

# PEPLYN PLUS Food and Beverage

Filter Cartridges



PEPLYN PLUS filter cartridges are utilized for the clarification and pre-stabilization of process liquids and supporting utility solutions for the beverage industries.

Available in a range of absolute retention ratings, PEPLYN PLUS cartridges represent a cost-effective solution to condition a range of beverage products prior to intermediate storage or final stabilization.

Extensive research has resulted in filter media with continuously graded fibre density giving progressively finer particulate retention through the depth of the media. This, combined with optimized media pleating density gives PEPLYN PLUS cartridges exceptional lifetime and retention performance characteristics.

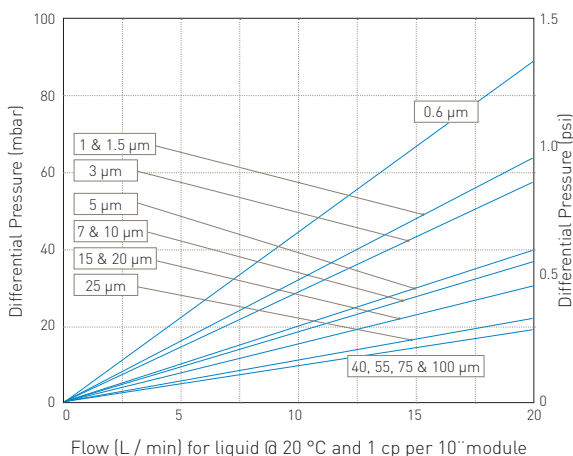
## Features

- Absolute retention ratings from 0.6µm to 100µm
- Pleated media with graded density
- All polypropylene, thermally bonded cartridge construction

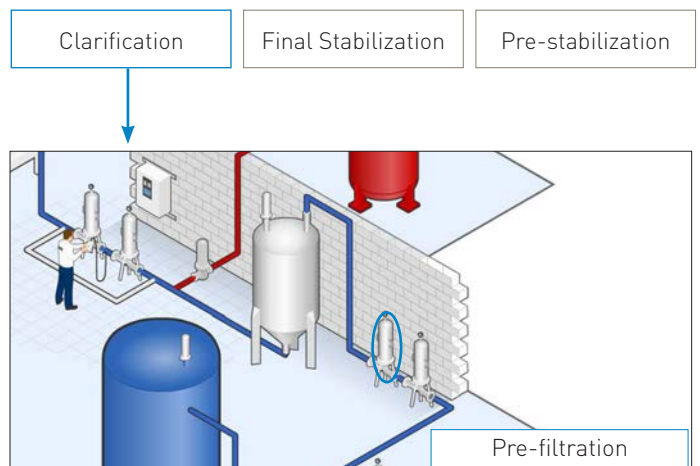
## Benefits

- Reliable, fine particle retention
- High flow and increased service life to blockage
- Compatible with aggressive process conditions including chemical cleaning and steam sanitization

## 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 (if applicable):	316L Stainless Steel*
* Not available in B End Cap variants	
■ Standard o-rings:	Silicone

### 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.



### Effective Filtration Area (EFA)

10" (250 mm) Up to 0.6 m<sup>2</sup> (6.5 ft<sup>2</sup>)

### Cleaning and Sterilization

PEPLYN PLUS cartridges can be repeatedly steam sterilized in-situ or autoclaved at up to 135 °C (275 °F). They can be sanitized with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals.

### 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.

### Retention Characteristics

The retention characteristics of PEPLYN PLUS filter cartridges have been determined by a single-pass technique using suspensions of ISO 12103 Pt. 1 A2 Fine and A4 Course test dust in water.

Media Code	Micron rating at various efficiencies				
	>99.99%	99.98%	99.90%	99%	90%
0.6	0.60	0.57	0.54	0.32	0.20
1.0	1.00	0.95	0.90	0.70	0.50
1.5	1.50	1.40	1.10	0.80	0.60
003	3.00	2.80	1.80	1.00	0.70
005	5.00	4.70	4.50	3.50	1.00
007	7.00	6.70	6.30	4.50	2.50
010	10.00	8.00	7.00	4.80	2.80
015	15.00	12.00	10.00	7.20	4.50
020	20.00	16.00	14.00	10.00	6.00
025	25.00	20.00	17.00	12.00	7.00

\* Higher microns available upon request

In addition, the removal efficiencies of the following grades of PEPLYN PLUS cartridges have been determined from tests conducted by Thames Water Utilities Limited on live *Cryptosporidium oocysts*.

Product	Micron	Retention
PEPLYN PLUS	0.6	>99.997%
PEPLYN PLUS	1.0	>99.3%

### Recommended Operating Conditions

Up to 70 °C (158 °F) continuous operating temperature and higher short-term temperatures during CIP to the following limits:

Temperature °C	°F	Max Forward dP	
		(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

## Ordering information

ZCPP



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

Code	Micron	Code	Micron
.60	0.6	015	15.0
1.0	1.0	020	20.0
1.5	1.5	025	25.0
003	3.0	040	40.0
005	5.0	055	55.0
007	7.0	075	75.0
010	10.0	100	100.0

Code	End Cap (10 inch)
B*	dh DOE
C	BF / 226 Bayonet
D	Fin / 222
E	Flat Top / 222
G	Recess / 222
H	UF Retrofit
R	BF / 222 Bayonet

\*EPDM gaskets supplied as standard

Code	Variant
S*	Steam Sterilizable

\*Not available in B End Cap variant

Code	O-rings
S*	Silicone
E	EPDM

\*Silicone O-rings supplied as standard

