

# PREPOR NG Bottled Water

Filter Cartridges



Parker domnick hunter's continued focus on process optimization has led to the development of a new range of prefilters which offer superior levels of membrane filter protection and reduced running costs for bottling plants worldwide.

Throughout the bottling process it is important to protect the water from external contamination. The PREPOR NG filter has been carefully designed and constructed to protect the purity and essential characteristics of the source water whilst reducing colloidal particulate and regulated micro-organisms over extended periods of use. This in turn reduces the potential for biofilm formation in downstream systems and significantly improves the operating lifetime of membrane final filters.

Increased resistance to frequent SIP / CIP cycles combined with the inherent strength and robust construction provides stable retention through the filter's lifetime.

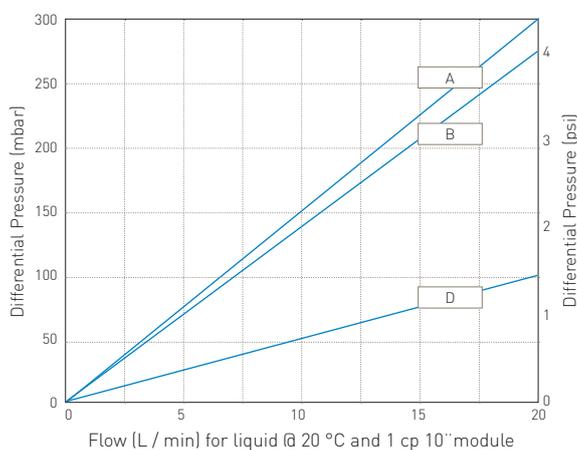
## Features

- Fully validated microbial reduction
- Truly optimized graded density using unique Optimized Depth Construction Technology
- Mechanically strong and chemically resistant polypropylene construction

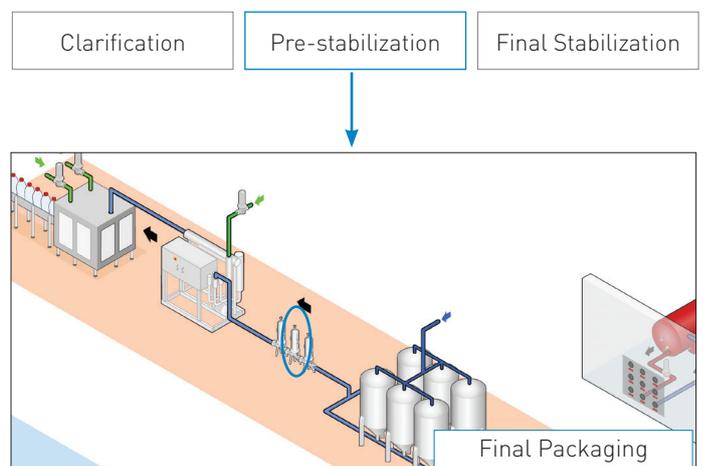
## Benefits

- Reduced risk of microbial contamination during intermediate storage
- Improved retention efficiency and dirt holding capacity
- Stable, reliable retention efficiency throughout the service life

## 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 m<sup>2</sup> (5.38 ft<sup>2</sup>)

### 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 <sup>7</sup> cfu per cm <sup>2</sup> |     |     |
|--------------------------------|---|-----|-----|
|                                | A   | B   | D   |
| <i>Pseudomonas aeruginosa</i>  | 3.0   | 2.8 | 0.5 |
| <i>Clostridium perfringens</i> | 5.0   | 2.2 | 2.2 |
| <i>Serratia marcescens</i>     | 3.9   | 3.4 | 1.9 |

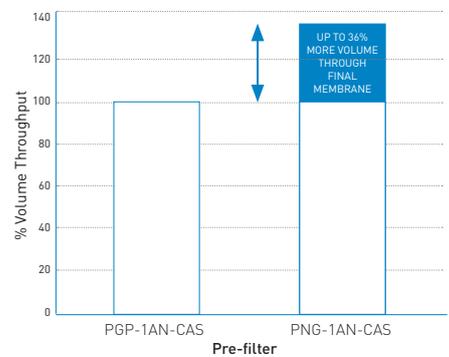
### Manufacturing Traceability

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

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

VSH & HSL  
HOUSING RANGE  
AVAILABLE