



## HM 8040-SWE-400 High Performance Sea Water RO Element

### Product Description

Membrane Type	:	Cross Linked Fully Aromatic Polyamide Composite
Construction	:	Spiral Wound Element
Application	:	Sea Water
Feed Spacer	:	34 mil (0.864 mm) with modified Geometry
Boron Rejection (Typical)*	:	90%

Model	Diameter Inches	Active Surface Area Ft <sup>2</sup> (m <sup>2</sup> )	Salt Rejection %	Product Flow Rate gpd (l/h)
HM 8040-SWE-400	8.0	400 (37.16)	99.7	10000 (1577)

### Test Conditions

Feed Water Pressure	:	800 psi (56.25 kg/cm <sup>2</sup> )
Feed Water Temperature	:	77°F (25°C)
Feed Water Concentration	:	32000 ppm NaCl solution
Recovery Rate	:	10%
Feed Water pH	:	7.2

#### Notes:

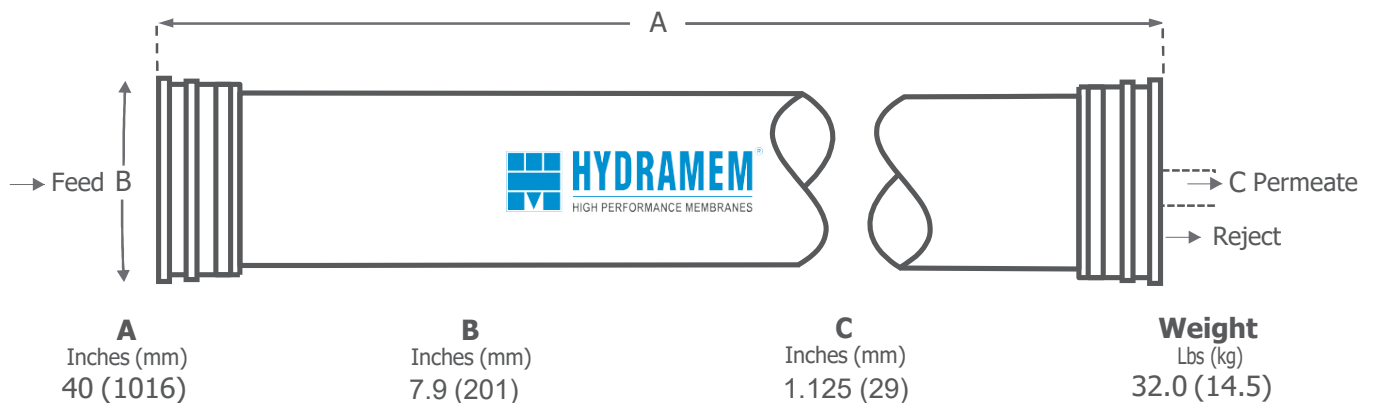
Minimum salt rejection is 99.6%

Permeate flow may vary +/-15%

Membrane active area variation – +/- 2

\*When tested at standard test conditions with 5 ppm Boron in feed solutions

### Dimensions



All Membrane Elements are supplied with a brine seal, interconnector and O rings

## Operating Limits

Maximum Operating Pressure	:	1200 psi (84.37 kg/cm <sup>2</sup> )
Maximum Operating Temperature	:	113°F (45°C)
Maximum Feed Flow	:	75 GPM (17.0 m <sup>3</sup> /h)
Feed Water Chlorine Concentration	:	<0.1 ppm
Feed Water pH Range, Continuous Operation	:	2-11
Feed Water pH Range, Chemical Cleaning	:	1-13
Maximum Feed Water SDI (15 Minute Test)	:	SDI ≤ 5
Maximum Feed Turbidity	:	NTU ≤ 1.0
Maximum Pressure Drop for each Element	:	15 psi
Maximum Pressure Drop for each Vessel	:	50 psi
Minimum Ratio of Concentrate to Permeate Flow for any Element	:	5:1

## Operating Information

1. For the recommended design range, please consult the latest HYDRAMEM technical bulletin, design guidelines or call an application specialist. If the operating limits given in this product information bulletin are not strictly followed, the limited warranty will be null and void.
2. Follow instructions mentioned on the caution sticker placed on product packaging.
3. Permeate from the first hour of operation should be discarded.
4. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. The use of incompatible chemicals will void limited warranty.
5. For element loading, use only the recommended silicon lubricant. The use of petroleum based lubricant or vegetable based oils may damage the element irreversibly.
6. Membranes shows some resistance to short-term attack by chlorine (Hypochlorite). Continuous exposure should be avoided as it may damage the membrane.

To the best of our knowledge, the information contained in this publication is accurate. Ion Exchange (India) Ltd., maintains a policy of continuous development and reserves the right to amend the information given herein without notice. Please contact our regional/branch office for current product specification.

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