

# 741V Needle valve system for precise, consistent fluid control.

accelerators   marking inks   silicone oils   solvents   uv-cure adhesives



The 741V Series valve design applies low viscosity assembly fluids with accurate, extremely close repeat deposit control.

Spring-loaded Teflon® needle packings compensate for wear and significantly reduce maintenance downtime. Because the stainless steel needle shutoff is at the dispense tip adapter, there is virtually no dead fluid volume in the valve.



## Features

- Adjustable fluid flow control
- Unaffected by entrapped air in fluid
- **Zero dead fluid volume**
- Fluid input up to 300 psi (20.7 bar)
- Positive shutoff
- Cycle rate exceeds 400/minute
- Low-maintenance design

*"We needed something that was accurate, repeatable and easily validated, and we found it. We're very pleased with the accuracy of these systems, particularly with their repeatability."*

*Retractable Technologies, Inc.*

Electronic pdf files of Nordson EFD manuals are also available at [www.nordsonefd.com](http://www.nordsonefd.com)

# Needle valve systems



The complete system includes the 741V dispense valve, ValveMate™ 8000 controller, the fluid reservoir and dispense tip.

Expert technical assistance and high quality standards ensure productive, trouble-free performance. Nordson EFD offers a full line of reliable dispensing systems to meet your specific application requirements.

## ValveMate 8000 Controller

Valve open time is the primary control of deposit size. The ValveMate controller puts push-button adjustment of valve open time where it needs to be — near the valve.

- Multi-valve control- up to (4) valves
- Partner to Programmable Logic Controller (PLC)
- Easy deposit size control
- Increased production output
- End user convenience
- Maximum machine efficiency

## Automation: XYZ & XYZR Robot Dispensing Systems

Nordson EFD offers a wide selection of XYZ and XYZR robot systems that are fully compatible with ValveMate valve controller systems. Consistent, accurate, repeatable and complex dispensing applications can be easily performed with EFD robots, with working envelopes that range from 200 x 200 x 50mm to 510 x 510 x 100mm. Scara robot systems are also available for larger, heavier products or inline dispensing applications.

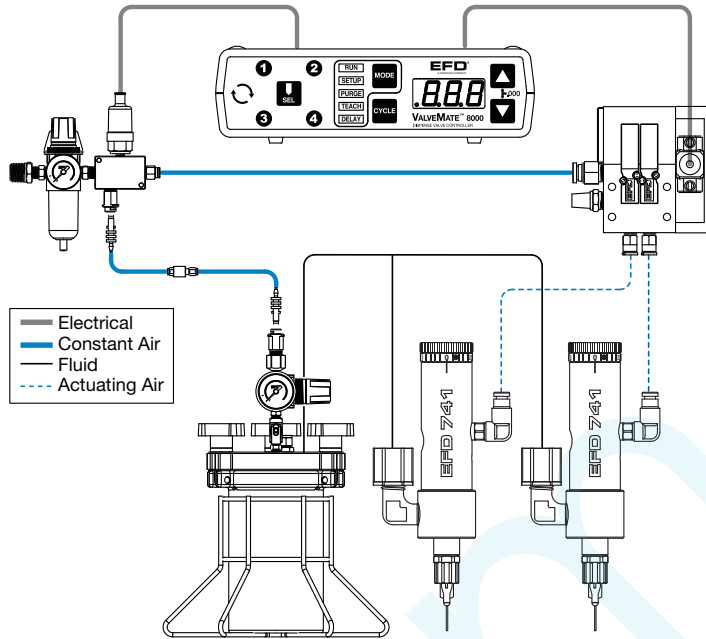
## Fluid Reservoirs

Nordson EFD reservoirs are supplied with precision, constant-bleed regulators to ensure consistent fluid pressure to the valve.

Tank reservoirs are available in 1.0, 5.0 and 19.0 liter capacities. Optimum™ Retainer Systems and Cartridges are available from 2.5 to 32 ounces (75cc to 950cc).

## Dispense Tips

Tip selection is critical to achieve optimum valve performance. 741V Series valves are packaged with an Ultra dispensing tip kit for maximum fluid control. The kit includes precision stainless steel tips in sizes from 22 to 32 gauge, a 33 gauge chamfered tip, and tip caps.



## 741V Series Valves

The 741V Series valves are used with the 8000 controllers or EFD TT automation system for precise, repeatable outputs of low to medium viscosity fluids.

During operation, controlled pulsed air acts on the piston to withdraw the needle a preset distance from the needle seat to provide exact, repeatable fluid flow.

**Size:** 114.6 mm x 26.9 mm (4.51" x 1.06") diameter

**Weight:** 741V-SS: 317.5 grams (11.2 oz)

741V: 158.8 grams (5.6 oz)

**Actuating air pressure required:** 70 to 90 psi (4.8 to 6.2 bar)

**Maximum input fluid pressure:** 300 psi (20.7 bar)

**Fluid inlet thread:** 1/8 NPT female

**Fluid outlet:** Male luer lock

**Mounting:** 1/4-28 UNF tapped hole

**Cycle rate:** Exceeds 400/minute

**Air cylinder body:** 741V-SS: Type 303 stainless steel

741V: Hard-coated aluminum

**Fluid body:** 741V-SS: Type 303 stainless steel

741V: Hard-coated aluminum

**Piston:** Type 303 stainless steel

**Needle:** Type 303 stainless steel

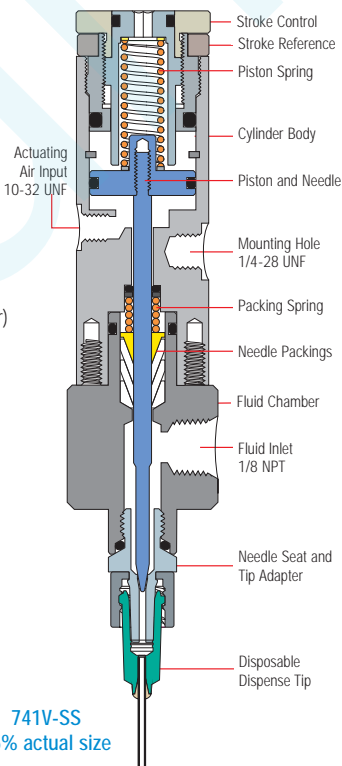
**Tip adapter/needle seat:** Type 303 stainless steel

**SafetyLok™ collar:** Nylon

**Needle packings:** Teflon®

Note: All stainless steel parts are passivated.

For tamper-resist model specify part #741V-TR or 741V-SS-TR.



741V-SS  
75% actual size

