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# POLYFLOW® MEMBRANE

Polypropylene membrane cartridge filter for general chemical purification



Polyflow® Membrane cartridges are comprised of pleated, hydrophobic polypropylene membrane surrounded by polypropylene supportive layers and hardware. This total polypropylene construction provides a wide range of benefits including: broad chemical compatibility, outstanding thermal stability, and is an excellent hydrophobic barrier. Polyflow® Membrane cartridge are a reliable choice for the purification of aggressive chemicals, compressed gases, and for vent applications.

These cartridges have been manufactured to maximize particle loading capacity and removal efficiencies, at the same time offering increased flow-rates and lower differential pressures. Product reliability is ensured by manufacturing to microelectronics processing quality standards.

## BENEFITS

- High flow-rates reduce processing time
- Broad chemical compatibility allows use in most applications
- Excellent hydrophobicity allows for use in venting / gas filtration applications
- 100% integrity tested prior to shipment to ensure quality

## APPLICATIONS

- Rinses/etchants/solvents/developers
- Acid etch benches
- Photoresist filtration
- Photomask chemicals
- Dilute acids and bases
- Clean compressed air and gases
- Bulk chemicals
  - Drum filling
  - Bottle packaging
  - Tank car filling

## SPECIFICATIONS

### Materials of construction

Membrane	Polypropylene
Support layers	Polypropylene
Structure	Polypropylene

### Effective filtration area

6.6ft <sup>2</sup> (0.61m <sup>2</sup> )	0.07 pore size per 10" (250mm) cartridge
7.7ft <sup>2</sup> (0.72m <sup>2</sup> )	0.1 pore size per 10" (250mm) cartridge
7.7ft <sup>2</sup> (0.72m <sup>2</sup> )	0.2 pore size per 10" (250mm) cartridge

### Metals extractables

<50ppb (total)	in a 10% HNO <sub>3</sub> extraction of 1.5 liters for 24 hours at ambient temperature
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### Maximum differential pressure/temperature

Forward	80psid (5.5bar) @ 75°F (24°C)
	40psid (2.8bar) @ 180°F (82°C)
Reverse	40psid (2.8bar) @ 75°F (24°C)

### Cleanliness (particle shedding)

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

Data as 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 40gal @ 1gal/min.

Resistivity rinse-up to background minus 0.2megohm-cm of feed after 40gal @ 1gal/min.

### Integrity test values

FILTER RATING	MINIMUM BUBBLE POINT*	
	µm	psig
0.07	25	1.7
0.1	16	1.1
0.2	9	0.6

\*Tested in a 60/40 IPA/DI water

