



Genuine BMW Batteries with AGM technology

- **Maintenance free**
- **Long shelf life**
- **High power output**
- **Long operating life**
- **Protected against corrosion and internal shorts**
- **Safe for deep discharge**
- **Stable at low and high temperatures**
- **100% acid binding**
- **Recyclable**

Function in detail

- The battery is made from a plastic housing, divided in the interior into multiple cells each with a rated voltage of 2 volts.
- Every cell contains a positive and negative set of plates, isolated from each other by transfer plates (the separators).
- The batteries are filled with sulphuric acid which is 100% bound in non-woven glass material.
- The derived battery capacity to store energy will be reduced under certain conditions:
 - high discharge voltages
 - high or low temperatures
 - increasing battery age
 - damage to the battery

AGM (Absorbent Glass Mat) technology

The ever-increasing energy requirements of modern vehicle electrical systems demands more powerful battery solutions. Even when the vehicle is switched off, the power consumption is considerable.

In a modern luxury vehicle, there are 100 actuator motors requiring electrical power. In addition, there are safety, environmental and comfort elements that are becoming more standard, for example anti-lock braking system (ABS), dynamic stability control (DSC), electric power steering (EPS), heated catalytic converter, electronic chassis control, climate control and navigation system.

Benefits

A Genuine BMW AGM Battery represents a high-performance component in the vehicle. It is delivered ready for installation and features the following technical innovations:

- No free-standing sulphuric acid in the battery housing.
- 100% acid containment by the non-woven glass mats (separators).
- No leaking of acid if the battery housing is damaged.
- Greatly reduced gas discharge, as gases are converted to water via a chemical cycle. In this way, neither gas nor electrolyte is lost.
- Release of gas via a pressure relief valve only after high-pressure build up (20 to 200 millibars).
- No intrusion of atmospheric oxygen through the pressure relief valve.
- Rechargeable after a deep discharge
- Genuine BMW AGM Batteries can be recognised by their black housing and by the omission of the so-called magic eye.





BMW AGM batteries offer better performance and value for the following reasons:

- Up to 3 times stronger cycle loading and thus longer operating life compared to lead-calcium batteries.
- Higher capacity stability over the entire operating life.
- Greater starting reliability at lower temperatures.
- Reliable starting of engines with higher starting voltage requirements e.g. high-performance diesel engines.
- Lower risk with accidents, reduced environmental risks (due to the 100% acid binding).

Genuine BMW AGM Batteries are specified for models with high energy requirements and cyclical loads, in particular for the following operating conditions:

- Higher energy operational capacity through auxiliary electrical components, auxiliary heating, TV, etc.
- Unfavourable usage profile (e.g. "stop-go traffic").

The higher quality of the individual components and a programme of comprehensive testing ensure that Genuine BMW AGM batteries meet and exceed high performance standards.

Tough real world and laboratory tests

The operational capability of the battery is an integral part of the pre-series, laboratory and real world tests that cover driving in all conditions, from the Polar Regions to the desert. The performance of the different batteries is tested repeatedly and their capacities are optimally matched to the respective model.

Continuous quality control

Continuous quality control during production according to EN ISO 9001 and DIN 50342, with regular checking of samples, eliminates almost 100% of material and manufacturing errors.

Advantages of Genuine BMW AGM Batteries

- Maintenance free
- Remains usable for longer during standing and storage times
- Higher power output
- Longer operating life
- Protection against corrosion and internal shorts
- Safe for deep discharge
- Stable at low and high temperatures
- Optimal safety against leakage of acid and deflagration (rapid burning of explosive gases)
- Optimal recyclability
- Increased security against short circuits
- Up to 3 times stronger cycle loading and longer operating life when compared to calcium batteries.
- Higher capacity stability over the entire operating life.
- Higher starting reliability at lower temperatures.
- Secure starting of engines with higher starting voltage requirements
- 100% acid binding (reduced risk in accidents or reduced environmental risk).

