

# **GVS BATTERY ANTI-EXPLOSION VENTS**

### **Description**

GVS has developed a specific solution for the ventilation and fast gas evacuation of battery packs with integrated safety function that protects the battery against external contaminants, fluids, moisture and dirt, exceeding over pressure which might happen in case of a cell failure or mechanical damage. We call it GVS Battery Anti-Explosion Vent!

Thanks to a patented technology, GVS Battery Anti-Explosion Vent opens temporarily, allowing a larger cross-section for the ventilation while keeping the integrity and functionality of the membrane.

This mechanism prevents the burst of the battery housing, allows fast evacuation and restores the controlled pressure equalization.

This device definitively improves battery durability, protection and safety.

## **Applications**

- Battery Packs and Modules for MHEVs, HEVs, PHEVs, BEVs and FCEVs.
- Battery Packs and Modules Off-Road, Material Handling and Marine Vehicles, Electric Aircrafts, Energy Storage Systems.

#### Installation

Ready to use. Clean the mounting surface and remove any contamination before the installation. Then screw the GVS Battery Anti-Explosion Vent in ortogonal direction with respect to the battery housing. The device can be mounted in both vertical and horizontal positions.

## **Specifications**

Pictures and Dimensions			Ø 57.4	
Part Number	AV030	AV031	AV032	AV033
Opening Pressure	2,5 KPa	6,5 KPa	19 KPa	30 KPa
Minimum Air Flow during Normal Operating Conditions	50 L/h @1.2 KPa			
Minimum Air Flow at Opening Pressure	1'000 L/h	2'000 L/h	5'000 L/h	20'000 L/h
Minimum Air Flow during Degassing Operation	100'000 L/h @60 KPa			
Water Entry Pressure	> 30 KPa / 30 sec			
Filter Media	Hydrophobic and Oleophobic Membrane			
Frame	Polybutylene Terephthalate (PBT)			
O-Ring	Silicone			
Interface	Screw-Fit M32 X 1.5 DIN13-22 8g			
Frame Flammability Rate	UL94 V0			
Operating Temperature	-40°C to 90°C			

Ingress Protection (IP) Rate dependent on application conditions.

Customized solution based on specific customer requirements.