

# VOLVO COMPACT EXCAVATOR

## EC15B XR, XT, XTV



- **Gross Power:**  
12 kW / 16.1 hp
- **Net Power:**  
ISO 9249: 11.7 kW / 15.7 hp
- **Operating Weight:**  
EC15B XR: 1479 - 1603 kg  
EC15B XT: 1539 - 1713 kg  
EC15B XTV: 1637 - 1811 kg
- **Bucket Capacities:**  
16 - 60 l.
- **Maximum Digging Depth:**  
2200 - 2520 mm
- **Load Sensing Hydraulic System** for very precise controls under all load conditions.
- **Hydraulically adjustable crawler undercarriage** for better stability and access to narrow sites or 1200 mm wide fixed undercarriage.
- **Simultaneous digging movements and high speed operations** for faster cycle times and increased productivity.
- **ROPS, TOPS and FOPS** cab and canopy for a better operator safety.
- **Compact dimensions. Wrap-around counterweight** protects the rear compartment against all impacts.
- **Two travel speeds** for higher mobility on job sites.
- **Excellent serviceability** thanks to easy access to the engine and hydraulics compartments.

**MORE CARE. BUILT IN.**



# SPECIFICATIONS

## Engine

Water-cooled low emissions Tier 4 Volvo D1D diesel engine.

<b>Displacement, total</b>	952 cc
<b>Gross power, rated</b>	12.0 kW (16.1 hp) at 2200 r/min
<b>Power, installed (ISO 9249)</b>	11.7 kW (15.7 hp) at 2200 r/min
<b>Maximum torque (ISO 9249)</b>	53 Nm at 1800 rpm
<b>Bore x stroke</b>	76 mm x 70 mm
<b>Gas emission</b>	PM: 0.4 g/kwh NOx + HC : 7.5 g/kwh CO: 6.6 g/kwh

## Electrical system

<b>Rated voltage</b>	12 V
<b>Battery capacity</b>	12 V - 45 Ah
<b>Alternator rating</b>	12 V - 40 A
<b>Starter motor output</b>	12 V - 1.6 kW

## Hydraulic system

Closed-centre Load-Sensing hydraulic system providing total independence of each movement.

<b>Control</b>	power-assisted hydraulic controls
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Gear pump for all the equipment, travel and power-assistance circuits:

<b>Maximum delivery</b>	32 litres/min.
<b>Maximum operating pressure</b>	17 MPa (170 bars)

Double-acting hydraulic circuit for accessories:

<b>Maximum delivery</b>	32 litres/min.
<b>Maximum operating pressure</b>	17 MPa (170 bars)

Cushions:

<b>On the boom ram</b>	at the rod end
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## Bucket performance

<b>Breakout force</b>	1510 daN
<b>Tearout force</b>	960 daN

## Slewing system

Turntable slewing is provided by an Ortitrol hydraulic motor which drives directly (without a reduction gear) a ball internal crown wheel with remote lubrication:

<b>Slewing speed</b>	9 r/min
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## Undercarriage

<b>EC15B XR/XT</b>	
<b>Track width</b>	230 mm
<b>Track tension</b>	by grease piston
<b>Blade height</b>	240 mm
<b>Width of the blade</b>	980 mm

## Undercarriage

<b>EC15B XTV</b>	
<b>Track width</b>	230 mm
<b>Track tension</b>	by grease piston
<b>Blade height</b>	240 mm
<b>Width of the blade</b>	980 mm and 1350 mm

## Drivetrain

**EC15B XR**  
Each track is driven by an Orbitrol hydraulic motor.

<b>Max. speed</b>	2.0 km/h
<b>Max. tractive force</b>	1260 daN

## EC15B XT/XTV

Each track is driven by an axial piston hydraulic motor equipped with two speeds and an epicyclic reduction gear.

<b>Max. speed (low/high speed)</b>	2.0 - 3.5 km/h
<b>Max. tractive force</b>	1440 daN

## Service fill capacities

<b>Fuel tank</b>	21 l
<b>Hydraulic system, total</b>	33 l
<b>Engine oil</b>	3.6 l
<b>Cooling system</b>	4.5 l

## Weight

	EC15B XR		EC15B XT	
<b>Ground pressure</b>	<b>Rubber Tracks</b>	<b>Rubber Tracks</b>	<b>Steel Tracks</b>	<b>Steel Tracks</b>
<b>Cab version</b>	0.30 kg/cm <sup>2</sup>	0.32 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>
<b>Canopy version</b>	0.28 kg/cm <sup>2</sup>	0.30 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>	0.31 kg/cm <sup>2</sup>

<b>Operating mass</b>	<b>Rubber Tracks</b>	<b>Rubber Tracks</b>	<b>Steel Tracks</b>
<b>Cab version</b>	1603 kg	1663 kg	1713 kg
<b>Canopy version</b>	1479 kg	1539 kg	1589 kg

<b>Transport mass</b>	<b>Rubber Tracks</b>	<b>Rubber Tracks</b>	<b>Steel Tracks</b>
<b>Cab version</b>	-	1538 kg	1588 kg
<b>Canopy version</b>	-	1414 kg	1464 kg

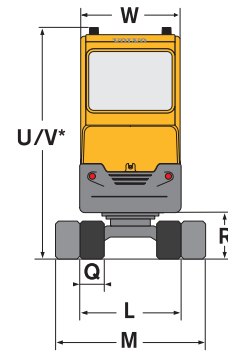
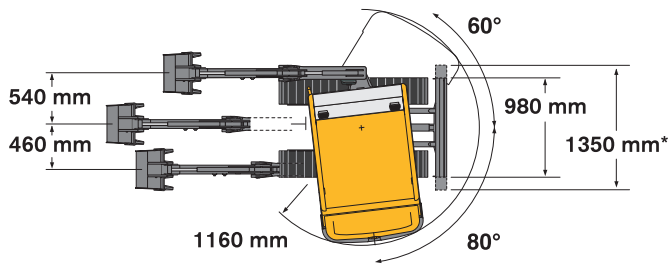
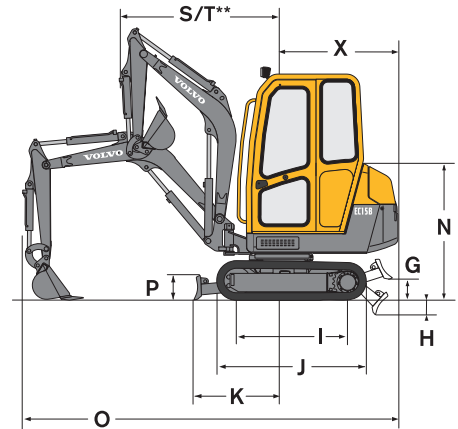
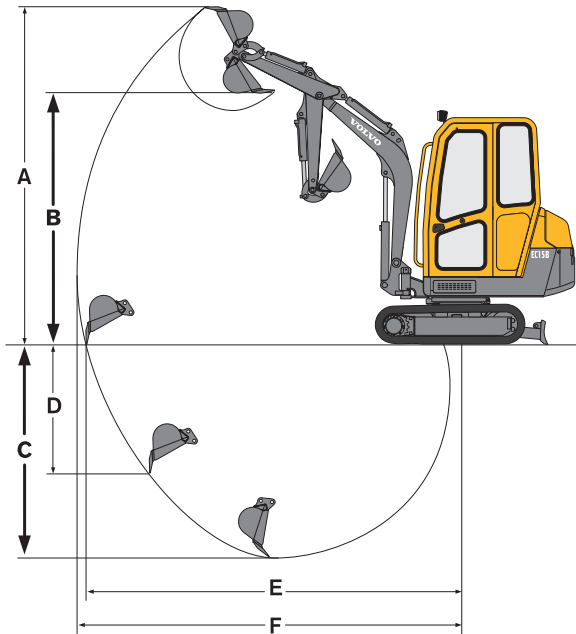
	EC15B XTV	
<b>Ground pressure</b>	<b>Rubber Tracks</b>	<b>Steel Tracks</b>
<b>Cab version</b>	0.34 kg/cm <sup>2</sup>	0.35 kg/cm <sup>2</sup>
<b>Canopy version</b>	0.32 kg/cm <sup>2</sup>	0.33 kg/cm <sup>2</sup>




<b>Operating mass</b>	<b>Rubber Tracks</b>	<b>Steel Tracks</b>
<b>Cab version</b>	1761 kg	1811 kg
<b>Canopy version</b>	1637 kg	1687 kg

<b>Transport mass</b>	<b>Rubber Tracks</b>	<b>Steel Tracks</b>
<b>Cab version</b>	1636 kg	1686 kg
<b>Canopy version</b>	1512 kg	1562 kg

## Noise levels

The EC15B conforms to the 2006 European Machine Directive Noise Level (2000/14/CE) of 93 dB(A) for this class of machine.



Buckets EC15B XR/XT/XTV			
	Width	Weight	Capacity
Excavator bucket	250 mm	25 kg	19 l
	300 mm	28 kg	24 l
	350 mm	30 kg	28 l
	400 mm	32 kg	33 l
	450 mm	35 kg	38 l
	500 mm	37 kg	43 l
	-	40 kg	53 l
Ditch bucket	1000 mm	47 kg	60 l

Dipper	A	B	C*	C	D	E	F
900 mm	3410	<b>2480</b>	<b>2200</b>	<b>2050</b>	1500	3570	3710
1150 mm	3550	<b>2620</b>	<b>2450</b>	<b>2300</b>	1740	3810	3940

\* Dig depth with blade down.

	G	H	I	J	K	L	M	N	O
EC15B XR	210	150	1045	1415	860	980	-	1345	3650
EC15B XT	210	150	1085	1415	860	980	-	1245	3650
EC15B XTV	221	175	1085	1470	860	980	1330	1225	3650

	P	Q	R	S	T	U	V	W	X
EC15B XR	240	230	450	1520	1230	-	2210	970	1120
EC15B XT	240	230	450	1520	1230	-	2210	970	1120
EC15B XTV	240	230	450	1520	1230	-	2210	970	1120

## STANDARD EQUIPMENT

### Engine

Dry-type air filter.  
Electric pre-heating device.  
Transparent diesel oil filter, pre-filter and sediment bowl.  
Oil sump sheet metal guard.  
Hand throttle.

### Electrical system

12 V - 45 Ah maintenance-free battery.  
Horn.  
12 V power socket for inspection lamp.

### Undercarriage

230 mm wide rubber tracks.  
Fixed or variable width undercarriage (EC15B XTV only).  
Dozer blade.  
Blade extensions with supports on the blade (variable width undercarriage) (EC15B XTV only).  
Towing and anchoring points.  
Remote lubrication of the slewing crown ring.

### Hydraulic system

Additional double-acting hydraulic control valve for an attachment circuit with folding control pedal and circuit for direct return of oil to the hydraulic tank.  
Attachment circuit piping (double-acting) as far as the bottom of the boom.  
Power-assisted control of the hydraulic offset of the boom by the left control lever.  
Control of forward movement by two levers.  
Hydraulic oil cooler.

### Cab (cab version)

Level 1 FOPS (Falling Objects Protective Structure).  
TOPS (Tip-Over Protective Structure).  
ROPS (Roll-Over Protective Structure).  
Vinyl-covered multi-adjustable sprung seat.  
Non-slip floor and grab handles for access to the driver's cab.  
Seatbelt.  
Cab mounted on rubber mountings.  
Two working lights.  
Two-speed heating and ventilation.  
Cab heat adjustment.  
Front window with opening system power-assisted by two gas rams.  
Sliding window (right).  
Door stops.  
Provision for a radio (location for a radio and two speakers, aerial and electric wiring already fitted).  
Interior lighting.  
Anti-corrosion protection of the cab.  
Windscreen wiper and washer (front).  
Emergency exit via the rear window.

### Canopy (Canopy version)

Level 1 FOPS (Falling Objects Protective Structure).  
TOPS (Tip-Over Protective Structure).  
ROPS (Roll-Over Protective Structure).  
Vinyl-covered all weather multiadjustable sprung seat.  
Non-slip floor and grab handle for access to the driver's cab.  
Seat belt.  
Working light on the canopy frame.

### Instrumentation and monitoring

Monitoring and warning light for : pre-heating, engine oil pressure, water temperature, battery charging, air filter restriction.

Fuel gauge.  
Hour meter.  
Shut down for automatic switching off engine in the event of overheating or drop in oil pressure.

### Working equipment

1750 mm long monobloc boom.  
900 mm dipper.  
140° hydraulic boom offset.  
Cushion on the boom ram.  
Handling equipment for loads inferior to 1000 kg (lifting hook on the bucket with load chart displayed in the driver's cab).  
Remote lubrication of the bottom of the offset ram.

### Safety

Engine safety start device : the left console must be raised to operate the starter.  
Nitrogen accumulator on the power assistance circuit in order to be able to put the equipment on the ground if the engine is switched off.  
Window-breaker hammer (cab).  
Key-lockable toolbox.

### Official approval

Machine conforming to directive n° 98/37 EEC and its amendments.  
Sources emissions in the environment conforming to directive 2000/14/CE.  
Handling device conforming to EN standard 474-5.  
FOPS 1 conforming to ISO standard 3449.  
TOPS conforming to ISO standard 12117.  
Electromagnetic compatibility (EMC) conforming to directive n° 89/336 EEC and its amendments.

## OPTIONAL EQUIPMENT

### Working equipment

Long dipper (1150 mm).  
Mechanically-controlled quickrelease attachment bracket.

### Hydraulic circuits for attachments

Hydraulic circuit for single or double-acting attachments (Auger...)  
Hydraulic circuit for operating a clam-shell bucket (opening/closing and rotation of the bucket).  
Push-pull connectors for attachment line.

### Undercarriage

Steel tracks (230 mm wide)  
(not EC15B XR).

### Lighting

Additional working light on the boom.  
Additional rear working light.  
Rotating beacon.

### Environmental protection

Bio-degradable hydraulic oil.  
Catalytic exhaust.

### Comfort and safety

Radio (cab).  
Anti-theft system (2 programmable codes).

Rear wind-deflector on canopy.  
Battery isolator switch.  
Fabric seat (cab).  
Translation pedals.  
Retractable seatbelt.  
Safety valve on boom and dipper ram.  
Dual stage air filter.  
Audible travel warning.  
Document storage.

### Miscellaneous

Tool kit.  
Special customised paint (RAL specifications).



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