

# Capsule-Clear™ PTFE Pleated Filters

*Pleated Hydrophobic PTFE Capsule Filters for Venting, Lab Scale, and Small Volume Applications*



## Description

Capsule-Clear™ PTFE Pleated Filters are intended for applications where sterile filtration or bio-burden reduction cannot be compromised. Purolator Liquid Process has designed the Capsule-Clear line to provide the retention, reliability, and robustness required for the Pharmaceutical and Bio-tech industries.

Capsule-Clear PTFE Filters are manufactured to the most current quality standards and are constructed with high throughput, single layered PTFE membrane for high flow rates in critical applications. The capsule structure has been tested at 2.5 times the recommended operating pressure and has been pulse pressure tested to ensure reliable performance in the most stringent applications. The capsule vent is placed high to allow maximum venting and the low point drain minimizes product loss due to excessive hold up volumes. PTFE capsules are excellent for filtering solvents that would damage other membrane materials. The polypropylene support materials in combination with the PTFE membrane give the filters a broad chemical spectrum while maintaining complete integrity.

Capsule-Clear PTFE filter capsules comply with the operating requirement of the Bio-tech and Pharmaceutical industry. Purolator's capsules are assembled in a Class 10,000 Clean Room and are integrity tested against intrusion to ensure absolute retention as correlated to a liquid bacterial challenge (0.2 µm). All materials of construction meet the requirements of USP Class VI and are FDA listed for food and beverage contact per 21 CFR. Purolator offers standard Microbial, Biological, and Pharmaceutical grade PTFE Capsule-Clear filters. The Pharmaceutical Grade is tested by our laboratory to ensure that the extractable endotoxin level is below 0.125 EU/mL. A Certificate of Conformance is provided upon request for the Pharmaceutical and Biological Grade capsules.

## Features and Benefits

- Single Layer PTFE construction
- Validated for Multiple Streaming Cycles
- Absolute bacterial retention for assured process sterility
- Water Intrusion tested
- Vent placed for ease of use and maximum venting
- Minimal hold-up volume
- Robust capsule construction for use up to 75 psi
- Three sizes available for use in lab scale, pilot scale, and production applications

## Materials of Construction

Membrane	Hydrophobic PTFE
Support Media	Polypropylene
Bell and Base	Polypropylene
Core and Endcaps	Polypropylene

## Applications

- Sterile Venting
- Sterile Filtration of Air and Gas
- Sterile Filtration of Solvents
- Industrial Fermentation
- Bulk Tank Vents
- Containment Filter for Kill Tanks
- Solvents Filtration
- Phage Removal from Air
- Instrument and Clean Process Air
- Vent for Autoclaves, Stills, WFI Tanks

## Compliance

	USP Class VI	FDA Listed Per 21 CFR
Membrane	Pass	Yes
Support Media	Pass	Yes
Bell and Base	Pass	Yes
Core and Endcaps	Pass	Yes

## Nominal Dimensions

Series	900	1700	3300
Diameter (inches)	3.0	3.0	3.0
Body Length (inches)	2.3	3.6	6.1
Filtration Area (cm <sup>2</sup> )	900	1700	3300

## Operating Conditions

Maximum Differential Pressure	Maximum Operating Temperature
75 psid (5.2 bar)	104 °F (40 °C)

## Sterilization

Autoclave	30 minutes	259 °F (126 °C)
In-line Steam*	30 minutes	275 °F (135 °C)

\*Rated for 140 cycles

## Integrity

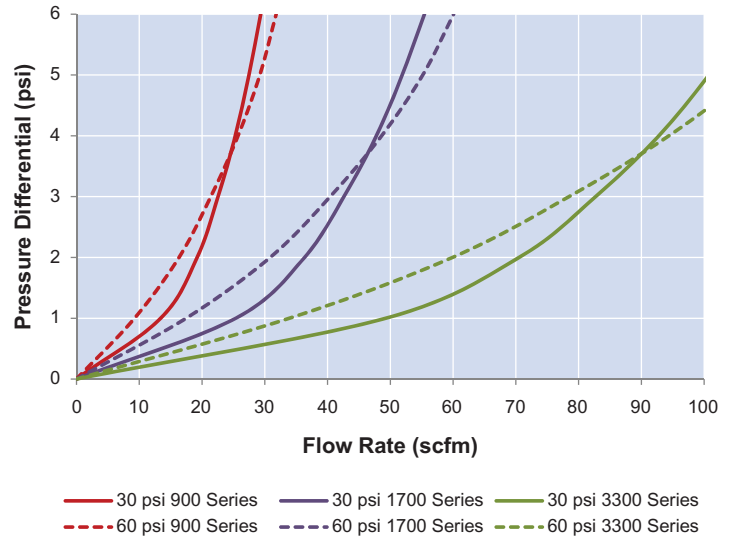
Length Designation	900	1700	3300
Maximum Water Intrusion at 30 psi (mL)	4.3	8.2	15.9
Minimum Bubble Point 70/30 IPA (psi)	16	16	16
(bar)	1.1	1.1	1.1

## Cartridge Selection Guide

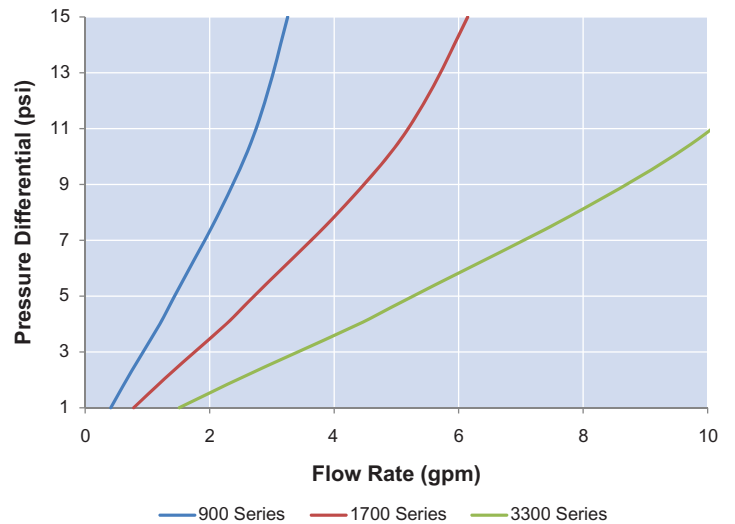
Product	Media	Micron Rating	Series	Layers	Effective Filtration Area (cm <sup>2</sup> )	Inlet Style	Outlet Style
W	T	002	P	1	1	A	A
W = Capsule	T = PTFE	002 = 0.2 µm	P = Pharmaceutical B = Biological M = Microbial S = Standard*	1 = Single Layer	1 = 900 2 = 1700 3 = 3300	A = Tapered Hose Barb 3/8 inch B = Straight Hose Barb 1/2 inch C = 1/4 inch Male NPT E = 1 1/2 inch Sanitary Flange	A = Tapered Hose Barb 3/8 inch B = Straight Hose Barb 1/2 inch C = 1/4 inch Male NPT E = 1 1/2 inch Sanitary Flange

\*Standard grade is not integrity tested

## Air Flow Rate



## Water Flow Rate



## Purolator Liquid Process

8314 Tiogawoods Drive  
Sacramento, CA 95828

Phone: 916-689-2328  
Fax: 916-689-1035  
E-mail: sales@purolator-lp.com

