# Clariflow®-E-Select

High-performance hydrophilic PES membrane cartridges for aqueous applications

Clariflow<sup>®</sup>-E-SELECT 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 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**

Parker-Hannifin Corporation domnick hunter Process Filtration - N.A. 2340 Eastman Avenue Oxnard, California, USA 93030

toll free +1 877 784 2234 phone +1 805 604 3400 fax +1 805 604 3401 dhpsales.na@parker.com

www.parker.com/processfiltration



## **Benefits**

- High-retention hydrophilic membrane
- Unique SELECT 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 and bases

# Clariflow®-E Select

#### **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

10.3ft2 (0.96m2) 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)

<u>Dry-packed:</u> <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	0.9	4.94
0.04	1.9	11
0.1	2.6	14
0.2	5.2	29

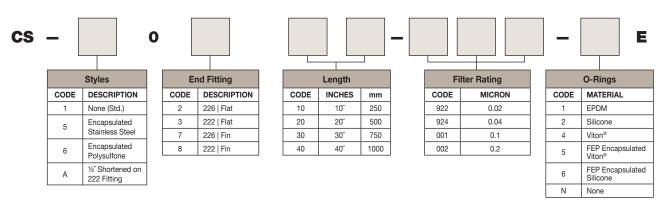
<sup>\*</sup> Per 10-inch (250mm) cartridge equivalent.

## 

Water Flow Rate (gpm)

### **Ordering Information**

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



Specifications are subject to change without notification.
For User Responsibility Statement, see www.parker.com/safety
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