

FLEX-PRO A3

Tube Failure Detection

Feed Rates to 33.3 GPH @ 125 PSI

Automated PPM Dosing System

Brushless DC Motor

NEMA 4X (IP 66) Washdown

2 Year Warranty



NEMA 4X **CE**



Patents: 4,496,295 7,001,153 and other patents pending

Applications:

- Chemical
- Wastewater treatment
- Chlorination
- Pulp & Paper Slurries
- Printing inks
- Oil based fluids
- Gaseous fluids
- Shear sensitive fluids
- Caustics
- Chemical Slurries
- Food and Beverage

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.
- Output rates to: 33.3 GPH (126 LPH) @ 125 PSI (8.6 Bar).
- Output volume is not effected by changes in back pressure.
- No maintenance brushless variable speed motor.
- Specially engineered tubing for long life at high pressures.
- Two pump tubes supplied with each pump. No extra tubing required.
- Inputs include: 4-20mA, 0-10Vdc, and Pulse inputs for external speed control and 0-30 VDC contact closure remote start/stop.
- Operator friendly digital touch pad with menu driven software.
- VGA Graphic backlit LCD displays motor speed, input signal values, service and alarm status.
- Outputs include: Scalable 4-20mA and pulse, One 10 amp relay and three 30 VDC contact closures assignable to monitor TFD, FVS, motor on, operating mode error.
- Two CNC machined squeeze rollers and two alignment rollers for optimum squeeze, unparalled accuracy, and tube life.
- Heavy duty rotor - single piece rotor design means no flexing and increased accuracy (no springs or hinges).
- Pump can handle same maximum PSI in either direction (clockwise and counter clockwise).
- Motor reverse feature to increase tube life.
- Patented Tube Failure Detection (TFD) system. Senses tube failure by detecting chemical in the pump head.

Specifications:

Maximum working pressure:
125 psig (8.6 bar)

Maximum Fluid temperature:
130° F (54° C)

Operating Temperature
14°F to 115°F (-10°C to 46°C)

Storage Temperature
-40°F to 158°F (-40°C to 70°C)

Operating Voltage (Model Specific):
115VAC/60Hz, 1ph (2 Amp)
230VAC/60Hz, 1ph (1.1 Amp)
220VAC/50Hz, 1ph (1.1Amp)

Power Cord Plug Type (Model Specific):
115V60Hz = NEMA 5/15 (USA)
230V60Hz = NEMA 6/15 (USA)
220V50Hz = CEE 7/VII (EU)

Accuracy:
+/- 0.5% of flow
Repeatability +/- 0.5%

Duty cycle:
Continuous

Output adjustment range:
1-100% in 0.1% increments

Maximum viscosity:
5,000 Centipoise

Maximum suction lift:
30 ft. Water, 0 psig (4.5 m, 0 bar)

Display
VGA backlit LCD, UV resistant.

Display Languages
English, Spanish, French or German selectable.

Keypad
Ten button positive action tactile switch keypad.

Security
Programmable 4-digit password.

Enclosure:
NEMA 4X (IP66), Powder coated aluminum.
Dimensions: 8.00W x 10.50H x 14.63D inches (203W x 267H x 371D mm)

Approximate shipping wt:
30 lb. (13.5 Kg)

Materials of Construction:

Wetted components:

Pump Tube Assembly (Model Specific):
Tubing:.....Norprene® or Tygothane®
Adapter fittings:PVDF

Suction Tubing:
3/8" OD x 1/4" ID x 10 feet Clear PVC

Discharge Tubing:
3/8" OD x 1/4" ID x 10 feet Natural Polyethylene (LLDPE)

Suction Strainer:
Polypropylene

Injection/Check valve:
Body & insert:PVDF
Check Ball:Ceramic
Spring:Hastelloy C-276
Ball Seat O-ring:.....Viton® (optional EP)
Static Seal O-ring:.....Viton® (optional EP)
Duckbill anti-scale valve: ..Santoprene®

Non-Wetted components:

Enclosure:
413 Aluminum (powder coated)

Pump Head:
Valox® (PBT) thermoplastic

Pump Head Cover:
Clear Acrylic - Annealed for added strength and chemical resistance.
Permanently lubricated sealed motor shaft support ball bearing.
Brass shaft support bearing retainer.

Cover Screws:
Stainless Steel

Roller Assembly:
Rotor:Valox® (PBT)
Rollers:Nylon
Roller Bearings:SS Ball Bearings

Motor Shaft:
Chrome plated steel

TFD System Sensor pins:
Hastelloy C-276

Power Cord:
3 conductor, SJTW-A Water-resistant

Series Comparison:

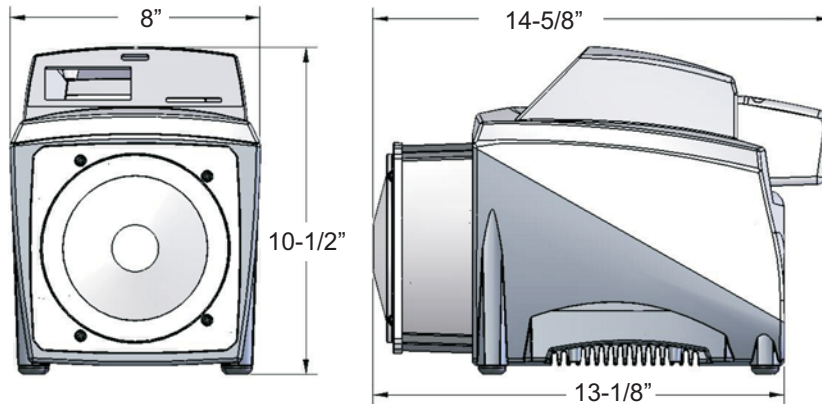
| Feature | A3F Series Models | A3V Series Models |
|---|-------------------|-------------------|
| TFD (Tube Failure Detection) System Alarm | ▶ | ▶ |
| FVS (Flow Verification System) Alarm * | ▶ | ▶ |
| Tube Saver Motor Reverse | ▶ | ▶ |
| One Button Prime Mode | ▶ | ▶ |
| 10 Amp Alarm Relay | ▶ | ▶ |
| Programmable 4-20mA Output Signal | | ▶ |
| Programmable Frequency Output Signal | | ▶ |
| Three 30VDC Assignable Contact Closures | | ▶ |
| One 30VDC Pump On/Off Contact Closure | | ▶ |
| Display in English, Spanish, German, French | | ▶ |
| Password Protection | | ▶ |
| Display % of motor speed | ▶ | ▶ |
| Display units: ml/min, oz/min, L/hr, Gal/hr, Gal/day, RPM | | ▶ |
| Automated PPM Chemical Dosing | | ▶ |
| Menu Driven Software | | ▶ |
| Operating Modes: | | |
| Manual Adjust Only | ▶ | ▶ |
| 4-20 mA Input Signal | | ▶ |
| 0-10 VDC Input Signal | | ▶ |
| High Speed Frequency Input | | ▶ |
| Pulse Triggered Batch Dispensing | | ▶ |
| Manually Triggered Batch Dispensing | | ▶ |
| Repeating Time Cycle | | ▶ |
| Fixed Speed Parts per Million Dosing | | ▶ |
| Proportional Input PPM Dosing | | ▶ |

* Requires Micro-Flo Sensor sold separately

Maximum Feed rate:

| Max GPH | Max LPH | Max PSI | Pump Tube Material | A3F Series model numbers | | A3V Series model numbers | |
|------------|------------|------------|-----------------------|--------------------------|-----------|--------------------------|-----------|
| | | | | 115V AC | 230V AC | 115V AC | 230V AC |
| 1 | 3.9 | 125 | Norprene | A3F14-SND | A3F15-SND | A3V14-SND | A3V15-SND |
| 4 | 15 | 125 | Norprene | A3F14-SNF | A3F15-SNF | A3V14-SNF | A3V15-SNF |
| 9 | 34.2 | 125 | Norprene | A3F14-SNH | A3F15-SNH | A3V14-SNH | A3V15-SNH |
| 12.7 | 48 | 125 | Norprene | A3F14-SNJ | A3F15-SNJ | A3V14-SNJ | A3V15-SNJ |
| 16.6 | 63 | 125 | Norprene | A3F14-SNK | A3F15-SNK | A3V14-SNK | A3V15-SNK |
| 2.4 | 9 | 65 | Tygothane | A3F14-SGE | A3F15-SGE | A3V14-SGE | A3V15-SGE |
| 5 | 18.9 | 65 | Tygothane | A3F14-SGG | A3F15-SGG | A3V14-SGG | A3V15-SGG |
| 12 | 45.6 | 65 | Tygothane | A3F14-SGH | A3F15-SGH | A3V14-SGH | A3V15-SGH |
| 2.1 | 7.8 | 125 | Norprene | A3F24-SND | A3F25-SND | A3V24-SND | A3V25-SND |
| 7.9 | 30 | 125 | Norprene | A3F24-SNF | A3F25-SNF | A3V24-SNF | A3V25-SNF |
| 17.4 | 66 | 125 | Norprene | A3F24-SNH | A3F25-SNH | A3V24-SNH | A3V25-SNH |
| 25.3 | 96 | 125 | Norprene | A3F24-SNJ | A3F25-SNJ | A3V24-SNJ | A3V25-SNJ |
| 33.3 | 126 | 125 | Norprene | A3F24-SNK | A3F25-SNK | A3V24-SNK | A3V25-SNK |
| 4.6 | 17.4 | 65 | Tygothane | A3F24-SGE | A3F25-SGE | A3V24-SGE | A3V25-SGE |
| 10.1 | 38.4 | 65 | Tygothane | A3F24-SGG | A3F25-SGG | A3V24-SGG | A3V25-SGG |
| 24.9 | 94.2 | 65 | Tygothane | A3F24-SGH | A3F25-SGH | A3V24-SGH | A3V25-SGH |

Dimensions:



mm = 203W x 267H x 371D

Model Number Matrix:

| A3 Model Number | |
|----------------------------|---|
| A3 | Flex-Pro A3 Peristaltic Metering Pump |
| Series | |
| F | Single manual output control mode |
| V | Multiple automatic input and output control and alarm modes |
| Maximum Motor Speed | |
| 1 | 62 RPM |
| 2 | 125 RPM |
| Operating Voltage | |
| 4 | 115V/60Hz, Power cord with NEMA 5/15 plug (U.S.) |
| 5 | 230V/60Hz, Power cord with NEMA 6/15 plug (U.S.) |
| 6 | 220V/50Hz, Power cord with CEE 7/VII plug (Europe) |
| Pump Tube Size | |
| SND | #075 Norprene tube material |
| SNF | #155 Norprene tube material |
| SNH | #220 Norprene tube material |
| SNJ | #312 Norprene tube material |
| SNK | #375 Norprene tube material |
| SGE | #125 Tygothane tube material |
| SGG | #187 Tygothane tube material |
| SGH | #250 Tygothane tube material |
| Options | |
| 1 | TI40-6V injector replaces A-104NK-6A |
| 2 | C-340A Footvalve replaces C-342-6 Inlet Strainer |

| | | | | | | | |
|-----------|----------|----------|----------|----------|------------|----------|--|
| A3 | V | 1 | 4 | - | SNH | - | |
|-----------|----------|----------|----------|----------|------------|----------|--|

Sample model number