

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×W×H) | | 280×210×140 (mm) | 280×250×140 (mm) |
| Weight | | 3.6kg | 4.3kg |
| Power supply | | AC 196V-240V/20W | AC 196V-240V/40W |
| Operating temperature | | 0 to 40°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 |