

## TS5000DMP Series Disposable Material Path Rotary Valve

The TS5000DMP Series Rotary Valve takes a revolutionary unique approach to solving some of the most difficult applications such as: dispensing two-component epoxy and abrasive fluid. The valve contains a disposable feed screw and chamber that can be easily and quickly replaced within seconds, while the production line is still in operation. This feature significantly reduces down time and waste.

The unique TS5000DMP Series Valve offers a choice of 3 different feed screw sizes (6, 8 and 16-pitch). Optional encoder motors are available for closed loop feedback requirement.

**Typical Applications:** Die Attach, Surface Mount Adhesive (SMA), Chip Encapsulation, Dam Writing, Thermal Grease; Silver paste, 2-part epoxy



### Key Features:

- No cleaning or maintenance required
- Accurate and repeatable dispensing output
- Quick and easy replacement of Disposable Material Path
- Adjustable dispense rate
- Compatible with a wide range of materials
- Closed-loop motor control with encoder feed back (encoder version)

### Available Configurations:

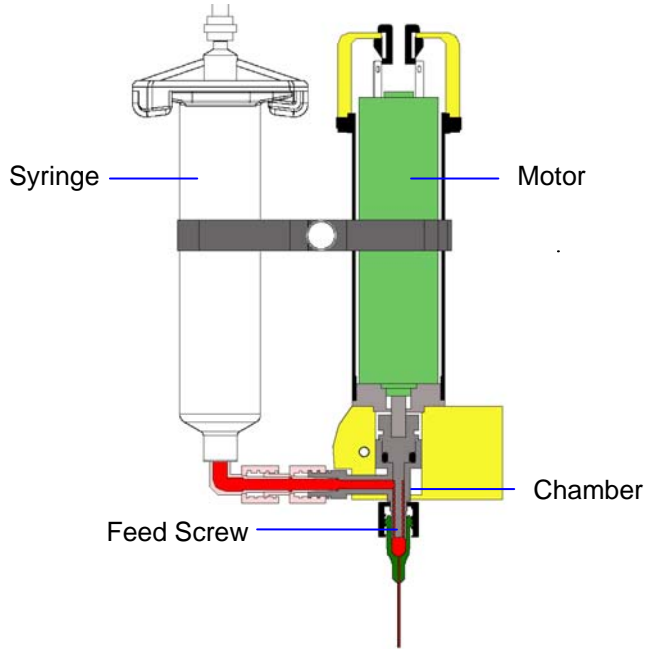
Part Number	Description
TS5000DMP	Rotary Valve, Disposable Material Path
TS5000DMPE	Rotary Valve, Disposable Material Path, Encoder



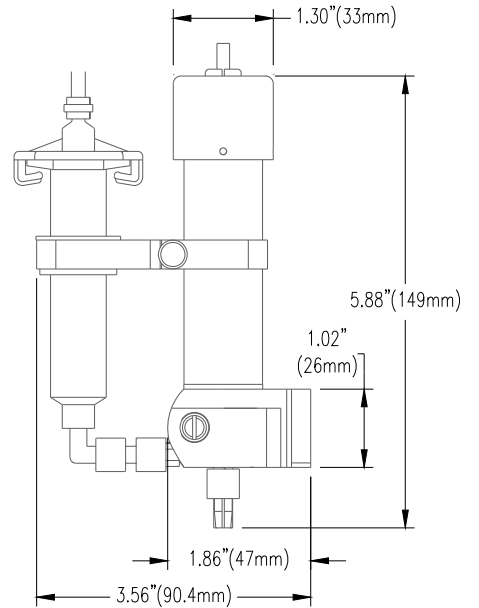
### Available Replacement DMP (Sold in pack of 10):

Size	Color	Fixed Collar	Rotating Collar
6-Pitch	Red	DMP6-10	DMP6R-10
8-Pitch	Black	DMP8-10	DMP8R-10
16-Pitch	Blue	DMP16-10	DMP16R-10

The TS5000DMP Series valve dispenses material with a rotary displacement action using a rotary feed screw principle. During operation, air pressure pushes material from the syringe into the feed screw chamber. As the feed screw rotates, material travel between the threads and out to the dispense tip. The feed screw is driven by the DC motor.



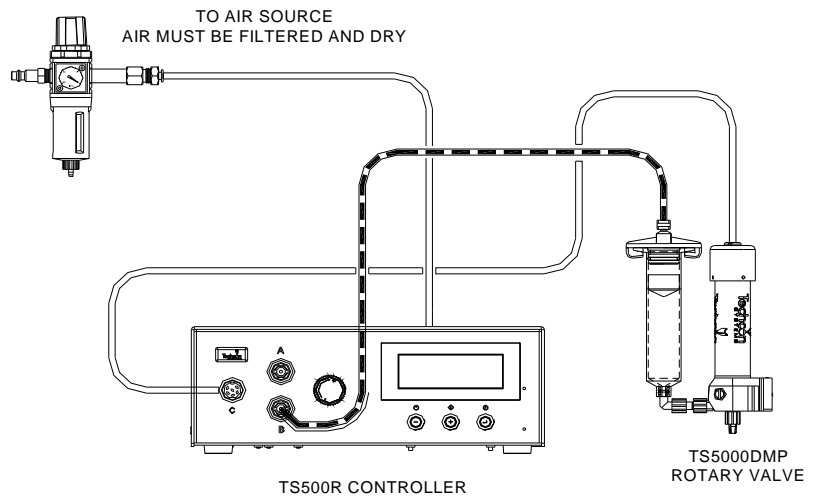
**Cross Section**



**Outside Dimension**

**Specifications**

- Length (without dispense tip): 5.88" (149mm)
- Width: 3.56" (90.4mm)
- Weight: 0.77lb (0.35 kg)
- Wetted Parts: Delrin®, Viton®, Nylon
- Motor : 6-Watt, 400 RPM (no load)
- Input Voltage: 5-24 VDC
- Available Feed Screw sizes: 16-Pitch, 8-Pitch, 6-Pitch
- Maximum Air Pressure: 30 psi (2.07 bar)
- Viscosity range: 30K – 1300K Cps.



**Typical Setup**

**Recommended Controller:** TS500R Digital Controller

**Material Reservoir:** The TS5000DMP Series valve can be fed directly from a syringe (3-55 cc) or can be fed remotely from a cartridge or a pressure tank.

**Dispense Tip:** Precision dispense tip such as the TE series, TS-SS series or TT series is recommended.

For application assistance and ordering information please visit Techcon Systems website at [www.techconsystems.com](http://www.techconsystems.com)