

Filter Data Sheet

EPD_{grade} Polypropylene Depth Media Filter Cartridges developed for the special needs of the electronics industry

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EPD cartridges are designed to meet the special needs of the electronics and high purity chemical industries. Raw materials of construction were specifically chosen on the basis of their ability to be chemically compatible plus produce minimal extractables when exposed to typical process chemicals and solvents. Each cartridge module is pulse, power flushed until the rinse effluent reaches 17+ megohm-cm and less than 3 ppb TOC. Each cartridge module is also individually tested to ensure it is integral. Our design criteria and special procedures allow us to provide the highest quality electronic grade cartridges.

Flow Rate

The following table represents typical water flow at a one psi (69 mbar) pressure differential across a single 10 inch cartridge element. The test fluid is water at ambient temperature. 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.

Pore Size	0.1 µm	0.22 µm	0.45 µm	1.0 µm	3 µm	5 µm	10 µm	20 µm	30 µm	40 µm
GPM	1.0	3.0	5.0	8.0	12.0	16.0	18.0	>20.0	>20.0	>20.0

Maximum Differential Pressures

Forward: 50 psi (3.4 bar) at 20°C.
Reverse: 40 psi (2.7 bar) at 20°C.

Ordering Information

The cartridge catalog number is made up of several variable characters i.e. pore size, length, O-ring material, and end cap code. For example: a 0.10 µm, 20 inch (50.8 cm) long cartridge with 2-222, Teflon® Encapsulated Viton O-rings, no spear (flat top) and no 316 SS Ring would be designated as: EPD*10N00002T5.

EPD 0000

<p style="text-align: center;"><u>Pore size code</u></p> <p>*10 - 0.10 µm *20 - 0.22 µm *40 - 0.45 µm 1*0 - 1.0 µm 3*0 - 3.0 µm 5*0 - 5.0 µm 10* - 10.0 µm 20* - 20.0 µm 30* - 30.0 µm 40* - 40.0 µm</p>	<p style="text-align: center;"><u>316 SS Ring</u></p> <p>S = Ring N = No Ring</p>	<p style="text-align: center;"><u>Cartridge Length</u></p> <p>1 - 10 inches (25.4 cm) 2 - 20 inches (50.8 cm) 3 - 30 inches (76.2 cm) 4 - 40 inches (101.6 cm)</p>	<p style="text-align: center;"><u>O-ring code</u></p> <p>S - Silicone B - Buna V - Viton T - Teflon® Encapsulated Viton E - EPR R - Teflon® Encapsulated Silicone</p>	<p style="text-align: center;"><u>End cap code</u></p> <p>0 - Flat Gasket, double open end 5 - 2-222 O-ring 7 - 020 O-ring 8 - 2-222 O-ring with Spear 9 - 2-226 O-ring with Spear</p>
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Construction Materials

Filtration Media:Polypropylene
Filtration Media Support:Polypropylene
End Caps:Polypropylene
Center Core:Polypropylene
Outer support Cage:Polypropylene
O-rings: Buna, Viton, Silicone, EPR, Teflon® Encapsulated Silicone, Teflon® Encapsulated Viton

Dimensions

Length:10 to 40 inches (25.4 to 101.6 cm) nominal
Outside Diameter:2.75 inches (7.0 cm) nominal

Sanitization/Sterilization

Filtered Hot Water:90°C
Chemical Sanitization:Industry standard concentrations of hydrogen peroxide, paracetic acid, sodium hypochlorite and other selected chemicals. Sanitization protocols designed to extend the useful life of EPD cartridges are available from Critical Process Filtration, Inc.®.

Integrity Test Information

Cartridges are factory tested for integrity before shipment. Field Duplication of these tests is not practical because of the complexity of the testing process and absence of commercial portable testing equipment.