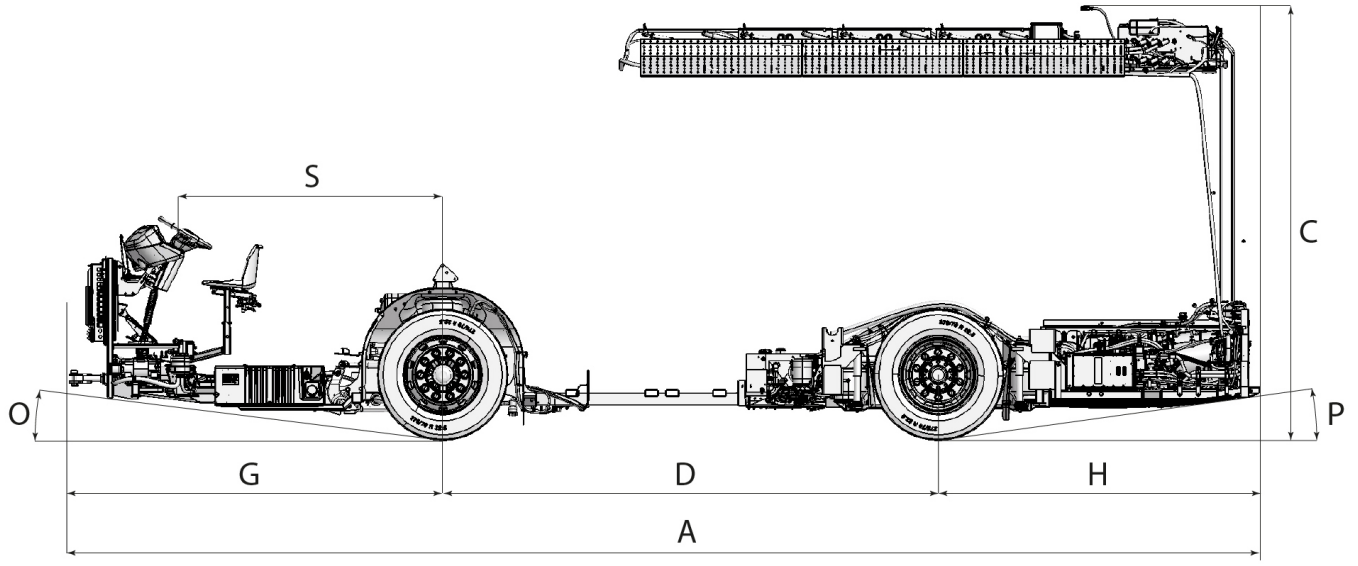
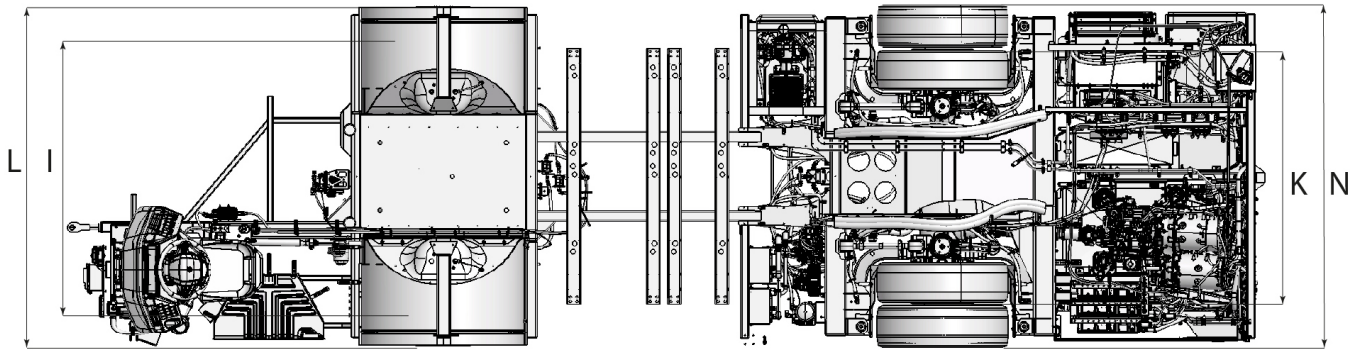
VOLVO BZL ELECTRIC





Model	BZL Electric

Overall dimensions		
A	Overall chassis length, depending on body, up to (mm)	11815
C	Frame height at rear structure (mm)	935
D	Transport wheelbase	3700
G	Front overhang (mm)	2500
H	Rear overhang (mm)	2315
S	Steering wheel position (mm)	1980
I	Track, front (mm)*	2107
K	Track, rear (mm)*	1885
L	Overall width front wheels or housing (mm)*	2500
N	Overall width rear wheels (mm)*	2500
O	Approach angle (°)	7
P	Departure angle (°)	7
	*) Overall height, approach and departure angles with tyres:	275/70 R22.5

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Weights	
Permitted front axle load (kg)	7500
Permitted drive axle load (kg)	12000
Permitted GVW (kg)	19500

Electrical motor	
EPT 402 (1 motor)	
Output, max (kW)	R85 max 200
Continuous power (kW)	R85 30 min 167
Max torque (Nm)	425
Max wheel torque (Nm)	19000
EPT802 (2 motors)	
Output, max (kW)	R85 max 400
Continuous power (kW)	R85 30 min 334
Max torque (Nm)	850
Max wheel torque (Nm)	31000

Transmission and axles	
Gearbox	Volvo 2-speed Automated Manual Transmission
Front axle	Volvo RFS-L
Rear axle	ZF AV133
Differential lock	No

Suspension and steering	
Air bellows, front	2
Air bellows, rear	4
Kneeling	Optional
Max wheel angle	53
Power steering	Electric driven hydraulic steering
Steering wheel side	LHD/RHD

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Energy storage system
- Lithium-ion battery
- Chassis including ESS module to be roof mounted
- Automatic temperature controlling of batteries

ESS (Energy Storage System)
Available storage energy (battery capacity)
94 kWh
Available storage energy (3–5 batteries)
282, 376, 470 kWh
Battery chemistry type
Lithium-ion, NCA
Energy density (Wh/kg)
159 Wh/kg (incl. brackets)
C Rating (maximum charge/discharge rate)
0.9
Voltage
600 V
Mass (kg)
590 kg incl. brackets

Charging system

CCS2 DC
- Industry standard solution
- Maximum charge power 150 kW
- Rear right or rear left charging

OppCharge
- Industry standard solution
- Maximum charge power 300 kW
- Customer decision of position of rails

Volvo Ready to run
- The bus will keep the batteries in working temperature, to ensure that the bus can be started directly when needed without pre-heating period
- 24 V batteries will be charged from 600 V battery
- Pre-heating/cooling of interior can be done when supported by HVAC supplier

Cooling system
- Coolant level warning in instrument cluster
- Automated control of battery temperature with active cooling/ heating
- Electric driveline and auxiliaries cooling circuit
- No coolant filter

Climate system
- Chassis prepared for various roof-mounted HVAC units from different suppliers (heating, ventilation and air conditioning, including heat pump functionality)
- High-voltage heaters come pre-assembled on chassis (0–24 kW)

Tyres and rims
Steel and aluminium rims available

Rims	Tyres
7.5 x 22.5″	275/70 R22.5

Air and brake system
- Volvo disc brakes
- Electronic Braking System (EBS 5)
- Anti-lock Braking System (ABS)
- Acceleration Slip Regulation (ASR)
- Brake blending
- Hill Start Aid
- Brake temperature warning
- Poor brake performance warning
- Door brake
- Brake Assistant
- Lining wear sensing and analysis
- Automatic calibration after brake pad change
- Pneumatic system, easily filled from external circuit

Driver's station
Volvo dashboard or Limited dashboard, completed by body builder. Dashboard moves with the steering column in height and tilt (Volvo dashboard)
- Instrument cluster
  - speedometer
  - power meter
  - 4.3" display
  - SOC gauge
  - brake pressure gauge
  - indicators
  - warning lamps
- Tachograph
- Data logging
- Volvo Alcolock
- Outdoor temperature meter

Electrical system
Automatic shut off of main switch at low voltage level

Number of batteries
2 x 12 V
Battery capacity
2 x 105 Ah

VOLVO

Volvo Bus Corporation
volvobuses.com