



# HYDRAULIC EXCAVATOR

Model code: ZX300LC-7H Engine rated power, net: 249 hp (186 kW) Operating weight: 68,784–69,005 lb. (31,200–31,300 kg) Bucket capacity: 1.30–2.11 yd<sup>3</sup> (1.00–1.62 m<sup>3</sup>)

# **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	264 hp (197 kW) at 1,900 min <sup>-1</sup>
ISO 9249: 2007 net	249 hp (186 kW) at 1,900 min <sup>-1</sup>
Maximum torque	774 lbf (1,050 Nm) at 1,500 min <sup>-1</sup>
Piston displacement	475.38 cu. in. (7.79 L)
Bore and stroke	4.5" x 4.9" (115 mm x 125 mm)
Batteries	2 x 12 V / 135 Ah

HYDRAULIC SYSTEM								
Hydraulic Pumps								
Main pumps	3 vai	riable displacemer	nt axial piston pumps					
Maximum oil flow		2 x 62 gal/min (236 L/min) 1 x 55 gal/min (210 L/min)						
Pilot pump	1 ge	ar pump						
Maximum oil flow	9.2 g	gal/min (34.7 L/mi	n)					
Hydraulic Motors								
Travel 2 variable displacement axial piston motors								
Swing	1 axi	1 axial piston motor						
Relief Valve Setting	gs							
Implement circuit	4,97	4,974.8 psi (34.3 MPa)						
Swing circuit	4,69	4,699.2 psi (32.4 MPa)						
Travel circuit	4,97	4,974.8 psi (34.3 MPa)						
Pilot circuit	565.	565.6 psi (3.9 MPa)						
Power boost	5,51	5,511.4 psi (38.0 MPa)						
Hydraulic Cylinder	S							
	Quantity	Bore	Rod diameter					
Boom	2	5.3" (135 mm)	3.7" (95 mm)					
Arm	1	5.9" (150 mm)	4.1" (105 mm)					
Bucket	1	5.3" (135 mm)	3.5" (90 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
 10.3 min<sup>-1</sup>

Swing torque 66,749 lbf (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.							
	High: 0 to 3.2 mph (0 to 5.2 km/h)						
Travel speeds	Low: 0 to 1.9 mph (0 to 3.1 km/h)						
Maximum traction force	55,303 lbf (246 kN)						
Gradeability	70% (35 degree) continuous						

SERVICE REFILL CAPACITIES						
Fuel tank	134.6 gal (510.0 L)					
Engine coolant	12.7 gal (48.0 L)					
Engine oil	12.7 gal (48.0 L)					
Swing device	3.2 gal (12.0 L)					
Travel device (each side)	2.5 gal (9.4 L)					
Hydraulic system	77.6 gal (294.0 L)					
Hydraulic oil tank	43.0 gal (163.0 L)					
DEF/AdBlue® tank	18.5 gal (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)					

Unit: Ib (kg)

### WEIGHTS AND GROUND PRESSURE

#### Operating Weight and Ground Pressure

		ZX300LC-7H <sup>*1</sup>			
	Boom type	Monoblock			
Shoe type	Shoe width, inch (mm)	Arm length, ft-in (m)	lb (kg)	psi (kPa)	
Triple grouser	Triple grouser 32" (800)		69,005 (31,300)	6.37 (43.9)	

\*1 Including 1.63 yd<sup>3</sup> (1.25 m<sup>3</sup>) (ISO 7451: 2007 heaped) bucket weight, 2,249 lb (1,020 kg) and counterweight, 12,346 lb (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.

			ZX300LС-7н				
	Shoe Type	Shoe width inch (mm)	Weight Ib (kg)	Overall width in (mm)			
$\supset$	Triple grouser	32" (800)	54,243 (24,600)	11' 1" (3,390)			

#### **Components Weight**

	ZX300LC-7H
Counterweight	12,346 (5,600)
Monoblock boom (with arm cylinder and boom cylinder)	7,143 (3,240)
Arm 12' 4" (3.76 m) (with bucket cylinder)	3,549 (1, 610)
Bucket ISO 7451: 2007 1.63 yd <sup>3</sup> (1.25 m <sup>3</sup> )	2,249 (1,020)

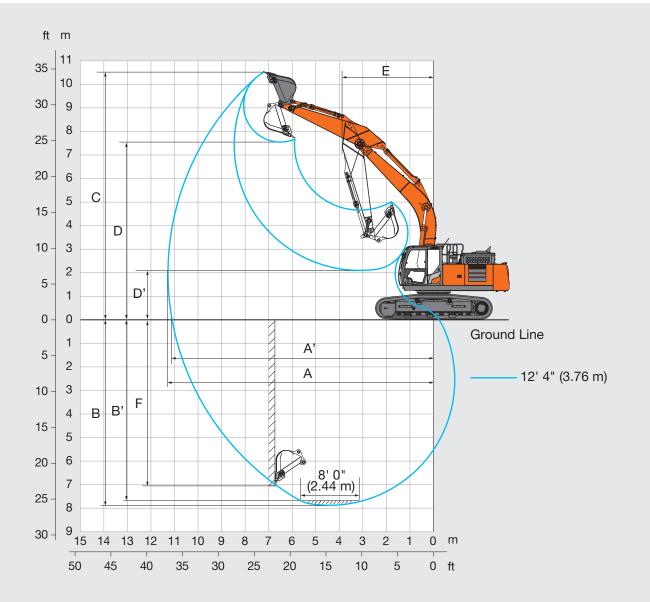
## BUCKET AND ARM DIGGING FORCE

	Unit: lbf (kN)
	ZX300LС-7н
Arm length	12' 4" (3.76 m)
Bucket digging force* ISO 6015: 2006	45,411 (202)
Arm crowd force* ISO 6015: 2006	32,372 (144)

\* At power boost

## SPECIFICATIONS ZX300LC-7H

WORKING RANGES

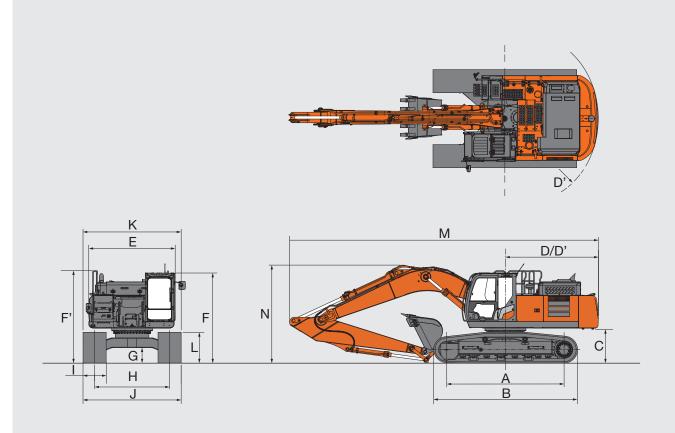


Unit: ft-in (mm)

	ZX300LC-7H
	Monoblock boom
Arm length	12'4" (3.76 m)
A Max. digging reach	36' 12" (11,270)
A' Max. digging reach (on ground)	36 ' 5" (11,100)
B Max. digging depth	25' 10" (7,870)
B' Max. digging depth for 8' 0" (2.44 m) level	25' 4" (7,710)
C Max. cutting height	34' 4" (10,470)
D Max. dumping height	24' 9" (7,540)
D' Min. dumping height	6' 10" (2,090)
E Min. swing radius	12' 9" (3,890)
F Max. vertical wall digging depth	22' 6" (6,870)

Excluding track shoe lug

## DIMENSIONS



Unit: ft-in (mm)

		ZX300LC-7н
		Monoblock boom
A	Distance between tumblers	13' 3" (4,050)
В	Undercarriage length	16' 4" (4,970)
*C	Counterweight clearance	3' 8" (1,130)
D	Rear-end swing radius	10' 8" (3,250)
D'	Rear-end length	10' 6" (3,210)
E	Overall width of upperstructure	9' 10" (2,990)
F	Overall height of cab	10' 3" (3,120)
F'	Overall height of handrail	11' 8" (3,560)
*G	Min. ground clearance	1' 8" (510)
Н	Track gauge	8' 6" (2,590)
Ι	Track shoe width	G 2' 7" (800)
J	Undercarriage width	11' 1" (3,390)
K	Overall width	11' 1" (3,390)
*L	Track height with triple grouser shoes	3' 6" (1,070)
М	Overall length with 12' 4" (3.76 m) arm	34' 12" (10,660)
Ν	Overall height of boom with 12' 4" (3.76 m) arm	11' 1" (3,380)

\* Excluding track shoe lug G: Triple grouser shoe

## **MACHINE CAPACITIES ZX300LC**-7H

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 ft (0 m) = Ground.
- 6. Each machine capacities values are applicable when selecting optional attachment basic piping and hose rupture valve for boom and arm.

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 MONOBLOCK BOOM

ZX300LC-7	'н MOI	NOBLOO	СК ВОО	Μ						💾 Ra	ting over-fro	ont 💭 F	Rating over-	side or 360	degrees	Unit: Ib (kg)
	Load		Load radius							1				At max. reach		:h
Conditions	point	, · · ·	1.5 m)	10 ft (	3.0 m)	15 ft (	4.5 m)	20 ft (	6.0 m)	25 ft	(7.5 m)	30 ft (	9.0 m)			
	height ft (m)	Ů	<b>⇔</b>	Ů	<b>∷</b> ⊸	Ů	Ç⊫≕	Ů	œ	Ů	C≕	Ů	¢⊒≕	Ů	œ	ft-in (meter)
	25' (7.5)									(5,120)*	(5,120)*			(3,910)*	(3,910)*	(7.94)
	20' (6.0)									13,540* (6,160)*	13,540* (6,160)*			8,320* (3,770)*	8,320* (3,770)*	28' 11" (8.82)
	15' (4.5)							15,810* (7,280)*	15,810* (7,280)*	14,610* (6,690)*	13,410 (6,220)	10,270* (5,210)*	9,950 (4,630)	8,320* (3,770)*	8,320* (3,770)*	30' 9" (9.37)
Boom 20' 4" (6.20 m)	10' (3.0)			33,050*	33,050*	24,330* (11,310)*	24,330* (11,310)*	18,910* (8,730)*	18,010 (8,340)	16,240* (7,460)*	12,910 (5,990)	13,280* (6,490)*	9,730 (4,520)	8,600* (3,900)*	8,600* (3,900)*	31' 8" (9.66)
Arm 12' 4"	5' (1.5)					30,300* (14,040)*	25,680 (11,900)	22,030* (10,170)*	17,020 (7,890)	17,970* (8,270)*	12,380 (5,740)	14,930 (6,930)	9,460 (4,390)	9,170* (4,160)*	8,640 (3,920)	31' 10" (9.7)
(3.76 m) Counterweight	0 (Ground)			14,750* (6,460)*	14,750* (6,460)*	33,830* (15,630)*	24,470 (11,360)	24,370* (11,240)*	16,290 (7,550)	19,200 (8,910)*	11,960 (5,540)	14,700 (6,820)	9,250 (4,290)	10,140* (4,590)*	8,750 (3,970)	31' 2" (9.51)
12,346 lb (5,600 kg)	-5' (-1.5)	14,380* (6,440)*	14,380* (6,440)*	22,380* (9,890)*	22,380* (9,890)*	34,810* (16,060)*	23,990 (11,140)	25,450* (11,740)*	15,890 (7,360)	18,920 (8,780)	11,700 (5,420)	(5,840)*	(4,240)	11,760* (5,310)*	9,290 (4,200)	29' 9" (9.06)
	-10' (-3.0)	22,950* (10,240)*	22,950* (10,240)*	32,760* (14,450)*	32,760* (14,450)*	33,610* (15,510)*	23,990 (11,140)	24,980* (11,540)*	15,810 (7,330)	18,900 (8,760)	11,680 (5,410)			14,690* (6,600)*	10,500 (4,730)	27' 4" (8.32)
	-15' (-4.5)	33,410* (14,840)*	33,410* (14,840)*	42,290* (19,610)*	42,290* (19,610)*	29,930* (13,880)*	24,400 (11,320)	22,270* (10,380)*	16,080 (7,440)					17,950* (8,130)*	13,110 (5,860)	23' 7" (7.18)
	-20' (-6.0)			(14,370)*	(14,370)*	21,630* (10,330)*	21,630* (10,330)*							18,050* (8,210)*	18,050* (8,210)*	17' 9" (5.41)

# NOTES


# EQUIPMENT

ENGINE	ZX300LC-7н
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 <sup>®</sup> 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	0
Radiator, oil cooler and intercooler	•

HYDRAULIC SYSTEM	ZX300LC-7н
Auto power lift	•
ConSite OIL (sensor)*	•
Control valve with main relief valve	•
Hose rupture valve for boom/arm and overload alarm	0
High mesh full flow filter	•
Pilot filter	•
Power boost	•
Restriction indicator for full flow filter	0
Suction filter	•
Swing dampener valve	•
Two extra ports for control valve	•
Variable relief valve for breaker and crusher	•
Work mode selector	•

•: Standard equipment O: Optional equipment -: Not applicable

CAB	ZX300LC-7H
4 fluid-filled elastic mounts	•
8 inch monitor	•
All-weather sound suppressed steel cab	•
Auto control air conditioner	•
AUX function lever (breaker)	•
AUX function lever (breaker assist)	0
Bluetooth® integrated radio	•
Console height adjustment	•
Control lever auto-lock	•
CRES VII (center pillar reinforced structure) cab	•
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 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	•
OPG front guard Level II (ISO 10262: 1998) compliant	0
OPG top guard Level I (ISO 10262: 1998) compliant	•
OPG top guard Level II (ISO 10262: 1998) compliant	0
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 3 in. (76 mm)	•
ROPS (ISO 12117-2: 2008) compliant cab	•
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)	•
Transparent roof with slide curtain	•
USB power supply	•
Wide view wiper	
Windows on front, upper, lower and left side can be opened	
2 speakers	

MONITOR SYSTEM	ZX300LC-7н
Alarm buzzers: overheat, engine oil pressure, overload, SCR system trouble, etc	٠
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, overload, SCR system trouble, etc	٠
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	ZX300LC-7н
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	ZX300LC-7н
AERIAL ANGLE (270-degree view camera system)	•
Batteries 2 x 128 Ah	•
Body top handrail	•
Control pattern changer (ISO / BH)	•
Counterweight 12,346 lb (5,600 kg)	•
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	•

MISCELLANEOUS	ZX300LC-7н
ConSite	0
Global e-Service	•
Onboard information controller	•
Satellite communication device	0
Standard tool kit	•
Travel alarm	•

Standard and optional equipment may vary by country, so please consult your Hitachi Construction Machinery Americas authorized dealer for details. \* Engine oil and hydraulic oil monitoring sensor.

UNDERCARRIAGE	ZX300LC-7н
Bolt-on sprocket	•
Greasing type track adjuster	
Reinforced track links with pin seals	•
Shoe: 32" (800 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	•

FRONT ATTACHMENTS	ZX300LC-7н
Arm 12' 4" (3.76 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	•

ATTACHMENTS	ZX300LC-7н
Accessories for 2 speed selector	0
Additional pump (13.2 gal (50 L)/min)	0
Assist piping	0
Auxiliary hydraulic piping	•
Auxiliary hydraulic piping (straight-short piping)	0
Pilot accumulator	0







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