

# Clariflow®-E Select Filter Cartridge

High-performance hydrophilic PES membrane cartridges for aqueous applications

Clariflow® E-SELECT filter cartridges are optimized for use in microelectronics applications such as DI water, and alkaline chemistries. 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 innovative SELECT pleating provides increased performance over competitive cartridges. Membrane area is increased by over 50% while flows are 40% higher within the same footprint. The result is one of the longest lasting cartridges on the market.

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
- Unique pleating technology
- High flow rates for increased bath turnover
- Broad chemical compatibility for multiple applications
- Wide range of configurations and ratings
- Reduced overall cost of filtration
- 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

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# Clariflow®-E Select Filter Cartridge

## 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

8.8ft<sup>2</sup> (0.82m<sup>2</sup>) 0.02µm pore size per 10" (250mm) cartridge  
 10.3ft<sup>2</sup> (0.96m<sup>2</sup>) other pore sizes per 10" (250mm) cartridge

### Maximum Differential

#### Pressure/Temperature

Forward: 70psid (5.5bar) @ 20°C (68°F)  
 40psid (2.8bar) @ 82°C (180°F)

Reverse: 40psid (2.8bar) @ 20°C (68°F)

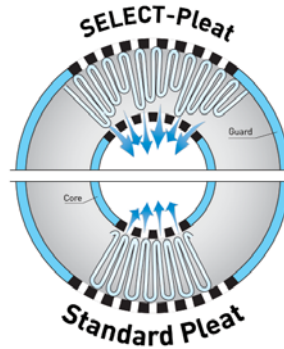
### Cleanliness (particle shedding)

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.

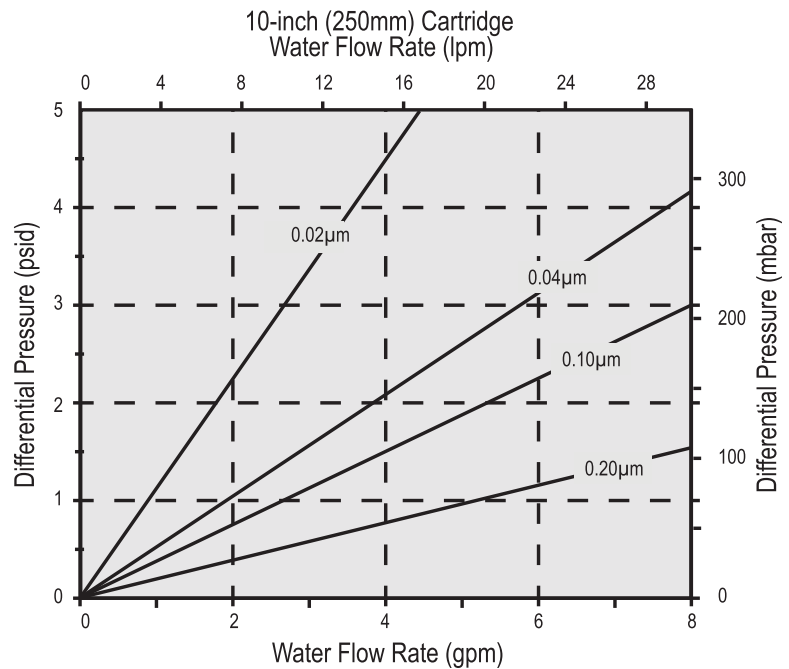


SELECT pleating provides an optimized effective filtration area, dramatically increasing flow rates compared to products with standard pleat format.

### Performance Attributes

Water flow rates, Typical*		
Micron	gpm/psid	lpm/100mbar
0.02	0.9	4.94
0.04	1.9	11
0.1	2.6	14
0.2	5.2	29

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



Specifications are subject to change without notification.  
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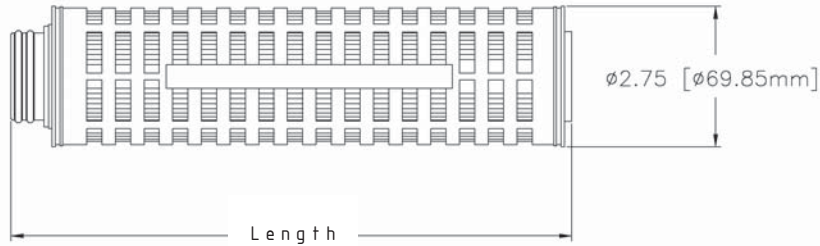


**WARNING:** This product can expose you to chemicals including 1,3-Butadiene which are known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov)

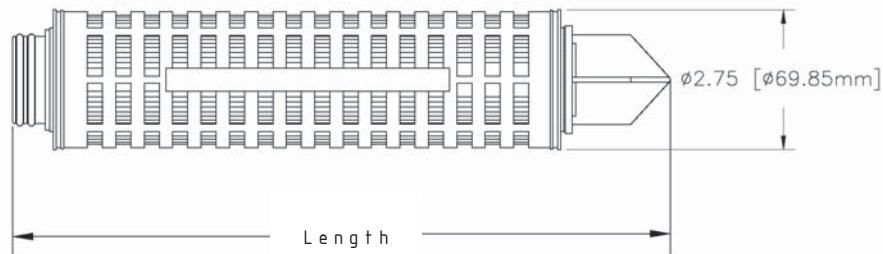
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# Clariflow®-E Select Filter Cartridge

Code 3 Lengths								
Style	10		20		30		40	
	in.	mm	in.	mm	in.	mm	in.	mm
1	11.13	282.7	20.92	531.4	30.76	781.3	40.58	1030.7
A	10.65	270.5	20.44	519.2	30.28	769.1	40.1	1018.5



Code 8 Lengths								
Style	10		20		30		40	
	in.	mm	in.	mm	in.	mm	in.	mm
1	12.87	326.9	22.70	576.6	32.54	826.5	42.36	1075.9



Note: For other code lengths, please consult your local Parker representative.

## Ordering Information

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

<b>CS</b>	—	<input type="text"/>	<b>0</b>	<input type="text"/>	<input type="text"/>	<input type="text"/>	—	<input type="text"/>	<input type="text"/>	<input type="text"/>	—	<input type="text"/>	<b>E</b>
<b>Styles</b>		<b>End Fitting</b>		<b>Length</b>			<b>Filter Rating</b>		<b>O-Rings</b>				
CODE	DESCRIPTION	CODE	DESCRIPTION	CODE	INCHES	mm	CODE	MICRON	CODE	MATERIAL			
1	None (Std.)	2	226   Flat	10	10"	250	922	0.02	1	EPDM			
5	Encapsulated Stainless Steel	3	222   Flat	20	20"	500	924	0.04	2	Silicone			
6	Encapsulated Polysulfone	7	226   Fin	30	30"	750	001	0.1	4	Viton®			
A	½" Shortened on 222 Fitting	8	222   Fin	40	40"	1000	002	0.2	5	FEP Encapsulated Viton®			
									6	FEP Encapsulated Silicone			
									N	None			

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DS\_ME\_Clariflow-E-SELECT Rev. C



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