

Industries, Ltd.

FLEXFLO® Peristaltic Metering Pumps

Engineering and Technical Data

A-100NV

Variable Speed

Digital Control

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



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 100 PSI (6.9 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 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:100 psig (6.9 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, -4T 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/II (EUROPE)
 240V50Hz = CEE 7/II (EUROPE)

Approximate shipping wt: ...12 lb. (5.4 kg)

Materials of Construction:

Wetted components:

Pump Tube Assembly:.....Flex-A-Prene®, Flex-A-Chem®,
Flex-A-Thane® or FKM tubing
with PVDF connection fittings

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)

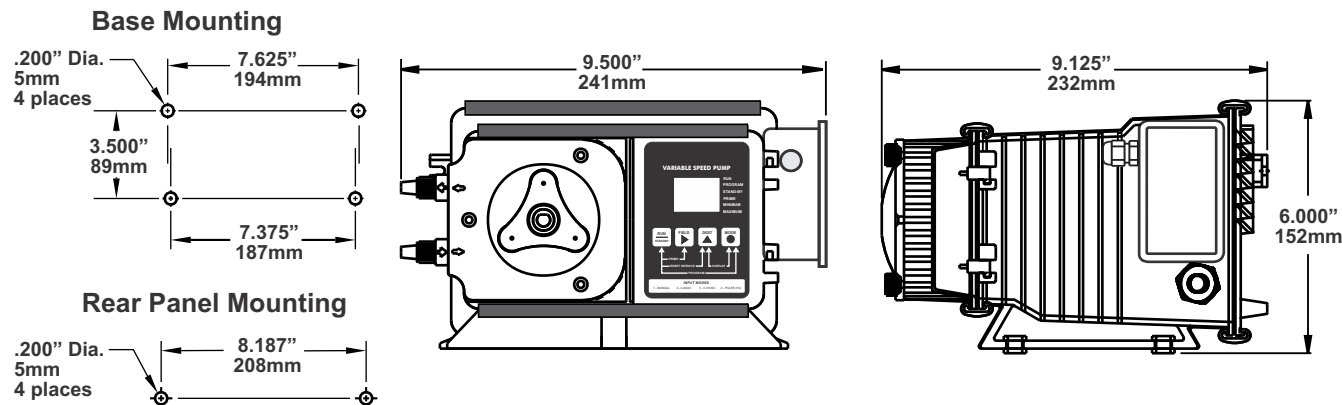
Static Seal O-ring:.....FKM (optional EP)

Non-Wetted components:

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

Blue-White® FLEXFLO® Peristaltic Metering Pumps Industries, Ltd.

Dimensions:



Model Number Matrix:

MODEL A1N ☐ ☐ V - ☐ - ☐ - ☐

Maximum Motor RPM

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

Power Supply

0 = 115V60Hz
1 = 220V50Hz
2 = 230V60Hz
8 = 240V50Hz AS 3112 (Australia/New Zealand)
9 = 230V50Hz BS 1363 (UK)

Output Control

V = Digital speed control with external input
F = Analog speed control
E = Digital batch timer with external input
A = Analog timer, 60 sec. Cycle - 100% duty
C = Analog timer, 5 sec. Cycle - 100% duty
S = Analog timer, 60 sec. Cycle - 10% duty
X = No output control - fixed feed rate

Miscellaneous Options (not required)

1 = T140-6V injector replaces A-014N-6A
2 = C-340V footvalve replaces C-342-6 strainer
5 = A-014NK-6A injector PVDF
6 = Jumper set for digital square wave input
T7 = 7 gallon chemical tank system
T15 = 15 gallon chemical tank system
T30 = 30 gallon chemical tank system
X = NSF61 certified (ships without accessories)

Tubing Connection Type

T = Compression tube nuts

Pump Tube Size and Material

1 = 1/4" OD Flex-A-Thane®
2 = 3/8" OD Flex-A-Thane®
3 = 7/16" OD Flex-A-Thane®
4 = 1/4" OD Flex-A-Prene®
5 = 5/16" OD FKM
6 = 3/8" OD Flex-A-Prene®
7 = 7/16" OD Flex-A-Prene®
8 = 7/16" OD Flex-A-Chem®

Maximum Flow rate and pressure capacities:

Tube no.	Tubing Material	14 RPM MODELS					30 RPM MODELS					45 RPM MODELS					60 RPM MODELS				
		ml/m	oz/m	lph	gph	PSI(bar)	ml/m	oz/m	lph	gph	PSI(bar)	ml/m	oz/m	lph	gph	PSI(bar)	ml/m	oz/m	lph	gph	PSI(bar)
1	Flex-A-Thane®	15	0.51	0.90	0.24	65(4.5)	35	1.18	2.10	0.55	65(4.5)	54	1.83	3.24	0.86	65(4.5)	67	2.26	4.02	1.06	65(4.5)
2	Flex-A-Thane®	32	1.08	1.92	0.51	65(4.5)	75	2.54	4.50	1.19	65(4.5)	115	3.89	6.90	1.82	65(4.5)	140	4.73	8.40	2.22	65(4.5)
3	Flex-A-Thane®	73	2.47	4.37	1.16	50(3.5)	173	5.85	10.38	2.74	50(3.5)	261	8.82	15.66	4.14	50(3.5)	326	11.01	19.56	5.17	50(3.5)
4	Flex-A-Prene®	6	0.20	0.36	0.10	100(6.9)	13	0.44	0.78	0.21	100(6.9)	21	0.71	1.26	0.33	100(6.9)	25	0.85	1.50	0.40	75(5.2)
5	FKM	11	0.37	0.66	0.17	25(1.7)	26	0.88	1.56	0.41	25(1.7)	39	1.31	2.34	0.62	25(1.7)	48	1.62	2.88	0.76	25(1.7)
6	Flex-A-Prene®	18	0.61	1.08	0.29	100(6.9)	42	1.42	2.52	0.67	100(6.9)	63	2.13	3.78	1.00	100(6.9)	79	2.67	4.74	1.25	75(5.2)
7	Flex-A-Prene®	57	1.92	3.42	0.90	50(3.5)	138	4.66	8.28	2.19	50(3.5)	200	6.76	12.00	3.17	50(3.5)	250	8.45	15.00	3.96	50(3.5)
8	Flex-A-Chem®	40	1.35	2.40	0.63	50(3.5)	84	2.80	5.04	1.31	50(3.5)	140	4.73	8.40	2.22	50(3.5)	180	6.10	10.80	2.85	50(3.5)

Gallons shown are U.S. Gallons

Replacement Pump Tubes:

Pump Model Number Suffix	Pump Tube Part Number	Pump Tube Material	Nominal Pump Tube OD
-1T	A1-1T	Flex-A-Thane®	1/4" (6.4mm)
-2T	A1-2T	Flex-A-Thane®	3/8" (9.5mm)
-3T	A1-3T	Flex-A-Thane®	7/16" (11.1mm)
-4T	A1-4T	Flex-A-Prene®	1/4" (6.4mm)
-5T	A1-5T	FKM	5/16" (7.9mm)
-6T	A1-6T	Flex-A-Prene®	3/8" (9.5mm)
-7T	A1-7T	Flex-A-Prene®	7/16" (11.1mm)
-8T	A1-8T	Flex-A-Chem®	7/16" (11.1mm)