MKP Series PTFE Filter Capsules

MKP sterilizing grade capsules were designed for small-scale filtration, clarification, and filling applications in the sterile compounding industries worldwide. This family of products is particularly suitable for scale-up testing where a full-size capsule or cartridge would be excessive. The all-polypropylene construction provides excellent compatibility with a wide range of chemicals. The capsules are thermally sealed, and 100% integrity tested.

MKP Filter Capsule with Female Luer Lock Inlet Fitting and Male Luer Lock Outlet Fitting



Technical Data Sheet

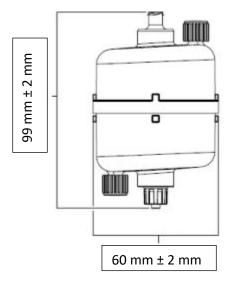
Popular Configuration:

Catalog Number	Effective	Inlet	Outlet	Sterilization Type
	Filtration Area	Connection	Connection	
MKPF100DLFLM-ETO	500 cm2 [77.5 in2]	Female Luer Lock	Male Luer Lock	Ethylene Oxide Sterilization (ETO)









Materials of Construction

Media: Pharmaceutical Grade PTFE Sterilizing Grade - Hydrophobic

Media Supports: Polypropylene

Cage, Core, End Caps: Polypropylene

Valve O-Rings: Silicon (Standard)

Sealing: Thermally Bonded

Micron Rating:

Final Media: 1.0 µm

Nominal Dimensions:

Lengths: 3.9" (99mm) without fittings

Diameter: 2.3" (60mm)

Effective Filtration Area:

500 cm^2 [77.5 in^2] for single layer membrane

Volume Filtered:

8.8L - 16.5L

Allowable Flowrate:

1000 mlpm to 1700 mlpm

Operating Conditions:

Maximum Forward Differential Pressure: Liquid: 5.5 bar (80psi) at 77°F/25°C

Gas: 4.1 bar (60psi) at 77°F/25°C

Minimum Burst Pressure: 8.3 bar (120psi) at 77°F/25°C

Maximum Forward Differential Pressure: 5 bar (72psi) at 68°F/20°C Maximum Reverse Differential Pressure: 2.1 bar (30psi) at 68°F/20°C

Maximum Operating Temperature: 176°F/80°C







Filter Integrity:

The finished product was sampled and shown to exhibit a 60% isopropanol/40% water bubble point of ≥0.35 bar (5.07 psi) using air at 22°C.

USP Bacterial Endotoxins:

The filters were tested to confirm that an aqueous extraction of this product contains <0.25 EU/ml as determined by the Limulus Amebocyte Lysate (LAL) Test

USP Conductivity:

Effluent is tested during the manufacturing process and shown to meet the requirements for USP Sterile Water for Injection for conductivity

Sterilization:

The filters can be autoclaved up to 25 cycles at 125°C (257°F) for 30 minutes.

Waring: The filters cannot be sterilized by steam-in-place (SIP)

ISO 10993-5 Cytotoxicity:

Extract from this product is non-Cytotoxic

ASTM Hemolysis:

Extract from this product is non-Hemolytic

Shelf Life:

The MKP capsules have a shelf life of 2 years from the date of sterilization

Material Compliance:

All components or raw materials used in this capsule conform to the requirements of 21CFR Part 177 and USP Class VI Biological Reactivity Tests for Plastics





Special Configuration:

Layer Option:

- Single Layer
- **Dual Layer**

Micron Rating Option:

- 0.1 Micron
- 0.45 Micron
- 0.2 Micron
- 1.0 Micron
- 3.0 Micron
- 5.0 Micron
- 10.0 Micron

Seal Option:

- **EPDM**
- Nitrile
- Viton

Inlet Fitting Option:

- 1H = 1/8" Hose Barb
- 1Q = 1/8" Male Quick Coupling
- 2H =1/4" Hose Barb
- 2Q = 1/4" Male Quick Coupling for Metal latch
- 3H = 3/8" Hose Barb
- LF = Female Luer Lock
- MT = 1/2" Tri clamps

Outlet Fitting Option:

- 1H = 1/8" Hose Barb
- 1Q = 1/8" Male Quick Coupling
- 2H = 1/4" Hose Barb
- 2H-FB = 1/4" Hose Barb with Filling Bell
- 2H -FC = 1/4" Hose barbs with Filling Bell with Cap
- 2Q = 1/4" Male Quick Coupling for Metal latch
- 3H = 3/8" Hose Barb
- LM = Male Luer Lock
- MT = 1/2" Tri clamps



