

# POLYETHERSULFONE MEMBRANE CARTRIDGE

## **ELCPF series**



*Feature-Tec's ELCPF hydrophilic pleated Polyethersulfone membrane filter cartridges are specifically designed to offer high flow rates at an economical cost. The asymmetric structure features a large surface area that allows for superior flow rates and high particle removal efficiency.*

### **Applications**

- Photoresists
- Washing liquids
- Solvents
- Ultrapure water
- Sterile filtration
- Pharmaceuticals
- CIP filtration
- Food & beverages
- Chemicals and many more

### **Features and benefits**

- Absolute removal ratings >99.9%
- Asymmetric, hydrophilic pleated Polyethersulfone membrane filter cartridges
- Large surface area offers high flow rates @ low initial differential pressure
- No surfactants or wetting agents
- Available in a wide variety of adapter/end cap configurations

- Flushed with 18 M  $\Omega$ -cm DI-water for 30 minutes at 7.57 l/min (2 gpm) with low TOC level
- Filter cartridges may be autoclaved for at least 10 times half-hour cycles @ 121 °C (250 °F)
- According to FDA requirements title 21

### **Filter specifications**

#### **Material**

Pleated asymmetric, hydrophilic polyethersulfone membrane

#### **Inner core, cage, caps, support layer**

Polypropylene

#### **O-rings / Gaskets**

Buna N, Silicone, EPDM, Viton, FEP/Silicone, FEP/Viton

#### **Retention ratings**

0.04, 0.1, 0.2, 0.45, 0.65, 1.2  $\mu$ m

### **Dimensions / Parameters**

#### **Nominal lengths**

10", 20", 30", 40"  
(254, 508, 762, 1016 mm)

#### **Outside diameter**

63 mm (2.48")

#### **Inside diameter**

28 mm (1.1")

#### **Maximum operating temperature**

93 °C (200 °F)

#### **Max. differential pressures**

1.67 bar @ 80 °C (24.2 psid @ 176 °F)  
5.39 bar @ 21 °C (78.2 psid @ 70 °F)

#### **Recommended change-out pressure drop for disposal**

2.1 bar @ 21 °C (30.5 psid @ 70 °F)

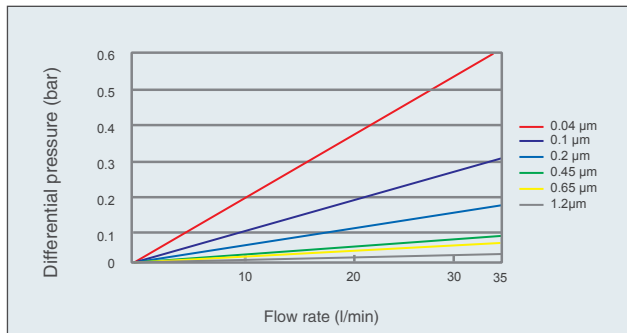
#### **Bubble point integrity test (Pure water, 20°C)**

0.1  $\mu$ m:  $\geq$ 3.8 bar

0.22  $\mu$ m:  $\geq$ 3.4 bar

0.45  $\mu$ m:  $\geq$ 2.3 bar

### ELCPF Water Flow Rate (10" length)\*



\* For fluids with a dynamic viscosity of 1 mPa·s @ 20 °C

### Ordering information

#### Nominal lengths

10: 10" (254 mm)  
20: 20" (508 mm)  
30: 30" (762 mm)  
40: 40" (1016 mm)

#### O-rings / Gaskets

B: Buna N  
S: Silicone  
E: EPDM  
V: Viton  
C: FEP/Viton\*  
D: FEP/Silicone\*  
\* O-rings only

#### Retention ratings

A: 0.04 µm  
B: 0.1 µm  
C: 0.2 µm  
D: 0.45 µm  
E: 0.65 µm  
F: 1.2 µm

**ELCPF**

**10**

**7**

**B**

**1**

#### Filter series

ELCPF: Pleated hydrophilic  
Polyethersulfone

#### End configurations

A: 222 Flat, Single Open End (Stainless steel reinforced)\*  
B: 222 Fin, Single Open End (Stainless steel reinforced)\*  
C: 226 Flat, Single Open End (Stainless steel reinforced)\*  
2: 226 Flat, Single Open End  
3: 222 Flat, Single Open End  
4: 226 Fin, Single Open End  
5: 226 Fin, Single Open End (Stainless steel reinforced)\*  
6: 222 Fin, Single Open End

\* For autoclave requirements