

EX235



Net flywheel power 107 kW / 145 HP

Operating weight 23625 Kg

Bucket capacity 0.52 - 1.31 m³



EVOLVING TECHNOLOGY

Specifications



Engine

HP mode

Net flywheel power (DIN 6271)	145 HP/ 107 kW
Net flywheel power (SAE J1349)	107 kW
Net flywheel power (ISO 9249)	107 kW
Net flywheel power (EEC 80/1269)	107 Kw

P mode

Net flywheel power (DIN 6271)	135 HP/ 99 kW
Net flywheel power (SAE J1349)	99 kW
Net flywheel power (ISO 9249)	99 kW
Net flywheel power (EEC 80/1269)	99 Kw

Make and modelFiat 8065.25T

TypeDiesel, 4 stroke, direct injection turbocharged

Governed rpm

HP mode2150 rpm

P mode1950 rpm

Number of cilinder6

Total displacement5.9 l

Bore x stroke104 x 115 mm

Electronic engine speed control

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

Electrical automatic cold start device (standard) effective down to -20°C ambient temperature



Electrical system

Voltage24 V

Maintenance-free batteries2 in series

- total capacity100 Ah

Alternator capacity55 A

Starter motor4 kW



Hydraulic system

Advanced Hydraulic System (A.H.S.) for pefect controllability and simultaneity of all movements.

Hydraulic power selectors HP-P-HE-E giving a choice of four different hydraulic power outputs to tailor performance to match the job in hand.

Working Mode Select or (W.M.S.) to select the optimal combination of hydraulic pump delivery and movement priority in relation to the type of work.

Computerized pump delivery control in relation to lever stroke and work pressure demands.

ESSC (Engine Speed Sensing Control): perfect control of pump flow rates and full exploitation of engine power.

"Power Boost" device: extra digging performance

ShockLess System (SLS): ensures perfect uniformity of movements even in the event of sudden control lever movements.

Cold Climate System (CCS): immediate availability of all excavator functions in cold climatic conditions.

Main pumps:

Two independent variable flow rate pumps; when controls are in neutral position the pumps return automatically to 0 displacement position.

Maximum flow rate2 x 185 l/min

Gear pump on pilot circuit

Maximum flow rate33 l/min

Maximum working pressure

Equipment and travel350 bar

Swing320 bar

Power Boost370 bar

Hydraulic cylindersdouble acting

Boom lift2

Bore x stroke120 x 1221 mm

- Dipperstick1

Bore x stroke	130 x 1475 mm
- Bucket	1
Bore x stroke	110 x 1060 mm
- Positioning (triple articulation)	1
Bore x stroke	145 x 1050 mm



Transmission

Typehydrostatic; two speed

Travel motors2 axial piston motors

Brakesautomatic disc brakes

Final drivesoil immersed, planetary reduction

Gradeability (continuous)70% (35°)

Travel speed:

Highfrom 0 to 5.5 km/h

Lowfrom 0 to 3.1 km/h

Automatic Down Shift device: with selector in "HI" position returns the motors to the maximum displacement position when traction force demands increase.



Swing

Swing motor1 axial piston motor

Swing brakeautomatic disc brake

Final driveoil immersed planetary reduction

Swing Speed13.7 rpm

Swing ringgrease bath



Controls

Typepiloted

Two cross-path pattern levers control all equipment movements and turret slewing.

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

A safety lever neutralizes the pilot circuit completely.

Quick Warm Up Circuit for immediate availability of machine functions in cold climatic conditions.



Undercarriage

"X" frame undercarriage design

Reinforced track chain with life lubricated idlers and rollers.

Link pitch190 mm

	EX235
Track rollers (each side)	8
Carrier rollers (each side)	2
Length of track on ground (mm)	3455
Gauge (mm)	2000
Shoes (mm)	550-700-800

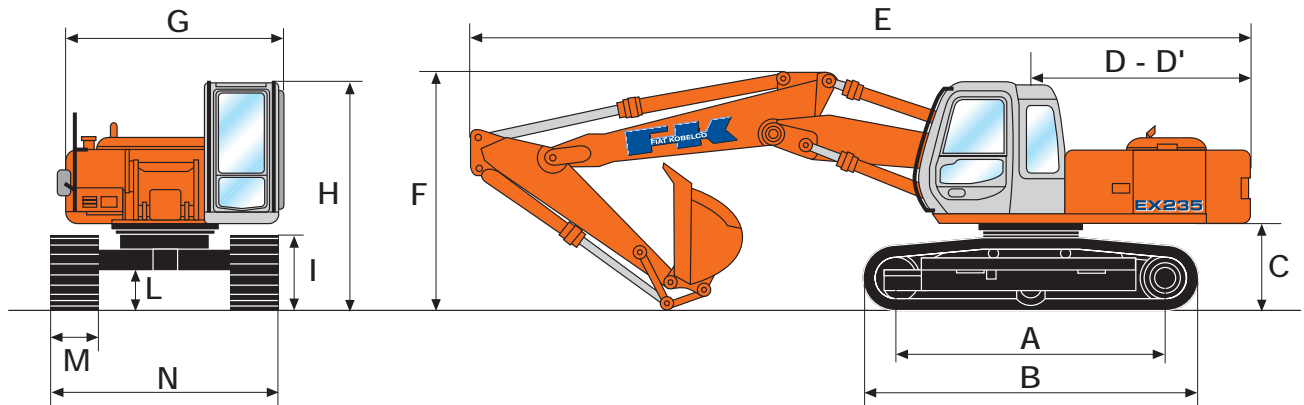


Capacities

	litres
ENGINE	
Lube oil	14
Coolant	19
Fuel tank	285
HYDRAULIC OIL	220

Triple articulation

Dimensions - Operating weight

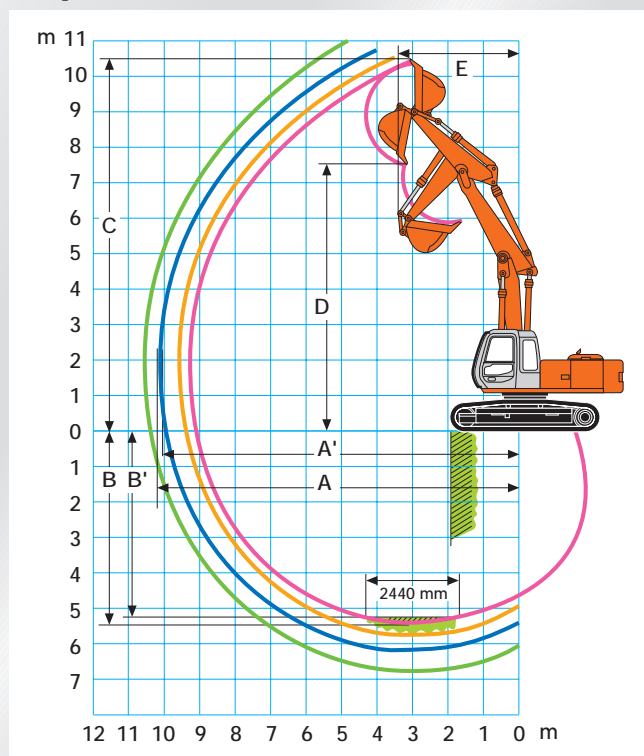


Version		A	B	C	D	D'(*)	E	F(**)	G	H	I	L
EX235	mm	3455	4260	1114	2720	2750	9513	1) 3109	2455	2954	975	480
								2) 3139				
								3) 2943				
								4) 3098				
(1) Rear swing radius		(**) Dipperstick				1) 2000 mm		2) 2400 mm		3) 2910 mm		4) 3500 mm

	EX235			
M - Shoe width	mm	550	700	800
N - Overall width	mm	2500	2800	3000
Operating weight	kg	22800	23295	23625
Ground pressure	bar	0,55	0,44	0,40

Digging data

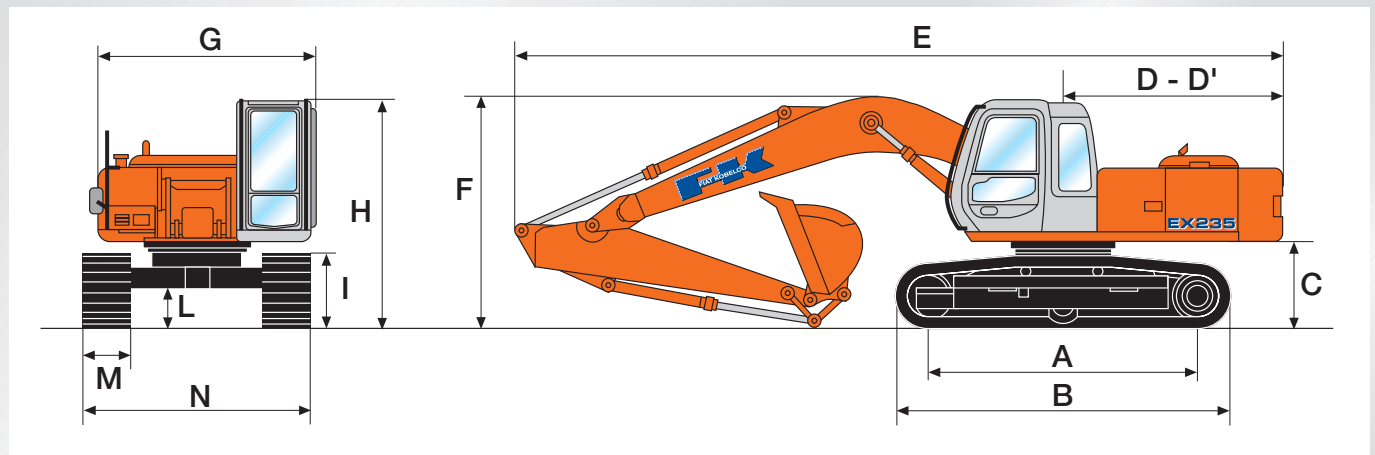
Triple articulation



Dipperstick	mm	2000	2400	2910	3500
A		9121	9400	9780	10300
A'		8920	9180	9600	10120
B		5440	5780	6250	6850
B'		5320	5660	6140	6760
C		10322	10350	10680	11020
D		7405	7360	7740	8080
E		2697	2640	2280	2300
Breakout force:					
bucket	kg	13000	13000	13000	13000
dipperstick	kg	12500	11500	9500	7900
With Power Boost:					
bucket	kg	14500	14500	14500	14500
dipperstick	kg	13400	12400	10200	8500

One-piece boom

Dimensions - Operating weight

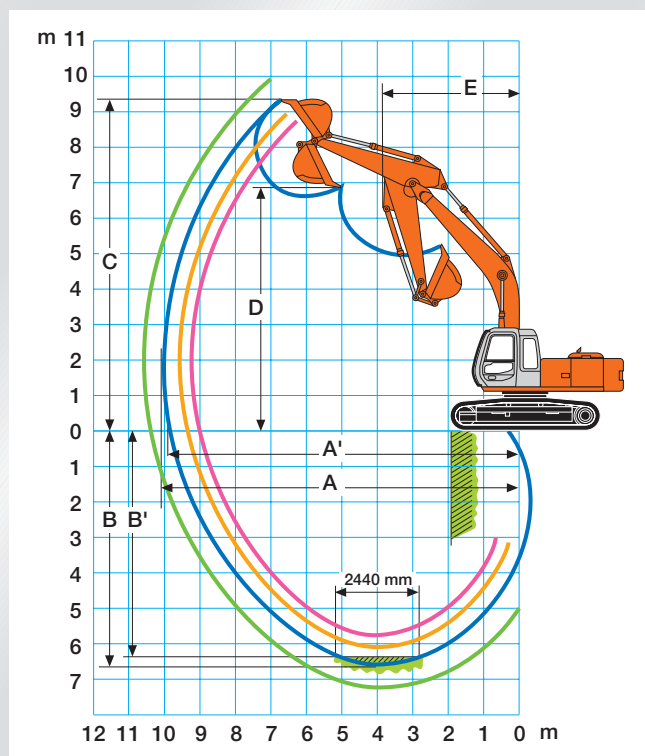


Version		A	B	C	D	D'(*)	E	F(**)	G	H	I	L
EX235	mm	3455	4260	1114	2720	2750	9608	1) 3018	2455	2954	975	480
								2) 3043				
								3) 2860				
								4) 2987				
(1) Rear swing radius		(**) Dipperstick				1) 2000 mm		2) 2400 mm		3) 2910 mm		4) 3500 mm

EX235			
M - Shoe width	mm	550	700
N - Overall width	mm	2500	2800
Operating weight	kg	22400	22995
Ground pressure	bar	0,53	0,43

Digging data

5680 mm one piece boom



Dipperstick	mm	2000	2400	2910	3500
A		9280	9480	9910	10460
A'		9110	9300	9750	10300
B		5700	6080	6670	7160
B'		5480	5880	6490	7000
C		9380	9280	9600	9780
D		6640	6460	6780	6920
E		3600	3600	3540	3560
Breakout force:					
bucket	kg	13000	13000	13000	13000
dipperstick	kg	12500	11500	9500	7900
With Power Boost:					
bucket	kg	14500	14500	14500	14500
dipperstick	kg	13400	12400	10200	8500

Standard equipment



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

- A.H.S. Advanced Hydraulic System
- Auto-Idling device
- Boom linkage pins in steel with oil-impregnated micropores
- Centralized boom lubrication
- Cylinders with hydraulic stroke-end cushioning
- Dual travel speeds with Automatic Down Shift
- Electronic engine speed indicator
- Electronic instrument console with gauges:
 - coolant temperature
 - fuel level
- indicators:
 - battery charge
 - restricted air filter
 - low engine oil pressure
 - fuel low
 - engine overheating
 - engine oil level
 - coolant level
 - hydraulic oil level

- audible alarms:
 - low engine oil pressure
 - engine overheating
- Electronic selector for hydraulic power HP-P-HE-E
- Grease bath slewing ring
- H.D. chains
- Horn
- Hydraulic pipelines and connections with front-sealing O-rings
- Hydraulically suspended cab with openable roof hatch and heating/ventilation system
- Main control valve with antidrift valves
- Maintenance-free battery
- One-piece or triple articulation boom
- Pedal or lever travel controls
- Power Boost
- Radio
- Reduced emission diesel engine
- Shoes. 550 mm
- Slewing and travel motors with automatic disc brakes
- Two-speed + intermittent windscreen wiper
- W.M.S. Working Mode Selector

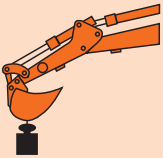
Optional equipment

- Air conditioning
- Antidrop valves
- 2000 mm dipperstick
- 2400 mm dipperstick
- 2900 mm dipperstick
- 3500 mm dipperstick
- Electric fuel pump
- FOPS frame
- Multi-purpose buckets with bucket to boom play adjustment
- Predisposition for clamshell bucket
- Predisposition for hydraulic hammer
- Oversized batteries
- Toolbox
- Track shoes: 700-800 mm

Buckets

Capacity SAE heaped	Capacity CECE heaped	Width	Weight
0.52 m ³	0.45 m ³	750 mm	503 kg
0.62 m ³	0.53 m ³	850 mm	537 kg
0.78 m ³	0.66 m ³	1000 mm	634 kg
1.00 m ³	0.83 m ³	1200 mm	651 kg
1.10 m ³	0.91 m ³	1300 mm	698 kg
1.31 m ³	1.09 m ³	1500 mm	766 kg

Lift capacity triple articulation

	Radius of load									
	3,0 m		4,5 m		6,0 m		7,5 m		At max. reach	
	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side

EX235 - Dipperstick 2000 mm

Height										
+ 6,0 m			5,7*	5,7*	4,5*	3,8			4,0*	2,8
+ 4,5 m	11,3*	10,4	6,7*	5,7	4,8*	3,6	3,8*	2,4	3,7*	2,3
+ 3,0 m			9,0*	5,2	5,4*	3,4	4,0*	2,3	3,7*	2,0
+ 1,5 m			9,9*	4,8	6,2*	3,1	4,2*	2,2	3,8*	1,9
0			9,6*	4,6	6,1*	3,0	4,4	2,1	4,1	2,0
- 1,5 m	9,9*	9,7	8,5*	4,5	6,0	2,9			4,5	2,2
- 3,0 m			6,7*	4,5	4,9*	2,9			4,2	2,7
- 4,5 m										

EX235 - Dipperstick 2400 mm

Height										
+ 6,0 m			5,4*	5,4*	4,3*	3,9			3,7*	2,8
+ 4,5 m	9,8*	9,8*	6,2*	5,8	4,6*	3,7	3,6*	2,5	3,5*	2,2
+ 3,0 m			8,4*	5,3	5,2*	3,4	3,8*	2,3	3,4*	2,0
+ 1,5 m			9,7*	4,9	5,9*	3,1	4,1*	2,2	3,5*	1,9
0	6,0*	6,0*	9,7*	4,6	6,2	3,0	4,3*	2,1	3,9*	1,9
- 1,5 m	10,9*	9,2	8,9*	4,5	6,0	2,9	4,3	2,1	4,3	2,0
- 3,0 m	9,5*	8,9	7,3*	4,4	5,4*	2,9			4,5*	2,5
- 4,5 m										

EX235 - Dipperstick 2910 mm

Height										
+ 6,0 m					4,1*	4,0	3,3*	2,6	2,7*	2,4
+ 4,5 m			5,7*	5,7*	4,3*	3,8	3,4*	2,5	2,8*	1,9
+ 3,0 m	13,6*	10,7	7,3*	5,5	4,8*	3,4	3,6*	2,4	2,9*	1,7
+ 1,5 m	4,6*	4,6*	9,3*	4,9	5,5*	3,2	3,8*	2,2	3,1*	1,6
0	6,2*	6,2*	9,6*	4,6	6,1	2,9	4,1*	2,0	3,3*	1,6
- 1,5 m	9,7*	8,8	9,1*	4,3	5,9	2,8	4,2	2,0	3,8	1,8
- 3,0 m	10,8*	8,3	7,8*	4,2	5,7*	2,7			4,2*	2,1
- 4,5 m				4,3	3,8*	2,9			3,8*	2,9

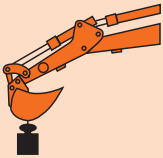
EX235 - Dipperstick 3500 mm

Height										
+ 6,0 m					3,7*	3,7	3,1*	2,7	2,2*	2,0
+ 4,5 m			4,3*	4,3*	4,0*	3,9	3,2*	2,6	2,2*^	1,7
+ 3,0 m	12,0*	11,8	6,5*	5,8	4,4*	3,6	3,4*	2,4	2,3*	1,5
+ 1,5 m	6,7*	6,7*	8,9*	5,2	5,2*	3,3	3,6*	2,2	2,5*	1,4
0	6,5*	6,5*	9,6*	4,7	6,0*	3,0	3,9*	2,1	2,8*	1,4
- 1,5 m	8,9*	8,9*	9,4*	4,4	5,9	2,8	4,2*	2,0	3,2*	1,5
- 3,0 m	12,3*	8,3	8,4*	4,2	5,8	2,7	4,2	1,9	3,8	1,8
- 4,5 m	9,0*	7,9	6,6*	4,2	4,8*	2,7			3,7*	2,3

The table values refer to ISO 10567 for excavator equipped with bucket.
The indicated load is no more than 87% of hydraulic system lift capacity or 75% of static tipping load.
Values marked with an asterisk are limited by the hydraulic system.

Lift capacity one-piece boom



	Radius of load									
	3,0 m		4,5 m		6,0 m		7,5 m		At max. reach	
	Front	Side	Front	Side	Front	Side	Front	Side	Front	Side

EX235 - Dipperstick 2000 mm

Height										
+ 6,0 m					4,4*	3,8			4,5*	3,0
+ 4,5 m			5,7*	5,7*	4,9*	3,7	4,6*	2,5	4,6*	2,4
+ 3,0 m			7,5*	5,3	5,7*	3,5	4,7	2,4	4,2	2,2
+ 1,5 m			9,0*	4,8	6,4	3,3	4,5	2,3	4,1	2,1
0			9,7*	4,6	6,2	3,1	4,5	2,2	4,2	2,1
- 1,5 m	11,1*	8,7	9,6*	4,6	6,2	3,1			4,7	2,3
- 3,0 m	12,5*	8,9	8,8*	4,7	6,3	3,1			5,8	2,9
- 4,5 m			6,7*	5,0					6,2*	4,6

EX235 - Dipperstick 2400 mm

Height										
+ 6,0 m					4,0*	3,9			4,1*	2,9
+ 4,5 m					4,6*	3,7	4,3*	2,5	4,3*	2,4
+ 3,0 m			6,9*	5,4	5,4*	3,5	4,6^	2,4	4,1	2,1
+ 1,5 m			8,6*	4,9	6,2*	3,3	4,5	2,3	4,0	2,0
0	7,4*	7,4*	9,5*	4,6	6,2	3,1	4,4	2,2	4,1	2,0
- 1,5 m	12,0*	8,6	9,7*	4,6	6,2	3,0			4,5	2,2
- 3,0 m	13,2*	8,8	9,1*	4,6	6,2	3,1			5,4	2,7
- 4,5 m	10,7*	9,1	7,5*	4,8					6,6*	4,1

EX235 - Dipperstick 2910 mm

Height										
+ 6,0 m							3,1*	2,6	2,7*	2,5
+ 4,5 m					4,1*	3,8	3,9*	2,5	2,8*	2,1
+ 3,0 m	9,7*	9,7*	6,2*	5,5	4,9*	3,5	4,3*	2,4	2,9*	1,8
+ 1,5 m	7,0*	7,0*	8,0*	5,0	5,8*	3,3	4,5*	2,3	3,2*	1,8
0	7,5*	7,5*	9,2*	4,6	6,2	3,1	4,4	2,2	3,6	1,8
- 1,5 m	10,5*	8,5	9,6*	4,5	6,1	3,0	4,3	2,1	3,9	1,9
- 3,0 m	13,9*	8,6	9,3*	4,5	6,1	3,0			4,6	2,3
- 4,5 m	11,8*	8,9	8,1*	4,7					5,9*	3,2

EX235 - Dipperstick 3500 mm

Height										
+ 6,0 m							3,2*	2,7	2,2*	2,1
+ 4,5 m							3,5*	2,6	2,2*	1,8
+ 3,0 m			5,4*	5,4*	4,4*	3,6	3,9*	2,5	2,3*	1,6
+ 1,5 m	11,0*	9,3	7,3*	5,1	5,4*	3,3	4,5*	2,3	2,5*	1,6
0	8,1*	8,1*	8,7*	4,7	6,3*	3,1	4,4	2,2	2,9*	1,6
- 1,5 m	9,8*	8,4	9,5*	4,5	6,1	3,0	4,3	2,1	3,4*	1,7
- 3,0 m	13,1*	8,5	9,5*	4,5	6,1	2,9	4,3	2,1	4,0	1,9
- 4,5 m	13,0*	8,7	8,7*	4,6	6,1	3,0			5,1	2,5

The table values refer to ISO 10567 for excavator equipped with bucket.
The indicated load is no more than 87% of hydraulic system lift capacity or 75% of static tipping load.
Values marked with an asterisk are limited by the hydraulic system.

At your own dealership

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Published by FIAT KOBELCO CONSTRUCTION MACHINERY S.p.A. - <http://www.fiatkobelco.com> - n. 60013 - INB
LEADER Firenze - Printed in Italy - 7/02



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