

# 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

Video link: 



### Highlights

#### Flow range

.01 - 5.17 GPH  
.04 - 19.56 LPH

#### Pressures

up to 65 PSI\*  
(4.5 bar)

#### Turndown ratio

10 : 1 / 20 : 1  
(model specific)

#### 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

	Manual Control	4-20ma Input	0-10 VDC Input	Pulse Input	FVS Input <sup>1</sup>	TFD / FVS Alarm Output	Motor Active Output
A-100NFP	Dial Knob				•	Open Collector	Open Collector
A-100NVP	Digital	•	•	•	•	Contact Closure	Open Collector

1. Requires flow sensor - sold separately



For more help and information regarding **A-100N Polymer**, please visit [www.blue-white.com](http://www.blue-white.com) or scan this QR code.

<b>Max. Working Pressure</b>	up to 65 psig (4.5 bar) (see specific tube ratings below)
<b>Max. Fluid Temperature</b>	130° F (54° C)
<b>Max. Ambient Temperature</b>	14 to 110° F/ -10 to 43° C
<b>Max. Viscosity</b>	5,000 Centipoise
<b>Max. Suction Lift</b>	30 ft. Water at sea level (14.7 atm psi)
<b>Operating Voltage</b>	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.)
<b>Power Cord Options</b>	115V 50/60Hz = NEMA 5/15 (USA) 220V 50/60Hz = NEMA 6/15 (EU)
<b>Motor</b>	Variable Speed DC
<b>Duty Cycle</b>	Continuous
<b>Flow Adjustment Range</b>	0.01 - 95.1 GPD (0.6 - 250 mL/min)
<b>Output Adjustment Range</b>	10% – 100% motor speed (5% -100% on certain models*)
<b>Solids</b>	50% by volume
<b>Programmable Input (V Model Only)</b>	4-20 mA, 0-10 VDC, Pulse/Frequency
<b>TFD+ (Tube Failure Detection)</b>	Built-in sensor. Will stop pump and activate alarm output. 6-30vdc collector voltage. 50mA max sinking current.
<b>FVS (Flow Verification System)</b>	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.
<b>Motor Active</b>	Motor active - open collector output. 6-30vdc collector voltage. 50mA max sinking current.
<b>Enclosure</b>	NEMA 3R, IP23, Valox PBT
<b>Product Weight</b>	8 lb. (3.63 Kg)
<b>Approximate shipping wt</b>	10 lb. (4.5 Kg)
<b>RoHS Compliant</b>	Yes
<b>Standards</b>	CE, cETLus

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

## Output Specifications

### Maximum Flow Rates

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

# Materials of Construction

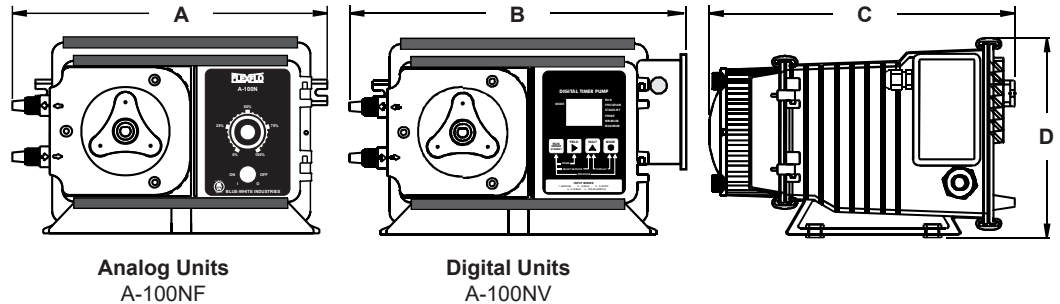
<b>Non-wetted Components:</b>	
<b>Enclosure:</b>	Valox® (PBT) thermoplastic
<b>Pump Head:</b>	Valox® (PBT) thermoplastic
<b>Pump Head Cover:</b>	Clear Acrylic Permanently lubricated sealed motor shaft support bronze sleeve bearing.
<b>Cover Screws:</b>	Stainless steel, polypropylene cap
<b>Roller Assembly:</b>	Rotor: Valox® (PBT) Rollers: Nylon Roller Bearings: Bronze
<b>TFD+ System Sensor:</b>	Polysulfone (PES)
<b>Power Cord:</b>	3 Conductor, SJTW-A water-resistant
<b>Hardware:</b>	Stainless Steel
<b>Shroud:</b>	Valox® (PBT) thermoplastic

<b>Wetted Components:</b>	
<b>Pump Tube Assembly*:</b>	Tubing: Flex-A-Thane® Adapter Fittings: PVDF (1/4" x 3/8" tube connection)
<b>Injection / Back-Flow Check Valve:</b>	Body & Insert: Polypropylene Check Ball: Ceramic Spring: Hastelloy C-276 Ball Seat O-Ring: TFE/P Static Seal O-Ring: FKM
<b>Ancillary Items Provided:</b>	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

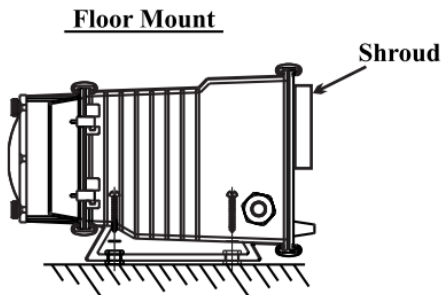
\* One spare tube provide with pump.

## Dimensions

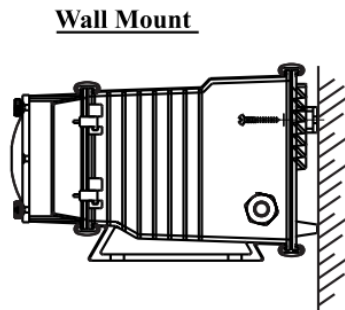
Dim	Inch	cm
A	9.375"	23.81
B	9.50"	24.10
C	9.125"	23.18
D	6.00"	15.24



## Shroud / Weather Proof



**Weather proof**



**Weather proof**


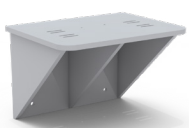




# Model Number Matrix

A100NP

## FLEXFLO® Model Number

<b>A1N</b>	FLEXFLO® Peristaltic Metering Pump								
<b>Maximum Motor RPM</b>									
<b>0</b>	14 RPM								
<b>1</b>	30 RPM								
<b>2</b>	45 RPM								
<b>3</b>	60 RPM								
<b>Power Cord</b>									
<b>0</b>	115V / 60HZ, power cord NEMA 5/15 plug (US)								
<b>1</b>	220V / 50HZ, power cord CEE7/VII plug (EU)								
<b>Input/Output Control</b>									
<b>F</b>	Analog Manual Speed Control (Dial Knob)								
<b>V</b>	Digital Speed Control with external input (4-20ma, 0-10VDC, and Frequency/Pulse)								
<b>Pump Tube Material, Pump Tube Size</b>									
<b>1</b>	1/4" OD Flex-A-Thane®, 65 PSI								
<b>2</b>	3/8" OD Flex-A-Thane®, 65 PSI								
<b>3</b>	7/16" OD Flex-A-Thane®, 50 PSI								
<b>Polymer Pump Model</b>									
<b>P</b>	Polymer Pump equipped with TFD+								
<b>A1N</b>	<b>0</b>	<b>0</b>	<b>F</b>	<b>-</b>	<b>1</b>	<b>T</b>	<b>-</b>	<b>P</b>	<b>Sample Model Number</b>

## Accessories

 <p><b>KIT-S07</b> <b>KIT-S15</b> <b>KIT-S30</b></p> <p>* Includes cover and foot valve</p> <p>KIT-S07 (7 Gallon), KIT-S15 (15 Gallon), KIT-S30 (30 Gallon) STAR III TANKS, PP</p>	 <p><b>KIT-PSM</b> WALL MOUNT BRACKET, HDPE</p>	 <p><b>A1-1T, A1-2T, A1-3T</b> Spare Tube Element</p>
 <p><b>T140-6V</b> T.I. INJECTOR, 3/8" OD</p>	 <p><b>C-340A</b> FOOT VALVE</p>	 <p><b>A-014NK-6A</b> PVDF INJECTOR</p>

Visit Accessory Pages for more Options