

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

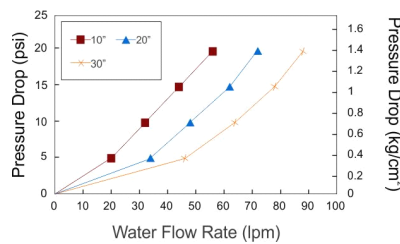
## Ordering Information

Type	Size	Pore Size	Inlet/outlet	Radiation Sterilizable	Inline/T-Line	Sterility	Pack size								
Code	Code	Code	Code	Code	code	code	code								
<i>BioPro KSO</i>	LBKO	5**	53	0.1µm	36	Single Step 1/2" hose barb	Q	Yes	R	Inline	X	Non Sterile	1	1	01
		10"	54	0.2µm	01	1 1/2" 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 1 1/2" sanitary flange only *****3/4" Sanitary Flange is available only in 5" and 10" capsule filters							
		30"	56			3/8" Hose Barb	I								
<b>Example :</b>						1" Hose Barb*	Z								
<b>LBKO</b>		56		01		QQ		R		X		1			01

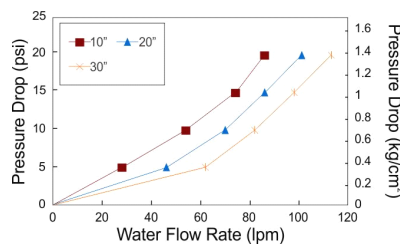


## Typical Water flow rates

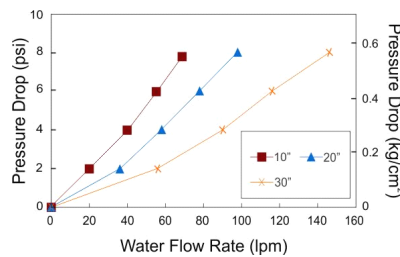
0.1µm *BioPro KSO-γ*



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 cm<sup>2</sup> of filter area

0.2µm: LRV > 5 for *B.diminuta* ATCC 19146 per cm<sup>2</sup> of filter area

### Material of Construction

Housing – Polypropylene

Filter – Polyethersulfone

Drainage Layer – Polyethylene

### Maximum Differential Pressure

≤ 4 Kg/cm<sup>2</sup> @ 30° C

### Maximum Operating Temperature

80° C @ < 2 Kg/cm<sup>2</sup>

### Sterilization by Gamma Irradiation

Gamma Irradiatable upto 50 kGy. Gamma sterilized capsule filters must 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