Needle Valves

741V Needle valve system for precise, consistent fluid control



Two 741V-SS valves mounted on a robot dispense UV-cure sealant onto LCDs.



741V valves dispense UV-cure on a medical production turntable.

"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 PTFE 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.

The 741V Series valves are used with the 8000 controllers or an automated dispensing 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.

Features and Benefits

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

a medical production turntable.

Part # Description

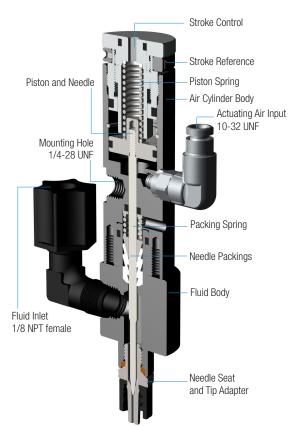
7007029 741V-SS valve. Air cylinder and fluid body are passivated 303 stainless steel.
7015584 741V-SS-BP valve. Air cylinder and fluid body are passivated 303 stainless steel. Includes fluid inlet fittings and BackPack valve actuator.

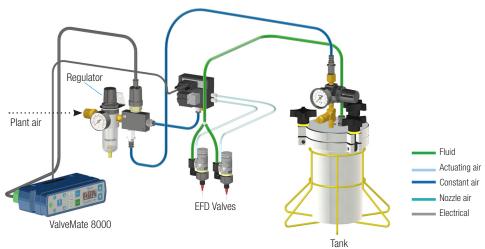




Specifications

Item	Specification
Size	114.6∟ x 26.9dia mm (4.51∟ x 1.06dia")
Weight	317.5 g (11.2 oz)
Actuating air pressure required	4.8–6.2 bar (70–90 psi)
Maximum fluid pressure	20.7 bar (300 psi)
Fluid inlet	1/8 NPT female
Fluid outlet	Male luer lock
Mounting	1/4-28 UNF tapped hole
Cycle rate	Exceeds 400 per minute
Air cylinder body	303 stainless steel
Fluid body	303 stainless steel
Piston	303 stainless steel
Needle and nozzle	303 stainless steel
Tip adapter	303 stainless steel
SafetyLok collar	Nylon
Maximum operating temperature	43° C (110° F)
Warranty	1 year, limited





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 — at 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



Select Your Controller

See the Valve Selection Guide for the controllers compatible with this valve – <u>www.nordsonefd.com/ValveGuide</u>.

Automated Dispensing Systems

Nordson EFD automated dispensing systems deliver market-leading repeatability and accuracy in fluid placement and positioning. Specialized dispensing software simplifies setup and programming. Optimize dispensing results with features such as laser height sensing and smart vision CCD cameras.

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. Cartridge sizes range 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 Optimum 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.

Request a Process Evaluation

Contact Nordson EFD to configure a precision dispense system that meets your specific needs, with:

- A complimentary process evaluation by experienced fluid dispensing experts
- Samples processed for customer evaluation and approval prior to purchase



741V valves dispense dots of UV-cure adhesive on a bar code scanner lens.



For Nordson EFD sales and service in over 40 countries, contact Nordson EFD or go to www.nordsonefd.com.

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