



EC75D

Volvo Excavators 7.4-7.8 t 58 hp



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.

Small machines, big results

With decades of experience in the design and manufacture of compact excavators and wheel loaders, our range of compact machinery is designed with customer success in mind. Built from the same DNA as large Volvo machinery, our compact range sets the standard for efficiency performance and uptime – complemented by an extensive range of Volvo attachments for maximum versatility.

Building on our proud history, the Volvo Concept Lab continues to create cutting-edge ideas and innovative concepts – such as our award-winning electric compact excavator – to ensure we offer our customers machines which deliver big results 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

Built bigger, designed stronger

Introducing the Volvo EC75D – the biggest excavator in its class. If you're looking for a strong, stable and durable platform, look no further than the EC75D which boasts new levels of strength and durability. Capitalize on greater machine size and weight and reap the benefits of maximum productivity with Volvo.

Working range

The configuration of the boom and arm provide optimal working range – allowing the machine to reach further and dig deeper for increased productivity.



Bucket size

Thanks to its large size, the EC75D can be used with a bigger bucket than similar machines in the same class – increasing productivity. The Volvo designed bucket is specifically matched to the machine's size for maximum performance.



Boom and arm

The boom and arm are made from high strength tensile steel for maximum durability and uptime. The boom is fixed to the superstructure at the side of the cab for improved stability and visibility of the job site.





MACHINE SIZE

The EC75D has been built larger and heavier than competitor products in the same class to ensure superior productivity and profitability. The wider and longer undercarriage provides excellent stability and lifting capacity together with fantastic ground clearance and working range.



DIGGING POWER

High digging force is delivered through optimum engine power and hydraulic pressure while excellent pump flow and swing torque enable faster cycle times – particularly when working with hard materials and a larger bucket.

More performance, less fuel

Volvo prides itself on producing machines that give you more power while using less fuel. The EC75D's enhanced hydraulic system is perfectly matched to the engine – delivering high performance and reduced fuel consumption. Features including industry-leading lift capacity and high digging power give you the most efficient operation possible – saving you time and money. The EC75D is in a league of its own.

Volvo engine

The powerful Volvo D3 diesel engine delivers 43kW and low fuel consumption. The automatic idling system reduces engine speed to idle when the controls are inactive for five seconds or the left-hand console is raised. The engine returns to the pre-selected speed when a control is touched or automatic idling is turned off.



Tractive force

Superior tractive force enables the machine to climb gradients with ease and travel over rough terrain. If an optional dozer blade is selected, tractive force will also aid backfilling and landscaping.



Swing performance

The balance between the torque and swing speed permits fast and precise placement of the attachment – even when working on a slope



Lifting capacity

The EC75D features industry-leading lifting capacity which, combined with strong hydraulic performance and stability, delivers exceptional lift and handling capabilities.



Optimize productivity

At Volvo we understand that when operators are comfortable they experience less fatigue and work more productively. That's why we've built an industry-leading, spacious operator environment with excellent allaround visibility. Operators will feel in control and perform efficiently all day long in this superior working environment. Witness the benefits for yourself and experience new levels of profitability.

I-ECU monitor

The large monitor clearly presents machine information and puts the operator in control, enabling high performance and efficiency. The operator and service technician can make quick visual and diagnostic checks, increasing uptime and productivity.



RPM control

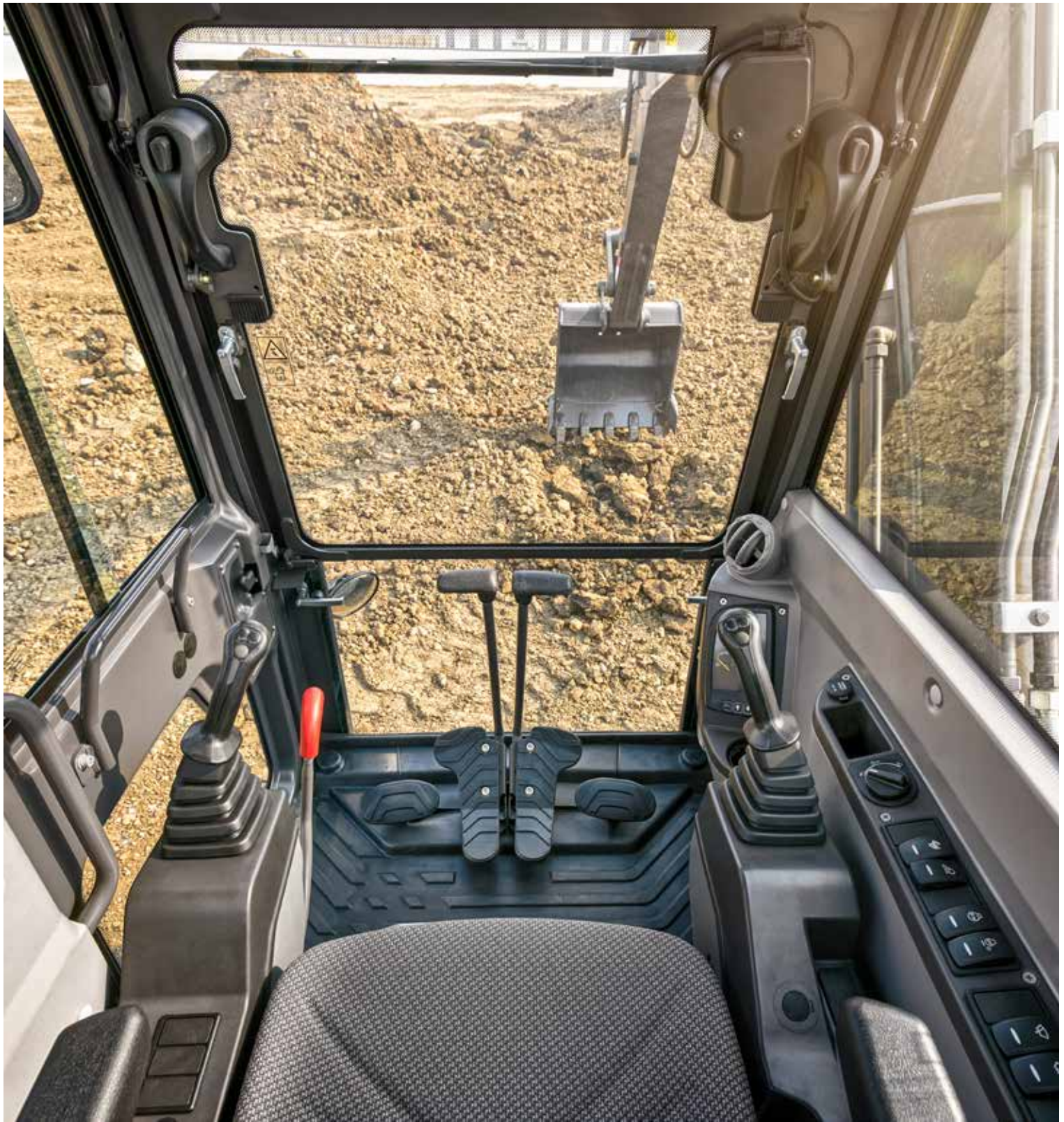
An electrical rpm control system allows the operator to precisely adjust and optimize engine rpm in any application. By using the rpm settings, fuel efficiency and machine performance are maximized. There are nine rpm settings as well as the P (Power) max mode.



Dozer blade control lever

The dozer blade control level manages the lift and fall of dozer blade. EC75D applies the advanced pilot control to make the control easier.





VOLVO CAB

See and do more in the Volvo cab, designed with the large expanses of glass that surround the adjustable operator seat, which features a headrest and orange seatbelt as standard. The spacious environment offers ergonomic controls, efficient HVAC system, and vibration and noise isolation, so you'll always be in control – and comfortable.

Designed to meet your needs

Boom and arm

The boom and arm are made from high strength tensile steel for maximum durability and uptime.

Lifting capacity

Industry-leading lift capacity delivers exceptional lifting and handling capabilities.

Bucket size

Due to its larger size, the EC75D can be used with a bigger bucket than similar machines in the same class – increasing productivity.

VCADS Pro

This analysis and programming tool makes it easy to control the machine for increased performance.



DIGGING POWER

The enhanced hydraulic system is perfectly matched to the engine to deliver high digging force.

MACHINE SIZE

The EC75D is bigger and heavier than competitor products in the same class to ensure more productivity and profitability.

VOLVO CAB

The industry-leading cab offers a spacious and comfortable environment with enhanced visibility for reduced fatigue and increased productivity.

Volvo engine

Powerful engine delivers 43kW. Volvo engine and automatic idling system provide low fuel consumption.

Swing performance

The swing motor design features a robust axial piston providing excellent performance.

SERVICEABILITY

Grouped service points and ground level access allow regular checks to be done faster for maximum machine uptime.





SERVICEABILITY

Grouped service points and excellent access to the engine compartment via the engine hood – which can be fully opened – allows regular checks to be done faster for maximum machine uptime.

Smart serviceability

Taking care of your excavator shouldn't be complicated. That's why the EC75D is packed with maintenance saving features to help you work for longer and sustain productivity day in and day out. Benefit from the Volvo experience and enjoy intuitive maintenance with the EC75D.

Customer Support Agreements

Customer Support Agreements offer service and maintenance with controlled costs and maximum uptime. The flexible system caters for a range of needs from total repair and maintenance to an inspection program covering vital parts and functions.



Support center

Volvo customers have direct access to the unique dealer support network. Customers can telephone a support number 24 hours a day, seven days a week, which identifies the call and transfers it to the local dealer where a dedicated team will take care of your needs – maximizing machine uptime.



VCADS Pro

The VCADS Pro (Volvo Computer Aided Diagnostic System Professional) analysis and programming tool makes it easy to control the machine for increased performance.



Get the most from your excavator

For increased versatility and profitability, the EC75D has been built attachment ready. Get the most out of your machine with Volvo attachments which have been designed to perfectly match and work in harmony with your excavator. The EC75D is a versatile machine that can effectively perform a variety of tasks. Get the job done with reduced cycle times and reduced fuel consumption with Volvo.

Interfaces



Direct fit

Direct fit attachments will always deliver a high performance however with the need for excavators to handle more tasks than ever before, Volvo offer Quick Couplers providing various levels of versatility and performance to meet every need.



Hydraulic quick coupler

The Volvo Hydraulic Quick Coupler allows pin on interface attachments that can be connected and disconnected in standard digging position or face shovel mode. It's also the perfect match for Volvo breakers.

Buckets



General purpose buckets

Designed to be used in a large variety of conditions for all trenching and handling jobs. The durable buckets can work in material like loose gravel, crushed rock, dirt and soil. Available in different widths: 770-890 mm.

Hydraulic breaker

Designed for optimum compatibility with Volvo machines, the Volvo hydraulic breaker range combines excellent operating performance with low vibration: Increase performance and productivity / Reliable and simple to maintain / Designed for a perfect fit



Wear parts

An all-round system that combines strength and durability with quick and easy change.



Tooth

Engineered for combined durability and penetration. Manufactured with optimal material composition and heat treatment process.



Adapter

Designed for optimal fitting with the tooth, better retention and better cutting edge protection.



Breaker tools

We offer an extensive range of high quality tools using high tensile steel to suit every application.



THE PERFECT MATCH

Select from a range of original Volvo buckets made to work in harmony with your Volvo excavator. Buckets are available as direct fit or with Volvo quick coupler interfaces.

Volvo EC75D in detail

Engine

Volvo engine Tier 3 (Stage 3) emissions compliant diesel engine. The engine uses precise, highpressure fuel injectors, Air Filter: 2 stage. Low cab noise levels.		
Model	Volvo	D2.6D
Max. power at	r/min	2 000
Net (ISO 9249/SAEJ1349)	kW	40.9
	hp	56
Gross (SAE J1995)	kW	43
	hp	58
Max. torque	Nm	225.8
at engine speed	r/min	1 600
No. of cylinders		4
Displacement	l	2.62
Bore	mm	87
Stroke	mm	110

Electrical system

Voltage	V	12
Batteries	V	1 x 12
Battery capacity	Ah	100
Alternator	V/Ah	12/60
Starter motor output	V - kW	12 - 2.5

Swing system

Swing provided by radial piston motor and reduction gear with remote lubrication.		
Max. swing speed	r/min	10.5
Max. swing torque	kNm	22.9

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.		
Travel speed low	km/h	2.86
Travel speed high	km/h	5
Max. drawbar pull	kN	65
Gradeability	°	35

Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.		
Track shoes		2 x 40
Link pitch	mm	154
Shoe width	mm	450
Bottom rollers		2 x 5
Top rollers		2 x 1

Hydraulic system

Closed-center, load-sensing hydraulic system (CCLS) providing fuel savings and independent control of functions.		
Main pump: Variable-displacement, load-sensing pump for all equipmen		
Maximum flow	l/min	1 x 160
Relief valve setting pressure		
Implement	MPa	26
Travel circuit	MPa	26
Swing circuit	MPa	23.5

Sound Level

Sound level in cab according to ISO 6396		
L _{pa}	dB	80
External sound level according to ISO 6395 and EU Noise Directive 2000/14/EC		
L _{WA}	dB	99

Service Refill

Fuel tank	l	145
Hydraulic system, total	l	140
Hydraulic tank	l	80
Engine oil	l	10
Engine coolant	l	13.6

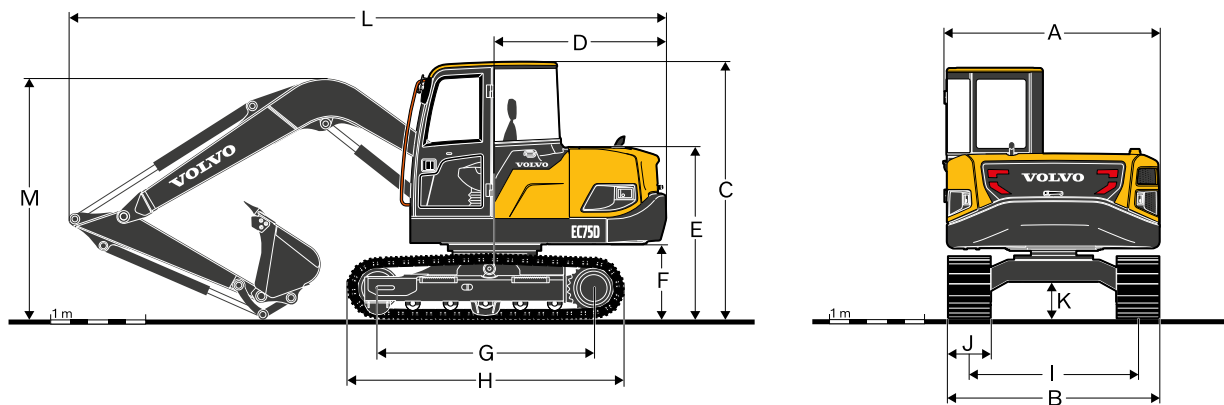
BUCKETS

Width	Weight	Capacity
mm	kg	l
770	262	340

MACHINE WEIGHT AND GROUND PRESSURE

	Shoe width	Operating weight	Ground pressure
	mm	kg	kPa
Boom 3.71 m, Arm 1.65 m, Bucket 262 kg (340 l), Counterweight 650 kg			
Steel track	450	7 400	30.4

Specifications

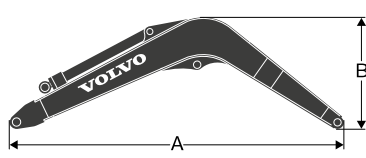
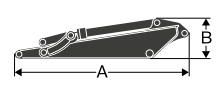


MACHINE DIMENSIONS

		Unit	EC75D
A	Overall width of upper structure	mm	2 280
B	Overall width	mm	2 230
C	Overall height of cab	mm	2 713
D	Tail swing radius	mm	1 868
E	Overall height of engine hood	mm	1 798
F	Counterweight clearance *	mm	813
G	Tumbler length	mm	2 220
H	Track length	mm	2 900
I	Track gauge	mm	1 780
J	Shoe width	mm	450
K	Min. ground clearance *	mm	408.5
L	Overall length	mm	6 290
M	Overall height of boom	mm	2 470

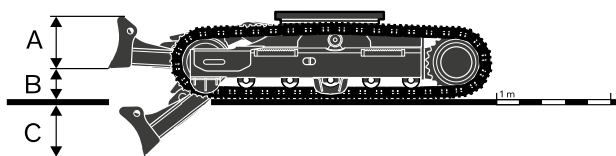
* Without shoe grouser

BOOM AND ARM DIMENSIONS

					
		unit	Boom	Arm	
		m	3.71	1.65	
A	Length	mm	3 850	2 195	
B	Height	mm	1 330	495	
	Width	mm	457	245	
	Weight	kg	540	285	

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

Arm: Includes cylinder, linkage and pin



DOZER BLADE DIMENSIONS

		Unit	
A	Height	mm	440
	Width	mm	2 240
B	Lifting height	mm	400
C	Digging depth	mm	330

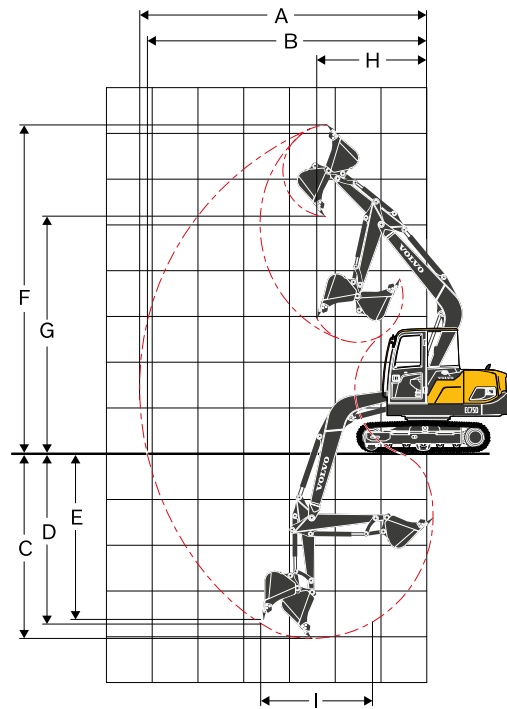
Specifications

WORKING RANGES

A	Max. digging reach	mm	6 340
B	Max. digging reach on ground	mm	6 190
C	Max. digging depth	mm	4 150
D	Max. digging depth (l=2.44m level)	mm	3 800
E	Max. vertical wall digging depth	mm	3 750
F	Max. cutting height	mm	7 200
G	Max. dumping height	mm	5 070
H	Min. front swing radius	mm	1 760

DIGGING FORCES

Breakout force (bucket)	ISO	kN	56
Tearout force (arm)	ISO	kN	38
Rotation angle, bucket		°	173



LIFTING CAPACITY EC75DV

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	2.0 m		3.0 m		4.0 m		5.0 m		Max. Reach		
		Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Along UC	Across UC	Max.
Boom: 3.71 m Arm: 1.6 m Shoe: 450 mm CWT: 650 kg No dozer blade	6.0 m kg									*1 785	*1 785	2.5
	5.0 m kg			*1 475	*1 475					*1 560	*1 560	3.9
	4.0 m kg			*1 595	*1 595	*1 500	*1 500			*1 520	1 410	4.7
	3.0 m kg	*2 880	*2 880	*1 995	*1 995	*1 670	*1 670	1 480	1 240	1 400	1 180	5.1
	2.0 m kg			*2 550	*2 550	*1 900	1 710	1 440	1 210	1 280	1 070	5.4
	1.0 m kg			*2 965	2 470	1 950	1 620	1 400	1 170	1 240	1 040	5.4
	0 m kg			2 950	2 390	1 890	1 570	1 370	1 140	1 280	1 070	5.2
	-1.0 m kg	*4 210	*4 210	2 940	2 380	1 880	1 550			1 430	1 190	4.9
	-2.0 m kg	*3 610	*3 610	*2 600	2 420	*1 850	1 580			*1 710	1 480	4.2
	-3.0 m kg	*2 455	*2 455	*1 670	*1 670					*1 605	*1 605	3.1
Boom: 3.71 m Arm: 1.6 m Shoe: 450 mm CWT: 650 kg Dozer blade: Down	6.0 m kg									*1 785	*1 785	2.5
	5.0 m kg			*1 475	*1 475					*1 560	*1 560	3.9
	4.0 m kg			*1 595	*1 595	*1 500	*1 500			*1 520	1 510	4.7
	3.0 m kg	*2 880	*2 880	*1 995	*1 995	*1 670	*1 670	*1 520	1 340	*1 520	1 270	5.1
	2.0 m kg			*2 550	*2 550	*1 900	1 840	*1 605	1 310	*1 550	1 160	5.4
	1.0 m kg			*2 965	2 670	*2 110	1 750	*1 700	1 260	*1 580	1 130	5.4
	0 m kg			*3 080	*2 600	*2 220	*1 700	*1 730	1 240	*1 630	1 160	5.2
	-1.0 m kg	*4 210	*4 210	*2 965	2 580	*2 170	1 680			*1 680	1 290	4.9
	-2.0 m kg	*3 610	*3 610	*2 600	*2 600	*1 850	1 710			*1 710	1 610	4.2
	-3.0 m kg	*2 455	*2 455	*1 670	*1 670					*1 605	*1 605	3.1
Boom: 3.71 m Arm: 1.6 m Shoe: 450 mm CWT: 650 kg Dozer blade: Up	6.0 m kg									*1 785	*1 785	2.5
	5.0 m kg			*1 475	*1 475					*1 560	*1 560	3.9
	4.0 m kg			*1 595	*1 595	*1 500	*1 500			*1 520	1 510	4.7
	3.0 m kg	*2 880	*2 880	*1 995	*1 995	*1 670	*1 670	*1 520	1 340	*1 520	1 270	5.1
	2.0 m kg			*2 550	*2 550	*1 900	1 840	*1 605	1 310	*1 475	1 160	5.4
	1.0 m kg			*2 965	2 670	*2 110	1 750	*1 605	1 260	1 430	1 130	5.4
	0 m kg			*3 080	*2 600	2 170	*1 700	1 580	1 240	1 480	1 160	5.2
	-1.0 m kg	*4 210	*4 210	*2 965	2 580	2 150	1 680			1 640	1 290	4.9
	-2.0 m kg	*3 610	*3 610	*2 600	*2 600	*1 850	1 710			*1 710	1 610	4.2
	-3.0 m kg	*2 455	*2 455	*1 670	*1 670					*1 605	*1 605	3.1

Notes: 1. The above loads are in compliance with SAE J1097 and ISO 10567 Hydraulic Excavator Lifting Capacity Standards.

2. Rated loads do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. 3. Rated loads marked with an asterisk (*) are limited by hydraulic capacity rather than tipping load. 4. No bucket.

Equipment

STANDARD EQUIPMENT

Engine

Engine Tier 3
Auto deceleration

Hydraulics

Hydraulic fluid mineral 46

Electrical System

Work light (One Cab front, One Boom)

Undercarriage

450mm steel track

Cab

CAB_Sld window
Fabric seat, Suspension
Head rest for Fabric seat
LH/RH one button in Single X1
Heater & air conditioner
Universal key
Radio with USB
2 inch retractible

Digging equipment

GP Boom, 3.70 m
GP Arm, 1.65 m
Linkage
Boom cylinder
Arm cylinder
Bucket cylinder

Service

Tool kit-daily maintenance
Spare parts

Other equipment

Counterweight
Pump for standard

Attachments / Buckets

BUCKET-0.34 m³(SAE)-with hook

OPTIONAL EQUIPMENT

Hydraulics

X1 piping (Breaker) (Single acting)
Quick coupler and piping (Double acting)
Hydraulic fluid mineral 68

Electrical System

Travel alarm

Undercarriage

Less lower structure
Dozer blade

Digging equipment

Reinforced Digging Arm

Attachments / Buckets

Hydraulic breaker

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Dozer blade



Quick coupler and piping



Hydraulic breaker



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 Construction Equipment
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