

# Ultrasulfomem® PF-PES

*Pleated Filters with Polyethersulfone Membrane*

## Features and Benefits

Ultrasulfomem® PF-PES filters, constructed with hydrophilic polyethersulfone membranes and all polypropylene components, exhibit both enhanced throughput and reliable particle retention for superior performance in most applications. PF-PES filters are compatible with a broad range of chemicals and pH extremes. The low protein binding characteristics of polyethersulfone membranes ensure that PF-PES filters are suitable for a variety of beverage, chemical and pharmaceutical applications.

Constructed using thermal welding techniques, PF-PES filters do not contain any adhesives or additives, and individual integrity testing assures that PF-PES filters meet the exacting performance requirements of our customers.

The PF-PES filter is just one example of our dedicated commitment to fluid filtration. Our extensive portfolio includes filters for every stage of processing, and we can offer custom solutions for your unique applications. Donaldson is your complete source for filters, housings, and other filtration equipment.

## Applications

PF-PES filters are suitable for a broad range of applications, including:

- Inks and dyes
- Acids, bases & oxidants
- Process water
- Pharmaceutical preparations
- Serums and tissue culture media



**Ultrasulfomem® PF-PES** for clear and sterile filtration of liquids with the lowest possible differential pressure

Materials	
Filtration Media:	Hydrophilic Polyethersulfone Membrane
Support Layers:	Polypropylene Microfiber
Core and Cage:	Polypropylene
End Caps and Adapters:	Polypropylene

Dimensions	
Nominal O.D.	2.75 in
Nominal I.D.	1.25 in
Effective Filtration Area	9.0 ft <sup>2</sup>



**Filter Products Company**  
 Richmond, VA  
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Pressure: 60 psid (4.1 bar)
Pressure: 30 psid (2.1 bar)
Temperature: 32°C at 10 psid (0.7 bar) in water

Integrity Testing	
Air diffusion per 10-inch module after saturation with clean water	
Pore Size Rating	Specification
0.1 $\mu\text{m}$	$\leq 2.75$ cu.in./min. at 50 psig (3.4 bar)
0.2 $\mu\text{m}$	$\leq 1.16$ cu.in./min. at 30 psig (2.1 bar)
0.45 $\mu\text{m}$	$\leq 0.98$ cu.in./min. at 20 psig (1.4 bar)
0.65 $\mu\text{m}$	$\leq 0.73$ cu.in./min. at 13 psig (0.9 bar)

Available Absolute Pour Size Ratings
0.04, 0.1, 0.2, 0.45 and 0.65 microns

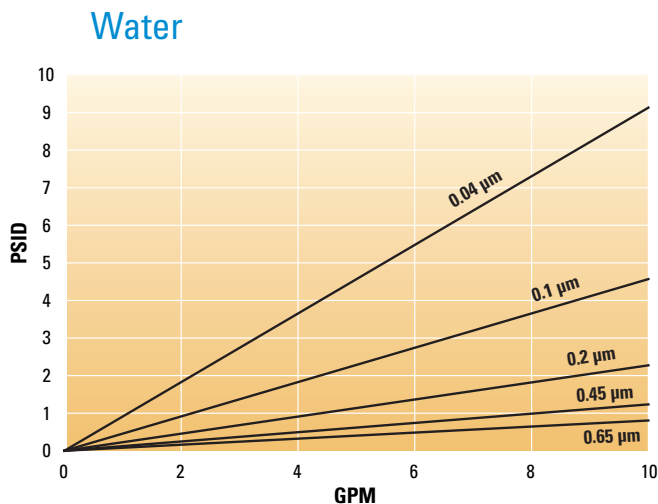
### Additional Information

Ultrasulfomem PF-PES filters may be autoclaved (250°F/121°C, 30 minute cycles) or *in-situ* steam sterilized (275°F/135°C, 30 minute cycles) for a maximum accumulated exposure of 10 hours. Alternatively, the filters may be sanitized with compatible chemical agents.

Donaldson certifies that the media used in its pleated filters meet the U.S. FDA requirements for processing beverage foods at up to 95°F, excepting distilled alcoholic beverages. Ultrasulfomem PF-PES filters meet the test criteria for USP Class VI-250°F Plastics and pass the MEM Elution Cytotoxicity Test.

Aqueous extracts from Ultrasulfomem PF-PES filters contain less than 0.25 EU/ml. The filters typically exhibit low levels of non-volatile residues.

These cartridge filters are designed and manufactured for resistance to a wide range of chemical solutions. Conditions will vary with each application and users should carefully verify chemical compatibility.



Ordering Information			
Base Model Number			
1C-PF-PES-P7-(Length Code)-(Rating Code)			
Example: 1C-PF-PES-P7-L3-M01			
Element Length		Absolute Micron Rating	
Code	Length (in.)	Code	Rating
L05	5	M004	0.04 $\mu\text{m}$
L1	10	M01	0.1 $\mu\text{m}$
L2	20	M02	0.2 $\mu\text{m}$
L3	30	M045	0.45 $\mu\text{m}$
-	-	M065	0.65 $\mu\text{m}$

Standard Element Configuration*	
End #1 Adapter	2 x 226 O-Ring
End #2 Adapter	Fin
Elastomer Material	EPDM (0.04 $\mu\text{m}$ ) Silicone (0.1-0.65 $\mu\text{m}$ )

\*Other configurations available upon request



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