

# Laboratorial Syringe Pump

## L0107 Series

Mainly used in laboratorial application. Controller and drive unit are separated. The drive unit has syringe holder and clamp.



SYRINGE PUMP

Specifications	Model	TJ-1A/L0107-1A	TS-1A/L0107-1A, TS-1A-B/L0107-1A	TJ-2A/L0107-2A	TS-2A/L0107-2A, TS-2A-B/L0107-2A
Work mode		Infusion		Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous	
Drive unit		1	1 to 4	1	1 to 4
Stroke of drive unit		70mm			
Pusher advance per microstep		0.165μm			
Linear speed		7.94μm/min-79.4mm/min (Flow rate = Linear speed * Section area of the barrel)			
Linear speed resolution		7.94μm/min			
Linear travel accuracy		≤ ±0.5% when travel ≥30% of drive unit stroke			
Linear force(max.)		>20N			
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		Parameters, such as dispensing volume, can be set by each channel. Or all channels use the parameters of the specified channel			
Start setting		Each drive unit can be started separately, simultaneously or according to each delay time			
Display setting		Display volume, flow rate or linear speed			
Power-off memory		Select keeping previous state or resetting parameters when power on			
Fast forward/backward		Infuse or withdraw liquid at full speed			
State signal output		2 output signals (OC gate signal) to indicate start/stop and direct on			
Control signal input		3 input signals (TTL signal) to control start/stop, fast forward and fast backward			
Communication interface		RS485			
Controller dimensions (L×W×H)		170×108×65 (mm)	235×178×74 (mm)	170×108×65 (mm)	235×178×74 (mm)
Controller weight		0.5kg	0.8kg	0.5kg	0.8kg
Drive unit dimensions (L×W×H)		180×46×78 (mm)			
Drive unit weight		0.6kg			
Power supply		AC 90V-260V/10W	AC 90V-260V/40W	AC 90V-260V/10W	AC 90V-260V/40W
Operating temperature		0 to 40℃			
Relative humidity		<80%			
	Controller Model(Product code, Language) /Drive Unit Model(Product code)	Syringe (μL)	Syringe Id(mm)	Flow Rate(nL/min-μL/min)	
	TJ-1A(05.03.10A, Chinese and English)/L0107-1A(05.03.00A)	5	0.35	0.764-7.64	
	TJ-2A(05.03.11A, Chinese and English)/L0107-2A(05.03.01A)	10	0.50	1.559-15.59	
	TS-1A(05.03.15A, Chinese)/L0107-1A(05.03.00A)	25	0.80	3.991-39.91	
	TS-1A-B(05.03.15B, English)/L0107-1A(05.03.00A)	50	1.10	7.546-75.46	
	TS-2A(05.03.16A, Chinese)/L0107-2A(05.03.01A)	100	1.60	15.96-159.6	
	TS-2A-B(05.03.16B, English)/L0107-2A(05.03.01A)	250	2.30	32.99-329.9	
		500	3.25	65.87-658.7	
		1000	4.61	132.5-1325	