

SKV Series PTFE Filter Capsules (PTFE/ PP Construction)

Pharmaceutical Capsule filter

The PureFlo® SKV Series PTFE filter capsule with all-polypropylene or polyethylene construction provides an excellent compatibility and superior flow per unit area. The SKV capsules were designed with built-in bleed valves for simple and efficient evacuation of air and liquid from the upstream side.

The hydrophobic PTFE membrane is ideally suited for sterilizing in biopharmaceutical applications in aggressive chemicals, air and gas. In addition, the hydrophobic membrane provides superior flow and pressure-drop characteristics for tank venting applications. PureFlo PTFE filter capsules are well-suited for critical applications where superior flow and bacterial retention is required.

The units are used for filtration of small to medium volumes used in production, laboratory and pilot runs. No adhesives, binders, or surfactants are used in the manufacturing process of these capsules. They are rinsed with pyrogen-free water to reduce extractables and downtime. All filter capsules are 100% integrity-tested to ensure filter performance each and every time out of the package. The capsule can be ordered pre-sterilized.



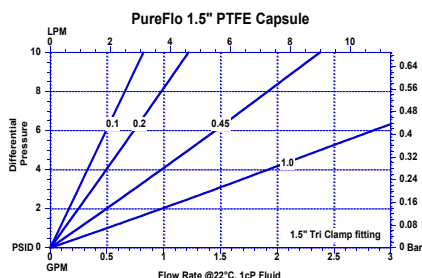
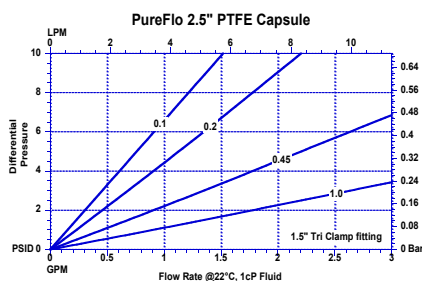
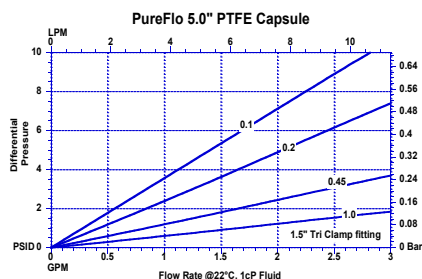
Applications

Buffer and Media	Fermentation Tanks
Product Sterilization	SVP (Small Volume Parenterals)
Bio Bags	Pharmaceuticals
Gas filtration	Biologics
Antibiotics	Venting
Water	Serums

Specifications

Materials of Construction:	Media: Hydrophobic PTFE (polytetrafluoroethylene) Media Supports: Polypropylene Cage, Core, End Caps: Polypropylene Valve O-Rings: Silicon (Standard); Sealing: Thermally welded
Fitting Connections:	See ordering guide for the availability. Any inlet/outlet combinations. (Custom adaptors available upon request)
Nominal Dimensions:	Lengths: 1.5 in (128 mm), 2.5 in (155 mm), 5.0 in (210mm), 7.5 in (270 mm), 10 in (340mm) Diameter: 2.75 in (70 mm)
Effective Filtration Area:	1.5 in - 0.77 ft ² (650 cm ²), 2.5 in - 1.48 ft ² (1250 cm ²), 5.0 in - 2.8 ft ² (2400 cm ²), 7.5 in - 4.3ft ² (3980 cm ²), 10 in - 5.6 ft ² (4800 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 Maximum Forward Differential Pressure: 5.0 bar (72psi) at 68°F/20°C Maximum Reverse Differential Pressure: 3.0 bar (44 psi) at 68°F/20°C Minimum Burst Pressure: 8.3 bar (120psi) at 77°F/25°C Maximum Operating Temperature: PP & Gamma PP: 176°F/80°C HDPE: 140°F/60°C
Regulatory Compliance:	The filters are constructed with polypropylene resins and filtration media in compliance with 21CFR Part 177 of the US Code of Federal Regulations and USP Class VI Biological Test for Plastic.

SKV Series PTFE Filter Capsules



Note - Graphs based on Sanitary fittings.



Specifications (continued)

Bacterial Retention (for 0.2um membrane):

Complete retention of $\geq 10^7$ organisms/cm² of *Brevundimonas diminuta* in accordance with the current HIMA challenge methodology (ASTM F838-83). Validation Guide upon request.

Autoclavable & Sanitizable:

Capsules can be autoclaved up to 25 times at 125°C for 30 minutes or chemically sanitized in situ using common sanitizing agents or hot water at 90°C for a limited time (dependent on time and temperature).

Note- Capsules must not be in situ steam-sterilized.

Bacterial Endotoxin:

Effluent is non-pyrogenic per USP Bacterial Endotoxin (0.25 EU/ml), determined using Limulus Amebocyte Lysate (LAL) Test.

PureFlo SKV Series PTFE Filter Capsule (Pharmaceutical grade) Ordering Guide

PureFlo Capsule Filters	Filter Media	Pore size (Micron)	Internal Filter Length	Input Fitting	Output Fitting	Option
SKV 70mm Diameter Capsule with Bleed Valve	F = PTFE	010 = 0.1	H = 1.5"	1H = 1/8" Hose Barbs	1H = 1/8" Hose Barbs	Blank = Polypro construction -E = Polyethylene shell and HDPE media support for gamma sterilization -GP = Gamma stable polypropylene shell -FB = Filling Bell* -FC = Filling Bell with Cap* -ETO = Ethylene oxide sterilization -N = No vent or drain fittings -NI = No vent or drain inlet fitting -NO = No vent or drain outlet fitting
		020 = 0.2	S = 2.5"	1NF = 1/8" FNPT	1NF = 1/8" FNPT	
		045 = 0.45	L = 5"	1Q = 1/8" Male Quick Coupling with Metal Latch	1Q = 1/8" Male Quick Coupling with Metal Latch	-O-Ring for Quick -OE = O-ring EPDM -ON = O-ring Nitrile -OV = O-ring Viton Blank = O-ring Silicon (Standard) -G(pore Size) = Glass Fiber PreFilter -P(pore Size) = PolyPro Media PreFilter -S(pore Size) = PES PreFilter
		100 = 1.0	E = 7.5"	1QF = 1/8" Female Quick Coupling with Metal Latch	1QF = 1/8" Female Quick Coupling with Metal Latch	
		300 = 3.0	K = 10"	2H = 1/4" Hose Barbs	2H = 1/4" Hose Barbs	Silicon O-Rings for Bleed Valve and Quick Coupling fittings
		500 = 5.0		2N = 1/4" MNPT	2N = 1/4" MNPT	
		999 = 10.0		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	
				2QF = 1/4" Female Quick Coupling with Metal Latch	2QF = 1/4" Female Quick Coupling with Metal Latch	
				2QFP = 1/4" Female Quick Coupling w/Plastic Latch	2QFP = 1/4" Female Quick Coupling w/Plastic Latch	
				2QP = 1/4" Male Quick Coupling for Plastic Latch	2QP = 1/4" Male Quick Coupling for Plastic Latch	
				3H = 3/8" Hose Barb	3H = 3/8" Hose Barb	
				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 - PureFlo SKV Series Capsule, PTFE, 2.5" internal filter, 0.2 micron, with 1.5" Tri-Clamp fittings 1/O, w/PP Construction, would be SKVF020STCTC						

Note: Quick Couplings are molded on. Female Quick Coupling with Plastic latch will be threaded on. Compatible with CPC (Colder), LinkTech and others.

* - 2H or 3H with filling bell only

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