

SNIPER SJ100 SERIES

HIGH PRECISION PIEZOELECTRIC JET VALVE SYSTEM

The **SJ100 Piezoelectric Jet Valve** utilizes high-frequency precision **piezoelectric ceramic** material as the driving force, enabling the needle to perform rapid up-and-down reciprocating motion for high-speed glue jetting.

Compared to pneumatic jet valves (which rely on compressed air), the **SJ100** offers superior performance due to:

- **Ultra-fast response** and **high precision** of piezoelectric ceramics.
- **Exceptional stability**, eliminating inconsistencies caused by air pressure fluctuations.



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Authorized Distributor:



FEATURES

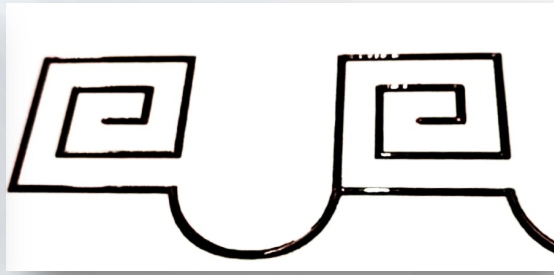
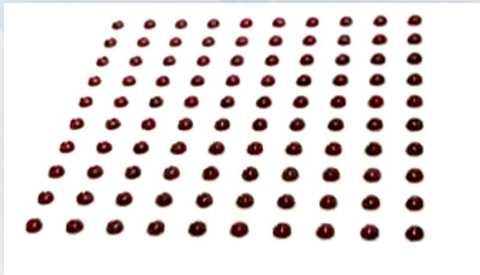
- ✓ **High Efficiency:** Latest precision piezoelectric drive with ultra-fast dispensing frequency up to **1200Hz per/secs.**
- ✓ **Quick Debugging:** Modular design simplifies needle adjustment and enables fast tip calibration.
- ✓ **High Productivity:** Non-contact dispensing eliminates Z-axis movement, boosting efficiency.
- ✓ **Long Lifespan:** Replaceable ultra-hard alloy nozzle and needle for extended durability.
- ✓ **Micro-Dispensing:** Minimum glue volume **0.5ml**, line width **0.25mm**, dot diameter **0.25mm**.
- ✓ **Consistency:** Constant temperature heating ensures $\pm 2\%$ dispensing accuracy.
- ✓ **Easy Maintenance:** Integrated flow path with minimal components for quick assembly.
- ✓ **Low Cost:** Patented design reduces consumables and maintenance expenses.
- ✓ **Stability:** Short needle stroke with strong jetting force prevents bubbles/splatter.
- ✓ **Seamless SNIPE Series Compatibility**
 - ❑ Unified **Geometry Sketch™** software interface
 - ❑ All process recipes are **directly transferable to S300BT and S400 systems**

ADVANCED FEATURES

- ★ **Cross-Platform Recipe Compatibility**
 - ✓ Reduces process validation time with seamless recipe transfer between S300BT (benchtop) and S400 systems
- ★ **Exceptional stability and Ultra-fast response** (1200Hz max frequency)
- ★ **Touchscreen interface** for easy operation

APPLICATIONS

- ✓ PCB encapsulation
- ✓ Semiconductor/electronics manufacturing
- ✓ LED optoelectronics industry
- ✓ FPC flexible circuit board production
- ✓ Medical device assembly
- ✓ Biological/medical reagent testing



SPECIFICATIONS

SJV100 Piezo Valve

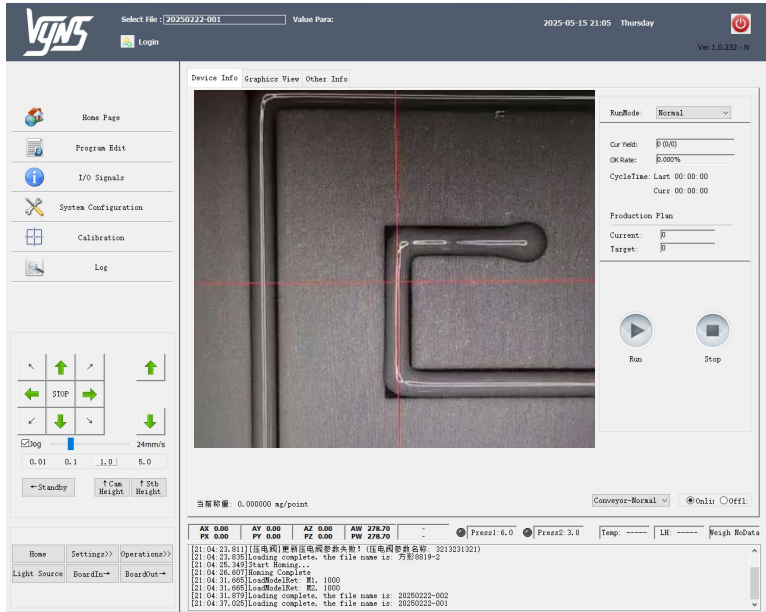
Parameter	Specification
Dispensing Method	Non-Contact Jet Dispensing
Compatible Fluids	Underfill Glue, UV Glue, Epoxy, Silicone, Red Glue, etc.
Fluid Viscosity Range	0 – 200,000 cps
Operating Frequency	Max: 1200 Hz
Nozzle Type Size	0.05 – 0.3mm
Air Pressure Supply	0.01–0.2 MPa
Valve Weight	500g
Dimensions	53mm (L) × 90mm (W) × 110mm (H)

SJC100 Controller

Parameter	Specification
Control Method	MCU-based Electronic
Dispensing Time Control	Controllable Digital
Power Supply	AC220V/50Hz, 120W
Weight	2kg
Dimensions	203mm (L) × 120mm (W) × 135mm (H)

Why Choose the SNIPE SJ100 Series?

- ✓ **Zero Transition Risk** – 100% recipe compatibility with production S300BT and S400 systems
- ✓ **Lab-to-Factory Continuity** – Eliminate revalidation when scaling up
- ✓ **Cost-Effective Precision** – Less investment cost for high precision micro dispensing application
- ✓ **Intuitive Operation** – <1 hour training curve for new users



 **Works with
Geometry Sketch™ Software**

S300BT



S400



SJ100 + S400 = High-volume production
SJ100 + SB300BT = Prototyping/testing