

## PureFlo® Polypropylene Filter Capsules

PureFlo® Polypropylene filter capsules are highly retentive, graded porosity, pleated polypropylene media filters that have been specially designed for clarification and prefiltration applications.

The graded porosity design removes particles in sequence by size – larger particles by the more open outer layers and smaller particles by the tighter inner layers. The outer layers act as a prefilter while the inner layers provide the absolute rating at the specified pore size. This efficiently spreads the contaminants throughout the media matrix resulting in superior contaminant holding capacity, lifetime, and pressure drop as compared to other media cartridges.

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

PureFlo Polypropylene filter capsules are absolute rated to ensure consistent filter performance each and every time out of the package. Available in a wide variety of micron sizes.



### Materials of Construction

Media: Non-Woven Polypropylene  
 Media Supports: Polypropylene  
 Cage, Core, End Caps: Polypropylene  
 Fitting Connections: MNPT, FNPT,  
 Compression, Hose Barb, Sanitary Flange

### Dimensions (Nominal)

Length: 1.5 in (68 mm) Length: 2.5 in (98 mm)  
 Length: 5.0 in (153 mm) Length: 7.5 in (251 mm)  
 Length: 10 in (281 mm)  
 Diameter: 2.88 in (73 mm)

### Effective Filtration Area

1.5 in - 0.65 ft<sup>2</sup> (600 cm<sup>2</sup>) 2.5 in - 1.3 ft<sup>2</sup> (1200 cm<sup>2</sup>)  
 5.0 in - 2.7 ft<sup>2</sup> (2400 cm<sup>2</sup>) 7.5 in - 4.3 ft<sup>2</sup> (3980 cm<sup>2</sup>)  
 10 in - 5.2 ft<sup>2</sup> (4800 cm<sup>2</sup>)

### Operating Conditions

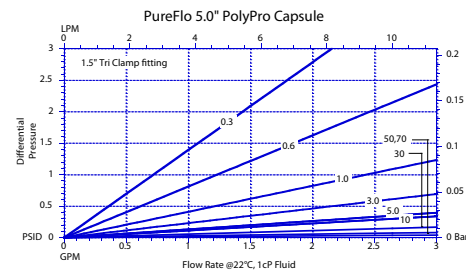
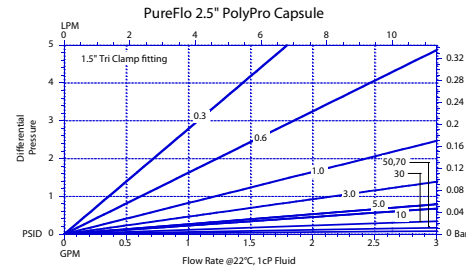
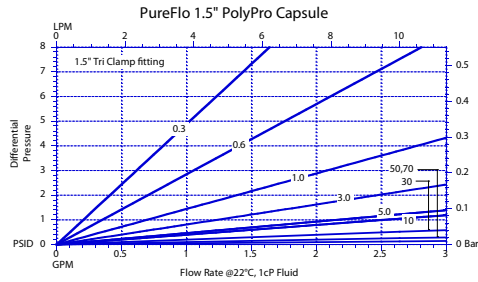
Maximum Operating Pressure:  
 Liquid: 5.5 bar (80psi) at 77°F/25°C  
 Gas: 4.1 bar (60psi) at 77°F/25°C  
 Minimum Burst Pressure:  
 8.3 bar (120psi) at 77°F/25°C  
 Maximum Forward Differential Pressure:  
 4.21 bar (72psi) at 68°F/20°C  
 Maximum Reverse Differential Pressure:  
 2.1 bar (30psi) at 68°F/20°C  
 Maximum Operating Temperature:  
 176°F/80°C

Applications	
Acids	Ink Jets
Bases	Beverages
Solvents	Pharmaceuticals
Fine Chemicals	Biologics
Plating Solutions	Dyes
Process Water	Lacquers

Features	Benefits
Absolute Rated Pleated Polypropylene Media (Graded Porosity Design)	Media matrix removes particles in sequence by size– larger particles by the more open outer layers and smaller particles by the tighter inner layers 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 No media migration 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 Capsules are rinsed with highpurity water



## PureFlo® Polypropylene Filter Capsules



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

### Autoclavable & Sanitizable

Capsules can be autoclaved 25 times at 257°F/125°C for 30 minutes or chemically sanitized in situ using common sanitizing agents or hot water at 194°F/90°C for a limited time (dependent on time and temperature). Capsules must not be in situ steam sterilized.

### 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.

### PureFlo Polypropylene Filter Cartridge 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 = MS Threaded Plug - Limited options N = No vent or drain fittings	P = PolyPro Media	003 = 0.3 006 = 0.6 010 = 1.0 030 = 3.0 050 = 5.0 100 = 10.0 200 = 20.0 300 = 30.0 500 = 50.0 700 = 70.0 10X = 100.0 15X = 150.0	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 2C = 1/4" Compression 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 3C = 3/8" Compression 3H = 3/8" Hose Barb 3HE = 3/8" Hose Barb Elbow 3NF = 3/8" FNPT 4C = 1/2" Compression 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 2C = 1/4" Compression 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 3C = 3/8" Compression 3H = 3/8" Hose Barb 3HE = 3/8" Hose Barb Elbow 3NF = 3/8" FNPT 4C = 1/2" Compression 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, 10 micron PolyPropylene Media Capsule, Standard Grade, with 1.5" Tri-Clamp fittings would be SKLP100STCTC							

