

The *BioPro KSO-γ* is designed for protecting your critical and high value downstream systems.

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

It improves the process efficiency by reducing filter sizing and prolonging life of expensive sterilizing filters.

These filters provide easy scalability from process development labs to actual manufacturing processes.

Special Features

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

Applications

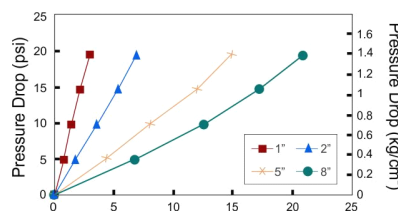
- Clarification of cell harvest
- Buffer filtration
- In process protein filtration
- Prefiltration to sterile filtration
- Prefiltration to virus filtration

Ordering Information

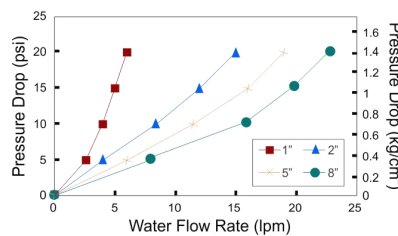


Typical Water Flow Rates

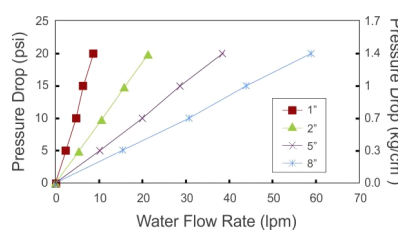
0.1µm BioPro KSO-γ



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

Type	Size		Pore Size		I/O Connection		Radiation Sterilizable		X	Sterility		Pack Size	
	Code	Code	Code	Code	Code	Code	Code	Code		Code	Qty	Code	
BioPro KSO	DBKO	1"	51	0.1µm	36	¼" SHB	A	Yes	R	Non Sterile	1	1	01
		2"	52	0.2µm	01	½" Hose Barb	D	No****	X				
		5"	53	0.45µm	02	1½" Sanitary Flange	E						
		8"	57			¾" Sanitary Flange	S						
						Quick Connector	J						
				Single Step ½" Hose Barb*	Q								
				Female Luer Lock	U								
				Male Luer Slip**	W								
				3/16" Hose Barb***	N								
				3/8" Hose Barb*	I								
Example:	DBKO	57		01		EE		X	X	3		01	

*Single Step ½" Hose Barb and 3/8" hose barb end connections are not available in 1" capsule filters
 **Male luer slip is available only in 1" capsule filter as outlet
 ***3/16" hose barb end connection is available in:
 - 1" and 2" capsule filters as inlet and outlet
 - 5" as outlet only
 ****Gamma Sterile capsule filters cannot be gamma irradiated again