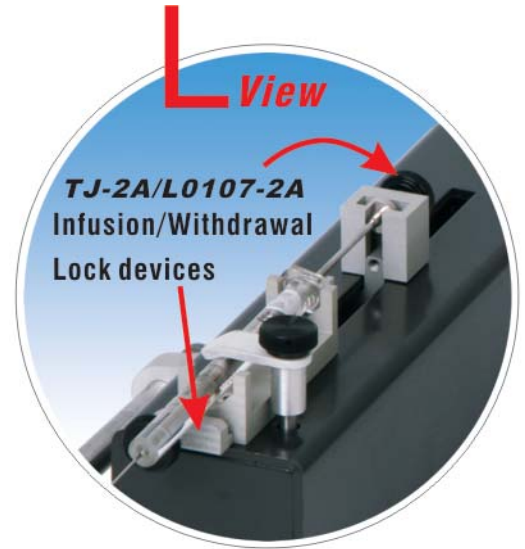


TJ-1A/L0107-1A TJ-2A/L0107-2A SYRINGE PUMP



The pumps combine precision, compact size with ease of install and operation. It can hold μL unit standard glass syringe. The features of accurate distance control and broad linear speed range (7.9 $\mu\text{m}/\text{min}$ - 79.4 mm/min) can meet versatile requirements. Its vertical (horizontal) installation structure makes this pump easily used in micromanipulator, stereotaxic instrument for various biologic research applications.

Functions and Features

- Working mode:** TJ-1A/L0107-1A: Infusion
TJ-2A/L0107-2A: Infusion, withdrawal, infusion/withdrawal, withdrawal/infusion, continuous
- User-defined glass syringe:** Save 4 inner diameters of user-defined glass syringe barrel
- Linear force output:** Full stroke > 20 N
- Memory function:** Select resume operation or remain stopped when power returns after an interruption
- Signal output:** Start/Stop output, cw/ccw output (open collector)
- Calibration:** Acquire accurate volume through calibration
- Fast forward & fast reverse:** Infusion or filling at the max. Speed

Specifications

- Max. Infusion distance:** 70 mm
- Acceptable glass syringe :** 5 - 1000 (μL)
- Linear speed:** 7.9 $\mu\text{m}/\text{min}$ - 79.4 mm/min
- Adjusting resolution:** 7.9 $\mu\text{m}/\text{min}$
- Distance resolution:** 0.165 μm
- Linear force:** > 20 N
- Setting mode:** Membrane keypad and rotary encoded switch
- Accuracy:** $\leq \pm 0.5\%$ error in the condition of $\geq 30\%$ of max. infusion distance
- Display:** 128 \times 64 graphic LCD
- External control:** Start/Stop control, fast forward control, fast reverse control
- Communication interface:** RS485
- Power:** AC 100 V - 240 V or DC 12 V
- Power consumption:** ≤ 10 W
- Operating condition:**
Temperature 0 - 40 $^{\circ}\text{C}$
Relative humidity < 80 %
- Controller dimensions (L \times W \times H):** 170 \times 108 \times 65 (mm)
- Controller weight:** 0.8 kg
- Drive unit dimensions (L \times W \times H):** 180 \times 46 \times 78 (mm)
- Drive unit weight:** 0.6 kg
- IP rating:** IP 21

| Syringe Pump (Part Number) | Glass Syringe Specification (μL) | Barrel Inner Diameter (mm) | Effective Stroke (mm) | Flow Rates (nL/min - $\mu\text{L}/\text{min}$) | Syringe Material | Weight (kg) |
|--|---|----------------------------|-----------------------|---|------------------|--|
| TJ - 1A / L0107 - 1A (0503101) (0503001) | 5 | 0.35 | 51.97 | 0.764 - 7.64 | Glass Syringe | Controller 0.8 Drive Unit 0.6 |
| | 10 | 0.50 | 50.93 | 1.559 - 15.59 | | |
| | 25 | 0.80 | 49.74 | 3.989 - 39.89 | | |
| TJ - 2A / L0107 - 2A (0503111) (0503011) | 50 | 1.10 | 52.61 | 7.544 - 75.44 | | |
| | 100 | 1.60 | 49.74 | 15.96 - 159.6 | | |
| | 250 | 2.30 | 60.17 | 32.98 - 329.8 | | |
| | 500 | 3.25 | 60.27 | 65.85 - 658.5 | | |
| | 1000 | 4.61 | 59.91 | 132.5 - 1325 | | |

Note: Flow rates = Linear rate \times Section area of the barrel