

Filter Data Sheet

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 industry and high purity chemical industries. Polyethersulfone membrane cartridges are resistant to most acids and bases and capable of handling strong sanitization agents. High flow rates make polyethersulfone a good choice for central DI water systems. This membrane will also handle elevated process temperatures in compatible fluids. To minimize extractables, each cartridge module is pulse power flushed until the rinse effluent reaches 17+ megohm-cm and less than 3ppb TOC. Each cartridge module is also individually tested.

Flow Rate

The following table represents typical water flow at one psi (69 mbar) pressure differential across a single 10 inch cartridge element. The test fluid is water at ambient temperature. Extrapolation for housing with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore Size	GPM
0.1 µm	2.5
0.2 µm	4.5
0.45 µm	7.0
0.65 µm	8.3



Construction Materials

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

Sanitization/Sterilization

Chemical Sanitization - Industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals.

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 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

Product Purity

All components FDA acceptable per 21 CFR

Ordering Information

GEPES	(Pore Size)	A	(Length)	C	(End Cap Code)	O-Rings/Gaskets
	0.1		10 (25.4 cm)		2 = DOE - Flat Gasket	B = Buna
	0.2		20 (50.8 cm)		3 = 222 w/ Fin	E = EPDM
	0.45		30 (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone
	0.65		40 (101.6 cm)		6 = 226 w/ Flat Cap	V = Viton
					7 = 226 w/ Fin	T = Teflon Encapsulated Viton