

# Memtrex MP-S Pleated Filters

FACT SHEET



Sterilizing-grade Pleated filter with polyethersulfone (PES) membrane (Validated double-layer media)



## Features and Benefits

- Double layer of validated asymmetric, hydrophilic PES membrane provides final sterile filtration performance.
- Engineered for biological and pharmaceutical products requiring sterile-grade filtration.
- Extremely low protein binding and extractables ensure high throughput and broad chemical compatibility for critical processes.
- Comprehensive Validation Guide documents rigorous testing and supports compliance with regulatory requirements.
- 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.

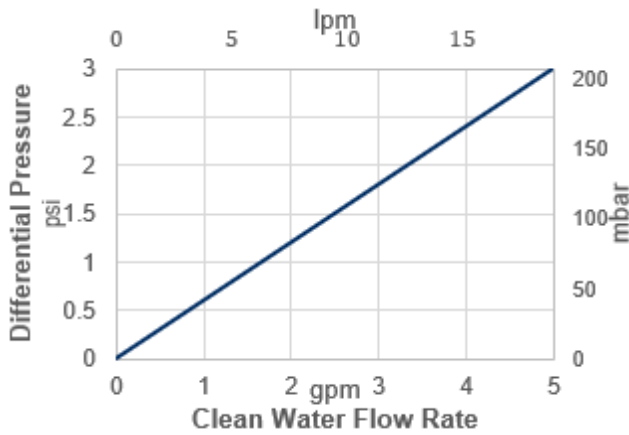
## Typical Applications

- Sterilizing Grade
- Final Filtration of Drugs and Biologicals, Vaccines
- Final Filtration of Pure Water for Dialysis
- Final Filtration of Water for Injection
- Diagnostics and tissue culture media
- LVPs, SVPs

## Specifications

Table 1: Filter construction and operational limits

<b>Ratings</b>	0.2 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>	5, 10, 20, 30, 40 in
<b>Effective Filtration Area</b>	5.5 ft <sup>2</sup> (0.51 m <sup>2</sup> ) per 10 in length
<b>Materials of Construction</b>	
Filtration Media:	Double-layer Asymmetric PES membrane
Support Layers:	Polypropylene Microfiber
Core and Cage:	Polypropylene
Endcaps and adapters:	Polypropylene with Stainless Steel insert
<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



Graph 1: Memtrex MP-S 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
0.2 µm	< 12 cc/min at 40 psig (2.8 barg)

## Quality

Memtrex MP-S 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-S 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. Contact your Veolia representative for more information.

## Efficiency & Microbial Retention

Memtrex MP-S filters are absolute rated. Representative filters meeting integrity test specifications have demonstrated ≥99.9% initial particle retention efficiency at the rated pore size based on ASTM F661 test methodology.

Memtrex MP-S filters have strong microbial retention for reliable bioburden control. Representative filters meeting integrity test specifications have demonstrated the following microbial retention characteristics based on ASTM F838-83 test methodology using a nominal challenge of 107 cfu/cm<sup>2</sup> of membrane area.

Table 3: Log Reduction Values (LRV)

Rating	Test Organism	LRV
0.2 µm	Brevundimonas diminuta	≥7

## Certifications

- U.S. 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 4.

Example: MMP9205ZGS-S



**Table 4: 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	05 = 5 in (12.7 cm) 1 = 10 in (25.4 cm) 2 = 20 in (50.8 cm) 3 = 30 in (76.2 cm) 4 = 40 in (101.6 cm)	Q = 222 O-Ring (with stainless steel Insert) Z = 226 O-Ring (with stainless steel insert)	G = Closed End Cap H = Fin Adapter	S = Silicone	S = Sterilizing grade