# 100.0

Intelligent Micro Pump MP-32-110S



Intelligent Micro Pump MP-32-110P

# Auto Valve-equipped Linear-drive Pulse Control **Intelligent Micro Pump MP-32 Series**

Uses FLOM's unique configration of swithing valve and linear-drive pump

#### Features

- Improved near-zero pulse flow
- Problems with bubbles greatly reduced
- □ Long life plunger seal
- □ Upper and lower pressure limiters
- □ Space-saving compact design
- □ Control with RS232C communication protocol

Product Name	Intelligent Micro Pump	
Product Number	MP-32-110S	MP-32-110P
Pump Head Material	SUS316	PEEK
Max Pressure*1	40 MPa (5800 psi)	20 MPa (2900 psi)
Flow Rate Range*2	$0.1 \sim 500.0 \mu\text{L/min}$	
Flow Per Stroke	80 μL	
Plunger Stroke	10 mm	
Flow Repeatability*2	< 0.3 % RSD (10 ~ 250 \(\mu\)L/min)	
Flow Accuracy*2	$\pm$ 2.0 % or $\pm$ 0.2 $\mu$ L/min or less, whichever is greater (at 250 $\mu$ L/min or the lower)	
Flow Mode	Continuous flow mode, Timer flow mode	
Satefy Function	Upper / lower pressure limiters	
Pressure Accuracy	± 0.2 MPa (± 29 psi)	
Wetted Materials	SUS: Sapphire, Ruby, PCTFE, PFA, UHMW-PE, FFKM, ELGILOY®*3, PEEK, SUS316 PEEK: Sapphire, Ruby, PCTFE, PFA, UHMW-PE, FFKM, PEEK	
Remote Control	Input: START / STOP , Output: ERROR / FUNC (either one of READY / END / RUN) DC1-5V Input: Setup flow rate , DC1-5V Output: Pressure signal	
Communication	RS232C, RS485 (between FLOM devices)	
Dimensions	$150 \text{ (H)} \times 150 \text{ (W)} \times 240 \text{ (D)} \text{ mm}$ , excluding protuberances	
Weight	Approx. 5.1 kg	
Power	AC100 ~ 240V (50 / 60 Hz) , MAX 250 VA	
Environment Temperature	$5 \sim 40  ^{\circ}\text{C}$ , $20 \sim 80  ^{\circ}\text{RH}$ (Non-condensing)	
Order Code	SMP-P5501	SMP-P5502

<sup>\*1:</sup> Maximum pressure is only sustained intermittently, this does not mean maximum pressure under continuous use.
\*2: Test data generated under FLOM's standard test conditions.
\*3: ELGILOY® is a registered trademark of the Elgiloy Specialty Metals.

## Roller Pump

### **Roller Pump WP-21**

# Great for plunger pump cleaning and basic pumping applications

### Features

- Choose tubing to match your solvent
- Tube cassette can be set in any of 4 directions
- Space-saving compact design

Product Name	Roller Pump	
Product Number	WP-21	
Flow Rate Range	Approx. 0.5, 1.0, 2.0, 3.0 mL/Min. (4 step settings in rotary style)	
Features	Hold down front switch to purge (approx. 5mL/min)	
Flow Rate Accuracy	± 5 % (fresh Pharmed® BPT*1)	
Max Pressure	90 kpa or less (Pharmed® BPT*1)	
Intake Pressure	-90 kpa or less (Pharmed® BPT*1)	
Liquid Temperature Range	5 ~ 50 °C	
Rotary Direction	Clockwise when viewed from front	
Remote Control	Input: OFF / ON switch	
	Output: Error from open collector	
Tubing	Pharmed® BPT*1 / Fluran F-5500-A / TransMaster TM-15	
Dimensions	65 (H) × 46 (W) × 110 (D) mm, exmcluding protuberances	
Weight	Approx. 0.5 kg	
Power	DC 24 V, MAX 15 W (AC Adapter included)	
Order Code	SWP-F021	

<sup>\*1: &</sup>quot;Pharmed® BPT" is a registered trademark of Saint-Gobain, S.A.







Pharmed® BPT (standard)



Fluran F-5500-A (sold separately)



TransMaster TM-15 (sold separately)

<sup>\*</sup> Product comes with Pharmed® BPT tubing standard. Please contact us if you prefer Fluran F-5500-A or TransMaster TM-15 tubing.

<sup>\*</sup> Pumping action begins automatically as soon as the power is turned on.