# **Engineering Specification Sheet**

Blue-White Industries model A-100N High Pressure Peristaltic

# Metering Pump Adjustable output models

# General

Five models shall be available with maximum outputs from 2.3 to 95.1 GPD and outlet pressure capabilities of up to 100 PSI. The pump shall operate on 115V60Hz, 230V60Hz, or 220V50Hz AC power. All models shall incorporate a tube failure detection system (TFD) that will detect a ruptured pump tube, shut off the pump, and provide an alarm output. Models A, C and E shall incorporate a shaded pole, AC gear motor with high grade, permanently lubricated ball bearings. Models V and F shall incorporate a permanent magnet, DC gear motor with high grade, permanently lubricated ball bearings. The enclosure shall be chemically resistant Valox thermoplastic and incorporate a clear acrylic tamper resistant electronic control panel cover. Priming and output quantity shall not be affected by outlet pressure. There shall be very little pulsation of the chemical output. Each unit shall be equipped with two long-life, replaceable pump tube assemblies, Injection fitting, suction strainer, low pressure inlet tubing and high pressure outlet tubing. Inlet and outlet connections shall be 3/8" O.D. x 1/4" I.D. tubing with compression type end connectors and compression tube nuts. All models shall be ETL, CETL (Canada), and NSF approved. 220V models shall be CE approved.

#### Model A

The output shall be adjustable from 5% to 100% by means of a 60 second percentage cycle timer. A knob shall be provided to adjust the cycle on time. Input power shall be controlled by an on-off switch without disturbing the adjustment settings.

#### Model C

The output shall be adjustable from 5% to 100% by means of a 5 second percentage cycle timer. A knob shall be provided to adjust the cycle on time. Input power shall be controlled by an on-off switch without disturbing the adjustment settings.

#### Model \

The output shall be adjustable either manually by means of a digital programmable speed control or externally by means of a 4-20mA, 0-10VDC, or pulsed input signal. All pump functions shall be controlled by four front panel push buttons. The pump motor speed shall be adjustable from 5 to 100 percent in 1 percent increments. In the external adjustment mode, the motor speed shall be adjusted automatically, relative to the input signal received. Pump output shall be interrupted at any time by pressing the standby button. A 99 second priming mode shall be initiated by simultaneously pressing the "standby" and "up" buttons. The LCD display "service" icon shall illuminate after 500 hours of accumulated run time recommending pump tube replacement. The LCD display "alarm" icon shall illuminate indicating an alarm condition. The programming memory shall not be affected by the loss of power. The pump shall be capable of verifying chemical output by accepting a frequency input signal from a flow sensor and shall indicate an alarm condition in the event of a loss of fluid output.

### Model F

The output shall be adjustable from 5 to 100 percent by varying the motor speed. A knob shall be provided to adjust the motor speed. Input power shall be controlled by an on-off switch without disturbing the adjustment settings.

# Model E

The output shall be adjustable either manually by means of a digital programmable cycle timer or externally by means of a 4-20mA, 0-10VDC, or pulsed input signal. All pump functions shall be controlled by four front panel push buttons. The repeating total cycle time shall be adjustable from 1.0 second through 99 seconds in .1 second increments. In the manual mode, the on time per cycle shall be adjustable, in .1 second increments, from a minimum of 0 seconds to the maximum total cycle time setting. In the external adjustment mode, the on time per cycle shall be adjusted automatically, relative to the input signal received, at the beginning of each cycle. Pump output shall be interrupted at any time by pressing the standby button. A 99 second priming mode shall be initiated by simultaneously pressing the "standby" and "up" buttons. The LED display shall flash after 500 hours of accumulated run time recommending pump tube replacement. The programming memory shall not be affected by the loss of power. The "on" portion of the timing cycle shall begin when input power is applied.

## Mounting

The unit shall be shelf or wall mounted.

## **Materials of construction**

The fluid path of the pump shall include a polypropylene suction strainer, 5 feet of clear PVC suction tubing, two patented replaceable pump tubes consisting of PVDF inlet/outlet connectors and custom Norprene pump tubing, 5 feet of opaque high pressure polyethylene outlet tubing, and a polypropylene injection fitting with integral ceramic check valve ball and Viton o-ring seals.