

# HP-PTFE Series

## PTFE Membrane



## Applications

- Tank Ventilation
- Esters
- Solvents
- Compressed Air
- Alcohols
- Process Gases
- Specialty Chemicals
- Photoresists
- Acids
- Bases



## Commercial / Industrial Filtration Applications

### Standard Features

- Manufactured in USA
- Absolute retention ratings from 0.1 to 1.0 microns
- High surface area provides superior flow rates and minimizes system size requirements
- Constructed of inherently hydrophobic PTFE membrane and polypropylene components
- Ideal for gas / vent applications and filtering of aggressive solvents and chemicals
- PTFE membrane and polypropylene component construction offers excellent chemical compatibility and cost effectiveness versus all fluoropolymer filters
- Complies with Food and Drug Administration's CFR criteria for food and beverage contact
- Meets USP Class VI Biological Test for plastics

## Specifications, Operating Parameters and Options

### Micron Sizes

0.1, 0.2, 0.45, 1.0

### Nominal Lengths

9-3/4" (24.7 cm), 10" (25.4 cm), 20" (50.8 cm), 30" (76.2 cm), and 40" (101.6 cm)

### Inside and Outside Diameters

1.0" (2.54 cm) ID, 2.67" (6.78 cm) OD

### Media Surface Area

8.5 sq. ft. (0.79 m<sup>2</sup>) per 10 inches filter length

### Maximum Operating Temperature

176°F (80°C) temperature limit

### Recommended Change-Out Differential Pressure

35 psid (2.4 bar)

### Maximum Differential (Collapse) Pressure

70 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

Inline steam at 257°F (125°C) @ 1 psid (0.7 bar) for 30 minutes

Autoclavable at 257°F (125°C) for 30 minutes

### Materials of Construction

Filter media: PTFE

Outer cage, inner core and end caps: polypropylene

### 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.

# Ordering Guide (Example: HP-PTFE-26100-0.2213-B-G-HT)

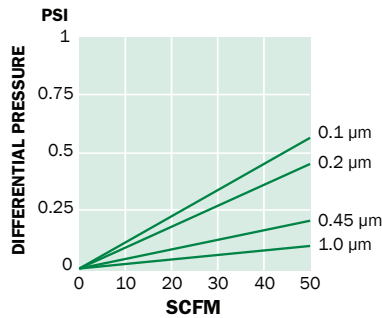
HP	PTFE	26	100	0.2	213	B	G	HT
HIGH PURITY PLEATED	MEDIA	CARTRIDGE DIAMETER	CARTRIDGE LENGTH	MICRON RATING	END CAP	O-RING / GASKETS	GRADE	OPTIONS
HP	PTFE = PTFE Membrane	26 = 2.67" (6.78 cm)	097 = 9-3/4" 100 = 10" 200 = 20" 300 = 30" 400 = 40"	0.1 = 0.1 0.2 = 0.2 0.45 = 0.45 1 = 1.0	Blank = DOE (standard) 213 = 213 internal O-ring 222f = 222/Flat 222n = 222/Fin 222s = 222/Spring 226f = 226/Flat 226n = 226/Fin SOEf = SOE/Flat SOEs = SOE/Spring SOEn = SOE/Fin Z = Custom	E = EPDM B = Buna N S = Silicone V = Viton T = Teflon	G = General E = Electronic	HT = High Temp (200°F, 93°C)*

\*High temperature construction (cage, core, and caps): maximum temperature 200°F (93.3°C) – available only in 222 or 226 with Fin or Flat end caps.

## Flow vs. Pressure Drop

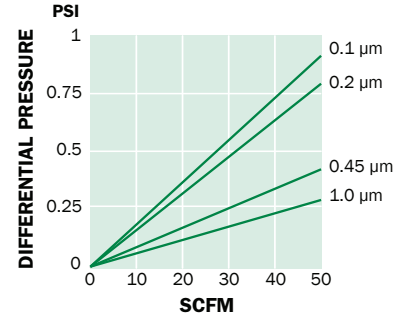
### Air Flow Rate

System pressure at 30 psig, 65°F (18°C)



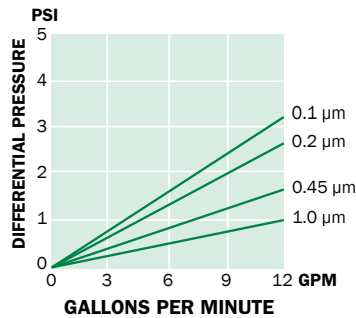
### Air Flow Rate

System pressure at < 10 psig (vent), 65°F (18°C). Outlet open to atmosphere.



### Water Flow Rate

This chart represents the typical water flow per 10" cartridge length. Cartridges are tested in water at ambient temperature. Data may be extrapolated for multiple lengths, but as flow rate increases, ΔP of the housing becomes more apparent.



## Integrity Testing

PORE SIZE	AIR DIFFUSION RATE
0.1 µm	<50cc/min@18 psig (1.2 bar)
0.2 µm	<20cc/min@12 psig (0.8 bar)
0.45 µm	<15cc/min@5 psig (0.34 bar)
1.0 µm	<15cc/min@3 psig (0.2 bar)

Per 10" length with 60/40 IPA/water wetted membrane



**Filter Housings Selection Guide**  
CLICK HERE

## Available End Cap Configurations



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