

# Polyethersulfone Membrane Bioburden Reduction Large Capsule Filters

The *BioPro KS-y* 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

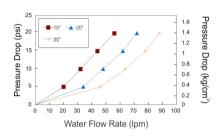
# **Applications**

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

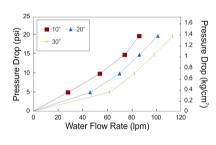


# **Typical Water Flow Rates**

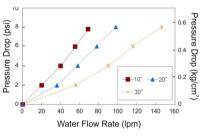
# 0.1μm *BioPro KS-y*



#### 0.2μm BioPro KS-y



## 0.45μm *BioPro KS-y*



# **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*-Polyester

# **Maximum Differential Pressure**

 $\leq$  4 Kg/cm<sup>2</sup> @ 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

**Cytotoxicity:** Passes Biological Reactivity Tests, In Vitro, USP <87> for Cytotoxicity

### **Indirect Food Additives:**

Passes as per USFDA 21 CFR 177.1520

# **Ordering Information**

LBKS

Туре		Size		Pore Size		Inlet/outlet		Radiation Sterilizable		Inline/T-Line		Sterility		Pack size	
	Code		Code		Code		Code		Code		code		code		code
BioPro KS	LBKS	5"*	53	0.1µm	36	Single Step ½" hose barb	Q	Yes	R	Inline	Х	Non Sterile	1	1	01
		10"	54	0.2µm	01	1½" Sanitary Flange	Е	No**	Х	T-Line***	Т	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							
		30"	56			3/8" Hose Barb	Ι	***T-Line is not available in 5" capsule filters  ***T-Line capsule filters are available with 1½" sanitary flange only							
Example:						1" Hose Barb*	Z	****3/4" Sanitary Flange is available only in 5" and 10" capsule filters							

QQ