A-100NF
Variable Speed
Dial Knob Control

Features:
- Peristaltic pump design does not have valves that can clog requiring maintenance.
- Self priming - even against maximum line pressure. By-pass valves are not required. Cannot vapor lock or lose prime.
- Outputs to 5.17 GPH (19.56 LPH).
- Output pressures to 100 PSI (6.9 bar).
- Output volume is not affected by changes in back pressure.
- Patented pump tube design installs easily and stays centered on the rollers without manual adjustment.
- Two pump tubes supplied with each pump. No extra tubing required.
- Easy to use dial knob speed adjustment.
- Built-in Tube Failure Detection system (TFD). Senses chemical in the pump head, shuts off the pump and activates an NPN open collector output.
- Compatible with Blue-White's output flow verification sensor system.
- Durable housing of chemical resistant Valox (PBT) thermoplastic.

Specifications:
Max. working pressure: .......... 100 psig (6.9 bar)
Max. fluid temperature: ........... 130° F (54° C)
Max. ambient temperature: ....... 14° to 110° F / -10° to 43° C
Output adjustment range: ....... 10-100% in 1% increments
Duty cycle: ..................... Continuous
Maximum viscosity: ............. 5,000 Centipoise
Maximum suction lift: ............ 30 ft. Water 0 psig
Maximum Solids: ....... 50% by volume
Enclosure: ..................... NEMA 3R, (IP23)

Voltage (amp draw): .......... 115VAC/60Hz, 1ph (.513 amp max)
.................................. 230VAC/60Hz, 1ph (.563 amp max)
.................................. 220VAC/50Hz, 1ph (.660 amp max)
.................................. 240VAC/50Hz, 1ph (.585 amp max)
Power Cord Plug Type: .......... 115V/60Hz = NEMA 5/15 (USA)
.................................. 230V/60Hz = NEMA 6/15 (USA)
.................................. 220V/50Hz = CEE 7/VII (EUROPE)
.................................. 240V/50Hz = CEE 7/VII (EUROPE)
Approximate shipping wt: .......... .12 lb. (5.4 kg)

Materials of Construction:
Wetted components:
Pump Tube Assembly: ........ Flex-A-Prene®, Flex-A-Thane® or FKM tubing
Pump Tube Assembly: ........ PVDF tube assembly connection fittings
Suction Tubing: ................ Clear PVC
Suction Strainer: ............... Natural Polypropylene
Discharge Tubing: .............. Natural Polyethylene (LLDPE)
Injection/Check valve:
Body & insert: ................ Polypropylene (optional PVDF)
Check Ball: ..................... Ceramic
Spring: ......................... Hastelloy C-276
Ball Seat O-ring: ............... TFE/P (optional EP)
Static Seal O-ring: ........... FKM (optional EP)

Non-Wetted components:
Pump Head & Enclosure: ........ Valox® (PBT) thermoplastic
Pump Head Cover: ............. Clear Acrylic
Cover Screws: ................. 300 Stainless, Polypropylene cap
Roller Assembly:
Rotor: ......................... Valox® (PBT)
Rollers: ........................ Nylon
Roller Bearings: .............. Bronze
Motor Shaft: .................... Nickel plated steel
TFD System Sensor pins: ....... Hastelloy C-276
Power Cord: .................... 3 conductor, SJTW-A Water-resistant
### Dimensions:

**Base Mounting**
- .20" Dia., 5mm, 4 places
- 7.625" (194mm)
- 3.500" (89mm)
- 187mm

**Rear Panel Mounting**
- .20" Dia., 5mm, 4 places
- 8.187" (208mm)

### Model Number Matrix:

<table>
<thead>
<tr>
<th>Maximum Motor RPM</th>
<th>MODEL A1N</th>
<th>F -</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 = 14 RPM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 = 30 RPM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 = 45 RPM</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3 = 60 RPM</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Power Supply**
- 0 = 115V60Hz
- 1 = 220V50Hz
- 2 = 230V60Hz
- 8 = 240V50Hz AS 3112 (Australia/New Zealand)
- 9 = 230V50Hz BS 1363 (UK)

**Output Control**
- V = Digital speed control with external input
- F = Analog speed control
- E = Digital batch timer with external input
- A = Analog timer, 60 sec. Cycle - 100% duty
- C = Analog timer, 5 sec. Cycle - 100% duty
- S = Analog timer, 60 sec. Cycle - 10% duty
- X = No output control - fixed feed rate

### Maximum Flow Rate and Pressure Capacities:

<table>
<thead>
<tr>
<th>Tube no.</th>
<th>Tubing Material</th>
<th>14 RPM MODELS</th>
<th>30 RPM MODELS</th>
<th>45 RPM MODELS</th>
<th>60 RPM MODELS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ml/m oz/m lph gph PSi(bar)</td>
<td>ml/m oz/m lph gph PSi(bar)</td>
<td>ml/m oz/m lph gph PSi(bar)</td>
<td>ml/m oz/m lph gph PSi(bar)</td>
<td>ml/m oz/m lph gph PSi(bar)</td>
</tr>
<tr>
<td>Flex-A-Thane®</td>
<td>15 0.51 0.90 0.24 65(4.5)</td>
<td>35 1.18 2.10 0.55 65(4.5)</td>
<td>54 1.83 3.24 0.86 65(4.5)</td>
<td>67 2.26 4.02 1.06 65(4.5)</td>
<td></td>
</tr>
<tr>
<td>2 Flex-A-Thane®</td>
<td>32 1.08 1.92 0.51 65(4.5)</td>
<td>75 2.54 4.50 1.19 65(4.5)</td>
<td>115 3.89 6.90 1.82 65(4.5)</td>
<td>140 4.73 8.40 2.22 65(4.5)</td>
<td></td>
</tr>
<tr>
<td>3 Flex-A-Thane®</td>
<td>73 2.47 4.37 1.16 50(3.5)</td>
<td>173 5.85 10.38 2.74 50(3.5)</td>
<td>261 8.82 15.66 4.14 50(3.5)</td>
<td>326 11.01 19.56 5.17 50(3.5)</td>
<td></td>
</tr>
<tr>
<td>4 Flex-A-Prene®</td>
<td>6 0.20 0.38 0.10 100(6.8)</td>
<td>13 0.44 0.76 0.21 100(6.8)</td>
<td>21 0.71 1.26 0.33 100(6.8)</td>
<td>22 0.88 1.50 0.40 75(5.2)</td>
<td></td>
</tr>
<tr>
<td>5 FKM</td>
<td>11 0.37 0.66 0.17 25(1.7)</td>
<td>26 0.88 1.56 0.41 25(1.7)</td>
<td>39 1.31 2.34 0.62 25(1.7)</td>
<td>48 1.62 2.88 0.76 25(1.7)</td>
<td></td>
</tr>
<tr>
<td>6 Flex-A-Prene®</td>
<td>18 0.61 1.08 0.29 100(6.9)</td>
<td>42 1.42 2.52 0.67 100(6.9)</td>
<td>63 2.13 3.78 1.00 100(6.9)</td>
<td>79 2.67 4.74 1.25 75(5.2)</td>
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</tr>
<tr>
<td>7 Flex-A-Prene®</td>
<td>57 1.92 3.42 0.90 50(3.5)</td>
<td>138 4.66 8.28 2.19 50(3.5)</td>
<td>200 6.76 12.00 3.17 50(3.5)</td>
<td>250 8.45 15.00 3.96 50(3.5)</td>
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</tr>
<tr>
<td>8 Flex-A-Chem®</td>
<td>40 1.35 2.40 0.63 50(3.5)</td>
<td>84 2.80 5.04 1.31 50(3.5)</td>
<td>140 4.73 8.40 2.22 50(3.5)</td>
<td>180 6.10 10.80 2.85 50(3.5)</td>
<td></td>
</tr>
</tbody>
</table>

### Replacement Pump Tubes:

<table>
<thead>
<tr>
<th>Pump Model Suffix</th>
<th>Pump Tube Part Number</th>
<th>Pump Tube Material</th>
<th>Nominal Pump Tube OD</th>
</tr>
</thead>
<tbody>
<tr>
<td>-1T</td>
<td>A1-1T</td>
<td>Flex-A-Thane®</td>
<td>1/4&quot; (6.4mm)</td>
</tr>
<tr>
<td>-2T</td>
<td>A1-2T</td>
<td>Flex-A-Thane®</td>
<td>3/8&quot; (9.5mm)</td>
</tr>
<tr>
<td>-3T</td>
<td>A1-3T</td>
<td>Flex-A-Thane®</td>
<td>7/16&quot; (11.1mm)</td>
</tr>
<tr>
<td>-4T</td>
<td>A1-4T</td>
<td>Flex-A-Prene®</td>
<td>1/4&quot; (6.4mm)</td>
</tr>
<tr>
<td>-5T</td>
<td>A1-5T</td>
<td>FKM</td>
<td>5/16&quot; (7.9mm)</td>
</tr>
<tr>
<td>-6T</td>
<td>A1-6T</td>
<td>Flex-A-Prene®</td>
<td>3/8&quot; (9.5mm)</td>
</tr>
<tr>
<td>-7T</td>
<td>A1-7T</td>
<td>Flex-A-Prene®</td>
<td>7/16&quot; (11.1mm)</td>
</tr>
<tr>
<td>-8T</td>
<td>A1-8T</td>
<td>Flex-A-Chem®</td>
<td>7/16&quot; (11.1mm)</td>
</tr>
</tbody>
</table>