704-HR(CA)
Brakish Water Desalination Shrinkwrap Membrane Element
Reverse Osmosis

ELEMENT SPECIFICATIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>GPD</th>
<th>Flow (m3/d)</th>
<th>Active Area (ft²)</th>
<th>Active Area (m²)</th>
<th>Rejection Average</th>
<th>Rejection Minimum</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>704-HR(CA)</td>
<td>1,250</td>
<td>4.7</td>
<td>65</td>
<td>6.0</td>
<td>97.5%</td>
<td>96.0%</td>
<td>1117453</td>
</tr>
</tbody>
</table>

Specifications are based on a 2000 mg/L NaCl solution at 420 psig operating pressure (2930 kPa), 77deg.F (25deg.C), 10% recovery, pH 6-7. Individual flux may vary +15%/-15%. Average salt rejection after a minimum of 24 hours in continuous operation.

OPERATING AND DESIGN PARAMETERS

- Membrane: Cellulose Acetate
- Optimum rejection pH: 5.0-6.5
- Typical Operating Pressure: 140-400psig (965-2760 kPa)
- Operating pH range: 5.0-6.5
- Maximum Pressure: 450psig (3143 kPa)
- Cleaning pH range: 3.0-8.0
- Maximum Pressure Drop: 50 psig (345 kPa) per vessel
- Maximum Temperature: 86°F (30°C)
- Chlorine Tolerance: 1 ppm maximum, continuous 30 ppm for 30 min. during sanitization
- Feed NTU: <1
- Feed SDI: <5
- Maximum Pressure Drop: 10 psig (69 kPa) per element
- Typical Operating Flux: 10-20 GFD (15-35 L.H⁻¹.M⁻²)
- Cleaning pH range: 3.0-8.0
- Maximum Temperature: 86°F (30°C)
- Chlorine Tolerance: 1 ppm maximum, continuous 30 ppm for 30 min. during sanitization
- Typical Operating Flux: 10-20 GFD (15-35 L.H⁻¹.M⁻²)

ELEMENT DIMENSIONS AND WEIGHT

<table>
<thead>
<tr>
<th>Model</th>
<th>A inches (mm)</th>
<th>B inches (mm)</th>
<th>C* inches (mm)</th>
<th>Weight lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>704-HR(CA)</td>
<td>39 (990.6)</td>
<td>0.84 (21)</td>
<td>4 (102)</td>
<td>11 (5)</td>
</tr>
</tbody>
</table>

* The element diameter (dimension C) is designed for optimum performance in Osmonics pressure vessels. Other pressure vessel dimension and tolerance may result in excessive bypass and leakage.

Notes:
- The Langelier Saturation Index (LSI) of the concentrate must be negative to minimize the possibility of calcium scale formation on the membrane surface.
- At start-up the first two hours of permeate should be discarded because of element preservative.
- Storage conditions should be less than <100°F, dry, in original carton and not in direct sunlight.