

Filter Data Sheet

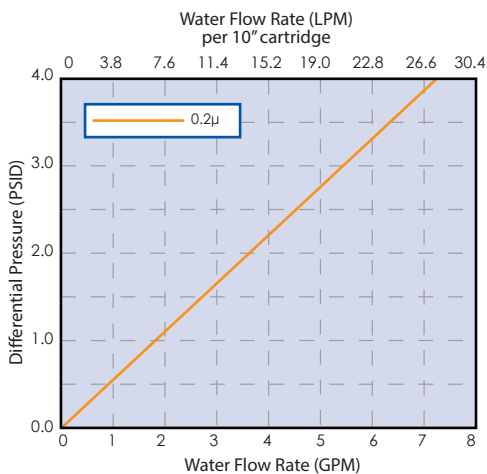
High Purity - Pharmaceutical Grade PES

Hydrophilic Polyethersulfone Membrane Cartridges for Pharmaceutical and Biological Applications

PPES Grade filter cartridges are ideal for sterile filtration and clarification of pharmaceutical and biological solutions. Each PPES cartridge is integrity tested during manufacturing and is supported by a validation guide for regulatory compliance. Low protein binding and the broad chemical compatibility characteristics of the polyethersulfone membrane, along with exceptional flow rate vs pressure drop, makes the PPES series the ideal choice for a variety of valuable and/or critical pharmaceutical solutions.

PPES cartridges are fully validated as sterilizing grade filters in accordance with HIMA and ASTM F838-05 guidelines. Sterile effluent was achieved with challenge concentration levels in excess of 10^7 *Brevundimonas diminuta* organisms per cm² of filter area.

Flow Rate vs Pressure Drop



Typical Applications

- Vaccines
- Large Volume Parenteral (LVP's)
- Water for Injection (WFI)
- Diagnostics
- Ophthalmics
- Cell and Tissue Culture Media
- Protein Solutions
- Serum and Blood Products

Construction Materials

Membrane Polyethersulfone
Support Media Polypropylene
End Caps Polypropylene
Center Core Polypropylene
Outer Support Cage Polypropylene
O-Rings/Gaskets Buna, EPDM, Silicone, Viton®, Teflon® Encapsulated Viton®

Sterilization

Hot Water 85°- 95°C, 30 min., max. ΔP 7 psi
In-Line Steaming 134°C, 30 min., max. ΔP 7 psi; 100 cycles

Dimensions

Length:
10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter:
2.70 inches (7.0 cm) nominal

Maximum Recommended Operating Conditions

Temperature 176°F (80°C)
Forward 72 PSI (5 bar) at 68°F (20°C)
 29 PSI (2 bar) at 176°F (80°C)
Reverse 29 PSI (2 bar)

Toxicity

All polypropylene components meet the specifications for biological safety per USP Class VI – 121°C for plastics.

FDA Listed Materials

Manufactured from materials which are listed for food contact applications in Title 21 of the U.S. Code of Federal Regulations.

Ordering Information

PPES	Rating (µ)	A	Length, Nominal	C	End Cap Style	O-Rings/Gaskets
	0.2		10" (25.4 cm)		2 = DOE Flat Gasket	B = Buna-N
			20" (50.8 cm)		3 = 222 w/ Fin	E = EPDM
			30" (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone
			40" (101.6 cm)		6 = 226 w/ Flat Cap	V = Viton®
					7 = 226 w/ Fin	T = Teflon® Encapsulated Viton®

DISCLAIMER: Filtration data presented is representative of performance observed in controlled laboratory testing. It is not given as a warranty, specification or statement of fitness for use. Specific performance can vary widely depending on contaminant type, fluid properties, flow rates and environmental conditions. It is recommended that users conduct thorough qualification testing to assure the product functions as required.