PharmBiologic Solutions, LLC Advancing custom solutions



High Purity - Water Service Grade PES Hydrophilic Polyethersulfone (PES) Membrane for Water Purification

Water Service Grade PES Cartridges are cost effective alternatives to General and Electronic Grade cartridges for a variety of aqueous based fluids. Water Service cartridges are manufactured from an inherently hydrophilic PES membrane. These cartridges offer excellent flow characteristics, extended service life and broad chemical compatibility.

Flow Rate vs Pressure Drop



Typical Applications

- Deionized Water Systems
- General-Use Water Filtration
- Liquid Clarification
- Recirculating Fluids
- Chemical Filtration

Ordering Information



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				

Sanitization/Sterilization

Filtered Hot Water	80°C for 30 min.
Steam Sterilization	121°C for 30 min.,
	multiple cycles

Chemicals: Cartridges are chemically compatible with most chemicals and sanitizing agents.

Note: Stainless steel insert option needed for all cartridges being hot water sanitized or steam sterilized.

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

Maximum Differential Pressures

Forward	. 50 PSI (3.4 bar) at 20°C
Reverse	. 40 PSI (2.7 bar) at 20°C

FDA Listed Materials

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

Toxicity

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

GWPES	Rating (µ)	А	Length	С	End Cap Style	O-Rings/Gaskets	Adders
	0.04		10" (25.4 cm)		2 = DOE Flat Gasket	B = Buna	I = Stainless Steel Insert
	0.1		20″ (50.8 cm)		3 = 222 w/ Fin	E = EPDM	HP = Heavy Poly Core
	0.2		30″ (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone	CS = 316ss Compression Spring
	0.45		40" (101.6 cm)		6 = 226 w/ Flat Cap	V = Viton [∞]	R = 18 Megohm Rinse
	0.65				7 = 226 w/ Fin	T = Teflon [®] Encapsulated Viton [®]	
	0.8				16 = 213 Internal O-Ring	Z = Teflon [®] Encapsulated Silicone	

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.

