

## Emflon® PFAW Filter Cartridges for bioburden reduction in dry gases

Emflon PFAW cartridges are high capacity hydrophobic membrane filters designed for reliable reduction of particles and microorganisms in compressed gas and vent applications.

### Description

The filter element features Pall's proprietary 0.2 micron polytetrafluoroethylene (PTFE) membrane, pleated to give high area in single open-end cartridges.

Emflon PFA cartridges offer exceptionally high flow rates to ensure low installation, operating, and compressor energy costs. They provide an economical solution for large-scale fermenter air, general purpose venting, instrument air, and general duty air and gas service lines.

### Features and Benefits

Features	Benefits
Strongly hydrophobic 100 % PTFE membranes	<ul style="list-style-type: none"> <li>Prevents wetting out in humid conditions, even after repeated use and steaming cycles, allowing excellent gas throughput</li> </ul>
High area pleated, robust membrane construction	<ul style="list-style-type: none"> <li>Enables extremely economical installations and compressor energy savings due to high flow rates and low pressure drops</li> </ul>
Multi-cycle autoclave and <i>in situ</i> steam challenged	<ul style="list-style-type: none"> <li>Enhanced steaming resistance</li> </ul>
Validated for bacteria removal in air with aerosol challenge	<ul style="list-style-type: none"> <li>Provides reliable and economical bioburden reduction in dry gas, protection of microbial cultures, protection of tank contents, and improved fermentation yields</li> </ul>
Integrity testable by forward flow or pressure hold test	<ul style="list-style-type: none"> <li>Ensures process security</li> </ul>
100% integrity tested prior to dispatch	<ul style="list-style-type: none"> <li>Lot traceable with documented quality</li> </ul>



Emflon PFAW Filter Cartridges

### Materials of Construction

Component	Description
Filter Medium	PTFE
Support / Drainage	Polypropylene
Cage, Core, Fin End and End Cap	Polypropylene
Adaptor	Polypropylene with internal stainless steel reinforcing ring
O-ring Seal	Silicone Elastomer

### Quality

- Cartridges produced in a controlled environment
- Manufactured according to ISO 9001:2008 certified Quality Management System

### Food Contact Compliance

Please refer to the Pall website <http://www.pall.com/foodandbev> for a Declaration of Compliance to specific National Legislation and/or Regional Regulatory requirements for food contact use.

## Technical Information

Nominal Filter Area: 0.8 m<sup>2</sup> (8.6 ft<sup>2</sup>) per 254 mm (10") module

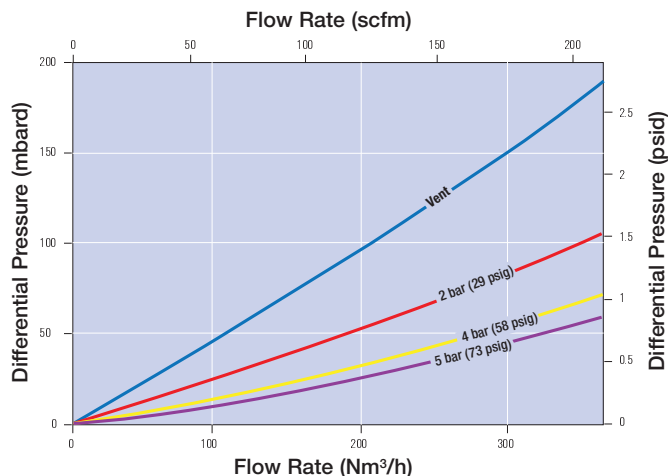
### Typical Service Life<sup>1</sup> under continuous operating conditions

Continuous gas <sup>2</sup> service	12 months to 60 °C (140 °F)
Vent service	6 months to 80 °C (176 °F)

<sup>1</sup> Emflon PFAW can be operated at higher temperatures for shorter periods. Please contact Pall for application details.

<sup>2</sup> Air, nitrogen, or other compatible gases

### Typical Flow Rates<sup>3</sup>



<sup>3</sup> Typical clean  $\Delta p$  per 254 mm (10") cartridge, air at 20 °C (68 °F). For gases other than air and for multi-round cartridge installations, please contact Pall for proper sizing.

### Steaming

Cumulative Steaming Time	Operating Temperature
40 hours (1-hour cycles, forward)	140 °C (284 °F)
100 hours (1-hour cycles, forward)	125 °C (257 °F)

Maximum Steaming Conditions	Steaming Temperature
0.3 bard (4.3 psid) (forward)	140 °C (284 °F)

For applications requiring autoclaving and sterilization, Pall recommends the use of Code 7 adaptors to ensure filter sealing after cooling. Cartridges should be cooled to system operating temperature prior to use.

### Removal Ratings

Fluid	Performance
Gases	0.3 micron particles in dry gas <sup>4</sup> , aerosol removal of bacteria <sup>5</sup>

<sup>4</sup> By NaCl aerosol CNC particle analysis, average removal efficiency > 99.9%. Please contact Pall for details.

<sup>5</sup> Passing an appropriate integrity test, provides sterile effluent when aerosol challenged with *Brevundimonas diminuta* at >10<sup>7</sup> cfu/254 mm (10") cartridge

### Ordering Information

This information is a guide to the part number structure and possible options. For availability of specific options and housing details, please contact Pall.

Part Number: AB   PFA   W H4  
Table 1                      Table 2

Example Part Number: **AB1PFA7WH4**

See bold reference code in tables

**Table 1: Nominal Length**

Code	Length
05	127 mm (5")
<b>1</b>	254 mm (10")
2	508 mm (20")
3	762 mm (30")

**Table 2: Adaptor**

Code	Description
2*	SOE – single open end with flat closed end, 2 locking tabs and external 226 O-rings
<b>7</b>	SOE – single open end with fin end, 2 locking tabs and external 226 O-rings
8	SOE – single open end with fin end and external 222 O-rings

\* AB05 configurations only.

For availability of additional adaptor configurations, please contact Pall.



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Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

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