

Technical Specifications

Futura *magis*

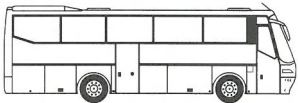


BOVA

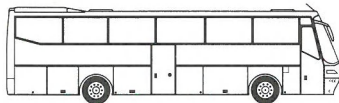
Technical Specifications Futura

Type	FL 12	FL 13	FL 15 Magnum	FH 10	FH 12	FH 13	FH 14 Magnum	FH 15 Magnum
Overall length :	11,990 mm	12,700 mm	14,990 mm	10,405 mm	11,990 mm	12,700 mm	13,580 mm	14,990 mm
Overall width :	2,490 mm	2,490 mm	2,490 mm	2,490 mm	2,490 mm	2,490 mm	2,490 mm	2,490 mm
Overall height :	3,334 mm	3,330 mm	3,321 mm	3,551 mm	3,551 mm	3,545 mm	3,561 mm	3,561 mm
Wheel base :	6,090 mm	6,800 mm	6,800 mm	4,885 mm	6,090 mm	6,800 mm	6,090 mm	6,800 mm
Wheel base 2 nd / 3 rd axle :			1,590 mm				1,590 mm	1,590 mm
Turning circle :	22,000 mm	23,600 mm	24,400 mm	18,500 mm	22,000 mm	23,600 mm	22,000 mm	24,400 mm
Nett weight :	approx. 11,600 kg	approx. 11,850 kg	approx. 14,950 kg	approx. 11,500 kg	approx. 12,400 kg	approx. 12,650 kg	approx. 15,100 kg	approx. 15,450 kg
Max. total weight :	18,000 kg	18,100 kg	24,450 kg	18,000 kg	18,000 kg	18,000 kg	24,450 kg	24,450 kg
Luggage locker capacity :	approx. 8.5 m ³	approx. 9.5 m ³	approx. 10.5 m ³	approx. 8 m ³	approx. 10 m ³	approx. 11.5 m ³	approx. 10.5 m ³	approx. 13.5 m ³
Rear axle :	ZF A-131	ZF A-131	ZF A-131	ZF A-131	ZF A-131	ZF A-131	ZF A-131	ZF A-131
Ratio :	2.93:1	2.93:1	2.93:1	2.93:1	2.93:1	2.93:1	2.93:1	2.93:1
3 rd Axle self steering :			ZF RL-85/E				ZF RL-85/E	ZF RL-85/E
Front axle :	ZF RL-85/E	ZF RL-85/E	ZF RL-85/E	ZF RL-85/E	ZF RL-85/E	ZF RL-85/E	ZF RL-85/E	ZF RL-85/E
Fuel tank :	290 litres	290 litres	290 litres	250 litres	380 litres	380 litres	380 litres	380 litres
Structure :	full integral all metal framing	full integral all metal framing	full integral all metal framing	full integral all metal framing	full integral all metal framing	full integral all metal framing	full integral all metal framing	full integral all metal framing

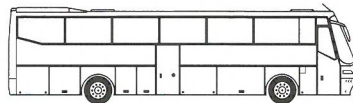
Engines :	DAF XE 250 C1	DAF XE 280 C1	DAF XE 315 C1
(6 cylinders in line)	250 kW (340 bhp)	280 kW (380 bhp)	315 kW (430 bhp)
	12.58 litres	12.58 litres	12.58 litres
Gearboxes + ZF intarder :	ZF 6 S 1600 HGS	ZF 6 S 1600 HGS / ZF 8 S 180 HGS	ZF 8 S 180 HGS



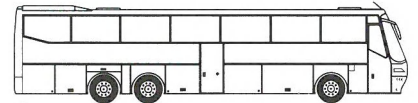
FH 10



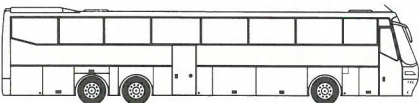
FH 12



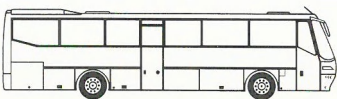
FH 13



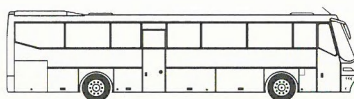
FH 14 Magnum



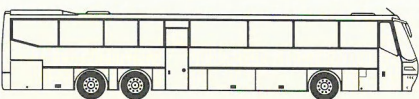
FH 15 Magnum



FL 12



FL 13

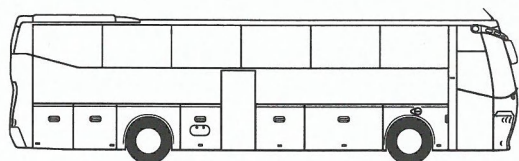


FL 15 Magnum



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HD 120-340XE/380XE

Measurements - Weights

• Overall length	11,990 mm
• Overall width	2,540 mm
• Overall height	3,570 mm
• Wheel base	6,150 mm
• Front overhang	2,540 mm
• Rear overhang	3,300 mm
• Interior saloon height	2,025 mm
• Entrance step height front	342 mm
• Entrance step height amidships	368 mm
• Floor height above front axle	1,340 mm
• Floor height above rear axle	1,370 mm
• Seat height, front	1,470 mm
• Seat height, rear	1,500 mm
• Turning circle	20,700 mm
• Nett weight	approx. 13,400 kg
• Max. design weight, front axle	7,100 kg
• Max. design weight, rear axle	12,000 kg
• Max. total design weight	19,100 kg
• Luggage locker	approx. 11 m ³

Engine

- Make DAF
- Type XE 250 C1 and XE 280 C1
- Swept volume 12.58 litres
- Max. power 250 kW (340 bhp) / 280 kW (380 bhp), both at 1900 rpm
- Max. torque 1600 Nm between 1000-1450 rpm (XE 250 C1)
1750 Nm between 1000-1500 rpm (XE 280 C1)
- Speed limiter incorporated in E-gas system
- Gearbox ZF 6 S 1600 + ZF intarder (XE 250 C1 + XE 280 C1)
ZF 8 S 180 + ZF intarder (XE 280 C1)
- Operation HGS system (Hydraulic Gear Shift)
- Rear axle ZF A-132
- Ratio 2.93:1
- Front axle ZF RL-75, independent front suspension
- Steering wheel 450 mm soft grip, adjustable for reach and rake

Brakes

- ZF ventilated disk brakes on front and rear axles
- APU (Air Processing Unit) including 4 circuit safety valve and air dryer
- ABS (WABCO D)
- ASR

Fuel Tank

- 2 Low Density Poly Ethylene (LDPE) fuel tanks of 400 litres

Structure

- Full integral all metal framing
- Parallel opening luggage flaps, constructed of a sandwich of lightweight material
- Integrated R66 roll bars of fibre-strengthened composite in B pillar and rear wall

Electrical equipment

Combination of a conventional wiring system and a digital multiplex system (CAN: Controller Area Network).

Five small computers communicate with a master computer and a screen computer.

By means of eight 'soft keys' on the steering wheel, the driver can operate primary functions such as audio, video and air-conditioning via a menu on his screen on the dashboard.

Secondary function level warning lamps are incorporated into the screen.

Heating - Ventilation

The BOVA 'Magiqair' heating and ventilation system consists of:

- A compact condenser/compressor unit
- Heat exchangers conduct warm and cold air to the passenger saloon by means of low-noise ventilators.

The air-flow is directed through the roof channel, via the parcel racks, and the combined lighting/hand rail units.

Each passenger has a PSU (Personal Service Unit) to adjust the airstream as they wish.

- Floor heating by means of under-floor heaters
- Heat exchanger in driver's cab: separate, continuously adjustable air-conditioning and heating for driver and courier
- Webasto pre-heater
- Demister

'Magiqair' operation: the entire heating and ventilation system is accessible by a menu on the driver's screen and is controllable by means of the 'soft keys' on the steering wheel.

Interior

- Fridge with a capacity of 56 litres (= 75 cans), in centre of dashboard
- Air-sprung adjustable driver's seat with three-point seat belt
- Adjustable courier seat with arm rests and three-point seat belt



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Futura

Magiq



BOVA

Autobusfabriek BOVA b.v.

De Vest 9, 5555 XL Valkenswaard - Postbus 5, 5550 AA Valkenswaard (NL)

Telephone: +31(0)40-2084611 - Telefax: +31(0)40-2042045

Internet: www.bova.nl - E-mail: info@bova.nl