CRT-PP Series Polypropylene Filter Cartridge

The CRT-PP Biological Grade filter cartridge represents a breakthrough in filtration technology, offering an absolute rating of 99.98% efficiency for precise particle retention. Its exceptional chemical compatibility and robust structural integrity ensure extended durability and consistent performance. Each cartridge is pre-flushed with pharmaceutical-grade water, and undergoes 100% integrity testing. Manufactured without animal-derived materials, the CRT-PP cartridge is a sustainable alternative to traditional filters like lenticular filters and cellulose sheets, enhancing filtration quality while reducing waste.

Application

- Buffers and Media
- Oil Base Solution
- Vaccines
- Scale up processing

- Acids & Bases
- Fine Chemicals
- Biologics
- Proteins

- > Fermentation Broths
- Pharmaceuticals
- Antibiotics
- Serums

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





CRT-PP Series PP Cartridge - Biological Grade 226 O-Rings with Fin







Technical Data Sheet

Micron Rating:

■ 0.10 µm

■ 0.20 µm

■ 0.45 µm

■ 0.65 µm

■ 0.80 µm

■ 1.0 µm

■ 3.0 µm

■ 5.0 µm

■ 10.0 µm

■ 15.0 um

■ 25.0 µm

■ 50.0 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:

Media: Polypropylene (PP) Media Chemical Grade

Membrane Feature: Flushed with ultrapure DI water, 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°F/25°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

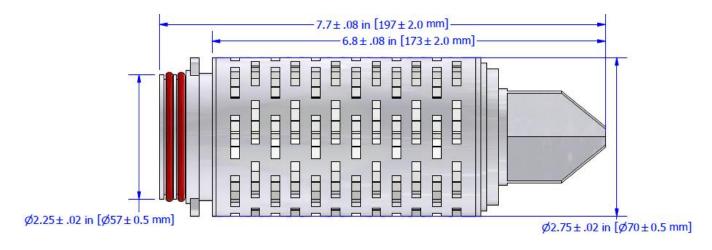
Maximum Operating Temperature: 176°F/80°C at 0.7 bar (10psi)

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

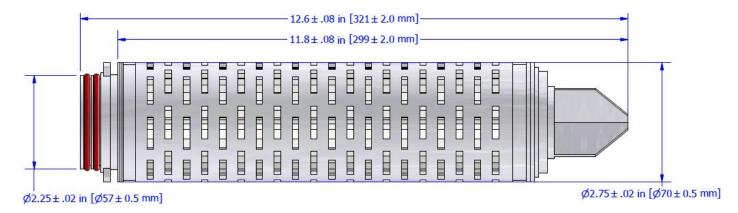


Nominal Dimension:

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

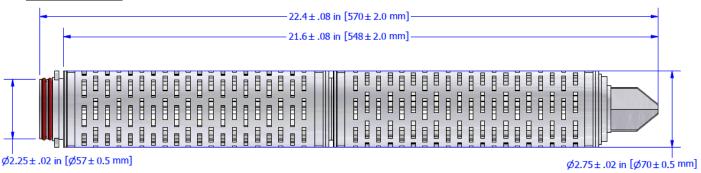


Part Number: CRT-PP-10-XXX-X6X / CRT-PP-10-XXX-X6X-5

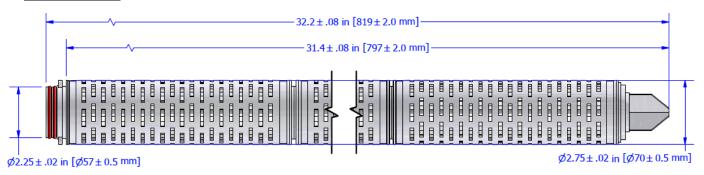




Part Number: CRT-PP-20-XXX-X6X / CRT-PP-20-XXX-X6X-5



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



Typical Filtered Volume:

5-Inch; 50L-250L

10-Inch; 100L-500L

• 20-Inch; 200L- 1,000L

30-Inch; 300L-1,500L





Performance Attributes:

Water flow rates					
Micron rating	gpm/psid	Lpm/100mbar			
0.10 μm	0.9	4.94			
0.20 μm	1.85	10			
0.45 μm	2.4	13			
0.65 μm	4.4	28			
0.80 µm	4.7	26			
1.0 µm	8	45			
3.0 µm	24	135			
5.0 μm	40	225			
10.0 µm	80	450			
15.0 µm	120	675			
25.0 µm	200	1,125			
50.0 μm	400	2,250			

Biocompatibility:

- ASTM F756-17 Hemolysis
- USP <88> (USP Class VI Plastics) Biological Reactivity Tests, In Vivo
- USP <87> / ISO 10993-5, In Vitro Cytotoxicity
- 21 CFR 177 FDA Indirect Food Additive





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.

Animal-derived Components:

No animal-derived material is intentionally added or used during the manufacture of IFP CRT-PP cartridges.

Human and Veterinarian Use:

The product is safe for Human and Veterinarian use. CGMP CFR part 210 & 211, additional requirement of 21 CFR part 600 and 21 CFR part 680 are applicable to the aseptic manufacturing process.

RoHS:

Restriction of Hazardous Substances (RoHS 3) Directive 2015/863

REACH:

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals) Article 57, Regulation No. 1907/2006)

Traceability:

For traceability and easy identification:

- A Certificate of Conformance is provided with each capsule.
- Each filter bag and box are labeled with the product part number, lot number, and identifying characteristics.

Each capsule is engraved and labeled with the product part number, lot number, and identifying characteristics.

Shelf Life:

The CRT-PP Biological Grade cartridges have a shelf life of 5 years from the date of manufacture.





CRT-PP Series PP Cartridge

(Biological Grade)

Ordering Guide

CRT PP [1] [2] A [3] [4] [5] [6]						
[1]	[2]	[3]	[4]	[5]	[6]	
Length	Micron Rating	End Modification	O-Ring / Gasket Material	Optional	Grade	
 10:10-Inch 20:20-Inch 30:30-Inch 40:40-Inch 05:5-Inch 	 001: 0.10 μm 002: 0.20 μm 004: 0.45 μm 006: 0.65 μm 008: 0.80 μm 010: 1.0 μm 030: 3.0 μm 050: 5.0 μm 100: 10.0 μm 250: 25.0 μm 500: 50.0 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	• -5 : Stainless Steel Insert	• -B: Biological Grade	

Example:

CRTPP10002A6S-B

IFP CRT PP Cartridge, 0.2µm PP hydrophilic membrane (Biological Grade), 10.0-inch Long, Filtration Area 0.7 m², 226 O-Rings with Fin, Silicone Double O-Rings.

Part Number Description





Special Configuration:

Layer Option:

- Single Layer
- Dual Layer

Micron Rating Option:

- 0.04 Micron
- 0.1 Micron
- 0.2 Micron
- 0.45 Micron
- 0.65 Micron
- 0.8 Micron
- 1.2 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

