

PRODUCT INFORMATION: SLIDER VALVE SV-100

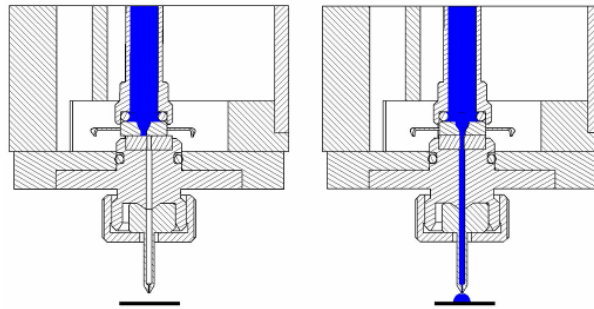
SLIDER VALVE SV-100

HIGH-SPEED SOLDER PASTE DISPENSING

Asymtek's SV-100 valve dispenses paste-type fluids with metal additives better than traditional needle dispensing, using slider valve technology.

This technology utilizes high-frequency, piezoelectric-drive actuation to quickly deposit small dots of thick fluids like solder paste and silver-filled epoxies. Lever action aligns valve seats to open a smooth path for fluid flow. Within milliseconds, the holes are forced out of alignment to stop fluid flow, and a dot is formed.

The SV-100 is fast and accurate for a range of production requirements, including solder paste dots for passive components smaller than 0603, rework of BGA/QFN electrical connections, lines and patterns for RF shield attach, or unique patterns of conductive epoxy.



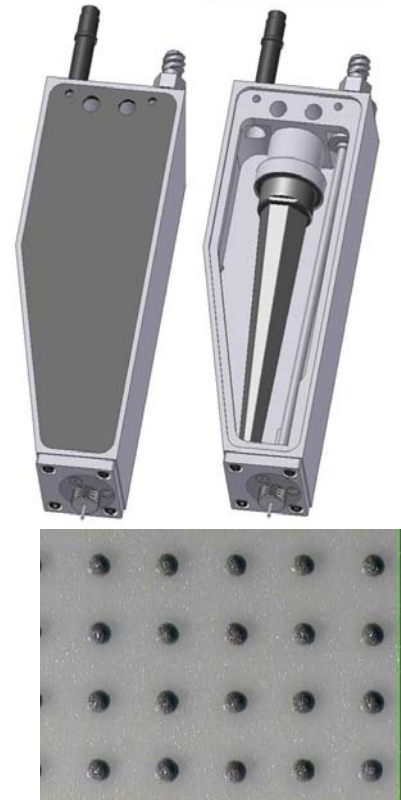
Features & Benefits:

- Up to 20% faster than auger dispensers
- 20,000 dots per hour (1 mm grid)
- Dot & Line deposition capability
- Compatible with lead free and no clean solder pastes
- Ideal for BGA/QFN re-work, when screen printing is not an option
- Dots < 300 μm with type 4, 5 & 6 pastes
- Compatible with Silver filled Epoxies
- Compatible with off-the-shelf needles
- Resistant to plugging
- Complements screen printing when SMT component mix requires large variation in dot sizes or difficult to print dot sizes

SV-100 SPECIFICATIONS:

Dimensions (L x W x H)	154 x 50 x 30 mm (without needle)
Fluid compatibility	Solder Pastes & Conductive Adhesives
Viscosity range	> 10,000 mPas
Stroke	1.2 mm
Minimum on time	2 ms (one open and close)
Maximum on time	∞ endless (continuous line dispensing)
Minimum off time	10 ms
Maximum off time	∞ endless
Dispense frequency	< 10 Hz
Dispense volume accuracy	± 2 % (constant pressure and temperature)
Maximum working pressure	6 bar (86 PSI)
Ambient temperature range	+ 15 °C → + 45 °C
Fluid temperature range	Max. + 60 °C
Standard orifice diameter	400 µm, other diameters on request
Estimated seal lifetime*	3,000,000 cycles
Estimated valve seat lifetime*	> 50,000,000 cycles
Estimated Piezoelectric drive lifetime	> 500,000,000 cycles

* Seal and valve seat lifetime will depend on fluid type used



Above: dot diameter 256 µm
(+/- 8.4% at 3σ)

SERVICE

Offline Cleaning: Takes about 15 minutes.
 Cleaning fluids: Use only solvents compatible with the fluids being dispensed, as specified by the material supplier.
 Consumable parts: 4 re-usable o-rings

Please contact these locations for the name of your local representative:

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Asymtek is ISO 9001:2000 Certified
 Intel's 2003, 2004, 2005, 2006, 2007 SCQI award winner