BEVPOR PW Cider

Filter Cartridges

BEVPOR PW cider filters protect the unique characteristics of cider 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 cider's organoleptic qualities to preserve a fresh taste and a long shelf-life once packaged.

The incorporation of an active prefilter layer allows graded retention throughout the depth of the filter to resist blockage, resulting in an increased capacity and long service lifetimes.

BEVPOR PW filters have been designed to provide a cost-effective solution to cider stabilization by providing increased process control with increased operational efficiency.

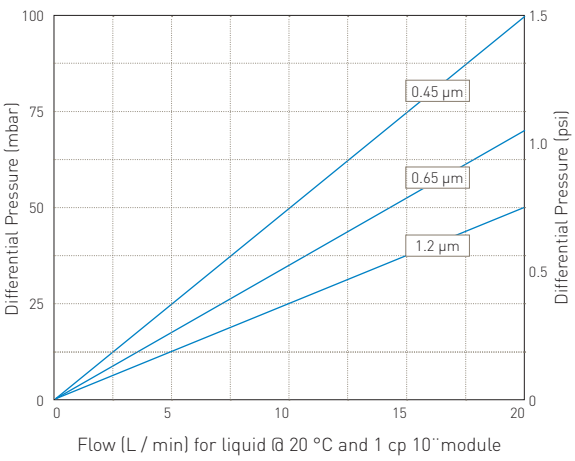
Features

- Validated retention to spoilage organisms
- Inert materials of construction
- Easily integrity tested in-situ
- Integral depth prefiltration layer

Benefits

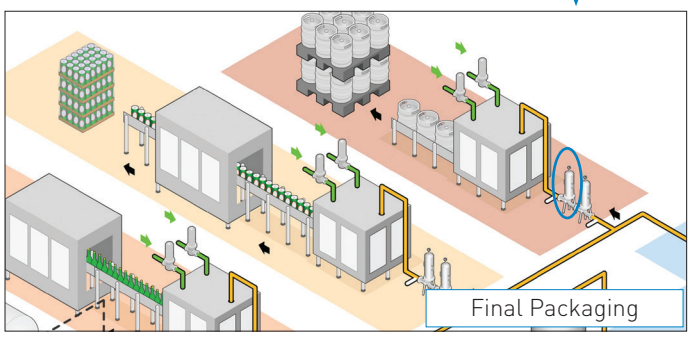
- Ensures effective microbial stabilization of cider
- Preserves the organoleptic qualities of the cider
- Assured filtration performance
- Increased throughput to blockage

Performance Characteristics



Filtration Stage

Clarification | Pre-stabilization | Final Stabilization



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 0.6 m^2 (6.45 ft^2)

Cleaning and Sterilization

BEVPOR PW 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 PW 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	1.2
Saccharomyces cerevisiae	FR	FR	FR
Brettanomyces bruxellensis	FR	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 >10^7 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	1.2
Test Pressure (barg)	1.4	1.0	0.6
Test Pressure (psig)	20.0	15.0	9.0
Max Diffusional Flow per 10˝ (ml /min)	16.0	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

BPW - [ ] [ ] - [ ] 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
12	1.20 µm

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

Code	O-rings
S	Silicone
E	EPDM

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