

FLEX-PRO® M-3 & M-4

- 10,000:1 Turndown ratio
- Tube Failure Detection
- Revolution Count Display & Alarm
- Brushless DC Motor
- NEMA 4X (IP 66) Washdown
- NSF Listed Std. 61
- 5 Year Warranty



Model M-324-MNK

Model M-424-BNL

Sold and serviced exclusively by highly skilled, factory authorized technicians.



NEMA 4X

Patents: 4,496,295, 7,001,153, 8,418,364 and other patents pending

Applications:

- Municipal Water Treatment
- Municipal Wastewater Treatment
- Chemical Metering
- Chlorination
- Chloramination
- Fluoridation
- Polymer Injection
- Acid Injection
- Alum Injection
- PAC Injection
- Caustic Injection

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: 158.5 GPH (600 LPH) and pressures to 125 PSI (8.6 Bar).
- 10,000:1 turndown ratio with high resolution motor speed adjustment.
- No maintenance brushless variable speed motor.
- Specially engineered tubing for long life at high pressures.
- Patented Tube Failure Detection (TFD) system. Senses tube failure by detecting chemical in the pump head. No false triggering from condensation or washdown.
- Control Inputs include: 4-20mA, 0-10Vdc, and Pulse inputs for remote external speed or batch control and 0-30 VDC / contact closure remote start/stop.
- Revolution count display with user programmable alarm set-point for tube maintenance.
- VGA Graphic multi-color backlit LCD displays remote/local control status, motor speed, output rate, input signal values, service and alarm status in three easy to see colors.
- Outputs include: Scalable 4-20mA or pulse, one 250V/6A relay and three 115V/1A contact closures assignable to monitor various pump functions including TFD, FVS, revolution counter, remote/local, forward/reverse, input signals, output signals, motor on, motor fault, operating mode setting, and others.
- Two molded squeeze rollers and two alignment rollers provide factory calibrated optimum squeeze for unparalleled accuracy and extra long tube life.
- Heavy duty rotor - single piece plastic rotor means no flexing and increased accuracy with no metal springs or hinges to corrode.
- Inject at maximum pressure in either direction (clockwise or counter clockwise).
- Compatible with Blue-White's output Flow Verification Sensor (FVS) system.

Engineering Specifications:

Maximum working pressure (excluding pump tubes):

125 psig (8.6 bar)

Note: see individual pump tube assembly maximum pressure ratings.

Maximum Fluid temperature (excluding pump tubes):

185°F (85°C)

Note: see individual pump tube assembly maximum temperature ratings.

Ambient Operating Temperature

14°F to 115°F (-10°C to 46°C)

Ambient Storage Temperature

-40°F to 158°F (-40°C to 70°C)

Operating Voltage:

A3 MODELS:

115VAC/60Hz, 1ph (2.0 Amp Maximum)

230VAC/60Hz, 1ph (1.0 Amp Maximum)

220VAC/50Hz, 1ph (1.0 Amp Maximum)

240VAC/50Hz, 1ph (1.0 Amp Maximum)

A4 MODELS:

115VAC/60Hz, 1ph (3.1 Amp Maximum)

230VAC/60Hz, 1ph (1.6 Amp Maximum)

220VAC/50Hz, 1ph (1.6 Amp Maximum)

240VAC/50Hz, 1ph (1.6 Amp Maximum)

Power Cord Options:

115V60Hz = NEMA 5/15 (USA)

230V60Hz = NEMA 6/15 (USA)

220V50Hz = CEE 7/II (EU)

240V50Hz = AS 3112 (Australia/New Zealand)

Enclosure:

NEMA 4X (IP66), Polyester powder coated aluminum.

Maximum Overall Dimensions:

M-3 models: 8-1/8"W x 10-3/4"H x 15-1/4"D (20.6W x 27.3H x 38.9D cm)

M-4 models: 12-1/8"W x 14-1/4"H x 18-5/8"D (30.8W x 36.1H x 47.3D cm)

Materials of Construction:

Wetted components:

Pump Tube Assembly (Model Specific - 2 provided):

Tubing: Flex-A-Prene®, Flex-A-Chem®, or Flex-A-Thane®

Adapter fittings: .PVDF

Recommended Ancillary Items Sold Separately:**Injection / Back-flow Check valve:**

Body & insert: PVDF

Check Ball: Ceramic

Spring: Hastelloy C-276

Ball Seat O-ring: TFE/P (optional EP)

Static Seal O-ring: TFE/P (optional EP)

For "S" tubing type connections only:

(Available on M3 only)

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

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

Suction Strainer: PVDF

For "B" barb tubing and "M" M/NPT connections only:

(Available on ND, NKL, NGG, NEE, G2G and M-4 only)

Suction Strainer:

Body: PVDF

Check Ball: Ceramic

Ball Seat O-ring: TFE/P (optional EP)

For "C" Tri-clamp and "Q" Quick Disconnect connections* only:

(Available on ND, NKL, NGG, NEE, and G2G only)

Suction Strainer: PVDF

*Quick Disconnect Valves sold separately

Approximate shipping wt:

M-3 models: 33 lb. (15.0 Kg)

M-4 models: 58 lb. (26.3 Kg)

Motor:

Brushless DC, 1/4 H.P.

Motor speed adjustment range

10,000:1 (0.01% - 100% motor speed)

Motor speed adjustment resolution

0.1% increments > 10% motor speed

0.01% increments > 1% motor speed and < 10%

0.001% increments < 1% motor speed

Maximum viscosity

12,000 Centipoise

Maximum suction lift:

30 ft. Water, 0 psig (9.14 m, 0 bar)

Display

3 color VGA backlit LCD, UV resistant.

Display resolution

0.0 > 10% motor speed

0.00 > 1% motor speed and < 10%

0.000 < 1% motor speed

Display languages

English, Spanish, French or German selectable.

Keypad

Eleven button positive action tactile switch keypad.

Security

Programmable 4-digit password.

Non-Wetted components:

Enclosure:

413 Aluminum (Polyester powder coated)

Pump Head:

Valox® (PBT) thermoplastic

Pump Head Cover:

Polycarbonate for added strength and chemical resistance.

Permanently lubricated sealed motor shaft support ball bearing.

Cover Screws:

Stainless Steel

Roller Assembly:

Rotor:.....Valox® (PBT)

Rollers:.....PVDF/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

Tube Installation Tool:

Glass Filled Nylon

Mounting Brackets and Hardware:

316 Stainless Steel

Output Specifications:

| Output Range | | | Max Speed | Max Pressure | Max Temperature | M-3 Model Numbers | | |
|---|---------------|--------------|-----------|--------------|-----------------|-------------------|-------------|-------------|
| Flex-A-Prene® M-3 Tube Pumps | | | | | | | | |
| Listed under NSF Std. 61 Meets FDA criteria for food Excellent chemical resistance CIP SIP | | | | | | | | |
| GPH | LPH | ML/MIN | RPM | PSI (bar) | F (C) | 115V AC | 230V AC | 220V AC |
| .0002 - 2.10 | .0007 - 7.92 | .0132 - 132 | 125 | 125 (8.6) | 185 (85) | M-324-*ND | M-325-*ND | M-326-*ND |
| .0025 - 25.3 | .0096 - 96.0 | .1596 - 1596 | 125 | 125 (8.6) | 185 (85) | M-324-*NJ | M-325-*NJ | M-326-*NJ |
| .0033 - 33.3 | .0126 - 126 | .2100 - 2100 | 125 | 125 (8.6) | 185 (85) | M-324-*NK | M-325-*NK | M-326-*NK |
| .0033 - 33.3 | .0126 - 126 | .2100 - 2100 | 125 | 30 (2.1) | 185 (85) | M-324-*NKL | M-325-*NKL | M-326-*NKL |
| Flex-A-Prene® M-3 Tube Pumps | | | | | | | | |
| Listed under NSF Std. 61 Meets FDA criteria for food Excellent chemical resistance Extra long life at low pressures | | | | | | | | |
| GPH | LPH | ML/MIN | RPM | PSI (bar) | F (C) | 115V AC | 230V AC | 220V AC |
| .0004 - 4.76 | .0018 - 18.0 | .03 - 300 | 125 | 110 (7.6) | 185 (85) | M-324-*NEE | M-325-*NEE | M-326-*NEE |
| .0019 - 19.02 | .0072 - 72.0 | .12 - 1200 | 125 | 110 (7.6) | 185 (85) | M-324-*NGG | M-325-*NGG | M-326-*NGG |
| Flex-A-Chem® M-3 Tube Pumps | | | | | | | | |
| Listed under NSF Std. 61 Meets FDA criteria for food Superior chemical resistance | | | | | | | | |
| GPH | LPH | ML/MIN | RPM | PSI (bar) | F (C) | 115V AC | 230V AC | 220V AC |
| .0015 - 15.06 | .0057 - 57.0 | .0950 - 950 | 125 | 50 (3.4) | 130 (54) | M-324-*TH | M-325-*TH | M-326-*TH |
| .0028 - 28.5 | .0108 - 108 | .18 - 1800 | 125 | 50 (3.4) | 130 (54) | M-324-*TK | M-325-*TK | M-326-*TK |
| Flex-A-Thane® M-3 Tube Pumps | | | | | | | | |
| Meets FDA criteria for food Resistant to oils, greases and fuels | | | | | | | | |
| GPH | LPH | ML/MIN | RPM | PSI (bar) | F (C) | 115V AC | 230V AC | 220V AC |
| .0004 - 4.60 | .0017 - 17.4 | .0290 - 290 | 125 | 65 (4.5) | 130 (54) | M-324-*GE | M-325-*GE | M-326-*GE |
| .0010 - 10.1 | .0038 - 38.4 | .0637 - 637 | 125 | 65 (4.5) | 130 (54) | M-324-*GG | M-325-*GG | M-326-*GG |
| .0024 - 24.9 | .0094 - 94.2 | .1570 - 1570 | 125 | 65 (4.5) | 130 (54) | M-324-*GH | M-325-*GH | M-326-*GH |
| .0028 - 28.5 | .0108 - 108 | .1800 - 1800 | 125 | 65 (4.5) | 130 (54) | M-324-*GK | M-325-*GK | M-326-*GK |
| .002 - 18.23 | .007 - 69.0 | .115 - 1150 | 125 | 65 (4.5) | 130 (54) | M-324-*G2G | M-325-*G2G | M-326-*G2G |
| Output Range | | | Max Speed | Max Pressure | Max Temperature | M-4 Model Numbers | | |
| Flex-A-Prene® M-4 Tube Pumps | | | | | | | | |
| Listed under NSF Std. 61 Meets FDA criteria for food Excellent chemical resistance CIP SIP | | | | | | | | |
| GPH | LPH | ML/MIN | RPM | PSI (bar) | F (C) | 115V AC | 230V AC | 220V AC |
| .0028 - 28.5 | .0108 - 108 | .180 - 1800 | 125 | 125 (8.6) | 185 (85) | M-424-*NH | M-425-*NH | M-426-*NH |
| .0044 - 44.4 | .0168 - 168 | .280 - 2800 | 125 | 100 (6.9) | 185 (85) | M-424-*NJ | M-425-*NJ | M-426-*NJ |
| .0054 - 54.4 | .0204 - 204 | .3400 - 3400 | 125 | 65 (4.5) | 185 (85) | M-424-*NHHL | M-425-*NHHL | M-426-*NHHL |
| .0050 - 50.7 | .0192 - 192 | .320 - 3200 | 125 | 80 (5.5) | 185 (85) | M-424-*NK | M-425-*NK | M-426-*NK |
| .0054 - 54.0 | .0204 - 204 | .340 - 3400 | 125 | 100 (6.9) | 185 (85) | M-424-*NHH | M-425-*NHH | M-426-*NHH |
| .010 - 100.0 | .0378 - 378 | .630 - 6300 | 125 | 50 (3.4) | 185 (85) | M-424-*NL | M-425-*NL | M-426-*NL |
| .015 - 158.5 | .0600 - 600 | 1.00 - 10000 | 125 | 30 (2.1) | 185 (85) | M-424-*NP** | M-425-*NP** | M-426-*NP** |
| Flex-A-Chem® M-4 Tube Pumps | | | | | | | | |
| Listed under NSF Std. 61 Meets FDA criteria for food Superior chemical resistance | | | | | | | | |
| GPH | LPH | ML/MIN | RPM | PSI (bar) | F (C) | 115V AC | 230V AC | 220V AC |
| .0054 - 54.00 | .0204 - 204 | .3400 - 3400 | 125 | 30 (2.1) | 130 (54) | M-424-*TK | M-425-*TK | M-426-*TK |
| .0126 - 126.0 | .0477 - 477.0 | .800 - 8000 | 125 | 30 (2.1) | 130 (54) | M-424-*TKK | M-425-*TKK | M-426-*TKK |
| Flex-A-Thane® M-4 Tube Pumps | | | | | | | | |
| Meets FDA criteria for food Resistant to oils, greases and fuels | | | | | | | | |
| GPH | LPH | ML/MIN | RPM | PSI (bar) | F (C) | 115V AC | 230V AC | 220V AC |
| .0039 - 39.6 | .0150 - 150 | .250 - 2500 | 125 | 65 (4.5) | 130 (54) | M-424-*GH | M-425-*GH | M-426-*GH |
| .0055 - 55.5 | .0210 - 210 | .350 - 3500 | 125 | 65 (4.5) | 130 (54) | M-424-*GK | M-425-*GK | M-426-*GK |
| .010 - 100.0 | .0378 - 378 | .630 - 6300 | 125 | 65 (4.5) | 130 (54) | M-424-*GKK | M-425-*GKK | M-426-*GKK |

* Inlet/outlet connection types available: **S** = 3/8" OD x 1/4" ID flexible tubing with compression type connections (M-3 models only), **M** = 1/2" male NPT **B** = 1/2" ID tubing barb type connections (ND, NKL, NEE, NGG, G2G, and M-4 models only), **C** = 3/4" tri-clamp connections (ND, NKL, NEE, NGG, and G2G only), **Q** = Quick Disconnect (M-3 models: ND, NKL, NEE, NGG, and G2G only, and M-4 single Flex-A-Prene® tube models only) (Valves sold separately)

**NP flow rate reduced 16.5% with Quick Disconnect connections.

Note: output volumes based on testing with water at 72 degrees F, 5 foot suction lift, atmospheric conditions at sea level.

Engineering and Technical Data

Chemical Resistance of Tubing:

| Flex-A-Prene® Tubing | | | |
|---|---------------------------------|-----------------------------|---------------------------|
| Meets FDA criteria for food Excellent chemical resistance | | | |
| Alcohol general | Citric Acid 50% | Hydrochloric acid 33% | Potassium hydroxide |
| Aluminum Sulfate (Alum) | Ethylene glycol | Hydrocyanic acid | Propylene glycol |
| Ammonium chloride | Ferric chloride | Hydrogen peroxide | Sodium hydroxide 50% |
| Ammonium hydroxide | Ferric nitrate | Hypochlorous acid | Sodium Bisulfite |
| Ammonium Sulfate (LAS) | Ferric sulfate | Iodine | Sodium Chlorite 12% |
| Benzyl alcohol | Ferrous chloride - 43% in water | Magnesium chloride | Sodium Hypochlorite 12.5% |
| Bleach | Ferrous sulfate | Magnesium sulfate | Sodium sulfide |
| Brine solutions | Fluosilicic Acid (up to 25%) | Phosphoric acid | Sulfuric acid up to 50% |
| Calcium Hydroxide 10% (Lime Slurry) | Formic acid | Plating solutions | Tannic acid |
| Calcium hypochlorite 20% | Glucose | Polyaluminum Chloride (PAC) | |

| Flex-A-Chem® - Ultra smooth plasticizer-free bore (inner liner) | | | |
|--|------------------------------------|------------------|---|
| Meets FDA criteria for food Superior chemical resistance | | | |
| Ferrous Chloride (up to 40%) | Phosphoric Acid (up to 85%) | Bases | Applications: Ink and solvent production Battery acid filling Specialty chemical production / processing Sensitive fluid transfer |
| Fluoboric Acid (up to 48%) | Potassium Permanganate (up to 6%) | Salts | |
| Fluosilicic Acid (up to 25%) | Potassium Hypochlorite (up to 70%) | Ketones | |
| Hydrofluoric Acid (up to 48%) | Sodium Phosphate (up to 30%) | Alcohols | |
| Nitric Acid (up to 71%) | Sulfuric Acid (up to 98%) | Isobutyl Alcohol | |
| | | | |

| Flex-A-Thane® Tubing | | | |
|--|-----------------|-------------------------|-------------|
| Meets FDA criteria for food Resistant to oils, greases and fuels | | | |
| Cyclohexane | Kerosene | Oils: | Oils: |
| Diesel Fuel | Lard | ASTM reference No.1,2,3 | Linseed |
| Fatty acids | Mineral spirits | Castor | Lubricating |
| Gasoline | Soap solutions | Coconut | Mineral |
| Heptane | Turpentine | Fuel | |
| Hexane | | | |

Pump Tube Assembly Output Specifications:

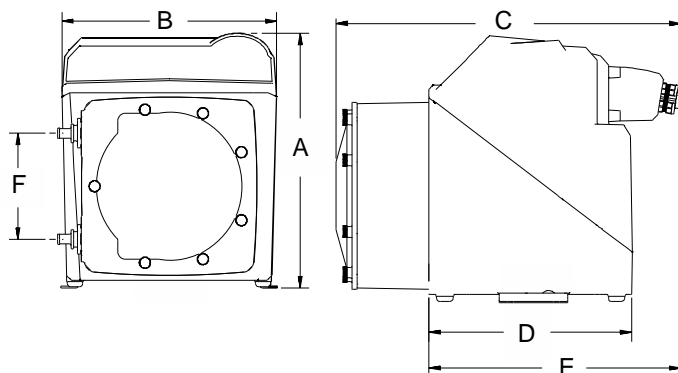
| Model M-3 - Available Pump Tubes and Output Ranges | | | | | | | |
|---|-----------|---------------------|----------|-----------------------------|---------------|--------------|--------------|
| Tube Material | Tube Size | Max Output Pressure | Max Temp | Required Roller Part Number | Output Range | | |
| Material | Code | PSI (bar) | F (C) | | GPH | LPH | ML/Min |
| Flex-A-Prene | ND | 125 (8.6) | 185 (85) | A3-SND-R | .0002 - 2.10 | .0007 - 7.92 | .0132 - 132 |
| Flex-A-Prene | NEE | 110 (7.6) | 185 (85) | A3-SNGG-R | .0004 - 4.76 | .0018 - 18.0 | .03 - 300 |
| Flex-A-Prene | NGG | 110 (7.6) | 185 (85) | A3-SNGG-R | .0019 - 19.02 | .0072 - 72.0 | .12 - 1200 |
| Flex-A-Prene | NJ | 125 (8.6) | 185 (85) | A3-SNGG-R | .0025 - 25.3 | .0096 - 96.0 | .1596 - 1596 |
| Flex-A-Prene | NK | 125 (8.6) | 185 (85) | A3-SNGG-R | .0033 - 33.3 | .0126 - 126 | .2100 - 2100 |
| Flex-A-Prene | NKL | 30 (2.1) | 185 (85) | A3-STH-R | .0033 - 33.3 | .0126 - 126 | .2100 - 2100 |
| Flex-A-Chem | TH | 50 (3.4) | 130 (54) | A3-STH-R | .0015 - 15.06 | .0057 - 57.0 | .0950 - 950 |
| Flex-A-Chem | TK | 50 (3.4) | 130 (54) | A3-SNGG-R | .0028 - 28.5 | .0108 - 108 | .18 - 1800 |
| Flex-A-Thane | GE | 65 (4.5) | 130 (54) | A3-SGE-R | .0004 - 4.60 | .0017 - 17.4 | .0290 - 290 |
| Flex-A-Thane | GG | 65 (4.5) | 130 (54) | A3-SGE-R | .0010 - 10.1 | .0038 - 38.4 | .0637 - 637 |
| Flex-A-Thane | GH | 65 (4.5) | 130 (54) | A3-SGE-R | .0024 - 24.9 | .0094 - 94.2 | .1570 - 1570 |
| Flex-A-Thane | GK | 65 (4.5) | 130 (54) | A3-SGE-R | .0028 - 28.5 | .0108 - 108 | .1800 - 1800 |
| Flex-A-Thane | G2G | 65 (4.5) | 185 (85) | A3-SGE-R | .002 - 18.23 | .007 - 69 | .115 - 1150 |

| Model M-4 - Available Pump Tubes and Output Ranges | | | | | | | |
|---|-----------|---------------------|----------|-----------------------------|---------------|-------------|--------------|
| Tube Material | Tube Size | Max Output Pressure | Max Temp | Required Roller Part Number | Output Range | | |
| Material | Code | PSI (bar) | F (C) | | GPH | LPH | ML/Min |
| Flex-A-Prene | NH | 125 (8.6) | 185 (85) | A4-MNH-R | .0028 - 28.5 | .0108 - 108 | 1800 - 1800 |
| Flex-A-Prene | NJ | 100 (6.9) | 185 (85) | A4-MNH-R | .0044 - 44.4 | .0168 - 168 | 2800 - 2800 |
| Flex-A-Prene | NHHL | 65 (4.5) | 185 (85) | A4-MNH-R | .0054 - 54.0 | .0204 - 204 | 3400 - 3400 |
| Flex-A-Prene | NK | 80 (5.5) | 185 (85) | A4-MNH-R | .0050 - 50.7 | .0192 - 192 | 3200 - 3200 |
| Flex-A-Prene | NHH | 100 (6.9) | 185 (85) | A4-MNH-R | .0054 - 54.0 | .0204 - 204 | 3400 - 3400 |
| Flex-A-Prene | NL | 50 (3.4) | 185 (85) | A4-MNL-R | .0100 - 100.0 | .0378 - 378 | 6300 - 6300 |
| Flex-A-Prene | NP* | 30 (2.1) | 185 (85) | A4-MNL-R | .0158 - 158.5 | .0600 - 600 | 1.00 - 10000 |
| Flex-A-Chem | TK | 30 (2.1) | 130 (54) | A4-MTH-R | .0054 - 54.00 | .0204 - 204 | 3400 - 3400 |
| Flex-A-Thane | GH | 65 (4.5) | 130 (54) | A4-MGH-R | .0039 - 39.6 | .0150 - 150 | 2500 - 2500 |
| Flex-A-Thane | GK | 65 (4.5) | 130 (54) | A4-MGH-R | .0055 - 55.5 | .0210 - 210 | 3500 - 3500 |
| Flex-A-Thane | GKK | 65 (4.5) | 130 (54) | A4-MGH-R | .0100 - 100.0 | .0378 - 378 | 6300 - 6300 |

*NP flow rate reduced 16.5% with Quick Disconnect connection.

Engineering and Technical Data

Dimensions:



| Dim | M-3 Series | | M-4 Series | |
|-----|------------|------|------------|------|
| | Inches | cm | Inches | cm |
| A | 10-3/4" | 27.3 | 14-1/4" | 36.1 |
| B | 8-1/8" | 20.6 | 12-1/8" | 30.8 |
| C | 15-1/4" | 38.9 | 18-5/8" | 47.3 |
| D | 10" | 25.4 | 11" | 27.9 |
| E | 12-1/4" | 31.0 | 13-5/8" | 34.6 |
| F | 4-1/4" | 10.7 | 6" | 15.2 |

Model Number Matrix:

| M | Flex-Pro® ProSeries-M® Model Number | | |
|--------------------------|---|------------|--|
| | Maximum Output Range | | |
| 3 | Flex-Pro M-3 maximum output 35.19 GPH(133.2 LPH) | | |
| 4 | Flex-Pro M-4 maximum output 158.5 GPH (600 LPH) | | |
| | Maximum Motor Speed | | |
| 2 | 125 RPM (maximum rotor rotation speed) | | |
| | Power Cord (operating voltage requirement 96VAC to 264VAC) | | |
| 4 | 115V / 60Hz, power cord NEMA 5/15 plug (US) | | |
| 5 | 230V / 60Hz, power cord NEMA 6/15 plug (US) | | |
| 6 | 220V / 50HZ, power cord CEE 7/VII plug (EU) | | |
| 8 | 240V / 50HZ, power cord AS 3112 plug (Australia/New Zealand) | | |
| 9 | 230V / 50HZ, power cord BS 1363 plug (UK) | | |
| X | No Power Cord | | |
| | Inlet/Outlet Connection Size, Connection Type, Connection Material | | |
| S | 3/8" OD x 1/4" ID Tube Compression Fitting, Natural PVDF (Kynar), available for M-3 models only | | |
| M | 1/2" Male NPT Fitting, Natural PVDF (Kynar), available for M-3 and M-4 models | | |
| B | 1/2" ID Tubing Barb Fitting, Natural PVDF (Kynar), available for ND, NKL, NEE, NGG, G2G and M-4 models only | | |
| C | 1/2" - 3/4" Tri-clamp connections, Natural PVDF (Kynar), available for ND, NKL, NEE, NGG, and G2G only | | |
| Q | Quick Disconnect, Natural PVDF (Kynar), M-3 models: ND, NKL, NEE, NGG, and G2G only, and M-4 single Flex-A-Prene® tube models only, NP flow rate reduced 16.5% with Quick Disconnect connections (Valves sold separately) | | |
| MB | 1/2" Male BSPT Fitting, Natural PVDF (Kynar), available for M-3 and M-4 models | | |
| | Pump Tube Material, Pump Tube Size | | |
| ND | Flex-A-Prene® .075 ID, M-3 models only | TK | Flex-A-Chem® .375 ID |
| NH | Flex-A-Prene® .250 ID - M-4 models only | TKK | Flex-A-Chem® .375 ID (Dual Tube), M-4 models only |
| NHL | Flex-A-Prene® .250 ID (65 PSI max pressure - longer life) M-4 only | GE | Flex-A-Thane® .125 ID, M-3 models only |
| NHH | Flex-A-Prene® .250 ID (Dual Tube), M-4 models only | GG | Flex-A-Thane® .187 ID, M-3 models only |
| NJ | Flex-A-Prene® .312 ID | GH | Flex-A-Thane® .250 ID |
| NK | Flex-A-Prene® .375 ID | GHH | Flex-A-Thane® .250 ID (Dual Tube), M-4 models only |
| NKL | Flex-A-Prene® .375 ID (30 PSI max pressure - longer life) | GK | Flex-A-Thane® .375 ID |
| NL | Flex-A-Prene® .500 ID, M-4 models only | GKK | Flex-A-Thane® .375 ID (Dual Tube), M-4 models only |
| NP | Flex-A-Prene® .750 ID, M-4 models only | NEE | Flex-A-Prene® .093 ID (Dual Tube), M-3 models only |
| TH | Flex-A-Chem® .250 ID | NGG | Flex-A-Prene® .187 ID (Dual Tube), M-3 models only |
| NHHL | Flex-A-Prene® .250 ID (65 PSI max pressure - longer life) | G2G | Flex-A-Thane® .187 ID, M-3 models only |
| | Options (leave this blank for standard model) | | |
| R | Right facing pump head, input / output (Left facing fluid input / output is standard) | | |
| D | Down facing pump head, input / output (Left facing fluid input / output is standard) | | |
| M - 4 2 4 - M N H | Sample Model Number | | |

Features list:

| Features |
|--|
| TFD (Tube Failure Detection) System Alarm |
| FVS (Flow Verification System) Alarm - Requires Micro-Flo Sensor (sold separately) |
| 10,000:1 turndown reversible motor. |
| Three position pump head rotation |
| Tube Life revolution counter with user programmable alarm set-point. |
| Set maximum motor RPM limit. |
| Power interruption re-start options. |
| Four output contacts can be triggered by the status of the TFD system, FVS system, general alarm, rotor direction, motor run/stop, revolution count, motor fail, remote/local setting, input signal failure, output signal failure, and currently active operating mode. |
| Output: One, 6 amp alarm relay |
| Output: Three, dry contact or maximum 30VDC/115VAC 1 amp contact closures |
| Output: Programmable 4-20mA signal or high speed pulse, proportional to pump output |
| Input: One, contact closure (remote start / stop) |
| Input: Remote speed control via 4-20mA, 0-10VDC, high speed digital pulse, contact closure pulse |
| Remote/Local control settings |
| Password protection |
| Display: Motor speed, Tube life revolutions, Tube Failure Detection (TFD) system and Flow Verification System (FVS) alarm status |
| Display: Output in ml/min, oz/min, L/hr, Gal/hr, Gal/day, RPM, and input signal values |
| Automated PPM chemical dosing system |
| Available Operating Modes: |
| Manual (local): speed adjustment |
| Remote input: 4-20mA |
| Remote input: 0-10 VDC |
| Remote input: high speed frequency (pulse) input |
| Remote input: pulse triggered batch dispensing |
| Remote input: proportional PPM (parts per million) dosing with high speed frequency (pulse) input |
| Manual (local): batch dispensing |
| Manual (local): repeating cycle timer |
| Manual (local): fixed speed PPM (parts per million) dosing |

Quick-Disconnect Valve Kits (Sold Separately)

For use with the Quick-Disconnect Flex-A-Prene Tube Assembly

| 3/8" OD, 1/4" Tubing | | 1/2" Hose Barb | | 1/2" M/NPT | |
|----------------------|--------|----------------|--------|------------|--------|
| | | | | | |
| Part # | O-ring | Part # | O-ring | Part # | O-ring |
| KIT-QSV | FKM | KIT-QBV | FKM | KIT-QMV | FKM |
| KIT-QSE | EP | KIT-QBE | EP | KIT-QME | EP |

Note: Quick-Disconnect valves are only available for M-2 and M-3 model pumps.



Color coded terminal block located within the single piece junction box.