BEVPOR PS Brewing

Filter Cartridges

BEVPOR PS beer filters protect the unique characteristics of beer by removing yeast and other spoilage organisms to ensure microbial stability during cold stabilization.

The inert and highly asymmetric PES membrane provides validated microbial retention to typical spoilage organisms, whilst protecting the beer's organoleptic qualities to preserve a fresh taste and a long shelf-life once packaged. 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 beer stabilization by providing increased process control with increased operational efficiency.

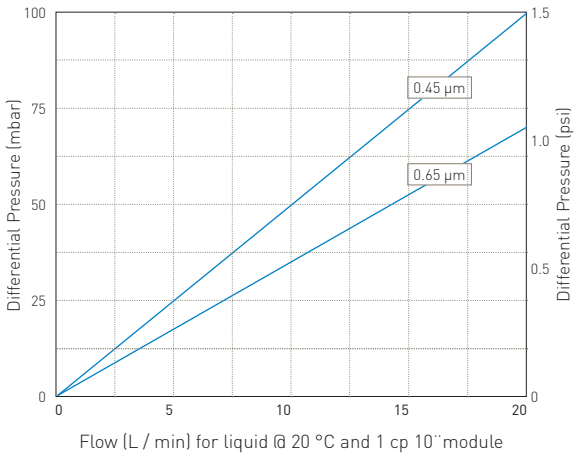
Features

- Validated retention to spoilage organisms
- Inert material of construction
- Easily integrity tested in-situ

Benefits

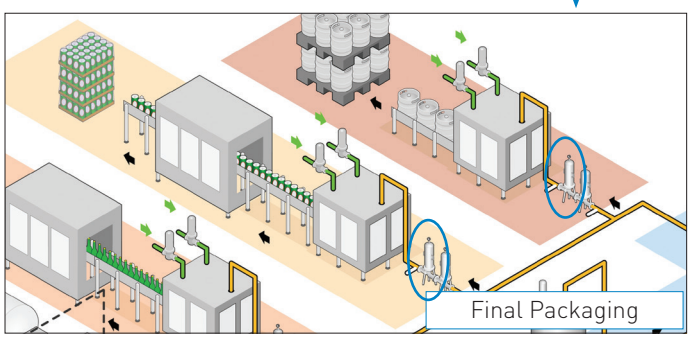
- Ensures effective microbial stabilization of beer
- Preserves the organoleptic qualities of the beer
- Assured filtration performance

Performance Characteristics



Filtration Stage

Clarification | Pre-stabilization | Final Stabilization



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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

The retention characteristics of BEVPOR PS filters have been validated by challenges performed with the following organisms.

Organism	LRV when challenged with a minimum of 10^7 cfu per cm^2	
	0.45	0.65
Saccharomyces cerevisiae	FR	FR
Brettanomyces bruxellensis	FR	FR
Lactobacillus brevis	FR	FR
Acetobacter oeni	FR	FR
Pseudomonas aeruginosa	9.1	8.9
Serratia marcescens	FR	FR

*FR - Fully retentive during challenge

When expressed as titre reduction "FR" equates to >10⁷ 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 0.45	0.65
Test Pressure (barg)	1.4	1.0
Test Pressure (psig)	20.0	15.0
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
04	0.45 µm
06	0.65 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 | dhprocess@parker.com | North America: ✆ toll free: +1 877 784 2234 | dhpsales.na@parker.com | www.parker.com/dhbeer