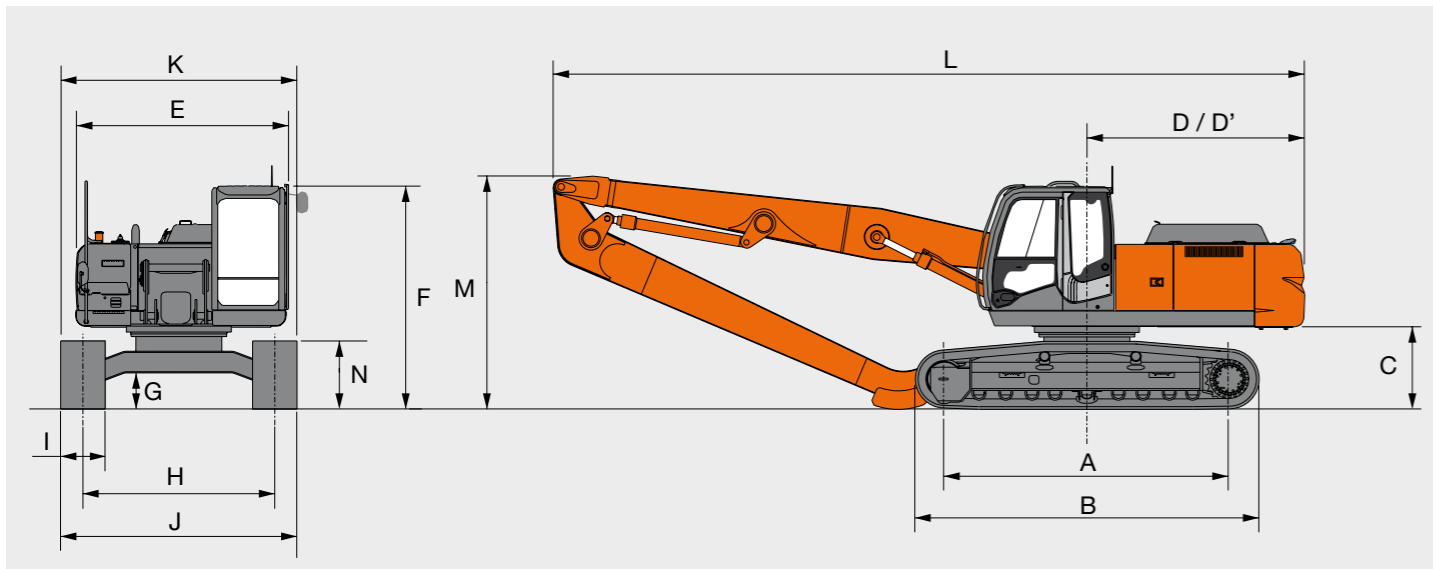
SERVICE REFILL CAPACITIES

Fuel tank	500.0 L
Engine coolant	26.0 L
Engine oil	23.0 L
Swing device	9.1 L
Travel device	7.8 L
(each side)	
Hydraulic system	280.0 L
Hydraulic oil tank	156.0 L

DIMENSIONS

ZX250LC-3

STANDARD CAB

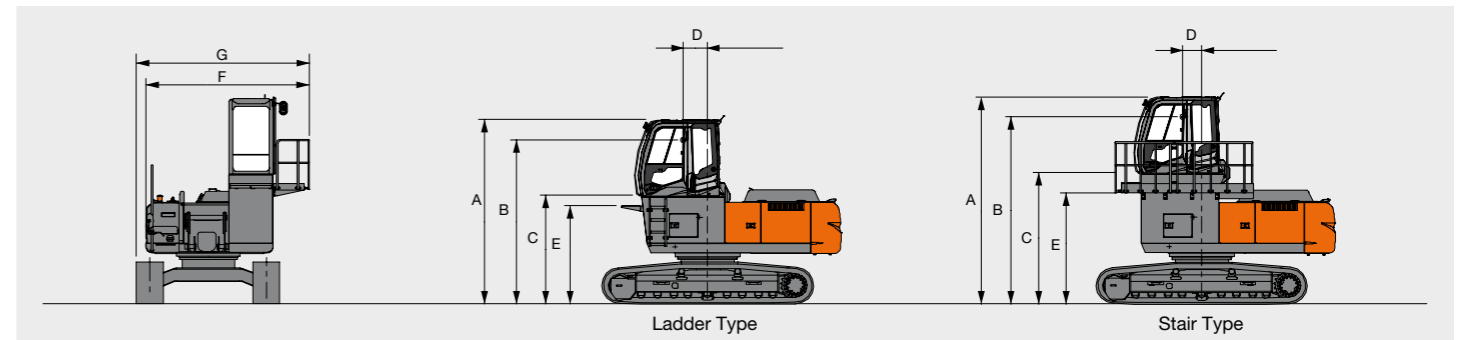


Unit: mm

	ZX250LC-3
A Distance between tumblers	3 845
B Undercarriage length	4 640
* C Counterweight clearance	1 090
D Rear-end swing radius	2 940
D' Rear-end length	2 940
E Overall width of upperstructure	2 890
F Overall height of cab	3 010
* G Min. ground clearance	460
H Track gauge	2 590
I Track shoe width with triple grouser shoes	600
J Undercarriage width	3 190
K Overall width	3 190
L Overall length	10 400 (with 7.00 m boom, 6.00 m arm)
M Overall height of boom	3 400 (with 7.00 m boom, 6.00 m arm)
N Track height with triple grouser shoes	920

*Excluding track shoe lug.

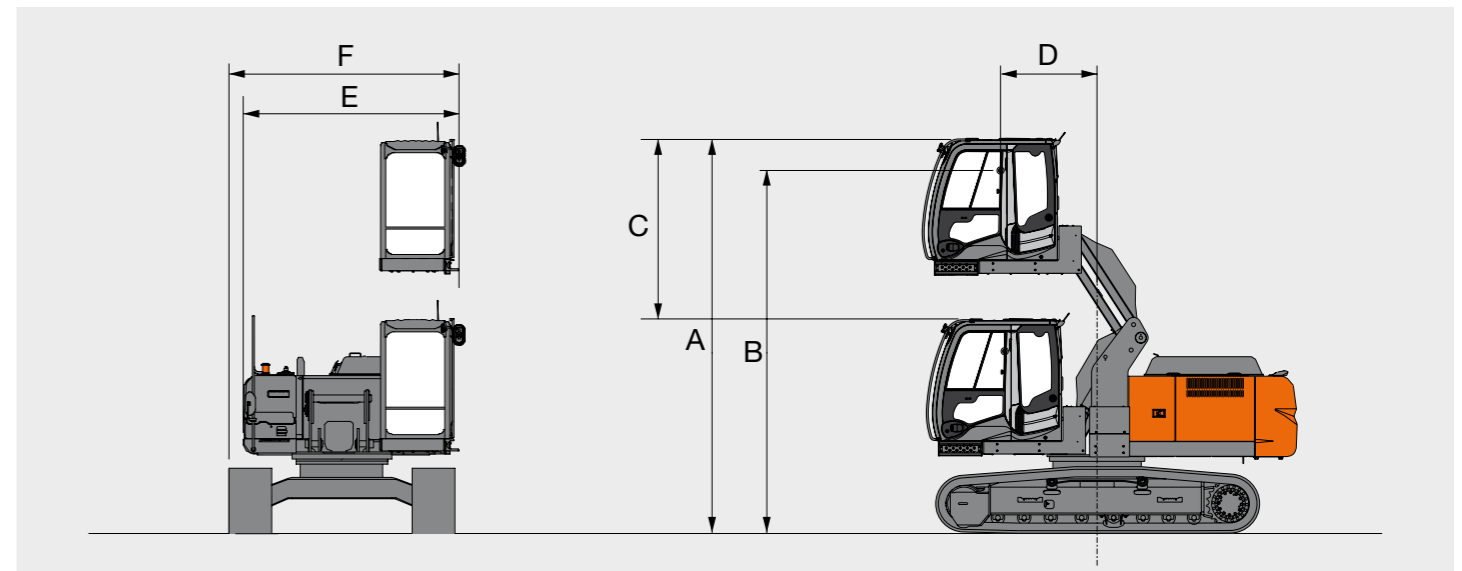
FIXED CAB



Unit: mm

Height Step Type	ZX250LC-3		
	1.0 m Ladder Type	1.5 m Stair Type	2.0 m
A Overall height of cab	4 010	4 510	5 010
B Operator's view point	3 600	4 100	4 600
C Floor height	2 360	2 860	3 360
D Operator's view between swing center	530	420	420
E Step height	2 160	2 560	2 560
F Overall width of upperstructure	3 060	3 650	
G Overall width	3 260	3 850	

LINKAGE CAB



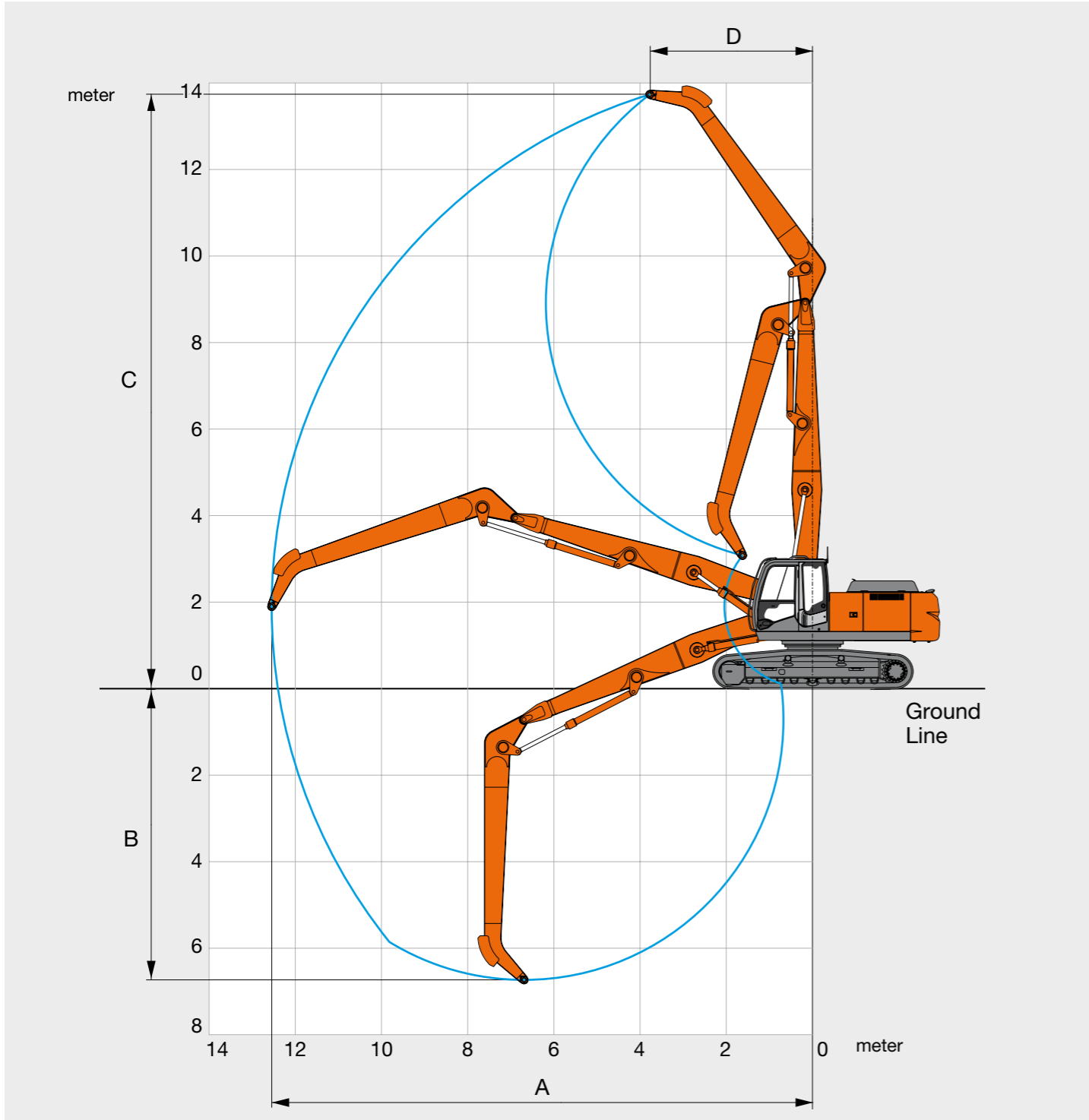
Unit: mm

	ZX250LC-3
A Overall height of cab	3 010 to 5 510
B Operator's view point	2 570 to 5 070
C Lift stroke	2 500
D Operator's view between swing center	1 320 to 1 380
E Overall width upperstructure (Including step)	3 040
F Overall width (Including step)	3 240

WORKING RANGES

ZX250LC-3

WORKING RANGES

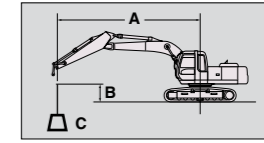


Unit: mm

	ZX250LC-3
Boom length	7.00 m
Arm length	6.00 m
A Max. working reach (arm point)	12 500
B Max. working depth (arm point)	6 700
C Max. working height (arm point)	13 710
D Min. swing radius at max. height (arm point)	3 770

LIFTING CAPACITIES

- Notes: 1. Ratings are based on ISO 10567.
- 2. Lifting capacity of the ZAXIS Series does not exceed 75% of tipping load with the machine on firm, level ground or 87% of 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

ZX250LC-3

Rating over-front

Rating over-side or 360 degrees

Unit: 1 000kg

Conditions	Load point height	Load radius												At max. reach															
		3 m		4 m		5 m		6 m		7 m		8 m		9 m		10 m		11 m		12 m									
																								Meters					
Boom: 7.00 m Arm: 6.00 m Counterweight: 7 900 kg Shoe: 600 mm	13 m					*3.9	*3.9																	*3.3	*3.3	5.6			
	12 m							*4.0	*4.0	*3.1	*3.1														*2.8	*2.8	7.3		
	11 m							*4.6	*4.6	*4.0	*4.0	*3.1	*3.1												*2.5	*2.5	8.5		
	10 m									*4.5	*4.5	*3.9	*3.9	*3.0	*3.0										*2.3	*2.3	9.5		
	9 m										*4.5	*4.5	*4.3	*4.3	*3.7	*3.7	*2.6	*2.6								*2.2	*2.2	10.3	
	8 m											*4.5	*4.5	*4.3	*4.3	*4.1	*4.1	*3.4	*3.4								*2.1	*2.1	10.9
	7 m								*4.9	*4.9	*4.6	*4.6	*4.4	*4.4	*4.2	*4.2	*4.0	3.8	*2.8	*2.8							*2.1	*2.1	11.4
	6 m								*5.1	*5.1	*4.8	*4.8	*4.5	*4.5	*4.3	*4.3	*4.0	3.7	*3.4	3.1							*2.1	*2.1	11.8
	5 m					*6.0	*6.0	*5.5	*5.5	*5.1	*5.1	*4.7	*4.7	*4.4	4.4	4.1	3.7	*3.8	3.1	*2.3	*2.3						*2.1	*2.1	12.1
	4 m			*7.9	*7.9	*6.8	*6.8	*6.0	*6.0	*5.4	*5.4	*4.9	*4.9	*4.5	4.3	*4.2	3.6	*3.9	3.0	*2.8	2.6						*2.1	*2.1	12.3
	3 m	*12.1	*12.1	*9.3	*9.3	*7.6	*7.6	*6.5	*6.5	*5.8	*5.8	*5.1	5.0	*4.7	4.1	*4.3	3.5	*3.9	3.0	*3.1	2.6						*2.1	*2.1	12.5
	2 m	*14.8	*14.8	*10.7	*10.7	*8.5	*8.5	*7.1	*7.1	*6.1	5.8	*5.4	4.8	*4.8	4.0	*4.3	3.4	*4.0	2.9	*3.3	2.5						*2.2	*2.2	12.5
	1 m	*3.8	*3.8	*11.8	*11.8	*9.1	9.1	*7.5	7.0	*6.4	5.6	*5.5	4.6	*4.9	3.9	*4.4	3.3	*4.0	2.8	*3.4	2.5						*2.3	*2.3	12.5
0 m	*2.8	*2.8	*6.1	*6.1	*9.5	8.7	*7.8	6.7	*6.6	5.4	*5.7	4.4	*5.0	3.8	*4.4	3.2	*3.9	2.8	*3.4	2.4						*2.4	*2.3	12.4	
-1 m	*2.8	*2.8	*4.9	*4.9	*9.6	8.3	*7.8	6.5	*6.6	5.2	*5.7	4.3	*5.0	3.7	*4.3	3.1	*3.8	2.7	*3.0	2.4						*2.5	2.4	12.2	
-2 m	*3.0	*3.0	*4.6	*4.6	*7.9	*7.9	*7.7	6.3	*6.5	5.1	*5.6	4.2	*4.8	3.6	*4.2	3.1	*3.6	2.7								*2.7	2.4	11.9	
-3 m	*3.2	*3.2	*4.6	*4.6	*7.3	*7.3	*7.4	6.2	*6.2	5.0	*5.3	4.2	*4.6	3.6	*3.9	3.1	*3.3	2.7								*2.9	2.6	11.5	
-4 m	*3.5	*3.5	*4.8	*4.8	*7.2	*7.2	*6.8	6.2	*5.8	5.0	*4.9	4.2	*4.2	3.5	*3.5	3.1	*2.7	2.7								*2.7	*2.7	11.0	
-5 m	*3.8	*3.8	*5.1	*5.1	*7.1	*7.1	*6.0	*6.0	*5.1	5.0	*4.3	4.2	*3.6	3.6	*2.8	*2.8										*2.5	*2.5	10.4	
-6 m			*5.5	*5.5	*5.7	*5.7	*4.9	*4.9	*4.2	*4.2	*3.5	*3.5	*2.7	*2.7															

EQUIPMENT

ZX250LC-3

STANDARD EQUIPMENT

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

ENGINE	CAB	MONITOR SYSTEM	UNDERCARRIAGE
<ul style="list-style-type: none"> - H/P mode control - E mode control - 50 A alternator - Dry-type air filter with evacuator valve (with air filter restriction switch for monitor) - Cartridge-type engine oil filter - Cartridge-type fuel double filters - Air cleaner double filters - Radiator, oil cooler and intercooler with dust protective net - Radiator reserve tank - Fan guard - Isolation-mounted engine - Auto-idle system - Fuel cooler - Electrical fuel feed pump - Engine oil drain coupler 	<ul style="list-style-type: none"> - CRES II (Center pillar reinforced structure) cab - OPG top guard fitted Level I (ISO10262) compliant cab - All-weather sound suppressed steel cab - Equipped with reinforced, tinted (green color) glass windows - Upper front window can be opened - 4 fluid-filled elastic mounts - Intermittent windshield wipers - Front window washer - Adjustable reclining seat with adjustable armrests - Footrest - Electric double horn - AM-FM radio with digital clock - Auto control air conditioner - Retractable seat belt - Drink holder - Cigarette lighter - Ashtray - Storage box - Glove compartment - Floor mat - Short wrist control levers - Pilot control shut-off lever - Engine shut-off switch - Alarm: Overload warning device - Front window lower guard - Front window upper guard 	<ul style="list-style-type: none"> - Display of meters: water temperature, hour, fuel rate, clock - Other displays: work mode, auto-idle, glow, rearview monitor (when optional rear view camera is equipped), operating conditions, etc - Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc - Alarm buzzers: overheat, engine oil pressure, overload 	<ul style="list-style-type: none"> - Travel parking brake - Travel motor covers - 1 track guard (each side) and hydraulic track adjuster - Bolt-on sprocket - Upper and lower rollers - Reinforced track links with pin seals - 4 tie down hooks - 600 mm triple grouser shoes
		LIGHTS	
		<ul style="list-style-type: none"> - 4 working lights Base machine x 1 Boom left side x 1 Arm x 2 (with covers) 	
		UPPERSTRUCTURE	
		<ul style="list-style-type: none"> - Undercover - 7 900 kg counterweight - Fuel level float - Hydraulic oil level gauge - Tool box - Utility space - Rear view mirror (right & left side) - Swing parking brake - Electric fuel refilling pump with auto stop - Rear view camera - 150 Ah batteries 	
		FRONT ATTACHMENTS	
		<ul style="list-style-type: none"> - HN bushing - Reinforced resin thrust plate - Flanged pin - Centralized lubrication system - Dirt seal on all bucket pins - 7.00 m boom and 6.00 m arm - Arm top piping stop valve - Arm top piping guard 	
		MISCELLANEOUS	
		<ul style="list-style-type: none"> - Standard tool kit - Lockable machine covers - Lockable fuel refilling cap - Skid-resistant tapes, plates and handrails - Travel direction mark on track frame - Onboard information controller - Theft deterrent system 	

HYDRAULIC SYSTEM

- Work mode selector
- Power boost
- Auto power lift
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Swing dampener valve
- Additional pump
- Boom hose rupture valves
- Arm hose rupture valves
- Attachment basic piping
- Assist piping

OPTIONAL EQUIPMENT

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

CAB	UNDERCARRIAGE	OTHERS
<ul style="list-style-type: none"> - Laminated round glass window - FOPS guard - Air suspension seat with heater - Rain guard - Sun visor - 12 V power source 	<ul style="list-style-type: none"> - 2 track guards - Track undercover 	<ul style="list-style-type: none"> - Fixed cab - Linkage cab (With under view mirror) - Alarm: Swing motion alarm device with lamps, Travel motion alarm device
	ATTACHMENTS	
	<ul style="list-style-type: none"> - Pilot accumulator - High mesh full flow filter with restriction indicator 	
LIGHTS		
<ul style="list-style-type: none"> - Additional cab roof front lights - Additional cab roof rear light - Boom right side light with cover 		

SPECIFICATIONS

ZX350LC-3

ENGINE

Model.....	Isuzu AH-6HK1X
Type.....	4-cycle water-cooled, direct injection
Aspiration.....	Turbocharged, intercooled
No. of cylinders.....	6
Rated power	
ISO 9249, net	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
ECC 80/1269, net ...	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
SAE J1349, net	202 kW (271 HP) at 1 900 min ⁻¹ (rpm)
Maximum torque.....	1 080 N·m (110 kgf·m) at 1 500 min ⁻¹ (rpm)
Piston displacement.....	7.790 L
Bore and stroke	115 mm x 125 mm
Batteries	2 x 12 V / 128 Ah

HYDRAULIC SYSTEM

- Work mode selector
 - Digging mode / Attachment mode
- Hydraulic control
 - Engine speed sensing system

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow...	2 x 288 L/min
Additional pump.....	1 gear pump
Maximum oil flow ..	34 L/min
Pilot pump.....	1 gear pump
Maximum oil flow...	34 L/min

Hydraulic Motors

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

Relief Valve Settings

Implement circuit	34.3 MPa (350 kgf/cm ²)
Swing circuit.....	32.4 MPa (330 kgf/cm ²)
Travel circuit	34.3 MPa (350 kgf/cm ²)
Pilot circuit.....	3.9 MPa (40 kgf/cm ²)
Power boost.....	36.3 MPa (370 kgf/cm ²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls.	Hitachi's original shockless valve.
Implement levers.....	2
Travel levers with pedals	2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. 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, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed	10.7 min ⁻¹ (rpm)
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Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for good visibility. Openable front windows (upper and lower). Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

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 rollers	2
Lower rollers	8
Track shoes	48
Track guards	3

Travel Device

Each track driven by 2-speed axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable. Parking brake is spring-set/hydraulic-released disc type. Travel shockless relief valve built in travel motor absorbs shocks when stopping travel. Automatic transmission system: High-Low.

Travel speeds.....	High : 0 to 5.5 km/h
	Low : 0 to 3.2 km/h

Maximum traction force....	298 kN (29 200 kgf)
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Gradeability.....	18% (10 degree) continuous
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WEIGHTS AND GROUND PRESSURE

ZX350LC-3: Standard Track

Equipped with 8.50 m boom, 6.20 m arm and 600 mm triple grouser shoe.

Cab type	Height	Step type	Operating weight	Ground pressure
Standard	–	–	35 600 kg	67.0 kPa (0.68 kgf/cm ²)
Fixed	1.0 m	Ladder	36 400 kg	69.0 kPa (0.70 kgf/cm ²)
	1.5 m	Stair	36 700 kg	69.0 kPa (0.70 kgf/cm ²)
	2.0 m	Stair	36 900 kg	70.0 kPa (0.71 kgf/cm ²)
Linkage	2.5 m	–	37 600 kg	71.0 kPa (0.72 kgf/cm ²)

ZX350LC-3: Wide Track

Equipped with 8.50 m boom, 6.20 m arm and 600 mm triple grouser shoe.

Cab type	Height	Step type	Operating weight	Ground pressure
Standard	–	–	36 600 kg	69.0 kPa (0.70 kgf/cm ²)
Fixed	1.0 m	Ladder	37 400 kg	71.0 kPa (0.72 kgf/cm ²)
	1.5 m	Stair	37 700 kg	71.0 kPa (0.72 kgf/cm ²)
	2.0 m	Stair	37 900 kg	72.0 kPa (0.73 kgf/cm ²)
Linkage	2.5 m	–	38 600 kg	73.0 kPa (0.74 kgf/cm ²)

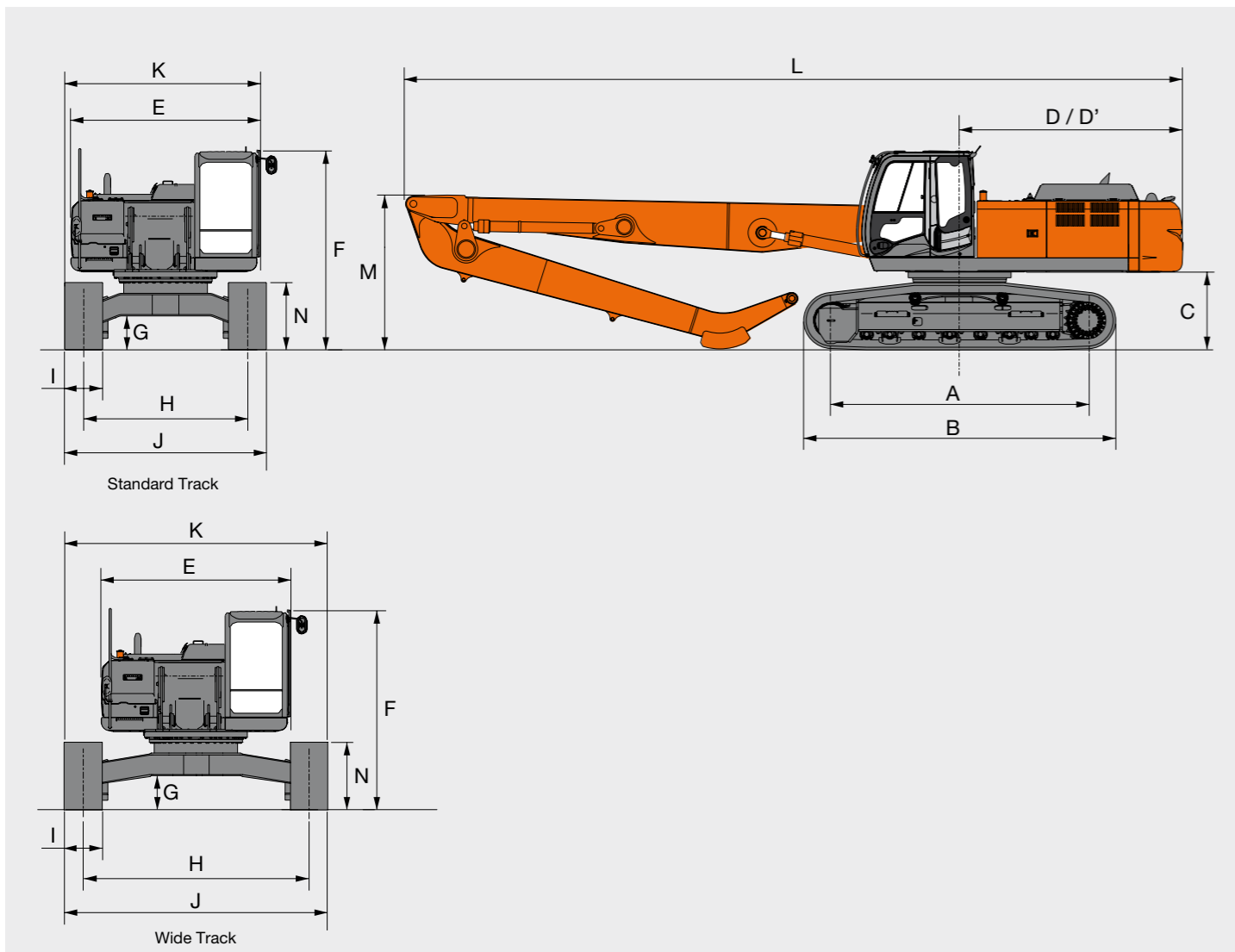
SERVICE REFILL CAPACITIES

Fuel tank	630.0 L
Engine coolant	32.0 L
Engine oil	41.0 L
Swing device	17.0 L
Travel device	9.2 L
(each side)	
Hydraulic system	374.0 L
Hydraulic oil tank	180.0 L

DIMENSIONS

ZX350LC-3

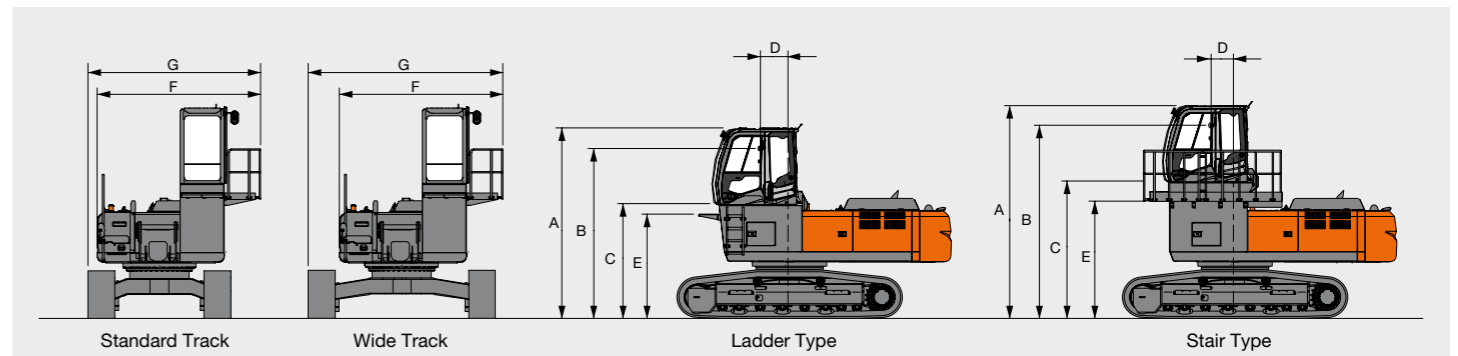
STANDARD CAB



	ZX350LC-3	
	Standard Track	Wide Track
A Distance between tumblers	4 050	
B Undercarriage length	4 940	
* C Counterweight clearance	1 160	
D Rear-end swing radius	3 540	
D' Rear-end length	3 520	
E Overall width of upperstructure	2 990	
F Overall height of cab	3 160	
* G Min. ground clearance	500	
H Track gauge	2 590	3 590
I Track shoe width with triple grouser shoes	600	
J Undercarriage width	3 190	4 190
K Overall width	3 190	4 190
L Overall length	12 340 (with 8.50 m boom, 6.20 m arm)	
M Overall height of boom	2 690 (with 8.50 m boom, 6.20 m arm)	
N Track height with triple grouser shoes	1 060	

*Excluding track shoe lug.

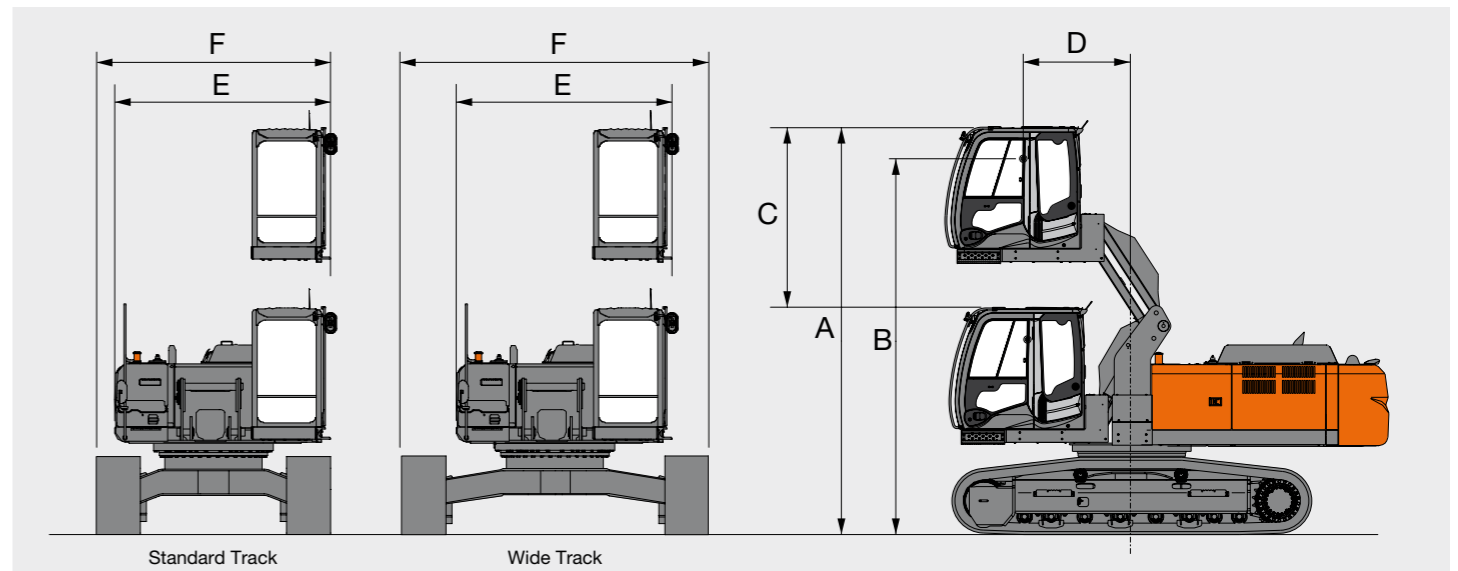
FIXED CAB



	ZX350LC-3		
	1.0 m	1.5 m	2.0 m
Height	Ladder Type		
Step Type	Stair Type		
A Overall height of cab	4 160	4 660	5 160
B Operator's view point	3 730	4 230	4 730
C Floor height	2 520	3 020	3 520
D Operator's view between swing center	640	530	530
E Step height	2 290	2 690	2 690
F Overall width of upperstructure	3 170	3 770	
G Overall width	Standard Track / Wide Track	3 270 / 4 190	3 860 / 4 360

Unit: mm

LINKAGE CAB



	ZX350LC-3	
	Standard Track	Wide Track
A Overall height of cab	3 160 to 5 660	
B Operator's view point	2 700 to 5 200	
C Lift stroke	2 500	
D Operator's view between swing center	1 430 to 1 490	
E Overall width upperstructure (Including step)	3 160	
F Overall width (Including step)	Standard Track / Wide Track	3 250 / 4 190

Unit: mm

EQUIPMENT

ZX350LC-3

STANDARD EQUIPMENT

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

ENGINE	CAB	MONITOR SYSTEM	UNDERCARRIAGE
<ul style="list-style-type: none"> - H/P mode control - E mode control - 50 A alternator - Dry-type air filter with evacuator valve (with air filter restriction switch for monitor) - Cartridge-type engine oil filter - Cartridge-type fuel double filters - Air cleaner double filters - Radiator, oil cooler and intercooler with dust protective net - Radiator reserve tank - Fan guard - Isolation-mounted engine - Auto-idle system - Fuel cooler - Electrical fuel feed pump - Engine oil drain coupler 	<ul style="list-style-type: none"> - CRES II (Center pillar reinforced structure) cab - OPG top guard fitted Level I (ISO10262) compliant cab - All-weather sound suppressed steel cab - Equipped with reinforced, tinted (green color) glass windows - Upper front window can be opened - 4 fluid-filled elastic mounts - Intermittent windshield wipers - Front window washer - Adjustable reclining seat with adjustable armrests - Footrest - Electric double horn - AM-FM radio with digital clock - Auto control air conditioner - Retractable seat belt - Drink holder - Cigarette lighter - Ashtray - Storage box - Glove compartment - Floor mat - Short wrist control levers - Pilot control shut-off lever - Engine shut-off switch - Alarm: Overload warning device - Front window lower guard - Front window upper guard 	<ul style="list-style-type: none"> - Display of meters: water temperature, hour, fuel rate, clock - Other displays: work mode, auto-idle, glow, rearview monitor (when optional rear view camera is equipped), operating conditions, etc - Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc - Alarm buzzers: overheat, engine oil pressure, overload 	<ul style="list-style-type: none"> - Travel parking brake - Travel motor covers - 3 track guards (each side) and hydraulic track adjuster - Bolt-on sprocket - Upper and lower rollers - Reinforced track links with pin seals - 4 tie down hooks - 600 mm triple grouser shoes
		LIGHTS	
		<ul style="list-style-type: none"> - 4 working lights Base machine x 1 Boom left side x 1 Arm x 2 (with covers) 	
		UPPERSTRUCTURE	
		<ul style="list-style-type: none"> - Undercover - 11 300 kg counterweight - Fuel level float - Hydraulic oil level gauge - Tool box - Utility space - Rear view mirror (right & left side) - Swing parking brake - Electric fuel refilling pump with auto stop - Rear view camera - 150 Ah batteries 	
		FRONT ATTACHMENTS	
		<ul style="list-style-type: none"> - HN bushing - Reinforced resin thrust plate - Flanged pin - Centralized lubrication system - Dirt seal on all bucket pins - 8.50 m boom and 6.20 m arm - Arm top piping stop valve - Arm top piping guard 	
		MISCELLANEOUS	
		<ul style="list-style-type: none"> - Standard tool kit - Lockable machine covers - Lockable fuel refilling cap - Skid-resistant tapes, plates and handrails - Travel direction mark on track frame - Onboard information controller - Theft deterrent system 	

OPTIONAL EQUIPMENT

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

CAB	UNDERCARRIAGE	OTHERS
<ul style="list-style-type: none"> - Laminated round glass window - FOPS guard - Air suspension seat with heater - Rain guard - Sun visor - 12 V power source 	<ul style="list-style-type: none"> - Track undercover 	<ul style="list-style-type: none"> - Fixed cab - Linkage cab (With under view mirror) - Alarm: Swing motion alarm device with lamps, Travel motion alarm device - Pre cleaner
	ATTACHMENTS	
	<ul style="list-style-type: none"> - Pilot accumulator - High mesh full flow filter with restriction indicator 	

LIGHTS
<ul style="list-style-type: none"> - Additional cab roof front lights - Additional cab roof rear light - Boom right side light with cover

SPECIFICATIONS

ZX470LCH-3

ENGINE

Model..... Isuzu AH-6WG1X
 Type 4-cycle water-cooled, direct injection
 Aspiration..... Turbocharged, intercooled
 No. of cylinders 6
 Rated power
 ISO 9249,
 Without Fan net 260 kW (349 HP) at 1 800 min⁻¹ (rpm)
 ECC 80/1269,
 Without Fan net 260 kW (349 HP) at 1 800 min⁻¹ (rpm)
 SAE J1349,
 Without Fan net 260 kW (349 HP) at 1 800 min⁻¹ (rpm)
 Maximum torque..... 1 580 N·m (161 kgf·m) at 1 500 min⁻¹ (rpm)
 Piston displacement..... 15.681 L
 Bore and stroke 147 mm x 154 mm
 Batteries 2 x 12 V / 170 Ah

HYDRAULIC SYSTEM

- Work mode selector
 General purpose mode / Attachment mode
- Hydraulic control
 Engine speed sensing system

Main pumps 2 variable displacement axial piston pumps
 Maximum oil flow .. 2 x 360 L/min

Additional pump..... 1 gear pump
 Maximum oil flow .. 30 L/min

Pilot pump..... 1 gear pump
 Maximum oil flow .. 30 L/min

Hydraulic Motors

Travel 2 axial piston motors with parking brake
 Swing..... 2 axial piston motor

Relief Valve Settings

Implement circuit 31.9 MPa (325 kgf/cm²)
 Swing circuit 28.4 MPa (290 kgf/cm²)
 Travel circuit 34.3 MPa (350 kgf/cm²)
 Pilot circuit 3.9 MPa (40 kgf/cm²)
 Power boost 34.3 MPa (350 kgf/cm²)

Hydraulic Cylinders

High-strength piston rods and tubes. Cylinder cushion mechanisms provided in boom and arm cylinders to absorb shock at stroke ends.

Hydraulic Filters

Hydraulic circuits use high-quality hydraulic filters. A suction filter is incorporated in the suction line, and full-flow filters in the return line and swing/travel motor drain lines.

CONTROLS

Pilot controls. HITACHI's original shockless valve.
 Implement levers..... 2
 Travel levers with pedals 2

UPPERSTRUCTURE

Revolving Frame

Welded sturdy box construction, using heavy-gauge steel plates for ruggedness. 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, shear-type ball bearing with induction-hardened internal gear. Internal gear and pinion gear are immersed in lubricant. Swing parking brake is spring-set/hydraulic-released disc type.

Swing speed 9.0 min⁻¹ (rpm)

Operator's Cab

Independent spacious cab, 1 005 mm wide by 1 675 mm high, conforming to ISO* Standards. Reinforced glass windows on 4 sides for good visibility. Openable front windows (upper and lower). Reclining seat with armrests; adjustable with or without control levers.

* International Standardization Organization

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 rollers 3
 Lower rollers 9
 Track shoes 53
 Full track guard 1

Travel Device

Each track driven by axial piston motor through planetary reduction gear for counterrotation of the tracks. Sprockets are replaceable. 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 3.4 km/h

Maximum traction force..... 322 kN (32 800 kgf)

Gradeability 18% (10 degree) continuous

WEIGHTS AND GROUND PRESSURE

ZX470LCH-3: Standard Track

Equipped with 9.50 m boom, 7.30 m arm and 600 mm triple grouser shoe.

Cab type	Height	Step type	Operating weight	Ground pressure
Standard	–	–	51 300 kg	88.0 kPa (0.90 kgf/cm ²)
Fixed	1.0 m	Ladder	52 000 kg	89.0 kPa (0.91 kgf/cm ²)
	1.5 m	Stair	52 450 kg	90.0 kPa (0.92 kgf/cm ²)
	2.0 m	Stair	52 650 kg	90.0 kPa (0.92 kgf/cm ²)
Linkage	2.5 m	–	53 350 kg	91.0 kPa (0.93 kgf/cm ²)

ZX470LCH-3: Wide track

Equipped with 9.50 m boom, 7.30 m arm and 600 mm triple grouser shoe.

Cab type	Height	Step type	Operating weight	Ground pressure
Standard	–	–	52 950 kg	91.0 kPa (0.93 kgf/cm ²)
Fixed	1.0 m	Ladder	53 650 kg	92.0 kPa (0.94 kgf/cm ²)
	1.5 m	Stair	54 100 kg	93.0 kPa (0.95 kgf/cm ²)
	2.0 m	Stair	54 300 kg	93.0 kPa (0.95 kgf/cm ²)
Linkage	2.5 m	–	55 000 kg	94.0 kPa (0.96 kgf/cm ²)

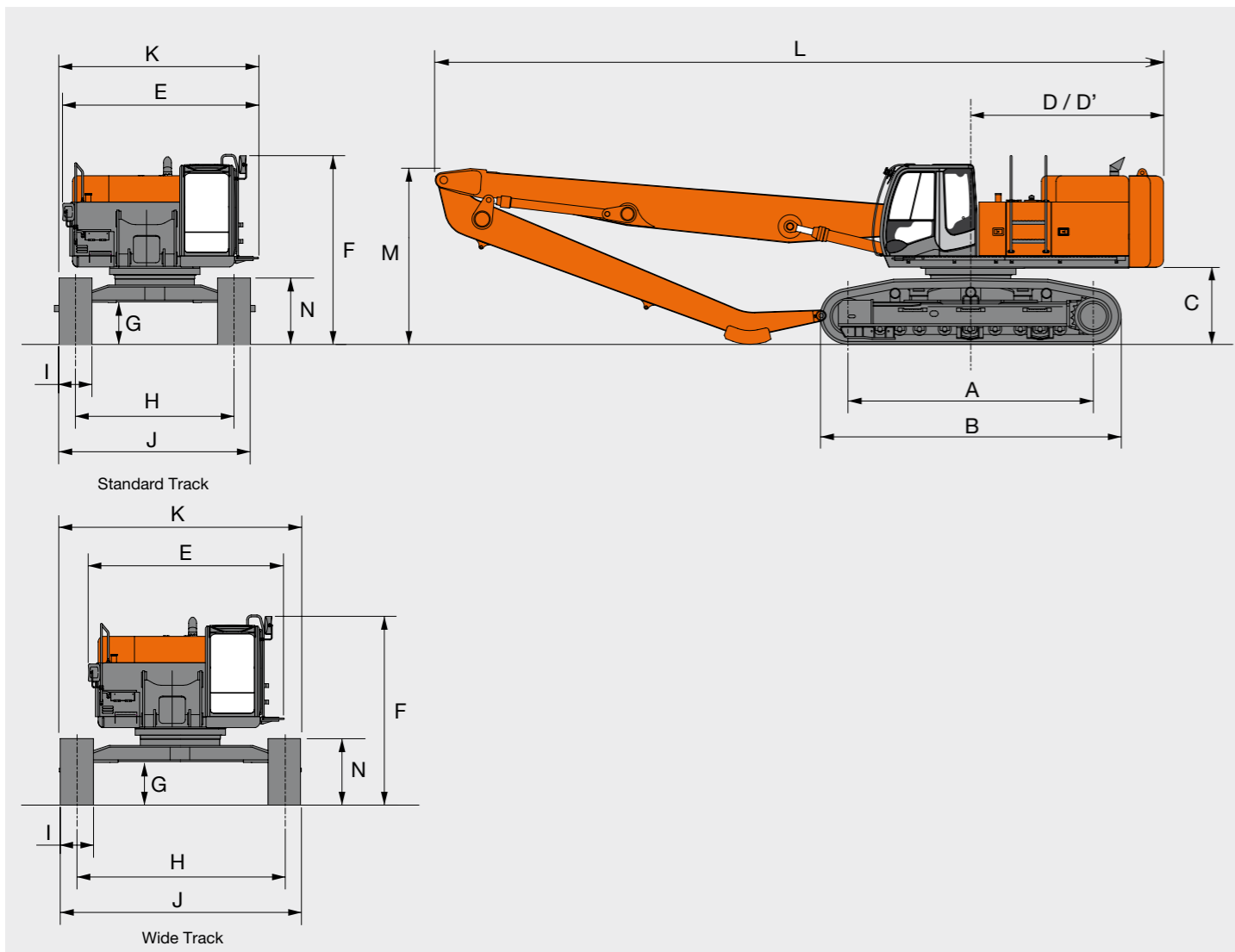
SERVICE REFILL CAPACITIES

Fuel tank 725.0 L
 Engine coolant 55.0 L
 Engine oil 57.0 L
 Swing device 6.5 L
 Travel device (each side)..... 11.0 L
 Hydraulic system 560.0 L
 Hydraulic oil tank 330.0 L

DIMENSIONS

ZX470LCH-3

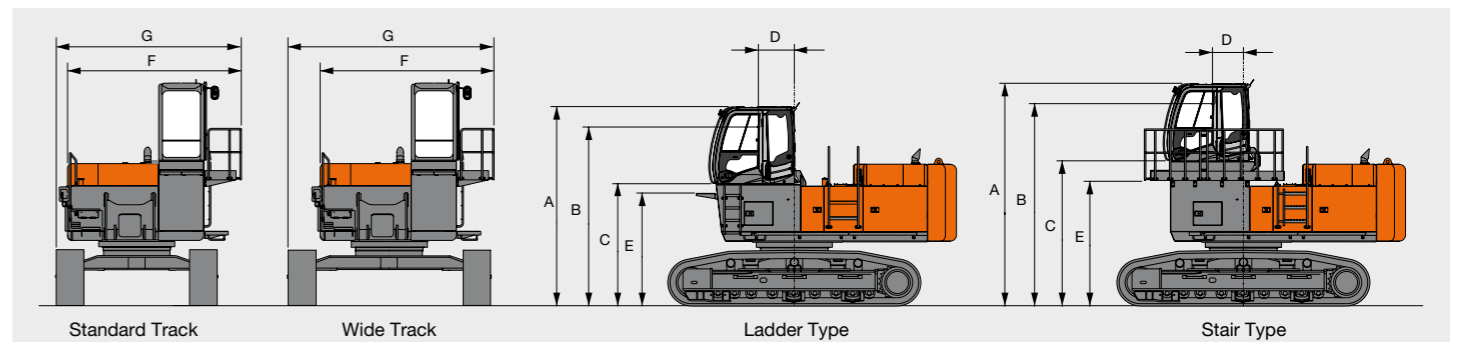
STANDARD CAB



	ZX470LCH-3	
	Standard Track	Wide Track
A Distance between tumblers	4 470	
B Undercarriage length	5 470	
* C Counterweight clearance	1 400	
D Rear-end swing radius	3 650	
D' Rear-end length	3 520	
E Overall width of upperstructure (Including sidewalk)	3 530	
F Overall height of cab	3 460	3 510
* G Min. ground clearance	760	
H Track gauge	2 890	3 800
I Track shoe width with triple grouser shoes	600	
J Undercarriage width	3 490	4 400
K Overall width (Including sidewalk)	3 770	4 400
L Overall length	13 420 (with 9.50 m boom, 7.30 m arm)	
M Overall height of boom	3 370 (with 9.50 m boom, 7.30 m arm)	
N Track height with triple grouser shoes	1 220	

*Excluding track shoe lug.

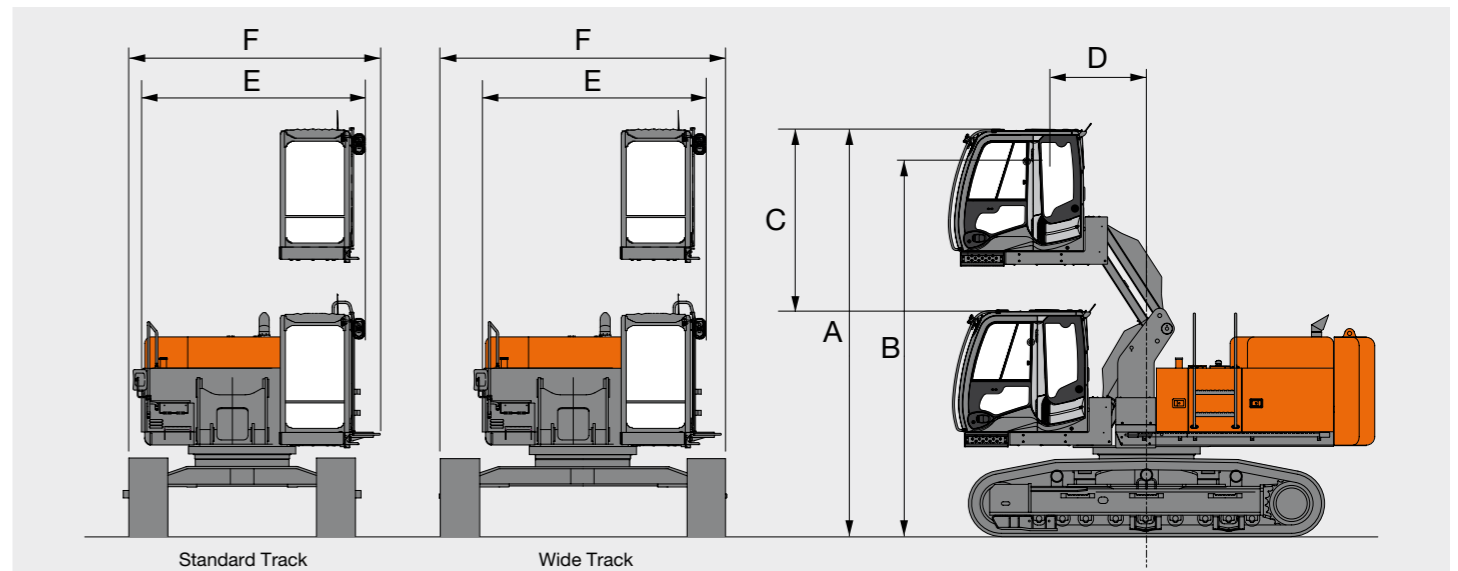
FIXED CAB



Unit: mm

	ZX470LCH-3 Standard Track / Wide Track		
	1.0 m	1.5 m	2.0 m
Height	Step Type		
A Overall height of cab	4 430 / 4 480	4 830 / 4 880	5 330 / 5 380
B Operator's view point	3 880 / 3 930	4 380 / 4 430	4 880 / 4 930
C Floor height	2 680 / 3 730	3 180 / 3 230	3 680 / 3 730
D Operator's view between swing center	780	660	660
E Step height	2 440 / 2 490	2 840 / 2 890	2 840 / 2 890
F Overall width of upperstructure	3 550	3 830	
G Overall width	3 750 / 4 400	4 030 / 4 490	

LINKAGE CAB



Unit: mm

	ZX470LCH-3 Standard Track / Wide Track	
	A Overall height of cab	3 330 to 5 830 / 3 380 to 5 880
B Operator's view point	2 850 to 5 350 / 2 880 to 5 380	
C Lift stroke	2 500	
D Operator's view between swing center	1 570 to 1 630	
E Overall width upperstructure (Including sidewalk)	3 150	
F Overall width (Including sidewalk)	3 770 / 4 400	

EQUIPMENT

ZX470LCH-3

STANDARD EQUIPMENT

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

ENGINE

- H/P mode control
- P mode control
- E mode control
- 50 A alternator
- Dry-type air double filter with evacuator valve (with air filter restriction switch for monitor)
- Cartridge-type engine oil filter
- Cartridge-type fuel filter
- Fuel pre-filter
- Radiator, oil cooler and intercooler with dust protective net
- Radiator reserve tank
- Fan guard
- Isolation-mounted engine
- Auto-idle system

HYDRAULIC SYSTEM

- Work mode selector
- Engine speed sensing system
- E-P control system
- Power boost
- Auto power lift
- Boom mode selector system
- Shockless valve in pilot circuit
- Control valve with main relief valve
- Extra port for control valve
- Suction filter
- Full-flow filter
- Pilot filter
- Drain filter
- Quick warm-up system for pilot circuit
- Additional pump
- Boom hose rupture valves
- Arm hose rupture valves
- Attachment basic piping
- Assist piping

CAB

- CRES II (Center pillar reinforced structure) cab
- OPG top guard fitted Level I (ISO10262) compliant cab
- ROPS for Excavators compliant cab
- All-weather sound suppressed steel cab
- Tinted (green color) glass windows
- 6 fluid-filled elastic mounts
- Openable windows ; upper and lower front, and left side
- Intermittent windshield wipers
- Front window washer
- Adjustable reclining suspension seat with adjustable armrests
- Footrest
- Electric double horn
- AM-FM radio with digital clock
- Auto-idle selector
- Retractable Seat belt
- Drink holder
- Cigarette lighter
- Ashtray
- Storage box
- Glove compartment
- Floor mat
- Short wrist control levers
- Pilot control shut-off lever
- Auto control air conditioner
- Pilot control shut-off lever
- Engine shut-off switch
- Alarm: Overload warning device
- Front window lower guard
- Front window upper guard

MONITOR SYSTEM

- Display of meters: water temperature, hour, fuel rate, clock
- Other displays: work mode, auto-idle, glow, rear view monitor, operating conditions, etc
- Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, etc
- Alarm buzzers: overheat, engine oil pressure, overload

LIGHTS

- 4 working lights
 - Base machine x 1
 - Boom left side x 1
 - Arm x 2

UPPERSTRUCTURE

- Undercover
- 13 650 kg counterweight
- Fuel level float
- Rear view camera
- 170 Ah batteries
- Hydraulic oil level gauge
- Tool box
- Utility space
- Rear view mirror (right & left side)
- Swing parking brake
- Ladder
- Electric fuel refilling pump with auto stop
- Electric grease gun with hose reel

UNDERCARRIAGE

- Travel parking brake
- Travel motor covers
- Full track guard (each side) and hydraulic track adjuster
- Idler track guard
- Bolt-on sprocket
- Upper and lower rollers
- Reinforced track links with pin seals
- 600 mm triple grouser shoes

FRONT ATTACHMENTS

- Pilot accumulator
- Flanged pin
- Centralized lubrication system
- Dirt seal on all bucket pins
- 9.50 m boom and 7.30 m arm
- Arm top piping stop valve
- Arm top piping guard

MISCELLANEOUS

- Standard tool kit
- Lockable machine covers
- Lockable fuel refilling cap
- Skid-resistant tapes, plates and handrails
- Travel direction mark on track frame
- Onboard information controller
- Theft deterrent system

OPTIONAL EQUIPMENT

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

CAB

- Air suspension seat with heater
- Rain guard
- Sun visor
- 12 V power source

LIGHTS

- Additional cab roof front lights
- Additional cab roof rear light
- Boom right side light with cover

UNDERCARRIAGE

- Track undercover

ATTACHMENTS

- Pilot accumulator
- High mesh full flow filter with restriction indicator

OTHERS

- Fixed cab
- Linkage cab (With under view mirror)
- Alarm: Swing motion alarm device with lamps, Travel motion alarm device
- Pre cleaner

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.