

## PureFlo® PTFE Mini Filter Cartridge (PTFE/PP Construction)

Versatile Small Cartridge filter

PureFlo® PTFE mini filter cartridges are highly retentive, hydrophobic PTFE membrane filters that have been specially designed for critical applications. No adhesives, binders, or surfactants are used in the manufacturing process. All cartridges are rinsed with high-purity pyrogen-free water to reduce extractables and downtime.

The naturally hydrophobic PTFE membrane is ideally suited for filtering 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. We are currently offering seven different PTFE pore sizes with eight different end modifications and three different length options to meet the needs of a wide variety of processes.



Retrofit for Mini Cartridge

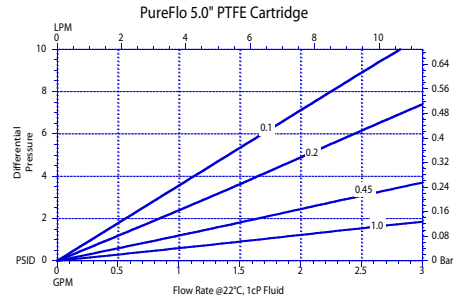
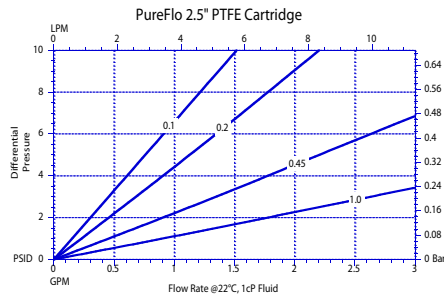
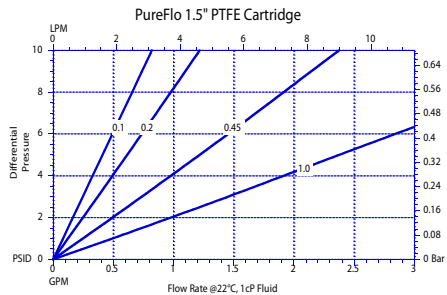
### Specification

Applications	
Buffers and Media	Fermentation Tanks
Product Sterilization	Venting
Bio Bags	Pharmaceuticals
Vaccines	Biologics
Gas Filtration	Scale up Processing
Ink Jets	Acids and Bases

Materials of Construction:	Media: PTFE Media Supports: Polypropylene Cage, Core, End Caps: Polypropylene O-Rings: Silicon (Standard), EPDM, Buna N, TES, Fluroelastomer Sealing: Thermally welded		
Nominal Dimensions:	Lengths: 1.5 in (38mm), Diameter: 2.2 in. (56 mm)	2.5 in (75 mm),	5 in. (135 mm)
Effective Filtration Area:	0.70 ft <sup>2</sup> (650 cm <sup>2</sup> ) per 1.5" cartridge 1.35 ft <sup>2</sup> (1250 cm <sup>2</sup> ) per 2.5" cartridge 2.6 ft <sup>2</sup> (2400 cm <sup>2</sup> ) per 5.0" cartridge		
Available Ratings:	0.1um to 10um (see Ordering Guide)		
Operating Conditions:	Maximum Forward Differential Pressure: 4.1 bar (60 psid) at 68°F/20°C 2.0 bar (29 psid) at 176°F/80°C Maximum Reverse Differential Pressure: 2.0 bar (29 psid) at 68°F/20°C 1.0 bar (14.5 psid) at 176°F/80°C Maximum Operating Temperature: 176°F/80°C		
Regulatory Compliance:	The filters are constructed with polypropylene resins and filtration media in compliance with 21CFR Part 177 of the U.S. Code of Federal Regulations and USP Class VI Biological Test for Plastics.		



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### Specifications (cont.)

#### Bacterial Retention (for 0.2um membrane):

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

#### Sterilization & Autoclaving

The filters can be sterilized by autoclaving for up to 25 cycles at 257°F/125°C. The filters can also be sterilized by steam-in-place procedure up to 10 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.

#### Bacterial Endotoxin:

Effluent is non-pyrogenic per USP Bacterial Endotoxin (0.25 EU/ml), determined using Limulus Amebocyte Lysate (LAL) Test.



Flange End Modification

### PureFlo PTFE Mini Filter Cartridge Ordering Guide

PureFlo Mini PTFE Filter Cartridges	Removal Rating	End Modifications	Length	O-Ring / Gasket Materials	Package Qty
MMF	010 - 0.10 micron	A = 116 Inner O-Ring	H = 1.5"	E = EPDM	2P = 2pc/ pack (5") 3P = 3pc/ pack (1.5" and 2.5")
	020 - 0.20 micron	C = 015 O-Ring	S = 2.5"	N = Buna N	
	045 - 0.45 micron	D = 1/2" MNPT	L = 5"	S = Silicone	
	100 - 1.0 micron	E = 118 O-Rings		U = TES	Option - 5 = SS Insert
	300 - 3.0 micron	F = Flange*		V = Fluro-Elastomer	
	500 - 5.0 micron	M = 123 O-Rings**		O = O-Ringless	
	999 - 10 micron	N = 116 Inner Housing Seal S = 116 Inner O-Ring with locking groove			
Example - A 3 pack of 2.5", 0.1 micron filters with 2-015 EPDM o-ring would be MMF010CSE3P					
*- F end modification is compatible to fit in a PALL SealKleen™ Housing, **- M end modification is compatible to fit in a Millipore OptiSeal™ Housing					

