



InterFine E

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 sanitisation 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 18 megohm-cm. Each cartridge module is also individually tested.

Flow Rate

The following table represents typical water flow at 69 mbar (one psi) 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	l/min
0.1 µm	9,5
0.2 µm	17
0.45 µm	26,5
0.65 µm	31,4
0,8 µm	34,2



Construction Materials

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

Absolute Filtration Ratings

99.98% ($\beta_x=5000$) removal efficiencies.

Sanitisation/Sterilisation

Chemical Sanitisation - Industry standard concentrations of hydrogen peroxide, peracetic 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
Filter Area: 0,7 m² per 10"

Maximum Recommended Operating Conditions

Maximum Temperature 80°C

Maximum Differential Pressures

Forward 3,4 bar at 20°C
Reverse 2,7 bar at 20°C

Product Purity

All components FDA acceptable per 21 CFR. All polypropylene components meet the specifications for biological safety per USP Class VI-121 C for plastics.

Ordering Information (universal ordering code, not all options are available)

PEE	Pore Size	Length	End Cap Code	O-Rings/Gaskets
	0,04 = 0,04 µm	1 = 10" (25.4 cm)	1 = DOE with Gaskets	1 = Silicone
	0,1 = 0,1 µm	2 = 20" (50.8 cm)	2 = SOE -222 O-rings with Flat Cap	2 = EPDM
	0,2 = 0,2 µm	3 = 30" (76.2 cm)	3 = SOE -222 O-rings with Fin	3 = Buna
	0,45 = 0,45 µm	4 = 40" (101.6 cm)	4 = SOE -222 O-rings with Spring	4 = Viton
	0,65 = 0,65 µm	Y = 5" (12.7 cm)	5 = SOE -226 O-rings with Spring	5 = Teflon® Encapsulated Viton
	0,8 = 0,8 µm		6 = SOE -226 O-rings with Flat Cap	6 = Polyfoam End Gaskets
			7 = SOE -226 O-rings with Fin	
			8 = SOE with Spring	
			9 = SOE with Core Extender	