

## CSM® BRACKISH WATER ELEMENTS

THIN-FILM POLYAMIDE MEMBRANE ELEMENTS FOR LIGHT INDUSTRIAL, PROCESS AND DRINKING WATER APPLICATIONS

### FEATURES

- Anti-fouling technology available for difficult waters
- Thicker feed spacer construction for enhanced fouling control
- Low-energy consumption models for added cost-savings
- Extended membrane area models for higher flow
- Inquire within for custom-engineered solutions



### SPECIFICATIONS

#### TEST CONDITIONS 77°F (25°C), pH 6.5–7.0

MODEL	PERMEATE FLOW RATE gpd (m <sup>3</sup> /day)	SALT REJECTION % STABILIZED / MIN.	APPLIED PRESSURE psi	MEMBRANE AREA ft <sup>2</sup> (m <sup>2</sup> )	FEED SPACER mil	NaCl Solution (mg/L)	Recovery (%)
RE8040-BE	10,500 (39.7)	99.7 / 99.4	225	400 (37.2)	32	2,000	15
RE8040-BE34	10,500 (39.7)	99.7 / 99.4	225	400 (37.2)	34	2,000	15
RE8040-BE440	11,500 (43.5)	99.7 / 99.4	225	440 (40.9)	28	2,000	15
RE8040-BLN	12,000 (45.4)	99.2 / 99.0	150	400 (37.2)	32	1,500	15
RE8040-BLN440	13,000 (49.2)	99.2 / 99.0	150	440 (40.9)	28	1,500	15
RE8040-BLF	11,500 (43.5)	99.2 / 99.0	100	400 (37.2)	32	500	15
RE8040-BLF440	12,650 (47.8)	99.2 / 99.0	100	440 (40.9)	28	500	15
RE8040-FEN*	10,500 (39.7)	99.7 / 99.4	225	400 (37.2)	32	2,000	15
RE8040-FLR*	9,000 (34.0)	99.6 / 99.4	150	400 (37.2)	32	1,500	15

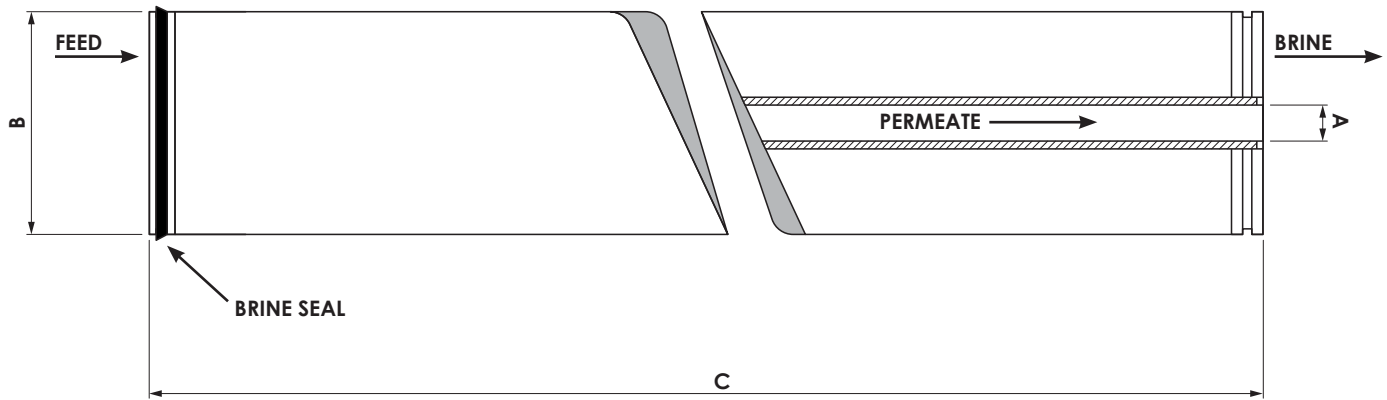
Permeate flow may vary ±15%

\*Anti-fouling membrane coating applied

### MAXIMUM OPERATING LIMITS

Pressure Drop / Element	15 psi (0.1 MPa)	Operating pH Range	2.0–11.0
Pressure Drop / 240" Vessel	60 psi (0.41 MPa)	CIP pH Range	1.0–13.0
Operating Pressure	600 psi (4.14 MPa)	Turbidity	1.0 NTU
Feed Flow Rate	75 gpm (17.0 m <sup>3</sup> /hr)	SDI (15 min.)	5.0
Operating Temperature	113°F (45°C)	Chlorine Concentration	< 0.1 mg/L

**KEY DIMENSIONS** inches (mm)



SIZE	A	B	C
8040*	1.12 (28)	8.0 (203)	40.0 (1,016)

\*Models with 440 ft<sup>2</sup> membrane area have 1.25" ID (measurement F) for the permeate tube  
 Each element comes packaged with a brine seal and interconnector kit (o-rings installed)



Check [NSF.org](http://NSF.org) for list of products listed under NSF/ANSI Standard 61.

**DESIGN GUIDELINES FOR VARIOUS WATER SOURCES**

FEED SOURCE	RO PERMEATE	WELL WATER	SURFACE WATER	WASTEWATER		SEAWATER		
				PRE-TREATED W/ MF	CONVENTIONAL	BEACH WELL	OPEN INTAKE	
SDI	<1	<3	<3	<5	<3	<5	<3	<5
DESIGN FLUX	21-30	13-17	13-17	12-16	10-14	8-12	8-12	7-10

**GENERAL HANDLING PROCEDURES**

Elements must be kept dry at room temperature and not stored in direct sunlight.

After the elements are wetted and need to be removed from the pressure vessels for short-term storage, it is recommended that CSM elements be immersed in a protective solution containing 500-1,000 ppm of sodium bisulfite (food grade) dissolved in permeate.

Permeate from the first hour of operation shall be discarded.

The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use will void the element Limited Warranty.

Permeate pressure must always be equal or less than the feed/concentrate pressure. Damage caused by permeate back pressure will void the limited warranty.

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