



Graver Technologies

Filtration | Separation | Purification

High Flow Series Filter Cartridges

Large Geometry Pleated Filters for High Flow

Graver High Flow Series filters feature a larger geometry to handle higher flows with fewer filter elements. The result is much faster, easier filter changeouts. In addition, the inside to outside flow allows for excellent dirt holding capacity, extending the time between filter changeouts. Filter housings are also available and because of the filters high flow and dirt holding capacity, smaller systems are possible, reducing upfront capital costs.

High Flow Series Features - Benefits

- 6" diameter, large geometry for high flows
- Absolute retention ratings from 1 to 100 microns
- Capable of flow rates up to 500 GPM in a single 60" element
- FDA listed materials of construction
- Inside-out flow retains contaminant even during changeout
- Multi layer pleated construction with optimized surface area
- Outer cage prevents media extrusion problem experienced with some competitive offerings
- Unique Quad Seal gasket provides maximum seal integrity
- Retrofits competitive high flow filter housings
- Thermally bonded construction

Filter Specifications

| | |
|---------------------|-------------------------------|
| Media/Support/Cage: | Polypropylene |
| End caps: | Polypropylene |
| Gaskets/O-rings: | EPDM, Silicone, Buna N, Viton |
| Micron ratings: | 1, 3, 5, 10, 20, 40, 60, 100 |

Dimensions

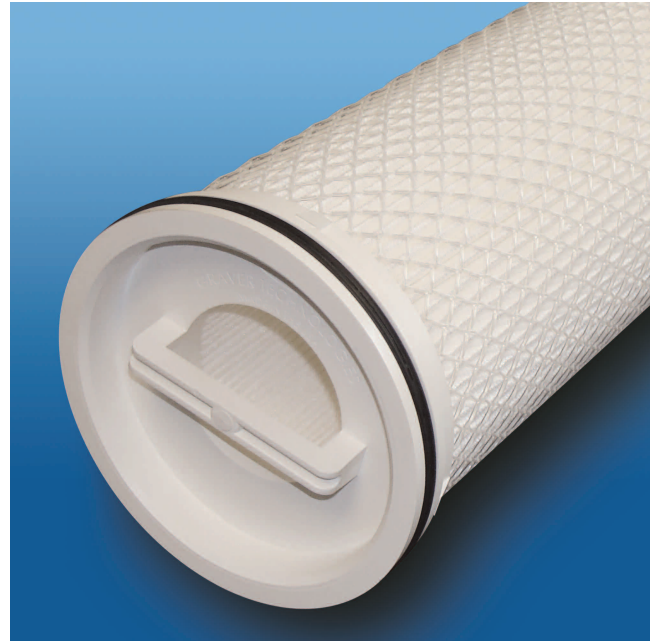
| | |
|-------------------|--|
| Nominal lengths: | 20, 40, 60 inches (50.8, 101.6, 152.4 cm) |
| Outside diameter: | 6.0 in (15.2 cm) |

Operating Conditions

| | |
|--------------------------------|--|
| Maximum operating temperature: | 180°F@ 20psid (82°C @1.4 bar) 160°F@ 30psid (71°C @2.1 bar) 77°F @ 50psid (25°C @ 3.4 bar) |
|--------------------------------|--|

| | |
|--|------------------|
| Recommended changeout differential pressure: | 35psid (2.4 bar) |
|--|------------------|

| | |
|---------------------|---|
| Maximum flow rates: | 60" element up to 500 GPM (1892 lpm) 40" element up to 350 GPM (1325 lpm) 20" element up to 175 GPM (662 lpm) |
|---------------------|---|



Applications

- Water Systems
- Chemicals
- Food and Beverage

Filter Removal Efficiency

| Micron Rating Beta Ratio | 99.9% Beta 1000 | 99% Beta 100 | 90% Beta 10 |
|-----------------------------|--------------------|-----------------|----------------|
| 1 micron | 1 | 0.6 | 0.2 |
| 3 micron | 3 | 2 | 1.5 |
| 5 micron | 5 | 4 | 3 |
| 10 micron | 10 | 8.5 | 6.5 |
| 20 micron | 22 | 19 | 14 |
| 40 micron | 38 | 18 | 15 |
| 60 micron | 60 | 35 | 20 |
| 100 micron | 100 | 75 | 45 |

High Flow Series Nomenclature Information

| High Flow | 5 | -60 | E |
|---------------------|-------------------------------|-----------------|------------------|
| Product Series | Retention Rating (microns) | Length (inches) | Gasket or O-Ring |
| HF-High Flow Series | 1 | | |
| | 3 | 20 | E EPDM |
| | 5 | 40 | S Silicone |
| | 10 | 60 | B Buna N |
| | 20 | | V Viton |
| | 40 | | |
| | 60 | | |
| | 100 | | |

Example: HF 5-60E = High Flow filter, 5 micron, 60 inches, EPDM

High Flow Series Element Pressure Drop

| | Element Pressure Drop psid/gpm | | | Element Pressure Drop Mbar/M3/Hr | | |
|-----|--------------------------------|--------|--------|----------------------------------|--------|--------|
| | 20" | 40" | 60" | 20" | 40" | 60" |
| 1 | 0.0200 | 0.0097 | 0.0065 | 6.0845 | 2.9395 | 1.9820 |
| 3 | 0.0167 | 0.0081 | 0.0054 | 5.0705 | 2.4495 | 1.6516 |
| 5 | 0.0076 | 0.0037 | 0.0025 | 2.3179 | 1.1198 | 0.7550 |
| 10 | 0.0046 | 0.0022 | 0.0015 | 1.3908 | 0.6719 | 0.4530 |
| 20 | 0.0021 | 0.0010 | 0.0007 | 0.6374 | 0.3079 | 0.2076 |
| 40 | 0.0017 | 0.0008 | 0.0006 | 0.5215 | 0.2520 | 0.1699 |
| 60 | 0.0015 | 0.0007 | 0.0005 | 0.4552 | 0.2199 | 0.1483 |
| 100 | 0.0010 | 0.0005 | 0.0003 | 0.3035 | 0.1466 | 0.0989 |

Note: For chemical compatibility, flow rates, and temperature requirements please consult the factory or your local Graver distributor.

For more information

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