

# Fluoroflow<sup>®</sup>-XL

Highest-performance all-fluoropolymer cartridge for aggressive applications

The Fluoroflow<sup>®</sup>-XL filter cartridge is setting the new standard for exceptional flow rates and on-stream life. It utilizes a larger diameter cartridge (3.25") combined with our unique SELECT pleating technology that increases filtration area and flow rate by over 70%. This results in increased bath turnover and longer filter lifetime demanded by today's advanced 300mm fabs. The all-fluoropolymer construction provides excellent chemical resistance for the most aggressive applications up to 180 °C. Its integral filter design maximizes up-time with safe and simple change-outs. Available wet-packed for quick installation or Ultraclean wet-packed which offers the lowest metals extractables in the industry.



## Contact Information

Parker-Hannifin Corporation  
**domnick hunter**  
**Process Filtration - N.A.**  
2340 Eastman Avenue  
Oxnard, California, USA 93030

toll free +1 877 784 2234  
phone +1 805 604 3400  
fax +1 805 604 3401  
dhpsales.na@parker.com

[www.parker.com/processfiltration](http://www.parker.com/processfiltration)

## Benefits

- Extra large filtration area for longer life
- Highest flow rates for maximum bath turn over
- Wet-pack option for quick installation
- Ultraclean option for absolute cleanliness
- All-fluoropolymer for maximum chemical resistance
- 100% integrity tested for consistent quality

## Applications

- Wet etch and clean
  - Phosphoric acid
  - Sulfuric acid
  - Hydrofluoric acid
  - Nitric acid
  - Piranha
  - SC1,SC2
  - NMP-based solvents
- Other high temperature or ozonated processes



ENGINEERING YOUR SUCCESS.

# Fluoroflow®-XL

## SPECIFICATIONS

### Materials of Construction

100% Fluoropolymer construct  
All components are thermally bonded to ensure integrity and reduce extractables.

### Effective Filtration Area per 10" (250mm) Cartridge

22.5ft<sup>2</sup> (2.04 m<sup>2</sup>) 0.03µm  
21.5ft<sup>2</sup> (1.99 m<sup>2</sup>) 0.05µm  
18.5ft<sup>2</sup> (1.71 m<sup>2</sup>) 0.10µm

### Metals Extractables\*

Standard: <30ppb (total)

Ultraclean: <7ppb (total)

\*In a 10% HNO<sub>3</sub> extraction

### Maximum Differential Pressure/Temperature

#### Forward:

70psid (5.5bar) @ 75°F (24°C)

50psid (3.8bar) @ 167°F (75°C)

30psid (2.0bar) @ 257°F (125°C)

15psid (1.0bar) @ 300°F (150°C)

#### Forward HT option:

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 @ 1gpm

Dry-packed: <2 particles/ml >0.2µm after 12gal @ 1gpm

### TOC/Resistivity Rinse-up (wet-packed)

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

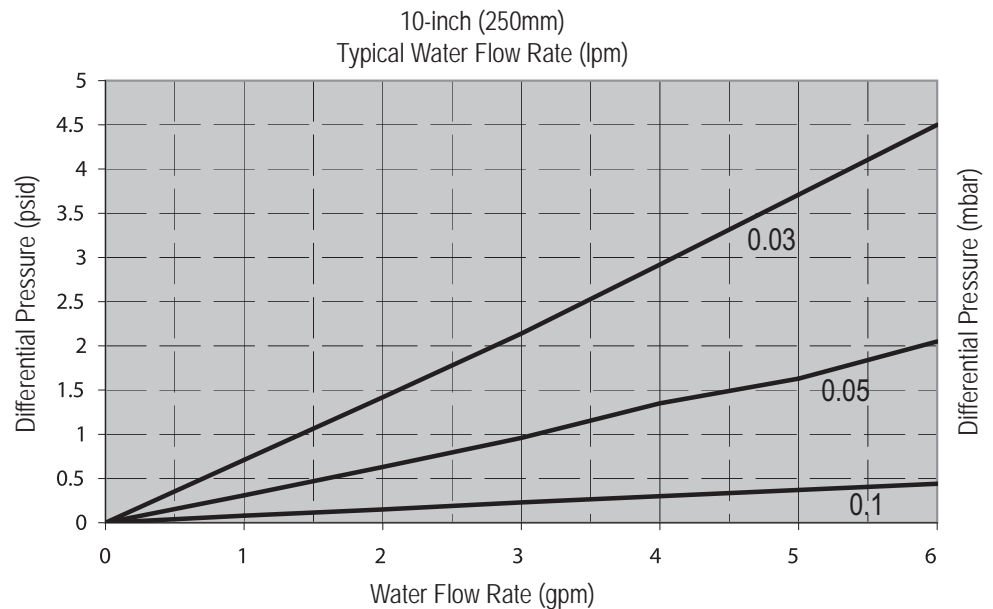
Resistivity recovery within 0.4megohm-cm of feed after 22gal @ 1gpm.

## Performance Attributes

### Water flow rates, Typical\*

Micron	gpm/psid	lpm/100mbar
0.03	1.4	7.7
0.05	3.3	18
0.1	13.0	71

\*Per 10" (250mm) cartridge equivalent.



## Ordering Information

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

**FL-18**

3	[ ]	[ ]	-	[ ]	[ ]	[ ]	-	[ ]	-	[ ]	[ ]	
End Fitting		Nominal Length			Filter Rating		O-Rings		Temperature		Treatment	
CODE	DESCRIPTION	CODE	INCHES	mm	CODE	MICRON	CODE	MATERIAL	CODE	OPTIONS	CODE	OPTIONS
3	222   Flat	04	4"	100	923	0.03	5	FEP-Encapsulated Viton®	E	Electronic Std. (150°C Max)	Blank	UPW Flush & Dry
		10	10"	250	925	0.05	7	Chemraz®	H*	High Temp. (180°C Max)	W	Wet Packed
		20	20"	500	031	0.1	K	Kalrez®			U	Ultraclean (pre-wet)
		30	30"	750			N	None			F	Ozone Flush & Dry

\*High temperature is only available in 4", 10" and 20" lengths

Specifications are subject to change without notification.  
For User Responsibility Statement, see [www.parker.com/safety](http://www.parker.com/safety)  
Viton and Kalrez are registered trademarks of E.I. DuPont de Nemours & Co., Inc.  
Chemraz is a registered trademark of Green, Tweed Companies.

© 2008 Parker-Hannifin Corporation  
domnick hunter Process Filtration - N.A.  
All Rights Reserved

DS\_ME\_Fluoroflow-XL Rev. A



ENGINEERING YOUR SUCCESS.