

Consistent, precise spray valve systems.

activators
coatings
grease
inks
liquid fluxes
oils
silicones
solvents

EFD[®]
A NORDSON COMPANY



“In manufacturing, reliability is everything. That’s what we get from EFD valves. If all our equipment worked as well... our jobs would be easier.”

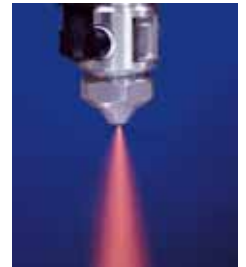
Ford Motor Company

The 781S Series Low Volume Low Pressure (LVLP) spray systems provide consistent coating of low to medium viscosity fluids.

Microliter to milliliter amounts can be reliably dispensed in round patterns with diameters ranging from 0.17" to 2.0" (4.3 to 50.8 mm) and in fan patterns with widths up to 6.5" (165.1 mm).

The combination of adjustable fluid flow, adjustable nozzle air and post-air cutoff provides excellent spray control.

The system includes compact spray valve, ValveMate™ controller and tank. The controller is set for length of time and air pressure required for precise coverage. Programmable nozzle air delay after each spray cycle keeps the spray nozzle clog-free and reduces maintenance and downtime.



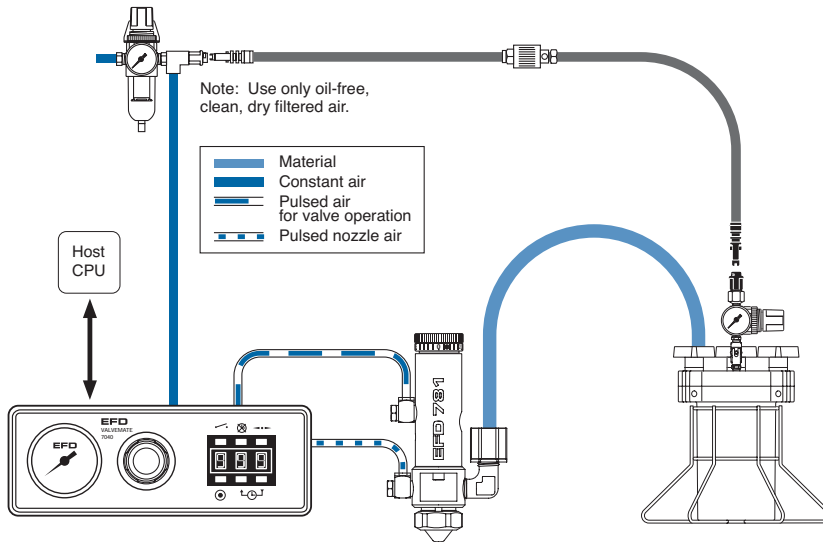
Features

- High transfer efficiency
- **No overspray, no mist, no bounce**
- Adjustable fluid flow rate
- Adjustable nozzle air
- Extremely consistent area of coverage
- Cycle rate exceeds 400/minute
- Low-maintenance design

Spray valve systems

The complete system includes the 781S dispense valve, ValveMate 7040 controller, and the fluid reservoir.

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.



ValveMate™ 7040 Controller

The ValveMate controls valve open time and nozzle pressure. Its compact size allows the controller to be mounted near the valve for easy setup and spray adjustment.

- Partner to Programmable Logic Controller (PLC)
- Easy control for consistent coverage
- Precise control of nozzle air pressure
- End-of-cycle air delay prevents valve from clogging
- 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- or 4-axis tabletop system offers consistent coverage repeatability. Work area: 325x325x100mm or 525x525x100mm.

781S Series Valves

The 781S Series valves are used with ValveMate 7040 controllers for precise control of fluids without mist or overspray. Adjustable Low Volume Low Pressure (LVLP) nozzle air transfers fluid from the nozzle to the substrate at low velocity and high transfer efficiency.

Size: 4.12" x 1.06" diameter (104.6 mm x 26.9 mm)

Weight: 14.2 oz (405.3 grams) for 781S-SS model
8.2 oz (235.3 grams) for 781S model

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

Mounting: (1) 1/4-28 UNF tapped hole or adjustable mounting block

Cycle rate: Exceeds 400 per minute

Air cylinder body: 781S-SS: Type 303 stainless steel
781S: Hard-coated aluminum

Fluid chamber: 781S-SS: Type 303 stainless steel
781S: Hard-coated aluminum

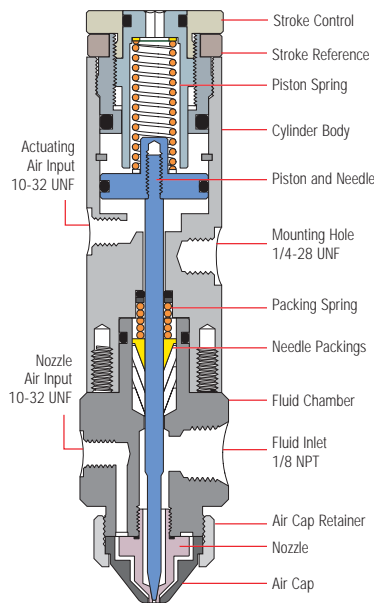
Air cap: Type 303 stainless steel

Piston: Type 303 stainless steel

Needle and nozzle: Type 303 stainless steel

Needle packings: Teflon®

All stainless steel parts are passivated.



781S-SS
75% actual size

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.



For EFD sales and service in over 30 countries, contact EFD or go to www.efd-inc.com/contact

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Spray Area Coverage

Stainless steel model #	Aluminum model #	nozzle diameter inches	nozzle diameter mm	pattern	Nozzle distance from surface									
					inches 1"	mm 25.4	inches 2"	mm 50.8	inches 3"	mm 76.2	inches 6"	mm 152.4		
781S-SS	781S	0.046"	1.1	round	0.25"	6.3	0.50"	12.7	0.75"	19.0	1.50"	38.1		
781S-SS-28	781S-28	0.028"	0.7	round	0.20"	5.0	0.40"	10.1	0.60"	15.2	1.20"	30.4		
781S-SS-14	781S-14	0.014"	0.3	round	0.17"	4.3	0.34"	8.6	0.50"	12.7	1.00"	25.4		
781S-SS-WA	781S-WA	0.046"	1.1	round	0.75"	19.0	1.50"	38.1	2.00"	50.8	n/a			
781S-SS-46F	781S-46F	0.046"	1.1	fan	1.00"	25.4	1.50"	38.1	2.00"	50.8	3.25"	82.6		
781S-SS-28F	781S-28F	0.028"	0.7	fan	0.40"	10.1	0.80"	20.3	1.20"	30.4	2.40"	60.9		
781S-SS-14F	781S-14F	0.014"	0.3	fan	0.34"	8.6	0.68"	17.2	1.00"	25.4	2.00"	50.8		
781S-SS-WF	781S-WF	0.046"	1.1	fan	1.50"	38.1	2.50"	63.5	3.25"	82.6	6.50"	165.1		

For tamper-resist model, specify part #781S-TR or #781S-SS-TR.

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