

Laboratorial Syringe Pump

LSP01-3A, LSP02-2B



Mainly used in Lab applications.

Excellent EMC performance, ESD \geq Level IV (IEC 61000-4-2)

Specifications	Model	LSP01-3A	LSP02-2B
Work mode		Infusion	Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous
Channel		1	2
Stroke of pump		140mm	
Pusher advance per microstep		0.156 μ m	
Linear speed		5 μ m/min-65mm/min	5 μ m/min-130mm/min(Flow rate=Linear speed * Section area of the barrel)
Linear speed resolution		5 μ m/min	
Linear travel accuracy		$\leq \pm 0.5\%$ when travel $\geq 30\%$ of pump stroke	
Linear force(max.)		>90N	>180N
Syringe selection		Built-in syringe branches, sizes and IDs for selection	
Syringe user-defined		Can store four user-defined syringe IDs	
Flow rate calibration		Improve flow rate accuracy	
Running parameters setting		Infusion volume, infusion time, etc	Infusion/Withdrawal volume, infusion time, withdrawal time, pause time, etc
Display setting		Display volume, flow rate or linear speed	
Power-off memory		Storing the running parameters automatically	
Status signal output		2 output signals (OC gate signal) to indicate start/stop and direction	
Control signal input		Falling edge or TTL signal to control Start/stop	
Communication interface		RS485	
Dimensions (L \times W \times H)		280 \times 210 \times 140 (mm)	280 \times 250 \times 140 (mm)
Weight		3.6kg	4.3kg
Power supply		AC 196V-240V/20W	AC 196V-240V/40W
Operating temperature		0 to 40 $^{\circ}$ C	
Relative humidity		<80%	
Controller Model (Product Code)		LSP01-3A (05.03.40B)	LSP02-2B (05.03.44B)
Syringe	Syringe ID(mm)	Flow Rate(μ L/min - mL/min)	
10 μ L	0.50	0.001 μ L/min-0.0128mL/min	0.001 μ L/min-0.0255mL/min
25 μ L	0.80	0.0025 μ L/min-0.0327mL/min	0.0025 μ L/min-0.0653mL/min
50 μ L	1.10	0.0048 μ L/min-0.0618mL/min	0.0048 μ L/min-0.1235mL/min
100 μ L	1.60	0.0101 μ L/min-0.1307mL/min	0.0101 μ L/min-0.2614mL/min
250 μ L	2.30	0.0208 μ L/min-0.2701mL/min	0.0208 μ L/min-0.5401mL/min
500 μ L	3.25	0.0415 μ L/min-0.5392mL/min	0.0415 μ L/min-1.0784mL/min
1mL	4.72	0.0875 μ L/min-1.1373mL/min	0.0875 μ L/min-2.2747mL/min
2mL	9.00	0.3181 μ L/min-4.1351mL/min	0.3181 μ L/min-8.2702mL/min
5mL	13.10	0.6739 μ L/min-8.7608mL/min	0.6739 μ L/min-17.522mL/min
10mL	16.60	1.0821 μ L/min-14.068mL/min	1.0821 μ L/min-28.135mL/min
20mL	19.00	1.4176 μ L/min-18.429mL/min	1.4176 μ L/min-36.859mL/min
30mL	23.00	2.0774 μ L/min-27.006mL/min	2.0774 μ L/min-54.012mL/min
60mL	29.14	3.3346 μ L/min-43.349mL/min	3.3346 μ L/min-86.699mL/min