# **HITACHI**

## **Reliable Solutions**



### **HYDRAULIC EXCAVATOR**

Model code: ZX300LC-7H Engine gross power: 197 kW Operating weight: 30 400 kg Bucket capacity: 1.00 - 1.62 m³

## **SPECIFICATIONS**

ENGINE		
Model	Isuzu 6HK1X	
Туре	4-cycle water-cooled, common rail direct injection	
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR	
Aftertreatment	DOC + SCR system	
No. of cylinders	6	
Rated power		
ISO 14396 : 2002 gross	197 kW at 1 900 min <sup>-1</sup>	
ISO 9249 : 2007 net	186 kW at 1 900 min <sup>-1</sup>	
Maximum torque	1 050 Nm at 1 500 min <sup>-1</sup>	
Piston displacement	7.79 L	
Bore and stroke	115 mm x 125 mm	
Batteries	2 x 12 V / 135 Ah	

HYDRAULIC SYSTEM			
Hydraulic Pumps			
Main pumps		3 variable displacement axial piston pumps	
Maximum oil flow		2 x 236 L/min	
IVIAXIITIUITI OII IIOW		1 x 210 L/min	
Pilot pump		1 gear pump	
Maximum oil flow		34.7 L/min	
Hydraulic Motor	rs		
Travel		2 variable displacement axial piston motors	
Swing		1 axial piston motor	
Relief Valve Settings			
Implement circuit		34.3 MPa	
Swing circuit		32.4 MPa	
Travel circuit		34.3 MPa	
Pilot circuit		3.9 MPa	
Power boost		38.0 MPa	
Hydraulic Cylinders			
	Quantity		
Boom	2		
Arm	1		
Bucket	1		

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 10.3 min <sup>-1</sup>		
Swing torque 90.5 kNm		

UNDERCARRIAGE		
Tracks		
Heat-treated connecting pins with dirt seals. Hydraulic (grease) track adjusters with shock-absorbing recoil springs.		
Numbers of Rolle	ers 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. Parking brake is spring-set/hydraulic-released disc type. Automatic transmission system: High-Low.		
Traval appeda	High: 0 to 5.2 km/h	
Travel speeds	Low: 0 to 3.1 km/h	
Maximum traction force 246 kN		
Gradeability 70% (35 degree) continuous		

SERVICE REFILL CAPACITIES		
Fuel tank	510.0 L	
Engine coolant	48.0 L	
Engine oil	48.0 L	
Swing device	12.0 L	
Travel device (each side)	9.4 L	
Hydraulic system	294.0 L	
Hydraulic oil tank	163.0 L	
DEF/AdBlue® tank	70.0 L	

ENVIRONMENT		
Engine Emissions	EPA Final Tier 4 / EU Stage IV	
Sounds Level		
Sound level in cab according to ISO 6396: 2008	LpA 69 dB(A)	
External sound level according to ISO 6395 : 2008 and EU Directive 2000/14/EC	LwA 104 dB(A)	

### WEIGHTS AND GROUND PRESSURE

#### Operating Weight and Ground Pressure

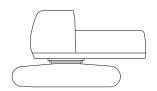
			ZX300	LC-7H <sup>*</sup>
Boom type		Monoblock		
Shoe type	Shoe width (mm)	Arm length (m)	kg	kPa
Triple grouser	600	2.42	30 400	56.9

<sup>\*</sup> Including 1.25 m³ (ISO 7451:2007 heaped) bucket weight (1 020 kg) and counterweight (5 600 kg).

### BASIC MACHINE WEIGHT AND COMPONENTS WEIGHT

#### Basic Machine Weight and Overall Width

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



		ZX300LC-7H	
Shoe type Shoe width (mm)		Weight (kg)	Overall width (mm)
Triple grouser 600		23 800	3 190

Components Weight Unit: kg

	ZX300LC-7H
Counterweight	5 600
Monoblock boom (with arm cylinder and boom cylinder)	3 240
Arm 2.42 m (with bucket cylinder)	1 470
Bucket ISO 7451:2007 1.25 m <sup>3</sup>	1 020

### BUCKET AND ARM DIGGING FORCE

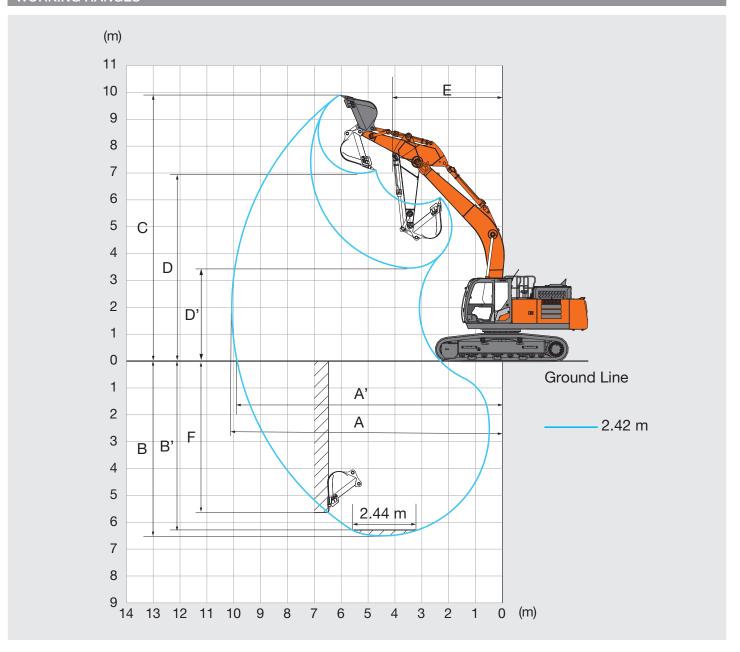
Unit: kN

	ZX300LC-7H
Arm length	2.42 m
Bucket digging force* ISO 6015 : 2006	203
Arm crowd force* ISO 6015 : 2006	183

<sup>\*</sup> At power boost

## **SPECIFICATIONS**

### WORKING RANGES

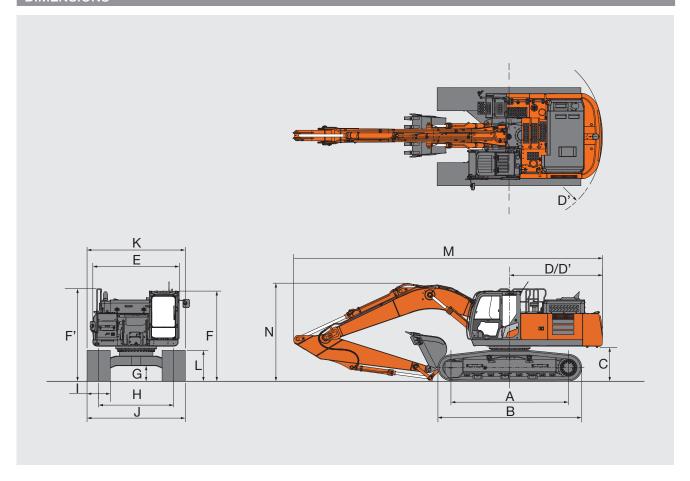


Unit: mm

	ZX300LC-7H
	Monoblock boom
Arm length	2.42 m
A Max. digging reach	10 060
A' Max. digging reach (on ground)	9 870
B Max. digging depth	6 530
B' Max. digging depth for 2.44 m level	6 310
C Max. cutting height	9 910
D Max. dumping height	6 980
D' Min. dumping height	3 450
E Min. swing radius	4 060
F Max. vertical wall digging depth	5 650

Excluding track shoe lug

### DIMENSIONS



Unit: mm

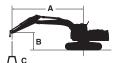
		ZX300LC-7н
		Monoblock boom
А	Distance between tumblers	4 050
В	Undercarriage length	4 970
*C	Counterweight clearance	1 130
D	Rear-end swing radius	3 250
D'	Rear-end length	3 210
Е	Overall width of upperstructure	2 990
F	Overall height of cab	3 120
F'	Overall height of handrail	3 200
*G	Min. ground clearance	510
Н	Track gauge	2 590
I	Track shoe width	G 600
J	Undercarriage width	3 190
K	Overall width	3 190
*L	Track height with triple grouser shoes	1 070
N 4	Overall length	
M	With Arm 2.42 m	10 710
N	Overall height of boom	
IN	With Arm 2.42 m	3 490

<sup>\*</sup> Excluding track shoe lug G: Triple grouser shoe

### MACHINE CAPACITIES

Notes: 1. Ratings are based on ISO 10567 : 2007.

- 2. Machine 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: Machine capacity

For machine capacities, subtract installed attachment and quick hitch weight from machine capacities.

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

Optional feature may affect machine performance.

#### ZX300LC-7H MOMOBLOOK BOOM

ZX300LC-7H MOMOBLOOK BOOM Hating over-front Rating over-front Rating over-front					ver-side or 3	60 degrees	Unit : kg							
	Load												At max. reach	
Conditions	point	3.0	3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		7 111001100011	
	height (m)	ů	₽	ů	₽	Ů	₽	ů	₽	ů	₽	ů	₽	meter
Boom 6.20 m Arm 2.42 m Counter Weight 5 600 kg Grouser shoe 600 mm	6.0					*7 920	*7 920					*7 680	6 030	7.46
	4.5			*11 130	*11 130	*8 890	8 260	*7 900	5 880			*7 740	5 180	8.11
	3.0			*14 010	11 770	*10 170	7 840	*8 460	5 690			7 500	4 760	8.44
	1.5					*11 260	7 490	8 800	5 510			7 330	4 620	8.49
	0 (Ground)			*16 140	10 960	*11 820	7 280	8 670	5 390			7 540	4 730	8.27
	-1.5	*10 290	*10 290	*15 540	10 970	*11 700	7 230	8 650	5 370			8 270	5 160	7.75
	-3.0	*18 560	*18 560	*14 050	11 140	*10 670	7 330					*8 930	6 160	6.86
	-4.5	*14 350	*14 350	*10 940	*10 940							*8 790	*8 790	5.42

# **MEMO**

## **EQUIPMENT**

ENGINE	ZX-7H 300LC
Aftertreatment device	•
Air cleaner double filters	•
Alternator 90 A	•
Auto idle system	•
Auto shut-down control	•
Cartridge-type engine oil filter	•
Cartridge-type fuel main filter	•
Cold fuel resistence valve	•
ConSite OIL (sensor)*	•
DEF / AdBlue® tank	•
DEF / AdBlue® tank inlet strainer and extension filler	•
Dry-type air filter with evacuator valve (with air filter restriction indicator)	•
Dust-proof indoor net	•
ECO / PWR / HP 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	ZX-7H 300LC
Auto power lift	•
ConSite OIL (sensor)*	•
Control valve with main relief valve	•
Equipment package for lifting objects	0
High mesh full flow filter	•
Hose rupture valve for arm	0
Hose rupture valve for boom	0
Pilot filter	•
Power boost	•
Restriction indicator for full flow filter	0
Suction filter	•
Swing dampener valve	•
Two extra ports for control valve	•
Variable reliefvalve for breaker and crusher	•
Work mode selector	•

		7./
	CAB	ZX-7H 300LC
	Auto control air conditioner	•
	AUX function lever (breaker)	•
	AUX function lever (breaker assist)	0
	Bluetooth® integrated radio	•
	Cab: All-weather sound suppressed steel	•
	Cab : CRES VII (center pillar reinforced structure)	•
	Cab: OPG top guard Level I (ISO 10262: 1998) compliant	•
	Cab: ROPS (ISO 12117-2: 2008) compliant	•
	Console height adjustment	•
	Control lever auto-lock	•
	Drink holder with hot and cool function	•
	Electric double horn	•
	Engine shut-off switch	•
	Equipped with reinforced, tinted (green color) glass windows	•
	Evacuation hammer	•
	Floor mat	•
	Footrest	•
	Front guard : OPG Level II (ISO 10262 : 1998) compliant	0
	Front window washer (2 points)	•
	Glove compartment	•
	Hands-free calling device	•
	Hot and cool box	•
	Intermittent windshield wipers	•
	Key cylinder light	•
	LED room light	•
	Magazine rack	•
	Pilot shut-off lever	•
	Power outlet 12 V and 24 V	•
	Push button low idle	•
	Rain guard (without OPG front guard)	•
	Rear tray	•
	Retractable seat belt 76 mm	•
	Rubber radio antenna	•
	Seat : air suspension seat with heater	•
	Seat adjustment part : backrest, armrest, height and angle, slide forward / back	•
	Seat belt reminder	•
	Short wrist control levers	•
	Smartphone holder	•
	Straight travel pedal	0
	Sunscreen roller type (multi-use front or side and rear window)	•
	Top guard: OPG Level II (ISO 10262 : 1998) compliant	0
_	Transparent roof with slide curtain	•
_	USB power supply	•
	Wide view wiper	•
	Windows on front, upper, lower and left side can be opened	•
	2 speakers	•
	4 fluid-filled elastic mounts	•
	8 inch monitor	•

#### • : Standard equipment O : Optional equipment

MONITOR SYSTEM	ZX-7H 300LC
Alarm buzzers: overheat, engine oil pressure, overload, SCR system trouble, etc	•
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	•
Display of meters: water temperature, hour, fuel rate, clock, DEF / AdBlue® rate, etc	•
Other displays: work mode, auto-idle, glow, rear view monitor, side view monitor, operating conditions, etc	•
35 languages selection	•

LIGHTS	ZX-7H 300LC
Additional boom LED light with cover	•
Additional cab roof front LED lights	•
LED lights for camera (side and rear view camera)	•
Rotating lamp	0
2 working LED lights	•

UPPER STRUCTURE	ZX-7н 300LC
AERIAL ANGLE (270-degree view camera system)	•
Batteries 2 x 135 Ah	•
Body top handrail	•
Control pattern changer (ISO / BH)	•
Counterweight 5 600 kg	•
Electric fuel refilling pump with auto stop and filter	•
Fuel level float	•
HD Undercover	0
Hydraulic oil level gauge	•
Lockable fuel refilling cap	•
Lockable machine covers	•
Lockable tool box	•
Platform handrail	•
Side view mirror (right and left)	•
Skid-resistant plates	•
Swing parking brake	•
Undercover	•
Utility space	•
2 way battery disconnect switch	•

UNDERCARRIAGE	ZX-7H 300LC
Bolt-on sprocket	•
Greasing type track adjuster	•
Reinforced track links with pin seals	•
Shoe: 600 mm triple grouser	•
Towing hole for light weight object	•
Track undercover	0
Travel direction mark on track frame	•
Travel motor covers	•
Travel parking brake	•
Upper and lower rollers	•
3 track guards (each side)	•
4 tie down brackets	•

ATTACHMENTS	ZX-7H 300LC
Accessories for 2 speed selector	0
Additional pump (50 L/min)	0
Assist piping	0
Breaker and crusher piping	•
Breaker and crusher piping (Short piping)	0
Pilot accumulator	0

• : Standard equipment O : Optional equipment

MISCELLANEOUS	ZX-7H 300LC
ConSite	0
Global e-Service	•
Onboard information controller	•
Satellite communication device	0
Standard tool kit	•
Travel alarm	•

FRONT ATTACHMENTS	ZX-7H 300LC
Arm 2.42 m	•
Arm tip remote lubrication	•
Casted bucket link A	•
Centralized lubrication system	•
Dirt seal on all bucket pins	•
Flanged pin	•
HN bushing	•
Lower arm reinforcement	•
Reinforced bucket link B	•
Reinforced resin thrust plate	•
WC (tungsten-carbide) thermal spraying	•