

# LOPAC PF

## Bioburden Control Filter



LOPAC PF Filter membrane is made of hydrophilic polyethersulfone membrane (PES) with good hydrophilicity and low protein adsorption. It is suitable for the bacteria-reducing filtration of bioprocess fluids with easy adsorption and complex ingredient, It can reduce the microbial contamination level and meet the process requirements.

### Product Features

- Unique double layer design
- Reliable bacterial and particulate retention
- Excellent chemical compatibility (pH: 1-14)
- Less dissolution
- Low protein adsorption

### Typical Applications

- Decontamination of cell culture media
- Filtration of buffers
- Pre-column / Pre-ultrafiltration protection

## Dimensions

Filter Type		Disc Filter	Capsule Filter				Cartridge Filter					
Nominal size (inches)		Φ50mm	S	2.5	5	10	Dimension	2.5	5	10	20	30
Filtration Area (m <sup>2</sup> )	Single Layer	15cm <sup>2</sup>	180cm <sup>2</sup>	0.073	0.23	0.63	D63	0.11	0.23	0.45	0.90	1.35
	Double Layer	15cm <sup>2</sup>	160cm <sup>2</sup>	0.065	0.20	0.60	D70	0.15	0.30	0.60	1.20	1.80
Filter Aperture		0.65μm+0.22μm, 0.8μm+0.22μm, 1.2μm+0.22μm, 0.8μm+0.45μm, 1.2μm+0.45μm, 0.45μm										
Materials of Construction		Support Layer: PP End Cap: PP Adaptor: PP, 222/226 metal reinforcement Sealing Ring: Silicon / Viton / EPDM / TEV Hot-Melt Technology: Adhesive free technology Membrane material: PES										
Maximum differential pressure	Forward	2bar (29psi) @20°C	L, M: 5bar (72.5psi) @20°C 3bar (43.5psi) @50°C				5bar (72.5psi) @25°C 2bar (29psi) @80°C					
	Backward	2bar (29psi) @20°C	S: 4bar (58psi) @20°C 2bar (29psi) @50°C				2bar (29psi) @25°C					
Sterilization		Resistant to autoclaving and irradiation.	Autoclave: 134°C*30min*25 times Irradiation: <50 kGy				Autoclave: 134°C*30min*25 times Online steam sterilization: 134°C*30min*25 times (Δp≤0.3bar)					
Component Material Toxicity		Components materials meet the criteria of the USP<88> Biological Reactivity for Class VI										
Cleaness		Comply with FDA 21 CFR 211.72 and 210.3(b)(5)(6) for fiberless shedding filters, and USP <788> for insoluble particulate levels in the rinse solution.										
Ingredient Material Toxicity		Component materials meet USP <88> Class V plastics reaction test standards.										
Bacterial Endotoxin		Aqueous extraction contains <0.25 EU/mL which meet USP<85> requirements										
Integrity		Each cartridge/filter passes 100% integrity testing before it leaves the factory.										
Production environment		All produced in 100,000 class clean room										

## Order Info.

### Capsule Filter

**LP** **S** **V** **0** **2** **H** **0** **1** **N** **A**

Name: LP: LOPAC PF

Size: S, M, L

Pore size:  
O4: 0.45μm  
V02: 0.65+0.22μm  
W02: 0.8+0.22μm  
F02: 1.2+0.22μm  
W04: 0.8+0.45μm  
F04: 1.2+0.45μm

Connector Type:  
S: 1½" tri-clamp 50.5 mm  
T: ½"(13mm) single-stepped hose barb  
F: ¾" tri-clamp 25 mm  
H: ¼"(6mm) multiple-stepped hose barb  
N: ¼" (6mm) multiple-stepped hose barb with rotector  
Type S: H, N; Type M: T, F; Type L: S, T;

Dimensions:  
01: 150cm<sup>2</sup>  
02: 2.5"  
05: 5"  
10: 10"

O-ring:  
E: EPDM  
S: Silicone  
V: Viton  
C: TEV  
N: N/A  
N for S type only

Sterilization:  
A: Resistant to autoclaving  
G: Irradiated

### Cartridge Filter

**LP** **C** **V** **0** **2** **A** **0** **5** **E** **A**

Name: LP: LOPAC PF

Outer diameter:  
C: φ63  
D: φ70

Retention ratings:  
O4: 0.45μm  
V02: 0.65+0.22μm  
W02: 0.8+0.22μm  
W04: 0.8+0.45μm  
F04: 1.2+0.45μm  
F02: 1.2+0.22μm

Adapter configurations:  
A: Single opening/flat end/222 metal reinforcement  
B: Single opening/fin end/222 metal reinforcement  
C: Single opening/flat end/226 metal reinforcement  
D: Single opening/fin end/226 metal reinforcement

Size:  
05: 5"  
10: 10"  
20: 20"  
30: 30"

O-ring:  
E: EPDM  
S: Silicone  
V: Viton  
C: TEV

Sterilization:  
A: Autoclaving sterilization

### Disc Filter

**LP** **F** **V** **0** **2** **H** **0** **1** **N** **A**

Name: LP: LOPAC PF

Disc

Retention ratings:  
O4: 0.45μm  
V02: 0.65+0.22μm  
W02: 0.8+0.22μm  
W04: 0.8+0.45μm  
F04: 1.2+0.45μm  
F02: 1.2+0.22μm

Adapter configurations:  
H: ¼" multiple-stepped hose barb

Area:  
01: 15cm<sup>2</sup>

O-ring:  
N: N/A

Sterilization:  
A: Resistant to autoclaving  
G: Irradiated

