

SKV Series PES Filter Capsules (PES/PE Construction)

Pharmaceutical Capsule filter

The PureFlo® SKV Series PES filter capsule with all-polyethylene (PE) construction provides excellent chemical compatibility and superior flow per unit area as compared to other membrane capsules. These PureFlo® PES filter capsules with Polyethylene construction have been specially **designed to be gamma sterilized** for biopharmaceutical applications. The PES and the PE construction are naturally Gamma radiation staple. The hydrophilic PES membrane does not require pre-wetting agents, thereby eliminating a potential source of contamination. The PES membrane is a low protein-binding media.

The capsules were designed with built-in bleed valves for simple and efficient evacuation of air and liquid. 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. PureFlo SKV Series PES filter capsules are well-suited for pharmaceutical applications where gamma sterilization is needed.

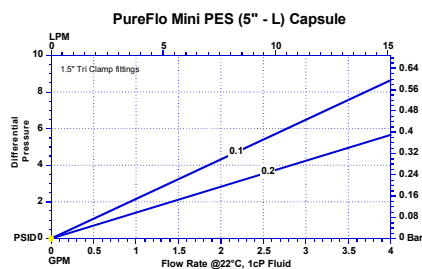
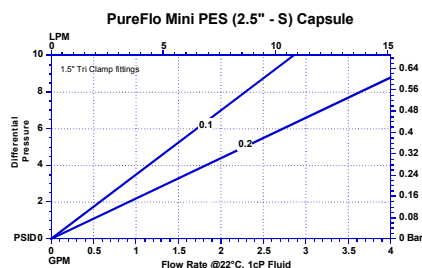
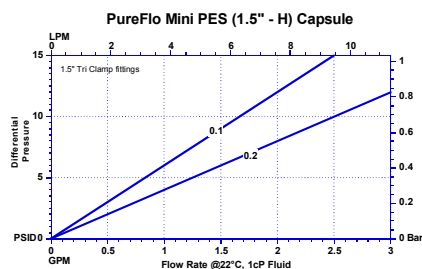


Applications	
Buffers and Media	Fermentation Broths
Product Sterilization	SVP (Small Volume Parenterals)
Bio Bags	Pharmaceuticals
Vaccines	Biologics
Antibiotics	Scale up processing
Water	Serums

Specifications

Materials of Construction:	Media: PES (Polyethersulfone) Media Supports: High Density Polyethylene (HDPE) Cage, Core, End Caps: HDPE 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 (270mm), 10 in (340mm) Diameter: 2.75 in (70 mm)
Effective Filtration Area:	1.5in: 0.77 ft ² (720 cm ²), 2.5in: 1.48 ft ² (1380 cm ²), 5.0in: 2.8 ft ² (2600 cm ²), 7.5in: 4.3ft ² (3980cm ²), 10in: 5.6 ft ² (5200 cm ²)
Operating Conditions:	Maximum Forward Differential 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:	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.

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Note - Graphs based on Sanitary fittings.



Specifications (cont.)

Bacterial Retention:

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

Sanitizable:

The filters can be Gamma sterilized up to 45kGy. The filters can also be chemically sanitized in situ using common sanitizing agents or hot water at 90°C for a limited time (dependent on time and temperature). Not Auto-clavable.

Water Bubble Point Specification:

0.1um: 23psi, 0.16 MPa (IPA)
0.2um: 50psi, 0.34 MPa

Bacterial Endotoxin:

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

PureFlo SKV Series PES 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	S = PES	004 = 0.04µ	L = 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
		010 = 0.1	S = 2.5"	1NF = 1/8" FNPT	1NF = 1/8" FNPT	
		020 = 0.2	L = 5"	1Q = 1/8" Male Quick Coupling with Metal Latch	1Q = 1/8" Male Quick Coupling with Metal Latch	
		045 = 0.45µ	L = 7.5"	1QF = 1/8" Female Quick Coupling with Metal Latch	1QF = 1/8" Female Quick Coupling with Metal Latch	
		065 = 0.65µ	L = 10"	2H = 1/4" Hose Barbs	2H = 1/4" Hose Barbs	
		080 = 0.8		2N = 1/4" MNPT	2N = 1/4" MNPT	
		120 = 1.2		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, PES, 2.5" internal filter, 0.2 micron, with 1.5" Tri-Clamp fittings I/O, w/PE Construction, would be SKV020STCTC-E						

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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