



LOFPLEAT™ HF-G high flow capacity fiberglass filter cartridges

Eaton's LOFPLEAT HF-G filter cartridges can be used in a variety of applications where high flow capacity is required including fuel oils, chemicals, petrochemicals, solvents and oil and gas.

LOFPLEAT HF-G filter cartridges are designed with pleated micro fiberglass filter material construction to provide a high total surface area. A single LPHF-G filter cartridge can replace several standard cartridge elements. Change-outs are quick and easy. Unlike standard design filter cartridges, the flow is inside out. The result is higher dirt-holding capacity.

Features and benefits

- Higher flow capacity reduces required number of filter cartridges
- Lower initial costs with smaller filter housings
- Less labor required for change-outs
- Available with absolute rated filter material at 1 to 20 µm retention ratings

- Inside-out flow for greater dirt-holding capacity
- Capable of flow rates up to 500 GPM (1892.5 l/min) in a single 60" length
- Can be retrofitted in most competitive high-flow housings
- Thermally bonded construction

Design

Filter material
Micro fiberglass

Cage
Polyester or polypropylene

End caps
Polyacetal or polypropylene

Gaskets/O-rings
EPDM (standard),
FPM

Retention ratings
1, 2.5, 4.5, 10, 20 µm
@ 99.9% efficiency

Technical data

Nominal lengths
20", 40", 60" (508, 1016, 1524 mm)

Outside diameter
6" (1524 mm)

Surface area
25.8 ft² (2.4 m²) per 20" element

Max. operating temperatures
Polyacetal: 230 °F (110 °C)
Polypropylene: 180 °F (82 °C)

Max. differential pressures
Polyacetal:
75 psid @ 70 °F (5.2 bar @ 21 °C)
50 psid @ 230 °F (3.4 bar @ 110 °C)
Polypropylene:
50 psid @ 77 °F (3.4 bar @ 25 °C)
20 psid @ 180 °F (1.4 bar @ 82 °C)

Recommended differential change-out pressure for disposal
35 psid (2.4 bar)

Max. flow rates
20" element: 175 USGPM (662 l/min)
40" element: 350 USGPM (1325 l/min)
60" element: 500 USGPM (1892 l/min)

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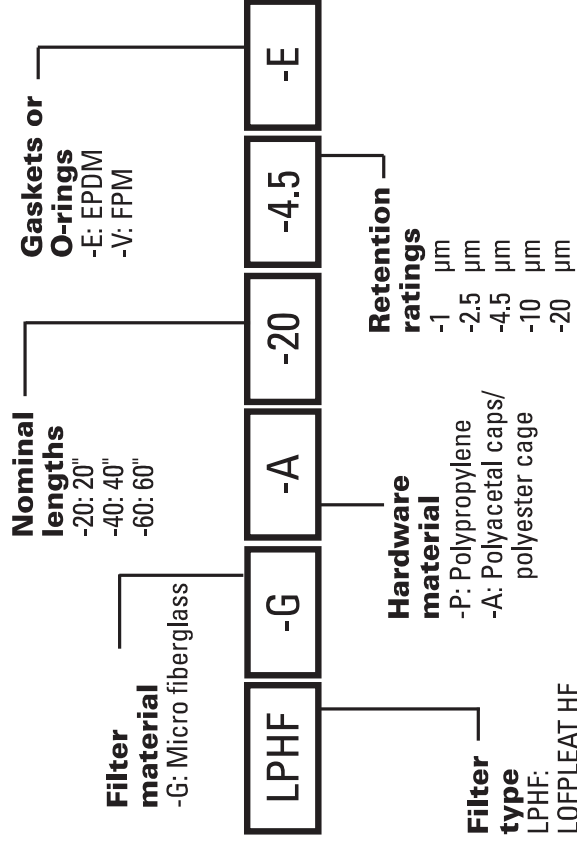
Efficiency of retention

Beta ratio efficiency of retention	Beta 1000 99.90%	Beta 100 99%	Beta 10 90%
1 µm	1	0.6	0.2
2.5 µm	3	2	1.5
4.5 µm	5	4	3
10 µm	10	8.5	6.5
20 µm	22	19	14

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

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 3 gpm/10" cartridge (9.46 l/min). Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

Ordering code



Element pressure drop

	mbar/m ³ /h			psid/gpm		
	20"	40"	60"	20"	40"	60"
1	11.9419	5.9709	3.9806	0.0394	0.0197	0.0131
2.5	5.5385	2.7692	1.8462	0.0183	0.0091	0.0061
4.5	4.3549	2.1775	1.4516	0.0144	0.0072	0.0048
10	2.8830	1.4415	0.9610	0.0095	0.0048	0.0032
20	2.0940	1.0470	0.6980	0.0069	0.0035	0.0028

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