

FLUOROFLOW®-SELECT

All-fluoropolymer, highest flow rate cartridge for applications up to 180°C



In high temperature processes, exceptional flow rates and on-stream life can be obtained by using Fluoroflow®-SELECT filter cartridges. The SELECT membrane pleat design (patent pending) results in higher flow rates, longer filter life and less down-time than a standard pleated configuration. The all-fluoropolymer construction offers excellent chemical resistance in aggressive chemical applications.

BENEFITS

- Exceptional flow rates increase bath turnover rates
- High chemical and thermal resistance
- 100% integrity tested
- Operating temperature 150°C (up to 180°C with HT option)
- Wet-packed option available for fast installation
- Higher membrane area for increased filter life

APPLICATIONS

- Processes using aggressive chemicals and process fluids
- High temperature recirculation baths operating at elevated temperatures
- Hot phosphoric acid in nitride etching process

SPECIFICATIONS

Materials of construction

100% Fluoropolymer construction

All components are thermally bonded to ensure integrity and reduce extractables.

Effective filtration area

6.0ft² (0.56 m²) 4" (100mm) cartridge
12.2ft² (1.1 m²) 10" (250mm) cartridge

Metals extractables

<20ppb (total) in a 10% HNO₃ extraction of 1.5 liters
for 24 hours at ambient temperature

Maximum differential pressure/temperature

Forward	80psid (5.5bar) @ 75°F (24°C)
	55psid (3.8bar) @ 167°F (75°C)
	30psid (2.0bar) @ 257°F (125°C)
	15psid (1.0bar) @ 300°F (150°C)
Forward HT option	100psid (6.8bar) @ 75°F (24°C)
	75psid (5.1bar) @ 167°F (75°C)
	50psid (3.4bar) @ 257°F (125°C)
	15psid (1.0bar) @ 356°F (180°C)
Reverse	50psid (3.4bar) @ 75°F (24°C)
	15psid (1.0bar) @ 250°F (121°C)

Cleanliness (particle shedding)

Wet-packed <2 particles/ml >0.2µm after 7gal at 1gal/min
Dry-packed <2 particles/ml >0.2µm after 12gal at 1gal/min

TOC/resistivity rinse-up (wet-packed)

TOC recovery within 3-5ppb of feed without additional rinse-up.

Resistivity recovery within 0.4megohm-cm of feed after 22gal @ 1gpm.

Integrity test values

FILTER RATING	BUBBLE POINT*	
	psig	bar
µm		
0.03	≥ 60	4.1
0.05	≥ 40	2.8
0.10	≥ 21	1.5
0.20	≥ 13	0.9
0.45	≥ 7	0.5
1.00	≥ 3	0.2

*In 60/40 IPA/water @ 25°C

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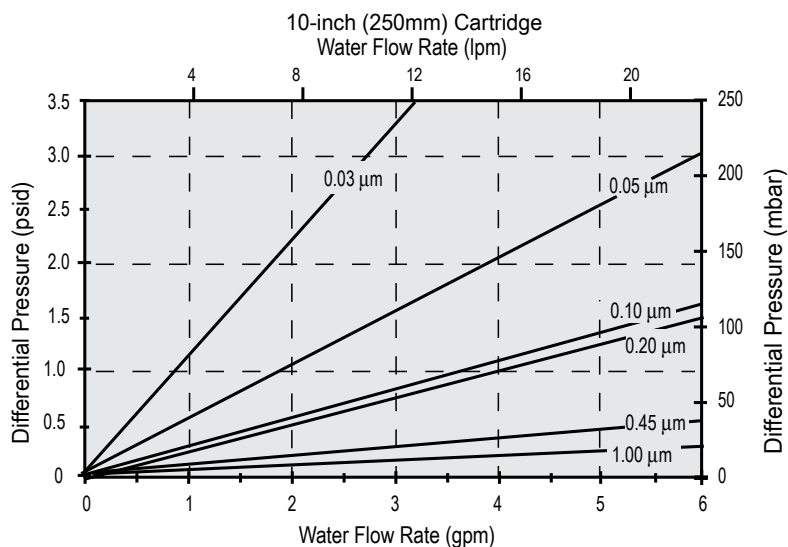
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PERFORMANCE ATTRIBUTES

Water in Flow Rates, Typical *

0.03µm	0.85gpm/psid (4.7lpm/100mbar)
0.05µm	2.0gpm/psid (11.0lpm/100mbar)
0.10µm	4.1gpm/psid (22.6lpm/100mbar)
0.20µm	4.6gpm/psid (25.3lpm/100mbar)
0.45µm	10.5gpm/psid (57.6lpm/100mbar)
1.00µm	16.0gpm/psid (87.8lpm/100mbar)

*Flow rates shown are for FluoroCap filters with 3/4" Flaretek® (in-line) fittings and for fluids with viscosity of 1cP.



ORDERING INFORMATION

Each cartridge is identified with a product number, pore size and lot number for traceability.

FS - 18

End Fitting	
CODE	DESCRIPTION
2	226/Flat
3	222/Flat
7	226/Fin
8	222/Fin

Nominal Length	
CODE	LENGTH
04	4" (100mm)
10	10" (250mm)
20	20" (500mm)
30	30" (750mm)
40	40" (1,000mm)

Filter Rating	
CODE	MICRON
923	0.03µm
925	0.05µm
001	0.10µm
002	0.20µm
004	0.45µm
010	1.00µm

O-Rings	
CODE	MATERIAL
2	Silicone
4	Viton®
5	FEP-Encapsulated Viton
6	FEP-Encapsulated Silicone
7	Chemraz®
N	None

Options	
CODE	TEMPERATURE
E	Electronic Standard (150°C Max)
H*	High Temperature (180°C Max)

*HT is only available in 4", 10" and 20" lengths

Treatments	
CODE	DESCRIPTIONS
Blank	UPW Flush
F	Ozone UPW Flush
W	Wet Packed

TECHNICAL SUPPORT AND PRODUCT INFORMATION

Parker Hannifin Corporation provides our customers with unsurpassed product consistency and cost-efficiency. Our experienced professionals can help you select the right solution for your application. For more information or to place an order, contact your local distributor. Information on product specifications, applications and chemical compatibility can be found on our web site at www.parker.com or through your nearest **Parker Hannifin Corporation** office.

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*US Patents Pending 4,588,464 and 4,663,041