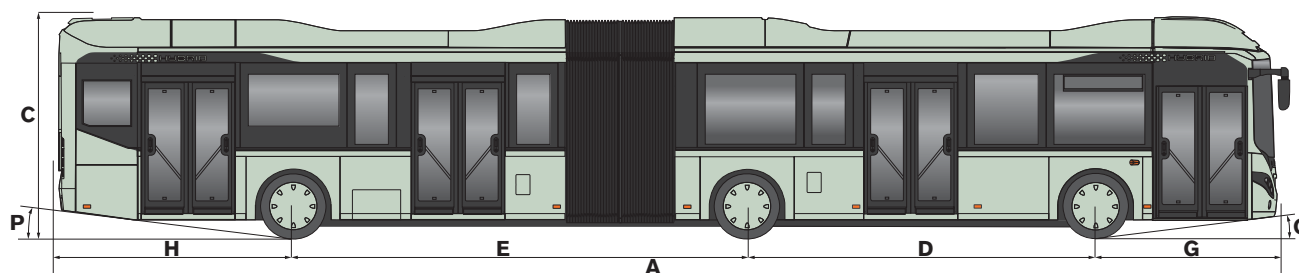


# VOLVO 7900 ARTICULATED HYBRID

EU6



Model		Articulated, 18.0 m
<b>Overall dimensions</b>		
A	Overall length (mm)	18134
	Overall width (mm)	2550
C	Overall height (mm)	3280
D	Front wheelbase (mm)	5190
E	Rear wheelbase (mm)	6755 (4870+1885)
	Max horizontal/vertical turning angle of articulated joint (°)	52/10
G	Front overhang (mm)	2704
H	Rear overhang (mm)	3485
O	Approach angle (°)	6.1
P	Departure angle (°)	6.0
	Turning radius (outer front corner) (mm)	11750
	Turning radius (outer front wheel) (mm)	10140
	Overall height, approach and departure angles with tyres	275/70 R22.5
<b>Weights</b>		
	Permitted front axle load (kg)	7100
	Permitted drive axle load (kg)	12500
	Permitted middle axle load (kg)	10000
	Permitted GVW (kg)	29000
<b>Engine</b>		<b>D5K240</b>
	Emission standard	Euro 6
	Engine system	EGR, Common Rail
	Displacement (dm <sup>3</sup> )	5.1
	Cylinders/arrangement	4/in-line
	Output (hp)	240
	Output ISO 1585 (kW)	177
	Torque ISO 1585 (Nm)	918
	at engine speed (rpm)	1200-1600
<b>Electrical motor</b>		
	Output, max (kW)	150
	Torque ISO 1585, max (Nm)	1200
	Output, continuous (kW)	70
	Torque ISO 1585, continuous (Nm)	400
	Max brake torque (Nm)	1200
	Continuous brake torque (Nm)	400

# VOLVO 7900 ARTICULATED HYBRID

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Model	Articulated, 18.0 m
<b>Fuel tanks</b>	
Diesel (L)	380
AdBlue (L)	30
Adblue tank side (RHS/LHS)	RHS
<b>Transmission and axles</b>	
Gearbox	Volvo I-shift AT2412E
Front axle	Volvo RFS-L
Rear Axle	ZF AV132
Differential lock	No
<b>Steering and suspension</b>	
Steering wheel side	LHD
Power steering	Electric driven hydraulic steering
Kneeling	Optional

## Energy storage system

- Lithium-Ion battery
  - Water cooled
  - Ramp heating with 230 V
- Voltage 600 V  
Capacity 2.4 kWh

## Exhaust system

- One box muffler design
- Diesel Oxidation Catalyst (DOC)
- Diesel Particulate Filter (DPF)
- Selective Catalytic Reduction (SCR)
- Ammonia Slip Catalyst (ASC)
- Automatic regeneration of DPF without driver involvement under normal conditions

## Cooling system

- Roof mounted radiator gives lower engine compartment temperature
- Charge air cooler separately installed from radiator gives improved airflow, better control of fan speed and lower fuel consumption
- Electrically driven fans with improved speed control
- Remote filling of coolant
- No coolant filter
- Coolant level warning in instrument cluster
- Higher allowed coolant temperature for better cooling performance and lower fuel consumption

## Tyres and rims

Steel rims available  
Rims 7.50"x22.5"  
Tyres 275/70R22.5"

## Air and brake system

- Volvo disc brakes
- Electronic braking system (EBS 5)
- Anti-lock Braking System (ABS)
- Acceleration Slip Regulation (ASR)
- Brake blending
- Dual retarder control
- Drag torque control
- 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
- Compressed air system can easily be filled from external circuit
- Electric air compressor replace hydraulic air compressor to increase fuel efficiency

## Exterior and structure

- Volvos patented lightweight aluminum body concept
- Front and rear wall in composite material and ABS elements
- Front and rear structure in anti-corrosion steel
- Single or double tinted glazing with hopper window options
- Multilayer exterior paint finish
- Easy repair of minor damages
- Parts commonality between city and intercity buses to lower maintenance cost
- Anti-corrosion treatment of underbody with conservation sealing and silencing agents
- Xenon and halogen headlights
- Fog lamps and auxiliary lights as option
- Electrically adjustable and heated external mirrors.

## Doors and door system

- Electric door system
- Pneumatic door system
- All doors are inward gliding
- Double glazing in all doors
- Electric sensitive edge for increased passenger safety

## Climate system

- Roof heating units
- Pipe convectors and air blowers
- Air blowers at doors
- Defroster with AC
- Driver convector or blower
- Auxiliary diesel heater
- Separate climate zones for driver and passengers

AC unit:  
Cooling capacity max (35/40/47%) 38 kW  
Heating capacity at Q80 56 kW

Roof heating unit (included if AC unit specified with heat):  
Heating capacity at Q80 25 kW

Convectors:  
Heating capacity at Q100 918 W/m

Defroster:  
Heating capacity at Q80 16 kW  
Cooling capacity max 5.5 kW  
Airflow max at dP 0 880 m³/h  
Available with/without AC

Driver AC:  
Electrical roof mounted driver AC, connected to defroster.

Auxiliary heater:  
Heating capacity 30 kW  
Variant for biodiesel available

# VOLVO 7900 ARTICULATED HYBRID

EU6

## Interior

- Spacious and bright
- Comfortable
- Separate passenger and driver climate zones
- Integrated position for passenger information displays
- Interior LED lights
- Low noise level
- Safety designed interior

## Passenger seats

Volvo city seats featuring:

- Optimized city bus seat
- Easy maintenance
- Available in wide range of specifications to meet individual customers' demands
- Volvo Service and spare parts handling

## Driver's seat and station

- Volvo dashboard
- Dashboard moves with the steering column in height and tilt
- Available in EBSF and VDV version with multistalk for wiper and direction indicator on left side of the steering wheel
- Instrument cluster:
  - speedometer
  - rev counter
  - 6.5" display
  - fuel gauge
  - coolant temperature
  - brakes
  - turbo and oil pressure
  - indicators
  - warning lamps
- Tachograph
- Data logging
- Alcolock
- External temperature meter
- Fuel economy meter
- Radio/phone switches in steering wheel
- Engine controls in engine compartment to enable engine operation from the rear of vehicle
- ISRI Driver's seat

## Electrical system

- I-Start:
  - Dual battery system which separates batteries into two circuits.
  - Optimized start batteries to increase engine start capability.
  - Optimized consumer batteries for longer lifetime
  - Automatic shut off of main switch at low voltage level

Number of batteries 2x12 V Start Batteries

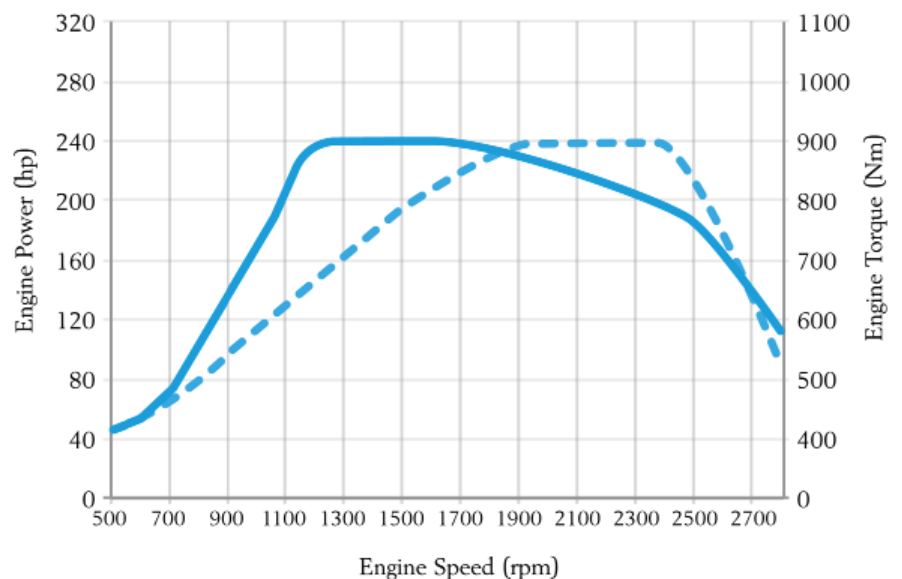
2x12 V Consumer Batteries

Battery capacity, consumer batteries 105 Ah

## Audio system

- Stereo radio with CD player
- Preparation kit for radio
- Foot controlled public address system
- City amplifier

Torque and Power curves D5K Eu6



# VOLVO

Volvo Bus Corporation

Göteborg, Sweden

[www.volvobuses.com](http://www.volvobuses.com)