# **VOLVO COMPACT EXCAVATOR**

# **EW55**



- Gross Power (SAE J1349):
   40 KW / 54 hp
- Net Horsepower:
   38 kW / 52 hp
- Operating weight: 5352 kg / 11740 lbs
- Bucket capacity: 70-231 liters / 2.4cu.ft-10.1 cu.ft
- Maximum dig depth: 3520 mm / 11'5"
- Maximum travel speed: 30 km/h / 18.6 mph

- Spacious, ergonomically designed and quiet cab
- Air conditioning as standard for more comfort
- . TOPS cab for operator safety
- Direct injection diesel engine and low emmissions for environmental protection
- Total Power Control hydraulic system providing independence of all movements and high productivity





# **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)	
Net power (ISO 9249/DIN 6271)	38 kW (52hp)@2200 rpm
Displacement, total	2.8   (171 in³)
Maximum torque181 Nm@	21600 rpm (134 lbf@1600 rpm)
Bore x stroke9	



# **ELECTRICAL EQUIPMENT**

Voltage	12 V
Battery	12 V - 100 AH
	12 V - 40 A
	12 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 delivery	2 x 55 liters/min. (2 x 13.8 gpm)
Maximum operating pressure	

# Gear pump for the swing, offset and blade circuits:

Maximum delivery	.35.6 liters/min. (9.4 gpm)
Maximum operating pressure	190 bar (2755 psi)

# Gear pump for the pilot control circuit:

Maximum delivery	/9.9 liters/min. (2.6 gpm)
Maximum operati	ng pressure33 bar (478 psi)

### Double-acting hydraulic circuit for accessories:

Maximum delivery	55 liters/min. (13.8 gpm)
Maximum operating pressure	210 bar (3045 psi)

#### End-of-stroke cushions:

On boom ram	at the end of the rod extension
On dipper ram	on both sides
On offset ram	on both sides



# SWING SYSTEM

Cab swing is provided by an axial piston hydraulic motor.

Swing speed	10 rpm
Turntable braking	automatic brake
Boom offset	130° (left: 80° / right: 50°)



# **BUCKET PERFORMANCES**

Bucket breakout force	.4070	daN	(9149	lbf)
Dipper tear out force	.2730	daN	(6137	lbf)



# LOWER UNDERCARRIAGE

4-wheel hydrostatic drive, transmission provides 2 forward and reverse travel speeds.

Slow speed	max. 9.5 km/h ( 5.9 mph)
	max. 30 km/h (18.6mph)
	3.026 daN (6803 lbf)
	58% (30°)
	12 x 16.5 - 12PR single

#### Power-assisted hydrostatic steering of front axle

# **Braking system**

Full hydraulic power brake with mu	lti-wet disc brakes
Service brake	multiple disc on all 4 wheels
Parking and emergency brake	on the front axle
Stabilising blade	standard



# CAPACITIES

Fuel tank	90 I (245 US gal)
Hydraulic system, total	
Hydraulic tank	
Engine oil	
Cooling system	



# WEIGHT

Operational weight ......5325 kg (11740 lbs)

Machine equipped with cab, standard bucket, full tanks, dozer blade, 75 kg (165 lb) operator weight.

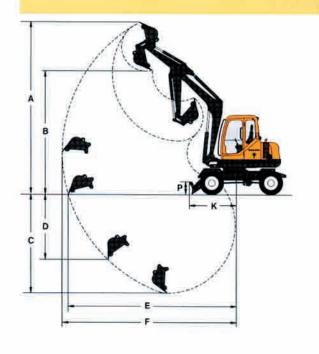


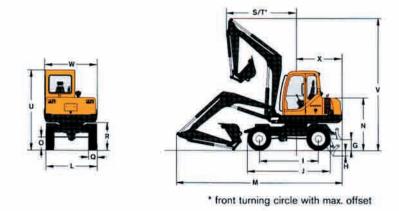
# SOUND LEVELS

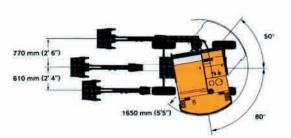
Results of dynamic measurements (according to ISO 6396):

Sound level exterior (LwA)	100 dB (A)
Sound level in the cab (LpA)	83 dB (A)

# **DIMENSIONS**







Buckets*	Width	Weight	Capacity
Backhoe buckets	735 mm	144 kg	1761
Narrow Bucket	370 mm	110 kg	68 1

Α	В	C,	С	D	E	F	G	H
	4290 mm (14' 1")							

<sup>\*</sup> Dig depth with the blade down.

	J	K	L	М	N	0	Р
2100 mm (6' 9")	2940 mm (9' 6")	1515 mm (5' 0")			1863 mm (6' 1")		376 mm (1' 2")

Q	R	S	T	U	٧	W	x
315 mm (1' 0")		2280 mm			4650 mm (15' 3")		

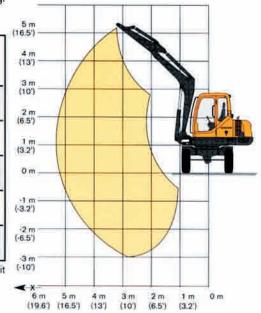
<sup>\*</sup> Contact your local Volvo dealer for bucket availability

# LOAD CAPACITIES

These capacities are given for a machine without a bucket or quick-release coupling. 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	
	C¥+	ė	C <del>4</del> -	₽.	C#+	ė	C <del>4</del> -	d d
4,5 m (15')							870 kg 1990 lbs	1030 kg 2280 lbs
3 m (10')			/±1		680 kg 1470 lbs	1050 kg 2310 lbs	580 kg 1290 lbs	1040 kg 2290 lbs
1,5 m (5')			1240 kg 2670 lbs	1950 kg 4180 lbs	640 kg 1380 lbs	1220 kg 2650 lbs	500 kg 1110 lbs	970 kg 2140 lbs
0 m (0')	2020 kg 4500 lbs	2020 kg 4500 lbs	1130 kg 2440 lbs	2360 kg 5060 lbs	600 kg 1310 lbs	1190 kg 2560 lbs	530 kg 1160 lbs	1030 kg 2290 lbs
-1,5 m (- 5')	3380 kg 7630 lbs	3380 kg 7630 lbs	1130 kg 2430 lbs	2080 4470 lbs			730 kg 1630 lbs	1380 kg 3060 lbs

\* hydraulic limit



Handling capacity in 360° rotation, with the blade up

# STANDARD EQUIPMENT

#### Engine

Low-emission engine meeting US EPA standards.

Three-stage air filter with restriction indicators.

External air pre-cleaner.

Electric cold start aid.

Diesel filter and sediment chamber.

Travel alarm.

Oil sump sheet metal protection.

# Electrical system

Maintenance-free 12 V - 100 AH battery.

Starter motor 12 V - 2.3 kW.

Halogen lights for working and travel (55W).

Indicators for road travelling. Horn.

## Undercarriage

Hydrostatic transmission with 4 drive wheels.

Tire size 12 x 16.5 – 12PR single.

Rim size 9.75 x 16.5.

Stabilisation and backfilling blade. Remote lubrication of the swing

ring.

# Hydraulic system

ISO power-assisted hydraulic control.

Cylinder cushions with contamination seals.

Total Power Control system.

Pilot operated hydraulic controls.

Boom anti-lowering device.

Multiple filtration system (30µm).

Pilot operated control of the hydraulic offset of the boom.

Auxiliary hydraulic valve port for hammer.

#### Cabin

Heating and air conditioning.

Anti-dust system by pressurization of the cab.

Tinted windows.

TOPS (Tip-Over-Protective Structure).

Fabric-covered multi-adjustable suspension seat.

Non-slip floor and grab handle for access to the cab.

Seatbelt.

Adjustable control console.

Hinged upper front window.

Removable lower front window.

Sliding right side window.

Door that can be latched in the open position.

Radio/cassette player with 2 speakers.

Flexible antenna.

Interior lighting.

Intermittent windscreen washer on the front window.

Ashtray.

Cigar lighter.

# Instrumentation and monitoring

Monitoring and warning light for the following functions: engine preheating, engine oil pressure, coolant temperature, battery charge, air filter clogging, internal and external fuel gauges.

Hour meter.

# Handling and earthwork equipment

2900 mm (9'5") long monobloc boom.

1500 mm (4'9") long dipper

130° hydraulic boom offset.

Remote lubrication on the offset and dipper rams.

#### Safety

Device for locking the controls when the left console is raised.

All working functions are locked when machine is in travel mode.

Full hydraulic power brake with multi wet disc brake, single circuit, one accumulator.

All windows tempered safety glass.

Audible reverse alarm.

# OPTIONAL EQUIPMENT

# Handling and earthwork equipment

Manual or hydraulic quick coupler.

Heavy-duty dipper arm.

#### Service

Electric fuel filler pump.

Bracket for grease can.

#### Lighting

Additional rear working light. Revolving light.

## **Environmental protection**

Bio degradable hydraulic oil.

#### Miscellaneous

Special customized paint (RAL) specification.

Under our policy of continuous product improvement, we reserve the right to change specifications and design without prior notice.

The illustrations do not neccessarily show the standard version of the machine.



Volvo Construction Equipment