

# DV-05A Diaphragm Valve with Suckback

## Air-actuated adjustable diaphragm poppet valve

### Features and Benefits

- Precision dispensing of medium to medium-high viscosity fluids
- Adjustable fluid flow
- Adjustable suck-back control
- Low maintenance
- Flexible diaphragm provides millions of dispensing cycles without wear
- Stainless steel construction for corrosive fluids
- High chemical resistance

The DV-05A valve dispenses medium to medium-high viscosity fluids in a variety of applications. To optimize the dispensing results, the design includes unique features for adjustable precision piston stroke for flow control, as well as suckback for positive fluid cutoff to prevent 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-05A is a normally closed, air-actuated diaphragm poppet valve for consistent dispensing of medium to medium-high viscosity fluids. Maximum dispensing precision is enabled through the design for high response rate, allowing for cycle rates in excess of 400 actuations per minute. 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 needles can be used with this applicator. A large (cone tip) needle with ¼ NPT thread, is installed directly onto the fluid outlet. Smaller needles for higher resolution and precise fluid patterns can be installed using a matching adaptor.

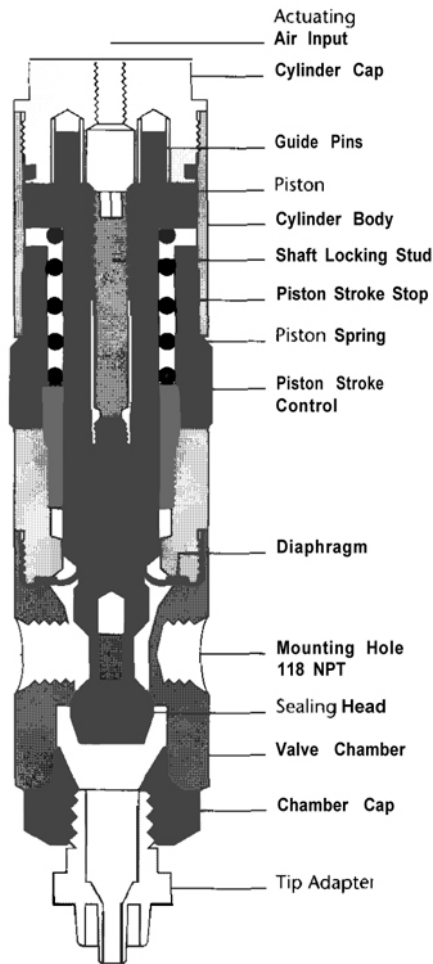
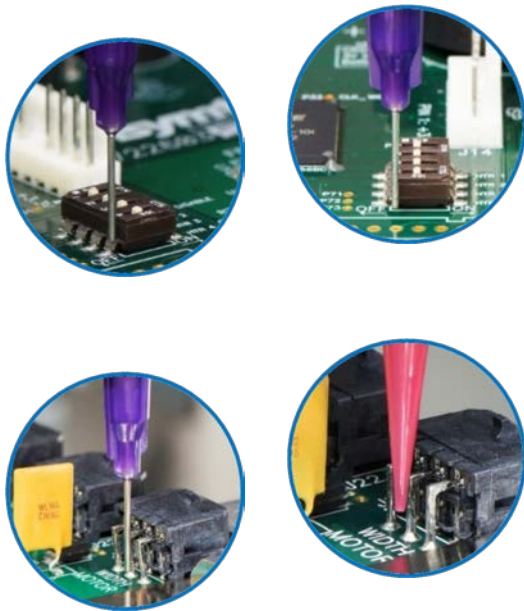
The materials used in the design of the DV-05A have been selected to provide maximum compatibility and endurance for the various fluids used as well as to minimize preventative maintenance requirements. As such, the fluid body is precision machined from type 303 passivated stainless steel. Furthermore, the sealing head/diaphragm is made from a very tough Ultra High Molecular Weight (UHMW) polyethylene, serving to transfer load more effectively. For cleaning of the fluid path, the lower section is disassembled in a few simple steps, allowing full access to wetted parts.

# DV-05A Diaphragm Valve with Suckback Specifications

Size:	116.3 x 29.7mm (2.656 x 1.160 in.)
Weight:	177gm (6.26 oz.)
Material input hole:	1/8 FPT
Output thread:	1/4 FPT
Operating frequency:	400+/minute
Maximum fluid pressure:	689kPa (100 psi) [6.89 bar]
Air pressure required:	414-621kPa (60-90 psi) [4.14-6.2 bar]
Air pressure input:	10-32 internal thread
Minimum mounting center distance:	29.6mm (1.165 in.)

## Valve Construction

Piston:	Hard-coated aluminum
Shaft:	Type 303 stainless steel
Cylinder unit:	Hard-coated aluminum
Fluid chamber:	Type 303 stainless steel
Valve seal/diaphragm:	UHMW polyethylene



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