

# Clariflow®-E

Hydrophilic PES membrane cartridges for aqueous applications

Clariflow®-E cartridges are optimized for use in microelectronics applications such as DI water and aqueous-based chemicals. The unique mirrored-anisotropic PES (Polyethersulfone) membrane has exceptionally high flow rates and on-stream lifetime while providing consistent removal of both organic and inorganic particulates.

The combination of hydrophilic PES membrane and a high-purity, all-polypropylene support structure results in a very low level of ionic and organic extractables, broad chemical compatibility, and resistance to particle shedding.

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.



## Contact Information

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## Benefits

- High-retention hydrophilic membrane
- High flow rate
- Broad chemical compatibility for multiple applications
- Long on-stream life
- 100% integrity tested

## Applications

- BOE
- Dilute HF
- POU DI rinse
- Bulk DI water systems
- Copper plating
- Ni plating
- Hard disk wash processes
- Other dilute acids and bases



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# Clariflow®-E

## SPECIFICATIONS

### Materials of Construction

Membrane: Polyethersulfone  
 Support layers: Polypropylene  
 Structure: Polypropylene

All components are thermally bonded to ensure integrity and minimize extractables.

### Effective Filtration Area

6.8ft<sup>2</sup>(0.63m<sup>2</sup>) per 10" (250mm) cartridges

### Maximum Differential Pressure/Temperature

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

Reverse: 50psid (3.4bar) @ 75°F (24°C)

### Cleanliness (particle shedding)

Dry-packed: <1 particles/ml >0.2µm after 6gal @ 1gpm

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

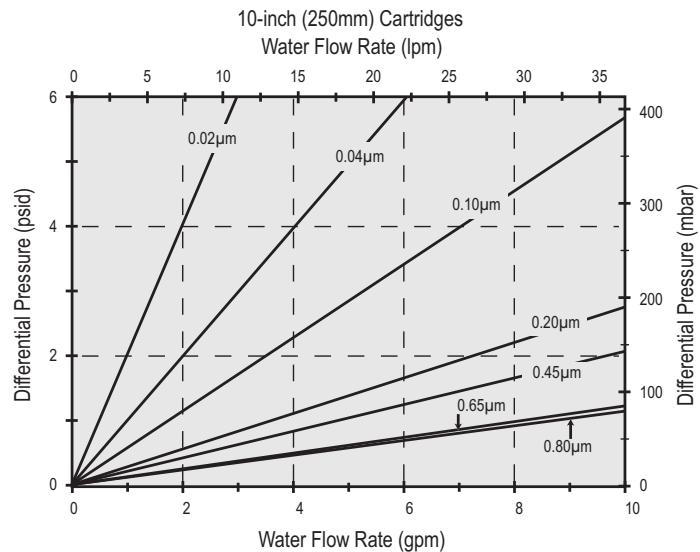
### Resistivity Rinse-up

Resistivity rinse-up to background minus 0.2megohm-cm of feed after 20gal @ 1gpm.

## Performance Attributes

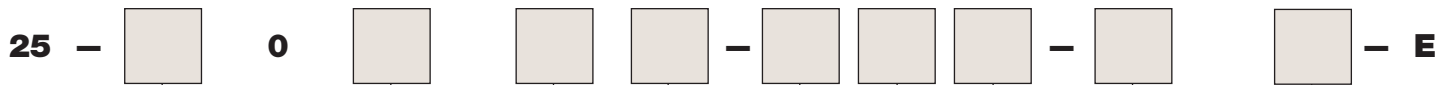
Water flow rates, Typical*		
Micron	gpm/psid	lpm/100mbar
0.02	0.5	2.75
0.04	1.0	5.49
0.1	1.8	9.88
0.2	3.7	20
0.45	4.8	26
0.65	8.9	49
0.8	9.5	52

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



## Ordering Information

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



Styles		End Fitting		Nominal Length			Filter Rating		Gasket/O-Rings		Gaskets		
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	INCHES	mm	CODE	MICRON	CODE	MATERIAL	CODE	THICKNESS	
												INCHES	mm
1	None (Std.)	0	DOE (CUNO®)	05 <sup>2</sup>	5"	130	922	0.02	0	Buna-N	1	0.200"	5
5	Encapsulated 316L Stainless Steel	1	DOE	10	10"	250	924	0.04	1	EPDM	2	0.125"	3
6	Encapsulated Polysulfone	2 <sup>1</sup>	226   Flat	20	20"	500	001	0.1	2	Silicone	4	(1) 0.200"	5
A	½" Shortened on 222 Fitting	3 <sup>1</sup>	222   Flat	30	30"	750	002	0.2	4	Viton®	5 <sup>3</sup>	(1) 0.125"	3
		6	020   Internal   Flat	40	40"	1000	004	0.45	5 <sup>3</sup>	FEP Encapsulated Viton®	N	No Gasket	
		7 <sup>1</sup>	226   Fin				006	0.65	6 <sup>3</sup>	FEP Encapsulated Silicone			
		8 <sup>1</sup>	222   Fin				008	0.8	N	None			
		G	120   Internal   Recessed Endcap										
		H	213   Recessed Endcap (Ametek®)										
		R	222   Recessed Endcap										

<sup>1</sup> 5" cartridges are available in these configurations.  
<sup>2</sup> 5" cartridges are available in 0.04 through 0.8 µm ratings.  
<sup>3</sup> O-rings only.

Specifications are subject to change without notification.  
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DS\_ME\_Clariflow-E Rev. A



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