PURON® MP Hollow Fiber Cartridge

8-inch Ultrafiltration Cartridge for Water and Wastewater Filtration

**PRODUCT DESCRIPTION**

- **Membrane Chemistry:** Proprietary PVDF
- **Membrane Type:** Braided hollow fiber for outside-in operation
- **Fiber Support Chemistry:** Polyester
- **Nominal Pore Size:** 0.03 µm
- **Outside Fiber Diameter:** 0.1 inch (2.6 mm)
- **Housing Shell:** PVC
- **Potting Material:** Proprietary Epoxy Compound
- **Storage Solution:** Glycerin/Water
- **Regulatory Status:** Classified by UL to NSF/ANSI Standard 61 and in accordance with NSF/ANSI Standard 372. Part number 0728000-LT2 meets State of California LT2 test requirements. Certified to be compliant with Italian D.M. 174 of 6 April 2004, under ICIM Norm 0415CS.

**PRODUCT SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Model</th>
<th>Membrane Area [ft² (m²)]</th>
<th>Typical Production Range [gpm (m³/hr)]</th>
</tr>
</thead>
<tbody>
<tr>
<td>0728000</td>
<td>PURON MP 8081-102</td>
<td>546 (51)</td>
<td>9 - 30 (2 - 6.8)</td>
</tr>
<tr>
<td>0728000-LT2</td>
<td>PURON MP 8081-102</td>
<td>546 (51)</td>
<td>9 - 30 (2 - 6.8)</td>
</tr>
</tbody>
</table>

**OPERATING AND DESIGN INFORMATION**

- **Maximum Pressure (water):** 45 psi (3.0 bar)** @ 104º F (40º C) or less
- **Temperature Range:** 32º F (0º C) - 104º F (40º C)
- **Maximum Production Transmembrane Pressure:** 25 psi (1.7 bar)
- **Maximum Backflush Transmembrane Pressure:** 10 psi (0.7 bar)
- **Allowable pH Range (continuous operation):** 4 - 9
- **Allowable pH Range (short term):** 1.8 - 10.5
- **Maximum Total Chlorine @ 77º F (25º C) or lower:** 1,000 ppm @ pH <10.5
- **Typical Air Scour Rate per Cartridge:** 7 scfm (12 Nm³/hr)
- **Maximum Air Scour Rate per Cartridge:** 9 scfm (15 Nm³/hr)
- **Typical Backflush Flow Rate per Cartridge:** 19 gpm (4.3 m³/hr)

*Consult KSS Process Engineering Group for specific applications

**NOMINAL DIMENSIONS**

<table>
<thead>
<tr>
<th>Model</th>
<th>D</th>
<th>L1</th>
<th>L2</th>
<th>L3</th>
</tr>
</thead>
<tbody>
<tr>
<td>PURON MP 8081-102</td>
<td>inches</td>
<td>8.6</td>
<td>81</td>
<td>84</td>
</tr>
<tr>
<td></td>
<td>mm</td>
<td>220</td>
<td>2,060</td>
<td>2,148</td>
</tr>
</tbody>
</table>

* Dimensions are provided for reference only and should not be interpreted as accurate specifications.

Note: Generation II Design shown
STORAGE GUIDELINES

Cartridge Storage Conditions:
New cartridges are packaged in a glycerin/water solution. The glycerin/water solution should be removed from new cartridges before their initial use with a water rinse followed by a chlorine clean. See the pre-startup cleaning instruction sheet packed with each cartridge shipment for more details. Prior to installation, cartridges should be stored in their original packaging under the following conditions:

- Indoors, out of direct sunlight.
- Temperatures between 50 - 85°F (10 - 30°C).
- Relative humidity below 70%.
- In a horizontal position (unless shipped as fully loaded crate).

It is best to use new cartridges within one year of shipment. Consult KSS for recommendations for longer term storage. Used cartridges should be cleaned, rinsed, and impregnated before storage using a solution of 80-100% glycerin. New cartridge storage conditions should also be used for used cartridges. Used cartridges must be drained, rinsed, and cleaned after storage per the pre-startup cleaning instruction sheet.

CARTRIDGE ASSEMBLY AND COMPONENTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Quantity Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Vent End Cap</td>
<td>1 each</td>
</tr>
<tr>
<td>2</td>
<td>Aeration End Cap</td>
<td>1 each</td>
</tr>
<tr>
<td>3</td>
<td>Face Seal</td>
<td>2 each</td>
</tr>
<tr>
<td>4</td>
<td>V-Band coupling</td>
<td>2 each</td>
</tr>
<tr>
<td>5</td>
<td>O-rings</td>
<td>2 each</td>
</tr>
<tr>
<td>6</td>
<td>PURON MP Cartridge</td>
<td>1 each</td>
</tr>
</tbody>
</table>

Note: Generation II End Cap Design shown

Generation II PURON MP Pass Kit
(includes items 1-5 on right)
Standard part number 1021079

Generation I PURON MP Pass Kit
Part Number: 1021034

PURON MP Seal Kit
(Includes 2 each of items 3 & 5 for both GENERATION I and II designs)
Part Number: 1021082

PURON MP Pinning Kits
Standard part number 1021076
Silicone free part number KDP3729

Process Connections:
- Feed, Permeate and Vent ports: 1½” Groove end couplings
- Air Scouring connection: ¼” OD tubing Parker 2-221 EPDM
- O-Rings:

Cartridge Weight and Hold Up Volume:
- Cartridge shipping weight: 98 lbs (44.5 kg)
- Cartridge hardware (Pass kit) weight: 12 lbs (5.5 kg)
- Hold up volume: 10 gallons (38 Liters)