# MicroVantage™ HCE Series

High Capacity Polyester Pleated Filter Cartridges





- 90% efficiency polyester 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
- Complies with FDA CFR criteria for food & 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 RO Prefilters
Viscous Fluids Process Water

## Specifications and Operating Parameters

#### Pore Sizes

0.5, 1.0, 3.0, 5.0, 10, 25 and 50 micron

#### Nominal Lengths

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: Polyester 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)

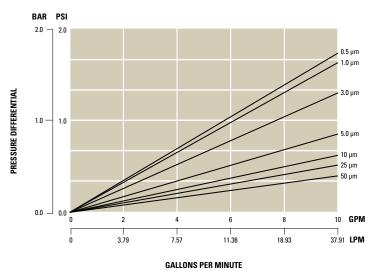
### Maximum Differential Collapse Pressure

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



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  $\Delta$  of the housing becomes more apparent



Rigid High Capacity Pleats

# Ordering Guide (Example: HCE5-20S5E-HT)

HCE	5 -	- 20	<b>S5</b>	Е -	- НТ
PRODUCT CODE	MICRON	LENGTH	END CAP CONFIGURATION	GASKET/O-RING	OPTIONS
HCE	0.5 1.0 3.0 5.0 10 25 50	10" 20" 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 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 Components S = SS Insert Reinforcing Ring

<sup>\*</sup>Maximum operating temperature 205°F (96°C)

## Sanitary Filter Housings & Accessories

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





