

# MicroVantage™ MGF Series

High Efficiency Glass Fiber Filter Cartridges

## MicroVantage Ultra Premium Filter Series

***Request a Quote Today!***



- High efficiency retention ratings from 0.2 to 30 microns
- Optimal surface area designed for maximum throughput and high dirt holding capacity
- Borosilicate microfiberglass media with polypropylene hardware construction offers wide range of chemical compatibility
- Uniform and fixed pore construction eliminates unloading under high differential pressures
- Long service life - reduces operator costs
- Rigid, molded cage protects pleated media and strengthens structural stability
- Manufactured in state-of-the-art white room manufacturing environment for high purity
- Available in standard lengths and end cap configurations – fits most filter housings

### ***Applications***

Wine Prefiltration  
Blowdown post filter  
Magnetic tape coatings

Chemicals  
Paint / Inks  
Oil & Gas

### ***Specifications & Operating Parameters***

***Pore Sizes*** 0.2, 0.45, 1.0, 3.0, 10.0, 30.0 microns

***Nominal Lengths*** 9.75" (24.7 cm), 10" (25.4 cm), 20" (50.8 cm), 30" (76.2 cm), 40" (101.6 cm)

***Outside Diameter*** 2.67" (6.78 cm)

***Inside Diameter*** 1.0" (2.54 cm)

***Media Surface Area*** 5.0 sq.ft. (0.46 m<sup>2</sup>)  
per 10 inches in length

#### ***Gaskets/O-rings***

Silicone, Buna N, EPR, Viton, Teflon Encapsulated Viton (O-rings only)

### ***Materials of Construction***

Filter Media:	Borosilicate Microfiberglass
Support Layer:	Polyester
Cage and End caps:	Polypropylene

***Maximum Operating Temperature*** 176°F ( 80°C)

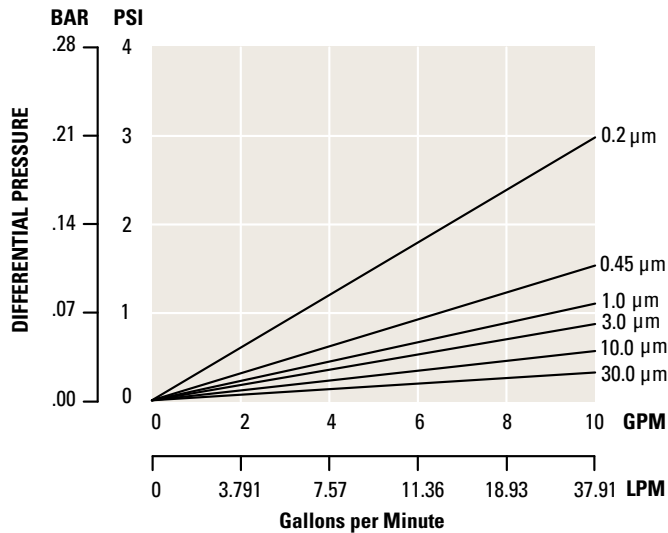
***Recommended Change-out Differential Pressure***  
35 psid (2.4 bar)

***Maximum Differential (Collapse) Pressure***  
80 psid @ 70°F (5.5 bar @21°C), 40 psid @ 150°F (2.75 bar @60°C)

### ***FDA and USP Compliance***

All materials comply with FDA requirements for food contact per CFR Title 21 177.1520. All components meet USP Class VI Plastic biological reactivity tests.

### Flow vs. Pressure Drop



This chart represents typical water flow per 10" cartridge length. The test fluid is water at ambient temperature. Extrapolation for multiple elements tends to be linear, but as flows increase the  $\Delta P$  of the housing becomes more apparent.

### Filter Removal Efficiency

MICRON	BETA 10 90%	BETA 100 99%	BETA 1000 99.98%
0.2 micron	0.20	0.6	1.0
0.45 micron	0.45	0.8	2.0
1.0 micron	1.0	2.0	4.0
3.0 micron	3.0	5.5	10.0
10.0 micron	10.0	15.0	18.0
30.0 micron	30.0	37.0	44.0

### Ordering Guide (Example: MGF3.0-10S4E)

MGF	3.0	10	S4	E
PRODUCT CODE	MICRON	LENGTH	END CAP CONFIGURATION	GASKET/O-RING
MGF	0.2 0.45 1.0 3.0 10.0 30.0	9.75" 10" 19.75" 20" 29.25" 30" 40"	S1 = DOE S3 = 222 w/ Fin End S4 = 222 w/ Flat End S5 = 226 w/ Fin End S6 = 226 w/ Flat End S7 = Internal O-ring with Recessed Plug S9 = Internal O-ring on both ends	B = Buna N E = EPDM S = Silicone V = Viton T = Teflon Encapsulated Viton (O-ring only)

### Filter Housings

Shelco manufactures a full line of filter housings. From our rugged single cartridge housings to our heavy duty multi-cartridge housings. Shelco is the perfect choice for your filtration solutions.



Authorized MAHLE-Nowata Distributor & Representative

For pricing and information please call  
Commercial Filtration Supply at (855)-236-0467

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for more filtration products.