

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 highpurity 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.



Materials of Construction

Membrane: Hydrophobic Polyethylene
 Membrane Supports: Polypropylene
 Cage, Core, End Caps, Capsule: Polypropylene
 Fitting Connections: MNPT, FNPT, Quick Couplings, 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 (270mm)
 Length: 10 in (340mm)
 Diameter: 2.75 in (70 mm)

Effective Filtration Area

1.5 in - 0.65 ft² (500 cm²) 2.5 in - 1.3 ft² (1000 cm²)
 5.0 in - 2.7 ft² (1900 cm²) 7.5 in - 4.3 ft² (2900 cm²)
 10 in - 5.2 ft² (3800 cm²)

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

Applications

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

Features

Benefits

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



PureFlo® Polyethylene 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	

PureFlo Polyethylene 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 = M8 Threaded Plug - <u>Limited options</u> N = No vent or drain fittings	E = Polyethylene	020 = 0.20 100 = 1.0 150 = 1.5 250 = 2.5	H = 1.5" S = 2.5" L = 5" E = 7.5" K = 10"	1H = 1/8" Hose barbs	1H = 1/8" Hose barbs	-GP = Gamma stable polypropylene shell	O-Ring for Quick Coupling
					1NF = 1/8" FNPT	1NF = 1/8" FNPT		Coupling
					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
					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
					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
					2HS = 1/4" to 3/8" Hose barbs	2HS = 1/4" to 3/8" Hose barbs	-ETO = Ethylene oxide sterilization	Blank = O-ring Silicon (Standard)
					2LF = Large Female Luer Lock fitting	2LF = Large Female Luer Lock fitting		
					2N = 1/4" MNPT	2N = 1/4" MNPT	-NI = No vent or drain inlet fitting	PreFilters
					2NF = 1/4" FNPT	2NF = 1/4" FNPT		
					2Q = 1/4" Male Quick Coupling for Metal latch	2Q = 1/4" Male Quick Coupling for Metal latch	-NO = NO vent or drain Outlet fitting	-G(pore Size) = Glass Fiber PreFilter
					2QF = 1/4" Female Quick Coupling w/Metal latch	2QF = 1/4" Female Quick Coupling w/Metal latch		
					2QFP = 1/4" Female Quick Coupling w/Plastic latch	2QFP = 1/4" Female Quick Coupling w/Plastic latch	-E = Polyethylene shell and HDPE media support for gamma sterilization	-P(pore Size) = PolyPro Media PreFilter
					2QP = 1/4" Male Quick Coupling for Plastic latch	2QP = 1/4" Male Quick Coupling for Plastic latch		-S(pore Size) = PES PreFilter
					3H = 3/8" Hose Barb	3H = 3/8" Hose Barb		
					3HE = 3/8" Hose Barb Elbow	3HE = 3/8" Hose Barb Elbow		
					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								
Quick Couplings are molded. Female Quick Coupling with Plastic latch will be threaded on, compatible with CPC (Colder), LinkTech and others.								

