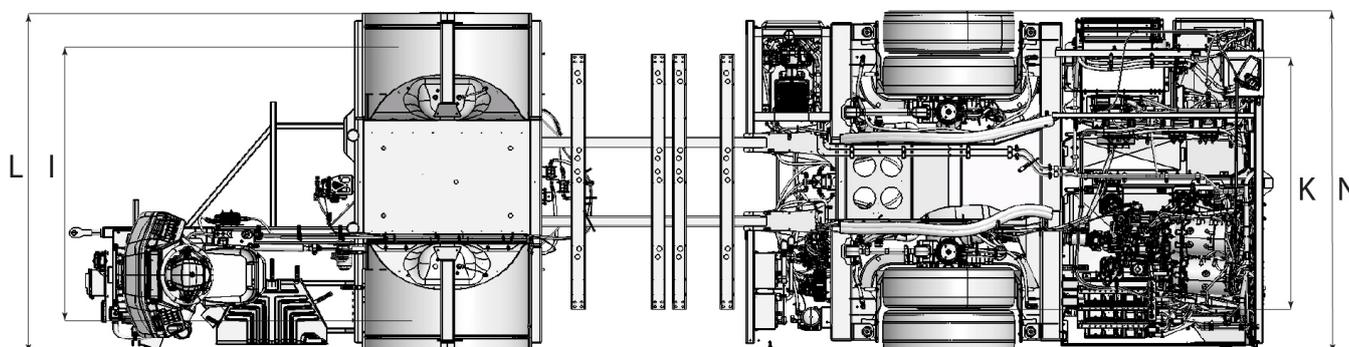
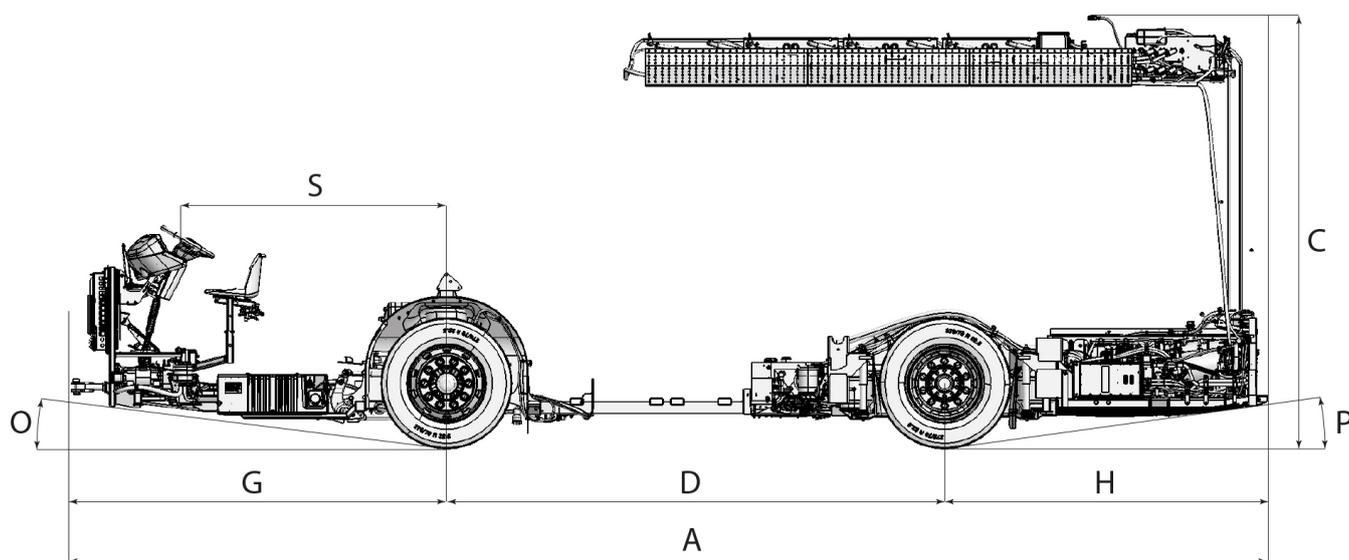




Volvo Buses. Driving quality of life

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 |

VOLVO BZL ELECTRIC

| | |
|--------------|---------------------|
| Model | BZL Electric |
|--------------|---------------------|

| 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 |

VOLVO BZL ELECTRIC

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