Blue-White®

Video link:

M1

FLEXFLO® Peristaltic Metering Pump

Features

> Tube Failure Detection senses tube rupture. No false triggering.

> Brushless DC variable speed motor for precise flows

> Heavy duty UV-resistant display shield protects pump controls.

> Compatible with Blue-White's Flow Verification Sensor.

> "C" Control Model includes multiple Input/Output options

> "B" Base Model includes manual speed control

NSF Certified to NSF / ANSI Standard 61 · ETL c us · CE · NEMA 4X

Highlights

Flow Range
.0001 – 5.60 GPH
.0004 – 21.2 LPH

Pressures
Up to 100 PSI
(6.89 bar)

Turndown ratio
10,000 : 1

Exclusive
Enhanced Tube Failure Detection
(TFD+)

Motor
Brushless
DC

Warranty
5 Years

Control Methods

Control Methods	Manual Control	4-20mA Input	Remote Start/Stop	4-20mA Output	Alarm Output	FVS	Motor Status Output	Prime Button	Lockout Feature
M1C	•	•	•	•	•	•	•	•	•
M1B	•							•	•

For more help and information regarding **M1**, please visit www.blue-white.com or scan this QR code.

Engineering Specifications

Maximum Working Pressure (Excluding pump tubes)	Up to 100 PSI (6.89 bar)
Maximum Fluid Temperature	185 °F (85 °C)
Maximum Viscosity	5,000 centipoise
Maximum Suction Lift	30 ft. of water at sea level (14.7 atm psi)
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	115V60Hz 1 PH (0.6A max., 80W max.)
	220V50Hz 1 PH (0.3A max., 80W max.)
	230V60Hz 1 PH (0.3A max., 80W max.)
	230V50Hz 1 PH (0.3A max., 80W max.)
	240V50Hz 1 PH (0.3A max., 80W max.)
Power Cord Options	115V60Hz = NEMA 5/15 (USA)
	230V60Hz = NEMA 6/15 (USA)
	220V50Hz = CEE 7/VII (EU)
	240V50Hz = AS 3112 (Australia/New Zealand)
	230V50Hz = BS 1363/A (UK)
Signal Connectors	M12 - 5 pin (IP67 rated)
Motor	Brushless DC, 42W.
Duty Cycle	Continuous
Motor Speed Adjustment Range	10,000:1 (0.01% - 100%) Max rpm = 65rpm
Maximum Overall Dimensions	7.25” W x 9” H x 10” D (18.5 W x 22.9 H x 25.2 D cm)
Product Weight	6 lb. (2.7 Kg)
Approximate Shipping Weight	13 lb. (5.9 Kg)
Approximate Shipping Dimensions	10.5” W x 13.75” H x 11” D (26.7 W x 35 H x 28 D cm)
Control Panel Cover	UV-Resistant Polycarbonate
Enclosure	NEMA 4X, Valox® (PBT)
RoHS Compliant	Yes
Standards	NSF/ANSI 61, cETLus, CE

Materials of Construction

Non-wetted Components:	
Enclosure:	Valox® (PBT)
Pump Head:	Valox® (PBT) thermoplastic
Controls/Display Shield:	Polycarbonate, Gray - UV Resistant
Pump Head Cover:	Polycarbonate
	Permanently lubricated sealed motor shaft support ball bearing.
Cover Screws:	Stainless steel, polypropylene cap
Roller Assembly:	Rotor: Valox® (PBT)
	Rollers: Nylon
	Roller Bearings: Bronze
TFD+ System Sensor:	Polysulfone (PES)
Power Cord:	3 Conductor, SJTW-A water-resistant
Mounting Brackets and Hardware:	316 Stainless steel screws, GF Nylon bracket

Wetted Components:	
Pump Tube Assembly:	Tubing : Flex-A-Prene®, Flex-A-Thane® or Flex-A-Chem®
	Adapter Fittings: PVDF

NOTE: Any accessories such as injectors, foot valves, strainers, tubing, tanks, and M12 Cables sold separately.

Output Specifications

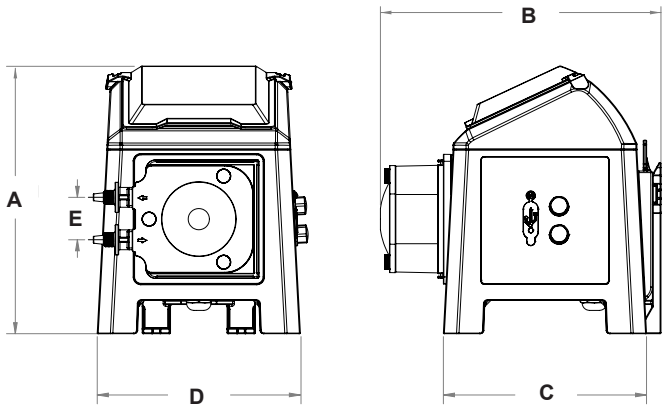
Tube Model	Feed Rate			Max Speed	Max Pressure	Max Temperature
	GPH	LPH	mL/Min	RPM	PSI (bar)	°F (°C)
A1-1*	.0001 - 1.09	.0004 - 4.13	.0069 - 69	65	65 (4.50)	130 (54)
A1-3*	.0005 - 5.60	.0021 - 21.2	.0353 - 353	65	50 (3.45)	130 (54)
A1-4*	.0001 - 0.44	.0002 - 1.68	.0028 - 28	65	100 (6.89)	185 (85)
A1-6*	.0001 - 1.35	.0005 - 5.14	.0085 - 85	65	100 (6.89)	185 (85)
A1-7*	.0004 - 4.17	.0015 - 15.8	.0263 - 263	65	50 (3.45)	185 (85)
A1-8*	.0003 - 3.09	.0011 - 11.7	.0195 - 195	65	50 (3.45)	130 (54)

NOTE: Data pertains to both “T” and “M” connection types.

Dimensions

Dim	Inch	cm
A	9.46”	24.02
B	9.92”	25.19
C	7.18”	18.23

Dim	Inch	cm
D	7.18”	18.23
E	1.5”	3.81



Model Number Matrix

FLEXFLO® Model Number

M1	FLEXFLO® Peristaltic Metering Pump

Control

B	Base = Manual Speed Control (No I/O)
C	Control = 4-20mA Input, 4-20mA Output, Manual Speed Control, Remote Start/Stop Input, Outputs (TFD, FVS, Motor)

Power Cord (Operating voltage requirement 96VAC to 264VAC)

4	115V 50/60Hz, power cord NEMA 5/15 plug (US) (detachable - 6 ft)
6	220V 50/60Hz, power cord CEE 7/V11 plug (EU) (detachable - 6 ft)
X	No Power Cord (Power cord is required - See accessories for power cord options)

Pump Tube Size and Material

1	1/4” OD Flex-A-Thane® | 0.0001 - 1.09 GPH | .0069 - 69 mL/Min | 65 PSI (4.5 bar)
3	7/16” OD Flex-A-Thane® | 0.0005 - 5.60 GPH | .0353 - 353 mL/Min | 50 PSI (3.45 bar)
4	1/4” OD Flex-A-Prene® | 0.0001 - 0.44 GPH | .0028 - 28 mL/Min | 100 PSI (6.89 bar)
6	3/8” OD Flex-A-Prene® | 0.0001 - 1.35 GPH | .0085 - 85 mL/Min | 100 PSI (6.89 bar)
7	7/16” OD Flex-A-Prene® | 0.0004 - 4.17 GPH | .0263 - 263 mL/Min | 50 PSI (3.45 bar)
8	7/16” OD Flex-A-Chem® | 0.0003 - 3.09 GPH | .0195 - 195 mL/Min | 50 PSI (3.45 bar)

Inlet/Outlet Connection Size, Connection Type

T	3/8” OD x 1/4” ID Tube Compression Fitting
M	1/2” Male NPT Fitting
MB	1/2” Male BSPT Fitting, Natural PVDF (Kynar)

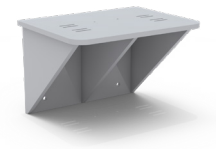
M1	B	4	-	1	T	**Sample Model Number**

Accessories

KIT-S07
KIT-S15
KIT-S30

*** Includes cover and foot valve**

KIT-S07 (7 Gallon), KIT-S15 (15 Gallon), KIT-S30 (30 Gallon)
STAR III TANKS, PP



KIT-PSM (Lg), MIT-PSS (Sm)
WALL MOUNT BRACKET, HDPE

A-050 5mL
A-100 10mL
A-150 15mL

A-050, A-100, A-150
SILICON OIL

90010-663 115V/60Hz NEMA 5/15
90010-664 220V/50Hz CEE 7/V11
90010-665 230V/50Hz BS 1363/A
90010-666 240V/50Hz AS 3112
90010-696 230V60Hz NEMA 6/15
90010-821 115V Lockable

POWER CABLES - 6 ft

KIT-M12
TWO M12 CABLES - 9.8 ft

A-014NK-6A
PVDF INJECTOR, 1/4” ID tubing

A1-(see spare parts page)
Spare Tube Element

Visit Accessory Pages for More Options

M1 is sold and serviced exclusively by highly skilled, factory authorized technicians.

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