

# TS5420 Series

Needle Valves



TECHCON™



## Needle Valve TS5420 Series

---

General purpose needle and seat valve designed for low to medium viscosity fluids over a wide range of deposit sizes.

---

The TS5420 Series Needle Valve is a normally closed needle and seat dispensing valve, which is designed to dispense low to medium viscosity fluids.

The TS5420 Series is a pneumatically triggered single acting valve that can be used with an internal spring or may be connected for air closing without the spring (double acting).

The internal spring return makes the valve fully adaptable with Techcon's TS550R controllers. A short opening stroke provides fast, positive shut off and the external stroke control adjustment allows the operator to fine tune deposit sizes.

Air pressure through the air inlet retracts the needle assembly, from the seat, allowing fluid to flow from the valve inlet to the Luer lock outlet.

Relieving the input pressure allows the spring to return the needle back to its closed position, closing the fluid path, ready for the next dispensing cycle.

A full stainless steel construction version is made available where operators require the air cylinder to be made of stainless steel.

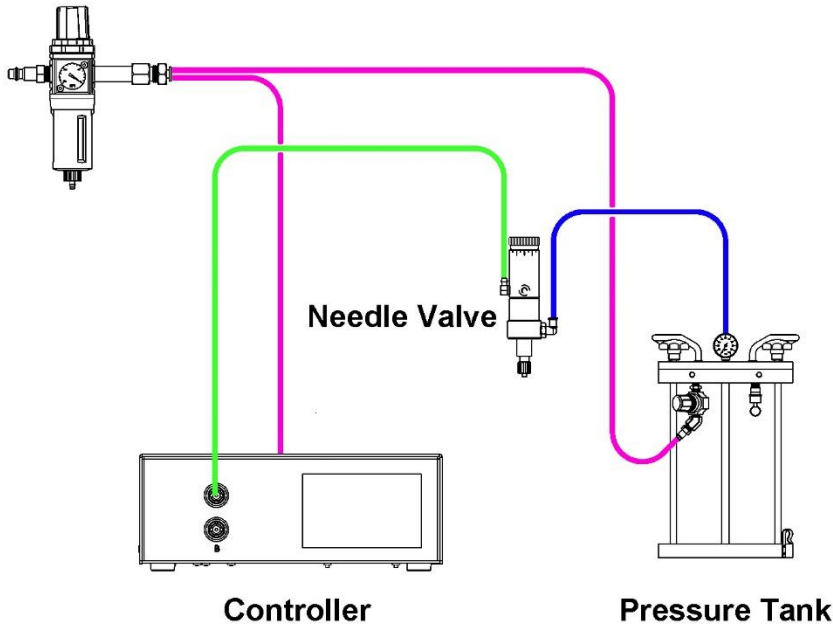
# TS5420 Series

Needle Valves



TECHCON

## IDENTIFICATION OF FEATURES



## SPECIFICATIONS & PART NUMBERS

Part Number:	TS5420	TS5420SS
Size (Imperial):	4.6" x 1.12"	4.6" x 1.12"
Size (Metric):	116.8mm x 28.4mm	116.8mm x 28.4mm
Weight:	0.30 lb (136g)	0.50 lb (227g)
Fluid Inlet:	1/8" NPT female	1/8" NPT female
Fluid Outlet:	Luer lock male	Luer lock male
Aux. Inlet: (Double Acting)	10-32 UNF female	10-32 UNF female
Act. Pressure:	70 psi (4.8bar) Min.	70 psi (4.8bar) Min.
Fluid Pressure:	300 psi (20.7bar) Max.	300 psi (20.7bar) Max.
Cycle Rate:	400+ Cycles/min.	400+ Cycles/min.
Mounting Port:	1/4" -20 UNC-2B female	1/4" -20 UNC-2B female
Viscosity Range:	1 – 100 000cps	1 – 100 000cps
Wetted Parts:	SS*, Teflon®, Al., Delrin®	SS*, Teflon®, EPR*, Delrin®

\*SS: Stainless Steel    \*Al.: Aluminum    \*EPR: Ethylene Propylene Rubber

The valve is shipped with the following items:

- Mounting Bracket
- Air Hose
- Luer Lock Fluid Line
- 1/4" and Luer lock inlet fittings
- Dispense Tip Selection Pack

## ACCESSORIES

- Fluid Reservoirs: The valve can be fed from Techcon's TS1254 or TS1258 pressure tanks, or from any size syringe barrel.
- Dispense Tips: Precision TE tips, TT-RIGID are recommended for this valve.
- Recommended Controller: TS550R Smart Pneumatic Valve Controller

## Key Features & Benefits

- Low maintenance design
- Can handle fluid pressures up to 300 psi (20.7bar)
- Rotating tip collar allows for easy tip integration

## Typical Applications

### Dispensing:

- Lubricant in automotive switches
- UV beads in LCD bonding applications
- Impregnating humidity cards with chemical in semiconductor packaging applications