

Fluoroflow®-HSA

Increased performance all-fluoropolymer cartridge for aggressive applications

The Fluoroflow®-HSA filter cartridge provides good flow rates and on-stream life. The enhanced pleating provides more than 40% more surface area than our standard Fluoroflow®. This results in increased bath turnover and longer filter lifetime demanded by today's fabs. The all-fluoropolymer construction provides excellent chemical resistance for the most aggressive applications up to 180°C. 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

Benefits

- Increased filtration area for longer life
- Higher flow rates for increased bath turn over
- Wet-pack option for quick installation
- Ultraclean wet-pack option for absolute cleanliness
- All-fluoropolymer for most 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[®]-HSA

SPECIFICATIONS

Materials of Construction

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

Effective Filtration Area

4.8ft² (0.45 m²) 4" (100mm) cartridge
9.8ft² (0.91 m²) 10" (250mm) cartridge

Metals Extractables*

Standard: <20ppb (total)
Ultraclean: <5ppb (total)
*In a 10% HNO₃ extraction

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 @ 1gpm

TOC/Resistivity Rinse-up (wet-packed)

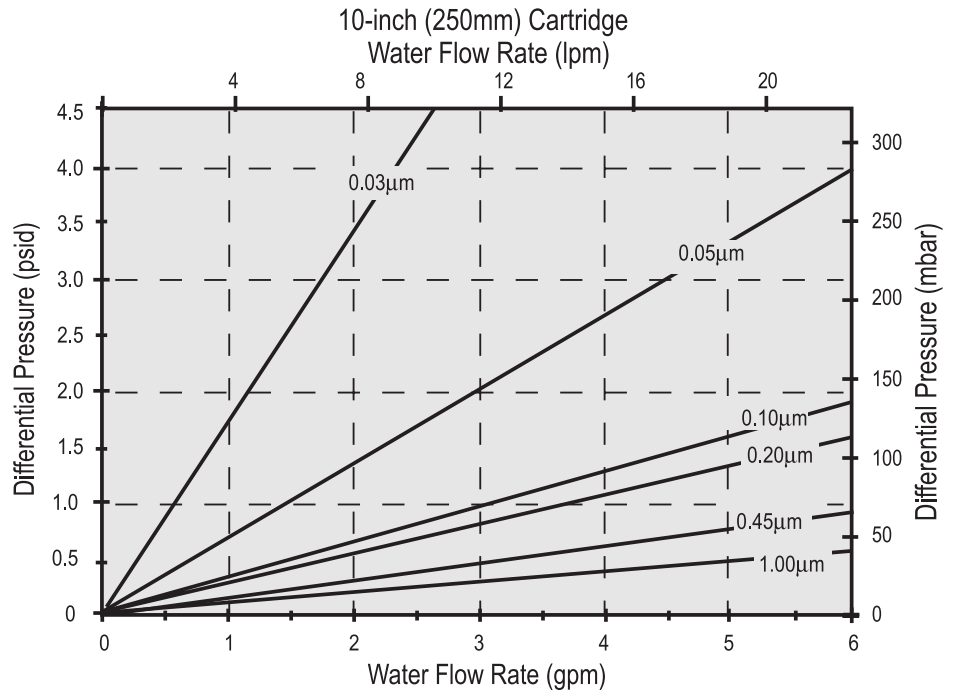
TOC recovery within 3-5ppb of feed without additional rinse-up.

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

Performance Attributes

Water flow rates, Typical*		
Micron	gpm/psid	lpm/100mbar
0.03	0.65	3.6
0.05	1.5	8.2
0.1	3.2	18
0.2	3.9	22
0.45	7.0	39
1.0	10.0	55

*Per 10" (250mm) cartridge equivalent.



Ordering Information

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

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End Fitting		Nominal Length			Filter Rating		O-Rings		Temperature		Treatment	
CODE	DESCRIPTION	CODE	INCHES	mm	CODE	MICRON	CODE	MATERIAL	CODE	OPTIONS	CODE	OPTIONS
2	226 Flat	04	4"	102	923	0.03	2	Silicone	E	Electronic Standard (150°C Max)	Blank	UPW Flush
3	222 Flat	10	10"	250	925	0.05	4	Viton [®]	H*	High Temperature (180°C Max)	F	Ozone UPW Flush
7	226 Fin	20	20"	500	001	0.1	5	FEP-Encapsulated Viton [®]			W	Wet Packed
8	222 Fin	30	30"	750	002	0.2	6	FEP-Encapsulated Silicone			U	Ultraclean (pre-wet)
		40	40"	1000	004	0.45	7	Chemraz [®]				
					010	1.0	N	None				
					503	100 (Nominal)	K	Kalrez [®]				

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

Specifications are subject to change without notification.
For User Responsibility Statement, see www.parker.com/safety
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