

SPECIFICATIONS - ECR88

Engine

Low emission, water-cooled, direct injection Volvo 4-cylinder diesel engine, meeting STEP 2 environmental regulations and equipped with an automatic return to idling system.

Model	Volvo D3.4
Gross power, rated (ISO 9249)	43.8 kW (59 hp) at 2100 r/min
Power, installed (ISO 9249)	41.9 kW (57 hp) at 2100 r/min
Displacement, total	3318 cc
Maximum torque	235 Nm at 1400 r/min
Bore x stroke	98 mm x 110 mm

Electrical system

Battery capacity	12 V - 100 Ah
Alternator rating	12 V - 55 A
Starter motor output	12 V - 3 kW

Hydraulic system

Closed centre Load Sensing hydraulic system providing total independence of each movement.

Control	power-assisted hydraulic controls
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Variable displacement Load Sensing pump for all the equipment and travel circuits:

Maximum flow	174 l/min
Maximum operating pressure	30 MPa (300 bars)

Gear pump for the power assistance circuit:

Maximum flow	16.8 l/min
Maximum operating pressure	3.3 MPa (33 bars)

Finger-tip controlled double-acting hydraulic circuit for accessories:

Maximum adjustable flow	90 l/min
Maximum operating pressure	30 MPa (300 bars)

End-of-stroke cushions:

On boom ram	at the end of the rod extension
On dipper ram	at the end of the rod retraction and extension
On offset ram	at the end of the rod retraction and extension

Bucket performance

Breakout force	5600 daN
Tearout force	4100 daN

Slewing system

Turntable slewing is provided by a radial piston hydraulic motor which drives directly (without a reduction gear) a ball internal crown wheel with remote lubrication:

Slewing speed	9.5 rpm
Turntable braking	automatic multi-disc brake
Absorption of hydraulic shocks	Shockless valve

Undercarriage

The undercarriage is made up of an "X" box fabricated centre part for more rigidity and of sloping side members for a better clearance of materials. The rollers and the tensioning wheels are lubricated for life.

Bottom/top rollers per side	6 / 1
Track width	Rubber: 450 mm Steel: 450 mm or 600 mm
Track tension	by grease piston
Blade (width x height)	2300 x 470 mm

Safety valve on the blade cylinder.

Drivetrain

Each track is driven by an axial piston hydraulic motor equipped with two speeds and an epicyclic reduction gear.

Braking is provided automatically by a multiple disc brake. Automatic 2 -speed Travel enables to automatically shift from high to low speed according to the travel load.

Max. speed (low speed/ high speed)	2.7 km/h / 5.1 km/h
Max. tractive force	5450 daN

The travel control is automatically locked when the operator raises the left console.

Service fill capacities

Fuel tank	110 l
Hydraulic tank	80 l
Hydraulic system, total	140 l
Engine oil	11.5 l
Cooling system	7.0 l

Weight

Operational weight and ground pressure:

Rubber Tracks (450 mm)	8200 kg - 0.36 kg/cm ²
Steel Tracks (450 mm)	8500 kg - 0.38 kg/cm ²

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Dipper	A	B	C	C*	D	E	F
1700 mm	6740	4860	4170	4470	2890	6860	7010
2100 mm	7000	5120	4570	4870	3260	7240	7390




G	H	I	J	K	L	M	N	O
490	400	2200	2850	1940	2300	6410	1780	390

P	Q	R	S	T ¹	U	V	W	X
470	450 ²	755	2570	2040	2680	5260	2265	1210

* : Digging depth with the blade down

1 : Front turning radius with maximum offset

2 : Options : 450 / 600 mm (steel)

Buckets ECR88			
	Width	Weight	Capacity
Standard	380 mm	128 kg	103 l
	450 mm	150 kg	130 l
	600 mm	183 kg	188 l
	750 mm	218 kg	246 l
	900 mm	236 kg	306 l
Ditch	1500 mm	250 kg	265 l

