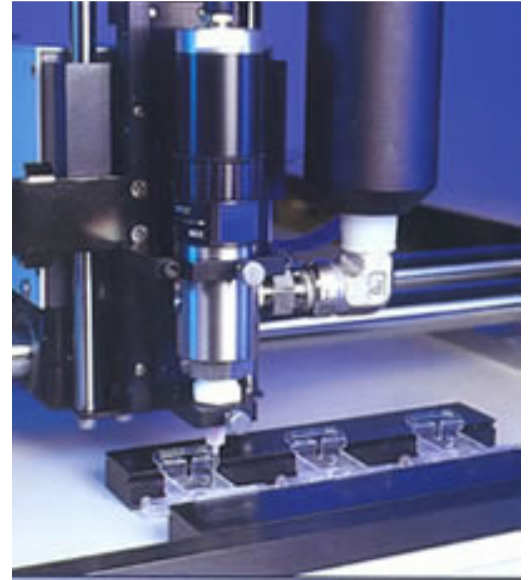


# DV-05A

## Diaphragm Valve with Suckback

### Features and Benefits

- **Adjustable fluid flow**
- **Adjustable suckback control**
- **Low maintenance**
- **High chemical resistance**
- **Stainless steel construction for corrosive fluids**
- **One year warranty**



*Precision Dispensing:* The DV-05A is an air actuated diaphragm poppet valve with an adjustable precision piston stroke. This valve provides precise dispensing of medium to medium-high viscosity fluids, and is suitable for a variety of applications. Typical fluids include adhesives, conformal coatings, non-acid fluxes, lubricants, and solder masks. The user can easily control the fluid flow by adjusting air pressure and pulse time and selecting the appropriate dispense tip. The piston stroke can also be adjusted to deposit a small amount of fluid onto the dispensing surface.

*Valve Operation:* The DV-05A dispenses fluid when the input air pressure is applied to the air cylinder and the fluid (70-90 psi required). This action pushes the poppet away from the valve seat, allowing fluid to flow. When the air pressure is removed, a spring return action closes the valve. As the valve shuts, the sealing head rapidly moves to the valve seat in the opposite direction of the fluid flow. This movement creates suckback, pulling the fluid back into the dispensing tip. The suckback action results in a clean cutoff of the dispensed fluid and eliminates fluid stringing. The amount of suckback can be adjusted to prevent air from being pulled into the dispensing tip.

The UHMW polyethylene diaphragm provides a flexible, maintenance free isolation seal between the air cylinder and the fluid chamber. Since the diaphragm seal area is larger than the sealing head area, increasing the fluid pressure creates a tighter seal, preventing leakage under high pressures.

*Easy to Maintain:* The DV-05A can be maintained by purging the valve with an appropriate solvent. Depending on your application, the sealing head, body cap and valve chamber should be periodically removed and cleaned to prevent build up of solidified fluid. The DV-05A can be easily disassembled and reassembled to thoroughly clean the valve chamber or replace parts.

This valve is not recommended for anaerobics, cyanoacrylates, solder pastes, or UV cure acrylic adhesives.

# Specifications: DV-05A Diaphragm Valve

## Size:

2.656 x 1.160" (116.3 x 29.7mm)

## Weight:

6.26 oz. (177 grams)

## Material Input Hole:

1/8 FPT

## Output Thread:

1/4 FPT

## Operating Frequency:

400+/minute

## Output Variation:

± 2.0% nominal

## Diaphragm Life:

5 x 10<sup>6</sup> nominal

## Air Pressure Required:

60-90 psi (4.14-6.2 Bar)

## Air Pressure Input:

10-32 internal thread

## Maximum Fluid Pressure:

100 psi

## Minimum Mounting Center Distance:

1.165" (29.6 mm)

## Valve Construction

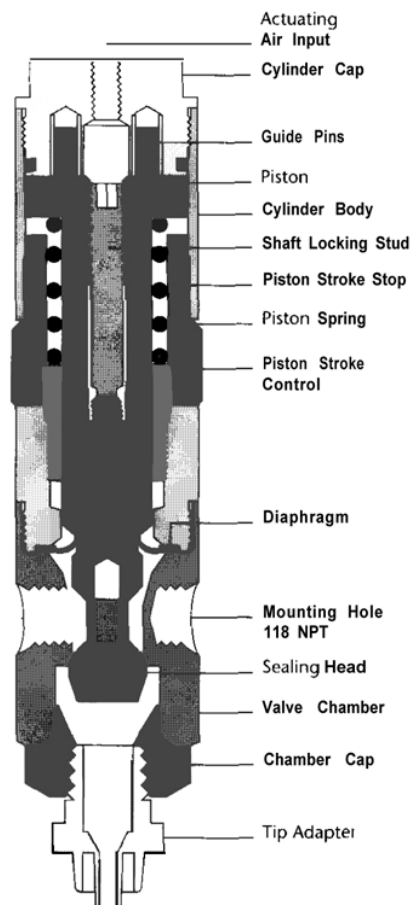
Cylinder Unit: Hard coated aluminum

Shaft: Stainless steel

Piston: Hard coated aluminum

Fluid Chamber: Stainless Steel

Valve Seal/Diaphragm: FDA Approved UHMW Polymer



For more information, speak with your local representative or contact your regional office.

[Nordsonasymtek.com](http://Nordsonasymtek.com)

## North America

Headquarters  
Carlsbad, CA, USA  
+1.760.431.1919  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

## China

Shanghai  
+8621.3866.9166  
[info@asymtek.cn](mailto:info@asymtek.cn)

Beijing  
+8610.8453.6388  
[info@asymtek.cn](mailto:info@asymtek.cn)

Guangzhou  
+8620.8554.0092  
[info@asymtek.cn](mailto:info@asymtek.cn)

## Europe

Maastricht, Netherlands  
+31.43.352.4466  
[cs.europe@asymtek.com](mailto:cs.europe@asymtek.com)

## Japan

Tokyo  
+81.3.5762.2801  
[Info-@nordsonasymtek.com](mailto:Info-@nordsonasymtek.com)

## Korea

Seoul  
+82.31.765.8337  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

## India

Chennai  
+91.44.4353.9024  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

## S.E. Asia/Australia

Singapore  
+65.6796.9514  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

## Taiwan

+886.229.02.1860  
[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com)

Nordson ASYMTEK

+1.760.431.1919 Phone

[info@nordsonasymtek.com](mailto:info@nordsonasymtek.com) Email

2747 Loker Avenue West

Carlsbad, CA USA 92010-6603

[www.nordsonasymtek.com](http://www.nordsonasymtek.com)

Reformatted 2011-04-21

