

# PTFE MEMBRANE CARTRIDGE

## ELCPT series



Feature-Tec's ELCPT pleated membrane filter cartridges are made with a polytetrafluoroethylene (PTFE) membrane with additional polypropylene support layers and components. PTFE filter media is characterized by high chemical resistance and is widely used for filtration of strong acids and bases in semiconductor industry applications.

### Applications

- Final filtration of solvents
- Photoresists
- Sterile filtration
- CIP filtration
- Spirits
- Alkaline solutions
- Fermentation air
- Strong acids & bases and many more

### Features and benefits

- Absolute removal ratings >99.9%
- Excellent chemical resistance
- Low initial differential pressure, high flow rates and long service life
- Filtration area >0.9 m<sup>2</sup> per 10" filter element
- Flushed with 18 M Ω-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
- Available in a wide variety of adapter/end cap configurations

### Filter specifications

#### Material

Pleated hydrophilic polytetrafluoroethylene (PTFE) membrane

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

Polypropylene

#### O-rings / Gaskets

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

#### Retention ratings

0.05, 0.1, 0.22, 0.45, 1 µm

### 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

1.37 bar @ 93 °C (19.9 psid @ 200 °F)  
5.49 bar @ 21 °C (79.7 psid @ 70 °F)

#### Recommended change-out

#### pressure drop for disposal

2.1 bar @ 21 °C (30.5 psid @ 70 °F)

#### Bubble point integrity test

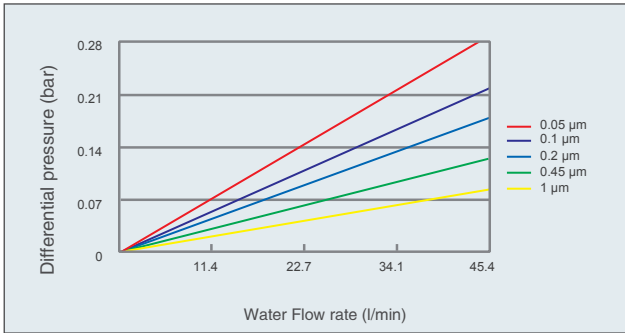
#### (absolute ethanol, 20°C)

0.1 µm: ≥1.4 bar

0.22 µm: ≥1.0 bar

0.45 µm: ≥0.5 bar

### ELCPT Flow Rate for Liquid (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\*
- T: PTFE
- \* O-rings only

#### Retention ratings

- A: 0.05 µm
- B: 0.1 µm
- C: 0.22 µm
- D: 0.45 µm
- F: 1 µm



#### Filter series

ELCPT: Pleated hydrophilic  
PTFE

#### 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

# PTFE MEMBRANE CARTRIDGE

## EGCPPT series



Feature-Tec's EGCPPT pleated membrane filter cartridges are made with a hydrophobic polytetrafluoroethylene (PTFE) membrane with additional polypropylene support layers and components. PTFE membrane cartridge is ideal as gas and vent filtration.

### Applications

- Gas / vent filtration
- Final filtration of solvents
- Photoresists
- Sterile filtration
- Spirits
- Alkaline solutions
- Fermentation air
- Strong acids & bases and many more

### Features and benefits

- Absolute removal ratings >99.9%
- Hydrophobic pleated polytetrafluoroethylene (PTFE) membrane
- Excellent chemical resistance
- Low initial differential pressure, high flow rates and long service life
- Flushed with 18 M Ω-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
- Available in a wide variety of adapter/end cap configurations
- Filtration area >0.9 m<sup>2</sup> per 10" filter element

### Filter specifications

#### Material

Pleated hydrophobic polytetrafluoroethylene (PTFE) membrane

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

Polypropylene

#### O-rings / Gaskets

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

#### Retention ratings

0.003, 0.05, 0.1, 0.22, 0.45, 1 μm

### 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

1.37 bar @ 93 °C (19.9 psid @ 200 °F)

5.49 bar @ 21 °C (79.7 psid @ 70 °F)

#### Recommended change-out

#### pressure drop for disposal

2.1 bar @ 21 °C (30.5 psid @ 70 °F)

#### Bubble point integrity test

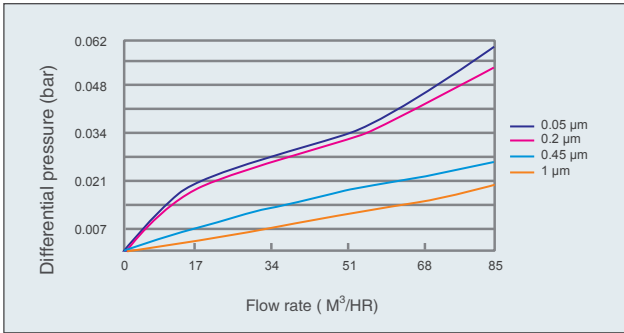
#### (absolute ethanol, 20°C )

0.1 μm: ≥1.4 bar

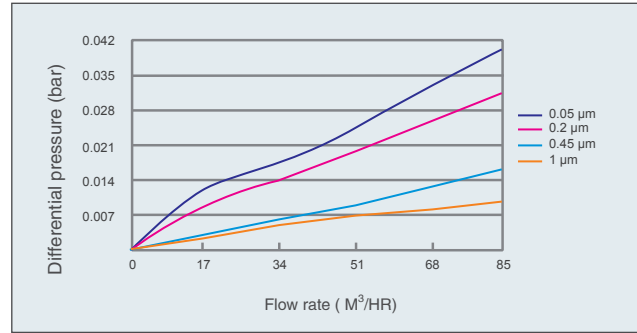
0.22 μm: ≥1.0 bar

0.45 μm: ≥0.5 bar

### EGCPT Flow Rate for Gas (10" length)\*



\* Test conditions: System pressure at <math>< 10 \text{ psig}</math> (vent), 65°F (18 °C)



\* Test conditions: System pressure at 30 psig, 65°F (18 °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\*
- T: PTFE
- \* O-rings only

#### Retention ratings

- G: 0.003 μm (for gas)
- A: 0.05 μm
- B: 0.1 μm
- C: 0.22 μm
- D: 0.45 μm
- F: 1 μm



#### Filter series

EGCPT: Pleated hydrophobic PTFE

#### 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



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