

# 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)

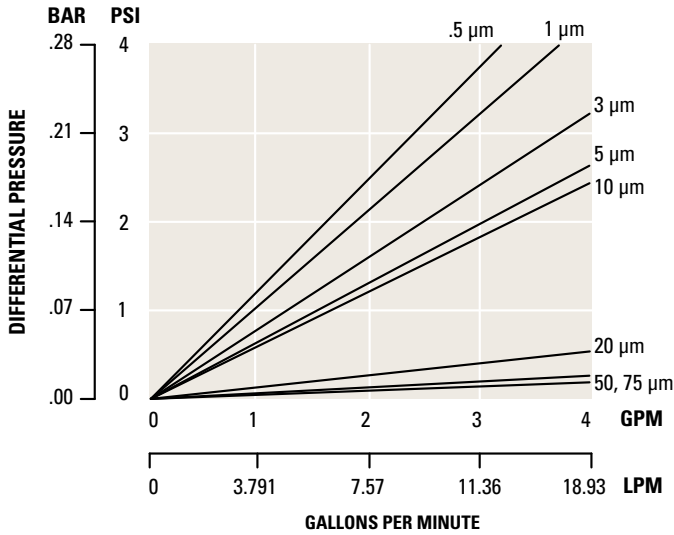
#### Steam Sterilization

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.

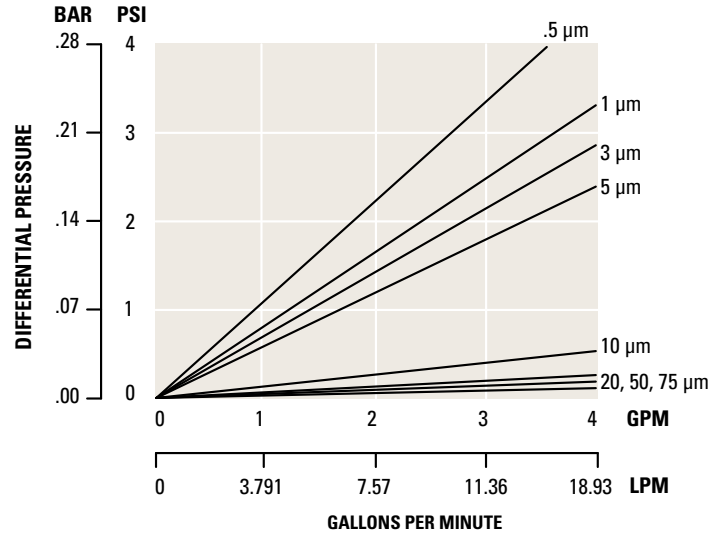
#### FDA Compliance

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 PDH	0.5 1.0 3.0 5.0 10.0 20.0 50.0 75.0		9.75" 10" 19.75" 20" 29.25" 30" 40"		Blank = None 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 S8 = SOE w/Spring S14 = Direct bond Santoprene gaskets F = Fin End Only FL = Flat End Only		Blank = None B = Buna N E = EPR S = Silicone V = Viton T = Teflon encapsulated Viton (O-ring only)

**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**

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