

LeSiever® Hydrophobic PTFE series filters

Hydrophobic polytetrafluoroethylene (PTFE) is a highly versatile and chemically inert material, exhibiting exceptional hydrophobic properties while enabling the smooth passage of gases and air.

The hydrophobic characteristics of the LeSiever® hydrophobic PTFE series filters ensure efficient gas flow, achieving high filtration rates while maintaining optimal breathability. This makes it an excellent choice for applications such as ventilation, gas and air filtration, and sterile filtration, effectively preventing clogging or performance degradation caused by liquid ingress.

The LeSiever® hydrophobic PTFE series filters demonstrate broad chemical compatibility and can withstand exposure to a wide range of chemicals, solvents, and acids, providing a long service life and consistent filtration performance over an extended period.



Product Advantages

- Excellent hydrophobicity
- Low extractable and leachable substances
- Excellent chemical compatibility
- Reliable gas flowability
- SIP and autoclavable
- Long service life and wide range of applications.
- A wide range of temperature and pH applicability.
- 100% integrity testing is conducted during the manufacturing process (if applicable)
- Various connection methods are available.

Typical Applications

- Non-aquatic product filtration
- Air and gas filtration
- Ventilation and exhaust
- Chemical Reagent filtration
- Sterile filtration

Specifications of filter

The LeSiever® hydrophobic PTFE series filters feature hydrophobic PTFE membranes with pore sizes of 0.1µm, 0.2µm, 0.45µm, and 1.0µm. Due to the variations in filtration area and inlet/outlet connection types, there are multiple configuration options available.

LeSiever® hydrophobic PTFE series filters with 0.1µm or 0.2µm are reliable choices for various industrial applications. They can ensure a clean, sterile and particle-free environment, making them indispensable for critical processes that require high-quality filtration.

LeSiever® hydrophobic PTFE series filters with a pore size of 0.45µm or 1.0µm are typically used as pre-filters in HVAC systems, compressed air pipelines and ventilation applications.

Technical Parameters of Disc and Capsule Filters

Filter size	S1	S5	2"	4"	5"	10"	20"
Area (m ²)	180 cm ²	550 cm ²	0.13 m ²	0.23 m ²	0.33 m ²	0.66 m ²	1.32 m ²
Composition Material							
Filter Membrane				Hydrophobic PTFE			
Supports				Polypropylene (PP)			
Housing				Polypropylene (PP)			
Sealing Ring				Silicone			
Pore Size	0.1 μm, 0.2 μm, 0.45 μm, 1.0 μm						
Integrity Test							
Water Intrusion Test (WIT)@ 2.6bar 22 psi, 23 °C ≤mL/min	/	/	0.16	0.27	0.38	0.76	1.52
Bubble Point Value, 23 °C	≥ 1350 mbar (19.6 psi), 60/40 % IPA/Water						
Bacterial Retention	According to ASTM testing methods, the retention test for <i>Brevundimonas diminuta</i> (ATCC® 19146™) was conducted with forward and reverse 10 ⁷ CFU/cm ² defects.						
Endotoxin	< 0.25 EU/mL						
Sterilization Method							
Autoclavable	126 °C Autoclavable, 60min, 25 cycles						
No Fiber Release	Complies with the 'No Fiber' release regulations in 21 CFR 210.3 (b) (6)						
Biocompatibility	Passed USP <87> and USP <88> test						

Ordering Information

LeSiever® Hydrophobic PTFE Capsule Filter

N	P	1	F	1	S	10	F	4
Area	Classify	Filter Type	Membrane Material	Pore Diameter	Sterilization Methods	Filter Size	Port Specification	Packing Specification
N-Oversea	A-Air Filter	1-Capsule	F-Hydrophobic PTFE	1-0.2μm	A-Autoclavable, non sterilized	D2-25mm Syringe	T-38mm (1.5") TC connection	1-1 piece/package
		2-Disc Type		2-0.1μm		D5-50mm disc	F-19.1mm (3/4") TC connection	3-3 pieces/package
		3-Syringe needle		3-0.45μm		S1-180cm ²	H-12.7mm (1/2") Barbed Interface	4-4 pieces/package
				5-0.45/0.2 μm		S3-300cm ²	B-19.1mm (3/4") Barbed Interface	6-6 pieces/package
				D-1.0μm		S5-550cm ²	O-1/4~1/2"(6.4~12.7mm) Multi-stage Barbed (Capsule)	X-10 pieces/package
						02-2"	N-1/4~1/2"(6.4~12.7mm)Multi-stage Barb (Disc)	Y-50 pieces/package
						04-4"		M-For Assembly
						05-5"		
						10-10"	L-Luer connection	
						20-20"		

LeSiever® Hydrophobic PTFE Cartridge Filter

N	1	D	F	1	Z	10	EN	S
Area	Industry	Filter Type	Membrane Material	Pore Diameter	Sterilization Methods	Filter Size	Port Specification	Packing Specification
N-Oversea	1-Pharmaceutical Industry	D-Cartridge	F-Hydrophobic PTFE	1-0.2μm	S-Triangular fin	25-2.5 inch	D-222	S-Silicone rubber
	2-Electronic Industry			2-0.1μm	Z-Cylindrical sharp corner	05-5 inch	E-226	V-Fluorine rubber
	3-F&B Industry			3-0.45μm	P-Flatend cap	10-10 inch	DN-Stainless Steelin 222	Y-EPDM rubber
				5-0.45/0.2 μm	LP-Two flat port	20-20 inch	EN-Stainless Steelin 226	F-Nitrile butadiene rubber (NBR)
				D-1.0μm		30-30 inch		WW-Outer tetrafluoroethylene rubber
						40-40 inch		

*For more product models, please contact technical support.

Typical air flow rate and pressure differential

