



Volvo Construction Equipment

EC140D

Volvo Excavators 12.8-16.7 t 105 hp



Do more and increase profit

Make more profit with the EC140D. This machine's reliability and durability increases your uptime allowing you to keep working and earning. With outstanding fuel efficiency and power for excellent productivity, it allows you to work faster and get more done.

ECO mode

Work efficiently and profitably with Volvo's intelligent ECO mode. This feature contributes to the machine's total improved fuel efficiency –without any loss of performance. The design optimizes flow and pressure while maintaining digging power and swing torque. Choose the right work setting for the job at hand.



Durability

Deliver a strong performance shift after shift, day after day. Built with durable components, the robust superstructure, undercarriage and boom and arm, will help you to achieve the best results in all applications.



Reliability

Quality, long lasting components and the machine's design increases uptime as well as profits. The EC120D/EC140D has a robust structure and parts ensure it's reliable on your job site so you can depend on your machine to perform and work hard.



Serviceability

The EC140D is built to ensure servicing is safe, quick and easy, featuring anti-slip plates, ground-level service access and centralized filters and greasing points. Long service intervals enhance machine availability and increase uptime for maximum productivity.





OUTSTANDING FUEL EFFICIENCY



Reduce fuel consumption, increase profitability and deliver higher productivity with the EC140D, featuring best-in-class fuel efficiency. The powerful engine works in harmony with the optimized hydraulics and machine auto-idle function for lower fuel consumption.



SUPERIOR MACHINE PERFORMANCE



The EC140D is designed to help you do more. This excavator delivers a strong, versatile performance in a wide range of applications. A robust frame combines with excellent engine power and hydraulic system to provide superior digging forces and fast cycle times for first-rate productivity in all operations.

Outperform your competition

The EC140D has outstanding power and controllability for a star performance. Superior digging power and machine stability results in faster cycle times and increased productivity.

Efficient new work mode

For fast cycle times and optimum fuel consumption, the EC140D is equipped with intelligent work modes, including the new G4 work mode. Operators can choose the best mode to suit the task at hand, selecting from I (Idle), F (Fine), G (General), H (Heavy) and P (Power max) mode. Choose the correct mode according to your working conditions for added versatility and increased performance.



Operator performance

Operate in a comfortable cab for a more productive working day. The EC140D has a premium cab equipped with an easy-to-view monitor, spacious and safe operator environment, offering enhanced all-around visibility, an adjustable seat and ergonomic controls.



Powerful Volvo engine

The engine boasts the best power and performance in its class, and its effective cooling capacity increases its longevity and performance.



Machine stability

Improve your stability and work in more challenging environments with the machine's long, wide undercarriage and heavy counterweight for a well-balanced and solid machine when operating in all terrains.



One machine for many jobs

Volvo offers a wide range of attachment combinations that are suitable for any job site. Volvo attachments are an integrated part of the excavator for which they are intended – delivering maximum productivity and versatility.

Quality Volvo buckets

Volvo's General Purpose bucket is ideal for digging in low impact materials such as soft ground and comes with a standard GP tooth and lifting hook. The Volvo Heavy-Duty bucket is heavier and more robust with a rigid top structure and double wear shrouds on each side of the bucket. It is thicker for aggressive digging and bucket loading, and the RC tooth comes as standard.



Breakers

Volvo's durable hydraulic breaker has been designed for ultimate compatibility with Volvo excavators and is built to break even the most demanding materials. With consistent power and high breaking force you'll benefit from maximum impact and durability. Set your Volvo breaker at the right frequency to suit your application needs.



Attachment Management System

The password protected attachment management system allows storage for up to 20 different attachments. The system allows the operator to pre-set hydraulic flow inside the cab through the monitor, which ensures the use of various attachments for increased versatility.



Optional auxiliary piping

The Volvo-designed hydraulic breaker/shear piping and quick coupler piping option provides optimum flow to the hydraulic attachments. State-of-the-art auxiliary lines allow the correct flow and pressure for special attachments.





A VERSATILE MACHINE



Access more applications and efficiently perform a variety of tasks with Volvo's extensive attachment range. The EC140D is compatible with a selection of robust buckets, breakers and piping options that allow you to adapt to any job with ease.

A valued performance

A VERSATILE MACHINE



Access more applications and efficiently perform a variety of tasks with Volvo's extensive attachment range.

Operator performance

The EC140D's premium cab is equipped with an easy-to-view monitor and features a spacious and safe operator environment.

Durability

Robust superstructure, undercarriage and boom and arm, helps to achieve the best results.

Reliability

The machine's durable components and parts ensure it's reliable on your job site.



SUPERIOR MACHINE PERFORMANCE



This excavator delivers a strong, versatile performance in a wide range of applications.

Serviceability

Built to ensure servicing is safe, quick and easy, featuring anti-slip plates, ground-level service access, centralized filters and greasing points.

ECO mode

This feature contributes to the machine's total improved fuel efficiency – without any loss of performance.

OUTSTANDING FUEL EFFICIENCY



Reduce fuel consumption, increase profitability and deliver higher productivity.

Efficient new work mode

For fast cycle times and optimum fuel consumption, the EC140D is equipped with intelligent work modes.

Powerful Volvo engine

The engine boasts the best power and performance in its class.

Machine stability

A well-balanced and solid machine when operating in all terrains with the machine's long, wide undercarriage and heavy counterweight.

CUSTOMER SUPPORT AGREEMENTS



Customer Support Agreements offer preventive maintenance, total repairs and a number of uptime services.

Adding value to your business

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



Complete Solutions

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



Genuine Volvo Parts

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



Service Network

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



CareTrack

CareTrack is the state-of-the-art Volvo telematics system that provides access to a wide range of machine monitoring information designed to save time and money. Proactively manage service and maintenance schedules, optimize machine and operator performance and reduce fuel costs with CareTrack.





CUSTOMER SUPPORT AGREEMENTS



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

Volvo EC140D in detail

Engine

The engine, which provide excellent performance, is equipped with four cylinder, vertical, electronic-controlled high pressure fuel injectors, 3.8 liter in-line waste gate turbo charger, air-to-air intercooler and water cooled diesel engine type.

| | | |
|----------------------------|-------|-------|
| Engine | Volvo | D3.8F |
| Max power at | r/min | 2 200 |
| Net, ISO 9249/SAE J1349 | kW | 73.3 |
| | hp | 100 |
| Gross, ISO 14396/SAE J1995 | kW | 77.4 |
| | hp | 105 |
| Max torque | Nm | 369.5 |
| at engine speed | r/min | 1 500 |
| No. of cylinders | | 4 |
| Displacement | l | 3.77 |
| Bore | mm | 100 |
| Stroke | mm | 120 |

Electrical System

Well protected high-capacity electrical system. Waterproof double-lock connectors are used to ensure corrosion-free connection. Main relays and fuses are located in a shielded electrical distribution box. The master switch is standard. Advanced monitoring of machine functions and important diagnostic information is displayed on the I-ECU.

| | | |
|------------------|--------|----------|
| Voltage | V | 24 |
| Batteries | V | 2 x 12 |
| Battery capacity | Ah | 100 |
| Alternator | V/Ah | 28/80 |
| Start motor | V - kW | 24 - 3.2 |

Swing System

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

| | | |
|------------------|-------|------|
| Max. slew speed | r/min | 11.2 |
| Max. slew torque | kNm | 30.2 |

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.

EC140DL

| | | |
|--------------------------|------|-----|
| Max. drawbar pull | kN | 119 |
| Max. travel speed (low) | km/h | 2.9 |
| Max. travel speed (high) | km/h | 5.2 |
| Gradeability | ° | 35 |

EC140DLM

| | | |
|--------------------------|------|-----|
| Max. drawbar pull | kN | 137 |
| Max. travel speed (low) | km/h | 2.5 |
| Max. travel speed (high) | km/h | 4.4 |
| Gradeability | ° | 35 |

Undercarriage

Robust X-shaped frame with greased and sealed track chains as standard.

EC140DL

| | | |
|---------------------------------|----|-----------------|
| Track shoe | | 2 x 46 |
| Link pitch | mm | 171.5 |
| Shoe width, triple grouser | mm | 500 / 600 / 750 |
| Shoe width, triple grouser (HD) | mm | 600 / 700 |
| Bottom rollers | | 2 x 7 |
| Top rollers | | 2 x 12 |

EC140DLM

| | | |
|----------------------------|----|-----------------------|
| Track shoe | | 2 x 42 |
| Link pitch | mm | 190 |
| Shoe width, triple grouser | mm | 600 / 700 / 800 / 900 |
| Shoe width, single grouser | mm | 900 |
| Bottom rollers | | 2 x 6 |
| Top rollers | | 2 x 2 |

Hydraulic System

The electro-hydraulic system and MCV (main control valve) use intelligent technology to control on-demand flow for high productivity, high-digging capacity and excellent fuel economy. The summation system, boom, arm and swing priority along with boom and arm 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, 2 x variable displacement axial piston pumps

| | | |
|--------------|-------|---------|
| Maximum flow | l/min | 2 x 118 |
|--------------|-------|---------|

Pilot pump, Gear pump

| | | |
|--------------|-------|--------|
| Maximum flow | l/min | 1 x 22 |
|--------------|-------|--------|

Relief value setting pressure

| | | |
|-----------|-----|-------------|
| Implement | MPa | 32.4 / 34.3 |
|-----------|-----|-------------|

| | | |
|----------------|-----|------|
| Travel circuit | MPa | 34.3 |
|----------------|-----|------|

| | | |
|--------------|-----|------|
| Slew circuit | MPa | 24.5 |
|--------------|-----|------|

| | | |
|---------------|-----|-----|
| Pilot circuit | MPa | 3.9 |
|---------------|-----|-----|

Hydraulic Cylinders

| | | |
|-----------|--|---|
| Mono boom | | 2 |
|-----------|--|---|

| | | |
|---------------|--------|-----------|
| Bore x Stroke | ø x mm | 105 x 980 |
|---------------|--------|-----------|

| | | |
|-----|--|---|
| Arm | | 1 |
|-----|--|---|

| | | |
|---------------|--------|-------------|
| Bore x Stroke | ø x mm | 120 x 1 045 |
|---------------|--------|-------------|

| | | |
|--------|--|---|
| Bucket | | 1 |
|--------|--|---|

| | | |
|---------------|--------|-----------|
| Bore x Stroke | ø x mm | 100 x 865 |
|---------------|--------|-----------|

| | | |
|-------------|--|---|
| Dozer blade | | 1 |
|-------------|--|---|

| | | |
|---------------|--------|-----------|
| Bore x Stroke | ø x mm | 130 x 270 |
|---------------|--------|-----------|

Service Refill

| | | |
|-----------|---|-----|
| Fuel tank | l | 250 |
|-----------|---|-----|

| | | |
|-------------------------|---|-----|
| Hydraulic system, total | l | 230 |
|-------------------------|---|-----|

| | | |
|----------------|---|----|
| Hydraulic tank | l | 85 |
|----------------|---|----|

| | | |
|------------|---|------|
| Engine oil | l | 13.2 |
|------------|---|------|

| | | |
|----------------|---|------|
| Engine coolant | l | 22.3 |
|----------------|---|------|

| | | |
|---------------------|---|-----|
| Slew reduction unit | l | 3.9 |
|---------------------|---|-----|

| | | |
|----------------------------|---|---------|
| Travel reduction unit (LC) | l | 2 x 2.2 |
|----------------------------|---|---------|

| | | |
|----------------------------|---|---------|
| Travel reduction unit (LM) | l | 2 x 5.8 |
|----------------------------|---|---------|

Cab

The Volvo cab features a brand new Volvo styling including a strong cab structure, slim pillars and a large glass area for good visibility, a spacious cab, an ergonomic switch layout, efficient air ventilation and a pressurized cab.

Sound Level

Sound level in cab according to ISO 6396

| | | |
|-----|-------|----|
| LpA | dB(A) | 70 |
|-----|-------|----|

External sound level according to ISO 6395 and EU Noise Directive (2000/14/EC)

| | | |
|-----|-------|-----|
| LwA | dB(A) | 101 |
|-----|-------|-----|

Specifications

| MACHINE WEIGHTS AND GROUND PRESSURE | | | | | | | |
|-------------------------------------|------------|--|------|-----------------|--|---------------|-------|
| Description | Shoe width | Operating weight | | Ground pressure | | Overall width | |
| Units | mm | kg | | kPa | | mm | |
| | | EC140DL, 4.6m boom, 2.5m arm, 0.52m ³ / 543kg bucket, 2 100kg counterweight | | | EC140DL, 4.6m boom, 2.5m arm, 0.52m ³ / 543kg bucket, 2 450kg counterweight | | |
| Triple grouser | 500 | 13 530 | 40.2 | 2 490 | 13 880 | 41.2 | 2 490 |
| | 600 | 13 730 | 34.3 | 2 590 | 14 080 | 35.3 | 2 590 |
| | 750 | 14 110 | 28.4 | 2 740 | 14 460 | 28.4 | 2 740 |
| Triple grouser, HD | 600 | 13 800 | 34.3 | 2 590 | 14 150 | 35.3 | 2 590 |
| | 700 | 14 010 | 29.4 | 2 690 | 14 360 | 30.4 | 2 690 |
| | | EC140DL with dozer blade, 4.6m boom, 2.5m arm, 0.52m ³ / 543kg bucket, 2100kg counterweight | | | EC140DL with dozer blade, 4.6m boom, 2.5m arm, 0.52m ³ / 543kg bucket, 2450kg counterweight | | |
| Triple grouser | 500 | 14 490 | 43.1 | 2 490 | 14 840 | 44.1 | 2 490 |
| | 600 | 14 690 | 36.3 | 2 590 | 15 040 | 37.3 | 2 590 |
| | 750 | 15 070 | 29.4 | 2 740 | 15 420 | 30.4 | 2 740 |
| Triple grouser, HD | 600 | 14 760 | 36.3 | 2 590 | 15 110 | 37.3 | 2 590 |
| | 700 | 14 970 | 31.4 | 2 690 | 15 320 | 32.4 | 2 690 |
| | | EC140DLM, 4.6m boom, 2.5m arm, 0.52m ³ / 460kg bucket, 2 100kg counterweight | | | EC140DLM, 4.6m boom, 2.5m arm, 0.52m ³ / 460kg bucket, 2 450kg counterweight | | |
| Triple grouser | 600 | 14 770 | 36.3 | 2 590 | 15 120 | 37.3 | 2 590 |
| | 700 | 14 980 | 31.4 | 2 690 | 15 330 | 32.4 | 2 690 |
| | 800 | 15 400 | 28.4 | 2 790 | 15 750 | 29.4 | 2 790 |
| | 900 | 15 650 | 25.5 | 2 890 | 16 000 | 26.5 | 2 890 |
| Triple grouser, HD | 900 | 15 720 | 26.5 | 2 890 | 16 070 | 26.5 | 2 890 |

BUCKET SELECTION GUIDE

| Bucket type | | Capacity | Cutting width | Weight | Teeth | EC140DL | | | | | |
|--------------------|-----------------|----------|---------------|--------|-------|-----------------------------------|----|----|-----------------------------------|------|------|
| | | | | | | 4.6m boom | | | | | |
| | | | | | | 600mm shoe, 2 100kg counterweight | | | 600mm shoe, 2 450kg counterweight | | |
| | | | | | | m ³ | mm | kg | EA | 2.1m | 2.5m |
| Direct fit buckets | General purpose | 0.60 | 930 | 438 | 4 | C | B | A | C | B | A |
| | | 0.75 | 1 110 | 513 | 5 | A | X | X | A | X | X |
| | | 0.52 | 1 020 | 458 | 5 | C | C | C | C | C | C |
| | | 0.64 | 1 094 | 439 | 5 | B | A | A | B | A | A |
| | Heavy duty | 0.52 | 1 040 | 542 | 5 | C | C | B | C | C | C |
| | | 0.57 | 1 115 | 564 | 5 | C | C | B | C | C | B |
| Bucket type | | Capacity | Cutting width | Weight | Teeth | EC140DL | | | | | |
| | | | | | | 4.6m boom | | | | | |
| | | | | | | 500mm shoe, 2 100kg counterweight | | | 500mm shoe, 2 450kg counterweight | | |
| | | | | | | m ³ | mm | kg | EA | 2.1m | 2.5m |
| Direct fit buckets | General purpose | 0.25 | 450 | 298 | 3 | C | C | C | C | C | C |
| | | 0.54 | 900 | 408 | 4 | C | C | C | C | C | C |
| | | 0.66 | 1 050 | 450 | 4 | C | B | A | C | C | B |
| | | 0.73 | 1 150 | 485 | 5 | B | A | X | C | B | A |
| | Heavy duty | 0.52 | 1 040 | 542 | 5 | C | C | B | C | C | C |
| | | 0.57 | 1 115 | 564 | 5 | C | C | B | C | C | B |

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

The recommendations are given as a guide only, based on typical operation conditions.

Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

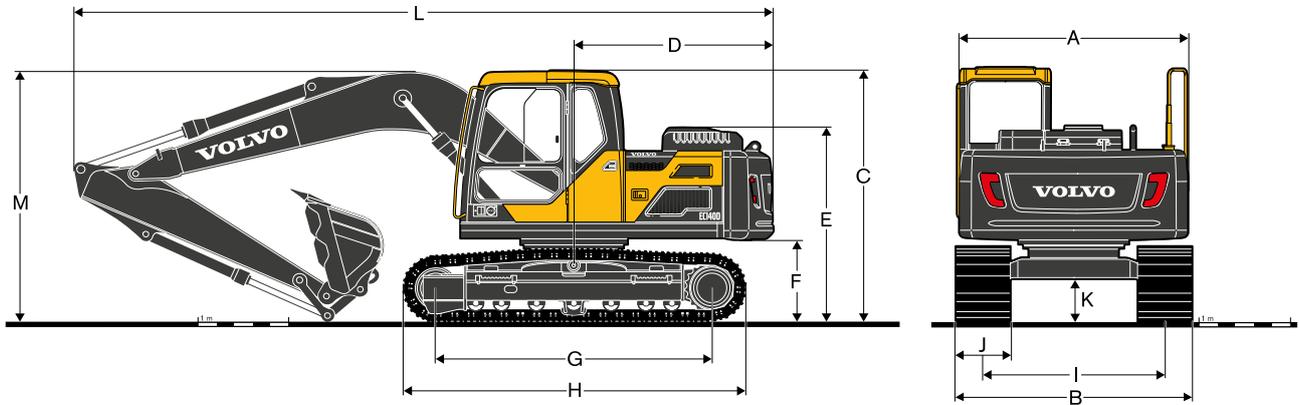
Maximum material density

| | | |
|---|-------------------------------|--|
| A | 1 200~1 300 kg/m ³ | Coal, Caliche, Shale |
| B | 1 400~1 600 kg/m ³ | Wet earth and clay, Limestone, Sandstone |
| C | 1 700~1 800 kg/m ³ | Granite, Wet sand, Well blasted rock |
| D | 1 900 kg/m ³ ~ | Wet mud, Iron ore |

X : Not recommended

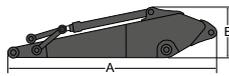
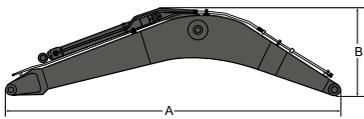
Specifications

DIMENSIONS



| Description | Unit | EC140DL | | | EC140DLM | | |
|------------------------------------|----------|------------|------------|------------|------------|------------|------------|
| Boom | m | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| Arm | m | 2.1 | 2.5 | 3.0 | 2.1 | 2.5 | 3.0 |
| A Overall width of upper structure | mm | 2 490 | 2 490 | 2 490 | 2 490 | 2 490 | 2 490 |
| B Overall width | mm | 2 590 | 2 590 | 2 590 | 2 690 | 2 690 | 2 690 |
| C Overall height of cab | mm | 2 800 | 2 800 | 2 800 | 2 980 | 2 980 | 2 980 |
| D Tail swing radius | mm | 2 200 | 2 200 | 2 200 | 2 200 | 2 200 | 2 200 |
| E Overall height of engine hood | mm | 2 170 | 2 170 | 2 170 | 2 350 | 2 350 | 2 350 |
| F Counterweight clearance * | mm | 920 | 920 | 920 | 1 113 | 1 113 | 1 113 |
| G Tumbler length | mm | 3 040 | 3 040 | 3 040 | 3 000 | 3 000 | 3 000 |
| H Track length | mm | 3 760 | 3 760 | 3 760 | 3 790 | 3 790 | 3 790 |
| I Track gauge | mm | 1 990 | 1 990 | 1 990 | 1 990 | 1 990 | 1 990 |
| J Shoe width | mm | 600 | 600 | 600 | 700 | 700 | 700 |
| K Min. ground clearance * | mm | 436 | 436 | 436 | 580 | 580 | 580 |
| L Overall length | mm | 7 720 | 7 720 | 7 650 | 7 690 | 7 720 | 7 690 |
| M Overall height of boom | mm | 2 670 | 2 800 | 3 180 | 2 730 | 2 850 | 3 160 |

* Without shoe grouser

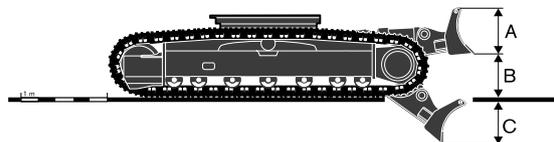


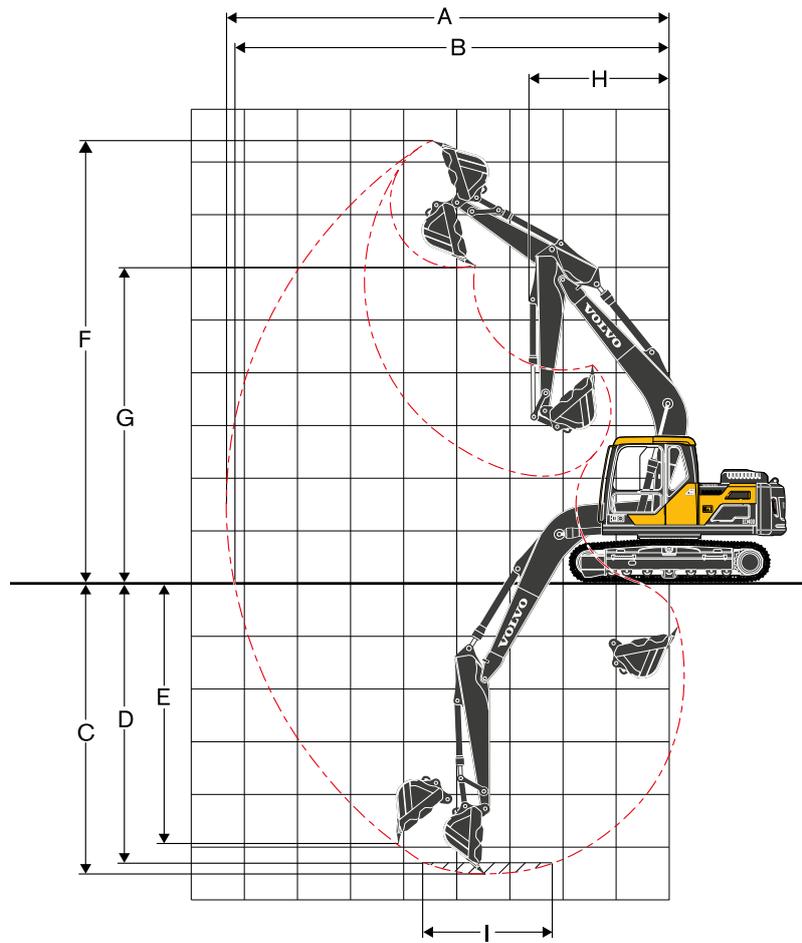
| Description | Unit | 4.6 | Description | Unit | 2.1 | 2.5 | 3.0 |
|-------------|----------|------------|-------------|----------|------------|------------|------------|
| Boom | m | 4.6 | Arm | m | 2.1 | 2.5 | 3.0 |
| A Length | mm | 4 770 | A Length | mm | 2 800 | 3 200 | 3 700 |
| B Height | mm | 1 370 | B Height | mm | 710 | 710 | 780 |
| Width | mm | 545 | Width | mm | 300 | 300 | 300 |
| Weight | kg | 1 060 | Weight | kg | 585 | 625 | 695 |

Includes cylinder, piping and pin, excludes boom cylinder pin

* Includes bucket cylinder, linkage and pin

| Description | Unit | |
|--------------------------|------|-------|
| Front dozer blade | | |
| A Height | mm | 580 |
| Width | mm | 2 590 |
| Weight | kg | 458 |
| B Lift height | mm | 480 |
| C Digging depth | mm | 600 |





WORKING RANGES

| Description | Unit | EC140DL | | | EC140DLM | | |
|-------------------------------------|----------|------------|------------|------------|------------|------------|------------|
| Boom | m | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 | 4.6 |
| Arm | m | 2.1 | 2.5 | 3.0 | 2.1 | 2.5 | 3.0 |
| A Max. digging reach | mm | 7 960 | 8 330 | 8 820 | 7 960 | 8 330 | 8 820 |
| B Max. digging reach on ground | mm | 7 820 | 8 190 | 8 680 | 7 780 | 8 160 | 8 660 |
| C Max. digging depth | mm | 5 130 | 5 530 | 6 030 | 4 960 | 5 360 | 5 860 |
| D Max. digging depth (2.44 m level) | mm | 4 870 | 5 310 | 5 850 | 4 710 | 5 140 | 5 680 |
| E Max. vertical wall digging depth | mm | 4 580 | 4 960 | 5 460 | 4 400 | 4 780 | 5 320 |
| F Max. cutting height | mm | 8 160 | 8 390 | 8 720 | 8 330 | 8 560 | 8 900 |
| G Max. dumping height | mm | 5 790 | 6 020 | 6 300 | 5 910 | 6 150 | 6 490 |
| H Min. front swing radius | mm | 2 570 | 2 630 | 2 740 | 2 570 | 2 630 | 2 740 |

DIGGING FORCES WITH DIRECT FIT BUCKET

| | | | | | | | | |
|----------------------------|-------------|-----------|---------|---------|---------|---------|---------|---------|
| Bucket radius | | mm | 1 247.5 | 1 247.5 | 1 247.5 | 1 247.5 | 1 247.5 | 1 247.5 |
| Breakout force - bucket | Normal | SAE J1179 | kN | 82.2 | 82.2 | 82.2 | 82.2 | 82.2 |
| | Power boost | SAE J1179 | kN | 87.2 | 87.2 | 87.2 | 87.2 | 87.2 |
| | Normal | ISO 6015 | kN | 92.9 | 92.9 | 92.9 | 92.9 | 92.9 |
| | Power boost | ISO 6015 | kN | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 |
| Tearout force - dipper arm | Normal | SAE J1179 | kN | 69.2 | 61.8 | 55.0 | 69.2 | 61.8 |
| | Power boost | SAE J1179 | kN | 73.4 | 65.5 | 58.3 | 73.4 | 65.5 |
| | Normal | ISO 6015 | kN | 71.4 | 63.4 | 56.2 | 71.4 | 63.4 |
| | Power boost | ISO 6015 | kN | 75.7 | 67.3 | 59.6 | 75.7 | 67.3 |
| Rotation angle, bucket | | ° | 175 | 175 | 175 | 175 | 175 | 175 |

Specifications

LIFTING CAPACITY EC140DL

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | Max. reach | | |
|---------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|-----|
| | | Along UC | Across UC | Along UC | Across UC | m |
| Boom : 4.6m | 6.0 m kg | | | | | *3 330 | *3 330 | | | | | *3 510 | 3 080 | 4.9 |
| Arm : 2.1m | 4.5 m kg | | | | | *3 480 | *3 480 | | | | | 3 450 | 2 210 | 6.0 |
| Shoe : 600mm | 3.0 m kg | | | *6 240 | 6 190 | *4 340 | 3 330 | 3 390 | 2 150 | | | 2 950 | 1 870 | 6.5 |
| CWT : 2 100kg | 1.5 m kg | | | | | 5 130 | 3 120 | 3 300 | 2 070 | | | 2 780 | 1 750 | 6.7 |
| | 0 m kg | | | *5 400 | *5 400 | 4 970 | 2 990 | 3 230 | 2 010 | | | 2 850 | 1 780 | 6.5 |
| | -1.5 m kg | *5 010 | *5 010 | *9 460 | 5 430 | 4 930 | 2 950 | | | | | 3 230 | 2 010 | 6.0 |
| | -3.0 m kg | | | *8 230 | 5 540 | 5 000 | 3 010 | | | | | 4 390 | 2 690 | 4.9 |
| Boom : 4.6m | 6.0 m kg | | | | | *2 840 | *2 840 | | | | | *3 220 | 2 640 | 5.4 |
| Arm : 2.5m | 4.5 m kg | | | | | *3 080 | *3 080 | *3 200 | 2 230 | | | 3 100 | 1 990 | 6.4 |
| Shoe : 600mm | 3.0 m kg | | | *5 340 | *5 340 | *3 960 | 3 370 | 3 400 | 2 160 | | | 2 700 | 1 710 | 6.9 |
| CWT : 2 100kg | 1.5 m kg | | | | | *5 090 | 3 140 | 3 300 | 2 070 | | | 2 550 | 1 600 | 7.1 |
| | 0 m kg | | | *5 960 | 5 390 | 4 970 | 2 980 | 3 210 | 1 990 | | | 2 600 | 1 620 | 6.9 |
| | -1.5 m kg | *4 550 | *4 550 | *9 620 | 5 360 | 4 890 | 2 920 | 3 180 | 1 960 | | | 2 900 | 1 800 | 6.4 |
| | -3.0 m kg | *8 930 | *8 930 | *8 700 | 5 450 | 4 930 | 2 950 | | | | | 3 730 | 2 300 | 5.4 |
| Boom : 4.6m | 7.5 m kg | | | | | | | | | | | *2 880 | *2 880 | 4.5 |
| Arm : 3.0m | 6.0 m kg | | | | | | | *2 880 | 2 250 | | | *2 820 | 2 220 | 6.0 |
| Shoe : 600mm | 4.5 m kg | | | | | | | *2 790 | 2 250 | | | *2 650 | 1 740 | 6.9 |
| CWT : 2 100kg | 3.0 m kg | | | | | *3 450 | 3 420 | *3 150 | 2 170 | | | 2 410 | 1 520 | 7.4 |
| | 1.5 m kg | | | *7 350 | 5 800 | *4 640 | 3 160 | 3 300 | 2 060 | 2 330 | 1 450 | 2 290 | 1 430 | 7.6 |
| | 0 m kg | | | *6 510 | 5 380 | 4 960 | 2 960 | 3 190 | 1 970 | | | 2 330 | 1 440 | 7.4 |
| | -1.5 m kg | *3 990 | *3 990 | *8 760 | 5 280 | 4 850 | 2 870 | 3 130 | 1 920 | | | 2 550 | 1 570 | 6.9 |
| | -3.0 m kg | *7 370 | *7 370 | *9 110 | 5 320 | 4 850 | 2 870 | 3 160 | 1 940 | | | 3 130 | 1 920 | 6.0 |
| | -4.5 m kg | | | *7 230 | 5 520 | | | | | | | *4 500 | 3 020 | 4.5 |
| Boom : 4.6m | 6.0 m kg | | | | | *3 330 | *3 330 | | | | | *3 510 | 3 280 | 4.9 |
| Arm : 2.1m | 4.5 m kg | | | | | *3 480 | *3 480 | | | | | *3 570 | 2 370 | 6.0 |
| Shoe : 600mm | 3.0 m kg | | | *6 240 | *6 240 | *4 340 | 3 560 | 3 590 | 2 310 | | | 3 130 | 2 020 | 6.5 |
| CWT : 2 450kg | 1.5 m kg | | | | | *5 400 | 3 350 | 3 500 | 2 230 | | | 2 950 | 1 890 | 6.7 |
| | 0 m kg | | | *5 400 | *5 400 | 5 280 | 3 220 | 3 430 | 2 170 | | | 3 030 | 1 930 | 6.5 |
| | -1.5 m kg | *5 010 | *5 010 | *9 460 | 5 840 | 5 230 | 3 180 | | | | | 3 440 | 2 170 | 6.0 |
| | -3.0 m kg | | | *8 230 | 5 950 | 5 310 | 3 240 | | | | | 4 660 | 2 890 | 4.9 |
| Boom : 4.6m | 6.0 m kg | | | | | *2 840 | *2 840 | | | | | *3 220 | 2 820 | 5.4 |
| Arm : 2.5m | 4.5 m kg | | | | | *3 080 | *3 080 | *3 200 | 2 390 | | | *3 160 | 2 130 | 6.4 |
| Shoe : 600mm | 3.0 m kg | | | *5 340 | *5 340 | *3 960 | 3 600 | *3 500 | 2 330 | | | 2 860 | 1 840 | 6.9 |
| CWT : 2 450kg | 1.5 m kg | | | | | *5 090 | 3 370 | 3 500 | 2 230 | | | 2 710 | 1 730 | 7.1 |
| | 0 m kg | | | *5 960 | 5 800 | 5 270 | 3 210 | 3 420 | 2 150 | | | 2 770 | 1 760 | 6.9 |
| | -1.5 m kg | *4 550 | *4 550 | *9 620 | 5 770 | 5 200 | 3 150 | 3 380 | 2 120 | | | 3 090 | 1 950 | 6.4 |
| | -3.0 m kg | *8 930 | *8 930 | *8 700 | 5 860 | 5 240 | 3 180 | | | | | 3 970 | 2 480 | 5.4 |
| Boom : 4.6m | 7.5 m kg | | | | | | | | | | | *2 880 | *2 880 | 4.5 |
| Arm : 3.0m | 6.0 m kg | | | | | | | *2 880 | 2 410 | | | *2 820 | 2 380 | 6.0 |
| Shoe : 600mm | 4.5 m kg | | | | | | | *2 790 | 2 420 | | | *2 650 | 1 870 | 6.9 |
| CWT : 2 450kg | 3.0 m kg | | | | | *3 450 | *3 450 | *3 150 | 2 330 | | | 2 570 | 1 640 | 7.4 |
| | 1.5 m kg | | | *7 350 | 6 210 | *4 640 | 3 390 | 3 500 | 2 230 | 2 480 | 1 580 | 2 440 | 1 550 | 7.6 |
| | 0 m kg | | | *6 510 | 5 790 | 5 260 | 3 190 | 3 400 | 2 130 | | | 2 480 | 1 560 | 7.4 |
| | -1.5 m kg | *3 990 | *3 990 | *8 760 | 5 680 | 5 150 | 3 100 | 3 340 | 2 080 | | | 2 720 | 1 700 | 6.9 |
| | -3.0 m kg | *7 370 | *7 370 | *9 110 | 5 730 | 5 160 | 3 100 | 3 360 | 2 100 | | | 3 330 | 2 080 | 6.0 |
| | -4.5 m kg | | | *7 230 | 5 930 | | | | | | | *4 500 | 3 250 | 4.5 |

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 EC140DLM

Lifting capacity at the arm end without bucket.

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

| | Lifting hook related to ground level | 1.5 m | | 3.0 m | | 4.5 m | | 6.0 m | | 7.5 m | | Max. reach | | m |
|---------------|--------------------------------------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|----------|-----------|------------|-----------|-----|
| | | Along UC | Across UC | Along UC | Across UC | |
| Boom : 4.6m | 6.0 m kg | | | | | *3 330 | *3 330 | | | | | *3 510 | 3 400 | 4.9 |
| Arm : 2.1m | 4.5 m kg | | | | | *3 480 | *3 480 | | | | | *3 570 | 2 460 | 6.0 |
| Shoe : 700mm | 3.0 m kg | | | *6 240 | *6 240 | *4 340 | 3 690 | 3 750 | 2 410 | | | 3 270 | 2 100 | 6.5 |
| CWT : 2 100kg | 1.5 m kg | | | | | *5 400 | 3 480 | 3 660 | 2 320 | | | 3 090 | 1 970 | 6.7 |
| | 0 m kg | | | *5 400 | *5 400 | 5 500 | 3 350 | 3 590 | 2 260 | | | 3 170 | 2 010 | 6.5 |
| | -1.5 m kg | *5 010 | *5 010 | *9 460 | 6 070 | 5 460 | 3 310 | | | | | 3 590 | 2 260 | 6.0 |
| | -3.0 m kg | | | *8 230 | 6 190 | *5 480 | 3 380 | | | | | *4 830 | 3 010 | 4.9 |
| Boom : 4.6m | 6.0 m kg | | | | | *2 840 | *2 840 | | | | | *3 220 | 2 930 | 5.4 |
| Arm : 2.5m | 4.5 m kg | | | | | *3 080 | *3 080 | *3 200 | 2 480 | | | *3 160 | 2 220 | 6.4 |
| Shoe : 700mm | 3.0 m kg | | | *5 340 | *5 340 | *3 960 | 3 730 | *3 500 | 2 420 | | | 2 990 | 1 920 | 6.9 |
| CWT : 2 100kg | 1.5 m kg | | | | | *5 090 | 3 510 | 3 660 | 2 320 | | | 2 840 | 1 810 | 7.1 |
| | 0 m kg | | | *5 960 | *5 960 | 5 490 | 3 340 | 3 570 | 2 250 | | | 2 900 | 1 840 | 6.9 |
| | -1.5 m kg | *4 550 | *4 550 | *9 620 | 6 010 | 5 420 | 3 280 | 3 540 | 2 220 | | | 3 230 | 2 030 | 6.4 |
| | -3.0 m kg | *8 930 | *8 930 | *8 700 | 6 100 | 5 460 | 3 310 | | | | | 4 140 | 2 580 | 5.4 |
| Boom : 4.6m | 7.5 m kg | | | | | | | | | | | *2 880 | *2 880 | 4.5 |
| Arm : 3.0m | 6.0 m kg | | | | | | | *2 880 | 2 510 | | | *2 820 | 2 470 | 6.0 |
| Shoe : 700mm | 4.5 m kg | | | | | | | *2 790 | 2 510 | | | *2 650 | 1 950 | 6.9 |
| CWT : 2 100kg | 3.0 m kg | | | | | *3 450 | *3 450 | *3 150 | 2 430 | | | *2 640 | 1 710 | 7.4 |
| | 1.5 m kg | | | *7 350 | 6 450 | *4 640 | 3 530 | 3 660 | 2 320 | 2 600 | 1 650 | 2 560 | 1 620 | 7.6 |
| | 0 m kg | | | *6 510 | 6 030 | 5 490 | 3 330 | 3 550 | 2 220 | | | 2 600 | 1 640 | 7.4 |
| | -1.5 m kg | *3 990 | *3 990 | *8 760 | 5 920 | 5 370 | 3 230 | 3 490 | 2 170 | | | 2 850 | 1 780 | 6.9 |
| | -3.0 m kg | *7 370 | *7 370 | *9 110 | 5 970 | 5 380 | 3 230 | 3 520 | 2 190 | | | 3 480 | 2 170 | 6.0 |
| | -4.5 m kg | | | *7 230 | 6 170 | | | | | | | *4 500 | 3 390 | 4.5 |
| Boom : 4.6m | 6.0 m kg | | | | | *3 330 | *3 330 | | | | | *3 510 | *3 510 | 4.9 |
| Arm : 2.1m | 4.5 m kg | | | | | *3 480 | *3 480 | | | | | *3 570 | 2 620 | 6.0 |
| Shoe : 700mm | 3.0 m kg | | | *6 240 | *6 240 | *4 340 | 3 920 | *3 750 | 2 570 | | | 3 450 | 2 240 | 6.5 |
| CWT : 2 450kg | 1.5 m kg | | | | | *5 400 | 3 710 | 3 860 | 2 480 | | | 3 260 | 2 110 | 6.7 |
| | 0 m kg | | | *5 400 | *5 400 | 5 800 | 3 580 | 3 790 | 2 420 | | | 3 350 | 2 150 | 6.5 |
| | -1.5 m kg | *5 010 | *5 010 | *9 460 | 6 480 | 5 760 | 3 540 | | | | | 3 790 | 2 420 | 6.0 |
| | -3.0 m kg | | | *8 230 | 6 600 | *5 480 | 3 610 | | | | | *4 830 | 3 220 | 4.9 |
| Boom : 4.6m | 6.0 m kg | | | | | *2 840 | *2 840 | | | | | *3 220 | 3 110 | 5.4 |
| Arm : 2.5m | 4.5 m kg | | | | | *3 080 | *3 080 | *3 200 | 2 640 | | | *3 160 | 2 370 | 6.4 |
| Shoe : 700mm | 3.0 m kg | | | *5 340 | *5 340 | *3 960 | *3 960 | *3 500 | 2 580 | | | *3 150 | 2 060 | 6.9 |
| CWT : 2 450kg | 1.5 m kg | | | | | *5 090 | 3 740 | 3 860 | 2 480 | | | 3 000 | 1 940 | 7.1 |
| | 0 m kg | | | *5 960 | *5 960 | 5 800 | 3 570 | 3 780 | 2 410 | | | 3 070 | 1 970 | 6.9 |
| | -1.5 m kg | *4 550 | *4 550 | *9 620 | 6 420 | 5 730 | 3 510 | 3 740 | 2 380 | | | 3 420 | 2 180 | 6.4 |
| | -3.0 m kg | *8 930 | *8 930 | *8 700 | 6 510 | 5 760 | 3 540 | | | | | 4 370 | 2 770 | 5.4 |
| Boom : 4.6m | 7.5 m kg | | | | | | | | | | | *2 880 | *2 880 | 4.5 |
| Arm : 3.0m | 6.0 m kg | | | | | | | *2 880 | 2 670 | | | *2 820 | 2 630 | 6.0 |
| Shoe : 700mm | 4.5 m kg | | | | | | | *2 790 | 2 670 | | | *2 650 | 2 090 | 6.9 |
| CWT : 2 450kg | 3.0 m kg | | | | | *3 450 | *3 450 | *3 150 | 2 590 | | | *2 640 | 1 840 | 7.4 |
| | 1.5 m kg | | | *7 350 | 6 860 | *4 640 | 3 760 | *3 700 | 2 480 | 2 750 | 1 770 | 2 710 | 1 740 | 7.6 |
| | 0 m kg | | | *6 510 | 6 440 | *5 640 | 3 560 | 3 750 | 2 380 | | | 2 750 | 1 760 | 7.4 |
| | -1.5 m kg | *3 990 | *3 990 | *8 760 | 6 330 | 5 680 | 3 460 | 3 700 | 2 330 | | | 3 010 | 1 920 | 6.9 |
| | -3.0 m kg | *7 370 | *7 370 | *9 110 | 6 380 | 5 680 | 3 460 | 3 720 | 2 350 | | | 3 680 | 2 330 | 6.0 |
| | -4.5 m kg | | | *7 230 | 6 580 | | | | | | | *4 500 | 3 620 | 4.5 |

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

Air filter with indicator

Air intake heater

Fuel filter and water separator

Extra water separator

Alternator, 80 A

Electric/Electronic control system

Contronics

Advanced mode control system

Self-diagnostic system

Machine status indication

Caretrack and subscription

Engine speed sensing power control

Automatic idling system

One-touch power boost

Power max mode (P)

Safety stop/start function

Adjustable LCD color monitor

Master electrical disconnect switch

Engine restart prevention circuit

Highcapacity halogen lights:

Frame-mounted 2

Boom-mounted 1

Batteries, 2 x 12 V / 100 Ah

Start motor, 24 V / 3.2 kW

Hydraulic system

Automatic sensing hydraulic system

Summation system

Boom priority

Arm priority

Swing priority

Boom and arm regeneration valves

ECO mode fuel saving technology

Swing anti-rebound valves

Boom and arm holding valves

Multi-stage filtering system

Cylinder cushioning

Cylinder contamination seals

Automatic two-speed travel motors

Superstructure

Access way with handrail

Tool storage area

Punched metal anti-slip plates

Undercovers

Cab and interior

Cab with roof hatch

Control lock out lever

Travel pedals and hand levers

Adjustable operator seat and joystick control console

Control joysticks

Heater & airconditioner

Flexible antenna

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

Windshield wiper with intermittent feature

Master key

Sun screens, front, roof, rear

Undercarriage

Undercover

Hydraulic track adjusters

Greased and sealed track link

Track guard

Digging equipment

Boom: 4.6 m mono

Linkage

OPTIONAL EQUIPMENT

Engine

- Cyclone pre-cleaner
- Rain cap
- Auto engine shutdown
- Block heater: 240 V
- Diesel coolant heater, 5 kW
- Fuel filler pump: 35 l/min

Electric

- Extra work lights:
 - Boom-mounted 1
 - Cab-mounted 3
 - Counterweight-mounted 1
- Travel alarm
- Rotating warning beacon
- Anti-theft with code lock system

Hydraulic system

- Boom hose rupture valve (HRV) with overload warning device
- Aoom hose rupture valve (HRV)
- Boom float with HRV
- Boom float without HRV
- Hydraulic piping:
 - Breaker & shear, 1 or 2 pump flow
 - Extra piping
 - Quick coupler
 - Grapple
 - Oil leak (drain) line
- Hydraulic oil, ISO VG 32, 46, 68
- Hydraulic oil, longlife oil 32, 46, 68

Cab and interior

- Electric pedal for breaker and shear
- Cab-mounted falling object guard (FOG)
- Cab-mounted falling object protective structure (FOPS)
- Radio or Radio MP3/AUX
- Rain shield
- Rear view camera
- Ashtray and lighter
- Safety net (lower net)
- Specific key

Superstructure

- Rear view mirror on counterweight
- Counterweight: 2 100kg, 2 450kg

Undercarriage

- 500 / 600 / 700 / 750 / 800 / 900 mm with triple grousers
- 600 / 700 mm HD with triple grousers
- 900 mm with single grousers

Digging equipment

- Arm: 2.1m, 2.5m, 3.0m

Service

- Tool kit, daily maintenance
- Spare parts kit

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Boom arm configuration**Boom float****Auxiliary piping****Fuel filler pump****FOG**

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



VOLVO

Volvo Construction Equipment

www.volvoce.com