GE
Water & Process Technologies

Fact Sheet

# Flotrex* GF

## Pleated Filters with Glass Microfiber Media



**Figure 1: Flotrex GF Filters**

## Description and Use

The Flotrex GF (FGF) filter (Figure 1) is an absolute-rated, glass microfiber filter that is dependable and very efficient in the removal of Cryptosporidium and Giardia cysts. The filters do not leach any flavor-altering substances and are ideal for final filtration applications. FGF filters have the important International Bottled Water Association (IBWA)-recommended 1.0-micron absolute rating. The FGF 1.0 micron filters are NSF International Standard 53 certified for the reduction of cysts.

The FGF filter is just one example of our strong commitment to liquid, air and gas treatment. Our complete portfolio includes filters for every stage of processing, and we offer custom solutions for your unique applications. GE Water & Process Technologies is your complete source for filters, housings and other filtration equipment.

## Applications

Flotrex GF filters are specifically designed for high throughput and long service life. Typical applications include:

- Final Filtration for Bottled Water
- Prefiltration of Pharmaceuticals and Biologicals
- Cosmetic Oil, Gel and Shampoo Filtration
- Beverage Clarification
- Paints and Coatings
- Ink

## General Properties

Flotrex GF filters are available the following absolute pore size micron ratings: 0.45 and 3.0 µm and 1.0 um which is NSF Standard 53 certified. Tables 1, 2, 3 and 4 show further details on materials of construction, dimensions, operational limits and flow performance in air and water.

**Table 1: Materials of Construction**

| | |
|---|---|
| Filtration Media | Acrylic Resin-Bonded Glass Microfiber |
| Support Layers | Polypropylene Microfiber |
| Core and Cage | Polypropylene |
| Endcaps and Adapters | Polypropylene |

**Table 2: Dimensions**

| Filter Model | Nominal O.D | Nominal I.D. | Effective Filtration Area |
|---|---|---|---|
| FGF94 | 2.75" (70mm) | 1.25" (31mm) | 3.8 ft² (0.35 m²) |
| FGF01 | 2.75" (70mm) | 1.25" (31mm) | 4.4 ft² (0.41 m²) |
| FGF03 | 2.75" (70mm) | 1.25" (31mm) | 4.4 ft² (0.41 m²) |

**Table 3: Operational Limits**

| | |
|---|---|
| Maximum Forward Differential Pressure | 60 psi (4.1 bar) at 70°F (21°C) |
| Maximum Reverse Differential Pressure | 30 psi (2.1 bar) at 70°F (21C°) |
| Maximum Operating Temperature | 180°F (82°C) at 10 psid (0.69 bar) in water |

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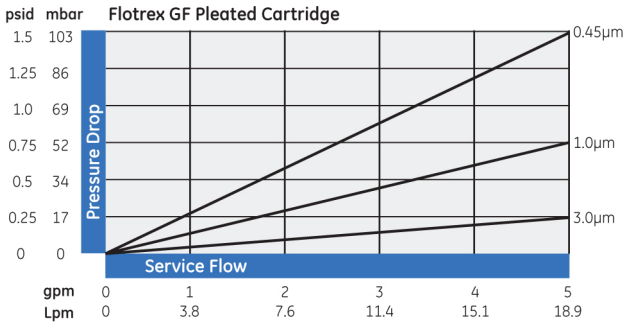
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## Additional Information

- Flotrex GF filters may be autoclaved or in situ steam sterilized (up to 257°F [125°C] 30-minute cycles) for a maixmum accumulated exposure of 10 hours. Alternatively, the filters may be sanitized with compatible chemical agents.
- GE certifies that the materials contained in its Flotrex GF pleated filters meet US FDA requirements for food contact under the applicable regulations in 21 CFR. For further information, contact GE technical services. Flotrex GF filters meet the test criteria for USP Class VI-121°C Plastics.
- Aqueous extracts from Flotrex GF filters contain less than 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues.
- GE Filter cartridges are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility. Please contact your GE distributor for more information.

**Table 4: Flow Performance in Clean Water[1]**




[1]Data based on 10" length filter

The Flotrex-GF 1.0 micron filter has been tested according to ANSI/NSF Standard 53 for reduction of the substances listed below. The concentration of the indicated substances entering the filter was reduced to a concentration less than or equal to the permissible limits for leaving the filter, as specified in ANSI/NSF Standard 53. Testing was performed under standard laboratory conditions. Actual performance may vary. Table 5 shows ANSI/NSF Standard 53 standards used in the performance testing.

**Table 5: ANSI/NSF Standard 53 Performance Requirements**

| Substance | Influent Challenge Concentratoin | Reduction Requirement |
|---|---|---|
| Cyst | Minimum 50,000/L | 99.95% |

ISO 9001 registered NSF

**Table 6: Ordering Information**

| Type | Absolute Micron Rating | Nominal Cartridge Length | End #1 Adapter | End #2 Adapter | Elastomer Material |
|---|---|---|---|---|---|
| FGF | 94 = 0.45 µm<br>01 = 1.0 µm[4] NSF<br>03 = 3.0 µm | 1 = 10 in (25 cm)<br>2 = 20 in (51 cm)<br>3 = 30 in (76 cm)<br>4 = 40 in (102 cm) | A = Open End Gasket<br>B = 120 O-Ring<br>C = 213 O-Ring<br>E = 222 O-Ring<br>F = 226 O-Ring<br>J = 020 O-Ring<br>Q = 222 O-Ring Stainless Steel Insert[2]<br>Z = 226 O-Ring Stainless Steel Insert[2] | A = Open End Gasket<br>B = 120 O-Ring<br>C = 213 O-Ring<br>G = Closed End Cap<br>H = Fin Adapter | B = Buna-N<br>E = EPDM<br>S = Silicone<br>T = Teflon[3] Encapsulated Viton[3] (Only in 222 and 226 sizes)<br>V = Viton |
| **Example: FGF013EHS** | | | | | |

[2]Q or Z Adapters normally require G or H adapters. [3]Teflon and Viton are registered trademarks of DuPont.
[4]This Flotrex-GF 1.0 micron filter is tested and certified by NSF international against ANSI/NSF Standard 53 for material requirements only.