# MicroVantage™ MAS-B Series

Beverage Grade Polyethersulfone Membrane Filter Cartridges

# MicroVantage Ultra Premium Filter Series



- Absolute retention ratings from 0.1 to 1.2 microns
- 7.2 square feet (0.67 m2) of media surface area per ten inch length for optimal performance
- Fully integrity tested to ensure reliable performance in critical applications
- 100% flushed with 18 megohm DI water for low extractables
- Rigid, molded cage protects pleated media and strengthens structural stability
- Manufactured in a Class 10,000 Clean Room environment for high purity
- Complies with Food & Drug Administration's CFR criteria for food & beverage contact
- Meets USP Class VI Biological Test for plastics
- Available in standard lengths and end cap configurations to fit most filter housings
- Produced up to 40 inches in length (10 inch modules)

## **Applications**

Food & Beverage Wine

Malt Beverages Bottled Water
Beer Process Water

RO Pre/Post Filtration Water & Wastewater

### Specifications & Operating Parameters

**Pore Sizes** 0.1, 0.2, 0.45, 0.65, 0.8, 1.0, 1.2 microns absolute retention

**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** 7.2 sq.ft. (0.67 m2) per 10 inches filter length

### Gaskets/O-rings

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

## **Materials of Construction**

Filter Media: Polyethersulfone
Outer Cage Polypropylene
Inner Core: Polypropylene
End caps: Polypropylene

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

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

Maximum Differential (Collapse) Pressure

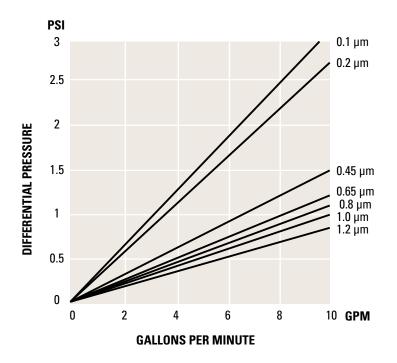
75 psid @ 70°F (5.2 bar @21°C), 40 psid @176°F (2.8 bar @ 80°C)

#### 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 (0.7 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 with no additives or other manufacturing agents. All polypropylene materials comply with the requirements of Food and Drug Administration Title 21 of The Code of Federal Regulations 174.5, 177.1520 and 177.1630. All components meet current USP Class VI biological tests for plastics



PORE SIZE	AIR DIFFUSION RATE			
0.1 μm 0.2 μm 0.45 μm 0.65 μm 0.8 μm 1.0 μm 1.2 μm	≤30cc/min@48psi ≤30cc/min@35psi ≤30cc/min@20psi ≤30cc/min@15psi ≤30cc/min@8psi ≤30cc/min@7psi			
Per 10" length water wetted membrane				

# Ordering Guide (Example: MAS0.2-10S4S-B)

MAS	0.2	10	<b>S4</b>	S	В	
PRODUCT CODE	MICRON	LENGTH	END CAP CONFIGURATION	GASKET/O-RING	GRADE	OPTION
MAS	0.1 0.2 0.45 0.65 0.8 1.0	9.75" 10" 19.75" 20" 29.25" 30" 40"	S1 = D0E S3 = 222 w/ Fin End S4 = 222 w/ Flat End S5 = 226 w/ Fin End S6 = 226 w/ Flat End S7 = Internal 0-ring with Recessed Plug S9 = Internal 0-ring on both ends	B = Buna N E = EPDM S = Silicone V = Viton T = Teflon encapsulated Viton (0-ring only)	B = Beverage	HT = High Temperature*

## 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.



