## ecoFORCE AGM



# The best battery for micro hybrid car models with Start&Stop device and Brake Engergy Regeneration.

Dedicated to high-performance, modern vehicles, AGM (Absorbent Glass Material) batteries guarantee a remarkable performance.

The implemented technology provides valve-controlled gas-recombination sealed batteries. During operation, there is no interaction with the outside.

The oxygen released by the positive plate, following splitting of water into hydrogen and oxygen, is channelled and conveyed the negative plate to start the process again.

The result is a closed, self-sufficient circuit which does not emit gas or consume water.

Batteries for Start&Stop applications must be replaced with Start&Stop batteries taking care to use the same technology.

### AGM -> AGM AFB/EFB -> AFB/EFB



## **Quality: Original Quality Spare Part**

The Original Quality batteries are produced in the same production plants where also original equipment batteries are manufactured, all certified according to the Automotive Standard IATF 16949. They use the same technology, manpower, equipments according to the technical specifications of the OEM involved.

## Applications:



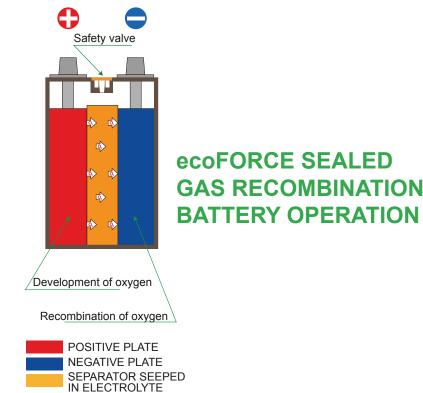
**CAR WITH START & STOP** 

### **Technologies:**

### **AGM VRLA**

### Main Advantages:

- OE technology and quality
- Breakaway current
- Extreme resistance to the charging and discharging cycles (three times more resistant than conventional lead-calcium batteries)
- Low self-discharge
- Vibration resistance higher than conventional batteries
- Maintenance-free
- · No leakage or liquid and gas



The operation of all these instruments depends on the presence of a battery which provides optimum efficiency operating mainly in extreme cycling conditions.



The main feature which differentiates an eco FORCE AGM battery from a conventional one is gas recombination technology. Water dissociates into hydrogen and oxygen in a conventional flooded lead battery when it is recharged. The two gases are released through the caps and the level of electrolyte decreases in the battery. ecoFORCE instead, exploits the recombination principle. By using a special, very fine separator (Absorbent Glass Material) seeped in a controlled amount of electrolyte, the oxygen released from the positive plate due to the dissociation of water during recharging can migrate to the negative plate where it is fixed to then recombine with hydrogen and form water again. In principle, this establishes a closed electrochemical cycle without gas emissions outside and without consuming water. It is a simple system that requires high constructive accuracy and careful selection of components in order to work perfectly. Crucial are the plate-mat system compression and the purity of components.