

# Memtrex MP-E Pleated Filters

FACT SHEET



Electronics-grade Pleated filter with polyethersulfone (PES) membrane (Rinsed with UPDI water)



## Typical Applications

- Electronics Grade
- Ultrapure DI Water
- Ultrapure semiconductor water
- High Purity Chemicals
- Point of Use Applications

## Features and Benefits

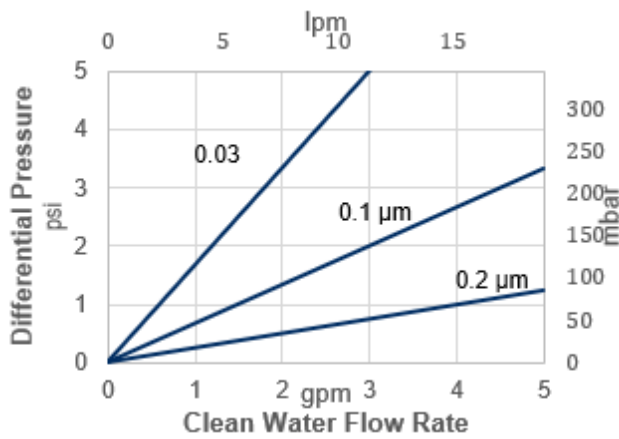
- Asymmetric, hydrophilic polyethersulfone (PES) membrane delivers low pressure drop, high throughput, and consistent retention for critical microelectronics applications.
- Electronics-grade construction features UPDI water rinse on each filter, reducing total organic carbon (TOC) and trace metals to below 5.0 ppb.
- Ensures cleanliness and reliability in UPDI water systems and other high-purity manufacturing processes.
- Ideal for final filtration of DI water pads and point-of-use (POU) systems.
- Thermally welded, adhesive-free construction ensures purity and structural integrity.
- Individually integrity tested filters confirm reliable particle retention and consistent performance.
- Etched serial numbers on every filter provide accurate traceability and quality assurance.

## Specifications

Table 1: Filter construction and operational limits

<b>Ratings</b>	0.03, 0.1, 0.2, 0.45 microns (absolute)
<b>Inner Diameter</b>	1.25 in (3.2 cm)
<b>Outer Diameter</b>	2.75 in (7.0 cm)
<b>Lengths (nominal)</b>	10, 20, 30, 40 in
<b>Effective Filtration Area</b>	8.5 ft <sup>2</sup> (0.79 m <sup>2</sup> ) per 10 in length
<b>Materials of Construction</b>	
Filtration Media:	Asymmetric PES membrane
Support Layers:	Polypropylene Microfiber
Core and Cage:	Polypropylene
Endcaps and adapters:	Polypropylene
<b>Performance Conditions</b>	
Flow:	Exterior to interior
Maximum forward differential pressure:	60 psid (4.1 bar) @ 70°F (21°C)
Maximum reverse differential pressure:	30 psid (2.1 bar) @ 70°F (21°C)
Maximum Operating Temperature:	180°F (82°C) at 10 psid (0.69 bar) in water

## Memtrex MP-E Pleated Filters



Graph 1: Memtrex MP-E filter initial pressure drops across a 10 in filter in clean water

## Integrity Test Specifications

Table 2: Maximum allowable diffusive flow rate based on integrity testing performed on a ten inch cartridge

Micron Rating	Diffusive Flow Rate
0.03 µm	< 45 cc/min at 50 psig (3.45 barg)
0.1 µm	< 45 cc/min at 50 psig (3.45 barg)
0.2 µm	< 19 cc/min at 30 psig (2.1 barg)
0.45 µm	< 19 cc/min at 30 psig (2.1 barg)

## Quality

Memtrex MP-E filters are manufactured under a quality management system. Each filter is etched with a lot number for its subassembly that enables tracing to a production date and shift. This lot number can also be found on the individual filter box label along with the filter description, part number, length, micron rating, seal type, part number, and manufacturing date. Each filter also comes with a certificate of Quality Assurance in the filter box containing additional information.

Memtrex MP-E filters may be autoclaved or in situ steam sterilized (up to 257°F [125°C] 30-minute cycles) for a maximum accumulated exposure of 10 hours. Alternatively, the filters may be sanitized with compatible chemical agents.

Confirmation of endotoxin concentrations below 0.25 EU/mL may be available upon request, which could incur additional costs.

Veolia filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact your Veolia representative for more information.

## Certifications

- Materials of construction meet FDA 21 CFR 177.2440 and 177.1520
- ISO 9001:2015 certified processes

## Directions for use

1. Follow site PPE, LOTO protocols, open housing
2. Store/dispose expired filters per local regulations
3. Lubricate gaskets on housing and filters as needed
4. Insert filters and close housing securely
5. Replace filter before max differential pressure

## Ordering Information

Replace the numbers with your desired values from each column of Table 3.

Example: MMP833FHS-E



Table 3: Ordering information

	1	2	3	4	5	6
Type	Micron Rating (absolute)	Cartridge Length	End #1 Adapter	End #2 Adapter	Elastomer Material	Grade
Memtrex MP = MMP	92 = 0.2 µm 94 = 0.45 µm 96 = 0.65 µm	1 = 10 in (25.4 cm) 2 = 20 in (50.8 cm) 3 = 30 in (76.2 cm) 4 = 40 in (101.6 cm)	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring E = 222 O-Ring F = 226 O-Ring J = 020 O-Ring Q = 222 O-Ring (with stainless steel Insert) Z = 226 O-Ring (with stainless steel insert)	A = Open End Gasket B = 120 O-Ring C = 213 O-Ring G = Closed End Cap H = Fin Adapter	B = Buna-N E = EPDM S = Silicone T = Teflon <sup>(1)</sup> Encapsulated Viton (only in 222 and 226 sizes) V = Viton <sup>(1)</sup>	E = Electronics grade

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