



Volvo Construction Equipment

# EC250E, EC300E

Volvo Excavators 24.6-33.9 t 218-245 hp



# A passion for performance

At Volvo Construction Equipment, we're not just coming along for the ride. Developing products and services that raise productivity – we are confident we can lower costs and increase profits for industry experts. Part of the Volvo Group, we are passionate about innovative solutions to help you work smarter – not harder.

## Helping you to do more

Doing more with less is a trademark of Volvo Construction Equipment. High productivity has long been married to low energy consumption, ease of use and durability. When it comes to lowering life-cycle costs, Volvo is in a class of its own.

## Designed to fit your needs

There is a lot riding on creating solutions that are suited to the particular needs of different industry applications. Innovation often involves high technology – but it doesn't always have to. Some of our best ideas have been simple, based on a clear and deep understanding of our customers' working lives.



## You learn a lot in 180 years

Over the years, Volvo has advanced solutions that have revolutionized the use of construction equipment. No other name speaks Safety louder than Volvo. Protecting operators, those around them and minimizing our environmental impact are traditional values that continue to shape our product design philosophy.

## We're on your side

We back the Volvo brand with the best people. Volvo is truly a global enterprise, one that is on standby to support customers quickly and efficiently – wherever they are.

**We have a passion for performance.**



Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



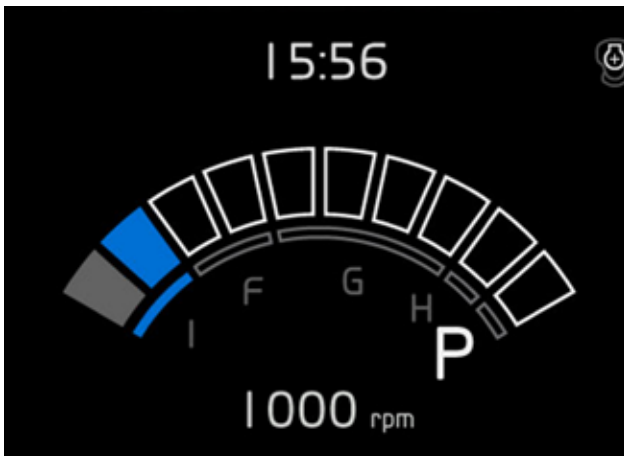
Volvo Financial Services

# Doing more for you

Volvo's EC250E/EC300E Stage IV crawler excavators are powerful and efficient machines designed to reduce fuel consumption and increase your productivity. With advanced technology, the machines deliver a significant improvement in fuel efficiency, saving your business time and cost. Put your mind at ease with a Volvo excavator.

## Automatic idling system

Engine speed is reduced to idle when the controls are inactive for a pre-set amount of time (between 3 and 20 seconds), which reduces fuel consumption and noise for nearby workers.



## Work modes

Volvo's integrated work mode system now includes the G4 mode for optimum fuel efficiency and machine performance. You can choose the best work mode for the task at hand – select from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max).



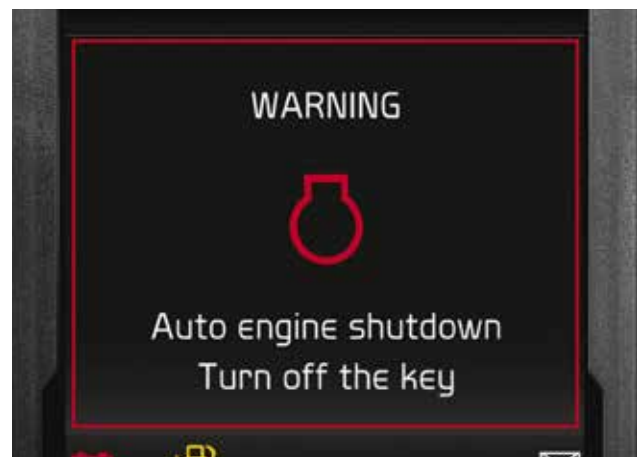
## Eco-gauge

Eco-gauge is an added gauge bar that indicates momentary fuel consumption and can be reset through the display monitor. This will track fuel consumption under different applications.



## Auto-engine shut down

E-Series excavators feature automatic engine shutdown for when the machine is not being used. When the machine is motionless for five minutes, the engine will automatically turn off and reduce your running costs.





# ECO MODE

Volvo's unique ECO mode optimizes the hydraulic system to reduce flow and pressure losses – resulting in improved fuel efficiency without any loss of performance in most operating conditions. ECO mode is automatically selected but can be switched off via the keypad.



# HUMAN MACHINE INTERFACE (HMI)

All machine interfaces – including the joysticks, keypad and LCD monitor – are ergonomically positioned and designed for optimum control and efficiency. For operator convenience and ease of use, the number of switches has been significantly reduced.

# Boost your productivity

It's a fact that operators work more efficiently when they're given the best tools for the job. That's why, on top of being a superior production machine, the EC250E/EC300E has an ergonomic design with ideally placed controls and switches. With built in comfort and optimized control, operators will work efficiently and productively all day long.

## Keypad + hot key

The optimally positioned keypad allows the operator to easily navigate through the LCD monitor and activate machine functions in a safe and comfortable way. The functionality of the camera, air conditioning and lights can be customized via the hot key – enabling the operator to select and save desired configurations.



## 8 inch LCD

The new, eight-inch non-glare colour LCD monitor displays machine status and information for easy operation. Through the use of a new remote keypad, the display enables the operator to easily navigate through various menus.



## Joystick + shortcut key

The windshield wipers, camera, audio mute or power max function can be assigned to a shortcut switch located on the joystick. This allows the operator to easily control the selected function by simply pressing a switch.



## Bluetooth®

Bluetooth and a hands-free function have been added that allows the operator to connect to wireless functions for easier connectivity and more convenience.

# Non-stop productivity

Experienced and skilled Volvo engineers have developed and rigorously tested Stage IV/Tier 4 Final engine systems that deliver the ultimate combination of high productivity and low fuel consumption. Benefit from Volvo's signature high torque at low rpm and experience superior performance and reduced fuel consumption.

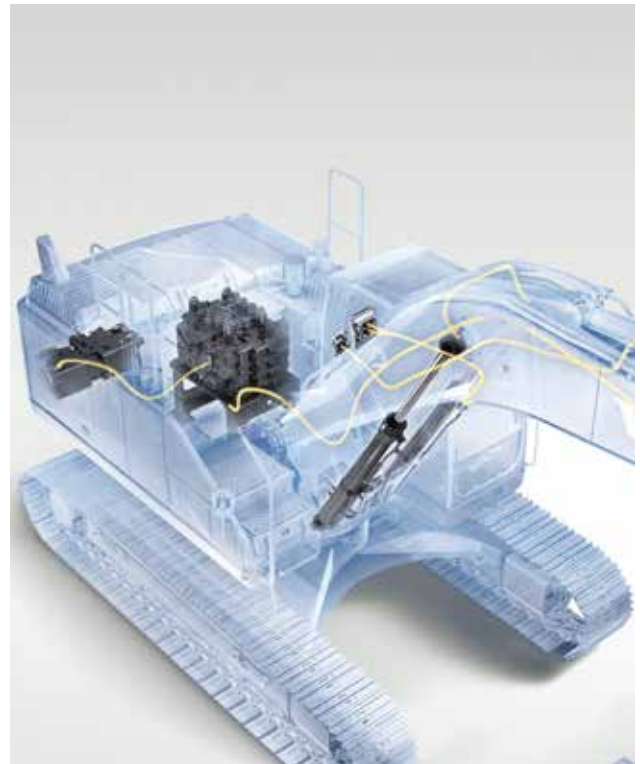
## Attachment management system

The attachment management system – controlled through the monitor – stores the settings for up to 20 different hydraulic attachments for ease of operation. Depending on the options configured, the management system can store rated flow and relieve pressure.



## Positive Control hydraulics + pump input torque

High pump flow combined with the electro-hydraulic control system creates a faster response and cycle time. In addition, the EC300E features increased pump input torque for a reduced cycle time.



## V-ACT (engine and pumps are matched to optimise performance)

It's the combination of the durable D8 Volvo engine and intelligent hydraulic system that makes all the difference. Boosting power while reducing both fuel consumption and emissions results in quicker cycle times and greater productivity.



## Boom float

With the boom float function the pump power for boom lowering can be saved or used for other functions, reducing your cycle time. Also, the grading operation can be made easier.

## Engine after treatment system

The After Treatment Control Module (ACM) automatically controls, monitors and diagnoses the after treatment system to secure emission regulation compliance.





# PROPORTIONAL TWO-PUMP FLOW

The proportional two-pump flow makes it easier for the operator to improve the machine's controllability for a higher quality grading finish. The ease of operation helps to get a quality job done quicker



# BOLT-ON WEAR PLATES

At the arm end where the most movement and wear occurs, Volvo provides wear plates which are easily replaced in a matter of hours in the field – a service that can't be matched by its competitors.

# Built to last

From quarries to mass excavation, this heavy-duty production machine has been built to work on tough job sites. Featuring a robust, reinforced structure and high quality welding, the EC250E/ EC300E boast superior strength and durability. Experience reliability you can count on with Volvo.

## HD superstructure undercover plating

The optional heavy-duty superstructure undercover protects components within the superstructure. For increased durability, heavy-duty undercover plates provide additional protection to the underside of the machine in tough applications – preventing damage from rock and debris.



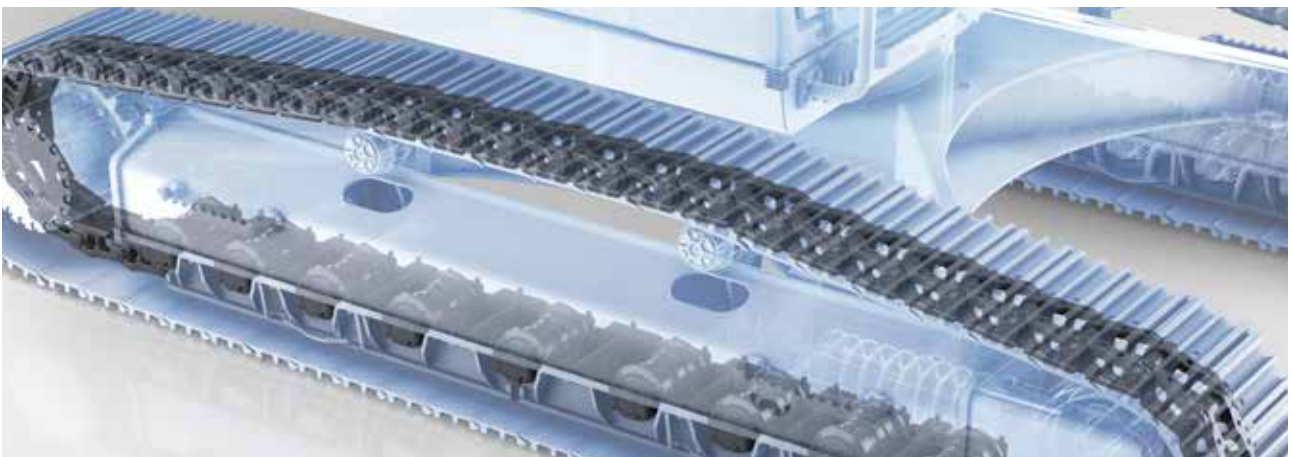
## Re-enforced bucket linkage

A steel strip reinforces and supports the bucket linkage for added strength. It provides consistent long term durability even in the most severe applications.



## Robust undercarriage

The reinforced idler frame, track links and bottom rollers are built to withstand tougher conditions for improved durability and reliability in demanding applications.



## Robust track link

The machines feature reinforced track links for increased durability in tough applications.

# Up your uptime

At Volvo we believe that maintaining your machine should be as quick and easy as possible. That's why our designers and engineers have developed innovative methods to make maintenance easy. With large, wide opening compartment doors and grouped service points, checks will be carried out faster and you'll get the most out of every operating shift.

## Handrails & bolted on anti-slip plates

Multiple handrails and fold-able guardrails provide safe and easy access to the cab and superstructure. The bolted-on punched anti-slip plates provide superior grip and increased safety on board your machine. The fold-able guardrails is to minimize transportation height when it is folded.



## Sturdy doors and hinges

Volvo's design features rigid side doors with robust handles, hinges and locks for superior durability.



## Tool box

The large tool box storage fitted on the right side is very convenient for daily maintenance.





# AIR COMPRESSOR

Volvo now offers an optional and unique air compressor system. The air compressor with air blower, fitted in the cab for easy access, is a powerful tool and can be used to clean the cab whenever necessary.



# MATCHED ATTACHMENTS

Volvo's durable attachments have been purpose-built to work in perfect harmony with Volvo machines, forming one solid, reliable unit. With functions and properties ideally matched, Volvo attachments are an integrated part of the excavator for which they're intended.

# Mix and match for a superior fit

Maximize your productivity and profitability with Volvo's EC250E/EC300E crawler excavators and a range of durable attachments. Increase your versatility, access more applications and perform a variety of tasks – all while experiencing faster cycle times and excellent control.

## Buckets – GP/HD/XD

Volvo's buckets are the perfect tool for digging and re-handling in all conditions from soft, medium and hard materials. Heavy-duty buckets are intended for productive digging in compact materials. All provide maximum productivity and long life and feature original Volvo wear components.



## Breakers HB24, HB36

The HB-Series of hydraulic breakers are optimized to the specific weights of Volvo machines and tailored to Volvo quick couplers for swift, safe and simple attachment changes. They are available with a full assortment of tools.



## Quick Coupler

Volvo offers a full range of quick couplers, including its dedicated S-type couplers, that eliminates a loss of break-out force and perfectly match Volvo's bucket range. The Volvo universal quick coupler picks up a variety of attachments from various manufacturers. All Volvo quick couplers meet the latest safety regulations.



## Tilt Rotator\*

Volvo's tilt rotator can be ordered factory installed with multifunctional joysticks and color display that's fully integrated into the machine's system. The new series of Volvo XD excavator buckets are perfectly matched to the factory installed tilt rotator.

*\*EC250E only*



# Optimize your options

## ECO MODE

Volvo's unique ECO mode improves fuel efficiency without any loss of performance.

## PROPORTIONAL TWO-PUMP FLOW

The proportional two-pump flow makes it easier for the operator to improve the machine's controllability for a higher quality grading finish. The ease of operation helps to get a quality job done quicker.

## Booms and arms

To achieve the best performance, select the most suitable boom and arm configuration combination for your requirements.

## BOLT-ON WEAR PLATES

At the arm end where the most movement and wear occurs, Volvo provides wear plates which are easily replaced in a matter of hours in the field – a service that can't be matched by its competitors.

## Demolition package

Volvo's factory fit demolition package offers ultimate protection for the machine.

## MATCHED ATTACHMENTS

Volvo's durable attachments have been purposebuilt to work in perfect harmony with Volvo machines, forming one solid, reliable unit. With functions and properties ideally matched, Volvo attachments are an integrated part of the excavator for which they're intended.

## AdBlue®

Volvo offers a total AdBlue solution that is quality assured, cost efficient and easily accessible. Contact your Volvo dealer for more information. ® = registered trademark of the Verband der Automobilindustrie e.V. (VDA)





## HUMAN MACHINE INTERFACE (HMI)

All machine interfaces are ergonomically positioned and designed for optimum control and efficiency.

### Bluetooth®

Bluetooth multimedia and hands-free functions have been added, allowing the operator to connect to wireless functions for increased comfort and safety.

## AIR COMPRESSOR

Volvo now offers an optional and unique air compressor system. The air compressor with air blower, fitted in the cab for easy access, is a powerful tool and can be used to clean the cab whenever necessary.

### Automatic engine shutdown

E-Series excavators feature optional automatic engine shutdown for when the machine is idle for a pre-set period.

### Handrails and anti-slip plates

Punched anti-slip plates and multiple handrails and fold-able guardrails provide safe and easy access to the machine.

### After treatment system

The automatic regeneration process takes place without interrupting machine operation, performance or productivity.

### Robust track link

The excavators feature reinforced track links for improved durability in tough applications.



# Adding value to your business

Being a Volvo customer means having a complete set of services at your fingertips. Volvo can offer you a long-term partnership, protect your revenue and provide a full range of customer solutions using high quality parts, delivered by passionate people. Volvo is committed to increasing the positive return on your investment and maximising uptime.

## Complete Solutions

Volvo has the right solution for you. So why not let us provide all your needs throughout the whole life cycle of your machine? By listening to your requirements, we can reduce your total cost of ownership and increase your revenue.



## Perform with precision

Unlock the full potential of your machine's productivity with Dig Assist, the intelligent and intuitive technology which allows the operator to quickly and easily manage all excavator functions from a single in-cab system. Powered by the high resolution in-cab Volvo Co-Pilot, and with 2D, In-Field Design and 3D software packages available, Dig Assist gives operators access to a range of tools to help them achieve unmatched control, accuracy and uptime.



## Genuine Volvo Parts

Our attention to detail is what makes us stand out. This proven concept acts as a solid investment in your machine's future. Parts are extensively tested and approved because every part is vital for uptime and performance. Only by using Genuine Volvo Parts, can you be sure that your machine retains the renowned Volvo quality.



## Service Network

In order to respond to your needs faster, a Volvo expert is on their way to your job site from one of our Volvo facilities. With our extensive infrastructure of technicians, workshops and dealers, Volvo has a comprehensive network to fully support you using local knowledge and global experience.





# CUSTOMER SUPPORT AGREEMENTS

The range of Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services. Volvo uses the latest technology to monitor machine operation and status, giving you advice to increase your profitability. By having a Customer Support Agreement you are in control of your service costs.

# Volvo EC250E, EC300E in detail

## Engine

The latest generation, Volvo engine Tier 4f (Stage IV) emissions compliant diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, high pressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.

Air Filter: 3-stage with precleaner.

Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

### EC250E

Engine	Volvo	D8J
Max power at	r/min	1 800
Net, ISO 9249/SAE J1349	kW	159
	hp	216
Gross, ISO 14396/SAE J1995	kW	160
	hp	218
Max torque	Nm	1 110
at engine speed	r/min	1 350
No. of cylinders		6
Displacement	l	7.8
Bore	mm	110
Stroke	mm	136

### EC300E

Engine	Volvo	D8J
Max power at	r/min	1 800
Net, ISO 9249/SAE J1349	kW	179
	hp	243
Gross, ISO 14396/SAE J1995	kW	180
	hp	245
Max torque	Nm	1 238
at engine speed	r/min	1 350
No. of cylinders		6
Displacement	l	7.8
Bore	mm	110
Stroke	mm	136

## Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard.

Contronics provides advanced monitoring of machine functions and important diagnostic information.

		EC250E	EC300E
Voltage	V	24	24
Batteries		2 x 12	2 x 12
Battery capacity	Ah	200	200
Alternator	V/A	28/80	28/80

## Service Refill

		EC250E	EC300E
Fuel tank	l	470	470
DEF/AdBlue® tank	l	53	53
Hydraulic system, total	l	320	400
Hydraulic tank	l	207	207
Engine oil	l	32	32
Engine coolant	l	41	41
Slew reduction unit	l	5.9	6.1
Travel reduction unit	l	2 x 5	2 x 6

## Swing system

The swing system uses an axial piston motors, driving a planetary gearbox for maximum torque. An automatic holding brake and anti-rebound valve are standard.

		EC250E	EC300E
Max. slew speed	r/min	11.9	10.7
Max. slew torque	kNm	91.7	110.9

## Travel System

Each track is powered by an automatic two-speed shift travel motor. The track brakes are multi-disc, spring-applied and hydraulic released. The travel motor, brake and planetary gears are well protected within the track frame.

		EC250E	EC300E
Max. drawbar pull	kN	217	248
Max. travel speed (low)	km/h	3.5	3.4
Max. travel speed (high)	km/h	5.5	5.4
Gradeability	°	35	35

## Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.

		EC250E	EC300E
Track shoes		2 x 51	2 x 50
Link pitch	mm	190	203
Shoe width, triple grouser	mm	600 / 700 / 800 / 900	600 / 700 / 800 / 900
Shoe width, triple grouser (HD)	mm	600	600
Shoe width, double grouser	mm	600 / 700	700
Bottom rollers		2 x 9	2 x 9
Top rollers		2 x 2	2 x 2

## Hydraulic system

The new electro-hydraulic system and new MCV (main control valve) use intelligent technology to control on-demand flow for high-productivity, high-digging capacity and excellent fuel consumption.

The following important functions are included in the system for optimum performance:

Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.

Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations.

Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.

Swing priority: Gives priority to swing functions for faster simultaneous operations.

Regeneration system: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.

Power boost: All digging and lifting forces are increased.

Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

	EC250E	EC300E	
<b>Main pump, Type 2 x variable displacement axial piston pumps</b>			
Maximum flow	l/min	2 x 240	2 x 263
<b>Pilot pump, Type Gear pump</b>			
Maximum flow	l/min	18	18
<b>Relief value setting pressure</b>			
Implement	MPa	33.3/36.3	33.3/36.3
Travel circuit	MPa	33.3	33.3
Slew circuit	MPa	27.9	27.9
Pilot circuit	MPa	3.9	3.9

Travel: Variable displacement axial piston motor with mechanical brake  
Slew: Fixed displacement axial piston motor with mechanical brake

## Hydraulic Cylinders

	EC250E	EC300E	
Mono boom	2	2	
Bore x Stroke	ø x mm	135 x 1 345	140 x 1 480
2 piece boom	1	1	
Bore x Stroke	ø x mm	160 x 1 230	170 x 1 300
Arm	1	1	
Bore x Stroke	ø x mm	140 x 1 665	150 x 1 745
Bucket	1	1	
Bore x Stroke	ø x mm	130 x 1 150	140 x 1 140
Bucket for LR boom	1	1	
Bore x Stroke	ø x mm	100 x 865	100 x 865

## Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door. Integrated air-conditioning and heating system: The pressurized and filtered cab air is supplied by an automatically-controlled fan. The air is distributed throughout the cab from 14 vents.

Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has nine different adjustments plus a seat belt for the operator's comfort and safety.

## Sound Level

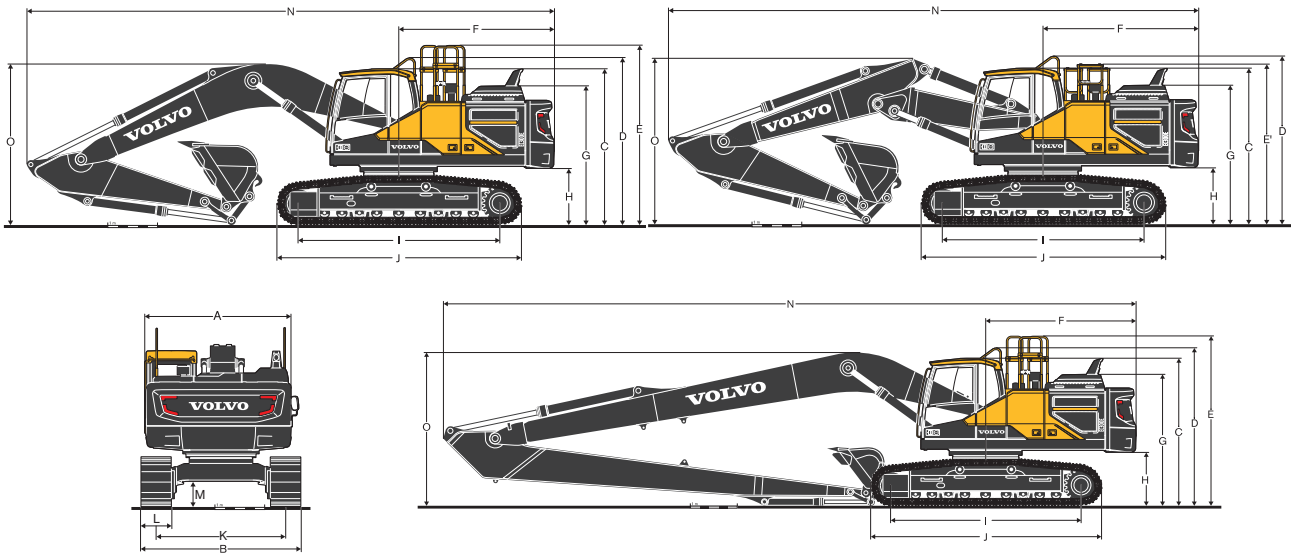
	EC250E	EC300E	
Sound level in cab according to ISO 6396			
LpA (standard)	dB(A)	70	70
LpA (tropical)	dB(A)	71	71
External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC) and 474-1:2006 +A1:2009			
LwA (standard)	dB(A)	103	104
LwA (tropical)	dB(A)	104	105

# Specifications

GROUND PRESSURE										
Description	Shoe width	EC250E								
		Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width
		kg	kPa	mm	kg	kPa	mm	kg	kPa	mm
Triple grouser	600	25 590	50.6	3 190	25 760	50.9	3 190	26 180	51.7	3 190
	700	25 890	43.8	3 290	26 070	44.1	3 290	26 480	44.8	3 290
	800	26 190	38.8	3 390	26 360	39.1	3 390	26 780	39.7	3 390
	900	26 490	34.9	3 490	26 670	35.1	3 490	27 090	35.7	3 490
Triple grouser(HD)	600	25 820	51.0	3 190	26 000	51.4	3 190	26 420	52.2	3 190
Double grouser	600	25 820	51.0	3 290	25 990	51.3	3 290	26 410	52.2	3 290
	700	26 160	44.3	3 290	26 340	44.6	3 290	26 750	45.3	3 290
		EC250E with L undercarriage, 6.0m boom, 2.97m arm, 1 197kg bucket, 4 250kg counterweight			EC250E with L undercarriage, 6.0m HD boom, 2.97m HD arm, 1 197kg bucket, 4 250kg counterweight			EC250E with L undercarriage, 5.95m 2-piece boom, 2.97m arm, 1 197kg bucket, 4 250kg counterweight		
Triple grouser	600	26 290	51.9	3 190	26 460	52.3	3 190	26 880	53.1	3 190
	700	26 590	45.0	3 290	26 770	45.3	3 290	27 180	46.0	3 290
	800	26 890	39.8	3 390	27 060	40.1	3 390	27 480	40.7	3 390
	900	27 190	35.8	3 490	27 370	36.0	3 490	27 790	36.6	3 490
Triple grouser(HD)	600	26 520	52.4	3 190	26 700	52.7	3 190	27 120	53.6	3 190
Double grouser	600	26 520	52.4	3 290	26 690	52.7	3 290	27 110	53.6	3 290
	700	26 860	45.5	3 290	27 040	45.8	3 290	27 450	46.5	3 290
		EC250E with L undercarriage, 6.0m boom, 2.97m arm, 1 197kg bucket, 4 950kg counterweight			EC250E with L undercarriage, 6.0m HD boom, 2.97m HD arm, 1 197kg bucket, 4 950kg counterweight			EC250E with L undercarriage, 5.95m 2-piece boom, 2.97m arm, 1 197kg bucket, 4 950kg counterweight		
Triple grouser	600	25 500	50.4	2 990	25 680	50.7	2 990	26 100	51.6	2 990
	700	25 800	43.7	3 090	25 980	44.0	3 090	26 400	44.7	3 090
	800	26 100	38.7	3 190	26 280	38.9	3 190	26 690	39.5	3 190
	900	26 410	34.8	3 290	26 580	35.0	3 290	27 000	35.6	3 290
Triple grouser(HD)	600	25 740	50.8	2 990	25 920	51.2	2 990	26 330	52.0	2 990
Double grouser	600	25 730	50.8	2 990	25 910	51.2	2 990	26 330	52.0	2 990
		EC250E with NL undercarriage, 6.0m boom, 2.97m arm, 1 197kg bucket, 4 250kg counterweight			EC250E with NL undercarriage, 6.0m HD boom, 2.97m HD arm, 1 197kg bucket, 4 250kg counterweight			EC250E with NL undercarriage, 5.95m 2-piece boom, 2.97m arm, 1 197kg bucket, 4 250kg counterweight		
Triple grouser	600	26 200	51.8	2 990	26 380	52.1	2 990	26 800	52.9	2 990
	700	26 500	44.9	3 090	26 680	45.2	3 090	27 100	45.9	3 090
	800	26 800	39.7	3 190	26 980	40.0	3 190	27 390	40.6	3 190
	900	27 110	35.7	3 290	27 280	35.9	3 290	27 700	36.5	3 290
Triple grouser(HD)	600	26 440	52.2	2 990	26 620	52.6	2 990	27 030	53.4	2 990
Double grouser	600	26 430	52.2	2 990	26 610	52.6	2 990	27 030	53.4	2 990
		EC250E with NL undercarriage, 6.0m boom, 2.97m arm, 1 197kg bucket, 4 950kg counterweight			EC250E with NL undercarriage, 6.0m HD boom, 2.97m HD arm, 1 197kg bucket, 4 950kg counterweight			EC250E with NL undercarriage, 5.95m 2-piece boom, 2.97m arm, 1 197kg bucket, 4 950kg counterweight		
Triple grouser	600	28 030	56.5	3 190						
	800	28 630	43.3	3 390						
	900	28 930	38.9	3 490						
Triple grouser(HD)	600	28 270	55.8	3 190						
		EC250E with LR undercarriage, 10.2m LR boom, 7.85m LR arm, 454kg bucket, 6 200kg counterweight								

GROUND PRESSURE										
Description	Shoe width	EC300E								
		Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width	Operating weight	Ground pressure	Overall width
		kg	kPa	mm	kg	kPa	mm	kg	kPa	mm
Triple grouser	600	29 350	56.6	3 190	29 650	57.2	3 190	30 230	58.3	3 190
	700	29 910	49.5	3 290	30 210	50.0	3 290	30 790	50.9	3 290
	800	30 290	43.8	3 390	30 590	44.3	3 390	31 170	45.1	3 390
	900	30 660	39.4	3 490	30 960	39.8	3 490	31 540	40.6	3 490
Triple grouser(HD)	600	29 550	57.0	3 190	29 850	57.6	3 190	30 430	58.7	3 190
Double grouser	700	30 060	49.7	3 290	30 360	50.2	3 290	30 940	51.2	3 290
		EC300E with L undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 100kg counterweight			EC300E with L undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 100kg counterweight			EC300E with L undercarriage, 6.2m 2-piece boom, 3.05m arm, 1 209kg bucket, 5 100kg counterweight		
Triple grouser	600	29 750	57.4	3 190	30 050	58.0	3 190	30 630	59.1	3 190
	700	30 310	50.1	3 290	30 610	50.6	3 290	31 190	51.6	3 290
	800	30 690	44.4	3 390	30 990	44.8	3 390	31 570	45.7	3 390
	900	31 060	39.9	3 490	31 360	40.3	3 490	31 940	41.1	3 490
Triple grouser(HD)	600	29 950	57.8	3 190	30 250	58.4	3 190	30 830	59.5	3 190
Double grouser	700	30 460	50.4	3 290	30 760	50.9	3 290	31 340	51.8	3 290
		EC300E with L undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 500kg counterweight			EC300E with L undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 500kg counterweight			EC300E with L undercarriage, 6.2m 2-piece boom, 3.05m arm, 1 209kg bucket, 5 500kg counterweight		
Triple grouser	600	29 220	56.4	2 990	29 520	57.0	2 990	30 100	58.1	2 990
	700	29 780	49.2	3 090	30 080	49.7	3 090	30 660	50.7	3 090
	800	30 160	43.6	3 190	30 460	44.1	3 190	31 040	44.9	3 190
	900	30 530	39.3	3 290	30 830	39.7	3 290	31 410	40.4	3 290
Triple grouser(HD)	600	29 420	56.8	2 990	29 720	57.3	2 990	30 300	58.5	2 990
		EC300E with NL undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 100kg counterweight			EC300E with NL undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 100kg counterweight			EC300E with NL undercarriage, 6.2m 2-piece boom, 3.05m arm, 1 209kg bucket, 5 100kg counterweight		
Triple grouser	600	29 620	57.1	2 990	29 920	57.7	2 990	30 500	58.8	2 990
	700	30 180	49.9	3 090	30 480	50.4	3 090	31 060	51.4	3 090
	800	30 560	44.2	3 190	30 860	44.7	3 190	31 440	45.5	3 190
	900	30 930	39.8	3 290	31 230	40.2	3 290	31 810	40.9	3 290
Triple grouser(HD)	600	29 820	57.5	2 990	30 120	58.1	2 990	30 700	59.2	2 990
		EC300E with NL undercarriage, 6.2m boom, 3.05m arm, 1 209kg bucket, 5 500kg counterweight			EC300E with NL undercarriage, 6.2m HD boom, 3.05m HD arm, 1 209kg bucket, 5 500kg counterweight			EC300E with NL undercarriage, 6.2m 2-piece boom, 3.05m arm, 1 209kg bucket, 5 500kg counterweight		
Triple grouser	600	31 470	60.7	3 190						
	800	32 400	46.9	3 390						
	900	32 770	42.1	3 490						
Triple grouser(HD)	600	31 670	61.1	3 290						
		EC300E with LR undercarriage, 10.2m LR boom, 7.9m LR arm, 473kg bucket, 6 800kg counterweight								

# Specifications



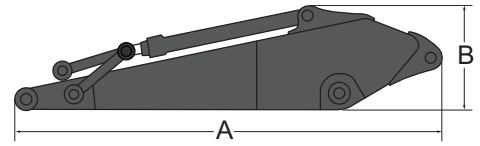
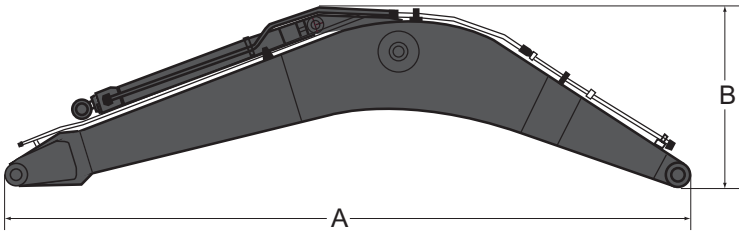
## DIMENSIONS

Description	Unit	EC250EL			EC250ENL			EC250ELR
Boom	m	6.0 mono or 5.95 2-piece		6.0 mono or 5.95 2-piece		10.2		
Arm	m	2.5	2.97	3.6	2.5	2.97	3.6	7.85
A. Overall width of upper structure	mm	2 890	2 890	2 890	2 890	2 890	2 890	2 890
B. Overall width	mm	3 190	3 190	3 190	2 990	2 990	2 990	3 190
C. Overall height of cab	mm	3 050	3 050	3 050	3 050	3 050	3 050	3 050
D. Overall height of handrail	mm	3 265	3 265	3 265	3 265	3 265	3 265	3 265
E. Overall height of guardrail (Unfolded)	mm	3 510	3 510	3 510	3 510	3 510	3 510	3 510
E'. Overall height of guardrail (Folded)	mm	3 115	3 115	3 115	3 115	3 115	3 115	3 115
F. Tail swing radius	mm	3 070	3 070	3 070	3 070	3 070	3 070	3 150
G. Overall height of engine hood	mm	2 710	2 710	2 710	2 710	2 710	2 710	2 710
H. Counterweight clearance *	mm	1 040	1 040	1 040	1 040	1 040	1 040	1 040
I. Tumbler length	mm	3 850	3 850	3 850	3 850	3 850	3 850	3 850
J. Track length	mm	4 650	4 650	4 650	4 650	4 650	4 650	4 650
K. Track gauge	mm	2 590	2 590	2 590	2 390	2 390	2 390	2 590
L. Shoe width	mm	600	600	600	600	600	600	600
M. Min. ground clearance *	mm	470	470	470	470	470	470	470
N. Overall length	mm	10 310	10 230	10 300	10 310	10 230	10 300	14 520
N1. Overall length	mm	10 260	10 230	10 230	10 260	10 230	10 230	-
O. Overall height of boom	mm	3 330	3 110	3 330	3 330	3 110	3 330	3 080
O1. Overall height of boom	mm	3 260	3 180	3 410	3 260	3 180	3 410	-
Description	Unit	EC300EL			EC300ENL			EC300ELR
Boom	m	6.2 mono or 6.2 2-piece		6.2 mono or 6.2 2-piece		10.2		
Arm	m	2.55	3.05	3.7	2.55	3.05	3.7	7.9
A. Overall width of upper structure	mm	2 890	2 890	2 890	2 890	2 890	2 890	2 890
B. Overall width	mm	3 190	3 190	3 190	2 990	2 990	2 990	3 190
C. Overall height of cab	mm	3 110	3 110	3 110	3 110	3 110	3 110	3 110
D. Overall height of handrail	mm	3 325	3 325	3 325	3 325	3 325	3 325	3 325
E. Overall height of guardrail (Unfolded)	mm	3 570	3 570	3 570	3 570	3 570	3 570	3 570
E'. Overall height of guardrail (Folded)	mm	3 175	3 175	3 175	3 175	3 175	3 175	3 175
F. Tail swing radius	mm	3 120	3 120	3 120	3 120	3 120	3 120	3 200
G. Overall height of engine hood	mm	2 770	2 770	2 770	2 770	2 770	2 770	2 770
H. Counterweight clearance *	mm	1 100	1 100	1 100	1 100	1 100	1 100	1 100
I. Tumbler length	mm	4 015	4 015	4 015	4 015	4 015	4 015	4 015
J. Track length	mm	4 870	4 870	4 870	4 870	4 870	4 870	4 870
K. Track gauge	mm	2 590	2 590	2 590	2 390	2 390	2 390	2 590
L. Shoe width	mm	600	600	600	600	600	600	600
M. Min. ground clearance *	mm	480	480	480	480	480	480	480
N. Overall length	mm	10 610	10 510	10 550	10 610	10 510	10 550	14 610
N1. Overall length	mm	10 600	10 540	10 540	10 600	10 540	10 540	-
O. Overall height of boom	mm	3 480	3 350	3 580	3 480	3 350	3 580	3 230
O1. Overall height of boom	mm	3 360	3 300	3 530	3 360	3 300	3 530	-

\* Without shoe grouser

1 2-piece boom





**DIMENSIONS**

		Boom				Arm			
		EC250E				EC300E			
Description	Unit	mono	mono	2-piece	Long-Reach	mono	mono	2-piece	Long-Reach
Boom	m	6.0 GP	6.0 HD	5.95	10.2	6.2 GP	6.2 HD	6.2	10.2
Length	mm	6210	6210	6160	10410	6430	6430	6430	10430
Height	mm	1630	1630	1100	1525	1680	1680	1590	1620
Width	mm	740	740	740	740	770	770	770	770
Weight	kg	2180	2360	2840	3010	2610	2810	3450	3410

\* Includes cylinder, piping and pin, excludes boom cylinder pin

**DIMENSIONS**

		EC250E					EC300E				
Description	Unit	2.5 HD	2.97 GP	2.97 HD	3.6 GP	7.85 LR	2.55 HD	3.05 GP	3.05 HD	3.7 GP	7.9 LR
Arm	m										
Length	mm	3590	4060	4060	4730	9000	3710	4150	4150	4800	9050
Height	mm	1000	1000	1000	1000	900	1010	1010	1010	1050	1050
Width	mm	500	500	500	500	480	545	545	545	545	450
Weight	kg	1360	1340	1430	1470	1720	1530	1530	1590	1660	1730

\* Includes cylinder, linkage and pin

# Specifications

## WORKING RANGES

Description	Unit	EC250EL and EC250ENL						EC250ELR
		6.0			5.95 2-piece			
Boom	m	2.5	2.97	3.6	2.5	2.97	3.6	10.2
Arm	m	2.5	2.97	3.6	2.5	2.97	3.6	7.85
A. Max. digging reach	mm	9 960	10 340	10 810	9 970	10 370	10 860	18 300
B. Max. digging reach on ground	mm	9 770	10 160	10 640	9 790	10 190	10 690	18 200
C. Max. digging depth	mm	6 590	7 060	7 690	6 120	6 560	7 130	14 350
D. Max. digging depth (2.44 m level)	mm	6 370	6 850	7 470	6 020	6 460	7 040	14 230
E. Max. vertical wall digging depth	mm	5 800	6 070	6 390	5 210	5 600	6 100	12 930
F. Max. cutting height	mm	9 620	9 690	9 650	11 140	11 390	11 630	14 890
G. Max. dumping height	mm	6 610	6 710	6 730	7 930	8 190	8 450	12 580
H. Min. front swing radius	mm	3 910	3 890	3 890	2 780	2 550	2 710	5 720

## DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius	mm		1 537	1 537	1 537	1 537	1 537	1 537	1 537		
Breakout force - bucket	Normal	SAE J1179	kN	152	152	152	152	152	152	68.6	
		Power boost	SAE J1179	kN	166	166	166	166	166	166	-
	Power boost	Normal	ISO 6015	kN	171	171	171	171	171	171	77.8
		Power boost	ISO 6015	kN	186	186	186	186	186	186	-
Tearout force - dipper arm	Normal	SAE J1179	kN	133	115	103	133	115	103	44.1	
		Power boost	SAE J1179	kN	145	125	112	145	125	112	-
	Power boost	Normal	ISO 6015	kN	137	118	105	137	118	105	44.7
		Power boost	ISO 6015	kN	149	129	114	149	129	114	-
Rotation angle, bucket	°		178	178	178	178	178	178	178		

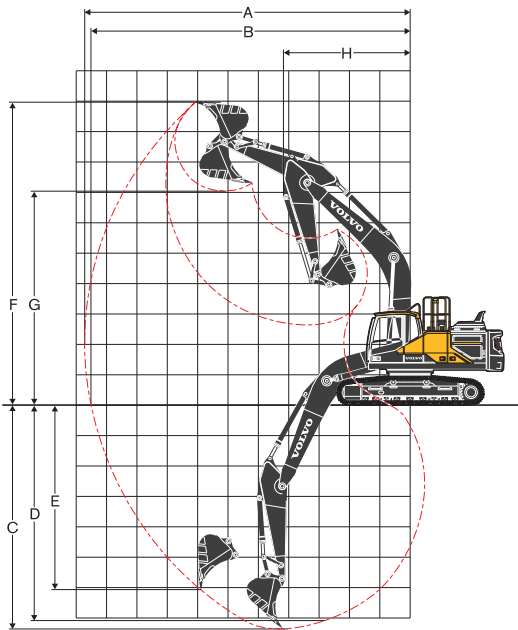
## WORKING RANGES

Description	Unit	EC300EL and EC300ENL						EC300ELR
		6.2			6.2 2-piece			
Boom	m	2.55	3.05	3.7	2.55	3.05	3.7	10.2
Arm	m	2.55	3.05	3.7	2.55	3.05	3.7	7.9
A. Max. digging reach	mm	10 180	10 710	11 310	10 250	10 780	11 390	18 590
B. Max. digging reach on ground	mm	9 970	10 520	11 130	10 040	10 580	11 210	18 480
C. Max. digging depth	mm	6 840	7 340	7 990	6 210	6 730	7 370	14 750
D. Max. digging depth (2.44 m level)	mm	6 600	7 150	7 830	6 100	6 630	7 280	14 650
E. Max. vertical wall digging depth	mm	5 320	6 080	6 680	5 040	5 630	6 240	13 630
F. Max. cutting height	mm	9 560	9 980	10 260	11 550	12 070	12 570	14 940
G. Max. dumping height	mm	6 680	7 040	7 330	8 360	8 850	9 360	12 600
H. Min. front swing radius	mm	4 220	4 180	4 240	2 750	2 580	2 770	6 190

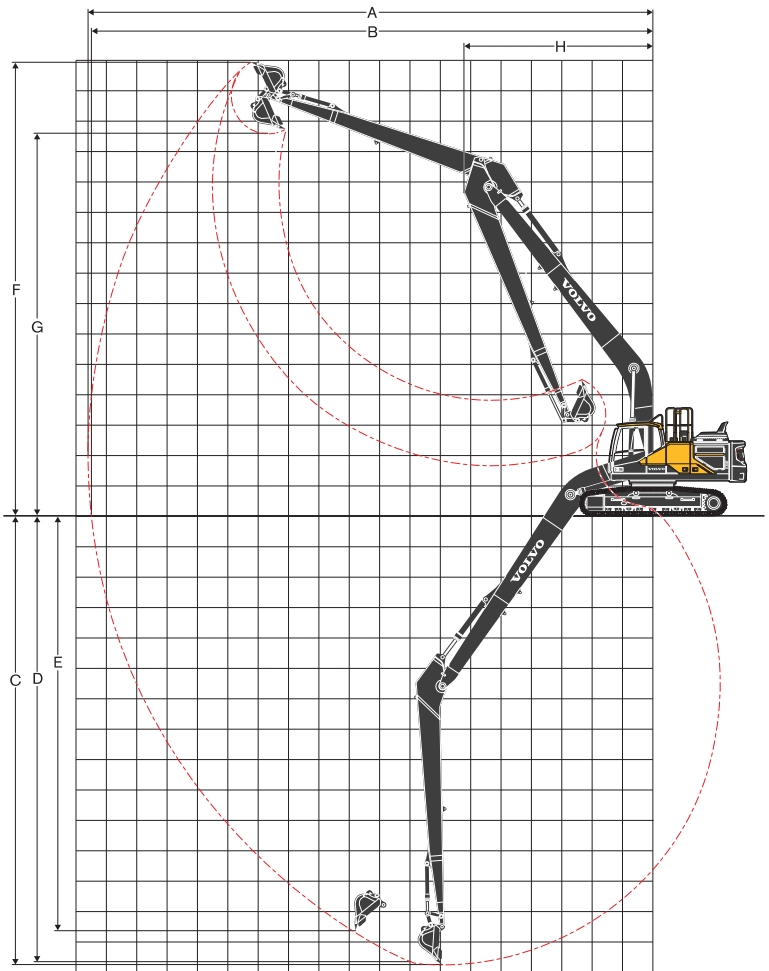
## DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius	mm		1 600	1 600	1 600	1 600	1 600	1 600	1 600		
Breakout force - bucket	Normal	SAE J1179	kN	168	168	168	168	168	168	69.1	
		Power boost	SAE J1179	kN	182	182	182	182	182	182	-
	Power boost	Normal	ISO 6015	kN	188	188	188	188	188	188	80.3
		Power boost	ISO 6015	kN	205	205	205	205	205	205	-
Tearout force - dipper arm	Normal	SAE J1179	kN	157	132	115	157	132	115	51.3	
		Power boost	SAE J1179	kN	170	143	125	170	143	125	-
	Power boost	Normal	ISO 6015	kN	161	135	118	161	135	118	51.8
		Power boost	ISO 6015	kN	176	147	128	176	147	128	-
Rotation angle, bucket	°		179	179	179	179	179	179	179		

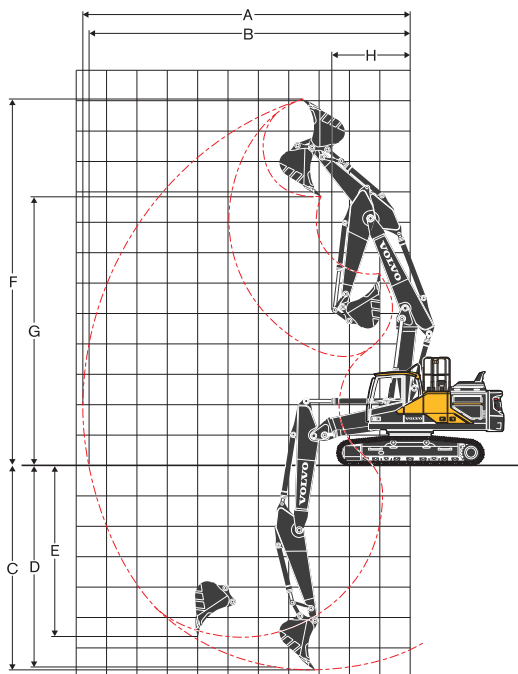
**MACHINE WITH MONO BOOM**



**MACHINE LONG-REACH BOOM**



**MACHINE WITH 2-PIECE BOOM**



# Specifications

## BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC250ELC					
						6.0m Boom			5.95m 2 piece Boom		
						600mm shoe, 4 950kg counterweight			600mm shoe, 4 950kg counterweight		
		m3	mm	kg	EA	2.5m	2.97m	3.6m	2.5m	2.97m	3.6m
Direct fit Buckets	General purpose	0.56	600	800	3	C	C	C	C	C	C
		0.62	750	823	3	C	C	C	C	C	C
		0.95	1 050	1 005	4	C	C	C	C	C	C
		1.32	1 350	1 196	5	C	C	C	C	C	C
		1.45	1 450	1 249	5	C	C	C	C	C	C
		1.51	1 500	1 294	5	C	C	C	C	C	B
		1.76	1 700	1 435	6	C	B	B	C	B	A
	Heavy duty	0.62	750	888	3	D	D	D	D	D	D
		1.14	1 200	1 287	5	D	D	D	D	D	D
		1.32	1 350	1 372	5	D	D	D	D	D	C
		1.51	1 500	1 469	5	D	C	B	D	C	B
		1.51	1 500	1 402	5	D	D	B	D	C	B

Bucket type		Capacity	Cutting width	Weight	Teeth	EC250ENL					
						6.0m Boom			5.95m 2 piece Boom		
						600mm shoe, 4 950kg counterweight			600mm shoe, 4 950kg counterweight		
		m3	mm	kg	EA	2.5m	2.97m	3.6m	2.5m	2.97m	3.6m
Direct fit Buckets	General purpose	0.56	600	800	3	C	C	C	C	C	C
		0.62	750	823	3	C	C	C	C	C	C
		0.95	1 050	1 005	4	C	C	C	C	C	C
		1.32	1 350	1 196	5	C	C	C	C	C	C
		1.45	1 450	1 249	5	C	C	B	C	C	B
		1.51	1 500	1 294	5	C	C	B	C	B	B
		1.76	1 700	1 435	6	B	B	A	B	A	X
	Heavy duty	0.62	750	888	3	D	D	D	D	D	D
		1.14	1 200	1 287	5	D	D	D	D	D	D
		1.32	1 350	1 372	5	D	D	B	D	C	B
		1.51	1 500	1 469	5	C	B	B	C	B	A
		1.51	1 500	1 402	5	C	B	B	C	B	A

Bucket type		Capacity	Cutting width	Weight	Teeth	EC300ELC					
						6.2m Boom			6.2m 2 piece Boom		
						600mm shoe, 5 500kg counterweight			600mm shoe, 5 500kg counterweight		
		m3	mm	kg	EA	2.55m	3.05m	3.7m	2.55m	3.05m	3.7m
Direct fit Buckets	General purpose	0.55	600	823	3	D	D	D	D	D	D
		0.66	750	869	3	D	D	D	D	D	D
		0.95	1 050	1 018	4	D	D	D	D	D	D
		1.32	1 350	1 209	5	D	D	D	D	D	D
		1.45	1 450	1 263	5	D	D	C	D	D	C
		1.51	1 500	1 307	5	D	D	C	D	D	B
		1.76	1 700	1 448	6	C	B	A	C	B	A
	Heavy duty	2.06	1 950	1 590	6	B	A	X	B	A	X
		0.66	750	1 000	3	D	D	D	D	D	D
		0.66	750	992	3	D	D	D	D	D	D
		1.14	1 200	1 294	5	D	D	D	D	D	D
		1.32	1 350	1 381	5	D	D	D	D	D	C
		1.51	1 500	1 476	5	D	D	B	D	C	B
		1.51	1 500	1 409	5	D	D	B	D	C	B

Bucket type		Capacity	Cutting width	Weight	Teeth	EC300ENL					
						6.2m Boom			6.2m 2 piece Boom		
						600mm shoe, 5 500kg counterweight			600mm shoe, 5 500kg counterweight		
		m3	mm	kg	EA	2.55m	3.05m	3.7m	2.55m	3.05m	3.7m
Direct fit Buckets	General purpose	0.55	600	823	3	D	D	D	D	D	D
		0.66	750	869	3	D	D	D	D	D	D
		0.95	1 050	1 018	4	D	D	D	D	D	D
		1.32	1 350	1 209	5	D	D	C	D	D	B
		1.45	1 450	1 263	5	D	C	B	D	C	B
		1.51	1 500	1 307	5	D	C	B	D	B	B
		1.76	1 700	1 448	6	B	B	X	B	A	X
	Heavy duty	2.06	1 950	1 590	6	A	X	X	A	X	X
		0.66	750	1 000	3	D	D	D	D	D	D
		0.66	750	992	3	D	D	D	D	D	D
		1.14	1 200	1 294	5	D	D	D	D	D	C
		1.32	1 350	1 381	5	D	D	B	D	C	B
		1.51	1 500	1 476	5	C	B	A	C	B	A
		1.51	1 500	1 409	5	D	C	B	C	B	A

\*For long reach boom and arm configuration, Volvo recommends to use 0.52cum bucket for EC250E and 0.57cum bucket for EC300E.  
Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.  
The recommendations are given as a guide only, based on typical operation conditions.  
Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

X : Not recommended  
**Maximum material density**  
A 1 200-1 300 kg/m<sup>3</sup> Coal, Caliche, Shale  
B 1 400-1 600 kg/m<sup>3</sup> Wet earth and clay, Limestone, Sandstone  
C 1 700-1 800 kg/m<sup>3</sup> Granite, Wet sand, Well blasted rock  
D 1 900 kg/m<sup>3</sup> ~ Wet mud, Iron ore





### LIFTING CAPACITY EC250ELR

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

Lifting hook related to ground level	0.0 m		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m	
	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC
3.0 m kg					*4 200	*4 200	*6 820	*6 820	*4 930	*4 930	*3 940	*3 940	*3 340	*3 340
1.5 m kg							*5 110	*5 110	*6 010	*6 010	*4 620	*4 620	*3 790	3 710
0.0 m kg					*1 540	*1 540	*3 470	*3 470	*6 890	5 830	*5 210	4 360	*4 210	3 410
-1.5 m kg			*1 500	*1 500	*1 990	*1 990	*3 350	*3 350	*6 260	5 380	*5 670	4 030	*4 550	3 160
-3.0 m kg	*2 060	*2 060	*2 050	*2 050	*2 530	*2 530	*3 660	*3 660	*5 960	5 140	*5 980	3 810	*4 810	2 980
-4.5 m kg	*2 490	*2 490	*2 620	*2 620	*3 120	*3 120	*4 180	*4 180	*6 230	5 040	*6 140	3 690	4 790	2 870
-6.0 m kg	*2 980	*2 980	*3 210	*3 210	*3 770	*3 770	*4 840	*4 840	*6 850	5 030	*6 160	3 650	4 740	2 830
-7.5 m kg	*3 510	*3 510	*3 830	*3 830	*4 480	*4 480	*5 630	*5 630	*7 600	5 100	*6 030	3 680	4 750	2 830
-9.0 m kg			*4 510	*4 510	*5 270	*5 270	*6 590	*6 590	*7 150	5 240	*5 720	3 770	*4 710	2 900
-10.5 m kg					*6 160	*6 160	*7 760	*7 760	*6 440	5 450	*5 200	3 920	*4 280	3 020
-12.0 m kg							*6 800	*6 800	*5 370	*5 370	*4 350	4 150	*3 520	3 230
Lifting hook related to ground level	10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		Max. reach		m	
	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC		
13.5 m kg											*570	*570	12.4	
12.0 m kg					*640	*640					*520	*520	13.7	
10.5 m kg					*1 050	*1 050					*490	*490	14.7	
9.0 m kg					*1 300	*1 300	*770	*770			*480	*480	15.5	
7.5 m kg			*1 710	*1 710	*1 500	*1 500	*1 080	*1 080			*480	*480	16.1	
6.0 m kg			*1 940	*1 940	*1 710	*1 710	*1 310	*1 310	*520	*520	*480	*480	16.6	
4.5 m kg	*2 530	*2 530	*2 280	*2 280	*1 970	*1 970	*1 520	*1 520	*770	*770	*500	*500	16.9	
3.0 m kg	*2 940	*2 940	*2 660	2 530	*2 290	2 040	*1 740	1 650	*940	*940	*530	*530	17.0	
1.5 m kg	*3 250	2 940	*2 880	2 370	*2 620	1 920	*1 950	1 570	*1 030	*1 030	*570	*570	17.1	
0.0 m kg	*3 550	2 720	*3 100	2 210	*2 780	1 810	*2 140	1 490	*1 040	*1 040	*620	*620	17.0	
-1.5 m kg	*3 810	2 540	*3 300	2 080	2 830	1 710	*2 250	1 420	*910	*910	*690	*690	16.7	
-3.0 m kg	3 960	2 410	3 270	1 970	2 760	1 640	*2 220	1 370			*780	*780	16.3	
-4.5 m kg	3 860	2 320	3 200	1 910	2 700	1 590	*1 920	1 350			*900	*900	15.8	
-6.0 m kg	3 820	2 270	3 170	1 870	2 690	1 580	*1 220	*1 220			*1 080	*1 080	15.1	
-7.5 m kg	3 820	2 280	3 180	1 880	*2 660	1 600					*1 340	*1 340	14.2	
-9 m kg	3 880	2 330	3 240	1 940							*1 760	1 740	13.1	
-10.5 m kg	*3 540	2 440									*2 580	2 140	11.6	
-12.0 m kg											*3 120	2 900	9.8	

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.

### LIFTING CAPACITY EC300ELR

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

Lifting hook related to ground level	0.0 m		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m	
	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC
3.0 m kg					*5 600	*5 600					*4 870	*4 870	*4 130	*4 130
1.5 m kg							*7 490	*7 490	*7 360	7 220	*5 660	5 350	*4 660	4 130
0.0 m kg					*2 520	*2 520	*5 350	*5 350	*8 370	6 430	*6 350	4 820	*5 140	3 770
-1.5 m kg			*2 480	*2 480	*3 240	*3 240	*5 280	*5 280	*9 030	5 920	*6 870	4 440	*5 540	3 490
-3.0 m kg	*3 350	*3 350	*3 360	*3 360	*4 100	*4 100	*5 830	*5 830	*9 320	5 650	*7 210	4 190	*5 790	3 280
-4.5 m kg	*4 060	*4 060	*4 270	*4 270	*5 050	*5 050	*6 690	*6 690	*9 480	5 530	7 340	4 060	5 660	3 160
-6.0 m kg	*4 850	*4 850	*5 210	*5 210	*6 090	*6 090	*7 760	*7 760	*9 360	5 520	7 290	4 010	5 600	3 110
-7.5 m kg	*5 720	*5 720	*6 230	*6 230	*7 240	*7 240	*9 050	8 770	*9 020	5 610	*7 180	4 040	5 610	3 120
-9.0 m kg	*6 650	*6 650	*7 330	*7 330	*8 530	*8 530	*10 630	9 060	*8 450	5 770	*6 790	4 150	*5 610	3 190
-10.5 m kg			*8 550	*8 550	*10 040	*10 040	*9 670	9 450	*7 560	6 020	*6 130	4 330	*5 060	3 340
-12.0 m kg					*10 550	*10 550	*7 840	*7 840	*6 230	*6 230	*5 070	4 610	*4 100	3 580
Lifting hook related to ground level	10.5 m		12.0 m		13.5 m		15.0 m		16.5 m		Max. reach		m	
	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC		
13.5 m kg											*1 170	*1 170	13.0	
12.0 m kg					*1 700	*1 700					*1 090	*1 090	14.2	
10.5 m kg					*2 250	*2 250	*1 180	*1 180			*1 050	*1 050	15.1	
9.0 m kg					*2 450	*2 450	*1 870	*1 870			*1 030	*1 030	15.9	
7.5 m kg					*2 540	*2 540	*2 310	2 090			*1 020	*1 020	16.4	
6.0 m kg			*2 790	*2 790	*2 670	2 540	*2 590	2 020	*1 520	*1 520	*1 030	*1 030	16.9	
4.5 m kg	*3 270	*3 270	*3 020	3 020	*2 840	2 410	*2 700	1 930	*1 890	1 540	*1 050	*1 050	17.2	
3.0 m kg	*3 630	3 540	*3 280	2 820	*3 030	2 270	*2 840	1 840	*2 150	1 480	*1 090	*1 090	17.3	
1.5 m kg	*4 000	3 270	*3 550	2 630	*3 220	2 140	*2 970	1 740	*2 310	1 420	*1 140	*1 140	17.3	
0.0 m kg	*4 350	3 020	*3 800	2 450	*3 400	2 010	2 920	1 650	*2 340	1 360	*1 210	*1 210	17.2	
-1.5 m kg	*4 650	2 810	3 990	2 300	3 350	1 890	2 840	1 570	*2 150	1 310	*1 310	1 240	17.0	
-3.0 m kg	4 670	2 650	3 870	2 180	3 260	1 810	2 780	1 520	*1 630	1 290	*1 430	1 270	16.6	
-4.5 m kg	4 560	2 550	3 780	2 100	3 200	1 750	2 750	1 490			*1 600	1 340	16.1	
-6.0 m kg	4 510	2 500	3 740	2 060	3 180	1 730	*2 720	1 490			*1 830	1 450	15.4	
-7.5 m kg	4 520	2 500	3 760	2 070	3 210	1 760					*2 170	1 620	14.5	
-9 m kg	4 580	2 570	3 830	2 140							*2 710	1 880	13.3	
-10.5 m kg	*4 180	2 700									*3 400	2 310	11.9	
-12.0 m kg											*3 420	3 100	10.1	

Notes: 1. Machine in "Fine Mode-F" (Power Boost) for lifting capacities. 2. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards. 3. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 4. Rated loads marked with an asterisk (\*) are limited by hydraulic capacity rather than tipping load.





# LIFTING CAPACITY EC300ENL

Lifting capacity at the arm end without bucket.

For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level	1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
<b>Boom : 6.2m Arm : 2.55m Shoe : 600mm CWT : 5 100kg</b>	7.5 m kg							*7 660	7 270					*7 820	6 270	6.5
	6.0 m kg							*8 000	7 130	*7 800	4 890			*7 810	4 830	7.6
	4.5 m kg					*11 310	10 530	*9 090	6 790	*8 120	4 780			7 170	4 120	8.2
	3.0 m kg					*14 460	9 570	*10 520	6 380	8 070	4 590			6 620	3 760	8.5
	1.5 m kg					*16 600	8 960	11 080	6 030	7 870	4 400			6 470	3 640	8.5
	0 m kg					*17 180	8 760	10 850	5 830	7 730	4 290			6 670	3 730	8.3
	-1.5 m kg			*12 810	*12 810	*16 750	8 770	10 780	5 780	*7 710	4 270			7 330	4 070	7.8
	-3.0 m kg			*20 860	17 770	*15 370	8 930	10 900	5 870					8 870	4 900	6.9
	-4.5 m kg			*16 600	*16 600	*12 360	9 300							*9 950	7 080	5.4
<b>Boom : 6.2m Arm : 3.05m Shoe : 600mm CWT : 5 100kg</b>	7.5 m kg									*7 190	5 020			*6 080	4 320	8.2
	6.0 m kg							*8 500	6 940	*7 660	4 880			*6 080	3 750	8.7
	4.5 m kg					*13 430	9 890	*10 000	6 520	8 160	4 670	6 110	3 480	6 070	3 460	9.0
	3.0 m kg					*15 980	9 160	11 200	6 130	7 930	4 460	6 010	3 390	5 940	3 350	9.1
	1.5 m kg					*17 090	8 830	10 910	5 880	7 760	4 310			6 090	3 410	8.9
	0 m kg					*17 090	8 830	10 910	5 880	7 760	4 310			6 090	3 410	8.9
	-1.5 m kg	*7 560	*7 560	*11 710	*11 710	*17 060	8 770	10 790	5 790	7 700	4 250			6 600	3 690	8.4
	-3.0 m kg	*13 850	*13 850	*19 420	17 560	*16 060	8 870	10 840	5 830	7 780	4 330			7 730	4 300	7.5
	-4.5 m kg			*18 860	18 070	*13 700	9 150	*10 000	6 060					*9 370	5 760	6.2
<b>Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 100kg</b>	7.5 m kg									*6 300	5 170			*5 010	4 610	8.0
	6.0 m kg							*7 570	7 080	*6 970	4 940	6 250	3 600	*4 820	3 790	8.8
	4.5 m kg					*11 900	10 190	*9 140	6 620	*7 810	4 700	6 130	3 490	*4 960	3 090	9.6
	3.0 m kg					*14 830	9 300	*10 700	6 170	7 940	4 460	5 990	3 360	*5 250	2 990	9.7
	1.5 m kg					*17 090	8 830	10 910	5 880	7 760	4 310			6 090	3 410	8.9
	0 m kg					*17 090	8 830	10 910	5 880	7 760	4 310			6 090	3 410	8.9
	-1.5 m kg	*6 990	*6 990	*11 020	*11 020	*17 030	8 620	10 700	5 690	7 600	4 160	5 840	3 230	5 830	3 230	9.0
	-3.0 m kg	*11 650	*11 650	*16 650	*16 650	*16 520	8 650	10 680	5 670	7 610	4 160			6 650	3 680	8.3
	-4.5 m kg	*17 420	*17 420	*21 100	17 530	*14 850	8 860	10 840	5 810					8 420	4 640	7.1
<b>Boom : 6.2m Arm : 2.55m Shoe : 600mm CWT : 5 500kg</b>	7.5 m kg							*7 660	7 530					*7 820	6 500	6.5
	6.0 m kg							*8 000	7 390	*7 800	5 090			*7 810	5 020	7.6
	4.5 m kg					*11 310	10 910	*9 090	7 050	*8 120	4 970			7 400	4 300	8.2
	3.0 m kg					*14 460	9 950	*10 520	6 630	8 330	4 780			6 840	3 930	8.5
	1.5 m kg					*16 600	9 340	11 440	6 290	8 130	4 600			6 690	3 810	8.5
	0 m kg					*17 180	9 140	11 200	6 090	7 990	4 480			6 890	3 900	8.3
	-1.5 m kg			*12 810	*12 810	*16 750	9 150	11 140	6 030	7 970	4 460			7 570	4 260	7.8
	-3.0 m kg			*20 860	18 480	*15 370	9 310	11 260	6 130					9 160	5 120	6.9
	-4.5 m kg			*16 600	*16 600	*12 360	9 680							*9 950	7 380	5.4
<b>Boom : 6.2m Arm : 3.05m Shoe : 600mm CWT : 5 500kg</b>	7.5 m kg									*7 190	5 220			*6 350	5 600	7.2
	6.0 m kg							*8 500	7 200	*7 660	5 070			*6 080	4 500	8.2
	4.5 m kg					*13 430	10 270	*10 000	6 770	*8 420	4 860	6 310	3 640	6 270	3 620	9.0
	3.0 m kg					*15 980	9 540	*11 400	6 390	8 190	4 660	6 210	3 550	6 140	3 510	9.1
	1.5 m kg					*17 090	9 210	11 270	6 140	8 020	4 510			6 300	3 580	8.9
	0 m kg					*17 090	9 210	11 270	6 140	8 020	4 510			6 300	3 580	8.9
	-1.5 m kg	*7 560	*7 560	*11 710	*11 710	*17 060	9 150	11 150	6 040	7 960	4 450			6 820	3 860	8.4
	-3.0 m kg	*13 850	*13 850	*19 420	18 270	*16 060	9 250	11 200	6 080	8 040	4 520			7 990	4 500	7.5
	-4.5 m kg			*18 860	18 780	*13 700	9 530	*10 000	6 320					*9 370	6 000	6.2
<b>Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 500kg</b>	7.5 m kg							*7 660	7 530			*6 300	5 370	*5 010	4 790	8.0
	6.0 m kg							*8 000	7 390	*7 800	5 090			*7 810	5 020	7.6
	4.5 m kg					*11 310	10 910	*9 090	7 050	*8 120	4 970			7 400	4 300	8.2
	3.0 m kg					*14 460	9 950	*10 520	6 630	8 330	4 780			6 840	3 930	8.5
	1.5 m kg					*16 600	9 340	11 440	6 290	8 130	4 600			6 690	3 810	8.5
	0 m kg					*17 180	9 140	11 200	6 090	7 990	4 480			6 890	3 900	8.3
	-1.5 m kg			*12 810	*12 810	*16 750	9 150	11 140	6 030	7 970	4 460			7 570	4 260	7.8
	-3.0 m kg			*20 860	18 480	*15 370	9 310	11 260	6 130					9 160	5 120	6.9
	-4.5 m kg			*16 600	*16 600	*12 360	9 680							*9 950	7 380	5.4
<b>Boom : 6.2m Arm : 3.05m Shoe : 600mm CWT : 5 500kg</b>	7.5 m kg									*7 190	5 220			*6 350	5 600	7.2
	6.0 m kg							*8 500	7 200	*7 660	5 070			*6 080	4 500	8.2
	4.5 m kg					*13 430	10 270	*10 000	6 770	*8 420	4 860	6 310	3 640	6 270	3 620	9.0
	3.0 m kg					*15 980	9 540	*11 400	6 390	8 190	4 660	6 210	3 550	6 140	3 510	9.1
	1.5 m kg					*17 090	9 210	11 270	6 140	8 020	4 510			6 300	3 580	8.9
	0 m kg					*17 090	9 210	11 270	6 140	8 020	4 510			6 300	3 580	8.9
	-1.5 m kg	*7 560	*7 560	*11 710	*11 710	*17 060	9 150	11 150	6 040	7 960	4 450			6 820	3 860	8.4
	-3.0 m kg	*13 850	*13 850	*19 420	18 270	*16 060	9 250	11 200	6 080	8 040	4 520			7 990	4 500	7.5
	-4.5 m kg			*18 860	18 780	*13 700	9 530	*10 000	6 320					*9 370	6 000	6.2
<b>Boom : 6.2m Arm : 2.55m Shoe : 600mm CWT : 5 500kg</b>	7.5 m kg							*7 660	7 530			*6 300	5 370	*5 010	4 790	8.0
	6.0 m kg							*8 000	7 390	*7 800	5 090			*7 810	5 020	7.6
	4.5 m kg					*11 310	10 910	*9 090	7 050	*8 120	4 970			7 400	4 300	8.2
	3.0 m kg					*14 460	9 950	*10 520	6 630	8 330	4 780			6 840	3 930	8.5
	1.5 m kg					*16 600	9 340	11 440	6 290	8 130	4 600			6 690	3 810	8.5
	0 m kg					*17 180	9 140	11 200	6 090	7 990	4 480			6 890	3 900	8.3
	-1.5 m kg			*12 810	*12 810	*16 750	9 150	11 140	6 030	7 970	4 460			7 570	4 260	7.8
	-3.0 m kg			*20 860	18 480	*15 370	9 310	11 260	6 130					9 160	5 120	6.9
	-4.5 m kg			*16 600	*16 600	*12 360	9 680							*9 950	7 380	5.4
<b>Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 500kg</b>	7.5 m kg									*7 190	5 220			*6 350	5 600	7.2
	6.0 m kg							*8 500	7 200	*7 660	5 070			*6 080	4 500	8.2
	4.5 m kg					*13 430	10 270	*10 000	6 770	*8 420	4 860	6 310	3 640	6 270	3 620	9.0
	3.0 m kg					*15 980	9 540	*11 400	6 390	8 190	4 660	6 210	3 550	6 140	3 510	9.1
	1.5 m kg					*17 090	9 210	11 270	6 140	8 020	4 510			6 300	3 580	8.9
	0 m kg					*17 090	9 210	11 270	6 140	8 020	4 510			6 300	3 580	8.9
	-1.5 m kg	*7 560	*7 560	*11 710	*11 710	*17 060	9 150	11 150	6 040	7 960	4 450			6 820	3 860	8.4
	-3.0 m kg	*13 850	*13 850	*19 420	18 270	*16 060	9 250	11 200	6 080	8 040	4 520			7 990	4 500	7.5
	-4.5 m kg			*18 860	18 780	*13 700	9 530	*10 000	6 320					*9 370	6 000	6.2
<b>Boom : 6.2m Arm : 3.7m Shoe : 600mm CWT : 5 500kg</b>	7.5 m kg							*7 660	7 530			*6 300	5 370	*5 010	4 790	8.0
	6.0 m kg							*8 000	7 390	*7 800	5 090			*7 810	5 020	7.6
	4.5 m kg					*11 310	10 910	*9 090	7 050	*8 120	4 970			7 400	4 300	8.2
	3.0 m kg					*14 460	9 950	*10 520	6 630	8 330	4 780			6 840	3 930	8.5
	1.5 m kg					*16 6										

# Equipment

STANDARD EQUIPMENT			
	EC250E	EC300E	
<b>Engine</b>			
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4f EU (Stage IV) requirements	•	•	
Air filter with indicator	•	•	
Air intake heater	•	•	
Cyclone precleaner	•	•	
Electric engine shutoff	•	•	
Fuel filter and water separator	•	•	
Fuel filler pump: 50 l/min, with automatic shutoff	•	•	
Alternator, 110 A	•	•	
<b>Electric / Electronic control system</b>			
Contronics	•	•	
Advanced mode control system	•	•	
Selfdiagnostic system	•	•	
Machine status indication	•	•	
Engine speed sensing power control	•	•	
Automatic idling system	•	•	
Onetouch power boost	•	•	
Safety stop/start function	•	•	
Adjustable LCD color monitor	•	•	
Master electrical disconnect switch	•	•	
Engine restart prevention circuit	•	•	
Highcapacity halogen lights:	•	•	
Frame-mounted 2	•	•	
Boom-mounted 1	•	•	
Batteries, 2 x 12 V / 200 Ah	•	•	
Start motor, 24 V / 5.5 kW	•	•	
<b>Frame</b>			
Access way with handrail	•	•	
Tool storage area	•	•	
Punched metal antislip plates	•	•	
Full height counterweight:	•	•	
4 950 kg	•	–	
6 200 kg Long Reach	•	–	
5 500 kg	–	•	
6 800 kg Long Reach	–	•	
<b>Undercarriage</b>			
Undercover (heavyduty)	•	•	
Hydraulic track adjusters	•	•	
Greased and sealed track link	•	•	
Track Guard	•	•	
<b>Hydraulic system</b>			
Hose rupture valve: boom	•	•	
Overload warning device	•	•	
Automatic sensing hydraulic system	•	•	
Summation system	•	•	
Boom priority	•	•	
Arm priority	•	•	
Swing priority	•	•	
ECO mode fuel saving technology	•	•	
Boom, arm and bucket regeneration valves	•	•	
Swing antirebound valves	•	•	
Boom and arm holding valves	•	•	
Multistage filtering system	•	•	
Cylinder cushioning	•	•	
Cylinder contamination seals	•	•	
Auxiliary hydraulic valve	•	•	
Automatic twospeed travel motors	•	•	
Hydraulic oil, ISO VG 46	•	•	

STANDARD EQUIPMENT			
	EC250E	EC300E	
<b>Cab and interior</b>			
ROPS (ISO121172) certified cab	•	•	
Silicon oil and rubber mounts with spring	•	•	
Travel pedals and hand levers	•	•	
Adjustable operator seat and joystick control console	•	•	
Control joysticks with 4 switches each	•	•	
Heater & airconditioner, automatic	•	•	
Flexible antenna	•	•	
Radio with MP3 & USB Jack with bluetooth	•	•	
Hydraulic safety lock lever	•	•	
Cab, allweather sound suppressed, includes:	•	•	
Cup holders	•	•	
Door locks	•	•	
Tinted glass	•	•	
Floor mat	•	•	
Horn	•	•	
Large storage area	•	•	
Pullup type front window	•	•	
Removable lower windshield	•	•	
Seat belt	•	•	
Safety glass	•	•	
Sun screens, front, roof, rear	•	•	
Rain shield	•	•	
Windshield wiper with intermittent feature	•	•	
Rear view camera	•	•	
Master key	•	•	
<b>Track shoes</b>			
600 mm with triple grousers	•	•	
800 mm with triple grousers Long Reach	•	•	
<b>Digging equipment</b>			
Boom: 6.0 m monoblock	•	–	
Arm: 2.97 m	•	–	
Boom: 10.2 m monoblock, Long Reach	•	–	
Arm: 7.85 m, Long Reach	•	–	
Boom: 6.2 m monoblock	–	•	
Arm: 3.05 m	–	•	
Boom: 10.2 m monoblock, Long Reach	–	•	
Arm: 7.9 m, Long Reach	–	•	
Manual centralized lubrication	•	•	

OPTIONAL EQUIPMENT			
	EC250E	EC300E	
<b>Engine</b>			
Block heater: 120 V, 240 V	•	•	
Oil bath pre-cleaner	•	•	
Diesel coolant heater, 10 kW	•	•	
Water separator with heater	•	•	
Auto engine shutdown	•	•	
<b>Electric</b>			
Extra work lights (Halogen or LED):	•	•	
Cab-mounted 3	•	•	
Boom-mounted 1	•	•	
Counterweight-mounted 1	•	•	
Travel alarm	•	•	
Anti-theft system	•	•	
Rotating warning beacon	•	•	

OPTIONAL EQUIPMENT		
	EC250E	EC300E
<b>Undercarriage</b>		
Full track guard	•	•
Track shoes	•	•
600/700/800/900 mm with triple grousers	•	•
600 mm HD with triple grousers	•	•
Track shoes 600 mm with double grousers	•	–
Track shoes 700 mm with double grousers	•	•
<b>Hydraulic system</b>		
Hose rupture valve: arm	•	•
Boom float function with HRV	•	•
Boom float function without HRV	•	•
Hydraulic piping:	•	•
Attachment management system	•	•
(up to 18 programmable memories)	•	•
Hammer & shear, 1 and 2 pump flow	•	•
Hammer & shear:	•	•
variable flow and pressure pre-setting	•	•
Additional return filter	•	•
Slope & rotator	•	•
Grapple	•	•
Oil leak (drain) line	•	•
Quick coupler piping	•	•
Volvo hydraulic quick coupler S1	•	–
Volvo hydraulic quick coupler S2	•	•
Volvo hydraulic quick coupler U24	•	–
Volvo hydraulic quick coupler U29	–	•
Volvo hydraulic quick coupler S70	•	–
Hydraulic oil, biodegradable 46	•	•
Hydraulic oil, longlife oil 32	•	•
Hydraulic oil, longlife oil 46	•	•
Hydraulic oil, longlife oil 68	•	•

OPTIONAL EQUIPMENT		
	EC250E	EC300E
<b>Cab and interior</b>		
Fabric seat with heater	•	•
Fabric seat with heater and air suspension	•	•
Opening top hatch	•	•
Falling object guard, FOG (fixed type or hinge type)	•	•
Frame-mounted	•	•
Cab-mounted	•	•
Cab-mounted falling object protective structure (FOPS)	•	•
Side view camera	•	•
Smoker kit (ashtray and lighter)	•	•
Safety net for front window	•	•
Lower wiper with intermittent control	•	•
Anti-vandalism kit	•	•
Specific key	•	•
Air compressor	•	•
<b>Digging equipment</b>		
Boom: 6.0 m monoblock, heavy duty	•	–
Boom: 5.95 m 2 piece boom	•	–
Boom: 10,2 m monoblock, long reach	•	–
Arm: 2.5 m HD, 2.97 m HD, 3.6 m	•	–
Arm: 7.85 m, long reach	•	–
Boom: 6,2 m 2 piece boom	–	•
Boom: 10.2 m monoblock, long reach	–	•
Arm: 2.55 m HD, 3.05 m HD, 3.7 m	–	•
Arm: 7.9 m, long reach	–	•
Linkage with lifting eye	•	•
<b>Service</b>		
Tool kit, daily maintenance	•	•
Tool kit, full scale	•	•
Automatic lubrication system	•	–

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

### LED Lights



### Side-view camera



### Reversible cooling fan



### Long reach and two-piece booms



### Swing-out FOG (\*for demolition package only)



### Demolition package



Not all products are available in all markets. Under our policy of continuous improvement, we reserve the right to change specifications and design without prior notice. The illustrations do not necessarily show the standard version of the machine.

**VOLVO**

**Volvo Construction Equipment**

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