

Industrial Syringe Pump

SP60-1A

1 years
warranty



Introduction

The SP60-1A Pump is a fully programmable, open frame, precision liquid handling pump module, designed for applications in the 5 μ L to 25 mL range. It is controlled by an external computer or microprocessor and automates pipetting, diluting, and dispensing functions.

Features

Unmatched application flexibility: Fully programmable;

Can be controlled by an external computer or microprocessor;

Available with a range of syringe sizes and valve configurations.

Faster product development: Can speed up and simplify validation of your instruments;

Robust performance: optical encoder for step loss detection; full control of start speed, top speed and cut-off speeds;

Programmable ramp-up and ramp-down rates;

Straight forward integration:

RS-232/RS-485 communication interfaces;

Up to fifteen SP60-1A pumps can be connected together;

Two digital inputs and three outputs for TTL level signals;

Used for synchronization with external devices. Planned maintenance replacement of valves and syringes.

Technical Specifications

Accuracy	Error $\leq \pm 0.1\%$ (stroke $\geq 30\%$ maximum stroke)
Max. stroke(Steps)	60mm (6000 steps or 48000 steps)
Linear speed range	0.01mm/s-60mm/s
Run time per stroke	1.25s-100min
Speed resolution	0.01mm/s
Stroke resolution	0.01mm or 0.00125mm
Valve switch time	≤ 250 ms between adjacent ports
Valves type	3 port 120° valve, 4 port 90° valve, 3 port distribution valve, 9 port distribution valve
Valve material	Valve body: PCTFE Valve element:PTFE
Tubing fittings	1/4-28UNF
Syringe fittings	1/4-28UNF
Syringes	50 μ L, 100 μ L, 250 μ L, 500 μ L, 1.0mL, 2.5mL, 5.0m, 10mL, 25mL
Weight	2.2kg
Syringe material	Barrel material: Borosilicate glass
	Plunger rod material: Stainless steel
	Plunger seal material: PTFE
Power supply	DC24V $\pm 10\%$ /1.25A(Peak value)
Communication interface	RS232/RS485/CAN
Baud rate	9600 or 38400(RS232/RS485); 100K, 125K, 250K, 500K, 1M(CAN)
Addressing	UP to 15 individual addresses available(BCD switch)
Input	Two TTL level signal inputs, for restart the paused instruct
Output	Three TTL level signal outputs, for synchronous external devices
Condition temperature	15°C-40°C
Storage temperature	-20°C -65°C
Max.pressure	0.68Mpa
Dimension(mm)	143*64.5*253mm

Dimension Drawing (Unit: mm)

