VOLVO



Volvo Excavators 38.9-40.6 t 313 hp

EC380E

Volvo Construction Equipment



Welcome to our world

Welcome to a world of industry leading machinery. A world where imagination, hard work and technological innovation will lead the way towards developing a future which is cleaner, smarter, and more connected. A world supported by the enduring values of the Volvo Group. A world of stability, sustainability and innovation. A world which we put our customers at the heart of.

Welcome to the world of Volvo Construction Equipment – we think you're going to like it here.

Working harder, working smarter

For over 180 years Volvo has been a pioneer in the design and manufacture of machines which set the standard for efficiency, performance and uptime. Across our range of excavators, wheel loaders and haulers, our reputation for engineering excellence is unrivalled, which means whatever your operation or application, we can provide a total fleet solution to help you succeed.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts, to ensure we offer customers machines which work harder and smarter long into the future.



Solutions for you

Our industry leading machines are just the start of your relationship with Volvo. As your partner, we have developed an extensive range of additional solutions to help you improve uptime, boost productivity and reduce costs.

Designed for your business

Structured across nine blocks, our portfolio of products and services are designed to complement your machine's performance and boost your profitability. Simply put, we offer some of the best guarantees, warranties and technological solutions in the industry today.

There when you need us

Whether you're buying new or used, our global network of dealers and technicians offer around-the-clock support, including machine monitoring and world-class parts availability. It's the basis of everything offered by Volvo Services, so you can be confident we've got you covered right from the start.



BUILDING TOMORROW

Elite efficiency

Fuel efficiency is at the center of the EC380E crawler excavator. With advanced technology including Volvo's unique ECO mode and a new electro-hydraulic control system, this production machine delivers a 9% improvement in fuel efficiency. Experience efficient production at its best with Volvo.

Advanced hydraulics

The new electro-hydraulic system uses intelligent technology to control on-demand flow and reduce internal losses in the hydraulic circuit. This increases controllability, shortens cycle times and improves fuel efficiency – resulting in higher productivity and performance.



Automatic idling system

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

Auto engine shut down

To reduce fuel consumption, the engine will automatically switch off when the machine is inactive for a pre-set amount of time (five minutes is the default setting).

Work modes

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



Fuel consumption display

A gauge bar on the monitor measures both instantaneous fuel consumption and average fuel consumption. This allows machine owners and operators to monitor fuel usage on different job sites.





ECO MODE

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



HUMAN MACHINE INTERFACE (HMI)

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

Boost your productivity

It's a fact that operators work more efficiently when they're given the best tools for the job. That's why, on top of being a superior production machine, the EC380E has an ergonomic design with ideally placed controls and switches. With built in comfort and optimized control, operators will work efficiently and productively all day long.

Keypad

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



Shortcut switch

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



LCD monitor

The new, color, eight inch LCD monitor displays machine status information including fuel consumption data and service interval alerts – enabling increased uptime and high productivity. The user-friendly design is easy to read in any light conditions.



Seatbelt warning alarm

If the seatbelt is not fastened when the ignition key is turned, a sensor triggers an alarm which sounds for three seconds.

Bluetooth®

For added convenience, operators can now connect a Bluetooth device to the machine.

Non-stop productivity

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

Volvo After Treatment System

During the fully automatic regeneration process, particulate matter in the Diesel Particulate Filter is oxidized at low exhaust temperatures via passive regeneration. Volvo uses Selective Catalytic Reduction technology where AdBlue®/Diesel Exhaust Fluid is heated to produce ammonia. This causes a chemical reaction which converts NOx to nitrogen and CO2 – both of which are naturally found in the air. Neither process interrupts machine operation, performance or productivity. ® = registered trademark of the Verband der Automobilindustrie e.V. (VDA)



Diesel-driven heater

The optional diesel-driven coolant heater helps to start the engine in low temperatures while simultaneously heating the cab. The heater can be set in advance to engage at a specific date and time.



Cooling fan

The hydraulically-driven, electronically controlled cooling fan regulates the temperature of the vital components. It automatically activates only when needed – reducing fuel consumption and noise. The optional reversible functionality – which blows air in the opposite direction – enables self-cleaning of the cooling units.





VOLVO ENGINE

Featuring proven, advanced technology and built on decades of experience, Volvo's robust D13 Stage V engine boasts more power while reducing both fuel consumption and emissions and delivering superior quality, reliability and durability.



REINFORCED UNDERCARRIAGE

With a strong three-piece undercarriage and a high strength tensile steel X-shaped frame, Volvo excavators are built to withstand tough conditions. For superior durability, the undercarriage components are reinforced – ensuring long life and high uptime.

Built to last

From quarries to mass excavation, this heavy-duty production machine has been built to work on tough job sites. Featuring a robust, reinforced structure and high quality welding, the EC380E boasts superior strength and durability. Experience reliability you can count on with Volvo.

Superstructure undercover

The heavy-duty superstructure undercover plates increase durability by providing additional protection to the underside of the machine in tough applications – preventing damage from rock and debris.



Doors and hinges

Volvo's durable design features a rigid side door with a robust handle and hinges for superior durability.



Robust design

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



Up
your uptime

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

Service access

Grouped filters are quick and easy to access from ground level. To facilitate fast servicing, grouped greasing points are easily accessed with the machine in one position.



Storage space

A large storage compartment provides a safe and convenient location for items including a toolbox and grease can.



Anti-slip plates

Punched anti-slip plates provide superior grip and increased safety. The design facilitates easy cleaning.



Handrails

Handrails and full size guardrails fold-able provide safe and easy access to the cab and superstructure. The fold-able guardrail is to minimize transportation height when it is folded.



SINGLE MODULE COOLER

The radiator, charged air cooler and hydraulic oil cooler are situated side-by-side on a single layer to maximize efficiency, reduce blockages and aid cleaning. The system is easily accessed from ground level by simply opening the side door.

Quality counts

Safe access

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

Human Machine Interface (HMI)

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

Advanced hydraulics

New electro-hydraulic system and main control valve use intelligent technology to control on-demand flow for high performance and efficiency.

Bucket range

The Volvo quick coupler offers maximum versatility, picking up a wide variety of attachments.

Attachments

Volvo's durable attachments have been purpose-built to deliver maximum productivity and long service life in combination with Volvo machines.



Reinforced undercarriage

The undercarriage components are reinforced to ensure long life, high uptime and ultimate durability in tough conditions.

AdBlue®

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

LCD monitor

The new, eight inch LCD monitor clearly displays machine status information for easy operation and increased productivity.



ECO mode

Volvo's unique ECO mode improves fuel efficiency without any loss of performance in most operating conditions.

Service access

Grouped filters are quick and easy to access from ground level via large, wide compartment doors.

Volvo engine

Volvo's D13 Stage V engine boasts more power while reducing both fuel consumption and emissions and delivering superior quality, reliability and durability.

Volvo After Treatment System

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

Single module cooler

The radiator, charged air cooler and hydraulic oil cooler are situated side-byside on a single layer to maximize efficiency, reduce blockages and aid cleaning.

The perfect match

Maximize your productivity and profitability with the EC380E and Volvo's durable range of attachments. Increase your versatility, access more applications and effectively perform a variety of tasks – all while experiencing faster cycle times and excellent control. Get the most out of your excavator with Volvo.

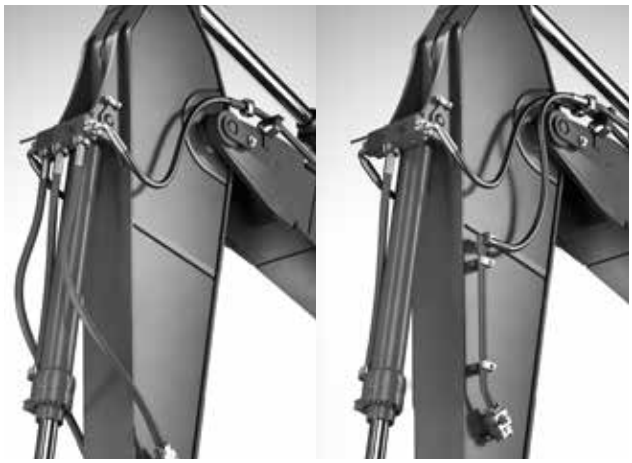
Bucket range

Volvo's general purpose buckets are the perfect tool for digging and re-handling in soft to medium conditions. Heavy-duty buckets are intended for productive digging in compact materials. Both provide maximum productivity and long life.



Optional auxiliary hydraulics

Factory fitted breaker and shear piping (X1) as well as tilt and rotator piping (X3) increase versatility by enabling a wide range of additional attachments to be used.



S-type quick coupler

The Volvo S-type quick coupler is designed to work with Volvo attachments – delivering ultimate compatibility and unrivalled performance.



Universal quick coupler

The Volvo universal quick coupler offers maximum versatility. It picks up a variety of attachments from various manufacturers and meets new safety regulations.



Genuine Volvo wear parts

Volvo offers a selection of economic, replaceable wear parts including high quality teeth, segments, side cutters, adapters and shrouds to protect the bucket and ensure long life.



ATTACHMENTS

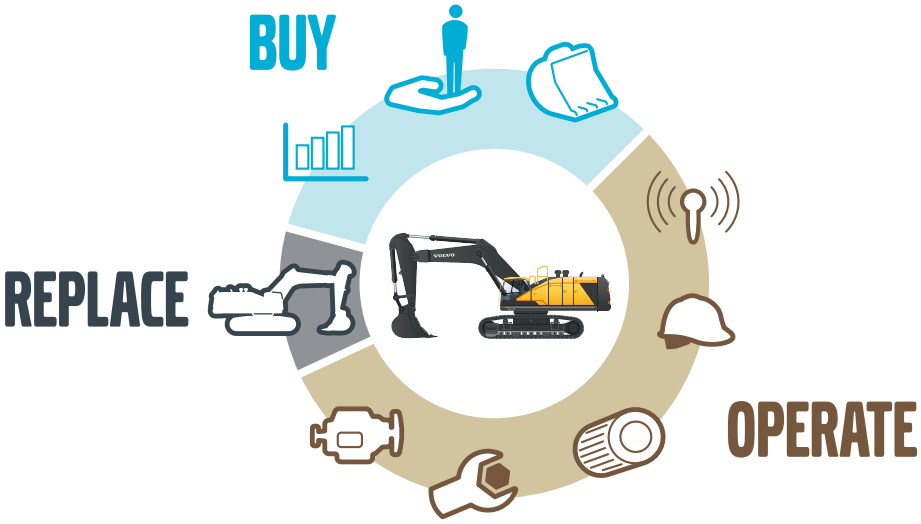
Volvo's durable attachments have been purposebuilt to work in perfect harmony with Volvo machines, forming one solid, reliable unit. With functions and properties ideally matched, Volvo attachments are an integrated part of the excavator for which they're intended – delivering maximum productivity.

Adding value to your business

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

Complete Solutions

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



Genuine Volvo Parts

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

Service Network

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







CUSTOMER SUPPORT AGREEMENTS

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

Volvo EC380E in detail

Engine

The latest generation, Volvo engine Stage V emissions certified diesel engine fully meets the demands of the latest, emissions regulations. Featuring Volvo Advanced Combustion Technology (V-ACT), it is designed to deliver superior performance and fuel efficiency. The engine uses precise, highpressure fuel injectors, turbo charger and air-to-air intercooler, and electronic engine controls to optimize machine performance.
Air Filter: 3-stage with precleaner.
Automatic Idling System: Reduces engine speed to idle when the levers and pedals are not activated resulting in less fuel consumption and low cab noise levels.

Engine Stage V	Volvo	D13J
Max power at	r/min	1 700
Net, ISO 9249/SAE J1349	kW	229
	hp	311
Gross, ISO 14396/SAE J1995	kW	230
	hp	313
Max torque	Nm	1 692
at engine speed	r/min	1 275
No. of cylinders		6
Displacement	l	12.8
Bore	mm	131
Stroke	mm	158

Electrical system

High-capacity electrical system that is well protected. Waterproof double-lock harness plugs are used to secure corrosion-free connections. The main relays and solenoid valves are shielded to prevent damage. The master switch is standard. Contronics provides advanced monitoring of machine functions and important diagnostic information.

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

Swing system

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

Max. slew speed	r/min	10.2
Max. slew torque	kNm	130.5

Travel System

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

Max. drawbar pull	kN	276.5
Max. travel speed (low)	km/h	3.4
Max. travel speed (high)	km/h	5.3
Gradeability	°	35

Undercarriage

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

Track shoes		2 x 50
Link pitch	mm	215.9
Shoe width, triple grouser	mm	600 / 600HD / 700 / 800 / 900
Shoe width, double grouser	mm	600
Bottom rollers		2 x 9
Top rollers		2 x 2

Sound Level

Sound pressure level in cab according to ISO 6396		
L_{pA}	dB	71
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L_{WA}	dB	105

Hydraulic system

The new electro-hydraulic system and new MCV (main control valve) use intelligent technology to control on-demand flow for highproductivity, high-digging capacity and excellent fuel consumption.
The following important functions are included in the system for optimum performance:
Summation system: Combines the flow of both hydraulic pumps to ensure quick cycle times and high productivity.
Boom priority: Gives priority to the boom operation for faster raising when loading or performing deep excavations.
Arm priority: Gives priority to the arm operation for faster cycle times in leveling and for increased bucket filling when digging.
Swing priority: Gives priority to swing functions for faster simultaneous operations.
Regeneration system: Prevents cavitation and provides flow to other movements during simultaneous operations for maximum productivity.
Power boost: All digging and lifting forces are increased.
Holding valves: Boom and arm holding valves prevent the digging equipment from creeping.

Main pump, Type 2 x variable displacement axial piston pumps		
Maximum flow	l/min	2 x 300
Pilot pump, Type Gear pump		
Maximum flow	l/min	32.6
Implement	MPa	32.4/35.3
Travel circuit	MPa	35.3
Slew circuit	MPa	27.9
Pilot circuit	MPa	3.9

Hydraulic Motors

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

Hydraulic Cylinders

Mono boom		2
Bore x Stroke	ø x mm	160 x 1 530
Arm		1
Bore x Stroke	ø x mm	175 x 1 700
Bucket		1
Bore x Stroke	ø x mm	145 x 1 285
ME Bucket		1
Bore x Stroke	ø x mm	160 x 1 250
Bucket for LR boom		1
Bore x Stroke	ø x mm	140 x 1 140

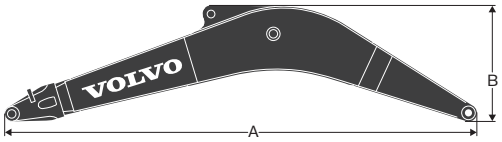
Service Refill

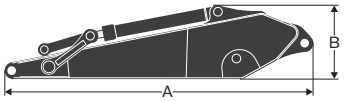
Fuel tank	l	620
DEF/AdBlue® tank	l	62.5
Hydraulic system, total	l	500
Hydraulic tank	l	225
Engine oil	l	42
Engine coolant	l	60
Slew reduction unit	l	6.5
Travel reduction unit	l	2 x 6.8

Cab

The operator's cab has easy access via a wide door opening. The cab is supported on hydraulic dampening mounts to reduce shock and vibration levels. These along with sound absorbing lining provide low noise levels. The cab has excellent all-round visibility. The front windshield can easily slide up into the ceiling, and the lower front glass can be removed and stored in the side door.
Integrated airconditioning and heating system: The pressurized and filtered cab air is supplied by an automaticallycontrolled fan. The air is distributed throughout the cab from 14 vents.
Ergonomic operator's seat: The adjustable seat and joystick console move independently to accommodate the operator. The seat has 12 different adjustments plus a seat belt for the operator's comfort and safety.
Refrigerant of the type R134a is used when this machine is equipped with air conditioning. Contains fluorinated greenhouse gas R134a, Global Warming Potential 1430 CO2-eq.

Specifications



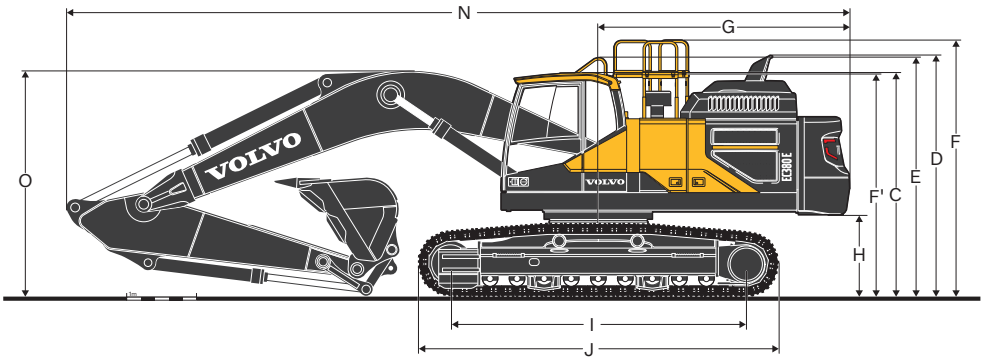


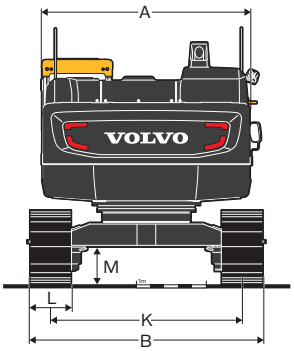
DIMENSIONS

Boom				Arm				
	Unit	mono	mono	Description	Unit			
Boom	m	6.2 ME	6.45 HD	Arm	m	2.6	3.2 HD	3.9
A	mm	6 460	6 700	A	mm	3 780	4 360	5 080
B	mm	1 740	1 800	B	mm	1 145	1 145	1 145
Width	mm	820	820	Width	mm	560	560	560
Weight	kg	3 355	3 310	Weight	kg	2 050	2 180	2 300

* Includes arm cylinder, piping and pin

* Includes bucket cylinder, linkage and pin



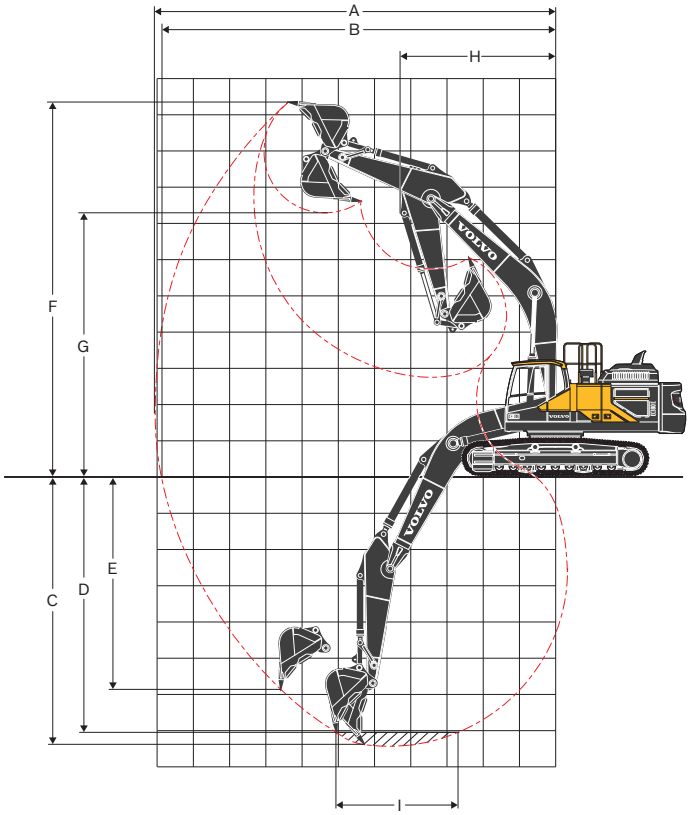


DIMENSIONS

Description	Unit	EC380EL				EC380ENL			
Boom	m	6.2	6.45			6.2	6.45		
Arm	m	2.6	2.6	3.2	3.9	2.6	2.6	3.2	3.9
A. Overall width of upper structure	mm	2 990	2 990	2 990	2 990	2 990	2 990	2 990	2 990
B. Overall width	mm	3 340	3 340	3 340	3 340	2 990	2 990	2 990	2 990
C. Overall height of cab	mm	3 220	3 220	3 220	3 220	3 220	3 220	3 220	3 220
D. Overall height of diffuser	mm	3 465	3 465	3 465	3 465	3 465	3 465	3 465	3 465
E. Overall height of handrail	mm	3 440	3 440	3 440	3 440	3 440	3 440	3 440	3 440
F. Overall height of guardrail (unfolded)	mm	3 685	3 685	3 685	3 685	3 685	3 685	3 685	3 685
F'. Overall height of guardrail (folded)	mm	3 215	3 215	3 215	3 215	3 215	3 215	3 215	3 215
G. Tail swing radius	mm	3 600	3 600	3 600	3 600	3 600	3 600	3 600	3 600
H. Counterweight clearance *	mm	1 150	1 150	1 150	1 150	1 150	1 150	1 150	1 150
I. Tumbler length	mm	4 240	4 240	4 240	4 240	4 240	4 240	4 240	4 240
J. Track length	mm	5 180	5 180	5 180	5 180	5 180	5 180	5 180	5 180
K. Track gauge	mm	2 740	2 740	2 740	2 740	2 390	2 390	2 390	2 390
L. Shoe width	mm	600	600	600	600	600	600	600	600
M. Min. ground clearance *	mm	500	500	500	500	500	500	500	500
N. Overall length	mm	11 060	11 310	11 220	11 270	11 060	11 310	11 220	11 270
O. Overall height of boom	mm	3 610	3 580	3 360	3 605	3 610	3 580	3 360	3 605

* Without shoe grouser

Specifications



WORKING RANGE

Description		Unit	EC380E			
Boom		m	6.2	6.45		
Arm		m	2.6	2.6	3.2	3.9
A. Max. digging reach		mm	10 450	10 695	11 220	11 855
B. Max. digging reach on ground		mm	10 225	10 480	11 010	11 665
C. Max. digging depth		mm	6 755	6 990	7 590	8 290
D. Max. digging depth (2.44 m level)		mm	6 575	6 805	7 425	8 145
E. Max. vertical wall digging depth		mm	4 860	5 000	5 510	6 110
F. Max. cutting height		mm	10 055	10 195	10 370	10 640
G. Max. dumping height		mm	6 800	6 950	7 140	7 415
H. Min. front slew radius		mm	4 090	4 290	4 280	4 305
Digging forces with direct fit bucket						
Breakout force - bucket (Normal/Power boost)	SAE J1179	kN	214.5	198.0	198.0	198.0
	SAE J1179	kN	234.5	215.0	215.0	215.0
	ISO 6015	kN	243.4	221.7	221.7	221.7
	ISO 6015	kN	265.4	242.7	242.7	242.7
Tearout force - dipper arm (Normal/Power boost)	SAE J1179	kN	187.7	195.9	161.9	141.3
	SAE J1179	kN	205.7	212.9	176.9	154.3
	ISO 6015	kN	193.9	201.1	166.0	144.4
	ISO 6015	kN	211.9	219.1	181.0	157.4

MACHINE WEIGHTS AND GROUND PRESSURE

Description	Shoe width	Operating weight	Ground pressure	Operating weight	Ground pressure
	mm	kg	kPa	kg	kPa
Triple grouser	600	39 245	71.6	38 865	70.9
	700	39 690	62.0	39 305	61.4
	800	40 140	54.9	39 755	54.4
	900	40 585	49.3	40 200	48.9
Triple grouser(HD)	600	39 675	72.4	39 290	71.7
Double grouser	600	39 525	72.1	39 140	71.4
		EC380E with LC undercarriage, 6.45 m boom, 3.2 m arm, 1 574 kg bucket, 6 700 kg counterweight		EC380E with NLC undercarriage, 6.45 m boom, 3.2 m arm, 1 574 kg bucket, 6 700 kg counterweight	

BUCKET SELECTION GUIDE

Bucket type		Capacity	Cutting width	Weight	Teeth	EC380ENL				EC380EL			
						600 mm shoe, 6 700 kg counterweight				600 mm shoe, 6 700 kg counterweight			
						6.2 m Boom	6.45 m Boom			6.2 m Boom	6.45 m Boom		
		L	mm	kg	EA	2.6 m	2.6 m	3.2 m	3.9 m	2.6 m	2.6 m	3.2 m	3.9 m
Direct fit Buckets	General purpose	870	750	1 176	3	C	C	C	C	C	C	C	C
		1 000	900	1 271	4	C	C	C	C	C	C	C	C
		1 420	1 200	1 514	5	C	C	C	C	C	C	C	C
		1 670	1 350	1 629	5	C	C	C	C	C	C	C	C
		1 920	1 500	1 769	5	C	C	C	C	C	C	C	C
		2 330	1 750	1 986	5	C	C	C	B	C	C	C	B
	Heavy duty	1 000	900	1 425	4	D	D	D	D	D	D	D	D
		1 420	1 200	1 699	5	D	D	D	D	D	D	D	D
		1 920	1 500	1 970	5	D	D	D	C	D	D	D	C
		2 330	1 750	2 175	5	D	D	C	B	D	D	C	B
Direct fit Buckets (UQC interface)	General purpose	870	750	1 176	3	C	C	C	C	C	C	C	C
		1 000	900	1 271	4	C	C	C	C	C	C	C	C
		1 420	1 200	1 514	5	C	C	C	C	C	C	C	C
		1 670	1 350	1 629	5	C	C	C	C	C	C	C	C
		1 920	1 500	1 769	5	C	C	C	B	C	C	C	C
		2 330	1 750	1 967	5	C	C	B	A	C	C	B	A
	Heavy duty	1 000	900	1 425	4	D	D	D	D	D	D	D	D
		1 420	1 200	1 699	5	D	D	D	D	D	D	D	D
		1 920	1 500	1 970	5	D	D	D	B	D	D	D	B
		2 330	1 750	2 175	5	B	A	X	X	B	B	A	X
Quick coupler Buckets (S3 Quick coupler)	General purpose	1 000	900	1 239	4	C	C	C	C	C	C	C	C
		1 420	1 200	1 482	5	C	C	C	C	C	C	C	C
		1 670	1 350	1 597	5	C	C	C	C	C	C	C	C
		1 920	1 500	1 720	5	C	C	C	B	C	C	C	C
		2 330	1 750	1 911	5	C	C	C	A	C	C	C	B
	Heavy duty	1 000	900	1 393	4	D	D	D	D	D	D	D	D
		1 420	1 200	1 648	5	D	D	D	D	D	D	D	D
		1 670	1 350	1 791	5	D	D	D	C	D	D	D	D
		1 920	1 500	1 921	5	D	D	C	B	D	D	D	B
		2 330	1 750	2 119	5	C	C	B	A	C	C	B	A

Please consult with your Volvo dealer for the proper match of buckets and attachments to suit the application.
The recommendations are given as a guide only, based on typical operation conditions.
Bucket capacity based on ISO 7451, heaped material with a 1:1 angle of repose.

X : Not recommended

Maximum materal density

A 1 200 - 1 300 kg/m3 Coal, Caliche, Shale
B 1 400 - 1 600 kg/m3 Wet earth and clay, Limestone, Sandstone
C 1 700 - 1 800 kg/m3 Granite, Wet sand, Well blasted rock
D > 1 900 kg/m3 Wet mud, Iron ore

Specifications

LIFTING CAPACITY EC380EL

Lifting capacity at the arm end without bucket.
For lifting capacity including bucket, simply subtract actual weight of the direct fit bucket or the bucket with quick coupler from the following values.

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom : 6.2m Arm : 2.6m Shoe : 600mm CWT : 6 700kg	7.5 m	kg							*10 700	*10 700					*10 870	10 200	6.7
	6 m	kg							*11 220	*11 220	*10 740	8 420			*10 760	8 080	7.7
	4.5 m	kg					*15 850	*15 850	*12 670	11 620	*11 200	8 250			10 840	7 050	8.3
	3 m	kg					*19 770	16 820	*14 470	11 060	*12 030	8 000			10 120	6 540	8.6
	1.5 m	kg					*22 280	15 990	*15 980	10 600	12 180	7 760			9 950	6 400	8.6
	0 m	kg					*22 820	15 720	*16 750	10 340	12 010	7 600			10 300	6 600	8.3
	-1.5 m	kg			*17 770	*17 770	*22 010	15 740	*16 560	10 280	11 990	7 590			11 370	7 230	7.8
	-3 m	kg			*26 490	*26 490	*19 850	15 980	*15 050	10 430					*12 530	8 690	6.9
	-4.5 m	kg					*15 320	*15 320							*12 280	*12 280	5.4
Boom : 6.45m Arm : 2.6m Shoe : 600mm CWT : 6 700kg	7.5 m	kg													*10 420	9 500	7.0
	6 m	kg							*11 020	*11 020	*10 360	8 460			*10 360	7 660	8.0
	4.5 m	kg					*16 080	*16 080	*12 580	11 570	*10 970	8 250			10 340	6 730	8.5
	3 m	kg							*14 430	10 990	*11 870	7 970			9 680	6 270	8.8
	1.5 m	kg							*15 940	10 530	12 140	7 720			9 520	6 130	8.8
	0 m	kg					*21 850	15 620	*16 690	10 280	11 960	7 560			9 830	6 300	8.6
	-1.5 m	kg			*14 880	*14 880	*21 890	15 660	*16 550	10 220	11 930	7 530			10 770	6 870	8.1
	-3 m	kg			*26 310	*26 310	*19 940	15 890	*15 270	10 350					*12 160	8 130	7.2
	-4.5 m	kg			*20 930	*20 930	*16 070	*16 070							*12 110	11 280	5.8
Boom : 6.45m Arm : 3.2m Shoe : 600mm CWT : 6 700kg	7.5 m	kg									*9 370	8 670			*8 200	*8 200	7.7
	6 m	kg									*9 500	8 600			*7 980	6 920	8.5
	4.5 m	kg					*14 350	*14 350	*11 610	*11 610	*10 260	8 360	*8 790	6 230	*8 060	6 150	9.1
	3 m	kg					*18 440	17 030	*13 580	11 160	*11 290	8 050	9 410	6 100	*8 390	5 760	9.3
	1.5 m	kg					*21 460	16 030	*15 330	10 620	12 190	7 760	9 260	5 960	8 740	5 630	9.4
	0 m	kg					*22 610	15 610	*16 410	10 280	11 950	7 550	9 150	5 870	8 970	5 750	9.1
	-1.5 m	kg			*15 110	*15 110	*22 370	15 530	*16 640	10 150	11 850	7 460			9 690	6 190	8.6
	-3 m	kg	*17 590	*17 590	*23 840	*23 840	*20 970	15 680	*15 880	10 200	11 930	7 520			11 240	7 130	7.8
	-4.5 m	kg			*24 300	*24 300	*17 980	16 050	*13 490	10 470					*11 830	9 270	6.6
Boom : 6.45m Arm : 3.9m Shoe : 600mm CWT : 6 700kg	9 m	kg													*6 920	*6 920	7.2
	7.5 m	kg									*8 160	*8 160			*6 470	*6 470	8.4
	6 m	kg									*8 510	*8 510	*7 680	6 430	*6 310	6 140	9.2
	4.5 m	kg							*10 380	*10 380	*9 380	8 480	*8 850	6 320	*6 370	5 530	9.7
	3 m	kg					*16 410	*16 410	*12 460	11 350	*10 510	8 130	*9 430	6 140	*6 600	5 200	10.0
	1.5 m	kg					*20 040	16 320	*14 440	10 740	*11 650	7 790	9 270	5 960	*7 040	5 080	10.0
	0 m	kg			*9 320	*9 320	*22 030	15 650	*15 870	10 300	11 940	7 530	9 100	5 810	*7 760	5 160	9.8
	-1.5 m	kg	*9 510	*9 510	*14 220	*14 220	*22 500	15 400	*16 510	10 070	11 770	7 370	9 030	5 740	8 590	5 480	9.3
	-3 m	kg	*14 830	*14 830	*20 550	*20 550	*21 740	15 430	*16 250	10 040	11 750	7 360			9 710	6 160	8.6
	-4.5 m	kg	*21 190	*21 190	*27 500	*27 500	*19 600	15 700	*14 770	10 190					*11 110	7 590	7.5
	-6 m	kg			*20 790	*20 790	*15 130	*15 130							*11 300	11 300	5.8
Boom : 6.2m Arm : 2.6m Shoe : 600mm CWT : 7 250kg	7.5 m	kg							*10 700	*10 700					*10 870	10 500	6.7
	6 m	kg							*11 220	*11 220	*10 740	8 680			*10 760	8 340	7.7
	4.5 m	kg					*15 850	*15 850	*12 670	11 970	*11 200	8 520			*10 870	7 280	8.3
	3 m	kg					*19 770	17 340	*14 470	11 420	*12 030	8 260			10 400	6 770	8.6
	1.5 m	kg					*22 280	16 520	*15 980	10 950	12 520	8 020			10 230	6 620	8.6
	0 m	kg					*22 820	16 250	*16 750	10 690	12 350	7 870			10 600	6 830	8.3
	-1.5 m	kg			*17 770	*17 770	*22 010	16 270	*16 560	10 630	12 340	7 850			11 700	7 480	7.8
	-3 m	kg			*26 490	*26 490	*19 850	16 500	*15 050	10 780					*12 530	8 990	6.9
	-4.5 m	kg					*15 320	*15 320							*12 280	*12 280	5.4
Boom : 6.45m Arm : 2.6m Shoe : 600mm CWT : 7 250kg	7.5 m	kg													*10 420	9 790	7.0
	6 m	kg							*11 020	*11 020	*10 360	8 720			*10 360	7 900	8.0
	4.5 m	kg					*16 080	*16 080	*12 580	11 920	*10 970	8 510			*10 480	6 950	8.5
	3 m	kg							*14 430	11 340	*11 870	8 240			9 950	6 480	8.8
	1.5 m	kg							*15 940	10 880	12 490	7 990			9 800	6 350	8.8
	0 m	kg					*21 850	16 140	*16 690	10 630	12 310	7 830			10 120	6 530	8.6
	-1.5 m	kg			*14 880	*14 880	*21 890	16 190	*16 550	10 570	12 280	7 800			11 090	7 110	8.1
	-3 m	kg			*26 310	*26 310	*19 940	16 410	*15 270	10 700					*12 160	8 410	7.2
	-4.5 m	kg			*20 930	*20 930	*16 070	*16 070							*12 110	11 650	5.8
Boom : 6.45m Arm : 3.2m Shoe : 600mm CWT : 7 250kg	7.5 m	kg									*9 370	8 930			*8 200	*8 200	7.7
	6 m	kg									*9 500	8 860			*7 980	7 140	8.5
	4.5 m	kg					*14 350	*14 350	*11 610	*11 610	*10 260	8 620	*8 790	6 450	*8 060	6 360	9.1
	3 m	kg					*18 440	17 560	*13 580	11 510	*11 290	8 310	9 680	6 320	*8 390	5 960	9.3
	1.5 m	kg					*21 460	16 560	*15 330	10 970	*12 280	8 020	9 530	6 170	8 990	5 830	9.4
	0 m	kg					*22 610	16 130	*16 410	10 630	12 300	7 810	9 420	6 080	9 240	5 960	9.1
	-1.5 m	kg			*15 110	*15 110	*22 370	16 060	*16 640	10 500	12 200	7 720			9 980	6 410	8.6
	-3 m	kg	*17 590	*17 590	*23 840	*23 840	*20 970	16 200	*15 880	10 550	*12 270	7 790			*11 520	7 380	7.8
	-4.5 m	kg			*24 300	*24 300	*17 980	16 570	*13 490	10 820					*11 830	9 580	6.6

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 EC380EL

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom : 6.45m Arm : 3.9m Shoe : 600mm CWT : 7 250kg	9 m	kg													*6 920	*6 920	7.2
	7.5 m	kg									*8 160	*8 160			*6 470	*6 470	8.4
	6 m	kg									*8 510	*8 510	*7 680	6 640	*6 310	*6 310	9.2
	4.5 m	kg							*10 380	*10 380	*9 380	8 740	*8 850	6 530	*6 370	5 720	9.7
	3 m	kg					*16 410	*16 410	*12 460	11 710	*10 510	8 400	*9 430	6 360	*6 600	5 380	10.0
	1.5 m	kg					*20 040	16 850	*14 440	11 090	*11 650	8 060	9 540	6 170	*7 040	5 260	10.0
	0 m	kg			*9 320	*9 320	*22 030	16 170	*15 870	10 650	12 290	7 790	9 370	6 020	*7 760	5 350	9.8
	-1.5 m	kg	*9 510	*9 510	*14 220	*14 220	*22 500	15 930	*16 510	10 420	12 120	7 640	9 300	5 960	8 850	5 680	9.3
	-3 m	kg	*14 830	*14 830	*20 550	*20 550	*21 740	15 960	*16 250	10 390	12 100	7 620			9 990	6 390	8.6
	-4.5 m	kg	*21 190	*21 190	*27 500	*27 500	*19 600	16 220	*14 770	10 550					*11 110	7 850	7.5
	-6 m	kg			*20 790	*20 790	*15 130	*15 130							*11 300	*11 300	5.8

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

LIFTING CAPACITY EC380ENL

Lifting capacity at the arm end without bucket.

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

	Lifting hook related to ground level		1.5 m		3.0 m		4.5 m		6.0 m		7.5 m		9.0 m		Max. reach		
			Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	m
Boom : 6.2m Arm : 2.6m Shoe : 600mm CWT : 7 250kg	7.5 m	kg							*10 730	*10 730					*10 900	9 180	6.7
	6 m	kg							*11 250	10 850	*10 770	7 580			*10 800	7 280	7.7
	4.5 m	kg					*15 890	*15 890	*12 700	10 400	*11 230	7 430			*10 900	6 350	8.3
	3 m	kg					*19 810	14 740	*14 500	9 870	*12 070	7 180			10 320	5 880	8.6
	1.5 m	kg					*22 330	13 960	*16 020	9 430	12 420	6 950			10 150	5 750	8.6
	0 m	kg					*22 870	13 710	*16 800	9 170	12 250	6 800			10 520	5 910	8.4
	-1.5 m	kg			*17 780	*17 780	*22 050	13 730	*16 610	9 120	12 240	6 790			11 600	6 480	7.8
	-3 m	kg			*26 540	*26 540	*19 900	13 950	*15 090	9 250					*12 560	7 760	6.9
	-4.5 m	kg					*15 360	14 450							*12 310	11 140	5.4
Boom : 6.45m Arm : 2.6m Shoe : 600mm CWT : 7 250kg	7.5 m	kg													*10 420	8 530	7.0
	6 m	kg							*11 020	10 810	*10 360	7 600			*10 360	6 880	8.0
	4.5 m	kg					*16 080	15 750	*12 580	10 320	*10 970	7 400			*10 480	6 030	8.5
	3 m	kg							*14 430	9 760	*11 870	7 130			9 850	5 610	8.8
	1.5 m	kg							*15 940	9 320	12 360	6 890			9 690	5 480	8.8
	0 m	kg					*21 850	13 560	*16 690	9 070	12 180	6 730			10 010	5 620	8.6
	-1.5 m	kg			*14 880	*14 880	*21 890	13 610	*16 550	9 020	12 140	6 700			10 970	6 120	8.1
	-3 m	kg			*26 310	*26 310	*19 940	13 820	*15 270	9 140					*12 160	7 240	7.2
	-4.5 m	kg			*20 930	*20 930	*16 070	14 270							*12 110	9 990	5.8
Boom : 6.45m Arm : 3.2m Shoe : 600mm CWT : 7 250kg	7.5 m	kg									*9 370	7 800			*8 200	7 510	7.7
	6 m	kg									*9 500	7 730			*7 980	6 220	8.5
	4.5 m	kg					*14 350	*14 350	*11 610	10 510	*10 260	7 500	*8 790	5 590	*8 060	5 520	9.1
	3 m	kg					*18 440	14 900	*13 580	9 920	*11 290	7 200	9 580	5 460	*8 390	5 150	9.3
	1.5 m	kg					*21 460	13 950	*15 330	9 410	*12 280	6 910	9 420	5 330	8 890	5 030	9.4
	0 m	kg					*22 610	13 550	*16 410	9 080	12 170	6 710	9 320	5 230	9 130	5 130	9.1
	-1.5 m	kg			*15 110	*15 110	*22 370	13 480	*16 640	8 950	12 070	6 620			9 870	5 510	8.6
	-3 m	kg	*17 590	*17 590	*23 840	*23 840	*20 970	13 620	*15 880	9 000	12 140	6 690			11 440	6 350	7.8
	-4.5 m	kg			*24 300	*24 300	*17 980	13 970	*13 490	9 260					*11 830	8 230	6.6
Boom : 6.45m Arm : 3.9m Shoe : 600mm CWT : 7 250kg	9 m	kg													*6 920	*6 920	7.2
	7.5 m	kg									*8 160	8 010			*6 470	*6 470	8.4
	6 m	kg									*8 510	7 880	*7 680	5 780	*6 310	5 520	9.2
	4.5 m	kg							*10 380	*10 380	*9 380	7 610	*8 850	5 670	*6 370	4 950	9.7
	3 m	kg					*16 410	15 380	*12 460	10 110	*10 510	7 280	*9 430	5 500	*6 600	4 640	10.0
	1.5 m	kg					*20 040	14 220	*14 440	9 510	*11 650	6 950	9 430	5 320	*7 040	4 530	10.0
	0 m	kg			*9 320	*9 320	*22 030	13 580	*15 870	9 090	12 160	6 690	9 270	5 180	*7 760	4 600	9.8
	-1.5 m	kg	*9 510	*9 510	*14 220	*14 220	*22 500	13 350	*16 510	8 870	11 980	6 540	9 200	5 110	8 750	4 880	9.3
	-3 m	kg	*14 830	*14 830	*20 550	*20 550	*21 740	13 380	*16 250	8 840	11 970	6 520			9 880	5 480	8.6
	-4.5 m	kg	*21 190	*21 190	*27 500	26 760	*19 600	13 630	*14 770	8 990					*11 110	6 740	7.5
	-6 m	kg			*20 790	*20 790	*15 130	14 160							*11 300	9 990	5.8

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

Equipment

STANDARD EQUIPMENT
Engine
Turbocharged, 4 stroke diesel engine with water cooling, direct injection and charged air cooler that meets EU Stage V requirements
Air filter with indicator
Air intake heater
Cyclone pre-cleaner
Electric engine shut-off
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 8inch LCD color monitor
Master electrical disconnect switch
Engine restart prevention circuit
High-capacity halogen lights:
Frame-mounted 2
Boom-mounted 2
Batteries, 2 x 12 V / 200 Ah
Start motor, 24 V / 7 kW
Frame
Access way with handrail
Tool storage area
Punched metal anti-slip plates
Undercover (heavy-duty)
Undercarriage
Undercover (heavy-duty)
Hydraulic track adjusters
Greased and sealed track link
Track Guard
Hydraulic system
Hose rupture valve: boom
Overload warning device
Automatic sensing hydraulic system
2-pump flow bucket circuit
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
Hydraulic oil, ISO VG 46

STANDARD EQUIPMENT
Cab and interior
ROPS (ISO12117-2) certified cab
Silicon oil and rubber mounts with spring
Travel pedals and hand levers
Adjustable operator seat and joystick control console
Control joysticks with 4 switches each
Heater & air-conditioner, automatic
Flexible antenna
AM/FM stereo with MP3, USB and bluetooth 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
Rear view camera
Master key
Track shoes
600 mm with triple grousers
Digging Equipment
Boom: 6.45 m HD
Arm: 3.2 m HD
Manual centralized lubrication

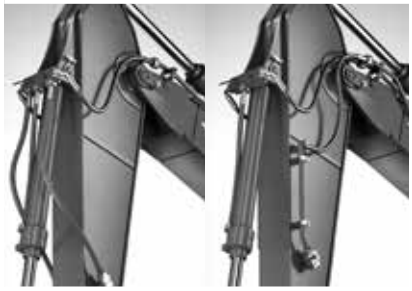
OPTIONAL EQUIPMENT
Engine
Block heater: 120 V, 240 V
Oil bath pre-cleaner
Diesel coolant heater, 10 kW
Water separator with heater
Auto engine shutdown
Electric
Extra work lights: Halogen/LED
Cab-mounted 3
Boom-mounted 2
Counterweight-mounted 1
Travel alarm
Anti-theft system
Rotating warning beacon
Undercarriage
Full track guard

OPTIONAL EQUIPMENT
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
Additional return filter
Slope & rotator
Grapple
Oil leak (drain) line
Quick coupler piping
Volvo hydraulic quick coupler S3
Volvo hydraulic quick coupler VQC-HU
Volvo hydraulic quick coupler DR38
Hydraulic oil, ISO VG 32
Hydraulic oil, ISO VG 46
Hydraulic oil, ISO VG 68
Hydraulic oil, biodegradable 46
Hydraulic oil, longlife oil 32
Hydraulic oil, longlife oil 46
Hydraulic oil, longlife oil 68
Counterweight
6 200 kg, 6 700 kg, 7 250 kg

OPTIONAL EQUIPMENT
Cab and interior
Fabric seat with heater
Fabric seat with heater and air suspension
Pilot control pattern change
Opening top hatch
Falling object guard (FOG)
Frame-mounted
Cab-mounted
Cab-mounted falling object protective structure (FOPS)
Smoker kit (ashtray and lighter)
Safety net for front window
Lower wiper with intermittent control
Anti-vandalism kit
Specific key
Track shoes
Track shoes 600/700/800/900 mm with triple grousers
Track shoes 600 mm HD with triple grousers and HD links
Track shoes 600 mm with double grousers
Digging Equipment
Boom: 6.2 m ME
Arm: 2.6 m ME, 3.9 m HD
Linkage with lifting eye
Service
Tool kit, daily maintenance
Tool kit, full scale
Automatic lubrication system
Air compressor

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Auxiliary hydraulics, (Breaker / Shear, Tilt / Rotator)



Side-view camera



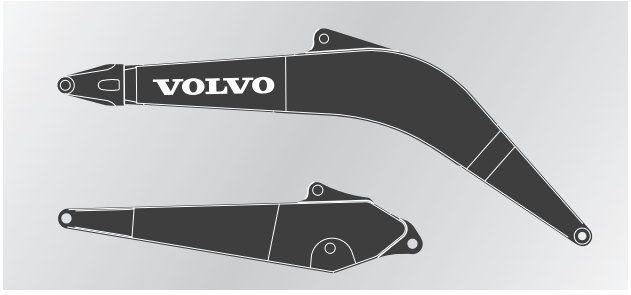
LED Lights



Air compressor



Mass excavation



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

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