

Flowrox™ pumps

Metering FXM tube pumps

Flowrox metering pump is ideal for especially to chemical dosing applications which require accurate metering. To optimise metering performance, we offer FXM2 and FXM3 series pumps with improved performance. They include expanded logic programming and functionality, but also higher capacity.

Flow rate is not affected by variation of the discharge pressure condition. Positive displacement of the tube bore with zero slip provides same output volume on every cycle. The compression point of the tube acts as self-cleaning check valve without clogging risk providing clear flow path with no possibility for vapour lock.

Benefits

- Accurate and safe metering
- Versatile system connectivity
- Self-priming (up to 90 % of full vacuum)
- Only the tube and tube fittings are in contact with the process medium
- Serviceable rotor construction for ease of maintenance

Features

- Fully reversible operation
- Dry run capability
- Field switchable power cord - no need to open pump housing
- Digital touchpad adjustment – precise and reliable
- Available display languages: English, Finnish, French, German, Russian and Spanish



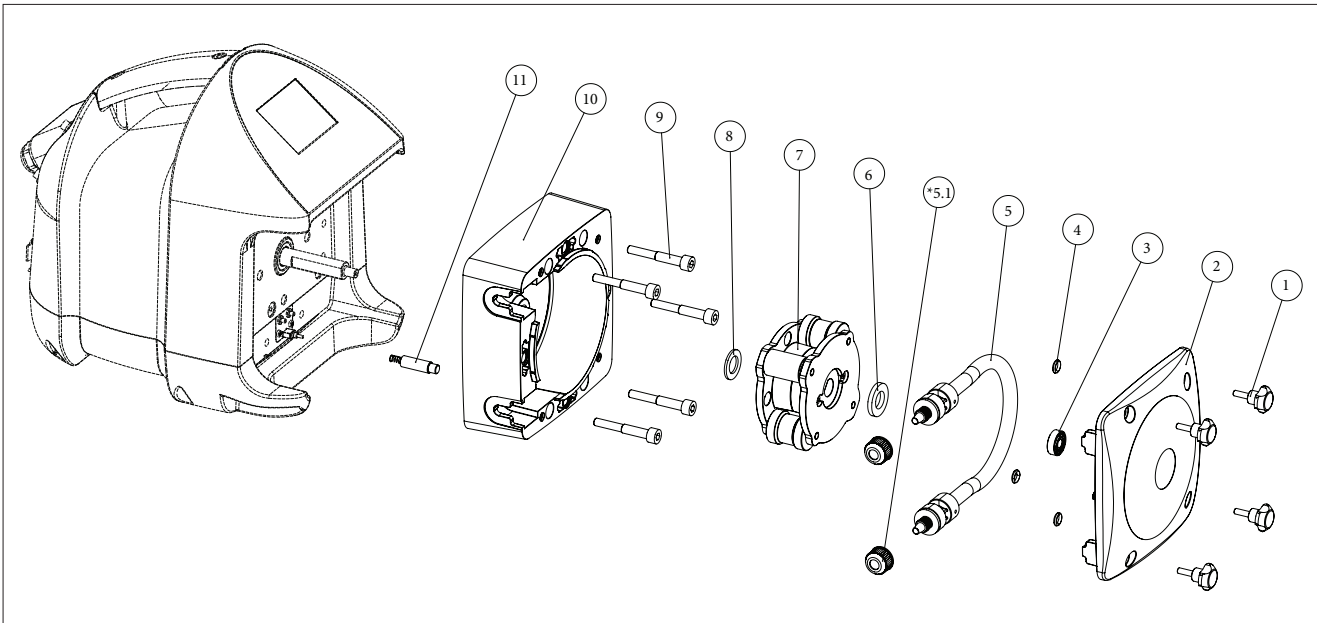
Ideal applications:

- Waste water/water treatment chemicals
- Reagents for mining processes
- Pulp & paper chemical metering
- Various industrial chemical dosing duties

| Technical Data | FXM2-S Metering Pump | FXM3-S Metering Pump |
|---------------------------|-----------------------------------|-------------------------------|
| Weight (shipping weight) | 13 kg (14 kg) / 28.6 lb (30.8 lb) | 20 kg (21 kg) / 44 lb (46 lb) |
| Maximum flow * | 176 l/h / 46.5 GPH | 840 l/h / 221.9 GPH |
| Maximum pressure * | 8,6 bar / 125 psi | 4,5 bar / 65 psi |
| Maximum viscosity | 5000 cp | |
| Maximum fluid temperature | 54° C / 130° F | |
| Motor power | 0,19 kW / 0.25 hp | |

*See page 4 for tube specific maximum flow rates and pressures

Exploded view of pump head FXM2-S

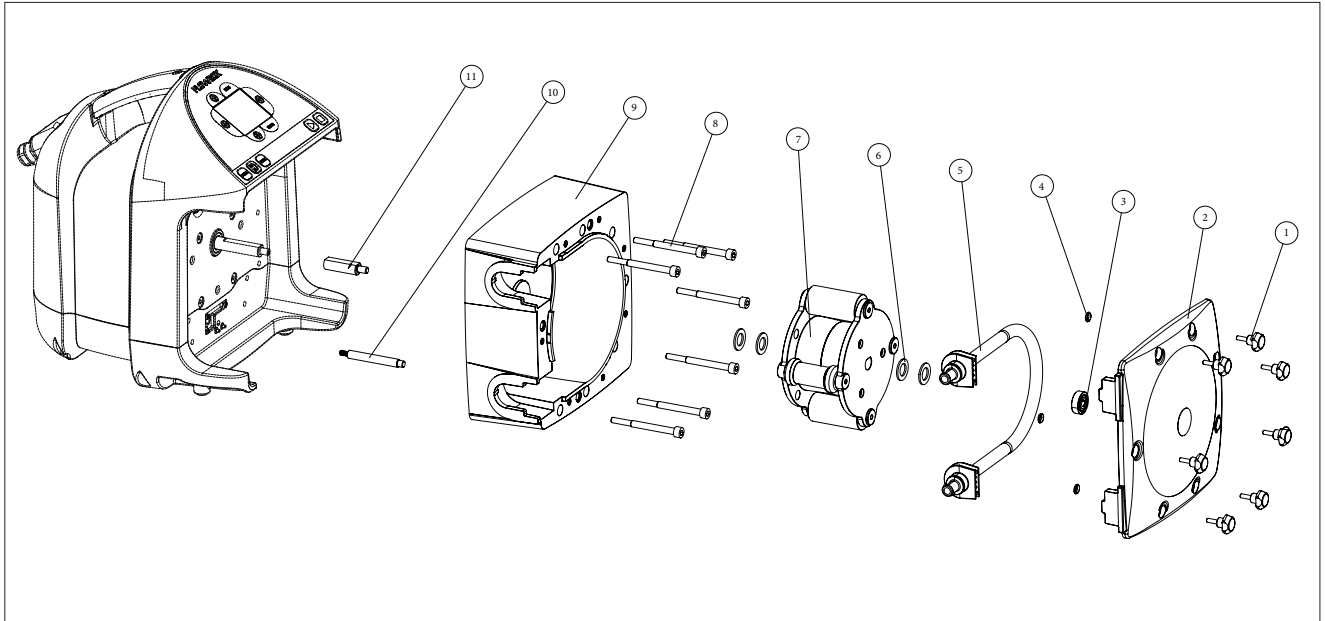


| ITEM NO. | DESCRIPTION | QTY. |
|----------|------------------|------|
| 1 | SCREW | 4 |
| 2 | COVER | 1 |
| 3 | BEARING | 1 |
| 4 | O-RING | 3 |
| 5 | TUBE ASSEMBLY | 1 |
| 6 | WASHER | 1 |
| 7 | ROTOR ASSEMBLY | 1 |
| 8 | WASHER | 1 |
| 9 | HEX SOCKET SCREW | 5 |
| 10 | BODY | 1 |
| 11 | PLUNGER ASSEMBLY | 1 |

Parts 5 and 7 are modular and order specific.

5.1: Only with 3/8" tube nut connectors.

Exploded view of pump head FXM3-S



| ITEM NO. | DESCRIPTION | QTY. |
|----------|------------------|------|
| 1 | SCREW | 7 |
| 2 | COVER | 1 |
| 3 | BEARING | 1 |
| 4 | O-RING | 3 |
| 5 | TUBE ASSEMBLY | 1 |
| 6 | WASHER | 4 |
| 7 | ROTOR ASSEMBLY | 1 |
| 8 | HEX SOCKET SCREW | 7 |
| 9 | BODY | 1 |
| 10 | PLUNGER ASSEMBLY | 1 |
| 11 | SHAFT EXTENSION | 1 |

Parts 5 and 7 are modular and order specific.

Technical specifications

Sizes:

FXM2 and FXM3

Temperature range:

Maximum fluid temperature: 54°C / 130 °F

Minimum & maximum

ambient operating temperature: 0°C to 46°C / 32 °F to 115 °F

Construction materials:

- Pump tube elements
- Norprene® (for chemicals)
 - Tygothane® (for oils and fats)
 - Tygon lined Norprene® (acids).
 - Adapter fittings: PVDF

Accessories wetted components:

- Suction tubing: Clear PVC
- Suction strainer: Natural polypropylene
- Discharge tubing: Natural polyethylene (LLDPE)
- Injection fitting with check valve: Body & insert: PVDF

Non-wetted components:

- Pump head: PBT GF30
 Housing: Powder coated aluminium
 Pump head cover: Clear acrylic
 Cover screws: 300 SS, polypropylene caps
 Roller assembly: Rotor: PBT GF30
 Rollers: POM
 Roller bearings: ball bearing
 Motor shaft: Chrome plated steel
 Leak detection: Capacitive non-contact

Technical data:

- Maximum suction lift: 9 m water, 0.1 bar (Abs) / 30 ft. water, 1.5 psi (Abs)
- Remote adjustment: 4-20 mA, 0-10 VDC or pulse
- Inputs: 2 remote inputs, 1 assignable input
- Feedbacks: 4-20 mA, pulse and 4 alarm contacts
- Voltage (max amp): Automatic identification
96-264 VAC 50/60 Hz (2 amp)
- Accuracy: ± 0.5 %
- Repeatability: ± 0.5 %
- Output speed control range: 1-100 % in 0.1 % increment
0.02-1 % in 0.01 % increment. 5000:1 turndown.
- Enclosure: NEMA 4X / IP66
- Plug type: 125V AC, NEMA 5/15 (US)
230V AC, NEMA 6/15 (US)
230V AC, CEE7/VII (Europe)
230V, BS 1363 (UK)
230V AC, AS/NZS3112 (AUS)

Maximum Flow Rate and Pressure Capabilities:

FXM2

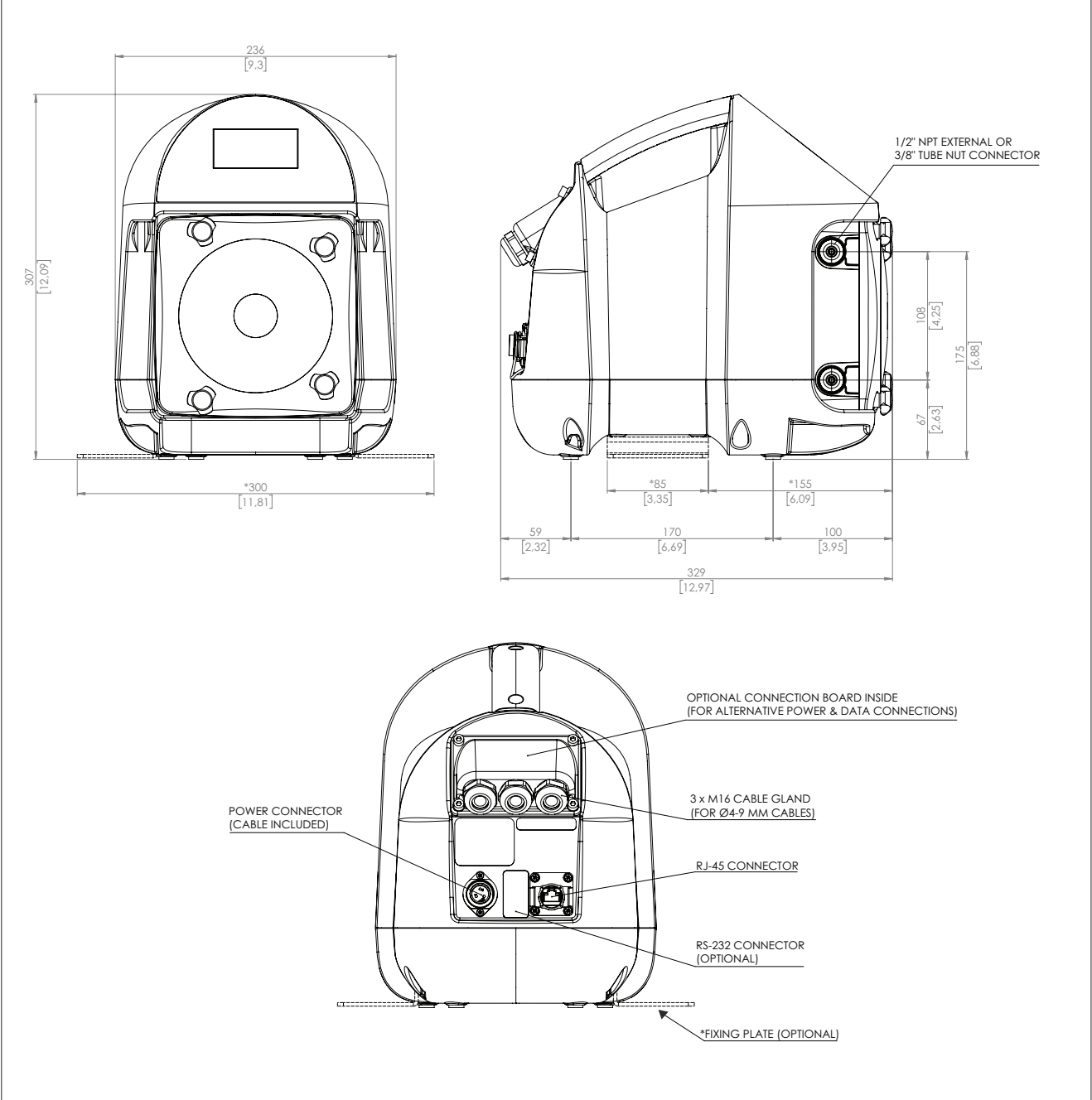
| Tube number | Tubing material | Bar/PSI | Liters/Gallons per hour |
|-------------|----------------------|---------|-------------------------|
| N011 | Norprene | 8,6/125 | 11/2.9 |
| N092 | Norprene | 8,6/125 | 92/24.3 |
| N176 | Norprene | 2,1/30 | 176/46.5 |
| G162 | Tygothane | 4,5/65 | 162/42.8 |
| T165 | Tygon lined Norprene | 3,5/50 | 165/43.6 |

FXM3

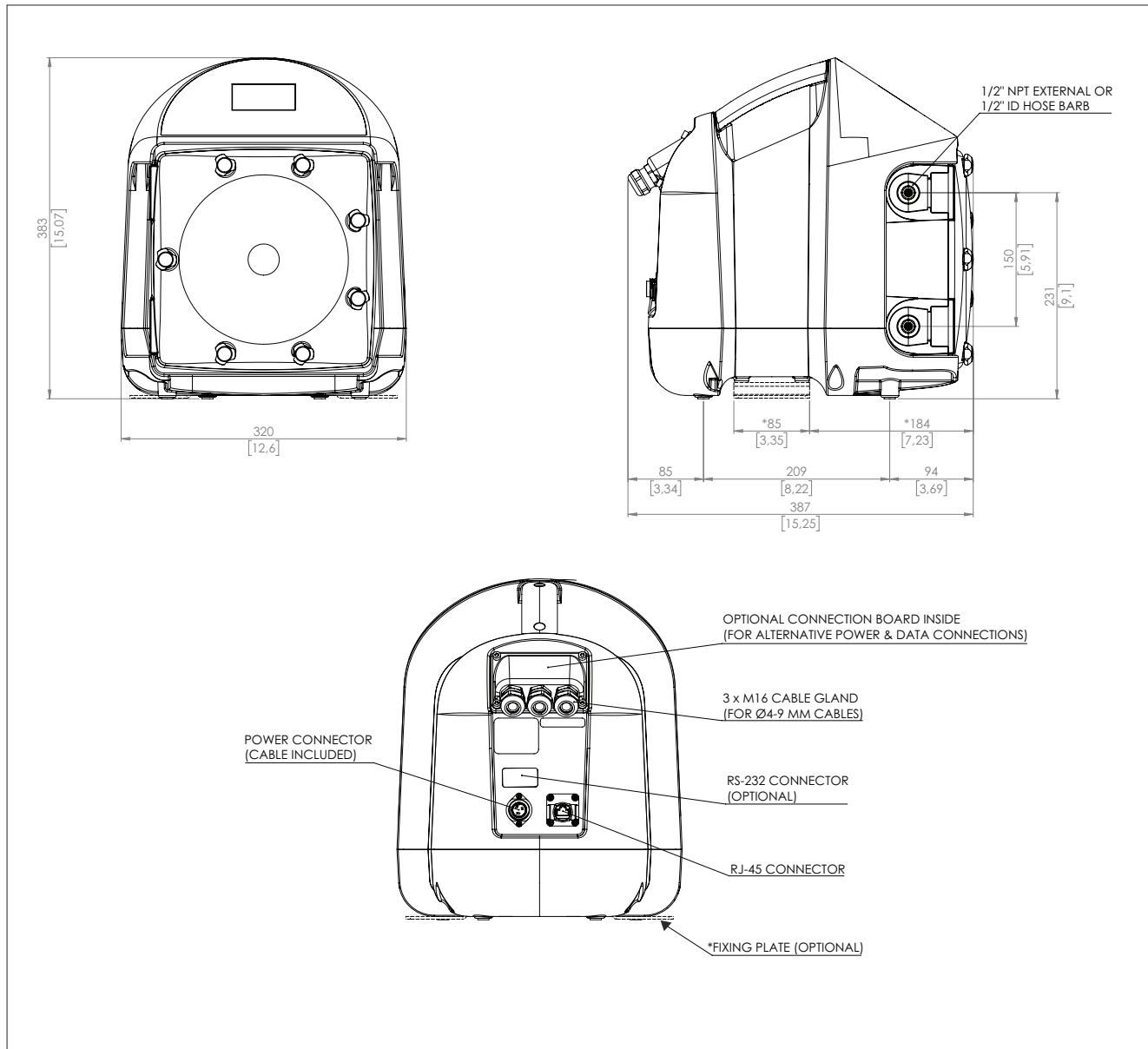
| Tube number | Tubing material | Bar/PSI | Liters/Gallons per hour |
|-------------|----------------------|---------|-------------------------|
| N269 | Norprene | 2,1/30 | 268/70 |
| N529 | Norprene | 3,4/50 | 529/139.7 |
| N840 | Norprene | 2,1/30 | 840/221.9 |
| G350 | Tygothane | 4,5/65 | 350/94.5 |
| T300 | Tygon lined Norprene | 2,1/30 | 300/81.2 |

Dimensions

FXM2:



FXM3:



Pump model selection guide

Metering Pumps FXM

| 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | . |
|-----|----|----|----|----|----|------|----|---|
| FXM | 2 | S | 3 | 4 | P | N269 | D | |

| 1. | TYPE |
|-----|----------|
| FXM | Metering |

| 2. | FRAME |
|----|---------------|
| 2 | Frame size: 2 |
| 3 | Frame size: 3 |

| 3. | MODEL |
|----|-------|
| S | SMART |

| 4. | MOTOR SPEED |
|----|-------------|
| 3 | 175 RPM |

| 5. | PLUG TYPE: |
|----|---------------------------|
| 4 | 125V AC, NEMA 5/15 (US) |
| 5 | 230V AC, NEMA 6/15 (US) |
| 6 | 230V AC, CEE 7/VII (EU) |
| 7 | 230V, BS 1363 (UK) |
| 8 | 230V AC, AS/NZS3112 (AUS) |

| 6. | CONNECTION TYPE FXM2 |
|-------|--------------------------------|
| Blank | 3/8" tube compression fittings |
| P | 1/2" NPT external |

| 6. | CONNECTION TYPE FXM3 |
|----|----------------------|
| B | 1/2" hose barb |
| P | 1/2" NPT external |

| 7. | TUBE MATERIAL FXM2 |
|------|----------------------|
| N092 | Norprene |
| N176 | Norprene |
| G162 | Tygothane |
| T165 | Tygon lined Norprene |

| 7. | TUBE MATERIAL FXM3 |
|------|----------------------|
| N269 | Norprene |
| N529 | Norprene |
| N840 | Norprene |
| G350 | Tygothane |
| T300 | Tygon lined Norprene |

| 8. | OPTIONAL AUXILIARIES: |
|----|-----------------------|
| A | Flow switch |

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