

International Filter Products

Revolutionary systems for your industry

CRT-PTFE Series PTFE Filter Cartridge

The CRT-PTFE filter cartridge is a versatile solution for microelectronics applications, offering a cost-effective alternative to all-fluoropolymer cartridges. Its PTFE membrane and high-purity polypropylene supports strike a balance between superior retention and cleanliness, ensuring excellent flow and extended operational life. Ideal for ultrapure microelectronics fluids and gases, the hydrophobic PTFE membrane serves as an efficient barrier to minimize moisture content in gases. CRT-PTFE cartridges boast quick installation and reduced extractables, along with impressive liquid and gas flow rates, PTFE/PP construction for outstanding chemical resistance, a wide range of configurations and ratings to suit various needs, and rigorous 100% integrity testing in a cleanroom environment, making them the reliable and economical choice for microelectronics processes.

Application

- > Aggressive Chemicals
- Wet etch
- Electroplating of Copper
- Strong / Weak Acids
- Ultrapure electronics-grade gases
- Nickel Plating

- Strong / Weak Bases
- Solvents
- Photochemicals

Part Number: CRT-PTFE-10-XXX-X6S / CRT-PTFE-10-XXX-X6S-5









FP International Filter Products

Revolutionary systems for your industry

Technical Data Sheet

Micron Rating:

- 0.20 µm
- 0.45 µm
- 1.0 µm

Effective Filtration Area:

- 5-Inch; 3.75 *ft*² (0.35 *m*²)
- 10-lnch; 7.5 ft^2 (0.7 m^2)
- 20-Inch; 15.0 *ft*² (1.4 *m*²)
- 30-Inch; 22.5 *ft*² (2.1 *m*²)

Materials of Construction:

Membrane: PTFE (Polytetrafluoroethylene - Fluoropolymer)

Membrane Feature: Hydrophobic, Broad Chemical Compatibility, High Flow Rate

Media Supports: Polypropylene

Shell, Cage, Core, End Caps: Polypropylene

O-Rings: Silicone (Standard)

Sealing: Thermally Bonded

Operating Conditions:

Maximum Forward Differential Pressure:

Liquid: 5.5 bar (80psi) at $77^{\circ}F/25^{\circ}C$

Gas: 4.1 bar (60psi) at 77°F/25°C

Minimum Burst Pressure: 8.3 bar (120psi) at 77°F/25°C

Maximum Reverse Differential Pressure: 3.0 bar (44psi) at 68°F/20°C

Maximum Operating Temperature: 176°F/80°C at 0.7 bar (10psi)

[Contact International Filter Products for high-temperature application above 122°F/50°C operating temperature]

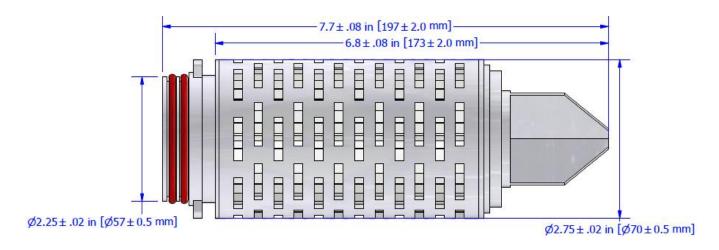




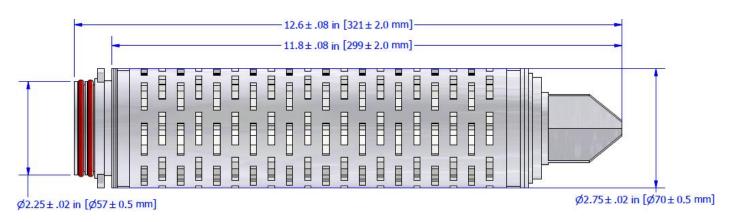


Nominal Dimension:

Part Number: CRT-PTFE-05-XXX-X6X / CRT-PTFE-05-XXX-X6X-5



Part Number: CRT-PTFE-10-XXX-X6X / CRT-PTFE-10-XXX-X6X-5

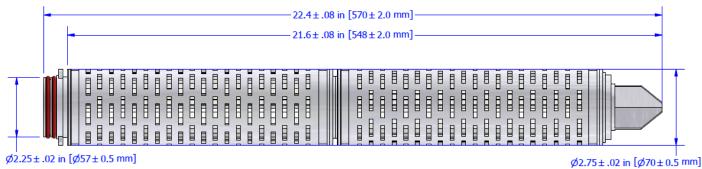




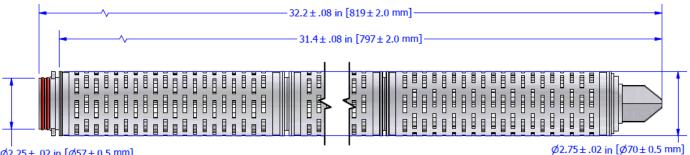




Part Number: CRT-PTFE-20-XXX-X6X / CRT-PTFE-20-XXX-X6X-5



Part Number: CRT-PTFE-30-XXX-X6X / CRT-PTFE-30-XXX-X6X-5



 $\emptyset 2.25 \pm .02$ in $[\emptyset 57 \pm 0.5$ mm]

Typical Filtered Volume:

- 5-Inch; 50L-200L
- 10-Inch; 100L-400L
- 20-Inch; 200L-800L •
- 30-Inch; 300L-1,200L







Performance Attributes:

Water flow rates (if pre-wet with Alcohol)					
Micron rating	gpm/psid	Lpm/100mbar			
0.20 µm	3.2	18			
0.45 µm	7.6	42			
1.0 µm	9.1	50			

Sterilization:

Autoclave: The filters can be sterilized by autoclaving for up to 50 cycles at 125 °C (257 °F) for 30 minutes.

Steam-In-Place: The filters can also be sterilized by steam-in-place procedure up to 30 cycles at 135 °C (275 °F) for 30 minutes at less than 0.3 bar differential pressure.

Sanitization: The filters can also be sanitized by hot water or common chemicals that are compatible with filter components.

Cleanliness (particle shedding):

If pre-wet with Alcohol: <1 particles/ml >0.2µm after 6gal @ 1gpm

Data as from open bag and installed, no additional installation flushing.

TOC/Resistivity Rinse-up (if pre-wet with Alcohol):

TOC rinse-up to background plus 5ppb of feed after 70gal @ 1gpm.

Resistivity Rinse-up:

Resistivity rinse-up to background minus 0.2megohm-cm of feed after 20gal @ 1gpm.

Animal-Derived Components & TSE/BSE Risk:

No animal-derived material is intentionally added or used during the manufacture of this product.

Shelf Life:

The CRT-PTFE Cartridges have a shelf life of 5 years from the date of manufacture.









CRT-PTFE Series PTFE Cartridge

(Chemical Grade)

Ordering Guide

CRT PTFE [1] [2] A [3] [4] [5] [6]						
[1]	[2]	[3]	[4]	[5]	[6]	
Length	Micron Rating	End Modification	O-Ring / Gasket Material	Optional	Grade	
 05 : 5-Inch 10 : 10-Inch 20 : 20-Inch 30 : 30-Inch 40 : 40-Inch 	 002 : 0.20 μm 004 : 0.45 μm 010 : 1.0 μm Note: All final membranes are sterilizing grade. 	 2: 222 O-Ring Flat 6: 226 O-Ring Fin 7: 226 O-Ring Flat 0: DOE Flat Gasket 	 S: Silicone E: EPDM N: Buna-N PV: Teflon Encapsulated Viton PS: Teflon Encapsulated Silicone V: Viton 	 -5 : Stainless Steel Insert 	• -C : Chemical Grade	

CRTPTFE10002A6S-C

IFP CRT-PTFE Cartridge, $0.2\mu m$ PTFE hydrophobic membrane (Sterilizing Grade), 10.0-inch Long, Filtration Area 0.7 m², 226 O-Rings with Fin, Silicone Double O-Rings.

Part Number

Description







Fp International Filter Products

Revolutionary systems for your industry

Special Configuration:

Layer Option:

- Single Layer
- Dual Layer

Micron Rating Option:

- 0.2 Micron
- 0.45 Micron
- 1.0 Micron

End Modification Option:

- 2 : 222 O-Ring Flat
- 6 : 226 O-Ring Fin
- 7 : 226 O-Ring Flat
- 0: DOE Flat Gasket

O-Ring/Gasket Material Option:

- S : Silicone
- E : EPDM
- N : Buna-N
- PV : Teflon Encapsulated Viton
- PS : Teflon Encapsulated Silicone
- V : Viton



