

# optimum filter

## Filter Data Sheet

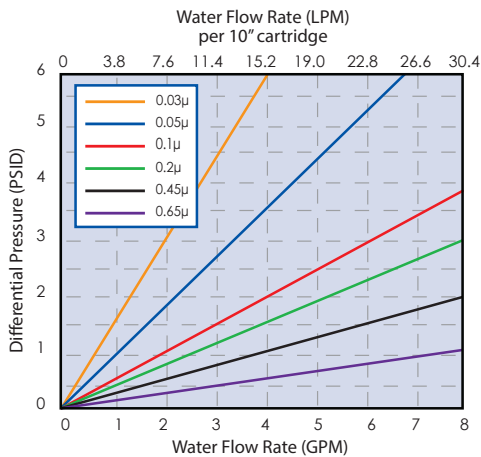
### High Purity - WaterClear PES

Hydrophilic Polyethersulfone (PES) Membrane Cartridges for Water Purification Applications

**WaterClear PES Cartridges** are constructed of continuous length\* polyethersulfone membrane with polypropylene supports. This combination offers extremely cost effective membrane filtration for aqueous solution applications. WaterClear cartridges deliver excellent flow rates at a low pressure drops.



### Flow Rate vs Pressure Drop



### 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.

### Typical Applications

Deionized Water Systems  
 General-Use Water Filtration  
 Liquid Clarification  
 Chemical Filtration

\* Continuous length up to 30" (40" cartridges have (2) 20" segments).

### Ordering Information

WCPES	Rating (µ)	A	Length	C	End Cap Style	O-Rings/Gaskets	-	Adders
	0.03		10" (25.4 cm)		2 = DOE Flat Gasket	B = Buna		I = Stainless Steel Insert
	0.05		20" (50.8 cm)		3 = 222 w/ Fin	E = EPDM		HP = Heavy Poly Core
	0.1		30" (76.2 cm)		4 = 222 w/ Flat Cap	S = Silicone		R = 18 Megohm Rinse
	0.2		40" (101.6 cm)		6 = 226 w/ Flat Cap	V = Viton®		CS = 316ss Compression Spring
	0.45				7 = 226 w/ Fin	T = Teflon® Encapsulated Viton®		
	0.65				16 = 213 Internal O-Ring			

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