

VDL BUS & COACH - MIDEURO VIP

T
E
S
T

Routers	km	km/h	km/liter
Milan, Piacenza, Voghera, Passo Penice, Piacenza, Milan	308	73	7.89

Performance Index	<div><div></div></div>
	0 8.5 10



DIMENSIONS

Lenght mm	8,044
Width mm	1,993
Height mm	2,800
Wheelbase mm	5,025
Front Overhang mm	1,004
Rear Overhang mm	2,015
Turning Circle mm	17,800
Luggage m ³	1.8
Fuel Tank liters	75
Empty Weight kg	4,000
Test Weight kg	5,260
Perm. GWV kg	5,300

Eigh meters of LUXURY

Intended for intercity and tourist services and measuring over 8 meters it is the longest of the MidEuro series produced by VDL Bus Venlo (former Kusters) on the basis of the Mercedes Sprinter. The MidEuro version that BusToCoach took for a test drive is the MLD 80/190 with VIP layout, offering the top-of-the-line equipment in terms of comfort for transfer transport and shuttle services. Its outstanding features are the glazed middle section of the roof, an extra side door, the 16 seats layout with tables in between and all kinds of other accessories. These are the features that justify the 135 thousand Euros price-tag compared to the almost 100 thousand for the standard equipment model.

PASSENGER AREA

Seats n.	16+1+1
Internal Height mm	1,950
Floor Height mm	605
Aisle Width mm	355
Entrances Width mm	620
Raks Volume m³	0.34

DRIVER AREA

Cockpit Width mm	800
Cockpit Depth mm	1,480
Cockpit Height mm	1,680
Adjustment Seat mm	120

COMFORT

Type Seats	Vogel Primus
Driver seat	MB Swingsitz
A.C.	7+7 kW
Heater	convectors
Roof	glazed
Glazing	colored, double
Audio/video	radio CD/DVD Mp3



VIP Features

THE VIP MidEuro version is fitted with a 16+1+1 seats configuration. The layout consists of 2+1 rows with seats facing one another across two tables (one on each side, with 220V and VGA wall sockets). The seats are the Vogel Primus

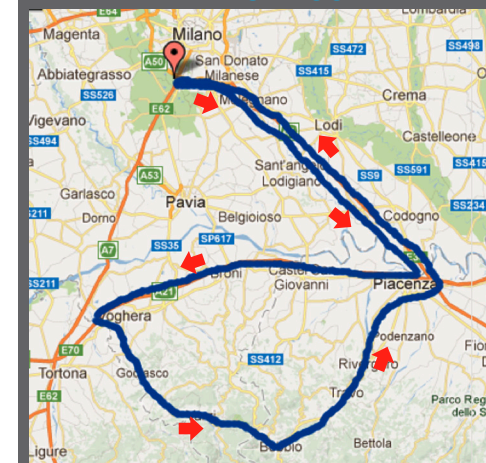
with leather inserts and folding armrest. They are reclining, extendable, fully equipped and heated. Covered in velvet and faux leather, the interior is made even brighter by coloured tinted windows in the central part of the roof.

Air conditioning is supplied by a 7 kW system blowing toward the centre and through individual vents located under the overhead compartment (also equipped with speakers and LED lights). Heating is provided by a 10 kW Eber-

spächer system connected to coils in the floor on both sides. There are also a 40-litre refrigerator next to the door and two 19" LCD monitors connected to the media player on the dashboard, inclusive of navigation system.



THE TEST ROUTE



Ballasted at 5,260 kg (maximum curb weight is 5,300 kg), the VIP MidEuro traveled 308 kilometres from Milan to Passo del Penice and back via Piacenza (197 kilometres on the highway), consuming an average of one litre of diesel fuel every 7.89 km. Average travelling speed was 73 km/h.

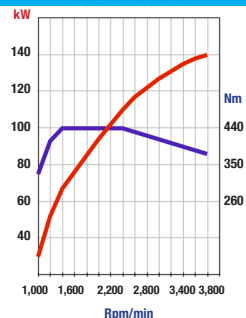
Overall performance results are considerably good giving it a performance index of 8.5 on a scale of one to ten (the product of speed and consumption).

Certainly in favour of the MidEuro performance there are the characteristics of the 3-litre OM 642 engine, with 190 horsepower (140 kW) and a maximum torque of 440 Nm that allowed the vehicle to tackle even the tortuous climb up the Passo del Penice (1,149 metres above sea level) without any effort. The five-speed Mercedes automatic transmission was responsible for keeping consumption under control and for adequately modulate gear shifts. That is in addition to reduce the driver's workload.

Running mode is even better than the one of the Sprinter 519 basis, thanks to the additional 700 millimetres in the distance between the



ENGINE



Mercedes OM 642 DE 30 LA

Displacement cc 2,987
Bore/Stroke 83/92
Geometry 6 V 72°
Position Front
Power 190 cv (140 kW)/3,800 rpm
Torque Nm 440 to 1,400-2,400 rpm
Injection Common rail
Compression Ratio 18:1
Oil Tank liters 7.5
Pollution Class EEV
Exhaust Gas Treatment Egr+Fap
Life test vehicle km 4,700

TYRES

Continental 195/75 R 16C
 110/108R, Twin rear tires.

SUSPENSIONS

Mechanical suspensions with independent tyres on the front axle with cross parabolic crossbows springs (longitudinal on the back), hydraulic shock absorbers with double effect and stabilizer bar.

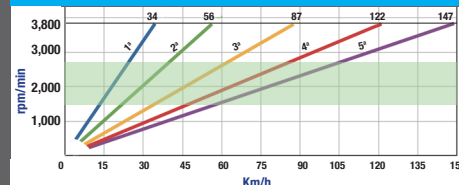
BRAKES

Full disc brakes. Electronically controlled hydraulic system with ABS, ASR, electronic brake force distribution (EBD), Bas (Brake assist), load Adaptive Control, RMI, EUC e Retarder.

SAFETY

ESP, Powder fire extinguisher of 6 kg.

GEARBOX



TRANSMISSION

The tested vehicle has the electro hydraulic automated Mercedes NAG W5A 380 with five speeds.

Transmission Ratio 4.182
Acceleration 0-100 km/h sec. 27.1

axles, which eliminates any hint of pitching. The rest of the work is performed by the sturdy mechanical suspensions (independent wheel on the front), which can optionally be replaced by pneumatic rear axle suspensions to further enhance passengers' comfort.

The vehicle is also equipped with a Telma electromagnetic retarder adding up to the braking system already featuring ESP and all other possible electronic control systems.

The external appearance retains the characteristics of the Sprinter 519 with the bodywork featuring a raised-roof that is also thermally insulated. The coloured panoramic side windows are double glazed and are glued-mounted while on the right side a full height glass single-sliding door with electric control has been added.

Two standard folding doors at the front are used by the guide and the driver to access the cabin. In addition to this standard doors layout, it is also possible to choose from four other solutions ranging from single-leaf electric door forward of the B-pillar to the electric double-leaf door behind the door reserved for the guide.

On the rear end, there is an upwards opening panel giving access to the lowered luggage compartment (almost 2 cubic metres capacity), featuring interior lighting and a retractable canvas to protect the bumper.

For external visibility the driver can rely on bi-xenon headlights with active and static illumination of turns as well as heated and electrically adjustable rear view mirrors.

As for all models based on commercial vehicles with a front engine, the manoeuvrability of the 8-metre MidEuro is great, due to its width of less than two meters, but also due to a steering system that allows it to turn around dimensions of 17.8 metres in diameter taking up a range of 4.05 meters only. Everything else is passengers' comfort.

By the Star

THE mechanics of the MidEuro is the same as the Sprinter 519 CDI including the equipment. Therefore upstream there is the powerful 3-litre OM 642 DE engine of 190 horsepower (140 kW) and 440 Nm of torque. First introduced on the Sprinter in 2009, the six cylinders engine has a V architecture, aluminium block and heads, four valves per cylinder, direct injection common rail and variable geometry turbocharger (VGT). Pollutant emissions are reduced to EEV standards through the exhaust gas recirculation system (EGR) and the use of a particulate filter at the exhaust.

The engine operates through the automated five-speed electronically controlled W5A 380 Mercedes hydraulic transmission, easing the driver's workload. The ground configuration is the typical 16-inch twin wheels on



the rear and mechanical suspensions with parabolic springs and hydraulic shock absorbers. It mounts independent wheels on the front. Secure braking is provided by the power-assisted system (BAS)

with latest-generation ESP and by ABS and ASR alongside Load Adaptive Control, electronic brake-force distribution (EBV), Roll Movement Intervention and steering under control (EUC). There is also the Telma retarder.

The electrical system also includes and additional 12-volt battery (located under the driver's seat) to power auxiliary equipment and a 14V/220A generator to power the electrical outlets at the tables.