

Specifications

Engine 75D

Manufacturer and Model	Isuzu 4LE2X
Non-Road Emission Standards	EPA Interim Tier 4/EU Stage IIIB
Net Power (ISO9249)	40.5 kW (54 hp) @ 2,000 rpm
Cylinders	4
Displacement	2.2 L (133 cu. in.)
Off-Level Capacity	70% (35 deg.)
Aspiration	turbocharged with intercooler

Cooling

Variable-speed fan directly driven by the engine through a linear clutch; nonreversible

Powertrain

2-speed propel with automatic shift	
Travel Speed (maximum)	
Low	3.1 km/h (1.9 mph)
High	5.0 km/h (3.1 mph)

Hydraulics

Open center, load sensing	
Main Pumps	3 variable-displacement axial pistons
Maximum Rated Flow	2 x 79.2 lpm + 61.6 lpm (2 x 20.9 gpm + 16.3 gpm)
Pilot Pump	one gear
Maximum Rated Flow	20 L/m (5.3 gpm)
System Relief Pressure	3900 kPa (566 psi)
System Operating Pressure	
Implement Circuits	26 000 kPa (3,771 psi)
Travel Circuits	31 400 kPa (4,554 psi)
Swing Circuits	25 000 kPa (3,626 psi)
Controls	pilot levers, short stroke, low effort; hydraulic pilot controls with shutoff lever

Cylinders

Heat-treated, chrome-plated, polished cylinder rods, hardened steel (replaceable bushings) pivot pins			
	<i>Bore</i>	<i>Rod Diameter</i>	<i>Stroke</i>
Boom (1)	115 mm (4.5 in.)	65 mm (2.6 in.)	885 mm (34.8 in.)
Arm (1)	95 mm (3.7 in.)	60 mm (2.4 in.)	900 mm (35.4 in.)
Bucket (1)	85 mm (3.3 in.)	55 mm (2.2 in.)	730 mm (28.7 in.)

Electrical

Batteries	2 x 12 volt
Reserve Capacity	100 min.
Alternator Rating	50 amp
Work Lights	halogen (2), one mounted on boom and one on frame

Undercarriage

Carrier Rollers (per side)	1
Track Rollers (per side)	5
Shoes, Triple Semi-Grouser (per side)	40
Drawbar Pull	6650 kg (14,661 lb.)
Track	
Adjustment	hydraulic
Chain	sealed and lubricated

Swing Mechanism

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Swing Speed	10.5 rpm
Swing Torque	16 600 Nm (12,244 lb.-ft.)

Ground Pressure

600-mm (24 in.) Triple Semi-Grouser Shoes	26 kPa (3.7 psi)
450-mm (18 in.) Rubber Crawler Pads	34 kPa (4.9 psi)
450-mm (18 in.) Rubber Crawler Belt	34 kPa (4.9 psi)

Serviceability

Refill Capacities

Fuel Tank	135 L (35.7 gal.)
Cooling System	10.3 L (2.7 gal.)
Engine Oil with Filter	12.1 L (3.2 gal.)
Hydraulic Tank	56 L (15 gal.)
Hydraulic System	100 L (26 gal.)
Propel Gearbox (each)	1.2 L (1.3 qt.)

Operating Weights

With Full Fuel Tank; 79-kg (175 lb.) Operator;

0.41-m³ (0.53 cu. yd.), 762-mm (30 in.),
333-kg (735 lb.) Bucket; 1.62-m (5 ft. 4 in.)
Arm; 1383-kg (3,049 lb.) Counterweight;
and 2470-mm (8 ft. 1 in.) Blade

600-mm (24 in.) Triple Semi-Grouser Shoes	8048 kg (17,743 lb.)
450-mm (18 in.) Rubber Crawler Pads	7920 kg (17,461 lb.)
450-mm (18 in.) Rubber Crawler Belt	7898 kg (17,412 lb.)

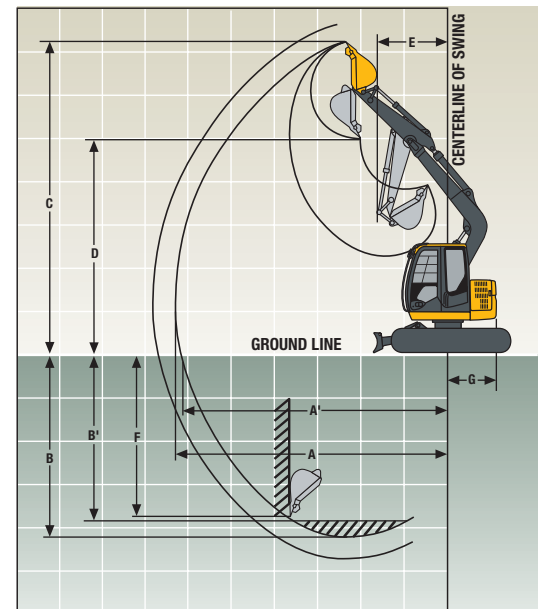
Optional Components

Undercarriage

600-mm (24 in.) Triple Semi-Grouser Shoes	1527 kg (3,366 lb.)
450-mm (18 in.) Rubber Crawler Pads	1377 kg (3,036 lb.)
One-Piece Boom (with arm cylinder)	465 kg (1,025 lb.)
Arm with Bucket Cylinder and Linkage	
1.62 m (5 ft. 4 in.)	233 kg (514 lb.)
2.12 m (6 ft. 11 in.)	270 kg (595 lb.)
Boom Lift Cylinder	89 kg (196 lb.)
Counterweight (standard)	1383 kg (3,049 lb.)

Operating Dimensions

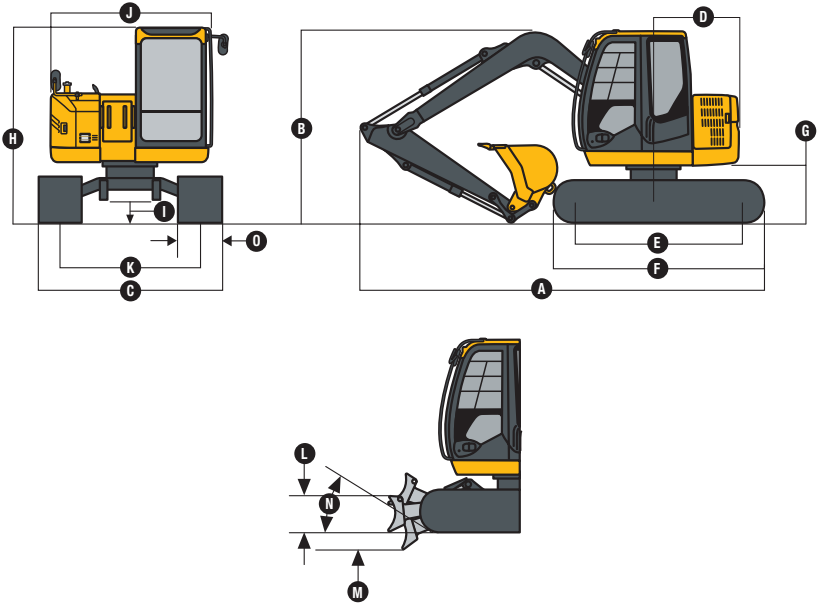
	Arm Length 1.62 m (5 ft. 4 in.)	Arm Length 2.12 m (6 ft. 11 in.)
Arm Force	38.1 kN (8,554 lb.)	32.1 kN (7,209 lb.)
Bucket Digging Force	55.0 kN (12,368 lb.)	55.0 kN (12,368 lb.)
Lifting Capacity Over Front at Ground Level		
6.1-m (20 ft.) Reach	1927 kg (4,248 lb.)	1883 kg (4,151 lb.)
A Maximum Reach	6.43 m (21 ft. 1 in.)	6.92 m (22 ft. 8 in.)
A' Maximum Reach at Ground Level	6.26 m (20 ft. 6 in.)	6.76 m (22 ft. 2 in.)
B Maximum Digging Depth	4.11 m (13 ft. 6 in.)	4.61 m (15 ft. 1 in.)
B' Maximum Digging Depth at 2.44-m (8 ft.) Flat Bottom	3.76 m (12 ft. 4 in.)	4.33 m (14 ft. 2 in.)
C Maximum Cutting Height	7.21 m (23 ft. 8 in.)	7.61 m (25 ft. 0 in.)
D Maximum Dumping Height	5.12 m (16 ft. 10 in.)	5.51 m (18 ft. 1 in.)
E Minimum Swing Radius	1.80 m (5 ft. 11 in.)	2.16 m (7 ft. 1 in.)
F Maximum Vertical Wall	3.67 m (12 ft. 0 in.)	4.22 m (13 ft. 10 in.)
G Tail Swing Radius	1.29 m (4 ft. 3 in.)	1.29 m (4 ft. 3 in.)



Machine Dimensions

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	Arm Length 1.62 m (5 ft. 4 in.)	Arm Length 2.12 m (6 ft. 11 in.)
A Overall Length	6.30 m (20 ft. 8 in.)	6.37 m (20 ft. 11 in.)
B Overall Height	2.60 m (8 ft. 6 in.)	2.83 m (9 ft. 3 in.)
C Undercarriage Width: 600-mm (24 in.) Triple Semi-Grouser Shoes	2.47 m (8 ft. 1 in.)	
450-mm (18 in.) Rubber Crawler Pad	2.37 m (7 ft. 9 in.)	
450-mm (18 in.) Continuous Rubber Belt	2.37 m (7 ft. 9 in.)	
D Rear-End Length/Swing Radius	1.29 m (4 ft. 3 in.)	
E Distance Between Idler/Sprocket Centerline	2.29 m (7 ft. 6 in.)	
F Undercarriage Length	2.92 m (9 ft. 7 in.)	
G Counterweight Clearance	0.76 m (30 in.)	
H Cab Height	2.69 m (8 ft. 10 in.)	
I Ground Clearance	360 mm (14 in.)	
J Upperstructure Width	2.25 m (7 ft. 5 in.)	
K Gauge Width	1.87 m (6 ft. 2 in.)	
L Blade Height	460 mm (18 in.)	
Blade Width	2.47 m (8 ft. 1 in.)	
Blade Lift Height	380 mm (15 in.)	
M Blade Cut Below Grade	280 mm (11 in.)	
N Blade Lift Angle	27 deg.	
Rear-End Length with Blade	1.88 m (6 ft. 2 in.)	
O Track Width: 600-mm (24 in.) Triple Semi-Grouser Shoes	600 mm (24 in.)	
450-mm (18 in.) Rubber Crawler Pad	450 mm (18 in.)	
450-mm (18 in.) Continuous Rubber Belt	450 mm (18 in.)	
Track Height (with triple grouser shoes)	650 mm (26 in.)	



Lift Capacities

Loadface italic type indicates hydraulic-limited capacities; **lightface** type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 3.72-m (12 ft. 8 in.) boom, 0.28-m³ (0.37 cu. yd.) bucket; 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. All lift capacities are based on SAE J1097.

Load Point Height	3.05 m (10 ft.)		4.57 m (15 ft.)		6.10 m (20 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 1.62-m (5 ft. 4 in.) arm, either 450-mm (18 in.) rubber crawler pads or 450-mm (18 in.) rubber crawler belt, and 2.32-m (7 ft. 7 in.) blade on ground</i>						
3.05 m (10 ft.)	1733 (3,821)	1733 (3,821)	1481 (3,265)	1435 (3,163)		
1.52 m (5 ft.)	2978 (6,566)	2527 (5,570)	1840 (4,056)	1355 (2,987)		
Ground Line	3482 (7,676)	2398 (5,286)	2136 (4,709)	1289 (2,842)		
-1.52 m (-5 ft.)	3288 (7,249)	2397 (5,285)	2112 (4,657)	1273 (2,807)		
-3.05 m (-10 ft.)	2386 (5,260)	2386 (5,260)				
<i>With 2.12-m (6 ft. 11 in.) arm, either 450-mm (18 in.) rubber crawler pads or 450-mm (18 in.) rubber crawler belt, and 2.32-m (7 ft. 7 in.) blade on ground</i>						
4.57 m (15 ft.)			1118 (2,464)	1118 (2,464)		
3.05 m (10 ft.)	1302 (2,871)	1302 (2,871)	1259 (2,775)	1259 (2,775)		
1.52 m (5 ft.)	2537 (5,593)	2537 (5,593)	1658 (3,656)	1363 (3,006)	1394 (3,073)	834 (1,838)
Ground Line	3357 (7,400)	2397 (5,285)	2032 (4,479)	1281 (2,824)	1277 (2,816)	806 (1,776)
-1.52 m (-5 ft.)	3396 (7,486)	2360 (5,202)	2141 (4,721)	1246 (2,748)		
-3.05 m (-10 ft.)	2806 (6,187)	2409 (5,312)				
<i>With 1.62-m (5 ft. 4 in.) arm, 600-mm (24 in.) triple semi-grouser shoes, and 2.47-m (8 ft. 1 in.) blade on ground</i>						
3.05 m (10 ft.)	1733 (3,821)	1733 (3,821)	1481 (3,265)	1554 (3,426)		
1.52 m (5 ft.)	2978 (6,566)	2592 (5,714)	1840 (4,056)	1393 (3,070)		
Ground Line	3482 (7,676)	2463 (5,430)	2136 (4,709)	1326 (2,924)		
-1.52 m (-5 ft.)	3288 (7,249)	2463 (5,429)	2112 (4,657)	1311 (2,890)		
-3.05 m (-10 ft.)	2386 (5,260)	2386 (5,260)				

Lift Capacities (continued)

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Boldface italic type indicates hydraulic-limited capacities; lightface type indicates stability-limited capacities, in kg (lb.). Ratings at bucket lift hook; machine equipped with 3.72-m (12 ft. 8 in.) boom, 0.28-m³ (0.37 cu. yd.) bucket; 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. All lift capacities are based on SAE J1097.

Load Point Height	3.05 m (10 ft.)		4.57 m (15 ft.)		6.10 m (20 ft.)	
	Over Front	Over Side	Over Front	Over Side	Over Front	Over Side
<i>With 2.12-m (6 ft. 11 in.) arm, 600-mm (24 in.) triple semi-grouser shoes, and 2.47-m (8 ft. 1 in.) blade on ground</i>						
4.57 m (15 ft.)			1118 (2,464)	1118 (2,464)		
3.05 m (10 ft.)	1302 (2,871)	1302 (2,871)	1259 (2,775)	1259 (2,775)		
1.52 m (5 ft.)	2537 (5,593)	2537 (5,593)	1658 (3,656)	1401 (3,089)	1394 (3,073)	860 (1,896)
Ground Line	3357 (7,400)	2463 (5,429)	2032 (4,479)	1319 (2,907)	1277 (2,816)	832 (1,834)
-1.52 m (-5 ft.)	3396 (7,486)	2425 (5,346)	2141 (4,721)	1284 (2,831)		
-3.05 m (-10 ft.)	2806 (6,187)	2475 (5,456)				

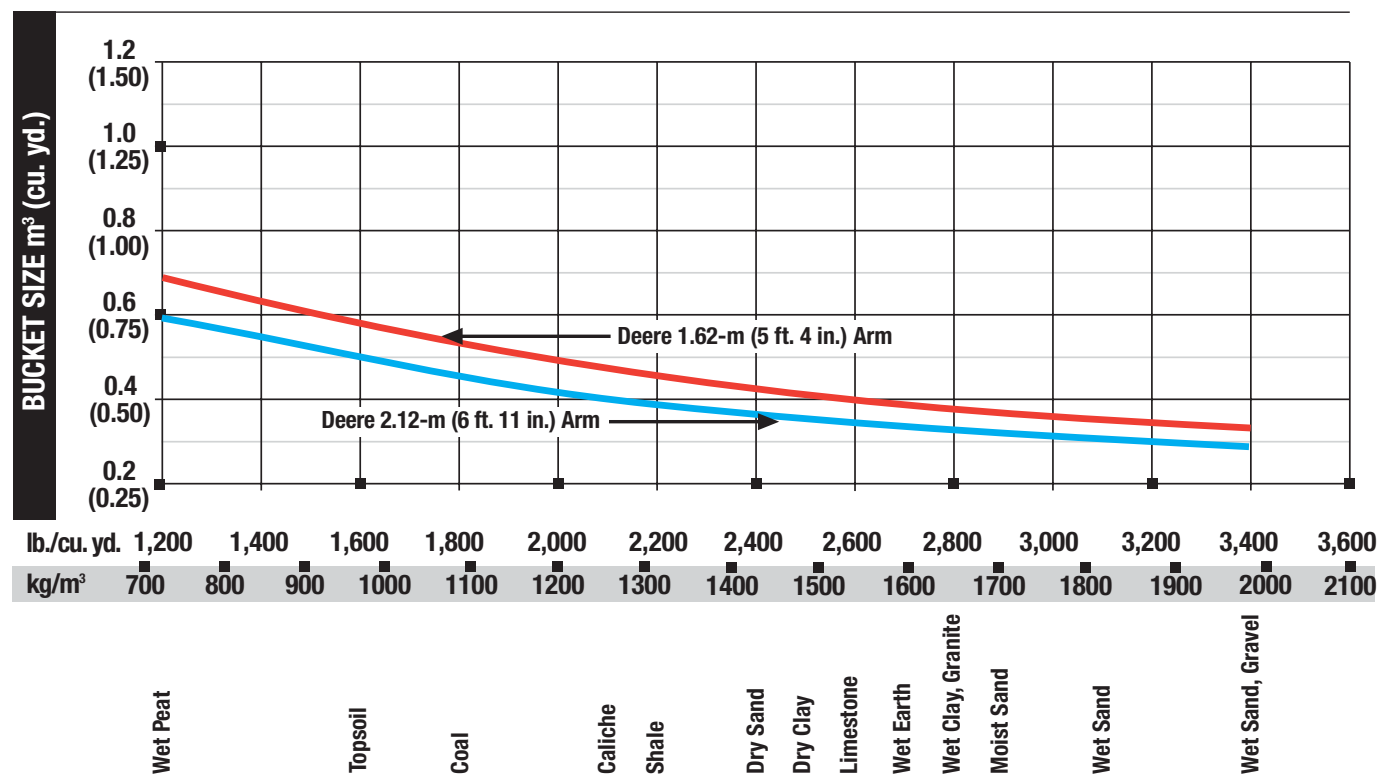
Buckets

A full line of buckets is offered to meet a wide variety of applications. Tooth selection includes either the John Deere Fanggs®, Standard, Tiger, Twin Tiger, Abrasion panel, or Flare tooth, or the ESCO (Vertalok) Standard, Tiger, Twin Tiger, or Flare tooth. Replaceable cutting edges are available through John Deere Parts. Optional side cutters add 150 mm (6 in.) to bucket widths.

Type Bucket	Bucket Width		Bucket Capacity*		Weight		Bucket Dig Force		Arm Dig Force 1.62 m (5 ft. 4 in.)		Arm Dig Force 2.12 m (6 ft. 11 in.)		Bucket Tip Radius		No. Teeth
	mm	in.	m ³	cu. yd.	kg	lb.	kN	lb.	kN	lb.	kN	lb.	mm	in.	
Heavy-Duty	610	24	0.31	0.40	287	633	54.0	12,061	38.0	8,491	32.0	7,162	1087	42.80	5
	762	30	0.41	0.53	333	735	54.0	12,061	38.0	8,491	32.0	7,162	1087	42.80	6
	914	36	0.50	0.66	380	837	54.0	12,061	38.0	8,491	32.0	7,162	1087	42.80	7
Ditching	1219	48	0.49	0.64	330	727	64.0	14,344	40.0	8,911	33.0	7,473	907	35.69	0

*All capacities are SAE heaped ratings.

Bucket Selection Guide*



*Contact your John Deere dealer for optimum bucket and attachment selections. These recommendations are for general conditions and average use. Does not include optional equipment such as thumbs or couplers. Larger buckets may be possible when using light materials, for flat and level operations, less compacted materials, and volume loading applications such as mass excavation applications in ideal conditions. Smaller buckets are recommended for adverse conditions such as off-level applications, rocks, and uneven surfaces. Bucket capacity indicated is SAE heaped.