GORE® Automotive Vents
Insect Guard Series



FROM DESIGN BLINDSPOT TO COMPETITIVE ADVANTAGE.

The rapid growth of automotive electronics is exposing a critical gap in venting design in ICE, HEV and BEV systems.

While conventional vents manage airflow and pressure, they leave sensitive components vulnerable to intrusion from water, fine debris and insects. Across warm, humid regions — including parts of China, Southern Europe and Latin America — these small threats are already causing big failures.

GORE® Automotive Vents Insect Guard Series is the industry's first snap-fit vent with certified, multi-threat environmental intrusion protection — precision-engineered to address this overlooked risk and set a new standard for safeguarding under-hood systems.

It's not an accessory. It's a system safeguard.

Blocks Insects*, Not Airflow

Stops micro-scale pests with a ≤300µm gap without compromising ventilation.

Engineered for Drop-In Integration

A single, integrated solution that eliminates the need for add-on mesh.

Snap-Fit Simplicity

Installs seamlessly into existing Snap-Fit PolyVent housings with standard tooling.

Patent-Backed Precision

Built on patented design WO2024213723_A1, certified to withstand pressure, ingress and environmental stress.

Tested for Real-World Heat & Humidity

Performs reliably from −40°C to +125°C/150°C, in high-risk, high-humidity environments.

GORE® Automotive Vents Insect Guard Series

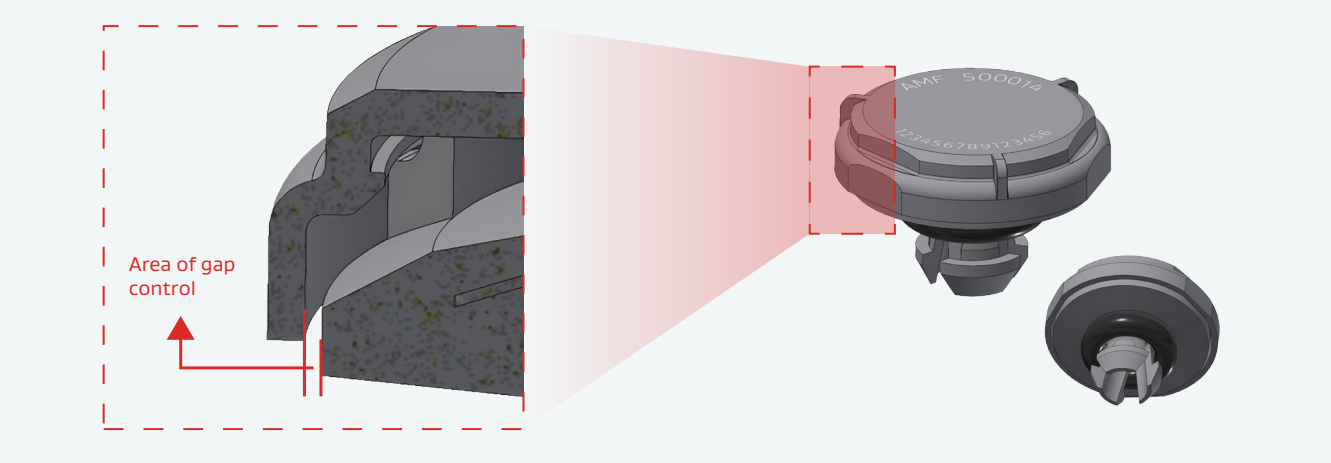
Technical Specifications	
Product Number	AMF500014, AMF500067
Gap Dimensions	≤300µm
Minimum Water Entry Pressure (WEP)	60 kPa/30 sec
Minimum and Maximum Airflow	15-60 l/h @ 7 kPA
Typical Airflow	34 l/h @ 7 kPA
Ingress Protection (IP)	IPX6K**, IPX9K**, WEP: 60 kPa for 30 sec



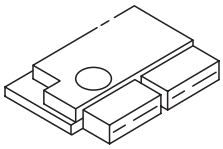
*The product design integrates an effective barrier to intrusion, but does not guarantee total prevention of insect entry.
**Depending on housing geometry.

Together, improving life

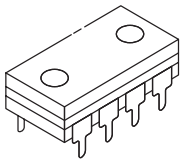
Precision gap blocks insects*. Integrated membrane maintains airflow.



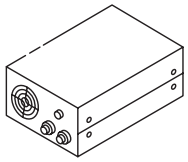
Compatible with electronics in ICE, HEV and BEV systems in:



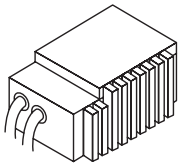
ECUs (Electronic Control Units)



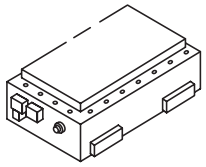
EPS (Electric Power Steering) modules



DC-DC converters



Cooling assemblies



Battery and motor controller enclosures

Optimized for high-humidity, high-intrusion environments.

Certifications and patent information

- **Patent Application**: WO2024213723_A1
- **Flammability**: UL 94 HB compliant as housing and O-ring materials
- **Designed in alignment with industry standards for automotive electronics venting and protection.**

The Gore Advantage

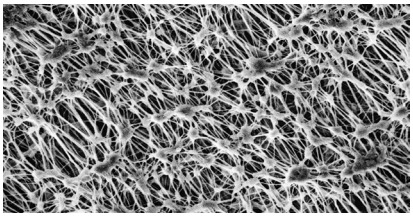
Backed by decades of materials science expertise and real-world collaboration:

- **Simplified Integration**
  Eliminates mesh add-ons and sealing workarounds, making design and assembly easier.
- **Global Reliability**
  Consistent product quality, secure supply chains and local technical support worldwide.
- **Lower Total Cost of Ownership**
  Fewer failures, less complexity and long-term sourcing efficiency.
- **Purpose-Driven Innovation**
  Durable, engineered solutions that align with your performance goals and sustainability priorities.

**The product design integrates an effective barrier to intrusion, but does not guarantee total prevention of insect entry.*

Why the GORE® Membrane matters

Only GORE® Automotive Vents incorporate the performance benefits of the GORE® Membrane. Made of expanded polytetrafluoroethylene (ePTFE), it's engineered with billions of pores. These pores are 700X larger than an air molecule, to ensure reliable airflow and pressure equalization. Yet at 20,000X smaller than a drop of water, these pores effectively block entry of liquids, dirt and debris.



The GORE® Membrane magnified 40,000 times

The GORE® Membrane is:

- chemically inert
- non-shedding
- UV-resistant
- temperature-resistant
- hydrophobic and oleophobic

What GORE® Automotive Vents can offer you

GORE® Automotive Vents deliver innovative technology, backed by decades of research and testing. Our product portfolio has proven itself in the harshest environments: literally billions of our vents have been installed in automotive applications worldwide. Today, virtually every global OEM trusts GORE® Automotive Vents to extend the reliability and longevity of their exterior lighting, electronics and powertrain products and assemblies.

With worldwide technical support and testing centers based in the US, Germany, Japan and China, our application engineers are easily accessible — and ready to work in close partnership with your design team, from product concept through manufacturing integration.

Gore's Sustainability Commitment

We use our materials science expertise to create products that improve the quality of life and address sustainability challenges for generations to come. We believe that one of the greatest contributions we can make to sustainability is through innovations that have a positive impact on human health as well as the planet.

For more information, please visit **gore.com/about/responsible-enterprise**

About Gore

W. L. Gore & Associates is a global materials science company dedicated to transforming industries and improving lives. Since 1958, Gore has solved complex technical challenges in demanding environments — from outer space to the world's highest peaks to the inner workings of the human body. With approximately 13,000 Associates and a strong, team-oriented culture, Gore generates annual revenues of $5 billion.

For more information, please visit **gore.com**

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AUTO-157-R1-DSH-EN-MAR26