

# optimum filter

## Filter Data Sheet

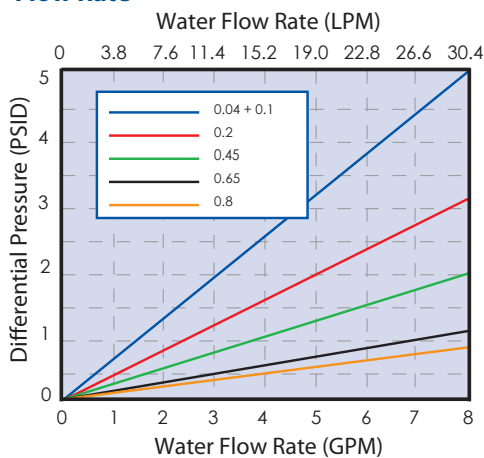
### High Purity – Electronics Grade PES

Hydrophilic Polyethersulfone (PES) Membrane for Electronics Applications

**Electronics Grade PES Cartridges** are designed to meet the special needs of the electronics and high purity chemical industries. Polyethersulfone membrane cartridges are resistant to most acids and bases; capable of handling strong sanitization agents. High flow rates make polyethersulfone a good choice for Ultra-Pure water systems. Each cartridge is flushed with 18 megohm high purity water to minimize extractable. Each cartridge is also individually integrity tested.



#### Flow Rate



#### Typical Applications

Ultra-Pure Water Systems  
Fine Chemical Filtration  
Electronics - Photoresist

#### Construction Materials

**Membrane**..... Polyethersulfone  
**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

**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.

#### Ordering Information

GEPES	Pore Size	A	Length	C	End Cap Code	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		
	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			

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