

Basic Syringe Pump 3-Year Warranty
SPLab Series

SPLab01



SPLab02



SPLab04



SPLab06



SPLab08



SPLab10



SPLab12



■ Introduction

The syringe pump with infusion/withdrawal mode. Online flow rate modification function: the pump is running, without stopping, adjust the flow rate at any time to meet complex application. Stainless steel body, and large-screen color LCD is easy to operate. It can install and fix different types of injectors or syringes, and it is suitable for transferring micro flow rates with high precision (non-medical).

■ Features

- Colorful LCD display: Friendly interface, large-screen LCD display every technical parameter in real time.
- Input injector inner diameter function: Can choose the injector from the list or input the injector inner diameter directly.
- Two measurement modes for selection: Infusion volume --- Infusion rate, Infusion volume --- Infusion time.
- 6 different working modes: Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous and additional mode (infusion/withdrawal, then exclude bubble). The parameters of each working mode saving separately.
- Protection function: The pump will stall and give an alarm when the drive structure of the pump is blocked.
- Online flow rate modification function: the pump is running, without stopping, adjust the flow rate at any time to meet complex application.

■ Technical Parameters

Working mode	Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous						
Channel number	1	2	4	6	8	10	12
Syringe size	10μL-150mL		10μL-10mL				
Syringe selection	Syringe size and customized diameter						
Linear speed	5μm/min-132mm/min(Flow rate=Linear speed*syringe inner cut area)						
Min.linear rate	5μm/min						
Linear force	≥25kgf						
Max.stroke	140mm						
Stoke resolution	0.078μm/μstep						
Accuracy	Error≤±0.5%(Stroke≥30% of maximum stroke)						
Display mode	320 * 240TFT-LCD						
Control method	Rotary encoded switch and imported membrane keypad						
Power-off memory	Display the previous data parameter after power supply again						
External control	Active switch signal,5V						
Communication interface	RS485,Modbus protocol,(RTU mode)						
Power supply	AC 220V±10%(standard)、AC 110V±10%(option)						
Condition temperature	0-40℃						
Relative humidity	<80%						
Dimension(mm)	282*214*148	282*248*158	282*220*165	282*243*165	282*265*163	295*292*175	325*314*175
Weight	5.26kg	5.40kg	5.40kg	5.66kg	5.78kg	5.96kg	6.16kg

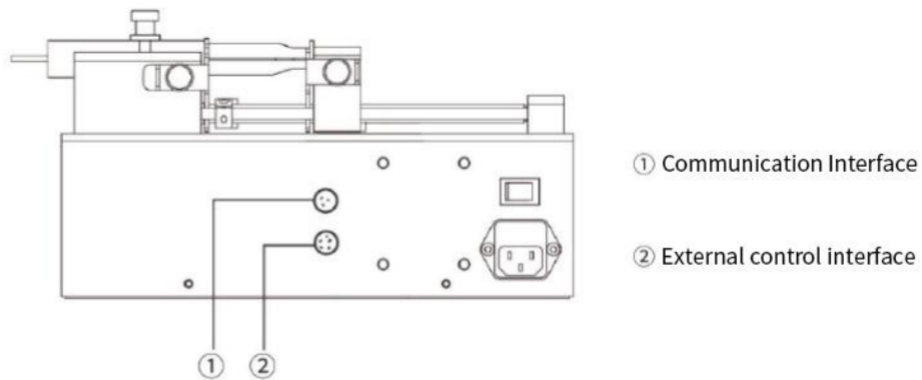
■ Applicable Syringes

Plastic Syringe	Inside Diameter(mm)	Flow Rate(μ L/min-mL/min)	
		SPLab01/SPLab02	SPLab04-SPLab12
1mL	4.70	0.0867-2.2889	0.0867-2.2889
2mL	8.95	0.3144-8.3002	0.3144-8.3002
5mL	12.36	0.5996-15.8299	0.5996-15.8299
10mL	14.90	0.8713-23.0046	0.8713-23.0046
20mL	19.20	1.4469-38.1984	---
30mL	22.00	1.8997-50.1520	---
50mL	29.20	3.3466-88.3505	---
60mL	29.20	3.3466-88.3505	---
100mL	32.00	4.0192-106.1544	---
150mL	40.00	6.28-165.8712	---

Glass Syringe	Inside Diameter(mm)	Flow Rate(μ L/min-mL/min)	
		SPLab01-G1/SPLab02-G1	SPLab01-G2
250 μ L	2.30	0.021-0.548	---
500 μ L	3.25	0.041-1.095	---
1mL	4.60	0.083-2.193	---
2.5mL	7.28	0.208-5.494	---
5mL	10.30	0.416-10.99	---
10mL	14.57	0.833-22.00	---
25mL	23.00	2.077-54.84	---
50mL	32.57	---	4.165-109.9
100mL	32.57	---	4.165-109.9

Micro Syringe	Inside Diameter(mm)	Flow Rate(nL/min- μ L/min)
		SPLab01-SPLab12
10 μ L	0.50	1-25.91
25 μ L	0.80	2.5-66.34
50 μ L	1.10	4.75-125.4
100 μ L	1.60	10-256.3

■ Syringe Pump External Control Schematic



■ Dimension Drawing (Unit:mm)

