<table>
<thead>
<tr>
<th>REF.</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
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<tbody>
<tr>
<td>99305</td>
<td>1</td>
<td>SHELL</td>
<td>Filament Wound Epoxy/Glass composite-Head locking grooves integrally wound in place.</td>
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<tr>
<td>47317</td>
<td>2</td>
<td>Bearing Plate</td>
<td>6061-16 As per SS-221 ASME Edition 2015</td>
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<tr>
<td>96003</td>
<td>2</td>
<td>Sealing Plate</td>
<td>Engineering Thermoplastic</td>
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<tr>
<td>50566</td>
<td>2</td>
<td>Feed/Conc Port</td>
<td>SS-3576/78 As per SA-790 ASME Edition 2015</td>
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<tr>
<td>45090</td>
<td>2</td>
<td>Port Retainer Set</td>
<td>CF8M Cast SS, Two-piece set.</td>
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<tr>
<td>90598</td>
<td>2</td>
<td>Permeate Port</td>
<td>Engineering Thermoplastic</td>
<td></td>
</tr>
<tr>
<td>45086</td>
<td>2</td>
<td>Port Nut</td>
<td>Engineering Thermoplastic</td>
<td></td>
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<tr>
<td>96000</td>
<td>2</td>
<td>Head Seal</td>
<td>Ethylene Propylene - O-Ring</td>
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<tr>
<td>45312</td>
<td>4</td>
<td>Port Seal</td>
<td>Ethylene Propylene - O-Ring</td>
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<tr>
<td>47336</td>
<td>2</td>
<td>Retaining Ring</td>
<td>SS-316 As per SA-479 ASME Edition 2015</td>
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<tr>
<td>52169</td>
<td>2</td>
<td>Saddle</td>
<td>Engineering Thermoplastic</td>
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<tr>
<td>45042</td>
<td>2</td>
<td>Stop Assy.</td>
<td>504 Stainless Steel - PVC cushion</td>
<td></td>
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<tr>
<td>46265</td>
<td>2</td>
<td>Stop screw</td>
<td>516-18 UNC, 18-8 Stainless Steel.</td>
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</tr>
</tbody>
</table>

**Vessel Support**

- Saddle Engineering Thermoplastic
- Stop Assy. 504 Stainless Steel - PVC cushion
- Stop screw 516-18 UNC, 18-8 Stainless Steel

**Element Interface**

- A/R Adapter Engineering Thermoplastic
- A/R PWT Seal Ethylene Propylene - O-Ring
- Adapter seal Ethylene Propylene - O-Ring
- Thrust Ring Engineering Thermoplastic

**Section Through End Closure**

- Item 17 Downstream Only

**WARNING:**

Internal port pressure must not exceed 125 PSI.
RATING:
- DESIGN PRESSURE: 1200 PSI (8.27 MPa)
- MAX. OPERATING TEMP: 120°F (-20°C)
- MIN. OPERATING TEMP: 20°F (-7°C)
- FACTORY TEST PRESSURE: 1800 PSI / 1320 PSI (12.41 MPa) / (9.10 MPa)
- BURST PRESSURE: 7200 PSI (49.6 MPa)

INTENDED USE:
The CodeLine Model 80E120 Fiberglass RO Pressure Vessel is designed for continuous, long term use as a housing for reverse osmosis membrane elements to desalt typical sea waters at pressures up to 1200 psi. Any make of eight-inch nominal diameter spiral-wound element is easily accommodated; the appropriate interfacing hardware for the element specified is furnished with the vessel.

Specifications are subject to change without notice.

PRECAUTIONS:
- DO…read, understand and follow all instructions; failure to take every precaution will void warranty and may result in vessel failure.
- DO…mount the shell on horizontal members at span “S” using compliant vessel supports furnished; tighten hold down straps just snug.
- DO…provide overpressure protection for vessel set at not more than 105% of design pressure.
- DO…inspect end closures regularly; replace components that have deteriorated and correct causes of corrosion.
- DO NOT… make rigid piping connections to ports or clamp vessel in any way that resists growth of fiberglass shell under pressure; ∆DIA = 0.015 in. (0.4mm) and ∆L = 0.2 in. (5mm) for a length code –7 vessel.
- DO NOT… hang piping manifolds from ports or use vessel in any way to support other components; branch connection piping may be simply supported between the header and port; maximum weight of branch piping; feed/concentrate – 16 lbs (7.3 kg); permeate – 8 lbs (3.6 kg).
- DO NOT… operate vessel at pressures and temperatures in excess of its rating.
- DO NOT… operate vessel without permeate ports internally connected with a complete set of elements and interconnecting hardware.
- DO NOT… operate vessel with permeate pressure in excess of 125 psi at 120°F (0.86 MPa @ 49°C).
- DO NOT… overtighten the connection to the permeate port (hand-tighten plus one-quarter turn, check for leaks).
- DO NOT… tolerate leaks or allow end closures to be routinely wetted in any way.
- DO NOT… pressureize vessel until double-checking to verify that the retaining ring is completely inside the groove.
- DO NOT… work on any component until first verifying that pressure is relieved from vessel.
- DO NOT… operate outside the pH range 3-11.

ORDERING:
Using the chart below, please check the features you require and fax them with your purchase order to our customer service department for expedited processing.
For optional materials and/or features not listed below, please consult factory for pricing and availability.

VEssel LENGTH CODE – please check one

MODEL 80E120 □ -1 □ -2 □ -3 □ -4 □ -5 □ -6 □ -7 □ -8

MEMBRANE BRAND AND MODEL – please check one and fill in information

☐ Please supply adapters for the following membrane brand and specific model.
Brand_________________________Model_______________________

CERTIFICATION REQUIRED
☐ ASME Stamped and National Board Registered (please consult factory for pricing)
☐ ASME Section X Edition 2015
☐ CE Marked
☐ Standard, Certified by Pentair.

EXTERIOR FINISH – please check one

☐ Standard – white high-gloss polyurethane coating.
☐ Option – optional colors are available for 50 or more vessels per order.
Call factory for pricing details.

MATERIAL OPTIONS
☐ Standard – All materials as per drawing 99110 on the first page.
☐ Customer specified materials: -
(Please consult the factory, as these options will affect pricing and vessel lead-time.)

For complete information on proper use of this vessel please refer to the 80E series USER’S GUIDE Bulletin 523004.