

## Membrane Element

## ESPA4-4040

|                     |                 |                                    |
|---------------------|-----------------|------------------------------------|
| <b>Performance:</b> | Permeate Flow:  | 2,500 gpd (9.46 m <sup>3</sup> /d) |
|                     | Salt Rejection: | 99.2% (99.0% minimum)              |

|             |                       |  |
|-------------|-----------------------|--|
| <b>Type</b> | Configuration:        | Spiral Wound                             |
|             | Membrane Polymer:     | Composite Polyamide                      |
|             | Membrane Active Area: | 85 ft <sup>2</sup> (7.9 m <sup>2</sup> ) |

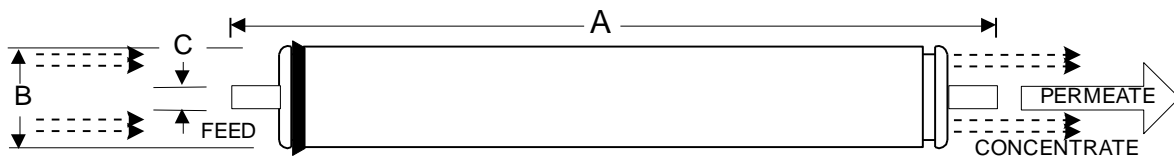
|                          |   |                                |
|--------------------------|---|--------------------------------|
| <b>Application Data*</b> | Maximum Applied Pressure:               | 600 psig (4.14 MPa)            |
|                          | Maximum Chlorine Concentration:         | < 0.1 PPM                      |
|                          | Maximum Operating Temperature:          | 113 °F (45 °C)                 |
|                          | pH Range, Continuous (Cleaning):        | 2-10 (1-12)*                   |
|                          | Maximum Feedwater Turbidity:            | 1.0 NTU                        |
|                          | Maximum Feedwater SDI (15 mins):        | 5.0                            |
|                          | Maximum Feed Flow:                      | 16 GPM (3.6 m <sup>3</sup> /h) |
|                          | Maximum Pressure Drop for Each Element: | 15 psi                         |

\* The limitations shown here are for general use. For specific projects, operating at more conservative values may ensure the best performance and longest life of the membrane. See Hydranautics Technical Bulletins for more detail on operation limits, cleaning pH, and cleaning temperatures.

### Test Conditions

The stated performance is initial (data taken after 30 minutes of operation), based on the following conditions:

500 PPM NaCl solution  
 100 psi (0.7 MPa) Applied Pressure  
 77 °F (25 °C) Operating Temperature  
 15% Permeate Recovery  
 6.5 - 7.0 pH Range  
 (Data taken after 30 minutes of operation)



| A, inches (mm) | B, inches (mm) | C, inches (mm) | Weight, lbs. (kg) |
|----------------|----------------|----------------|-------------------|
| 40.0 (1016)    | 3.95 (100.3)   | 0.75 (19.1)    | 8 (3.6)           |

Core tube extension = 1.05" (26.7 mm)

**Notice:** Permeate flow for individual elements may vary + or - 15 percent. All membrane elements are supplied with a brine seal, interconnector, and o-rings. Elements are enclosed in a sealed polyethylene bag containing less than 1.0% sodium meta-bisulfite solution and then packaged in a cardboard box.

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