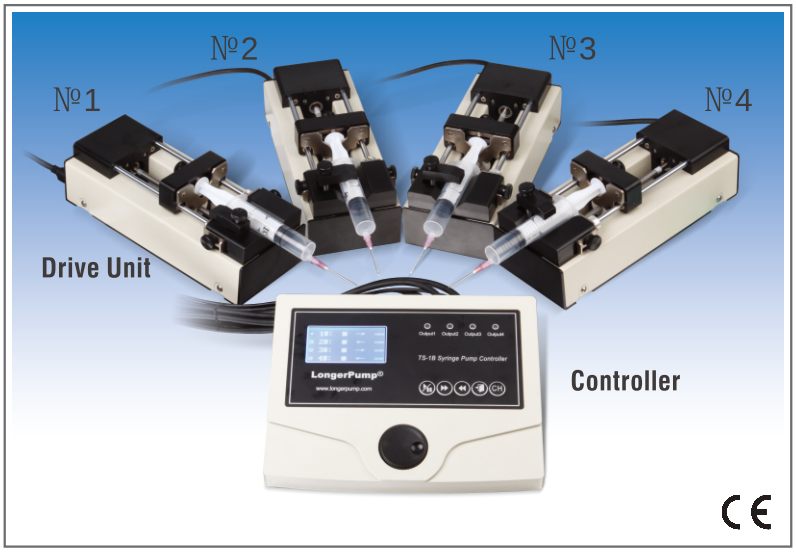
Laboratorial Syringe Pump

TJ-3A/W0109-1B, TS-1B/W0109-1B

Mainly used in laboratorial applications.
Controller and drive unit are separated.



Specifications \ Model	TJ-3A/W0109-1B	TS-1B/W0109-1B, TS-1B-B/W0109-1B
Work mode	Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous	
Drive unit	1	1 to 4
Stroke of drive unit	90mm	
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.)	＞90N	
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 status or resetting parameters when powered on	
Fast forward/backward	Infuse or withdraw liquid at full speed	
status signal output	2 output signals (OC gate signal) to indicate start/stop and direction	
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)
Controller weight	0.5kg	0.8kg
Drive unit dimensions (L×W×H)	245×100×95 (mm)	
Drive unit weight	1.3kg	
Power supply	AC 90V-260V/10W	AC 90V-260V/40W
Operating temperature	0 to 40°C	
Relative humidity	＜80%	

Controller Model (Product code, Language)	Drive Unit Model (Product code)	Syringe (mL)	Syringe ID(mm)	Flow Rate (μL/min-mL/min)
TJ-3A (05.03.12A, Chinese and English) TS-1B (05.03.17A, Chinese) TS-1B-B (05.03.17B, English)	W0109-1B (05.03.02A)	1	4.72	0.139-1.39
		2	9.00	0.505-5.05
		5	13.10	1.07-10.7
		10	16.60	1.718-17.18
		20	19.00	2.251-22.51
		30	23.00	3.298-32.98
		60	29.14	5.295-52.95