

BevPure® Filter Cartridges

Single-layer PES Membrane · Sterilizing Grade

BevPure® Filter Cartridges are specially designed to provide reliable sterilizing filtration at the most economical costs. Hydrophilic PES membrane filters require no pre-wetting and are ready to use. This filter is recommended for the sterile filtration of a wide range of liquids e.g. diluting water and beverages.

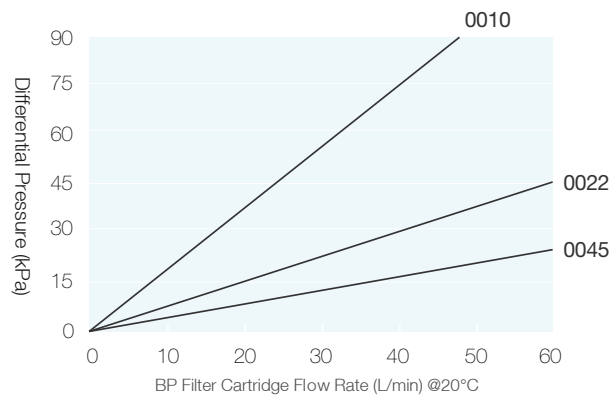
Features and Benefits

- Inherent hydrophilic PES membrane
- Each filter is individually Integrity Tested prior to factory dispatch
- Bacterial Challenge Test with *B.diminuta* bacteria
- Complies with Food Contact Regulations: FDA 21CFR177-182 and 1935/2004 EC

Materials of Construction

Filter Media	Single-Layer PES Membrane
Cage/Support	Polypropylene
Core/End Caps	Polypropylene

Flow Rate Characteristics



Microbiological Stability



Trap/Pre-Filtration

Microbiological Stabilization

Gas Filtration

Additional Filters



Operating Conditions

Max. Temperature	80°C
Max. Differential Pressure	4.0 bar / 21°C (forward flow) 2.4 bar / 70°C (forward flow)
Bubble Point	BP: >0.34 MPa (water), 0.22 µm BP: > 0.22 MPa(water), 0.45 µm
Diffusion Flow	DF: < 30 ml/min/10" @ 0.25Mpa(water), 0.22µm DF: < 28 ml/min/10" @ 0.16Mpa(water), 0.45 µm
Steam Sterilization (Saturated Steam)	≥200 cycles (135°C/30 min @ Max.Differential Pressure of 0.3 bar)
Hot Water Sterilization	85°C/30 min @ Max. Differential Pressure of 2 bar
Cleaning Solution	2% NaOH Solution @ ≤65°C
Effective Filtration Area	0.58m ² / Φ69-10 inch

Reliable Microbiological Control

The primary purpose of this membrane filter cartridge in beverage filtration is to effectively remove product spoiling microorganisms

Typical Log Reduction Value(LRV)			
	<i>B. diminuta</i>	Lactobacillus Brevis	Sasharomyces Cerevisiae
0.1µm	>7/cm ²	N/A	N/A
0.2µm	>7/cm ²	N/A	N/A
0.45µm	N/A	>7/cm	N/A
0.65µm	N/A	>4/cm ²	>7/cm ²
1.2µm	N/A	N/A	>7/cm ²

Log Reduction Values are calculated using the following formula:

$$LRV = \log_{10} \left(\frac{\text{total number of organisms entering the filter}}{\text{total number of organisms exiting the filter}} \right)$$

Ordering Information

BP	-R	Removal Ratings	End Cap	Nominal Length	Seal Material	-F
[Φ69]	Blank	0010 =0.1µm	DOE =Double Open End	10 =10"	S =Silicone	
		0022 =0.22µm	HTC =222 O-ring/Flat (PBT Insert)	20 =20"	E =EPDM	
		0045 =0.45µm	HTF =222 O-ring/Fin (PBT Insert)	30 =30"	V =Viton	
			HSF =226 O-ring/Fin (PBT Insert)	40 =40"		
			SSF =226 O-ring/Fin (SS Insert)			
			SSC =226 O-ring/Flat (SS Insert)			
			STF =222 O-ring/Fin (SS Insert, 3 Tabs)			