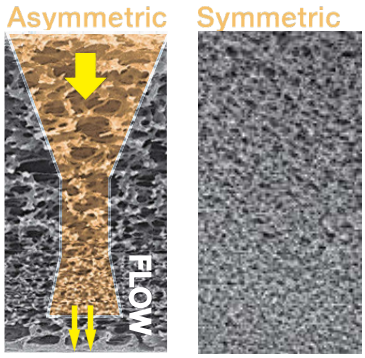
FILTRATION
PSA

BevPure XL Filter Cartridges

Extended Service Life through Asymmetric PES Membrane · Sterilizing Grade

BevPure XL Filter Cartridges have a unique membrane arrangement of single-layer asymmetric hydrophilic PES membrane. Characteristics include excellent throughput, high dirt holding capacity and durability. The extremely high flow rates in comparison to other sterilizing grade filter media can significantly reduce filtration costs.

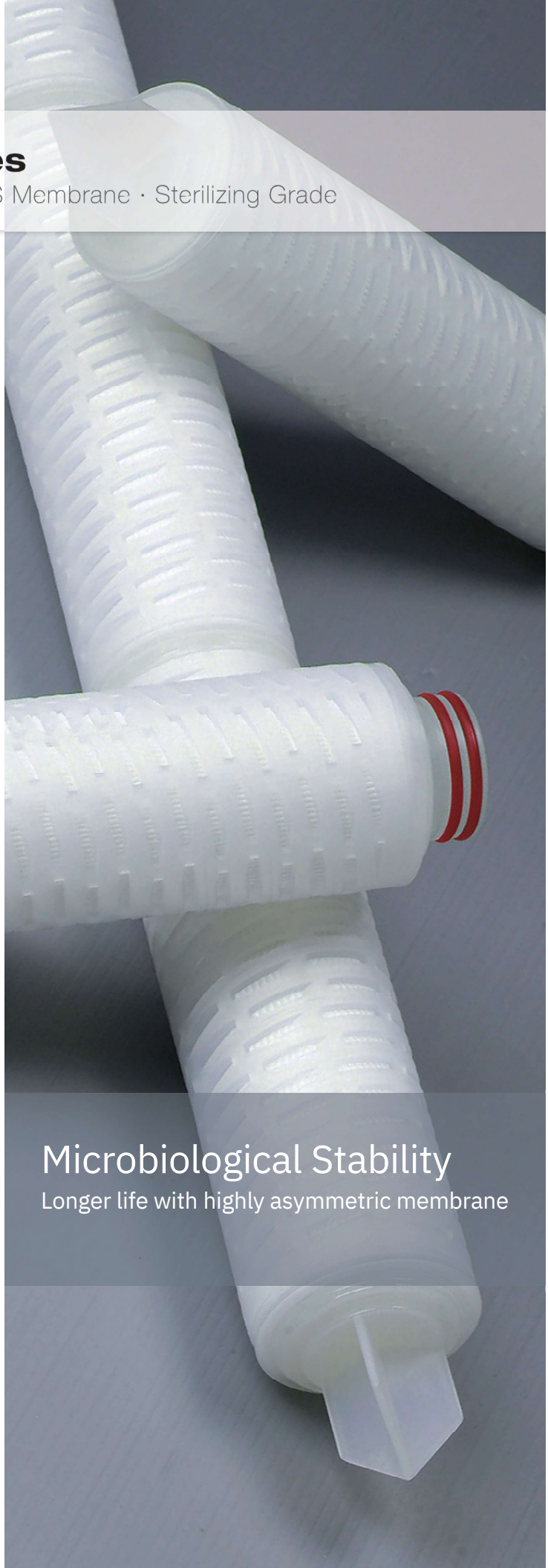


Features and Benefits

- Highly asymmetric PES membrane provides high dirt holding capacity for longer service life
- Each filter is individually Integrity Tested prior to factory dispatch
- Available in ratings from 0.1µm to 1.2µm for precise bacteria and particle removal
- Complies with Food Contact Regulations: FDA 21CFR177-182 and 1935/2004 EC

Materials of Construction

Filter Media	Asymmetric PES Membrane
Cage/Support	Polypropylene
Core/End Caps	Polypropylene



Microbiological Stability

Longer life with highly asymmetric membrane

Operating Conditions

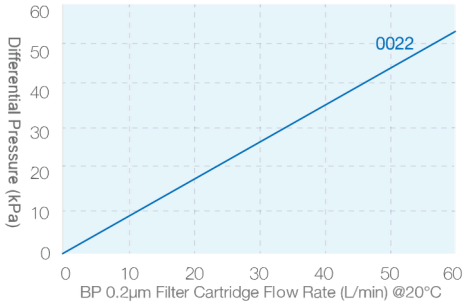
Maximum Operating Pressure	6.9 bar (100 psi) at 25 °C 2.4 bar (35 psi) at 80 °C
Max. Differential Pressure	Forward 6.9 bar (100 psi) at 25 °C 2.4 bar (35 psi) at 80 °C Reverse 3.0 bar (44 psi) at 25 °C 1.0 bar (15 psi) at 80 °C
Bubble Point (BPXLR)	≥3.4 bar (49 psi) , air ,0.22μm ≤ 30 mL/min at 2.5 bar, water

Sterilization

Inline Steam Sterilization: 100 cycles for 30 minutes at 135 °C (< 0.3 bar, 5 psi).
Autoclave: 200 cycles for 30 minutes at 130 °C.
Hot water sanitization: 50 cycles for 30 minutes at 85 °C
Chemistry sanitization: 50 cycles for 30 minutes at 40 °C in a mix solution of sodium hypochlorite (NaClO, 100 ppm) and peroxyacetic acid (100 ppm).

Cleaning Solution	2% NaOH Solution @ ≤65°C
Effective Filtration Area	0.58m² / Φ69-10 inch

Flow Rate Characteristics



Flow Rate (LPM)	10	20	30	40	50	60
Differential Pressure (kPa)	9.2	18.5	27.7	37.0	46.2	55.5

Raliable Microbiological Control

The primary purpose of a membrane filter cartridge in beverage processing is to effectively control spoilage microorganisms.

Typical Log Reduction Value (LRV)			
	B.*diminuta*	**Lactobaccilus Brevis**	**Sasharomyces Cerevisiae**
0.2μm	>7/cm²	N/A	N/A
0.45μm	N/A	>7/cm²	>7/cm²
0.65μm	N/A	>4/cm²	>7/cm²
0.8μm	N/A	N/A	>7/cm²
1.2μm	N/A	N/A	>7/cm²

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

BPXL		Removal Ratings	End Cap	Nominal Length	Seal Material	**-F**
[Φ69]	-R	**0022** =0.22 μm	**DOE** =Double Open End	**05** = 5"	**S** =Silicone	
		0045 =0.45 μm	**HTC** =222 O-ring/Flat (PBT Insert)	**10** =10"	**E** =EPDM	
		0065 =0.65 μm	**HTF** =222 O-ring/Fin (PBT Insert)	**20** =20"	**V** =Viton	
		0080 =0.8 μm	**HSF** =226 O-ring/Fin (PBT Insert)	**30** =30"		
		0120 =1.2 μm	**SSF** =226 O-ring/Fin (SS Insert)	**40** =40"		
			SSC =226 O-ring/Flat (SS Insert)			
			STF =222 O-ring/Fin (SS Insert, 3 Tabs)			