

## PureFlo® Polypropylene Membrane Filter Capsules

PureFlo® polypropylene membrane filter capsules are highly retentive and naturally hydrophobic filters. Polypropylene membrane is a reliable choice for the purification of aggressive chemicals, compressed gases, and vent applications. The all-polypropylene construction is an excellent economic alternative to the more expensive fluoropolymer based medias.

No adhesives, binders, or surfactants are used in the manufacturing process. The membrane does not allow for migration of particle into the process fluid, thereby reducing the potential for contamination and downtime. Furthermore, the all-polypropylene construction provides excellent thermal and chemical compatibility with low and high pH chemicals.

PureFlo polypropylene membrane filter capsules are absolute rated to ensure consistent filter performance each and every time. All filter capsules are 100% integrity tested to ensure filter performance.

### Applications

Acids	Ink Jets
Bases	Tank vents
Solvents	Lacquers
Fine Chemicals	Dyes



### Materials of Construction

Membrane: Polypropylene (hydrophobic)  
 Membrane Supports: Polypropylene  
 Cage, Core, End Caps: Polypropylene  
 Fitting Connections: MNPT, FNPT, Flare Compression,  
 Hose Barb, Sanitary Flange

### Dimensions (TC fittings)

Length: 1.5 in (128 mm) Length: 2.5 in (155 mm)  
 Length: 5.0 in (210 mm) Length: 7.5 in (270 mm)  
 Length: 10 in (340 mm)  
 Diameter: 2.75 in (70 mm)

### Effective Filtration Area

1.5 in: 0.7 ft<sup>2</sup> (650 cm<sup>2</sup>) 2.5 in: 1.4 ft<sup>2</sup> (1300 cm<sup>2</sup>)  
 5.0 in: 2.7 ft<sup>2</sup> (2500 cm<sup>2</sup>) 7.5 in: 4.3 ft<sup>2</sup> (3980 cm<sup>2</sup>)  
 10 in: 5.4 ft<sup>2</sup> (5000 cm<sup>2</sup>)

### Operating Conditions

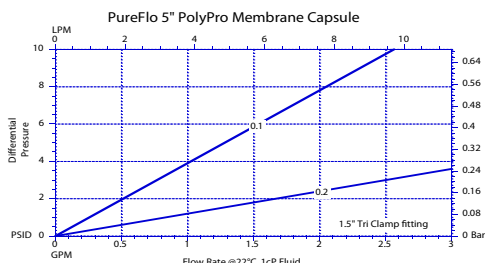
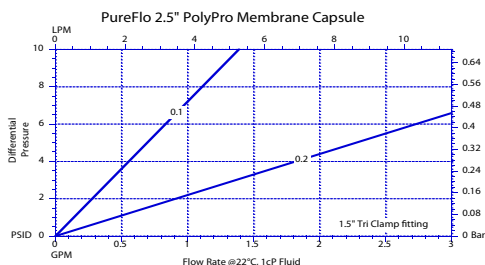
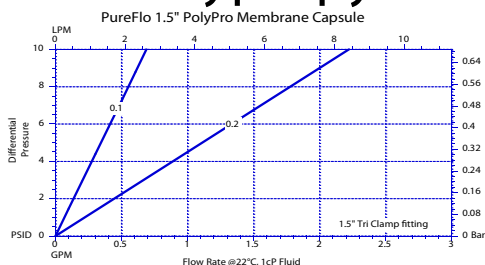
Maximum Operating Pressure:  
 Liquid: 5.5 bar (80psi) at 77°F/25°C  
 Gas: 4.1 bar (60psi) at 77°F/25°C  
 Minimum Burst Pressure:  
 8.3 bar (120psi) at 77°F/25°C  
 Maximum Forward Differential Pressure:  
 4.21 bar (60psi) at 68°F/20°C  
 Maximum Reverse Differential Pressure:  
 2.1 bar (30psi) at 68°F/20°C  
 Maximum Operating Temperature:  
 PP & Gamma PP: 176°F/80°C  
 HDPE: 140°F/60°C

### Features

### Benefits

Absolute Rated Polypropylene Membrane	Consistent and reproducible particulate removal High flow rates and low pressure drops Superior filter lifetime and process throughputs Consistent and reproducible particulate removal
100% Polypropylene Disposable Capsule	Excellent thermal and chemical compatibility Rapid installation and reduced downtime Reduced chemical handling and hazardous waste disposal
Low Filter Extractables	No adhesives, binders, or surfactants are used during manufacturing resulting in superior downstream cleanliness

# PureFlo® Polypropylene Membrane Filter Capsules



Note - Graphs based on Sanitary fittings.

## Regulatory Compliance

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

## Autoclavable /Sanitizable

Capsules may be autoclaved up to 10 times (30 minutes) at 266°F (130°C), or chemically sanitized in situ using common sanitizing agents. The capsules can also be sanitized with hot water at up to 194°F (90°C)

Inlet/Outlet Fittings	Vent and Drain fittings
1H = 1/8" Hose barbs	Luer Lock
1NF = 1/8" FNPT	Luer Lock
2C = 1/4" Compression	1/4" Comp
2H = 1/4" to 1/2" Hose barbs	Luer Lock
2HS = 1/4" to 3/8" Hose barbs	Luer Lock
2L = Large Female Luer Lock fitting	Luer Lock
2N = 1/4" MNPT	Luer Lock
2NF = 1/4" FNPT	Luer Lock
2Q = 1/4" Male Quick Coupling	Luer Lock
2QF = 1/4" Female Quick Coupling	Luer Lock
2QFP = 1/4" Female Quick Coupling with Plastic latch	Luer Lock
2QP = 1/4" Male Quick Coupling for Plastic latch	Luer Lock
3C = 3/8" Compression	1/4" Comp
3H = 3/8" Hose Barb (future)	Luer Lock
3HE = 3/8" Hose Barb Elbow	Luer Lock
3NF = 3/8" FNPT	Luer Lock
4C = 1/2" Compression	1/4" Comp
4H = 1/2" Hose Barb (future)	Luer Lock
4N = 1/2" MNPT	Luer Lock
4QP = 1/2" Male Quick Coupling for Plastic latch	Luer Lock
MT = 0.5" Tri clamps	Luer Lock
TC = 1-1/2" Tri clamp	Luer Lock
Option: Plugged and Cut off Vent and/or Drains	

## PureFlo Ordering Guide

PureFlo Capsule Filters	Vent & Drain Fitting	Filter Media	Pore size (Micron)	Length	Input Fitting	Output Fitting	Options	
SK  70mm Diameter Capsule	L = Female Luer Lock P = M8 Threaded Plug - Limited options N = No vent or drain fittings	M = PolyPro Membrane	010 = 0.1 020 = 0.2	H = 1.5" S = 2.5" L = 5" E = 7.5" K = 10"	1H = 1/8" Hose barbs 1NF = 1/8" FNPT 1Q = 1/8" Male Quick Coupling for Metal latch 1QF = 1/8" Female Quick Coupling w/Metal latch 2H = 1/4" to 1/2" Hose barbs 2HS = 1/4" to 3/8" Hose barbs 2LF = Large Female Luer Lock fitting 2N = 1/4" MNPT 2NF = 1/4" FNPT 2Q = 1/4" Male Quick Coupling for Metal latch 2QF = 1/4" Female Quick Coupling w/Metal latch 2QFP = 1/4" Female Quick Coupling w/Plastic latch 2QP = 1/4" Male Quick Coupling for Plastic latch 3H = 3/8" Hose Barb 3HE = 3/8" Hose Barb Elbow 3NF = 3/8" FNPT 4H = 1/2" Hose Barb 4N = 1/2" MNPT 4QP = 1/2" Male Quick Coupling for Plastic latch MT = 1/2" Tri clamps TC = 1-1/2" Tri clamp	1H = 1/8" Hose barbs 1NF = 1/8" FNPT 1Q = 1/8" Male Quick Coupling for Metal latch 1QF = 1/8" Female Quick Coupling w/Metal latch 2H = 1/4" to 1/2" Hose barbs 2HS = 1/4" to 3/8" Hose barbs 2LF = Large Female Luer Lock fitting 2N = 1/4" MNPT 2NF = 1/4" FNPT 2Q = 1/4" Male Quick Coupling for Metal latch 2QF = 1/4" Female Quick Coupling w/Metal latch 2QFP = 1/4" Female Quick Coupling w/Plastic latch 2QP = 1/4" Male Quick Coupling for Plastic latch 3H = 3/8" Hose Barb 3HE = 3/8" Hose Barb Elbow 3NF = 3/8" FNPT 4H = 1/2" Hose Barb 4N = 1/2" MNPT 4QP = 1/2" Male Quick Coupling for Plastic latch MT = 1/2" Tri clamps TC = 1-1/2" Tri clamp	-GP = Gamma stable polypropylene shell -NY = Nylon Construction -FB = Filling bell -FC = Filling bell w/Cap -ETO = Ethylene oxide sterilization -NI = No vent or drain inlet fitting -NO = NO vent or drain Outlet fitting -E = Polyethylene shell and HDPE media support for gamma sterilization	O-Ring for Quick Coupling -OE = O-ring EPDM -ON = O-ring Nitrile -OV = O-ring Viton Blank = O-ring Silicon (Standard)  PreFilters -G(pore Size) = Glass Fiber PreFilter -P(pore Size) = PolyPro Media PreFilter -S(pore Size) = PES PreFilter
Example - SK Series Capsule, Luer Lock V/D, 2.5" Internal filter, 0.2 micron PolyPro Membrane Capsule, Standard Grade, with 1.5" Tri-Clamp fittings would be SKLM2052CTC								
Quick Couplings are molded. Female Quick Coupling with Plastic latch will be threaded on, compatible with CPC (Colder), LinkTech and others.								