

PureFlo® PTFE Mini Cartridges (PTFE/PP Construction)

Versatile Small Cartridge

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

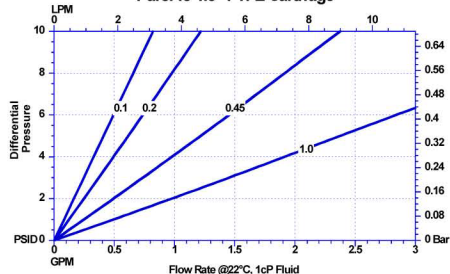
Materials of Construction:	Media: PTFE		
	Media Supports: Polypropylene		
	Cage, Core, End Caps: Polypropylene		
	O-Rings: Silicon (Standard), EPDM, Buna N, TES, Fluroelastomer		
	Sealing: Thermally welded		
Nominal Dimensions:	Lengths: 1.5 in (38 mm),	2.5 in (63.5 mm),	5 in. (127 mm)
	Diameter: 2.2 in. (56 mm)		
Effective Filtration Area:	0.70 ft ² (650 cm ²) per 1.5" cartridge		
	1.35 ft ² (1250 cm ²) per 2.5" cartridge		
	2.6 ft ² (2420 cm ²) per 5.0" cartridge		
Available Ratings:	0.1 µm to 10 µm (see ordering guide)		
Operating Conditions:	Maximum Forward Differential Pressure: 4.1 bar (60 psid) at 22 °C		
	2.0 bar (29 psid) at 80 °C		
	Maximum Reverse Differential Pressure: 2.0 bar (29 psid) at 22 °C		
	1.0 bar (14.5 psid) at 80 °C		
	Maximum Operating Temperature: 80 °C		
Regulatory Compliance:	The filters are constructed with polypropylene resins and filtration media in compliance with 21 CFR Part 177 of the U.S. Code of Federal Regulations and USP Class VI Biological Test for Plastics.		

Applications

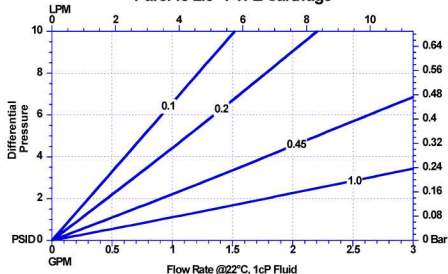
Buffers and Media	Fermentation Tanks
Product Sterilization	Venting
Bio Bags	Pharmaceuticals
Vaccines	Biologics
Gas Filtration	Scale up Processing
Ink Jets	Acids and Bases

PureFlo® PTFE Mini Cartridges

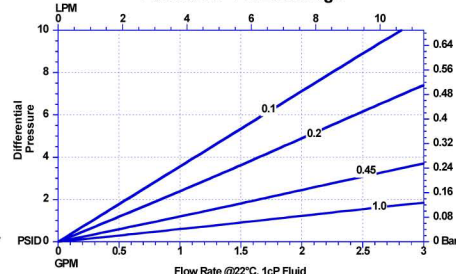
PureFlo 1.5" PTFE Cartridge



PureFlo 2.5" PTFE Cartridge



PureFlo 5.0" PTFE Cartridge



Specifications (cont.)

Bacterial Retention (for 0.2 µm membrane):

Complete retention of $> 10^7$ organisms/cm² 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 125 °C (257 °F). The filters can also be sterilized by steam-in-place procedure up to 10 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.

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 Cartridge Ordering Guide

PureFlo Mini PTFE Filter Cartridges	Removal Rating	End Modifications	Length	O-Ring / Gasket Materials	Package Qty
MMF = Mini PTFE Cartridge	010 - 0.10 micron	O = 222 O-Ring Flat	H = 1.5"	E = EPDM	2P = 2pc/ pack (5")
	020 - 0.20 micron (0.003µm Gas filter)	6 = 226 O-Ring Flat	S = 2.5"	N = Buna N	3P = 3pc/ pack (1.5" and 2.5")
	045 - 0.45 micron	A = 116 Inner O-Ring	L = 5"	S = Silicone	
	100 - 1.0 micron	C = 015 O-Ring		T = TEV	
	300 - 3.0 micron	D = 1/2" MNPT		U = TES	
	500 - 5.0 micron	E = 118 O-Rings		V = Fluoroelastomer	
	999 - 10 micron	F = Flange*		O = O-Ringless	
		M = 123 O-Rings with hold down tabs**			
		N = 116 Inner Housing Seal			
		S = 116 Inner O-Ring with locking groove			
		T = 126 O-Rings with locking tabs***			
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, *** - T end modification is compatible to fit a Parker TrueSeal™ Housing					