

# Biviro X™ Virus Filtration Filters

The Biviro X™ series virus removal filters are made with modified polyethersulfone (PES) membrane. The filter membrane features an asymmetric structure, providing high flow rates and high capacity. The precise membrane pore size effectively ensures virus retention and removal. This product series offers a powerful tool for virus removal processes, particularly for biopharmaceutical products such as antibodies, recombinant proteins, and plasma products.

## Product Features

- **Efficient Virus Retention**

Effectively removes viruses in various biopharmaceutical applications, ensuring product safety.

- **Low Protein Adsorption**

Minimizes non-specific protein adsorption, preserving the yield and activity of biopharmaceuticals.

- **High Flow Rate and Capacity**

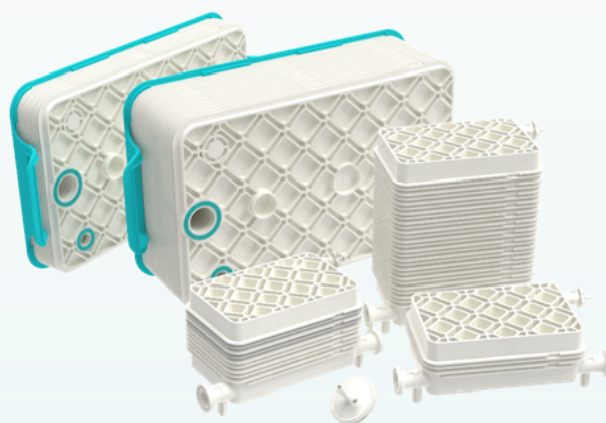
Provides high throughput and flow rate while maintaining excellent filtration efficiency, shorten process time.

- **Chemical Compatibility**

Offers broad chemical compatibility, ensuring long-term stable use of the filter.

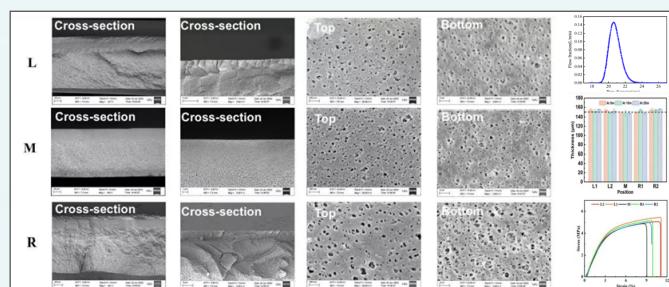
- **Reliable Performance Validation**

Undergoes rigorous performance testing to ensure consistency and reproducibility under various process conditions.



## Typical Applications

- Virus removal filtration process for biopharmaceutical antibody production.
- Virus removal filtration process for recombinant proteins from eukaryotic expression systems.
- Virus removal filtration process for plasma products.



Electron microscope structure of virus removal filter membrane, pore size, and some material data

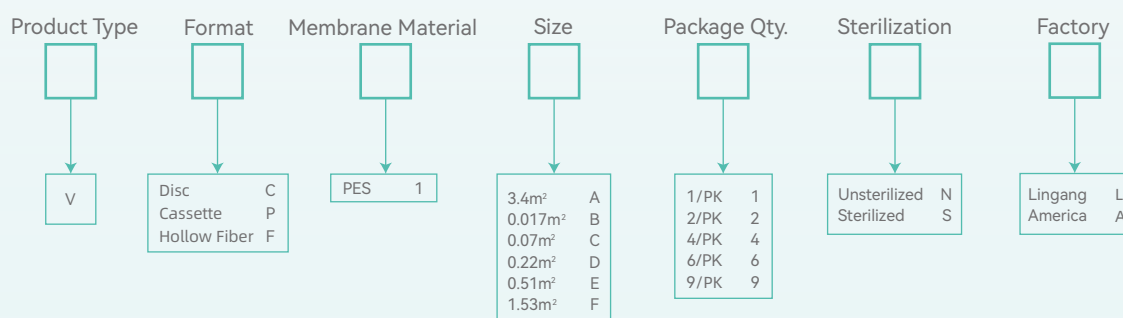
## Product Characteristics and Parameters

Product Characteristics	Parameter	Product Characteristics	Parameter
Maximum Forward Differential Pressure	4.1 bar(25°C)	Membrane Bacteriophage Retention	In the presence of simulated protein, membrane samples showed a retention of bacteriophage $\phi$ X174 with a reduction level of $\geq 4$ LRV at a minimum challenge level of $10^7$ pfu/cm <sup>2</sup> .
Maximum Operating Differential Pressure	3.5 bar(25°C)		
Flux (water)	9-30 LMH/Psi	Filter Bacteriophage Retention	In the presence of simulated protein, filter samples demonstrated bacteriophage $\phi$ X174 retention with a reduction level of $\geq 4$ LRV at a minimum challenge level of $10^7$ pfu/cm <sup>2</sup> .
Endotoxin	$\leq 0.25$ EU/ML	Integrity	Diffusion Flow: At 50 psi (3.4 bar) and 25°C water, the air diffusion flow of each filter is $\leq 40$ mL/m <sup>2</sup> .
Biological Safety	USP <88>, USP Class VI		

## Main Specifications and Materials

Format	Size	Dimensions (mm)	Membrane Material	Housing Material	Gasket	Connector Type		
Micap	3.4cm <sup>2</sup>	Ø43.6*41	PES	Polypropylene	/	Luer		
Mid	0.017m <sup>2</sup>	191*92*63.1		PES		PVDF	/	0.75"TC
	0.07m <sup>2</sup>	191*92*91.9						
	0.22m <sup>2</sup>	191*92*178.3						
Sub	0.51m <sup>2</sup>	344.8*215*62.2			Silicone Rubber		1.5TC	
	1.53m <sup>2</sup>	344.8*215*124.6						

## Ordering Information



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