

# ***E195*** EVOLUTION



## PRELIMINARY

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*Net flywheel power*                      **95 kW - 130 HP**

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*Maximum operating weight*            **20030 kg**

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*Bucket capacity*                      **from 0.53 to 1.10 m<sup>3</sup>**

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EVOLVING TECHNOLOGY

# ***E195*** ***EVOLUTION***

- *Evolution in technology*
- *Evolution in productivity and low fuel consumption*
- *Evolution in comfort and safety*
- *Evolution in easy serviceability and maintenance*
- *Evolution in hydraulic system versatility and predisposition*



EVOLVING TECHNOLOGY



# Specifications



## Tier-2 emissioned engine

Net flywheel power (ISO 14396) .....95 kW / 130 HP  
 Governed rpm .....2200  
 Make and model .....IVECO F4BE0484D  
 Type .....diesel 4-stroke, direct injection, turbocharged and intercooler  
 Displacement .....3,9 l  
 Number of cylinders .....4  
 Bore x stroke .....102 x 120 mm  
 Maximum torque at 1400 rpm .....450 Nm

**Remote engine oil filter** for easy replacement

**Electronic engine rpm control**, dial type

**Auto-idling selector** returns engine to minimum rpm when all controls are in neutral position

**-20° outside temperature start** as standard equipment (-25° optional)

*The engine complies with EEC Standard 97/68 STAGE 2 and USA CARB EPA TIER 2 specifications*



## Electrical system

Voltage .....24 V  
 Alternator .....70 A  
 Starter motor .....4 kW  
 Standard maintenance-free batteries .....2  
 Capacity .....100 Ah



## Hydraulic system

**New S.H.S. (Smart Hydraulic System)** for perfect controllability and simultaneity of all movements

New generation **A.I. (Artificial Intelligence)** on-board computer

**A.P.S. (Automatic Priority System)** device

**Computerized pumps delivery and main control** valve actuation in relation to manipulators stroke and working pressure demand

**ESSC (Engine Speed Sensing Control device)** for total installed hydraulic power exploitation

**High definition E.T.S. (EASY TO USE) multi-function monitor** incorporating:

- Maintenance programme
- Self Diagnosis System
- Operating Data Storage (engine rpm/operating pressure and the like)

**M.W.S. Mechatronic Work Selector:**

- **Standard Mode (W)** - Standard operating mode

- **Heavy/Mechatronic Mode (H/M)** - Maximum hydraulic power for top productivity. In this mode, the unit **"learns"** the type of operation being completed after 2 cycles and automatically selects maximum efficiency/speed and operating precision with the **A.P.S. (Automatic Priority System)** device

- **Attachments Mode (A)** - Possibility of selecting and storing delivery for supplementary tooling from the operator compartment  
 Continuous untimed insertion **Power Boost Device**. Continuous insertion of the device when selected ensures maximum diggability and productivity in the toughest applications.

**Standard double pumps flow** device

**Pipe pressure discharge push button** to facilitate tooling changeover without piping oil leakage.

**Two-directional crusher/hammer system**

Main pumps:

Two variable delivery pumps with electronic delivery adjustment.

Pumps automatically revert to zero delivery with controls in neutral.

Maximum delivery .....2 x 176 l/min

Piloting circuit gear type pump

Maximum delivery .....22 l/min

Maximum operating pressure:

Equipment/travel .....34.3 MPa

Swing .....30 MPa

Power boost .....37.8 MPa

Hydraulic cylinders .....double effect

- Lift (2) - bore x stroke .....110 x 1150 mm

- Penetration (1) - bore x stroke .....130 x 1290 mm

- Bucket (1) - bore x stroke .....110 x 1105 mm

- Positioning (only triple articulation)  
 bore x stroke .....135 x 1000 mm

Independent hammer/positioning control



## Transmission

Type .....hydrostatic, two-speeds

Travel motors .....2, axial piston type, double displacement

Brakes .....automatic discs type

Final drive .....oil bath, planetary reduction

Gradeability (continuous) .....70% (35%)

Travel speeds:

low .....from 0 to 3.0 km/h

high .....from 0 to 5.0 km/h

**Automatic Down Shift device:** to move travel motors to maximum displacement position with selector on "High" position when greater traction is required.



## Swing

Swing motor .....axial piston type

Swing brake .....automatic discs type

Final drive .....oil bath, planetary reduction

Swing ring .....oil bath type

Swing speed .....11.5 rpm



## Cab and controls

Transparent upper cab roof.

Standard automatic conditioning.

Controls .....piloted

Two cross path pattern levers actuate all equipment movements and superstructure swing.

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

A safety lever completely neutralizes the piloting circuit



## Undercarriage

X-frame undercarriage design

Reinforced track chain with sealed bushings.

	E195EL	E195LC
Track rollers (each side)	2	2
Carrier rollers (each side)	7	7
Length of track on ground (mm)	3375	3375
Gauge (mm)	1990	2200
Shoes (mm)	500-600-700	600-700 800-900



## Capacities

Engine ..... litres

Lube oil .....15.0

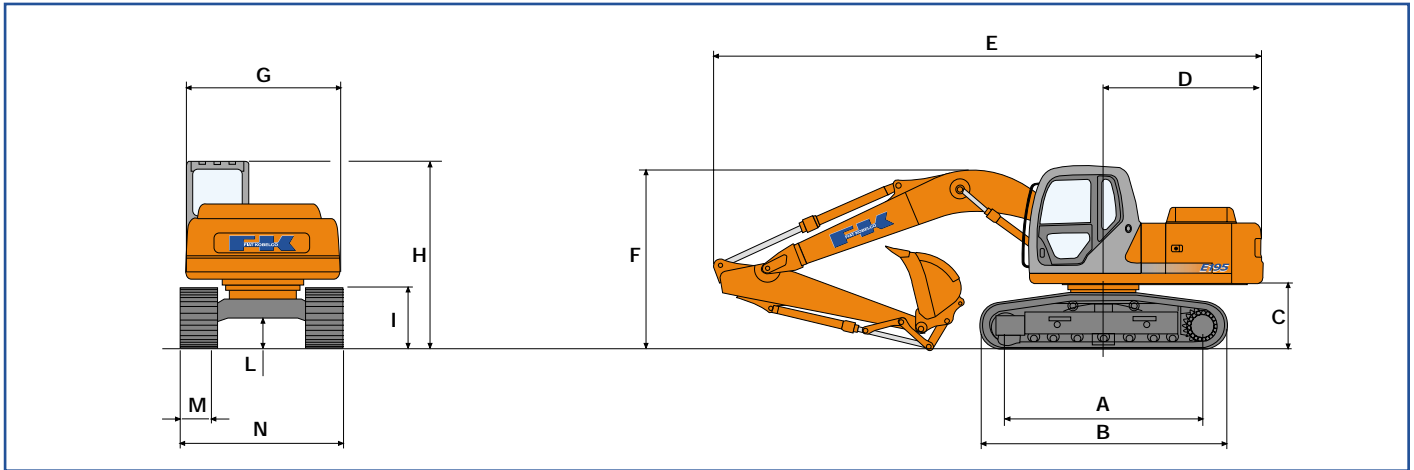
Coolant .....18.0

Fuel tank .....250

Hydraulic reservoir .....150

# One-piece boom

# Dimensions (mm) - Operating weight

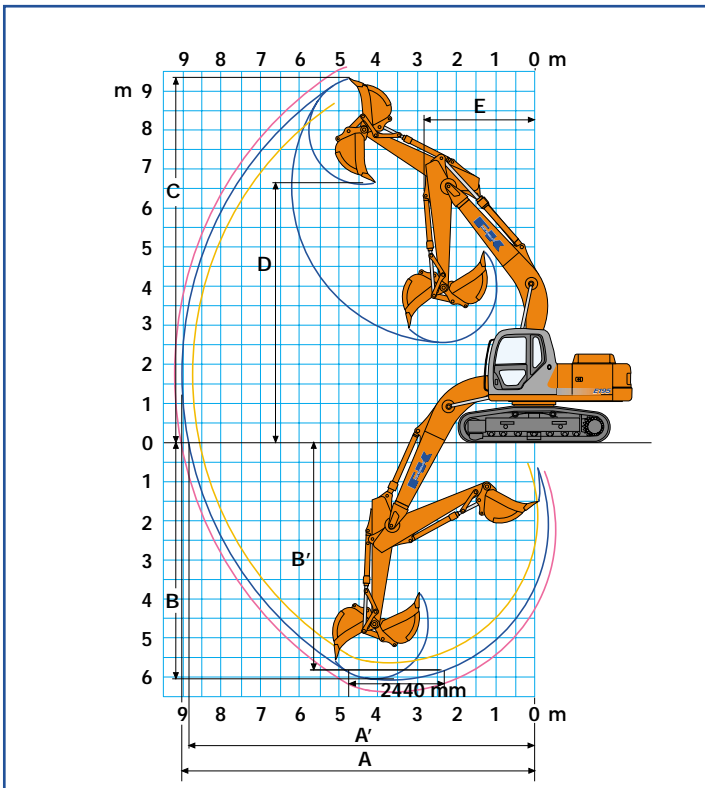


Versions	A	B	C	D	E(*)	F(*)	G	H	I	L
E195EL	3375	4197	1083	2610	(1) 8860	(1) 3030	2490	2984	952	482
					(2) 8780	(2) 2940				
					(3) 8780	(3) 3030				
E195LC	3375	4197	1069	2610	(1) 8870	(1) 3020	2490	2970	952	468
					(2) 8780	(2) 2920				
					(3) 8780	(3) 3030				

(\*) dipper stick: (1) 2200 mm, (2) 2600 mm, (3) 3100 mm

		E195EL			E195LC			
M - Shoe width	mm	500	600	700	600	700	800	900
N - maximum width	mm	2490	2590	2690	2800	2900	3000	3100
Operating weight	kg	18600	18730	18860	18940	19070	19200	19330
Ground pressure	bar	0,55	0,46	0,40	0,47	0,40	0,36	0,32

# Digging performance



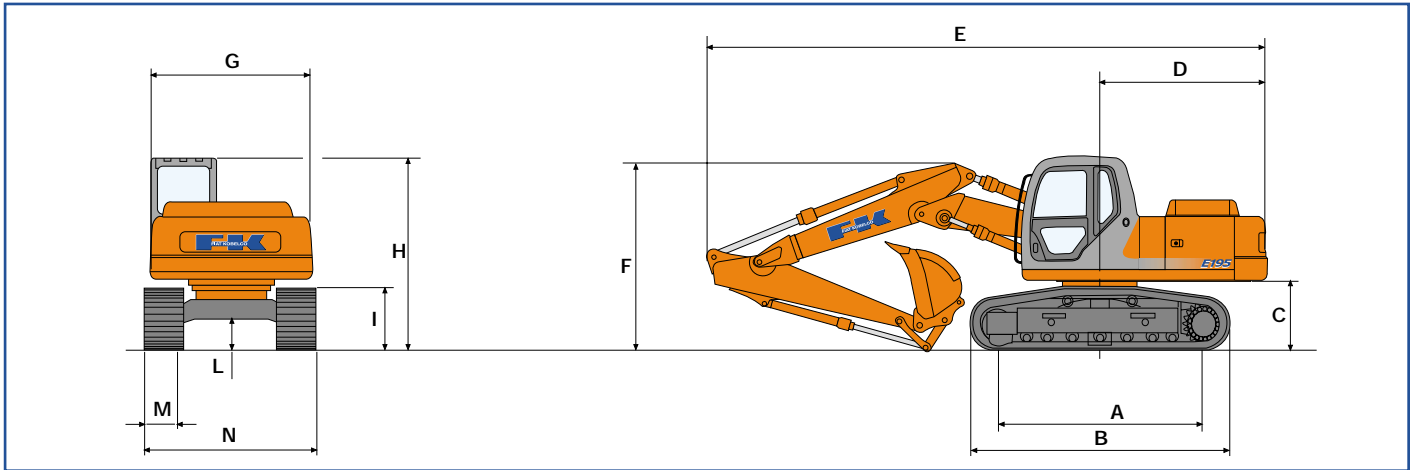
Dipper stick	mm	2200	2600	3100
A	mm	8692	9088	9601
A'	mm	8499	8904	9427
B	mm	5714	6115	6614
B'	mm	5443	5885	6432
C	mm	9073	9385	9785
D	mm	6290	6531	6903
E	mm	3041	2849	2881

Breakout force:				
Bucket	daN	12600	12600	12600
Dipper stick	daN	11800	10000	8700

With: Power Boost on:				
Bucket	daN	14000	14000	14000
Dipper stick	daN	13100	11000	9300

## Triple articulation

## Dimensions (mm) - Operating weight

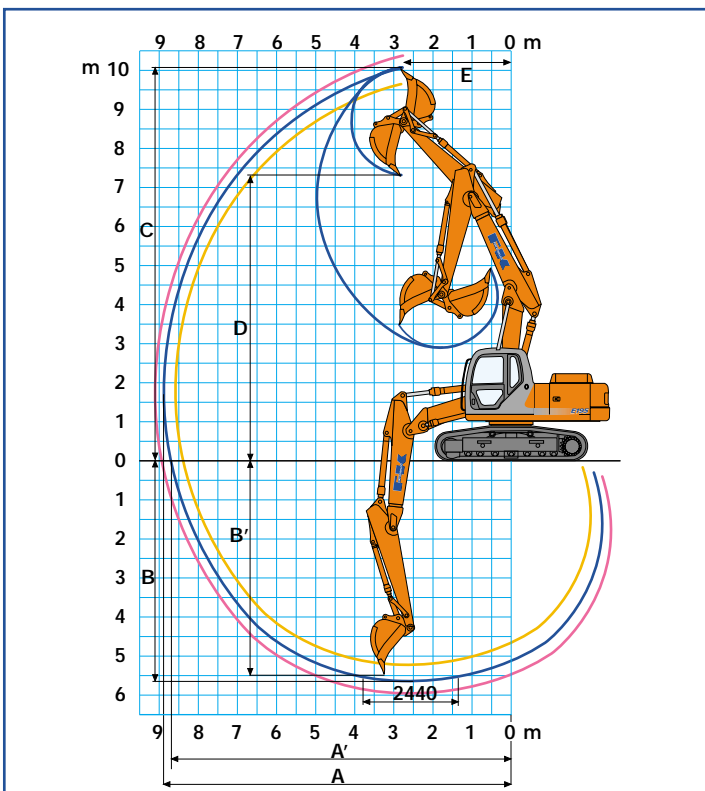


Versions	A	B	C	D	E(*)	F(*)	G	H	I	L
E195EL					(1) 8710	(1) 3050				
	3373	4197	1083	2610	(2) 8630	(2) 2960	2490	2984	952	482
					(3) 8620	(3) 3090				
E195LC					(1) 8710	(1) 3050				
	3373	4197	1069	2610	(2) 8630	(2) 2960	2490	2970	952	468
					(3) 8620	(3) 3090				

(\*) Dipper stick: (1) 2200 mm, (2) 2600 mm, (3) 3100 mm

		E195EL			E195LC			
M - Shoe width	mm	500	600	700	600	700	800	900
N - maximum width	mm	2490	2590	2690	2800	2900	3000	3100
Operating weight	kg	19300	19430	19560	19640	19770	19900	20030
Ground pressure	bar	0,57	0,48	0,41	0,49	0,42	0,37	0,33

## Digging performance



Dipper stick	mm	2200	2600	3100
A	mm	8565	8964	9487
A'	mm	8370	8778	9303
B	mm	5301	5709	6223
B'	mm	5177	5593	6116
C	mm	9816	10166	10629
D	mm	6891	7240	7714
E	mm	2410	2213	2299

Breakout force:				
Bucket	daN	12600	12600	12600
Dipper stick	daN	11800	10000	8700

With: Power Boost on:				
Bucket	daN	14000	14000	14000
Dipper stick	daN	13100	11000	9300

## Standard equipment

Auto-idling device  
 Batteries, maintenance free  
 Cell phone holder with recharge socket  
 Centralised boom lubrication  
 Cyclone pre-filter  
 Double pumps flow  
 Engine rpm electronic control  
 Foot pedal or lever travel control  
 Front seal hydraulic piping and connections  
 Fuel transfer electrical pump  
 Grease bath swing ring  
 HD chains  
 Horn  
 Hydraulically suspended cab with transparent opening roof and automatic air conditioning system  
 Main control valve with antidrift valves

Multi-function electronic instrument panel (E.T.S.)  
 M.W.S. (Mechatronic Mode Selector)  
 One-piece boom or triple articulation  
 Power Boost device  
 Radio set  
 Seat, heated mechanical suspended  
 Shoes:  
     EL version - 500 mm  
     LC version - 600 mm  
 S.H.S. (Smart Hydraulic System)  
 Swing and travel motors with automatic disc type brakes  
 Tier-2 emissioned diesel engine  
 Tool kit  
 Two-speed intermittent operation windshield wiper  
 Two travel speeds with Automatic Down Shift device

## Optional equipment

Antitheft device  
 Air suspension heated operator seat  
 Boom anti-drop valves on lift cylinders  
 Boom anti-drop valves on dipper stick cylinder  
 2200 mm dipper stick  
 2600mm dipper stick  
 3100mm dipper stick  
 Hammer/crusher predisposition  
 Hammer piping on booms  
 Load handling (including all anti-drop valves and hook)

Multi-purpose, rock and heavy duty buckets with boom/bucket adjustment device  
 Northern country equipment  
 Piping on booms for supplementary low delivery function  
 Shoes:  
     EL version - 600 - 700mm  
     LC version - 700 - 800 - 900mm  
 Supplementary cab lights  
 Supplementary low delivery hydraulic function predisposition for grass cutter/grapple rotation bucket

## Buckets

SAE Capacity	CECE heaped capacity	Width	Weight
0,53 m <sup>3</sup>	0,46 m <sup>3</sup>	750 mm	505 kg
0,63 m <sup>3</sup>	0,54 m <sup>3</sup>	850 mm	540 kg
0,79 m <sup>3</sup>	0,68 m <sup>3</sup>	1000 mm	635 kg
1,00 m <sup>3</sup>	0,86 m <sup>3</sup>	1200 mm	650 kg
1,10 m <sup>3</sup>	0,95 m <sup>3</sup>	1300 mm	700 kg

At your own dealership

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