

# MicroVantage™ HCP Series

High Capacity Polypropylene Pleated Filter Cartridges

# MicroVantage

Ultra Premium Filter Series



- 98% Efficiency Polypropylene Pleated Media
- High capacity stable pore structure
- Optimized for retention and excellent flow rates
- Heavy duty components protect pleated media and strengthens structural stability
- Manufactured in state-of-the-art clean room environment for high purity applications
- USP Class VI: Meets USP Class VI Biological Test for Plastics
- FDA Listed Materials: All materials comply with FDA Title 21 of the Code of Federal Regulations Sections 174.5, and 177.1520, as applicable for food and beverage contact
- Available in a variety of end cap configurations to fit most filter housings
- Thermal bonded and produced in standard lengths up to 40 inches

### Applications

Ink	Paints & Coatings
Adhesives	Beer & Wine Pre-filtration
Cosmetics	CBD Oil
RO Prefilters	

### Specifications and Operating Parameters

#### Pore Sizes

0.2, 0.45, 1, 3, 5, and 10 micron

#### Nominal Lengths

5" (12.7 cm), 10" (25.4 cm), 20" (50.8 cm), 30" (76.2 cm), 40" (101.6 cm)

#### Outside Diameter

2.67" (6.78 cm)

#### Gaskets/O-rings

Silicone, EPR, Viton, Buna, Teflon Encapsulated Viton, Teflon Encapsulated Silicone

#### Materials of Construction

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

#### Maximum Operating Temperature

Standard Materials: 176°F (80°C)

#### Recommended Change-out Differential Pressure

25 – 30 psid (1.72 – 2.07 bar)

#### Maximum Differential Collapse Pressure

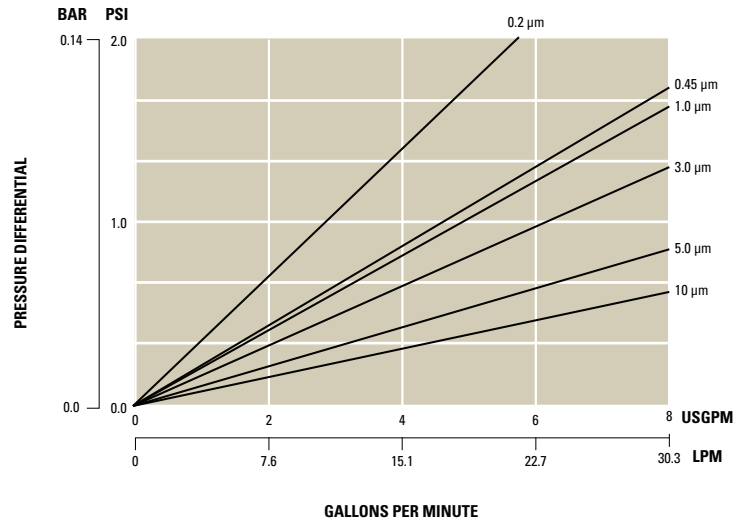
Forward: 70 psid @ 70°F (4.8 bar @ 21° C)  
50 psid @ 176°F (3.4 bar @ 80° C)

#### Sanitization and Sterilization

Hot water at 194°F (90°C) @ max 3 psid for 30 minutes  
In-line steam at 257°F (125°C) @ max 3 psid for 30 minutes  
Autoclavable at 257°F (125°C) for 30 minutes

## Flow vs. Pressure Drop

Typical Flow Rate Clean Water at Ambient Temperature  
(per 10" cartridge)



For liquids other than water, multiply the pressure drop by the fluid viscosity in centipoise.

### Ordering Guide (Example: HCP5-20S5E)

HCP	5	–	20	S5	E	–	HT
PRODUCT CODE	MICRON	LENGTH	END CAP CONFIGURATION	GASKET/O-RING	OPTIONS		
HCP	0.2 0.45 1.0 3.0 5.0 10	5" 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	S = Silicone E = EPR V = Viton B = Buna T/V = Teflon Encapsulated Viton T/S = Teflon Encapsulated Silicone	*HT = High Temp  S = SS Insert Reinforcing Ring		

\*Maximum operating temperature 205°F (96°C)

### Sanitary Filter Housings & Accessories

Shelco's offers a full line of sanitary & High Purity filter housings and accessories to meet your most critical applications.

