IT PAYS TO COMPARE: EXTENDED LIFETIME, INCREASED PROFITABILITY

GORE® Protective Vents vs. Common Venting Solutions

As the name says, GORE® Protective Vents enable pressure equalization through venting with the key feature of ingress protection. Other venting technologies have limits to protecting against the ingress of dust and moisture.

	GORE® Polyvent Stainless Steel		Sponge Vent	Metal Mesh	Air Vent
			(50 - 20) (50 - 20)		
Moisture Ingress Protection*	 IP69K	•	•	•	•
Dust Ingress Protection*	IP69K	• •	•	•	•
Pressure Equalization	• • •	• • •	• • •	• • •	• • •
Robustness	IK10	• •	•	•	•
Thermal Resistance	• • •	• • •	•	•	•
Corrosion Resistance**	• • •	•	•	•	•
Integration	• • •	• • •	•	•	•

^{*}Based on the following test scenario performed by Gore, simulating the change from a hot summer day to a sudden thunderstorm and subsequent condensation: pretreatment 85 °C/85% RH storage 6 hr ▶ ice water shower 10 °C water spray 10 min ▶ monitor condensation at room temperature with a heater inside (80 °C)



^{**} Based on salt spray test according to ASTM B117 for 120 hours.

Moisture and Dust Ingress Protection (IP)

- High IP ratings are commonly considered important for outdoor electronic enclosures, like control and monitoring devices, which are installed on electrical grid equipment to assess its conditions.
- Gore ePTFE membranes are the superior solution when it comes to enabling an even airflow while also ensuring the highest possible IP rating (IP69K).

Pressure Equalization

- Every venting solutions aims to ensure pressure equalization in outdoor electronic enclosures.
- The key is combining pressure equalization with ingress protection and impact resistance against other external influences.

Robustness

- Enclosures must have adequate protection against external mechanical impacts.
- The material chosen (Stainless Steel 1.4404) for the GORE® Polyvent Stainless Steel allows for the highest IK rating possible (IK10).

More information: www.gore.com/energy-grid

Thermal Resistance

- Stainless Steel 1.4404 is both highly thermally and chemically resistant.
- ePTFE offers high thermal resistance (from –180 °C to +260 °C).
- The membrane ensures the right level of airflow to equalize differences in pressure related to temperature changes.

Corrosion Resistance

- The GORE® Polyvent Stainless Steel, unlike other products, passed the 2,000 h aging test as well as the salt fog test without any corrosions on the vent.
- The combination of the highest IP rating with the prevention of condensation minimizes condensation-induced corrosion for the enclosed components. This way, sensitive electronics in control and monitoring devices will not fail due to corrosion or soiling.

Easy Integration

- The product design as a screw-in vent makes GORE® Polyvent Stainless Steel easy to integrate into your new or existing design.
- GORE® Polyvent Stainless Steel can be applied as a new installation, replacement, or upgrade in outdoor enclosures.

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GORE® Protective Vent(s) are manufactured under the generic industrial ISO 9001 quality system. No other certifications can be provided by Gore for this GORE® Protective Vent. All technical information given is based on Gore's previous experiences and/or test results. Gore gives this information to the best of its knowledge, but assumes no legal responsibility. Customers are asked to check the suitability and usability in the specific application, since the performance of the product can only be judged when all necessary operating data are available. The above information is subject to change and is not to be used for specification purposes. Gore's terms and conditions of sale apply to the sale of the products by Gore.

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