BEVPOR PS Bottled Water

Filter Cartridges

BEVPOR PS filters ensure the microbiological safety of bottled water whilst protecting the purity and essential characteristics of the source water.

The inert and highly asymmetric PES membrane provides validated microbial retention to industry regulated contaminating organisms. Combined with hydrophilic properties for easy integrity testing, BEVPOR PS filters provide assured performance throughout their service life.

BEVPOR PS filters have been designed to provide a cost-effective solution to the microbial stabilization of bottled water by providing increased process control with increased operational efficiency.

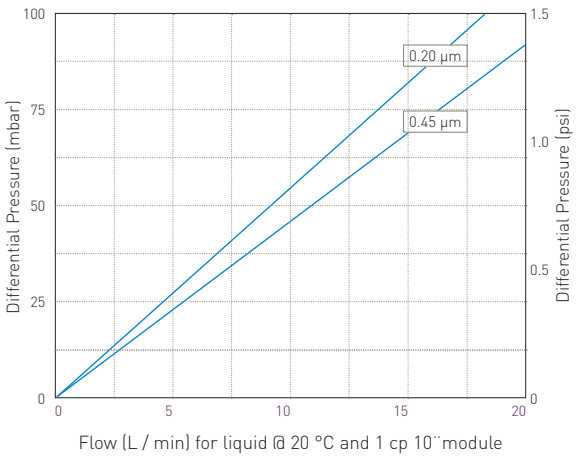
Features

- Validated retention to industry regulated micro-organisms
- Inert material of construction
- Easily integrity tested in-situ

Benefits

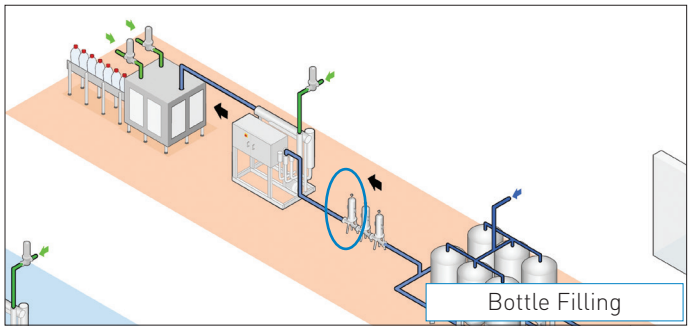
- Ensures the safety of the water prior to bottling
- Protects the purity and essential characteristics of the source water
- Assured filtration performance

Performance Characteristics



Filtration Stage

Clarification | Pre-stabilization | **Final Stabilization**



BEVPOR PS Bottled Water

Specifications

Materials of Construction

Filtration Membrane:	Polyethersulphone
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 21 CFR 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 0.6 m^2 (6.45 ft^2)

Cleaning and Sterilization

BEVPOR PS 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 PS filters have been validated to provide sterile effluent after bacterial challenge testing following ASTM F838-05 methodology on 10˝ cartridges with more than 10^7cfu 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	0.45
Serratia marcescens	FR	FR
Escherichia coli	FR	FR
Enterococcus faecalis	FR	FR
Clostridium perfringens	FR	FR
Pseudomonas aeruginosa	FR	9.1
Brevundimonas diminuta	5	-

**FR - Fully retentive during challenge*

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

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	0.45
Test Pressure (barg)	1.7	1.4
Test Pressure (psig)	25.0	20.0
Max Diffusional Flow per 10˝ (ml /min)	16.0	16.0

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.

Ordering information

BPS - [ ] [ ] - [ ] A [ ]

Code	Length (Nominal)	
1	10˝	(250 mm)
2	20˝	(500 mm)
3	30˝	(750 mm)
4	40˝	(1000 mm)

Code	Micron
02	0.20 µm
04	0.45 µm

Code	End Cap (10 inch)
C	Fin / 226 Bayonet
D	Fin / 222
E	Flat Top / 222
G	Recess 222
R	BF / 222 Bayonet

Code	O-rings
S	Silicone
E	EPDM

VSH & HSL
HOUSING RANGE AVAILABLE

Europe: ✆ +44 (0)191 4105121 | dhprocessid@parker.com | North America: ✆ toll free: +1 877 784 2234 | dhpsales.na@parker.com | www.parker.com/dhbottledwater