

DV-09 Needle Valve

Air-operated adjustable needle valve

Features and Benefits

- Dispensing capabilities from a fraction of a microliter up to continuous stripes
- Ideal for low-viscosity fluids
- Needle shutoff prohibit needle dripping and provides an even bead at the end of a dispensed line
- Adjustable flow control
- Low maintenance
- Fast response
- Zero fluid dead volume
- Positive shutoff
- Cycle rate is 400+ per minute

The DV-09 dispenses low viscosity fluids in a variety of applications from a fraction of a microliter up to continuous stripes. To optimize the dispensing results, the design includes a unique adjustable precision piston stroke for flow control.

The low cavity design results in virtually no dead fluid volume, providing an even bead at the end of a dispensed line, and also preventing needle dripping between dispensing. It has high chemical resistance, and is compatible with a variety of fluid formulations ensuring process flexibility in support of your future dispensing needs.

The DV-09 is a normally closed, air-actuated needle valve for consistent dispensing of low viscosity fluids. For maximum precision, the user can control the fluid flow by use of the stroke control. The user can select the optimal fluid pressure, actuation time for dots or robotic velocity for lines, and the appropriate dispense tip for best process definition. A variety of needle tips can be used with this applicator for precision dispensing.



The DV-09 is designed for extensive intervals between preventive maintenance by material selection for endurance. The materials used in the design of the DV-09 have been selected to provide maximum compatibility and endurance for the various fluids used as well as to minimize preventative maintenance requirements. The air cylinder body is precision machined from type 303 passivated stainless steel. Specially designed, spring-loaded Teflon® needle packings compensate for wear and significantly reduce maintenance downtime. To clean the fluid path, the lower section is disassembled in a few simple steps, allowing full access to wetted parts.

DV-09 Needle Valve Specifications

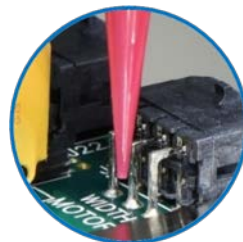
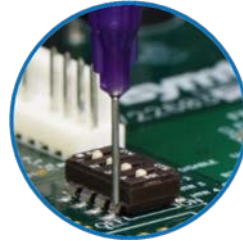
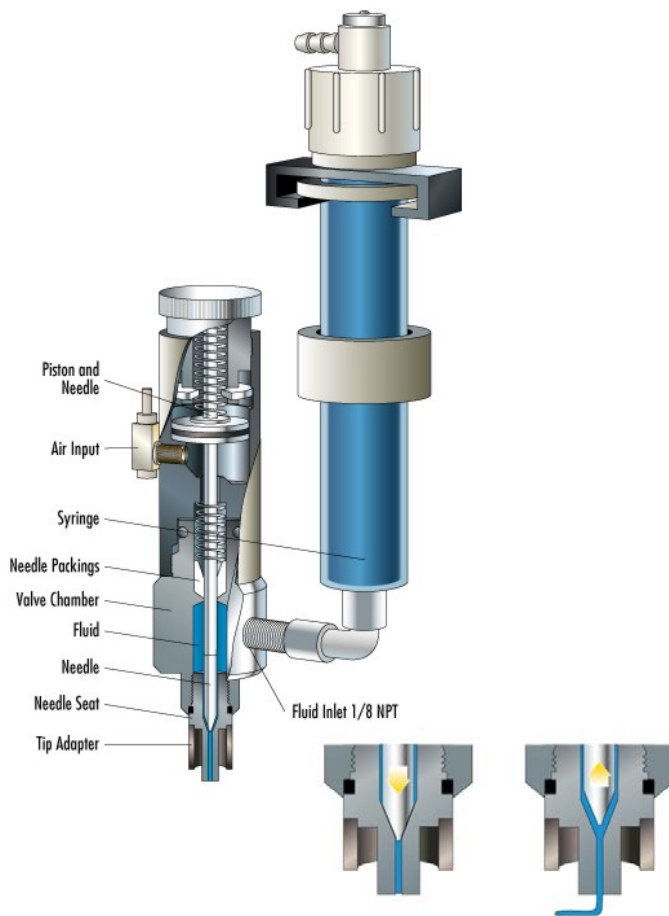
Size: 108 x 27mm (4.25 x 1.06 in.)
Weight: 170gm (6 oz.)
Fluid inlet thread: 1/8 NPT Female
Fluid outlet thread: Male luer lock
Free-flow area: 1.37mm² (.002 in.²)
Maximum fluid pressure: 2067kPa (300 psi) [21 bar]
Air pressure required: 482kPa (70 psi) [4.8 bar]

Valve Construction

Piston and piston rod: Type 303 stainless steel
Cylinder body: Hard-coated aluminum
Wetted parts: Type 303 stainless steel, delrin, nylon

Valve Attachments

Needle: Type 303 stainless steel
Brush: Soft nylon for low-viscosity fluid



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