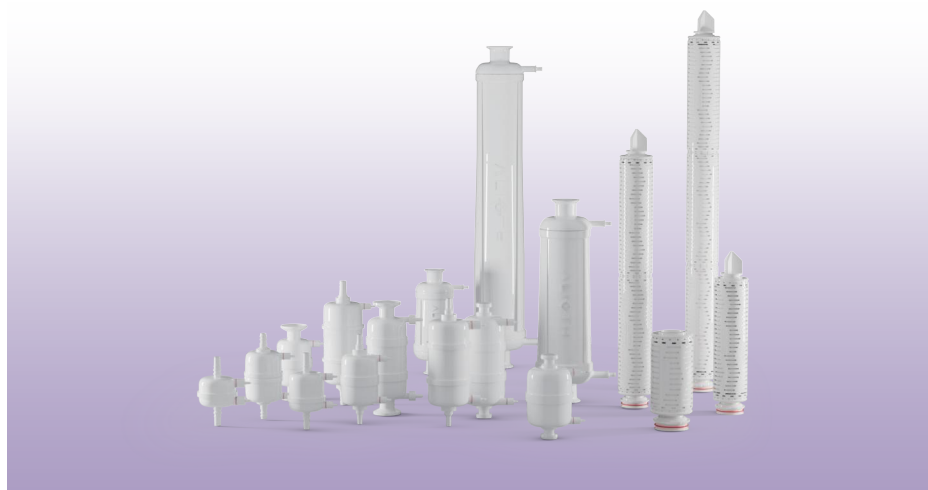


Alipore® TEHF Radiation-Resistant Gas Filter

Hydrophobic Polyethersulfone (PES)

Sterilizing-grade gas filters



⊕ Product Introduction

Alipore® TEHF Series filters consist of hydrophobic polyethersulfone (PES) membranes and have undergone rigorous liquid bacterial retention validation. They effectively retain microorganisms or particles in wet or humid gases, featuring high mechanical strength, radiation resistance, and tolerance to repeated autoclaving cycles. Ideal for sterile gas filtration in single-use systems for pharmaceutical applications, including sterilization of air, hydrogen, nitrogen, and other gases.

⊕ Key Features and Benefits

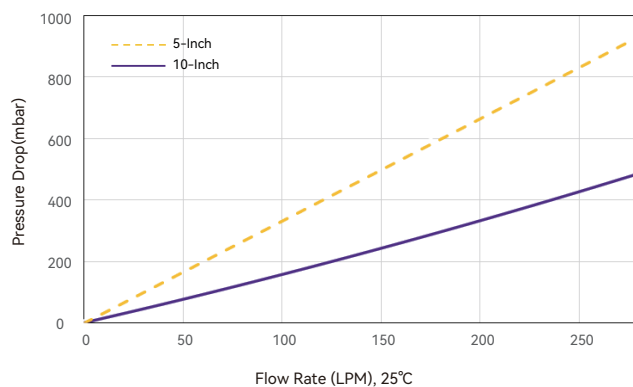
- Hydrophobic material
- Tolerance to 45 kGy gamma irradiation
- Reliable bacterial retention and particle removal efficiency
- High gas flux with low pressure differential
- Excellent chemical compatibility

⊕ Typical Applications

- Vent filter for single-use bags
- Aeration of single-use reaction bags
- Sterile filtration of gases (air/hydrogen/nitrogen, etc.)

⊕ Typical Flow Characteristics

Air Flow Rate and Pressure Drop-Alipore® TEHF Alicap® L5/L10 0.2 µm Capsule Filters



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⊕ Product Specifications - Alidisk® Disc Filters

Product Specifications	Diameter	50 mm
Materials of Construction	Membrane	Hydrophobic polyethersulfone (PES)
	Inlet/Outlet Cap, Supporting layer	Polypropylene (PP)
Integrity Testing	Bubble Point	≥1300 mbar (19 psi) (wetted with 60% IPA, 20°C, compressed air)
	Maximum Differential	Forward: 5.0 bar (72.5 psi) @ 25°C
	Pressure	Reverse: 1.0 bar (14.5 psi) @ 80°C
		Gamma-compatible (G): 25-45 kGy
	Sterilization Resistance	Autoclave at 135°C for 30 min, 50 cycles
		*Capsule filters can't be sterilized by SIP, sterile type capsule filters can't be sterilized again
	Effective Filtration Area	18 cm²
	Pore Size	0.2 µm
	Bacterial Retention	>10 ⁷ cfu/cm² B. diminuta (ATCC® 19146™)
		All construction components meet the biological safety requirements referring to USP<88>
Working Characteristics	Biological Safety	Class VI plastic and USP<87>
	Indirect Food Additive	All component materials meet the requirements of Indirect Food Additive cited in EU 1935/2004/EC and FDA 21 CFR 177-182
	Cleanliness	Meets the requirements for a 'non-fiber releasing' filter defined in FDA 21 CFR 211.72 and 210.3 (b) (5) (6), and particulate matter meets the requirements of USP<788>
	Endotoxin	Endotoxin<0.25 EU/mL by LAL test method, which complies with the requirements of USP<85>
	Manufacturing Integrity	100% integrity test passed
	Manufacturing Environment	Manufactured in conformance with cGMP

⊕ Ordering Information

Format	Membrane material	Membrane series	Pore size	Length	Disc adaptor
D=Disc	E=PES	E=E series	02=0.2 µm	5=Diameter 50 mm	B0=7-13 mm(1/4"-1/2") Hose barb inlet and outlet
Package	Sterilization				
6=6/PK	G=Gamma compatible S=Sterile				

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⊕ Product Specifications - Alicap® Capsule Filters

		L300	L600	L02	L04	L3	L5	L10	L20	L30	T10	T20	T30
Product Specifications	Body Diameter	67 mm	67 mm	72 mm	72 mm	97 mm	92 mm	92 mm	92 mm	92 mm	92 mm	92 mm	92 mm
	Maximum Width	75 mm	75 mm	97 mm	97 mm	128 mm	132 mm	132 mm	132 mm	132 mm	132 mm	132 mm	132 mm
	Maximum Length	98.5 mm	120 mm	161 mm	214 mm	170 mm	211 mm	330 mm	575 mm	830 mm	350 mm	596 mm	851 mm
Materials of Construction	Membrane	Hydrophobic polyethersulfone (PES)											
	Supporting Layer	Polypropylene (PP)											
	O-rings	Silicone											
	Core/Cage/End caps/Housing	Polypropylene (PP)											
Integrity Testing	Bubble Point	≥1300 mbar (19 psi) (wetted with 60% IPA, 20°C, compressed air)											
	Diffusion Flow(mL/min)	Test pressure 1040 mbar (15 psi) (wetted with 60% IPA, 20°C, compressed air)											
		-	≤ 1.5	≤ 3.0	≤ 5.0	≤ 5.0	≤ 7.5	≤ 15	≤ 30	≤ 45	≤ 15	≤ 30	≤ 45
Working Characteristics	Maximum Differential Pressure	Forward: 5.5 bar (79.8 psi) @ 25°C/3.0 bar (43.5 psi) @ 80°C Reverse: 4.0 bar (58.0 psi) @ 25°C/1.0 bar (14.5 psi) @ 80°C											
	Sterilization Resistance	Alicap® L300/L600/L02/L04/L3:						Alicap® L5/L10/L20/L30/T10/T20/T30:					
		Gamma compatible & Autoclavable: 25–45 kGy gamma irradiation or 135°C autoclaving for 30 minute, for 30 cycles.						Gamma compatible & Autoclavable: 25–45 kGy gamma irradiation or 135°C autoclaving for 30 minute, for 50 cycles.					
		*Capsule filters can't be sterilized by SIP, sterile type capsule filters can't be sterilized again						*Capsule filters can't be sterilized by SIP, sterile type capsule filters can't be sterilized again					
	Effective Filtration Area	230 cm ²	430 cm ²	0.11 m ²	0.19 m ²	0.19 m ²	0.30 m ²	0.59 m ²	1.18 m ²	1.77 m ²	0.59 m ²	1.18 m ²	1.77 m ²
	Pore Size	0.2 µm											
	Bacterial Retention	>10 ⁷ cfu/cm ² B. diminuta (ATCC® 19146™)											
	Biological Safety	All construction components meet the biological safety requirements referring to USP<88> Class VI plastic and USP<87>											
	Indirect Food Additive	All component materials meet the requirements of Indirect Food Additive cited in EU 1935/2004/EC and FDA 21 CFR 177-182											
	Cleanliness	Meets the requirements for a 'non-fiber releasing' filter defined in FDA 21 CFR 211.72 and 210.3 (b) (5) (6), and particulate matter meets the requirements of USP<788>											
	Endotoxin	Endotoxin<0.25 EU/mL by LAL test method, which complies with the requirements of USP<85>											
	Manufacturing Integrity	100% integrity test passed											
	Manufacturing Environment	Manufactured in conformance with cGMP											

⊕ Ordering Information

Format	Membrane material	Membrane series	Pore size	Length	Capsule connector
K=L-type Capsule T=T-type Capsule	E=PES	E=E series	02=0.2 µm	S2: Alicap® L300 S3: Alicap® L600 M1: Alicap® L02 M3: Alicap® L04 L3: Alicap® L3 5: Alicap® L5 1: Alicap® L10/T10 2: Alicap® L20/T20 3: Alicap® L30 /T30	T1: 38 mm(1 1/2") Sanitary flange inlet and outlet T3: 19 mm(3/4") Sanitary flange inlet and outlet B4: 13 mm(1/2") Single-stage hose inlet and outlet B5: 9.6 mm(3/8") Multistage hose inlet and outlet B6: 7-13 mm(1/4"-1/2") Hose barb inlet and outlet B7: 6 mm(1/4") Multistage hose inlet and outlet
O-ring	Package	Sterilization			
S = Silicone	1=1/PK	G=Gamma compatible S=Sterile			

• Connector:

Alicap® L300/L600, available with B6 Connector; Alicap® L02/L04, available with T1, T3, B5, B7 Connector; Alicap® L3/L5/L10/L20/L30, available with B4, T1 Connector; Alicap® T10/T20/T30, available with T1 Connector.