

Chemflow[®]-PE

Chemically-resistant cartridge for bulk and lower temperature applications

The Chemflow[®]-PE filter cartridge uses a PTFE membrane along with HDPE supports that provide an economical alternative to all-fluoropolymer cartridges. It provides a high degree of retention and cleanliness along with good flow and lifetime. This filter is ideally suited for bulk chemical delivery and lower temperature wet processes (<60°C). It is available dry or wet-packed for quick installation.



Benefits

- Good flow rates
- Long lifetime
- Wet-pack option for quick installation
- PTFE/ HDPE construction for chemical resistance
- 100% integrity tested in cleanroom environment

Applications

- Bulk chemical delivery
 - Acids, bases, solvents, photochemicals
 - Wet etch and clean (< 60°C)
 - Phosphoric acid
 - Hydrofluoric acid
 - Nitric acid
 - SC1, SC2
 - Solvents

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.

Parker Hannifin Corporation designs and manufactures an extensive line of innovative solutions for specific applications in the Microelectronics, Biopharmaceutical, Food and Beverage, Industrial and Chemical industries.



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Chemflow®-PE

Specifications

Materials of Construction

Membrane : PTFE
 Support Layers : HDPE
 Structure : HDPE

Effective Filtration Area

8.3ft² (0.78m²) per 10" (250mm) cartridge

Metals Extractables*

Standard: <55ppb (total)

*in a 10% HNO₃ extraction

Maximum Differential Pressure/ Temperature

Forward: 80psid (5.5bar) @ 75°F (24°C)

Reverse: 50psid (3.4bar) @ 75°F (24°C)

Maximum Operating Temperature

140°F (60°C)

Cleanliness (particle shedding)

Wet-packed: <1 particles/ml >0.2µm after 5gal at 1gpm

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

TOC/Resistivity Rinse-up (wet-packed)

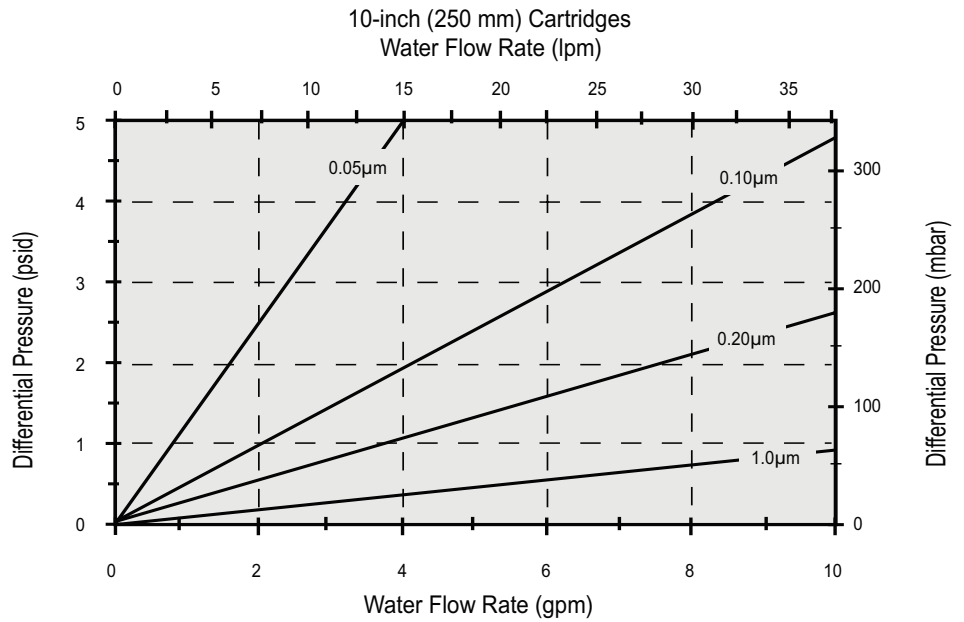
TOC rinse-up to background plus 5ppb of feed after 70gal @ 1gpm. Resistivity rinse-up to background minus 0.2 megohm-cm of feed after 60gal @ 1gpm.

Performance Attributes

Water Flow rates, Typical *

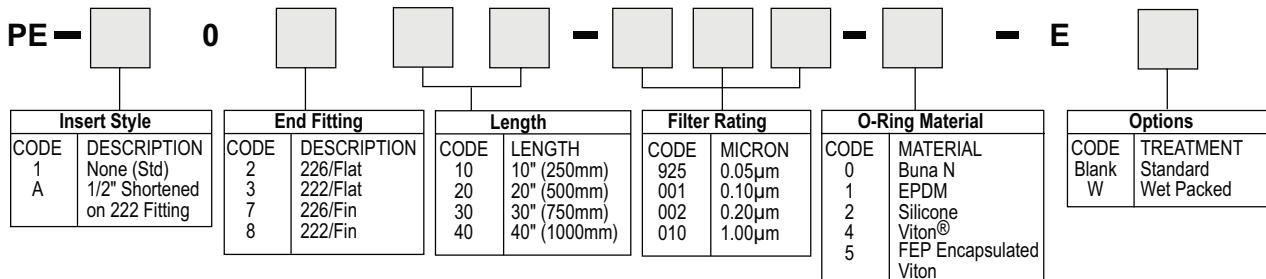
0.05µm 0.8gpm/psid (4.39lpm/100mbar)
 0.10µm 2.1gpm/psid (11.53lpm/100mbar)
 0.20µm 3.8gpm/psid (20.86lpm/100mbar)
 1.0µm 10gpm/psid (55.0lpm/100bar)

* Per 10-inch (250mm) cartridge equivalent.



Ordering Information

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



Specifications are subject to change without notification.
 Chemflow is a registered trademark of Parker Hannifin Corporation.
 Viton is a registered trademark of E.I. DuPont de Nemours & Co., Inc.
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Chemflow[®]-XF

Highest-flowing cartridge for bulk and lower temperature chemical applications

The Chemflow[®]-XF filter cartridge uses a superior asymmetric PTFE membrane that provides unmatched flow rates and on-stream life. It is constructed with HDPE supports that provide an economical alternative to all fluoropolymer cartridges while still maintaining a high degree of retention and cleanliness. This filter is ideally suited for bulk chemical delivery and lower temperature wet processes (<60°C). Customers using the cartridge for viscous fluids like phosphoric acid, have reported flow rates and lifetimes more than twice that of the leading competitor. These advantages help improve yields while decreasing overall filtration costs. In bulk delivery applications, the high flow allows for reduced system sizing and associated savings. It is available dry or wet-packed for quick installation.



Benefits

- Highest flow rates in the industry
- Long lifetime
- Wet-pack option for quick installation
- PTFE/ HDPE construction for chemical resistance
- 100% integrity tested in cleanroom environment

Applications

- Bulk chemical delivery
 - Acids, bases, solvents, photochemicals
- Wet etch and clean (< 60°C)
 - Phosphoric acid
 - Hydrofluoric acid
 - Nitric acid
 - SC1, SC2
 - Solvents

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Chemflow[®]-XF

Specifications

Materials of Construction

Membrane : PTFE (Asymmetric)
 Support Layers : HDPE
 Structure : HDPE

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

Effective Filtration Area

SELECT:
 11.0ft² (0.99m²) per nominal 10"
 (250mm) cartridge

Standard:
 5.7ft² (0.51m²) per nominal 10"
 (250mm) cartridge

Metals Extractables*

Standard: <70ppb (total)

*in a 10% HNO₃ extraction

Maximum Differential Pressure/ Temperature

Forward: 55psid (4.1bar) @ 75°F (24°C)

Reverse: 30psid (2.8bar) @ 75°F (24°C)

Cleanliness (particle shedding)

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

TOC/Resistivity Rinse-up (wet-packed)

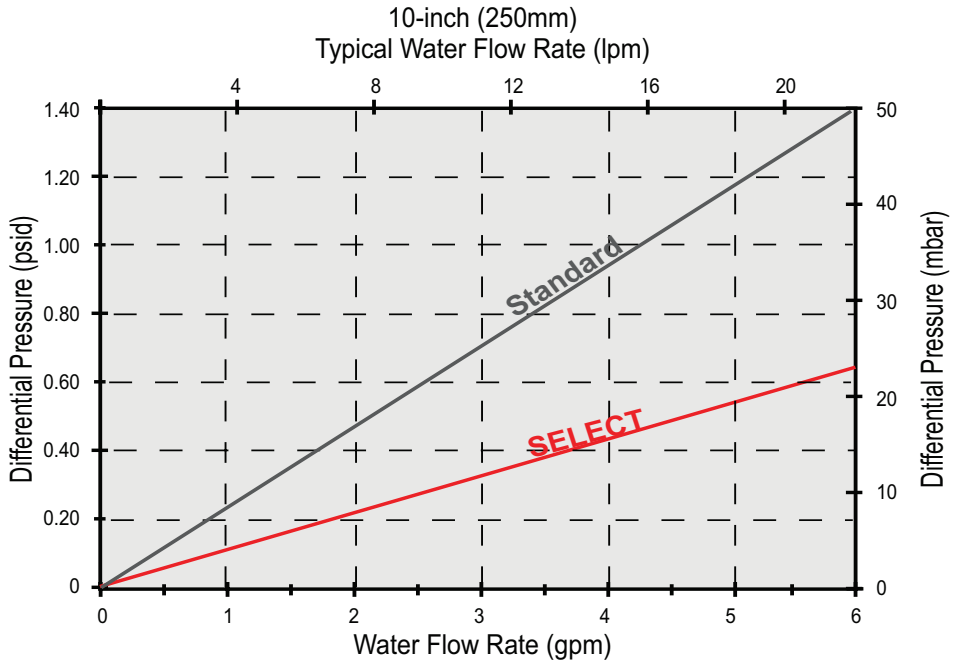
TOC recovery within 5ppb of feed without
 additional rinse-up. Resistivity recovery
 within 0.2 megohm-cm of feed after
 12gal @ 1 gpm.

Performance Attributes

Water Flow rates, Typical *

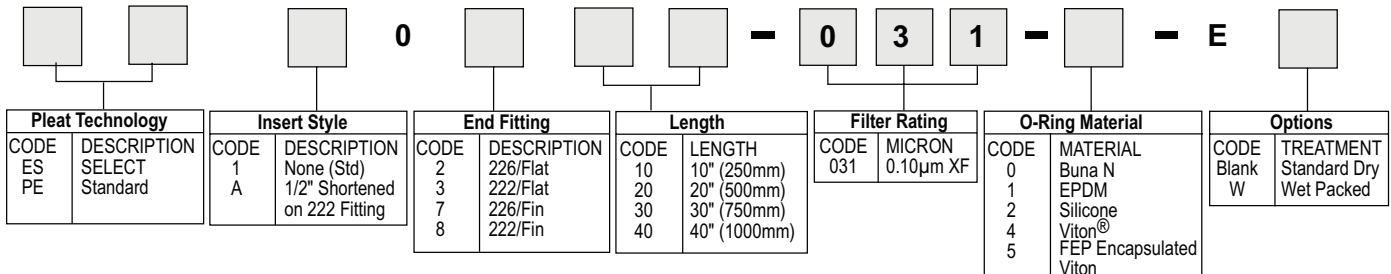
SELECT 7.9gpm/psid (52.0lpm/100mbar)
 Standard 4.3gpm/psid (30.3lpm/100mbar)

* Per 10-inch (250mm) cartridge equivalent.



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