ZX135US-6 SPECIFICATIONS

ENGINE

Model	Isuzu AR-4JJ1X
Type	4-cycle water-cooled, common rail direct injection
Aspiration	Variable geometry turbocharged, intercooled, cooled EGR
Aftertreatment	DOC and SCR system
No. of cylinders	4
Rated power	
ISO 14396: 2002 Gross	105 hp (78.5 kW) at 2,000 rpm
ISO 9249: 2007 Net	100 hp (74.9 kW) at 2,000 rpm
Maximum torque	277 lbf-ft (375 Nm) at 1,800 rpm
Piston displacement	183 cu. in. (3 L)
Bore and stroke	3.8" x 4.1" (95.4 mm x 104.9 mm)
Batteries	2 x 12 V/58 Ah

HYDRAULIC SYSTEM

Hydraulic Pumps

Main pumps	2 variable displacement axial piston pumps
Maximum oil flow	2 x 27.7 gal/m (2 x 105 L/min)
Pilot pump	1 gear pump
Maximum oil flow	7.9 gal/m (30 L/min)

Hydraulic Motors

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

Relief Valve Settings

Implement circuit	4,975 psi (34.3 MPa)
Swing circuit	4,685 psi (32.3 MPa)
Travel circuit	4,975 psi (34.3 MPa)
Pilot circuit	566 psi (3.9 MPa)
Power boost	5,265 psi (36.3 MPa)

Hydraulic Cylinders

Unit: in (mm)

	Quantity	Bore	Rod diameter
Boom	2	4.1" (105)	2.8" (70)
Arm	1	4.5" (115)	3.1" (80)
Bucket	1	3.9" (100)	2.8" (70)

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	13.3 rpm
Swing torque	25,077 lbf-ft (34 kNm)

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	1
Lower rollers	7
Track shoes	44
Track guards	1

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 3.4 mph (0 to 5.5 km/h) Low: 0 to 2.2 mph (0 to 3.5 km/h)
Maximum traction force	26,303 lbf (117 kN)
Gradeability	70% (35 degree) continuous

ENVIRONMENT

Engine Emissions	EPA Final Tier 4/EU Stage IV

SOUND 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 99 dB(A)*

*At PWR mode

SERVICE REFILL CAPACITIES

Unit: gal (L)

Fuel tank	58.1 (220)
Engine coolant	5.5 (21)
Engine oil	4.5 (17)
Swing device	0.8 (3.2)
Travel device (each side)	1.1 (4)
Hydraulic system	40.9 (155)
Hydraulic oil tank	15.9 (60)
DEF/AdBlue® tank	3.4 (13)

WEIGHTS AND GROUND PRESSURE

Operating Weight and Ground Pressure

		ZX135US-6		ZX135US-6 with blade (optional)	
Shoe type	Shoe width Unit: in (mm)	lb (kg)	psi (kPa)	lb (kg)	psi (kPa)
Triple grouser shoes	24" (600)	31,306 (14,200)	5.37 (37)	33,731 (15,300)	5.80 (40)
	28" (700)	-	-	34,172 (15,500)	5.08 (35)

Including 0.7 yd3 (0.50 m3) (ISO heaped) bucket weight 904 lb (410 kg) and counterweight 7,760 lb (3,520 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.

		ZX135US-6		ZX135US-6 with blade (optional)	
Shoe type	Shoe width Unit: in (mm)	Weight Unit: lb (kg)	Overall width Unit: ft-in (mm)	Weight Unit: lb (kg)	Overall width Unit: ft-in (mm)
Triple grouser shoes	24" (600)	25,133 (11,400)	8'6" (2,590)	27,558 (12,500)	8' 10" (2,690)
	28" (700)	-	-	28,000 (12,700)	8' 10" (2,690)

Components Weight

Unit: lb (kg)

Counterweight	7,760 (3,520)
Boom (with arm cylinder and boom cylinder)	2,733 (1,240)
Arm 9' 11" (3.01 m) (with bucket cylinder)	1,521 (690)
Bucket ISO 7451: 2007 0.7yd^3. (0.50 m^3)	904 (410)

BUCKET AND ARM DIGGING FORCE

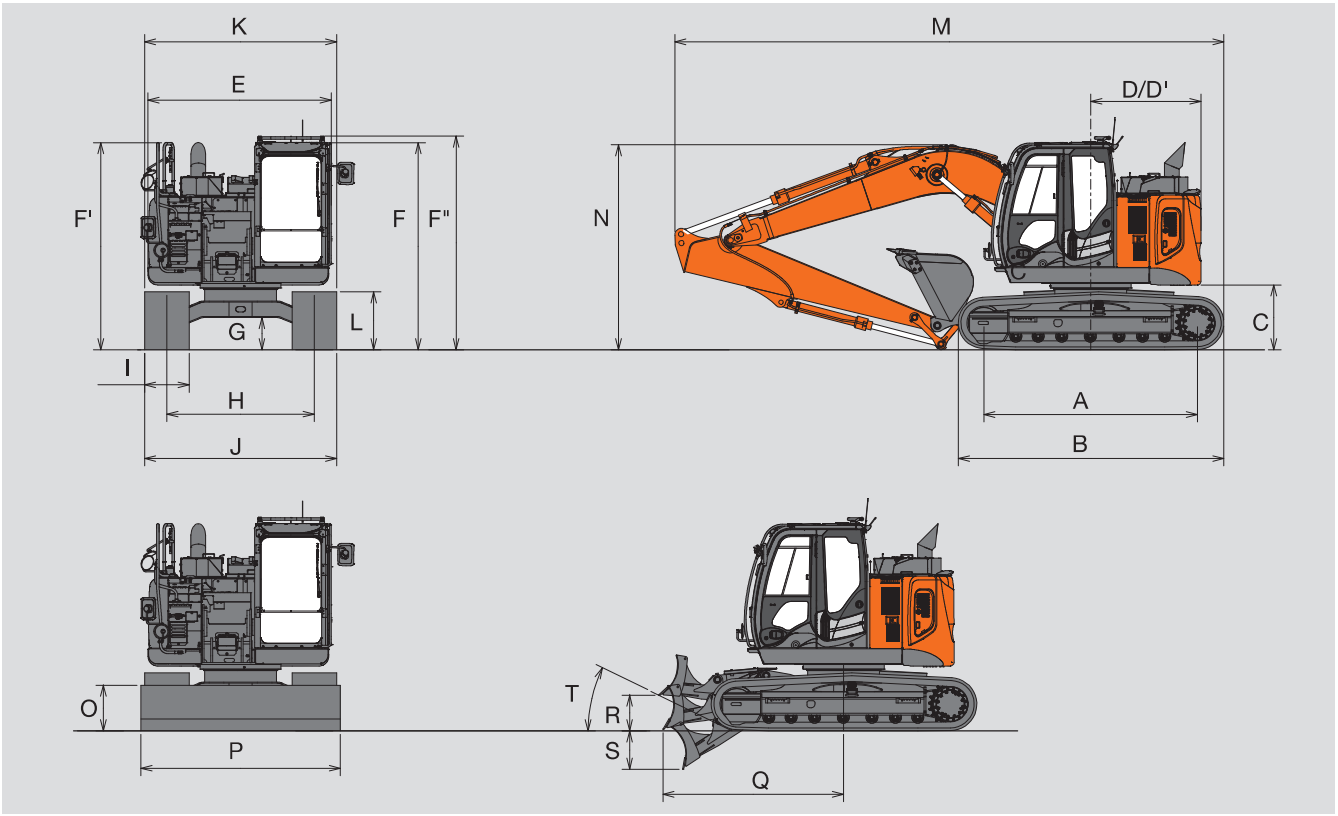
Unit: lbf (kN)

Arm length	9' 11" (3.01 m)
Arm crowd force* ISO 6015: 2006	13,713 (61)
Bucket digging force* ISO 6015: 2006	22,380 (104)

* At power boost

ZX135US-6 SPECIFICATIONS

DIMENSIONS

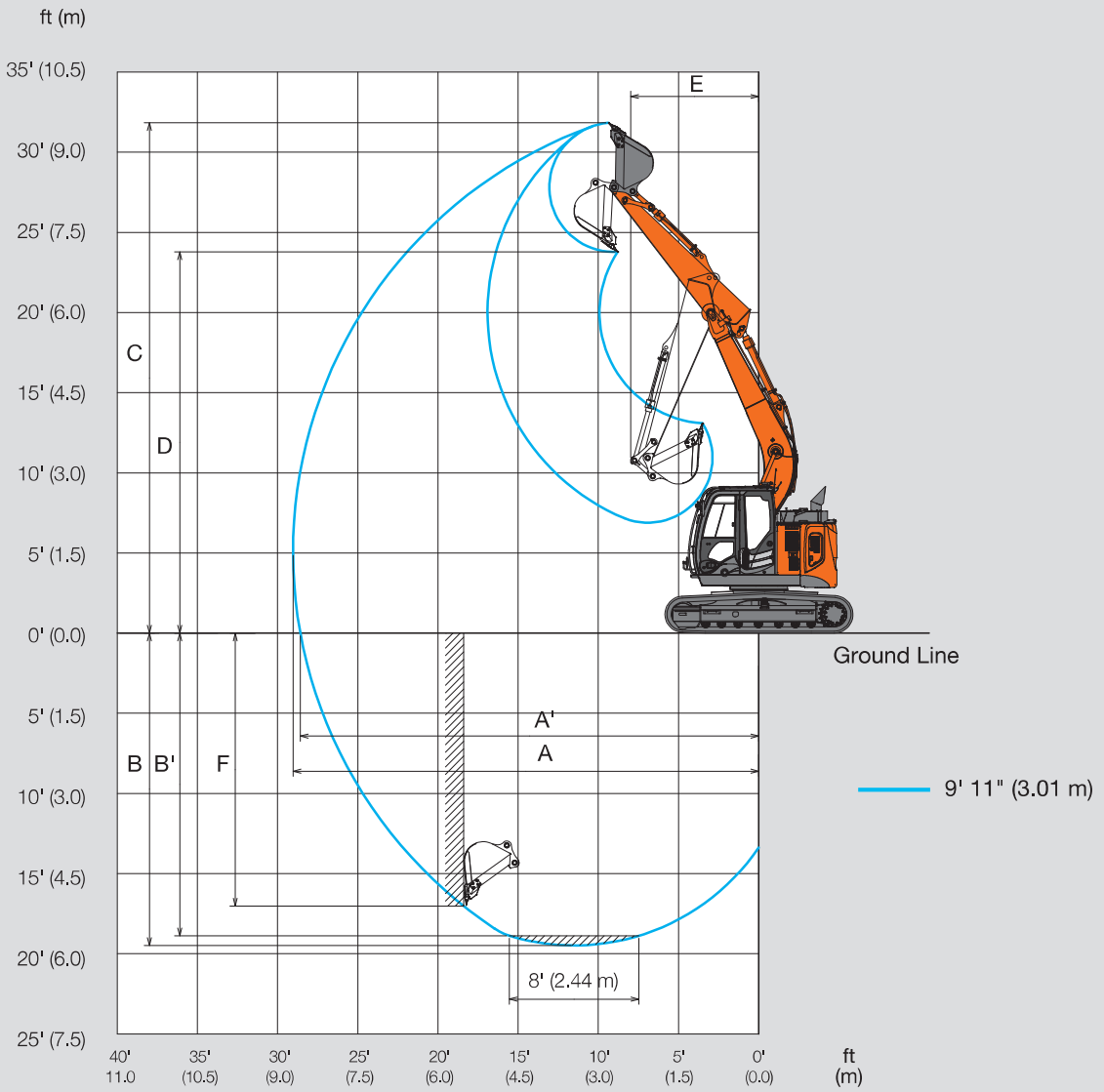


Unit: ft-in (mm)

			ZX135US-6
A	Distance between tumblers		9' 5" (2,880)
B	Undercarriage length		11'9" (3,580)
C*1	Counterweight clearance		2' 9" (840)
D	Rear-end swing radius		4' 11" (1,490)
D'	Rear-end length		4' 11" (1,490)
E	Overall width of upperstructure		8' 2" (2,480)
F	Overall height of cab		9' 2" (2,790)
F'	Overall height of handrail		9' 5" (2,870)
F"	Overall height of handrail (on cab)		9' 5" (2,870)
G*1	Min. ground clearance		1' 4" (410)
H	Track gauge		6' 6" (1,990)
I	Track shoe width		24" (600)
			28" (700)
J	Undercarriage width	Track shoe width 24" (600)	8' 6" (2,590)
		Track shoe width 28" (700)	8' 10" (2,690)
K	Overall width	Track shoe width 24" (600)	8' 6" (2,590)
		Track shoe width 28" (700)	8' 10" (2,690)
		with blade	8' 10" (2,690)
L*1	Track height with triple grouser shoes		2' 7" (790)
M	Overall length	with Arm 9' 11" (3.01 m)	24' 3" (7,390)
		with blade	24' 4" (8,030)
N*2	Overall height of boom with Arm 9' 11" (3.01 m)		9' 1" (2,780)
O	Blade height		2' (600)
P	Blade width		8' 10" (2,690)
Q	Distance between the front end of blade and the axis of rotation		8' (2,430)
R	Blade maximum lifting		1' 6" (460)
S	Blade maximum lowering		1' 9" (540)
T	Blade approach angle		26°

*1 Excluding track shoe lug *2 The dimensions asterisked are for transport pin position

WORKING RANGES



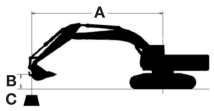
Unit: ft-in (mm)

	ZX135US-6
Arm length	9' 11" (3.01 m)
A Max. digging reach	29' 1" (8,860)
A' Max. digging reach (on ground)	28' 7" (8,720)
B Max. digging depth	19' 7" (5,980)
B' Max. digging depth for 8' (2.44 m) level	19' (5,790)
C Max. cutting height	31' 9" (9,690)
D Max. dumping height	23' 8" (7,220)
E Min. swing radius	8' (2,450)
F Max. vertical wall digging depth	17' (5,190)

Excluding track shoe lug

ZX135US-6 MACHINE CAPACITIES

Boldface type indicates hydraulically limited capacity; lightface type indicates stability limited capacities, in lb (kg). All machine capacities are based on ISO 10567 (with power boost). Ratings at bucket lift hook; Machine equipped with standard counterweight and standard gauge; and situated on firm, uniform supporting surface. Total load includes weight of cables, hook, etc. Figures do not exceed 87 percent of hydraulic capacities or 75 percent of weight needed to tip machine.



A: Load radius
B: Load point height
C: Machine capacity

ZX135US-6

Rating over-front Rating over-side or 360 degrees Unit: lb (kg)

Conditions	Load point height ft (m)	Load radius									
		5' (1.5 m)		10' (3.0 m)		15' (4.5 m)		20' (6.0 m)		25' (7.5 m)	
Boom 15' 1" (4.60 m) Arm 9' 11" (3.01 m) Bucket 913 lb (414 kg) Counterweight 7,760 lb (3,520 kg) Triple grouser shoes 24" (600 mm)	20' (6.0 m)					**6,170 (2,780)**	**6,170 (2,780)**				
	15' (4.5 m)					**6,710 (3,080)**	**6,710 (3,080)**	6,410 (2,990)	4,610 (2,150)		
	10' (3.0 m)			**10,240 (4,910)**	**10,240 (4,910)**	**8,490 (3,920)**	**7,200 (3,390)**	7,260 (3,330)	4,440 (2,070)		
	5' (1.5 m)			**17,310 (8,050)**	**12,630 (5,950)**	10,750 (4,970)	6,730 (3,130)	8,210 (3,780)	4,200 (1,960)	3,700 (2,170)	2,740 (1,300)
	0 (Ground)			**14,570 (6,270)**	**11,860 (5,520)**	12,340 (5,700)	6,290 (2,920)	8,910 (4,110)	3,990 (1,860)		
	5' (1.5 m)	**8,490 (3,780)**	**8,490 (3,780)**	**18,970 (8,260)**	**11,640 (5,420)**	12,560 (5,810)	6,080 (2,830)	8,850 (4,100)	3,880 (1,810)		
	10' (3.0 m)	**15,430 (6,840)**	**15,430 (6,840)**	**16,770 (7,780)**	**11,780 (5,490)**	11,050 (5,140)	6,110 (2,840)				
	15' (4.5 m)			**10,500 (5,030)**	**10,500 (5,030)**						
Boom 15' 1" (4.60 m) Arm 9' 11" (3.01 m) Bucket 913 lb (414 kg) Counterweight 7,760 lb (3,520 kg) Triple grouser shoes 28" (700 mm)	20' (6.0 m)					**6,170 (2,790)**	**6,170 (2,790)**				
	15' (4.5 m)					**6,710 (3,040)**	**6,710 (3,040)**	**6,410 (2,900)**	4,170 (1,890)		
	10' (3.0 m)			**10,240 (4,640)**	**10,240 (4,640)**	**8,490 (3,850)**	6,660 (3,020)	6,280 (2,840)	4,000 (1,810)		
	5' (1.5 m)			**17,310 (7,850)**	11,680 (5,290)	9,750 (4,420)	6,100 (2,760)	6,030 (2,730)	3,760 (1,700)	**3,700 (1,670)**	2,450 (1,110)
	0 (Ground)			**14,570 (6,600)**	10,740 (4,870)	9,250 (4,190)	5,650 (2,560)	5,800 (2,630)	3,550 (1,610)		
	5' (1.5 m)	**8,490 (3,850)**	**8,490 (3,850)**	18,640 (8,450)	10,520 (4,770)	9,020 (4,090)	5,450 (2,470)	5,680 (2,570)	3,440 (1,560)		
	10' (3.0 m)	**15,430 (6,990)**	**15,430 (6,990)**	**16,770 (7,600)**	10,660 (4,830)	9,050 (4,100)	5,480 (2,480)				
	15' (4.5 m)			**10,500 (4,760)**	**10,500 (4,760)**						

ZX135US-6 EQUIPMENT

●: Standard equipment ○: Optional equipment

ENGINE	ZX135US-6
Aftertreatment device	●
Air cleaner double filters	●
Alternator 50 A	●
Auto idle system	●
Auto shut-down control	●
Cartridge-type engine oil filter	●
Cartridge-type fuel main filter	●
Cold fuel resistance valve	●
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/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	●
Radiator, oil cooler and intercooler	●

HYDRAULIC SYSTEM	ZX135US-6
Auto power lift	●
Control valve with main relief valve	●
Extra port for control valve	●
High mesh full flow filter	●
Pilot filter	●
Power boost	●
Suction filter	●
Variable relief valve for crusher	●
Work mode selector	●

CAB	ZX135US-6
All-weather sound suppressed steel cab	●
AM-FM radio	●
Ashtray	●
Auto control air conditioner	●
AUX function lever (Attachment)	●
AUX terminal and storage	●
Cigarette lighter 24 V	●
CRES V (Center pillar reinforced structure) cab	●
Drink holder with hot & 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	●
Glove compartment	●
Hot and cool box	●
Intermittent windshield wipers	●
Key cylinder light	●
Lever auto locking function	●
Motion alarm with cancel switch (conforms to SAE J994: 2014)	●
OPG top guard Level I (ISO 10262: 1998) compliant cab	●
Pilot control shut-off lever	●
Power outlet 12 V	●
Rain guard (without OPG front guard)	●
Retractable seat belt 3 in.	●
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	●
Short wrist control levers	●
Sun visor (multi-use front or side and rear window)	●
Transparent roof with slide curtain	●
USB power supply	●
Windows on front, upper, lower and left side can be opened	●
2 speakers	●
4 fluid-filled elastic mounts	●

MONITOR SYSTEM	ZX135US-6
Alarms: overheat, engine warning, engine oil pressure, alternator, minimum fuel level, hydraulic filter restriction, air filter restriction, work mode, SCR system trouble, etc.	●
Alarm buzzers: overheat, engine oil pressure, SCR system trouble	●
Display of meters: water temperature, hour, fuel rate, clock, DEF/AdBlue® rate	●
Other displays: work mode, auto-idle, glow, rearview monitor, operating conditions, etc.	●
32-language selection	●

LIGHTS	ZX135US-6
Additional boom LED light with cover	●
Additional cab roof front LED lights	●
Additional cab roof rear LED lights	●
2 working LED lights	●

UPPERSTRUCTURE	ZX135US-6
AERIAL ANGLE® (270-degree view camera system)	●
Batteries 2 x 58 Ah	●
Battery disconnect switch	●
Body top handrail	●
Cab top handrail	●
Counterweight 7,760 lb(3,520 kg)	●
Fuel level float	●
Hydraulic oil level gauge	●
Lockable fuel refilling cap	●
Lockable machine covers	●
Lockable tool box	●
Platform handrail	●
Rear view mirror (right and left)	●
Skid-resistant plates and handrails	●
Swing parking brake	●
Undercover	●

ZX135US-6 EQUIPMENT

●: Standard equipment ○: Optional equipment

UNDERCARRIAGE	ZX135US-6
Bolt-on sprocket	●
Blade	○
Reinforced track links with pin seals	●
Shoe: 24" (600 mm) triple grouser	●
Shoe: 28" (700 mm) triple grouser	○
Travel direction mark on track frame	●
Travel motor covers	●
Travel parking brake	●
Upper and lower rollers	●
1 track guard (each side) and hydraulic track adjuster	●
4 tie down brackets	●

FRONT ATTACHMENTS	ZX135US-6
Arm 9' 11" (3.01 m)	●
Boom 15' 1" (4.60 m)	●
Casted bucket link A	●
Centralized lubrication system	●
Dirt seal on all bucket pins	●
Flanged pin	●
HN bushing	●
Reinforced resin thrust plate	●
WC (tungsten-carbide) thermal spraying	●

ATTACHMENTS	ZX135US-6
Attachment basic piping	●

MISCELLANEOUS	ZX135US-6
ConSite	○
Global e-Service	●
Onboard information controller	●
Standard tool kit	●

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

Net engine power is with standard equipment including air cleaner, exhaust system, alternator and cooling fan, at test conditions specified per ISO 9249: 2007. No derating is required up to 6,600 ft. (2,000 m) altitude.

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with 9' 11" (3.01 m) Arms; 35" (890 mm), 904 lb (410 kg) buckets; 7,760 lb (3,520 kg) counterweights; full fuel tanks; 165 lb (75 kg) operators; and a ZX135US-6 unit with 24" (600 mm) triple grouser shoes.