

Micro-Meter Mix System

TS8200D Data Sheet



TECHCON™



True volumetric measuring, mixing, and dispensing of 2-component materials

The TS8200D Series Micro-Meter Mix is a precision volumetric mixing and dispensing system for 2-component material. It consists of 2 progressive cavity pumps integrated in a fluid manifold connected to the static mixing nozzle. Part A and part B of the material is precisely fed by the progressive cavity pump with the correct ratio into the static mixing nozzle to provide accurate mixing and dispensing output.

Every component of the pump was designed to the highest tolerances and manufactured to the strictest degree of precision, ensuring world class accuracy and repeatability.

TS580D-MM smart controller features an intuitive touchscreen user-interface for easy setup and operation. Pump calibration is quick and easy. Dispensing parameters can be quickly dialed in on the touchscreen.

KEY FEATURES AND BENEFITS:

- True Volumetric/Positive Displacement technology to achieve +/- 1% variation in dispense output
- High quality mixing to ensure proper material curing
- Continuous Flow with adjustable flow rate to provide continuous dispensing process for efficient operation
- Independent of pressure and viscosity change to ensure accurate and precise results
- Suck back action to prevent material dripping
- Quick and easy cleaning to reduce down-time
- Internal fluid pressure alarm to prevent cross-contamination

TYPICAL APPLICATIONS:

- Bonding
- Glob-Top Potting and Encapsulation
- Potting of Electronic Components
- Battery Pack Sealing
- Thermal Paste Dispensing
- Filling

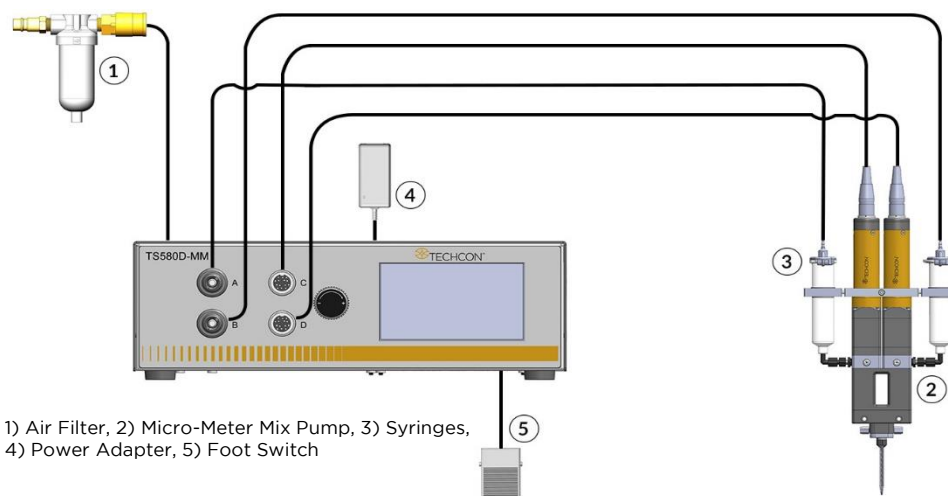
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TYPICAL SETUP



SPECIFICATIONS

| | 100 | 200 | 300 | 400 | 500 |
|----------------------------|--|------------------|------------------|------------------|------------------|
| Length (mm) L x W x D | 276 x 69 x 33 | 276 x 69 x 33 | 276 x 69 x 33 | 302 x 69 x 33 | 323 x 69 x 33 |
| Length (inches) L x W x D | 10.9 x 2.7 x 1.3 | 10.9 x 2.7 x 1.3 | 10.9 x 2.7 x 1.3 | 11.9 x 2.7 x 1.3 | 12.7 X 2.7 x 1.3 |
| Weight (kg) | 1.24 | 1.24 | 1.24 | 1.33 | 1.47 |
| Weight (lbs.) | 2.74 | 2.74 | 2.74 | 2.95 | 3.25 |
| Motor | 24V DC, incremental encoder | | | | |
| Repeatability | +/- 1% per pump* | | | | |
| Dispense Accuracy | > 99% | | | | |
| Fluid Inlet Pressure - Max | Up to 2 bar (30 psi) for viscosity of 1,000 cps or less, up to 5.5 bar (80 psi) for viscosity greater than 1,000 cps** | | | | |
| Fluid inlet type | 1/8" NPT | | | | |
| Mixing Nozzle | K-type, Standard Bayonet | | | | |
| Mounting | M4 x 35MM, SHC, S.S | | | | |
| Operating Temperature | 10 – 40°C (50 - 104°F) | | | | |
| Fluid Temperature | 10 – 40°C (50 - 104°F) | | | | |
| Storage Conditions | 10 – 40°C (50 - 104°F) | | | | |
| Fluid Viscosities | 1 - 300K Cps (m.Pa.s) | | | | |

| | 100X100 | 200X200 | 300X300 | 200X100 | 300X100 | 300X200 | 400X400 | 500X500 |
|--|-------------|--------------|--------------|--------------------------|-------------------------|-------------------------|----------|----------|
| Flow Rate (mL/min) | 0.24 – 2.42 | 1.29 – 13.80 | 1.56 – 16.24 | 0.77 – 8.11 | 0.90 – 9.33 | 1.43 – 15.02 | 4.8 – 48 | 6.4 – 64 |
| Dispensing Volume /Revolution /Pump (ml) | .012 | .047 | .08 | .047 (200) .012 (100) | .08 (300) .012 (100) | .08 (300) .047 (200) | .12 | .31 |

WETTED PARTS

| | |
|----------------------------|-----------------------------|
| Stator Housing | Anodized Aluminum |
| Rotor | Stainless Steel |
| Stator | PFE |
| Flex Coupling | Stainless Steel, Polyolefin |
| Shaft Seal | UHMW PE |
| Seal Block, Manifold Plugs | Delrin |
| Manifold Gaskets | Viton |
| Pump O-rings | BUNA N |
| Vent Seals | Fluorosilicone |
| Fluid Inlet Fittings | UHMWPE, Nylon |

*Accuracy measurements are taken for one complete revolution. Absolute deviation in volumetric dispense accuracy exist for incomplete revolutions and may also occur for certain dispensing fluid.

**2 bar self-sealing is for fluid with viscosity of 1000 Cps or lower. The pump can handle up to 5.5 bar for 300K Cps viscosity fluid.