VOLVO

B12B

WHERE IT COUNTS,

SPECIFICATION

Length Measurements (mm)

A Transport wheelbase	4000
G Overall chassis length	
F steering	9668
FX steering	9898
I Front overhang	
F steering	2399
FX steering	2629
J Rear overhang	3270
Steering wheel location	
F steering	1835
FX steering	2065
Approach angle	10.5°
Departure angle	8.0°
Frame height in front	745
X Frame height at rear (based on tyre 295/80R22.5)	1650
Track width with tyres	295/80R22.5"
Steel disc rim	8.25"x22.5"
M Track, front	2043
N Track, rear	1833
K Overall width front wheels	2487
Overall width rear wheels	2471

Weights (kg)

Chassis weight front axle - F steering	1124
Chassis weight rear axle	5061
Total chassis weight	6185
Permitted front axle load	7500
Permitted rear axle load	11500/12000
Permitted GVW	19000

Included in chassis weights are wheelbase 6000 m, DH12 engine, ZFHP602 gearbox, cooling water, oil, 70 litre of fuel, tyre equipment 315/80R22.5.

FUEL TANKS

Mounted above front axle	600 l
Mounted above front axle	720 l
Mounted Transport tank	50 l

Weight modifications (kg)	Front	Rear	Total
Aluminium rims 9.00x22.5"	- 25	- 50	- 75
Spare wheel 315/80 R22.5" with aluminium rim 9.00x22.5"	-	-	+ 100
steel rim 9.00x22.5"	-	-	+ 110
Tools	-	-	+ 15

ENGINE

6-cylinder, 4-stroke turbo-charged diesel with overhead valves and direct injection.

Bore	131 mm
Stroke	150 mm
Displacement	12.1 dm^3 (l)
Compression ratio	18.5:1
DH12D340	
Output kW (hp) ISO 1585	250 (340)
at r/s (r/m)	30 (1800)
Torque Nm (kpm) ISO 1585	1700 (173)
at r/s (r/m)	20 (1200)
DH12D380	
Output kW (hp) ISO 1585	279 (380)
at r/s (r/m)	30 (1800)
Torque Nm (kpm) ISO 1585	1850 (189)
at r/s (r/m)	20 (1200)
DH12D420	
Output kW (hp) ISO 1585	309 (420)
at r/s (r/m)	30 (1800)
Torque Nm (kpm) ISO 1585	2000 (204)
at r/s (r/m)	20 (1200)

Fulfil the European emission requirements Euro 3.

CLUTCH

Volvo EGS-V/VR and **ZF 6S-1600** uses pull type single dry disc KFD117E. Power assisted clutch control gives low pedal pressure.

Diameter	430mm
Total friction area	2000cm^2

EXHAUST AND COOLING SYSTEM

Optional	Coolant filter
Optional	Oxidysing catalyst
Optional	Volvo exhaust filter

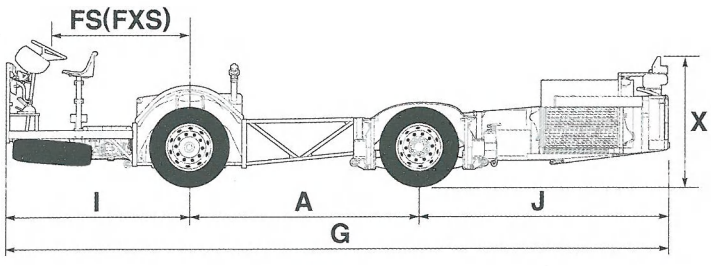
GEARBOXES

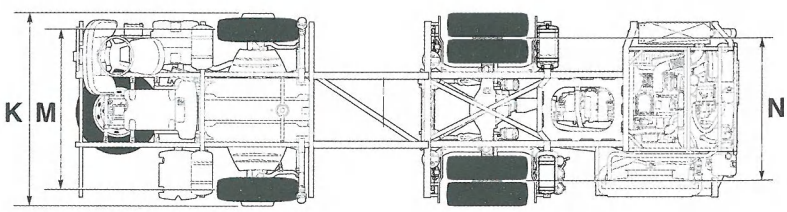
Volvo EGS-V/VR Easy gear shift. Mechanical 8 speed fully synchronized. Without/With Volvo compact retarder.

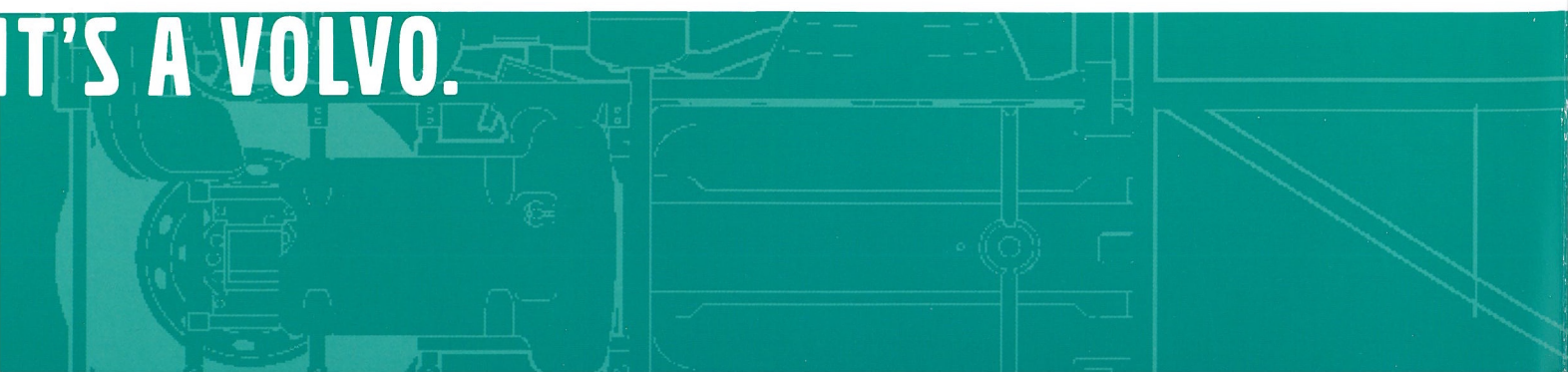
ZF 6S-1600 Mechanical 6 speed fully synchronized.

ZF 5HP602 NBS neutral on bus stop. 5-speed fully automatic gearbox with integral retarder and electronic control system.

Allison 5/6B500R Allison 5B500 5-speed fully automatic gearbox with electronic control system. Allison 6B500 6-speed fully automatic gearbox with electronic control system.







gearboxes continued:

Ratios:	ZF 6S-1600	Volvo EGS-VR EGS-V	ZF 5HP602
Torque converter	-	-	1.83:1
1st gear	7.72:1	9.13:1	2.81:1
2nd gear	4.42:1	6.42:1	1.84:1
3rd gear	2.66:1	4.77:1	1.36:1
4th gear	1.79:1	3.75:1	1.00:1
5th gear	1.28:1	2.44:1	0.80:1
6th gear	1.00:1	1.71:1	-
7th gear	-	1.27:1	-
8th gear	-	1,00:1	-
Reverse	7.10:1	13.69:1	3.97:1

	Allison 5B500R	Allison 5B600R
Torque converter	1.90:1	1.90:1
1st gear	3.51:1	3.51:1
2nd gear	1.91:1	1.91:1
3rd gear	1.43:1	1.43:1
4th gear	1.00:1	1.00:1
5th gear	0.74.1	0.74:1
6th gear	-	0.64:1
Reverse	4.80:1	4.80:1

REAR AXLE

Single reductio rear axle of hypoid type. Max geared speed km/h with tyre 295/80R22.5

Ratio	5.29:1	4.63:1	4.11:1
Volvo EGS-V/VR			89
ZF 6S-1600			89
5HP602	90	102	115
Allison 5B500R	102	116	
Allison 6B600R	118		
Ratio	3.70:1	3.36:1	3.08:1
Volvo EGS-V/VR	99	109	119
ZF 6S-1600	99	109	119
Ratio	2.85:1		
Volvo EGS-V/VR	128		
ZF 6S-1600	128		
Optional			Differential Lock

TYRES AND RIMS

10-stud steel or optional alluminium disc wheels. Dual driving axle wheels.

Rims	8.25"x22.5"	9.00"x22.0"
Tyres	295/80R22.5" 12R22.5"	315/80R22.5" 295/80R22.5"

Optional spare wheel and carrier.

SUSPENSION AND STEERING

Individual front suspension.

Numbers	Front	Rear
Air bellows	2	4
Levelling Valves	2	2

Stabilizer both front and rear.

Shock absorbers. Double-acting, hydraulic telescopic shock absorbers, two front, four rear.

Kneeling front axle suspension.

Ferry lift and lowering.

Steering gear. Power steering of ball and nut type with built-in servo unit. Max wheel angle (275/70R22.5" tyres) 50° Steering wheel diameter 500mm. Steering wheel lock.

BRAKING SYSTEM

Service brakes: Air brakes complying with EEC regulations with separate circuits for front and rear wheels. EBS electrical controlled brakes, Airdrier. Automatic brake adjustment. Asbestos free brake linings.

Brake disc diameter:	Front 434mm	Rear 434mm
Axle, disc brake	Front 2x200cm²	Rear 2x200cm²
Brake system operating pressure		8.5 kp/cm²
Compressor capacity at 10 bar and engine speed 33 r/s (2000 r/m)		15 dm³/s (900 l/m)
Compressor ratio		1.46:1
Air tanks standard	Primary	30dm³ (l)
	Front circuit	30dm³ (l)
	Rear circuit	30dm³ (l)
	Park circuit	15dm³ (l)

Compressed air system an easily be filled from external circuit.

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

Std	ABS
Optional	Traction control

VEHICLE STRUCTURE

The frame is made of 3CR12 stainless steel. Precision welded box frame construction, consisting of 3 and 4 mm RHS profiles.

DRIVER'S POSITION AND INSTRUMENTATION

Adjustable steering wheel, both height and tilt, with (as an option) the instrument panel following. Self-cancelling turn indicators.

Dashboard, mid module: Tachometer, tachograph. Indicator lamps for door brake, parking brake, turn indicator, full headlights, differential lock, kneeling, ABS failure, rear fog lights, seat belt.

Dashboard, left module: Gauges for oil pressure, coolant temperature, turbo pressure. Message Centre Display (MCD) indicating fault conditions and pre-trip check to confirm to the driver that all systems are serviceable before the bus sets off. Indicator lamps for engine preheat, attention and stop.

Dashboard, right module: Gauges for brake pressure front and rear, fuel. Indicators for next stop, pram, central warning.

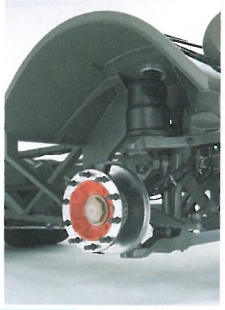
ELECTRICAL EQUIPMENT

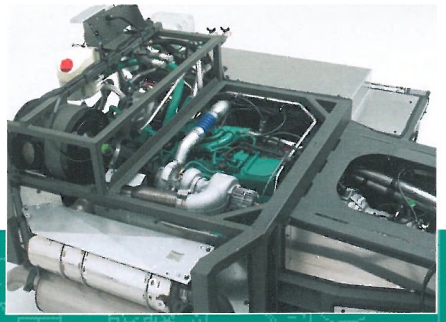
Number of batteries	2
Voltage	24V
Battery capacity	220 Ah
Alternator output, max	2x140 A
Amperemeter	Optional
Fuel consumptionmeter	Optional
Outdoor/indoor temp meter	Optional

The system also incorporates starter inhibitor relay and one transistor regulator.

OPTIONS

Common Ignition Key without steering lock
Data Log information centre





B12B

The Volvo B12B is a new addition to the model line up, adding further choice for operators who are looking for long distance coaching capability in a rear engine format, with all the associated advantages that come only with a Volvo product.

Based on the highly acclaimed Volvo "TX" platform, the B12B, like its stablemate the B12M, is bristling with new technology and electronics that promote new levels of reliability, availability and lower whole life costs.

Like the B12M, the new Volvo B12B benefits too from extended engine oil change intervals of up to 60,000kms and comes with a comprehensive five year Volvo assurance package. This package incorporates a full 24 month chassis warranty and driveline warranty in the third year to a maximum of 455,000 kms, plus a further 24 months power unit warranty on the DH12 engine to a maximum of 1 million kms.

Initially available with Jonckheere bodywork, the new Volvo B12B is set to make an impact on the UK and Irish coach market, giving operators the ideal choice between a rear engine layout and a mid engine configuration from the same product platform - the TX.

Some of the highlights of the comprehensive B12B chassis specification include:-

- The powerful 12 litre Volvo DH12 engine available in ratings of 340hp, 380hp and 420hp, delivers an impressive torque with increased low end torque for a smoother, more controlled drive. Its rear mounted position facilitates extensive through luggage space between the wheelbase.
- A completely new 'space frame' chassis, manufactured from box section 3CR12 stainless steel gives corrosion-resistance, lower weight with increased torsional strength. Automated precision production ensures dimensional accuracy and consistent high quality.
- The chassis incorporates a new state-of-the-art electrical multiplex wiring system, enabling major components to communicate with each other to optimise vehicle performance and additionally provides invaluable operational data for diagnostics in the workshop
- Electronically controlled disc brakes and Independent Front Suspension (IFS) gives exceptionally short stopping distance with the temperature resistant design of the brake discs minimising the risk of fade in repeated use, whilst IFS contributes to excellent ride and roadholding characteristics.
- Cruise Control Braking System regulates speed on downgrades for total driver control and vehicle safety.
- A new driver's compartment features a new instrument cluster and fully-adjustable steering column with optional adjustable instrument panel, giving even greater control and enhanced driver comfort.

However, what is beneath the Volvo B12B is only part of the story.

Behind every Volvo B12B is an unrivalled support organisation dedicated to maximising vehicle availability and reducing operating costs. It is an infrastructure equally capable of servicing the needs of small coach operators as it is the larger fleets, with the experience and resources to structure financing and contractual arrangements for both new and pre-owned Volvo vehicles.

T'S A VOLVO.

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Volvo Bus Ltd. Wedgnock Lane, Warwick CV34 5YA • Tel: 01926 401777 • Fax: 01926 407407 • Website: www.volvo.com

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