

**The new special-protection variant of the M-Class is the latest addition to the extensive Mercedes-Benz Guard family. As with all Guard models, the armoured version of this popular SUV follows the brand-typical integrated special protection design principle. All the additional protection systems are taken fully into account right from the development phase of each model series and perfectly integrated into the vehicle's architecture. This enables all the advantages of the standard series-production vehicle to be retained, such as for instance the luxurious yet functional vehicle interior, the high level of active and passive safety, the exceptional ride comfort and the agile driving dynamics.**

As with all special-protection vehicles with the three-pointed star, in the new M-Guard the focus is on a holistic development approach: integrated special protection. This means that the individual protection elements are integrated in the raw vehicle bodyshell from scratch in an autonomous process, by virtue of which the entire passenger compartment receives a kind of coat of armour that even includes elements such as the roof frame struts, locks, door gaps and exterior mirror mounts. This way, a Mercedes-typical comprehensive protection system against ballistic attacks is created, providing protection that includes places where retrofitting would hardly be possible, or would be much less effective.

Another advantage of the integrated protection concept over retrofits that burden the vehicle body structure with added weight: right from the outset the vehicle bodyshell is strengthened in accordance with the greater weight and the positioning of the armour elements. This results in a greater stability of the entire body structure and consequently in the typical longevity and high resistance characteristic of the conventional M-Class models.

#### **M-Class Guard: all-round protection**

The bodyshell of the M-Class goes through all the stages of large-series production, benefiting from the excellent quality of the M-Class bodyshell. Unlike its standard series-production counterpart, though, the Guard bodyshell has specific adaptations for the attachment of the armour elements, a front structure with reinforcing elements and modified doors. The armour itself includes:

- Windows of the highest optical quality Special laminated glazing with a uniform thickness all-round, polycarbonate layer on inside to protect against shards.
- In the un-transparent sectors perfectly tight-fitting formed special steel is used throughout. In the A-, B- and C- pillars and the firewall and roof, this steel also reinforces the passenger compartment and increases structural firmness.
- All the components installed comply with defined ballistic requirements, are subjected to constant ballistic control and are already correspondingly certified beforehand.

#### **Complies with VR 4 protection class**

The new M-Guard meets the requirements of protection level VR4 according to testing guidelines BRV 2009 for special-protection vehicles with bullet resistance (according to **Bullet Resistant Vehicles 2009**). This ballistic classification designates ballistic resistance (VR = Vehicle Resistance) in terms of the weapons and calibre: in this case, among others, Magnum .357 and .44. Certification was carried out by the Ulm-based Ballistics Bureau. This independent, neutral, test ensures that the integrated protection concept is appropriate to face the hard requirements of real danger situations. The M-Guard passed the following ballistic and explosives tests successfully:

- Fire from different angles
- Blasts, for example with DM51 hand grenade, according to test guidelines ERV 2010. Both in the front and in the vehicle rear, these were resisted by the M-Guard with the optional floor armour successfully

#### **Well-harmonised suspension, powerful engines**

In spite of the increased weight caused by its armour, the M-Guard achieves the impressive ride comfort, great agility and extraordinary active safety of its series-production counterpart. The special-protection variant features as standard an AIRMATIC air suspension system with Adaptive Damper System (ADS) specifically adapted to the vehicle's special protection features. Stronger axle

components compensate for the increased weight of the M-Guard superbly, Guard-specific torsion bars at the rear axle optimise roll behaviour in fast curves and when taking evasive action. The M-Guard is exclusively available with tyres with run-flat capability and 5-spoke 50.8 cm (20-inch) AMG light-alloy wheels. MOE tyres with run-flat capability make it possible to drive on safely for up to 30 km at a maximum speed of 80 km/h even if the tyre has suffered a total loss of air. With the new ML 350 BlueTEC Guard there is a diesel power plant that is just as economical as it is agile for the first time in this segment. It offers the tried-and-tested V6-cylinder diesel engine with 190 kW output (258 hp) and a top torque level of 620 Nm. It meets the requirements of the currently strictest EURO 6 emissions standard. The V8 petrol-engine-powered ML 500 Guard with 300 kW (408 hp) and 600 Nm is available as an alternative. LHD and RHD versions of both vehicles are available.

### **Unrestricted interior space**

The sporty character and high value appeal of the series-production vehicle are also distinctive of the generously-dimensioned interior of the M-Guard. The protection measures restrict neither the car's famed ambience of well-being nor the space available for its up to five passengers. Its load capacity of up to 2010 litres and the payload of around 560 kg are of the same high level as those of the series-production non-special protection M-Class models. In addition the M-Guard customers can choose from among most of the M-Class's attractive equipment options. Among these worthy of note are for instance exclusive leather appointments, infotainment systems, such as COMAND Online, and high-value sound systems.

### **Extensive trial programme for top reliability**

Apart from the specific ballistic tests carried out by the Ballistics Bureau in Ulm, the M-Guard has to pass a detailed test programme just like its series-production counterparts. These trials mimic everyday operating conditions, exceeding these parameters by a large factor in many cases. They include an endurance test lasting several weeks to determine bodyshell strength, standardised simulation of arduous roads on special bodywork test rigs and road endurance tests to ensure the durability of drivetrain and suspension under extreme conditions. Over and above these trials, heat and cold tests and high-speed driving on test courses are carried out to ensure the resistance of individual components and their overall operation under the greatest stresses. In a separate winter trial on ice and snow, the engineers adjust the driving dynamics systems to the increased weight due to the armour. Finally a crash test programme ensures fault-free operation of all passive protection systems.

### **Mercedes-Benz offers nine special-protection models**

The Guard programme currently includes vehicles of the S-, E-, M- and G-Class. With a total of nine models Mercedes Benz has one of the most comprehensive special-protection ranges:

- E 350 BlueTEC Guard
- E 250 Guard\*
- E 350 Guard\*
- E 500 Guard
- ML 350 BlueTEC Guard
- ML 500 Guard
- S 600 Guard
- S 600 Pullman Guard
- G 500 Guard

*\*Only for certain countries*

The Guard models can avail themselves of a network of Mercedes-Benz Service stations all around the world for the service, maintenance and repair work needed. And of course the special-protection models also come with a full factory warranty. The new M-Guard can be ordered as of 15 March 2013.

The prices in Germany (in addition statutory 19% VAT):

- ML 350 BlueTEC Guard €105,050
- ML 500 Guard €118,65

**Technical data**

	<b>ML 350 BlueTEC Guard</b>	<b>ML 500 Guard</b>
Displacement (cc)	2987	4663
Rated output (kW/hp)	190/258	300/408
Torque (Nm)	620	600
Transmission	7G-TRONIC PLUS	
Kerb weight – EC (kg)	2765	2785
Perm. GVW – EC (kg)	3350	
Payload (kg)	585	565
Luggage compartment capacity (l)	690/2010	
Tank capacity (l)	70	93
Wheels & tyres	9J x 20 ET 57 265/45 R20 MOE*	
Protection level	High protection VR4**	
Fuel consumption NEDC (l/100km)	8.1	12.2
CO2 (g/km)	212	285
Emissions class	EURO 6	EURO 5
Acceleration 0-100 km/h (s)	9.4	6.5
Top speed (km/h)	210***	

\* *MOE (Mercedes Original Extended) = Genuine Mercedes tyres with run-flat characteristics*

\*\**VR (Vehicle Resistance) BRV 2009 (special-protection vehicle withbullet resistance according to **Bullet Resistant Vehicles 2009***

\*\*\**Electronically limited*