

## FPD Mini-Capsule Filters

Pleated Polypropylene Depth Media



FPD Mini-Capsule filters are constructed with pleated Polypropylene depth media and designed to comply with all FDA requirements for the food industry. FPD Mini-Capsule filters are used for wine and beer clarification, as well as prefiltering water, food ingredients, cosmetics, chemicals, air and gases. Pore sizes range from 0.10 to 100  $\mu\text{m}$ . Additional filter devices scale from laboratory to full production using identical materials to ensure consistent results.

These cartridges have low extractables that may affect the taste of the product or other characteristics such as foaming or brightness. FPD Mini-Capsule filters have 99.9% retention efficiency at the rated pore size and are designed for high throughput because of our unique graded density construction. This design also allows for filter cleaning and re-use in some applications.

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.

### Clarification & Prefiltration

### Particle Filtration

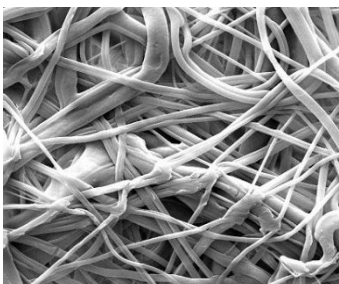


#### MINI-CAPSULES – Nominal Dimensions

Body Length: 2.85 in. (7.2 cm)

Overall Length – 3.75 to 5.19 in. (9.5 to 13.2 cm)

Outside Diameter: 2.95 in. (7.5 cm)



FPD Mini-Capsule filters are recommended for clarification & prefiltration in:

- Wine (clarification)
- Beer (clarification)
- Bottled Water
- Process Water
- Process Chemicals
- Air & Gases

## Maximum Operating Parameters

	MINI-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>	50 psid at 68 °F (3.45 bard at 20 °C)
<b>Reverse Differential Pressure</b>	40 psid at 68 °F (2.76 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.

## Filtration Area (Nominal)

	Pleated Depth Media
	0.44 ft <sup>2</sup>
Area	413 cm <sup>2</sup>

## Extractables

FPD Mini-Capsule filters typically exhibit low levels of non-volatile residues.

## Non-Fiber Releasing

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

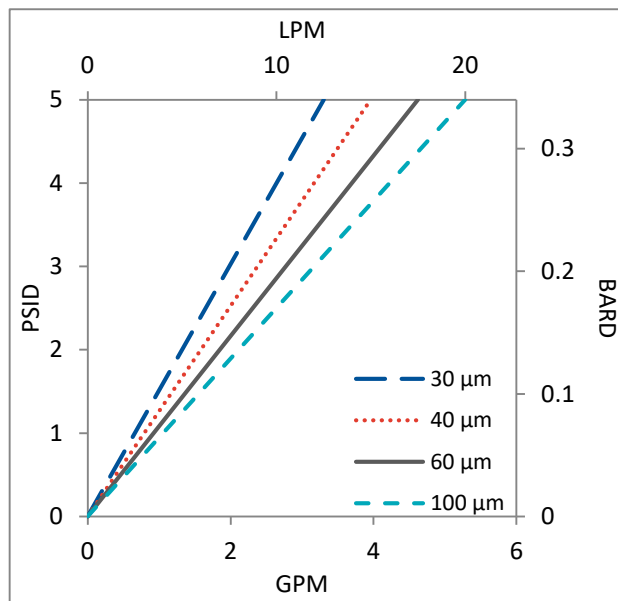
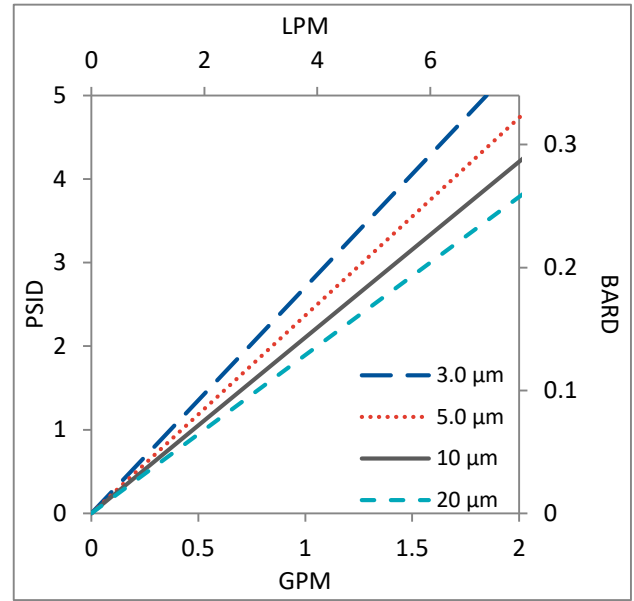
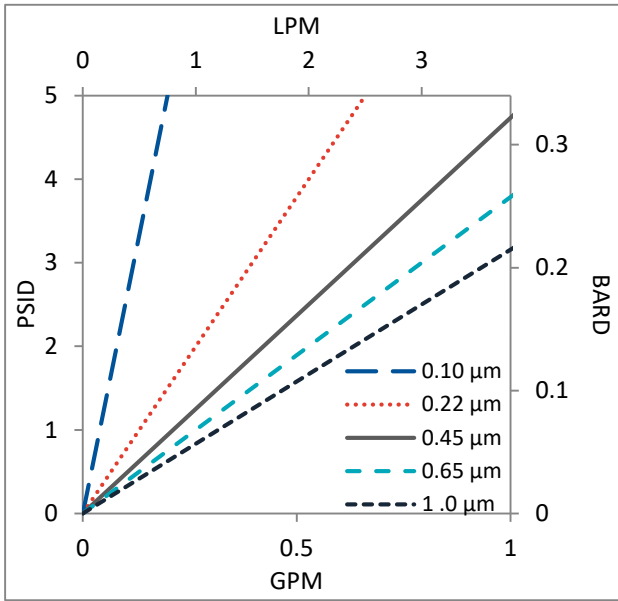
## FDA and EC Compliance

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. All materials used to make the filters are listed in European Commission Regulation EU/10/2011, Annex 1.

## Construction Materials

<b>Filtration Media</b>	Pleated Polypropylene Depth Media
<b>Media Support</b>	Polypropylene
<b>End Caps, Center Core, Outer Support Cage, Mini-Capsule Housing</b>	Polypropylene
<b>Sealing Method</b>	Thermal Bonding

## Flow Rates for FPD Mini-Capsules by Pore Size



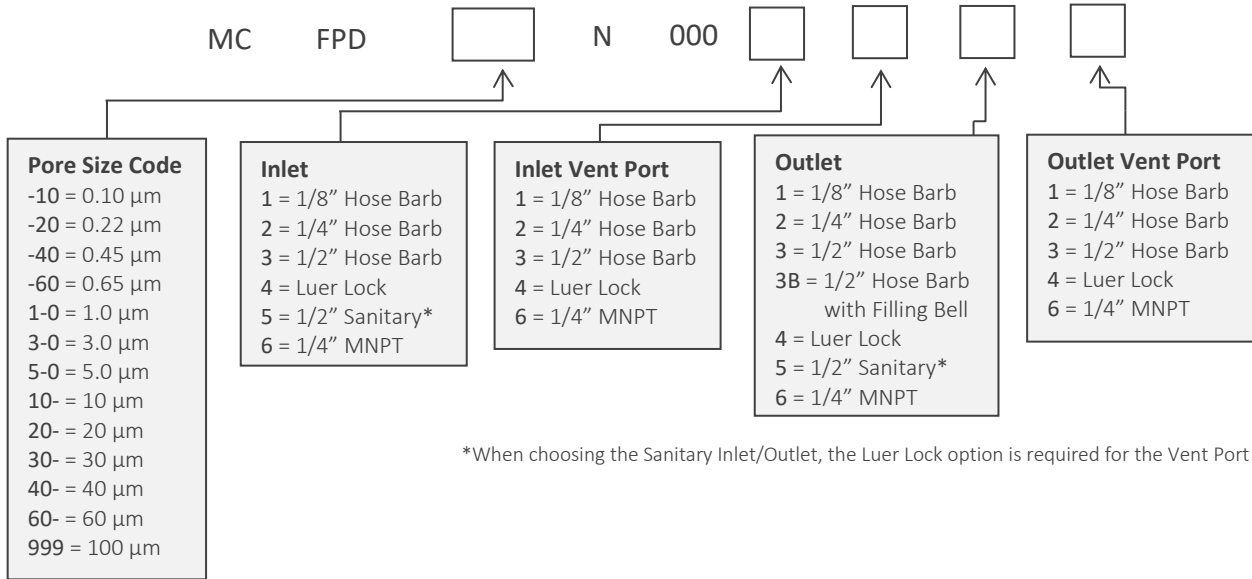
Flow rates for Mini-Capsule filters are per filter. The test fluid is water at ambient temperature. Flows are tested using a mini-capsule filter with 1/2" Sanitary inlet and outlet ports. Rates will vary based on end configuration of the mini-capsule.

## FPD Mini-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)

### Mini-Capsule Filters



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