

HYDRAULIC EXCAVATOR



CX500C

ENGINE

Brand	ISUZU
Model	GH-6UZ1XKSS-01
Type	4-stroke engine, water-cooled, 6 cylinder – common rail injection system, turbocharged with air-cooled intercooler, with tier 3 emission certification.
Rating Power	
Gross (ISO 14396)	362 hp (270 kW) @ 2000 rpm (without ventilator pump)
Net (SAE J1349, ISO 9249)	328 hp (245 kW) @ 2000 rpm (with ventilator pump)
Piston displacement	9839 cc
Maximum torque	
Gross (ISO 14396)	1005.3 lbf.ft (1363 Nm) @ 1500 rpm (without ventilator pump)
Bore and stroke	4.7 x 5.7 in (120 x 145 mm)
Voltage	24 V
Alternator	50 A
Starter engine	24 V 5,5 kW

ELECTRICAL SYSTEM

Engine control	
1 - Quadrant type acceleration control	
2 - Touch idling / automatic deceleration / automatic idling shutdown system	
3 - Emergency shutdown	
Lights	
1 - Work lights	
Top	24 V 70 W X 1
Boom	24 V 70 W X 2
Cabin	24 V 70 W X 2
2 - Operator's cabin compartment	24 V 10 W X 1
Battery	2 X 12 V 128 Ah/5hr

Safety

- 1 - Travel alarm
- 2 - Double horn

Wiring Waterproof connectors

HYDRAULIC SYSTEM

Main pumps	2 axial piston pumps with variable flow and adjustment system
1 - Max. oil flow	2 x 105.6 gpm (400 l/min) @ 2000 rpm
2 - Work circuit pressure	
Boom/Arm/Bucket	4554 psi (31.4 MPa)
	4975 psi (34.3 MPa) with Auto power up
Swing circuit	4260 psi (29.4 MPa)
Travel circuit	4975 psi (34.3 MPa)
Pilot pump	1 gear pump
1 - Max. oil flow	8 gpm (30 l/min)
2 - Work circuit pressure	565 psi (3.9 MPa)
Control valve	With boom and arm retention valve
	One 4-spool valve for Right track travel, Bucket, Boom and Arm acceleration
	One 5-spool valve for Left track travel, Auxiliary, Swing, Arm and Boom acceleration.
Swing device	
1 - Motor	Axial piston motor and fixed displacement
2 - Brake	SAHR type
3 - Final control	Epicyclic gear reduction
4 - Rotating table bushing	Ball type with internal gear
5 - Max. turning speed	9.0 rpm
6 - Swing torque	110.634 lbf.ft (150 kN.m)
Cylinder Qty	Diam.Bore x Diam.Rod x Stroke
Boom	2 6.7 in x 4.5 in x 5 ft 1 in (170 mm) (115 mm) (1550 mm)
Arm	1 7.8 in x 5.5 in x 5 ft 11 in (200 mm) (140 mm) (1820 mm)
Bucket	1 6.5 in x 4.5 in x 4 ft 2.6 in (165 mm) (115 mm) (1285 mm)

HYDRAULIC CONTROLS

Boom/arm/bucket/swing	Pilot pressure control system (ISO standard control)
Travel	Pilot pressure control system
Work mode selection	
1 - Mode SP	
2 - Mode H	
3 - Mode Auto	
Travel mode selection	(2 speeds)
Fan reverse rotation system	
Hydraulic block	(door block, left side tilt console)
Fan reverse rotation system	

MONITORING SYSTEM

- 1 - Message screen (Warning, Situation, etc...)
- 2 - Work mode screen (SP, H, Auto)
- 3 - Machine condition (Power boost, etc...)
- 4 - Alarm and buzzer screen
- 5 - Water temperature
- 6 - Hydraulic oil temperature
- 7 - Fuel level
- 8 - Diagnose system

OPERATOR'S ENVIRONMENT

Operator's cabin

- 1 - Round shaped cabin with a smooth design
- 2 - Safety glass on all windows
- 3 - Cabin suspension through 4 hydraulic dampers
- 4 - Sliding front window with automatic block
- 5 - Color LCD screen
- 6 - Membrane switch on the display screen
- 7 - Windscreen wipers and washer
- 8 - AM/FM radio with automatic tuner
- 9 - Floor carpet
- 10 - Hinged skylight
- 11 - Automatic air conditioning
- 12 - Top FOPS defense level 1 (on the cabin's structure)
- 13 - Internal noise level 72 dBa (According to ISO 6396)

Operator's seat

- 1 - Suspension seat with upholstered cloth
- 2 - Sliding and reclining seat

Other

- 1 - Back mirror (cabin side and right side)

UNDERCARRIAGE

Drive motor	Axial piston motor with variable cylinder capacity
Brake	SAHR type
Hydraulic service brake	Brake valve
Final control	Epicyclic gear reduction
Travel speed	
High	3.3 mph (5,3 km/h) (automatic speed change)
Low	2 mph (3,2 km/h)
Drawbar pull	76210 lbf (339 kN)
Quantity of upper rollers	2 (on each side)
Quantity of lower rollers	9 (on each side)
Quantity of pads	50 (on each side)
Type of pad	Triple claw pad
Link pitch	8.9" (228.6 mm)
Shoes width - STD	1' 11" (600 mm)
Gradeability	70% (35°)

COOLING SYSTEM

Fan	3' 4" (1016 mm) with 6 blades
Radiator capacity	188 hp (140.3 kW)
Fin type	Corrugated (Wave type)
Fin space	0.07" (1.75 mm)
Long-life coolant	55% coolant, 45% water
Oil cooler capacity	142.8 (106.5 kW)
Air interchanger capacity	53.6 hp (40 kW)
Fin type	Straight
Fin space	0.08" (2,0 mm)
Fuel cooler capacity	5 hp (3.72 kW)
Fin type	Corrugated (Wave type)
Fin space	0.09" (2.25 mm)
Cooling ventilator control system	
(1) Pump	1 vane pump
(2) Motor	Fixed displacement axial piston motor
Filters	
Suction filter	105 µm
Return filter	6 µm
Pilot line filter	8 µm

EXCAVATION FORCE

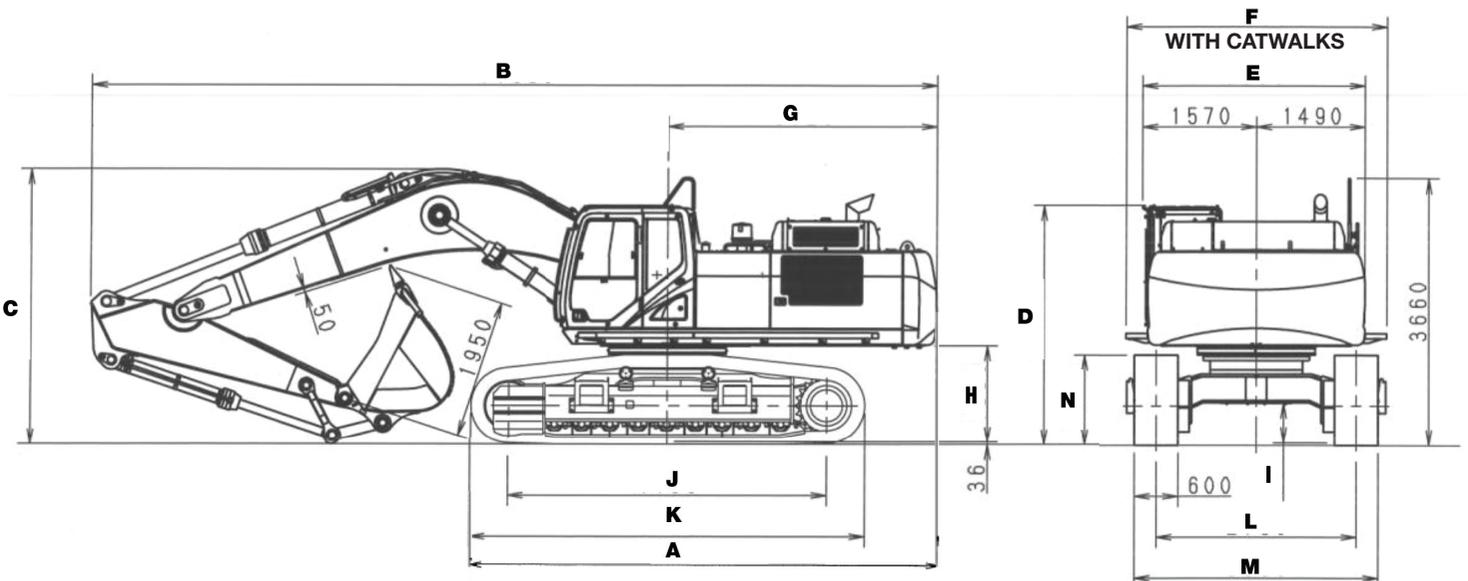
WITH 3.6 YD³ (2,8 m³) BUCKET

Arm (ISO 6015)	8' 3" (2.53 m)
Arm digging force	56427 lbf (251 kN)
With AUTO power up	61597 lbf (274 kN)
Bucket digging force	61597 lbf (274 kN)
With AUTO power up	67442 lbf (300 kN)

OPERATING WEIGHT

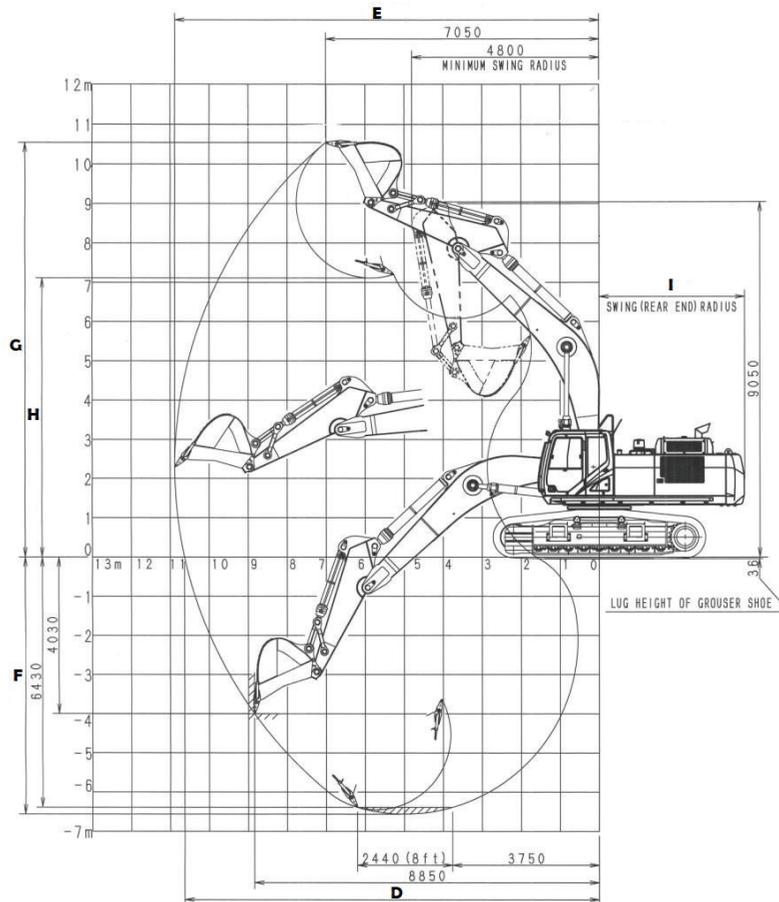
Operating weight	109128 lb (49.500 kg)
With 8' 3" (2.53 m) arm, 3.6 yd ³ (2.8 m ³) bucket, 1' 11" (600 mm) Track shoes, operator, lubricant, coolant and full fuel tank	
Shipping weight	101633 lb (46.100 kg)
Operating weight – Operator's weight 165 lb (75 kg) + 90% of the fuel weight 1069 lb (485 kg) + bucket weight 6261 lb (2840 kg)	
Counterweight	22046 lb (10.000 kg)
Ground pressure	12.4 psi (0,87 kgf/cm ²)
With 8' 3" (2,53 m) arm, 3.6 yd ³ (2,8 m ³) bucket, 1' 11" (600 mm) track shoes	

DIMENSIONS



Long Arm		8' 3" (2,53 m)
A. Total length (without accessory)		21' 1.7" (6445 mm)
B. Total length (with accessory)		38' 3.8" (11680 mm)
C. Total height (with accessory)		12' 4.4" (3770 mm)
D. Cab height		10' 9.5" (3290 mm)
E. Upper structure total width (without catwalks)		10' 0.4" (3060 mm)
F. Upper structure total width (with catwalks)		11' 9.3" (3590 mm)
G. Rotation radius (back)		12' 2.8" (3730 mm)
H. Clearance height under upper structure		4' 4.3" (1330 mm)
I. Minimum ground clearance		1' 9.2" (540 mm)
J. Distance between shafts (from center to center of the wheels)		14' 5.2" (4400 mm)
K. Crawler overall length		17' 10" (5450 mm)
L. Track gauge		9' 0.2" (2750 mm)
M. Undercarriage overall width (with 600 mm shoes)		10' 11" (3350 mm)
N. Tracks height		4' 0.8" (1240 mm)

PERFORMANCE INFORMATION



Long Arm		8' 3" (2,53 m)
A. Boom length		21' 5.8" (6550 mm)
B. Bucket radius		6' 4.7" (1950 mm)
C. Bucket rotation		160°
D. Max. ground level reach		35' (10670 mm)
E. Max. reach		35' 9.9" (10920 mm)
F. Max. excavation depth		21' 7.8" (6600 mm)
G. Max. excavation height		34' 7.7" (10560 mm)

SERVICE CAPACITIES AND SPECIFICATIONS

	Capacities	Specifications
Hydraulic system	121.5 gal (460 l)	ISO VG 46
Hydraulic deposit	60.8 gal (230 l)	ISO VG 46
Fuel tank	171.7 gal (650 l)	(Diesel)
Cooling system	12.4 gal (47 l)	Coolant 55% 45% water
Final drive case (on each side)	4 gal (15 l)	API GL-4 90
Swing drive case	2.8 gal (10.5 l)	API GL-5 90
Engine crank case (with remote oil filter)	9.5 gal (36 l)	API CD SAE 10W-30

ELEVATION CAPACITY

Short Arm 8 ft 3 in (2.53 m), Bucket 3.7 jd³ (2.80 m³)

	0 ft (0 m)		6.5 ft (2 m)		10 ft (3 m)		13 ft (4 m)		20 ft (6 m)		23 ft (7 m)		30 ft (9 m)		MAXIMUM REACH		ft (m)
	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	FRONT	SIDE	
30 ft (9 m)											16270 lb (7380 kg)*	16270 lb (7380 kg)*			12522 lb (5680 kg)*	12522 lb (5680 kg)*	26 ft 6 in (8.09 m)
25 ft (7.5 m)											20062 lb (9100 kg)*	20062 lb (9100 kg)*	15873 lb (7200 kg)*	14682 lb (6660 kg)	11794 lb (5350 kg)*	11794 lb (5350 kg)*	30 ft 2 in (9.20 m)
20 ft (6 m)									22420 lb (10170 kg)*	22420 lb (10170 kg)*	22156 lb (10050 kg)*	20987 lb (9520 kg)	19290 lb (8750 kg)*	14550 lb (6600 kg)	11486 lb (5210 kg)*	11486 lb (5210 kg)*	32 ft 5 in (9.90 m)
15 ft (4.5 m)							38206 lb (17330 kg)*	38206 lb (17330 kg)*	30269 lb (13730 kg)*	29255 lb (13270 kg)*	24339 lb (11040 kg)*	19995 lb (9070 kg)	20723 lb (9400 kg)*	14021 lb (6360 kg)	11596 lb (5260 kg)*	10207 lb (4630 kg)*	33 ft 10 in (10.32 m)
10 ft (3 m)							45944 lb (20840 kg)*	44070 lb (19990 kg)	34722 lb (15750 kg)*	27601 lb (12520 kg)	26653 lb (12090 kg)*	18849 lb (8550 kg)	21825 lb (9900 kg)*	13404 lb (6080 kg)	12081 lb (5480 kg)*	9590 lb (4350 kg)	34 ft 4 in (10.48 m)
5 ft (1.5 m)							57367 lb (23300 kg)*	40719 lb (18470 kg)	37302 lb (16920 kg)*	25816 lb (11710 kg)	28197 lb (12790 kg)*	17835 lb (8090 kg)	22310 lb (10120 kg)	12830 lb (5820 kg)	12963 lb (5880 kg)	9523 lb (4320 kg)*	34 ft 1 in (10.41 m)
0 ft (0 m)					28549 lb (12950 kg)*	28549 lb (12950 kg)*	52139 lb (23650 kg)*	39484 lb (17910 kg)	37478 lb (17000 kg)*	24757 lb (11230 kg)	28439 lb (12900 kg)*	17129 lb (7770 kg)	21935 lb (9950 kg)	12434 lb (5640 kg)	14418 lb (6540 kg)*	10008 lb (4540 kg)	33 ft 1 in (10.10 m)
- 5 ft (- 1.5 m)					42218 lb (19150 kg)*	42218 lb (19150 kg)*	49537 lb (22470 kg)*	40212 lb (18240 kg)	36398 lb (16510 kg)*	24625 lb (11170 kg)	27623 lb (12530 kg)*	16909 lb (7670 kg)	20943 lb (9500 kg)*	12389 lb (5620 kg)	16799 lb (7620 kg)*	11221 lb (5090 kg)	31 ft 3 in (9.53 m)
- 10 ft (- 3 m)					59105 lb (26810 kg)*	59105 lb (26810 kg)*	43960 lb (19940 kg)*	40454 lb (18350 kg)	32914 lb (14930 kg)*	25066 lb (11370 kg)	24515 lb (11120 kg)*	17328 lb (7860 kg)			17129 lb (7770 kg)*	13558 lb (6150 kg)	28 ft 4 in (8.66 m)
- 15 ft (- 4.5 m)					44841 lb (20340 kg)*	44841 lb (20340 kg)*	34392 lb (15600 kg)*	34392 lb (15600 kg)*	25441 lb (11540 kg)*	25088 lb (11380 kg)					15167 lb (6880 kg)*	15167 lb (6880 kg)*	24 ft 3 in (7.40 m)*

BUCKET INFORMATION

CX500C

BUCKET	CAPACITY yd ³ (m ³)	WIDTH inch (mm)	WEIGHT lb (kg)	TEETH NUMBER	CNHI NUMBER
HD (ME)	3.04 (2,33)	54" (1372)	5654 (2565)	6	47957624
HD (ME)	3.44 (2,63)	60" (1524)	5950 (2699)	6	47957625
HD (ME)	3.75 (2,87)	66" (1676)	6239 (2830)	7	47957626
HD (ME)	4.12 (3,15)	75" (1905)	6635 (3010)	7	48086958

Note: HD (Heavy Duty)
ME (Mass Excavator)

SERIES EQUIPMENT

Operator's Compartment

Pressurized cabin with round shape and smooth design
 Safety glass on all windows
 Shock-less cab suspension by 4-point fluid mounting
 Sliding front window with automatic block
 Full color LCD screen included
 Membrane switch on the display screen
 Windscreen wipers and washer
 AM/FM radio with automatic tuner
 floor carpet
 Ceiling hatch of polycarbonate and sun protection
 Automatic air conditioning
 Top FOPS defense level 1 (on the cabin's structure)
 Rollover protection structure (ROPS)
 Operator's seat with low frequency mechanical suspension with helical spring and double acting hydraulic damper, manual weight adjustment, back angle adjustment, adjustable armrest height attached to the consoles, adjustable headrest, self retracting seatbelt (3") and adjustable back support
 The control consoles are adjusted independently from the seat
 Double horn
 Travel alarm
 Joystick levers to control hydraulic functions
 Safety levers to neutralize hydraulic functions and start of the engine.
 Telematics on board (SiteWatch).

Engine

4-stroke engine, water-cooled, 6 cylinder – common rail injection system, turbocharged with air-cooled intercooler, with tier 3 emission certification.

Electric System

Wiring with waterproof connectors
 Battery 2 x 12V 128 Ah/5hr
 Voltage 24V
 Alternator 50 A
 Starter engine 5.5 kW

Hydraulic System

With ISO control pattern
 Work mode selection Auto, H and SP
 Auxiliary accessory mode
 Auto power up
 2 variable flow pumps
 Electronic flow control
 Cylinder with end cushioning
 Fan reverse rotation system
 One gear pump for pilot system
 8'3" (2.53m) arm

Undercarriage

Travel speed
 High 3.3 mph (5.3 km/h)
 Automatic movement speed change
 Low 2 mph (3.2 km/h)
 Quantity of transport rollers: 2 (each side)
 Quantity of rollers on each track 9 (on each side)
 Number of pads 50 (on each side)
 Pads width 1' 11" (600 mm)
 Type of pad Triple grousers
 Track width 9' (2750 mm)
 Track length 17' 10" (5450 mm)
 Track guide Simple
 Sealed and lubricated chains



ISO Conformitie

ROPS	12117-2:2008
FOPS level 1	10262:1998
Seat belt	6683:2005
Operator's seat	11112:1995
Seat vibration	7096:2000
Operator's primary controls, functional information, symbols for operator controls and other displays	10968:2004 / 6011:2003 6405-1:2004 / 6405-2:1993 / 6682:1995
Machine-control systems	15998:2008
Visibility	5006:2006 14401-1:2004 / 14401-2:2004
Sound level	
Internal	6396:2008
External	6395:2008
Ground contact pressure	16754:2008
Digging force	6015:2006
Terminology and commercial specifications	7135:2009
Lift capacity	10567:2007

OPTIONAL EQUIPMENT

Cabin

Seat with air suspension
 2 options for front stone protection.
 Level 2 FOPS superior protection
 Rain deflector
 Sun screen

Accessories

Heavy Duty bucket and link with hook
 Six options for auxiliary accessory
 Additional handrails Rh + Lh
 Safety valve for the Boom

Other

Rear view camera
 Side view camera
 Refueling pump

Undercarriage

2' 3.5" (700 mm) and 2' 11.4" (900 mm) track shoes
 Triple track guide



SiteWatch™

Fleet monitoring and tracking management system through satellite or mobile phone

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