ZAXIS-7 series

HITACHI

Reliable solutions



HYDRAULIC EXCAVATOR

Model Code : ZX240N-7 Engine Rated Power : 128.4 kW

Operating Weight: $22\ 700 - 23\ 300\ kg$ Bucket Capacity: $0.51 - 1.20\ m^3$

SPECIFICATIONS

ENGINE

Model Isuzu 4HK1

Type 4-cycle water-cooled, common rail direct injection

Aspiration Variable geometry turbocharged, intercooled,

cooled EGR

Aftertreatment DOC+CSF+SCR system

No. of cylinders 4

Rated power

ISO 14396 : 2002 128.4 kW at 2 000 min⁻¹
ISO 9249 : 2007 122 kW at 2 000 min⁻¹
Maximum torque 670 Nm at 1 600 min⁻¹

Piston displacement 5.193 L

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps 3 variable displacement axial piston pumps

Maximum oil flow 2 x 212 L/min 1 x 184 L/min Pilot pump 1 gear pump

Maximum oil flow 33.7 L/min

Hydraulic Motors

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

Unit: mm

			Unit: mm		
	Quantity	Bore	Rod diameter		
Boom	2	120	85		
Arm	1	135	95		
Bucket	1	115	80		
Positionina *1	1	150	100		

^{*1 :} For 2-piece boom

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.

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

	ZX240N-7
Upper rollers	2
Lower rollers	8
Track shoes	47
Track guards	2

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 3.5 km/h

Maximum traction force ... 203 kN

ENVIRONMENT

Engine Emissions

EU Stage V

Sounds Level

Sound level in cab according to ISO 6396: 2008	. LpA 70 dB(A)
External sound level according to ISO 6395 : 2008 and	
EU Directive 2000/14/ECL	_wA 102 dB(A)

Air Conditioning System

The air conditioning system contains fluorinated greenhouse gases. Refrigerant type: HFC-134a, GWP: 1430, Amount: 0.85 kg, CO2e: 1.22 ton.

SERVICE REFILL CAPACITIES

	Unit: L
	ZX240N-7
Fuel tank	300.0
Engine coolant	28.0
Engine oil	23.0
Swing device	6.9
Travel device (each side)	6.8
Hydraulic system	220.0
Hydraulic oil tank	120.0
DEF/AdBlue® tank	35.0

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

				ZX24	10N-7		
Boom type			Mono	block	2-Piece		
Shoe type	Shoe width (mm)	Arm length (m)	kg kPa		kg	kPa	
Triple grouser 550 mm	2.42 m	22 700	54.0	23 200	55.0		
	550 mm	2.91 m	22 800	54.0	23 300	56.0	

Including 0.80 m³ (ISO 7451: 2007 heaped) bucket weight (660 kg) and counterweight (4 700 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.

Shoe Type	Shoe width (mm)	Weight (kg)	Overall width (mm)		
Triple grouser	550	18 300	2 500		

Components Weight

Unit: kg

	ZX240N-7
Counterweight	4 700
Monoblock boom (with arm cylinder and boom cylinder)	2 310
2-Piece boom (with arm cylinder and boom cylinder)	2 990
Arm 2.42 m (with bucket cylinder)	1 030
Arm 2.91 m (with bucket cylinder)	1 080
Bucket ISO 7451: 2007 0.80 m ³	660

BUCKET AND ARM DIGGING FORCE

Unit: kN

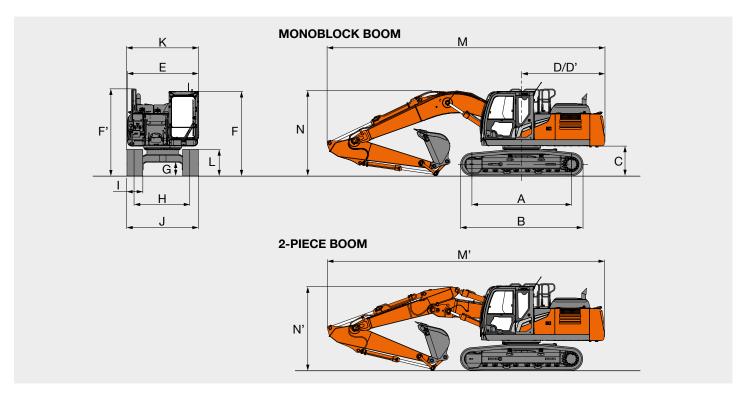
	ZX240N-7					
Arm length	2.42 m	2.91 m				
Bucket digging force* ISO 6015 : 2006	158	158				
Arm crowd force* ISO 6015 : 2006	140	114				

^{*} At power boost

SPECIFICATIONS

ZX240N-7

DIMENSIONS



Unit: mm

	Office Hilling
	ZX240N-7
A Distance between tumblers	3 460
B Undercarriage length	4 260
* C Counterweight clearance	980
D Rear-end swing radius	2 890
D' Rear-end length	2 890
E Overall width of upperstructure	2 480
F Overall height of cab	2 950
F' Overall Height of Handrail	3 030
* G Min. ground clearance	450
H Track gauge	1 980
I Track shoe width	G 550
J Undercarriage width	2 480
K Overall width	2 500
* L Track height with triple grouser shoes	900
MONOBLOCK BOOM	
M Overall length	
With arm 2.42 m	9 740
With arm 2.91 m	9 650
N Overall height of boom	
With arm 2.42 m	3 200
With arm 2.91 m	3 000
2-PIECE BOOM	
M' Overall length	
With arm 2.42 m	9 680
With arm 2.91 m	9 630
N' Overall height of boom	
With arm 2.42 m	3 060
With arm 2.91 m	2 910

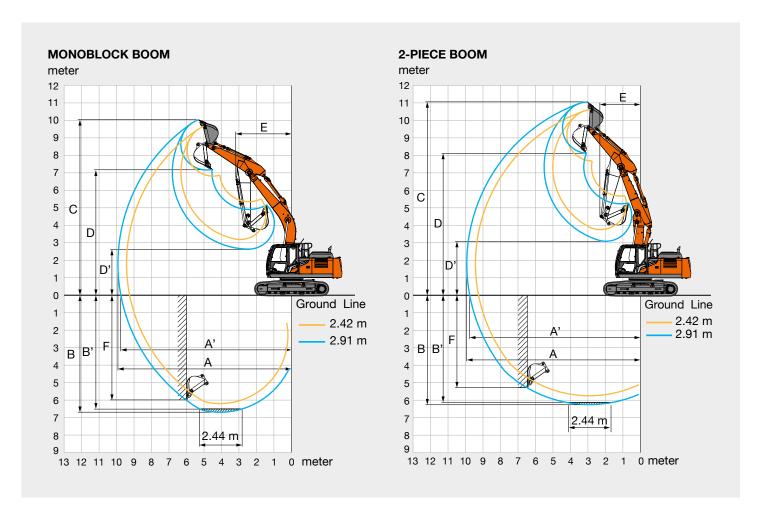
^{*}C,G,L: Excluding track shoe lug

G:Triple Grouser shoe

SPECIFICATIONS

ZX240N-7

WORKING RANGES



Unit: mm

	ZX240N-7						
	Monoble	ock boom	2-Piece boom				
Arm length	2.42 m	2.91 m	2.42 m	2.91 m			
A Max. digging reach	9 430	9 920	9 430	9 930			
A' Max. digging reach (on ground)	9 250	9 750	9 250	9 750			
B Max. digging depth	6 180	6 670	5 720	6 230			
B' Max. digging depth for 2.44 m level	5 950	6 480	5 610	6 120			
C Max. cutting height	9 670	10 040	10 640	11 080			
D Max. dumping height	6 830	7 180	7 700	8 150			
D' Min. dumping height	3 200	2 650	3 780	3 110			
E Min. swing radius	3 280	3 180	2 630	2 320			
F Max. vertical wall digging depth	5 300	5 990	4 720	5 280			

Excluding track shoe lug

MACHINE CAPACITIES

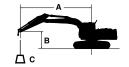
ZX240N-7

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

- Machine capacity does not exceed 75% of tipping load with the machine on firm, level ground or 87% full hydraulic capacity.
 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.

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.



A: Load radius

B: Load point height

C: Machine capacity

ZX240N-7 MONOBLOCK BOOM

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

	Load	oad Load radius							At max, reach					
Conditions	point	1.5	m	3.0) m	4.5	m	6.0	m	7.5	m	Al	. max. reach	
	height m	ů	₽	ď	₽	Ů	<u> </u>	ů	₽	ů	₽	ů	₽	meter
Boom 5.68 m	6.0							*5 690	5 080			*5 720	4 200	6.74
Arm 2.42 m	4.5					*7 270	*7 270	*6 160	4 930			*5 740	3 510	7.48
Counterweight 4 700 kg	3.0					*9 120	6 980	*6 960	4 700	5 740	3 410	5 340	3 180	7.87
4 700 kg	1.5					*10 610	6 540	*7 720	4 480	5 630	3 320	5 180	3 060	7.95
	0 (Ground)					*11 120	6 350	7 630	4 340	5 560	3 250	5 320	3 120	7.74
	-1.5			*9 880	*9 880	*10 780	6 330	7 580	4 300			5 860	3 420	7.21
	-3.0			*13 060	11 910	*9 610	6 430	*7 060	4 380			*6 580	4 150	6.28
	-4.5					*6 770	6 720					*6 340	6 320	4.71
Boom 5.68 m	6.0							*5 170	5 150			*4 000	3 720	7.32
Arm 2.91 m	4.5					*6 550	*6 550	*5 710	4 990	*5 320	3 530	*3 950	3 170	8.01
Counterweight 4 700 kg	3.0					*8 440	7 120	*6 570	4 750	*5 680	3 430	*4 060	2 890	8.37
4 700 kg	1.5					*10 150	6 630	*7 430	4 510	5 630	3 310	*4 330	2 790	8.45
	0 (Ground)			*4 810	*4 810	*11 000	6 360	7 630	4 340	5 530	3 220	*4 840	2 840	8.25
	-1.5	*5 440	*5 440	*9 070	*9 070	*10 960	6 280	7 540	4 260	5 500	3 200	5 260	3 070	7.76
	-3.0	*9 930	*9 930	*14 220	11 750	*10 100	6 340	*7 490	4 300			*6 150	3 610	6.90
	-4.5			*11 090	*11 090	*8 000	6 550					*6 150	5 000	5.52

ZX240N-7 2-PIECE BOOM

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

	Load					Load	radius					Λ.	t may raaah	
Conditions	point	1.5	5 m	3.0) m	4.5	5 m	6.0) m	7.5	m	A	t max. reach	
	height m	ů	₽	ů	₽	ů	₽	ů	₽	ů	∄	ů	₽	meter
2-Piece Boom	9.0			*9 060	*9 060							*8 670	*8 670	3.19
Arm 2.42 m	7.5					*6 890	*6 890					*5 860	5 810	5.50
Counterweight 4 700 kg	6.0					*6 960	*6 960	*5 760	5 190			*4 930	4 180	6.74
4 700 kg	4.5			*12 120	*12 120	*7 880	*7 740	*6 020	5 190			*4 550	3 480	7.48
	3.0			*13 650	13 300	*10 050	7 550	*6 680	5 060	*5 280	3 430	*4 440	3 140	7.87
	1.5			*15 330	13 220	*11 030	7 490	*7 620	4 850	*5 650	3 340	*4 540	3 020	7.95
	0 (Ground)	*12 310	*12 310	*17 070	12 600	*11 050	7 020	7 880	4 590	5 600	3 240	*4 860	3 090	7.74
	-1.5	*18 380	*18 380	*17 440	12 200	*11 200	6 730	7 760	4 390			*5 470	3 390	7.21
	-3.0	*24 580	*24 580	*16 690	12 140	*10 320	6 530	*5 900	4 380			*4 900	4 160	6.25
2-Piece Boom	9.0											*5 390	*5 390	4.30
Arm 2.91 m	7.5					*6 050	*6 050	*5 030	*5 030			*4 390	*4 390	6.20
Counterweight 4 700 kg	6.0					*6 230	*6 230	*5 390	5 290			*4 060	3 690	7.32
1 7 00 Ng	4.5			*8 200	*8 200	*7 270	*7 270	*5 670	5 220	*4 740	3 570	*3 970	3 140	8.01
	3.0	*10 950	*10 950	*14 230	*13 370	*9 120	7 590	*6 290	5 080	*4 990	3 520	*3 960	2 860	8.37
	1.5	*8 800	*8 800	*14 840	13 190	*10 840	7 340	*7 210	4 920	*5 370	3 400	*4 040	2 760	8.45
	0 (Ground)	*11 140	*11 140	*16 520	12 840	*11 000	7 110	7 840	4 690	5 630	3 270	*4 290	2 810	8.25
	-1.5	*15 120	*15 120	*17 280	12 260	*11 070	6 770	7 810	4 430	5 540	3 180	*4 800	3 040	7.76
	-3.0	*19 180	*19 180	*17 350	12 130	*10 970	6 530	*7 270	4 320			*4 650	3 600	6.91
	-4.5	*20 940	*20 940	*12 790	12 160	*7 150	6 560					*6 960	6 420	4.57

MEMO			

EQUIPMENT

ENGINE	ZX240N-7
Aftertreatment device	•
Air cleaner double filters	•
Alternator 60 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 inlet strainer and extension filler	•
DEF/AdBlue® tank	•
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	0
Radiator, oil cooler and intercooler	•

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

CAB	ZX240N-7
All-weather sound suppressed steel cab	•
Auto control air conditioner	•
AUX function lever (breaker assist)	0
Bluetooth® integrated DAB+radio	•
Cab with P5A glass and roof wiper	0
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	•
Laminated round glass window	0
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	•
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	•
Sunscreen roller type (multi-use front or side and rear window)	
Smartphone holder	•
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	

MONITOR SYSTEM	ZX240N-7
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, etc	•
Display of meters: water temperature, hour, fuel rate, clock, DEF/AdBlue® rate, etc	•
Other displays:work mode, auto-idle, glow, rearview monitor, operating conditions, etc	•
35 languages selection	•

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

UPPER STRUCTURE	
Aerial Angle® (270-degree view camera system)	•
Batteries 2 x 126 Ah	•
Battery disconnect switch	•
Body top handrail	•
Counterweight 4 700 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	•
Side view mirror (right and left)	•
Skid-resistant plates	•
Swing parking brake	•
Undercover	•
Utility space	•

•	: Standard	equipment
---	------------	-----------

0	: Optional	equipmer
---	------------	----------

UNDERCARRIAGE	ZX240N-7
Bolt-on sprocket	•
Greasing type track adjuster	•
Lockable tool box	•
Reinforced track links with pin seals	•
Shoe: 550 mm triple grouser	•
Towing hole for light weight object	•
Track undercover	•
Travel direction mark on track frame	•
Travel motor covers	•
Travel parking brake	•
Upper and lower rollers	•
2 track guards (each side)	•
4 tie down brackets	•

FRONT ATTACHMENTS	
Arm tip remote lubrication	•
Casted bucket link A	•
Centralized lubrication system	•
Dirt seal on all bucket pins	•
Flanged pin	•
HN bushing	•
Lower arm reinforcement	0
Reinforced bucket link B	•
Reinforced resin thrust plate	•
WC (tungsten-carbide) thermal spraying	•
Welded bucket link A	0
Welded bucket link A with welded hook	0

0
0
0
•
•

MISCELLANEOUS	
ConSite	0
Global e-Service	•
Onboard information controller	•
Standard tool kit	•

in a country other than a country of its intended use, it may be necessary	These specifications are subject to change without notice. Illustrations and photos show the standard models, and may or may not include optional
	equipment, accessories, and all standard equipment with some differences in color and features. Before use, read and understand the Operator's Manual for proper operation.

KS-EN000EU

Printed in Europe

Hitachi Construction Machinery

www.hcme.com