

AFA® – Pleated Backwashable Filter Elements

Graver’s AFA non-precoatable backwashable condensate polishing septa are engineered to meet the high demands in the utility industry for iron oxide removal and repeatable backwashing. A selection of filter media is available in absolute ratings ranging from 1.0 to over 20 microns to meet the removal requirements of each individual condensate system. Like all the condensate filters from Graver Technologies, a variety of end fittings can be selected to retrofit the elements in existing Powdex® or other condensate filter systems.

Features

- Absolute micron rating from 1 to 25 µm
- Removal efficiency rated at 99.9%
- High surface area of pleated media
- High dirt holding capacity
- Fixed pore construction eliminates dirt unloading as differential pressure increases



FILTER SPECIFICATIONS

Media	Polypropylene	
Inner Core	Polypropylene	Polypropylene
End Caps	Polypropylene	Polypropylene
Cage	Polypropylene	Polypropylene
Gaskets/O-Rings Options	EPDM Sulfur Free	
Micron Ratings	1.0, 2.0, 5.0, 10, 25µm	
	Other micron rated media available upon request	

Dimensions

Nominal Lengths	50" (1,270 mm)	60" (1,524 mm)
	70" (1,778 mm)	80" (2,032 mm)
Outside Diameter	2½" (63.5 mm)	
Inside Diameter	1" (25.4 mm)	
Maximum Operating Temperature	Polypropylene: 180°F (85°C)	
Polypropylene Maximum Collapse Pressure	130 psid @ 70°F (8.9 bar @ 21°C)	
	40 psid @ 180°F (2.8 bar @ 85°C)	

FILTER REMOVAL EFFICIENCY

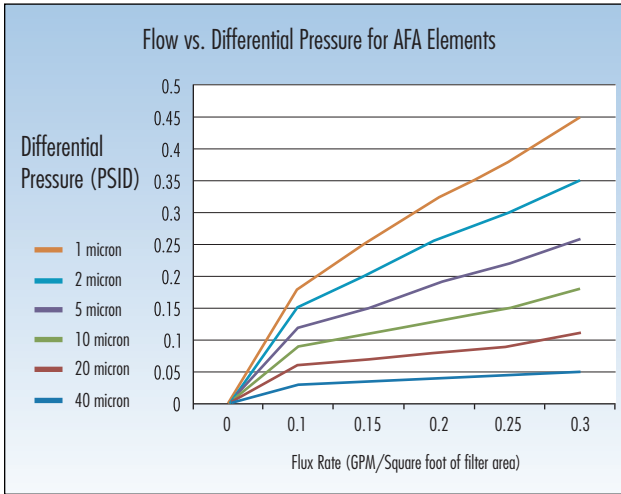
Beta Ratio Efficiency	Beta 1,000	Beta 100	Beta 50
	99.9%	99%	98%
Polypropylene			
1.0 micron	1.0	0.6	0.3
2.0 microns	2.0	1.5	1.0
5.0 microns	5.0	4.0	3.0
10.0 microns	10.0	8.0	7.0
25.0 microns	25.0	19.0	15.0

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

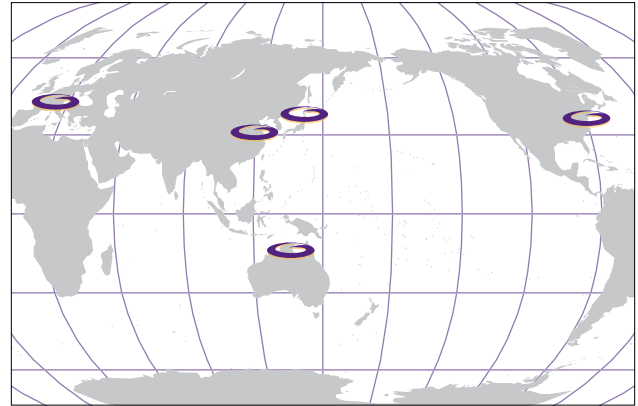
The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability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

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

**FLOW RATE VS PRESSURE DROP PER SQ. FOOT OF FILTER AREA
POLYPROPYLENE FILTER @ 70°F (21°C)**



Graver Technologies' Worldwide Locations



Superior Products & Global Reach

Graver is the global leader in high purity and condensate water treatment for power generation applications. Including both ion exchange and backwashable septa and filters.

Our innovative technology and products enable our customers to consistently meet today's tougher requirements for purity.

Graver's products treat more than 6.5 billion gallons of process water every day in over 38 countries. Over 75 percent of the nuclear powered generation plants, worldwide, use our technology. Graver has achieved this by consistently delivering dependable, high performance technology and products.

Whether your business is around the corner or around the world, Graver Technologies can support you with superior products and services.

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ISO 9001:2000
FM 38860