



## EPD/HT Filters

Pleated Polypropylene Depth Media



EPD/HT cartridge filters are constructed with pleated Polypropylene Depth Media for prefiltering critical process liquids including water, chemicals and solvents. They are designed for applications running at elevated temperatures (up to 203°F). All EPD products are designed to meet the needs of the electronics and high-purity chemical industries. Pore sizes range from 0.10 to 100  $\mu\text{m}$  and filter sizes scale from laboratory to full production using identical materials to ensure consistent results.

These hydrophilic filters have superior retention and protect downstream filters by removing large amounts of particulate and other contaminants. EPD/HT filters are rated at 99.9% efficiency at the indicated pore size. Designed for high capacity and long life, the EPD/HT is a very cost-effective filter.

EPD/HT filters are pulse power flushed until the rinse effluent reaches 18+ Megohm-cm and less than 3ppb TOC.

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.

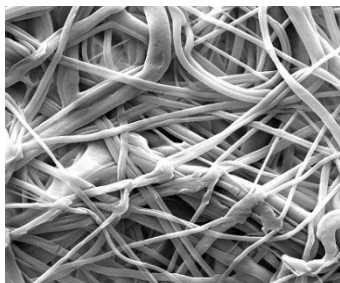
### Fine Particle Removal



#### CARTRIDGES – Nominal Dimensions

Length: 5 to 40 in. (12.7 to 101.6 cm)

Outside Diameter: 2.75 in. (7.0 cm)



EPD/HT filters are recommended for clarification & prefiltration in:

- Ultrapure DI Water
- Chemicals
- Acids & Bases
- Plating Solutions
- Etch Baths
- Solvents

## Maximum Operating Parameters

CARTRIDGES	
<b>Operating Temperature (water)</b>	203 °F at 30 psid (95 °C at 2.07 bard)
<b>Forward Differential Pressure</b>	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>Filtered Hot Water*</b>	90 °C (194 °F), 30 minutes, multiple cycles, max 3 psid forward flow
<b>Inline Steam*</b>	275 °F (135 °C), 30 min, 25+ cycles
<b>Autoclave*</b>	250 °F (121 °C), 30 min, 25+ cycles
<b>Chemical Sanitization</b>	Performed using industry standard concentrations of hydrogen peroxide, peracetic acid, sodium hypochlorite and other selected chemicals.

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

## Filtration Area (Nominal)

	CARTRIDGES				
	5"	10"	20"	30"	40"
Length	12.7cm	25.4cm	50.8cm	76.2cm	101.6cm
Area	2.9 ft <sup>2</sup>	6.24 ft <sup>2</sup>	12.48 ft <sup>2</sup>	18.72 ft <sup>2</sup>	24.96 ft <sup>2</sup>
	0.27m <sup>2</sup>	0.58m <sup>2</sup>	1.16m <sup>2</sup>	1.74m <sup>2</sup>	2.32m <sup>2</sup>

## Construction Materials

<b>Filtration Media</b>	Pleated Polypropylene Depth Media
<b>Media Support</b>	Polypropylene
<b>End Caps, Center Core, Outer Support Cage</b>	Polypropylene
<b>Sealing Method</b>	Thermal Bonding
<b>O-Rings/Gaskets</b>	Buna, Viton® (or FKM), EPDM, Silicone, FEP Encapsulated Silicone, FEP Encapsulated Viton (or FKM)

## Extractables

EPD/HT filters typically exhibit low levels of non-volatile residues.

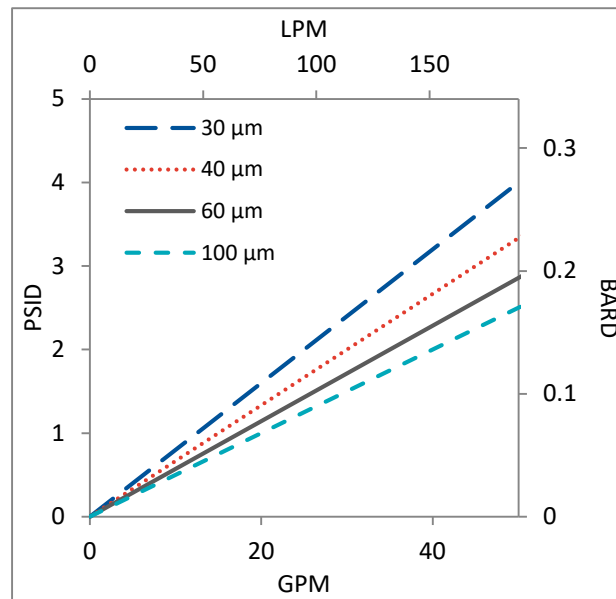
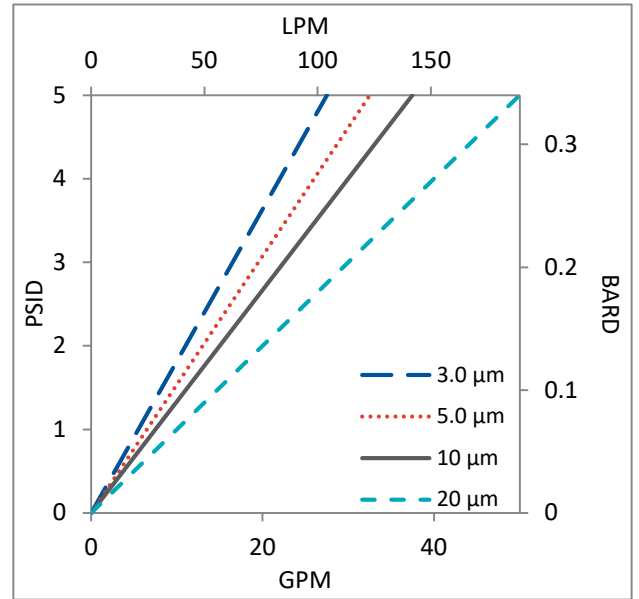
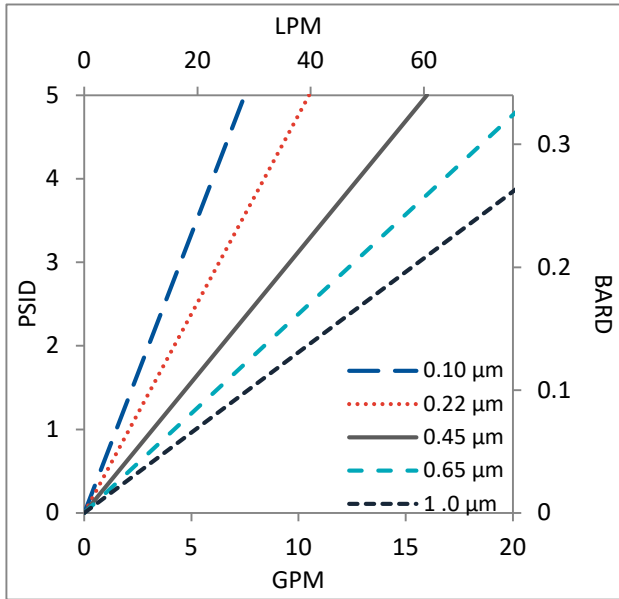
## TOC and Conductivity

EPD/HT filter water effluent conforms with the TOC and water conductivity standards of SEMI Standard F63 after an appropriate flush with ultrapure water.

## Non-Fiber Releasing

EPD/HT filters comply with Title 21 CFR sections 210.3 (b)(6) and 211.72, for non-fiber releasing filters.

## Flow Rates for EPD/HT Cartridges by Pore Size



Flow rates for Cartridge filters are per 10-inch length. The test fluid is water at ambient temperature.

## EPD/HT Filters Ordering Information

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 or [contact us here](#).

### Cartridge Filters

EPD		S	OHT			
<b>Pore Size Code</b> -10 = 0.10 µm -20 = 0.22 µm -40 = 0.45 µm -60 = 0.65 µm 1-0 = 1.0 µm 3-0 = 3.0 µm 5-0 = 5.0 µm 10- = 10 µm 20- = 20 µm 30- = 30 µm 40- = 40 µm 60- = 60 µm 999 = 100 µm	<b>Length</b> 05 = 5 in. (12.7 cm) 01 = 10 in. (25.4 cm) 02 = 20 in. (50.8 cm) 03 = 30 in. (76.2 cm) 04 = 40 in. (101.6 cm)	<b>O-Ring/Gasket Code</b> S = Silicone B = Buna V = Viton (or FKM) T = FEP Encapsulated Viton (or FKM) E = EPDM R = FEP Encapsulated Silicone	<b>End Cap Code</b> 0 = Flat Gasket, DOE 2 = 2-222 O-ring/Plug 5 = 2-222 O-ring/Flat 6 = 2-226 O-ring/Flat 8 = 2-222 O-ring/Spear 9 = 2-226 O-ring/Spear			



One Chestnut Street  
Nashua, NH 03060  
603.880.4420  
FAX: 603.880.4536

[CriticalProcess.com](http://CriticalProcess.com)

The information contained herein is subject to change without notice. The Critical Process Filtration logo is a trademark of Critical Process Filtration, Inc. Viton is a trademark of DuPont Performance Elastomers L.L.C.  
© 2021 Critical Process Filtration, Inc. • All Rights Reserved

Data Sheet EPDHTDS Rev B