

# Product Data Sheet

## TS5540 Series

### Precision Spray Valve

The TS5540 Series Spray Valve is designed for precise spray applications of low viscosity fluids. An external stroke control makes it easy for the operator to fine-tune fluid flow. Total control of the spray cycle is provided by adjustable fluid flow and precise control of pre-spray, atomizing air and post spray with the TS500R Multi-Purpose Digital Controller. Downtime is virtually eliminated with only one seal to replace during normal maintenance.

The TS5540 Series Spray Valves comes with FDA-Compliant 303 stainless steel construction in both air cylinder and fluid housing. A field replaceable Delrin® seat provides positive shut off and very long life cycles. The compact design allows for easy integration into automated applications.

Two nozzle types are made available, cone (R) for round spray patterns and fan (F) for elliptical spray patterns. Both versions are available in 3 nozzle orifice sizes.

The valve is shipped with the following items:

- Mounting bracket kit
- Valve air hoses
- Luer lock fluid line
- Fluid inlet fittings - 1/4" compression and Luer lock type

### TYPICAL APPLICATIONS

- Spraying Conformal Coating onto PCBA's
- Spraying oil for lubrication purposes
- Spraying ink to indicate Pass or Fail

#### Round (cone) Nozzle

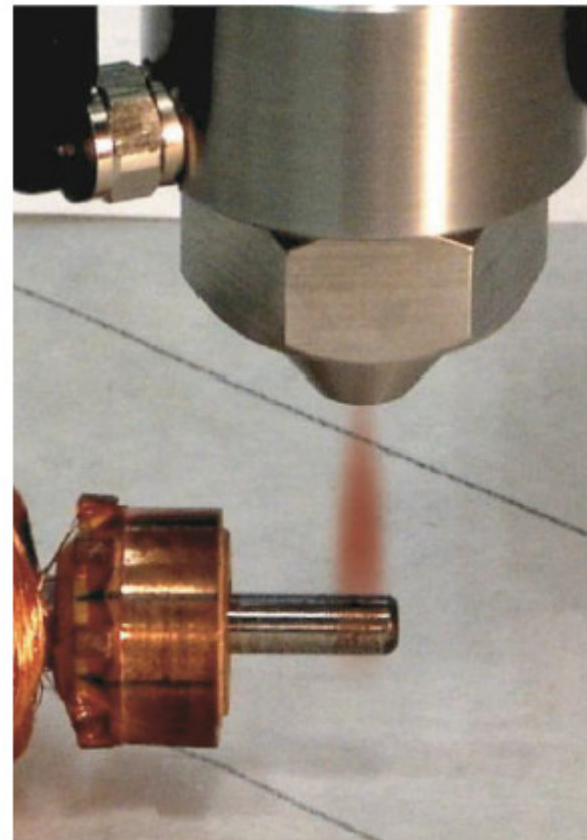


#### Fan Nozzle

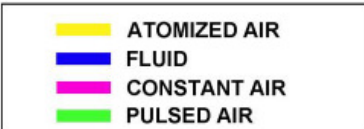
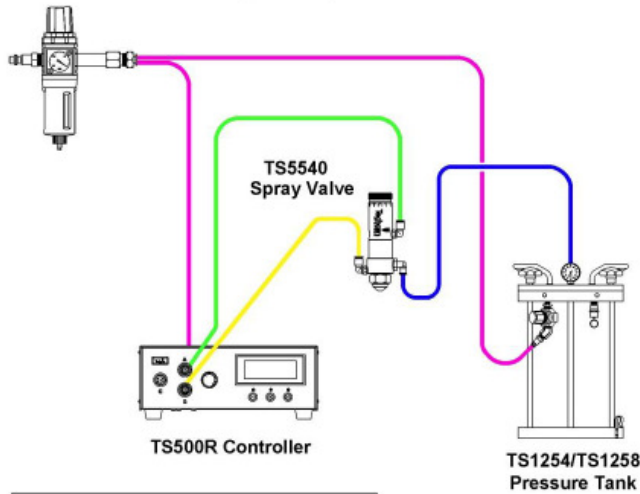


### KEY FEATURES AND BENEFITS

- No overspray
- Long life cycles
- Uniform spray pattern
- Round or elliptical spray pattern



**TYPICAL SETUP**



**SPECIFICATIONS & PART NUMBERS**

Series Number:	TS5540
Size:	See drawing
Fluid Inlet Port:	1/4" NPT female
Fluid Outlet Port:	Spray cap
Aux Air Inlet Port:	10-32 UNF female
Activation Pressure:	70 psi (4.8bar) Min.
Max Fluid Pressure:	100 psi (6.9bar)
Operating Frequency:	400+ cycles/min.
Mounting Port:	1/4-20 UNC-2B female
Viscosity Range:	1 - 5 000cps

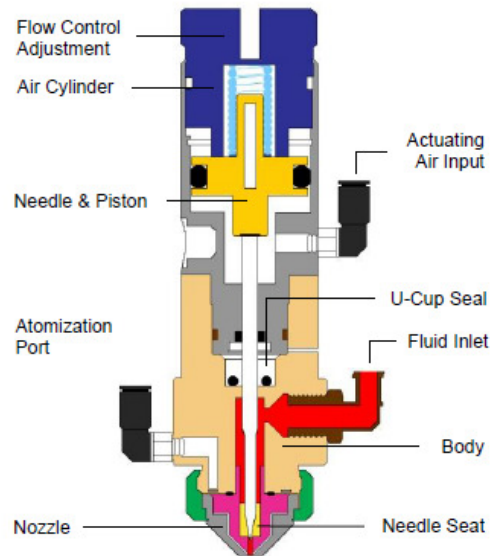
Wetted Parts: 303 SS, Teflon®, Delrin®

Part Number	Nozzle Orifice	Min Ø Spray Pattern	Pattern
TS5540-014R	0.014"/0.36mm	0.17"/4.32mm	●
TS5540-028R	0.028"/0.71mm	0.20"/5.08mm	
TS5540-046R	0.046"/1.17mm	0.25"/6.35mm	
TS5540-014F	0.014"/0.36mm	0.50"/12.70mm	●
TS5540-028F	0.028"/0.71mm	0.65"/16.51mm	
TS5540-046F	0.046"/1.17mm	1.00"/24.40mm	

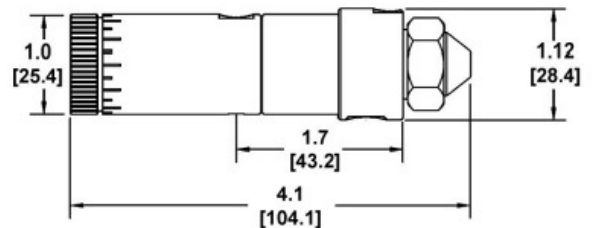
NOTE: Above data is with water and nozzle is at 1" (25.4mm) substrate distance

**ACCESSORIES**

- **Fluid reservoirs:** The valve can be fed from the TS1254 or TS1258 Pressure Tank, or from any size syringe barrel or cartridge



Dimensions are in inches [mm]



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