

LSP01-1BH Syringe Pump



This pump is a single channel high pressure syringe pump. The acceptable syringes are 2.5mL-100mL stainless steel syringes. Because of the extra linear force this pump is suitable for transferring viscous fluids or delivering the fluid to reactors in chemical applications.

Functions and Features

Syringe selection: The syringe can be selected in the manufacturer table which includes manufacturer, material and size or input the inner diameter of the syringe barrel directly

Easy to operate: Combining big screen LCD display with rotary encoder switch and membrane keypad makes the operation simple and prompt.

Working mode: Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous

Memory function:

1. The parameters are saved in EEPROM . The parameters don't need to be reset when power returns after an interruption
2. In flow rate mode, the pump remains running or stop according to the setting parameters when power returns after an interruption

Protection function: The pump will stall and give an alarm when the drive structure of the pump is blocked

Communication function: Realize computer control through RS485 communication interface

External control function: Input/output control

Calibration function: Acquire accurate volume through calibration

Syringe protection: Adjust syringe rest to prevent syringe from damaging

Specifications

Syringe size	2.5 - 100 (mL)
Linear force	45kg
Advance per microstep	0.156 μ m (1/16step)
Infusion volume per microstep	0.149 μ L (100mL syringe 1/16step)
Max. Step rate	13867 (1/16step) /sec
Min. step rate	16 (1/16step) /30sec
Max. linear rate	130mm/min
Min. Linear rate	5 μ m/min
Flow rates	0.09 μ L/min - 124.36mL/min
Accuracy	$\leq \pm 0.5\%$ error in the condition of $\geq 30\%$ of max. Infusion distance
Setting mode	Rotary coded switch and membrane keypad
Display	128 \times 64 graphic LCD
Power	AC100 - 240V
Operating condition	Temperature 5 $^{\circ}$ C - 40 $^{\circ}$ C Relative humidity <80%
Dimensions	280 \times 250 \times 140 (mm)
Weight	6.3kg

Syringe Pump	Part Number	Inner Diameter (mm)	Syringe	Flow Rates (μ L/hr - mL/hr)	Outlet Pressure	Linear Rate	Weight (kg)
LSP01 - 1BH	0503431	4.79	2.5mL	5.406 μ L/hr - 140.5mL/hr	>19.48MPa	5 μ m/min - 130mm/min	6.3
		9.53	8mL	21.399 μ L/hr - 556.3mL/hr	>5.05MPa		
		19.13	20mL	86.226 μ L/hr - 2241.8mL/hr	>1.25MPa		
		28.6	50mL	192.727 μ L/hr - 5010.9mL/hr	>0.56MPa		
		34.9	100mL	286.986 μ L/hr - 7461.6mL/hr	>0.37MPa		

Note: Flow rates=Linear rate \times Section area of the barrel