

PharmBiologic Solutions, LLC

Advancing custom solutions



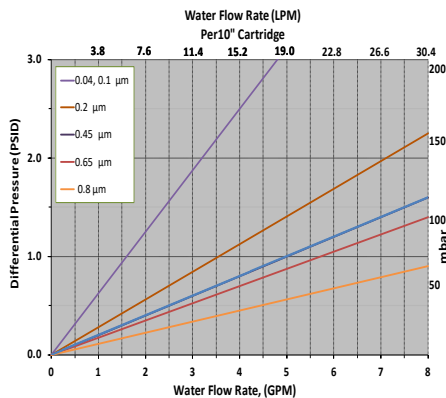
High Purity - Electronics Grade PES

Hydrophilic Polyethersulfone (PES) Membrane for Electronics Applications

Electronics Grade PES Cartridges are designed to meet the special needs of the electronics and high purity chemical industries. GEPES membrane cartridges are resistant to most acids and bases and are compatible with most sanitizing agents. The GEPES series delivers high flowrates at low pressure drops; making it an excellent choice for Ultra-Pure water systems. Each cartridge is flushed to 18 MΩ with UPW and 100% integrity tested to deliver ultra-clean effluent as well as ultra-low extractables. The Extended Area option (GEPESX) offers up to 40% more surface area. This additional area results in significant increases in flowrate and loading capacity in the same footprint.



Flow Rate vs Pressure Drop



Data represents GEPES. For GEPESX options, multiply given flowrate by 1.4.

Typical Applications

- Ultra-Pure Water Systems
- Fine Chemical Filtration
- Photoresist Chemicals

Ordering Information

GEPES	Rating (μ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
GEPESX	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		CS = 316ss Compression Spring
	0.2		30" (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone		
	0.45		40" (101.6 cm)		6 = 226 w/ Flat Cap	V = Viton®		
	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.

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

Temperature 176°F (80°C)

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.

