

Polyethersulfone Membrane Bioburden Reduction Large Capsule Filters

The *BioPro KSO* capsule filters are designed for protecting your critical and high value downstream systems.

These help in significant reduction of bioburden and complete removal of particulate contamination and are ideal for applications which do not require sterilization but where reduction in bio load in the process fluid is the objective.

These improve the process efficiency by reducing filter sizing and prolonging life of expensive sterilizing filters.

Special Features

- Validated for high bio-burden reduction
- High flow rates
- High throughput
- Low protein binding
- No media migrating
- Biologically inert
- Easy installation

Applications

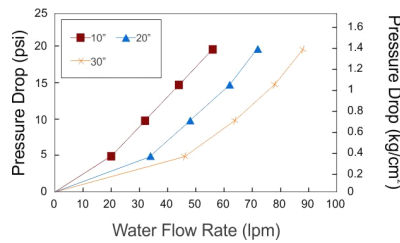
- Clarification of cell harvest
- Buffer filtration
- In process protein filtration
- Prefiltration to sterile filtration
- Prefiltration to virus filtration

Ordering Information

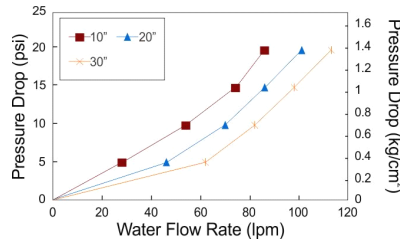


Typical Water Flow Rates

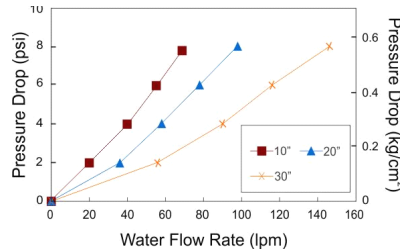
0.1µm *BioPro KSO*



0.2µm *BioPro KSO*



0.45µm *BioPro KSO*



Specifications

Integrity Test (Bubble Point) Specifications (water wetted)

0.1µm: ≥ 40psi, 0.2µm: ≥ 30psi

Bacterial Retention

0.1µm: LRV > 6 for *B.diminuta* ATCC 19146 per cm² of filter area

0.2µm: LRV > 5 for *B.diminuta* ATCC 19146 per cm² of filter area

Material of Construction

Housing – Polypropylene

Filter – Polyethersulfone

Drainage Layer–Polypropylene

Maximum Differential Pressure

≤ 4 Kg/cm² @ 30° C

Maximum Operating Temperature

80° C @ < 2 Kg/cm²

Sterilization

Autoclave	Autoclavable at 125° C for 30 minutes for 25 cycles. Cannot be in-line steam sterilized.
Gas	Sterilization by Ethylene Oxide

Oxidizable Matter

Passes test as per USP <1231>

Extractables

Passes NVR test as per USP <661>

Bacterial Endotoxin

Aqueous extracts exhibit < 0.25 EU/ml as established by LAL Test as per USP <85>

Fiber Release:

Complies with USFDA CFR Title 21, 210.3 (b) (6)

Particle Release:

The filtrate complies with USP <788> test for particulate matter in injections

Biosafety

Toxicity: Passes Bioreactivity test, *In-vivo*, as per USP <88> for Class VI plastics

Indirect Food Additives:

Passes as per USFDA 21 CFR 177.1520

pH Compatibility:

Compatible with 1-14 pH

Type	Size		Pore Size		Inlet/outlet		X	Inline/T-Line		Sterility		Pack size	
	Code	Code	Code	Code	Code	Code		code	code	code	code		
<i>BioPro KSO</i>	LBKO	5"	53	0.1µm	36	Single Step 1/2" hose barb	Q	Inline	X	Non Sterile	1	1	01
		10"	54	0.2µm	01	1 1/2" Sanitary Flange	E	T-Line**	T	EO Sterile	2		
		20"	55	0.45µm	02	3/4" Sanitary Flange***	S						
		30"	56			3/8" Hose Barb	I						
Example :													
	LBKO		56		01	EE		X	X		1		01

*1" hose barb connection is not available in 5" capsule filter

**T-Line is not available in 5" capsule filters

***T-Line Capsule filters are available with 1 1/2" Sanitary Flange only

****3/4" Sanitary Flange is available only in 5" and 10" capsule filters