

## GFC™ Series Filter Cartridges

### Glass Fiber Cartridges (GFC)

This high efficiency, disposable filter element is suited for a wide range of applications. The filter is constructed of pleated Borosilicate Microfiberglass filter media with greater surface area for high system flow rate.

### Features–Benefits

- Micron ratings from 0.2 to 30 µm – Broad application range
- Uniform pore size – High removal efficiency
- High surface area – High flow capability and dirt holding capacity
- Long service life – Minimizes maintenance costs
- Fixed pore construction – Eliminates dirt unloading at maximum differential pressure

### Product Specifications

|                  |  |
|------------------|--|
| Media:           | Borosilicate Microfiberglass with Acrylic Binder                 |
| Inner core:      | Polypropylene  |
| Support layers:  | Polyester  |
| End caps:        | Polypropylene  |
| Cage:            | Polypropylene  |
| Gaskets/O-Rings: | Buna-N, EPDM, Silicone, Teflon Encapsulated Viton (O-Rings only) |
| Micron ratings:  | 0.2, 0.45, 1.0*, 3.0, 10, 30 µm                                  |

### Dimensions

|                   |   |
|-------------------|---|
| Nominal lengths:  | 5", 9.75", 10", 20", 30", 40"<br>(12.7, 24.8, 25.4, 50.8, 76.2, 101.6 cm) |
| Outside diameter: | 2.7" (6.9 cm)   |
| Inside diameter:  | 1.0" (2.54 cm)  |

### Operating Parameters

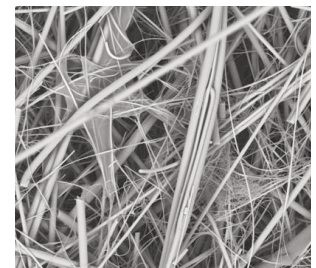
|                                  |   |
|----------------------------------|---|
| Maximum operating temperature:   | 176 °F (80°C)   |
| Maximum differential pressure:   | 80 psid @ 70°F (5.5 bar @ 21°C)<br>40 psid @ 150°F (2.8 bar @ 65°C) |
| Recommended change-out pressure: | 35 psid (2.4 bar)   |

\* 1 micron grade features all FDA listed materials of construction.



### Typical Applications

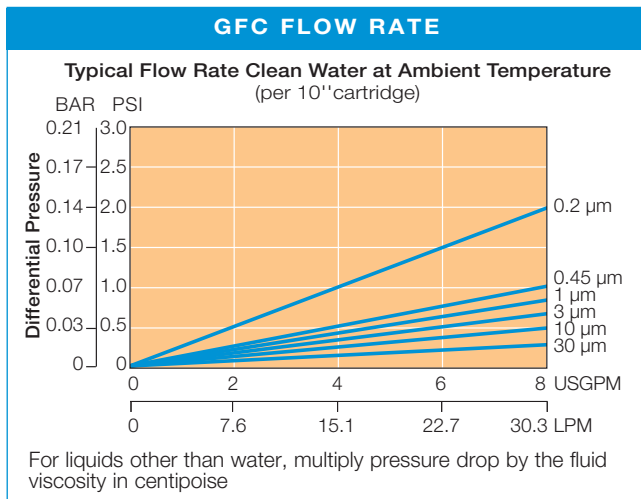
- Wine prefiltration
- Chemicals
- Blowdown post filter
- Inks
- Magnetic tape coatings
- Oil & Gas



## GFC Nomenclature Information

|  |            |            |   |  |   |
|--|------------|------------|---|--|---|
| <b>GFC</b>                               | <b>3</b>   | <b>-10</b> | <b>P7</b>   | <b>B</b>                                     | <b>-I</b>   |
| <b>Filter Type</b><br>GFC Series Filters |            |            | <b>End Configuration</b><br><b>P</b> Double Open End<br><b>P2</b> 226/Flat Single Open End<br><b>P3</b> 222/Flat Single Open End<br><b>P7</b> 226/Fin Single Open End<br><b>P8</b> 222/Fin Single Open End<br><b>AM</b> Single open end, internal O-Ring<br><b>NPC</b> Double open end, internal O-Ring |  | <b>Insert</b><br><b>-I</b> endcap insert for steaming |
| <b>Retention Rating (microns)</b>        |            |            |   | <b>Gasket or O-Ring</b>                      |   |
| <b>0.2</b>                               | <b>3</b>   |            |   | <b>S</b> Silicone                            |   |
| <b>0.45</b>                              | <b>10</b>  |            |   | <b>B</b> Buna-N                              |   |
| <b>1</b>                                 | <b>30</b>  |            |   | <b>E</b> EPDM                                |   |
|  |            |            |   | <b>V</b> Viton                               |   |
|  |            |            |   | <b>T</b> Teflon endcap. Viton (O-Rings only) |   |
| <b>Nominal Length (inches)</b>           |            |            |   |  |   |
| <b>-5</b>                                | <b>-20</b> |            |   |  |   |
| <b>-9.75</b>                             | <b>-30</b> |            |   |  |   |
| <b>-10</b>                               | <b>-40</b> |            |   |  |   |

Example: GFC 3-10P7B-1



### Removal Efficiency

| Beta Ratio Efficiency | Beta 10 | Beta 20 | Beta 100 | Beta 1000 | Beta 5000 |
|-----------------------|---------|---------|----------|-----------|-----------|
| 90%                   | 90%     | 95%     | 99%      | 99.9%     | 99.98%    |
| 0.2 micron            | 0.2     | 0.3     | 0.6      | 0.8       | 1.0       |
| 0.45 micron           | 0.45    | 0.6     | 0.8      | 1.8       | 2.0       |
| 1 micron              | 1.0     | 1.3     | 2.0      | 3.5       | 4.0       |
| 3 microns             | 3.0     | 4.0     | 5.5      | 9.0       | 10.0      |
| 10 microns            | 10.0    | 12.0    | 15.0     | 17.0      | 18.0      |
| 30 microns            | 30.0    | 35.0    | 38.0     | 42.0      | 45.0      |

$$\text{Beta Ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$

The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability of filtration parameters.

Testing was conducted using the single-pass test method, water at 2.5 gpm/10" cartridge. Contaminant's included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

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