

The *BioPro KSO-γ* 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

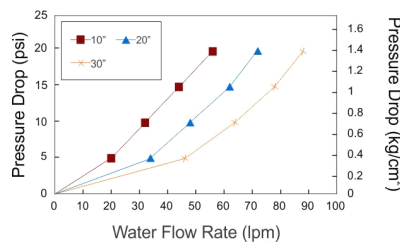
Ordering Information

Type	Size		Pore Size		Inlet/outlet		Radiation Sterilizable		Inline/T-Line		Sterility		Pack size		
	Code	Code	Code	Code		Code		Code		code	code		code		
<i>BioPro KSO</i>	LBKO	5"	53	0.1µm	36	Single Step ½" hose barb	Q	Yes	R	Inline	X	Non Sterile	1	1 01	
		10"	54	0.2µm	01	1½" Sanitary Flange	E	No**	X	T-Line***	T	Gamma Sterile	3		
		20"	55	0.45µm	02	3/4" Sanitary Flange****	S	*1" hose barb connection is not available in 5" capsule filter **Gamma sterile capsule filters cannot be gamma Irradiated again ***T-Line is not available in 5" capsule filters ****T-Line capsule filters are available with 1½" sanitary flange only *****3/4" Sanitary Flange is available only in 5" and 10" capsule filters							
		30"	56			3/8" Hose Barb	I								
Example :						1" Hose Barb*	Z								
LBKO		56		01		QQ		R		X		1		01	

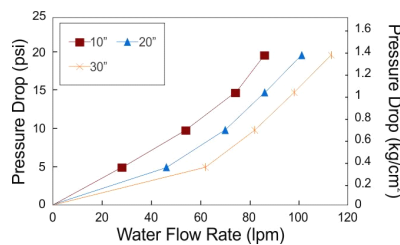


Typical Water flow rates

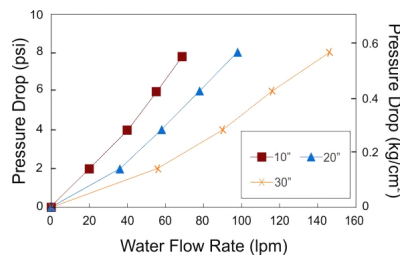
0.1µm *BioPro KSO-γ*



0.2µm *BioPro KSO-γ*



0.45µm *BioPro KSO-γ*



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 – Polyethylene

Maximum Differential Pressure

≤ 4 Kg/cm² @ 30° C

Maximum Operating Temperature

80° C @ < 2 Kg/cm²

Sterilization by Gamma Irradiation

Gamma Irradiatable upto 50 kGy. These filters should not be autoclaved or in-line steam sterilized.

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