

## GENERAL DESCRIPTION

Compact benchtop pumps for accurate low-flow fluid delivery with intuitive touchscreen interface. Choose between Single- or Dual-Channel pump system.

## MARKETS & APPLICATIONS

The Ismatec<sup>®</sup> Reglo Miniflex<sup>®</sup> Digital Pump System provides a small footprint, making it ideal for applications that require a space-saving design. The intuitive touch-screen interface makes it ideal for general-purpose laboratory, research and development, and pilot-scale applications including fluid transfer, filtration, bioreactor feed, or accurate repetitive dispensing.

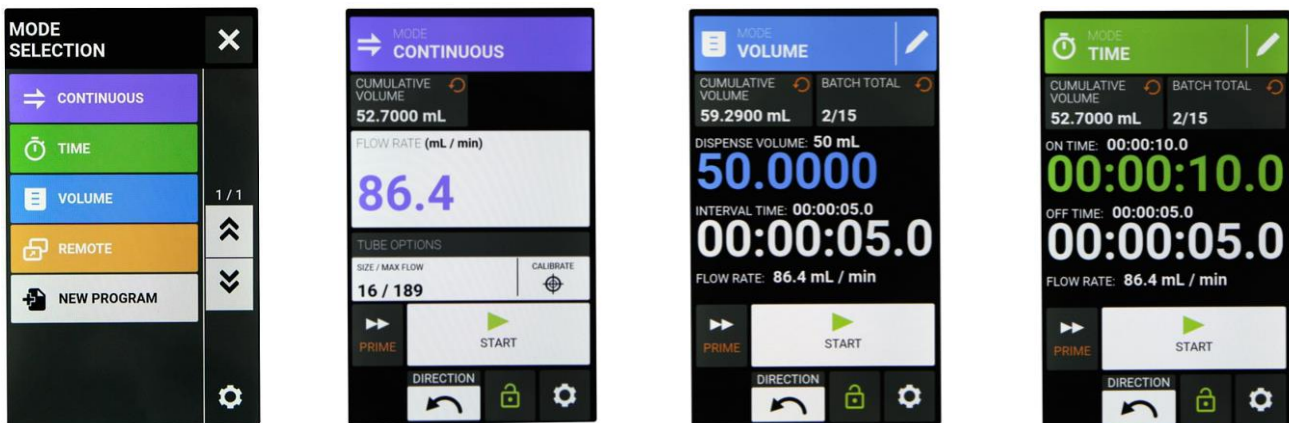


## FEATURES & BENEFITS

- 5" (12.7 cm) capacitive TFT/RGB touch screen for crisp resolution and a wide viewing angle
- Save and recall up to 50 commonly used dispense programs for rapid set up
- Three-level user access gives you the option of controlling who can operate the pump and at what level
- Flexible operational control via touchscreen, EtherNet/IP, serial, or analog remote control
- Over-the Air firmware updates keeps your pump up to date
- Miniflex<sup>®</sup> pump head accepts continuous Masterflex<sup>®</sup> L/S<sup>®</sup> pump tubing for uninterrupted fluid paths
- Selectable tubing lifetime timer
- Integrated open-head sensor stops the drive when the pump head is opened

## OPERATION MODES

Select between Continuous run, Volume dispense and Time dispense modes. Batch control and interval/off time are available in Volume dispense and Time dispense modes. Optimize dispensing applications in Volume mode with anti-drip and speed ramping. Remote control options include analog control, serial control, and control through EtherNet/IP.



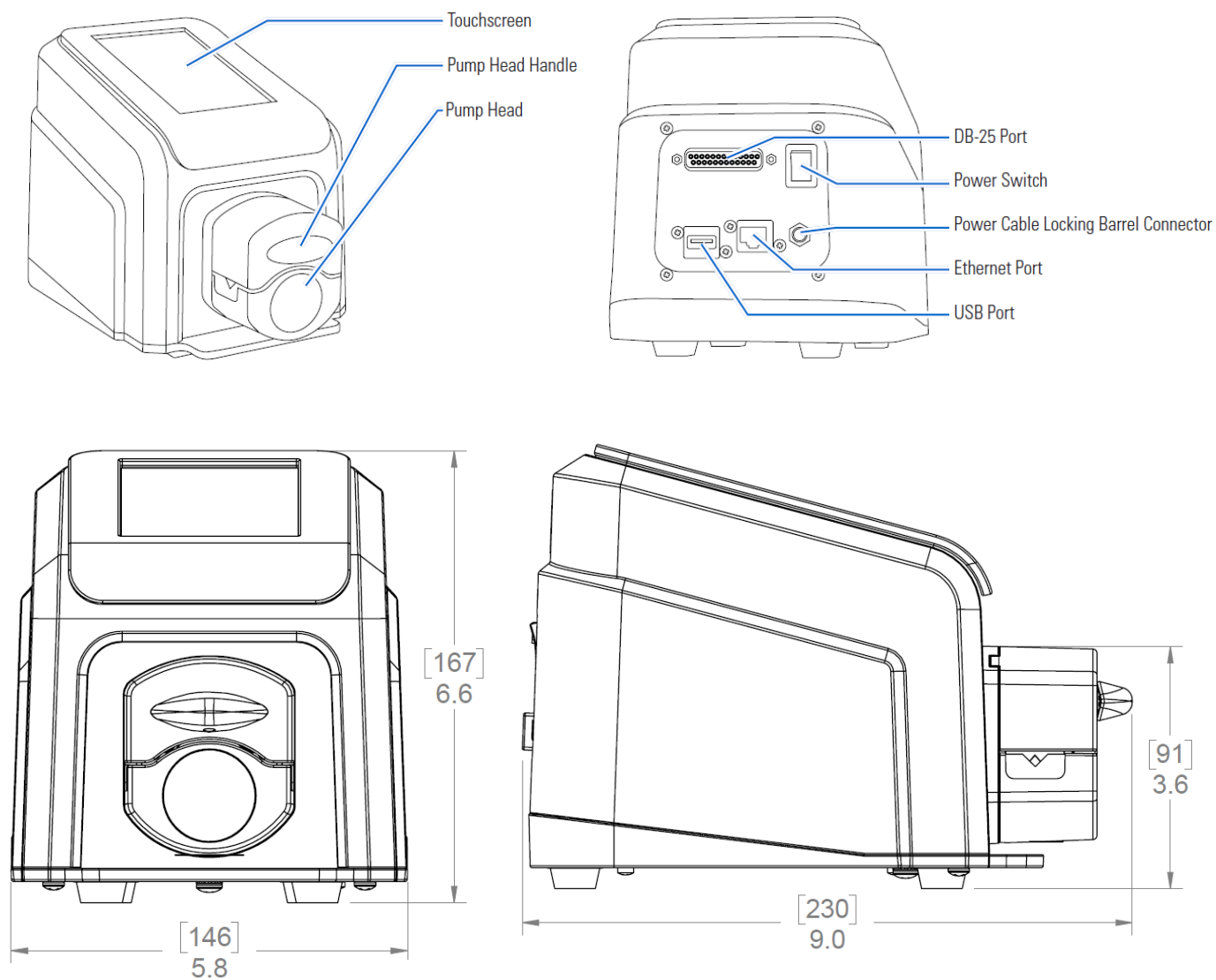
## ORDERING INFORMATION

Model	Max Flowrate (per channel)	SKU
Single Channel System	367 mL/min	MFLX78018-40
Dual Channel System	189 mL/min	MFLX78018-42

### Pump Accessories:

SKU	Description
MFLX07523-92	Foot switch, momentary start/stop; 1.8-m (6-ft) cable
MFLX07523-95	Cable assembly, DB25 male connector and 7.9-m (25-ft) cable with stripped wire ends
MFLX07523-94	DB25 male connector, use to create your own cable.
MFLX07523-97	Handheld remote controller; 1.8-m (6-ft) cable.
MFLX78006-90	USBA to USBA Serial Control Cable (for remote control)

## DIMENSIONS/DRAWINGS



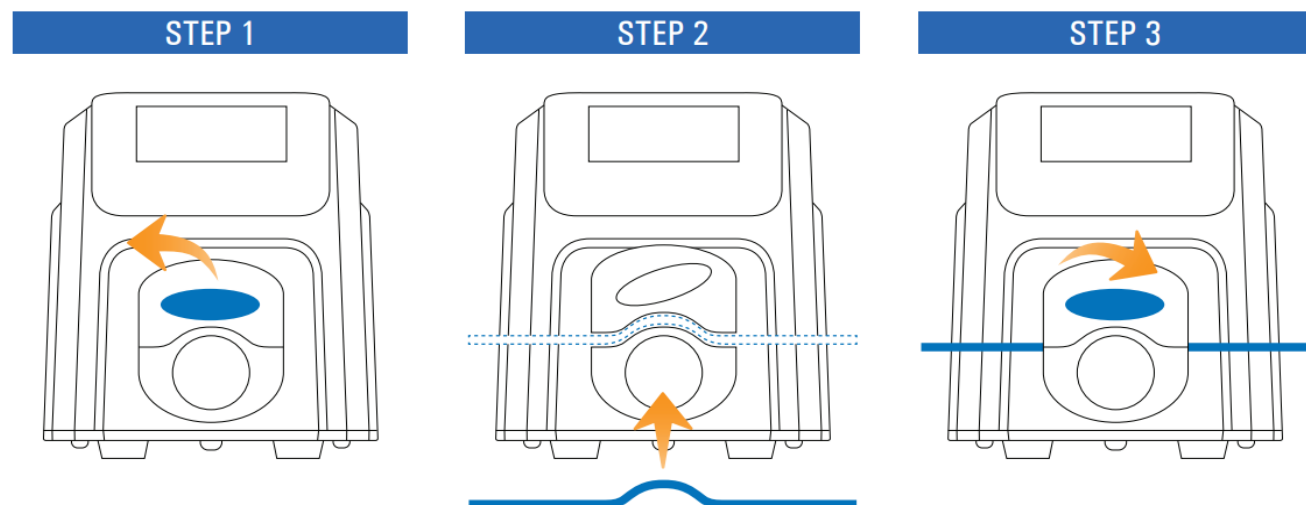
## SPECIFICATIONS

Catalog number	MFLX78018-40	MFLX78018-42
<b>Performance specifications</b>		
Flow capacity	0.008 to 367 mL/min	0.008 to 189 mL/min
Speed range	0.2 to 350 rpm	
Pump head included	MFLX77220-20	MFLX77220-30
Number of channels	1	2
Number of Rollers	3	
Maximum torque continuous	6.48 kg-cm (90 oz-in)	
Reversible	Yes	
Remote digital connection	EtherNet/IP (RJ-45), Serial (USB)	
Analog Remote signal - Inputs	0 to 20 mA, 20 to 0 mA, 4 to 20 mA, 20 to 4 mA; 0 to 10V, 10 to 0 V, 0 to 5 V, 5 to 0 V; Start/Stop, Direction (CW/CCW), Prime via contact closure	
Analog Remote signal - Outputs	0 to 20 mA, 20 to 0 mA, 4 to 20 mA, 20 to 4 mA; 0 to 10V, 10 to 0 V, 0 to 5 V, 5 to 0 V; Tach output 5V TTL pulse, Drive running	
<b>Electrical specifications</b>		
Voltage VAC (50/60 Hz)	90 to 260 VAC Uses a power adapter with 24VDC output	
Current	1.3 A @ 115 VAC; 0.6 A @ 230 VAC	
Fuse rating	3.15 A / 250 V	
Display	5" (12.7 cm) capacitive TFT/RGB touch screen with in-plane switching (wide angle view); 800 x 480 pixels with LCD backlight	
Motor type	No maintenance BLDC with encoder	
Motor/Turndown	1750:1	
Speed control resolution/accuracy	0.1 rpm / 0.1%	
<b>Physical specifications</b>		
Housing materials	Drive	ABS Plastic housing with an aluminum chassis and aluminum bezel
	Head	Housing: Polyarylamide Rotor: Stainless Steel and Aluminum Rollers: Thermoplastic Polyester
IP rating	IP31 per IEC 60529	
Agency listings	CE, RoHS 2, Power supply is UL, cUL	
Operating temperature	0 to 40°C (32 to 104°F)	
Humidity	10 to 90% non-condensing	
Storage temperature	-25 to 65°C (-13 to 149°F)	
Dimensions (L x W x H)	22.9 x 14.7 x 15.7 cm (9.0" x 5.8" x 6.3")	
Shipping weight	3.2 kg (7 lbs)	
Noise rating	<70 dBA @ 1m	

## NOMINAL FLOWRATES

L/S® tubing size	Inner Diameter	ml/rev	MFLX78018-40	MFLX78018-42
L/S® 13	0.8 mm (0.03")	0.04	0.008 to 14 mL/min	0.008 to 14 mL/min per channel
L/S® 14	1.6 mm (0.06")	0.14	0.028 to 49 mL/min	0.028 to 49 mL/min per channel
L/S® 16	3.2 mm (0.12")	0.54	0.108 to 189 mL/min	0.108 to 189 mL/min per channel
L/S® 25	4.8 mm (0.19")	1.05	0.21 to 367 mL/min	NA

## TUBE LOADING



Turn the pump head handle counterclockwise to raise the upper section of the pump head

Place the tube into the opening, ensuring that the tube is:

- a. Completely inside the pump head.
- b. Seated over the roller-head.
- c. Sitting in the V-shaped grooves located on either side of the pump head

Turn the pump head handle clockwise to close the pump head

## COMPLETE SYSTEM COMPONENTS

Pump includes integral drive and pump head. Tubing and fittings are sold separately. Use only Masterflex® L/S® pump tubing. Over 20+ formulations are available with most popular options listed below.

L/S® tubing size	Inner Diameter	Silicone (Platinum cured)	Puri-Flex™ (TPE)	PharMed® BPT
L/S® 13	0.8 mm (0.03")	MFLX96410-13	MFLX96419-13	MFLX06508-13
L/S® 14	1.6 mm (0.06")	MFLX96410-14	MFLX96419-14	MFLX06508-14
L/S® 16	3.2 mm (0.12")	MFLX96410-16	MFLX96419-16	MFLX06508-16
L/S® 25*	4.8 mm (0.19")	MFLX96410-25	MFLX96419-25	MFLX06508-25

\*dual channel model only