





Parker domnick hunter commitments

Cider collection

Cider choice and consumption continue to grow and quality specifications are increasing to reflect consumer needs and the extended shelf-life required for products that travel further afield. Aside of live and cloudy ciders, the emphasis for the majority of volume produced is to provide consumers with a fresh tasting, visually brilliant product.

Key to achieving these requirements is the efficacy of filtration throughout the process. For products that are to be pasteurised filtration of the final product is primarily to provide visual clarity, although use of stabilizing grade filters also provides a dual barrier approach to microbiological quality. For cold stabilized products, whether in glass, PET or keg, the filter must provide a guarantee of protection against microbiological instability. Throughout the process, microfiltration plays a large role in assuring the quality of ancillary fluids such as carbon dioxide, steam and water.

Parker domnick hunter has partnered with cider makers and packagers to meet their changing needs over the years. Through a structured application-led approach, we can provide options for various levels of clarification and microbiological stability throughout the production process, whilst demonstrating proven cost reductions through operational efficiencies and filter design. Quality, economy and continuing process optimisation are our ongoing commitments.



BEVPOR PS Cider

Filter Cartridges



BEVPOR PS 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. 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 cider stabilization by providing increased process control with increased operational efficiency.

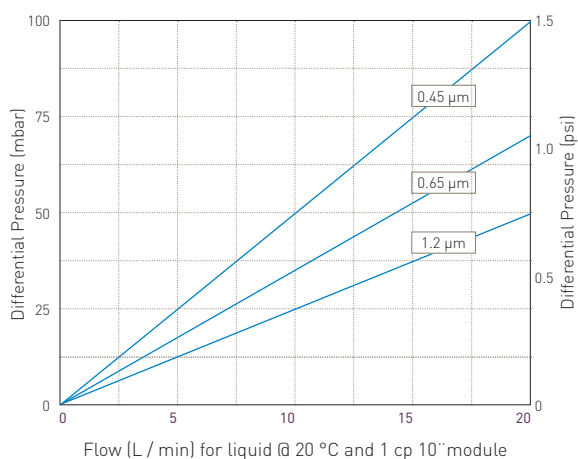
Features

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

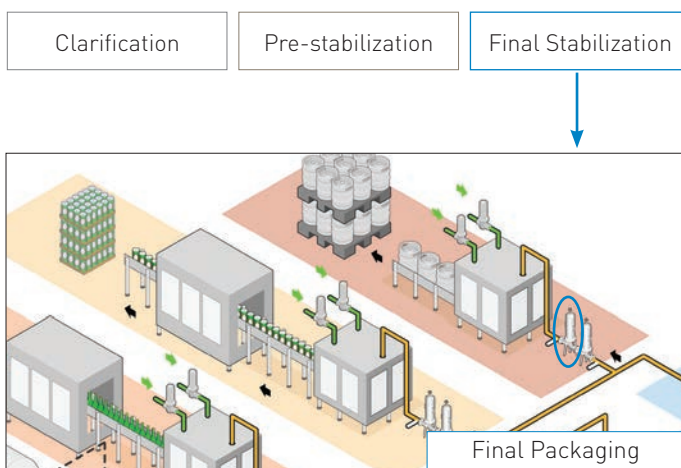
Benefits

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

Performance Characteristics



Filtration Stage





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]	[psil]
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 m² (6.45 ft²)

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	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 >10⁶ 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

BPS	-	<input type="checkbox"/>	-	<input type="checkbox"/>	-	<input type="checkbox"/>	A	-	<input type="checkbox"/>
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



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.

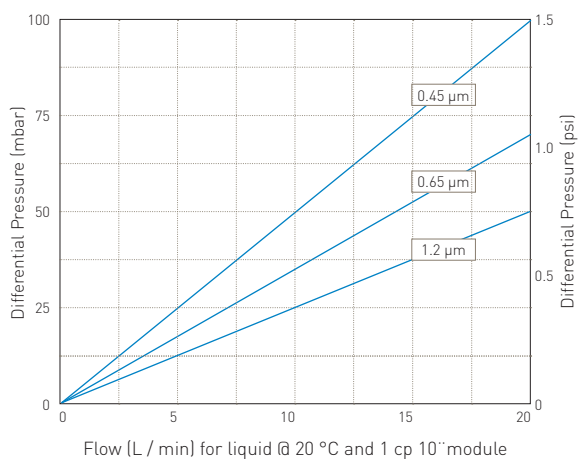
Features

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

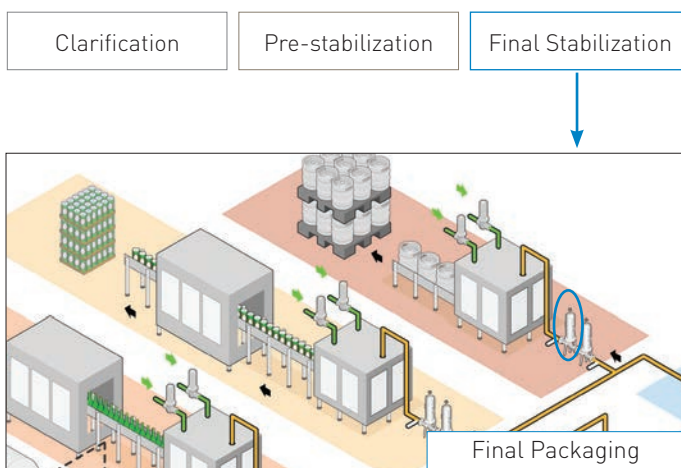
Benefits

- 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 m² (6.45 ft²)

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
<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 >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	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)	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



BEVPOR PH Cider

Filter Cartridges



BEVPOR PH 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, combined with an increased filtration area provides high cider flow rates, greater resistance to blockage and maximized service lifetime.

BEVPOR PH filters have been designed to provide the optimum solution to cider stabilization by providing increased process control with maximized operational efficiency.

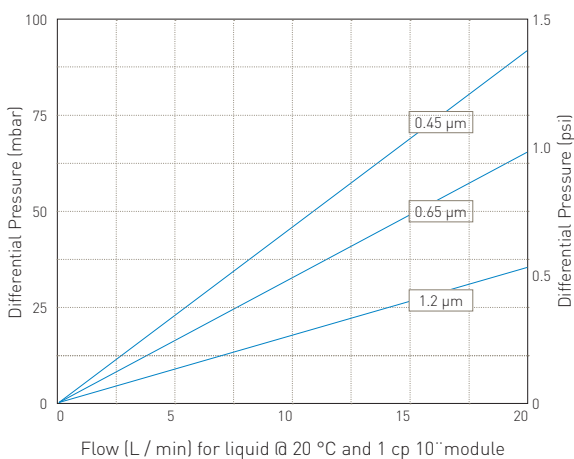
Features

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

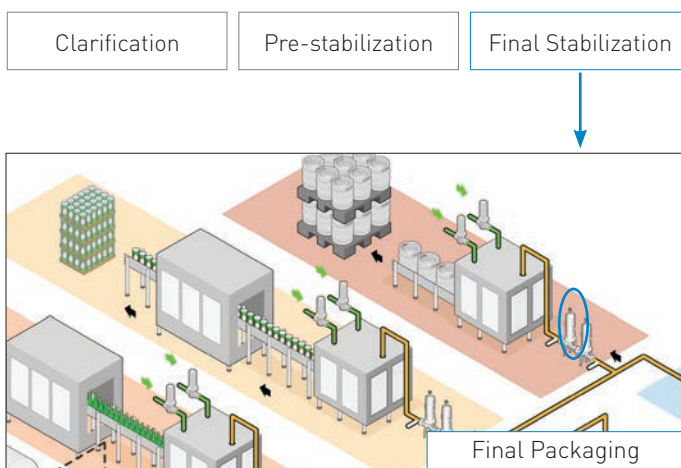
Benefits

- Ensures effective microbial stabilization of cider
- Preserves the organoleptic qualities of the cider
- Assured filtration performance
- Increased throughput to blockage
- High cider flow and maximized operational efficiency

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 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 0.8 m² (8.61 ft²)

Cleaning and Sterilization

BEVPOR PH 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 PH 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
<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 >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	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)	21.0	21.0	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

BPH	-		-		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	1.2 µm	E	Flat Top / 222		
4	40" (1000 mm)			R	BF / 222 Bayonet		

VSH & HSL
HOUSING RANGE
AVAILABLE



PREPOR NG Cider

Filter Cartridges



Parker domnick hunter's continued focus on process optimization and control has led to the development of a new range of prefilters for the clarification and pre-stabilization stages of cider production.

The control of particulate and microbial loading is important to provide stability to cider during storage and transport and to ensure that the finished product maintains its desirable characteristics after packaging.

Parker domnick hunter's next generation of PREPOR filters have been developed to remove yeast and reduce bacterial loading to improve short-term stability and to increase the service life of downstream membrane filters. The robust componentry allows for caustic and backwash regeneration, making the filter stage a reliable and cost-effective solution to intermediate stabilization.

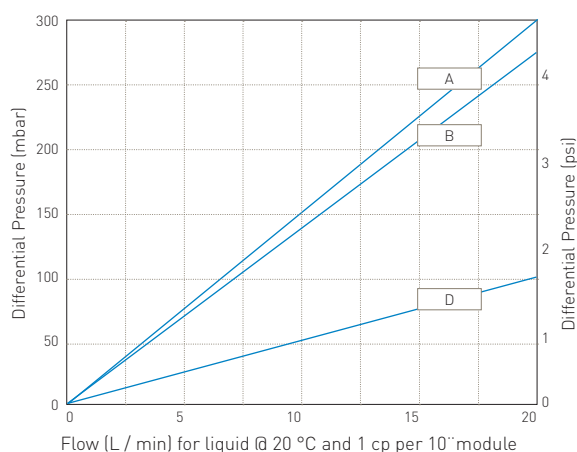
Features

- Fully validated yeast removal and bacterial reduction
- Truly optimized graded density using unique Optimized Depth Construction Technology
- Mechanically strong and chemically resistant polypropylene construction designed for chemical CIP and backwash

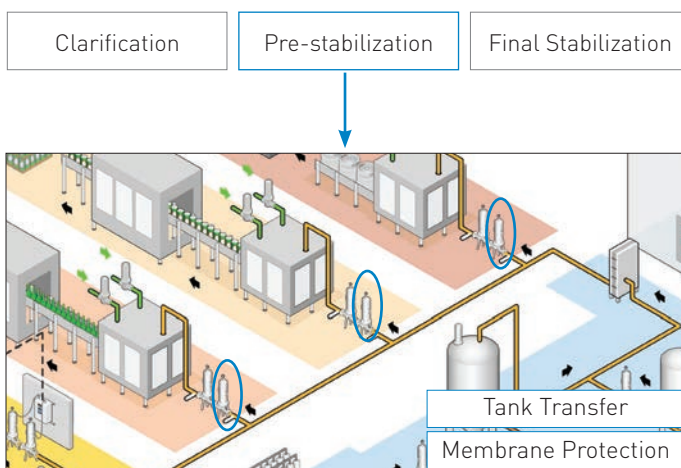
Benefits

- Effective control of clarity and microbial stability
- Increased filtration capacity
- Increased service life when combined with regular CIP regeneration

Performance Characteristics



Filtration Stage





Specifications

Materials of Construction

■ Filtration Media:	Polypropylene
■ Upstream Support:	Polypropylene
■ Downstream Support:	Polypropylene
■ Inner Support Core:	Polypropylene
■ Outer Protection Cage:	Polypropylene
■ End Caps:	Polypropylene
■ 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]	[psil]
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 0.5 m² (5.38 ft²)

Cleaning and Sterilization

PREPOR NG cartridges can be repeatedly steam sterilized in-situ or autoclaved up to 135 °C (275 °F). They can be sanitized with hot water up to 90 °C (194 °F), are compatible with a wide range of chemicals and can be backwashed. Please refer to our Clean-in-Place Support Guide or contact your local Parker representative for more information.

Retention Characteristics

The absolute retention characteristics of PREPOR NG 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		
	A	B	D
<i>Saccharomyces cerevisiae</i>	FR	FR	FR
<i>Brettanomyces bruxellensis</i>	FR	FR	FR
<i>Lactobacillus brevis</i>	FR	FR	2.0
<i>Acetobacter oeni</i>	2.0	2.0	1.7
<i>Serratia marcescens</i>	3.9	3.4	1.9

*FR - Fully retentive during challenge

When expressed as titre reduction "FR" equates to >10⁶ per 10" module.

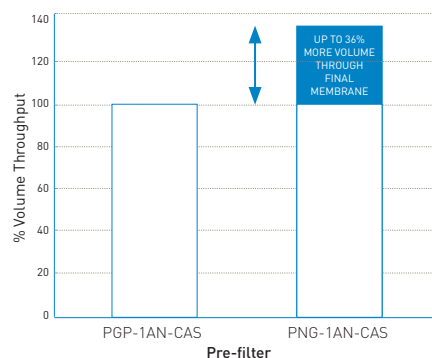
Manufacturing Traceability

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



Optimized Depth Construction (ODC) provides a unique graded density combining longer service life with absolute filtration efficiency.

Performance Benefits



ODC technology combines fine particle retention with increased strength and stability to enhance the performance offered by the PREPOR range.

Ordering information

PNG	-	<input type="text"/>	-	<input type="text"/>	N	-	<input type="text"/>	A	-	<input type="text"/>
		Code Length (Nominal)			Code Micron				Code End Cap (10 inch)	
		1 10" (250 mm)			A 0.5				C BF / 226 Bayonet	
		2 20" (500 mm)			B 0.6				D Fin / 222	
		3 30" (750 mm)			D 1.0				E Flat Top / 222	
		4 40" (1000 mm)							G Recess / 222	
									R BF / 222 Bayonet	
									S Silicone	
									E EPDM	

VSH & HSL
HOUSING RANGE
AVAILABLE