MicroVantage™ MPX Series

Absolute-Rated (99.98%) High Performance Pleated Polypropylene Filter Cartridges

MicroVantage
Ultra Premium Filter Series

- Absolute-Rated Beta 5000 (99.98%) retention efficiency
- 7.0 square feet (0.65 m2) of media surface area per 10" length
  - Maximum throughput and particle retention
  - Longer service life reduces maintenance costs
- 100% polypropylene construction offers wide range of chemical compatibility
- Rigid, molded cage provides greater structural integrity
- Gradient, fixed pore structure increases dirt-holding capacity and resists unloading under high differential pressure
- Manufactured in state-of-the-art white room for high purity
- Complies with Food & Drug Administration's CFR criteria for food & beverage contact
- Meets USP Class VI Biological Test for plastics
- Various end cap configurations available to fit existing housings
- Produced in continuous lengths up to 40 inches
- Optional preflushed cartridges available for electronic and pharmaceutical applications

Applications

RO Prefilters	Food & Beverage
Process Water	Bottled Water
Plating Solutions	Microelectronics
Chemicals	Paint/Inks
Water & Wastewater	Cosmetics

Specifications & Operating Parameters

Pore Sizes 0.2, 0.45, 1.0, 3.0, 5.0, 10.0, 20.0, 30.0, 40.0, 50.0 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 7.0 sq. ft. (0.65 m2) per ten inches in length

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

Materials of Construction

Filter Media:	Polypropylene
Outer Cage / Core / End Caps:	Polypropylene

Maximum Operating Temperature 176F (80C)

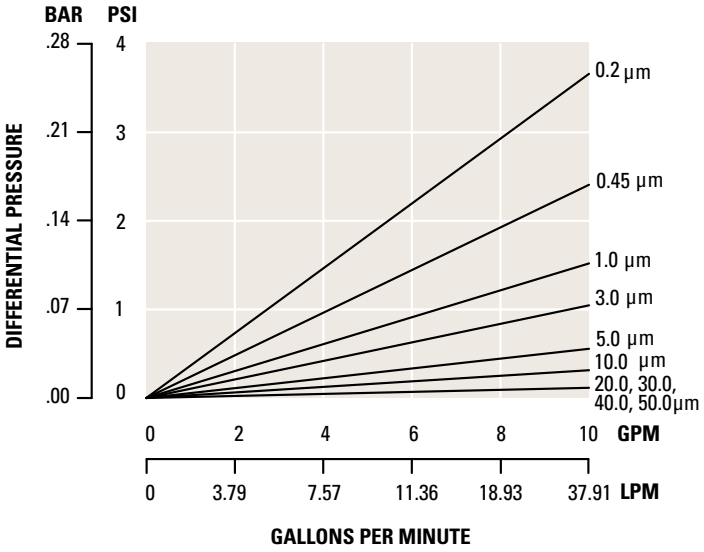
Recommended Change-out Differential Pressure
35 psid (2.4 bar)

Maximum Differential (Collapse) Pressure
75 psid @ 70°F (5.2 bar @21°C), 40 psid @176°F (2.8 bar @ 80°C)

Sanitization and Sterilization
Hot water at 175°F (80°C) at 5 psid for 30 minutes
In-line steam at 257°F (125°C) @ 1 psid (0.07 bar) for 30 minutes
Autoclavable at 257°F (125°C) for 30 minutes

FDA and USP Compliance
All filters are manufactured of virgin polypropylene materials. All materials comply with FDA requirements for food contact per CFR Title 21 174.5, 177.1520 and 177.1630. All Components meet USP Class VI Plastics 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 △P of the housing becomes more apparent

Filter Removal Efficiency

PORE SIZE	BETA 5000 99.98%	BETA 100 99%	BETA 50 98%
0.2 micron	0.20	0.10	0.05
0.45 micron	0.45	0.30	0.20
1.0 micron	1.0	0.65	0.35
3.0 micron	3.0	2.5	2.0
5.0 micron	5.0	4.0	3.0
10.0 micron	10.0	8.0	7.0
20.0 micron	20.0	17.0	15.0
30.0 micron	30.0	26.0	21.0
40.0 micron	40.0	34.0	28.0
50.0 micron	50.0	42.0	36.0

Ordering Guide (Example: MPX1.0-10S3E)

MPX	1.0	10	–	S3	E	–
PRODUCT CODE	**MICRON**	**LENGTH**		**END CAP CONFIGURATION**	**GASKET / O-RING**	**OPTION**
MPX	0.2 0.45 1.0 3.0 5.0 10.0 20.0 30.0 40.0 50.0	9.75" 10" 20" 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)	F = Flushed with 18megohm DI water (Constructed with 10" modules)

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.

SHELCO FILTERS

Authorized Distributor

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