






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	Sintered Vent	Sponge Vent	Metal Mesh	Air Vent
					
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 solution 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 corruptions 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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