Specifications

1. Priming: Unit is self-priming and will hold vacuum when mounted off.
2. Operation: Pump can run dry without damage.
3. Weight: See model information chart
4. Capacity: From 5ml/min to 900l/min (see model information chart)
5. Maximum: Head Pressure: 27 feet of water
6. Maximum Flow Pressure: 20 feet of water
7. Maximum suction lift: 25 feet of water
8. Maximum system pressure: 250 psi (17.2 bar)
9. Material: All materials are listed.
10. Repair kit: All materials are listed.

General Description

INTRODUCTION

The OMEGA® bellows pump is self-priming and can handle a wide variety of viscous fluids from oil to heavy syrup with positive displacement. The OMEGA® bellows pump will operate quietly and can handle a wide variety of viscous fluids from oil to heavy syrup with positive displacement.

WARRANTY

One year warranty and a three-year limited warranty on the bellows. This warranty does not cover the bellows pump if the bellows pump is used in a manner not specified by OMEGA Engineering, Inc. Any warranty claims must be made within one year of the date of purchase. OMEGA Engineering, Inc. does not assume any liability for any consequential damages caused to other equipment or for any loss of production as a result of the use of the bellows pump. In the event that the bellows pump is returned to OMEGA Engineering, Inc. for repair, the user is responsible for all costs incurred in the repair of the bellows pump. OMEGA Engineering, Inc. is not responsible for any damages or losses caused to other equipment or for any loss of production as a result of the use of the bellows pump.
Instructions for Optional Timer

OR IN HAZARDOUS LOCATIONS.

THIS UNIT SHOULD NOT BE USED OUTDOORS

WARNING:

25°C. Supply of cooling air. The ambient temperature should not exceed 25°C. The circuit through ventilation holes.

Mounting Location: Pump should be used in a dry location with an ade-

1. Mounting (a) Mount OEM model mounting bracket to any flat, rigid surface with retaining screws and local electrical code.

2. Wiring Connections. All wiring and electrical connections must comply

3. Remove four screws and detach the suction and discharge piping from the pump.

4. Disconnect the suction and discharge piping from the pump.

5. Clean roller race. Removing

6. Remove old pump tubing and

7. Pump cover. Replace pump tubing.

8. Replace the roller race,

9. Finally, insert the lifting into

10. Push the new lifting into the

11. Follow the program disc in the direction of the arrows to align the

12. Correct time of day with the time mark.

13. Set the desired switching program by pressing the switch

14. Provides a 15 minute "ON" time. The now visible orange button

15. Set the desired switching program by pressing the switch

16. Correction:

17. The box with the timer switch:

Replacement and Replacement

TUBE INSPECTION AND REPLACEMENT

TUBE INSPECTION:

Inspect all tubing regularly and

Tube Inspection:

Instructions:

Replacement:

Tubing Replacement:

Replace pump tubing.

The following instructions to

Remove, then replace if depletion occurs.

Inspect all tubing regularly and

WARNING:

Power Requirements: Voltage and frequency of power supply must be

Operational Information

Operational Information
INTERFERING WITH THE ROLLER ASSEMBLY OUTSIDE OF THE PUMP HOUSING AND IS NOT MAKE SURE THE FASTENER IS ON THE PLASTIC THE FASTENER

INSTRUCTION FOR 1/16" TUBING ASSEMBLY

<table>
<thead>
<tr>
<th>1/16&quot;</th>
<th>3/16&quot;</th>
<th>1/8&quot;</th>
<th>1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>Red</td>
<td>Red</td>
<td>Red</td>
</tr>
<tr>
<td>Black</td>
<td>Black</td>
<td>Black</td>
<td>Black</td>
</tr>
</tbody>
</table>

Use the following color coded rollers with the appropriate tubing ID:

ROLLER & TUBING SELECTION

SERIES FP

Omega FP Series

Variable Speed Drives

Omega FP Series

Motor Life

Operation in the Stalled Position For Longer Is Set At The Low End Range Avoid Prolonged May Stop Rotating When Speed/Flow Control Use And Fluid Being Pumped Roller Assembly

Caution: Depending on Pump Model, Tubing In
### Tubing Replacement Chart

<table>
<thead>
<tr>
<th>Motor Starter (not all models)</th>
<th>1</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screw, Pump Housing Cover</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Screw, Pump Housing Running</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

### Assembly Instructions

1. Assemble mounting plate (4) and pump housing (5) to gearmotor.
2. Slide the plastic washer (6) onto the motor shaft. Press roller bracket into assemblly (see details).
3. Insert tubing (6) into pump housing (6) first and work into assembly (see above) with the four self-locking teeth toward the gearmotor (as shown in the view above).
4. Assemble pump cover (10) to pump housing (6) with four #6-32 x 3/8" screws (11). On page 5 roller face as you route the roller bracket assembly. See details.

### Replacement Parts

- Fan
- Gearmotor
- Mounting Plate or Case
- Endscrut (endscrut)
- Tubing (See Tubing Replacement Chart)
- Pump Housing (See Pump Housing Replacement Chart)
- Screw, Pump Housing (See Screw, Pump Housing Replacement Chart)
- Screw, Gearmotor (See Screw, Gearmotor Replacement Chart)
- Screw, Pump Housing (See Screw, Pump Housing Replacement Chart)
- Screw, Pump Housing (See Screw, Pump Housing Replacement Chart)
- Screw, Pump Housing (See Screw, Pump Housing Replacement Chart)
- Screw, Pump Housing (See Screw, Pump Housing Replacement Chart)
- Screw, Pump Housing (See Screw, Pump Housing Replacement Chart)
- Screw, Pump Housing (See Screw, Pump Housing Replacement Chart)
### FPU SERIES - DC MODELS

**OEM Style, Fixed Speed**

The following models require a motor starter as shown in the drawing at right. These models are not UL listed.

#### MODEL INFORMATION CHART

<table>
<thead>
<tr>
<th>Omega™ Model Number</th>
<th>Approximate Flow of H₂O @ 80Hz mL/min</th>
<th>GPM</th>
<th>Tubing ID</th>
<th>Speed RPM</th>
<th>Amps at 80Hz</th>
<th>A Dim.</th>
<th>B Dim.</th>
<th>Weight w/ Case Lbs/Kgs</th>
<th>Weight w/o Case Lbs/Kgs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPU101</td>
<td>3</td>
<td>0.0008</td>
<td>1/16&quot;</td>
<td>14</td>
<td>0.37</td>
<td>3.61</td>
<td></td>
<td>4.2/1.9</td>
<td>2.6/1.2</td>
</tr>
<tr>
<td>FPU102</td>
<td>5</td>
<td>0.0013</td>
<td>1/16&quot;</td>
<td>23</td>
<td>0.42</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU103</td>
<td>6</td>
<td>0.0016</td>
<td>1/16&quot;</td>
<td>28</td>
<td>0.75</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU104</td>
<td>12</td>
<td>0.0032</td>
<td>1/8&quot;</td>
<td>14</td>
<td>0.37</td>
<td>3.61</td>
<td></td>
<td>4.2/1.9</td>
<td>2.6/1.2</td>
</tr>
<tr>
<td>FPU105</td>
<td>19</td>
<td>0.0052</td>
<td>1/8&quot;</td>
<td>23</td>
<td>0.42</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU106</td>
<td>24</td>
<td>0.0065</td>
<td>1/8&quot;</td>
<td>28</td>
<td>0.75</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU107</td>
<td>28</td>
<td>0.008</td>
<td>3/16&quot;</td>
<td>14</td>
<td>0.37</td>
<td>3.16</td>
<td></td>
<td>4.1/1.9</td>
<td>2.6/1.2</td>
</tr>
<tr>
<td>FPU108</td>
<td>46</td>
<td>0.012</td>
<td>3/16&quot;</td>
<td>23</td>
<td>0.42</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU109</td>
<td>48</td>
<td>0.013</td>
<td>1/4&quot;</td>
<td>14</td>
<td>0.37</td>
<td>3.16</td>
<td></td>
<td>4.1/1.9</td>
<td>2.6/1.2</td>
</tr>
<tr>
<td>FPU110</td>
<td>56</td>
<td>0.015</td>
<td>3/16&quot;</td>
<td>28</td>
<td>0.75</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU111</td>
<td>72</td>
<td>0.018</td>
<td>3/16&quot;</td>
<td>36</td>
<td>0.90</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU112</td>
<td>81</td>
<td>0.022</td>
<td>1/4&quot;</td>
<td>23</td>
<td>0.42</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU113</td>
<td>98</td>
<td>0.026</td>
<td>3/16&quot;</td>
<td>49</td>
<td>1.0</td>
<td>4.42</td>
<td></td>
<td>4.6/1.9</td>
<td>2.8/1.3</td>
</tr>
<tr>
<td>FPU114</td>
<td>98</td>
<td>0.026</td>
<td>1/4&quot;</td>
<td>28</td>
<td>0.75</td>
<td>4.67</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU115</td>
<td>116</td>
<td>0.030</td>
<td>3/16&quot;</td>
<td>36</td>
<td>0.90</td>
<td>4.17</td>
<td></td>
<td>4.3/1.9</td>
<td>2.7/1.2</td>
</tr>
<tr>
<td>FPU116</td>
<td>126</td>
<td>0.034</td>
<td>1/4&quot;</td>
<td>58</td>
<td>1.2</td>
<td>4.42</td>
<td></td>
<td>4.6/1.9</td>
<td>2.8/1.3</td>
</tr>
<tr>
<td>FPU117</td>
<td>150</td>
<td>0.040</td>
<td>3/16&quot;</td>
<td>75</td>
<td>1.5</td>
<td>4.42</td>
<td></td>
<td>4.6/1.9</td>
<td>2.8/1.3</td>
</tr>
<tr>
<td>FPU118</td>
<td>172</td>
<td>0.044</td>
<td>1/4&quot;</td>
<td>49</td>
<td>1.0</td>
<td>4.42</td>
<td></td>
<td>4.6/1.9</td>
<td>2.8/1.3</td>
</tr>
<tr>
<td>FPU119</td>
<td>208</td>
<td>0.052</td>
<td>1/4&quot;</td>
<td>58</td>
<td>1.2</td>
<td>4.42</td>
<td></td>
<td>4.6/1.9</td>
<td>2.8/1.3</td>
</tr>
<tr>
<td>FPU120</td>
<td>263</td>
<td>0.066</td>
<td>1/4&quot;</td>
<td>75</td>
<td>1.5</td>
<td>4.42</td>
<td></td>
<td>4.6/1.9</td>
<td>2.8/1.3</td>
</tr>
<tr>
<td>FPU121</td>
<td>378</td>
<td>0.095</td>
<td>1/4&quot;</td>
<td>108</td>
<td>1.9</td>
<td>5.02</td>
<td></td>
<td>5.3/2.4</td>
<td>3.7/1.7</td>
</tr>
<tr>
<td>FPU122</td>
<td>452</td>
<td>0.110</td>
<td>1/4&quot;</td>
<td>129</td>
<td>2.2</td>
<td>5.02</td>
<td></td>
<td>5.3/2.4</td>
<td>3.7/1.7</td>
</tr>
<tr>
<td>FPU123</td>
<td>602</td>
<td>0.168</td>
<td>1/4&quot;</td>
<td>172</td>
<td>3.3/2.2</td>
<td>5.02</td>
<td></td>
<td>5.7/2.6</td>
<td>4.1/1.9</td>
</tr>
<tr>
<td>FPU124</td>
<td>711</td>
<td>0.200</td>
<td>1/4&quot;</td>
<td>203</td>
<td>3.3/2.2</td>
<td>5.02</td>
<td></td>
<td>5.7/2.6</td>
<td>4.1/1.9</td>
</tr>
<tr>
<td>FPU125</td>
<td>987</td>
<td>0.265</td>
<td>1/4&quot;</td>
<td>282</td>
<td>3.3/2.2</td>
<td>5.02</td>
<td></td>
<td>5.7/2.6</td>
<td>4.1/1.9</td>
</tr>
</tbody>
</table>

**POWER SUPPLY**
- [ ] 12VDC
- [ ] 24 VDC
- [ ] 24VAC
- [ ] 115VAC
- [ ] 220VAC

**TUBING TYPE**
- [ ] Norprene
- [ ] Silicone
- [ ] Other

**ENCLOSURE**
- [ ] OEM Panel Mount
- [ ] Case w/ Timer
- [ ] Case w/o Timer

**PUMP CONFIGURATION**
- [ ] Single Head
- [ ] Dual Head