<table>
<thead>
<tr>
<th>DWG REF</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
<th>MATERIAL</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>1</td>
<td>95001</td>
<td>SHELL</td>
<td>Filament Wound Epoxy/Glass composite - Head locking grooves integrally wound in place.</td>
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<tr>
<td></td>
<td>2</td>
<td>51050</td>
<td>Bearing Plate</td>
<td>6061-T6 As per SB-221 ASME Edition 2015</td>
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<tr>
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<td>2</td>
<td>96003</td>
<td>Sealing Plate</td>
<td>Engineering Thermoplastic.</td>
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<td>2</td>
<td>50070</td>
<td>Head/Conc Port</td>
<td>SB-316 As per SA-312 ASME Edition 2015</td>
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<td>2</td>
<td>45047</td>
<td>Port Retainer</td>
<td>Stainless Steel.</td>
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<td>2</td>
<td>9780</td>
<td>Permeate Port</td>
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<tr>
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<td>2</td>
<td>45066</td>
<td>Port Nut</td>
<td>Engineering Thermoplastic.</td>
</tr>
<tr>
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<td>2</td>
<td>96000</td>
<td>Head Seal</td>
<td>Ethylene Propylene - O Ring.</td>
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<tr>
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<td>4</td>
<td>45312</td>
<td>Port Seal</td>
<td>Ethylene Propylene - O Ring.</td>
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<tr>
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<td>10</td>
<td>47336</td>
<td>Retaining Ring</td>
<td>SS-316 As per SA-479 ASME Edition 2015</td>
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<td>2</td>
<td>62169</td>
<td>Saddle</td>
<td>Engineering Thermoplastic.</td>
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<tr>
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<td>2</td>
<td>45042</td>
<td>Strap Assy.</td>
<td>304 Stainless Steel - PVC cushion</td>
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<tr>
<td></td>
<td>2</td>
<td>46265</td>
<td>Strap Screw</td>
<td>5/16-18 UNCD, 2 5/8&quot; L, 18-8 Stainless Steel.</td>
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<tr>
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<td>2</td>
<td>A/R</td>
<td>A/R Adapter</td>
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</tr>
<tr>
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<td>A/R</td>
<td>PWT Seat</td>
<td>Ethylene Propylene - O - Ring.</td>
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<td>52245</td>
<td>Adapter Seal</td>
<td>Ethylene Propylene - O - Ring.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>45089</td>
<td>Thrust Ring</td>
<td>Engineering Thermoplastic.</td>
</tr>
</tbody>
</table>

### WARNING!
INTERNAL PORT PRESSURE MUST NOT EXCEED 125 PSI

### SHELL INTERFACE
- **Head Interlock**
- **Vessel Support**

### ELEMENT INTERFACE
- **A/R Adapter**
- **PWT Seat**

### MODEL 80E30
MEMBRANE HOUSING

### SHEET METADATA
- SHEET: 1 of 2
- NUMBER: 99111
- SCALE: 0
- SIZE: B
- REV: N

### DRAWING METADATA
- DRAWN DATE: 10APR15
- DRAWN BY: 4272
- CHECKED DATE: 10APR15
- CHECKED BY: EON

### SHELL WEIGHT
- Length Code: 1
  - L.O.A: 61 (1549)
  - Span: 30 x1 (192)
  - L: 57.63 (1549)
  - S: 33 (15)
  - F: 44 (20)
- Length Code: 3
  - L.O.A: 141 (3561)
  - Span: 110 x1 (2794)
  - L: 137.63 (3561)
  - S: 55 (25)
  - F: 77 (40)
- Length Code: 4
  - L.O.A: 221 (5613)
  - Span: 95 x2 (2413)
  - L: 217.63 (5613)
  - S: 35 (35)
  - F: 99 (45)
- Length Code: 5
  - L.O.A: 261 (6629)
  - Span: 115 x2 (2921)
  - L: 297.63 (6629)
  - S: 88 (40)
  - F: 110 (50)
- Length Code: 7
  - L.O.A: 301 (7645)
  - Span: 135 x2 (3429)
  - L: 337.63 (7645)
  - S: 88 (40)
  - F: 110 (50)

Changes are in inches (in approx.)
- Shell exterior coated with white RAL 9003, high gloss polyurethane paint.
- Not to be used for construction unless certified.
- General tolerances apply for details contact factor.
- LOA refers to overall length of the vessel.
- Empty weight refers to shell weight including head assemblies without membranes.
RATING:

DESIGN PRESSURE: 300 PSI (2.07 MPa)
MAX. OPERATING TEMP. 120°F (49°C)
MIN. OPERATING TEMP. 20°F (-7°C)
FACTORY TEST PRESSURE: ASME 450 / 330 PSI (3.1 MPa) / (2.27 MPa)
BURST PRESSURE: 1800 PSI (12.4 MPa)

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; \[\Delta DIA = 0.015 \text{ in. (0.4 mm)}\] and \[\Delta L = 0.2 \text{ in. (5 mm)}\] for a length code –8 vessel
DO NOT… hang piping manifold 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… tighten 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… pressurize 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.

VESEL LENGTH CODE – please check one

-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)

☐ CE Marked

☐ Standard, Certified by Pentair.

EXTERIOR FINISH – please check one

☐ Standard – white high-gloss RAL 9003 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 99111 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.

Pentair will assist the purchaser in determining the suitability of this standard vessel for their specific operating conditions. The final determination however, including evaluation of the standard material of construction for compatibility with the specific corrosive environment, shall be the responsibility of the purchaser.

Specifications are subject to change without notice.