A-100N Polymer
FLEXFLO® Peristaltic Metering Pump

Features

- Smooth and accurate peristaltic feed of polymers.
- Self-priming - even against maximum line pressure.
- Does not have valves that can clog requiring maintenance.
- Output volume is not effected by changes in back pressure.
- Variable Speed Motor with up to 20:1 Turndown.
- V Model: 4-20ma Input, 0-10VDC Input, Pulse Input
- Built-In Tube Failure Detection (TFD+) system senses tube failure

Highlights

Flow range
- .01 - 5.17 GPH
- .04 - 19.56 LPH

Pressures
- up to 65 PSI* (4.5 bar)

Max. suction lift
- 30 ft. Water 0 psig

Motor
- Variable Speed DC

Warranty
- 1 Year

*Consult factory for proper tube choice based on actual system pressure

Control Methods

<table>
<thead>
<tr>
<th></th>
<th>Manual Control</th>
<th>4-20ma Input</th>
<th>0-10 VDC Input</th>
<th>Pulse Input</th>
<th>FVS Input</th>
<th>TFD / FVS Alarm Output</th>
<th>Motor Active Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-100NFP</td>
<td>Dial Knob</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
<td>Open Collector</td>
<td>Open Collector</td>
</tr>
<tr>
<td>A-100NVP</td>
<td>Digital</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>Contact Closure</td>
<td>Open Collector</td>
</tr>
</tbody>
</table>

1. Requires flow sensor - sold separately

For more help and information regarding A-100N Polymer, please visit www.blue-white.com or scan this QR code.
Engineering Specifications

Max. Working Pressure    up to 65 psig (4.5 bar) (see specific tube ratings below)
Max. Fluid Temperature    130° F (54° C)
Max. Ambient Temperature    14 to 110° F / -10 to 43° C
Max. Viscosity    5,000 Centipoise
Max. Suction Lift    30 ft. Water at sea level (14.7 atm psi)

Operating Voltage
115VAC/60Hz, 1ph (14 & 30 RPM = 1.37 Amp Max.)
45 & 60 RPM = 1.87 Amp Max.
220VAC/50Hz, 1ph (14 & 30 RPM = 0.68 Amp Max.)
45 & 60 RPM = 1.14 Amp Max.

Power Cord Options
115V 50/60Hz = NEMA 5/15 (USA)
220V 50/60Hz = NEMA 6/15 (EU)

Motor    Variable Speed DC
Duty Cycle    Continuous
Flow Adjustment Range    0.01 - 95.1 GPD (0.6 - 250 mL/min)
Output Adjustment Range    10% - 100% motor speed (5% - 100% on certain models*)
Solids    50% by volume
Programmable Input (V Model Only)    4-20 mA, 0-10 VDC, Pulse/Frequency
TFD+ (Tube Failure Detection)    Built-in sensor. Will stop pump and activate alarm output. 6-30vdc collector voltage. 50mA max sinking current.
FVS (Flow Verification System)    Compatible with optional pulse flow sensor. Will stop pump and activate alarm output. 6-30vdc collector voltage. 50mA max sinking current.
Contact factory for sensor options.
Motor Active    Motor active - open collector output. 6-30vdc collector voltage. 50mA max sinking current.
Enclosure    NEMA 3R, IP23, Valox PBT
Product Weight    8 lb. (3.63 Kg)
Approximate shipping wt    10 lb. (4.5 Kg)
RoHS Compliant    Yes
Standards    CE, cETLus

* 14 RPM & 30 RPM Models with 1 and 2 tubes have 20:1 turndown.

Output Specifications
Maximum Flow Rates

<table>
<thead>
<tr>
<th>Tube Max Pressure PSI (bar)</th>
<th>14 RPM MODELS (GPD GPH OZ/MIN ML/MIN LPH)</th>
<th>30 RPM MODELS (GPD GPH OZ/MIN ML/MIN LPH)</th>
<th>45 RPM MODELS (GPD GPH OZ/MIN ML/MIN LPH)</th>
<th>60 RPM MODELS (GPD GPH OZ/MIN ML/MIN LPH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 65(4.5)</td>
<td>5.7 0.24 0.51 15 0.90 13.3 0.55 1.18 35 2.1</td>
<td>20.5 0.86 1.83 54 3.24</td>
<td>25.5 1.06 2.26 67 4.02</td>
<td>12.4 4.14 8.82 261 15.66</td>
</tr>
<tr>
<td>2 65(4.5)</td>
<td>12.2 0.51 1.08 32 1.92 28.5 1.19 2.54 75 4.5</td>
<td>43.6 1.82 3.89 115 6.90</td>
<td>53.3 2.22 4.73 140 8.40</td>
<td>124 5.17 11.01 326 19.56</td>
</tr>
<tr>
<td>3 50(3.5)</td>
<td>27.8 1.16 2.47 73 4.37 65.8 2.74 5.85 173 10.38</td>
<td>99.2 4.14 8.82 261 15.66</td>
<td>124 5.17 11.01 326 19.56</td>
<td></td>
</tr>
</tbody>
</table>
Materials of Construction

Non-wetted Components:

Enclosure: Valox® (PBT) thermoplastic
Pump Head: Valox® (PBT) thermoplastic

Pump Head Cover:
- Clear Acrylic
- Permanently lubricated sealed motor shaft support bronze sleeve bearing.

Cover Screws:
- Stainless steel, polypropylene cap
- Rotor: Valox® (PBT)
- Rollers: Nylon
- Roller Bearings: Bronze

TFD+ System Sensor: Polysulfone (PES)

Power Cord: 3 Conductor, SJTW-A water-resistant

Hardware: Stainless Steel

Shroud: Valox® (PBT) thermoplastic

Wetted Components:

Pump Tube Assembly*:
- Tubing: Flex-A-Thane®
- Adapter Fittings: PVDF (1/4" x 3/8" tube connection)

Body & Insert: Polypropylene

Injection / Back-Flow Check Valve:
- Body & Insert: Polypropylene
- Check Ball: Ceramic
- Spring: Hastelloy C-276
- Ball Seat O-Ring: TFE/P
- Static Seal O-Ring: FKM

Ancillary Items Provided:
- Suction Tubing: 3/8" OD x 1/4" ID x 5’ Clear PVC
- Discharge Tubing: 3/8” OD x 1/4” ID x 5’ Polyethylene (LLDPE)
- Suction Strainer: Polypropylene
- Weight: Ceramic

* One spare tube provide with pump.

Dimensions

<table>
<thead>
<tr>
<th>Dim</th>
<th>Inch</th>
<th>cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9.375”</td>
<td>23.81</td>
</tr>
<tr>
<td>B</td>
<td>9.50”</td>
<td>24.10</td>
</tr>
<tr>
<td>C</td>
<td>9.125”</td>
<td>23.18</td>
</tr>
<tr>
<td>D</td>
<td>6.00”</td>
<td>15.24</td>
</tr>
</tbody>
</table>

Shroud / Weather Proof

Floor Mount

Wall Mount

Weather proof

Weather proof
**Model Number Matrix**

**FLEXFLO® Model Number**

<table>
<thead>
<tr>
<th>A1N</th>
<th>FLEXFLO® Peristaltic Metering Pump</th>
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</thead>
</table>

**Maximum Motor RPM**

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>14 RPM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30 RPM</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>45 RPM</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>60 RPM</td>
<td></td>
</tr>
</tbody>
</table>

**Power Cord**

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>115V / 60HZ, power cord NEMA 5/15 plug (US)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>220V / 50HZ, power cord CEE7/VII plug (EU)</td>
<td></td>
</tr>
</tbody>
</table>

**Input/Output Control**

- F: Analog Manual Speed Control (Dial Knob)
- V: Digital Speed Control with external input (4-20ma, 0-10VDC, and Frequency/Pulse)

**Pump Tube Material, Pump Tube Size**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>1/4&quot; OD Flex-A-Thane®, 65 PSI</th>
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<tbody>
<tr>
<td>2</td>
<td>3/8&quot; OD Flex-A-Thane®, 65 PSI</td>
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</tr>
<tr>
<td>3</td>
<td>7/16&quot; OD Flex-A-Thane®, 50 PSI</td>
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**Polymer Pump Model**

- P: Polymer Pump equipped with TFD+

**Sample Model Number**

A1N 0 0 F - 1 T - P

**Accessories**

- **KIT-S07**
- **KIT-S15**
- **KIT-S30**

*Includes cover and foot valve

**KIT-PSM**

WALL MOUNT BRACKET, HDPE

**A1-1T, A1-2T, A1-3T**

Spare Tube Element

**TI40-6V**

T.I. INJECTOR, 3/8" OD

**C-340A**

FOOT VALVE

**A-014NK-6A**

PVDF INJECTOR

Visit Accessory Pages for more Options