



International Filter Products

Revolutionary systems for your industry

L Series PES – Dual Layer Full Size Filter Capsules

PureFlo® L-Series Full-size Capsule Filters feature an asymmetric hydrophilic PES membrane that demonstrates the exceptional capacity and flow performance in liquid applications. The L-Series Full-size Capsule filters offer full-scale filtration in various applications in the biopharmaceutical industry. The L-Series product family has been designed for easy pre- and post-use integrity testing, assuring easy wetting for quick and accurate integrity test results. The 0.2 um / 0.1 um configuration has a state-of-the-art, asymmetrical PES 0.2 um pre-filter, which yields 15%-20% more filtration volume than usual. The compact design and available inlet and outlet fittings allow efficient integration of L-Series Full-size Capsule Filters into a wide range of systems. L-Series Full-size Capsule Filters provide biopharmaceutical manufacturers with a filtration solution configured to meet their process needs.

Application

- Buffers and Media
- SVP (Small Volume Parenteral)
- Vaccines
- Scale up processing
- Product Sterilization
- Bio Bags
- Biologics
- Ultrapure Water
- Fermentation Broths
- Pharmaceuticals
- Antibiotics
- Serums

Part Number: LI1S020010GTCTC-ETO



L-Series Full-Size Capsule with 1.5" Tri-Clamp Inlet and Outlet Connection



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Technical Data Sheet

Popular Configuration:

Catalog Number	Micron Rating	Style	Inlet/Outlet Connection	Vent Connection	Sterilization
LI1S020010GTCTC-ETO	0.2 µm / 0.1 µm (Dual Layer)	In-Line	1.5" Tri-Clamp	Bleed Valve with 1/4" Hose Barb	ETO Sterilized
❖ Find the complete list of available standard inlet and outlet fittings in page 5.					

Micron Rating:

Final Media: 0.1 µm PES [Sterilizing Grade Membrane]

Pre-Filter: 0.2 µm PES

Effective Filtration Area:

10-inch long; 7.5 ft² (0.7 m²)

Materials of Construction:

Membrane: Pharmaceutical Grade PES (Polyethersulfone) Sterilizing Grade

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

Media Supports: Polypropylene

Shell, Cage, Core, End Caps: Polypropylene

Valve O-Rings: Silicon (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

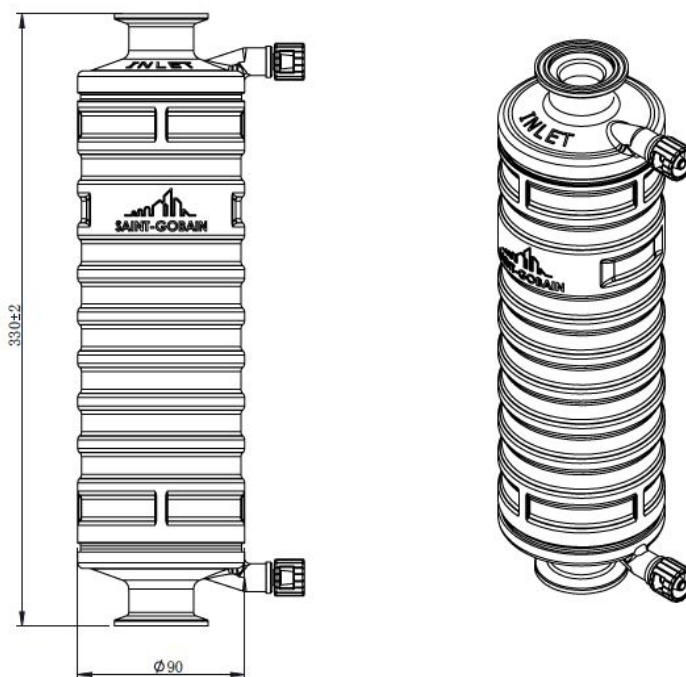


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Nominal Dimension: All dimensions are in Millimeter

Part Number: LI1S020010GTCTC-ETO



Hold-Up Volume (Approx.):

Upstream Volume: 916 ml

Downstream Volume: 127 ml

Typical Filtered Volume:

55.0L – 250.0L

Filter Integrity:

The finished product was sampled and shown to exhibit a minimum bubble point of ≥ 23 psi (1.6 bar) in 60%IPA / 40% water and ≥ 72.5 psi (5.0 bar) in DI Water (at 22°C).

Sterilization:

Capsules can be autoclaved 25 times at 125 °C (257°F) for 30 minutes or chemically sanitized in situ using common sanitizing agents or hot water at 90 °C (194°F) for a limited time (dependent on time and temperature).

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



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Regulatory Compliance:

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 Test for Plastic.

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.

Bacterial Retention:

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

ISO 10993-5 Cytotoxicity:

Extract from this product is non-Cytotoxic

ASTM Hemolysis:

Extract from this product is non-Hemolytic

Shelf Life:

The L-Series capsules have a shelf life of 3 years from the date of sterilization.





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L - Series PES Full-Size Capsules

Ordering Guide



[1]	[2]	[3]	[4]	[5] Inlet [6] Outlet	[7]
Filter Configuration	Filter Size Code [Filtration Area]	Micron Rating [Pre-Filter /Final Filter]	Vent/Drain	Inlet and Outlet Connection	Sterilization
<ul style="list-style-type: none"> I : I-Line T : T-Line 	<ul style="list-style-type: none"> 1 : 10-Inch [Filtration Area: 0.7 m²] 2 : 20-Inch [Filtration Area: 1.4 m²] 3 : 30-Inch [Filtration Area: 2.1 m²] 4 : 40-Inch [Filtration Area: 2.8 m²] 	<ul style="list-style-type: none"> S020 : 0.2 μm DS065S020 : Highly Asymmetric 0.65/0.2 μm DS045S020 : Highly Asymmetric 0.45/0.2 μm DS045S010 : Highly Asymmetric 0.45/0.1 μm S080020 : 0.8/0.2 μm S020010 : 0.2/0.1 μm 	<ul style="list-style-type: none"> G : 1/4" bleed valve vent and drain J : 1/4" bleed valve vent (1) only A : 1/4" bleed valve drain (2) only 	<ul style="list-style-type: none"> 1H : 1/8" Hose Barb 2H : 1/4" Hose Barb 3H : 3/8" Hose Barb 4H : 1/2" Hose Barb 5H : 9/16" Hose Barb MT : 1/2" Tri-Clamp TC : 1-1/2" Tri-Clamp 	<ul style="list-style-type: none"> -ETO Ethylene Oxide Sterilization [Only Available for 10-Inch]

Example:

LI1DS065S020GTCTC-ETO

PureFlo L Series In-Line Full-Size Capsule, Highly Asymmetric Dual Layer PES 0.65μm / 0.2μm PES [Sterilizing Grade Membrane] Final Filter, 10.0", Filtration Area 0.7 m², 1/4" bleed valve vent and drain, 1.5" Tri-Clamp (Inlet/Outlet), ETO Sterilized (Factory Sterilized)

Part Number

Description



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Special Configuration:

Layer Option:

- Single Layer
- Dual Layer

Micron Rating Option:

- S020 : 0.2 μm
- DS065S020 : Highly Asymmetric 0.65/0.2 μm
- DS045S020 : Highly Asymmetric 0.45/0.2 μm
- DS045S010 : Highly Asymmetric 0.45/0.1 μm
- S080020 : 0.8/0.2 μm
- S020010: 0.2/0.1 μm

Vent/Drain Option:

- G : 1/4" bleed valve vent and drain
- J : 1/4" bleed valve vent (1) only
- A : 1/4" bleed valve drain (2) only

Inlet Fitting Option:

- 1H = 1/8" Hose Barb
- 2H = 1/4" Hose Barbs
- 3H = 3/8" Hose Barb
- 4H = 1/2" Hose Barb
- 5H = 5/8" Hose Barb
- MT = 1/2" Tri clamps
- TC = 1-1/2" Tri clamp

Outlet Fitting Option:

- 1H = 1/8" Hose Barb
- 2H = 1/4" Hose Barbs
- 3H = 3/8" Hose Barb
- 4H = 1/2" Hose Barb
- 5H = 5/8" Hose Barb
- MT = 1/2" Tri clamps
- TC = 1-1/2" Tri clamp

