

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 m² (7.0 ft²) per 10" cartridge element

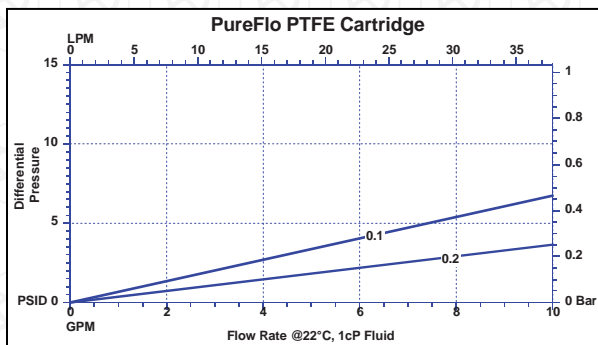
Nominal Dimensions: Lengths: 5 in. (13 cm), 10 in. (25 cm), 20 in. (51 cm), 30 in. (76 cm),
40 in. (102 cm)
Diameter: 2.75 in. (70 mm)

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

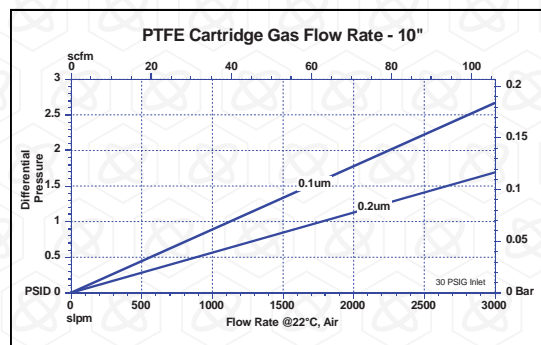
Operating Conditions: Maximum Forward Differential Pressure: 6.0 bar (87 psid) at 22 °C
3.0 bar (43.5 psid) at 80 °C
Maximum Reverse Differential Pressure: 3.0 bar (43.5 psid) at 22 °C
1.0 bar (14.5 psid) at 80 °C
Maximum Operating Temperature: 95 °C

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/cm² of *Brevundimonas diminuta* in accordance with the current HIMA challenge methodology (ASTM F838-05).

Gas: Validated by aerosol bacterial (*Staphylococcus aureus*) and Viral (φX174 Bacteriophage) challenge testing.

Integrity tested: All cartridges @22°C 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, 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 | | | | |

ZenPure

Your Local Distributor:

ZenPure

North & South Americas:
ZenPure Americas, Inc
www.zenpure.com
Info-us@zenpure.com
703-335-9910

All Other Regions:
ZenPure Corporation
www.zenpure.com
info@zenpure.com
+86 571 2288 6800

ZenPure and PureFlo are registered trademarks of ZenPure Corporation or an affiliated company. Copyright 2003-2012 ZenPure or an affiliated company. All rights reserved.

