## **IFP PTFE-E Pleated Filter Cartridge**

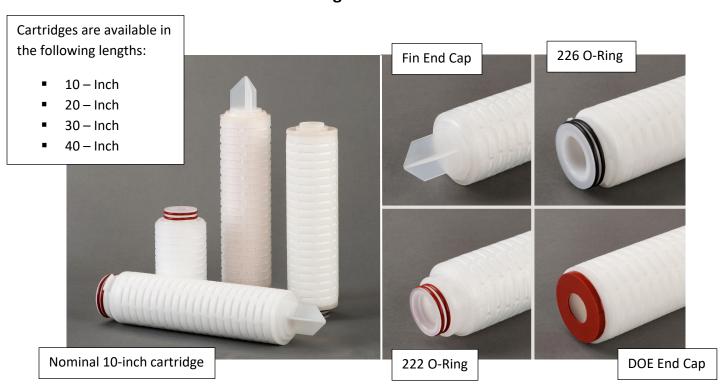
IFP PTFE-E Pleated Filter Cartridges use super-hydrophobic, and high flux PTFE membranes have an excellent flow rate and long service life. The filter cartridges are electronic grade and high-purity filters, while flushed with 18.2MΩ.cm ultrapure water and can be wet-packaged. These filters are suitable for gases and electronic grade high purity, aggressive liquids, and organic solvents. The optimized structure of these filters can give full play to the membrane's performance; the high flow rate and long service lifetime can significantly reduce the cost, and the prewetted package option minimizes the process downtime. These features ensure the highest process efficiency and decreased filtration costs. IFP PTFE-E filters are manufactured in a cleanroom under the ISO 9001 quality management system to ensure product cleanliness and control the documentation. These filters are manufactured by the thermal bonding process, contain no adhesive and surfactant, all deliver the lower extractables.

## **Application**

- Ultra-Pure chemicals and gases
- Wet Etch
- Non-sterile venting

- Acids and Bases
- Buffered oxide etches
- Phytochemicals
- CDS Filtration
- Photoresists, solvents, and electroplating.
- Bulk DI water system

## IFP PTFE-E Filter Cartridge with different End Modification









## **Technical Data Sheet**

## Popular Configuration:

Part Number	End Modification	Standard O-Ring	Grade	
CRT- PTFE A2S-E	222 O-Rings, Flat	Silicone	Electronic Grade	
CRT- PTFE A3S-E	222 O-Rings, Fin	Silicone	Electronic Grade	
CRT- PTFE A6S-E	226 O-Rings, Fin	Silicone	Electronic Grade	
CRT- PTFE A7S-E	226 O-Rings, Flat	Silicone	Electronic Grade	
CRT- PTFE A0S-E	Double Open Ended (DOE)	Silicone	Electronic Grade	

The blank spaces are for filter length micron rating code. Find the codes below.

### PTFE Micron Rating:

Element Length Code	Micron Rating Code		
	<b>001</b> : 0.1 μm		
<b>10</b> : 10-Inch	<b>002</b> : 0.22 μm		
<b>20</b> : 20-Inch	<b>004</b> : 0.45 μm		
<b>30</b> : 30-Inch	<b>010</b> : 1.0 μm		
<b>40</b> : 40-Inch	<b>050</b> : 5.0 μm		
	<b>100</b> : 10.0 μm		

## **Materials of Construction**

Filter Media: Hydrophobic PTFE

Supports: Polypropylene

Cage/End Caps: Polypropylene

Core: Polypropylene

### Effective Filtration Area:

7.97  $ft^2$  (0.74  $m^2$ ) per 10-Inch Cartridge Element

### **Nominal Dimensions:**

Lengths: 10.0 inch (25.4 cm), 20.0 inch (50.8 cm), 30.0 inch (76.2 cm) and 40.0 inch (101.6 cm)

Inside Diameter: 1.3" (33mm) Outside Diameter: 2.7" (68.5mm)





## **Operating Conditions:**

Maximum Forward Differential Pressure: 5.2 bar (75.4 psi) at 77°F/25°C Maximum Reverse Differential Pressure: 3.4 bar (50 psi) at 77°F/25°C

Maximum Operating Temperature: 179.6°F/82°C

Recommended Replacement Pressure: 2.4 bar (34.8 psi)

### Filtration Efficiency:

≥ 99.98%

### **Integrity Data:**

Pore Size	Min Bubble Point (60% IPA)	Diffusion			
0.1 μm	≥ 1.6 bar (23.2 psi)	≤ 40 ml/min at 1.2 bar (17.4 psi)			
0.22 μm	≥ 1.0 bar (14.5 psi)	≤ 30 ml/min at 0.8 bar (11.6 psi)			
0.45 μm	≥ 0.5 bar (7.2 psi)	≤ 30 ml/min at 0.4 bar (5.8 psi)			
1.0 μm	≥ 0.2 bar (2.9 psi)	-			
5.0 μm	-	-			
10.0 μm	-	-			

## **Regulatory Compliance:**

- ASTM D6394 SP0112
- FDA 21 CFR 177.1655
- ISO 10993-Part 1, 5
- EN 285:2006+A2:2009
- Regulation (EC) NO 1935/2004

#### **USP Bacterial Endotoxins:**

The filters were tested to confirm that an aqueous extraction of this product contains <0.25 EU/ml as determined by the Limulus Amebocyte Lysate (LAL) Test

#### Non-Fiber Releasing:

This filter meets the criteria of "non-fiber releasing" filter that defined in 21CFR.210.3 (b) (6).

#### Oxidizable Substances:

Effluent of sterilized sample filters is negative after a water flushing 1000 ml per 10".

#### **Extractable Substances:**

Sample filters are immersed in DI Water for 24 hours at 25°C. Extractable substance is usually equal to or less than 40mg per 10".





## Cleanliness:

FluorPure-E filters are pre-flushed with 18.2  $M\Omega$ ·cm ultrapure water, and can be wet-packaged, which prevent alcohol-chemical interaction, avoid potential contamination sources.

- ❖ Particle shedding cleanliness: <15 particles/10ml ≥ 0.2μm @ 5L/min DI water flow
- ❖ TOC recovery: <10 ppb of feed after 120 L flush @ 1L/min
- \* Resistivity rinse-up: minus 0.2 MΩ·cm feed after 120 L flush @ 1L/min
- ♦ Metallic extractables level: <50 µg/10" device (In a 10% HNO₃ extraction)</p>

## **Special Configuration:**

## Size Option:

- 10-inch [Filtration Area: 6.67 ft<sup>2</sup>]
- 20-inch [Filtration Area: 13.34 ft<sup>2</sup>]
- 30-inch [Filtration Area: 20.01 ft<sup>2</sup>]
- 40-inch [Filtration Area: 26.68 ft<sup>2</sup>]

## Micron Rating Option:

- 0.1 μm
- 0.22 μm
- 0.45 μm
- 1.0 μm
- 5.0 μm
- 10.0 μm

#### Seal Option:

- Silicone
- EPDM
- Viton
- NBR
- Teflon Encapsulated Viton
- Teflon Encapsulated Silicone

### **End Modification:**

- 222 O-Rings, Flat
- 222 O-Rings, Fin
- 226 O-Rings, Flat
- 226 O-Rings, Fin
- DOE Flat Gasket
- 222 O-Rings, Fin with 316L SS Insert
- 226 O-Rings, Fin with 316L SS Insert

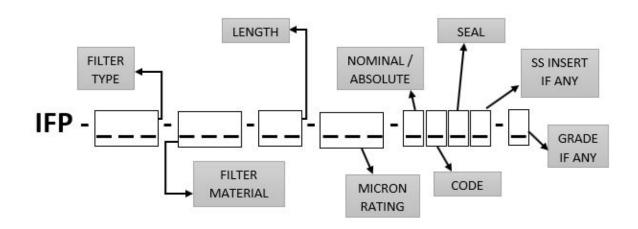






# **Ordering Information:**

# FILTER PART NUMBER



Filter Type	Filter Material	Length	Micron Rating	Absolute / Nominal	End Modification Code	Seal	Insert	Grade
<b>CRT</b> : Cartridge	<b>PTFE</b> : Hydrophobic PTFE	10: 10-Inch 20: 20-Inch 30: 30-Inch 40: 40-Inch	001: 0.1 μm 002: 0.22 μm 004: 0.45 μm 010: 1.0 μm 050: 5.0 μm 100: 10.0 μm	A: Absolute N: Nominal	0: DOE 2: 222/Flat 3: 222/Fin 6: 226 Fin 7: 226/Flat	S: Silicone E: EPDM V: Viton N: NBR F: Teflon	<b>5:</b> SS Insert	<b>E:</b> Electronic

7914 Ajay Dr. Sun Valley, CA 91352 Tel: (818) 504-8115 - Office

Tel: (818) 917-9538 - Cell

