

EPD Mini-Capsule Filters

Pleated Polypropylene Depth Media



Wide range of high efficiency retention ratings

High capacity for long life

Prefiltration of water, acids, bases, resists, plating solutions, solvents

Applications

- ◆ UP DI Water
- ◆ Acids & Bases
- ◆ Solvents & Alcohols
- ◆ Photo Resists
- ◆ Plating Solutions
- ◆ Etch Baths
- ◆ Process Water

EPD mini-capsules are made with polypropylene microfiber media and other polypropylene components. All materials were chosen for their high purity and broad chemical compatibility. Designed with optimal filtration area, the media can remove large amounts of particulate and other contaminants over a long filter life. EPD mini-capsules protect critical membrane filters downstream by removing 99.9% of contaminants at the rated pore size.

EPD mini-capsule filter applications include low to moderate temperature prefiltration of acids and bases, prefiltration of solvents, alcohols, plating solutions, photo resists and other fluids at the point-of-use.

EPD Mini-Capsule Filters - Dimensions*

Diameter	Length	Filtration Area*
75 mm (2.95")	Body Length = 2.85" (72.4mm) Overall Length = 3.75" to 5.19" (Varies with Choice of Inlet/Outlet)	500 cm ² (0.5 ft ²) (nominal)

*Average – Filtration area varies with media thickness and porosity.

Flow Rates

The following table represents typical water flow at a one psi (69 mbar) pressure differential through a mini-capsule filter with 500 cm² (0.54 ft²) of media and 1/4" hose barb inlet and outlet ports. The test fluid is water at ambient temperature. Higher pressure drops are acceptable, but as flows increase the pressure drop of the housing becomes more apparent.

Pore Size	0.10 μm	0.22 μm	0.45 μm	0.65 μm	1 μm	3 μm	5 μm	10 μm	20 μm	30 μm	40 μm	60 μm	100 μm
GPM	0.04	0.13	0.21	0.26	0.32	0.37	0.42	0.48	0.53	0.58	0.63	1.00	1.03
LPM	0.15	0.50	0.80	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	3.8	3.9

Construction Materials

Housing	Polypropylene
Filtration Media	Pleated Polypropylene Depth Media
Media Support	Polypropylene
End Caps	Polypropylene
Center Core	Polypropylene
Outer Support Cage	Polypropylene
Sealing Method	Thermal Bonding

Maximum Operating Parameters

Liquid Operational Pressure	80 psi (5.5 bar) at 20 °C (68 °F)
Gases Operational Pressure	60 psi (4.1 bar) at 20 °C (68 °F)
Operating Temperature	43 °C (110 °F) at 30 psi (2.1 bar) in water
Forward Differential Pressure	50 psid (3.4 bard) at 20 °C (68 °F)
Reverse Differential Pressure	40 psid (2.7 bard) at 20 °C (68 °F)
Recommended Changeout Pressure	35 psid (2.4 bard)

