



## PureFlo Hi Temp PTFE Cartridges (PTFE Membrane w/Hi Temp Nylon construction)

PureFlo® Hi Temp PTFE filter cartridges are highly retentive hydrophobic PTFE membrane filters with Nylon components that have been specially designed for critical liquid and gas sterilization applications as a possible alternative to all Teflon® filters. The PTFE membrane with nylon construction provides excellent chemical compatibility and superior flow per unit area for steam-in-place and hot gas applications. No adhesives, binders, or surfactants are used in the manufacturing process and all cartridges are rinsed with high-purity water to reduce extractables and downtime.

The naturally hydrophobic PTFE membrane with nylon construction is ideally suited for aggressive chemicals and gas filtration. In addition, the hydrophobic membrane provides superior flow and pressure drop characteristics per unit area for higher temperature venting applications. All filter cartridges are 100% integrity tested to ensure filter performance each and every time out of the package. PureFlo® Hi Temp PTFE filter cartridges are well-suited for critical applications where superior microorganism removal efficiency is required in a high temperature or aggressive environments.



### Applications

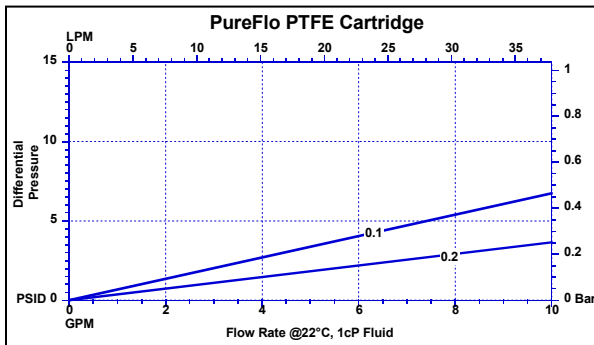
High temp Chemicals	Hot Water
Solvent filtration	Hot Gas filtration
Tank vent	Gas Sterilization
Fine Chemicals	Fermentation

### Specifications

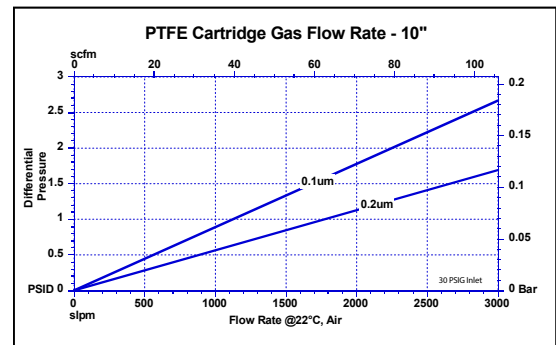
Materials of Construction:	Media: PTFE membrane (hydrophobic) Media Supports: Nylon O-ring insert: Stainless steel 316L option Cage, Core, End Caps: Nylon O-Rings: Silicone, EPDM, Fluoroelastomer, Buna N
Effective Filtration Area:	0.65 m <sup>2</sup> (7.0 ft <sup>2</sup> ) per 10" cartridge element
Nominal Dimensions:	Lengths: 5 in. (13 cm), 10 in. (25 cm), 20 in. (51 cm), 30 in. (76 cm), 40 in. (102 cm) Diameter: 2.75 in. (70 mm)
Available Ratings:	0.1 µm, 0.2 µm (0.003 µm in gas), 0.45 µm, 0.65 µm, 1.0 µm, 3.0 µm, 5.0 µm, and 10.0 µm
Operating Conditions:	Maximum Forward Differential Pressure: 6.0 bar (87 psid) at 22 °C 3.0 bar (43.5 psid) at 80 °C Maximum Reverse Differential Pressure: 3.0 bar (43.5 psid) at 22 °C 1.0 bar (14.5 psid) at 80 °C Maximum Operating Temperature: 95 °C
Regulatory Compliance:	The filters are constructed with polypropylene resins and filtration media in compliance with 21 CFR Part 177 of the US Code of Federal Regulations and USP Class VI Biological Test for Plastic.



## PureFlo Hi Temp PTFE Cartridges



Liquid



Gas

### Specifications (cont.)

#### Sterilization & Autoclaving:

The filters can be sterilized by autoclaving for up to 100 cycles at 135 °C (275 °F) for 30 min. The filters can also be sterilized by steam-in-place procedure up to 100 cycles at 142 °C (287.6 °F) for 30 minutes at less than 0.3 bar (4.35 psi) differential pressure. The filters can also be sanitized by hot water or common chemicals that are compatible with filter components.

#### Retention: For 0.2 µm (0.003 µm in Gas)

Liquid: Complete retention of  $\geq 10^7$  organisms/cm<sup>2</sup> of *Brevundimonas diminuta* in accordance with the current HIMA challenge methodology (ASTM F838-05).

Gas: Validated by aerosol bacterial (*Staphylococcus aureus*) and Viral (X174 Bacteriophage) challenge testing.

Integrity tested: All cartridges are 100% integrity tested – validation guide available upon request.

### PureFlo Hi Temp PTFE Cartridge with Nylon Construction Ordering Guide

PureFlo Filter Cartridges	Removal Rating	End Modifications	Length	O-Ring / Gasket Materials	Package Qty	Options
MNF = Hydrophobic PTFE W/ Nylon Construction	10 - 0.10 micron	0 = 222 O-Ring Flat	1 - 10"	E = EPDM	1 = 1pc/ pack	Blank = Standard -5 = Stainless Steel Insert -SC = Stainless Steel Core
	20 - 0.20 micron	3 = 222 O-Ring w/tabs Spear	2 - 20"	N = Buna N		
	45 - 0.45 micron	5 = 222 O-Ring Spear	3 - 30"	P = Peroxide Cured EPDM		
	1X - 1.0 micron	6 = 226 O-Ring Flat	4 - 40"	Q = Platinum Cured Silicon		
	3X - 3.0 micron	7 = 226 O-Ring Spear	5 = 5"	S = Silicone		
	5X - 5.0 micron	8 = 223 O-Ring Flat	9 = 9.75"	T = TEV or FEP Gasket		
	9X - 10 micron	F = DOE Flat Gasket S = SOE Flat Gasket Z = SOE Internal O-ring Flat **		U = TES* V = Fluoroelastomer		

Example - PTFE w/ Nylon Construction filter, 10", 0.2 micron cartridge, w with 2-222 Silicone o-ring, Flat end cap, and SS insert would be MNF2001S1-5

\* - not available in Code Z

\*\* - only available in 5", 9.75", 10" and 20", retrofit for DOE housings



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