Blue-White®

Engineering and Technical Data

A-100N

FLEXFLO® Peristaltic Metering Pump





Video link:

Features

- Smooth and accurate peristaltic chemical feed.
- Self-priming - even against maximum line pressure. Cannot vapor lock or lose prime.
- 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
- Patented Tube Failure Detection (TFD) system senses tube failure

Highlights

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

Pressures
up to 100 PSI*
(6.9 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[1]	TFD / FVS Alarm Output	Motor Active Output
A-100NF	Dial Knob				•	Open Collector	Open Collector
A-100NV	Digital	•	•	•	•	Contact Closure	Open Collector

1. Requires flow sensor - sold separately

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

Engineering Specifications

Max. Working Pressure	up to 100 psig (6.9 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. 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	0.1 - 124 GPD (0.3 - 326 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)	Patented sensor. Will stop pump and activate open collector output. 6-30vdc collector voltage. 50mA max sinking current.
FVS (Flow Verification System)	Compatible with optional pulse flow sensor. Will stop pump and activate open collector 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, NSF/ANSI 61(must be specified in model number)

* 14 RPM & 30 RPM Models with 1, 2, or 4 tubes have 20:1 turndown.

Output Specifications

Maximum Flow Rates

Tube	Max Pressure 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
4	100(6.9)*	2.3	0.10	0.20	6.0	0.36	4.9	0.21	0.44	13	0.78	8.0	0.33	0.71	21	1.26	9.5	0.40	0.85	25	1.50
6	100(6.9)*	6.9	0.30	0.60	18.4	1.10	16.0	0.67	1.42	42.1	2.5	24.0	1.0	2.13	63.1	3.8	30.1	1.25	2.67	79.2	4.7
7	50(3.5)	21.7	0.90	1.92	57.0	3.40	52.5	2.19	4.66	138	8.3	76.1	3.17	6.76	200	12.0	95.1	3.96	8.45	250	15.0
8	50(3.5)	15.2	0.63	1.35	40.0	2.40	31.9	1.31	2.80	84	5.04	53.2	2.22	4.73	140	8.4	68.4	2.85	6.10	180	10.8

***** See pressure rating for specific tubes. Note: -4, -6 Tubes max pressure for 60 rpm model is 75 psi
Flex-A-Thane = 1, 2, and 3 tubes.
Flex-A-Prene = 4, 6, and 7 tubes.
Flex-A-Chem = 8 tube.

Materials of Construction

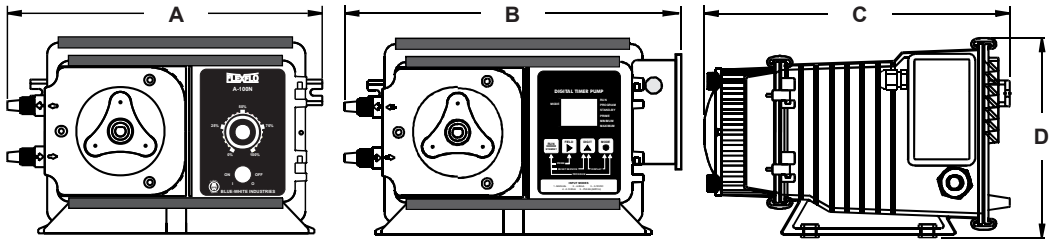
Non-wetted Components:	
Enclosure:	Valox® (PBT) thermoplastic
Pump Head:	Valox® (PBT) thermoplastic
Pump Head Cover:	Clear Acrylic
	Permanently lubricated sealed motor shaft support bronze sleeve bearing.
Cover Screws:	Stainless steel, polypropylene cap
Roller Assembly:	Rotor: Valox® (PBT)
	Rollers: Nylon
	Roller Bearings: Bronze
TFD System Sensor:	Hastelloy C-276
Power Cord:	3 Conductor, SJTW-A water-resistant
Hardware:	Stainless Steel
Shroud:	Valox® (PBT) thermoplastic

Wetted Components:	
Pump Tube Assembly*:	Tubing: Flex-A-Prene®, Flex-A-Thane®, Flex-A-Chem®
	Adapter Fittings: PVDF (1/4” x 3/8” tube connection)
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

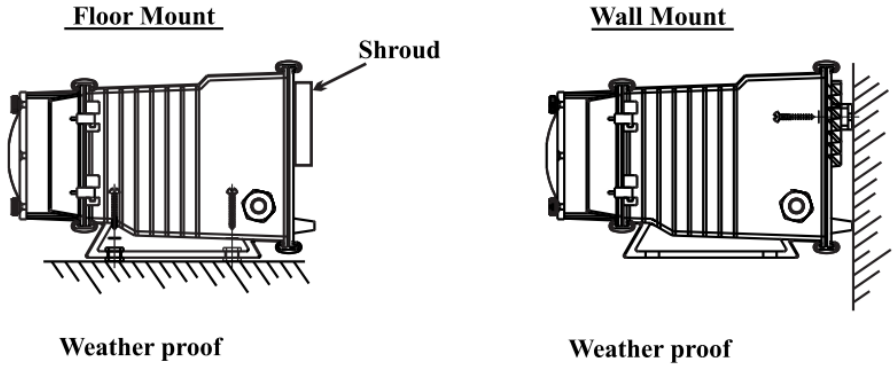
Dim	Inch	cm
A	9.375”	23.81
B	9.50”	24.10
C	9.125”	23.18
D	6.00”	15.24



Analog Units
A-100NF

Digital Units
A-100NV

Shroud / Weather Proof



Model Number Matrix

FLEXFLO® Model Number

A1N	FLEXFLO® Peristaltic Metering Pump

Maximum Motor RPM

0	**14 RPM**
1	**30 RPM**
2	**45 RPM**
3	**60 RPM**

Power Cord

0	115V / 60HZ, power cord NEMA 5/15 plug (US)
1	220V / 50HZ, power cord CEE7/VII plug (EU)

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, Flow Rate

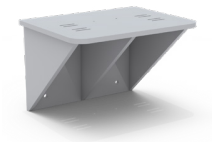
1	1/4” OD Flex-A-Thane®, 65 PSI (14 RPM = 5.7 GPD, 30 RPM = 13.3 GPD, 45 RPM = 20.5 GPD, 60 RPM = 25.5 GPD)
2	3/8” OD Flex-A-Thane®, 65 PSI (14 RPM = 12.2 GPD, 30 RPM = 28.5 GPD, 45 RPM = 43.6 GPD, 60 RPM = 53.3 GPD)
3	7/16” OD Flex-A-Thane®, 50 PSI (14 RPM = 27.8 GPD, 30 RPM = 65.8 GPD, 45 RPM = 99.2 GPD, 60 RPM = 124 GPD)
4	1/4” OD Flex-A-Prene®, 100 PSI (14 RPM = 2.3 GPD, 30 RPM = 4.9 GPD, 45 RPM = 8.0 GPD, 60 RPM = 9.5 GPD)
6	3/8” OD Flex-A-Prene®, 100 PSI (14 RPM = 6.9 GPD, 30 RPM = 16.0 GPD, 45 RPM = 24.0 GPD, 60 RPM = 30.1 GPD)
7	7/16” OD Flex-A-Prene®, 50 PSI (14 RPM = 21.7 GPD, 30 RPM = 52.5 GPD, 45 RPM = 76.1 GPD, 60 RPM = 95.1 GPD)
8	7/16” OD Flex-A-Chem®, 50 PSI (14 RPM = 15.2 GPD, 30 RPM = 31.9 GPD, 45 RPM = 53.3 GPD, 60 RPM = 68.4 GPD)

NSF Certification

(Blank)	None
X	NSF 61 certified (only with -4T, -6T, -7T, and -8T tubes) (ships without accessories)

A1N	0	0	F	-	1	T	-		**Sample Model Number**

Accessories



KIT-PSM
WALL MOUNT BRACKET, HDPE



A1-(see spare parts page)
Spare Tube Element



KIT-S07
KIT-S15
KIT-S30

*** Includes cover and foot valve**

KIT-S07 (7 Gallon), KIT-S15 (15 Gallon), KIT-S30 (30 Gallon)
STAR III TANKS, PP



A-014NK-6A
PVDF INJECTOR

Model Number Matrix



TI40-6V
T.I. INJECTOR, 3/8” OD



C-340A
FOOT VALVE

Visit Accessory Pages for more Options

P.N. 85000-197 A100NF/A100NV REV 10 20240107

5300 Business Drive, Huntington Beach, CA 92649
TEL 714-893-8529 | FAX 714-894-9492 | www.blue-white.com | sales@blue-white.com

ISO 9001:2015 CERTIFIED
SINCE Quality 1957
MADE IN THE USA