

# MicroVantage™ PDA and PDH Series

*Absolute-Rated and High Efficiency Polypropylene Depth Filter Cartridges*

## MicroVantage Ultra Premium Filter Series



- Ideal for critical applications requiring economical absolute or high efficiency filtration
- Absolute (99.9%) and high efficiency (90%) retention ratings from 0.5 to 75 microns
- Multiple zone gradient density fixed pore structure – maximizes dirt holding capacity and provides true clarifying filtration
- Fixed pore structure with high void volume – optimizes on-stream service life
- Microfibers thermally bonded to rigid center core – provides greater stability under higher temperatures and differential pressures
- PDA Series are lot traceable - comes with certificate of conformance
- 100% polypropylene construction – meets FDA requirements
- All components meet USP Class VI criteria for use in pharmaceutical applications
- Free of surfactants, binders and adhesives
- Available in standard lengths and end cap configurations – fits most filter housings

### **Applications**

|                    |                  |
|--------------------|------------------|
| RO Prefilters      | Food & Beverage  |
| Plating Solutions  | Microelectronics |
| Chemicals          | Paint/Inks       |
| Water & Wastewater | Cosmetics        |

### **Specifications & Operating Conditions**

#### **Pore Sizes**

0.5, 1.0, 3.0, 5.0, 10.0, 20.0, 50.0, 75.0 microns

#### **Nominal Lengths**

9.75", 10", 19.5", 20", 29.25", 30", 40"

#### **Materials of Construction**

Filter Media: Polypropylene

Core / End caps: Thermally bonded polypropylene

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

Silicone, Buna N, EPR, Viton, Teflon Encapsulated Viton (O-rings only) and Santoprene (direct bond gaskets)

#### **Recommended Change-out Differential Pressure**

35 psid (2.4 bar)

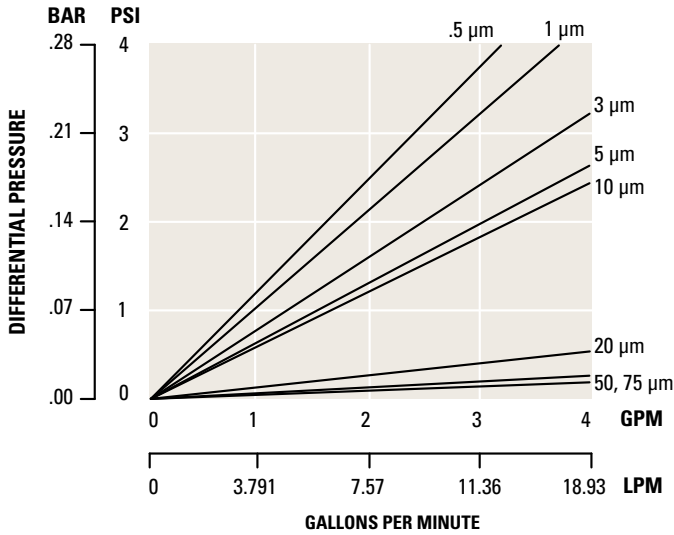
#### **Steam Sterilization**

Shelco's PDA single open end style filters may be autoclaved under no end load conditions for 30 minutes at 121° C. Filters should be cooled at normal operating temperatures prior to use.

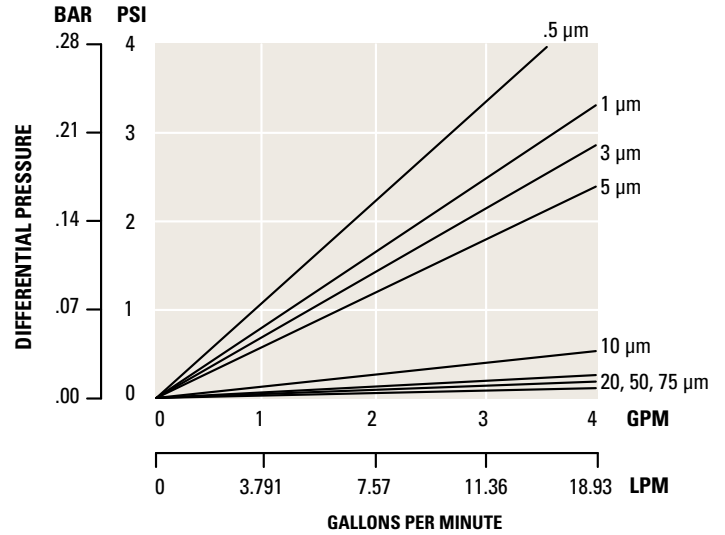
#### **FDA Compliance**

PDA and PDH products are manufactured of pure polypropylene materials with no additives or other manufacturing agents. All materials used in the production of these cartridges meet the requirements of FDA Title 21 of The Code of Federal Regulations 174.5 and 177.1520.

**PDA Series**  
Flow vs. Pressure Drop



**PDH Series**  
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

**Ordering Guide (Example: PDA1.0-10-S1E)**

| PDA          | 1.0  | - | 10  | - | S1   | - | E  |
|--------------|--|---|---|---|--|---|--|
| PRODUCT CODE | MICRON   |   | LENGTH  |   | END CAP CONFIGURATION  |   | GASKET / O-RING  |
| PDA<br>PDH   | 0.5<br>1.0<br>3.0<br>5.0<br>10.0<br>20.0<br>50.0<br>75.0 |   | 9.75"<br>10"<br>19.75"<br>20"<br>29.25"<br>30"<br>40" |   | Blank = None<br>S1 = DOE<br>S3 = 222 w/ Fin End<br>S4 = 222 w/ Flat End<br>S5 = 226 w/ Fin End<br>S6 = 226 w/ Flat End<br>S7 = Internal O-ring with Recessed Plug<br>S8 = SOE w/Spring<br>S14 = Direct bond Santoprene gaskets<br>F = Fin End Only<br>FL = Flat End Only |   | Blank = None<br>B = Buna N<br>E = EPR<br>S = Silicone<br>V = Viton<br>T = Teflon encapsulated<br>Viton (O-ring only) |



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