## PureFlo® Polyethylene Filter Capsules

PureFlo® Polyethylene filter capsules are highly retentive hydrophobic membrane filters that have been specially designed for critical applications. The PE membrane in an all-polypropylene construction provides excellent chemical compatibility and superior flow per unit area as compared to other membrane capsules. 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 hydrophobic PE membrane is gamma stable and ideally suited for sterile applications. In addition, the hydrophobic membrane provides superior flow and pressure drop characteristics per surface area for gas filtration and tank venting applications. All filter capsules are 100% integrity tested to ensure filter performance each and every time out of the package. PureFlo PE filter capsules are well-suited for critical applications where superior flow and particle removal efficiency at 0.2 to 2.5 micron is required.

Applications						
Sterile gasses and liquids	Ink Jets					
Bases	Beverages					
Solvents	Pharmaceuticals					
Fine Chemicals	Biologics					
Plating Solutions	Dyes					
Process Water	Lacquers					



### **Materials of Construction**

Membrane: Hydrophobic Polyethylene Membrane Supports: Polypropylene

Cage, Core, End Caps, Capsule: Polypropylene

Fitting Connections: MNPT, FNPT, Quick Couplings, Compres-

sion, Hose Barb, Sanitary Flange

<u>Dimensions (TC fittings)</u> Length: 1.5 in (128 mm) Length: 2.5 in (155 mm)

Length: 5.0 in (210 mm) Length: 7.5 in (270mm)

Length: 10 in (340mm) Diameter: 2.75 in (70 mm)

**Effective Filtration Area** 

1.5 in - 0.65 ft<sup>2</sup> (500 cm<sup>2</sup>) 2.5 in - 1.3 ft<sup>2</sup> (1000 cm<sup>2</sup>) 5.0 in - 2.7 ft<sup>2</sup> (1900 cm<sup>2</sup>) 7.5 in - 4.3 ft<sup>2</sup> (2900 cm<sup>2</sup>)

10 in -  $5.2 \text{ ft}^2 (3800 \text{ cm}^2)$ 

**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:

5 bar (72psi) at 68°F/20°C

Maximum Reverse Differential Pressure:

3.0 bar (44psi) at 68°F/20°C

Maximum Operating Temperature: 140°F/60°C

#### **Regulatory Compliance**

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

Features	Benefits		
■ Naturally Hydrophobic PE Membrane	<ul> <li>High flow rates with low pressure drop per surface area as compared to other filter materials</li> <li>Superior filter lifetime and process throughputs</li> </ul>		
■ Wide Chemical & Thermal Compatibility	<ul> <li>Provides excellent compatibility with a wide-range of chemicals such as acids, bases, and solvents</li> <li>No media migration into the process fluid</li> </ul>		
■ Low Filter Extractables	<ul> <li>No adhesives, binders, or surfactants are used during the manufacturing process resulting in superior downstream cleanliness</li> <li>All cartridges are rinsed with high-purity water to reduce extractables and downtime</li> </ul>		
■ Quality Manufacturing	■ Consistent and reproducible particulate removal		

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Inlet/Outlet Fittings	Vent and Drain fittings					
1H = 1/8" Hose barbs	Luer Lock					
<b>1NF</b> = 1/8" FNPT	Luer Lock					
2C = 1/4" Compression	1/4" Comp					
<b>2H</b> = 1/4" to 1/2" Hose barbs	Luer Lock					
<b>2HS</b> = 1/4" to 3/8" Hose barbs	Luer Lock					
2L = Large Female Luer Lock fitting	Luer Lock					
<b>2N</b> = 1/4" MNPT	Luer Lock					
<b>2NF</b> = 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					
<b>3NF</b> = 3/8" FNPT	Luer Lock					
4C = 1/2" Commpression	1/4" Comp					
4H = 1/2" Hose Barb (future)	Luer Lock					
<b>4N</b> = 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 Polyethylene Filter Cartridge Ordering Guide**

PureFlo Capsule Filters	Vent & Drain Fitting	Filter Media	Pore size (Micron)	Length	Input Fitting	Output Fitting	Options			
	L = Female Luer		<b>020</b> = 0.20	<b>H</b> = 1.5"	1H = 1/8" Hose barbs	1H = 1/8" Hose barbs	-GP = Gamma stable	O-Ring for Quick		
J.K	Lock  P = M8 Threaded  Plug - <u>Limited</u> options	<b>E</b> = Polyethylene	<b>100</b> = 1.0	S = 2.5"	1NF = 1/8" FNPT	1NF = 1/8" FNPT	polypropylene shell	Coupling		
			<b>150</b> = 1.5	L = 5"	1Q = 1/8" Male Quick Coupling for Metal latch	1Q = 1/8" Male Quick Coupling for Metal latch	-NY = Nylon Construction	-OE = O-ring EPDM		
70mm			<b>250</b> = 2.5	E= 7.5"	1QF = 1/8" Female Quick Coupling w/Metal latch	1QF = 1/8" Female Quick Coupling w/Metal latch	-FB = Filling bell	-ON = O-ring Nitrile		
				K = 10"	2H = 1/4" to 1/2" Hose barbs	2H = 1/4" to 1/2" Hose barbs	-FC = Filling bell with Cap	-OV = O-ring Viton		
Capsule	N = No vent or drain fittings				2HS = 1/4" to 3/8" Hose barbs	2HS = 1/4" to 3/8" Hose barbs	-ETO = Ethylene oxide	Blank = O-ring Silicon		
					2LF = Large Female Luer Lock fitting	2LF = Large Female Luer Lock fitting	sterilization <sup>'</sup>	(Standard)		
					2N = 1/4" MNPT	2N = 1/4" MNPT	-NI = No vent or drain	PreFilters		
					2NF = 1/4" FNPT	2NF = 1/4" FNPT	inlet fitting	Fierliters		
					2Q = 1/4" Male Quick Coupling for Metal latch	2Q = 1/4" Male Quick Coupling for Metal latch	-NO = NO vent or drain	-G(pore Size) = Glass		
					2QF = 1/4" Female Quick Coupling w/Metal latch	- t,	Outlet fitting	Fiber PreFilter		
					2QFP = 1/4" Female Quick Coupling w/Plastic latch	2QFP = 1/4" Female Quick Coupling w/Plastic latch	-E = Polyethylene shell	-P(pore Size)= PolyPro		
					2QP = 1/4" Male Quick Coupling for Plastic latch		and tibi E incaid support	Media PreFilter		
					3H = 3/8" Hose Barb	3H = 3/8" Hose Barb	for gamma sterilization	-S(pore Size) = PES		
					3HE = 3/8" Hose Barb Elbow	3HE = 3/8" Hose Barb Elbow		PreFilter		
					3NF = 3/8" FNPT	3NF = 3/8" FNPT				
					4H = 1/2" Hose Barb	4H = 1/2" Hose Barb				
					4N = 1/2" MNPT	4N = 1/2" MNPT				
					4QP = 1/2" Male Quick Coupling for Plastic latch	4QP = 1/2" Male Quick Coupling for Plastic latch				
					MT = 1/2" Tri clamps	MT = 1/2" Tri clamps				
					TC = 1-1/2" Tri clamp	TC = 1-1/2" Tri clamp				
	Example - SK Series Capsule, Luer Lock V/D, 2.5" Internal filter, 1.5 micron Polyethylene Capsule, Standard Grade, with 1.5" Tri-Clamp fittings would be SKLPE150STCTC									
Ouick Countings	uick Couplings are molded. Female Quick Coupling with Plastic latch will be threaded on. compatible with CPC (Colder). LinkTech and others.									

#### **Your Local Distributor:**

## **ZenPure**

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