

## VH SERIES PLEATED PES MEDIA PHARMACEUTICAL GRADE FILTER CARTRIDGE

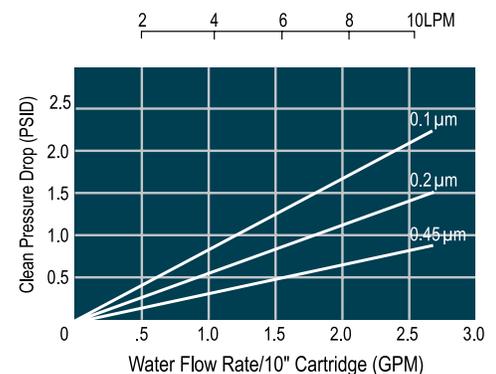
- Cartridge is a validated, pleated polyethersulphone membrane over a non-woven polyester support layer
- Absolute rated
- Code 0, Code 5, Code 7 and Code 10 configurations are available in 10, 20, 30, and 40-in lengths that are 100% tested in manufacturing to ensure absolute bacteria retention with typical reduction of  $> 10^7/cm^2$
- Meet current USP Plastics Class VI biological test for plastics, with a validation certificate available to support the bacteria challenge results
- Contain no surfactants or coatings to interfere with your application, and the thermo-plastic construction process minimizes extractables.
- Supported single layer membrane ensures strength, while exhibiting low pressure drop and exceptionally high flow rates
- These validated cartridges can be sterilized by autoclaving



### CARTRIDGE SPECIFICATIONS

Dimensions		
Diameter (OD)	2.75" (7.0 cm)	
Length (in)	10, 20, 30, 40	
Materials		
Cartridge	Polypropylene, core and cage, nylon endcaps	
Media	Polyethersulphone	
Seals	Silicone o-rings	
Operating Parameters		
Maximum Temperature	158°F (70°C) @ 25 psid (1.7 bar)	
Maximum Differential Pressure @25°C	72 psi (5.0 bar)	
Filtration Rating	100% Absolute	
Toxicity	Non-toxic by USP Class VI Biological Test for Plastics	
Validation	HIMA bacterial challenge test methods ( $10^7$ organisms/cm <sup>2</sup> )	
Recommended Water Flow Rates		
0.1 µm	1.8 gpm/10" length (2.3 lpm/10" length)	
0.2 µm	2.0 gpm/10" length (7.6 lpm/10" length)	
0.45 µm	3.0 gpm/10" length (11.4 lpm/10" length)	
Sanitizing Agents		
Chlorine, hydrogen peroxide, autoclaved for 20 minutes at 121°C under no load conditions. Hot water sanitizable 85°C (185°F) at 10 psid max up to 24 hours		
Integrity Test		
Pore Size	Minimum Water Bubble Point	Diffusional Flow (cc/min) @ Test Pressure per 10" length
0.1 µm	≥ 31 psig*	≤ 27 @ 70 psig (4.9 bar)
0.2 µm	≥ 49 psig	≤ 16 @ 40 psig (2.7 bar)
0.45 µm	≥ 316psig	≤ 16 @ 25 psig (1.7 bar)
*60/40 IPA water test solution		

FLOW RATE vs. INITIAL CLEAN PRESSURE DROP



### ORDERING INFORMATION

Catalog Number and Description	
FCVH	Filter Cartridge Pharmaceutical/Validated
<b>X</b>	Cartridge Code: <b>0</b> = 2-222 o-rings <b>1</b> = single open end w/internal o-ring <b>5</b> = 2-222 o-rings w/spear end <b>7</b> = 2-226 o-rings w/locking tabs/spear end
<b>XX</b>	Length (in): <b>10</b> = 10, <b>20</b> = 20, <b>30</b> = 30, <b>40</b> = 40
<b>XX</b>	Micron Rating: <b>S1</b> = 0.1 µm, <b>S2</b> = 0.2 µm, <b>S4</b> = 0.45 µm

To figure your order number, replace the X with one of the numbered or lettered options beside it. Note: Not all part number combinations are available; consult Technical Support for assistance.