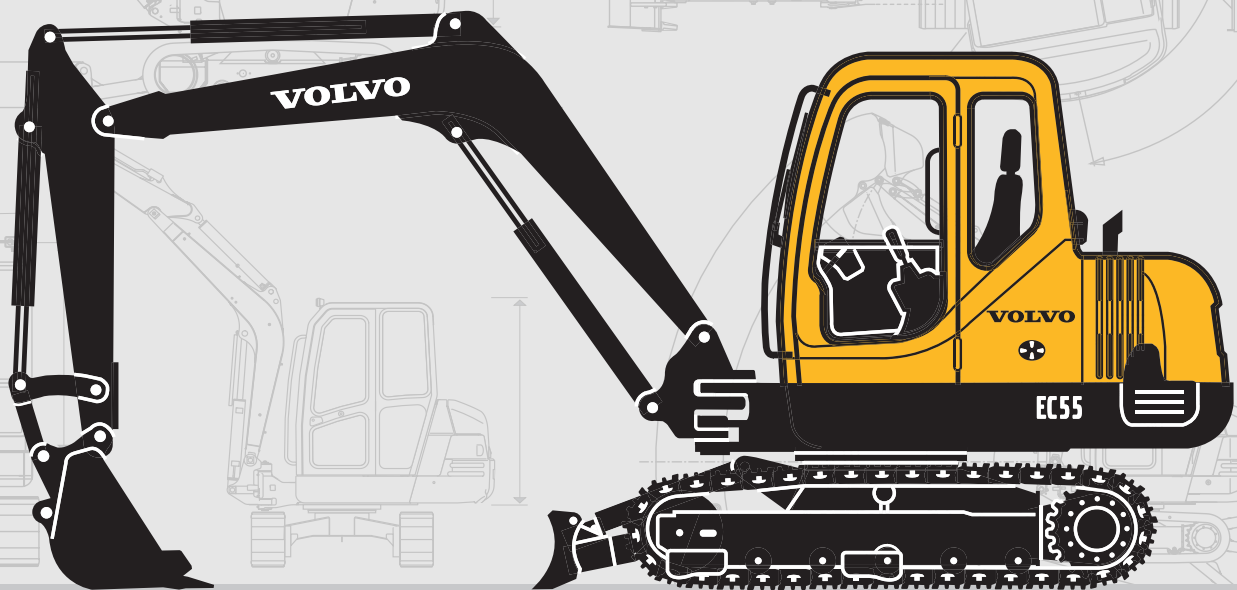


VOLVO COMPACT EXCAVATOR

EC55



- **Gross power (SAE J 1349) :**
40 kW / 54 HP
- **Net horsepower :**
38 kW / 52 hp
- **Operating weight :**
4910 – 5050 kg / 10830 - 11130 lbs
- **Bucket capacity :**
70 – 231 liters / 2.4 cu.ft - 10.1 cu.ft
- **Maximum dig depth :**
4000 mm / 13' 2"
- **Spacious, ergonomically designed and quiet cab**
- **Air conditioning** as standard for more comfort
- **TOPS and ROPS** cab for operator safety
- **Two travel speeds** for higher mobility on job sites
- **Control pattern selector (ISO / SAE)** for a quick change of operating mode
- Direct injection diesel engine and **low emissions** for **environmental protection**
- **Total Power Control** hydraulic system providing **independence** of all movements and high **productivity**
- Long tracks for **greater stability**

VOLVO



ENGINE

Low-emission, water-cooled, 4-cylinder direct-injection diesel engine in conformity with US EPA regulations.

Air Filter:.....3 stage, with pre cleaner
Gross power (SAE J 1349)40 kW (54 hp) @ 2250 rpm
Net power (ISO 9249/DIN 6271)38kW (52 hp) @ 2200 rpm
Displacement, total2.8 l (171 in3)
Maximum torque181 Nm @ 1600 rpm (134 lbf @ 1600 rpm)
Bore x stroke94 mm x 100 mm (3.7 in x 3.94 in)



ELECTRICAL EQUIPMENT

Voltage12 V
Battery12 V – 100 AH
Alternator12 V – 40 A
Starter12 V – 2.3 kW



HYDRAULIC SYSTEM

Variable displacement Total Power Control hydraulic system. The system provides total independence of all movements and of travel. It also incorporates the following functions :

- Summation system provides optimal use of the pump oil flow
- Priority to the boom for faster raising
- Priority to the dipper for fast cycle times when doing levelling and earth work
- Boom anti-drift device

Control pilot operated hydraulic servo controls

Variable displacement double pump for the equipment (boom, dipper and bucket) and travel circuits :

Maximum delivery2 x 55 liters/min. (2 x 13.8 gpm)
Maximum operating pressure210 bar (3045 psi)

Gear pump for the swing, offset and blade circuits :

Maximum delivery35.6 liters/min. (9.4 gpm)
Maximum operating pressure190 bar (2755 psi)

Gear pump for the pilot control circuit :

Maximum delivery9.9 liters/min. (2.6 gpm)
Maximum operating pressure33 bar (478 psi)

Double-acting hydraulic circuit for accessories :

Maximum delivery55 liters/min. (13.8 gpm)
Maximum operating pressure210 bar (3045 psi)

End-of-stroke cushions :

On boom ramat the end of the rod extension
On dipper ramon both sides
On offset ramon both sides



SWING SYSTEM

Cab swing is provided by an axial piston hydraulic motor.

Swing speed10 rpm
Turntable brakingautomatic brake



BUCKET PERFORMANCES

Bucket breakout force4070 daN (9149 lbf)
Dipper tear out force2730 daN (6137 lbf)



LOWER UNDERCARRIAGE

The rollers and the tensioning wheels are lubricated for life.

Bottom/top rollers per side.....5 / 1
Width of the standard tracks (rubber)400 mm (1' 3 ")
Width of the optional tracks (steel)380 mm (1' 2 ")
Track tensionby grease piston
Blade (width x height)1900 x 360 mm (6' 3" x 1' 2")



TRAVEL SYSTEM

Each track is driven by an axial piston hydraulic motor equipped with two gears and an epicyclic reduction gear. Braking is provided automatically by a multiple disc brake.

Max. speed (low range/high range) ..2.6 – 4.3 kph / 1.6 mph - 2.5 mph
Max. tractive effort4280 daN (9621 lbf)
Permitted slope35° (70%)



CAPACITIES

Fuel tank.....90 liters (24 US gal)
Hydraulic reservoir.....90 liters (24 US gal)
Total capacity of the hydraulic system130 liters (34 US gal)
Engine oil sump9.7 liters (2.6 US gal)
Coolant12.1 liters (3.2 US gal)



WEIGHTS

Operating weight and ground pressure:

Rubber tracks	Steel tracks
4910 kg (10824 lb) 0.29 kg/cm ² (4.04 lbs/in ²)	5050 kg (11133 lb) 0.31 kg/cm ² (4.12 lbs/in ²)

Machine equipped with cab, standard bucket, full tanks, 165 lb operator weight.

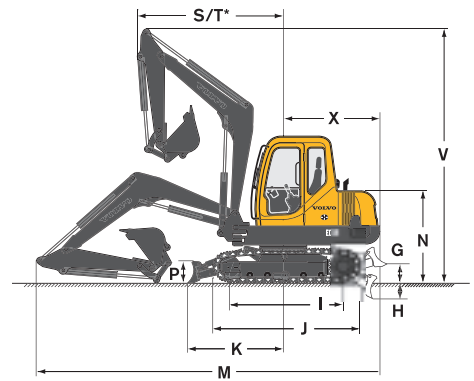
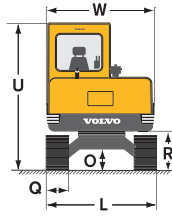
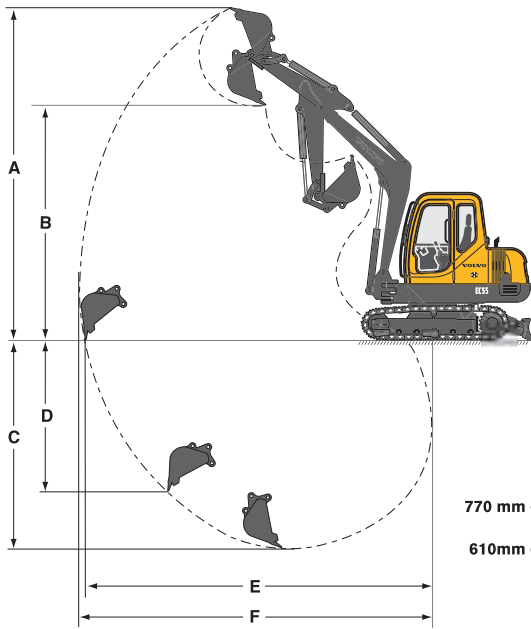


SOUND LEVELS

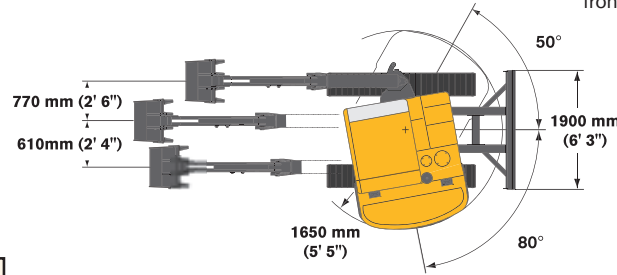
Results of dynamic measurements :



Sound level exterior (LwA)98 dB(A)
Sound level in the cab (LpA)79 dB(A)

DIMENSIONS



* front turning circle with max. offset



Buckets*	Width	Weight	Capacity
Backhoe buckets 	300 mm (12")	143 kg (316 lbs)	67 l (2.4 cu.ft)
	450 mm (18")	162 kg (358 lbs)	98 l (3.4 cu.ft)
	600 mm (24")	195 kg (429 lbs)	135 l (4.8 cu.ft)
	750 mm (30")	217 kg (478 lbs)	174 l (7.5 cu.ft)
Ditch bucket 	1200 mm (48")	227 kg (500 lbs)	287 l (10.1 cu.ft)

A	B	C*	C	D	E	F	G	H
5770 mm (18' 10")	4090 mm (13' 5")	4000 mm (13' 2")	3820 mm (12' 6")	2620 mm (8' 6")	5980 mm (19' 7")	6110 mm (20' 1")	350 mm (1' 2")	450 mm (1' 5")

* Dig depth with the blade down.









I	J	K	L	M	N	O	P
1950 mm (6' 4")	2500 mm (8' 3")	1610 mm (5' 3")	1920 mm (6' 3")	5900 mm (19' 4")	1600 mm (5' 3")	380 mm (1' 3")	360 mm (1' 2")

Q	R	S	T	U	V	W	X
400 mm (1' 4")	690 mm (2' 3")	2360 mm (7' 8")	2330 mm (7' 7")	2550 mm (8' 4")	4470 mm (14' 7")	1840 mm (6' 1")	1650 mm (5' 5")

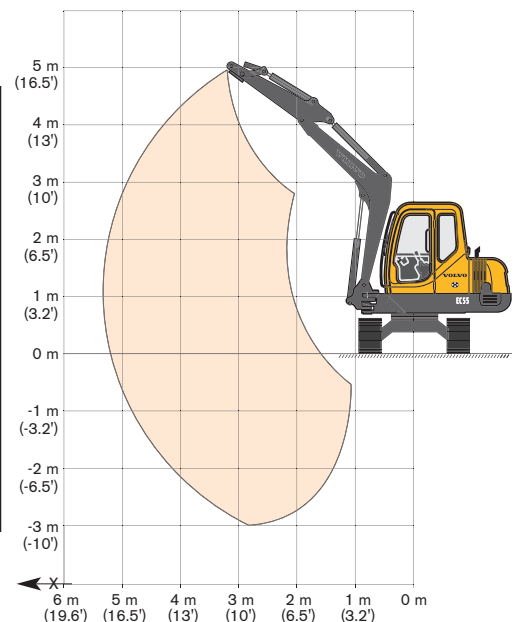
* Contact your local Volvo dealer for bucket availability

LOAD CAPACITIES


These capacities are given for a machine without a bucket or quick-release coupling and fitted with rubber tracks. The handling capacity is 75% of the tipping load or 87% of the hydraulic limit.

Outreach	1.5 m - (5')		3 m - (10')		4.5 m - (15')		Max reach	
								
4,5 m (15')							870 kg 1920 lbs	990 kg * 2180 lbs
3 m (10')					630 kg 1390 lbs	870 kg 1920 lbs	530 kg 1170 lbs	750 kg 1650 lbs
1,5 m (5')			1160 kg 2560 lbs	1640 kg 3620 lbs	580 kg 1280 lbs	830 kg 1830 lbs	430 kg 950 lbs	630 kg 1390 lbs
0 m (0')			1030kg 2270 lbs	1500 kg 3310 lbs	540 kg 1190 lbs	780 kg 1720 lbs	440 kg 970 lbs	640 kg 1410 lbs
-1,5 m (-5')	2370kg * 5230 lbs	2370 kg * 5230 lbs	1010 kg 2230 lbs	1480 kg 3260 lbs				

* hydraulic limit



 Handling capacity in 360° rotation, with the blade up

 Front load capacity, with the blade up

STANDARD EQUIPMENT

<p>Engine</p> <p>Low-emission engine meeting US EPA standards</p> <p>Three-stage air filter with restriction indicators</p> <p>External air pre-cleaner</p> <p>Electric cold start aid</p> <p>Diesel filter and sediment chamber</p> <p>Travel alarm</p> <p>Oil sump sheet metal protection</p>	<p>Hydraulic system</p> <p>Straight travel circuit system.</p> <p>Cylinder cushions with contamination seals</p> <p>Total Power Control system</p> <p>Pilot operated hydraulic controls</p> <p>Boom anti-lowering device</p> <p>Multiple filtration system (30 µm)</p> <p>Double-acting hydraulic circuit for accessories fitted on the boom (auger, hammer, thumb...)</p> <p>Pilot operated control of the hydraulic offset of the boom by the left joystick</p> <p>Control of forward movement by two levers coupled to pedals</p>	<p>Hinged upper front window</p> <p>Removable lower front window</p> <p>Sliding right side window</p> <p>Door that can be latched in the open position</p> <p>Radio/cassette player with 2 speakers</p> <p>Flexible antenna</p> <p>Interior lighting</p> <p>Intermittent windshield wiper and windshield washer on the front window</p> <p>Ashtray</p> <p>Cigar lighter</p>	<p>Safety</p> <p>Device for locking the controls when the left console is raised</p> <p>Pressure accumulator on the pilot control circuit in order to lower the equipment to the ground if the engine is switched off</p> <p>Rear window emergency escape</p>
<p>Electrical system</p> <p>Maintenance-free 12 V - 100 AH battery</p> <p>Starter motor 12V – 2.3kW</p> <p>Halogen working lights (2 on the cab and 1 on the boom)</p> <p>Horn</p>	<p>Cab</p> <p>Heating and air conditioning</p> <p>Anti-dust system by pressurization of the cab</p> <p>Tinted windows</p> <p>ROPS (Roll-Over Protective Structure)</p> <p>TOPS (Tip-Over Protective Structure)</p> <p>Fabric-covered multi-adjustable air suspension seat</p> <p>Non-slip floor and grab handle for access to the cab</p> <p>Seatbelt</p> <p>Adjustable control console</p>	<p>Instrumentation and monitoring</p> <p>Monitoring and warning light for the following functions: engine preheating, engine oil pressure, coolant temperature, battery charge, air filter clogging</p> <p>Internal and external fuel gauges</p> <p>Hour meter</p>	<p>Official approval</p> <p>ROPS conforming to ISO standard 3471/SAE J 1040</p> <p>TOPS conforming to ISO standard 12117</p> <p>Engine in conformity with US EPA regulation</p>
<p>Load-bearing chassis</p> <p>400 mm (1' 4") wide rubber tracks</p> <p>Backfilling blade</p> <p>Remote lubrication of the swing ring</p>	<p>Handling and earthwork equipment</p> <p>3030 mm (9' 11") long monobloc boom</p> <p>1540 mm (5' 1") dipper</p> <p>130° hydraulic boom offset</p> <p>Remote lubrication of the offset and dipper rams</p>	<p>Handling and earthwork equipment</p> <p>3030 mm (9' 11") long monobloc boom</p> <p>1540 mm (5' 1") dipper</p> <p>130° hydraulic boom offset</p> <p>Remote lubrication of the offset and dipper rams</p>	

OPTIONAL EQUIPMENT

<p>Handling and earthwork equipment</p> <p>Manual or hydraulic quick coupler</p>	<p>Lower chassis</p> <p>Steel tracks (380 mm - 1' 3" wide)</p> <p>Lighting</p> <p>Additional rear working light</p> <p>Revolving light</p>	<p>Safety</p> <p>Anti-starting device with digicode keypad (2 programmable codes)</p> <p>FOPS/FOG windshield guard</p>	<p>Miscellaneous</p> <p>Special customized paint (RAL specifications)</p>
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See your local Volvo dealer for a complete list of options and attachments

Under our policy of continuous product development and improvement, we reserve the right to change specifications and designs without prior notice. The illustrations do not necessarily show the standard version of the machine.

VOLVO

**Volvo Construction Equipment
North America Inc.**

One Volvo Drive, Asheville, N.C. 28803-3447
www.VolvoCE.com

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