



# Polyflow® Membrane-Select

## High-performance polypropylene membrane cartridges for microelectronics

Polyflow® MEMBRANE-SELECT cartridges are optimized for use in microelectronics applications such as bulk chemicals and photoresists. The all-polypropylene construction is an economical alternative to fluoropolymer-based cartridges.

The innovative SELECT pleating provides increased performance over competitive cartridges. Membrane area is increased by about 30% while flows are more than 50% higher within the same footprint. The result is one of the longest-lasting cartridges on the market.

Every cartridge is fabricated in a clean room environment, pre-flushed with 18 megohm-cm ultrapure DI water, and 100% integrity tested in an ISO-certified facility.



### Benefits

- High-retention membrane
- Unique SELECT pleating technology
- High flow rates
- Wide range of configurations and ratings
- 100% integrity tested

### Applications

- Bulk photoresist
- Bulk electronics grade chemicals

**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.

**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.

# Polyflow® Membrane-Select

## Specifications

### Materials of Construction

Membrane : Polypropylene  
 Support layers : Polypropylene  
 Structure : Polypropylene

### Effective Filtration Area

11.5ft<sup>2</sup> (1.07m<sup>2</sup>) 0.04 pore size per 10" (250mm) cartridge  
 8.4ft<sup>2</sup> (0.78m<sup>2</sup>) 0.07 pore size per 10" (250mm) cartridge\*  
 10.1ft<sup>2</sup> (0.94m<sup>2</sup>) 0.10 pore size per 10" (250mm) cartridge  
 9.8ft<sup>2</sup> (0.88m<sup>2</sup>) 0.20 pore size per 10" (250mm) cartridge

\* double layers of membrane

### Metals Extractables\*

<50ppb (total)  
 \*in a 10% HNO<sub>3</sub> extraction

### Maximum Differential Pressure/ Temperature

Forward: 70psid (4.8bar) @ 68°F (20°C)\*  
 40psid (2.8bar) @ 158°F (70°C)  
 Reverse: 30psid (2.1bar) @ 68°F (20°C)  
 60 psid (4.1 Bar) @ 68°F for 0.04µm

### Cleanliness (particle shedding)

Wet-packed <1 particles/ml >0.2µm after 10gal at 1gpm

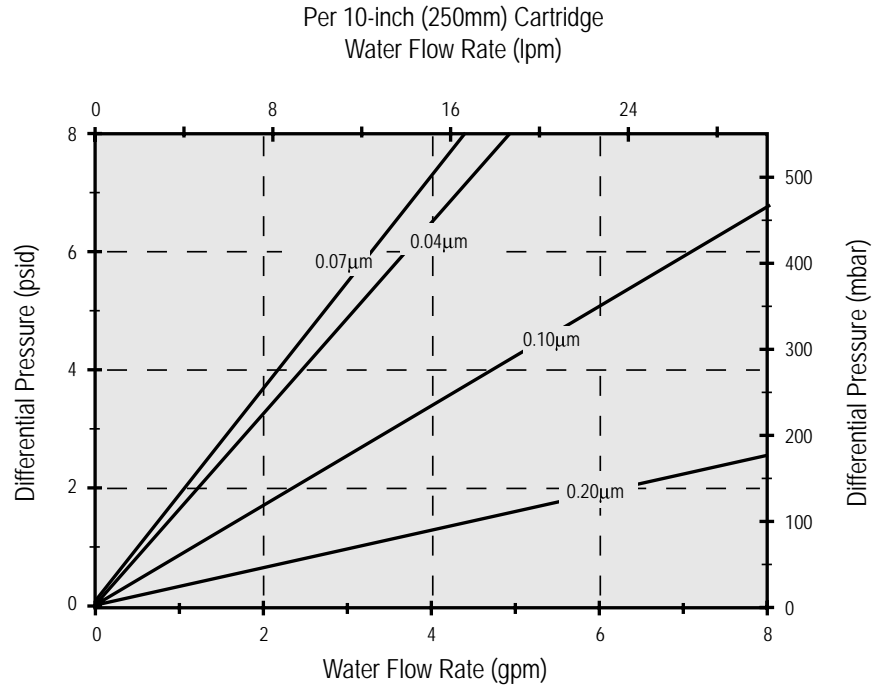
Data as from bag open and installed, no additional installation flushing.

## Performance Attributes

### Water Flow rates, Typical \*

0.04µm 0.65gpm/psid (3.6lpm/100mbar)  
 0.07µm 0.55gpm/psid (3.0lpm/100mbar)  
 0.10µm 1.2gpm/psid (6.5lpm/100mbar)  
 0.20µm 3.0gpm/psid (16.5lpm/100mbar)

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



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

TOC rinse-up to background plus 5ppb of feed after 40gal @ 1gpm.

Resistivity rinse-up to background minus

0.2megohm-cm of feed after 40gal @ 1gpm.

## Ordering Information

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

MS - [ ] 0 [ ] [ ] [ ] - [ ] [ ] [ ] - [ ] - E [ ]

Insert Style	
CODE	DESCRIPTION
1	No Insert (Std.)
5	Encapsulated Stainless Steel
6	Encapsulated Polysulfone
A	1/2" Shortened on 222 Fitting

End Fitting	
CODE	DESCRIPTION
2	226/Flat
3	222/Flat
7	226/Fin
8	222/Fin

Length	
CODE	LENGTH
10	10" (250mm)
20	20" (500mm)
30	30" (750mm)
40	40" (1000mm)

Filter Rating	
CODE	MICRON
924	0.04µm
001	0.10µm
002	0.20µm
101	0.07µm

O-Rings	
CODE	MATERIAL
0	Buna
1	EPDM
2	Silicone
4	Viton®
5	FEP-Encapsulated Viton®
N	None

Options	
CODE	TREATMENT
Blank	Standard
W	Wet Pack



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