

MICROINJECTION AND ADMINISTRATION PUMPS

Stereotaxic Syringe Pump

This product features a professional and innovative design, capable of accommodating both Metal Needle Syringes (e.g., Hamilton syringes) and Capillary Glass Pipette. It is widely used in model animals such as mice, rats, zebrafish, insects, and toads, as well as in vitro cells (e.g., egg cells, embryonic cells). It is ideal for microinjections of viruses, dyes, proteins, drugs, and more.



Cat No. 20-0100
(HAMILTON Syringe is not included)

■ Product Features

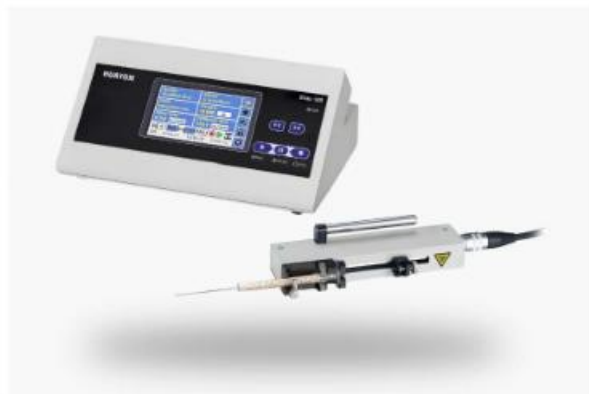
- **High Precision:** Offers picoliter, nanoliter, and microliter injection levels, ensuring high accuracy, repeatability, and stability in liquid dispensing.
- **Flexible Functions:** Supports five modes—injection, withdrawal, injection/withdrawal, withdrawal/injection, and continuous operation.
- **Exceptional Stability:** Innovative syringe piston (plunger) fixation design ensures the plunger remains stable, without deviation or bending, ensuring smooth operation and protecting the plunger.
- **Quick Operation:** The injection parameter interface is simple, clear, and logically organized for ease of use.
- **Visual Clarity:** Multiple indicator lights clearly display the working status (start, stop, pause) and provide intuitive progress tracking (completed vs. pending tasks).
- **Safety:** Built-in safety distances at both ends of the stroke. The system automatically stops with an alarm when the plunger reaches the limit, preventing damage to the syringe or the machine.
- **Compatibility:** The ultra-light pump head (approximately 0.25 kg) is highly compatible with stereotaxic instruments and micromanipulators, effectively reducing operational vibrations.

■ Technical Specifications

Parameter	Specification
Metal Needle Syringe Capacity	0.5-100 μ l
Metal Needle Syringe Rate	0.005 nl/min (0.5 μ l)- 152.4 μ l/min (100 μ l)
Capillary Glass Tube Specs	Inner diameter \geq 0.5 mm, outer diameter \leq 1.5 mm
Capillary Glass Tube Capacity	5 μ l
Capillary Glass Tube Rate	0.119 nl/min- 17.9 μ l/min
Working Mode	Injection, Withdrawal, Injection/Withdrawal, Withdrawal/Injection, Continuous
Maximum Distance	70 mm
Distance Resolution	0.1905 μ m/micro-step
Stepping Rate	0.6096 μ m/min- 91.44 mm/min
Rate Accuracy	0.6096 μ m/min
Volume Accuracy	Error < 0.5%
Maximum Force	> 10N
Adjustable Force	1- 100%
Syringe Selection	Built in or User Defined
Display	4.3" color LCD Touch Screen
Operation Mode	LD Touch Screen and Buttons
Power-off Memory	Reserved Parameters before Power-off
Communication	RS485 and Support Modbus Protocol
External Control	External Signal Control ON/OFF
Power Supply	AC 90-264V 50Hz/60Hz
Consumption Powe	20 W
Working Environment	4- 40°C, RH < 80%
Main Controller Size	245*205*100 mm
Pump Head Size	173*24.4*52 mm
Main Controller Weight	2.0 kg
Pump Head Weight	0.25 KG

■ Injection Method

■ Syringe Injection



■ Glass Pipette Injection



■ Use combing with Stereotaxic frame



■ Use combing with Micromanipulator



■ Optional Accessory

1.Name: Hamilton Syringe (Please contact the sales representative for specific model requirements).



2.Name: Glass pipette holder; Cat. No.: 32-2004.



3.Name: Glass pipette, 100pcs/tube; Cat. No.: 32-3009.

