

## PureFlo® PTFE Filter Cartridges

PureFlo® PTFE filter cartridges are highly retentive hydrophobic PTFE membrane filters that have been specially designed for critical applications. The PTFE membrane in an all-polypropylene construction provides excellent chemical compatibility and superior flow per unit area as compared to other membrane cartridges. No adhesives, binders, or surfactants are used in the manufacturing process and all cartridges are rinsed with highpurity water to reduce extractables and downtime.

The naturally hydrophobic PTFE membrane is ideally suited for aggressive chemicals such as acids, bases, and solvents. In addition, the hydrophobic membrane provides superior flow and pressure drop characteristics per unit area for gas filtration and tank venting applications. All filter cartridges are 100% integrity tested to ensure filter performance each and every time out of the package. PureFlo PTFE filter cartridges are well-suited for critical applications where superior flow and particle removal efficiency at 0.1 and 0.2 micron is required.



### Materials of Construction

Membrane: Hydrophobic PTFE  
Membrane Supports: Polypropylene  
Cage, Core, End Caps: Polypropylene  
O-Rings: Silicone, EPDM, Viton, Buna N, TES, and TEV

### Dimensions (nominal)

Lengths: 5 in. (13 cm), 10 in. (25 cm), 20 in. (50 cm), 30 in. (76 cm), 40 in. (102 cm)  
Diameter: 2.75 in. (7 cm)

### Effective Filtration Area

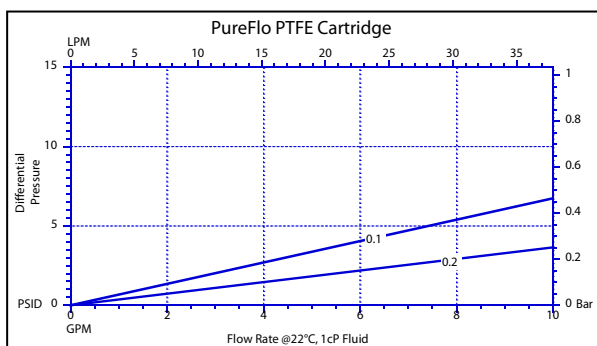
0.65 m<sup>2</sup> (7.0 ft<sup>2</sup>) per 10" cartridge element

### Operating Conditions

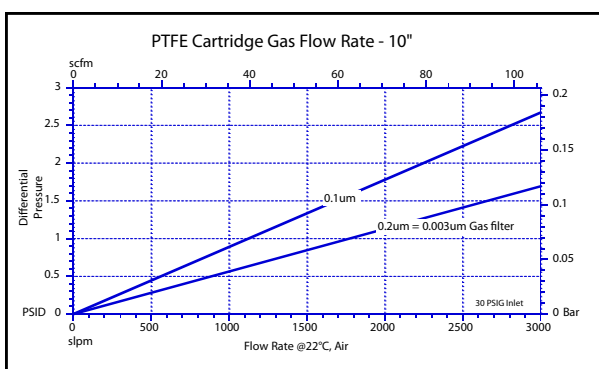
Maximum Forward Differential Pressure:  
6.0 bar (87 psid) at 20 °C  
2.0 bar (29 psid) at 80 °C  
Maximum Reverse Differential Pressure:  
3.0 bar (44 psid) at 20 °C  
1.0 bar (14.5 psid) at 80 °C  
Maximum Operating Temperature: 80°C

Applications	
Acids	Ink Jets
Bases	Electronics
Solvents	Pharmaceuticals
Fine Chemicals	Biologics
Plating Solutions	Dyes
Parts Cleaning	Lacquers

Features	Benefits
Hydrophobic PTFE Membrane (Absolute Rated)	Consistent and reproducible particulate removal High flow rates and low pressure drops Superior filter lifetime and process throughputs
Wide Chemical & Thermal Compatibility	Provides excellent compatibility with a wide range of chemicals such as acids, bases, and solvents No media migration into the process fluid
Low Filter Extractables	No adhesives, binders, or surfactants are used during the manufacturing process resulting in superior downstream cleanliness All cartridges are rinsed with highpurity water to reduce downtime



Liquid



Gas

## SPECIFICATIONS

### Regulatory Compliance

Manufactured from materials that conform to the requirements of 21CFR Part 177 of the U.S. Code of Federal Regulations and USP Class VI Biological Test for Plastics

### Bacterial Retention

Complete retention of  $\geq 10^7$  organisms/cm<sup>2</sup> of *Brevundimonas diminuta* in accordance with the current HIMA challenge methodology (ASTM F838-83). Validation Guide available upon request.

### Sterilization & Autoclaving

The filters can be sterilized by autoclaving for up to 50 cycles at 257°F/125°C. The filters can also be sterilized by steam-in-place procedure up to 50 cycles at 275°F/135°C for 30 minutes at less than 0.3 bar differential pressure. The filters can also be sanitized by hot water or common chemicals that are compatible with filter components.

### Bio-Safety

Filter effluent is non-pyrogenic per USP bacterial endotoxin (<0.25 EU/ml)

## PureFlo PTFE Filter Cartridge Ordering Guide

PureFlo PTFE	Pore Size (micron)	Connections	Length	Gasket / O - Ring Materials	Package Quantity	Inserts
MCF	10 = 0.10 20 = 0.20 45 = 0.45 1X = 1.0 3X = 3.0 5X = 5.0 9X = 10	0 = 222 O-Ring Flat 5 = 222 O-Ring Spear 6 = 226 O-Ring Flat 7 = 226 O-Ring Spear F = DOE Flat Gasket S = SOE Flat Gasket Z = SOE Internal 213 O-ring Flat **	1 = 10" 2 = 20" 3 = 30" 4 = 40" 5 = 5" 9 = 9.75"	E = EPDM N = Buna N S = Silicone V = Viton T = TEV * U = TES *	1 = 1 per pack	Blank = Standard -5 = Stainless Steel Insert
PTFE with PP Construction						
Example - 20", 0.20 micron, with 2-222 EPDM O-Rings/Flat Cap and no insert would be MCF2002E1						
* - not available in Code Z      ** - only available in 5", 10", and 20"						

