

# Blue-White<sup>®</sup>

**FLEXFLO<sup>®</sup> Peristaltic Metering Pumps**

**Industries, Ltd.**

Engineering and Technical Data

## A-100NVP

**Variable Speed**

**Digital Control**

**4-20mA, 0-10VDC  
& Pulse Inputs**

**Enhanced Tube Failure Detection**

**Oil and Water Based Polymers**



### 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 65 PSI (4.5 bar).
- Output volume is not effected 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.
- Accepts 4-20mA, 0-10Vdc, and Pulse inputs for manual or external speed control.
- Operator friendly digital touch pad.
  - Easy to read LCD display
  - Service and Alarm indicator icons.
  - Display motor speed or input signal values.
  - Prime mode for easy priming without changing programming.
- Built-in Tube Failure Detection Plus system (TFD+). Senses chemical in the pump head, shuts off the pump and activates a 1 amp alarm relay (dry contact closure).
- Compatible with Blue-White's output flow verification sensor system.
- Durable housing of chemical resistant Valox (PBT) thermoplastic.

### Specifications:

Max. working pressure: .....65 psig (4.5 bar)  
 Max. fluid temperature: .....130° F (54° C)  
 Max. ambient temperature: .....14° to 110° F/ -10° to 43° C  
 Output adjustment range:  
   14 & 30 RPM with -1T, -2T tubes: .....5-100% (20:1 turndown)  
   All other models: .....10-100% (10:1 turndown)  
 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 (.350 amp max)  
   230VAC/60Hz, 1ph (.173 amp max)  
   220VAC/50Hz, 1ph (.175 amp max)  
   240VAC/50Hz, 1ph (.193 amp max)  
 Power Cord Plug Type: .....115V60Hz = NEMA 5/15 (USA)  
   230V60Hz = NEMA 6/15 (USA)  
   220V50Hz = CEE 7/VII (EUROPE)  
   240V50Hz = CEE 7/VII (EUROPE)  
 Approximate shipping wt: ...12 lb. (5.4 kg)

### Materials of Construction:

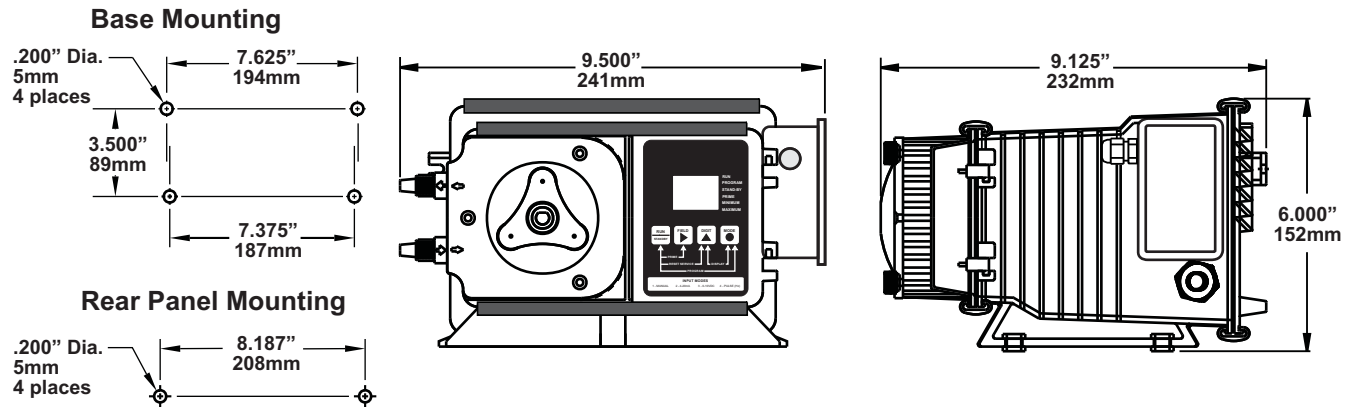
#### Wetted components:

Pump Tube Assembly: ..... Tygothane<sup>®</sup>  
 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)

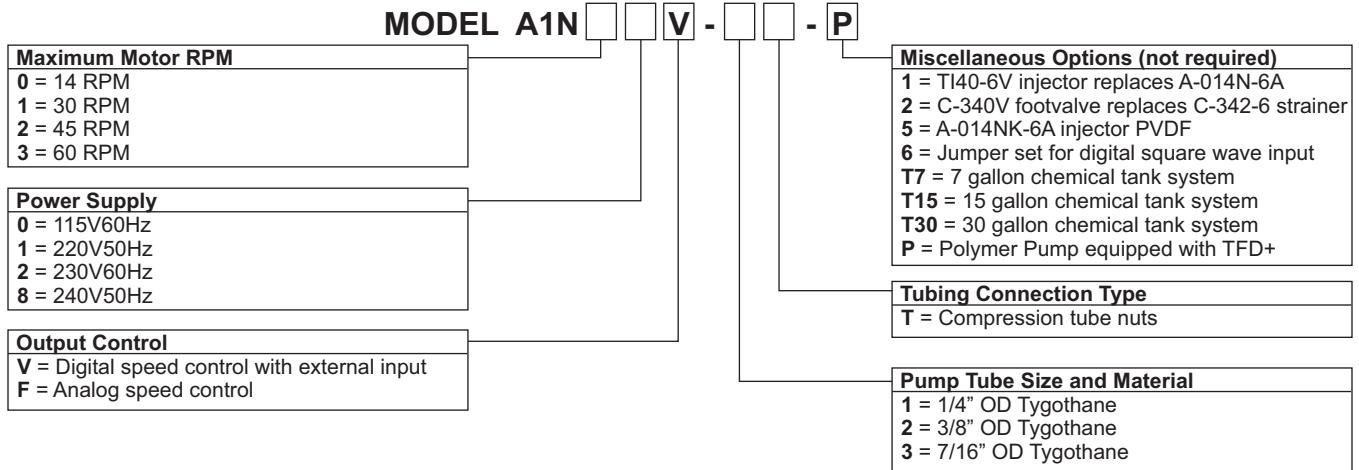
#### Non-Wetted components:

Pump Head & Enclosure: .....Valox<sup>®</sup> (PBT) thermoplastic  
 Pump Head Cover: .....Clear Acrylic  
 Cover Screws: .....300 Stainless, Polypropylene cap  
 Roller Assembly:  
   Rotor: .....Valox<sup>®</sup> (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:



### Model Number Matrix:



### Maximum Flow rate and pressure capacities:

| Model Number | Feed Rate         | RPM | Max PSI (BAR) | Pump Tube Part Number | Pump Tube Material | Nominal Pump Tube OD |
|--------------|-------------------|-----|---------------|-----------------------|--------------------|----------------------|
| A1N0*V-1T-P  | 0.8 - 15 ML/min   | 14  | 65 (4.5)      | A1-1T                 | Tygothane          | 1/4" (6,4mm)         |
| A1N1*V-1T-P  | 1.8 - 35 ML/min   | 30  | 65 (4.5)      | A1-1T                 | Tygothane          | 1/4" (6,4mm)         |
| A1N3*V-1T-P  | 6.7 - 67 ML/min   | 60  | 65 (4.5)      | A1-1T                 | Tygothane          | 1/4" (6,4mm)         |
| A1N3*V-2T-P  | 14.0 - 140 ML/min | 60  | 65 (4.5)      | A1-2T                 | Tygothane          | 3/8" (9,5mm)         |
| A1N2*V-3T-P  | 26.1 - 261 ML/min | 45  | 50 (3.5)      | A1-3T                 | Tygothane          | 7/16" (11,1mm)       |
| A1N3*V-3T-P  | 32.6 - 326 ML/min | 60  | 50 (3.5)      | A1-3T                 | Tygothane          | 7/16" (11,1mm)       |