

Consistent, precise 781S spray valve systems.

activators
coatings
grease
inks
liquid fluxes
oils
silicones
solvents

EFD®
A NORDSON 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 4.3 to 50.8 mm (0.17" to 2.0") and in fan patterns with widths up to 165.1 mm (6.5").

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
- Extremely consistent area of coverage
- Cycle rate exceeds 400/minute
- Low-maintenance design
- Adjustable nozzle air

"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."

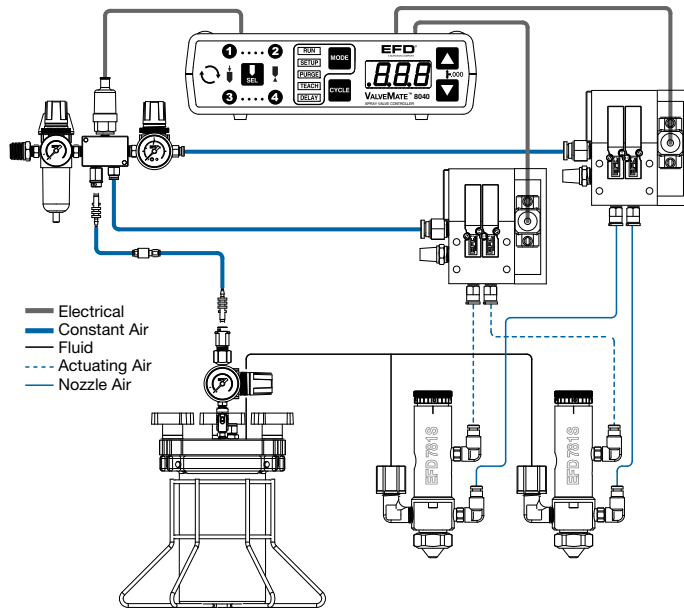
— Ford Motor Company

www.efd-inc.com info@efd-inc.com USA 800-556-3484 Europe +44 (0) 1582 666334 Asia +86 (21) 3866 9006

Sales and service of EFD® dispensing systems are available worldwide.

Spray valve systems

The complete system includes the 781S dispense valve, ValveMate 8040 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.



781S Series Valves

The 781S Series valves are used with ValveMate 8040 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: 104.6 mm x 26.9 mm diameter (4.12" x 1.06")

Weight: 405.3 g (14.2 oz) for 781S-SS model
235.3 g (8.2 oz) 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 body: 781S-SS: Type 303 stainless steel
781S: Hard-coated aluminum

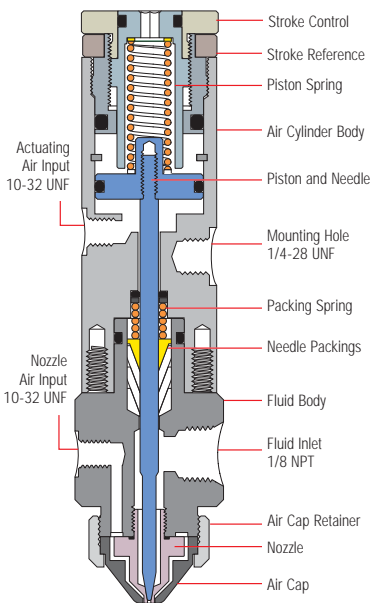
Air cap: Type 303 stainless steel

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

Spray Area Coverage

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

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



ValveMate 8040 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.

- Multi-valve control- up to (2) spray valves
- 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 TT xyz dispensing system incorporates all functions of the ValveMate. Compact 3- or 4-axis tabletop system offers consistent coverage repeatability. Work area: 325 x 325 x 100 mm or 525 x 525 x 100 mm.

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. Optimum™ Retainer Systems and Cartridges are available from 2.5 to 32 ounces (75cc to 950cc).



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

EFD, Inc.

East Providence, RI USA

USA & Canada: 800-556-3484; +1-401-431-7000

info@efd-inc.com

www.efd-inc.com

EFD International Inc.

Dunstable, Bedfordshire, UK

0800 585733 or +44 (0) 1582 666334

Ireland 00800 8272 9444

europa@efd-inc.com

www.efd-inc.com

EFD, Inc., Asia

China: +86 (21) 3866 9006

china@efd-inc.com

www.efd-inc.com/cn

Singapore: +65 6796 9522

sin-mal@efd-inc.com

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