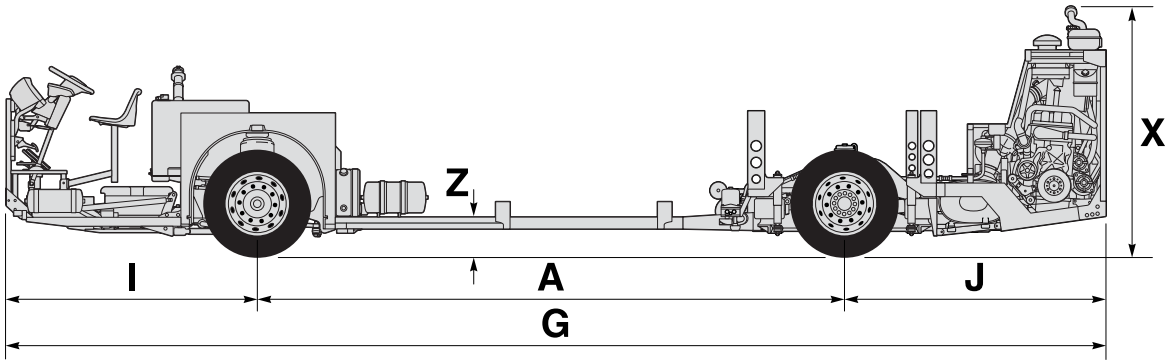
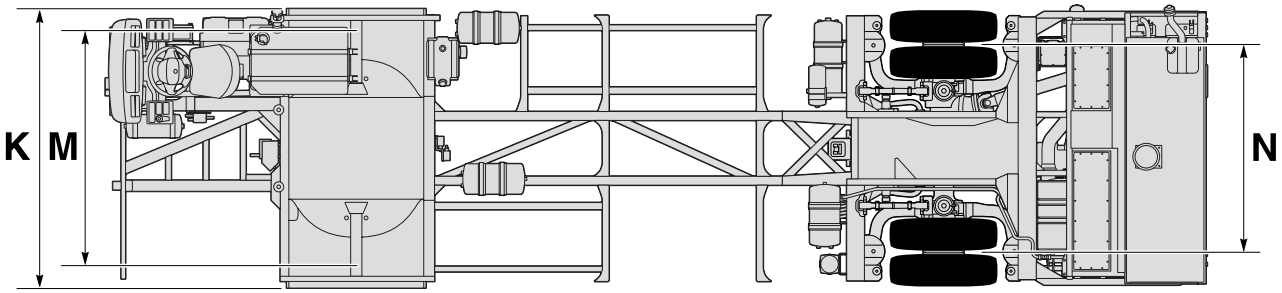
VOLVO B9TL

RFS, 4x2, RHD, Euro 5, EEV





Dimensions & Weights

Overall dimensions

A Wheelbase ..... 5150, 5300 mm
..... 5800, 6300 mm
Wheelbase certified ..... 5150-7000 mm
G Overall chassis length
TL-steer ..... 9778-10928 mm
N-steer ..... 10013-11163 mm
I Front overhang
TL-steer ..... 2265 mm
TS-steer ..... 2215 mm
J Rear overhang ..... 2363 mm
Steering wheel location
TL-steer ..... 1683 mm
TS-steer ..... 1633 mm
Approach angle ..... 7.4 °
Departure angle ..... 8.1 °
Frame height in front ..... 314 mm
Z Frame height in middle ..... 314 mm
X Frame height at rear ..... 2000 mm
based on tyre 275/70R22.5
Track width with tyres ..... 275/70R22.5”
and steel disc rim ..... 7.5”x22.5”
M Track, front ..... 2107 mm
N Track, rear ..... 1885 mm
K Overall width front wheels housing ..... 2500 mm
Overall width rear wheels ..... 2480 mm

Weights

Permitted front axle load ..... 7100 kg
Permitted rear axle load ..... 12000 kg
Permitted GVW ..... 19000 kg

Engine

6-cylinder, 4-stroke, turbo-charged and intercooled diesel with overhead camshaft and electronically controlled injection. Closed crank case ventilation. On-board diagnostic (OBD 2.2) to detect, warn and to take action for malfunctions leading to increased emission. Exhaust brake, engine protection and fuel water separator. Engine preheating and automatic oil filter as an options. Speed limit set to 60, 70, 80 or 90 km/h. Engine encapsulation: 77 or 80 dB(A).

Bore ..... 120 mm
Stroke ..... 138 mm
Displacement ..... 9.36 dm3 (l)
Weight ..... 938 kg
Compression ratio 18:1

D9B 260 hp

Output ISO 1585 ..... 193 kW (262 hp)
at ..... 32 r/s (1900 r/m)
Torque ISO 1585 ..... 1100 Nm (112 kpm)
at ..... 15-25 r/s (900-1500 r/m)

Engine fulfill Euro 5 emission requirements and EEV as an option.

Fuel tanks

Fuel tank is made of stainless steel, located on the right hand side over the front axle. Filler right side, fast filling function available.

Fuel tank ..... 325 l
Transport tank ..... 50 l

Exhaust and Cooling System

Stainless steel exhaust system with SCR catalytic converter, AdBlue pump and 40 l urea tank. Urea tank is mounted behind right hand front wheel. Catalytic converter is integrated with the silencer. Muffler sensor are linked to the On Board Diagnostics that alerts the driver if the level of air pollutants in the exhaust gases is excessive, and when AdBlue refilling is needed.

Transmission

ZF 6AP1400B

6 speed automatic gearbox. Torque converter, hydraulic control unit with proportional valves. Integrated oil coolers, NBS (Neutral on Bus Stop).

Voith D864.5

Fully automatic 4 speed gearbox with integrated retarder and electronic control system. The torque converter also functions as a retarder. ANS - Auto Neutral at Stop function.

	ZF	Voith
Torque conv	1.968:1	-
1st gear	3.36:1	5.05:1
2nd gear	1.91:1	1.36:1
3rd gear	1.42:1	1.00:1
4th gear	1.00:1	0.73:1
5th gear	0.72:1	-
6th gear	0.615:1	-
Reverse	4.24:1	4.30:1

Available 3, 4, 6-buttons gear selectors, kick down function, retarder foot or foot and hand control.
Optional ..... Kick down

Driveline - Rear axle and tyres

Rear axle

The ZF single reduction portal axle with three alternative ratios available. The casing designed for high ground clearance, low weight and quiet operation.

Theoretical speed at max engine revs with tyre 275/70R22.5:

Ratio:	6.20:1	5.74:1	5.13:1
6AP1400B	101	109	123
D864.5	78	84	94

The maximum speed on the highest gear is restricted depending on installation.

Optional ..... Differential lock

Tyres & Rims

10-stud steel or aluminium disc wheels. Chrome or zinc wheelnut protector ring. Dual driving axle wheels.

Rims ..... Tyres
7.5"x22.5" ..... 275/70R22.5"

Suspension and Steering

Electronically Controlled Suspension (ECS2), rigid low front axle. Stabilizer both front and rear. Double-acting, hydraulic telescopic shock absorbers, two front, four rear. Full front or front one side kneeling. Kneeling interrupt configuration (stop or return).

Numbers	Front	Rear
Air bellows	2	4
Levelling valves	2	2

Steering gear

Power steering of ball and nut type with built-in servo unit. Approx. 4.5 turns of wheel from lock to lock. Right steering wheel position. Steering wheel feed knob.

Max wheel angle ..... 55 °
Steering wheel diameter ..... 450 or 500 mm

Optional ..... Steering wheel lock

Air and Brake system

Separate circuits for front and rear wheels. Volvo disc brakes combined with electronic braking system. EBS5 medium package. Available features: ABS, TC, lining wear sensing, analysis and warning, brake blending, drag torque control, differential lock synchro, automatic differential lock, hill start aid, brake temperature warning, poor brake performance warning, brake assistant, doorbrake, EBS status recorder.

Brake disc diameter:
Front ..... 434 mm
Rear ..... 434 mm
Friction area:
Front axle, disc brake ..... 2x200 cm^2
Rear axle, disc brake ..... 2x200 cm^2

System operating pressure ..... 8.5 kp/cm^2
Compressor capacity at 10 bar and engine speed 33 r/s (2000 r/m)
..... 15 dm^3/s (900 l/m)
Compressor ratio 1.46:1

Air tanks standard

- Primary ..... 30 dm^3 (l)
- Front circuit ..... 30 dm^3 (l)
- Rear circuit ..... 30 dm^3 (l)
- Park circuit ..... 15 dm^3 (l)

Compressed air system can easily be filled from external circuit.

Handbrake

Air operated spring brake acting directly on the drive axle wheels. Application is infinitely variable by means of a control on the fascia.

Vehicle Structure

The Volvo B9TL is a chassis prepared for bodybuilding of double-decked city buses. The chassis is low floor type.

Driver's seat and Station

Volvo dashboard available or instruments only supplied. Dashboard fully compatible with BEA2, two satellites on the right and the left side. Adjustable steering wheel, both height and tilt. Self canceling turn indicators.

Dashboard, center: speedometer, rev counter, AIC display, fuel gauge, coolant temperature, brakes, turbo and oil pressure, indicators, indicator lamps.
Dashboard, left: emergency switch, tachograph, audio control panel (option).
Dashboard, right: radio, climate control unit.
Steering wheel, left satellite: control buttons, Light Control Panel.
Steering wheel, right satellite: gearbox selector, doorbrake knob, switches and warning lamps.

Instruments, behind engine: selector switch for front or rear operation, starting, charging lamp, mechanical stop, oil gauge. These controls enable the engine to be run and controlled from the tail of the vehicle during service work.

Optional ..... Tachograph
Optional ..... Data logging
Optional ..... External temperature meter
Optional ..... Radio/phone switches ..... in steering wheel

Electrical system

The electrical system is a 24-volt system, where the chassis and engine frame are used as a ground. The battery's negative terminal is connected to the chassis via the battery disconnector. There are three alternator capacities available.

2nd generation Bus Electrical Architecture (BEA2) with electronic databus system Multiplex 2 for data transmission, bus systems control, monitoring and coordination of all devices installed on the bus. Multiplex 2 also provides diagnostic information for driver and workshop. BEA2 features electronic control of the Engine Management System, transmission and suspension. For testing, callibrating and programming of the control units can be used a PC based software package VCADSPro. External lighting functions integrated in chassis Multiplex. They are activated by new Light Control Panel and controlled by Light Control Module.

The system is equipped with three main switches: engine shut off, fuel shut off and electrical shut off. Tachograph system is available, analog or digital.

Battery capacity ..... 225 Ah
Alternators output ..... 2x80 A, 2x110 A, ... 3x110 A

VOLVO

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