TAKE A TOUR. THEN TAKE IN MORE PROFITS.

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.

• Reduced engine hood size/height for better rear visibility.

• Recessed bolts on superstructure walk areas for less risk of trip hazard.

• Lead-free exterior paint: more harmony with the environment.

MORE COMFORT

• New larger, more comfortable cab puts you in command with perfectly placed, ergonomic controls.

• Roomy, adjustable seat supports your whole body.

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 boom float position.

• Optional universal quick fit makes versatility easier.
• **Top-mounted windshield wiper** cleans a wider area – including both upper corners.

• **Vibration dampening** protects against whole body fatigue for all-day production.

• **Electronic climate control system** delivers the highest-capacity heating and cooling available.

**MORE UPTIME**

• **Simplified, ground level serviceability** for quick access.

• **Easy access, centralized lubrication points.**

• **Easy-to-read LCD color monitor** for real-time information and trouble-shooting.

• **Easy to learn. Easy to operate. Easy to get more done.**

**MORE QUALITY**

• **Strengthened undercarriage frame** provides endurance against 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.
Most days it's just you and your machine. But that machine is more than just hard-working steel. It's your partner. And for the partner you can rely on everyday, put your trust in the Volvo EC180C Excavator. Small contractors, owner/operators and rental companies trust it for versatility in pipe laying, landscaping, road maintenance, drainage ditching, levelling/fine grading and more. The Volvo EC180C does it all. Excellent control and capacity. Quality from bucket to counterweight. An improved Volvo Care Cab. Proven, industry-leading fuel economy. It's ready to make you money. Let's go partner.

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.

The Volvo edge in fuel efficiency
Fuel usage can be a huge operating expense. Rest assured, because Volvo doesn’t rest on reputation. The EC180C is set to remain the industry leader that gets the most out of each tank.

Ease into legendary Volvo comfort
Everybody is now paying attention to comfort. If you've been in a Volvo cab, you know Volvo is the innovative leader in comfort. That hasn't changed, but our Care Cab has been intelligently improved. The EC180C puts you in command. Improved visibility. A larger work environment with more floor space. Greater access to controls and a seat you can work in all day long.

Trust Volvo quality and protection
Quality lasts and the Volvo EC180C has it throughout – from the reinforced service doors to the rigid, long-life undercarriage. See it, touch it and feel it. It’s better than the competitors and it’s because of quality. Those who have owned or operated a Volvo Wheel Loader, Articulated Hauler or any of our machines, trust Volvo for quality, comfort and safety. We’re proud of that, and the Volvo EC180C Excavator is another example of that strong legacy.

Strength and endurance
The conditions you operate in aren’t getting any easier. That why the Volvo EC180C is built to handle it all with stable, proven booms and arms. Every detail – from the digging equipment to the track – has been designed and tested to live up to high Volvo standards.

The experience for your application
From the installation of footings and the trenching for utilities to the excavation of basements and the loading of trucks, the Volvo EC180C Excavator is ready for your work.
As the world’s second-largest manufacturer of 9- to 18-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.

**VOLVO’S ENGINE LEADERSHIP SPANS LAND, SEA, SKY AND SPACE**
TAKE COMFORT. TAKE CARE. TAKE COMMAND.

You know the feeling when everything is clicking? Smooth movements. Full bucket every time. Fast work pace. You’re in the “zone” and don’t even realize you’ve worked for 10 hours. Volvo EC180C owners and operators know that feeling well. That’s because the EC180C is built for command with industry-leading comfort and safety. We’ve made the legendary Volvo Care Cab even better. Dependable Volvo safety puts your mind at ease with protection and confidence. Everything is right where you want it. That’s because operators spoke, and Volvo listened. Now listen to this: you too can find the “zone” everyday with the Volvo EC180C.

**Innovative new Care Cab**
Innovators never rest. And the EC180C Care Cab keeps Volvo at the forefront of operator comfort and productivity. The cab is now wider. Pedal positions have been shifted forward for more foot space. Experience the adjustable seat, which supports your whole body and maintains a uniform operating position in relation to the joystick and pedals. To reduce fatigue and hazardous whole body vibration, Volvo has gone beyond emerging cab vibration regulations with an enhanced suspension system.

**Electronic climate control**
Intelligently going beyond automobile technology, the EC180C’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.

**Greater visibility for greater command**
The new Volvo cab includes more glass, including above through the roof hatch. This expands your view during high-reach applications. There’s better visibility to the rear from a smaller, lower engine hood. The gas strut assisted windshield opens with ease, while the intelligently positioned windshield wiper cleans a wider area – including both upper corners. The easy-to-read LCD color monitor keeps you informed in real time. The EC180C Volvo engine produces less noise and the pressurized, well-insulated cab blocks sound. Step inside the Volvo experience and get more done.

**The protection of Volvo safety**
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. A color rear view camera displaying on the LCD color monitor provides a safe view whenever needed.

**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 care: a core Volvo value**
External sound levels have been greatly reduced for fewer disturbances. The exterior paint is lead-free and more than 95% of the machine materials are recyclable. Trust Volvo for leadership in our cornerstone values of safety and environmental protection.
• Well-positioned monitor and controls.

• Greater floor space with larger pedals.

• Industry’s highest heating/cooling capacity with 14 vents.
Everyone is looking for smarter ways to do more work. Here it is: the Volvo EC180C Excavator. The best way to make more profit is to spend more time up, running and working. And the best way to achieve this is through the Volvo EC180C’s complete service access, long service intervals and easy routine maintenance. It’s your Volvo edge and it means each day starts easier and ends only when the job is done. Experience power, capacity and stability. Go to work the smart way and take on all the excavation, piping, grading and trenching jobs you can find.

**Easier service for maximum uptime**
The Volvo EC180C makes service easy so you can get to work faster. It’s easy to change the oil, fuel and water separator filters, as well as drain the oil and access the hydraulic pump. Inside the cab, the LCD color monitor makes it quick and easy to check the engine oil level and perform self-diagnostics.

**Daily maintenance with ease**
Ground level access makes routine inspection and service simple. The cab air filter is conveniently located outside the cab for easy replacement. Fuses are easy to check in a sealed and protected box behind the cab. The self-cleaning design of the sloped track frame reduces build up of mud and debris.

**Trust the V-Act Volvo engine**
The Volvo EC180C delivers the strength and power you need with an intelligent new generation Stage IIIA compliant V-Act (Volvo Advanced Combustion Technology) engine. It delivers 87 kW (118 metric hp) of optimized output. And with high engine torque at low revs, Volvo achieves ultra-efficient fuel consumption.

**Hydraulic system gives you an edge**
The Volvo advanced hydraulic system helps you do more with precise, highly-responsive control that allows you to know exactly what to expect when you touch the joystick, in-cab operator-selectable hydraulic flow and pressure increases performance and ease of attachment use at full performance. There’s also boom, arm and swing priority.

**Hydraulic cooling system with intelligence**
Intuitively sensing hydraulic oil/engine temperature, fan speed is hydraulically (not engine) driven to automatically activate and keep the system regulated at an optimized temperature. There’s also extra reliability from O-ring faced sealing in all hydraulic connections. An anti-corrosive aluminium cooling module offers better heat dissipation and long life.

**Profit with the universal quick fit**
The new optional universal quick fit features a proven design that makes attachment change out easy. Increased bucket speed, optional boom float position and a wide range of working modes provide the perfect match for your attachments and profitability.

**Lower costs through common parts**
Volvo designs all its machines with a common vision. The Volvo EC180C uses over 100 components and consumable parts common to other Volvo machines you may run. This results in higher availability of parts and lower operating costs.
- Simplified, ground level service access.
- Easy access to filters.
- Safe, anti-slip steps and platforms.
High-tech toughness that is intelligent
You have to be tough in this line of work. But it also pays to be intelligent. The Volvo EC180C brings it all together through high-tech innovation that’s still easy to learn and operate. The machine’s computer balances maximum available horsepower to hydraulic output, preventing engine overload – regardless of load on the pumps or engine speed. How do we do it? It’s all Volvo – with a Volvo engine, designed by Volvo engineers to specifically work with Volvo components.

An investment in quality
Quality from top to bottom. That’s the Volvo way, and you can find it right down to the details of the EC180C. You see it from the cab to the protected electrical system. You feel it in the rigid service doors and the sturdy engine hood. From the strengthened, high-tensile steel undercarriage frame and reinforced superstructure with double-welded corners to the heavy-duty booms and arms – it’s built with quality for reliability, lower costs and high resale value.

Track offers strength beneath you
Durability, reliability and strength are built into the Volvo EC180C undercarriage and track. And for less noise and guaranteed longevity without leaks, there’s also a lifetime greased sealed track link.

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

CareTrack monitors it all
CareTrack is an optional GPS monitoring program that works with the machine’s diagnostic system. Installation is simple. Track geographic machine location, usage, fuel consumption and more from your computer. Maximize uptime through important service reminders. CareTrack also offers theft protection by allowing you to limit geographic areas or hours of the day the machine can be operated.

MATRIS reports on your efficiency
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. Maximize machine and operator performance, while reducing maintenance costs and increasing 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.

Why does Volvo use quality parts, components and fabrication throughout the EC180C? It’s because a Volvo excavator built with quality lasts and lasts. Mud, rock and water are no match. Your Volvo EC180C is built for strength, protection and endurance. Roll on to the jobsite and tear through your work. From the first turn of the key on day one until you set the bucket down at the close of a job years later, you’re working with reliability. You’re working with Volvo. You’re working with a partner you can trust. Volvo knows that still means something.
• Lifetime greased and sealed track link.

• Volvo is the partner you can grow with.

• Optional protected arm with reinforced strip.
MORE OPTIONS FOR MORE OF WHAT YOU WANT – PROFITS.

It’s a custom-fit world, so why should your excavator be any different? We offer a wide variety of optional equipment choices that will make your Volvo EC180C the perfect moneymaker. Add some extra protection or make those 12-hour shifts a little more productive with some additional comfort features. Your options are open. Take your pick.

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. Choose between 1 or 2 pump flow for best performance.

Hydraulic quick fit
A Volvo hydraulic quick fit makes changing attachments quick and easy – all from the comfort and safety of the cab. Three different Volvo quick fit types (S1, S6, U16) are available to fit new and existing customer’s buckets/attachments, making it very user friendly.

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

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-suspended models, provide excellent support and are individually adjustable to suit operator preferences.

Diesel-driven engine coolant heater
The diesel-driven engine coolant heater aids low temperature starting, while simultaneously warming the cab. Heating time duration can be adjusted, set and programmed in advance to engage at a specific date and time.

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.

Straight travel pedal
A pedal located by the left foot rest operates two 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.

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

<table>
<thead>
<tr>
<th>Hydraulic kits</th>
<th>Wrist control joysticks - proportional control</th>
<th>FOG and FOPS cab protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydraulic quick fit</td>
<td>Operator seats</td>
<td>Straight travel pedal</td>
</tr>
<tr>
<td>Extra work lights</td>
<td>Diesel-driven engine coolant heater</td>
<td>Boom float function</td>
</tr>
</tbody>
</table>

**NOTE:** Some features listed as optional equipment are standard equipment in some markets. Some equipment features listed are not available in all markets. Not a complete list of available optional equipment features. See included specification sheet for a complete listing.
### Specifications

#### Engine

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 EU Stage IIIA compliant engine uses precise, high-pressure fuel injectors, turbo charger and air to air intercooler and electronic engine controls to optimize machine performance.

<table>
<thead>
<tr>
<th>Engine</th>
<th>Volvo D6E EBE3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. power, at 32 V/s</td>
<td>1 800 rpm</td>
</tr>
<tr>
<td>Net (ISO 9249, SAE J1249)</td>
<td>87 kW (118 metric hp)</td>
</tr>
<tr>
<td>Gross (SAE J1995)</td>
<td>98 kW (133 metric hp)</td>
</tr>
<tr>
<td>Max. torque at 1 350 rpm</td>
<td>625 Nm</td>
</tr>
<tr>
<td>No. of cylinders</td>
<td>6</td>
</tr>
<tr>
<td>Displacement</td>
<td>5.7 l</td>
</tr>
<tr>
<td>Bore</td>
<td>98 mm</td>
</tr>
<tr>
<td>Stroke</td>
<td>126 mm</td>
</tr>
</tbody>
</table>

#### 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.

| Voltage | 24 V |
| Batteries | 2 x 12 V |
| Battery capacity | 140 Ah |
| Alternator | 28 V / 80 A |

#### Service refill capacities

| Fuel tank | 250 l |
| Hydraulic system, total | 265 l |
| Engine oil | 123 l |
| Engine coolant | 24 l |
| Swing reduction unit | 26 l |
| Travel reduction unit | 2 x 5,8 l |

#### 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 | 11.9 rpm |
| Max. swing torque | 51.7 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.

| Max. drawbar pull | 159 kN |
| Max. travel speed | 2,7/5,3 km/h |
| Gradeability | 35° |

### Undercarriage

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

- **Track pads**: 2 x 46
- **Link pitch**: 190 mm
- **Shoe width, triple grouser**: 600/700/800/900 mm
- **Bottom rollers**: 2 x 7
- **Top rollers**: 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.
- **Swing priority**: Gives priority to swing functions for faster simultaneous operations.

#### Relief valve setting:

- **Implement**: 32.4/34.3 MPa
- **Travel circuit**: 34.3 MPa
- **Swing circuit**: 26.5 MPa
- **Pilot circuit**: 3.9 MPa

#### Hydraulic cylinders:

- **Mono boom**: 2
  - Bore x Stroke: ø115 x 1 165 mm
  - 1st boom of 2-piece boom: 2
  - Bore x Stroke: ø115 x 1 165 mm
  - 2nd boom of 2-piece boom: ø160 x 950 mm
- **Arm**: 1
  - Bore x Stroke: ø120 x 1 345 mm
- **Bucket**: 1
  - Bore x Stroke: ø105 x 1 000 mm

#### Cab

The new-design Volvo Care Cab, with operator protective structure provides security, along with more interior space, leg room and foot space. Audio system with remote control. Cup holders, 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 16.3 cm (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.

#### Sound Level:

- **Sound level in cab according to ISO 6396**: LpA 70 dB(A)
- **External sound level according to ISO 6395 and EU Directive 2000/14/EC**: Lwa 101 dB(A)
### Ground pressure

- **EC180C L** with 5.2 m boom, 2.6 m arm, 690 l (470 kg) bucket, 3 200 kg counterweight

<table>
<thead>
<tr>
<th>Description</th>
<th>Shoe width</th>
<th>Operating weight (up to)</th>
<th>Ground pressure</th>
<th>Overall width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triple grouser</td>
<td>600 mm</td>
<td>18 300 kg</td>
<td>40.9 kPa</td>
<td>2 800 mm</td>
</tr>
<tr>
<td></td>
<td>700 mm</td>
<td>18 700 kg</td>
<td>35.9 kPa</td>
<td>2 900 mm</td>
</tr>
<tr>
<td></td>
<td>800 mm</td>
<td>19 000 kg</td>
<td>32.4 kPa</td>
<td>3 000 mm</td>
</tr>
<tr>
<td></td>
<td>900 mm</td>
<td>19 200 kg</td>
<td>29.4 kPa</td>
<td>3 200 mm</td>
</tr>
</tbody>
</table>

### Max. permitted buckets

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.

- **EC180C L** with 3 200 kg counterweight

<table>
<thead>
<tr>
<th>Description</th>
<th>Max. bucket volume / weight</th>
<th>5.2 m boom, direct fit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.3 m arm</td>
</tr>
<tr>
<td>GP bucket 1.5 t/m³</td>
<td>1 / kg</td>
<td>1 225 / 1 000</td>
</tr>
<tr>
<td>GP bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>1 075 / 900</td>
</tr>
<tr>
<td>HD bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>1 025 / 1 000</td>
</tr>
<tr>
<td>HD bucket 2.0 t/m³</td>
<td>1 / kg</td>
<td>950 / 950</td>
</tr>
</tbody>
</table>

- **EC180C L** with 3 200 kg counterweight

<table>
<thead>
<tr>
<th>Description</th>
<th>Max. bucket volume / weight</th>
<th>5.2 m boom, quick fit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2.3 m arm</td>
</tr>
<tr>
<td>GP bucket 1.5 t/m³</td>
<td>1 / kg</td>
<td>1 100 / 950</td>
</tr>
<tr>
<td>GP bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>975 / 800</td>
</tr>
<tr>
<td>HD bucket 1.8 t/m³</td>
<td>1 / kg</td>
<td>925 / 900</td>
</tr>
<tr>
<td>HD bucket 2.0 t/m³</td>
<td>1 / kg</td>
<td>875 / 850</td>
</tr>
</tbody>
</table>
Dimensions

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>5,2 m boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2,3 m arm</td>
</tr>
<tr>
<td>A. Overall width of upper structure</td>
<td>mm</td>
<td>2 490</td>
</tr>
<tr>
<td>B. Overall width</td>
<td>mm</td>
<td>2 800</td>
</tr>
<tr>
<td>C. Overall height of cab</td>
<td>mm</td>
<td>2 900</td>
</tr>
<tr>
<td>D. Tail swing radius</td>
<td>mm</td>
<td>2 550</td>
</tr>
<tr>
<td>E. Overall height of engine hood</td>
<td>mm</td>
<td>2 110</td>
</tr>
<tr>
<td>F. Counterweight clearance *</td>
<td>mm</td>
<td>1 042</td>
</tr>
<tr>
<td>G. Tumbler length</td>
<td>mm</td>
<td>3 370</td>
</tr>
<tr>
<td>H. Track length</td>
<td>mm</td>
<td>4 166</td>
</tr>
<tr>
<td>I. Track gauge</td>
<td>mm</td>
<td>2 200</td>
</tr>
<tr>
<td>J. Shoe width</td>
<td>mm</td>
<td>600</td>
</tr>
<tr>
<td>K. Min. ground clearance *</td>
<td>mm</td>
<td>460</td>
</tr>
<tr>
<td>L. Overall length</td>
<td>mm</td>
<td>8 880</td>
</tr>
<tr>
<td>L'. Overall length</td>
<td>mm</td>
<td>8 700</td>
</tr>
<tr>
<td>M. Overall height of boom</td>
<td>mm</td>
<td>2 990</td>
</tr>
<tr>
<td>M'. Overall height of boom</td>
<td>mm</td>
<td>2 800</td>
</tr>
</tbody>
</table>

* Without shoe grouser
**Description** | **Unit** | **5,2 m** | **5,0 m 2-piece**
---|---|---|---
Length | mm | 5 400 | 5 200
Height | mm | 1 640 | 1 270
Width | mm | 565 | 565
Weight | kg | 1 350 | 1 600

* Includes arm cylinder, piping and pin

**Description** | **Unit** | **2,3 m** | **2,6 m** | **3,0 m**
---|---|---|---|---
Length | mm | 3 240 | 3 500 | 3 900
Height | mm | 855 | 955 | 845
Width | mm | 395 | 395 | 395
Weight | kg | 760 | 776 | 840

* Includes bucket cylinder, linkage and pin
Machine with direct fit bucket | Unit | 5.2 m boom
--- | --- | --- | ---
| | 2.3 m arm | 2.6 m arm | 3.0 m arm
A. Max. digging reach | mm | 8 650 | 8 970 | 9 340
B. Max. digging reach on ground | mm | 8 480 | 8 800 | 9 180
C. Max. digging depth | mm | 5 710 | 6 010 | 6 410
D. Max. digging depth (2.44 m level) | mm | 5 400 | 5 740 | 6 170
E. Max. vertical wall digging depth | mm | 4 040 | 4 510 | 4 930
F. Max. cutting height | mm | 8 560 | 8 820 | 9 030
G. Max. dumping height | mm | 6 140 | 6 370 | 6 570
H. Min. front swing radius | mm | 3 070 | 3 070 | 3 070

Digging forces with direct fit bucket | Unit | 5.2 m boom
--- | --- | --- | ---
| | 2.3 m arm | 2.6 m arm | 3.0 m arm
Bucket radius | mm | 1 315 | 1 315 | 1 315
Breakout force - bucket (Normal/Power boost) | SAE J1179 kN | 99.2 / 105.2 | 99.2 / 105.2 | 99.2 / 105.2
| ISO 6015 kN | 111.3 / 118.1 | 111.3 / 118.1 | 111.3 / 118.1
Tearout force - arm (Normal/Power boost) | SAE J1179 kN | 84.9 / 90.1 | 75.5 / 80.0 | 68.4 / 72.6
| ISO 6015 kN | 87.3 / 92.5 | 77.4 / 82.1 | 69.9 / 74.1
Rotation angle, bucket | deg. | 174 | 174 | 174
<table>
<thead>
<tr>
<th>Machine with direct fit bucket</th>
<th>Unit</th>
<th>5,0 m 2-piece boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2,3 m arm</td>
</tr>
<tr>
<td>A. Max. digging reach</td>
<td>mm</td>
<td>8 550</td>
</tr>
<tr>
<td>B. Max. digging reach on ground</td>
<td>mm</td>
<td>8 370</td>
</tr>
<tr>
<td>C. Max. digging depth</td>
<td>mm</td>
<td>5 180</td>
</tr>
<tr>
<td>D. Max. digging depth (2,44 m level)</td>
<td>mm</td>
<td>5 060</td>
</tr>
<tr>
<td>E. Max. vertical wall digging depth</td>
<td>mm</td>
<td>4 040</td>
</tr>
<tr>
<td>F. Max. cutting height</td>
<td>mm</td>
<td>9 540</td>
</tr>
<tr>
<td>G. Max. dumping height</td>
<td>mm</td>
<td>6 950</td>
</tr>
<tr>
<td>H. Min. front swing radius</td>
<td>mm</td>
<td>2 290</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Digging forces with direct fit bucket</th>
<th>Unit</th>
<th>5,0 m 2-piece boom</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2,3 m arm</td>
</tr>
<tr>
<td>Bucket radius</td>
<td>mm</td>
<td>1 315</td>
</tr>
<tr>
<td>Breakout force - bucket (Normal/Power boost)</td>
<td></td>
<td>SAE J1179</td>
</tr>
<tr>
<td></td>
<td>kN</td>
<td>ISO 6015</td>
</tr>
<tr>
<td>Tearout force - arm (Normal/Power boost)</td>
<td></td>
<td>SAE J1179</td>
</tr>
<tr>
<td></td>
<td>kN</td>
<td>ISO 6015</td>
</tr>
<tr>
<td>Rotation angle, bucket</td>
<td>deg</td>
<td>174</td>
</tr>
</tbody>
</table>
# 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.

• **EC180C L**

<table>
<thead>
<tr>
<th>Across under-carryage</th>
<th>Lifting hook related to ground level</th>
<th>1.5 m</th>
<th>3.0 m</th>
<th>4.5 m</th>
<th>6.0 m</th>
<th>7.5 m</th>
<th>Max. reach</th>
<th>Max. mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boom 5,2 m + Arm 2.3 m + Shoe 600 mm + Counterweight 3,200 kg</td>
<td>Boom 5,2 m</td>
<td>7,5 m kg</td>
<td>6,0 m kg</td>
<td>4,5 m kg</td>
<td>3,0 m kg</td>
<td>1,5 m kg</td>
<td>0.0 kg</td>
<td>-1,5 m kg</td>
</tr>
<tr>
<td></td>
<td>Arm 2.3 m</td>
<td>4,670</td>
<td>6,180</td>
<td>7,730</td>
<td>9,902</td>
<td>12,280</td>
<td>7,990</td>
<td>8,440</td>
</tr>
<tr>
<td></td>
<td>Shoe 600 mm</td>
<td>4,670</td>
<td>5,810</td>
<td>5,470</td>
<td>5,300</td>
<td>2,520</td>
<td>5,200</td>
<td>5,810</td>
</tr>
<tr>
<td></td>
<td>Counterweight 3,200 kg</td>
<td>3,830</td>
<td>4,900</td>
<td>3,680</td>
<td>3,570</td>
<td>3,530</td>
<td>3,970</td>
<td>4,380</td>
</tr>
</tbody>
</table>

| Boom 5,2 m + Arm 2.6 m + Shoe 600 mm + Counterweight 3,200 kg | Boom 5,2 m | 7,5 m kg | 6,0 m kg | 4,5 m kg | 3,0 m kg | 1,5 m kg | 0.0 kg | -1,5 m kg |
| | Arm 2.6 m | 9,840 | 8,810 | 5,470 | 5,300 | 5,150 | 5,100 | 5,150 |
| | Shoe 600 mm | 9,840 | 8,810 | 5,470 | 5,300 | 5,150 | 5,100 | 5,150 |
| | Counterweight 3,200 kg | 3,970 | 3,970 | 3,680 | 3,570 | 3,530 | 3,570 | 3,970 |

| Boom 5,2 m + Arm 3.0 m + Shoe 600 mm + Counterweight 3,200 kg | Boom 5,2 m | 7,5 m kg | 6,0 m kg | 4,5 m kg | 3,0 m kg | 1,5 m kg | 0.0 kg | -1,5 m kg |
| | Arm 3.0 m | 7,990 | 8,020 | 8,220 | 8,020 | 8,020 | 8,020 | 8,020 |
| | Shoe 600 mm | 7,990 | 8,020 | 8,020 | 8,020 | 8,020 | 8,020 | 8,020 |

Notes:
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 1.5 m

<table>
<thead>
<tr>
<th>Max. mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,970</td>
</tr>
<tr>
<td>4,380</td>
</tr>
<tr>
<td>4,830</td>
</tr>
<tr>
<td>6,050</td>
</tr>
<tr>
<td>6,755</td>
</tr>
</tbody>
</table>

### Lifting capacity 3.0 m

<table>
<thead>
<tr>
<th>Max. mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,970</td>
</tr>
<tr>
<td>4,380</td>
</tr>
<tr>
<td>4,830</td>
</tr>
<tr>
<td>6,050</td>
</tr>
<tr>
<td>6,755</td>
</tr>
</tbody>
</table>

### Lifting capacity 4.5 m

<table>
<thead>
<tr>
<th>Max. mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,830</td>
</tr>
<tr>
<td>5,370</td>
</tr>
<tr>
<td>6,050</td>
</tr>
<tr>
<td>6,755</td>
</tr>
</tbody>
</table>

### Lifting capacity 6.0 m

<table>
<thead>
<tr>
<th>Max. mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,830</td>
</tr>
<tr>
<td>5,370</td>
</tr>
<tr>
<td>6,050</td>
</tr>
<tr>
<td>6,755</td>
</tr>
</tbody>
</table>

### Lifting capacity 7.5 m

<table>
<thead>
<tr>
<th>Max. mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,830</td>
</tr>
<tr>
<td>5,370</td>
</tr>
<tr>
<td>6,050</td>
</tr>
<tr>
<td>6,755</td>
</tr>
</tbody>
</table>

---

### Notes:

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.
STANDARD EQUIPMENT

Engine
- Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage IIIA requirements
- Air filter with indicator
- Air intake heater
- Electric engine shut-off
- Cyclone pre-cleaner
- Fuel filter and water separator
- Fuel filler pump: 50 l/min, with automatic shut-off
- 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
  - Cab-mounted 2
- Batteries, 2 x 12 V / 140 Ah
- Start motor, 24 V / 4.8 kW

Hydraulic system
- Hose rupture valve: boom
- Automatic sensing hydraulic system
  - Summation system
  - Boom priority
  - Arm priority
  - Swing priority
- Boom, arm and bucket regeneration valves
- Swing anti-rebound valves
- Boom and arm holding valves
- Multi-stage filtering system
- Cylinder cushioning
- Cylinder contamination seals
- Auxiliary hydraulic valve
- Automatic two-speed travel motors
- Long life hydraulic oil, mineral 46

Superstructure
- Access way with handrail
- Tool storage area
- Punched metal anti-slip plates
- Undercover (HD 4.5 mm)

Cab and interior
- Control joysticks with 4 switches each
- Heater & air-conditioner, automatic
- Hydraulic dampening cab mounts
- Adjustable operator seat and joystick control console
- Flexible antenna
- AM/FM stereo with CD player and MP3 input
- Hydraulic safety lock lever

Cab, all-weather sound suppressed, includes:
- Cup holders
- Door locks
- Tinted glass
- Floor mat
- Horn
- Large storage area
- Pull-up type front window
- Removable lower windshield
- Seat belt
- Safety glass
- Sun screens, front, roof, rear
- Rain shield
- Windshield wiper with intermittent feature
- Anti-vandalism kit assembly preparation
- Rear view camera
- Master key

Undercarriage
- Hydraulic track adjusters
- Greased and sealed track chain
- Track guard

Digging equipment
- Manual centralized lubrication
- CareTrack

OPTIONAL EQUIPMENT

Engine
- Block heater: 120 V, 240 V
- Oil bath pre-cleaner
- Rain cap
- Diesel driven coolant heater, 5 kW
- Water separator with heater
- Reversible cooling fan

Electric
- Extra lights:
  - Cab-mounted 3
  - Counterweight-mounted 1
  - Boom-mounted 1
- Travel alarm
- Anti-theft system
- Overload warning device
- Rotating warning beacon

Hydraulic system
- Hose rupture valve: arm
- Boom float function
- Hydraulic piping:
  - Work tool management system
    (up to 20 programmable memories)
  - Hammer & shear, 1 and 2 pump flow
  - Hammer & shear: variable flow and pressure pre-setting

Engine
- Block heater: 120 V, 240 V
- Oil bath pre-cleaner
- Rain cap
- Diesel driven coolant heater, 5 kW
- Water separator with heater
- Reversible cooling fan

Electric
- Extra lights:
  - Cab-mounted 3
  - Counterweight-mounted 1
  - Boom-mounted 1
- Travel alarm
- Anti-theft system
- Overload warning device
- Rotating warning beacon

Hydraulic system
- Hose rupture valve: arm
- Boom float function
- Hydraulic piping:
  - Work tool management system
    (up to 20 programmable memories)
  - Hammer & shear, 1 and 2 pump flow
  - Hammer & shear: variable flow and pressure pre-setting

Cab and interior
- Fabric seat
- Fabric seat with heater
- Fabric seat with heater and air suspension
- Control joystick with proportional control
- Cab-mounted falling object guard (FOG)
- Cab-mounted falling object protective structure (FOPS)
- Screen guard for front window
- Lower wiper with intermittent control
- Anti-vandalism kit
- Opening top hatch
- Specific key
- Smoker kit

Undercarriage
- Undercover (HD 10 mm)

Track shoes
- Track shoes 600/700/800/900 mm with triple grousers
- 5.2 m monoblock
- Arm: 2.3 / 2.6 / 3.0 m
- Linkage with lifting eye
- Auto lubrication system

Service
- Tool kit, daily maintenance
- Tool kit, full scale

Standard and optional equipment may vary by market. Please consult your local Volvo dealer for details.
Volvo Construction Equipment is different. Our machines are designed, built and supported in a different way. That difference comes from an engineering heritage of over 175 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.