

GORE® Packaging Vents

For hazardous liquids,
institutional cleaners &
agrochemicals



PREVENT LEAKS AND DEFORMATIONS AND ENHANCE CONTAINER SAFETY

Concentrated or hazardous chemical formulations need packaging that breathes without leaking, to equalize pressure imbalances that would otherwise deform the container and cause dangerous spills or costly returns. GORE® Packaging Vents minimize these risks with a breathable barrier membrane that reliably maintains container integrity.

Plug-In Vents

- **D38/D17/D15:** One of our most robust, reliable vents for the most aggressive industrial chemicals and “dangerous goods” packaging. Optimized for ADR Drop Test Specifications.
- **D15 Converse:** For cartridges or other packaging that require exterior vent integration. Ideal for dosing/dispensing applications.
- **D10:** A high-performance, small-footprint vent designed to enhance safety, sustainability and savings in applications like dispensers for household or institutional cleaners.
- **D3:** Equalizes pressure ONLY from the outside to the inside, for specialty applications including the smallest cartridges/dispensers that don't off-gas, but need pressure-balancing for product flow.

Liners

- **Foam Liners:** Two Series, with full-surface membranes, for all flat-cap designs. Easy drop-in replacements for all single-point or unvented liners, in applications from consumer chemicals to DOT and ADR-regulated packaging.
- **Pulp Induction Liners:** Two Series, for agrochemical bottles (up to 20 l). Weldable installation ensures tamper-evidence; membrane construction provides needed breathability for gas-scavenging chemicals and off-gassing liquids.

Benefits of Plug-In Vents:

- Meet the demanding needs of nearly all hazardous chemicals and cleaners within the field of agricultural, household and institutional applications.
- D38/D17/D15 consistently demonstrate compliance with DOT and ADR requirements in varied container systems.
- Easy to integrate via snap-fit or press-fit.

Benefits of Liners:

- Developed for fertilizer, pesticides, household chemicals and cleaners.
- Easy to integrate without re-design of cap.
- All liners are available in single- and multi-up roll goods as well as in various widths.

Together, improving life



Plug-In Vents



Typical Application

	IBCs/Drums	Drums/Containers
Packaging Size	50 – 1500 liters	5 – 60 liters

Product Series

	D38		D17	
	Standard Series	High Airflow Series	Standard Series	High Airflow Series
Packaging Content/Application	Hazardous Chemicals and Agrochemicals	Hazardous Chemicals and Agrochemicals	Hazardous Chemicals, Agrochemicals	Biostimulants, Organic Fertilizers



Order Numbers ...

... for Press-Fit Integration	CMF300207	CMF300277	CMF300181	CMF300280
... for Snap-Fit Integration	CMF300278	CMF300279	CMF300206	CMF300281

Product Performance Characteristics

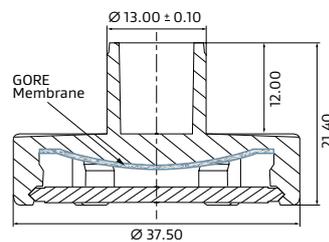
Typical Airflow at $dp = 12 \text{ mbar}^1$	45 l/h	137 l/h	5.6 l/h	15 l/h
Water Entry Pressure (WEP)	> 0.6 bar	> 0.3 bar	> 0.6 bar	> 0.3 bar
Drop Test Optimized	Yes		Yes	
Traceability	Yes: Individually laser-marked		Yes: Individually laser-marked	
Membrane Type	SC5	SG5	SC5	SG5
Laminate: membrane backing material	ePTFE PE/PP	ePTFE PE/PP	ePTFE PE/PP	ePTFE PE/PP
Vent Housing: material	HDPE		HDPE	
Vent Housing: color	Natural	White	Natural	

Vent Design and Dimensions

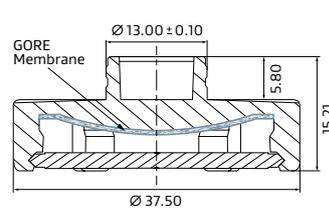
Units are in mm

Dimensions without tolerances follow DIN 16742

Press-Fit Integration:



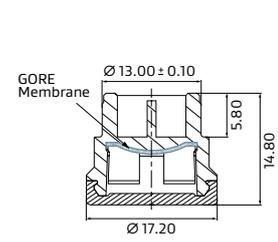
Snap-Fit Integration:



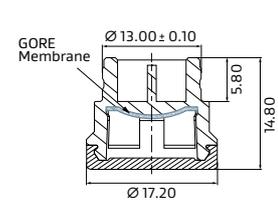
Scale of 1:1



Press-Fit Integration:



Snap-Fit Integration:



Scale of 1:1



¹ Values are based on measurements without liquid contact. More detailed information can be found in our White Papers.

Plug-In Vents



Typical Application

Typical Application	Containers/Bottles	Cartridges	Trigger Sprayers/Dispensers/Bottles
Packaging Size	1 – 30 liters	1 – 5 liters	0.2 – 2 liters

Product Series

Product Series	D15		D15 Converse		D10	
	Standard Series	Standard Series	Standard Series	High Airflow Series	Standard Series	High Airflow Series
Packaging Content/Application	Agrochemicals	Hazardous Chemicals	Institutional Cleaners and Domestic Appliance		Household Chemicals, Institutional Cleaners and Domestic Appliance	



Order Numbers ...

... for Press-Fit Integration	CMF300161	CMF300180	CMF300275	CMF300276	CMF300223	CMF300274
... for Snap-Fit Integration	-	-	-	-	-	-

Product Performance Characteristics

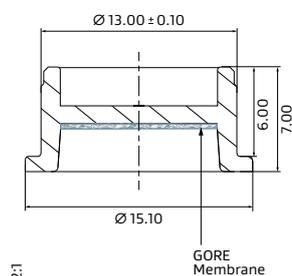
Typical Airflow at $dp = 12 \text{ mbar}^1$	1.6 l/h	4.2 l/h	0.9 l/h	4.2 l/h	0.38 l/h	2.3 l/h
Water Entry Pressure (WEP)	> 0.5 bar	> 0.6 bar	> 0.5 bar	> 0.6 bar	> 0.5 bar	> 0.3 bar
Drop Test Optimized	Yes		Yes		No	
Traceability	Yes: Individually laser-marked		On lot level		On lot level	
Membrane Type	SE0	SC5	SF0	SC5	SF0	SH0
Laminate: membrane backing material	ePTFE -	ePTFE PE/PP	ePTFE -	ePTFE PE/PP	ePTFE -	
Vent Housing: material	HDPE		HDPE		PP	
Vent Housing: color	Natural		Natural		White	

Vent Design and Dimensions

Units are in mm

Dimensions without tolerances follow DIN 16742

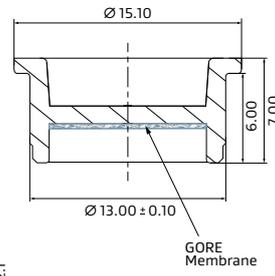
Press-Fit Integration:



Scale of 2:1

Liquid side

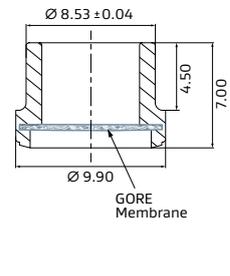
Press-Fit Integration:



Scale of 2:1

Liquid side

Press-Fit Integration:



Scale of 2:1

Liquid side

¹ Values are based on measurements without liquid contact. More detailed information can be found in our White Papers.

Plug-In Vents



Typical Application	Specialities
Packaging Size	0.2 – 1 liters
Product Series	D3
	StandardSeries
Packaging Content/Application	Applications requiring underpressure-compensation or vacuum-elimination



Order Numbers ...	
... for Press-Fit Integration	CMF300246
... for Snap-Fit Integration	–

Product Performance Characteristics	
Typical Airflow at $dp = 12 \text{ mbar}^1$	0.04 l/h
Water Entry Pressure (WEP)	> 0.6 bar
Drop Test Optimized	No
Traceability	On lot level
Membrane Type	SCI
Laminate: membrane backing material	ePTFE PET
Vent Housing: material	PP
Vent Housing: color	Gray

Vent Design and Dimensions	
Units are in mm	Press-Fit Integration:
Dimensions without tolerances follow DIN 16742	
	Scale of 4:1
	Liquid side

Quality Assurance for Plug-In Vents

In-Line Airflow Test (Not applicable to D10 and D3)

100% of the vents are airflow-inspected during production. This ensures that every part meets the specified airflow requirements.

Water Entry Pressure Test

WEP testing allows more control of the membrane integration process and also verifies the membrane's water entry pressure resistance.

In-Line Camera Test

100% optical testing ensures that the membrane is integrated properly and is free of defects.

Tracking

Each D38, D17 and D15 vent is laser-marked with an individual tracking code. This enables Gore to reference the actual production data at any time.

Drop Test (Not applicable to D10 and D3)

Compliant with European ADR standard 6.1



¹ Values are based on measurements without liquid contact. More detailed information can be found in our White Papers.

Liners



Typical Application

Bottles

Bottles

Packaging Content	Hazardous Chemicals, Institutional Cleaners and Liquid Fertilizer	Household Chemicals and Agrochemicals	Agrochemicals
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Product Family

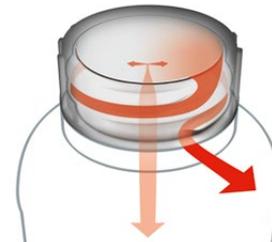
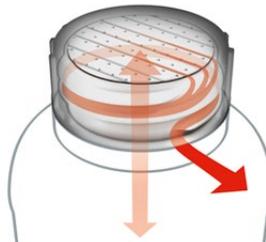
Foam Liner

Pulp Induction Liner

Product Series	High Roll-Off Series	Standard Series		Standard Series	High Flow Series
Order Numbers	CM700363G	CM700323GAN	CM700324G	CM6	CM8

Product Performance Characteristics

Typical Airflow at $dp = 12 \text{ mbar}^1$	0.4 l/h/cm ²	0.4 l/h/cm ²		0.04 l/h	1.8 l/h & 6.7 l/h
Water Entry Pressure (WEP)	> 2.7 bar	> 1.4 bar		> 0.5 bar	> 0.3 bar
Drop Test Optimized ²	Yes	No		No	
Traceability	On lot level			On lot level	
Membrane Liner Construction	ePTFE PE foam			ePTFE PE + aluminium + PET + wax + pulp	
Thickness	1.1 mm	1.1 mm	1.9 mm	1.0 mm	
Venting Hole Diameter	the whole liner surface is breathable			2.0 mm	
Venting Method	cap thread venting (venting through hole in cap also possible)			cap thread venting (venting through hole in cap also possible)	



- 1 This value is based on an optimum closure bottle design in combination with a typical closure torque.
 2 Drop Test: compliant with European ADR standard 6.1

All liners are available in single- and multi-up roll goods as well as in various widths. Cut parts can also be offered.

Does your application require advanced performance?
 Contact us at packvent@wlgore.com

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