



## 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

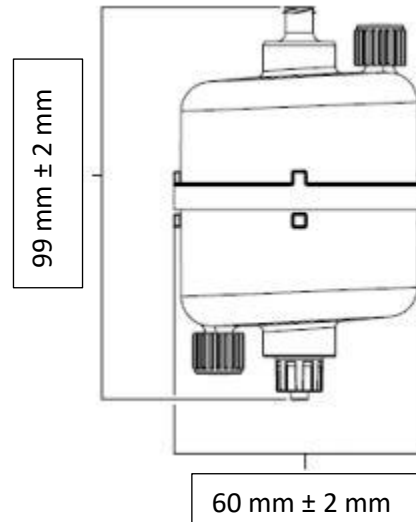


### Technical Data Sheet

#### Popular Configuration:

Catalog Number	Effective Filtration Area	Inlet Connection	Outlet Connection	Sterilization Type
MKPF100DLFLM-ETO	500 cm <sup>2</sup> [77.5 in <sup>2</sup> ]	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  $\mu\text{m}$

## Nominal Dimensions:

Lengths: 3.9" (99mm) without fittings

Diameter: 2.3" (60mm)

## Effective Filtration Area:

500  $\text{cm}^2$  [ 77.5  $\text{in}^2$ ] 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  $\geq 0.35$  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.

*Warning:* 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

