

CLARIFLOW® -E MINI-CAPSULES

Encapsulated PES membrane filters for microelectronics applications



Clariflow®-E capsules filter high-quality water and solvents in semiconductor and microelectronics applications. The mirrored anisotropic polyethersulfone (PES) membrane provides superior fluid flow rates, extended on-stream life, and highly efficient removal of organic and inorganic particulates that can impact process quality.

Clariflow-E capsules are available in a variety of sizes and end-fitting combinations enabling users select the best configuration for their system requirements.

The encapsulated design maximizes efficiency by providing faster, easier change-out without laborious cleaning procedures. Eliminating the need to open reusable housings for cartridge replacement minimizes the chance of introducing contamination into the process, and promotes safety by reducing the risk of exposure to potentially hazardous fluids.

BENEFITS

- Reduce process down time, chance of contamination and risk of exposure to hazardous materials
- Low extractables shorten start-up time
- High flow rate reduces processing time
- Improved design prevents vent caps from disconnecting under pressure

APPLICATIONS

- Deionized water at point-of-use
- Aqueous chemical fluids

SPECIFICATIONS

Materials of construction

Membrane	Polyethersulfone
Support layers	Polypropylene
Structure	Polypropylene
Housing	Polypropylene

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

Effective filtration area

H = Half-size capsule	0.9ft ² (0.08m ²) per 4.82" (122mm)
S = Standard-size capsule	1.8ft ² (0.16m ²) per 6.38" (162mm)
D = Double-size capsule	2.5ft ² (0.23m ²) per 7.92" (201mm)

Maximum differential pressure/temperature

Forward	70psid (4.8bar) @ 75°F (24°C)
	35psid (2.4bar) @ 140°F (60°C)
	20psid (1.4bar) @ 167°F (75°C)
Reverse	30psid (2.1bar) @ 75°F (24°C)

Resistivity rinse-up

The rinse-up volume required for double-size Clariflow®-E capsules to reach 18megohm-cm resistivity is approximately 12gal (45.4 liters).

Integrity test values

FILTER RATING	MINIMUM BUBBLE POINT*	
	µm	psig
0.10	70	4.8
0.20	45	3.1

*Wetted with DI water

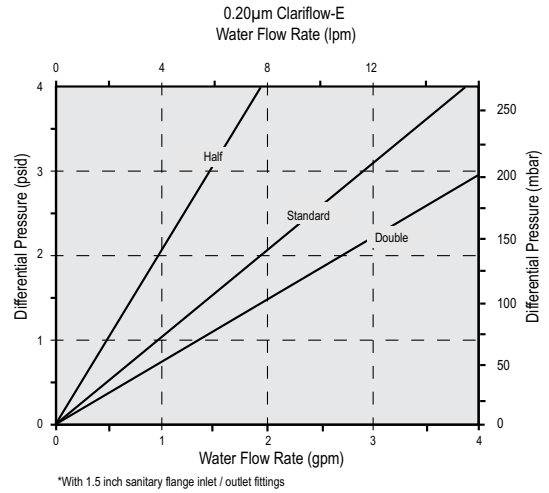
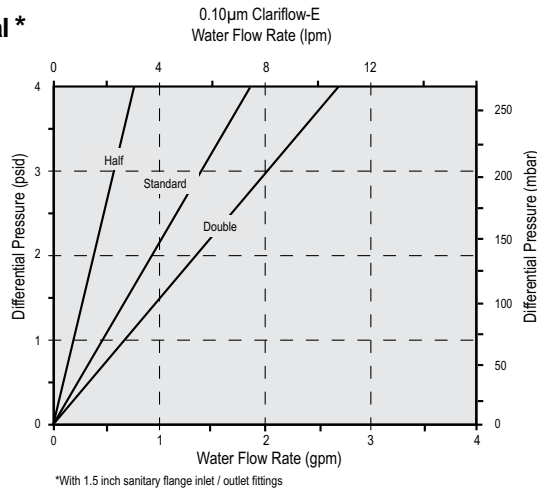
CLARIFLOW™ -E MINI-CAPSULES

Encapsulated PES membrane filters for microelectronics applications

PERFORMANCE ATTRIBUTES

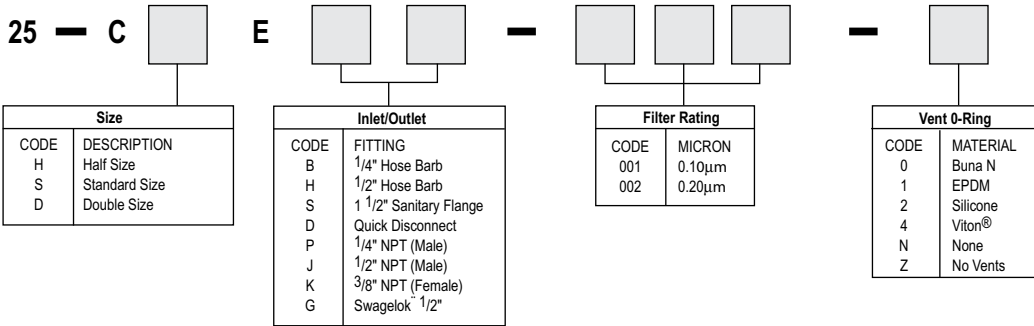
Water in Flow Rates, Typical *

* for fluids with viscosity of 1cP.



ORDERING INFORMATION

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



TECHNICAL SUPPORT AND PRODUCT INFORMATION

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. Information on product specifications, applications and chemical compatibility can be found on our web site at www.parker.com or through your nearest **Parker Hannifin Corporation** office.

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.

DISTRIBUTED BY:



Process Advanced Filtration Division
2340 Eastman Avenue
Oxnard, California, 93030, USA
Toll Free: +1 877 784 2234
Phone: +1 805 604 3400
Fax: +1 805 604 3401
www.parker.com

Specifications are subject to change without notification
© 2006 Parker Hannifin Corporation.
Clariflow is a registered trademark of Parker Hannifin Corporation.
Viton is registered trademark of E.I. DuPont de Nemours & Co., Inc.
Swagelok is a registered trademark of The Crawford Fitting Company.