



## InterPore E

### Electronics Grade Nylon - Nylon Membrane for Electronics Applications

**Electronics Grade Cartridges** are designed to meet the special needs of the electronics and high purity chemical industries. Able to remove particles below the rated pore size of the membrane, these cartridges exhibit superior retention. Nylon cartridges are often used for DI water, photoresist, developers and other compatible chemicals. Each cartridge module is pulse power flushed until the rinse effluent reaches 18 megohm-cm. Each cartridge module is also individually tested for integrity. Our design criteria and special procedures allow us to provide the highest quality electronic grade cartridge.

#### 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	3,8
0.2 µm	5,7
0.45 µm	15,1
0.65 µm	22,7
0.8 µm	24,6
1.0 µm	26,5



#### Construction Materials

**Filtration Media** ..... Nylon 6,6  
**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

**Filtered Hot Water** ..... 90°C  
**Autoclave** ..... 127°C, 30 min, multiple cycles  
**In-line Steam** ..... 135°C, 30 min, multiple cycles  
**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 m<sup>2</sup> per 10"

#### Maximum Recommended Operating Conditions

**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)

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