

V O L V O



Volvo Compact Excavators 1.79-2.06 t

ECR18 ELECTRIC

Volvo Construction Equipment

ECR18 ELECTRIC

Low noise, zero emissions and an ergonomically designed cab make the ECR18 Electric quiet, clean and comfortable. A perfect fit for a modern work site.



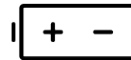
Packed with power

The ECR18 Electric boasts low noise and zero-tailpipe emissions, creating new opportunities for your business. Now you can operate in noise sensitive areas, out of standard hours, on low-carbon projects or indoors, without the need for costly fume extraction systems. Enjoy an enhanced operator experience with ergonomic and intuitive controls, unrivalled performance in combined movements and best-in-class stability.



Flexible charging solutions

- Safe and standard Electric Vehicles (EV) charging protocol
- 10 to 100% in under 5 hours on 230V level 2 charging
- 10 to 80% in less than 45 minutes with standard DC fast charging
- Supported by Electric Machine Management Application



Premium battery

- 48V lithium-ion battery
- 2 to 5 hours of run time
- Maintenance-free battery
- Designed to deliver up to 2 000 full charge cycles



Operator comfort

- Spacious and uncluttered cab
- Superior visibility, low vibration
- 5" color display with jog wheel navigation
- Extensive information and customization abilities
- Simplified menu option for large fleet owners
- Fingertip controls, with adjustable hydraulic flow



Zero emission

- No emission locally
- Sound level down – 80 dB external noise L_{WA}
- Low electricity cost
- No power consumption when machine not working

Volvo ECR18 Electric in detail

Electrical system		
Battery Type	Lithium-ion	
Battery Voltage	V	48
Battery capacity	kWh	16
	Ah	360
Indicative runtime (depending on application)	hours	up to 5
Auxiliary Battery Voltage	V	12
Electrical Motor		
Motor type	Permanent magnet	
Motor power (peak)	kW	18
Motor power (continuous)	kW	12.5
Operating mode max. / Standard	r/min	2 550
Operating mode max. / Eco	r/min	2 250
Operating mode max. / Boost	r/min	3 000
Swing System		
Max, slew speed	r/min	9.5
Max, slew torque	daNm	243
Digging Performances		
Standard bucket width (blade, W/O side cutter)	mm	450
Standard bucket mass	kg	33
Standard bucket rated capacity	l	36
Bucket rotation	°	196
Bucket breakout force (ISO)	daN	1 290
Short arm tearout force (ISO)	daN	795
Long arm tearout force (ISO)	daN	695
Travel System		
Max, drawbar pull	daN	1 300
Max. travel speed low	km/h	1.8
Max. travel speed high	km/h	3.5
Gradeability	°	30

Hydraulic system		
Maximum system flow	l/min	34
Maximum flow for accessories	l/min	30
Maximum flow for 2nd accessory circuit	l/min	
Maximum operating pressure	MPa	17
Weight and Ground Pressure		
Operating weight according to ISO 6016	kg	1 795
Ground pressure (cab)	kPa	
Ground pressure (canopy)	kPa	27
Transport weight	kg	1 720
With rubber tracks	mm	230
With short arm	mm	950
With canopy	-kg	
With long arm	+kg	4
With long arm and heavy counterweight	+kg	42
With heavy counterweight	+kg	38
With steel tracks	+kg	32
Service Refill		
Hydraulic system, total	l	21
Hydraulic tank	l	15
Undercarriage		
Bottom/top rollers per side	3 / 0	
Track tension	By grease piston	
Blade (width x height)	mm	1 340 x 230

Attachments specifications

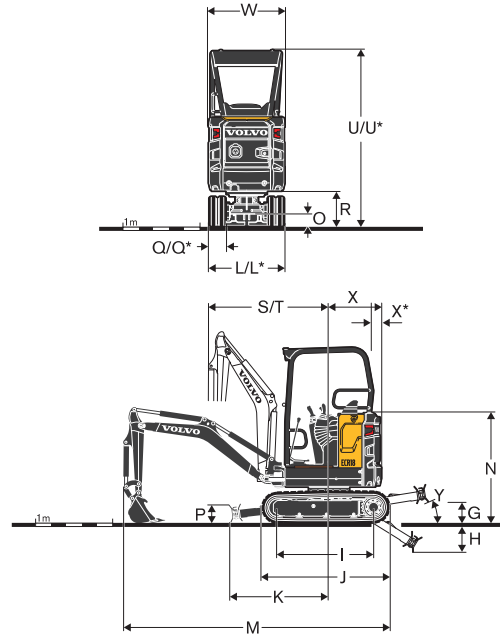
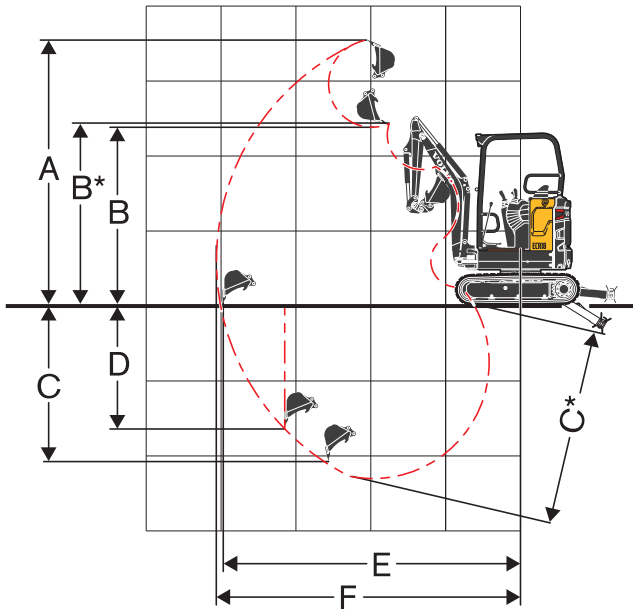
	Unit	General Purpose buckets							Aggressive Cut buckets			Ditching buckets				Hydraulic breaker HBO2 Low Noise
		200	250	300	400	450	500	600	350	550*	550	Fixed		Tiltable		
Quick Coupler type	mm	200	250	300	400	450	500	600	350	550*	550	850	1 000	850	1 000	-
Volvo mechanical (pin-on)	l	14	19	23	32	36	41	51	-	-	-	59	76	59	-	Pin-on bracket
Lehnhoff® mechanical	l	-	-	23	32	-	41	-	-	-	-	59	76	59	-	Lehnhoff type bracket
Mechanical, symmetrical type	l	-	-	-	-	-	-	-	25	55	55	-	76	-	76	Symmetrical type bracket

*with teeth

For more details, see Attachments catalogue



Specifications



DIMENSIONS

Description		Unit	ECR18 Electric	
Arm		mm	950	1 150
A	Maximum cutting height	mm	3 442	3 582
B	Maximum dump height	mm	2 444	2 588
B*	Maximum bucket clearance	mm	2 482	2 625
C	Digging depth	mm	2 234	2 434
C*	Maximum digging depth	mm	2 528	2 727
D	Maximum vertical wall digging depth	mm	1 898	2 091
E	Maximum digging reach at ground level	mm	3 921	4 113
G	Highest position dozer blade	Short blade	mm	225
		Long blade	mm	267
H	Lowest position dozer blade	Short blade	mm	267
		Long blade	mm	386
J	Track length	mm	1 620	
K	Dozer blade, maximum reach at ground level	Short blade	mm	1 082
		Long blade	mm	1 272
L	Overall width with 230mm tracks	Min	mm	995
		Max	mm	1 352
M	Overall length	mm	3 431	3 309
M*	Transport length (arm lowered)	Short blade	mm	3 932
		Long blade	mm	4 122
P	Dozer blade height	mm	231	
Q	Shoe width (rubber)	mm	230	
Q ⁽¹⁾	Shoe width (steel)	mm	230	
R	Ground clearance to superstructure	mm	456	
S	Front slew radius	mm	1 575	1 568
T	Front slew radius with maximum offset	mm	1 269	1 287
U*	Overall height canopy	mm		2 298
X	Tail slew radius	mm	688	
X*	Rear overhang (across tracks)	mm	12	
β ₁	Maximum boom offset to the right	mm	516	
β ₂	Maximum boom offset to the left	mm	640	

⁽¹⁾ Option

Equipment

STANDARD EQUIPMENT

Drivetrain

- Automatic two-speed travel hydraulic motors with reduction gears
- Inner flange bottom rollers lubricated for life
- Grease tensioning wheel lubricated for life

Electric / Electronic control system

- Maintenance free 48V battery (3-rack) - fixed for anti-theft protection
- On-board charger with Type 2 socket
- Standard charger cable with 3 plugs (domestic, CEE 16A 1 phase, and CEE 32A 3 phase)
- Fast charger ready with weather protected socket
- Maintenance free 12V auxiliary battery
- High quality connectors
- Protected battery cut-off switch
- Auto-idling and auto-shutdown function on electric motor

Swing System

- Radial piston hydraulic motor with integrated shockless valve
- Automatic multi-disc spring applied hydraulic released slew brake
- Centralized and remote lubrication of crown wheel and ball bearing

Superstructure

- Stamped steel panels all-around, recessed 5 to 15mm
- 4 integrated tie-down points on upper structure

Undercarriage

- Box welded fabricated frame
- Sturdy removeable protecting covers for track motors and slew system
- Box section highly rigid dozer blade structure

Hydraulic system

- High performance Volvo Hydraulic System
- Flow-Sharing and Load Sensing main control valve
- Boom cylinder cushioning at end stroke (up)
- Patented filtering and filling element
- Large side by side oil cooler and radiator
- Double-acting hydraulic circuit for accessories
- Breaker/Shear valve
- Hydraulic hoses routed inside the boom for increased protection

Canopy

- Robust 4-pillar structure canopy
- Cushionned operator station
- Highly visible orange footstep
- Highly visible orange seatbelt with warning indicator
- Warning beacon, flashing LED
- Front cabin LED worklight
- Right and left rear-view mirror
- White noise travel alarm
- Toolbox with integrated storage for operator's manual and lockable door

Digging equipment

- Casted end and structural parts on arm, pivot, undercarriage and upper structure noze
- Monoblock box welded fabricated boom and arm
- Long-life steel bushings & hardened, pre-lubricated and corrosion resistant pins
- 50-hours intervals on all grease points

Machine controls

- Automatic locking device for pilot controls and travel levers when the left console is raised
- Proportional and adjustable fingertip control for boom offset and auxiliary circuit
- Pressure accumulator to lower the equipment on the ground

Instrumentation and monitoring

- High contrast colour 5" LCD display with day and night modes enabling good readability whatever lighting conditions
- Jogwheel for easy navigation and electric motor speed adjustment
- Simplified menus with master profile for full control and user profile with limited customization
- 3 working modes: Standard, ECO and Boost
- Built-in anti-theft feature
- Several warning messages, coupled to needed action, in the event of malfunction
- Volvo Telematic System

STANDARD EQUIPMENT

Official approval

- Machine conforming to European directive 2006/42/EC
- Low voltage certified according to European directive 2014/35/EU
- Noise emissions in the environment conforming to directive 2000/14/EC
- Hand Arm Vibrations - Whole Body Vibrations compliant with directive 2002/44/EC
- Electromagnetic compatibility (EMC) conforming to European directive 2014/30/EU
- Object handling device conforming to EN 474-1 and EN 474-5 standards
- ROPS (Roll-Over Protective Structure) conforming to ISO 3471
- TOPS (Tip-Over Protective Structure) conforming to ISO 12117 and EN 13531 standards
- OPG 1 (Operator Protective Guard on top) conforming to ISO 10262 standard (when equipped)
- FOPS (Falling Object Protective Structure) conforming to EN ISO 3449

OPTIONAL EQUIPMENT

Operator environment

- Vinyl seat with mechanical suspension, extended back with lumbar adjustment and 2" orange retractable seatbelt
- Additional lockable storage box (behind the seat)
- Electrical switch for ISO/SAE control pattern change
- Controls lock, switch
- Controls lock, seat operator presence and switch
- Controls lock, seatbelt sensor
- Tool kit

Machine exterior

- LED worklights package
- Green beacon link to safety belt
- Heavy counterweight
- Several level of customisation (RAL specifications) to match with your corporate identity

Undercarriage

- 230mm (0'9") rubber tracks
- 230mm (0'9") steel tracks
- Short dozer blade
- Long dozer blade

Hydraulics

- Relief valve for auxiliaries
- Kit 2 flat face hydraulic couplings
- Double acting circuit for hydraulic quick couplers
- Boom and arm safety lifting valves
- Boom, arm and dozer blade safety lifting valves
- Several grades of mineral and bio hydraulic oil

Digging equipment

- Short arm
- Long arm

Machine controls

- On/Off fingertip control for boom offset and auxiliary circuit

Attachments

- Volvo mechanical quick coupler (pin-on)
- Lehnhoff® mechanical quick coupler
- Symmetrical type mechanical quick coupler (S30)
- General Purpose buckets
- Fixed Ditching buckets
- Tiltable Ditching buckets
- Hydraulic breaker HB02LN

Charging solutions

- Fast charger, 9.6 kW, indoor use
- Fast charger, 17.3 kW, indoor use
- Fast charger, 17.3 kW, outdoor use



BIG ENOUGH TO TRUST SMALL ENOUGH TO CARE

Founded in 1974...

CJD Equipment are in the industry for the long term and have the skills and knowledge to support you and your equipment. CJD Equipment takes great pride in being Volvo CE's first and only authorised partner in Australia for three decades. Together, we provide a full range of machinery ideally suited to Australia's unique landscapes and industry requirements. These products are fully supported through a nationwide network of branches, and carefully selected dealers and service agents, strategically positioned to ensure total support.

With fully equipped parts warehouses in every capital city, and dealers throughout major regional towns, we have the support network in place to ensure you're well supported, no matter where you or your machines are. Ongoing in-house training programs ensures our technicians' skills keep pace with the latest technology and product advances.

Visit www.cjd.com.au to read more about our history, range of products and to locate your local branch or dealer.

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