

Laboratorial Syringe Pump

LSP Series

Mainly used in
laboratorial applications.
Integrated structure.



SYRINGE PUMP

Specifications	Model	LSP01-2A	LSP02-2A	LSP01-1A	LSP04-1A	LSP02-1B	LSP10-1B
Work mode		Infusion				Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous	
Channel		1	2	1	4	2	10
Stroke of pump		140mm					
Pusher advance per microstep		0.03125 μ m			0.156 μ m		
Linear speed		1 μ m/min-13mm/min		5 μ m/min-65mm/min	5 μ m/min-130mm/min(Flow rate=Linear speed * Section area of the barrel)		
Linear speed resolution		1 μ m/min			5 μ m/min		
Linear travel accuracy		$\leq \pm 0.5\%$ when travel $\geq 30\%$ of pump stroke					
Linear force(max.)		> 90N	> 290N	> 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×W×H)		280×210×140(mm)			280×250×140(mm)		280×330×140(mm)
Weight		3.6kg			4.5kg	4.3kg	5.3kg
Power supply		AC 90V-260V/15W			AC 90V-260V/20W		
Operating temperature		0 to 40°C					
Relative humidity		< 80%					

Controller Model (Product Code)		LSP01-2A(05.03.41A) LSP02-2A(05.03.47A)	LSP01-1A(05.03.40A)	LSP04-1A(05.03.45A)	LSP02-1B(05.03.44A)	LSP10-1B(05.03.46A)
Syringe	Syringe ID(mm)	Flow Rate(μ L/min - mL/min)				
10 μ L	0.50	0.0002-0.0026	0.001-0.0128	0.001-0.0255	0.001-0.0255	0.001-0.0255
25 μ L	0.80	0.0005-0.0065	0.0025-0.0327	0.0025-0.0653	0.0025-0.0653	0.0025-0.0653
50 μ L	1.10	0.0095-0.0124	0.0048-0.0618	0.0048-0.1235	0.0048-0.1235	0.0048-0.1235
100 μ L	1.60	0.002-0.026	0.0101-0.1307	0.0101-0.2614	0.0101-0.2614	0.0101-0.2614
250 μ L	2.30	0.0042-0.054	0.0208-0.2701	0.0208-0.5401	0.0208-0.5401	0.0208-0.5401
500 μ L	3.25	0.0083-0.1078	0.0415-0.5392	0.0415-1.0784	0.0415-1.0784	0.0415-1.0784
1mL	4.72	0.0175-0.2275	0.0875-1.1373	0.0875-2.2747	0.0875-2.2747	0.0875-2.2747
2mL	9.00	0.0636-0.827	0.3181-4.1351	0.3181-8.2702	0.3181-8.2702	0.3181-8.2702
5mL	13.10	0.1348-1.7522	0.6739-8.7608	0.6739-17.522	0.6739-17.522	0.6739-17.522
10mL	16.60	0.2164-2.8135	1.0821-14.068	1.0821-28.135	1.0821-28.135	1.0821-28.135
20mL	19.00	0.2835-3.6859	1.4176-18.429	-	1.4176-36.859	-
30mL	23.00	0.4155-5.4012	2.0774-27.006	-	2.0774-54.012	-
60mL	29.14	0.6669-8.6699	3.3346-43.349	-	3.3346-86.699	-