# Controlled, consistent coatings and bonding for optical media.

dyes solvents UV lacquers UV adhesives resins



"The valve start/stop performance is very good; no droplets formed. The size is much smaller, a particular advantage for the dispense arm robot."

- EFD optical media OEM customer

The 702M-SS mini-diaphragm dispense valve is designed for drip-free coating and consistent shot-to-shot bonding with low-to-medium viscosity fluids in the optical media industry.

Used in combination with Nordson EFD PTFE\*-coated dispense tips, the 702M-SS valve significantly reduces reject rates and applies consistent, precise deposits of dye, UV lacquers and UV adhesives.

At 60% smaller and 70% lighter than other dispense valves, the 702M-SS mounts above the disc and is easy to move, which means less maintenance and wear on the disc machine's robotic arm.

\*PolyTetraFluoroEthylene





### **Features**

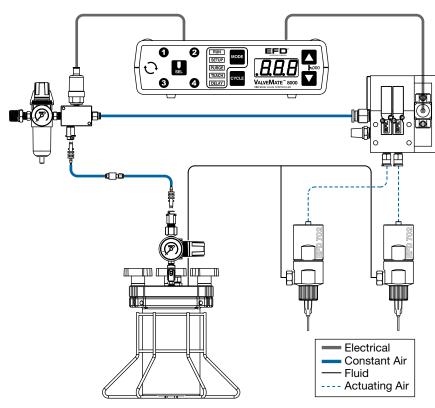
- Consistent shot-to-shot performance
- Quick, clean cutoff eliminates drips and stops crystallized contamination
- Low maintenance for millions of cycles
- Tamper-resist stroke adjustment
- Unique design eliminates trapped air and bubbles



## Mini-diaphragm valve systems

The complete system includes the 702M-SS dispense valve, ValveMate<sup>™</sup> 8000 controller, 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.



Fluid Inlet Ms

702M-SS actual size

Actuating

#### 702M-SS Valve

The dispense valve incorporates an inert polymer diaphragm that isolates the fluid from the valve actuating cylinder and provides very fine flow control for all low to medium viscosity fluids. The unique design provides guick valve ON/OFF and the ability to rapidly obtain maximum flow rates.

Amount dispensed depends on valve open time, fluid pressure, fluid viscosity, stroke adjustment and tip size.

Size: 63.5 mm x 19.1 mm (2.50" x 0.75" diameter)

Weight (less fittings): 49.3 grams (1.74 oz)

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

Maximum fluid pressure: 70 psi (4.8 bar)

Fluid inlet thread: M5

Cycle rate: Exceeds 500 per minute Air cylinder body: Type 303 stainless steel

Fluid body: Type 303 stainless steel Piston: Type 303 stainless steel

Diaphragm: UHMW\* polyethylene, FDA approved

Tip retaining nut: Aluminum All stainless steel parts are passivated. \*Ultra High Molecular Weight polyethylene



#### 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
- Maximum machine efficiency
- Increased production output
- · Easy deposit size control
- On-the-fly adjustability
- Interfaces with Programmable Logic Controller (PLC)

#### Fluid Reservoirs

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).

#### **PTFE-Coated Tips**

The correct tip selection is very important to achieve proper performance of dispense valves.

EFD offers special PTFE-coated stainless steel tips as part of the 702M-SS dispense system. 702M-SS valves are packaged with a sample of these tips, which provide a clean cutoff and prevent wicking to eliminate drips. These tips are integral to the 702M-SS valve performance.

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The Wave Design is a trademark of Nordson Corporation.



