



## PureFlo® Nylon Cartridges

PureFlo® Nylon Cartridges are highly-retentive, naturally hydrophilic nylon membrane filters that have been specially designed for critical applications. The nylon 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 high-purity water to reduce extractables and downtime.

The naturally hydrophilic nylon membrane does not require pre-wetting with IPA and flushing with DI water, thereby eliminating a potential source of contamination and hazardous waste. In addition, unlike hydrophobic filters such as PTFE, the hydrophilic membrane of nylon reduces the potential for bubble formation by not de-wetting in out-gassing fluids. All filter cartridges are 100% integrity tested to ensure filter performance each and every time out of the package. PureFlo® Nylon Cartridges are well-suited for critical applications where superior flow and particle removal efficiency at 0.05, 0.1, 0.2, 0.45, 0.65, 0.85 and 1.2 micron is required.



### Materials of Construction

Membrane: Naturally Hydrophilic Nylon 6,6  
 Membrane Supports: Polypropylene  
 Cage, Core, End Caps: Polypropylene  
 O-Rings: Silicone, EPDM, Viton, Buna N, TES, TEV

### Dimensions (nominal)

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)

### 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:  
 5 bar (72.5 psid) at 22 °C  
 2 bar (29 psid) at 80 °C

Maximum Reverse Differential Pressure:  
 3.0 bar (43.5 psid) at 22 °C  
 1 bar (14.5 psid) at 80 °C

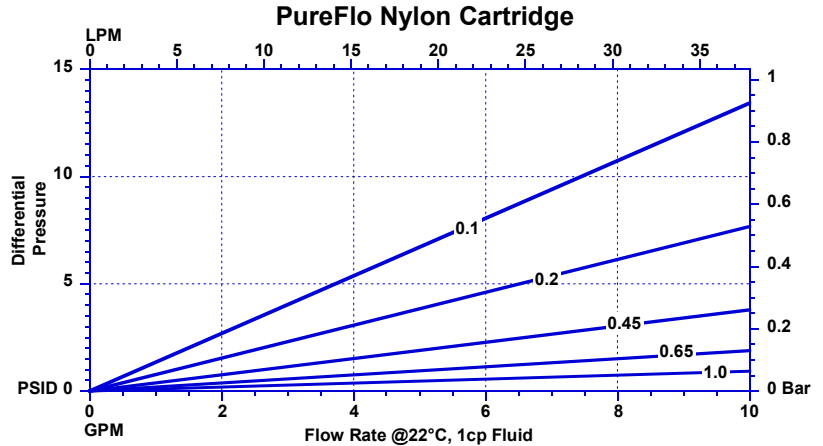
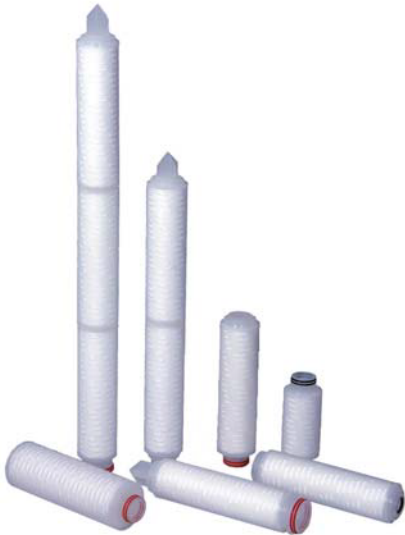
Maximum Operating Temperature: 80 °C

Applications	
Solvents	Ink Jets
Fine Chemicals	Parts Cleaning
Plating Solutions	Pharmaceuticals
Process Water	Biologics
Beverages	Dyes

Features	Benefits
<ul style="list-style-type: none"> <li>Naturally Hydrophilic Nylon Membrane (Absolute Rated)</li> </ul>	<ul style="list-style-type: none"> <li>IPA pre-wetting not required – thereby eliminating a potential source of contamination and disposal waste</li> <li>Reduces downtime and improves throughput</li> <li>Economic alternative to PTFE and PVDF filters</li> <li>No dewetting in outgassing fluids unlike hydrophobic filters such as polypropylene</li> </ul>
<ul style="list-style-type: none"> <li>Built To Exacting Specifications</li> </ul>	<ul style="list-style-type: none"> <li>Provides a consistent level of filtration</li> </ul>
<ul style="list-style-type: none"> <li>Low Levels of Filter Extractables</li> </ul>	<ul style="list-style-type: none"> <li>No adhesives, binders, or surfactants are used during manufacturing resulting in superior downstream cleanliness</li> <li>Cartridges are rinsed with high-purity water</li> </ul>



## PureFlo® Nylon Cartridges



Regulatory Compliance:

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

Sterilization & Autoclaving:

The filters can be sterilized by autoclaving for up to 5 cycles at 125 °C (257 °F) for 30 minutes. The filters can also be sterilized by steam-in-place procedure up to 3 cycles at 135 °C (275 °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.

### PureFlo Nylon Cartridge Ordering Guide

PureFlo Nylon Filters	Removal Rating	End Modifications	Length	O-Ring / Gasket Materials	Package Qty	Options
<b>Cartridge</b> MCN = Nylon w/ PP construction	05 - 0.05 micron	0 = 222 O-Ring Flat	1 - 10"	E = EPDM	1= 1pc/ pack	- 5 = SS Insert -RI = RFID Chip
	10 - 0.10 micron	3 = 222 O-Ring w/tabs Spear	2 - 20"	N = Buna N		
	20 - 0.20 micron	5 = 222 O-Ring Spear	3 - 30"	P = Peroxide Cured EPDM		
	50 - 0.45 micron	6 = 226 O-Ring Flat	4 - 40"	Q = Platinum Cured Silicon		
	65 - 0.65 micron	7 = 226 O-Ring Spear	5 = 5"	S = Silicone		
	80 - 0.80 micron	8 = 223 O-Ring Flat	9 = 9.75"	T = TEV or FEP Gasket		
	1X - 1.2 micron	F = DOE Flat Gasket S = SOE Flat Gasket Z = SOE Internal O-ring Flat **		U = TES* V = Fluoroelastomer		

**Example** - PureFlo Nylon filter, 10", 0.2 micron cartridge, with 2-222 Silicone o-ring, Flat end cap, and no insert would be MCN2001S1

\* - not available in Code Z

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



### International Filter Products



9001  
14001

