64,340 - 67,210 lb, 192 hp

VOLVO EXCAVATOR

EC290C



MORE CARE. BUILT IN.



VOLVO – A PARTNER TO TRUST.

Volvo wants you to trust your Volvo excavator. Volvo wants you to be comfortable while you work, so you can get more done. Volvo wants you to maximize profit through industry-leading fuel economy. Volvo delivered. It's all here in the Volvo EC290C Excavator and it meets all your wants, needs and jobsite requirements. Perfect for contractors, civil engineers and quarry companies, the Volvo EC290C excels in earth moving, road building, demolition and quarry work. It's everything you want and a whole lot more. You want a trusted partner, and this is it.

Your local partner around the globe

Since 1927, Volvo has earned a global reputation for providing complete solutions. Volvo is built on core values of quality, safety and environmental care. The extensive line of construction equipment is augmented by Volvo's commercial transport solutions, including buses and trucks. This global experience and expertise have led to the ongoing development of engines with the lowest fuel consumption in their class. Today, the tradition continues with Volvo C-Series Excavators – designed and built to the exacting standards that make each machine a trusted Volvo partner.

Strong on quality, long on endurance

Quality lasts. That is why Volvo is built to last with high quality throughout. The Volvo difference is clear, from the well-built cab details to the reinforced service doors to the rigid, long-life undercarriage.

If you have ever operated a Volvo Wheel Loader, Articulated Hauler or any of our machines, you know that Volvo is your edge for production, comfort and safety. Trust the Volvo EC290C Excavator to be ready to work – every day.

The innovators of comfort

Volvo is known for legendary comfort, for less fatigue and higher productivity. The

EC290C takes it to a whole new level of innovation with a larger, more ergonomic work environment. Visibility is better. So are the seat, floor space and access to controls/switches.

Leading fuel efficiency stretches profit

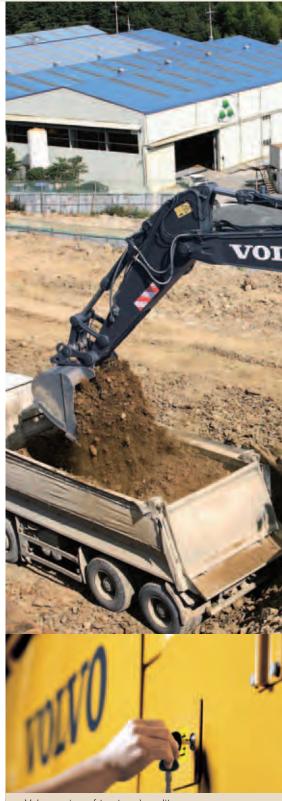
Construction professionals around the world know Volvo for fuel efficiency – and the EC290C is set to remain the industry leader that gets the most out of each tank. Volvo: your most fuel-efficient option.

Experience for your work

Get the job done in the excavator made for your work. From earth moving, 25-ton hauler loading and demolition to civil engineering, landfill work and utility/piping, the Volvo EC290C Excavator puts you in command.

The protection you need

The Volvo EC290C's proven, long life booms and arms are ready for the toughest conditions. We've designed it and tested it to deliver strength and day after day endurance. Count on Volvo to help your business grow by getting the job done, making money and moving on to the next job. The standard machine configuration has a maximum digging reach of 10.7 m (35' 1"), to a maximum depth of 7.3 m (24' 0"). And it's built to keep working day after day.



· Volvo: a sign of trust and quality.



· Reinforced boom/arm handles the jobs.

· Ideal reach and lift capacity.

• Intelligent command means greater profits.





• Efficient Volvo engine delivers high torque at very low RPMs.

- Reliable, reinforced boom and arm handle a variety of jobs with ease.
- Fast cycle times while excavating, loading and lifting are a result of an ideal combination of capacity, reach and force.
- Volvo high-tech toughness puts you comfortably in command of greater profits.
- Powerful Volvo V-ACT engine delivers proven performance and industry-leading fuel efficiency through high torque at low revs.

VOLVO'S ENGINE LEADERSHIP SPANS LAND, SEA, SKY AND SPACE

As the world's largest manufacturer of 9-to18-liter diesel engines, Volvo has unmatched expertise designing power systems that move the world. Volvo engines for Volvo Construction Equipment, Volvo

Aero, Volvo Buses, Volvo Penta and Volvo Trucks define productivity and fuel economy. Our performance has been honed on land, over the sea, across the sky and into space. Leading research and development

keeps all Volvo Group products at the forefront of productivity. So when we say Volvo engines are tested — and proven — you can believe it. Trust in it. It's the real advantage of Volvo Power.



EASE INTO JOB SECURITY AND GET TO WORK.

At the beginning of each job, you try to figure out the best way to move the most material in the quickest, most effective manner. Volvo is with you, and one of the ways we do it is through industry-leading comfort and safety. It helps put your body and mind at ease so you can work longer and get more work done. The Volvo EC290C cab is now more roomy and comfortable. Take command in the seat of comfort. There's plenty of space for your feet. Experience excellent all-around visibility. Enjoy complete, full-body climate control. Less noise, more safety and harmony with the environment. It's the smart way to work.

Work with the ease of the comfortable cab

Volvo is the innovative industry leader in comfort. More comfort means longer operation and increased productivity. The EC290C adjustable seat supports your whole body. The cab is wider and pedal positions have been shifted forward for more foot space. Find the correct joystick, seat and pedal position with forward/reverse and up/down adjustments. To reduce hazardous vibration, Volvo has gone beyond emerging regulations with a cab suspension system that greatly reduces whole body vibration.

Better all around command

There's plenty of glass surface for all around visibility. Volvo listened to operators and greatly expanded upper visibility. The roof hatch offers an optimal view during high-reach applications. The gas strut assisted windshield opens easily, while the smartly positioned windshield wiper cleans a wider area – including both upper corners. The easy-to-read LCD color monitor offers real-time information. The EC290C Volvo engine produces less noise and the pressurized, well-insulated cab blocks sound.

High-tech Volvo comfort

The EC290C is the ultimate, modern work environment. Intelligently going beyond automobile technology, the EC290C's high-tech electronic climate control system comforts your entire body with the highest capacity heating and cooling ventilation system available in the excavator industry.

Safe and protected

The new-design Volvo Care Cab, with operator protective structure provides security. Volvo's attention to ergonomics when designing controls, pedals and monitors ensures safe, long-term use. An optional color rear view camera displaying on the LCD color monitor provides a safe view while swinging or traveling.

Anti-slip walk areas

Outside the cab, all steps and platforms feature quality anti-slip traction with punched steel plates for superior grip – even when wet or icy. The bolt-on plates feature recessed bolts for less risk of trip hazard.

Environmental harmony

More than 95% of the machine materials are recyclable. External sound levels have been greatly reduced for fewer disturbances. The machine's exterior paint is lead-free. Safely working in harmony with the people and environment around you is a core concern of Volvo.



- Expansive glass and clear sight lines provide outstanding all-around visibility with greater safety.
- Experience the adjustable suspension seat and take command of the jobsite.
- Intelligent new, easy-to-read LCD color monitor and perfectly positioned controls.
- All-new cab is larger and more comfortable with ergonomic controls and vibration dampening suspension for all-day production.
- Electronic climate control system distributes comfort evenly with 14 air vents and the highest capacity heating and cooling available in the excavator industry.



GREATER ACCESS TO SERVICE, WORK & PROFITS.

Minimizing downtime. It can have one of the biggest impacts on your productivity and ultimately your profitability. The Volvo EC290C is built to maximize uptime. Maintenance is simple. Service access is complete. And to stay up and running, the EC290C is built for reliability with Volvo power, intelligent hydraulics, ideal capacity and a desire to handle every job in its path. In the trench, landfill, in the quarry or on the demolition site, the EC290C is right at home. Get one on your site and take home more of what you want: profit.

Volvo engine power and strength

You want power and the EC290C has it. Experience the powerful new generation Tier 3 compliant V-ACT (Volvo Advanced Combustion Technology) engine. It delivers 192 hp (143 kW) of optimized output with high engine torque at low revs, for ultra-efficient fuel consumption.

Innovative, advanced hydraulics

The advanced hydraulic system will help you get more done – with the boom, arm and swing priority you demand. It's also highly responsive, for control that allows you to know exactly what to expect when you touch the joystick. In-cab operator-selectable hydraulic flow and pressure increases ease of attachment use and performance.

The perfect fit for your job

In addition to the proven S-Type quick fit, the new optional universal quick fit with a proven design makes it easy to change attachments. Experience the Volvo edge with increased bucket speed, optional float position and a wide range of working modes that let you match requirements to the application, attachment and terrain.

The ease of service access

The key to uptime is ease of service. The Volvo EC290C has simplified it. Ground level access makes inspection and

service quick and easy. Change the oil, fuel and water separator filters, as well as drain the oil and access the hydraulic pump – all from the ground. Inside the cab, quickly perform self-diagnostics through the color LCD monitor.

An edge in routine maintenance

Get the most out of each day with ease of maintenance. The cab air filter is conveniently located outside the cab for easy replacement. Fuses are sealed and protected in a ground-accessible, steel box behind the cab. The sloped track frame design reduces build up of mud and debris.

Intelligent hydraulic oil cooler

Fan speed is hydraulically (not engine) driven, intuitively sensing hydraulic oil/ engine temperature and automatically activating to keep the system regulated at an optimized temperature. The result is less noise and lower fuel consumption. O-ring faced sealing is used in all hydraulic connections for added reliability. An anti-corrosive aluminium cooling module offers better heat dissipation and long life.

Common parts stretch profit

You'll appreciate ease of parts availability, lower operating costs and over 100 components and consumable parts common to other Volvo machines you may run.





• Simplified, ground level service access.

• Easy access for hydraulic pump filters.

· Safe, anti-slip steps and platforms.



• More care built in through quality.

- Simplified, ground level service access, long service intervals and centralized lubrication points mean more uptime.
- Quick and easy access to hydraulic pumps and filters.
- Anti-slip, punched steel platforms and walk areas offer superior grip and safety.
- Intelligent, advanced hydraulic system balances available engine power with hydraulic output for smooth, responsive control.
- More uptime from wellprotected hydraulic lines and easy-access grease points.



RELIABILITY STARTS AND ENDS WITH QUALITY.

Perform your daily checks, climb in, turn the key and go to work. It may seem routine, but when you can count on it everyday and slice through the toughest of materials and conditions, you know you're working with Volvo reliability. Trust the Volvo EC290C. It's designed and built with more care and more quality. And Volvo dependability through quality is more than claims or mere words on paper. It's proven day after day, around the world, from the start to the end of every job. It's time to find out for yourself with the Volvo EC290C.

Quality is in the details

You can see and feel the quality. It's in the rigid service doors, engine hood and protected electrical system. It's in the strengthened, high-tensile steel undercarriage frames, along with the reinforced booms and arms. It's in the reinforced superstructure with double welded corners and load-bearing boom frame. It's built for lower cost of ownership and higher resale value.

Grounded in durability

The Volvo EC290C undercarriage and track are built for durability, reliability and stability. The lifetime greased sealed track link prevents grease leaks, reduces noise and guarantees longevity. A reinforced idler bracket prevents opening and track link derailing. For stability, the EC290C features an increased tumbler length.

Intelligent, high-tech toughness

The Volvo EC290C isn't just tough, it's also intelligent and easy to operate. The machine's computer balances maximum available horsepower to hydraulic output, preventing engine overload – regardless of load on the pumps or engine speed. Volvo can do this because it's a Volvo engine, designed by Volvo engineers to specifically work with Volvo components.

Rely on your Volvo dealer for the support services you need:

CareTrack helps track your machine

CareTrack is an optional GPS monitoring program that works with the machine's diagnostic system. Installation is simple. You and your dealer can remotely track usage, productivity, fuel consumption and more. Maximize uptime through important service reminders. CareTrack also monitors geographic machine location and can even prevent unauthorized use. With CareTrack, you can focus on the care of your business while your Volvo dealer focuses on the care of your machine.

MATRIS gives you a full report

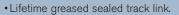
MATRIS delivers detailed operating history analysis about the utilization and efficiency factors that influence your operating costs. MATRIS turns the data captured inside the machine's computer into easy-to-use graphs and reports. Check and correct operating techniques, reduce maintenance costs and increase service life.

PROSIS makes parts ordering faster

PROSIS is a CD-ROM application that makes it quick and easy for your Volvo dealer to order all your Volvo CE product parts. Your dealer will help you find the right part, place your order and get you back up and running fast.









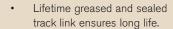
• Your trust. Your satisfaction. Your edge.



• Optional protected arm with reinforced strip.



• Volvo is the partner you can grow with.



- Your Volvo dealer is always there to help with parts, service and support.
- Optional protected arm with longer, reinforced strip and replaceable steel plates at both ends offers less wear and less expensive arm end maintenance.
- Reinforced, robotically-welded undercarriage frame distributes stress with rigid strength.
- Durable, standard undercover on the underside of the x-shaped frame provides extra protection.



ADD SOMETHING EXTRA - TO YOUR BOTTOM LINE.

The Volvo EC290C Excavator is factory-ready to hit a wide range of jobsites in a wide range of industries. And if you want to customize your excavator specifically for your preferences or your work, you have lots of options. With Volvo optional equipment, you can add something extra, like some more comfort features or exterior protection. It can mean added machine versatility and, most importantly, added profit.

Hydraulic kits

A wide variety of hydraulic kits are available for various boom and arm combinations. Each kit maximizes performance according to the machine's boom and arm length/shape. Get the most out of rotating/tilting attachments, crushers and hammers. Hydraulic flow is easily adjusted from the cab. Up to 20 presets can be saved.

Hydraulic quick fit

A Volvo hydraulic quick fit makes changing attachments quick and easy – all from the comfort and safety of the cab. Different quick fit types (universal and S-type) are available to fit new and existing customers' buckets/attachments.

Wrist control joysticks - proportional control

Low-effort, wrist control joysticks provide smooth, precision control for increased comfort, efficiency and production. Wrist control joysticks with proportional control switches are also available.

Operator seats

Volvo offers a wide variety of ergonomic operator seats designed specifically for comfort and protection. All seats, from various adjustable models to the most advanced air-suspension models, provide excellent support and are individually adjustable to suit operator preferences.

FOG and FOPS cab protection

For added safety and protection, FOG (Falling Object Guard) and FOPS (Falling Object Protective Structure) certified cabs provide peace-of-mind for tough conditions such as quarries and demolition. The front guard of the FOG unit is tiltable and supported by a gas strut for easy front

window cleaning. Both cab and framemounted FOG are available.

Straight travel pedal

A pedal located by the left foot rest operates both travel motors at the same time, providing convenience when traveling and efficient work control in applications such as pipe laying.

Boom float function

The boom float function lifts the boom over the ground without any pressure in the boom cylinders. Increases digging speed, cycle times and comfort of operation while working on rocky terrain. Reduces fuel consumption and wear. Effective for applications such as grading/finishing and grab work.

Extra work lights

Extra work lights provide increased visibility, safety and precision, while extending the workday in low light conditions. Features two lights in the front of the machine, one light in the rear area of the cab and one light mounted on the counterweight.

Rear view camera

For improved safety on the jobsite, the manually-operated camera provides a clear rear view when reverse travel is selected or to the right hand side of the superstructure when the swing function is activated. A clear display is visible on the wide screen, color LCD of the IECU (Instrument Electronic Control Unit). The protected camera can be switched manually, using a selection switch on the keypad, to show either rear or side view.

To customize your excavator with other optional equipment features to suit your application, contact your local Volvo dealer.



VOLVO OPTIONAL EQUIPMENT



















Hydraulic kits
Hydraulic quick fits
Wrist control joysticks
- proportional control

Operator seats

FOG and FOPS cab protection

Straight travel pedal

Boom float function

Extra work lights

Rear view camera

TAKE A TOUR. EXPERIENCE THE EC290C.

MORE SAFETY

- The new-design Volvo Care Cab, with operator protective structure provides security.
- Anti-slip steps and platforms with punched steel plates for superior grip even when wet or icy.
- · Low engine emission levels and low noise.
- Increased tumbler length ensures stability.
- Recessed bolts on superstructure walk areas for less risk of trip hazard.
- **Lead-free exterior paint** is in harmony with the environment.

MORE PROFIT

- New generation Volvo V-ACT engine: powerful, innovative and efficient.
- Volvo continues to deliver industry-leading fuel efficiency.
- Advanced hydraulic system with priority functions and optional float position.
- Optional universal quick fit increases versatility.

MORE COMFORT

- **New larger, more comfortable cab** puts you in command with ergonomic controls.
- Roomy, adjustable seat supports your whole body.



- Top-mounted windshield wiper cleans a wider area - including both upper corners.
- Vibration dampening protects against whole body fatigue for all-day productivity.
- Electronic climate control system delivers the highest capacity heating and cooling available.



MORE QUALITY

- Strengthened undercarriage frame endures daily abuse.
- · Reinforced boom/arm and proven components deliver every time.
- Reinforced superstructure with double welded corners.
- · Lifetime greased, sealed track link prevents leaks and guarantees long life.

SPECIFICATIONS

The next-generation Volvo diesel engine uses Volvo Advanced Combustion Technology (V-ACT) to deliver lower emissions and maintain superior performance and fuel efficiency. The EPA Tier 3 compliant engine uses precise, highpressure fuel injectors, turbo charger and air to air intercooler and electronic engine controls to optimize machine performance.

Engine	Volvo D7E EAE3		
Max. power, at	30 r/s	1,800 r/min	
Net (ISO 9249, SAE J1349)	143 kW	192 hp	
Gross (SAE J1995)	153 kW	205 hp	
Max. torque at 1,350 r/min	965 Nm	712 lb.ft	
No. of cylinders	6		
Displacement	7.14 I	436 cu.in	
Bore	108 mm	4.25"	
Stroke	130 mm	5.12"	

Electrical system

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

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

Service refill capacities

Fuel tank	470 I	124 gal
Hydraulic system, total	400 I	106 gal
Hydraulic tank	195 I	52 gal
Engine oil	30 I	8 gal
Engine coolant	36 I	10 gal
Swing reduction unit	11 I	2.9 gal
Travel reduction unit	2 x 6.2	2 x 1.6 gal

Swing system

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

Max. swing speed	10.2 r/min
Max. swing torque	104,3 kNm

Drive

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

Gradeability	35°	70%
		2.1/3.2 mph
Max. travel speed		3.3/5.2 km/h
51,820 lb		
Max. drawbar pull (tractive effort)		230.5 kN

Undercarriage

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

2 x 50
203 mm 8.0
600/700/800/900 mm
24"/28"/32"/36"
700 mm 28"
2 x 9
2 x 2

Hydraulic system

The hydraulic system, also known as the "Integrated work mode control" is designed for high-productivity, high-digging capacity, high-maneuvering precision and excellent fuel economy. The summation system, boom, arm and swing priority along with boom, arm and bucket regeneration provides optimum performance. 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:

Type: 2 x variable displacement axial piston pumps Maximum flow: 2 x 250 l/min 2 x 66 gpm

Pilot pump:

Type: Gear pump Maximum flow: 19 I/min 5.0 gpm

Hvdraulic motors:

Travel: Variable displacement axial piston motor with mechanical brake

Swing: Fixed displacement axial piston motor with mechanical brake

Relief valve setting:

Implement·····	31.4/34.3 Mpa
	4,550/4,980 psi
Travel circuit · · · · · · ·	34.3 Mpa 4,980 psi
Swing circuit······	26.5 Mpa 3,840 psi
Pilot circuit · · · · · · ·	3.9 Mpa 570 psi

Hydraulic cylinders	:
Boom 2	2
Bore x Stroke · · · · · ·	o140 x 1,480 mm
9	ø5.5 x 58.3"
Arm	1
Bore x Stroke · · · · · ·	o150 x 1,745 mm
9	э5.9 x 68.7"
Bucket · · · · · 1	1
Bore x Stroke · · · · · ·	o140 x 1,140 mm
9	ø5.5 x 44.9"
LR bucket · · · · · 1	1
Bore x Stroke · · · · · ·	o100 x 865 mm
9	э3.9 x 34.1"

Cab

The new-design Volvo Care Cab, with operator protective structure provides security, along with more interior space, leg room and foot space. 3 cup holders, 3 high-capacity outlets. Independently adjustable joystick consoles.

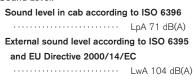
Excellent all around-visibility provided through maximum cab glass, transparent roof hatch and 2-piece sliding door window. The lift-up front windshield can easily be secured at the ceiling and the removable lower front glass can be stored in the side door. Interior lighting consists of one reading light and one cab light with timer.

The pressurized and filtered cab air is supplied by a 14-vent climate-control system, providing fast defrosting and high cooling and heating performance. Viscous/spring-mounted suspension cushions operator from vibrations.

Deluxe seat with adjustable height, tilt, recline, forward-back settings, retractable seat belt and selectable horizontal suspension for reduced whole body vibration.

Adjustable easy-to-read 6.4" LCD color monitor provides real time information of machine functions, important diagnostic information and a wide variety of work tool settings. LCD monitor is switchable to rear view camera monitor (option).

Sound Level:



Ground pressure

\bullet EC290C L with 6.2 m, 20' 4" boom, 3.05 m, 10' 0" arm, 975 kg, 2,150 lb bucket, 5,800 kg, 12,790 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	600 mm, 24"	29,200 kg, 64,340 lb	55.1 KPa, 8.0 psi	3,190 mm, 10' 6"
	700 mm, 28"	29,700 kg, 65,580 lb	48.1 KPa, 7.0 psi	3,290 mm, 10' 10"
	800 mm, 32"	30,100 kg, 66,390 lb	42.6 KPa, 6.2 psi	3,390 mm, 11' 1"
	900 mm, 36"	30,500 kg, 67,210 lb	38.4 KPa, 5.6 psi	3,490 mm, 11' 5"
Double grouser	700 mm, 28"	29,900 kg, 65,890 lb	48.4 KPa, 7.0 psi	3,290 mm, 10' 10"

• EC290C LR with 10.2 m, 33' 6" boom, 7.9 m, 25' 11" arm, 452 kg, 1,000 lb bucket, 7,150 kg, 15,770 lb counterweight

Description	Shoe width	Operating weight	Ground pressure	Overall width
Triple grouser	800 mm, 32"	31,700 kg, 69,900 lb	45.0 KPa, 6.5 psi	3,390 mm, 11' 1"

Max. permitted buckets

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

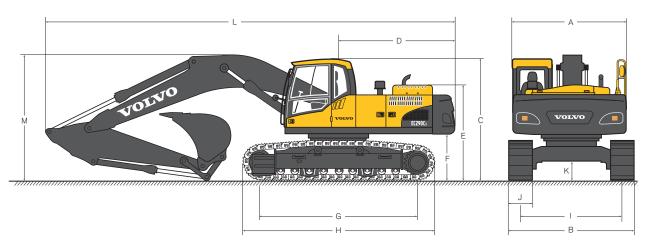
\bullet EC290C L with pin-on bucket, 5,800 kg, 12,790 lb counterweight

Baradakian .	Max. bucket	6.2 m, 20¹ 4" boom			
Description	volume / weight	2.55 m, 8' 4" arm	3.05 m, 10' 0" arm	3.7 m, 12' 2" arm	
CD burd at 1 5 t/m ³ 0 520 lb (vd ³	l/kg	1,950/1,650	1,775/1,500	1,575/1,350	
GP bucket 1.5 t/m³, 2,530 lb/yd³	yd³/lb	2.55/3,640	2.32/3,310	2.06/2,980	
GP bucket 1.8 t/m³, 3,030 lb/yd³	I/kg	1,725/1,475	1,575/1,325	1,400/1,200	
	yd³/lb	2.26/3,250	2.06/2,920	1.83/2,650	
HD bucket 1.8 t/m³, 3,030 lb/yd³	I/kg	1,625/1,625	1,500/1,500	1,325/1,325	
	yd³/lb	2.13/3,580	1.96/3,310	1.73/2,920	
HD bucket 2.0 t/m³, 3,370 lb/yd³	l/kg	1,525/1,525	1,400/1,400	1,250/1,250	
	yd³/lb	1.99/3,360	1.83/3,090	1.64/2,760	

• EC290C L with quick fit bucket, 5,800 kg, 12,790 lb counterweight

Barada kina	Max. bucket	6.2 m, 20' 4" boom			
Description	weight	2.55 m, 8' 4" arm	3.05 m, 10' 0" arm	3.7 m, 12' 2" arm	
	l/kg	1,825/1,550	1,650/1,400	1,475/1,250	
GP bucket 1.5 t/m³, 2,530 lb/yd³	yd³/lb	2.39/3,420	2.16/3,090	1.93/2,760	
GP bucket 1.8 t/m³, 3,030 lb/yd³	I/kg	1,625/1,375	1,475/1,250	1,300/1,100	
	yd³/lb	2.13/3,030	1.93/2,760	1.70/2,430	
HD bucket 1.8 t/m³, 3,030 lb/yd³	l/kg	1,525/1,525	1,400/1,400	1,225/1,225	
	yd³/lb	1.99/3,360	1.83/3,090	1.60/2,700	
HD bucket 2.0 t/m³, 3,370 lb/yd³	l/kg	1,425/1,425	1,300/1,300	1,150/1,150	
	yd³/lb	1.86/3,140	1.70/2,870	1.50/2,540	

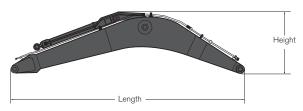
Dimensions



			EC290C LR					
Description			6.2 m, 20' 4" boom		10.2 m, 33' 6" boom			
		2.55 m, 8' 4" arm	3.05 m, 10' 0" arm	3.7 m, 12' 2" arm	7.9 m, 25' 11" arm			
A. Overall width of upper structure	mm, ft-in	2,890, 9' 6"	2,890, 9' 6"	2,890, 9' 6"	2,890, 9' 6"			
B. Overall width	mm, ft-in	3,390, 11' 1"	3,390, 11' 1"	3,390, 11' 1"	3,390, 11' 1"			
C. Overall height of cab	mm, ft-in	3,030, 9' 11"	3,030, 9' 11"	3,030, 9' 11"	3,030, 9' 11"			
D. Tail swing radius	mm, ft-in	3,000, 9' 10"	3,000, 9' 10"	3,000, 9' 10"	3,000, 9' 10"			
E. Overall height of engine hood	mm, ft-in	2,400, 7' 10"	2,400, 7' 10"	2,400, 7' 10"	2,400, 7' 10"			
F. Counterweight clearance *	mm, ft-in	1,145, 3' 9"	1,145, 3' 9"	1,145, 3' 9"	1,145, 3' 9"			
G. Tumbler length	mm, ft-in	4,015, 13' 2"	4,015, 13' 2"	4,015, 13' 2"	4,015, 13' 2"			
H. Track length	mm, ft-in	4,870, 16' 0"	4,870, 16' 0"	4,870, 16' 0"	4,870, 16' 0"			
I. Track gauge	mm, ft-in	2,590, 8' 6"	2,590, 8' 6"	2,590, 8' 6"	2,590, 8' 6"			
J. Shoe width	mm, in	800, 32"	800, 32"	800, 32"	800, 32"			
K. Min. ground clearance *	mm, ft-in	480, 1' 7"	480, 1' 7"	480, 1' 7"	480, 1' 7"			
L. Overall length	mm, ft-in	10,500, 34' 5"	10,420, 34' 2"	10,450, 34' 3"	14,620, 48' 0"			
M. Overall height of boom	mm, ft-in	3,430, 11' 3"	3,290, 10' 10"	3,540, 11' 8"	3,340, 10' 11"			

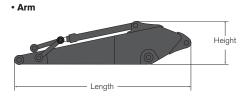
^{*} Without shoe grouser





Description	n	6.2 m,	6.2 m, 20' 4"									
Description	"	General Purpose	Heavy-duty	10.2 m, 33' 6"								
Length	mm, ft-in	6,430, 21' 1"	6,430, 21' 1"	10,430, 34' 3"								
Height	mm, ft-in	1,680, 5' 6"	1,680, 5' 6"	1,620, 5' 4"								
Width	mm, ft-in	770, 2' 6"	770, 2' 6"	770, 2' 6"								
Weight	kg, lb	2,480, 5,470	2,590, 5,710	3,420, 7,540								

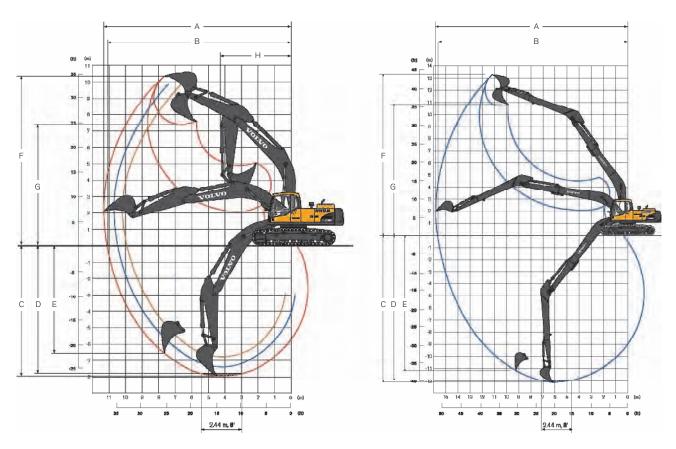
 $^{^{\}star}$ Includes arm cylinder, piping and pin



Description		2.55 m, 8' 4"	3.05 m	10' 0"	27 m 101011	7.9 m, 25' 11"		
Description	2.55 m, 6 4	General Purpose	Heavy-duty	3.7 m, 12' 2"				
Length	mm, ft-in	3,710, 12' 2"	4,150, 13' 7"	4,150, 13' 7"	4,900, 16' 1"	9,060, 29' 9"		
Height	mm, ft-in	1,010, 3' 4"	1,010, 3' 4"	1,010, 3' 4"	1,050, 3' 5"	1,065, 3' 6"		
Width	mm, ft-in	545, 1' 9"						
Weight	kg, lb	1,475, 3,250	1,480, 3,260	1,540, 3,400	1,680, 3,700	1,790, 3,950		

^{*} Includes bucket cylinder, linkage and pin

Working ranges & digging force



Machine with him on bunket			10.2 m, 33' 6" boom		
Machine with pin-on bucket		2.55 m, 8' 4" arm	3.05 m, 10' 0" arm	3.7 m, 12' 2" arm	7.9 m, 25' 11" arm
A. Max. digging reach	mm, ft-in	10,160, 33' 4"	10,690, 35' 1"	11,290, 37' 0"	18,600, 61' 0"
B. Max. digging reach on ground	mm, ft-in	9,950, 32' 8"	10,490, 34' 5"	11,110, 36' 5"	18,490, 60' 7"
C. Max. digging depth	mm, ft-in	6,830, 22' 5"	7,320, 24' 0"	7,980, 26' 2"	14,770, 48' 5"
D. Max. digging depth (8' level)	mm, ft-in	6,590, 21' 7"	7,140, 23' 5"	7,820, 25' 8"	14,670, 48' 1"
E. Max. vertical wall digging depth	mm, ft-in	5,440, 17' 10"	6,200, 20' 4"	6,590, 21' 7"	13,520, 44' 4"
F. Max. cutting height	mm, ft-in	9,620, 31' 7"	10,040, 32' 11"	10,320, 33' 10"	14,920, 48' 11"
G. Max. dumping height	mm, ft-in	6,690, 21' 11"	7,050, 23' 2"	7,340, 24' 1"	12,580, 41' 3"
H. Min. front swing radius	mm, ft-in	4,220, 13' 10"	4,180, 13' 9"	4,240, 13' 11"	-

Discipa forces with his	an hualeat			10.2 m, 33' 6" boom		
Digging forces with pin-	on bucket		2.55 m, 8' 4" arm	3.05 m, 10' 0" arm	3.7 m, 12' 2" arm	7.9 m, 25' 11" arm
Bucket radius		mm, in	1,600, 63"	1,600, 63"	1,600, 63"	1,250, 49"
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN lb	158.0/173.0 35,480/38,810	158.0/173.0 35,480/38,810	158.0/173.0 35,480/38,810	69.1 15,550
	ISO 6015	kN lb	181.0/198.0 40,790/44,610	181.0/198.0 40,790/44,610	181.0/198.0 40,790/44,610	80.3 18,050
Tearout force - arm (Normal/Power boost)	SAE J1179	kN lb	145.0/159.0 32,610/35,680	123.0/135.0 27,740/30,340	108.0/119.0 24,370/26,640	64.2 14,440
	ISO 6015	kN lb	153.0/167.0 34,380/37,600	128.0/140.0 28,690/31,380	111.0/122.0 25,050/27,390	65.1 14,630
Rotation angle, bucket deg.			179	179	179	179

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 fit from the following values.

• EC290C L

Across	Lifting			3.0 m	n, 10'			4.5 m	n, 15'			6.0 m	n, 20'			7.5 m	ı, 25'		Max. reach					
undercarriage Along undercarriage	related ground		Į.	†	C	-	I	<u>.</u>	C	-	١	‡	C	-	ı	<u>.</u>	C		١	F	C	-	Max.	
undercarnage	level		t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	m/ ft	
	7.5 m	25'									*7.3	*16,240	*7.3	*16,240					*7.5	*16,480	7.1	16,140	6.5/21.01	
Boom 6.2 m, 20' 4"	6.0 m	20'									*7.6	*16,650	*7.6	*16,650	*7.4		5.6		*7.5	*16,420	5.5	12,360	7.5/ 24.59	
+	4.5 m	15'					*10.7	*23,070	*10.7	*23,070	*8.7	*18,770	7.7	16,690	*7.7	*16,910	5.5	11,810	7.5	16,640	4.8	10,570	8.2/ 26.76	
Arm 2.55 m, 8' 4"	3.0 m	10'					*13.7	*29,450	11.1	23,920	*10.0	*21,640	7.3	15,840	*8.4	18,180	5.3	11,430	7.0	15,360	4.4	9,690	8.5/27.86	
+ Shoe 800 mm, 32"	1.5 m	5'					*15.8	*34,000	10.5	22,570	*11.2	*24,220	7.0	15,100	8.3	17,760	5.1	11,060	6.8	14,990	4.3	9,390	8.5/28.03	
	0 m	0'					*16.3	*35,370	10.3	22,090	11.4	24,410	6.8	14,670	8.1	17,490	5.0	10,810	7.0	15,440	4.4	9,620	8.3/27.27	
+ Counterweight	-1.5 m	-5'	*11.6	*26,400	*11.6	*26,400	*15.9	*34,540	10.3	22,090	11.3	24,280	6.7	14,550	8.1	17,460	5.0	10,780	7.7	16,970	4.8	10,510	7.8/ 25.52	
5,800 kg, 12,790 lb	-3.0 m	-10'	*19.8	*43,070	*19.8	*43,070	*14.6	*31,660	10.4	22,420	*11.0	*23,820	6.8	14,750					9.3	*20,420	5.7	12,630	6.9/22.51	
3, ,	-4.5 m	-15'	*15.8	*33,970	*15.8	*33,970	*11.8	*25,170	10.8	23,220									*9.5	*20,860	8.1	18,380	5.5/ 17.62	
	7.5 m	25'																	*5.8	*12,830	*5.8	*12,830	7.2/23.29	
Boom 6.2 m, 20' 4"	6.0 m	20'													*6.8	*15,040	5.7	12,230	*5.5	*12,220	4.9	11,000	8.1/ 26.56	
+	4.5 m	15'									*8.1	*17,470	7.9	16,930	*7.3	*15,880	5.6	11,950	*5.5	*12,170	4.3	9,580	8.7/ 28.57	
Arm 3.05 m, 10' 0"	3.0 m	10'					*12.7	*27,280	11.3	24,480	*9.5	*20,490	7.4	16,040	*8.0	*17,360	5.4	11,530	*5.7	*12,570	4.0	8,850	9.0/29.61	
+	1.5 m	5'					*15.1	*32,600	10.6	22,880	*10.8	*23,370	7.1	15,230	8.3	17,820	5.2	11,100	*6.1	*13,420	3.9	8,590	9.1/ 29.76	
Shoe 800 mm, 32"	0 m	0'					*16.2	*35,020	10.3	22,140	11.4	24,460	6.8	14,700	8.1	17,470	5.0	10,790	6.4	14,060	4.0	8,760	8.9/29.06	
+	-1.5 m	-51	*10.6	*24,030	*10.6	*24,030	*16.2	*35,030	10.2	21,980	11.3	24,200	6.7	14,480	8.0	17,340	4.9	10,670	6.9	15,230	4.3	9,450	8.4/27.42	
Counterweight 5,800 kg, 12,790 lb	-3.0 m	-10'	*17.6	*39,950	*17.6	*39,950	*15.2	*32,950	10.3	22,190	11.3	24,300	6.8	14,560	8.1		5.0		8.1	17,870	5.0	11,030	7.5/ 24.65	
0,000 kg, 12,100 lb	-4.5 m	-15'	*17.9	*38,500	*17.9	*38,500	*13.0	*27,920	10.6	22,790	*9.5	*20,080	7.0	15,090					*8.9	*19,570	6.6	14,810	6.3/20.30	
	7.5 m	25'													*5.8	*11,860	*5.8	*11,860	*4.6	*10,080	*4.6	*10,080	7.9/25.80	
D 00 001 411	6.0 m	20'				İ			İ					i	*6.1	*13,340	5.8	12,420	*4.4	* 9,650	4.4	* 9,650	8.8/28.77	
Boom 6.2 m, 20' 4"	4.5 m	15'							İ		*7.2	*15,570	*7.2	*15,570	*6.6	*14,440	5.6	12,080	*4.4	* 9,610	3.9	8,550	9.4/30.64	
+ Arm 3.7 m, 12' 2"	3.0 m	10'					*11.3	*24,190	*11.3	*24,190	*8.7	*18,730	7.5	16,250	*7.4	*16,100	5.4	11,590	*4.5	* 9,880	3.6	7,940	9.6/ 31.61	
AIII 0.7 III, 12 2	1.5 m	5'					*14.0	*30,250	10.8	23,220	*10.1	*21,930	7.1	15,330	*8.2	17,830	5.1	11,090	*4.8	*10,470	3.5	7,710	9.7/ 31.76	
Shoe 800 mm, 32"	0 m	0'	*6.1	*14,030	*6.1	*14,030	*15.7	*33,880	10.3	22,120	*11.2	*24,350	6.8	14,650	8.1	17,390	5.0	10,690	*5.2	*11,510	3.5	7,820	9.5/31.09	
+	-1.5 m	-5'	*10.0	*22,560	*10.0	*22,560	*16.1	*34,970	10.1	21,710	11.2	24,020	6.6	14,290	8.0	17,140	4.9	10,470	*6.0	*13,250	3.8	8,330	9.0/ 29.57	
Counterweight	-3.0 m	-10'	*15.1	*34,170	*15.1	*34,170	*15.7	*33,920	10.1	21,760	11.1	23,970	6.6	14,250	8.0	17,150	4.9	10,480	6.9	15,390	4.3	9,480	8.3/27.03	
5,800 kg, 12,790 lb	-4.5 m	-15'	*20.0	*43,170	*20.0	*43,170	*14.1	*30,370	10.3	22,190	*10.5	*22,500	6.7	14,550	1			,	*8.3	*18,290	5.4	11,990	7.1/23.14	
	-6.0 m	-20'	*14.8	*31,220	*14.8	*31,220	*10.5	*21,940	*10.5	*21,940	10.0	,_,_	0.1	,					*8.5	*18,600	8.4	*18.600	5.3/16.97	
	-0.U m	-20	14.8	31,220	14.8	31,220	10.5	21,040	10.5	21,040									0.0	10,000	0.4	10,000	0.0/ 10.07	

• EC290C LR

undercarriage hool relat Along grou undercarriage level	ted to		ă							12.0 m, 40'					13.5 n	'	15.0 m, 50					Max. reach				
undercarriage level		l	<u> </u>	Ċ	-	l	4	Ċ	-		Ė	C	-	į	4	Ċ	1	Į	<u>‡</u>	Ċ	-	[Ė	Ċ	-	Max.
	el .	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	t	lb	m/ ft
13.5 r	m 45'																					*1.2	*2,570	*1.2	*2,570	12.9/41.73
12.0 r														*1.6	*2,990	*1.6	*2,990					*1.1	*2,410		*2,410	14.1/ 45.88
10.5 r														*2.2	,	*2.2	*4,460	*1.1		11.1		*1.0	*2,310		*2,310	
9.0 r														*2.5	.,.	*2.5	*5,310	*1.8	*3,460	*1.8	*3,460	*1.0	*2,250		*2,250	
Boom 7.5 r														*2.7	*5,960	2.6	5,640	*2.2	*4,530	2.1	4,410	*1.0	*2,240		*2,240	
10.2 m, 33' 6" 6.0 r										*3.0	*6,520	*3.0	*6,520	*2.9	*6,230	2.5	5,420	*2.6	*5,330	2.0	4,280	*1.0	*2,250		,	16.9/ 55.24
+ 4.5 r						*3.5	*7,590	*3.5	*7,590	*3.2	*7,010	3.0	6,460	*3.0	*6,570	2.4	5,140	*2.9	*6,050	1.9	4,090	*1.0	*2,300	*1.0	,	
79 m 25' 11"		*4.4	*9,490	*4.4	*9,490	*3.9	*8,360	3.5	7,590	*3.5	*7,550	2.8	6,030	*3.2	*6,950	2.3	4,830	*3.0	*6,500	1.8	3,880	*1.1	*2,380	11.1	,	17.3/56.75
1.51		*4.9	*10,610	4.1	8,820	*4.2	*9,140	3.2	6,970	*3.7	*8,100	2.6	5,590	*3.4	*7,350	2.1	4,520	3.0	6,350	1.7	3,660	11.1	*2,490	11.1	,	17.3/56.84
Shoe			*11,610	3.7	8,000	*4.5	*9,850	3.0	6,390	*4.0	*8,620	2.4	5,180	3.4	,	2.0	4,220	2.9	6,120	1.6	3,440	*1.2	*2,650		2,630	
800 mm, 32" -1.5 r		*5.7	*12,420	3.4	7,330	4.7	10,160	2.7	5,900	3.9	8,370	2.2	4,810	3.3	7,000	1.8	3,950	2.8	5,920	1.5	3,250	*1.3	*2,860	1.2	2,620	
+ -3.0 r		5.6	12,080	3.2	6,830	4.5	9,750	2.6	5,510		8,060	2.1	4,510	3.2	6,780	1.7	3,730	2.7	5,770	1.5	3,100	*1.4	*3,130		2,660	
Counterweight -4.5 r		5.4	11,720	3.0	6,490	4.4	9,460	2.4	5,240	3.6	7,840	2.0	4,300	3.1	6,610	1.7	3,580	2.6	5,670	1.4	3,010	*1.6	*3,510		2,770	
7,150 kg, 15,770 lb -6.0 r		5.3	11,520		6,310	4.3	9,290	2.4	5,080	3.6	7,710	1.9	4,180	3.0	.,	1.6	3,500	2.6	*4,330	1.4	2,990	*1.8	*4,030		2,980	
-7.5 r		5.3	11,480	2.9	6,270	4.3	9,240	2.3	5,040	3.6	7,690	1.9	4,160	3.0	6,560	1.0	3,530					*2.1	*4,800	1.5	,	14.5/47.16
-9.0 r		5.4 *5.1	11,580	2.9	6,370 6,620	4.3 *4.2	9,330	2.4	5,120	3.6	7,800	2.0	4,270									*2.7 *3.4	*6,020	1.7	,	13.3/ 43.35 11.9/ 38.51
-10.5 r -12.0 r		*4.1	*10,810 *8,410	3.3	7,120	4.2	*8,880	2.5	5,370													*3.4	'7,550 '7,490	2.1	6,520	

Notes:

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

STANDARD EQUIPMENT

Engine

Turbocharged, 4-stroke diesel engine with water cooling, direct injection and charged air cooler that meets EPA (Environmental Protection Agency) Tier 3 emission standards 3-stage air filter with indicator and precleaner Intake air pre-heater Electric engine shut-off Fuel filter and water separator Alternator, 80 A

Electric/Electronic control system

Contronics

- Advanced mode control system
- Self-diagnostic system Machine status indication

Engine speed sensing power control

Automatic idling system One-touch power boost Safety stop/start function Adjustable LCD color monitor Master electrical disconnect switch Engine restart prevention circuit High-capacity halogen lights:

- Frame-mounted 2
- Boom-mounted 2

Travel alarm

Batteries, 2 x 12 V / 200 Ah Start motor, 24 V / 5.5 kW

Hydraulic system

Automatic sensing hydraulic system

- Summation system
- Boom priority
- Arm priority
- Swing priority

Cab adjustment of auxiliary hydraulic pressure and flow

Hydraulic piping:

- Hammer & shear: adjustable flow control
- Quick fit piping

Boom and arm regeneration valves

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Boom cylinders (x2)

Cylinder cushioning

Cylinder contamination seals

Auxiliary hydraulic valve

Automatic two-speed travel motors Hydraulic oil, ISO VG 46

Superstructure

Access way with handrail Full height counterweight:

L: 5,800 kg, **12,790 lb** LR: 7,150 kg, **15,770 lb**

Tool storage area

Service walkway with anti-slip grating Undercover (heavy-duty 4.5 mm, 0.18")

Cab and interior

Fabric seat with heater and air suspension 2-button control for hammer/shear auxiliary hydraulics

Control joysticks with 4 switches each Travel pedals with hand levers

Pilot control pattern change Heater & air-conditioner, automatic

Hydraulic dampening cab mounts Adjustable operator seat and joystick

control console

Hydraulic safety lock lever

Cab, all-weather sound suppressed, includes:

- Cup holder (x3)

- Lighter
- Door locks
- Tinted glass
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Safety glass, light tinted
- Sun shields, front, roof, rear
- Windshield wiper with washer and intermittent feature
- AM/FM stereo with cassette includes flexible antenna

Anti-vandalism kit assembly preparation Master key

Opening top hatch

Undercarriage

Hydraulic track adjusters Greased and sealed track link

Track guard

Undercover (4.5 mm, 0.18") Standard roller guard

Track equipment

Track pads 800 mm, 32" with triple grousers

Digging equipment

Boom: 6.2 m, 20' 4" general purpose Arm: 3.05 m, 10' 0" heavy-duty without

wear strips

Centralized lubrication

Service

Tool kit, daily maintenance

OPTIONAL EQUIPMENT

Block heater: 120 V Oil-bath pre-cleaner

Diesel coolant heater, programmable Water separator with heater

Fuel filler pump: 50 I/min, 13.2 gpm with automatic shut-off

Electric

Extra lights:

- Cab front top-mounted 2
- Cab rear-mounted 1
- Counterweight-mounted 1

Anti-theft system

Rotating warning beacon

Hydraulic system

Hose rupture valve: boom, arm Overload warning device Hydraulic piping:

- Additional return filter
- Slope & rotator
- Grapple
- Oil leak (drain) line

Volvo hydraulic quick fit, S2 size Hydraulic oil, ISO VG 32 Hydraulic oil, ISO VG 68 Hydraulic oil, biodegradable 32 Hydraulic oil, biodegradable 46

Boom float function

Cab and interior

Fabric seat

Fabric seat with heater

Control joystick with semi-long levers Control joystick with proportional control

- Falling object guard (FOG)
- Frame-mounted - Cab-mounted

Cab-mounted falling object protective structure (FOPS)

Protective screen for front window Rain shield

Lower wiper with intermittent control

Rear view camera

Anti-vandalism kit Straight travel pedal

Undercarriage

Full track guard

Undercover (heavy-duty 10 mm, 0.39")

Track equipment

600 mm, 24"/700 mm, 28"/900 mm, 36" track pads with triple grousers 700 mm, 28" track pads with double grouser

Digging equipment

Boom: 6.2 m, 20' 4" heavy-duty 10.2 m, **33' 6"** long reach

Arm: 2.55 m, 8' 4"

3.05 m, 10' 0" general purpose 3.05 m, 10' 0" heavy-duty with

wear strips

3.7 m, 12' 2" with or without wear strips 7.9 m, 25' 11" long reach

Service

Tool kit



Volvo Construction Equipment is different. It's designed, built and supported in a different way. That difference comes from an engineering heritage of over 170 years. A heritage of thinking first about the people who actually use the machines. About how to help them be safer, more comfortable, more productive. About the environment we all share. The result of that thinking is a growing range of machines and a global support network dedicated to helping you do more. People around the world are proud to use Volvo. And we're proud of what makes Volvo different – **More care. Built in.**



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.



Construction Equipment