

Membrane Element

ESPA1

Performance: Permeate Flow: 12,000 gpd (45.4 m³/d)
 Salt Rejection: 99.3 % (99.0 % minimum)

Type Configuration: Spiral Wound
 Membrane Polymer: Composite Polyamide
 Membrane Active Area: 400 ft² (37.1m²)

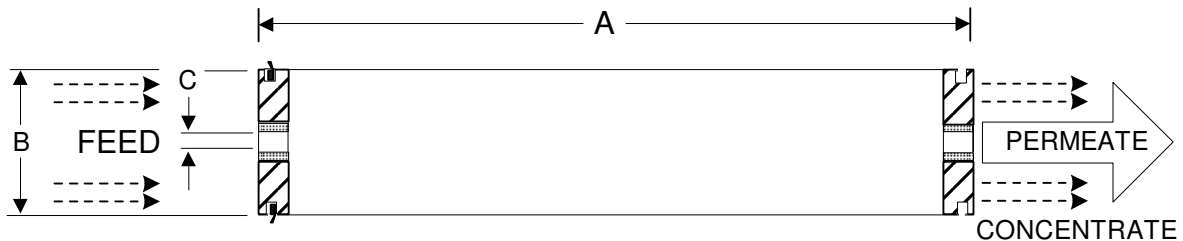
Application Data* Maximum Applied Pressure: 600 psig (4.16 MPa)
 Maximum Chlorine Concentration: < 0.1 PPM
 Maximum Operating Temperature: 113 °F (45 °C)
 pH Range, Continuous (Cleaning): 2-10 (1-12)*
 Maximum Feedwater Turbidity: 1.0 NTU
 Maximum Feedwater SDI (15 mins): 5.0
 Maximum Feed Flow: 75 GPM (17.0 m³/h)
 Minimum Ratio of Concentrate to Permeate Flow for any Element: 5:1
 Maximum Pressure Drop for Each Element: 10 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:

1500 PPM NaCl solution
 150 psi (1.05 MPa) Applied Pressure
 77 °F (25 °C) Operating Temperature
 15% Permeate Recovery
 6.5 - 7.0 pH Range



| A, inches (mm) | B, inches (mm) | C, inches (mm) | Weight, lbs. (kg) |
|----------------|----------------|----------------|-------------------|
| 40.0 (1016) | 7.89 (200) | 1.125 (28.6) | 36 (16.4) |

Notice: Permeate flow for individual elements may vary + 25 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 10% propylene glycol, and then packaged in a cardboard box.

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