# E485 EVOLUTION



Net flywheel power 250 kW - 340 hp

Maximum E485LCH E485BEH operating weight 50 250 kg 49 600 kg

Bucket capacity E485LCH E485BEH 1.66-2.26 m<sup>3</sup> 1.66-2.60 m<sup>3</sup>



# E485 EVOLUTION

- Evolution in technology
- Evolution
   in productivity
   and consumption
- Evolution in comfort and safety
- Evolution

   in accessibility
   and service
- Evolution
   in equipment
   and versatility
- Evolution in reliability



#### **PRODUCTIVITY:**

The perfect match between the top engine performances and the great delivery of hydraulic pumps lands to a productivity which is 8% higher than in the previous model.



#### New last generation ISUZU engine

The new engine has an adeguate displacement to supply a high torque same time featuring low fuel consumption.

Its conformity to the European Rules 97/68/CE TIER 2, highly respecting the environement, does not effect the exceptional power output.



Hydraulic system

The new hydraulic system S.H.S. (Smart Hydraulic System) features an electronic management of pumps delivery and of main control valve spools actuation. Precisely and promphty following manipulators strokes, the onboard computer grants an outstanding controllability and simultaneous movements.





## HD track chains and severe service

Higher class trackchains with 6% increased link pitch if compared to the previous model, grant an outstanding strength and durability on all kind of rough terrain. Moreover, special external reinforcement and wear plates are standard reinforcement and wear plates are standard. welded on dippersticks, thus providing maximum integrity even when digging tough grounds or handling rocks.



#### **Automatic centralised lubrication**

A standard automatic centralised lubrication system which can be programmed in advance in terms of timing, frequency and quantity of grease released, grants the necessary lubrication of all specific points.

This means shorter maintenance time, no risk of

abnormal wear and greater operator comfort.



"High Space" cab

Perfect visibility in all directions thanks to the wide glass surface and transparent cab roof. The extremely low noise level thanks to elasto-viscous connection to the upperstructure and a deep study of the best ergonomical solutions make this cab really innovative and confortable. It offers also an optimised safety

package (optional) designed, tested and homologated to be fitted with a FOPS canopy along with a front windshield protective grid.

# **Specifications**



# Tier-2 emissioned engine

Net flywheel power (ISO	14396)250 kW/340 hp
Rated rpm	1950
Make and model	ISUZU AA-6SD1XQY
Type	Diesel, 4 strokes, direct injection, turbocharged
Total Displacement	9.8
Number of cylinders	6
Bore x stroke	120 x 145 mm
Maximum torque at 1600	) rpm1275 Nm
	·

Remote location engine oil filter and water/fuel separator for easy replacement

Engine rpm electronic control with knob selector.

**Automatic idling return selector** with "**Auto-idling**" controls in neutral **Start at -15**° outside temperature as standard equipment (-25° as an optional device)

The engine conforms to 97/68/CE STAGE 2



## **Electrical system**

Operating voltage	24 V
Alternator	50 Amp
Starter motor	5.5 kW
Standard maintenance-free batteries	2
Capacity	160 Ah



## **Hydraulic system**

**New S.H.S. (Smart Hydraulic System)** for outstanding controllability and complete simultaneous movements.

New generation A.I. (Artificial Intelligence) on-board computer A.P.S. (Automatic Priority System device)

Hydraulic valve, rod opening and pump delivery computerised control according to manipulator travel

**E.S.S.C.** (Engine Speed Sensing Control) device for total use of installed hydraulic power

High definition E.T.U. (Easy to Use) multifunction monitor incorporating:

- Maintenance programme
- Self Diagnosis System
- Operating Data Storage

#### Mechatronic Work Selector (M.W.S.):

- Standard Mode (W) Standard operating mode
- **Heavy/Mechatronic Mode (H/M)** Maximum hydraulic power for top productivity. In this function, the machine "learns" the work cycle it operates after 2 cycles and automatically selects maximum efficiency/speed and operating precision with the A.P.S. Automatic Priority System device.
- **Attachments Mode (A)** Possible selection and storage of supplementary implement delivery from the cab

Continuous untimed insertion **Power Boost Device**. Continuous insertion of the device, when selected, ensures maximum digging performance and productivity in the toughest applications.

#### Double delivery device supplied standard

**Piping pressure release push button:** to facilitate tooling change without oil loss from piping

#### Hammer/two-directional pincer system

Main pumps

two variable delivery pumps with electronic delivery adjustment With controls on neutral, the pumps automatically move to displacement

, , , , , , , , , , , , , , , , , , , ,	
position "0".	
Maximum delivery2 x 370 l/m	nin
Piloting circuit gear type pump	
Maximum delivery28 l/m	nin



Maximum operating proceure:

#### **Transmission**

Type	two-speed hydrostatic
	axial pistons double displacement type,
	collapsible into track carriage
Brakes	oil bath disc type, automatically applied
	and hydraulically released
Final drives	oil bath, planetary reduction
Maximum slope	70% (35°) continuous
Travel speeds:	
slow	0 to 3.5 km/h
high	0 to 5.6 km/h
"Automatic DownShift"	device: with selector on "fast" in case of need

"Automatic DownShift" device: with selector on "fast" in case of need for more traction force adjusts travel motors to maximum displacement.



#### **Swing**

Swing motors	two, axial piston type
Swing brake	oil bath disc type, automatically applied
	and hydraulically released
Final drive	oil bath, planetary reduction
Circle	grease bath type
Swing speed	9.0 rpm



## **Cab and controls**

Transparent opening roof.
Standard automatic conditioning

Controls ......piloted Two cross travel levers control all equipement movements and superstructure swing.

Two pedals with hand levers control all track movements, counter-rotation included.

A safety lever netrualises the piloting circuit completely.



## **Undercarriage**

Type	variable gauge
X-design undercarriage	0 0
Sealed bushing reinforced track HD	chain
Chain link pitch	229 mm
·	E485LCH-E485BEH
Track rollers (each side)	9
Carrier rollers (each side)	3
Length of track on ground (mm)	4 400
Minimum gauge (mm)	2390
Maximum gauge (mm)	2 890
Shoes avaliable (mm)	600-700
. ,	800-900

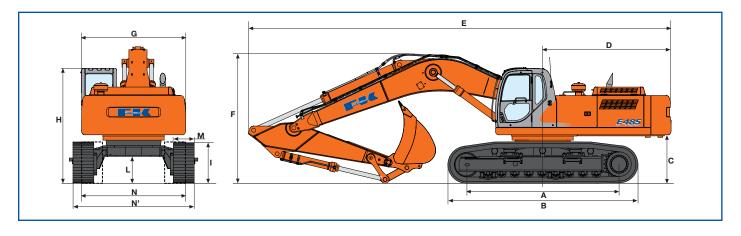


## **Capacities**

Engine Lube oil	litres
Antifreeze mixture	
Fuel	663
Hydraulic tank	300

#### **E485LCH**

# **Dimensions** (mm) - **Operating weights**

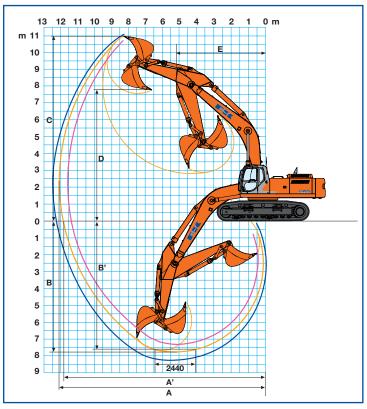


Version	Α	В	С	D	E	F	G	Н	1	L
					(1) 12175	(1) 3730				
E485LCH	4400	5470	1394	3342	(2) 12110	(2) 3590	3000	3310	1203	775
					(3) 12120	(3) 3610				

Dipperstick: (1) 2 900 mm - (3) 3 450 - (4) 4 040 mm

		E485LCH						
M - Shoe width	mm	600	700	800	900			
N - Minimum width	mm	2990	3090	3190	3290			
N' - Maximum width	mm	3490	3590	3690	3790			
Operating weight	kg	48600	49150	49700	50250			
Specific ground pressure	bar	0.90	0.78	0.70	0.62			

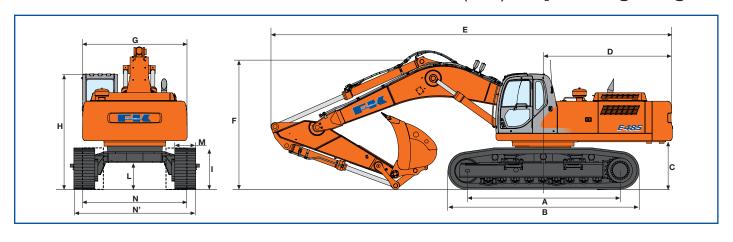
# **Digging performance**



Dipperstick	mm	2900	3450	4040
Α	mm	11553	12079	12577
A'	mm	11308	11845	12353
В	mm	7226	7770	8366
B'	mm	7061	7626	8237
С	mm	10707	10969	11032
D	mm	7531	7767	7884
E	mm	5237	5173	5187
Breakout force:				
Bucket	daN	24800	24800	24800
Dipperstick	daN	22800	18000	15200
With				
"Power Boost" on:				
Bucket	daN	27000	27000	27000
Dipperstick	daN	25200	19900	16900

#### **E485BEH**

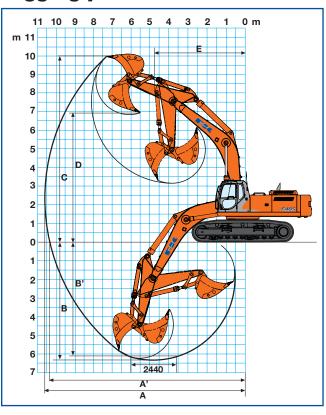
# **Dimensions** (mm) - **Operating weights**

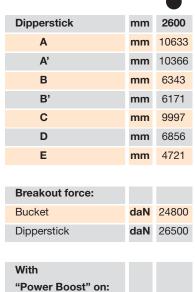


Version	Α	В	С	D	E	F	G	Н	I	L
E485BEH	4400	5470	1394	3700	11500	3980	3000	3310	1203	775

		E485BEH					
M - Shoe width	mm	600	700	800	900		
N - Minimum width	mm	2990	3090	3190	3290		
N' - Maximum width	mm	3490	3590	3690	3790		
Operating weight	kg	47950	48500	49050	49600		
Specific ground pressure	bar	0.89	0.77	0.68	0.61		

# **Digging performance**





							Radi	us of	load							
1.	5 m	3.0	) m	4.5	m	6.0	) m	7.5	i m	9.0	) m	10.	5 m	At m	ax reach	1
Front	Side	Reach m														

#### E485LCH - Dipperstick 2 900 mm

Height							
+7.5 m						8.6 * 8.6 *	8.5
+6.0 m				9.2 * 9.2 *	8.7 * 8.4	8.7 * 7.9	9.3
+4.5 m		16.0 * 16.0 *	12.1 * 12.1 *	10.2 * 10.2 *	9.2 * 8.2	8.9 * 7.1	9.8
+3.0 m		20.4 * 20.4	14.3 * 14.3 *	11.4 * 10.4	9.8 * 7.9	9.2 * 6.7	10.0
+1.5 m		21.3 * 21.1	16.1 * 13.8	12.5 * 10.0	10.4 * 7.7	9.5 * 6.5	10.0
0 m		23.7 * 20.7	17.1 * 13.4	13.2 * 9.7	10.9 * 7.5	10.0 * 6.7	9.7
-1.5 m	17.3 * 17.3 *	23.4 * 20.7	17.3 * 13.3	13.4 * 9.6	10.9 * 7.4	10.5 * 7.2	9.2
-3.0 m	26.0 * 26.0 *	21.9 * 20.9	16.6 * 13.3	12.9 * 9.6		11.1 * 8.2	8.4
-4.5 m	25.9 * 25.9 *	19.2 * 19.2 *	14.7 * 13.6			11.7 * 10.4	7.2
-6.0 m						13.7 * 13.7 *	5.4

#### E485LCH - Dipperstick 3 450 mm

Height									
+7.5 m						7.8 * 7.8 *		7.8 * 7.8 *	9.2
+6.0 m						8.0 * 8.0 *		7.9 * 7.1 *	9.9
+4.5 m					9.5 * 9.5 *	8.6 * 8.2		8.2 * 6.4	10.3
+3.0 m			18.7 * 18.7 *	13.4 * 13.4 *	10.7 * 10.5	9.3 * 7.9	8.4 * 6.1	8.4 * 6.1	10.5
+1.5 m			22.0 * 21.3	15.3 * 13.9	11.9 * 10.0	10.0 * 7.6	8.8 * 6.0	8.8 * 5.9	10.5
0 m		9.7 * 9.7 *	23.5 * 20.7	16.6 * 13.3	12.8 * 9.6	10.5 * 7.4		9.2 * 6.0	10.3
-1.5 m	11.7 * 11.7 *	15.8 * 15.8 *	23.5 * 20.5	17.1 * 12.6	13.3 * 9.4	10.8 * 7.3		9.7 * 6.4	9.8
-3.0 m	17.5 * 17.5 *	22.6 * 22.6 *	22.5 * 20.6	16.8 * 13.1	13.0 * 9.4	10.3 7.3		10.2 * 7.2	9.1
-4.5 m		28.4 * 28.4 *	20.3 * 20.3 *	15.4 * 13.3	11.8 * 9.6			10.8 * 8.8	8.0
-6.0 m			16.2 * 16.2 *	12.1 * 12.1 *				11.2 * 11.2 *	6.3

## E485LCH - Dipperstick 4 040 mm

Height									
+7.5 m						6.9 * 6.9 *		6.7 * 6.7 *	9.8
+6.0 m						7.3 * 7.3 *		6.8 * 6.5	10.4
+4.5 m					8.7 * 8.7 *	7.9 * 7.9 *	7.5 * 6.3	7.0 * 5.9	10.8
+3.0 m		13.6 * 13.6 *	16.8 * 16.8 *	12.3 * 12.3 *	10.0 * 10.0 *	8.7 * 7.9	7.9 * 6.1	7.4 * 5.6	11.0
+1.5 m		7.9 * 7.9 *	20.7 * 20.7 *	14.4 * 14.1 *	11.3 * 10.1	9.4 * 7.6	8.4 * 5.9	8.0 * 5.4	11.0
0 m	6.0 * 6.0 *	10.7 * 10.7 *	22.8 * 20.8	16.0 * 13.4	12.4 * 9.6	10.0 * 7.3	8.7 * 5.8	8.5 * 5.5	10.8
-1.5 m	10.7 * 10.7 *	15.1 * 15.1 *	23.5 * 20.4	16.8 * 13.1	13.0 * 9.4	10.6 * 7.2		8.9 * 5.8	10.3
-3.0 m	15.5 * 15.5 *	20.6 * 20.6 *	23.0 * 20.4	16.8 * 12.9	13.1 * 9.3	10.5 * 7.1		9.5 * 6.4	9.7
-4.5 m	21.0 * 21.0 *	27.6 * 27.6 *	21.3 * 20.6	15.9 * 13.0	12.3 * 9.4			10.1 * 7.7 *	8.6
-6.0 m		25.4 * 25.4 *	18.1 * 18.1 *	13.6 * 13.4				10.8 * 10.4	7.2

## E485BEH - Dipperstick 2 600 mm

Height							
+7.5 m						10.3 * 10.3 *	7.4
+6.0 m				10.3 * 10.3 *		10.2 * 9.3	8.2
+4.5 m		11.4 * 11.4 *	11.3 * 11.3 *	10.8 * 10.7		10.3 * 8.2	8.7
+3.0 m		12.1 * 12.1 *	12.1 * 12.1 *	11.5 * 10.0		10.6 * 7.6	9.0
+1.5 m		13.3 * 13.3 *	12.1 * 11.7	12.3 * 9.5		10.9 * 7.5	9.0
0 m		15.2 * 12.4	14.3 * 10.9	13.0 * 9.3		11.3 * 7.8	8.7
-1.5 m	18.8 * 14.9	17.1 * 13.0	15.3 * 11.3	13.1 * 9.5		11.7 * 8.6	8.1
-3.0 m	20.8 * 20.8 *	17.9 * 15.9	15.1 * 12.8			12.0 * 10.4	7.2
-4.5 m		15.6 * 15.6 *				11.7 * 11.7 *	5.8

As per **ISO 10567** with excavator equipped with bucket. The indicated load is no more than 87% of hydraulic system lift capacity or 75% of static tipping load. Value marked with an asterisc are limited by the hydraulic system.

#### **Standard equipment**

2600 Dipperstick (BEH version) 2900 Dipperstick (LCH version)

Anti-leakage main spool hydraulic control valve

Auto-Idling

Cell phone holder with charge socket

Centralised automatic lubrication

Cyclone prefilter Double delivery

Double travel speed with Automatic DownShift

Engine rpm electronic control Fuel transfer electrical pump

Grease bath circle

Hammer/pincer system predispotition

Hammer piping on booms

HD sealed type tracks chains and 229 mm pitch link

Hydraulic piping and connections with front seals

Hydraulic travel end cylinders

Hydraulically suspended cab with transparent opening

roof and automatic air conditioning system

Maintenance-free batteries

Mechanically suspended heated operator seat

Mechatronic Mode Selector

Multi-function electronic instrument panel

Pedal or lever travel control

Power Boost

Radio set

Shoes: 600 mm

Smart Hydraulic System

Swing and travel motors with automatic disc brakes

New TIER 2 emission diesel engine

Two-speed intermittent windshield wiper

Variable gauge undercarriage

Version LCH or BEH

#### **Optional equipment**

3450 mm Dipperstick (LCH version) 4040 mm Dipperstick (LCH version)

Antidrop valves on dipper stick cylinder Antidrop valves on lift cylinders

Compressed air suspended heated seat

Fops protection on cab roof and front window grid

Fuel transfer electrical pump

Grab bucket/grass cutter bucket low delivery supplementary

hydraulic function predisposition

Heavy duty, rock and special buckets with bucket/boom setting device

Hydraulic quick coupler predisposition

Mechanical quick coupler

Northern country equipment

Overhead load handling

Piping on booms for supplementary low delivery function

Shoes LCH/BEH: 700 mm - 800 mm - 900 mm

Supplementary lights on cab

Note: standard and optional equipment may vary by country. Consult your FIAT KOBELCO dealer for specific details.

#### **Buckets**

SAE Capacity	CECE heaped capacity	Width	Weight
1.66 m³	1.48 m³	1320 mm	1231 kg
1.83 m³	1.63 m³	1420 mm	1328 kg
2.05 m <sup>3</sup>	1.82 m³	1550 mm	1409 kg
2.26 m³	2.00 m³	1670 mm	1468 kg
2.60 m³*	2.31 m³*	1740 mm*	1850 kg*

<sup>\*</sup> Only for E485BEH

AT YOUR OWN DEALERSHIP

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