GORE® Protective Vents
Snap-In Series



FAST, RELIABLE INSTALLATION AND DURABLE PROTECTION

Harsh or changing environmental conditions cause pressure changes that can stress outdoor enclosure seals to failure, allowing contaminants to enter and damage sensitive electronics.

GORE® Protective Vents Snap-In Series effectively equalize pressure and reduce condensation in sealed enclosures, while keeping out solid and liquid contaminants. They improve safety, reliability and service life of outdoor electronic devices.

Venting Solution for any application

GORE® Protective Vents Snap-In Series delivers robust venting performance and consistent, long-lasting protection, even in very harsh environments. Engineered for use in high-throughput (semi- or fully-automated) production lines, they also allow quick and easy manual installation. All Snap-In Series vents are manufactured with 100% in-line quality inspections; most are individually laser-marked for full product traceability. Choose the performance option that meets your application needs:

- **GORE® PolyVent Hysi** offers fast, economical integration, and the option to inside-mount for nearly-invisible installation. For enclosure volumes up to 3.5 liters.
- **GORE® PolyVent XS** is 30% smaller than PolyVent Standard, for light-weight, thin-walled enclosures with volumes up to 5 liters.
- **GORE® PolyVent Standard** offers reliable performance in many applications, for enclosure volumes up to 5 liters.
- **GORE® PolyVent High Airflow**, in hydrophobic or oleophobic versions, delivers high airflow for enclosure volumes up to 30 liters.

Benefits of GORE® Protective Vents Snap-In Series:

- **Fast installation on any production line:** automated, semi-automated or manual.
- **Reliable performance:** snap-in construction securely seats and seals the vent to the housing.
- **Durable protection:** even after immersion, the GORE Membrane blocks contaminant ingress.
- **Rugged durability:** engineered for chemical and temperature resistance, and hydrolytic stability.
- **Reduces condensation:** by allowing air exchange
- **Product quality:** 100% quality control, plus full traceability for all Snap-in Vents (except PolyVent Hysi)

Together, improving life

Product Information

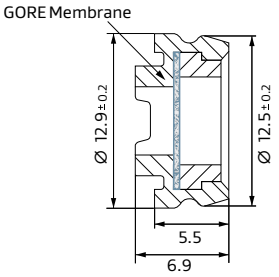
Product Name	PolyVent Hysi	PolyVent XS
Product Number	PMF100271	PMF200125
		

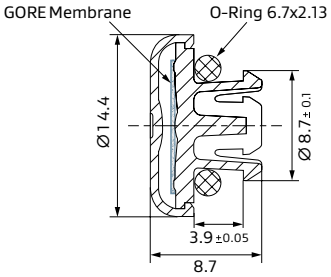
Product Performance Characteristics

Typical airflow	350 ml/min (dp = 70 mbar)	450 ml/min (dp = 70 mbar)
Laminate: membrane | backing material	ePTFE | –	ePTFE | Polyester (PET)
Membrane characteristic	Oleophobic	Oleophobic
Vent body & cap: material	Outer hull: Silicone | Carrier ring: TPE	PBT-I-GF30 hydrostabilized
Vent body & cap: color	Outer hull: clear | Carrier ring: black	Black (similar to RAL 9004)
O-ring material	–	Silicone 50 Shore A
Installed height (to the inside)	1.4 mm	1.45 mm
Installed height (to the outside)	0.0 mm (when inside-mounted)	3.75 mm
Traceability	No	Yes: Individually laser-marked

Design and Dimensions

Units are in mm

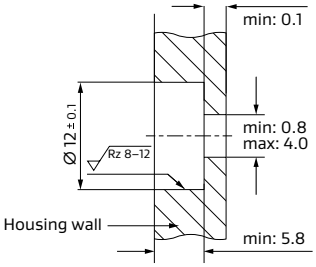


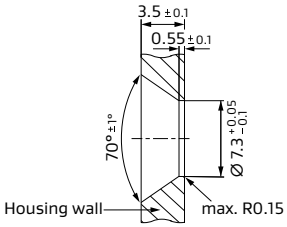


Recommended Installation

Units are in mm

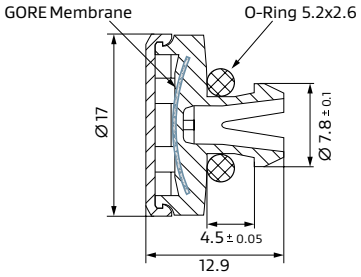
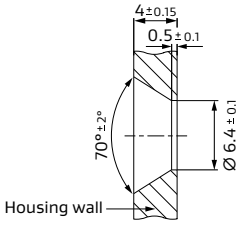
- Install on a flat, vertical housing surface where water or other contaminants will not pool.
- PolyVent XS, Standard and High Airflow are designed to be installed from outside the enclosure.
- PolyVent Hysi is designed to be mounted from inside the enclosure (it can also be mounted from outside, but inside-mounting is recommended).





RoHS Information

Product Stewardship RoHS Status: W. L. Gore & Associates declares that we do not intentionally add substances listed in RoHS Directive 2011/65/EU in its current valid version including all valid amendments to GORE® Protective Vents.

PolyVent Standard	PolyVent High Airflow	
PMF200128	PMF200484	PMF200521
		
450 ml/min (dp = 70 mbar)	2500 ml/min (dp = 70 mbar)	2000 ml/min (dp = 70 mbar)
ePTFE | Polyester (PET)	ePTFE | Polyester (PET)	ePTFE | Polyester (PET)
Oleophobic	Hydrophobic	Oleophobic
PBT-I-GF30 hydrostabilized	PBT-I-GF30 hydrostabilized	PBT-I-GF30 hydrostabilized
Black (similar to RAL 9004)	Black (similar to RAL 9004)	Black (similar to RAL 9004)
EPDM 50 Shore A	EPDM 50 Shore A	EPDM 50 Shore A
2.9 mm	2.9 mm	2.9 mm
5.7 mm	5.7 mm	5.7 mm
Yes: Individually laser-marked	Yes: Individually laser-marked	Yes: Individually laser-marked
		
		

Recommendation for storage

Gore recommend to store products in cool dry conditions (20–25 °C / 30–50% RH) and out of direct sun light, preferably in the original packaging.

Environmental Performance

GORE® Protective Vents Snap-In Series have been tested by independent laboratories and have been verified to meet these performance standards. **All certificates are available upon request.**

Ingress Protection Testing

Vent protection against ingress of particulates and water

METHODS:

- **IEC 60529**
  - IP65
  - IP66
  - IP67
  - IP68* (extended immersion: 2 meters for 1 hour)
- **ISO 20653**
  - IP69K* (depending on housing geometry)

* Not applicable for PolyVent Hysi

Humidity Testing

Vent durability in hot, humid environments (accelerated aging test)

METHOD:

- **IEC 60068-2-78**

TEST CONDITIONS:

- 85 °C
- 85% relative humidity
- 1000 hours

Vibration Testing

Not applicable to PolyVent Hysi

Vent resistance against vibration

METHODS:

- **ETSI EN 300 019-2-2**
- **IEC 60068-2-64**

Flammability Testing

Not applicable to PolyVent Hysi

Resistance to open flame and radiant heat

METHOD:

- **UL 94-HB**
  All PolyVent cap and body materials

Salt Fog Testing

Vent resistance to salty environments

METHODS:

- **IEC 60068-2-11** (salt fog)
- **IEC 60068-2-52** (cyclic salt fog)

Temperature Testing

Vent durability in a range of temperatures

METHODS:

- **IEC 60068-2-1** (to -40 °C)
- **IEC 60068-2-2** (to +125 °C; PolyVent XS: to +140 °C; PolyVent Hysi: to +85 °C)
- **IEC 60068-2-14** (cycling: -40 °C to +125 °C; PolyVent XS: to +140 °C; PolyVent Hysi: to +85 °C)

UV Resistance Testing

Vent resistance to ultraviolet light

METHOD:

- **ASTM G155-05a** (1000 hours)

Corrosive Gas Testing

Vent durability in corrosive gas environment (e.g., NO_x, SO_x, H_2S, Cl_x)

METHOD:

- **GR-3108-CORE**

FOR INDUSTRIAL USE ONLY. Not for use in food, drug, cosmetic or medical device manufacturing, processing, or packaging operations.
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.

GORE, *Together, improving life* and designs are trademarks of W. L. Gore & Associates. © 2021–2024 W. L. Gore & Associates GmbH

W. L. Gore & Associates GmbH
Hermann-Oberth-Str. 26, 85640 Putzbrunn, Germany
T +49 89 4612 2211 **F** +49 89 4612 2302 **E** protectivevents@wlgore.com
gore.com/protectivevents

PTV-032-R16-DSH-EN-FEB24