

BetPore™

Hydrophilic PVDF filter

Polyvinylidene fluoride (PVDF) filters are widely used in biopharmaceutical applications. With low protein adsorption, PVDF filters are effective for separating different components in mixtures. The BetPore™ Hydrophilic PVDF Sterilizing Filter delivers excellent filtration performance, stable operation, and long service life. Sterile filtration is essential in drug production, and this series reliably captures bacteria throughout the entire bioprocess, ensuring control of biological load. LePure Biotech offers multiple PVDF filter types to meet diverse application requirements.



Typical application

BetPore™ hydrophilic PVDF sterilization filter improves the economy of the process and is suitable for laboratory, pilot, and production processes of different scales, such as:

- Cell and tissue culture media
- Media additives
- Serum
- process intermediates
- Virus suspensions
- Protein solutions
- process intermediates
- Virus suspensions
- Buffers

Product advantages

- Low protein adsorption, high protein recovery rate
- Broad chemical compatibility
- High flow rates
- 100% integrity tested during manufacture
- Full Scalability

Technical Parameter

BetPore™ Hydrophilic PVDF Cartridge Filter

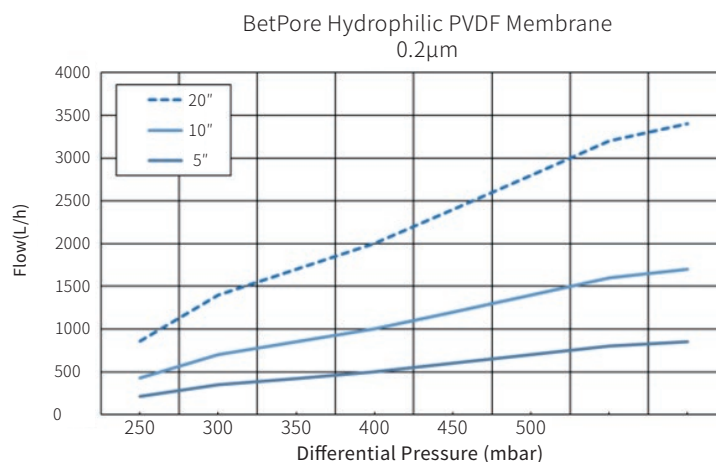
Size	2.5"	5"	10"	20"	30"	40"	10"WTT	20"WTT
Effective filtration area m ²	0.17	0.33	0.6~0.7	1.32	1.98	2.64	0.8	1.6
Composition Material								
Membranes	PVDF							
Housing	PP							
O-ring	Silicone / Fluorine / EPDM /Nitrile butadiene/Outer tetrafluoroethylene							
Capping form	Triangular fin/Cylindrical sharp corner/Flat end cap/Two flat port/Two flat with Steel/one flat endcap, one flat port							
Center pole and interface type	Center pole: polypropylene, stainless steel, high temperature resistant reinforced center pole Interface types: 222 ordinary type, 226 ordinary type, 222 outer lined steel ring, 226 outer lined steel ring, 222 inner lined steel ring, 226 inner lined steel ring, 222 special type, 226 special type, 215 ordinary type, 220 ordinary type							
IFilter membrane protective layer	PP							
Maximum operating pressure								
Temperature (°C)	25		40		60		80	
Positive pressure (mbar) Forward Pressure	5000		4500		4000		2000	
Reverse pressure (mbar) Backward Pressure	3000		/		/		1000	
Integrity testing parameters								
Bubble Point								
Double layer0.45/0.2μm	≥3200mbar 46.4 psi, Water							
Bacterial interception	According to the ASTM testing method, the retention test of 10 ⁷ CFU/cm ² <i>Brevundimonas diminuta</i> (ATCC19146) was conducted							
TOC/Conductivity	The total organic carbon of the rinsing solution meets USP<643>, and the conductivity meets USP<645>WFI requirements. Rinse 5.5L or 10L at 25 °C							
Oxide	After rinsing 1000 mL, the rinsing solution meets the requirements of USP							
Chemical Compound	Compliant with USP standards, endotoxin content<0.25 EU/mL							
Online steam sterilization/ Autoclave	134 °C, 30min, 30 cycles (△P≤350mbar)							
No fiber release	Complies with the provisions of 21 CFR 210.3 (b) (6) regarding "fiber free" release							
biocompatibility	Tested by USP<87>USP<88>							

Ordering Information

LeSiever®Hydrophilic PVDF Capsule Filter

Size	Size 1	Size 5	2"	4"	5"	10"	20"	10"WTT	20"WTT
Effective filtration area (m²)	0.018	0.055	0.13	0.23	0.33	0.66	1.32	0.8	1.6
Material composition									
Membranes	PVDF								
Housing	PP								
O-ring	Silicone / EPDM (optional)								
Filter membrane protective layer	PP								
Maximum operating pressure									
Positive mbar(psi) Forward Pressure at 25°C	4000	5000	5000	5000	5000	5000	5000	5000	5000
Reverse mbar(psi) Backward Pressure at 25°C	2000	2500	2500	2500	2500	2500	2500	2500	2500
Integrity testing parameters									
Bubble Point									
Double Layer 0.45/0.2µm	≥3200mbar 46.4 psi, Water								
Bacterial interception	According to the ASTM testing method, the retention test of 10 ⁷ CFU/cm ² <i>Brevundimonas diminuta</i> (ATCC19146) was conducted								
TOC/Conductivity	The total organic carbon of the rinsing solution meets USP<643>, and the conductivity meets USP<645>WFI requirements. Rinse 5.5L or 10L at 25 ° C								
Oxide	After rinsing 1000 mL, the rinsing solution meets the requirements of USP								
Chemical Compound	Compliant with USP standards, endotoxin content<0.25 EU/mL								
Autoclave	126 °C, 60min, 25cycle								
No fiber release	Complies with the provisions of 21 CFR 210.3 (b) (6) regarding "fiber free" release								
biocompatibility	Tested by USP<87>USP<88>								

Typical water flow rate (0.2μm)



Ordering information

BetPore™ Hydrophilic PVDF Cartridge Filter

N	1	D	D	1	S	2	5	1	1
Area	Industry	Filter Type	Material	Pore Size	Upper Cap	Size	Center Tube and Connector	Gasket	
N: international	1:Phammaceutical industry	D:Fiiter cartridge	D: Hydrophilic PVDF	1: 0.2 μm	S:Triangular fin	25:2.5 inch	DN: Pp center tube with 222 inner steel ring	S:Silicone rubber	
	2: Electronic Industry			2.0.1 μm	Z:cylindrical sharp comer	05:5 inch	EN: PP center tube with 226 inner steel ring	V:Fluorine rubber	
	3:F&B industry			3: 0.45 μm	P:Flat end cap	10:10 inch		Y:EPDM rubber	
				5: 0.45/0.2 μm	LP: Two nat port	20:20 inch		F:Nitrile butadiene rubber(NBR)	
				6:0.2/0.1μm		30:30 inch		WV: Outer tetrafluoro-ethylene rubber	
				8:0.65/0.2μm		40:40 inch			
				9:0.65 μm	*Special type: PP71:P7001 PP72:P7002 PSE2:2 inch small 226 cap(126A) PP4:P4440.four claws PM8:MP 5112. eight claws PSF7:S15-7 PSF8:S15-8 PSF9:S15-9				
				D: 1 μm					
				J:0.2/0.2μm					
				N:0.65/0.45μm					

BetPore™ Hydrophilic PVDF Capsule Filter

N	P	1	D	1	D	D	2	T	T	1
Area	Industry	Filter Type	Material	Pore Size	Sterilization Methods	Filter Size	Port Specification	Packing Specification		
N:Overseas	P:Pharmaceutical	1: Capsule	D: Hydrophilic PVDF	1: 0.2 μm	D: Gamma Resistant. no sterilized	D2: 25mm Syringe	T=38mm (1.5")TC connection	1:1 piece/package		
	E: Electronic	2: Disc Type		2:0.1 μm	A:Autoclavable,no sterilized	D6:50mm disc (with valve)	F=19.1mm (3/4")TC connection	3:3 pieces/package		
	F:Food & Beverage	3:Syringe needle		3:0.45 μm	S:Gamma sterilized	S1:180 cm ²	H=12.7mm(1/2") Barbed Interface	4:4 pieces/package		
				5:0.45/0.2 μm		S5: 550cm ²	B=19.1mm (3/4") Barbed Interface	6:6 pieces/package		
				6:0.2/0.1 μm		02:2"	0=1/4~1/2" (6.4~12.7mm) Multi-stage Barbed (Capsule)	X:10 pieces/package		
				8:0.65/0.2 μm		04:4"	N=1/4~1/2" (6.4~12.7mm) Multi-stage Barb (Disc)	Y:50 pieces/package		
				9:0.65 μm		05:5"	L=Luer connection	M: For Assembly		
				D:1 μm		10: 10"				
				J:0.2/0.2μm		20:20"				
				N:0.65/0.45μm						
*Interface and dimension matching instructions: F: O (D5-4 inches), B (20)										
**Packaging specifications and dimension matching instructions, pieces/package.: D2(50), D5(10), S1-S4(6), S5/02(4), 04(3), 05/10120(1)]										
***Add '-P' to the end of the part number for Super Folding										