



Customer Satisfaction Membrane

CSM UF MEMBRANE, The approved **Ultrafiltration Membrane** in the world.

CSM HOUSEHOLD UF MEMBRANE

High performance household membrane

Product Specifications

Model name	Permeate Flow rate gpd (L/day)	MWCO (Molecular Weight Cut Off)
UE1810	200 (757)	1,000K
UE1812	250 (946)	1,000K
UE2010	450 (1,703)	1,000K

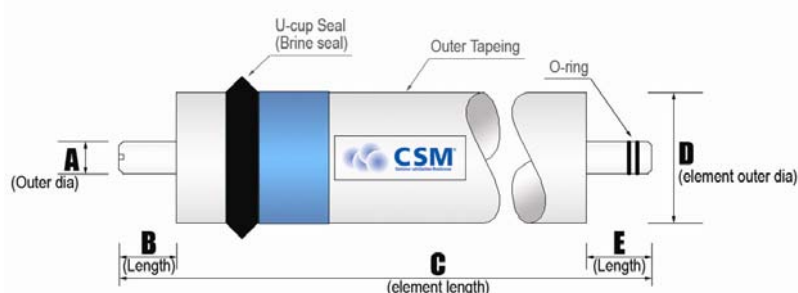
- The stated performance is initial data taken after 30 minutes of operation based on the following conditions;
Pure water (2 MΩ) at 20 psig applied pressure, 100 % recovery and 77 °F (25 °C).
- Dry type elements are vacuum leak tested using the *San Diego Protocol* so that the performance shall satisfy their specifications.
- Permeate flow rate is based on standard test conditions and may vary depending on feed water quality. Individual element's permeate flow may vary within 15%.
- All wet type elements are vacuum sealed in a polyethylene bag containing 1.0 % SBS (Sodium bisulfite) solution. All dry type elements are sealed in a polyethylene bag without vacuum.

Product Description

Membrane Type : Thin-film Composite
 Membrane Material : PSf (Polysulfone)
 Element Configuration : Spiral-Wound, Tape wrapping

Product Dimensions

Model name	A (inch)	B (inch)	C (inch)	D (inch)	E (inch)
UE1810	0.67	0.55	10.08	1.77	0.98
UE1812	0.67	0.00	11.02	1.77	0.79
UE2010	0.67	0.55	10.08	1.91	0.98



1. Outer feature may vary as design revisions take place.

Features

- CSM Household UF membrane has high permeability with homogeneous pore size less than 0.01 μm.
- CSM Household UF membrane can remove most of harmful substances larger than 0.01 μm so that it is suitable for home purifier.

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IMPORTANT NOTICE

Elements contain preservative solution, therefore the permeate from the first hour of operation should be discarded.

If the operating conditions in this document are not followed, no warranty of the element is honored.

Conditions for Handling CSM in general

- Customers must keep the element boxes dry at room temperature to prevent them from freezing and damages from heat. If the polyethylene bag is broken, a new protective solution has to be added to the RO membrane element and the element has to be repackaged air-tight to prevent from biological growth.
- Keep elements moist at all times after initial wetting
- Permeate water obtained from first hour of operation should be discarded in order to flush the protective solution in the elements.
- CSM elements should be immersed in a protective solution during storage, shipping or system shutdowns to prevent biological growth and freeze damage. The standard storage solution contains one (1) weight percent sodium bisulfite or sodium metabisulfite (food grade). For short term storage of one week, one (1) weight percent sodium metabisulfite solution is adequate for inhibiting biological growth.
- The customer is fully responsible for the effects of incompatible chemicals on elements. Their use will void the element limited warranty.

Application Data

Operating Limits

- | | |
|------------------------------|---------------------------------|
| • Max. Operating pressure | 125 psi (0.86 MPa) |
| • Max. Feed flow rate | 2 gpm (0.45 m ³ /hr) |
| • Max. Operating temperature | 113 °F (45 °C) |
| • Operating pH range | 3.0 ~ 10.0 |
| • Max. Turbidity | 1.0 NTU |
| • Max. SDI (15 min) | 5.0 |



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