PureFlo® MKL Series PES 1.2µm – Single Layer Filter Capsules

PureFlo® MKL Filter Capsules are designed for applications where sterility of the affluent is mandatory (Sterile Compounding and Pharmaceutical use). The product contains a pharmaceutical grade PES, and the filters are built in a 10,000-class clean room, flushed, dried and 100% integrity tested prior to packaging. The product is factory sterilized by Ethylene Oxide gas (ETO) ensuring sterility.

PureFlo® MKL Filter Capsules with various Inlet/Outlet Connections







3H3H Connections

MTMT Connections

LFLM Connections

Inlet: 3/8" Hose Barb <u>Inlet:</u> Luer Lock Female <u>Inlet:</u>
½" Tri Clamp

Outlet: 3/8" Hose Barb

Outlet: Luer Lock Male Outlet: ½" Tri Clamp



Application

> Buffers and Media

Product Sterilization

> Fermentation Broths

> SVP (Small Volume Parenteral)

Bio Bags Compatible

Pharmaceuticals
Pre-Filtration

Vaccines

Biologics

Antibiotics

Scale up processing

Ultrapure Water

Serums

Technical Data Sheet

Micron Rating:

Final Membrane: 1.2 µm PES

Effective Filtration Area:

Junior Capsule; 77.5 in^2 (500 cm^2)

Materials of Construction:

Membrane: PES (Polyethersulfone)

Membrane Feature: Hydrophilic, Low Protein Binding, High Flow Rate

Shell, Cage, Core, End Caps: Polypropylene

Valve O-Rings: Silicone (Standard)

Sealing: Thermally Bonded

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 Reverse Differential Pressure: 3.0 bar (44psi) at 68°F/20°C

Maximum Operating Temperature: 176°F/80°C

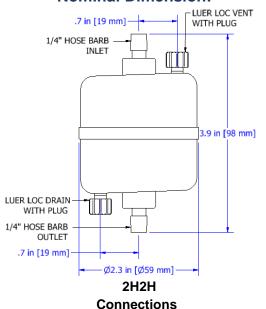


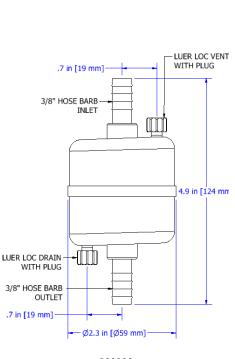


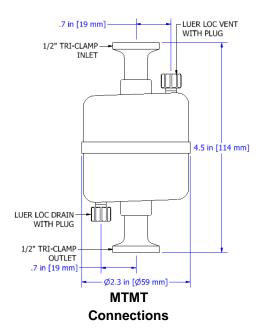
International Filter Products

Revolutionary systems for your industry

Nominal Dimension:



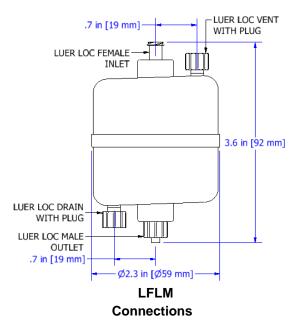




LUER LOC FEMALE INLET LUER LOC DRAIN WITH PLUG LUER LOC FEMALE OUTLET .7 in [19 mm] Ø2.3 in [Ø59 mm]

Connections

3H3H CONNECTIONS





Typical Filtered Volume:

15.8L - 85.8L

[Aqueous and alcohol base solution]

*Volume Filtered is an estimated range for Sterile Compounding, Pharmaceutical & Biological applications. The Filtration Volume is significantly influenced by your solution's viscosity, active ingredients, etc., properties. The best way to determine the exact filtration volume per filter is to try it with your solution.

Filter Integrity:

The finished product was sampled and shown to exhibit a minimum bubble point of \geq 18 psi (1.2 bar) in 60%IPA / 40% water and \geq 50 psi (3.5 bar) in DI Water (at 22°C).

Bacterial Retention ASTM F838-05:

The filters are quantitatively retentive towards *Brevundimonas diminuta* (ATCC #19146) at a minimum challenge level of 10^7 CFU per cm^2 of filtration area, consistent with ASTM F838-05

Sterilization:

International Filter Products Inc. mostly stocks ETO Sterilized (Factory Sterilized) Filter Capsules.

Ethylene Oxide (ETO) Sterilization Process complies with ISO 10993-7:2008 Biological Evaluation of Medical Devices - Part 7. Each filter is subjected to a validated ETO process. Sterilization of the fluid path has been validated per ANSI/AAMI/ISO 11135 which provides a minimum sterility assurance level (SAL) of 10⁻⁶.

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





Regulatory Information

Regulatory Compliance 21CFR Part 177 & USP <88>:

The filters are constructed with polypropylene resins and filtration media in compliance with 21CFR Part 177 of the US Code of Federal Regulations and USP Class VI Biological USP <88>Test for Plastic.

USP <85> 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 <645> Conductivity USP:

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

USP <87> / ISO 10993-5 Cytotoxicity:

Extract from this product is non-Cytotoxic.

Hemolysis ASTM F756-17:

Extract from this product is non-Hemolytic.

Human and Veterinarian Use:

The product is safe for Human and Veterinarian use. CGMP CFR part 210 & 211, additional requirements of 21 CFR part 600 and 21 CFR part 680 are applicable to the aseptic manufacturing process.

Animal-Derived Components & TSE/BSE Risk:

No animal-derived material is intentionally added or used during the manufacture of this product.

Shelf Life:

The MKL capsules have a shelf life of 3 years from the date of sterilization.

Ethylene Oxide (ETO) Sterilized product packaging provides adequate protection to maintain a sterile barrier throughout the product's distribution, handling, and 3-year shelf life.





MKL- Series PES Mini Capsules (Pharmaceutical Grade)

Ordering Guide

M K L [1] [2] [3] [4] [5]			
[1]	[2]	[3] Inlet and [4] Outlet	[5]
Micron Rating (Pre-Filter/Final Filter]	Filter Size Code [Filtration Area]	Inlet and Outlet Connection	Sterilization
• S120 : 1.2 μm Note: All final membranes are sterilizing grade.	• B [Filtration Area: 360 cm²] • C [Filtration Area: 420 cm²] • D [Filtration Area: 500 cm²]	 1H: 1/8" Hose Barb 1Q: 1/8" Male Quick Coupling with Metal Latch 2H: 1/4" Hose Barbs 2H-FB: 1/4" Hose barbs with Filling Bell 2Q: 1/4" Male Quick Coupling for Metal Latch 2N: ½" MNPT 3H: 3/8" Hose Barbs LF: Luer Loc Female LM: Luer Loc Male MT: 1/2" Tri clamps 	-ETO Ethylene Oxide Sterilization

Example:

MKLS120DLF2H-ETO

PureFlo® MKL Series Mini Capsule, Single Layer 0.2µm PES membrane (Sterilizing Grade), Filtration Area 500 cm², Luer Loc Female (Inlet) and Luer Loc Make (Outlet), ETO Sterilized (Factory Sterilized)

Part Number Description





Special Configuration:

Layer Option:

• Single Layer

Micron Rating Option:

- 0.04 Micron
- 0.1 Micron
- 0.2 Micron
- 0.45 Micron
- 0.65 Micron
- 0.8 Micron
- 1.2 Micron

Inlet Fitting Option:

- 1H: 1/8" Hose Barb
- 1Q: 1/8" Male Quick Coupling with Metal Latch
- 2H: 1/4" Hose Barbs
- 2H-FB: 1/4" Hose barbs with Filling Bell
- 2Q: 1/4" Male Quick Coupling for Metal Latch
- 2N: ¼" MNPT
- 3H: 3/8" Hose Barbs
- LF: Luer Loc Female
- MT: 1/2" Tri clamps

Outlet Fitting Option:

- 1H: 1/8" Hose Barb
- 1Q: 1/8" Male Quick Coupling with Metal Latch
- 2H: 1/4" Hose Barbs
- 2H-FB: 1/4" Hose barbs with Filling Bell
- 2Q: 1/4" Male Quick Coupling for Metal Latch
- 2N: ¼" MNPT
- 3H: 3/8" Hose Barbs
- LM : Luer Loc Male
- MT: 1/2" Tri clamps

