FPVWB Cartridge Filters High Capacity Hydrophobic PVDF Membrane





FPVWB cartridges are hydrophobic and manufactured with high capacity PVDF polyvinylidene fluoride (PVDF) membrane. The proprietary membrane casting process creates a thick membrane with high contaminant holding capacity, excellent retention characteristics and high flow rates. PVWB membrane provides excellent throughput and is available in multiple retention ratings to help protect product quality and assure consumer safety.

Applications for FPVWB filters include bioburden control in nonaqueous liquids, compressed air filtration, Process gas filtration and as tank vent filters to proterct the integrity of products as they are stored in tanks.

All elements of the filter design from surface area to filter core, pleat configuration and pleat pack density have been optimized to provide increased cartridge life and lower filtration operating costs. Rugged construction ensures repeatable steaming.

Construction Materials

Filtration Media	High Capacity Hydrophobic PVDF Membrane			
Media Support	Polypropylene			
End Caps	Polypropylene			
Center Core	Polypropylene			
Outer Support Cage	Polypropylene			
Sealing Method	Thermal Bonding			
O-rings	Buna, Viton® (or FKM), EP, Silicone, FEP Encapsulated Silicone, FEP Encapsulated Viton (or FKM)			

Applications

- Process Gas
- Solvent Filtration
- Non-Aqueous Solutions
- Compressed Air Filtration
- Tank Vents

Dimensions

Length	5 to 40 in. (12.7 to 101.6 cm) nominal
Outside Diameter	2.75 in. (7.0 cm) nominal

Integrity Test Information

Representative samples from each manufacturing lot are tested for integrity to ensure consistent performance.

Maximum Operating Parameters

Differential Pressure Forward 	50 psid (3.4 bard) at 20 °C (68 °F)
• Reverse	40 psid (2.7 bard) at 20 °C (68 °F)
Operating Temperature	82 °C (180 °F) at 10 psid (0.69 bard) in water
Recommended Changeout Pressure	35 psid (2.4 bard)

Sanitization/Sterilization

Autoclave	121 °C (250 °F), 30 min, multiple cycles			
In-line Steam	135 °C (275 °F), 30 min, multiple cycles			
For all elevated temperature procedures above, a stainless steel				

For all elevated temperature procedures above, a stainless steel support ring is required.

Chemical Sanitization

Performed using industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite, and other selected chemicals.

Total Performance

Critical Process Filtration, Inc. is a vertically integrated manufacturer of filtration products to industries in which filtration is considered a critical part of the manufacturing process. We supply a complete line of products and services to help you cost effectively satisfy all your filtration requirements from a single source.

FDA and EC Compliance

All Critical Process Filtration cartridge filters are designed to meet the FDA requirements for processing food and beverage products. The materials used to construct food & beverage grade filters are 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 appropriate. FPVWB filters comply with Title 21 CFR sections 210.3 (b)(6) and 211.72, for non-fiber releasing filters. All materials used to make the filters are listed in European Commission Regulation EU/10/2011, Annex 1.

Quality Assurance and Standards

Our goal is to ensure our customers the greatest possible value for their filtration dollar. Our state of the art manufacturing facility and quality management system both meet ISO 9001:2008 standards. Each operation from assembly and test to cleaning, drying, and packaging is done in appropriately rated clean rooms. A sophisticated MRP system collects and processes real time data from manufacturing centers and inspection points. This allows variable and attribute data to be quickly and easily analyzed driving constant improvements in both quality and cost.

Extractables

Food & beverage grade filters typically exhibit low levels of nonvolatile residues.

Flow Rate

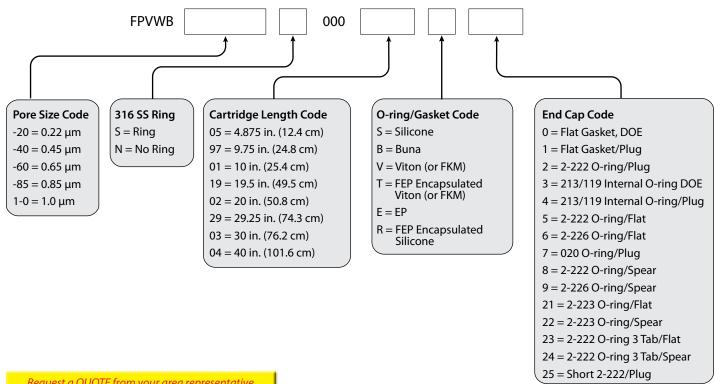
The Typical Flow Rates table represents typical water flow at ambient temperatures and a 1 psid (69 mbard) pressure differential across a single 10 in. cartridge element. Extrapolation for housings with multiple elements and higher pressure drops is acceptable, but as flows increase the pressure drop of the housing becomes more apparent

Typical Flow Rates

Pore Size	0.22 μm	0.45 µm	0.65 µm	0.85 µm	1.0 µm
Liquid Flow Rates (gpm)	1.1	1.4	2.5	4.0	7.0
Air/Gas Flow Rates (scfm)	>45	>72	>85	>91	>91

Ordering Information

Cartridge order numbers have several variables from pore size to end cap type. For example, Food & Beverage Grade High Capacity Hydrophobic PVDF Membrane, 0.22 Micron Rating, With SS Support Ring, 20" Length, Silicone O-Rings, 2-226/Spear End Cap Configuration = FPVWL-20S00002S9



Request a QUOTE from your area representative



Critical Process Filtration, Inc. One Chestnut Street • Nashua, NH 03060 Tel: 603.880.4420 • Fax: 603.880.4536

criticalprocess.com • sales@criticalprocess.com

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