

Volvo Construction Equipment  
Building Tomorrow



# EC200E

Volvo Crawler Excavators 20.4-24.7 t / 44,974-54,388 lb 154 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 customers around the globe. 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.

### A strong, dedicated, capable dealer network

Our dealers are strategically located throughout North America to provide the equipment you need and the parts and service support you demand for a productive and profitable operation.

The strength of our dealer network is enhanced with extensive individualized product support training at our best-in-class Customer Center in Shippensburg and through hands-on training. Using a great Product Demonstration Center featuring a dedicated area for most common applications, visitors operate equipment from our entire product line under a variety of simulated working conditions. This facility is in year-round use by our dealers and customers.

## Building the best starts right here.

The products designed and manufactured by Volvo Construction Equipment have their beginnings at the most advanced Research & Design centers in the industry. Volvo CE machines are designed in 11 R&D centers and produced in 15 manufacturing facilities across the world.

The major R&D center and manufacturing plant in the Americas is located in Shippensburg, Pennsylvania. This facility has been in operation for over 30 years and – with its recently added 200,000 sq. ft. expansion – now covers 570,000 sq. ft. on an 80 acre campus. Dedicated work teams and highly advanced technologies and techniques using the Volvo Production System ensure continuous quality improvements, labor savings and cost control to reach the high quality that our customers have come to expect from Volvo.







Volvo Trucks



Renault Trucks



Mack Trucks



UD Trucks



Volvo Buses



Volvo Construction Equipment



Volvo Penta



Volvo Financial Services

# Down to business

Introducing the EC200E, a new 20-ton size class excavator from Volvo Construction Equipment, purpose built to deliver outstanding results in medium duty applications. Working in building, utilities, road construction and more, the EC200E will be the perfect addition to your in-house operation or as part of a rental fleet.

## Optimized engine

Built on decades of experience, the Tier 4 final certified D4 Volvo engine is perfectly optimized to get the best from your EC200E; providing the power, fuel-efficiency and reliability needed to succeed across a wide range of tasks.

## Hydraulic harmony

The hydraulics system, combined with the fully electronic control system and advanced ECO mode, has been optimized to work in harmony to match the engine power, reduce power loss and improve controllability and response time.



## Additional auxiliary hydraulic piping

The machine can be factory fitted with breaker and shear piping (X1). The state-of-the-art auxiliary line provides the correct flow and pressure for hydraulic attachments, boosting the versatility and productivity of your machine.

## Keep track

Stay in the know with CareTrack, providing real-time telematics data on your machine, including operating hours, location and service alerts. With geo fence and time fence functionality you can specify the location and time parameters your machine can operate within and receive alerts when these pre-defined rules are broken.







# PURPOSE-BUILT

In the EC200E Volvo has extended its excavator range to offer a machine which combines Volvo quality with exceptional value, to deliver performance and profitability in medium duty applications.



# BUILT TO LAST

When it comes to successful operations uptime is key and you can count on the EC200E to work harder, for longer. The balanced machine design features a robust boom and arm, strong undercarriage, protected components and heavy counterweight to comfortably take on tough work in tough environments.



# Keep on working

All the reliability and engineering excellence you expect from Volvo is built in to the EC200E. A durable design, long service intervals and easy routine maintenance help maximize uptime and keep your machines on site and working their best.

## Easy servicing

Complete routine servicing with speed and ease thanks to a range of features, including grouped filters accessed from the ground-level, foldable guard rails and real-time service alerts. To further improve serviceability the radiator, charged air cooler and hydraulic oil cooler are situated side-by-side on a single layer.



## Proactive machine monitoring

ActiveCare Direct™ is a revolutionary new telematics monitoring and fleet utilization reporting service offered directly from Volvo — free for a year on applicable new machine purchases. With 24/7/365 active machine monitoring and monthly fleet reports, ActiveCare Direct™ allows you to spend more time making informed fleet management decisions and less time sorting through data and alarm codes.



## Work for longer

With long service intervals for oil and filter changes, the EC200E keeps working uninterrupted with fewer stops, lowering maintenance costs and minimizing disruption to your operation.



# Do more

Maximize productivity and profitability by combining the EC200E with 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

Whether working with soft, medium or hard materials, Volvo buckets are the ideal tool for digging in all conditions. Volvo buckets provide maximum productivity and long life and feature original Volvo wear components.



## Thumb

The thumb can be the ideal attachment when working with rocks, debris and other irregular objects difficult to manage using only the bucket. Easy to work with thanks to the machine's smooth and strong hydraulic system, the thumb can be easily retracted when the bucket is used for normal digging operations, yet quickly available at the flick of a switch from the cab when required.



## Universal quick coupler

The Volvo Universal Quick Coupler (pin grabber type) is designed to be a perfect fit with Volvo excavators, using the latest technology to give operators precise control in locking attachments without leaving the cab. The result is a more versatile and efficient machine, saving time and money.



## Breaker

When working in breaking applications Volvo can offer a range of proven hydraulic breakers, designed to deliver consistent power and performance – strike after strike. Durable by design, hydraulic breakers are available with a range of work tools to suit your operation.







# A TRUE ALL-ROUNDER

With one machine you can take on many tasks thanks to the outstanding versatility of the EC200E, compatible with a range of attachments and suitable for a host of applications. Mix and match between a wide variety of Volvo attachments, purpose-built to work in harmony with your Volvo machine.



# BUILDING TOMORROW

Volvo is a company working today for a better tomorrow and we do that by putting customers at the heart of our organisation. It's how we have worked for over 180 years and the EC200E continues that tradition, born out of a commitment to provide truly customer-focussed solutions.



# Simply Volvo

The EC200E features all the machine performance, operator comfort, environmental care and safety you expect from Volvo, combined with a comprehensive portfolio of services, to help you get the most from your operation.

## Impressive performance

Whether digging, lifting, swinging, grading or travelling, you can count on the EC200E for the machine performance your operation demands. With power boost, the already impressive lifting and digging forces are increased further, resulting in faster cycle times and optimum productivity.



## Safety first

Every Volvo machine is designed with safety as a priority and the EC200E features a ROPS cab, high visibility handrails, anti-slip steps and easy access to the machine via the right-hand side. Excellent all-around visibility, side view camera and optional Volvo Smart View further help to enhance the safety of operators and those working around the machine.



## The operator's choice

Widely regarded as an industry favourite, the Volvo cab is designed in consultation with operators based on their direct feedback. The outcome is a comfortable low-noise cab, easy-to-use controls and ergonomic layout, helping to keep operators comfortable and productive throughout their entire working shift.



## At your service

More than machines, Volvo offers a comprehensive portfolio of services to complement your machine's performance and boost your profitability. With a range of customer-focussed solutions, including fuel efficiency, productivity and uptime services, contact your local dealer to get started with Volvo Services.



# Purpose built performance

## OPERATOR'S CHOICE

- Comfortable low-noise cab
- Easy-to-use controls
- Ergonomic layout

## SAFETY FIRST

- ROPS cab
- High visibility hand rails
- Anti-slip steps and easy access via right-hand side

## EASY SERVICING

- Grouped filters accessed at ground level
- Foldable guard rails
- Long service intervals
- Real-time service alerts
- Single layer cooling system

## IMPRESSIVE PERFORMANCE

- Digging and lifting force
- Power boost
- Fast cycle times







## BUILT TO LAST

- Durable boom and arm
- Protected components
- Heavy counterweight
- Proactive machine monitoring

## DOWN TO BUSINESS

- Optimized engine
- Hydraulic harmony
- ECO Mode
- Optional auxiliary hydraulic piping
- CareTrack machine reports and alerts

## A TRUE ALL-ROUNDER

- Matched Volvo attachments
- Quick coupler
- Breaker
- General Purpose buckets, Ditching buckets
- Thumb

# Volvo EC200E in detail

## Engine

The latest generation, Volvo engine Tier 4f 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.

Engine	Volvo	D4J
Max power at	r/min (r/s)	2,000 (33.3)
Net, ISO 9249/SAE J1349	kW (hp)	115 (154)
Gross, ISO 14396/SAE J1995	kW (hp)	115 (154)
Max torque	Nm (ft lbf)	618 (456)
at engine speed	r/min (r/s)	1,700 (28.3)
No. of cylinders		4
Displacement	l (in <sup>3</sup> )	4.04 (247)
Bore	mm (in)	101 (3.98)
Stroke	mm (in)	126 (4.96)

## 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.

Voltage	V	24
Maintenance free Batteries	V	2 x 12
Battery capacity	Ah	100
Alternator	V/A	28/80
Start motor	V - kW	24-5.5

## 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.

Max. drawbar pull	kN (lbf)	178 (40,016)
Max. travel speed (low)	km/h (mi/h)	3.4 (2.1)
Max. travel speed (high)	km/h (mi/h)	5.6 (3.5)
Gradeability	°	35

## Undercarriage

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

Track shoe		2 x 49
Link pitch	mm (in)	190 (7.5)
Shoe width, triple grouser	mm (in)	500 / 600 / 700 / 800 (20 / 24 / 28 / 32)
Bottom rollers		2 x 8
Top rollers		2 x 2

## Swing system

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

Max. slew speed	r/min	11.5
Max. slew torque	kNm (ft lbf)	77.1 (56,866)

## 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:

“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.

## Main pump : 2 x Variable displacement axial piston pumps

Maximum flow	l/min (gal/min)	2 x 200 (2 x 52.8)
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## Pilot pump : Gear pump

Maximum flow	l/min (gal/min)	1 x 20 (1 x 5.3)
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## Relief value setting pressure

Implement	MPa (psi)	34.3/36.3 (4,975/5,265)
Travel circuit	MPa (psi)	34.3 (4,975)
Slew circuit	MPa (psi)	27.9 (4,047)
Pilot circuit	MPa (psi)	3.9 (566)

## Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm (ø x in)	125 x 1 235 (4.9 x 48.6)
Arm		1
Bore x Stroke	ø x mm (ø x in)	135 x 1 540 (5.3 x 60.6)
Bucket		1
Bore x Stroke	ø x mm (ø x in)	120 x 1 065 (4.7 x 41.9)

## Service Refill

Fuel tank	l (gal)	330 (87.2)
DEF/AdBlue® tank	l (gal)	27 (7.1)
Hydraulic system, total	l (gal)	300 (79.3)
Hydraulic tank	l (gal)	140 (37)
Engine oil	l (gal)	17 (4.5)
Engine coolant	l (gal)	14 (3.7)
Slew reduction unit	l (gal)	5.4 (1.4)
Travel reduction unit	l (gal)	2 x 2.5 (2 x 0.7)

## 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 12 different adjustments plus a seat belt for the operator's comfort and safety.

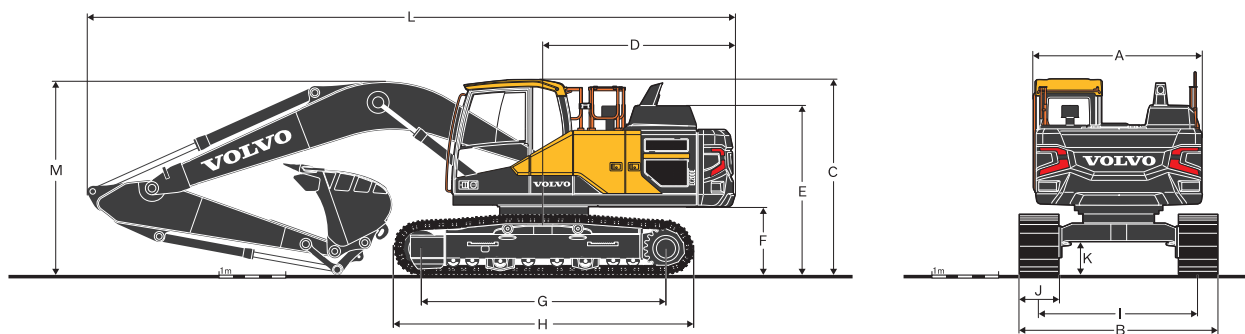
Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1.430 t CO<sub>2</sub>-eq.

## Sound Level

Sound pressure level in cab according to ISO 6396		
L <sub>pA</sub> (standard)	dB	69
L <sub>pA</sub> (tropical)	dB	70
External sound level according to ISO 6395, EU Noise Directive (2000/14/EC)		
L <sub>WA</sub> (standard)	dB	102
L <sub>WA</sub> (tropical)	dB	103



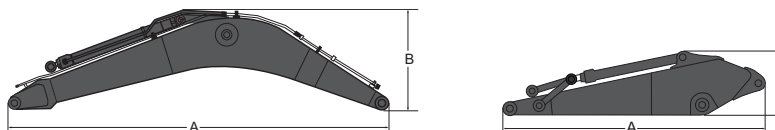
# Specifications



## DIMENSIONS

Description		Unit		EC200E L	
Boom		m	ft in	5.7	18'8"
Arm		m	ft in	2.9	9'6"
A	Overall width of upper structure	mm	ft in	2,500	8'2"
B	Overall width	mm	ft in	2,990	9'10"
C	Overall height of cab	mm	ft in	2,915	9'7"
D	Tail swing radius	mm	ft in	2,850	9'4"
E	Overall height of engine hood	mm	ft in	2,916	9'7"
F	Counterweight clearance *	mm	ft in	1,011	3'4"
G	Tumbler length	mm	ft in	3,660	12'0"
H	Track length	mm	ft in	4,460	14'8"
I	Track gauge	mm	ft in	2,390	7'10"
J	Shoe width	mm	ft in	600	2'0"
K	Min. ground clearance *	mm	ft in	460	1'6"
L	Overall length	mm	ft in	9,687	31'9"
M	Overall height of boom	mm	ft in	2,950	9'8"

\* Without shoe grouser



## BOOM AND ARM DIMENSIONS

Description	Unit		Boom		Arm	
			Mono		GP	
	m	ft in	5.7	18'8"	2.9	9'6"
A. Length	mm	ft in	5,910	19'5"	3,910	12'10"
B. Height	mm	ft in	1,560	5'1"	860	2'10"
Width	mm	ft in	670	2'2"	440	1'5"
Weight	kg	lb	1,885	4,156	1,073	2,366

Boom: includes cylinder, piping and pin, excludes boom cyl. Pin

Arm: includes cylinder, linkage and pin

# Specifications

## MACHINE WEIGHTS AND GROUND PRESSURE

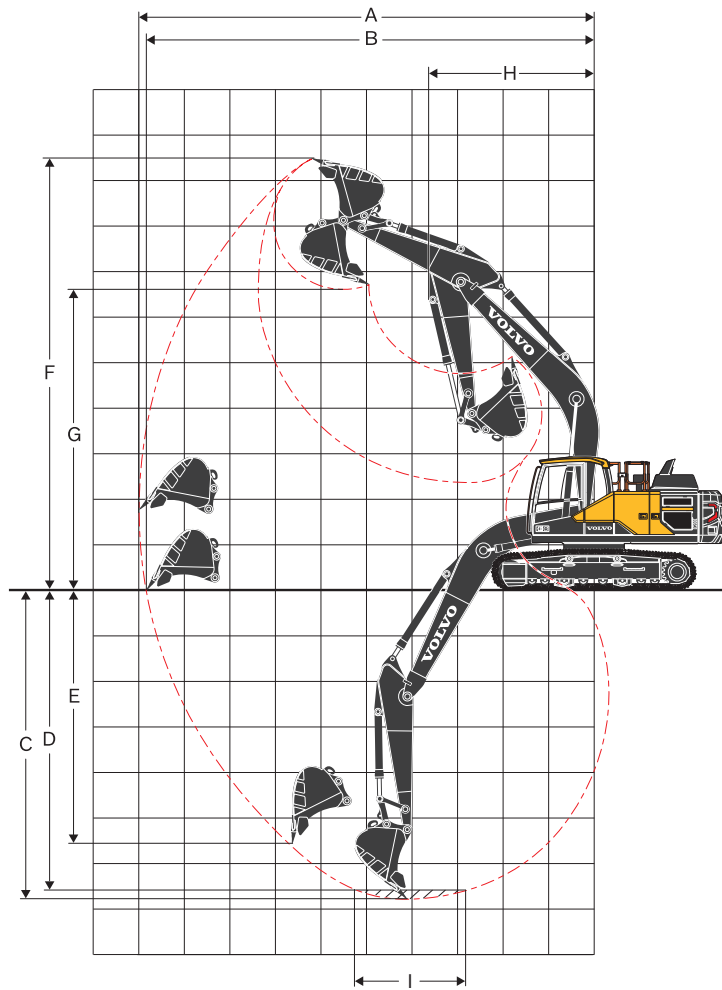
Description	Shoe width		Operating weight		Ground pressure		Overall width	
	mm	in	kg	lb	kPa	PSI	mm	ft in
Triple grouser			<b>EC200E L</b> <b>5.7 m / 18'8" mono boom, 2.9 / 9'6" arm, 920 l / 1.2 yd<sup>3</sup> (860 kg / 1,896 lb) bucket,</b> <b>4,200 kg / 9,260 lb counterweight</b>					
	500	20	21,307	46,980	53	7.7	2,890	9'6"
	600	24	21,564	47,550	45.1	6.5	2,990	9'10"
	700	28	21,976	48,460	39.2	5.7	3,090	10'2"
	800	32	22,257	49,080	34.3	5	3,190	10'6"

## MAX. PERMITTED BUCKET

Note: 1. bucket size based on ISO 7451, heaped material with a 1:1 angle of repose. 2. "Max. permitted sizes" are for reference only and are not necessarily available from the factory. 3. bucket widths are less than bucket's tip radius.

### EC200E L with 4,200 kg / 9,260 lb counterweight

			5.7 m / 18'8" Boom, Direct Fit			
			2.9 m / 9'6" Arm			
Material density			volume		weight	
	t/m <sup>3</sup>	lb/yd <sup>3</sup>	l	yd <sup>3</sup>	kg	lb
GP Bucket	1.5	2,528	1,280	1.67	1,050	2,314
	1.8	3,034	1,200	1.57	1,000	2,204
HD Bucket	1.8	3,034	1,050	1.37	1,050	2,314
	2	3,371	1,000	1.31	1,000	2,204
			5.7 m / 18'8" Boom, S1 Quick Coupler			
			2.9 m / 9'6" Arm			
Material density			volume		weight	
	t/m <sup>3</sup>	lb/yd <sup>3</sup>	l	yd <sup>3</sup>	kg	lb
GP Bucket	1.5	2,528	1,200	1.57	1,000	2,204
	1.8	3,034	1,000	1.31	850	1,873
HD Bucket	1.8	3,034	950	1.24	950	2,094
	2	3,371	900	1.18	900	1,984



#### WORKING RANGES WITH DIRECT FIT BUCKET

Description		Unit		EC200E L	
Boom		m	ft in	5.7 m / 18'8" mono boom	
Arm		m	ft in	2.9	9'6"
A	Max. digging reach	mm	ft in	9,993	32'9"
B	Max. digging reach on ground	mm	ft in	9,829	32'3"
C	Max. digging depth	mm	ft in	6,781	22'3"
D	Max. digging depth (2.44 m / 8' level)	mm	ft in	6,592	21'8"
E	Max. vertical wall digging depth	mm	ft in	5,560	18'3"
F	Max. cutting height	mm	ft in	9,488	31'2"
G	Max. dumping height	mm	ft in	6,600	21'8"
H	Min. front swing radius	mm	ft in	3,642	11'11"

#### DIGGING FORCES WITH DIRECT FIT BUCKET

Bucket radius			mm	ft in	1,528	5'0"
Breakout force (bucket)	Normal	SAE J1179	kN	lbf	125	28,100
	Power boost	SAE J1179	kN	lbf	132	29,670
	Normal	ISO 6015	kN	lbf	141	31,700
	Power boost	ISO 6015	kN	lbf	149	33,500
Tearout force (arm)	Normal	SAE J1179	kN	lbf	101	22,710
	Power boost	SAE J1179	kN	lbf	107	24,050
	Normal	ISO 6015	kN	lbf	104	23,380
	Power boost	ISO 6015	kN	lbf	110	24,730

Rotation angle, bucket

°

175



# Specifications

## BUCKET SELECTION GUIDE

Bucket type				Capacity		Cutting width		Weight		Teeth	Recommended maximum material density	
											EC200E LC with 4,200 kg / 9,260 lb	
											5.7 m / 18'8" Boom	
											2.9 m / 9'6" Arm	
				L	yd³	mm	in	kg	lb	EA	kg/m³	lb/yd³
DF Buckets	Without Quick Coupler	V4	GP	480	0.63	600	23.6	623	1,373	3	1,800	3,034
				480	0.63	600	23.6	666	1,467	3	1,800	3,034
				590	0.77	750	29.5	712	1,569	3	1,800	3,034
				630	0.82	800	31.5	703	1,550	4	1,800	3,034
				750	0.98	900	35.4	749	1,652	4	1,800	3,034
				750	0.98	900	35.4	792	1,747	4	1,800	3,034
				920	1.20	1,050	41.3	819	1,806	4	1,800	3,034
				920	1.20	1,050	41.3	862	1,901	4	1,800	3,034
				1,090	1.43	1,200	47.2	908	2,001	5	1,800	3,034
				1,090	1.43	1,200	47.2	951	2,098	5	1,800	3,034
				1,270	1.66	1,350	53.1	995	2,194	5	1,700	2,865
				1,270	1.66	1,350	53.1	1,036	2,391	5	1,600	2,697
				1,440	1.88	1,500	59.1	1,085	1,628	6	1,400	2,360
		HD		480	0.63	600	23.6	738	1,488	3	2,100	3,540
				480	0.63	600	23.6	675	1,922	3	2,100	3,540
				750	0.98	900	35.4	872	1,783	4	2,100	3,540
				750	0.98	900	35.4	809	2,098	4	2,100	3,540
				920	1.20	1,050	41.3	952	1,959	4	2,100	3,540
				920	1.20	1,050	41.3	889	2,308	4	2,100	3,540
				1,090	1.43	1,200	47.2	1,047	2,308	5	1,900	3,203
				1,090	1.43	1,200	47.2	984	2,169	5	2,000	3,371
Quick Coupler Buckets	U type quick coupler	V4	GP	480	0.63	600	23.6	623	1,373	3	1,800	3,034
				480	0.63	600	23.6	666	1,467	3	1,800	3,034
				590	0.77	750	29.5	712	1,569	3	1,800	3,034
				630	0.82	800	31.5	703	1,550	4	1,800	3,034
				750	0.98	900	35.4	749	1,652	4	1,800	3,034
				750	0.98	900	35.4	792	1,747	4	1,800	3,034
				920	1.20	1,050	41.3	819	1,806	4	1,800	3,034
				920	1.20	1,050	41.3	862	1,901	4	1,800	3,034
				1,090	1.43	1,200	47.2	908	2,001	5	1,700	2,865
				1,090	1.43	1,200	47.2	951	2,098	5	1,700	2,865
				1,270	1.66	1,350	53.1	995	2,194	5	1,400	2,360
				1,270	1.66	1,350	53.1	1,036	2,391	5	1,400	2,360
				1,440	1.88	1,500	59.1	1,085	1,628	6	1,200	2,023
		HD		480	0.63	600	23.6	738	1,488	3	2,100	3,540
				480	0.63	600	23.6	675	1,922	3	2,100	3,540
				750	0.98	900	35.4	872	1,783	4	2,100	3,540
				750	0.98	900	35.4	809	2,098	4	2,100	3,540
				920	1.20	1,050	41.3	952	1,959	4	2,000	3,371
				920	1.20	1,050	41.3	889	2,308	4	2,100	3,540
				1,090	1.43	1,200	47.2	1,047	2,308	5	1,600	2,697
				1,090	1.43	1,200	47.2	984	2,169	5	1,700	2,865

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.

(In case of using bigger bucket than regional standard MRS, consultation with R&D is highly recommended)

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.

Maximum load : Payload, bucket and additional tools such as quick coupler, rotator, ....

**BUCKET SELECTION GUIDE**

Bucket type				Capacity		Cutting width		Weight		Teeth	Recommended maximum material density	
											EC200E LC with 4,200 kg / 9,260 lb	
											5.7 m / 18'8" Boom	
											2.9 m / 9'6" Arm	
				L	yd³	mm	in	kg	lb	EA	kg/m³	lb/yd³
Quick Coupler Buckets	S1 type quick coupler	V4	GP	480	0.63	600	23.6	609	1,342	3	1,800	3,034
				480	0.63	600	23.6	642	1,414	3	1,800	3,034
				630	0.82	800	31.5	689	1,520	4	1,800	3,034
				750	0.98	900	35.4	735	1,621	4	1,800	3,034
				750	0.98	900	35.4	768	1,693	4	1,800	3,034
				920	1.20	1,050	41.3	805	1,775	4	1,800	3,034
				920	1.20	1,050	41.3	838	1,847	4	1,800	3,034
				1,090	1.43	1,200	47.2	894	1,971	5	1,800	3,034
				1,090	1.43	1,200	47.2	927	2,043	5	1,800	3,034
				1,270	1.66	1,350	53.1	970	2,138	5	1,500	2,528
				1,270	1.66	1,350	53.1	1,003	2,210	5	1,500	2,528
				1,440	1.88	1,500	59.1	1,057	2,331	6	1,200	2,023

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.

(In case of using bigger bucket than regional standard MRS, consultation with R&D is highly recommended)

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.

Maximum load : Payload, bucket and additional tools such as quick coupler, rotator, ....

**Maximum material density**

kg/m³	lb/yd³	
1 200~1 300	2,000 ~ 2,200	Coal, Caliche, Shale
1 400~1 600	2,300 ~ 2,700	Wet earth and clay, Limestone, Sandstone
1 700~1 800	2,800 ~ 3,100	Granite, Wet sand, Well blasted rock
> 1 900 ~	> 3,200 ~	Wet mud, Iron ore

# Specifications

## LIFTING CAPACITY EC200E L

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		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	Max.
Boom : 5.7 m GP 18'8" GP	7.5 m	kg											*4,958	*4,958	6.1 m
	25 ft	lb											*10,930	*10,930	19.9 ft
Arm : 2.9 m GP 9'6" GP	6.0 m	kg							*5,058	*5,058			*4,590	3,783	7.3 m
	20 ft	lb							*11,150	*11,150			*10,120	8,340	23.8 ft
Shoe : 500 mm 20'	4.5 m	kg							*5,579	4,944	5,293	3,443	*4,513	3,175	8.0 m
	15 ft	lb							*12,300	10,900	11,670	7,590	*9,950	7,000	26.2 ft
CWT : 4,200 kg 9,260 lb	3.0 m	kg					*8,233	7,217	*6,473	4,699	5,185	3,343	4,459	2,871	8.4 m
	10 ft	lb					*18,150	15,910	*14,270	10,360	11,430	7,370	9,830	6,330	27.5 ft
	1.5 m	kg					*10,129	6,690	7,094	4,454	5,053	3,225	4,314	2,753	8.5 m
	5 ft	lb					*22,330	14,750	15,640	9,820	11,140	7,110	9,510	6,070	27.8 ft
	0 m	kg			*5,697	*5,697	10,904	6,405	6,895	4,277	4,958	3,139	4,409	2,799	8.3 m
	0 ft	lb			*12,560	*12,560	24,040	14,120	15,200	9,430	10,930	6,920	9,720	6,170	27.1 ft
	-1.5 m	kg	*6,373	*6,373	*10,650	*10,650	10,809	6,328	6,813	4,205	4,935	3,116	4,799	3,035	7.8 m
	-5 ft	lb	*14,050	*14,050	*23,480	*23,480	23,830	13,950	15,020	9,270	10,880	6,870	10,580	6,690	25.5 ft
	-3.0 m	kg	*11,603	*11,603	*15,368	12,447	*10,705	6,396	6,858	4,246			5,738	3,611	6.9 m
	-10 ft	lb	*25,580	*25,580	*33,880	27,440	*23,600	14,100	15,120	9,360			12,650	7,960	22.7 ft
	-4.5 m	kg			*12,374	*12,374	*8,745	6,627					*6,913	5,126	5.5 m
	-15 ft	lb			*27,280	*27,280	*19,280	14,610					*15,240	11,300	18.0 ft
Boom : 5.7 m GP 18'8" GP	7.5 m	kg											*4,958	*4,958	6.1 m
	25 ft	lb											*10,930	*10,930	19.9 ft
Arm : 2.9 m GP 9'6" GP	6.0 m	kg							*5,058	*5,058			*4,590	3,824	7.3 m
	20 ft	lb							*11,150	*11,150			*10,120	8,430	23.8 ft
Shoe : 600 mm 24'	4.5 m	kg							*5,579	4,994	*5,325	3,484	*4,513	3,211	8.0 m
	15 ft	lb							*12,300	11,010	*11,740	7,680	*9,950	7,080	26.2 ft
CWT : 4,200 kg 9,260 lb	3.0 m	kg					*8,233	7,289	*6,473	4,754	5,248	3,384	4,518	2,908	8.4 m
	10 ft	lb					*18,150	16,070	*14,270	10,480	11,570	7,460	9,960	6,410	27.5 ft
	1.5 m	kg					*10,129	6,768	7,180	4,504	5,121	3,266	4,368	2,790	8.5 m
	5 ft	lb					*22,330	14,920	15,830	9,930	11,290	7,200	9,630	6,150	27.8 ft
	0 m	kg			*5,697	*5,697	11,040	6,482	6,985	4,332	5,021	3,175	4,463	2,835	8.3 m
	0 ft	lb			*12,560	*12,560	24,340	14,290	15,400	9,550	11,070	7,000	9,840	6,250	27.1 ft
	-1.5 m	kg	*6,373	*6,373	*10,650	*10,650	10,945	6,405	6,899	4,259	4,999	3,152	4,863	3,075	7.8 m
	-5 ft	lb	*14,050	*14,050	*23,480	*23,480	24,130	14,120	15,210	9,390	11,020	6,950	10,720	6,780	25.5 ft
	-3.0 m	kg	*11,603	*11,603	*15,368	12,587	*10,705	6,468	6,945	4,300			5,811	3,656	6.9 m
	-10 ft	lb	*25,580	*25,580	*33,880	27,750	*23,600	14,260	15,310	9,480			12,810	8,060	22.7 ft
	-4.5 m	kg			*12,374	*12,374	*8,745	6,700					*6,913	5,185	5.5 m
	-15 ft	lb			*27,280	*27,280	*19,280	14,770					*15,240	11,430	18.0 ft
Boom : 5.7 m GP 18'8" GP	7.5 m	kg											*4,958	*4,958	6.1 m
	25 ft	lb											*10,930	*10,930	19.9 ft
Arm : 2.9 m GP 9'6" GP	6.0 m	kg							*5,058	*5,058			*4,590	3,892	7.3 m
	20 ft	lb							*11,150	*11,150			*10,120	8,580	23.8 ft
Shoe : 700 mm 28'	4.5 m	kg							*5,579	5,080	*5,325	3,543	*4,513	3,270	8.0 m
	15 ft	lb							*12,300	11,200	*11,740	7,810	*9,950	7,210	26.2 ft
CWT : 4,200 kg 9,260 lb	3.0 m	kg					*8,233	7,412	*6,473	4,835	5,348	3,443	4,609	2,962	8.4 m
	10 ft	lb					*18,150	16,340	*14,270	10,660	11,790	7,590	10,160	6,530	27.5 ft
	1.5 m	kg					*10,129	6,890	7,321	4,590	5,221	3,329	4,459	2,844	8.5 m
	5 ft	lb					*22,330	15,190	16,140	10,120	11,510	7,340	9,830	6,270	27.8 ft
	0 m	kg			*5,697	*5,697	*11,199	6,604	7,121	4,413	5,126	3,239	4,559	2,894	8.3 m
	0 ft	lb			*12,560	*12,560	*24,690	14,560	15,700	9,730	11,300	7,140	10,050	6,380	27.1 ft
	-1.5 m	kg	*6,373	*6,373	*10,650	*10,650	11,158	6,523	7,040	4,341	5,098	3,216	4,962	3,134	7.8 m
	-5 ft	lb	*14,050	*14,050	*23,480	*23,480	24,600	14,380	15,520	9,570	11,240	7,090	10,940	6,910	25.5 ft
	-3.0 m	kg	*11,603	*11,603	*15,368	12,814	*10,705	6,591	7,085	4,382			5,924	3,724	6.9 m
	-10 ft	lb	*25,580	*25,580	*33,880	28,250	*23,600	14,530	15,620	9,660			13,060	8,210	22.7 ft
	-4.5 m	kg			*12,374	*12,374	*8,745	6,822					*6,913	5,280	5.5 m
	-15 ft	lb			*27,280	*27,280	*19,280	15,040					*15,240	11,640	18.0 ft

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 EC200E L

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, 5 ft		3.0 m, 10 ft		4.5 m, 15 ft		6.0 m, 20 ft		7.5 m, 25 ft		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	Max.
Boom : 5.7 m GP	7.5 m	kg											*4,958	*4,958	6.1 m
18'8" GP	25 ft	lb											*10,930	*10,930	19.9 ft
Arm : 2.9 m GP	6.0 m	kg							*5,058	*5,058			*4,590	3,937	7.3 m
9'6" GP	20 ft	lb							*11,150	*11,150			*10,120	8,680	23.8 ft
Shoe : 800 mm	4.5 m	kg							*5,579	5,135	*5,325	3,588	*4,513	3,311	8.0 m
32'	15 ft	lb							*12,300	11,320	*11,740	7,910	*9,950	7,300	26.2 ft
CWT : 4,200 kg	3.0 m	kg					*8,233	7,493	*6,473	4,890	5,416	3,488	*4,631	2,998	8.4 m
9,260 lb	10 ft	lb					*18,150	16,520	*14,270	10,780	11,940	7,690	*10,210	6,610	27.5 ft
	1.5 m	kg					*10,129	6,972	7,412	4,645	5,289	3,370	4,518	2,885	8.5 m
	5 ft	lb					*22,330	15,370	16,340	10,240	11,660	7,430	9,960	6,360	27.8 ft
	0 m	kg			*5,697	*5,697	*11,199	6,686	7,217	4,468	5,194	3,284	4,618	2,930	8.3 m
	0 ft	lb			*12,560	*12,560	*24,690	14,740	15,910	9,850	11,450	7,240	10,180	6,460	27.1 ft
	-1.5 m	kg	*6,373	*6,373	*10,650	*10,650	11,308	6,604	7,135	4,395	5,166	3,257	5,030	3,175	7.8 m
	-5 ft	lb	*14,050	*14,050	*23,480	*23,480	24,930	14,560	15,730	9,690	11,390	7,180	11,090	7,000	25.5 ft
	-3.0 m	kg	*11,603	*11,603	*15,368	12,964	*10,705	6,672	7,180	4,436			6,006	3,774	6.9 m
	-10 ft	lb	*25,580	*25,580	*33,880	28,580	*23,600	14,710	15,830	9,780			13,240	8,320	22.7 ft
	-4.5 m	kg			*12,374	*12,374	*8,745	6,904					*6,913	5,343	5.5 m
	-15 ft	lb			*27,280	*27,280	*19,280	15,220					*15,240	11,780	18.0 ft

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.

# Equipment

## STANDARD EQUIPMENT

### Engine

Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets Tier 4f requirements

Air filter with indicator

Air intake heater

Tropical cooling system by fan clutch (50 deg. C)

Cyclone pre-cleaner

Fuel filter and water separator

Alternator, 80A

Radiator mesh

### Electric / Electronic control system

Contronics

- Advanced mode control system

- Self-diagnostic system

Satellite Caretrack and 3yr-Caretrack subscription

Machine status indication

Engine speed sensing power control

Automatic idling system

One-touch power boost

Safety stop/start function

Adjustable 8" LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

High-capacity halogen lights:

- Frame-mounted 1

- Boom-mounted 1

Travel alarm

Rear view camera

Batteries, 2 x 12 V / 100 Ah

Start motor, 24 V / 5.5 kW

Travel alarm

Rotating warning beacon\_LED

### Superstructure

Counterweight: 4 200kg / 9,260 lb

Access way with handrail

Tool storage area

Punched metal anti-slip plates

Undercovers (GP)

### Undercarriage

Belly cover(GP)

Hydraulic track adjusters

Greased and sealed track link

Standard track guard

### Hydraulic system

Hydraulic piping:

- Work tool management system (up to 20 programmable memories)

- Breaker & shear, 1 pump flow

- Quick coupler

Automatic sensing hydraulic system

- Summation system

- Boom priority

- Arm priority

- Swing priority

"ECO" mode fuel saving technology

Boom, arm and bucket regeneration valves

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Cylinder cushioning

Cylinder contamination seals

Automatic two-speed travel motors

Hydraulic oil, ISO VG 46

Pressure pre-setting

## STANDARD EQUIPMENT

### Cab and interior

ROPS (ISO12117-2) certified cab with open roof hatch

Travel pedals and hand levers

Seat-Fabric,Heat,Mech,3 inch

Heater & air-conditioner, automatic

Flexible antenna

AM/FM stereo with MP3, USB and bluetooth

Control lock out lever

Cab, all-weather sound suppressed, includes:

- Cup holders

- Seat belt\_Orange

- Door locks

- Tinted and safety glass

- Floor mat

- Horn

- Sun screens, front, roof, rear

- Large storage area

- Pull-up type front window

- Removable lower windshield

- Windshield wiper with intermittent feature

Universal key

### Track shoes

800mm (32") with triple grousers

### Digging equipment

Boom: 5.7m (18'8") monoblock

Arm: 2.9m (9'6")

Linkage

Manual centralized lubrication

### Service and maintenance

Tool kit, daily maintenance

## OPTIONAL EQUIPMENT

### Engine

- Auto engine shutdown
- Block heater: 120 V, 240 V
- Diesel coolant heater, 5 kW
- Water separator with heater
- Fuel filler pump: 50 l/min (13.2 gpm), with automatic shut-off
- Standard cooling system by fan clutch (40 deg. C)

### Electric

- Extra work lights: Halogen / LED
- Boom-mounted 1
- Cab-mounted 3 (front 2, rear 1)
- Counterweight-mounted 1
- Side view camera
- Anti-theft with code lock system

### Hydraulic system

- Hydraulic piping:
  - Breaker & shear, 2 pump flow
  - Oil leak (drain) line on base machine and boom
- Additional return filter
- Hydraulic oil, ISO VG 32, 68
- Hydraulic oil, longlife oil 32, 46, 68
- Pilot pattern change
- Straight travel pedal
- Boom float function without HRV

## OPTIONAL EQUIPMENT

### Cab and interior

- ROPS (ISO12117-2) certified cab with fixed roof hatch
- Front rain shield

### Track shoes

- 500 (20") / 600 (24") / 700 (28") with triple grousers

### Digging equipment

- Linkage with lifting eye
- Volvo hydraulic quick coupler S1, S1 without hook, VQC U22

### Service and maintenance

- Tool kit, full scale
- Spare parts kit

## SELECTION OF VOLVO OPTIONAL EQUIPMENT

Fuel fill pump



Auto engine shutdown



Extra LED work lights



Boom float



Control pattern valve



Diesel coolant heater



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.





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