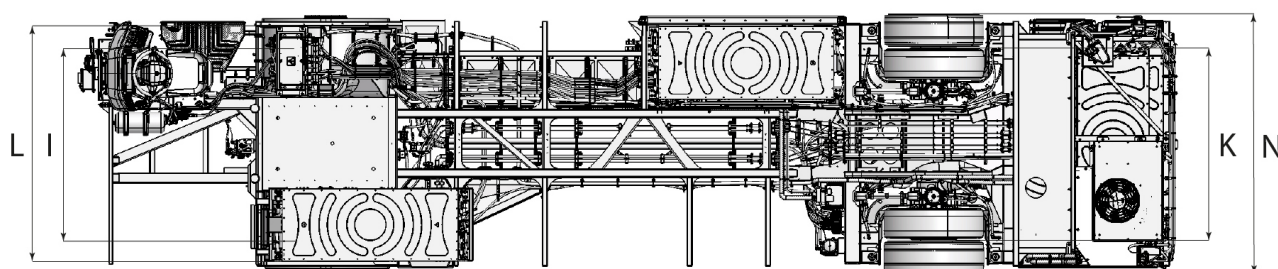
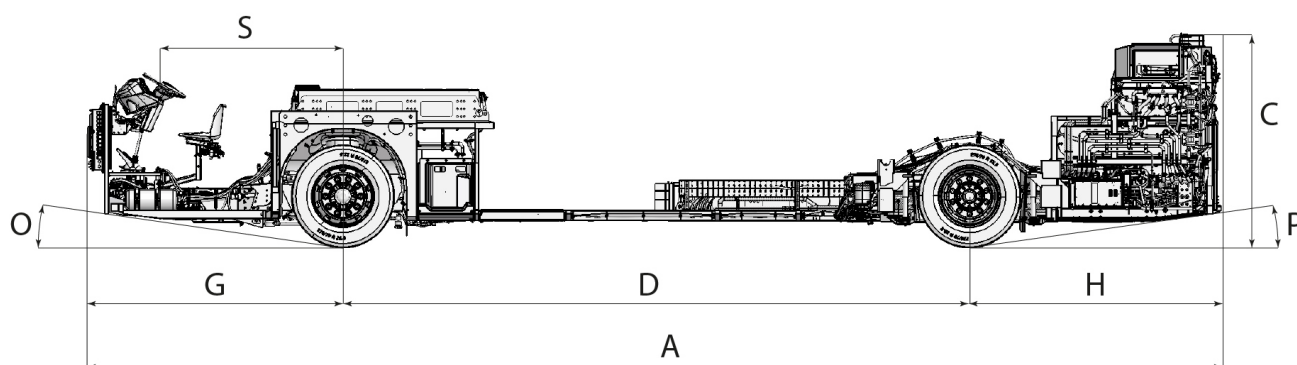




Volvo Buses. Driving quality of life

# VOLVO BZL DD ELECTRIC



|              |                        |
|--------------|------------------------|
| <b>Model</b> | <b>BZL DD Electric</b> |
|--------------|------------------------|

| <b>Overall dimensions</b> |  |              |
|---------------------------|--|--------------|
| A                         | Overall chassis length, depending on body, up to (mm)        | 10585        |
| C                         | Frame height at rear structure (mm)                          | 1695         |
| D                         | Wheelbase  | 5965         |
| G                         | Front overhang (mm)  | 2265         |
| H                         | Rear overhang (mm)   | 2355         |
| S                         | Steering wheel position (mm)                                 | 1683         |
| 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 |

| <b>Weights</b>                 |       |
|--------------------------------|-------|
| Permitted front axle load (kg) | 7500  |
| Permitted drive axle load (kg) | 12000 |
| Permitted GVW (kg)             | 19500 |

# VOLVO BZL DD ELECTRIC

|              |                        |
|--------------|------------------------|
| <b>Model</b> | <b>BZL DD Electric</b> |
|--------------|------------------------|

| <b>Electrical motor EPT402</b> |                |
|--------------------------------|----------------|
| Output, max (kW)               | R85 max 200    |
| Continuous power (kW)          | R85 30 min 167 |
| Max torque (Nm)                | 425            |
| Max wheel torque (Nm)          | 19000          |

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

| <b>Suspension and steering</b> |                                    |
|--------------------------------|------------------------------------|
| 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                            |

## Energy storage system

- Lithium-ion battery
- Chassis including ESS module
- Automatic temperature controlling of batteries

### ESS (Energy Storage System)

Available storage energy (battery capacity)  
94 kWh

Available storage energy (4–5 batteries)  
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 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

# VOLVO BZL DD ELECTRIC

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## 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](http://volvobuses.com)