



# Protective Vents

Screw-In Vents

## Installation and Handling Guidelines for Screw-In Vents

Part Series: PMF100318, PMF100319, PMF100320, PMF100321, PMF100391, PMF100520, PMF100444

GORE® Protective Vents are designed to protect in the harshest environments while quickly and effectively equalizing the pressure in sealed enclosures. *To maximize the performance of the vent for the lifetime of your product, please follow the handling and installation recommendations provided.*

### HANDLING GUIDELINES

- Avoid direct contact with GORE™ Membrane.
- Do not remove vent cap.
- Do not over-tighten.
- It is recommended to use the following torque wrench sizes for installation:

Plastic molded parts	16 mm socket or wrench
Metal vent	18 mm wrench
Recommended force	0.6 – 0.8 Nm (0.44 – 0.59 lbf-ft)

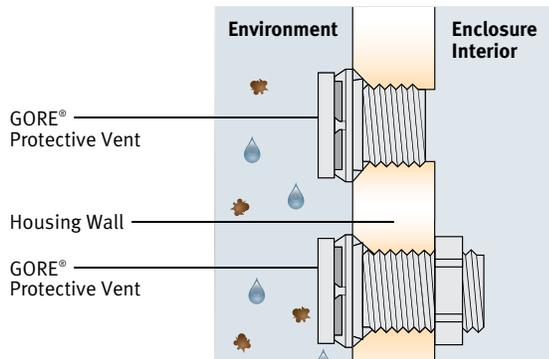
### INSTALLATION RECOMMENDATIONS

#### 1. Preparation

Make sure mounting surface is clean and free of oils, particles and other contaminants. Isopropyl alcohol can be used to clean the mounting surface if needed. Ensure the surface is dry prior to installation.

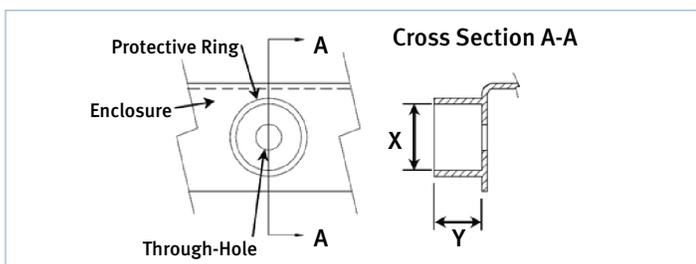
#### 2. Positioning

For best performance, vents should be mounted on a flat, vertical surface where liquids or other contaminants will not pool. (See diagram below for mounting recommendation). Gore molded parts are designed for mounting to the exterior housing wall.



*The Gore proprietary membrane is constructed of ePTFE and allows for the free passage of gases and vapors while at the same time preventing liquid and particulates from entering the housing.*

To prevent unintentional damage, an additional means of protection is recommended at the installation site. An example of one possible means of protection, a protective ring, is shown below:

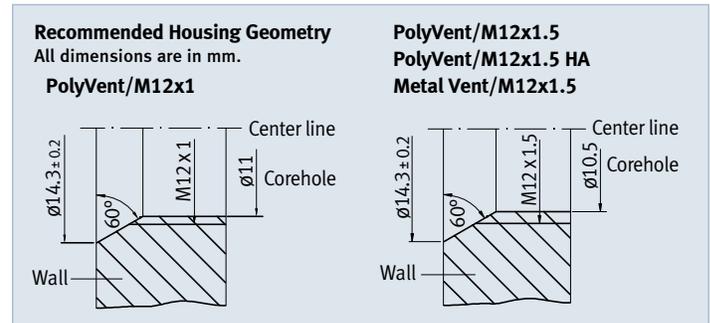


#### 3. Installation

To insert into the housing, make sure that the threads have proper engagement and screw into the housing. If using a socket to tighten vent to surface, ensure socket is fully engaged with the vent housing before tightening.

#### 4. Final Inspection

Look over the part to ensure that the vent is properly seated.



### Recommended Protective Ring Dimensions by Part

Part Description	PolyVent M12x1	PolyVent M12x1.5/ M12x1.5 HA	Metal Vent/ M12x1.5
Part Number	PMF100318 PMF100319	PMF100320 PMF100321 PMF100391 PMF100520	PMF100444
X dimension	22 mm (0.866")	22 mm (0.866")	24 mm (0.945")
Y dimension	9 mm (0.354")	8 mm (0.315")	15 mm (0.590")



# Protective Vents

## Screw-In Vents

### SPECIFICATIONS

Part Description	PolyVent M12x1	PolyVent M12x1.5/ M12x1.5 HA	Metal Vent M12x1.5*
Part Number	PMF100318 PMF100319	PMF100320 PMF100321 PMF100391 PMF100520	PMF100444
<b>Through Hole (Bulkhead Mounting) Installation</b>			
Through Hole (± 0.2 mm)	NA	12.2 mm (0.472")	12.2 mm (0.472")
Counter Nut Part Number	NA	M10510-007	M10510-008
<b>Chamfer Specifications for O-Ring Seal</b>			
Angle	60 degrees		
OD for Wall Thickness > 3 mm	14.3 mm (0.562")		
OD for Wall Thickness < 3 mm	13.8 mm (0.543")		
Torque Specification	0.6 – 0.8 Nm (0.44 – 0.59 lbf-ft)		
<b>Other Useful Information</b>			
Thread Angle	60 degrees		
Major OD	12.0 mm (0.472")		

\*Note: If using the Metal Vent PMF100444 at temperatures below -20°C, mechanical protection for the vent is recommended (e.g. protective ring). Additional installation and handling instructions are available upon request.

### STORAGE RECOMMENDATIONS

Store in the original packaging in a clean and dry environment.

### CONTACT US

For additional assistance, please contact a Gore representative.

#### INTERNATIONAL CONTACTS

Argentina	54.351.4886.427	Korea	82.2.393.3411
Australia	61.2.9473.6800	Mexico	52.81.8288.1281
Brazil	55.11.5502.7800	Netherlands	49.89.4612.2211
China	86.21.6247.1999	Scandinavia	46.31.706.7800
France	33.1.5695.6565	Singapore	65.6733.2882
Germany	49.89.4612.2211	Spain	34.93.480.6900
India	91.22.6768.7000	Taiwan	886.2.8771.7799
Italy	39.045.6209.240	United Kingdom	44.1506.460123
Japan	81.3.3327.0011	USA	1.410.392.4440

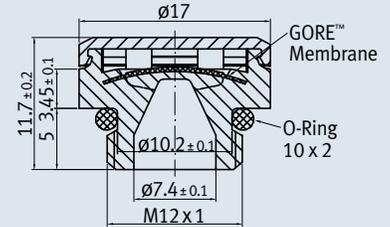
#### W. L. GORE & ASSOCIATES, INC.

401 Airport Road • Elkton, MD 21921 • USA  
Phone: 410.392.4440 (USA) • Toll free: 800.455.4684  
Fax: 410.506.8749 • Email: protectivevents@wlgore.com

[gore.com/protectivevents](http://gore.com/protectivevents)

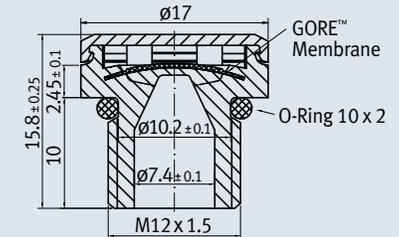
### CROSS SECTION All dimensions are in mm unless otherwise specified

#### PolyVent/M12x1



#### PolyVent/M12x1.5

#### PolyVent/M12x1.5 HA

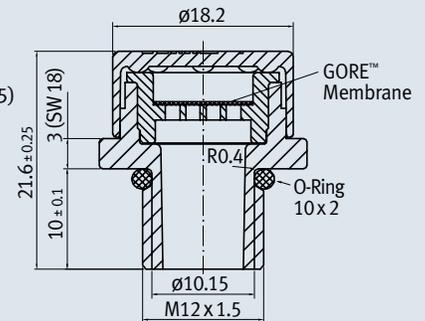


#### Metal Vent/M12x1.5

According to Council Directive 94/9/EC ATEX (95)

- ⊕ I M2 Ex e I
- ⊕ II 2G Ex e II
- ⊕ II 1D

Certificate available upon request



Tolerances: DIN 16901/130 unless otherwise specified

### FOR INDUSTRIAL USE ONLY.

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

The optimal performance of any GORE® Protective Vent depends on how it is handled and incorporated into the final product. This includes such elements as the device design, sealing method, and assembly method. While Gore is able to provide general guidelines based upon its experience with GORE® Protective Vents, the device manufacturer is ultimately responsible for validating each product and its performance for its intended application. Contact a Gore technical sales associate today for assistance in determining the best GORE® Protective Vent for your specific application.

© GORE and designs are trademarks of W. L. Gore & Associates, Inc. All rights reserved.  
© 2010 W. L. Gore & Associates, Inc.

