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 allfluoropolymer construction provides excellent chemical resistance for the most aggressive applications up to 180°C. Available wet-packed for quick installation or Ultraclean wetpacked which offers the lowest metals extractables in the industry.



Contact Information

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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

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*

<20ppb (total) Standard: 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.

Ordering Information

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

33 —	18					•				_	-	-			
	E	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	_	Electronic	Blank	UPW Flush
	3	222 Flat	10	10″	250		925	0.05		4	Viton®	E	Standard (150°C Max)	F	Ozone UPW
	7	226 Fin	20	20″	500		001	0.1		5	FEP-Encapsulated Viton®		High	w	Flush Wet Packed
	8	222 Fin	30	30″	750		002	0.2		-	FEP-Encapsulated	H*	Temperature		Ultraclean
			40	40″	1000		004	0.45		6	Silicone	ti Bala Tana	(180°C Max)	U	(pre-wet)
			L		·		010	1.0		7	Chemraz®		perature is available 10" and 20" lengths		
							503	100 (Nominal)		Ν	None	5y 11 4 ,			
							L	/	'	К	Kalrez®				

Specifications are subject to change without notification.

For User Responsibility Statement, see www.parker.com/safety Flouroflow is a registered trademark of Parker-Hannifin Corporation.

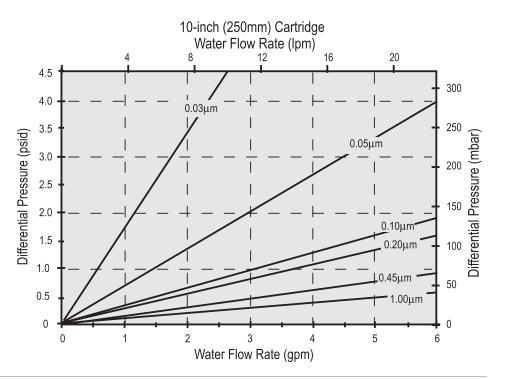
Viton and Kalrez are registered trademarks of E.I. DuPont de Nemours & Co., Inc. Chemraz is a registered trademark of Green, Tweed Companies



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.



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DS ME Fluoroflow-HSA Rev. A

ENGINEERING YOUR SUCCESS.