

SE series

industrial high rejection brackish water RO elements

The S-Series family of proprietary thin-film reverse osmosis membrane elements is characterized by high sodium chloride rejection and a smooth, fouling-resistant membrane surface.

SE High Rejection Brackish Water Elements are used for brackish water desalination and process stream concentration.

The SE elements feature either a fiberglass or a patented Durasan* cage outer wrap, 30mil or 50 mil spacers and polysulfone or Noryl plastic parts.

Table 1: Element Specification

Membrane	S-Series, Thin-Film Membrane (TFM*)		
Model	Average permeate flow gpd (m3/day) ^{1,2}	Average NaCl rejection ^{1,2}	Minimum NaCl rejection ^{1,2}
SE2540F30	550 (2.1)	99%	97.5%
SE2540F50	370 (1.4)	99%	97.5%
SE8040C30	8,500 (32.2)	99%	97.5%

¹Average salt rejection after 24 hours operation. Individual flow rate may vary $\pm 25\%$.

²Testing conditions: 2,000ppm NaCl solution at 425psi (2,930kPa) operating pressure, 77°F (25°C), pH6.5 and 15% recovery.

Model	Spacer mil (mm)	Active area ft ² (m ²)	Outer wrap	Part number
SE2540F30	30 (0.76)	28 (2.6)	Fiberglass	1207431
SE2540F50	50 (1.27)	22 (2.0)	Fiberglass	1207427
SE8040C30	30 (0.76)	374 (34.7)	Cage	1207488

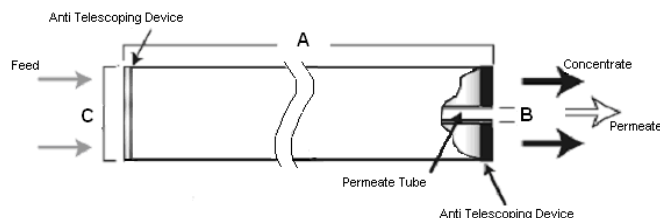


Figure 1 : Element Dimensions Diagram (Female)

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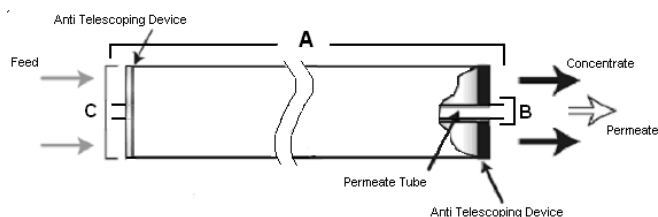


Figure 2 : Element Dimensions Diagram (Male)

Table 2: Dimensions and Weight

Model ¹	Dimensions, inches (cm)			Boxed Weight lbs (kg)
	A	B ²	C ³	
SE2540F30	40.0 (101.6)	0.75 (1.9) OD	2.4 (6.1)	4 (1.8)
SE2540F50	40.0 (101.6)	0.75 (1.9) OD	2.4 (6.1)	4 (1.8)
SE8040C30	40.0 (101.6)	1.125 (2.86)	7.9 (20.1)	29 (13.2)

¹These elements are dried then bagged before shipping.

²Internal diameter unless specified OD (outside diameter).

³The element diameter (dimension C) is designed for optimum performance in GE pressure vessels. Other pressure vessel dimension and tolerance may result in excessive bypass and loss of capacity.

Table 3: Operating and CIP Parameters

Typical Operating Flux	5-20 GFD (8-34 LMH)
Maximum Operating Pressure	600psi (4,137kPa) if T < 95°F (35°C) 435psi (3,000kPa) if T > 95°F (35°C)
Maximum Temperature	Continuous Operation: 122°F (50°C) Clean-In-Place (CIP): 122°F (50°C)
pH Range	Optimum rejection Range 5.5-7.0 Continuous Operation: 2.0-10.0 Clean-In-Place (CIP): 1.0-10.5
Maxime Pressure Drop	Over an element: 15psi (103kPa) Per housing: 60psi (414kPa)
Chlorine Tolerance	500+ ppm-hours, dechlorination recommended
Feed water	NTU < 1 SDI < 5

LENNTECH

info@lenntech.com Tel. +31-152-610-900

www.lenntech.com Fax. +31-152-616-289