

PREPOR NG BEER

Filter Cartridges



Parker domnick hunter's continued focus on process optimization and control has led to the development of a new range of prefilters to benefit the latter stages of beer stabilization processes.

Following upstream clarification stages there is a need to control the microbial loading of the bright beer before intermediate storage.

The new range of PREPOR NG filters has been specifically developed to remove yeast and particulate such as filter aids and haze components. The superior level of retention ensures that a consistent quality of brew is delivered to bright beer storage whilst also offering a greater level of membrane filter protection during cold stabilization.

The robust componentry is specifically designed to withstand caustic and backwash regeneration, making the filter stage a reliable and cost effective solution to beer stabilization.

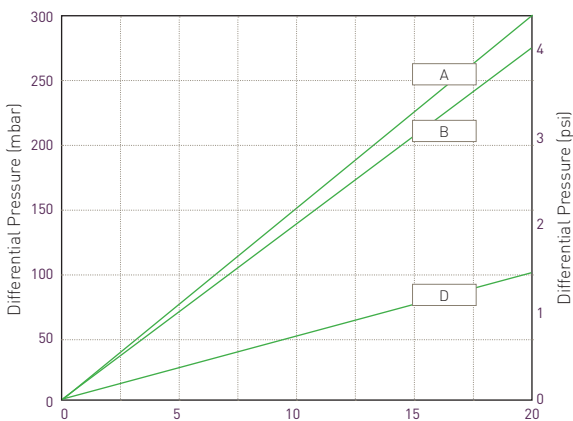
Features

- 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

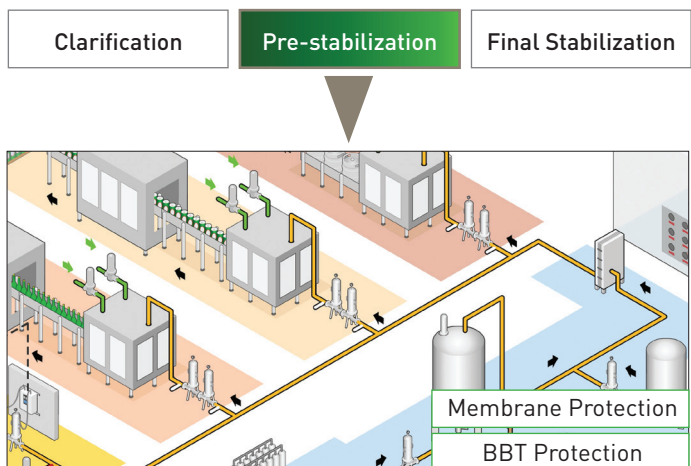
- Greater control of beer quality prior to final stabilization processes
- Increased filtration capacity
- Increased service life when combined with regular CIP regeneration

Performance Characteristics



Flow (L / min) for liquid @ 20 °C and 1 cp per 10'' module
Recommended beer flow rates between 3 - 7L/min/10'' module

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
- Standard o-rings: Silicone

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 and ISO10993 equivalents.



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 0.5 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

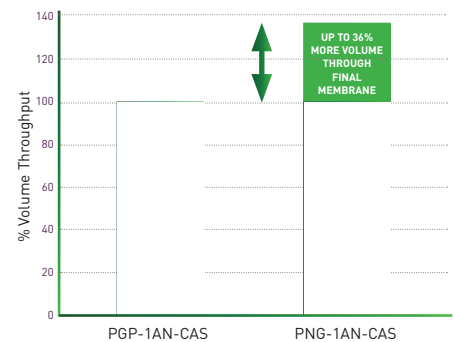


Optimized Depth Construction (ODC) provides a unique graded density combining longer service life with absolute filtration efficiency.

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.

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 | | N | | A | | | |
|------|------------------|------|--------|------|------------------|--|----------|
| Code | Length (Nominal) | Code | Micron | Code | Endcap (10 inch) | Code | O-rings |
| 1 | 10" (250 mm) | A | 0.5 | C | BF / 226 Bayonet | S* | Silicone |
| 2 | 20" (500 mm) | B | 0.6 | D | Fin / 222 | E | EPDM |
| 3 | 30" (750 mm) | D | 1.0 | E | Flat Top / 222 | *Silicone O-rings supplied as standard | |
| 4 | 40" (1000 mm) | | | G | Recess / 222 | | |
| | | | | R | BF / 222 Bayonet | | |

VSH & HSL range of Sanitary Beverage Housings



- Multi and single elements
- Designed specifically for the food & beverage industry
- 0.4µM Ra internal, 0.25µM Ra external
- High quality crevice free construction
- Available for up to 30 round filters
- Sanitary vent, tri-clamp connections as standard
- Sanitary tri-clamp body closure as standard