BEVPOR MH Bottled Water

Filter Cartridges





BEVPOR MH filters provide full retention to industry regulated, water contaminating organisms to ensure the microbiological safety of bottled water.

The inert and highly asymmetric PES membrane provides validated microbial retention to regulated, contaminating organisms. The 0.2µm grade provides complete sterility in accordance to ASTM F838-05 requirements. Combined with hydrophilic properties for easy integrity testing, BEVPOR MH filters provide assured performance throughout their service life. The incorporation of an active prefilter layer, combined with an increased filtration area provides high water flow rates, greater resistance to blockage and maximized service lifetimes.

BEVPOR MH filters have been designed to provide the optimum solution to the microbial sterilization and stabilization of bottled water by providing increased process control with increased operational efficiency.

Features

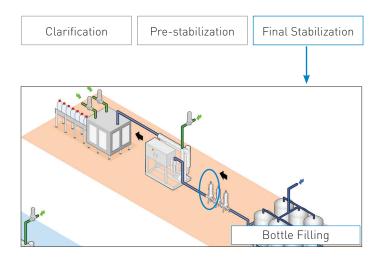
- I Validated retention to industry regulated organisms
- I Inert materials of construction
- Easily integrity tested in-situ
- Integral depth prefiltration layer
- High filtration area

Performance Characteristics

Benefits

- I Ensures the safety of the water prior to bottling
- Protects the purity and essential characteristics of the source water
- Assured filtration performance
- I Increased throughput to blockage

Filtration Stage



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Specifications

Materials of Construction

Filtration Membrane:	Polyethersulphone
Prefilter Layer:	Polyester
Upstream Support:	Polyester
Downstream Support:	Polyester
Inner Support Core:	Polypropylene
Outer Protection Cage:	Polypropylene
End Caps:	Nylon
End Cap Insert:	316L Stainless Steel
O-rings:	Silicone / EPDM

Food Contact Compliance



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

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 0.8 m² (8.61 ft²)

Cleaning and Sterilization

BEVPOR MH 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. Please refer to our Clean-in-Place support guide or contact your local Parker representative for more information.

Retention Characteristics

0.2µm BEVPOR MH filters have been validated to provide sterile effluent after bacterial challenge testing following ASTM F838-05 methodology on 10" cartridges with more than 107 cfu per cm² using Brevundimonas diminuta.

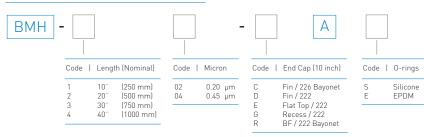
In addition, challenges with the following EU regulated organisms have been performed.

Organism	LRV wh minimu	LRV when challenged with a minimum of 10 ⁷ cfu per cm ²		
		0.20	0.45	
Serratia marceso	ens	FR	FR	
Escherichia coli		FR	FR	
Enterococcus faecalis		FR	FR	
Clostridium perfringens		FR	FR	
Pseudomonas aeruginosa		FR	FR	
Brevundimonas diminuta		FR	5	

*FR - Fully retentive during challenge

When expressed as titre reduction "FR" equates to >10" per 10" module.

Ordering information



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	Micron Rating	
Test Parameters	0.20	0.45
Test Pressure (barg)	2.4	1.7
Test Pressure (psig)	35.0	25.0
Max Diffusional		
Flow per 10" (ml /min)	21.0	21.0

Manufacturing Traceability

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



Parker domnick hunter has a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any alterations. This publication is for general information only and customers are requested to contact cur Process Filtration Sales. Department for detailed information and advice on a products suitability for specific applications. All products are sold subject to the company's standard conditions of sale.