

# POLYFLOW®

Pleated polypropylene absolute-rated depth cartridges with superior dirt-holding capacity



Polyflow®'s random fiber polypropylene depth media provides long on-stream life and high retention efficiencies. While many polypropylene depth media are nominally rated and cannot meet their actual claimed retention efficiency, Polyflow® has been engineered to meet exacting performance claims.

Parker Hannifin's innovative research team developed an exclusive calendering process that produces media with unsurpassed dirt-loading capacity. Before each lot of media is fabricated, the best calendering conditions are determined to ensure minimal lot-to-lot variability and peak product performance. The number of pleats for each filter rating has also been optimized to ensure maximum dirt-loading capacity and on-stream life.

Polyflow® is thermally bonded from 100% virgin polypropylene to ensure superior cleanliness and excellent chemical and thermal compatibility under harsh processing conditions.

## BENEFITS

- Low extractables
- Absolute particle retention provides excellent protection for downstream filters
- Broad chemical compatibility allows use in most applications
- High flow rate/ long service life reduces processing time
- Non-pyrogenic for use in pharmaceutical applications

## APPLICATIONS

- Solvent clarification
- Recirculating liquids
- General water filtration
- Beverage/wine clarification
- Reagent grade chemicals
- RO/DI pre-filtration
- Waste water

## SPECIFICATIONS

### Materials of construction

Depth media	Polypropylene
Support layers	Polypropylene
Structure	Polypropylene

### Effective filtration area

2.4ft <sup>2</sup> (0.22m <sup>2</sup> )	5" (130mm) cartridge
4.9ft <sup>2</sup> (0.46m <sup>2</sup> )	10" (250mm) cartridge

### Filtration efficiency

The 0.6µm offers typical retention up to 99% efficient. 1.2µm, 2.5µm, 5µm, 10µm, 20µm, and 40µm are up to 99.9% efficient at specified pore size.

### Cartridge extractables

NVR < 35mg per 10" (250mm) cartridge

### Maximum differential pressure/temperature

Forward	80psid (5.5bar) @ 75°F (24°C)
Reverse	40psid (2.8bar) @ 75°F (24°C)
	15psid (1.0bar) @ 140°F (60°C)

### Maximum operating temperature

160°F (71°C)

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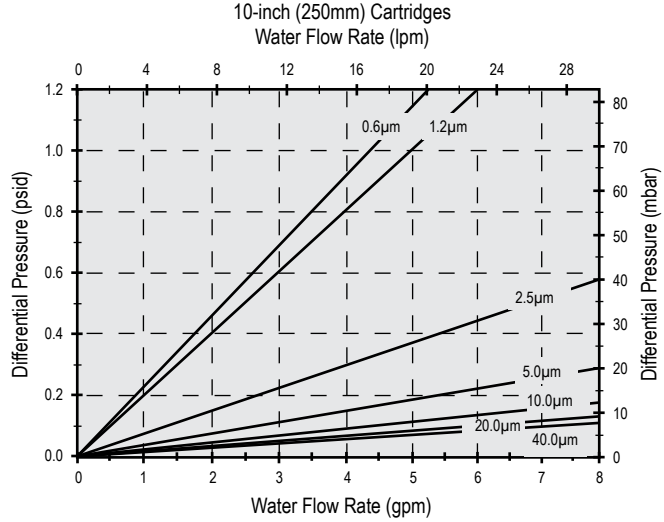
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## PERFORMANCE ATTRIBUTES

### Water in Flow Rates, Typical \*

0.6µm	4.2gpm/psid (23.3lpm/100mbar)
1.2µm	5.0gpm/psid (27.4lpm/100mbar)
2.5µm	13.5gpm/psid (74.1lpm/100mbar)
5.0µm	26.0gpm/psid (142.7lpm/100mbar)
10.0µm	40.0gpm/psid (219.6lpm/100mbar)
20.0µm	50.0gpm/psid (274.4lpm/100mbar)
40.0µm	60.0gpm/psid (329.3lpm/100mbar)

\* Per 10-inch (250 mm) cartridge equivalent and for fluids with viscosity of 1cP.



## ORDERING INFORMATION

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

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Insert Style		End Fitting		Nominal Length		Filter Rating		Gasket/O-Rings		Thickness (Gaskets Only)	
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	LENGTH	CODE	MICRON	CODE	MATERIAL	CODE	THICKNESS
1	None (STD)	0	DOE (CUNO®)	05	5" (125mm)	006	0.6µm	0	Buna N	1	0.200" (5mm)
5	Encapsulated 316L Stainless Steel	1	DOE	10	10" (250mm)	012	1.2µm	1	EPDM	2	0.125" (3mm)
6	Encapsulated Polysulfone	2	226/Flat	20	20" (500mm)	025	2.5µm	2	Silicone	4	(1) 0.200" (5mm) & (1) 0.125" (3mm)
A	Shortened 222 1/2"	3	222/Flat	30	30" (750mm)	050	5.0µm	4	Viton®	N	No Gasket
		6	020/Internal/Flat	40	40" (1,000mm)	100	10.0µm	5*	FEP Encapsulated Viton		
		7	226/Fin			200	20.0µm	6*	FEP Encapsulated Silicone		
		8	222/Fin			400	40.0µm	N	None		
		G	120/Internal/Recessed Endcap								
		H	213/Recessed Endcap (Ametek)								
		R	222/Recessed Endcap								

\*O-rings only

## TECHNICAL SUPPORT AND PRODUCT INFORMATION

**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](http://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.

## DISTRIBUTED BY:



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