



## BPVWL Micro Capsule Filters

Hydrophilic PVDF Membrane

BPVWL Micro Capsule filters consist of a single layer, hydrophilic, high capacity polyvinylidene fluoride (PVDF) membrane. These filters are used for bioburden control and clarification/prefiltration in aqueous liquids. Pore sizes range from 0.22 to 1.0  $\mu\text{m}$ , and are available pre-sterilized.

The hydrophilic PVDF filters deliver high flow and throughput with the broad chemical compatibility of a fluoropolymer, making them ideal for filtering aggressive aqueous solutions.

Critical Process provides unrivaled delivery times, technical consulting before purchasing, and very competitively priced high-performance products. Our comprehensive testing & analysis and validation services support your team whenever they need it. Your process experts partnering with our filtration experts is how we deliver your company's solution right the first time.

### Bioburden Control

### Clarification & Prefiltration

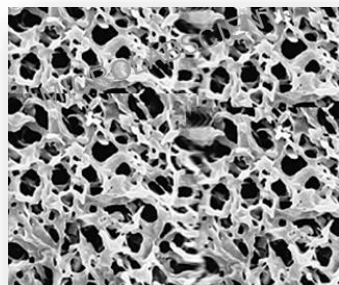


#### MICRO CAPSULES – Nominal Dimensions

Body Length: 1.9 in. (4.8 cm)

Overall Length: 2.8 to 3.8 in. (7.1 to 9.7 cm)

Outside Diameter: 2.6 in. (6.6 cm)



PVDF is the recommended media for bioburden control in:

- LVPs & SVPs
- Buffers
- Plasma Products
- Serum
- Vaccines
- WFI
- Clean-in-Place Solutions

## Maximum Operating Parameters

	MICRO CAPSULES
<b>Liquid Operational Pressure</b>	80 psi at 68 °F (5.52 bard at 20 °C)
<b>Gases Operational Pressure</b>	60 psi at 68 °F (4.14 bar at 20 °C)
<b>Operating Temperature (water)</b>	110 °F at 30 psid (43 °C at 2.07 bard)
<b>Forward Differential Pressure</b>	Liquid - 80 psid at 68 °F (5.52 bard at 20 °C)
<b>Reverse Differential Pressure</b>	50 psid at 68 °F (3.45 bard at 20 °C)
<b>Recommended Changeout Pressure</b>	35 psid (2.41 bard)

## Sanitization & Sterilization

<b>Autoclave*</b>	250 °F (121 °C), 30 min, 5+ cycles
<b>Chemical Sanitization</b>	Performed using industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

### Endotoxins

The levels of bacterial endotoxins in aqueous extracts from BPVWL Micro Capsule filters are below current USP limits as specified for water for injection.

### Extractables

BPVWL Micro Capsule filters typically exhibit low levels of non-volatile residues.

### Non-Fiber Releasing

The BPVWL Micro Capsule filters comply with Title 21 CFR sections 210.3 (b)(6) and 211.72, for non-fiber releasing filters.

### FDA Compliance

Materials meet the requirements listed by the FDA as appropriate for use in articles intended for repeated food contact as specified in Title 21 CFR sections 174.5, 177.1500, 177.1520, 177.1630, 177.2440, and 177.2600 as applicable.

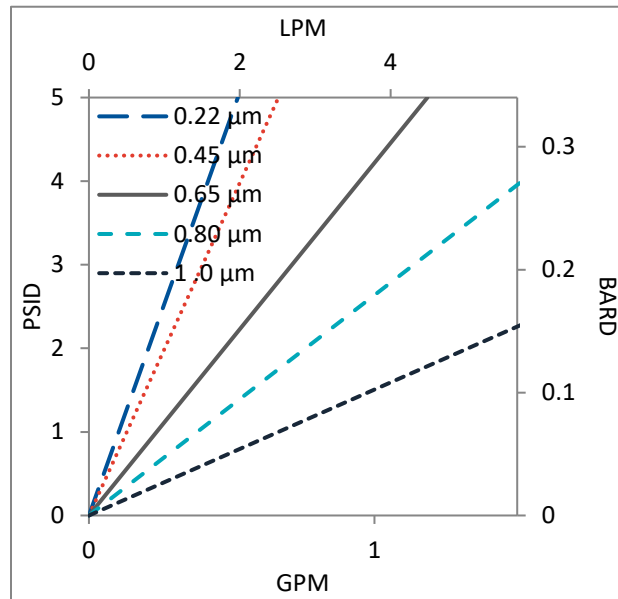
### Filtration Area (Nominal)

Area	0.569 ft <sup>2</sup>
	529 cm <sup>2</sup>

### Construction Materials

<b>Filtration Media</b>	Hydrophilic High Capacity Polyvinylidene Fluoride (PVDF) Membrane
<b>Media Support</b>	Polypropylene
<b>End Caps, Center Core, Outer Support Cage, Capsule Housing</b>	Polypropylene
<b>Sealing Method</b>	Thermal Bonding
<b>O-Rings/Gaskets Cartridges only</b>	Buna, Viton® (or FKM), EPDM, Silicone, FEP Encapsulated Silicone, FEP Encapsulated Viton (or FKM)

## Flow Rates for BPVWL Micro Capsules by Pore Size



Flow rates for Micro Capsule filters are per filter. The test fluid is water at ambient temperature. Flows are tested using a Micro capsule filter with ½" Sanitary inlet and outlet ports. Rates will vary based on end configuration of the Micro capsule.

## BPVWL Micro Capsule Filters Ordering Information

All Critical Process filters are configurable to meet customer specifications. Fill in the corresponding codes in the boxes below to build your Part Number.

To consult with one of our technical team members, request a quote or place an order: call (603) 880-4420 Ext. 106, or send an email to [sales@criticalprocess.com](mailto:sales@criticalprocess.com)

### Micro Capsule Filters

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<b>Pore Size Code</b> -20 = 0.22 µm -40 = 0.45 µm -60 = 0.65 µm -80 = 0.80 µm 1-0 = 1.0 µm	<b>Pre-Sterilized or Not</b> S = Pre-Sterilized N = Not Sterilized	<b>Inlet</b> 1 = 1/8" Hose Barb 2 = 1/4" Hose Barb 3 = 1/2" Hose Barb 4 = Luer Lock 5 = 1/2" Sanitary* 6 = 1/4" MNPT	<b>Inlet Vent Port</b> 1 = 1/8" Hose Barb 2 = 1/4" Hose Barb 3 = 1/2" Hose Barb 4 = Luer Lock 6 = 1/4" MNPT 7 = Side Bleed Valve	<b>Outlet</b> 1 = 1/8" Hose Barb 2 = 1/4" Hose Barb 3 = 1/2" Hose Barb 3B = 1/2" Hose Barb with Filling Bell 4 = Luer Lock 5 = 1/2" Sanitary* 6 = 1/4" MNPT	<b>Side Vent O-Ring**</b> B = Buna E = EP S = Silicone V = Viton (or FKM) K = FFKM	<b>Outlet Vent Port</b> 1 = 1/8" Hose Barb 2 = 1/4" Hose Barb 3 = 1/2" Hose Barb 4 = Luer Lock 6 = 1/4" MNPT 7 = Side Bleed Valve
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\*When choosing the Sanitary Inlet/Outlet, the Luer Lock or bleed valve option is required for the Vent Port

\*\* O-Ring is only available on Bleed Valve



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