Graver Technologies

Filtration | Separation | Purification

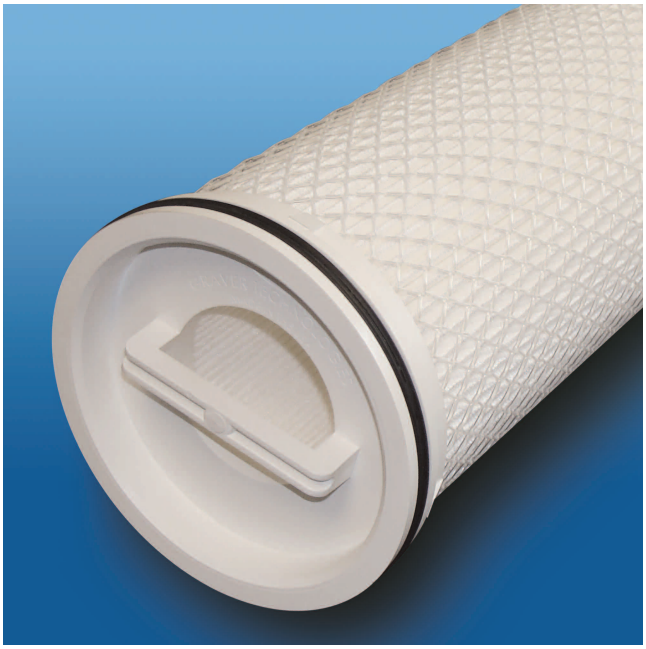
High Flow Series Filter Cartridges

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



Applications

- Water Systems
- Chemicals
- Food and Beverage

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)*

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** **5** **10** **20** **40** **60** **100**	**20** **40** **60**	**E** EPDM **S** Silicone **B** Buna N **V** Viton

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 requirments please consult the factory or your local Graver distributor.

For more information

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