

# Fluoryte™ High Flow Filter

## **Description**

The Pall Fluoryte™ High Flow Filter is an all fluoropolymer¹ cartridge. The filter cartridge uses the latest generation of high permeability proprietary PTFE membranes. The filter media encapsulation design was developed using Pall's unique computer aided design modeling system. This advanced fluid dynamics design provides enhanced lateral flow across, through and out of the membrane. The unrestricted fluid passage allows the high permeability property of the membrane to be fully utilized. The result is improved flow rates and extended service life over conventional filter media corrugation and support methods, including those that use more area or variable pleat size combinations.

- Excellent flow performance
- Proprietary PTFE nonwoven flow promotion layers
- Excellent chemical and temperature resistance
- High purity PFA hardware
- All Fluoropolymer construction
- 100% Integrity tested
- Prewet and acid washed options

### **Specifications**

#### Materials<sup>2</sup>

Medium: PTFE

Hardware: High Purity PFA

Support and drainage: PTFE

O-ring options: FEP encapsulated

fluoroelastomer, Kalrez<sup>3</sup>

#### Removal Rating

 $1.0 \mu m$ ,  $0.45 \mu m$ ,  $0.2 \mu m$ ,  $0.1 \mu m$ ,  $0.05 \mu m$ 

Configurations

Nominal length: 102 mm/4 in, 227 mm/9 in,

254 mm/10 in, 508 mm/20 in.

762 mm/30 in

Diameter: 70 mm / 2.75 in

O-ring size / end caps: Code 3 (222 double O-ring / flat

end),

Code 8 (222 double O-ring/

extended cap end),

Code 6 (226 double O-ring/flat

end),

Code 7 (226 double O-ring /

extended cap end)



#### Filter Area

254 mm / 10 in 0.84 m<sup>2</sup> / 9 ft<sup>2</sup>

#### **Operating Conditions**

Maximum Operating Temperature: 185° C/365° F

### Integrity Test Values<sup>4</sup>

0.05 μm, 254 mm/10 in segment at 0.14 MPa (20 psig), 60 cm<sup>3</sup>/min

0.1 µm, 254 mm/10 in segment at 0.1 MPa (15 psig), 40 cm<sup>3</sup>/min

0.2  $\mu$ m, 254 mm/10 in segment at 0.069 MPa (10 psig), 40 cm<sup>3</sup>/min

0.45  $\mu m, 254$  mm/10 in segment at 0.035 MPa (5 psig), 10 cm³/min

#### **Prewetting Procedures**

PTFE is a naturally hydrophobic media. If filtering a high surface tension solution, it is necessary to prewet the FLHF cartridge. Please refer to our prewetting procedures located at the end of the Chemicals Introduction section of the Pall Microelectronics Catalog or at www.pall.com/micro for proper prewetting recommendations.

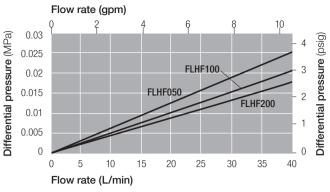
<sup>&</sup>lt;sup>1</sup> Exclusive of o-ring seals.

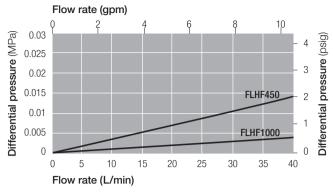
 $<sup>^{2}</sup>$  All fluoropolymer materials are PFOA-free

<sup>&</sup>lt;sup>3</sup> Kalrez is a trademark of E. I. du Pont de Nemours and Company

<sup>&</sup>lt;sup>4</sup> Test fluid used is 60/40 IPA: DI H2O.

## Typical Pressure Drop vs. Liquid Flow Rate<sup>5</sup>





<sup>&</sup>lt;sup>5</sup> For liquids with viscosity differing from water, multiply the pressure drop by the viscosity in centipoise.

## **Ordering Information**

## Pall Part Number = FL HF

Table 1		
Code	Removal Ratings in Microns (µm)	
050	0.05	
100	0.1	
200	0.2	
450	0.45	
1000	1.0	

Table 2		
Code	Grade	
Е	UHP Grade (Reference Technical Bulletin #1077-T)	

### Table 3

Code	Cartridge Lengths (nominal)
04	102 mm / 4 in (standard)
09	227 mm / 9 in (standard)
10	254 mm / 10 in (standard)
20	508 mm / 20 in (standard)
30	762 mm / 30 in (standard)
40	1016 mm / 40 in (consult factory)

<sup>&</sup>lt;sup>6</sup> Kalrez is a trademark of E. I. du Pont de Nemours and Company

#### Table 4

Code	End Configurations
МЗ	SOE flat closed end external 222 O-rings
M6	SOE flat closed end external 226 O-rings
M7	SOE extended cap end external 226 O-rings
M8	SOE extended cap end external 222 O-rings

Table 5	
Code	O-r

Code	O-ring Materials
F	FEP Encapsulated fluoroelastomer (standard)
K	Kalrez <sup>6</sup>
С	Chemraz <sup>7</sup>
Е	EPDM
S	Silicone
V	Fluoroelastomer

Table 6			
Code <sup>8</sup>			
None	Dry		
PW	Prewet (consult factory)		

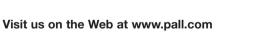
Other O-ring materials are available.

For FLHF Kleen-Change® Assemblies, please see data sheet number A99b. Unit conversion: 1 MPa = 10 bar



### Microelectronics

25 Harbor Park Drive Port Washington, NY 11050 +1 516 484 3600 telephone +1 800 360 7255 toll free US



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 $<sup>^{7}</sup>$  Chemraz is a trademark of Greene, Tweed & Co.

<sup>&</sup>lt;sup>8</sup> The suffix PW following the part number indicates that the filter is pre-wet and packaged with DI water.