



# HM 4040-SWE High Performance Sea Water RO Element

**Product Description** 

Membrane Type Cross Linked Fully Aromatic Polyamide Composite

Spiral Wound Element Construction **Application** Sea Water Application

Feed Spacer 34 mil (0.864 mm) with modified Geometry

Salt Rejection 99.7%

Model	Diameter	Active Surface Area	Salt Rejection	Product Flow Rate
	Inches	Ft²(m)²	%	gpd (I/h)
HM 4040-SWE	4.0	85 (7.89)	99.7%	1700 (268.13)

### **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

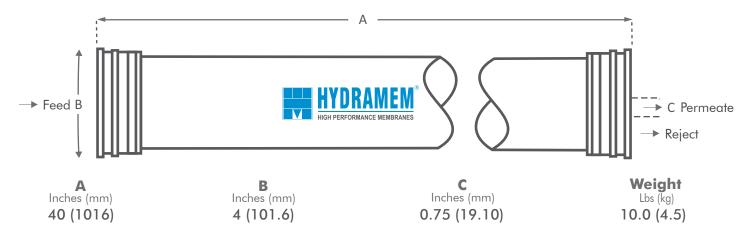
Recovery Rate Feed Water pH 6.5 - 7

Notes:

Minimum salt rejection is 99.6% Permeate flow may vary +/-15%

Membrane active area variation - +/- 2

## **Dimensions**



## **Operating Limits**

Maximum Operating Pressure : 1200 psi (84.37 kg/cm²)

Maximum Operating Temperature : 113°F (45°C)

Maximum Feed Flow : 16 GPM (3.6 m³/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) :  $SDI \le 5$ Maximum Feed Turbidity :  $NTU \le 1.0$ 

Maximum Pressure Drop for each Element : 15 psi (0.10 MPa)

## **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. All elements are wet tested, treated with 1% by weight sodium Meta bisulfate preservative solution, and then vacuum packed in oxygen barrier bags. To prevent biological growth during short term system shutdown, it is recommended that HYDRAMEM elements be immersed in a protective solution containing 500-1000 ppm of esu erofeb evitavreserp tuo esniR .etaemrep ni devlossid etfilus ib ateM muidos
- 3. Pdedracsid eb dluohs noitarepo fo ruoh tsrfi eht morf etaemre
- 4. The customer is fully responsible for the effects of chemicals that are incompatible with the elements. Their use 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 may damage the membrane and should be avoided

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.

HYDRAMEM is the registered trademark of Ion Exchange (India) Ltd.



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