



PREPOR GF Filter Cartridges

- liquid filters
- glass microfibre

PREPOR GF filter cartridges have been specifically developed for fine clarification of water, products and ancillary liquids.

The higher efficiency grades also provide excellent bioburden reduction and protection to microporous membranes.

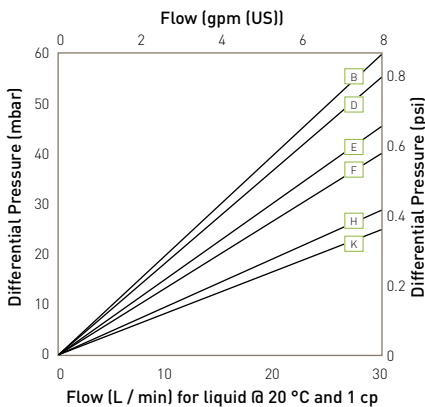
The high porosity of the microfibre filter media means that the filters have high dirt holding capacity and exhibit exceptional flow performance compared to similarly rated polypropylene filters. Coupled with the hydrophilic nature of the media, this makes them more suitable for low pressure and gravity fed systems, viscous liquids and an option for all systems where long-term elevated temperature and chemical cleaning are not required.

Features and Benefits

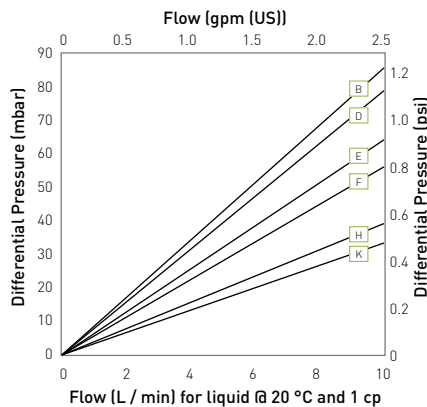
- Clarification of products for the purpose of visual aesthetics
- Removal of low levels of bioburden, such as natural yeasts, from incoming liquids
- Fine clarification of products and ancillary liquids to extend the lifetime of microporous membrane filters
- Clarification of viscous liquids such as syrups, especially where low transfer pressures are used



Performance Characteristics



For K size for a given flow rate multiply 10" size differential pressure by 2



For A size for a given flow rate divide B size differential pressure by 2
For E size for a given flow rate multiply B size differential pressure by 2

10" Size (250 mm) Cartridge

B size (125 mm) Cartridge and Capsule

Specifications

Materials of Construction

- Filtration Membrane: Glass Microfibre
- 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 & L endcap variants
- Standard o-rings/gaskets: Silicone / EPDM
- Capsule Body: Polypropylene
- Capsule Vent Seals: Silicone

Food and Biological Safety

Materials conform to the relevant requirements of 21CFR Part 177, 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 |

Capsules can be operated up to a temperature of 40 °C (104 °F) at line pressures up to 5.0 barg (72.51 psig) for liquids.

Effective Filtration Area (EFA)

10" (250 mm) Up to 0.6 m² (6.3 ft²)

Cleaning and Sterilisation

PREPOR GF cartridges can be repeatedly steam sterilized in situ or autoclaved at up to 121 °C (249.8 °F). They can be sanitized with hot water at up to 90 °C (194 °F) and are compatible with a wide range of chemicals. Capsules can be repeatedly autoclaved up to 130 °C (266 °F).

Retention Characteristics

The retention characteristics of PREPOR GF have been determined through controlled laboratory tests challenging with a standard aqueous suspension of ACFTD (AC Fine Test Dust) using on-line laser particle counters.

| Efficiency Beta Ratio | Micron Rating at Various Efficiencies | | | | | |
|-----------------------|---------------------------------------|--------|--------|------|------|------|
| | >99.99% | 99.98% | 99.90% | 99% | 95% | 90% |
| B | 0.60 | 0.50 | 0.46 | 0.33 | 0.25 | 0.22 |
| D | 1.0 | 0.80 | 0.60 | 0.52 | 0.42 | 0.35 |
| E | 1.5 | 1.2 | 0.93 | 0.77 | 0.63 | 0.47 |
| F | 2.0 | 1.6 | 1.5 | 1.2 | 0.82 | 0.73 |
| H | 5.0 | 4.3 | 3.6 | 2.9 | 2.3 | 2.0 |
| K | 10.0 | 9.2 | 7.9 | 5.9 | 4.4 | 4.0 |

Ordering Information

Cartridges



| Code | Length (Nominal) | Retention Rating | Code Flush | Code Endcap (10") | Code Format | Code O-rings |
|------|------------------|------------------|--|--------------------------|---------------|----------------|
| B* | 2.5" (65 mm) | B | N None | B* dh DOE | A 10" Modular | E EPDM |
| A* | 5" (125 mm) | D | <i>For detailed operational procedures and advice on cleaning and sterilization, please contact the Technical Support Group through your usual Parker dominick hunter contact.</i> | C BF / 226 Bayonet | D Demi | S Silicone |
| K | 5" (125 mm) | E | | D Fin / 222 | | |
| 1 | 10" (250 mm) | F | | E Flat Top / 222 | | |
| 2 | 20" (500 mm) | H | | G Recess / 222 | | |
| 3 | 30" (750 mm) | K | | H UF Retrofit | | |
| 4 | 40" (1000 mm) | | | J SOE (no o-ring) dh DOE | | |
| | | | | L* dh DOE | | |
| | | | | N Internal 213 | | |
| | | | | R BF / 222 Bayonet | | |
| | | | | | | |

* Supplied in packs of 3.

| Code Endcap (Demi) |
|----------------------|
| SK Retrofit |
| T TRUESEAL |
| Y Demi Stub |
| Z Demi A & B Std |

* EPDM gaskets supplied as standard

Capsules



| Code | Length (Nominal) | Retention Rating | Code Flush | Code Inlet Connection | Code Outlet Connection | Code Vent / Drain Seals |
|------|------------------|------------------|--------------|-------------------------|--------------------------|---------------------------|
| E | 4.4" (113 mm) | B | N None | T 1" Tri-Clamp | T 1" Tri-Clamp | S Silicone |
| B | 5.5" (140 mm) | D | | N 1/2" NPT Male | N 1/2" NPT Male | |
| A | 7.9" (200 mm) | E | | H 1/2" Hosebarb | H 1/2" Hosebarb | |
| | | F | | G Stepped Hosebarb | G Stepped Hosebarb | |
| | | H | | M 1/4" NPT Male | M 1/4" NPT Male | |
| | | K | | V 3/8" NPT Female | V 3/8" NPT Female | |

Supplied in packs of 3.