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 µm 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.

EPD-HT filters are recommended for clarification & prefiltration in:
- Ultrapure DI Water
- Chemicals
- Acids & Bases
- Plating Solutions
- Etch Baths
- Solvents
Maximum Operating Parameters

| CARTRIDGES |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| **Operating Temperature (water)** | 203 °F at 30 psid (95 °C at 2.07 bard) |
| **Forward Differential Pressure** | 80 psid at 68 °F (5.52 bard at 20 °C) |
| **Reverse Differential Pressure** | 50 psid at 68 °F (3.45 bard at 20 °C) |
| **Recommended Changeout Pressure** | 35 psid (2.41 bard) |

Sanitization & Sterilization

| **Filtered Hot Water*** | 90 °C (194 °F), 30 minutes, multiple cycles, max 3 psid forward flow |
| **Inline Steam*** | 275 °F (135 °C), 30 min, 25+ cycles |
| **Autoclave*** | 250 °F (121 °C), 30 min, 25+ cycles |

**Chemical Sanitization**

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

Filtration Area (Nominal)

| Length | CARTRIDGES |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| 5” | 10” | 20” | 30” | 40” |
| 12.7cm | 25.4cm | 50.8cm | 76.2cm | 101.6cm |
| 2.9 ft² | 6.24 ft² | 12.48 ft² | 18.72 ft² | 24.96 ft² |
| 0.27m² | 0.58m² | 1.16m² | 1.74m² | 2.32m² |

Construction Materials

<table>
<thead>
<tr>
<th>Filtration Media</th>
<th>Pleated Polypropylene Depth Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Media Support</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>End Caps, Center Core, Outer Support Cage, Capsule Housing</td>
<td>Polypropylene</td>
</tr>
<tr>
<td>Sealing Method</td>
<td>Thermal Bonding</td>
</tr>
<tr>
<td>O-Rings/Gaskets</td>
<td>Buna, Viton® (or FKM), EPDM, Silicone, FEP Encapsulated Silicone, FEP Encapsulated Viton (or FKM)</td>
</tr>
</tbody>
</table>

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.
Cartridge Filters

Pore Size Code
-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

SS Ring
S = Silicone
B = Buna
V = Viton (or FKM)
T = FEP Encapsulated Viton (or FKM)
E = EPDM
R = FEP Encapsulated Silicone

Length
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)

O-Ring/Gasket Code
S = Silicone
B = Buna
V = Viton (or FKM)
T = FEP Encapsulated Viton (or FKM)
E = EPDM
R = FEP Encapsulated Silicone

End Cap Code
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

Housings
CPF offers Model CSH sanitary housings in Single-Round (Inline and T-Style) and Multi-Round (3, 6, 8, 12 and 21-round) configurations.