

V O L V O



Volvo Compact Excavators 5,4-5,63 t / 11.905-12.412 lb 36,5 kW

EC55D

Volvo Construction Equipment

A machine you can rely on

Volvo's EC55D high quality compact excavator is designed to work harder for longer. Using high quality components and Volvo design, the machine is built to last while delivering a superior performance and high fuel efficiency.

You can rely on a solid investment in the durable EC55D, benefiting from increased uptime and a highly competitive residual value.

Smooth control

Achieve a smooth and comfortable operating experience with the EC55D. You can dig, swing, load and lift with increased controllability, for enhanced productivity and reduced fatigue. The machine does exactly what the operator intends with responsive controls and an optimized hydraulic system to achieve precise grading results for a high quality finish.



A profitable operation

Reduce fuel costs with the EC55D for a more profitable operation. The state-of-the-art hydraulic system is perfectly matched to Volvo's premium Tier 3 engine to deliver high performance and superior fuel efficiency.



Proven reliability

Rely on increased uptime and a highly competitive residual value with the durable EC55D. The robust design of the EC55D incorporates the wrapped-around counterweight to shield the engine compartment, X-shaped undercarriage and heavy-duty arm, to enable a sturdy operation in extreme conditions. Maximum uptime is preserved thanks to easy-access maintenance points, and the new, easy-to-clean single layer cooling system.



Complete comfort and convenience

For comfortable operation and reduced operator fatigue, the EC55D cab offers a spacious and quiet working environment. Built for maximum convenience, the cab features ergonomically located monitor and controls, a fully adjustable seat, and a semi-long joystick. Performance of the air conditioning has been increased by 10% to ensure comfortable operation in all climates.





POWER TO PERFORM

Do more in less time with market-leading power, outstanding combined digging efforts and faster digging equipment speed of the EC55D. Tackle challenging job sites with ease thanks to the superior traction, swing force and lifting capacity. For the ultimate combination of power and productivity, improved cooling ensures optimized performance for any climate.

The complete solution

We're committed to providing a complete solution to guarantee the highest performance from your Volvo machine, including high quality attachments and state-of-the-art support through our customer solutions. Take advantage of our unique dealer support network to ensure your machine achieves maximum uptime, and generates maximum profit and growth for your business.

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.



Genuine Volvo Parts

Volvo Service Technicians work with industry-leading diagnostic tools and techniques, using only Genuine Volvo Parts to deliver the highest levels of quality and service. Talk to your local Volvo dealer about how genuine Volvo services can provide the service and maintenance plan that best fits your needs.



Customer support centre

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.





ROBUST ATTACHMENTS TO MATCH

Well-engineered and built to last in tough conditions, Volvo's robust, high quality buckets and hydraulic breakers offer high durability and performance. Specifically made for your Volvo machine, the buckets are reinforced with Volvo teeth and wear parts for longer life, and the range of breaker tools has been developed to break any kind of material with excellent performance.

Lasting performance

Proven reliability

Volvo conducts rigorous testing in the development stages resulting in a durable machine that won't let you down.

Smooth control

Increased controllability ensures smooth operation, improved productivity, and a high quality finish.

Grease can holder

Free up room in the cab with the conveniently-positioned grease can storage to allow for quick periodic greasing.

Proven reliability

Volvo conducts rigorous testing in the development stages resulting in a durable machine that won't let you down.

Robust attachments to match

High quality buckets and hydraulic breakers are specifically made for your Volvo machines to secure high durability.

Complete comfort and convenience

The spacious and ergonomic EC55D cab ensures a comfortable and productive operation as well as reducing operator fatigue.



Power to perform

Do more in less time with market-leading power and outstanding combined digging power and speed of the EC55D.

Single layer cooling unit

The single layer cooling unit maximizes efficiency, reduces blockages and aids cleaning.

New D-Series styling

The new Volvo D-series styling offers a unique look to differentiate from competitors' designs and previous generations.

Improved air conditioning

Volvo's industry-leading climate control system provides a more comfortable and productive working environment.

Customer Support Agreements

Covering a variety of service and maintenance needs, Customer Support Agreements control costs and maximize uptime.

X-shaped undercarriage

Durable and strong X-shape undercarriage ensures superior stability and increases machine lifetime.



Volvo EC55D in detail

Engine

Volvo engine Tier 3 (Stage 3) emissions compliant diesel engine. The engine uses precise, high pressure fuel injectors, Air Filter: 2 stage.		
Model	Volvo	D2.6A
Max. power at	r/min (r/s)	2.000 (33,3)
Net (ISO 9249/SAEJ1349)	kW (hp)	34,5 (46)
Gross (SAE J1995)	kW (hp)	36,5 (49)
Max. torque	Nm (ft lbf)	210 (155)
at engine speed	r/min	1.000
No. of cylinders		4
Displacement	l (in ³)	2,62 (160)
Bore	mm (in)	87 (3,4)
Stroke	mm (in)	110 (4,3)

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	9
Max. swing torque	kNm (ft lbf)	11 (8.110)

Undercarriage

The undercarriage has a robust X-shaped frame. Greased and sealed track chains are standard.		
Track shoes		2 x 39
Link pitch	mm (in)	135 (5,3)
Shoe width	mm (in)	380 (15)
Bottom rollers		2 x 5
Top rollers		2 x 1

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	98

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 (mi/h)	2,6 (1,6)
Travel speed high	km/h (mi/h)	4,3 (2,7)
Max. drawbar pull	kN (lbf)	43 (9.670)
Gradeability	°	35

Hydraulic system

Open-center, horsepower control providing fuel saving and high performance		
Variable-displacement, load-sensing pump for all equipment:		
Maximum flow	l/min (gal/min)	2 x 55 (2 x 14,5)
Maximum operating pressure	MPa (psi)	21,6 (3.130)
Maximum flow	l/min (gal/min)	1 x 32,4 (1 x 8,6)
Maximum operating pressure	MPa (psi)	20,6 (2.990)
Pilot pump (Gear pump) for the power assistance circuit:		
Maximum flow	l/min (gal/min) min	1 x 9 (1 x 2,4)
Maximum operating pressure	MPa (psi)	3,2 (464)
Swing circuit:		
Maximum operating pressure	MPa (psi)	18,6 (2.700)
Travel circuit:		
Maximum operating pressure	MPa (psi)	20,6 (2.990)

Service Refill

Fuel tank	l (gal)	100 (26,4)
Hydraulic system, total	l (gal)	130 (34,3)
Hydraulic tank	l (gal)	90 (23,8)
Engine oil	l (gal)	10 (2,64)
Engine coolant	l (gal)	7,8 (2,06)

BUCKETS

Width		Weight		Capacity	
mm	in	kg	lb	l	gal
450	17,7	99	218	98	26
770	30,3	160	353	200	53

MACHINE WEIGHTS AND GROUND PRESSURE

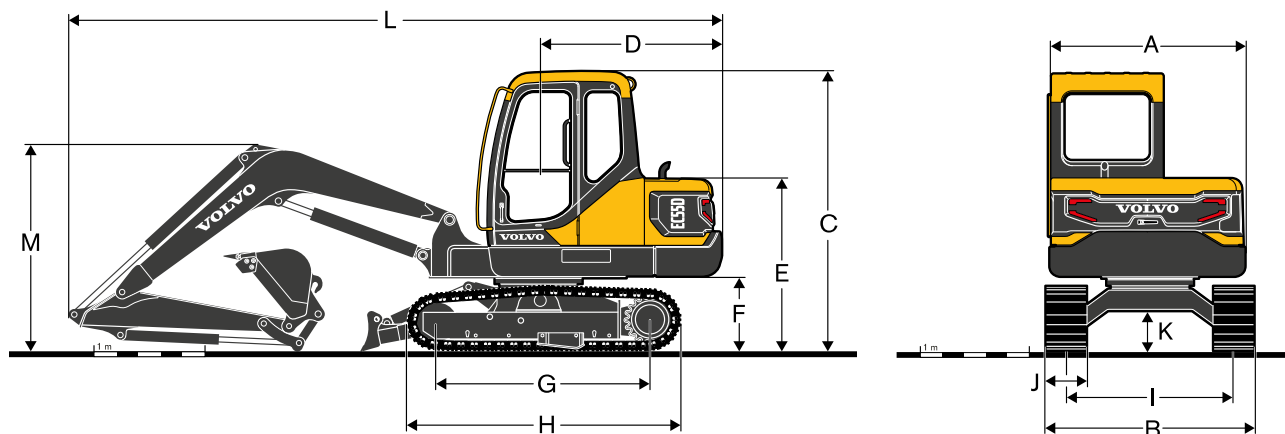
EC55D with 3,03 m (9'11") boom, 1,54 m (5'1") arm, 142 l (160 kg) / 28 gal (353 lb) bucket, 420 kg (926 lb) counterweight

Description	Shoe width		Operating weight		Ground pressure	
Units	mm	in	kg	lb	kPa	psi
Steel track	380	15	5.510	12.147	33,3	4.83

DIGGING PERFORMANCE

Breakout force - bucket	SAE J1179	kN	lbf	36,2
	ISO 6015	kN	lbf	41,6
Tearout force - dipper arm	SAE J1179	kN	lbf	28,8
	ISO 6015	kN	lbf	29,5
Rotation angle, bucket		°		174

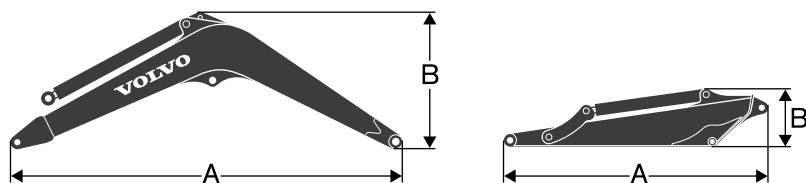
Specifications



DIMENSIONS

Description	Unit			
A Overall width of upper structure	mm	ft in	1 840	6'0"
B Overall width	mm	ft in	1 920	6'4"
C Overall height of cab	mm	ft in	2 560	8'5"
D Tail swing radius	mm	ft in	1 680	5'6"
E Overall height of engine hood	mm	ft in	1 600	5'3"
F Counterweight clearance*	mm	in	690	27"
G Tumbler length	mm	ft in	1 950	6'5"
H Track length	mm	ft in	2 500	8'2"
I Track gauge	mm	ft in	1 540	5'1"
J Shoe width	mm	in	380	15"
K Min. ground clearance*	mm	in	380	15"
L Overall length	mm	ft in	5 885	19'4"
M Overall height of boom	mm	ft in	1 865	6'1"

* Without shoe grouser

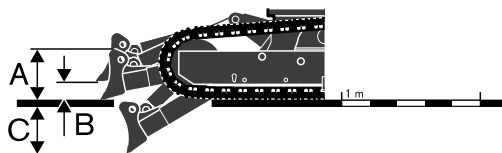


DIMENSIONS

Description	Unit		Boom		Arm	
	m	ft in	3,03	9'11"	1,54	5'1"
A Length	mm	ft in	3.136	10'3"	2.040	6'8"
B Height	mm	ft in	1.090	3'7"	463	1'6"
Width	mm	in	202	7,95	148	5,83
Weight	kg	lb	210	463	125	276

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

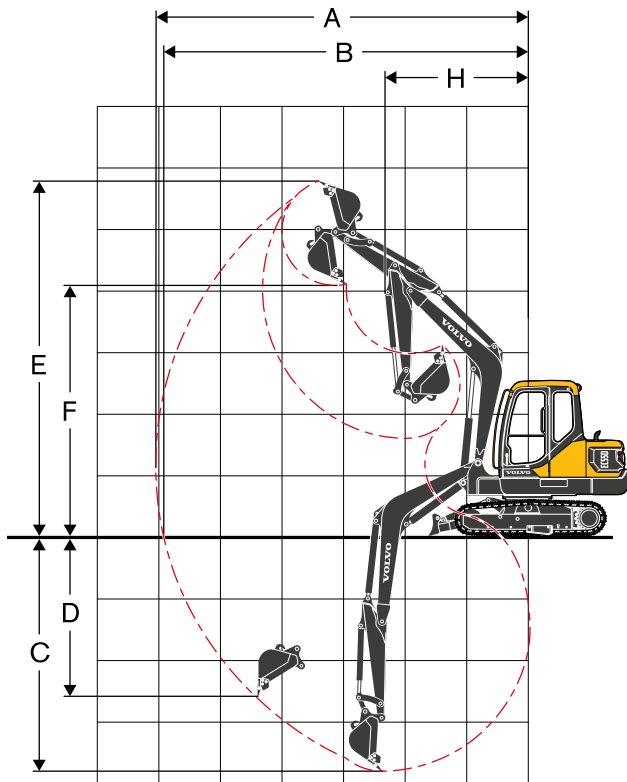
Arm: Includes cylinder, linkage and pin



DIMENSIONS

Description	Unit		Dozer blade	
A Height	mm	in	360	14,2
Width	mm	ft in	1.920	6'4"
B Lifting height	mm	in	350	13,7
C Digging depth	mm	in	450	17,7

Specifications



WORKING RANGES

Description	Unit			
A Max. digging reach	mm	ft in	6.110	20'1"
B Max. digging reach on ground	mm	ft in	5.980	19'7"
C Max. digging depth	mm	ft in	3.820	12'6"
D Max. vertical wall digging depth	mm	ft in	2.620	8'7"
E Max. cutting height	mm	ft in	5.770	18'11"
F Max. dumping height	mm	ft in	4.090	13'5"
G Min. front swing radius	mm	ft in	2.360	7'9"

LIFTING CAPACITY EC55D

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		1,0 m / 3,3 ft		2,0 m / 6,6 ft		3,0 m / 9,8 ft		4,0 m / 13,1 ft		5,0 m / 16,4 ft		Max. reach		
			Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Along	Across	Max.
Boom 3,03 m 9,8 ft Arm 1,54 m 5,1 ft Shoe 380 mm 15 in CWT 420 kg 926 lb Dozer blade up	4,0 m	kg							*1.360	1.070			1.300	960	4.248 mm
	13,1 ft	lb							*2.998	2.359			2.866	2.116	13,9 ft
	3,0 m	kg							*1.410	1.050			1.040	770	4.862 mm
	9,8 ft	lb							*3.109	2.315			2.293	1.698	16,0 ft
	2,0 m	kg					2.140	1.540	1.370	1.010	980	720	930	690	5.171 mm
	6,6 ft	lb					4.718	3.395	3.020	2.227	2.161	1.587	2.050	1.521	17,0 ft
	1,0 m	kg					2.020	1.430	1.330	960	960	700	900	660	5.238 mm
	3,3 ft	lb					4.453	3.153	2.932	2.116	2.116	1.543	1.984	1.455	17,2 ft
	0 m	kg					1.970	1.390	1.290	930	950	690	930	680	5.076 mm
	0 ft	lb					4.343	3.064	2.844	2.050	2.094	1.521	2.050	1.499	16,7 ft
	-1,0 m	kg	*2.480	*2.480	*3.220	2.660	1.970	1.380	1.290	930			1.050	760	4.654 mm
	-3,3 ft	lb	*5.467	*5.467	*7.099	5.864	4.343	3.042	2.844	2.050			2.315	1.676	15,3 ft
Boom 3,03 m 9,8 ft Arm 1,54 m 5,1 ft Shoe 380 mm 15 in CWT 420 kg 926 lb Dozer blade down	-2,0 m	kg	*4.230	*4.230	*3.150	2.700	2.000	1.410					1.370	990	3.868 mm
	-6,6 ft	lb	*9.326	*9.326	*6.945	5.952	4.409	3.109					3.020	2.183	12,7 ft
	4,0 m	kg							*1.360	1.140			*1.390	1.030	4.248 mm
	13,1 ft	lb							*2.998	2.513			*3.064	2.271	13,9 ft
	3,0 m	kg							*1.410	1.130			*1.370	820	4.862 mm
	9,8 ft	lb							*3.109	2.491			*3.020	1.808	16,0 ft
	2,0 m	kg					*2.210	1.660	*1.630	1.080	*1.400	780	*1.380	740	5.171 mm
	6,6 ft	lb					*4.872	3.660	*3.594	2.381	*3.086	1.720	*3.042	1.631	17,0 ft
	1,0 m	kg					*2.780	1.550	*1.870	1.040	*1.470	760	*1.400	710	5.238 mm
	3,3 ft	lb					*6.129	3.417	*4.123	2.293	*3.241	1.676	*3.086	1.565	17,2 ft
	0 m	kg					*2.920	1.510	*1.980	1.010	*1.470	740	*1.440	730	5.076 mm
	0 ft	lb					*6.437	3.329	*4.365	2.227	*3.241	1.631	*3.175	1.609	16,7 ft
	-1,0 m	kg	*2.480	*2.480	*3.220	2.930	*2.700	1.500	*1.870	1.000			*1.460	820	4.654 mm
	-3,3 ft	lb	*5.467	*5.467	*7.099	6.460	*5.952	3.307	*4.123	2.205			*3.219	1.808	15,3 ft
	-2,0 m	kg	*4.230	*4.230	*3.150	2.980	*2.110	1.530					*1.420	1.070	3.868 mm
	-6,6 ft	lb	*9.326	*9.326	*6.945	6.570	*4.652	3.373					*3.131	2.359	12,7 ft

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.

Equipment

STANDARD EQUIPMENT

Engine

Low-emission Volvo diesel engine
Standard cooling system (45 deg. C)
Two-stage air filter
Fuel filter and water separator
Alternator, 60 A

Electric / Electronic control system

Safe engine start function
Halogen working lights: Cab-mounted 1, Boom-mounted 1
Battery, 12 V / 100 Ah
Start motor, 12 V / 2,5 kW

Frame

Lower frame with dozer blade
420 kg (926 lb) counterweight
Under cover

Undercarriage

380 mm (15") steel track

Hydraulic system

Pump for Standard
Automatic two speed travel motors
Cylinder cushioning
Hydraulic fluid mineral 46

Cab and interior

Standard cab
Fabric operator seat
Control joystick with LH/RH one button
Heater and air-conditioner
Radio with USB
Master Key
Rearview mirror-side (LH/RH)

Digging equipment

3,03 m (9'11") Boom, 1,54 m (5'1") Arm
Linkage

Service

Tool kit, standard
Spare parts

OPTIONAL EQUIPMENT

Engine

Fuel filler pump: 35 l/min (9,25 gpm), with automatic shut-off

Electric/Electronic control system

Extra working lights: Cab-mounted 1 (rear 1)
Rotating warning beacon
Travel alarm

Undercarriage

400 mm (16") rubber shoe

Hydraulic system

Pump for High Attitude
Hydraulic fluid mineral 68
Hammer

Hammer piping

Cab and interior

Audio - provision
FOG (Falling Object Guard)
FOPS (Falling Object Protection Structure)

Service

Tool kit, full scale
Tool kit-daily maintenance

SELECTION OF VOLVO OPTIONAL EQUIPMENT

Extra work lights



Breaker piping



Rotating beacon



Travel alarm



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.

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