

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 >0.71 m² 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

- 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, PFA

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), 185 °C (365 °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)

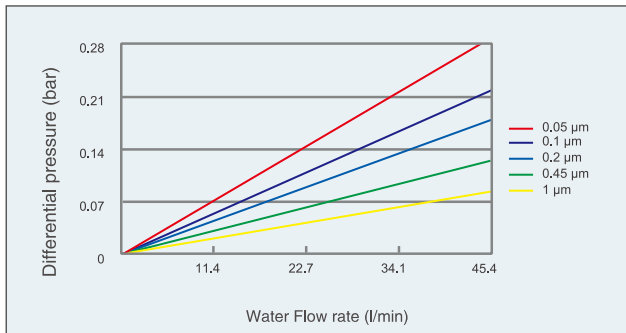
0.1 μm: ≥1.4 bar

0.22 μm: ≥1.0 bar

0.45 μm: ≥0.5 bar

■ ELCPT Filter Cartridge Range

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

