NANO-SW-4040

Specified Performance*

MgSO₄
Permeate Flow: 2,000 gpd (7.6 m³/d)
MgSO₄ Rejection: 99.8% (99.6% minimum)
Test Conditions:
2000 ppm MgSO₄
110 psig (0.76 MPa) Applied Pressure
77 °F (25 °C) Operating Temperature
15% Permeate Recovery
6.5 - 7.0 pH Range

*The Specified Performance is based on data taken after a minimum of 10 minutes of operation. Actual testing of elements may be done at conditions which vary from these exact values; in which case, the performance is normalized back to these standard conditions. Permeate flow for individual elements may vary ± 20 percent from the value specified.

General Product Description**

Configuration: Spiral Wound
Membrane Polymer: Composite Polyamide
Membrane Active Area**: 75 ft² (7 m²)
Feed Spacer: 34 mil (0.87 mm)

Packaging: 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 metabisulfite solution, and then packaged in a cardboard box.

Element Details**

<table>
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<tr>
<th>A, inches (mm)</th>
<th>B, inches (mm)</th>
<th>C, inches (mm)</th>
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<tbody>
<tr>
<td>40.0 (1016)</td>
<td>3.95 (100.3)</td>
<td>0.75 (19.1)</td>
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Core tube extension = 1.05" (26.7 mm)

**Values listed are indicative, not specified. For more detailed specifications, see our Technical Service Bulletin documents or contact Hydranautics Technical Department.

Product Use and Restrictions^*

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): 3.9 (1-11.5)
Maximum Feedwater Turbidity: 1.0 NTU
Maximum Feedwater SDI (15 mins): 5.0
Maximum Feed Flow: 16 gpm (3.6 m³/h)
Minimum Brine Flow: 3 gpm (0.7 m³/h)
Maximum Pressure Drop for Each Element: 15 psi (0.10 MPa)

Typical Seawater Performance†:
Nominal Permeate Flow: 1,200 gpd (4.6 m³/d)
Nominal Chloride Rejection: 25%
Nominal Sulfate Rejection: 99.8%

^ The limitations shown here are for general use. For specified projects, operation at more conservative values may ensure the best performance and longest life of the membrane. See Hydranautics Technical Bulletins for more details.
† Typical Synthetic Seawater Test Condition: 35,000 ppm NaCl + 8000 ppm MgSO₄, 200 psi (1.4 MPa), 77 °F (25°C), 15% Permeate Recovery, 6.5 – 7.0 feed pH.

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