

Flowrox™ pumps

Metering Flowrox FXM tube pumps

Flowrox metering pumps are ideal for 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



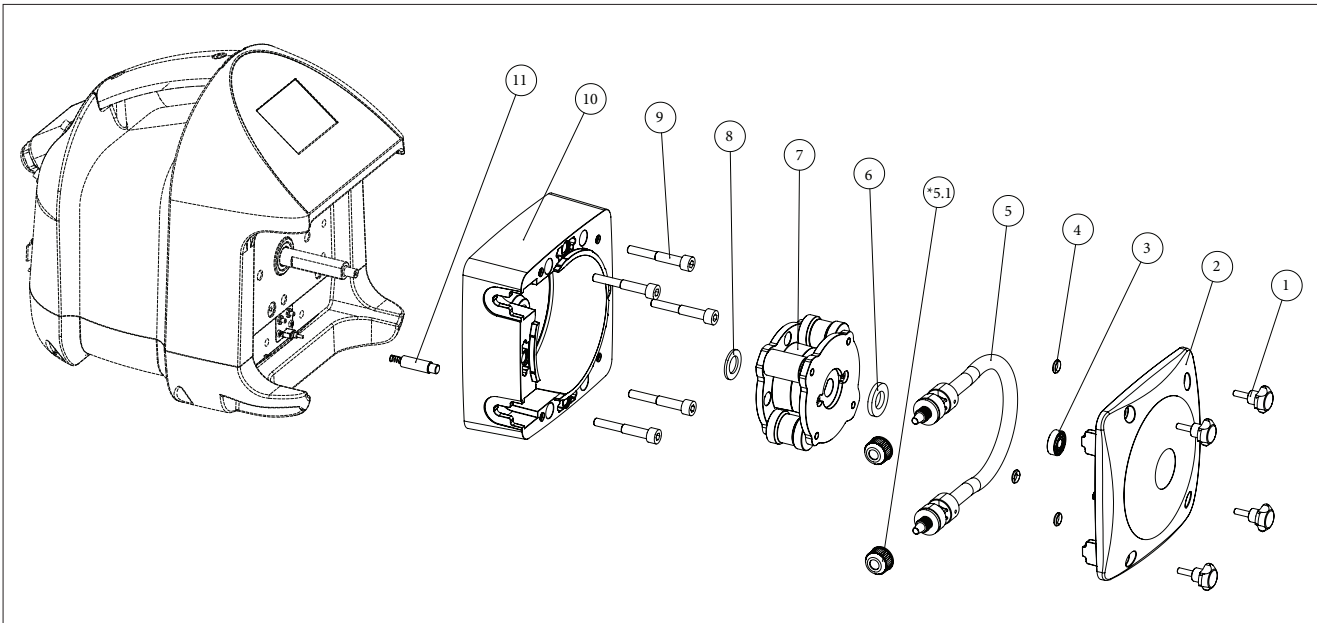
Ideal applications:

- 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

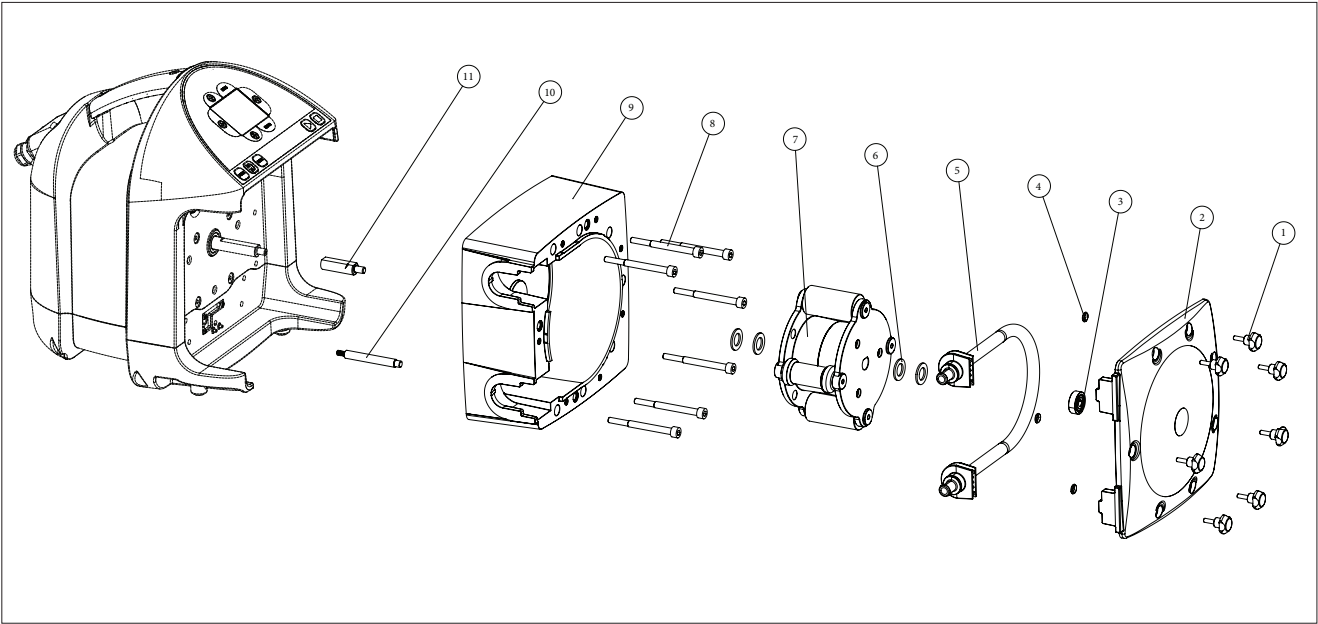


ITEM NO.	DESCRIPTION	QTY.
1	SCREW	4
2	COVER	1
3	BEARING	1
4	O-RING	3
5	TUBE ASSEMBLY	1
6	WASHER	1
7	ROTOR ASSEMBLY	1
8	WASHER	1
9	HEX SOCKET SCREW	5
10	BODY	1
11	PLUNGER ASSEMBLY	1

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
 Industrial network protocols: Ethernet/IP, Modbus TCP
 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)

Certifications:

- UL standard 778, 6th edition, motor operated water pumps
- CAN/CSA standard C22.2 No. 109-14, 5th edition
- WQA according to NSF/ANSI/ CAN 61 & NSF/ANSI/ CAN 372 (applies for Flowrox FXM pumps, Norprene® tubes)



Maximum Flow Rate and Pressure Capabilities:

FXM2

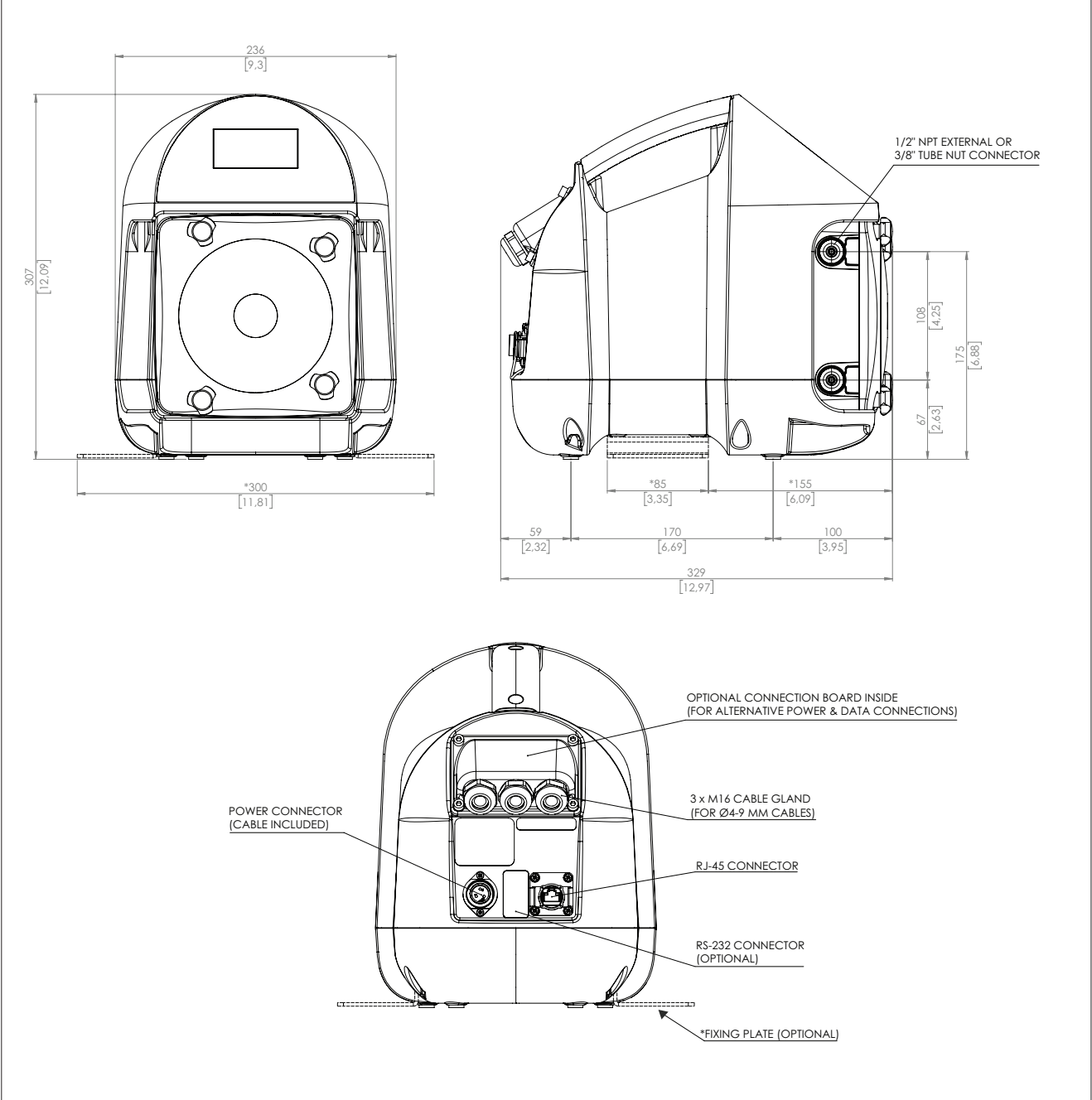
Tube number	Tubing material	Bar/PSI	Liters/Gallons per hour
N011	Norprene	8,6/125	11/2.9
N092	Norprene	8,6/125	92/24.3
N176	Norprene	2,1/30	176/46.5
G162	Tygothane	4,5/65	162/42.8
T165	Tygon lined Norprene	3,5/50	165/43.6

FXM3

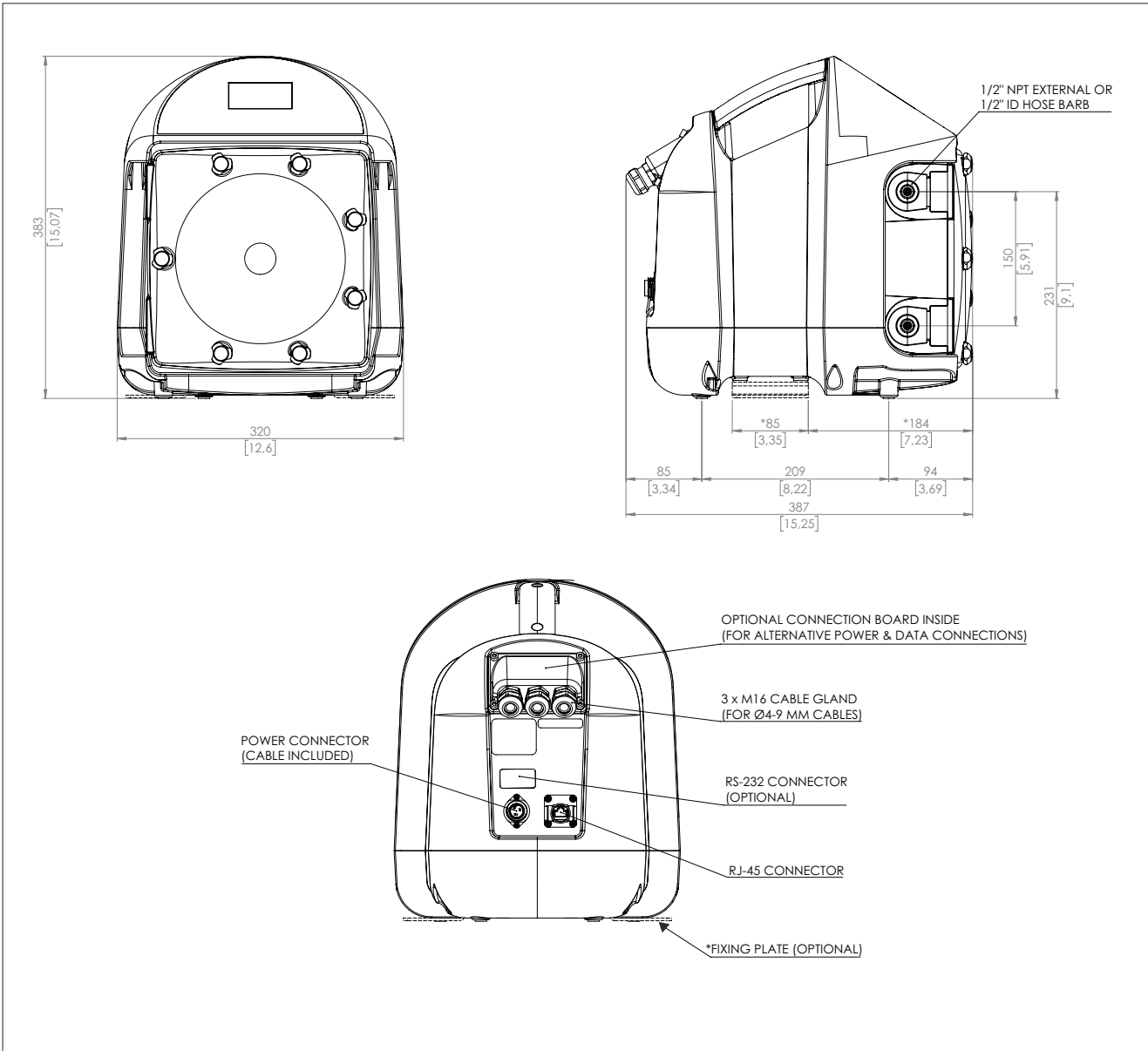
Tube number	Tubing material	Bar/PSI	Liters/Gallons per hour
N269	Norprene	2,1/30	268/70
N529	Norprene	3,4/50	529/139.7
N840	Norprene	2,1/30	840/221.9
G350	Tygothane	4,5/65	350/94.5
T300	Tygon lined Norprene	2,1/30	300/81.2

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
N011	Norprene
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	Ethernet/IP, Modbus TCP

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