

# 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.

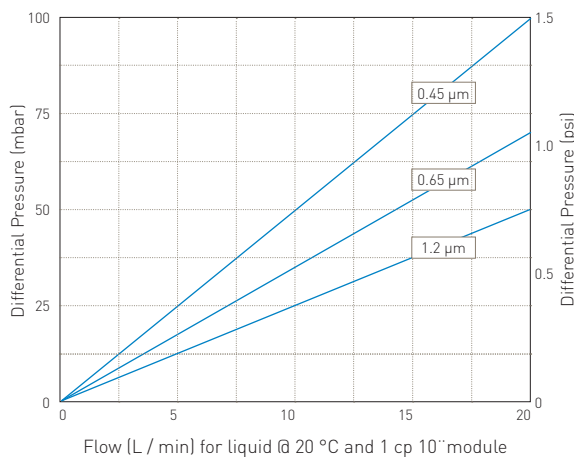
## Features

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

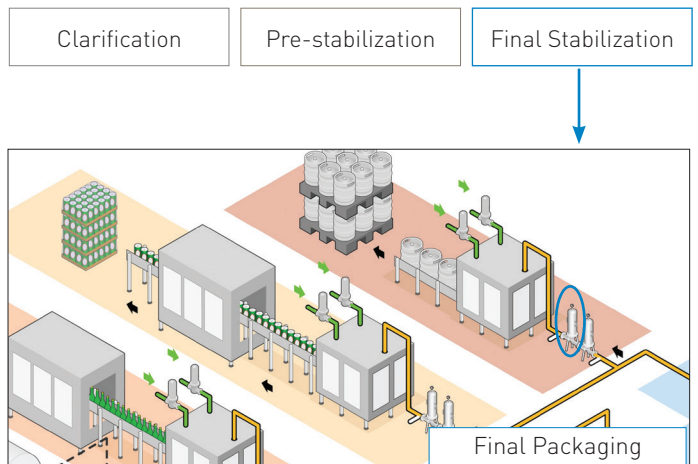
## Benefits

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

## Performance Characteristics



## Filtration Stage



## 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<sup>2</sup> (6.45 ft<sup>2</sup>)

### 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 <sup>7</sup> cfu per cm <sup>2</sup>		
	0.45	0.65	1.2
<i>Saccharomyces cerevisiae</i>	FR	FR	FR
<i>Brettanomyces bruxellensis</i>	FR	FR	FR
<i>Lactobacillus brevis</i>	FR	FR	-
<i>Acetobacter oeni</i>	FR	FR	-
<i>Pseudomonas aeruginosa</i>	9.1	8.9	-
<i>Serratia marcescens</i>	FR	FR	-

\*FR - Fully retentive during challenge

When expressed as titre reduction "FR" equates to >10<sup>7</sup> 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	8.7
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)	Code	Micron	Code	End Cap (10 inch)	Code	O-rings
1	10" (250 mm)	04	0.45 µm	C	Fin / 226 Bayonet	S	Silicone
2	20" (500 mm)	06	0.65 µm	D	Fin / 222	E	EPDM
3	30" (750 mm)	12	1.20 µm	E	Flat Top / 222		
4	40" (1000 mm)			G	Recess / 222		
				R	BF / 222 Bayonet		

VSH & HSL  
HOUSING RANGE  
AVAILABLE