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

accelerators
marking inks
silicone oils
solvents
uv-cure adhesives





"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.

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.





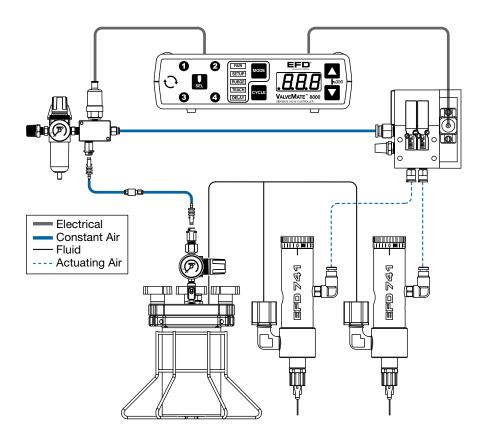
#### **Features**

- · 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

## 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. EFD offers a full line of reliable dispensing systems to meet your specific application requirements.



#### 741V Series Valves

The 741V Series valves are used with the 8000 controllers or an Ultra® 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 **741V-SS:** Type 303 stainless steel

Fluid body: 741V-SS: Type 303 stainless s 741V: Hard-coated aluminum

**Piston:** Type 303 stainless steel **Needle:** Type 303 stainless steel

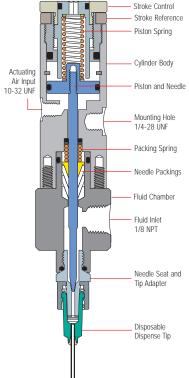
Tip adapter/needle seat: Type 303 stainless steel

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



#### 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

#### Optional: XYZ Dispensing System

The EFD Ultra TT xyz dispensing system incorporates all functions of the ValveMate. Compact 3-axis tabletop system offers consistent deposit repeatability.

Work area: 325 x 325 x 100 mm or 525 x 525 x 100 mm.

#### Fluid Reservoirs

EFD reservoirs are supplied with precision, constantbleed regulators to ensure consistent fluid pressure to the valve

Tank reservoirs are available in 1.0, 5.0 and 19.0 liter capacities. Cartridge sizes range from 2.5 to 32 ounces (75cc – 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.



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