

# Fluoroflow®-XF

Highest-flowing all-fluoropolymer cartridge for the most aggressive applications

The Fluoroflow®-XF filter cartridge uses a superior asymmetric PTFE membrane which provides unmatched flow rates and on-stream life. Customers using the cartridge for viscous fluids like phosphoric acid, have reported flow rates and lifetimes more than twice that of the leading competitor. The advantages of increased bath turnover and longer lifetime improve yields while decreasing filtration costs. In addition, the all-fluoropolymer construction provides excellent chemical resistance for the most aggressive applications up to 180 °C. Available dry, wet-packed for quick installation or Ultraclean wet-packed which offers the lowest metals extractables in the industry.



## Contact Information

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## Benefits

- Highest flow rates in the industry
- Longest lifetime
- 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
  - Hot phosphoric acid
  - Sulfuric acid
  - Hydrofluoric acid
  - Nitric acid
  - Piranha
  - SC1, SC2
  - NMP-based solvents
- Other high temperature or ozonated processes
- Ultrapure electronics-grade gases

# Fluoroflow<sup>®</sup>-XF

## SPECIFICATIONS

### Materials of Construction

Asymmetric PTFE membrane  
All-fluoropolymer support & structure  
All components are thermally bonded to ensure integrity and reduce extractables.

### Effective Filtration Area

#### SELECT:

11.4 ft<sup>2</sup> (1.03m<sup>2</sup>) per nominal 10" (250mm) cartridge

#### Standard:

6.8 ft<sup>2</sup> (0.61m<sup>2</sup>) per nominal 10" (250mm) cartridge

### Metals Extractables\*

Standard: <20ppb (total)

Ultraclean: <5ppb (total)

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

### Maximum Differential Pressure/Temperature

#### Forward:

SELECT - 80psid (5.5bar) @ 75°F (24°C)

Standard - 60psid (4.1bar) @ 75°F (24°C)

HT option - 15psid (1.0bar) @ 356°F (180°C)

#### Reverse:

SELECT - 50psid (3.4bar) @ 75°F (24°C)

Standard - 40psid (2.8bar) @ 75°F (24°C)

HT option - 5psid (1.0bar) @ 250°F (121°C)

### Cleanliness (particle shedding)

Wet-packed: <2 particles/ml >0.2µm after 7gal @ 1gpm

Data is from open bag and installed, no additional installation flushing.

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

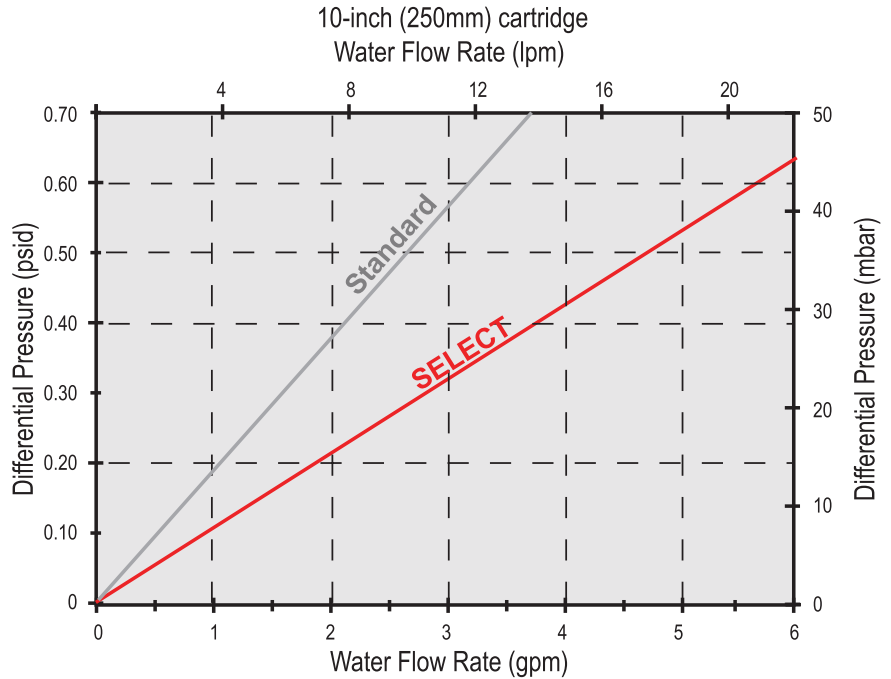
TOC recovery within 5ppb of feed without additional rinse-up.

Resistivity recovery within 0.2 megohm-cm of feed after 12gal @ 1gpm.

## Performance Attributes

| Filter   | Typical Water Flow Rate* |          | Typical Air Flow Rate |           |                              |
|----------|--------------------------|----------|-----------------------|-----------|------------------------------|
|          | Type                     | gpm/psid | lpm/100mbar           | scfm/psid | Nm <sup>3</sup> /hr /100mbar |
| SELECT   |                          | 9.5      | 52                    | 165       | 408                          |
| Standard |                          | 5.7      | 31                    | 131       | 324                          |

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



## Ordering Information

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

| Pleat Technology |             | End Fitting |             | Nominal Length |        |     | Filter Rating |          | O-Rings |                           | Temperature |                                 | Treatment |                      |
|------------------|-------------|-------------|-------------|----------------|--------|-----|---------------|----------|---------|---------------------------|-------------|---------------------------------|-----------|----------------------|
| CODE             | DESCRIPTION | CODE        | DESCRIPTION | CODE           | INCHES | mm  | CODE          | MICRON   | CODE    | MATERIAL                  | CODE        | OPTIONS                         | CODE      | OPTIONS              |
| FS-18            | SELECT      | 2           | 226/Flat    | 04             | 4"     | 100 | 031           | 0.1 (XF) | 2       | Silicone                  | E           | Electronic Standard (150°C Max) | Blank     | Dry Packed (Std.)    |
| 33-14            | Standard    | 3           | 222/Flat    | 10             | 10"    | 250 |               |          | 4       | Viton®                    | H           | High Temperature (180°C Max)    | W         | Wet Packed           |
|                  |             | 7           | 226/Fin     | 20             | 20"    | 500 |               |          | 5       | FEP-Encapsulated Viton®   |             |                                 | U         | Ultraclean (pre-wet) |
|                  |             | 8           | 222/Fin     | 30*            | 30"    | 750 |               |          | 6       | FEP-Encapsulated Silicone |             |                                 | F         | Ozone Flush & Dry    |
|                  |             |             |             |                |        |     |               |          | 7       | Chemraz®                  |             |                                 |           |                      |
|                  |             |             |             |                |        |     |               |          | N       | None                      |             |                                 |           |                      |
|                  |             |             |             |                |        |     |               |          | K       | Kalrez®                   |             |                                 |           |                      |

\*High temperature is not available in 30" length

Specifications are subject to change without notification.  
For User Responsibility Statement, see [www.parker.com/safety](http://www.parker.com/safety)  
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DS\_ME\_Fluoroflow-XF Rev. A



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