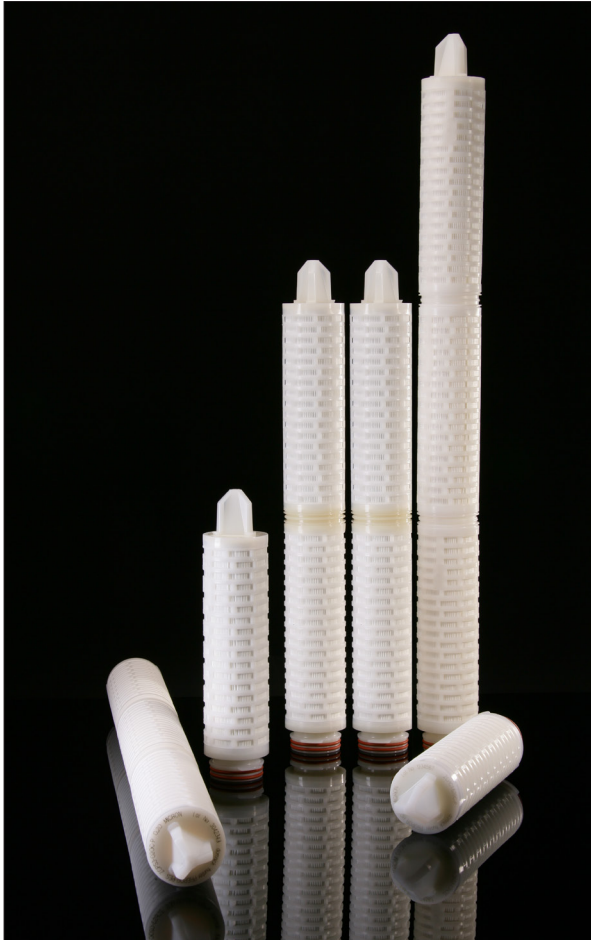


BEVPOR MS

Filter Cartridges



Minimizing the cost of microbiological control while maintaining quality and product protection is a key requirement for utility water treatment within beverage production.

BEVPOR MS is an advanced membrane filter cartridge designed for the beverage industry to meet and surpass these criteria. Specifically developed as a beverage grade cartridge,

BEVPOR MS utilizes an advanced polyethersulphone membrane configured to provide high flow and cost-effective performance. The membrane has an asymmetric pore structure which provides graded filtration throughout its depth, resulting in increased capacity to hold contaminants. Componentry has been selected to maximize mechanical strength and chemical compatibility enabling the filter to withstand repeated chemical cleaning and sterilization.

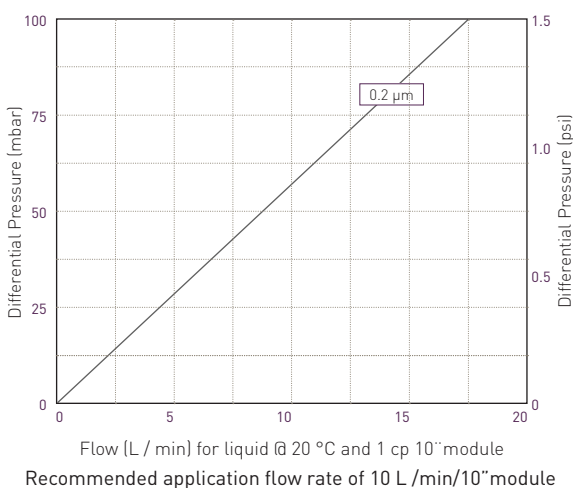
Features

- Sterilizing grade PES membrane
- Highly asymmetrical pore structure
- Robust materials of construction can be repeatedly steam sterilized and hot water sanitized
- Easily integrity tested in-situ

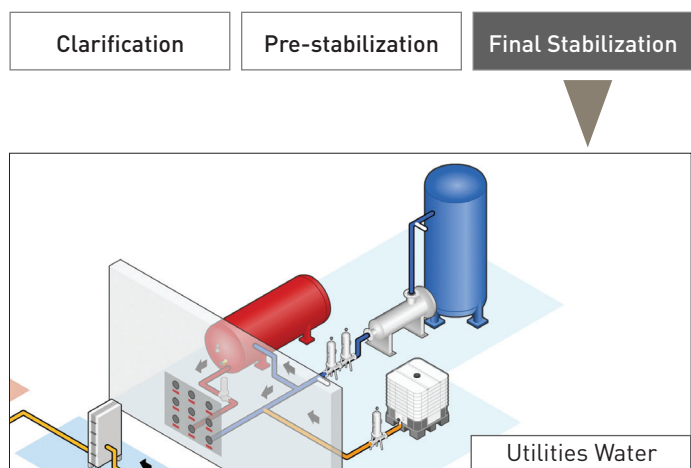
Benefits

- Ensures safety of process water
- High flow and cost-effective performance
- Extended service life
- Assure filtration performance

Performance Characteristics



Filtration Stage





Specifications

Materials of Construction

- Filtration Membrane: Polyethersulphone
- Upstream Support: Polypropylene
- Downstream Support: Polypropylene
- Inner Support Core: Polypropylene
- Outer Protection Cage: Polypropylene
- End Caps: Polypropylene
- End Cap Insert (if applicable): 316L Stainless Steel*
- *Not available in B & L endcap variants
- Standard o-rings/gaskets: Silicone / EPDM

Food and Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177, EC1935 / 2004 and current USP Plastics Class VI - 121 °C and ISO10993 equivalents.



Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

Temperature		Max Forward dP	
°C	°F	(bar)	(psi)
20	68	5.0	72.5
40	104	4.0	58.0
60	140	3.0	43.5
80	176	2.0	29.0
90	194	1.0	14.5
>100 (steam)	>212 (steam)	0.3	4.0

Effective Filtration Area (EFA)

10" (250 mm) Up to 0.5 m² (5.38 ft²)

Cleaning and Sterilization

BEVPOR MS cartridges can be repeatedly steam sterilized in situ or autoclaved at up to 130 °C (266 °F). They can be sanitized with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals.

For detailed operational procedures and advice on cleaning and sterilization, please contact the Technical Support Group through your usual Parker domnick hunter contact.

Recommended Rinse Volume

Prior to use - 10 litres per 10" (250 mm) filter cartridge.

Retention Characteristics

0.2µm BEVPOR MS filters have been validated to provide sterile effluent after bacterial challenge testing following ASTM F838-05 methodology on 10" cartridges with more than 10⁷cfu per 10" cartridge using *Brevundimonas diminuta*.

In addition, challenges with the following EU regulated organisms have been performed.

Organism	LRV when challenged with a minimum of 10 ⁷ cfu per cm ²
	0.20
<i>Serratia marcescens</i>	FR
<i>Escherichia coli</i>	FR
<i>Enterococcus faecalis</i>	FR
<i>Clostridium perfringens</i>	FR
<i>Pseudomonas aeruginosa</i>	FR

*FR - Fully retentive during challenge

Integrity Test Data

All filters are flushed with pharmaceutical grade purified water prior to despatch. They are integrity tested to the following limits:

Diffusional Flow Test Parameters	Micron Rating
	0.20
Test Pressure (barg)	2.4
Test Pressure (psig)	40.6
Max Diffusional Flow per 10" (ml /min)	16.0

Manufacturing Traceability

Each filter element displays the product description, product code and lot number. Additionally each filter module displays a unique serial number providing full manufacturing traceability.

Ordering Information

BMS - **02** - **A**

Code	Length (Nominal)	Code	Micron	Code	Endcap (10 inch)	Code	O-rings
1	10" (250 mm)	02	0.2 µm	C	BF / 226 Bayonet	E	EPDM
2	20" (500 mm)			D	Fin / 222	S	Silicone
3	30" (750 mm)			E	Flat Top / 222		
4	40" (1000 mm)			R	BF / 222 Bayonet		

VSH & HSV range of Sanitary Beverage Housings



- Multi and single elements
- Designed specifically for the food & beverage industry
- 0.4µM Ra internal, 0.25µM Ra external
- High quality crevice free construction
- Available for up to 30 round filters
- Sanitary vent, tri-clamp connections as standard
- Sanitary tri-clamp body closure as standard