# PEPLYN HD Food and Beverage

Filter Cartridges





PEPLYN HD filter cartridges have been developed to excel in liquid clarification applications where a consistent quality of filtrate is required from variable particle loadings of the process solution.

The PEPLYN HD filter media has outstanding particle holding capacity through its multi-layer high depth construction, providing extended service lifetimes and consistent quality filtrate under demanding conditions.

Capture of particles is throughout the depth of the media with larger particles being retained in the outer prefiltration layers, while the inner graded density media provides accurately defined retention to finer particulate. Both these mechanisms combine to provide a cartridge filter which returns extended service lifetimes.

### Features

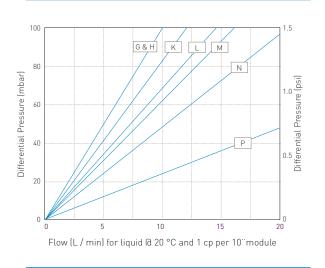
- I High depth, graded density filtration media
- Available in a range of absolute micron retention ratings

Performance Characteristics

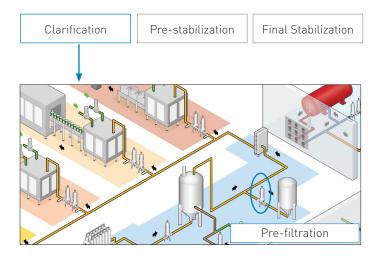
All polypropylene, thermally bonded construction

### Benefits

- Increased dirt holding capacity and resistance to blockage under high loading conditions
- Ability to provide consistent quality of filtrate in a wide range of clarification applications
- Compatible with aggressive process conditions including chemical cleaning and steam sanitization



### Filtration Stage



## EPLYN HD Food and Beverage

### **Specifications**

#### Materials of Construction

| Filtration Media:      | Polypropylene        |
|------------------------|----------------------|
| Prefilter Layer:       | 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



Ν

Micron

3.0 µm

4.8 μm 9.0μm

. 12.0um

14.0µm

17.0um 22.0µm

Code

С

D

Е

Н

R

Code T.

G

Н

Κ

М

Ν

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   |  |
|              | _ · _ (= (000111) |                |       |  |

Ordering information

10

20 30 40

Code

3

4

| Length (Nominal)

(250 mm)

(500 mm)

(750 mm)

(1000 mm)

PHD

#### Effective Filtration Area (EFA)

10" (250 mm) Up to 0.3 m<sup>2</sup> (3.22 ft<sup>2</sup>)

#### **Cleaning and Sterilization**

PEPLYN HD 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.

#### **Retention Characteristics**

The retention characteristics of PEPLYN HD 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.

|          | Mic     | ron ratin | g at vario | ous effi | icienci | es   |
|----------|---------|-----------|------------|----------|---------|------|
| Media    | >99.99% | 99.98%    | 99.90%     | 99%      | 95%     | 90%  |
| Code     | 10000   | 5000      | 1000       | 100      | 20      | 10   |
| <u>_</u> | 2.00    | 2.00      | 1.00       | 1.00     | 0.05    | 0.70 |
| G        | 3.00    | 2.80      | 1.80       | 1.00     | 0.85    | 0.70 |
| Н        | 4.80    | 4.70      | 3.20       | 2.60     | 1.90    | 1.60 |
| K        | 9.00    | 8.20      | 6.90       | 5.00     | 3.70    | 3.40 |
| L        | 12.00   | 10.00     | 7.80       | 5.90     | 4.60    | 4.00 |
| М        | 14.00   | 10.00     | 9.20       | 6.90     | 6.10    | 5.00 |
| N        | 17.00   | 14.00     | 12.00      | 9.00     | 7.00    | 6.00 |
| Ρ        | 22.00   | 18.00     | 15.00      | 12.00    | 9.40    | 6.80 |
|          |         |           |            |          |         |      |

А

Code | O-rings

Silicone

FPDM

S

| End Cap (10 inch)

BF / 226 Bayonet

BF / 222 Bayonet

Fin / 222 Flat Top / 222

UF Retrofit

#### 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.

| VSH & HSL     |
|---------------|
| HOUSING RANGE |
| AVAILABLE     |

Parker domnick hunter has a continuous policy of product development and although the Company reserves the right to change specifications, it attempts to keep customers informed of any alterations. This publication is for general information only and customers are requested to contact our Process Filtration Sales Department for detailed information and advice on a products suitability for specific applications. All products are sold subject to the company's standard conditions of sale.