Memtrex* MP Capsules

FACT SHEET

With Polyethersulfone Membrane

Figure 1: Memtrex MP Capsule Filters

Description and Use

Memtrex MP capsule filters (CMMP) offer unique polyethersulfone membranes that exhibit both high throughputs and precise retention characteristics for superior performance in most applications.

Additionally, CMMP filters are resistant to a broad range of chemicals and pH extremes. The DI water rinsed CMMP filters are the filtration solution to a wide variety of applications in the beverage, pharmaceutical, and electronics industries.

Typical Applications

Memtrex MP capsule filters are specifically designed for filtration of process fluids in the beverage, pharmaceutical, and electronics industries, including applications such as filtration of:

- Acids, bases, and oxidants
- Serums and tissue culture media
- Pharmaceutical intermediates
- Fine inks and dyes
- Point-of-use for process water

Features and Benefits

- High throughput and precise retention characteristics
- Broad chemical compatibility — ideal for filtration of acids, bases, and solvents
- Individually integrity tested during manufacturing
- Rinsed with DI water during manufacturing for improved cleanliness and rinse-up times
- Low protein binding membrane suitable for biopharmaceutical processes

Available Absolute Micron Ratings

Memtrex MP Capsule Filters are available in absolute micron ratings of: 0.1, 0.2, 0.45, and 0.65 µm.

Materials of Construction

- Filtration Media: Hydrophilic Polyethersulfone Membrane
- Membrane Support Layers: Polypropylene Microfiber
- Structural Components: Polypropylene

Table 1 details the dimensions and Table 2 shows the operational limits of the Memtrex MP Capsule Filters. Table 3 details the results of integrity testing at various micron ratings and test pressures.

Table 1: Dimensions

Capsule Size	Effective Filtration	Area Length[1]
Small	0.8 ft² (748 cm²)	3.5 – 5.0” (9 – 13 cm)
Medium	3.0 ft² (2806 cm²)	7.6 – 9.1” (19 – 23 cm)
Large	5.9 ft² (5500cm²)	11.5 – 13.0” (29 – 33 cm)
Diameter: 3.5” (9cm)		

[1]Varies with connection style

Table 2: Operational Limits

Description	Operational Limits
Max. Operational Pressure	80 psi (5.5 bar) at 70ºF (21ºC) in liquid 55 psi (3.8 bar) at 70ºF (21ºC) in gas
Max. Differential Pressure	60 psi (4.1 bar) at 70ºF (21ºC)
Max. Operating Temperature	110ºF (43ºC) at ≤30 psid (2.1 bar) Operating Pressure

Table 3: Integrity Testing

Micron Rating	Test Pressure	Specification
0.1 µm	50 psi (3.4 bar)	≤5.6 cc/min per ft² of EFA
0.2 µm	30 psi (2.1 bar)	≤2.4 cc/min per ft² of EFA
0.45 µm	20 psi (1.4 bar)	≤2.0 cc/min per ft² of EFA
0.65 µm	13 psi (0.9 bar)	≤1.5 cc/min per ft² of EFA
Air diffusion through water saturated membrane		

Additional Information

Memtrex MP capsule filters may be sanitized with a variety of commonly used chemical agents. The capsules may be repeatedly autoclaved at 257°F (125°), for 30 minutes up to 5 cycles.

Veolia certifies that the materials contained in its Memtrex MP capsule filters meet U.S. FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact Veolia. Memtrex MP filters meet the test criteria for USP class VI-121°C Plastics.

Figures 2, 3, and 4 show the test data results of flow performance for the small, medium, and large Memtrex MP Capsule Filters using a 10-inch length filter.

Veolia filter capsules 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.

Consult Table 4 below for ordering information or contact your Veolia distributor for more information.

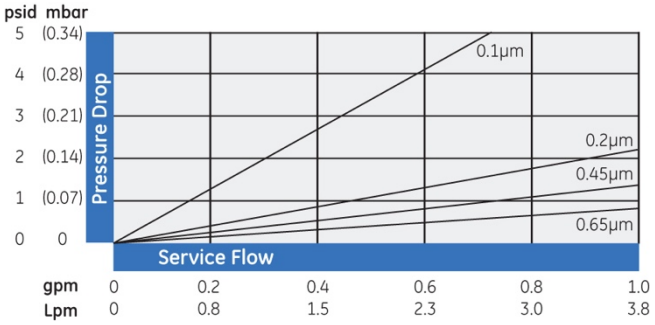

Figure 2: Memtrex MP small capsule flow rate performance in clean water[2]

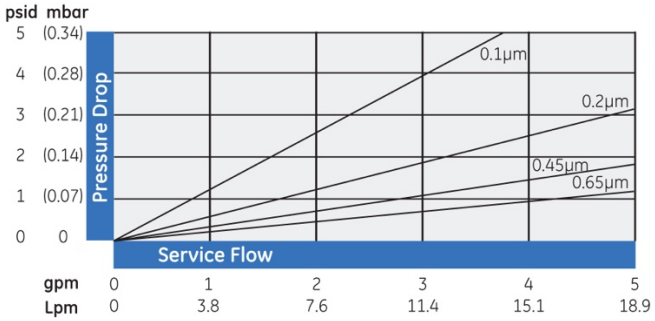

Figure 3: Memtrex MP medium capsule flow rate performance in clean water[2]

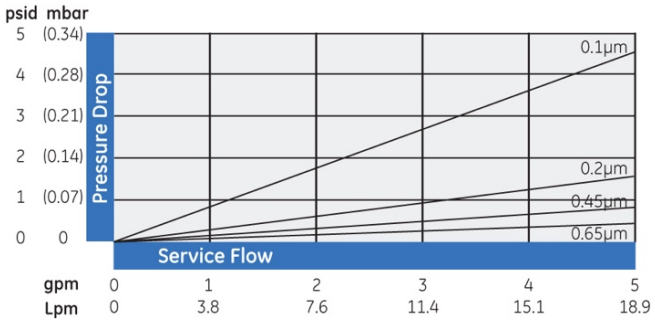

Figure 4: Memtrex MP large capsule flow rate performance in clean water[2]

[2]Data based on 10 inch length filter

Table 4: Ordering Information

Type	Absolute Micron Rating	Capsule Size	Connections[3]
CMMP	91 = 0.1 µm 92 = 0.2 µm 94 = 0.45 µm 01 = 1.0 µm	08 = small (0.8 ft^2) 30 = medium (30. ft^2) 59 = large (5.9 ft^2)	L = ¼" – ½" (6.3 – 12.7 mm) hose barb M = 3/8" (9.5 mm) hose barb R = ¼" (6.3 mm) NPT male W = ½" (12.7 mm) NPT male Y = 1.5" (38.1 mm) sanitary flange

[3]Choose an inlet and outlet connection

For More Information

Call USA Toll free 800-446-8004 or +1-757-855-9000 or contact your local Veolia representative at veoliawatertechnologies.com.

ISO 9001:2000 QUALITY MANAGEMENT SYSTEM

Veolia Water Technologies
Please contact us via:
www.veoliawatertechnologies.com