



Precision Dispensing Solutions

Industrial Ingenuity Lives Here.



The Techcon Story

In the evolving world of manufacturing, Techcon is delivering smarter, cleaner, more durable solutions.

Since 1961, our fluid and adhesive dispensing products have been renowned for their superior accuracy and durability, offering customers both improved industrial hygiene and enhanced productivity.

Moving forward, our innovation road map pushes these boundaries even further, with the introduction of intelligent solutions such as an automatic robotic dispensing system and equipment with homeostatic dispensing capabilities. These new developments Reduce human error and further increase precision.

Our products are backed by an expert engineering team that can solve the toughest manufacturing problems in a range of industries, from aerospace, military and material packaging to industrial assembly, medical devices and electronics.

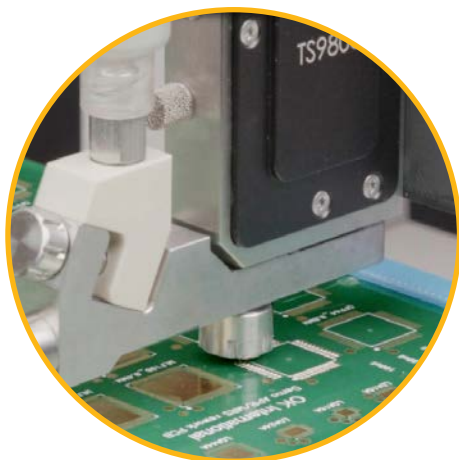
We're Techcon, an OK International company.



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Find the right products for your application



Bonding With Cyanoacrylate Adhesives (CA)

CA is a very frequently used adhesive in generic bonding applications and is best used with a moisture-resistant dispensing system. The TS5622VU Diaphragm Valve along with the TS555R Controller and TS1258 Pressure Pot is a perfect system for this application. **TS5622VU (page 21), TS555R (page 27), TS1258 (page 28)**



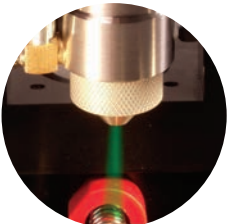
Bonding & Encapsulation with 2K Material

Electrical finished goods become smaller each year. It has become necessary for most operations to use two-part epoxies to bond and protect these otherwise fragile assemblies. To accurately measure, mix and dispense these often fast-curing materials, manufacturers turn to the Techcon **TS8200D Micro-Meter Mix** to achieve precision dispensing of bonding and filling materials, glob-top encapsulate, battery sealing and thermal past. **TS8200D Micro-Meter Mix & TS580D-MM Controller (page 17)**



Microdot Adhesive Dispensing

Most medical device manufacturing applications require a dispensing system that can provide highly repeatable dispensing of UV adhesives. With the unique needle shut off design inside the dispensing tip, the TS5440 Microshot Needle Valve is the perfect choice for these applications. The TS555R controller is recommended for this valve. **TS5440 Microshot Needle Valve (page 23), TS555R Controller (page 27)**



Spray Conformal Coating Application

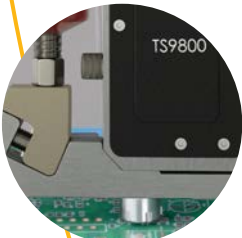
The TS5540 Series Spray Valve along with the TS566R Controller and the TS1258 Pressure Pot is an ideal system to spray conformal coating material on the surface of an assembled printed circuit board to provide protection against moisture, dust and corrosion from extreme environments. **TS5540 Series Spray Valve (page 26), TS566R Controller (page 27), TS1258 Pressure Pot (page 28)**



Gasketing Application

When a high throughput or large shot size is required for gasketing or similar "form-in-place-gasket" applications, the TS941 Series Spool Valve along with the TS555R Controller is the recommended system choice. Whether the fluid is fed from a cartridge or pail pump, the TS941 Series will dispense accurately and consistently through a dispensing nozzle or dispensing tip. **TS941 Series Spool Valve (page 24), TS555R Controller (page 27)**

For finer deposit control of sealing material, the TS5322 Series Mini Spool Valve with the TS555R Controller is recommended. **TS5322 Series Mini Spool Valve (page 24), TS555R Controller (page 27)**



Jet Dispensing Chip Bonders

Dispensing chip bonders is an essential part of electronics manufacturing, from applying die attach to bonding laser diodes and optical systems. Not only is the Techcon TS9800 Jet Valve the best solution for dispensing chip bonders because it's so fast (up to 1500 Hz continuous, 2000 Hz burst), but it can jet customized volumes and patterns on uneven surfaces, into small holes and at angles not possible with other dispensing methods. **TS9800 Jet Valve and TS980 Smart Controller (page 16)**

Plural Component Material Dispensing

Plural component material dispensing is no longer a problem when using a Disposable Material Path valve. When the 2-component material starts to cure, just throw away the valve wetted parts. It takes less than one minute to replace the DMP.

For low viscosity material, the TS1212 Pinch Tube Valve along with the TS555R Controller is recommended. For medium to High-Viscosity material with high repeatability rate requirement, the TS5000DMP valve with the TS577R controller is suitable. **TS1212 Pinch Tube Valve (page 25), TS555R Controller (page 27), TS5000DMP-DCX Valve (page 19), TS577R Controller (page 27)**



Solder Paste Dispensing

Solder paste is the most difficult material to dispense. The TS5000DMP-DCX Series Rotary Valve is designed specifically to dispense solder paste without clogging and separation. Dot size as small as 0.5 mm can be dispensed consistently. A majority of automated dispensing systems incorporate the TS5000DMP-DCX Series valve for solder paste dispensing. **TS5000DMP-DCX Series Rotary Valve (page 19), TS577R Controller (page 27) Pressure Pot (page 28)**

Find the Best Dispensing Solution for Your Application

Determining the best configuration of valves, fluid line assemblies, controllers, adapters, syringes, and/or dispensing cartridges for your own needs is not easy.

Techcon is here to help

Take advantage of the Techcon Material Test Program, a service where our Application Engineers test your material in our systems and dispense on your part to build the best bespoke solution to meet your requirements.



Interested? Fill out the Application Form or contact your Techcon Regional Sales Manager:

www.techcon.com/application-form

www.techcon.com/contact-us



| | Page Number | Viscosity Range | | | Small Shot Accuracy by Viscosity Range | | | Disposable Material Path (DMP) | Field-Replaceable Wetted Parts | High Flow Rate | High Feed Pressure | Aggressive Material | Abrasive Material | Atomizing Spray |
|----------------------------|-------------|-----------------|-----|------|--|-----|------|--------------------------------|--------------------------------|----------------|--------------------|---------------------|-------------------|-----------------|
| | | Low | Med | High | Low | Med | High | | | | | | | |
| TS1201 Dispensing Pen | 25 | • | | | | | | • | • | | | • | | |
| TS1212 Pinch Tube Valve | 25 | • | | | | | | • | • | | | • | | |
| TS941 Spool Valve | 24 | | • | • | | | | | • | • | • | • | | |
| TS5322 Mini Spool Valve | 24 | | • | • | | • | • | | • | | • | | | |
| TS5420 Needle Valve | 23 | • | • | | • | | | | • | | | • | | |
| TS5440 MS Needle Valve | 23 | • | • | | • | • | | | • | | | • | | |
| TS5540/5520 Spray Valves | 26 | • | | | • | | | | • | | | • | | • |
| TS5622 Diaphragm Valve | 21 | • | | | • | | | | • | | | • | | |
| TS5624DMP DMP Diaphragm | 22 | • | | | • | | | • | • | | | • | | |
| TS5000DMP DMP Rotary Valve | 19 | | • | • | | • | • | • | • | | | | • | |
| TS7000 Rotary Valve | 20 | | • | • | | • | • | | • | | | • | • | |
| TS8100-M PC Pump | 18 | • | • | • | • | • | • | | • | | | • | • | |
| TS9800 Jet Valve | 16 | • | • | • | • | • | • | | • | | | • | • | |
| TS8200-MM Micro-Meter Mix | 17 | • | • | • | • | • | • | | • | | | • | • | |

Viscosity Rating; Low = Up to 30K Cps; Med = 30K-100K Cps; High = 100K Cps - up

Recommended = •

For additional reference, see the The Valve Application Guide on page 43. Disclaimer: The chart above and the Valve Application Guide is for reference only. Please contact a Techcon applications engineer for accurate valve recommendations.

TS250 Series

Digital Dispenser/Controller

The TS250 Series Dispenser/Controller dispenses low, medium and high-viscosity fluids accurately and consistently. These systems are economical, highly accurate and repeatable microair dispensing systems. These user-friendly fluid dispensing systems include a digital timer with rotary control time knob for easy setup and a vacuum control for all viscosities of fluids.

Packaged ready to use with a universal power supply, foot switch, air hose, sample tips, syringe barrel and adapter. Features a small footprint and is lightweight.

Available in two versions of operating pressure: TS250 for 0 to 100 psi (0-6.9 bar) for general applications and TS255 for 0 to 15 psi (0-1.0 bar) for specific low-viscosity applications.



TS350 Series

Digital Dispenser/Controller

The TS350 Series Dispenser/Controller is equipped with a digital timer and a pressure and vacuum read out on a large LCD. The firmware provides the option of programming up to 10 varied, sequenced, or individual shots. It is intuitive to use, dispenses low, medium and high-viscosity fluids accurately and consistently.

The TS350/355 Series includes a vacuum-driven "suck-back" to control material tailing and waste and to control drips of fluid between dispense cycles. These systems have user-programmable manual and automatic dispense cycle settings (program and time) and they feature a "Teach Mode" for determining the dispensing time required when dispensing output is unknown.

Packaged ready to use with a universal power supply, foot switch, air hose, sample tips, syringe barrel and adapter. Features a small footprint and is lightweight.

Available in two versions of operating pressure: TS350 for 0 to 100 psi (0-6.9 bar) for general applications and TS355 for 0 to 15 psi (0-1.0 bar) for specific low-viscosity applications.



Specifications

| | TS250 Series | TS350 Series |
|---------------------------------|--|--------------------------------|
| Cabinet Dimensions | 6"W (152 mm) x 6.5"L (152 mm) x 7.0"H (178 mm) | |
| Weight | 2.6 lb. (1.2 kg) | |
| Cycle Rate | 600 cycle/minute | 1200 cycle/minute |
| Timing Range | 0.020-60.000 seconds | 0.008-60.000 seconds |
| Timing Repeat Tolerances | +/- 0.001% | |
| Input Voltage | 100-240 VAC | |
| Input Frequency | 50-60 Hz | |
| Cycle Mode | TIMED, PURGE | TIMED, INTERRUPT, TEACH, PURGE |
| Meets or exceeds | CE, TUV-GS and NRTL | |
| Warranty | 1 year | |

Operating Pressure

| | TS250 Series | TS350 Series |
|---|-----------------------|--------------|
| TS250/TS350 Dispenser/Controller | 0-100 psi (0-6.9 bar) | |
| TS255/TS355 Dispenser/Controller | 0-15 psi (0-1.0 bar) | |

Dispensing Components

700 Series



700 Series Syringe Barrel Kits

For your convenience these syringe barrels and white wiper pistons are packaged together without pistons inserted. Kits with blue pistons are also available. Sold in bulk and packs of 50.

Syringe Barrel Kits With White Wiper Pistons

| Size | Natural | Amber | Black |
|-------|----------------|----------------|----------------|
| 3 cc | 7030LL1NW-1000 | 7030LL1DW-1000 | 7030LL1BW-1000 |
| 5 cc | 7050LL1NW-1000 | 7050LL1DW-1000 | 7050LL1BW-1000 |
| 10 cc | 7100LL1NW-1000 | 7100LL1DW-1000 | 7100LL1BW-1000 |
| 30 cc | 7300LL1NW-500 | 7300LL1DW-500 | 7300LL1BW-500 |
| 55 cc | 7550LL1NW-250 | 7550LL1DW-250 | 7550LL1BW-250 |

Syringe Barrel Kits With Blue Wiper Pistons

| Size | Natural |
|-------|-----------------|
| 3 cc | 7030LL1NBL-1000 |
| 5 cc | 7050LL1NBL-1000 |
| 10 cc | 7100LL1NBL-1000 |
| 30 cc | 7300LL1NBL-500 |
| 55 cc | 7550LL1NBL-250 |

700 Series Air Powered Pistons

Spread the pressure evenly, using a piston for consistent dispensing of even high-viscosity material. Easy Flow pistons (blue) require less pressure to dispense and prevent air from becoming entrapped during the dispense process. Tight fit Wiper pistons (white) provide a complete seal for low-viscosity fluid. Loose fit straight wall pistons (red) prevent stringing and bouncing when dispensing high-viscosity material. Sold in bulk and packs of 50. Made of polyethylene.

| Size | Straight Wall Piston (Red) | Easy Flow Piston (Blue) | Wiper Piston (White) | High Interference (Green) |
|----------|----------------------------|-------------------------|----------------------|---------------------------|
| 3 cc | 7030006R-1000 | 7030007BL-1000 | 7030009W-1000 | |
| 5 cc | 7050006R-1000 | 7050007BL-1000 | 7050009W-1000 | |
| 10 cc | 7100006R-1000 | 7100007BL-1000 | 7100009W-1000 | |
| 30-55 cc | 7300006R-1000 | 7300007BL-1000 | 7300009W-1000 | 7300008G-1000 |

700 Series Dispensing Components

Our 700 Series Premier Dispensing Components are silicone and chloride-free and designed to work with industry-standard equipment. 700 Series Dispensing components ensure accuracy, repeatability, and productivity.

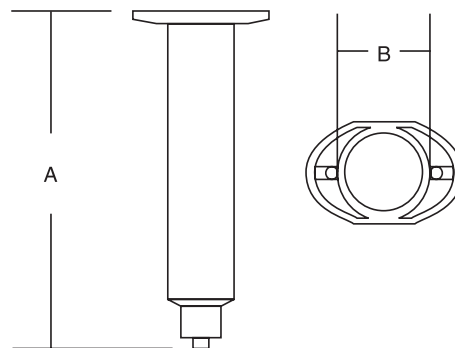
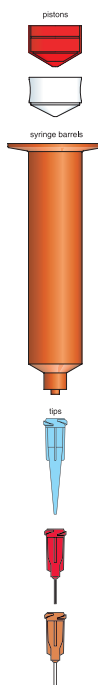
700 Series Syringe Barrels

Unique ultra-low draft construction of the inner diameter yields high accuracy and stability. They are comprised of industry-compliant silicone and chloride-free, low-friction PP. Available in three different colors: Natural for most generic applications, amber provides protection of UV/visible light block (up to 520nm), but with the ability to see material inside the barrel; and Black for total light block. Sold in bulk and packs of 50.

| Size | Natural | Amber | Black |
|-------|---------------|---------------|---------------|
| 3 cc | 7030LL1N-1000 | 7030LL1D-1000 | 7030LL1B-1000 |
| 5 cc | 7050LL1N-1000 | 7050LL1D-1000 | 7050LL1B-1000 |
| 10 cc | 7100LL1N-1000 | 7100LL1D-1000 | 7100LL1B-1000 |
| 30 cc | 7300LL1N-500 | 7300LL1D-500 | 7300LL1B-500 |
| 55 cc | 7550LL1N-250 | 7550LL1D-250 | 7550LL1B-250 |

700 Series Syringe Barrel Dimensions

| Capacity | Overall Length A inches/mm | Outside Diameter B inches/mm |
|----------|----------------------------|------------------------------|
| 3 cc | 2.96/75.18 | 0.46/11.56 |
| 5 cc | 2.83/71.9 | 0.59/14.99 |
| 10 cc | 3.58/90.9 | 0.72/18.29 |
| 30 cc | 4.66/118.36 | 0.99/25.15 |
| 55 cc | 6.91/175.51 | 1.01/25.65 |



Dispensing Components

700 Series

700 Series Receiver Head Assemblies

Receiver Head Assemblies are the connecting link between time/pressure controllers and syringe assemblies. These assemblies provide a safe connection for accident-proof dispensing. Available with 3 or 6 feet (0.9 - 1.8 meters) of tubing. Consists of a Delrin® receiver head with Viton® O-ring, tubing and male quick connector. Sold individually.



| Size | 3' (0.9m) Hose | 6' (1.8m) Hose | No Hose |
|----------|----------------|----------------|----------|
| 3 cc | 70303RHB | 70306RHB | 70300RHR |
| 5 cc | 70503RHB | 70506RHB | 70500RHR |
| 10 cc | 71003RHB | 71006RHB | 71000RHR |
| 30/55 cc | 73003RHB | 73006RHB | 73000RHR |

In-Line Fluid Filter

Attach the fluid filter to the receiver head to prevent fluid from being pulled back from the syringe barrel into the dispenser.

| Part No. | Description |
|-------------|---------------------------|
| 881-000-000 | In-line fluid filter kit |
| TSD800-11 | In-line fluid filter only |

In-Line Filter Specifications

| | |
|--------------------|-------------|
| Housing Material | PP |
| Filter Media | 0.2 µm PTFE |
| Operating Pressure | 75 psi max. |

Replacement O-rings for Receiver Heads

Sold in packs of 10.



| Size | EPR O-ring | Viton® O-ring |
|----------|------------|---------------|
| 3 cc | P3015EPK | P3019VPK |
| 5 cc | P3016EPK | P3020VPK |
| 10 cc | P3017EPK | P3021VPK |
| 30/55 cc | P3018EPK | P3022VPK |

The Receiver Head is installed with a Viton® O-ring.

700 Series Tip Cap

Designed to seal the syringe barrel tip during storage and shipment. Fits all syringe barrel sizes. Sold in bulk and packs of 50. Made from PP.



| Part No. | Description |
|---------------|------------------------------------|
| 7015LL-1000 | Tip Cap Double Helix Thread Orange |
| TE7015LB-1000 | Tip Cap Double Helix Thread Black |

Stand-up Tip Cap

Designed for easy attachment with large flat base to allow the syringe barrel to stand upright. Sold in bulk and packs of 50. Made of PP.



| Part No. | Description |
|--------------|-----------------------|
| 7015STC-1000 | Blue Stand up Tip Cap |

700 Series End Caps

Designed to seal the large end of the syringe barrel to ensure no contaminants come in contact with material during storage and shipment. Standard color is blue. Made from PP. Sold in bulk and packs of 50.

| Size | End Cap |
|----------|---------------|
| 3 cc | 703000CB-1000 |
| 5 cc | 705000CB-1000 |
| 10 cc | 710000CB-1000 |
| 30/55 cc | 730000CB-1000 |



TS700 Series Manual Syringe Gun

Lightweight syringe barrel applicator gun provides excellent control for medium/high-viscosity material. Easy to use. No dripping or spillage.



| Size | Manual Syringe Gun |
|-------|--------------------|
| 10 cc | TS710SG |
| 30 cc | TS730SG |
| 55 cc | TS755SG |
| Size | Replacement Rods |
| 10 cc | 71000ROD |
| 30 cc | 73000ROD |
| 55 cc | 75500ROD-C |

Finger Switch Assembly

Use the Finger Switch with Techcon's dispensers and syringes in place of a foot pedal. Provides control at your finger tip.



| Part No. | Description |
|----------|--|
| DX9010 | Finger Switch Assembly for TS Series Dispenser |

Premium Dispensing Tips

TE Series & Teflon™



TE Series — Dispensing Tips

TE Series Dispensing Tips

TE Series dispensing tips consist of a stainless-steel cannula with a double-helix PP hub.

This premium line of dispensing tips is burr-free and has an electro-polished cannula for unobstructed and consistent material flow. Silicone and chloride free. Sold in bulk and packs of 50.

| TE Dispensing Tips | | | | |
|--------------------|---------------|---------------|---------------|-----------------|
| | 1/4" (6.35mm) | 1/2" (12.7mm) | 1" (25.4mm) | 1-1/2" (38.1mm) |
| Gauge | | | | |
| 14 | | TE714050-1000 | TE714100-1000 | TE714150-1000 |
| 15 | | TE715050-1000 | TE715100-1000 | TE715150-1000 |
| 18 | TE718025-1000 | TE718050-1000 | TE718100-1000 | TE718150-1000 |
| 20 | TE720025-1000 | TE720050-1000 | TE720100-1000 | TE720150-1000 |
| 21 | TE721025-1000 | TE721050-1000 | TE721100-1000 | TE721150-1000 |
| 22 | TE722025-1000 | TE722050-1000 | TE722100-1000 | TE722150-1000 |
| 23 | TE723025-1000 | TE723050-1000 | TE723100-1000 | TE723150-1000 |
| 25 | TE725025-1000 | TE725050-1000 | | |
| 27 | TE727025-1000 | TE727050-1000 | | |
| 30 | TE730025-1000 | TE730050-1000 | | |
| 32 | TE732025-1000 | | | |
| 34 | TE734025-1000 | | | |

Color Coding and Gauge

For TE Series and TE Bent Dispensing Tips

| Color | Gauge | | I.D. (") | I.D. (mm) |
|------------|-------|--|----------|-----------|
| Olive | 14 | | 0.063 | 1.600 |
| Amber | 15 | | 0.054 | 1.371 |
| Green | 18 | | 0.033 | 0.838 |
| Pink | 20 | | 0.024 | 0.610 |
| Purple | 21 | | 0.020 | 0.508 |
| Blue | 22 | | 0.016 | 0.406 |
| Orange | 23 | | 0.013 | 0.330 |
| Red | 25 | | 0.010 | 0.254 |
| Clear | 27 | | 0.008 | 0.203 |
| Lavender | 30 | | 0.006 | 0.152 |
| Yellow | 32 | | 0.004 | 0.102 |
| Lime Green | 34 | | 0.0037 | 0.095 |

TE Bent Dispensing Tips

TE Bent Tips are precision bent at 45° and 90° angles. Perfect for dispensing fluid in hard to reach places. Sold in packs of 50.



TE Bent — Dispensing Tips

| TE Bent Dispensing Tips | | | |
|-------------------------|---------------|---------------|-----------------|
| | 1/2" (12.7mm) | | 1-1/2" (38.1mm) |
| Gauge | 90° | 45° | 45° |
| 14 | TE714050B90PK | TE714050B45PK | TE714150B45PK |
| 15 | TE715050B90PK | TE715050B45PK | |
| 18 | TE718050B90PK | TE718050B45PK | TE718150B45PK |
| 20 | TE720050B90PK | TE720050B45PK | |
| 21 | TE721050B90PK | TE721050B45PK | TE721150B45PK |
| 22 | TE722050B90PK | TE722050B45PK | |
| 23 | TE723050B90PK | TE723050B45PK | |
| 25 | TE725050B90PK | TE725050B45PK | |
| 27 | TE727050B90PK | TE727050B45PK | |
| 30 | TE730050B90PK | TE730050B45PK | |

Teflon™ Lined Tips

Teflon™ lined tips are ideal for low-viscosity fluids and cyanoacrylates (CA). They resist CA clogging and prevent damage to substrates. Teflon™ lined tips feature a double-helix PP color hub and a rigid Teflon™ crimped lining that protrudes approximately 1/8" (3.17 mm) from the inside of a stainless steel tube. Sold in packs of 50.



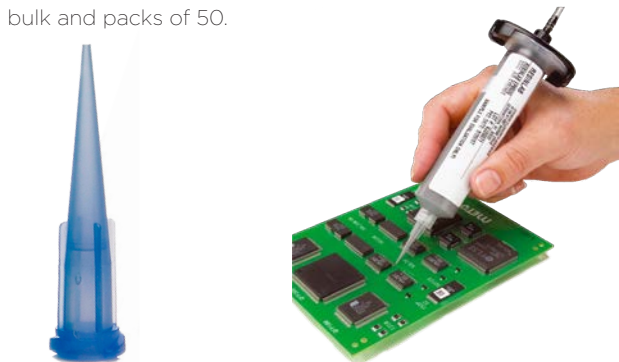
Teflon™ Lined — Dispensing Tips

| Teflon™ Lined Tips | | | | |
|--------------------|---------------|-------------|------------------|------------------|
| Hub Color | 1/2" (12.7mm) | 1" (25.4mm) | Tip ID | Crimp ID |
| Gray | TF720050PK | TF720100PK | 0.024" (0.61 mm) | 0.023" (0.58 mm) |
| Pink | TF725050PK | TF725100PK | 0.011" (0.28 mm) | 0.006" (0.15 mm) |

TT Series

Dispensing Tips

The tapered tip prevents blockage and increases the flow of high-viscosity material. Standard tips are molded in high-density polyethylene with UV light block additive. Rigid tips are molded in PP with opaque color. Sold in bulk and packs of 50.



Specifications

| | ID (inches) | ID (mm) | Width Line (mm) | Tip Height (mm) |
|------|-------------|---------|-----------------|-----------------|
| TT14 | 0.063 | 1.6 | 2.4 | 0.8 |
| TT16 | 0.047 | 1.19 | 1.785 | 0.595 |
| TT18 | 0.033 | 0.838 | 1.257 | 0.419 |
| TT20 | 0.023 | 0.58 | 0.87 | 0.29 |
| TT22 | 0.016 | 0.406 | 0.609 | 0.203 |
| TT25 | 0.010 | 0.254 | 0.381 | 0.127 |
| TT27 | 0.008 | 0.203 | 0.3045 | 0.101 |

| Color | Gauge | Standard TT Tips | Rigid TT Tips |
|-------|-------|------------------|-----------------|
| Olive | 14 | TT14-DHUV-1000 | TT14-RIGID-1000 |
| Gray | 16 | TT16-DHUV-1000 | TT16-RIGID-1000 |
| Green | 18 | TT18-DHUV-1000 | TT18-RIGID-1000 |
| Pink | 20 | TT20-DHUV-1000 | TT20-RIGID-1000 |
| Blue | 22 | TT22-DHUV-1000 | TT22-RIGID-1000 |
| Red | 25 | TT25-DHUV-1000 | TT25-RIGID-1000 |
| White | 27 | TT27-DHUV-1000 | TT27-RIGID-1000 |

TS-P

Plastic Dispensing Tips

Flexible tips allow access to hard to reach areas and allow you to "customize" the length. Ideal for CA applications. 1.5" length. Sold in bulk and packs of 50. Made from PP.

| Color | Gauge | TS-P Dispensing Tips |
|--------|-------|----------------------|
| Grey | 15 | TS15P-1-1/2-500 |
| Brown | 16 | TS16P-1-1/2-500 |
| Pink | 18 | TS18P-1-1/2-500 |
| Yellow | 20 | TS20P-1-1/2-500 |
| Black | 22 | TS22P-1-1/2-500 |
| Red | 25 | TS25P-1-1/2-500 |

BT Series

Dispensing Tips

Use these double-helix Brush Tips for "spread" applications such as glues, paints and other materials. The Soft brush is made of Red sable. The Stiff brush is made of nylon. Sold in packs of 12.



| Gauge | Soft Bristle | Bristle |
|-------|--------------|--------------|
| 16 | BT16-SOFTPK | BT16-STIFFPK |
| 18 | BT18-SOFTPK | BT18-STIFFPK |
| 22 | BT22-SOFTPK | BT22-STIFFPK |

Dispensing Tip Kit

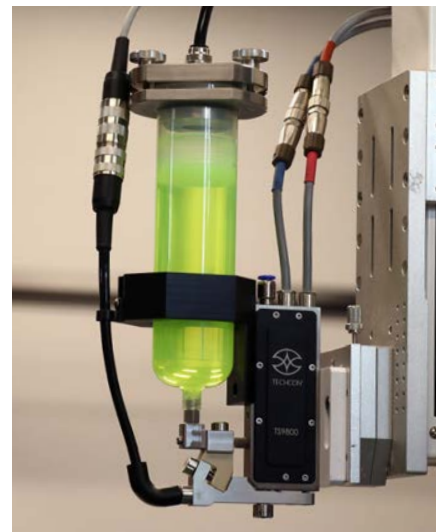
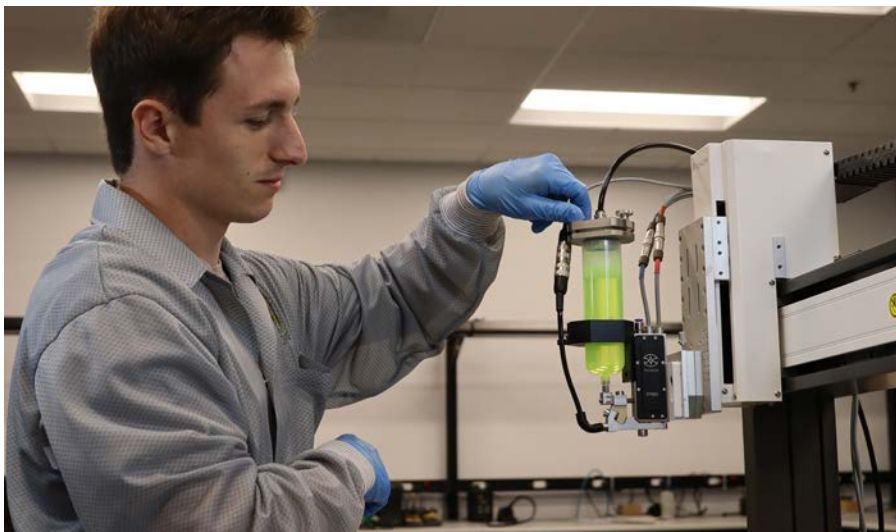
Decide for yourself which tip to use. This kit contains a variety of the most popular 700 Series tips to let you test different tips to find the ones that fit your needs.



| Part No. | Description |
|----------|--------------------|
| TN00DKIT | Dispensing Tip Kit |

TS60C-LL-N 140 cc Syringe Barrel

Introducing one of the largest syringe barrels on the market



Techcon TS60C-LL-N 140 cc syringe barrel is one of the largest capacity syringe barrels available in the fluid dispensing market, allowing productions to run longer with fewer fluid changeovers.

Key Features & Benefits

- Made of clear Polypropylene (PP)
- Ultra-low draft construction of inner diameter
- High accuracy and stability
- Silicon and chloride-free
- Connects directly to air adapters
- Allows for longer production runs, Reducing downtime

TS60C-LL-N Specifications

| | |
|-------------------------|------------------|
| Capacity | 140 cc (4.73 oz) |
| Material | Clear PP |
| Length | 177 mm (6.969") |
| Outside Diameter (O.D.) | 40 mm (1.57") |
| Maximum Pressure | 100 psi |

TS60C-LL-N Part Numbers

| Part Number | | Description |
|----------------|---|--|
| TS60C-LL-N-50 | 1 | Syringe, 140 cc (QTY = 50) |
| TS60C-LL-N-250 | 1 | Syringe, 140 cc (QTY = 250) |
| TS5C-A-50 | 2 | End Cap for TS60C-LL-N Syringe (QTY = 50) |
| TS5C-A-500 | 2 | End Cap for TS60C-LL-N Syringe (QTY = 500) |
| TS7P-LL-50 | 3 | Luer lock tip cap for TS60C-LL-N (QTY = 50) |
| TS7P-LL-500 | 3 | Luer lock tip cap for TS60C-LL-N (QTY = 500) |
| TS4P-LL-50 | 4 | Piston for TS60C-LL-N Syringe (QTY = 50) |
| TS4P-LL-500 | 4 | Piston for TS60C-LL-N Syringe (QTY = 500) |
| RH60CC-LL-6 | 5 | Receiver Head Assembly w/ 6 ft. / 1.8 m Hose |

All Techcon syringe barrels are manufactured in our silicone-free facilities in the United States and certified for industrial use.

Typical Applications

Bonding / Underfill / Potting /
Conformal Coating



Dispensing Components

700 & 400 Series Syringe Barrels & Disposable Components



400 Series

Disposable Dispensing Components

400 Series Disposable Syringes and Components are available in a variety of styles to meet a wide range of applications.

Syringe Barrels

Barrels are molded from polypropylene (PP). Standard style is Luer lock. Luer slip and taper tip styles are also available, however minimum quantity, lead time and pricing considerations apply. In natural color only (for black and amber refer to page 4).

| Syringe Barrels | |
|-----------------|--|
| Part No. | Description |
| 401L-1L-1000 | 400 Barrel 1 cc Luer Slip Natural (QTY = 1000) |
| 403LL-1-4000 | 400 Barrel 3 cc Luer Lock Natural (QTY=4000) |
| 406L-1-2400 | 400 Barrel 6 cc Luer Slip Natural (QTY = 2400) |
| 406LL-1-2400 | 400 Barrel 6 cc Luer Lock Natural (QTY = 2400) |

Pistons

Pistons are molded from polyethylene (-7) or thermoplastic rubber (-2). The rubber pistons listed are not lubricated unless indicated by the -LUB in the part number. Suitable for manual and/or air dispensing (see product descriptions).

| Pistons | |
|-----------------|---|
| Part No. | Description |
| 401L-2L-1000 | 400 Piston 1 cc Manual/Air, Rubber (QTY = 1000) |
| 403L-2-4000 | 400 Piston 3 cc Manual/Air, Rubber (QTY = 4000) |
| 403L-2-LUB-4000 | 400 Piston 3 cc Manual/Air, Rubber Lub (QTY = 4000) |
| 403L-7-4000 | 400 Piston 3 cc Manual Wiper, Black (QTY = 4000) |
| 406L-2-2400 | 400 Piston 6 cc Manual, Rubber (QTY = 2400) |
| 406L-2-LUB-2400 | 400 Piston 6 cc Manual, Rubber Lub (QTY = 2400) |
| 406L-7-1000 | 400 Piston 6 cc Manual , Wiper, Black (QTY = 1000) |
| 406L-8-2400 | 400 Piston 6 cc Air, Rubber (QTY = 2400) |
| 406L-8-LUB-2400 | 400 Piston 6 cc Air Rubber Lub (QTY = 2400) |
| 435L-8-1000 | 400 Piston 35 cc Air, Rubber (QTY = 1000) |

Thumb Plungers

Plungers lock to the piston for smooth manual dispensing.

| Thumb Plungers | |
|----------------|-----------------------------------|
| Part No. | Description |
| 401L-4L-1000 | 400 Plunger, 1 cc (QTY = 1000) |
| 406L-4-2400 | 400 Thumb Plunger 6 cc (QTY=2400) |

700 Series

Manual Plungers & Pistons for 700 Series Barrels

Manual Plungers & Pistons 700 Series Syringe Barrels

The new manual syringe assemblies provide simple and quick dispensing solutions without the need for compressed air. Molded from PP resin, manual Plungers are compatible with a wide range of dispensing fluids. Pistons are made from thermoplastic rubber and are available dry or with lubrication. Sold in packs of 50.

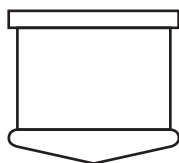
| Plungers and Pistons | |
|----------------------|-------------------------------------|
| Part No. | Description |
| 7030004PPK | 700 Manual Thumb Plunger, 3 cc |
| 7030002MPK | 700 Manual Piston Rubber, 3 cc |
| 7030002M-LUBPK | 700 Manual Piston Rubber, Lub, 3 cc |
| 7050004PPK | 700 Manual Thumb Plunger, 5 cc |
| 7050002MPK | 700 Manual Piston Rubber, 5 cc |
| 7050002M-LUBPK | 700 Manual Piston Rubber, Lub, 5 cc |



Manual Rubber Piston



Plastic Wiper Piston



Air-Powered Rubber Piston

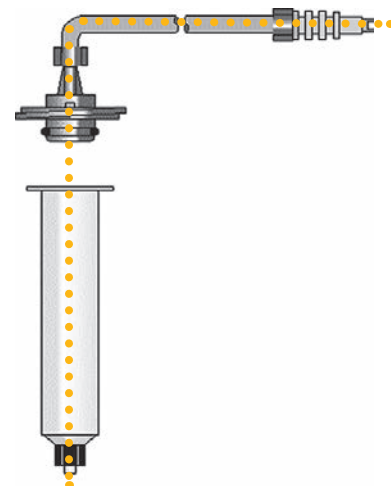
400 Series

Receiver Head Assemblies

The connecting link between time/pressure controllers and syringe assemblies, Receiver Head Assemblies provide a safe connection between the receiver head and syringe barrel for accident-proof dispensing.

Receiver Head Assemblies are available with 3 feet/0.9 m of tubing (-3), 6 feet/1.8 m of tubing (-6) and no tubing (-R). Sold individually.

| 400 Series Receiver Head Assemblies | | | |
|-------------------------------------|--------------------------|--------------------------|------------|
| | 3 feet of tubing (0.9 m) | 6 feet of tubing (1.8 m) | No tubing |
| 1 cc | 900-250-3 | 900-250-6 | 900-250-R |
| 3 cc | 900-350-3 | 900-350-6 | 900-350-R |
| 6 cc | 900-550-3 | 900-550-6 | 900-550-R |
| 10 cc | 900-650-3 | 900-650-6 | 900-650-R |
| 35 cc | 900-950-3 | 900-950-6 | 900-950-R |
| 60 cc | 900-1150-3 | 900-1150-6 | 900-1150-R |



400 Series

Manual Syringe Configurations

In manual syringe dispensing, the Plunger locks to the Piston for smooth, controlled dispensing. Below are configurations with polypropylene Barrels and Plungers and either thermoplastic rubber Pistons (-2) or polyethylene Pistons (-7) for better chemical compatibility. Use of a Tip Cap will seal the delivery end of the Syringe Barrel when not dispensing. See the previous page for product descriptions.

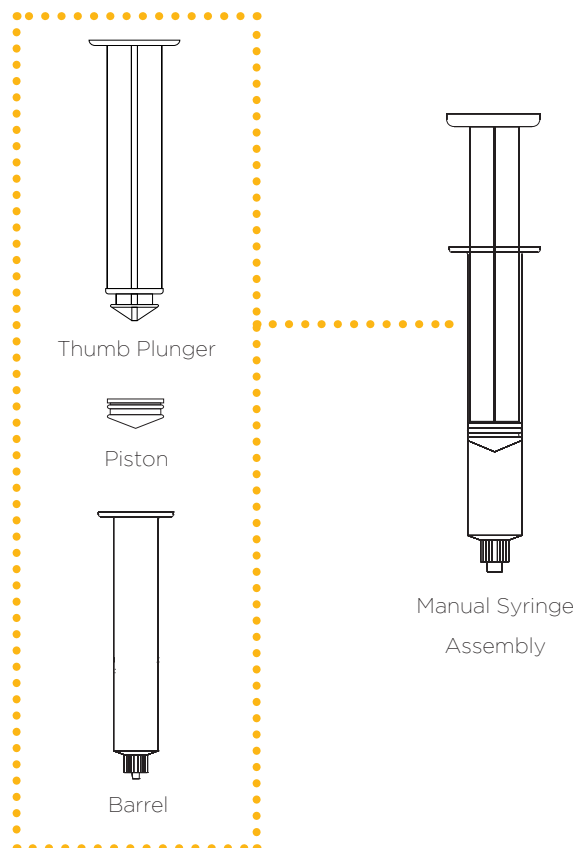
| Manual Syringes with Thermoplastic Rubber Pistons | | | |
|---|--------------|--------------|--------------|
| Size | Syringe | Piston | Plunger |
| 1 cc | 401L-1L-1000 | 401L-2L-1000 | 401L-4L-1000 |
| 3 cc | 403LL-1-4000 | 403L-2-4000 | |
| 6 cc | 406LL-1-2400 | 406L-2-2400 | 406L-4-2400 |

| Manual Syringes with Polyethylene Pistons | | | |
|---|--------------|-------------|--------------|
| Size | Syringe | Piston | Plunger |
| 1 cc | 401L-1L-1000 | | 401L-4L-1000 |
| 3 cc | 403LL-1-400 | 403L-7-4000 | |
| 6 cc | 406LL-1-2400 | 406L-7-1000 | 406L-4-2400 |

Tip Caps

Use of a Tip Cap will seal the delivery end of the Syringe Barrel when not dispensing

| Tip Caps | |
|-------------|-------------------------|
| Part No. | Description |
| 15LL-1000 | Luer Lock Tip Cap |
| 15LL-B-1000 | Black Luer Lock Tip Cap |
| 15LT-1000 | Yellow Tip Cap |



Dispensing Tips

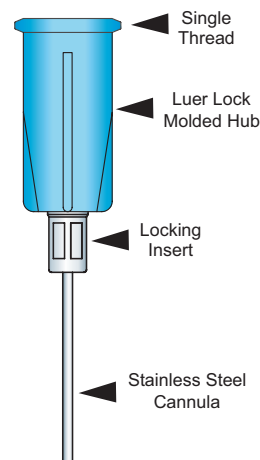
TS Series



TS Series Dispensing Tips

The TS Series Dispensing Tips offer a variety of dispensing performance and flexibility options. Stainless steel tubing is cut to precise lengths and ground to be burr-free. Cut tubing is crimped into an aluminum locking insert, then molded into polyethylene hubs. Molded hub colors correspond to gauge size. All TS Series tips secure to Techcon syringe barrels and correspond to the Luer lock specification.

| Part Number | International Hub Color | Gauge | I.D. (inches) | I.D. (mm) | Length (inches) | Length (mm) |
|----------------|-------------------------|-------|---------------|-----------|-----------------|-------------|
| TS18-1/2-1000 | Pink | 18 | 0.033 | 0.838 | 0.5 | 12.7 |
| TS18-1-1000 | Pink | 18 | 0.033 | 0.838 | 1.0 | 25.4 |
| TS19-1/2-1000 | Brown | 19 | 0.028 | 0.711 | 0.5 | 12.7 |
| TS19-1-1000 | Brown | 19 | 0.028 | 0.711 | 1.0 | 25.4 |
| TS20-1/2-1000 | Yellow | 20 | 0.024 | 0.609 | 0.5 | 12.7 |
| TS20-1-1000 | Yellow | 20 | 0.024 | 0.609 | 1.0 | 25.4 |
| TS21-1/2-1000 | Green | 21 | 0.020 | 0.508 | 0.5 | 12.7 |
| TS22-1/2-1000 | Black | 22 | 0.016 | 0.406 | 0.5 | 12.7 |
| TS22-1-1000 | Black | 22 | 0.016 | 0.406 | 1.0 | 25.4 |
| TS23-1/4-1000 | Blue | 23 | 0.013 | 0.330 | 0.25 | 6.35 |
| TS23-1/2-1000 | Blue | 23 | 0.013 | 0.330 | 0.5 | 12.7 |
| TS27-1/4-1000 | Grey | 27 | 0.008 | 0.203 | 0.25 | 6.35 |
| TS30-1/4-1000 | Lavender | 30 | 0.006 | 0.152 | 0.25 | 6.35 |
| TS30-5/16-1000 | Lavender | 30 | 0.006 | 0.152 | 0.31 | 7.94 |



TS-M Metal Dispensing Tips

This series features a stainless steel cannula and aluminium hub. Sold in bulk quantity of 500.

| Part Number | Gauge | Length (inches) | Length (mm) |
|---------------|-------|-----------------|-------------|
| TS14-1/2M-500 | 14 | 0.5 | 12.7 |
| TS14-1M-500 | 14 | 1.0 | 25.4 |
| TS14-2M-500 | 14 | 2.0 | 50.8 |
| TS15-1M-500 | 15 | 1.0 | 25.4 |
| TS16-1M-500 | 16 | 1.0 | 25.4 |



TS-SS Metal Dispensing Tips

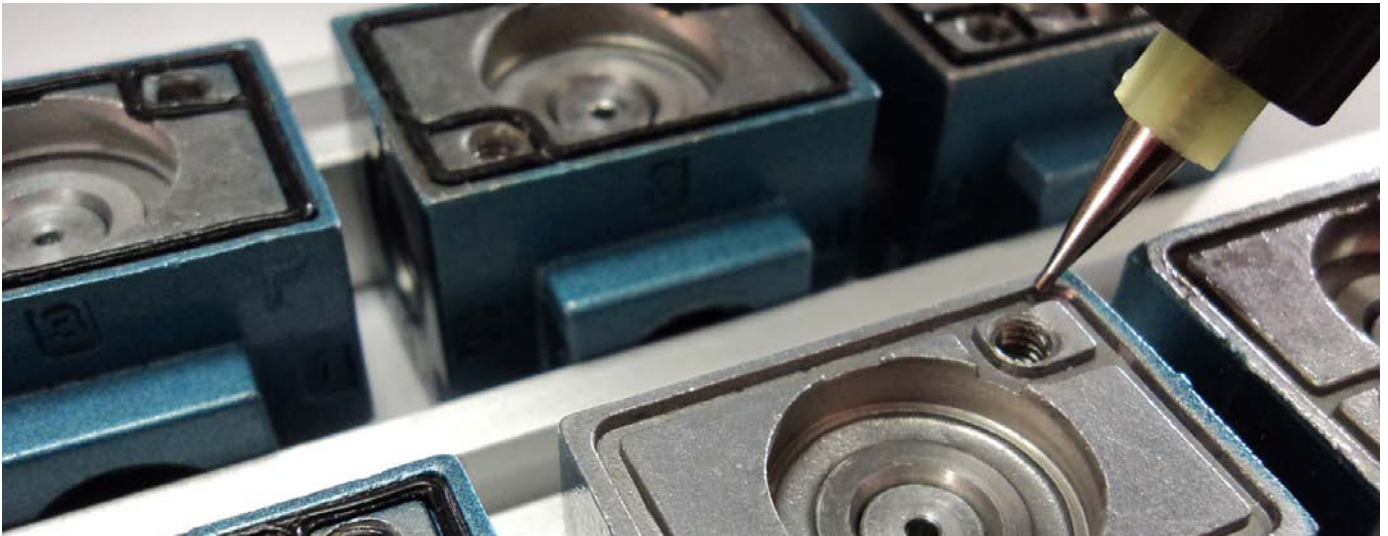
High-precision and high-tolerance for use in automated applications. With stainless steel cannula and nickel plated brass hub. Length of 1/2" (12.7 mm). Sold in packs of 12.



| Part Number | Gauge | I.D. (inches) | I.D. (mm) |
|--------------|-------|---------------|-----------|
| TS12SS-1/2PK | 12 | 0.087 | 2.21 |
| TS13SS-1/2PK | 13 | 0.077 | 1.95 |
| TS14SS-1/2PK | 14 | 0.061 | 1.54 |
| TS15SS-1/2PK | 15 | 0.056 | 1.43 |
| TS16SS-1/2PK | 16 | 0.048 | 1.22 |
| TS17SS-1/2PK | 17 | 0.044 | 1.11 |
| TS18SS-1/2PK | 18 | 0.033 | 0.83 |
| TS19SS-1/2PK | 19 | 0.028 | 0.72 |
| TS20SS-1/2PK | 20 | 0.024 | 0.62 |
| TS21SS-1/2PK | 21 | 0.021 | 0.54 |
| TS22SS-1/2PK | 22 | 0.017 | 0.42 |
| TS23SS-1/2PK | 23 | 0.013 | 0.34 |
| TS25SS-1/2PK | 25 | 0.011 | 0.27 |
| TS26SS-1/2PK | 26 | 0.010 | 0.25 |
| TS27SS-1/2PK | 27 | 0.008 | 0.21 |
| TS28SS-1/2PK | 28 | 0.007 | 0.17 |

Precision Dispensing Tips

MT Series



MT Series Dispensing Tips

MT Series Precision Metal Tapered Tips deliver the best in high flow rates, which are ideal for high-speed dispensing at a fraction of the cost of comparable precision tips. The smooth internal conical fluid path increases performance and Reduces clogging and back pressure, allowing for higher flow rates.

The phosphor bronze construction with electroless nickel plating makes the MT Series ideal for use in robotic applications or whenever precision counts. The thin-walled design at the tip enhances dispensing accuracy, while at the same time reduces fluid tailing and stringing. Available from 18 to 30 gauge, the MT Series Tips are color-coded for easy identification. Sold individually.



Key Features & Benefits

- Smooth internal fluid path
 - Reduces turbulent fluid flow
 - Reduces back pressure
 - Increases flow rates
 - Reduces air entrapment and fluid dripping
- Metal construction
 - Provides accurate positioning
 - Ideal for automatic dispensing applications
- Thin walls - Reduces fluid tailing and stringing
- Clog resistant - Ideal for filled fluids

| Part Number | Hub Color | | Gauge | I.D. (inches) | I.D. (mm) | OD (inches) | OD (mm) |
|-------------|-----------|--------|-------|---------------|-----------|-------------|---------|
| MT18-PBN | | Pink | 18 | 0.040 | 1.019 | 0.050 | 1.260 |
| MT19-PBN | | Orange | 19 | 0.033 | 0.839 | 0.042 | 1.079 |
| MT20-PBN | | Green | 20 | 0.026 | 0.661 | 0.035 | 0.899 |
| MT21-PBN | | Blue | 21 | 0.023 | 0.590 | 0.033 | 0.830 |
| MT23-PBN | | Purple | 23 | 0.021 | 0.544 | 0.026 | 0.655 |
| MT25-PBN | | White | 25 | 0.016 | 0.417 | 0.021 | 0.528 |
| MT27-PBN | | Red | 27 | 0.012 | 0.315 | 0.017 | 0.426 |
| MT30-PBN | | Black | 30 | 0.008 | 0.214 | 0.013 | 0.325 |

TSR2000 Series

Benchtop Dispensing Robots



TSR2305 Dispensing Robot

Techcon Benchtop Dispensing Robots are easy to program, simple to operate and compatible with all valve types and controllers. These versatile dispensing platforms deliver consistent, high-performance dispensing results, at an affordable price.

Designed and configured specifically for fluid dispensing applications, Techcon robots provide total control over fluid placement, from beads, arcs and circles to repeated timed dots. Programming is simple via teach pendant.

TSR2305 Dispensing Robot even enables the fourth axis to allow for dispensing at any angle along the 360° rotation plane.

From a general assembly manufacturer looking to automate an existing dispensing application, to an engineer designing a production process from scratch, Techcon dispensing robots offer unsurpassed value in automated precision fluid dispensing.

Key Features & Benefits

- Easy to program and simple to operate
- Programmable interface via TSR-TPENDANT-2 Teach Pendant
- Fast - increase productivity
- Compatible with all Techcon syringes, valves and jet dispensing systems
- Suitable for a wide range of fluid dispensing applications
- Rugged and reliable construction

Specifications - Benchtop Dispensing Robots

| | | TSR2202(E) | TSR2302(E) | TSR2402(E) | TSR2305(E) |
|------------------------------|-------------------|-----------------------------------|--------------------|--------------------|---------------------|
| Features | | | | | |
| Input Voltage | | 110 VAC 50/60 HZ | | | |
| Input Voltage (E version) | | 220 V AC 50/60 HZ | | | |
| Power Consumption | | 150 W | 200 W | 200 W | 300 W |
| Motor | | 2-phase stepper | | | |
| Drive Mechanism | | Belt | | | |
| Number of Controllable Axes | | 3-Axis | | | 4-Axis |
| Moving Range | X axis | 200 mm | 300 mm | 400 mm | 300 mm |
| | Y axis | 200 mm | 300 mm | 400 mm | 300 mm |
| | Z axis | 50 mm | 100 mm | 100 mm | 100 mm |
| | R axis | | | | ±180° |
| Speed Range | X/Y axis | 0.1~600 mm/sec | 0.1~800 mm/sec | 0.1~800 mm/sec | 0.1~800 mm/sec |
| | Z axis | 0.1~300 mm/sec | 0.1~300 mm/sec | 0.1~300 mm/sec | 0.1~300 mm/sec |
| | R axis | | | | 0.1~800 degrees/sec |
| Repeatability Accuracy | X/Y/Z axis | +/-0.01 mm | | | |
| | R axis | | | | +/-0.02° |
| Resolution | X/Y/Z axis | 0.01 mm | | | |
| | R axis | | | | 0.01° |
| Loading Weight | Tool | 5 Kg | 8 Kg | 8 Kg | |
| | Head | 2 Kg | 5 Kg | 5 Kg | |
| Payload | Y axis | | | | 8 Kg |
| | Head Z & R | | | | 3 Kg |
| Storage for Processing Files | | Max. 255 files & Max. 60000 bytes | | | |
| Processing Files | | Max 128 files | | | |
| Working Ambient | Temperature | 0~40 °C | | | |
| | Relative Humidity | 20%~90% (no condensation) | | | |
| Dimensions (H x W x D) | | 521 x 377 x 303 mm | 654 x 484 x 528 mm | 628 x 584 x 650 mm | 700 x 470 x 520 mm |
| Unit Weight | | 23 kg | 43 kg | 48 kg | 46 kg |

Benchtop Dispensing Robots

TSR2000 Series



TSR2302 Dispensing Robot



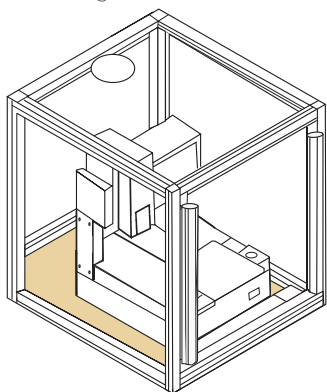
TSR2202 Dispensing Robot



TSR-TPENDANT-2 Teach Pendant

Typical Applications

- Dots of solder paste
- Form-in-place gasketing
- Filling
- Potting
- Encapsulation
- Bonding
- Coating



TSR2202-SC Safety Cover

Benchtop Dispensing Robot Platforms

| | |
|------------|--------------------------------------|
| TSR2202(E) | 200 mm X 200 mm working area, 3-Axis |
| TSR2302(E) | 300 mm X 300 mm working area, 3-Axis |
| TSR2402(E) | 400 mm X 400 mm working area, 3-Axis |
| TSR2305(E) | 300 mm X 300 mm working area, 4-Axis |

Light Beam Safety Covers for TSR2000 Dispensing Robots

| | |
|------------|---|
| TSR2202-SC | Light Beam Safety Cover for TSR2202 Dispensing Robots |
| TSR2302-SC | Light Beam Safety Cover for TSR2302 Dispensing Robots |
| TSR2402-SC | Light Beam Safety Cover for TSR2402 Dispensing Robots |
| TSR2305-SC | Light Beam Safety Cover for TSR2305 Dispensing Robots |

Accessories & Replacement Parts

| | |
|---------------------|--|
| TSR-TPENDANT-2 | Teach Pendant for TSR2000 Series Dispensing Robots |
| TSR-CABRACKET-10 | Assembly, Bracket, 1/10 Gal. Retainer for TSR Robot |
| TSR-CABRACKET-10DMP | Cartridge Bracket for TS110C Cartridges on TS5000DMP |
| TSR-CABRACKET-10MSP | Cartridge Bracket, 1/10 Gal, for Mini Spool Valves |
| TSR-CABRACKET-6 | Assembly, Bracket for 6 oz Retainer |
| TSR-CARING-6 | Assembly, Adapter Ring for 6 oz Retainer |
| TSR-DSB50ML-2 | Bracket for 50ml Dual-Syringe Dispenser, Sm |
| TSR-DSB50ML-3 | Bracket for 50 ml Dual-Syringe Dispenser, Ad |
| TSR-SVBRACKET | Bracket Assembly for Spool Valves |
| TSR-VCABLE | I/O Cable, Valve Controller to TSR Robot |

For a complete list of TSR Dispensing Robot Accessories and Spare Parts, please contact Techcon



TS9800 — Piezo Actuated Jet Valve

Key Features

- Fast dispense frequency, up to 1500 Hz continuous, with up to 2000 Hz maximum burst for higher throughput
- Micro shot sizes as small as 2 nL for small component applications
- Quick and easy calibration
- Localized fluid housing heater for better viscosity stabilization and dispensing (optional)
- Touch screen user-friendly interface for easy setup
- Parameters can be adjusted remotely

Jet Valve System Specifications

| | |
|--|---|
| Valve Size (mm) H x W x D | 125 x 69 x 16 mm / 5" x 2.7" x 0.6" |
| Valve Weight | 258 g / 0.6 lbs |
| Nozzle Orifice Diameter Range | 50 µm - 400 µm |
| Minimum Shot Size | 2 nL |
| Max. Dispensing Frequency | 1500 Hz Continuous, 2000 Hz Burst |
| Wetted Parts | Stainless Steel, Tungsten, PEEK, EPDM, FFKM* |
| Max. Fluid Pressure | 6.9 bar / 100 psi |
| Fluid Viscosity | 1 - 2 million cps |
| Operating Frequency | 1 - 1500 Hz (depending on parameter settings) |
| Environmental Temperature Range | 10 - 50 °C (50 - 122 °F) |
| Warranty | 6 months or 500 million pulses on the Piezo Actuator, whichever comes first |

Jet Valve System Configurations

| | |
|-----------------------|-----------------------------------|
| TS9800-TT15-H | Jet Valve TT 1.5 mm w/ Heater |
| TS9800-TT15-NH | Jet Valve TT 1.5 mm, w/out Heater |
| TS9800-TT20-H | Jet Valve TT 2.0 mm w/ Heater |
| TS9800-TT20-NH | Jet Valve TT 2.0 mm, w/out Heater |
| TS9800-TT7-H | Jet Valve TT 0.7 mm w/ Heater |
| TS9800-TT7-NH | Jet Valve TT 0.7 mm, w/out Heater |

*Nozzle Insert sold separately

TS9800 Series

Jet Valve System

TS9800 Piezo-Actuated Jet Valve

The TS9800 Series Jet Valve System delivers ultra-fast and high-precision dispensing results for a wide range of adhesives and viscosities. The high-speed piezo actuator enables the valve to dispense as fast as 1500 Hz continuously with up to 2000 Hz maximum burst and produce microshots as small as 2 nL.

The valve features fully adjustable parameter settings, allowing the operator to change the jetting properties for different fluid types and optimize the process for repeatable dispensing.

Every component of the valve was designed to the highest tolerances and manufactured to the strictest degree of precision and Jet Valve's compact size and modular design aids integration into robotic systems.

TS980 Smart Controller

The TS980 Smart Controller for Jet Valve features an intuitive touchscreen user interface that allows for easy setup and operation, making valve calibration quick and easy. The Internet port allows users to monitor, record data and make precise parameter adjustments from remote locations. Troubleshooting and training can be done remotely through an Ethernet connection.



Tungsten Carbide Nozzle Inserts

| Part Number | Size |
|---------------------|-------|
| 7511-0140-05 | 50µm |
| 7511-0140-07 | 70µm |
| 7511-0140-10 | 100µm |
| 7511-0140-12 | 120µm |
| 7511-0140-15 | 150µm |
| 7511-0140-20 | 200µm |
| 7511-0140-30 | 300µm |
| 7511-0140-40 | 400µm |



Typical Applications

Edge sealing and end sealing of LCDs and OLEDs, die bonding and frame bonding for camera module assembly, under-fill in micro-electronic package applications, micro dots of UV adhesive in medical device applications

Micro-Meter Mix TS8200D Series



TS8200D Series Micro-Meter Mix

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

Every component of the TS8200D Micro-Meter Mix was designed to the highest tolerances and manufactured to the strictest degree of precision, ensuring world-class accuracy and repeatability.



TS8200D — Micro-Meter Mix

Typical Applications

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

Key Features

- Mix & dispense 2-component materials
- Volumetric accuracy up to +/- 1%
- Unaffected by changes in fluid pressure or viscosity
- No possibility of material cross-contamination
- Fast and easy cleaning and maintenance

| 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 (mm) 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, A-Type & B-Type Optional | | | | |
| Mounting | M4 x 35 mm, SHC, S.S | | | | |
| Operating Temperature | 10 - 40 °C (50 - 104 °F) | | | | |
| Fluid Viscosities | 1 - 300K Cps (m.Pa.s) | | | | |



TS580D-MM — Smart Controller
for Micro-Meter Mix

| Part No. | Description |
|-----------|--------------------------------------|
| TS580D-MM | Smart Controller for Micro-Meter Mix |

| | 100 x 100 | 200 x 200 | 300 x 300 | 200 x 100 | 300 x 100 | 300 x 200 | 400 x 400 | 500 x 500 |
|--|------------|-------------|-------------|----------------------------|---------------------------|---------------------------|-----------|-----------|
| 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) | 0.012 | 0.047 | 0.08 | 0.047 (200) 0.012 (100) | 0.08 (300) 0.012 (100) | 0.08 (300) 0.047 (200) | 0.12 | 0.31 |

| Wetted Parts | | | |
|----------------|-----------------------------|----------------------------|------------------|
| Stator Housing | Anodized Aluminum | Seal Block, Manifold Plugs | Delrin® |
| Rotor | Stainless Steel | Manifold Gaskets | Viton® |
| Stator | Perfluoroelastomer (PFE) | Pump O-rings | BUNA N |
| Flex Coupling | Stainless Steel, Polyolefin | Vent Seals | Fluorosilicone |
| Shaft Seal | ***UHMWPE | 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.

***UHMWPE = Ultra-High Molecular Weight Polyethylene

TS8100-M

Progressive Cavity (PC) Pump Dispensing System

The TS8100 Series Positive Displacement Pump is a continuously volumetric dispense pump based on Progressive Cavity (PC) technology. The pump is designed to dispense a wide range of fluids, from low-viscosity coatings to high-viscosity greases. Techcon's PC Pump uses a special stator and rotor design to provide consistent dispensing output. The turning rotor moves the fluid in tightly sealed cavities through the stator's fluid chambers to create a volumetric fluid flow that does not change the shape or size of the fluid. Due to the PC Pump's unique dispensing technology, accuracy and repeatability of $\pm 1\%$ are achievable.

Typical Applications

Underfilling PCBA components, encapsulation and potting applications, applying lubrication on automotive parts, dispensing pastes and flux.

Key Features

- Volumetric, positive displacement
- Accurate and repeatable up to $\pm 1\%$
- No dripping with any viscosity fluid
- Compatible with abrasive materials
- Does not damage or break fillers
- Easy to clean

Specifications

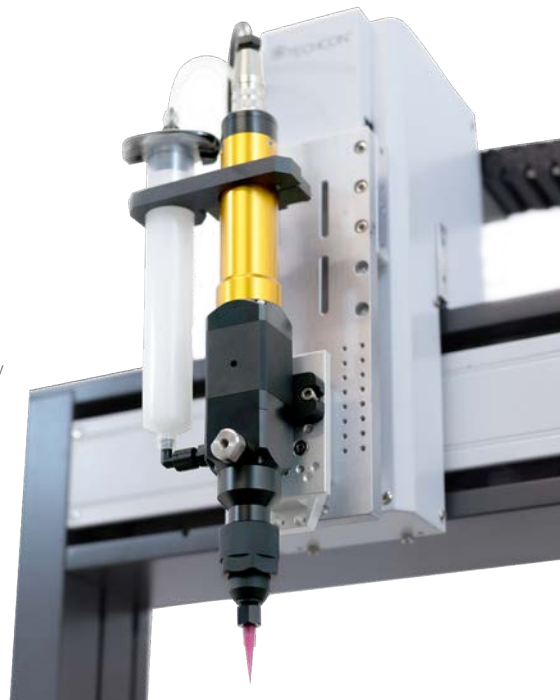
| | |
|---------------------------------|---|
| Weight (g) | 590 g |
| Weight (lb) | 1.3 lb |
| Wetted Parts | Delrin® (Acetal), Carbide, *PFE, Stainless Steel, *UHMWPE |
| Fluid Viscosity | 1-300K cps or m.Pa.s |
| Precision \pm , Absolute (1) | $\pm 1\%$ |
| Self-sealing (2) | 2 bar |
| Material Inlet Port | 1/8" NPT |
| Material Outlet Port | Luer Taper & Cap (Optional Luer Lock) |
| Direct Mount Material Reservoir | 3 to 55 cc (Optional Cartridge Mount) |

| | TS8100-100M | TS8100-200M | TS8100-300M | TS8100-400M | TS8100-500M |
|--|--------------------|--------------------|--------------------|--------------------|--------------------|
| Dispense Volume per Rotation (average) | 0.012 ml | 0.047 ml | 0.070 ml | 0.12 ml | 0.31 ml |
| Flow Rate | 0.15-1.04 ml/min. | 0.47-4.46 ml/min. | 0.74 - 6.7 ml/min. | 1.2 - 12 ml/mi | 3.1 - 31 ml/mi |
| Max. Flow Rate Recommended (3) | 0.65 ml/min | 3.38 ml/min | 5.06 ml/min | 8.0 ml/min | 21 ml/min |
| Minimum Dispense Amount | 0.001 ml | 0.0045 ml | 0.0068 ml | 0.012 ml | 0.031 ml |
| Size mm | 261 mm L x 34 mm W | 261 mm L x 34 mm W | 261 mm L x 34 mm W | 275 mm L x 34 mm W | 275 mm L x 34 mm W |
| Size inches | 10" L x 1.3" W | 10" L x 1.3" W | 10" L x 1.3" W | 11" L x 1.3" W | 11" L x 1.3" W |

Accessories

XYZ Robot: Techcon's Benchtop Dispensing Robots makes it easy to automate fluid dispensing.

Fluid reservoirs: The pump can be fed from the TS1254 (1.8 liter) or TS1258 (5 liter) Pressure Tank, or from any size syringe barrel or cartridge.



TS8100-M — Progressive Cavity (PC) Pump



TS588R — Smart PC Pump Controller

| Part No. | Description |
|----------|--------------------------|
| TS588R | Smart PC Pump Controller |

1) Volumetric dispensing as absolute deviation per complete revolution and depends on dispensing fluid.

2) For fluid with viscosity of 1000 Cps or lower. The pump can handle up to 5.5 bar for 300K Cps viscosity fluid.

3) This is the maximum flow rate that does not shorten the stator work life

DMP Rotary Microvalve

TS5000DMP-DCX Series



TS5000DMP-DCX
Rotary Microvalve

Key Features

- Precise and consistent shot sizes
- Motor reverse capability
- Field-replaceable wetted parts
- Adjustable dispense rate
- Closed-loop motor control with encoder feedback (encoder version)

| Specifications | |
|------------------------|--|
| Size (Imperial) | 1.56" W x 3.56" L x 5.88" H |
| Size (Metric) | 39.6 mm x 90.4 mm x 149.4 mm |
| Weight | 0.73 lb. (331 g) |
| Fluid Inlet | Luer Lock female |
| Fluid outlet | Luer Lock male |
| Door Opening | Right hand side, Left hand side, Front |
| Input Voltage | 5 - 24 VDC |
| Fluid Pressure | 30 psi (2.07 bar) MAX |
| Cycle Rate | 300 cycles/min. |
| Mounting Port | 1.0" (25.4 mm) Channel |
| Viscosity Range | 30K - 1300K cps |
| Wetted Parts | Delrin [®] , Viton [®] , Nylon |

| DMP Insert Options | | |
|------------------------|--------------------|-----------------------|
| | Fixed Luer Collars | Rotating Luer Collars |
| 6 Pitch (red) | DMP6-10 | DMP6R-10 |
| 8 Pitch (black) | DMP8-10 | DMP8R-10 |
| 16 Pitch (blue) | DMP16-10 | DMP16R-10 |

TS5000DMP-DCX

Rotary Auger Microvalve

Techcon's patented Disposable Material Path (DMP) rotary auger valve contains a disposable feed screw for easy maintenance and reliable dispensing.

With the feed screw made of Delrin[®], the valve is designed for use with two-compound and UV fluids. The DMP valve has a hinged doorway that opens easily so the disposable feed path can be removed, disposed of and replaced within seconds while the line is still in operation. No cleaning or refurbishment of the valve is required.

TS5000DMP-DCX is the perfect valve for applications where removing the valve for cleaning is inconvenient and costly. With the ability to remove and replace the disposable material path, the valve maintains its accuracy over a greater period of time. With less fluid build up to reduce wear-and-tear on the motor, the valve's usable lifetime is dramatically increased.

The TS5000DMP-DCX Series valve offers three options in feed screw pitch type: 6, 8 and 16 pitch. All DMP inserts are made available with fixed or rotating color-coded tip collar.

Configurations - TS5000DMP-DCX Rotary Valve w/ Disposable Material Path (DMP)

| | |
|--------------------------|--|
| TS5000DMP-DCX-SR | Slim Body, Right Door Opening |
| TS5000DMP-DCX-SL | Slim Body, Left Door Opening |
| TS5000DMP55-DCX | Slim Body, Front Door Opening |
| TS5000DMPE-DCX-SR | Encoder Motor, Slim Body, Right Door Opening |
| TS5000DMPE-DCX-SL | Encoder Motor, Slim Body, Left Door Opening |



Right-hand opening shown. Left and front door opening versions are also available.



Disposable Material Paths are available in 3 different pitches and with 3 different rotating Luer collars.

Typical Applications

Dispensing of thermal conductive, UV gels, silicone, epoxies, flux paste, an-aerobic gel, 2K epoxies, grease



TS577R Smart Rotary Valve Controller.

| Part No. | Description |
|---------------|-------------------------------|
| TS577R | Smart Rotary Valve Controller |

TS7000-DCX Series

Interchangeable Material Path (IMP) Rotary Valve

The TS7000-DCX Series IMP Rotary Valve uses a feed screw to dispense fluid with a rotary displacement action, allowing ultra-precise control of the dispensing process.

The valve's modular design allows quick and easy replacement of the feed screw/chamber (cartridge assembly) without removing the valve from the machine. In addition, the valve can be interchanged to accommodate TS5000DMP-DCX feed screw inserts (with optional 7000-DMPBKIT retrofit kit).

The TS7000-DCX Series Valve is available in 4 feed screw sizes (8-pitch, high output 8-pitch, 16-pitch and 32-pitch), all made of precision-hardened tool steel. An encoder motor version is available for applications that require closed-loop motor control with encoder feedback.



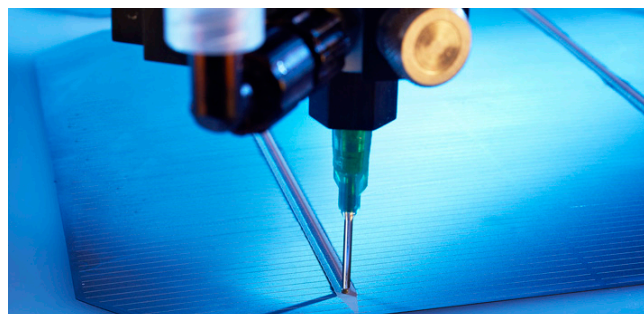
TS7000-DCX — Rotary Valve

| Specifications | |
|---------------------|------------------------|
| Size (Imperial) | 6.78" x 3.70" x 2.23" |
| Size (Metric) | 172.2 x 94 x 56.6 mm |
| Weight | 0.96 lb. (438 g) |
| Fluid Inlet Port | Luer lock female |
| Fluid Outlet Port | Luer taper and cap |
| Input Voltage Range | 4 - 24 VDC |
| Max Fluid Pressure | 30 psi (2.07 bar) |
| Operating Frequency | 300+ cycles/min. |
| Mounting Port | 1"/25.4 mm channel |
| Viscosity Range | 30K - 1 300Kcps |
| Wetted Parts | 303SS, *UHMWPE, Nylon* |

Typical Applications

Encapsulation & potting applications, dispensing thermal conductive, UV gels, silicone, epoxies, solder paste, flux pastes and grease.

| Cartridge Assemblies | |
|----------------------|--------------------------------|
| Part No. | Description |
| 7090-9030 | Cartridge Assembly, 8-Pitch |
| 7090-9040 | Cartridge Assembly, 16-Pitch |
| 7090-9050 | Cartridge Assembly, 8-Pitch HO |
| 7090-9140 | Cartridge Assembly, 32-Pitch |



| Configurations | |
|-----------------|---|
| Part Number | Description |
| TS7000-DCX-8 | Rotary Valve, 8P Feed Screw |
| TS7000-DCX-8HO | Rotary Valve, 8P High Output Feed Screw |
| TS7000-DCX-16 | Rotary Valve, 16P Feed Screw |
| TS7000-DCX-32 | Rotary Valve, 32P Feed Screw |
| TS7000E-8-DCX | Rotary Valve, 8P Feed Screw |
| TS7000E-8HO-DCX | Rotary Valve, 8P High Output Feed Screw |
| TS7000E-16-DCX | Rotary Valve, 16P Feed Screw |
| TS7000E-32-DCX | Rotary Valve, 32P Feed Screw |
| 7000-DMPBKIT | TS7000 DMP Conversion Kit |

Key Features

- Accurate and repeatable dispensing output
- Field replaceable spare parts
- Quick and easy feed screw/chamber cartridge changeover
- Closed-loop motor control with encoder feed back (encoder version)



TS577R Smart Rotary/Auger Valve Controller

| Part No. | Description |
|----------|-------------------------------|
| TS577R | Smart Rotary Valve Controller |

Diaphragm Valves

TS5620 Series



TS5621HD



TS5622VU-DVD



TS5622VT



TS555R Smart Valve Controller

| Part No. | Description |
|----------|----------------------------------|
| TS555R | Smart Pneumatic Valve Controller |

*UHMWPE = Ultra-High Molecular Weight Polyethylene

TS5620 Series

Diaphragm Valves

Diaphragm Valves are designed to dispense low to medium-viscosity materials with accuracy over a wide range of shot and bead sizes down to a fraction of a micro liter. A short opening stroke provides fast, positive shut-off. An external stroke control adjustment makes it easy to fine-tune shot sizes. The compact design allows for mounting flexibility and easy integration into automated applications.

Body available in FDA-compliant Ultra High Molecular Weight Polyethylene (UHMWPE) for most applications. A Teflon™ version for chemical compatibility and a Delrin® version for UV-curable are also available. A stainless steel version with optimized internal fluid route is especially dedicated to dispense UV-cure adhesives, resins and lacquers. A hand-held actuated valve is also available. The valves are easy to use and maintain with user replaceable spare parts.

Typical Applications

To dispense a wide range of shot sizes of low viscosity fluids such as: cyanoacrylates, anaerobics, liquid fluxes, solvents, UV-cure adhesives, resins and lacquers.

Specifications

| | |
|---------------------|--|
| Length | 2.4" (61 mm) - 3.47" (88 mm) (Depending on exact configuration) |
| Diameter | 0.94" (24 mm) - 1.06" (27 mm) |
| Weight | 0.13 lb. (59 g) to 0.26 lb. (118 g) |
| Wetted Parts | Depending on exact configuration |
| Viscosity Range | 1-50k cps |
| Max Fluid Pressure | 70 psi (4.8 bar) |
| Activation Pressure | 70 psi (4.8 bar) - 90 psi (6.2 bar) |
| Connections | Depending on exact configuration |
| Mounting | 10-32 UNF (not available on handheld models) |

Part Number Description

| | |
|--------------|---|
| TS5620HU | Horizontal Valve *UHMWPE |
| TS5621HD | Horizontal Valve Delrin® |
| TS5620HT | Horizontal Valve Teflon™ |
| TS5622VU | Vertical Valve *UHMWPE |
| TS5622VD | Vertical Valve Delrin® |
| TS5622VT | Vertical Valve Teflon™ |
| TS5622VU-DVD | Vertical Valve, *UHMWPE and Stainless Steel |
| TS5623HU | Hand-Held Valve *UHMWPE |
| TS5623HD | Hand-Held Valve Delrin® |
| TS5623HT | Hand-Held Valve Teflon™ |

Key Features



- Excellent moisture-sensitive resistance
- Adjustable stroke control
- Compact size and weight
- Simple and low-maintenance design
- Long life cycles

TS5624DMP

Disposable Material Path Diaphragm Valve

The TS5624 Diaphragm Valve features a “first to market” Disposable Material Path. Difficult fluids such as CAs and pre-mixed 2-part epoxies can now be dispensed without the need of frequent cleaning by simply replacing the entire wetted area in a matter of seconds while the valve stays on the production line.

The wetted parts are manufactured from Black polyethylene to prevent moisture and UV light coming into contact with the dispense fluids. As a result, moisture-sensitive fluids such as cyanoacrylate and UV-cured adhesives can be dispensed reliably and accurately.

The TS5624 dispenses low to medium-viscosity fluids over a wide range of shot and bead sizes, down to a fraction of a micro liter. An internal spring return makes the valves fully adaptable for use with Techcon controllers. A short opening stroke provides an extremely fast and positive shut-off. The seal-less valve design offers an excellent moisture sensitive resistance and the incorporated diaphragm creates a barrier between the wetted parts and the air cylinder.

Typical Applications

Dispensing difficult fluids such as cyanoacrylate (CA) and pre-mixed 2-part epoxies in bonding applications.

| Specifications | |
|---------------------------|------------------------------------|
| Length | 3.34" (84.8 mm) |
| Width | 2.15" (54.6 mm) |
| Weight: | 0.25 lb. (113 g) |
| Fluid Inlet Port | Luer lock female |
| Fluid Outlet Port | Luer lock male |
| Aux Air Inlet Port: | 10-32 UNF female |
| Activation Pressure Range | 70 psi - 90 psi, (4.8bar - 6.2bar) |
| Max Fluid Pressure | 60 psi (4.1 bar) |
| Operating Frequency | 400+ cycles/min. |
| Mounting Port | 10-32 UNF female |
| Viscosity Range | 1 - 50,000 cps |
| Wetted Parts | Black Polyethylene Compound |

| Accessories | |
|-------------|---|
| DMP-5624 | Replacement DMP Insert (Pack of 10) |
| 7509-9100 | Syringe Bracket, fits all syringe sizes |
| 5624DMP-FLB | Fluid Line Bracket |
| TS1254 | 1.8 liter Pressure Pot, 100 psi/6.9 bar |
| TS1258 | 5.0 liter Pressure Pot, 100 psi/6.9 bar |



TS5624DMP — Disposable Material Path Diaphragm Valve



TS555R Smart Pneumatic Valve Controller

| Part No. | Description |
|----------|----------------------------------|
| TS555R | Smart Pneumatic Valve Controller |

Key Features

- Disposable material path - no cleaning
- Compact size and weight
- Excellent moisture sensitive resistance
- No special tools required
- Low cost of ownership
- Accurate and repeatable dispensing

Needle Valves

TS5400 Series



TS5440 — Dispensing medical device adhesive

TS5400 Series Needle Valves

Needle Valves dispense very precise deposits over a wide range of shot and bead sizes due to a minimal dead-fluid zone and an external stroke control adjustment to fine-tune shot sizes.

The TS5440 Microshot Needle Valve, with its needle closing the fluid path directly on the cannula inside the dispensing tip hub, can dispense very precise deposits down to 0.0005 cm³.

The TS5420 Adjustable Needle Valve is a pneumatically triggered single-acting valve that can be used with an integral spring close (single action) or may be connected for air closing without the spring (double acting).

Easy to maintain, with little or no downtime. The compact design and easy-mount threaded hole allows for easy integration into automated applications.

Typical Applications

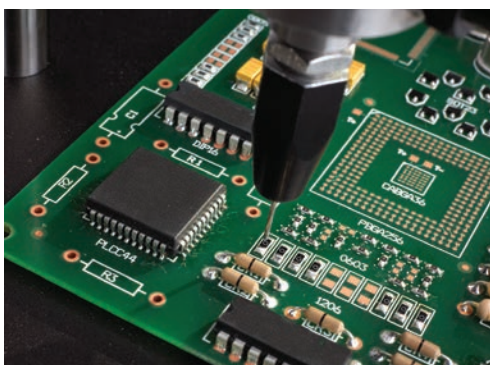
Dispense microdots of low-viscosity fluids such as solvents, inks, oils, activators, activators and primers. The TS5440 is excellent for dispensing microdots of UV adhesive used in medical device manufacturing.

| Specifications | | | |
|------------------------------------|---|---|---|
| Part Number | TS5420 | TS5420SS | TS5440 |
| Size and Weight | L: 4.4" (112 mm) D: 1.12" (28 mm) Weight: 0.3 lb. (136 g) | L: 4.4" (112 mm) D: 1.12" (28 mm) Weight: 0.5 lb. (227 g) | L: 5.0" (127 mm) D: 1.12" (28 mm) Weight: 0.5 lb. (227 g) |
| Wetted Parts | 303 SS, Anodized Al, Teflon™, *EPR, Delrin* | 303 SS, Teflon™, *EPR, Delrin* | 303 SS, Teflon™, *EPR |
| Maximum Fluid Pressure | 300 psi (20.7 bar) | 300 psi (20.7 bar) | 100 psi (6.9 bar) |
| Activation Pressure | 70 psi (4.8 bar) Minimum | 70 psi (4.8 bar) Minimum | 70 psi (4.8 bar) Minimum |
| Connections | Inlet: 1/8" NPT Outlet: Male Luer Lock | Inlet: 1/8" NPT Outlet: Male Luer Lock | Inlet: 1/8" NPT Outlet: Luer Taper and Cap |
| Mounting | 1/4"-20UNC-2B | 1/4"-20UNC-2B | 10-32 UNF |
| Recommended Viscosity Range | 1-100k cps | 1-100k cps | 1-100k cps |

TS5420
Needle Valve



TS5440
Microshot Needle Valve



Key Features

- Precise and consistent shot sizes
- Adjustable flow control
- Zero dead fluid zone
- Simple and low-maintenance design



TS555R Smart Pneumatic Valve Controller

| Part No. | Description |
|----------|----------------------------------|
| TS555R | Smart Pneumatic Valve Controller |

*EPR = Ethylene Propylene Rubber

TS941

High Pressure Spool Valve

The Spool Valves provide precise shot accuracy along with high-volume capacity over a range of material viscosities, shot sizes and pressures. They feature "suck back" anti-drip as well as a fast on/off dispensing function that is not affected by material input pressure. An optional oil chamber creates an additional liquid seal to prevent moisture from being carried on the spool, excellent for moisture-sensitive materials.

Pneumatically activated, the valves can be used with an internal spring close (single acting) or an air-closing connection (double acting). Output is a 1/4" NPT which allows multiple tip types to be used. See page 34 for compatible nozzles.

TS5322

Mini Spool Valve

The Mini Spool Valve Series is designed for better accuracy with lower pressure. The TS5322 operates similarly to the TS941 but in a smaller form factor.

| Specifications | | |
|---------------------|--------------------------------------|--|
| Part Number | TS941 | TS5322 |
| Length | 4.7" (119 mm) | 4.00" (101.6 mm) |
| Diameter | 1.5" (38 mm) | 1" (25 mm) |
| Weight | 1.61 lb. (726 g) | 0.31 lb. (141 g) |
| Wetted Parts | UHMWPE*, EPR**, 303 Stainless Steel, | 303 Stainless Steel, Anodized Al, Teflon™, EPR** |
| Viscosity Range | 5 - 3 million cps | 5 - 1 million cps |
| Max Fluid Pressure | 2500 psi (172.4 bar) | 500 psi (34.5 bar) |
| Activation Pressure | 70 psi (4.8 bar) | 70 psi (4.8 bar) |
| Material Inlet | 3/8" NPT | 1/8" NPT |
| Material Outlet | 1/4" NPT | 1/8" NPT |
| Mounting | 1.50" Diameter | 1/4"-20UNC-2B |

Typical Applications

Suitable for moisture-sensitive adhesive when utilizing supplied oiler. The Spool Valves can be used in a wide range of applications such as flux paste, grease, RTV silicone, UV cure gel, solder mask and gasketing.



| Part Numbers | |
|--------------|--------------------------------|
| TS941 | High-Pressure Spool Valve |
| TS5322 | Mini Spool Valve |
| 934-003-000 | TS941 Adjustable Suck-Back Cap |



TS941 High Pressure Spool Valve



TS5322 Gasketing



TS555R Smart Pneumatic Valve Controller

| Part No. | Description |
|----------|----------------------------------|
| TS555R | Smart Pneumatic Valve Controller |

* UHMWPE = Ultra-High Molecular Weight Polyethylene
**EPR = Ethylene Propylene Rubber

Pinch Tube Valves

TS1212 & TS1201



TS1201 Dispense pen

| Specifications | | |
|---------------------|--|--------------------------|
| Part Number | TS1201 | TS1212 |
| Length | 5" (127 mm) | 2.49" (63 mm) |
| Diameter | 1.34" (34 mm) | 1.58" (40 mm) |
| Weight | 0.08 lb. (36 g) | 0.18 lb. (82 g) |
| Wetted Part: | Polyethylene (PE) (standard), Polyurethane (PU) (optional) | |
| Viscosity Range | 1-45k cps | |
| Max Fluid Pressure | 60 psi (4.1 bar) | |
| Material Inlet | Female Luer Lock | |
| Material Outlet | Male Luer Lock | |
| Mounting | | 1/4"-20UNC-2B |
| Activation Pressure | | 50 psi (3.4 bar) minimum |



TS1201
Dispenser Pen



TS1212 Pneumatic
Pinch Tube Valve



TS555R Smart Controller

| Part No. | Description |
|----------|------------------------------|
| TS555R | Smart Pneumatic Controller |
| TS250 | Digital Dispenser/Controller |
| TS350 | Digital Dispenser/Controller |

TS1201 & TS1212 Pinch Tube Valves

TS1201 Dispense Pen

The TS1201 Dispensing Pen uses a disposable moulded tube assembly. Designed to handle a wide variety of fluids from adhesives and lubricants to sealants and masks. Gravity or pressure fed, the pen has a built-in shot and flow rate for repeatability. Includes pre-assembled applicator pen, two clear and two Black spare pinch tube assemblies, an assortment of disposable dispensing tips and a 24" (0.61 m) hose. Replacement pinch tube assemblies sold in packs of 10.

TS1212 Pneumatic Pinch Tube Valve

Provides control for continuous or micro-shot applications of low to semi-viscous fluids. The "ON/OFF" control is achieved by automatically opening and closing (pinching) a moulded polyethylene tube assembly. Adjusting the opening size of the pinch tube assembly determines the shot size or flow rate. In addition, the air-actuated valve can be timed to develop desired shot sizes. Finally, a wide range of dispensing tips can be used to further refine the amount of dispensed output. The only part of the valve making contact with the fluid being dispensed is the disposable pinch tube assembly. Replacement pinch tube assemblies are sold in packages of 10.

Typical Applications

Cyanoacrylates, anaerobics, two-part adhesive.



Key Features

- Disposable fluid path
- Simple to operate
- Compact size and weight

Spare Pinch Tubes for TS1201 (Sold in packs of 10)

| Part Number | Material | I.D. | Connection | Length |
|-----------------|-------------|------------------|----------------|---------|
| 1201-000-004BPK | Black PE* | 0.1" (2.54 mm) | Male to Female | 15.2 cm |
| 1201-000-004PK | Natural PE | 0.1" (2.54 mm) | Male to Female | 15.2 cm |
| 1201-000-006PK | Natural PE | 0.07" (1.78 mm) | Male to Female | 15.2 cm |
| 1201-006-000PK | Natural PU* | 0.125" (3.18 mm) | Male to Female | 15.2 cm |

Spare Pinch Tubes for TS1212 (Sold in packs of 10)

| Part Number | Material | I.D. | Connection | Length |
|-----------------|------------|-----------------|----------------|---------|
| 1212-004-002BPK | Black PE | 0.1" (2.54 mm) | Male to Female | 10.2 cm |
| 1212-004-002PK | Natural PE | 0.1" (2.54 mm) | Male to Female | 10.2 cm |
| 1212-004-000PK | Natural PE | 0.07" (1.78 mm) | Male to Female | 10.2 cm |

PE = Polyethylene, PU = Polyurethane

TS5500 Series

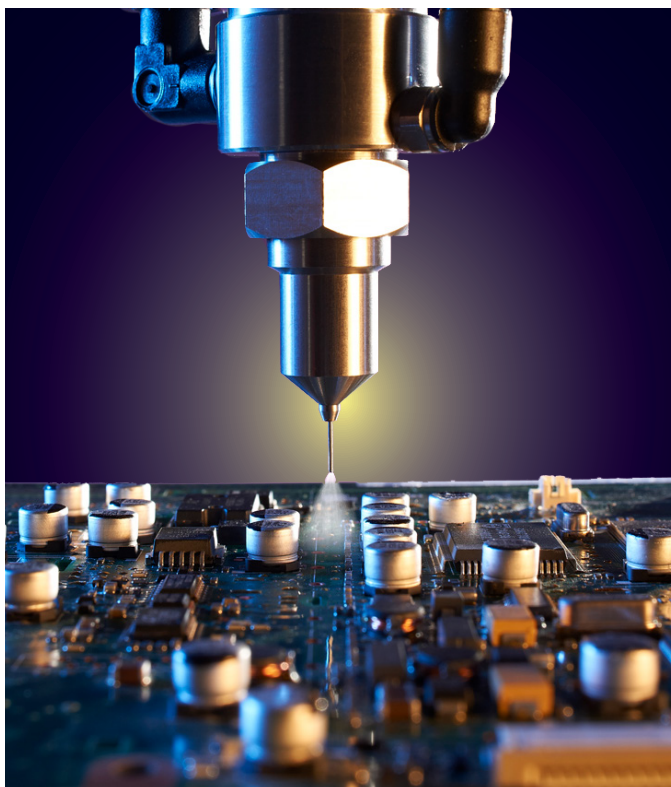
Spray Valves

Techcon Spray Valves are designed for precise spray applications of low viscosity materials. Total control of the spray cycle is provided by adjustable fluid flow and precise control of prespray, atomizing air and post-spray with the TS566R Valve Controller. Normal maintenance is simple and downtime is virtually eliminated with only one seal to replace.

TS5540 Spray Valves come with FDA-Compliant 303 stainless steel construction in both air cylinder and fluid housing. A field replaceable Delrin® seat provides positive shut-off and extends life cycles. The compact design and easy-mount threaded hole allow for easy integration into automated applications.

Typical Applications

To spray fine mist of low viscosity fluids such as conformal coating, solvent, oil, etc.



| Specifications | | |
|---------------------|--|--------------------------|
| | TS5520 | TS5540/TS5540-MS |
| Length | 4.2" (107 mm) | 4.2" (107 mm) |
| Diameter | 1.12" (28 mm) | 1.12" (28 mm) |
| Weight | 0.3 lb. (136 g) | 0.74 lb. (336 g) |
| Wetted Parts | 303 SS, Teflon™, EPR, Anodized Al, Delrin® | 303 SS, Teflon™, Delrin® |
| Viscosity Range | 1-1K cps | 1-5K cps |
| Max Fluid Pressure | 100 psi (6.9 bar) | |
| Activation Pressure | 70 psi (4.8 bar) Minimum | |
| Connections | Inlet: 1/8" NPT Outlet: Spray nozzle | |
| Mounting | 1/4" 20UNC-2B | |



TS5520
Spray Valve
with Cone Nozzle



TS5540
Spray Valve
with Fan Nozzle



Cone Nozzle



Fan Nozzle



TS5540-MS
Microshot Spray Valve

TS5540-MS Microshot Spray Valve

The TS5540-MS Spray Valve is designed to spray low-viscosity materials through disposable dispensing tips (TE range, 23 gauge - 32 gauge). Spray patterns range from 0.18" - 0.60" (4.6 mm - 15 mm) in diameter.

| Spray Valves with Nozzles | | | |
|---------------------------|-------------------|-------------|---------------|
| | Opening Diameter | Cone Nozzle | Fan Nozzle |
| TS5520 | 0.046" / 1.17 mm | Standard | Not Available |
| TS5540 | 0.014" / 0.356 mm | TS5540-014R | TS5540-014F |
| | 0.028" / 0.711 mm | TS5540-028R | TS5540-028F |
| | 0.046" / 1.17 mm | TS5540-046R | TS5540-046F |

| Nozzle Outlet Kits | | |
|--------------------|-----------------|----------------|
| Nozzle Diameter | Cone Outlet P/N | Fan Outlet P/N |
| 0.014" / 0.356 mm | RNC014 | FNC014 |
| 0.028" / 0.711 mm | RNC028 | FNC028 |
| 0.046" / 1.17 mm | RNC046 | FNC046 |

Key Features

- Consistent spray coverage with no overspray
- Positive shut-off
- Adjustable flow control
- Long life cycles



TS566R Smart Spray Valve Controller

| Part No. | Description |
|----------|------------------------------|
| TS566R | Smart Spray Valve Controller |

Smart Valve Controllers

TS500 Series



TS500 Series Smart Valve Controllers

We are pleased to introduce our new series of Smart Valve Controllers: the **TS555R**, **TS566R**, **TS577R** and **TS588R** that will control our complete line of precision valves. Equipped with a universal power supply, the new Smart Valve Controllers are fully plug-and-play and can be used immediately anywhere in the world.



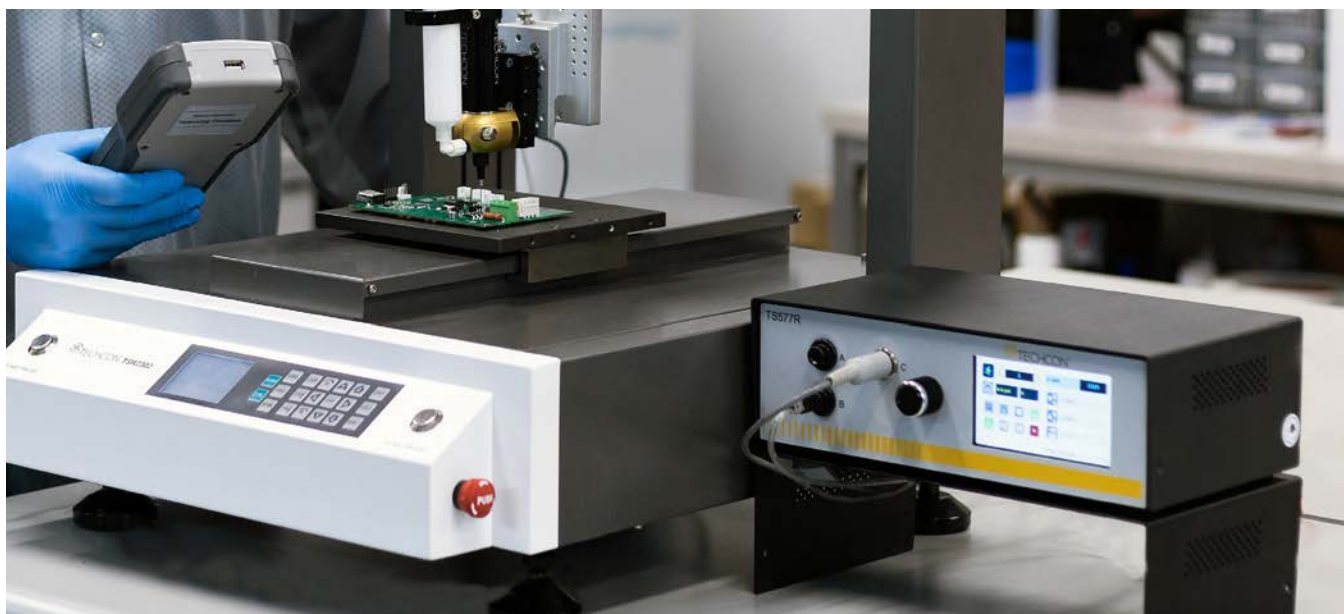
TS588R — Smart PC Pump Controller

Key Features

- User-friendly touchscreen interface with icon-based GUI
- Easy setup and operation
- Parameters set through interface or remotely
- Ethernet interface for remote configuration
- Digital timer for accurate & repeatable spray times
- Program up to 50 varied, sequenced, or individual shots
- Password protection of all settings
- Purge and Timed dispense cycles
- Teach mode for determining dispensing times
- Low-Pressure Warning maintains uninterrupted dispensing
- Easily integrates with automatic/semi-automatic machinery

| Specifications | |
|------------------|--------------------------------|
| Size (Imperial) | 11.4" W x 8.3" L x 3.9" H |
| Size (Metric) | 290 mm x 211 mm x 99 mm |
| Weight | 6.8 lb. (3100 g) |
| Pressure Range | 0 to 100 psi (0-6.9 bar) |
| Display | Touch Screen |
| Timing Range | 0.008 - 99.9 seconds |
| Timing Tolerance | +/- 0.001% |
| Input Voltage | 100 - 240 VAC |
| Cycle Rate | 900/min. |
| Cycle Modes | Timed, Interrupt, Teach, Purge |
| Connectivity | Ethernet |
| Certification | CE, TUV-GS |

| Part Number | Description |
|-------------|-------------------------------------|
| TS555R | Smart Pneumatic Valve Controller |
| TS566R | Smart Spray Valve Controller |
| TS577R | Smart Rotary/Auger Valve Controller |
| TS588R | Smart PC Pump Controller |



Pressure Pots

TS1254/1258 Pressure Pot

TS1254/1258

Pressure Pots

TS1254 and TS1258 Pressure Pots are designed to accommodate low to medium-viscosity fluids, including solvents and adhesives, CAs and UVs. The fluid feed line is located in the center of the unit for a direct and continuous feed path from the reservoir to the dispensing valve.

TS1254 is shipped with 6 mm tubing, TS1258 is shipped with 1/4" tubing. The TS1252-4MM Fluid Line Kit is needed when using these pressure pumps with the TS1212 or TS1201 valves.

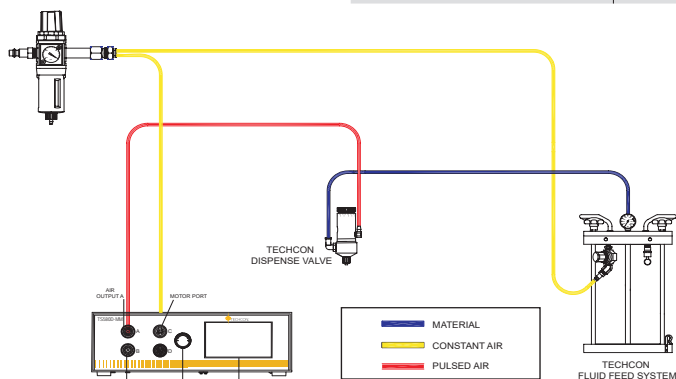


TS1254 Pressure Pot



TS1258 Pressure Pot

| Specifications - Pressure Pots | |
|--------------------------------|---------------------------------------|
| | TS1254 |
| Size | 7.5" x 12.5" (190 x 318 mm) |
| Chamber | 4.75" I.D. x 6.5" (121 I.D. x 165 mm) |
| Weight | 10.4 lb. (4.7 kg) |
| Max Operating Pressure | 100 psi (6.9 bar) |
| Internal Volume | 1.8 liters |
| | TS1258 |
| Size | 10" x 15.1" (254 x 383 mm) |
| Chamber | 6.1" I.D. x 11.0" (155 I.D. x 280 mm) |
| Weight | 21 lb. (9.5 kg) |
| Max Operating Pressure | 100 psi (6.9 bar) |
| Internal Volume | 5 liters |



Typical Valve Set Up

Available Fluid Line Kits (include clear and black tubing)

For TS1254 Pressure Pot

| | |
|------------|--|
| TS1252-4MM | 4 mm O.D. Tube (required for TS1212 & TS1201 connection) |
| 1254-250PE | 6 mm O.D. Polyethylene (PE) Tube |

For TS1258 Pressure Pot

| | |
|------------|--|
| TS1252-4MM | 4 mm O.D. Tube (required for TS1212 & TS1201 connection) |
| TS1258-250 | 1/4" O.D. Tube |
| TS1258-375 | 3/8" O.D. Tube |

TS918

Four-way Manifold

Designed to provide equal flow for up to four fluid paths, the TS918-46 is used whenever precision fluid flow to multiple stations is required. The manifold works with the TS1258 Pressure Pot (TS1258-375 Hose Kit required to use TS918-46 and TS1258 together). Made from Delrin® and suitable with UV materials. The manifold can be used with any Techcon valve.

Specifications - TS918-46 Four-way Manifold

| | |
|------------------------|--|
| Size | 2.6" x 2.2" (66 x 56 mm) |
| Inlet Port | 1/4" NPT (3/8" O.D. tube fitting is included) |
| Outlet Port | 1/8" NPT (4 Luer Lock fittings are included) |
| Max Operating Pressure | 100 psi (6.9 bar) |
| Mounting | 1/4"-20UNC-2B (x2) |



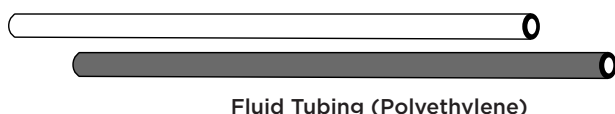
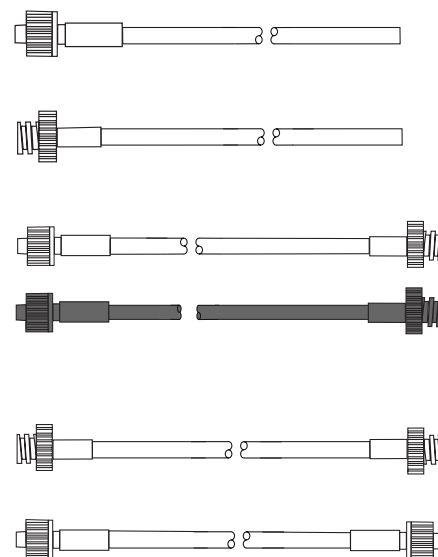
TS918-46 — Four-way Manifold

Fluid Line Assemblies

Fluid Line Assemblies

Each polyethylene hose assembly is provided with a moulded Luer lock fitting on one or both ends. The assembly can be used with other standard Luer lock connectors and will handle up to 100 psi (6.9 bar) working pressure.

| Fluid Line Assemblies | | | |
|-----------------------|----------------------------------|-------------------------|------------|
| Part Number | Size | Connection | Material |
| TSD126-118PK | 0.100" (2.54 mm) x 18" (457 mm) | Male Luer/Open | Natural PE |
| TSD126-124PK | 0.100" (2.54 mm) x 24" (610 mm) | Male Luer/Open | Natural PE |
| TSD126-136PK | 0.100" (2.54 mm) x 36" (914 mm) | Male Luer/Open | Natural PE |
| TSD126-218PK | 0.100" (2.54 mm) x 18" (457mm) | Female Luer/Open | Natural PE |
| TSD126-224PK | 0.100" (2.54 mm) x 24" (610 mm) | Female Luer/Open | Natural PE |
| TSD126-236PK | 0.100" (2.54 mm) x 36" (914 mm) | Female Luer/Open | Natural PE |
| TSD126-318PK | 0.100" (2.54 mm) x 18" (457 mm) | Male Luer/Female Luer | Natural PE |
| TSD126-318BPK | 0.100" (2.54 mm) x 18" (457 mm) | Male Luer/Female Luer | Black PE |
| TSD126-324PK | 0.100" (2.54 mm) x 24" (610 mm) | Male Luer/Female Luer | Natural PE |
| TSD126-324BPK | 0.100" (2.54 mm) x 24" (610 mm) | Male Luer/Female Luer | Black PE |
| TSD126-336PK | 0.100" (2.54 mm) x 36" (914 mm) | Male Luer/Female Luer | Natural PE |
| TSD126-336BPK | 0.100" (2.54 mm) x 36" (914 mm) | Male Luer/Female Luer | Black PE |
| TSD126-360BPK | 0.100" (2.54 mm) x 60" (1524 mm) | Male Luer/Female Luer | Black PE |
| TSD126-418PK | 0.100" (2.54 mm) x 18" (457 mm) | Female Luer/Female Luer | Natural PE |
| TSD126-424PK | 0.100" (2.54 mm) x 24" (610 mm) | Female Luer/Female Luer | Natural PE |
| TSD126-436PK | 0.100" (2.54 mm) x 36" (914 mm) | Female Luer/Female Luer | Natural PE |
| TSD126-524PK | 0.100" (2.54 mm) x 24" (610 mm) | Male Luer/Male Luer | Natural PE |

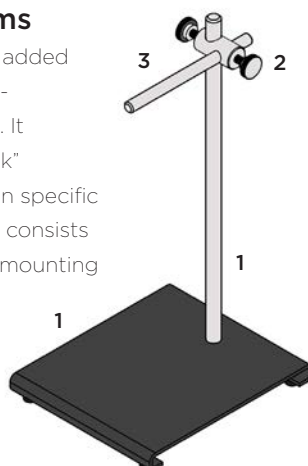


| Fluid Tubing (Polyethylene) | | |
|-----------------------------|-------|--------------------|
| Part No. | Color | Size |
| TSD1099-22 | Black | 3/8" O.D x 1/4" ID |
| TSD1099-23 | Clear | 3/8" O.D x 1/4" ID |
| TSD1099-24 | Clear | 1/4" O.D x 1/8" ID |
| TSD1099-25 | Black | 1/4" O.D x 1/8" ID |
| TSD1099-45 | Clear | 6mm O.D x 4mm ID |
| TSD1099-46 | Black | 6mm O.D x 4mm ID |

Tubing sold per meter

Production Master Systems

Production Master Systems provide added flexibility and productivity for hands-free, remotely-controlled dispensing. It incorporates a unique "building block" concept to provide more versatility in specific dispensing applications. The system consists of a basic Production Master stand, mounting rod, brackets and a rod clamp.



| Part No. | | Description |
|--------------|---|--|
| 918-033-000 | 1 | Production Master Stand (Base and Support) |
| 918-000-011 | | Syringe Bracket for 400 Series |
| 918-000-013 | | TS934/TS941 Spool Valve Bracket |
| 918-110-004 | | 1/10 gallon (325 ml) Cartridge Bracket |
| 918-000-007 | | 2.5 oz, 6 oz, 8 oz and 12 oz Cartridge Bracket |
| 918-000-039 | | 20 oz (591 ml) Cartridge Bracket |
| 918-000-012 | 2 | Rod Clamp Assembly |
| 918-000-009 | | 6" Non-Threaded Mounting Rod |
| 1212-000-008 | 3 | 6" 1/4-20UNC-2B Threaded Mounting Rod |
| 5620-000-008 | 3 | 4" 10-32 Threaded Mounting Rod |
| 5000-000-005 | | TS5000DMP/TS7000IMP Mounting Bracket |

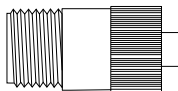
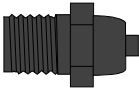
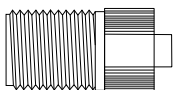
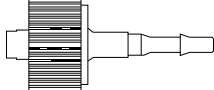
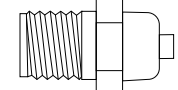
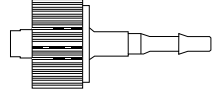
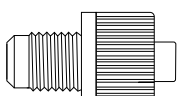
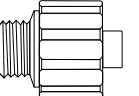
Fluid Line Adapters

Luer Lock Fittings

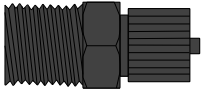
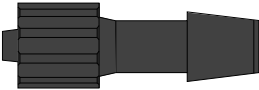
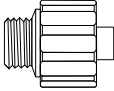
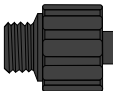
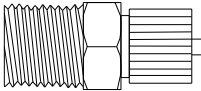
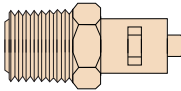
All TSD931 Series fittings are moulded and have good chemical resistance to solvents, acids and resin fluids. The locking end accepts all standard dispensing tips and moulded fittings used on the TSD126 Series hose assemblies. For a complete list, contact your local representative.




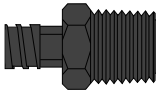
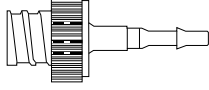
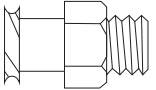
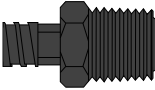
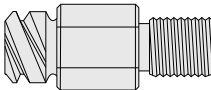
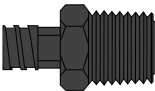
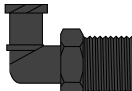
Male Luer Lock Adaptors

| | | | |
|--|--|--|--|
|  | Part Number: TSD931-5 Material: White Celcon Thread Size: 5/16-28 |  | Part Number: TSD931-14 Material: Black PP Thread Size: 1/4-18 NPT |
|  | Part Number: TSD931-6 Material: White Acetal Thread Size: 1/8" NPT |  | Part Number: TSD931-16 Material: White Acetal Barb Size: 3.30 mm/0.13" |
|  | Part Number: TSD931-7 Material: White PP Thread Size: 1/4-18 NPT |  | Part Number: TSD931-17 Material: White Acetal Barb Size: 4.32 mm/0.17" |
|  | Part Number: TSD931-8 Material: White Acetal Thread Size: 1/4-32 |  | Part Number: TSD931-49 Material: White Nylon Thread Size: 1/4-28 |

Male Luer Lock Adaptors



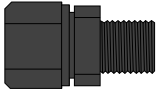
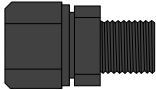
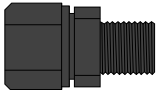

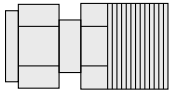
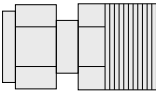
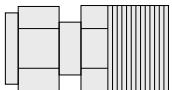
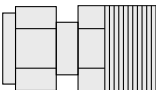


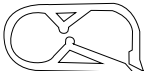
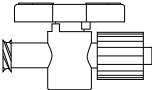
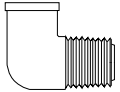
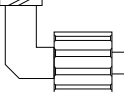
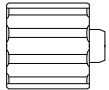

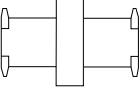
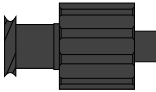
| | | | |
|---|--|--|--|
|  | Part Number: TSD931-57 Material: Black Nylon Thread Size: 1/8" NPT |  | Part Number: TSD931-73 Material: Black PP Barb Size: 8.38mm/0.33" |
|  | Part Number: TSD931-60 Material: Clear PP Thread Size: 1/4-28 |  | Part Number: TSD931-91 Material: Black Delrin® Thread Size: 1/4-28 |
|  | Part Number: TSD931-62 Material: Clear PP Thread Size: 1/8" NPT |  | Part Number: 918-006-000 Material: Nickel Plated & Brass Thread Size: 1/4" NPT |

Female Luer Lock Adaptors

| | | | |
|---|---|--|---|
|  | Part Number: TSD931-9 Material: Black Acetal Thread Size: 1/4-32 |  | Part Number: TSD931-54 Material: Black PP Thread Size: 1/8" NPT |
|  | Part Number: TSD931-13 Material: White Acetal Barb Size: 4.32 mm/0.17" |  | Part Number: TSD931-58 Material: Clear PP Thread Size: 1/4-28 |
|  | Part Number: TSD931-15 Material: Black Nylon/Acetal Thread Size: 1/4" NPT |  | Part Number: TSD931-63 Material: Stainless Steel Thread Size: 10-32 |
|  | Part Number: TSD931-54 Material: Black Nylon/Acetal Thread Size: 1/8" NPT |  | Part Number: TSD931-75 Material: Black PP Thread Size: 1/8-27 NPT |

Compression Fittings & Tubes

Compression fittings and tubes provide secure connection and increase fluid flow.

| "Non -Through" Compression Fittings | | | |
|---|---|--|---|
|  | Part Number: TSD1002-17 Material: Black PP Thread Size: 1/8" NPT Tube Size: 3/8" OD |  | Part Number: TSD1003-16 Material: Black PP Thread Size: 1/8" NPT Tube Size: 1/4" OD |
|  | Part Number: TSD1002-18 Material: Black PP Thread Size: 1/8" NPT Tube Size: 1/4" OD |  | Part Number: TSD1566-5 Material: Black PP Thread Size: 1/4" NPT Tube Size: 3/8" OD |
|  | Part Number: TSD1002-38 Material: Black PP Thread Size: 1/4" NPT Tube Size: 1/4" OD |  | Part Number: VFKIT Material: Black PP/Nylon Use: 1/4" OD To Male Luer Lock |
| Through Compression Fittings | | | |
|  | Part Number: P3000042 Material: Stainless Steel Thread Size: 3/8-18 NPT Tube Size: 1/4" OD |  | Part Number: P3000045 Material: Stainless Steel Thread Size: 1/4-18 NPT Tube Size: 1/4" OD |
|  | Part Number: P3000043 Material: Stainless Steel Thread Size: 1/4-18 NPT Tube Size: 3/8" OD |  | Part Number: P3000046 Material: Stainless Steel Thread Size: 1/4-18 NPT Tube Size: 4mm OD |
| Special Adaptors & Tubing Accessories | | | |
|  | Part Number: TSD1102-18 Use: Tube Clamp Tube Size: Up To 1/2" OD |  | Part Number: TSD931-296N Material: White Acetal Use: Euro Cart Transfer Adaptor |
|  | Part Number: TSD1102-19 Use: Tube Clamp for Tube Size: Up To 1/4" OD |  | Part Number: TSD931-42 Material: Clear Polycarbonate Use: Luer Tap |
|  | Part Number: TSD918-3 Material: Clear PP Use: Male/Female 1/4-18 NPT |  | Part Number: TSD931-81 Material: White Nylon Use: Male/Female Luer Elbow |
|  | Part Number: TSD921-3 Material: Clear PP Use: Luer Blank |  | Part Number: TSD931-81B Material: Black Nylon Use: Male/Female Luer Elbow |
|  | Part Number: TSD931-28 Material: Clear PP Use: Syringe Transfer |  | Part Number: TSD931-82B Material: Black Nylon Use: Male/Female Luer Extender |

Cartridges & Accessories

These dependable, high-quality products are designed for the rigors of manufacturing and have undergone continuous improvement to keep pace with the exacting requirements of this challenging field.

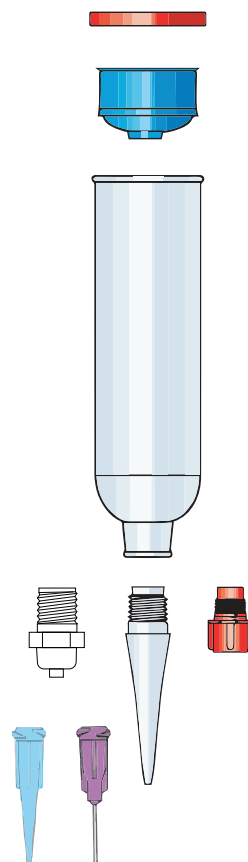
Disposable plastic cartridges and nozzles provide a clean, efficient and low-cost method to meet all types of production requirements. Plungers with a wiper-leading edge clean each cartridge thoroughly. Caps for both ends of the cartridges are available, making the system ideal for prepackaged materials and pre-mixed frozen material (PMF) handling.



Cartridges

Cartridges are available in 2.5, 6, 8, 12 and 20 ounce and 1/10 gallon capacities. Each size can be used with hand or bench-mounted air-powered dispensing tools or manual dispensing tools. Cartridges are molded in either high-density or low-density polyethylene. Custom colors and assemblies are available. Sold in bulk packages.

| Cartridges | | | | |
|--------------------------|---------------------------------|---------------------|-----------------------|----------|
| Part Number | Description | Length Inches/mm | Diameter Inches/mm | Quantity |
| TS25C-500 | 2.5 oz (65 ml) Natural HD | 4.00/101.6 | 1.59/40.4 | 500 |
| TS25C-GREEN-500 | 2.5 oz (65 ml) Green HD | 4.00/101.6 | 1.59/40.4 | 500 |
| TS25C-LD-500 | 2.5 oz (65 ml) Natural LD | 4.00/101.6 | 1.59/40.4 | 500 |
| TS60C-500 | 6 oz (165 ml) Natural HD | 7.11/180.6 | 1.59/40.4 | 500 |
| TS60C-BLACK-500 | 6 oz (165 ml) Black HD | 7.11/180.6 | 1.59/40.4 | 500 |
| TS60C-BLUE-500 | 6 oz (165 ml) Blue HD | 7.11/180.6 | 1.59/40.4 | 500 |
| TS60C-GREEN-500 | 6 oz (165 ml) Green HD | 7.11/180.6 | 1.59/40.4 | 500 |
| TS60C-YELLOW-500 | 6 oz (165 ml) Yellow HD | 7.11/180.6 | 1.59/40.4 | 500 |
| TS60C-LD-500 | 6 oz (165 ml) Natural LD | 7.11/180.6 | 1.59/40.4 | 500 |
| TS80C-250 | 8 oz (225 ml) Natural HD | 8.92/226.6 | 1.59/40.4 | 250 |
| TS80C-LD-250 | 8 oz (225 ml) Natural LD | 8.92/226.6 | 1.59/40.4 | 250 |
| TS120C-250 | 12 oz (330 ml) Natural HD | 12.34/313.4 | 1.59/40.4 | 250 |
| TS120C-BLACK-250 | 12 oz (330 ml) Black HD | 12.34/313.4 | 1.59/40.4 | 250 |
| TS120C-GREEN-250 | 12 oz (330 ml) Green HD | 12.34/313.4 | 1.59/40.4 | 250 |
| TS120C-RED-250 | 12 oz (330 ml) Red HD | 12.34/313.4 | 1.59/40.4 | 250 |
| TS120C-YELLOW-250 | 12 oz (330 ml) Yellow HD | 12.34/313.4 | 1.59/40.4 | 250 |
| TS120C-LD-250 | 12 oz (330 ml) Natural LD | 12.34/313.4 | 1.59/40.4 | 250 |
| TS110C-250 | 1/10 Gallon (310 ml) Natural HD | 8.99/228.3 | 1.85/47.0 | 250 |
| TS110C-LD-250 | 1/10 Gallon (310 ml) Natural LD | 8.99/228.3 | 1.85/47.0 | 250 |
| TS20C-100 | 20 oz (600 ml) Natural HD | 10.3/254.8 | 2.57/65.3 | 100 |
| TS20C-BLACK-100 | 20 oz (600 ml) Black HD | 10.3/254.8 | 2.57/65.3 | 100 |





Plungers

Wiper Plungers incorporate a modified or extended front wiper edge. Sold in bulk packages.

| Plungers | | Qty |
|------------------|--|------|
| Part Number | Description | |
| TS1P-SR-1000 | 2.5, 6, 8, 12 oz., Blue Wiper LD | 1000 |
| TS1PB-SR-1000 | 2.5, 6, 8, 12 oz., Black Wiper LD | 1000 |
| TS1WP-1000 | 2.5, 6, 8, 12 oz., Natural Extended Wiper LD | 1000 |
| TS1WP-BLACK-1000 | 2.5, 6, 8, 12 oz., Black Extended Wiper LD | 1000 |
| TS2PW-1000 | 1/10 Gallon White Extended Wiper LD w/ EVA | 1000 |
| TS2P-BLACK-1000 | 1/10 Gallon Black Wiper LD | 1000 |
| TS20P-100 | 20 oz White Wiper MD | 100 |
| TS20PLD-100 | 20 oz Natural Wiper LD | 100 |

Caps

Top and bottom Caps provide a choice of methods to seal the neck and base of the cartridge. Sold in bulk packages of 1,000.

| Caps | | |
|-------------|-----------------|--------------------------------------|
| | Part Number | Description |
| Flange Caps | TS2C-1000 | 2.5, 6, 8, 12 oz Red LD Flange Cap |
| | TS2C-BLACK-1000 | 2.5, 6, 8, 12 oz Black LD Flange Cap |
| | TS2C-GREEN-1000 | 2.5, 6, 8, 12 oz Green LD Flange Cap |
| | TS4C-1000 | 1/10 Gallon Red LD Flange Cap |
| | TS6C-1000 | 20 oz Red LD Flange Cap |
| Thread Caps | TS3P-1000 | Threaded Tri-Seal Red PE Cap |
| | TS4P-1000 | Threaded Square Red PE Cap |
| | TS5P-1000 | Snap On Tri-Seal Red PE Cap |
| | TS5P-BLACK-1000 | Snap On Tri-Seal Black PE Cap |
| | TS5P-GREEN-1000 | Snap On Tri-Seal Green PE Cap |
| | TS5P-BLUE-1000 | Snap On Tri-Seal Blue PE Cap |
| | TS6P-BLACK-1000 | Threaded Black PE Cap |
| | TS6P-RED-1000 | Threaded Red PE Cap |
| | TS6P-GREEN-1000 | Threaded Green PE Cap |

Cartridge Assemblies

HD and LD Cartridges with plungers inserted offer an even higher level of convenience. Check the product descriptions for exact configuration and quantity.

| Cartridge Assemblies | | | |
|----------------------|--------------------|--|-----|
| | Part Number | Description | Qty |
| 2.5 oz | TS25CP-500 | 2.5 oz HD with TS1P-SR Plunger inserted | 500 |
| | TS25CP-LD-500 | 2.5 oz LD with TS1P-SR Plunger inserted | 500 |
| | TS25CP-LD-BLUE-500 | 2.5 oz LD blue with TS1P-SR Plunger inserted | 500 |
| | TS25CWP-500 | 2.5 oz HD with TS1WP Plunger inserted | 500 |
| | TS25CPB-500 | 2.5 oz HD with TS1PB-SR Plunger inserted | 500 |
| | TS25CPB-LD-500 | 2.5 oz LD with TS1PB-SR Plunger inserted | 500 |
| 6 oz | TS25CWP-500 | 2.5 oz LD with TS1WP-SR Plunger inserted | 500 |
| | TS60CP-500 | 6.0 oz HD with TS1P-SR Plunger inserted | 500 |
| | TS60CP-LD-500 | 6.0 oz LD with TS1P-SR Plunger inserted | 500 |
| | TS60CP-LD-BLUE-500 | 6 oz LD blue with TS1P-SR Plunger inserted | 500 |
| | TS60CPB-500 | 6.0 oz HD with TS1PB-SR Plunger inserted | 500 |
| | TS60CPB-LD-500 | 6 oz, LD with TS1PB Plunger inserted | 500 |
| 8 oz | TS60CWP-500 | 6 oz with TS1WP Plunger inserted | 500 |
| | TS60CWP-GREEN-500 | 6 oz HD Green with TS1WP Plunger inserted | 500 |
| | TS60CWP-LD-500 | 6 oz LD with TS1WP Plunger inserted | 500 |
| | TS80CP-250 | 8 oz with TS1P-SR Plunger inserted | 250 |
| | TS80CWP-250 | 8 oz with TS1WP Plunger inserted | 250 |
| | TS120CP-250 | 12 oz HD with TS1P-SR Plunger inserted | 250 |
| 12 oz | TS120CPB-250 | 12 oz HD with TS1PB-SR Plunger inserted | 250 |
| | TS120CWP-250 | 12 oz HD with TS1WP Plunger inserted | 250 |
| | TS120CWP-GREEN-250 | 12 oz HD Green with TS1PB Plunger inserted | 250 |
| 20 oz | TS20CP-100 | 20 oz with TS20P Plunger inserted | 100 |
| | TS20CPFM-100 | 20 oz with TS20PFLD Plunger and 600-380 Mix Wheel inserted - MOQ applies | 100 |



TS2C / TS4C / TS6C



TS2C / TS2C-BLACK / TS2C-GREEN



TS5P Snap-On Tri-Seal



TS4P

TS6P

TS3P

Disposable Nozzles & Tip Adapters

Tip Adapters, Standard & Specialty Nozzles

Disposable Nozzles and Dispensing Tip Adapters

Nozzles and dispensing tip adapters provide a wide range of application capabilities. Standard nozzles may be cut back to increase orifice size.

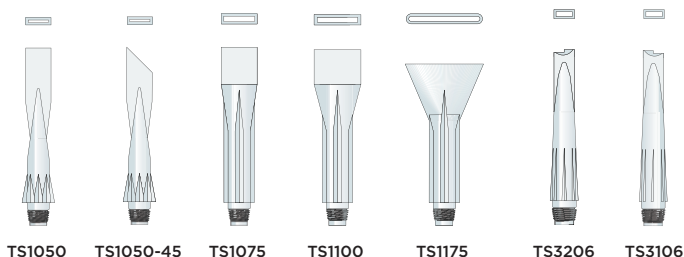
Standard Nozzles

Standard nozzles are precision moulded from natural polyethylene and have 1/4" NPT male threads to fit all Techcon cartridges or equivalent. Color nozzles are available upon request. Sold in bulk packages of 1,000.

| Part No. | Description |
|------------------|--------------------------------------|
| TS216-1000 | 2" (64 mm) x 1/16" (1.6 mm), HDPE |
| TS218-1000 | 2" (64 mm) x 1/8" (3.2mm), HDPE |
| TS218-LD-1000 | 2" (64 mm) x 1/8" (3.2 mm), LD |
| TS416-HO-HD-1000 | 4" (101.6 mm) x 1/16" (1.6 mm), HDPE |
| TS416-HO-LD-1000 | 4" (101.6 mm) x 1/16" (1.6 mm), LD |
| TS418-HO-LD-1000 | 4" (101.6 mm) x 1/8" (3.2 mm), LD |
| TS432-HO-HD-1000 | 4" (101.6 mm) x 1/32" (0.8 mm), HDPE |
| TS432-HO-LD-1000 | 4" (101.6 mm) x 1/32" (0.8 mm), LD |
| TS490-HO-LD-1000 | 4" (101.6 mm) x 3/32" (2.4 mm), LD |
| TS616-HO-LD-1000 | 6" (152.4 mm) x 1/16" (1.6 mm), LD |
| TS618-HO-LD-1000 | 6" (152.4 mm) x 1/8" (3.2 mm), LD |

Specialty Nozzles

Specialty nozzles are precision moulded from natural polyethylene and have 1/4" NPT male threads to fit all Techcon cartridges or equivalent. Sold in bulk packages of 1,000.



| Part No. | Description |
|----------------|--|
| TS1050-1000 | 4" (101.6 mm) x 0.5" (12.4 mm) x 0.06" (1.52 mm) |
| TS1050-45-1000 | 4" (101.6 mm) x 0.5" (12.4 mm) x 0.06" (1.52 mm) |
| TS1075-1000 | 4.5" (114.3 mm) x 0.75" (19.5 mm) x 0.13" (3.3 mm) |
| TS1100-1000 | 4.4" (111.7 mm) x 1.0" (25.4 mm) x 0.13" (3.3 mm) |
| TS1175-1000 | 4" (101.6 mm) x 1.75" (44.45 mm) x 0.13" (3.3 mm) |
| TS3106-1000 | 3.8" (96.5 mm) x 0.35" (8.89 mm) x 0.11" (2.79 mm) |
| TS3206-1000 | 3.8" (96.5 mm) x 0.35" (8.89 mm) x 0.11" (2.79 mm) |



Bent Nozzles

Below is the list of standard bent nozzles. Special bent nozzles available upon request. Sold in bulk packages of 1,000.

| Part No. | Description |
|------------------------|--------------------------|
| TS416-HO-LD-B30/1-1000 | Bent 30° at 1" (25.4 mm) |
| TS416-HO-LD-B30/2-1000 | Bent 30° at 2" (50.8 mm) |
| TS416-HO-LD-B40/1-1000 | Bent 40° at 1" (25.4 mm) |
| TS418-HO-LD-B30/1-1000 | Bent 30° at 1" (25.4 mm) |
| TS618-HO-LD-B30/2-1000 | Bent 30° at 2" (50.8 mm) |



Dispensing Tip Adapters

These tip adapters have standard 1/4" NPT male threads on one end to fit all Techcon cartridges or equivalent, and standard male Luer lock threads on the opposite side to fit all Luer lock dispensing tips.

| Part No. | Description |
|-----------|---------------------------------|
| TSD931-7 | Dispensing Tip Adapter White PP |
| TSD931-14 | Dispensing Tip Adapter Black PP |

TSM50FR & TSM120FR

Two-Component Meter Mix Systems



TSM120FR — Meter Mix System

TSM50FR & TSM120FR

Meter Mix Systems

The TSM50FR and TSM120FR Meter-Mix Systems employ a parallel-drive system with positive-displacement pump technology to ensure repeatable, accurate volumetric metering, mixing and dispensing of low to medium-viscosity two-part materials.

These systems are fixed-ratio, pneumatically powered and digitally controlled via a user-friendly touch-screen interface, enabling a wide range of electrical dispensing accessories and a simple, robust robot interface.

The TSM50FR is capable of dispensing mixed material from 2 cc to 50 cc and is an economical solution to what is often an inefficient and hazardous process.

The TSM120FR will dispense from 5 cc to 120 cc within +/- 1% volumetric accuracy.

These mix-and-dispense systems can be used in bonding, encapsulation, potting, sealing and insulating applications for all industries.

| Specifications | | |
|------------------------|---------------------------------------|------------|
| | TSM50FR* | TSM120FR* |
| Dispensing Range | 2 - 50 cc | 5 - 120 cc |
| Mix Ratios | 1:1, 2:1, 4:1, 10:1 | |
| Maximum Viscosity | 150K cps (leveled) | |
| Activation | Pedal Switch & Touch Screen | |
| Repeatability | +/- 1 % | |
| Maximum Pressure | 6.9 bar (100 psi) | |
| Mixer | Static Mixer | |
| Reservoir Options | 3, 5, 7, 10 liter | |
| Dispensing Mechanism | Parallel Drive, Positive Displacement | |
| Controller Interface | Touch Screen | |
| Input voltage | 110 & 220 VAC | |
| Dimensions (L x W x H) | 775 x 430 x 570 mm | |
| Certification | CE | |
| Weight | 40 kg | 50 kg |

Key Features

- Positive-displacement pump technology
- Repeatable, accurate volumetric 2K dispensing
- Pneumatically powered, digitally controlled

Typical Applications

- Bonding
- Encapsulation
- Potting
- Sealing
- Insulating

*This is the reference part number for the basic unit. Please contact Application Support for the part number and configuration that will meet your application requirements.

TS6500 Series

Techkit Cartridge Mixers

The TS6500 Series Techkit Cartridge Mixer provides complete automatic mixing of two-component material filled in a cartridge kit. The feature-rich TS6500 Series accommodates all standard size cartridge kits ranging from 2.5 oz (50 ml) to 20 oz (550 ml) and is immediately usable anywhere in the world with its accompanying tools, accessories and universal power supply.

| Specifications | |
|-------------------------|---|
| Size | 15.7" x 21.2" x 40.6" / 398 mm x 538 mm x 1032 mm |
| Weight | 80 lb. (36 kg) |
| Internal Voltage | 120-230 VAC, 50-60 Hz, 2 A |
| Motor Speed | 139 RPM and 118 RPM (-RS) versions |
| Air Inlet | 80 psi (5.5 Bar) Min. |
| Stroke Speed | 33 Strokes/minute (fully extended) |
| Meets or exceeds | CE, cTUV-us |
| Warranty | 1 year |

Key Features

- Universal power supply for worldwide use
- Automatic fluid level sensing device for all kit sizes - No need to set stroke length
- Automatically injects hardener into resin to provide uniform mixed material
- Robust, high torque motor to handle high-viscosity material
- Safety features include safety enclosure, emergency stop button and two-hand start
- User-programmable memories for storing and recalling most frequently used mix cycle
- Quick/easy toolless replacement of cartridge holder & plunger
- User-friendly interface for easy setup
- Robust and sturdy platform for heavy industrial use
- RoHS, WEEE compliance, CE certified



TS6500 — Techkit Cartridge Mixer

| Part No. | Description |
|-------------------------|---|
| TS6500CIM-6 | Cartridge Mixer for 2.5 oz (50 ml), 6 oz (140 ml), 8 oz (210 ml) kit, 139 RPM |
| TS6500CIM-RS-6 | Cartridge Mixer for 2.5 oz (50 ml), 6 oz (140 ml), 8 oz (210 ml) kit, 118 RPM |
| TS6500CIM-20 | Cartridge Mixer for 20 oz (550 ml) kit, 139 RPM |
| TS6500CIM-SMR-6 | Cartridge Mixer for 2.5 oz (50 ml), 6 oz (140 ml), 8 oz (210 ml) kit, 139 RPM. Requires metal rod 800-100-METAL |
| TS6500CIM-SMR-20 | Cartridge Mixer for 20 oz (550 ml) kit, 139 RPM. Requires metal rod 800-100-METAL |
| CK6500-6 | Conversion Kit for 2.5 oz (50 ml), 6 oz (140 ml), 8 oz (210 ml) kit |
| CK6500-10 | Conversion Kit for 1/10 gal (280 ml) kit |
| CK6500-20 | Conversion Kit for 20 oz (550 ml) kit |

Techkits

Two-Component Cartridge Packaging and Mixing Kits

The Techkit is a compact and simple method of packaging two or three-component resin systems into a 2.5, 6, 8, 20 ounce or 1/10 gallon cartridge. The kit mechanically separates the base and hardener until they are ready to be used. An internal mixing head provides a thorough blend for all types of compounds. When the job has been completed, the entire package is disposed of - no clean up or physical contact with the resin. Reliability is increased with accurate compound ratios, complete mixing and proper application techniques. Three types of kits are available:

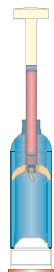
Barrier Type

For compounds with a minimum demand of 23 ml of hardener, the catalyst and base are separated by an aluminum barrier formed over the mixing head.



Injection Type

For compounds with a maximum demand of 12.5 ml or less, the catalyst is contained inside the valved mixing rod while the base is in the cartridge.



Barrier/Injection Type

For three component compounds, components of both Barrier Techkits and Injection Techkits are combined.



Techkit Components

Complete Techkits

| Part Number | Size | Kit Type | Cartridge | Plunger | Cap | Mix Head | Rod | Ram Rod |
|--------------|--------------------|---------------|-----------|----------|------|----------|----------|---------|
| 110-80 | 1/10 gal. (280 ml) | Injection | TS110C | TS2PW | TS4C | 110-340 | 810-100A | 600-080 |
| 110-81T | 1/10 gal. (280 ml) | Taped Barrier | TS110C | TS2PW | TS4C | 110-350 | 800-100 | |
| 250-60 | 2 1/2 oz (50 ml) | Injection | TS25C | TS1WP | TS2C | 600-200 | 610-100A | 600-080 |
| 250-61T | 2 1/2 oz (50 ml) | Taped Barrier | TS25C | TS1WP | TS2C | 600-310 | 600-100 | |
| 250-61T-330 | 2 1/2 oz (50 ml) | Taped Barrier | TS25C | TS1WP | TS2C | 600-330 | 600-100 | |
| 250-80 | 2 1/2 oz (50 ml) | Injection | TS25C | TS1WP | TS2C | 600-200 | 810-100A | 600-080 |
| 250-81T | 2 1/2 oz (50 ml) | Taped Barrier | TS25C | TS1WP | TS2C | 600-310 | 800-100 | |
| 600-60 | 6 oz (140 ml) | Injection | TS60C | TS1WP | TS2C | 600-200 | 610-100A | 600-080 |
| 600-61T | 6 oz (140 ml) | Taped Barrier | TS60C | TS1WP | TS2C | 600-310 | 600-100 | |
| 600-80 | 6 oz (140 ml) | Injection | TS60C | TS1WP | TS2C | 600-200 | 810-100A | 600-080 |
| 600-81T | 6 oz (140 ml) | Taped Barrier | TS60C | TS1WP | TS2C | 600-310 | 800-100 | |
| 600-81T-330 | 6 oz (140 ml) | Taped Barrier | TS60C | TS1WP | TS2C | 600-330 | 800-330 | |
| 800-80 | 8 oz (210 ml) | Injection | TS80C | TS1WP | TS2C | 600-200 | 810-100A | 600-080 |
| 800-81T | 8 oz (210 ml) | Taped Barrier | TS80C | TS1WP | TS2C | 600-310 | 800-100 | |
| 800-81T-330 | 8 oz (210 ml) | Taped Barrier | TS80C | TS1WP | TS2C | 600-330 | 800-330 | |
| 200-80 | 20 oz (550 ml) | Injection | TS20C | TS20P | TS6C | 600-360 | 810-100A | 600-080 |
| 200-81T | 20 oz (550 ml) | Taped Barrier | TS20C | TS20P | TS6C | 600-370 | 800-100 | |
| 200-81T-PFLD | 20 oz (550 ml) | Taped Barrier | TS20C | TS20PFLD | TS6C | 600-380 | 800-100 | |

Mix Heads



Mix Heads

| Part Number | Description |
|-------------|--------------------------------------|
| 110-340 | 1/10 gal. (280 ml) Mix Head |
| 110-350 | 1/10 gal. (280 ml) Foiled Mix Head |
| 600-200 | Open Mix Head |
| 600-300 | Wheel Mix Head |
| 600-310 | Foiled Wheel Mix Head |
| 600-320 | Half Closed Circle Mix Head |
| 600-330 | Foiled Half Closed Circle Mix Head |
| 600-360 | 20 oz (550 ml) Wheel Mix Head |
| 600-370 | 20 oz (550 ml) Foiled Wheel Mix Head |
| 600-380 | 20 oz (550 ml) Spoked Wheel Mix Head |

Sealant Smoothing and Removal Tools

Techcon plastic sealant tools are ideal for spreading, smoothing and removing sealants or adhesives. Approved for use in aerospace industry, these tools are designed to prevent damage to delicate substrates. Spatulas made from nylon. Smoothing tool made from Acetal.



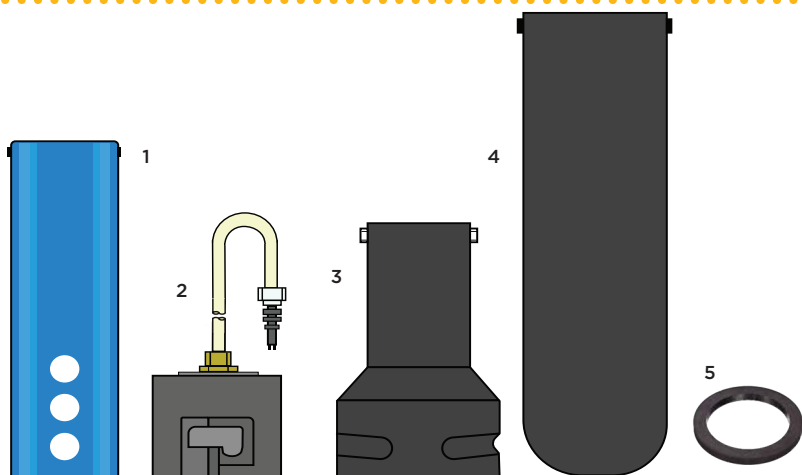
| Part Number | Description |
|-------------|------------------------------|
| TS1275-KP | 1 Spatula Kit |
| TS1275-4 | 2 Smoothing tool, Red Acetal |



Rods

| Part Number | Description |
|---------------|--|
| 600-080 | 1 8" (203.2 mm) Ram Rod |
| 600-100 | 2 6" (152.4 mm) Plugged Rod |
| 600-101 | Piston for Injection Rod |
| 610-100A | 3 6" (152.4 mm) Valved Rod with Piston |
| 800-100 | 4 8" (203.2 mm) Plugged Rod |
| 810-100A | 5 8" (203.2 mm) Valved Rod with Piston |
| 800-100-METAL | 6 8" (203.2 mm) Plugged Rod, Metal |

20 oz & 1/10 Gallon (310 ml) Dispensing Components



| Part No. | | Size |
|---------------|---|----------------------------------|
| 110-2-C | 1 | 1/10 gal. (310 ml) Retainer |
| 918-000-036-C | 2 | 20 oz / 1/10 Gallon Retainer Cap |
| 101-20A | 3 | 20 oz Adapter Retainer |
| 101-20R* | 4 | 20 oz Retainer |
| 101-20G | 5 | Gasket for 20 oz Adapter |

*101-20A Adapter is required for 20 oz.

TS Retainers

TS Series Retainers are durable, lightweight and can withstand up to 100 psi (6.9 bar) pressure.

| Part No. | | Size |
|-------------|---|--------|
| 918-030-000 | 6 | 2.5 oz |
| 918-031-000 | 7 | 6 oz |
| 918-034-000 | 8 | 8 oz |
| 918-032-000 | 9 | 12 oz |



TS Retainer Cap

The TS Series Retainer Cap provides a leakproof connection between the dispenser and TS Series Retainers. Quick connector and air hose assembly are available separately and can withstand up to 100 psi (6.9 bar) pressure.

| Part No. | | Description |
|-------------|----|----------------------------|
| 918-001-004 | 10 | TS Series Retainer Cap |
| 918-000-002 | 11 | Air Hose Assembly |
| 918-001-007 | 12 | Gasket for TS Retainer Cap |
| 534A | 13 | Connector without Shut-off |



Dispensing Guns & Components

TS Series



TS Series

Dispensing Guns and Components

TS Series Dispensing Guns and components are designed to accommodate Techcon's extensive line of cartridges and Techkits.

TS2560 Series Applicator Guns

These lightweight palm and pistol grip applicator guns allow for the processing of Techcon and standard sealant cartridges with ease. The TS2560 Series Dispensing Gun is ideal for dispensing silicones, grease, or other materials that come in standard cartridges.

A unique, light-weight, adjustable retainer fits cartridge sizes of 2.5 oz., 6 oz & 8 oz.

With a maximum working pressure of 5.5 bar (80psi), the guns are ideally suited for a multitude of aerospace and other industrial applications.

| Part No. | Description |
|-------------|---------------------------|
| TS2560-PG | Palm Grip |
| TS2560-HG | Pistol Grip |
| TS2560-2040 | Bayonet Retainer |
| TS2560-2041 | Threaded Retainer Adapter |



Key Features

- Easy to assemble & operate
- Adjustable retainer to fit 2.5 oz., 6 oz & 8 oz cartridges
- Light-weight
- Pistol version features adjustable air regulator
- Compatible with all aerospace sealant



TS950 Sealant Gun

The TS950 is a versatile, pneumatic sealant gun designed to accommodate all TS Series Retainers. Complete assemblies include palm grip gun with pistol grip handle attached. Shipped without an air hose, the 1000-12 10 foot hose assembly can be ordered separately.

| Pistol Grip Sealant Gun | Size | Palm Grip Assembly | Pistol Grip Handle | Retainer |
|-------------------------|--------|--------------------|--------------------|-------------|
| TS950-25-HA | 2.5 oz | TS950-75 | TS950-3 | 918-030-000 |
| TS950-60-HA | 6 oz | TS950-75 | TS950-3 | 918-031-000 |
| TS950-80-HA | 8 oz | TS950-75 | TS950-3 | 918-034-000 |
| TS950-120-HA | 12 oz | TS950-75 | TS950-3 | 918-032-000 |

TS16 Manual Gun Assemblies

The lightweight TS16 Series Manual Gun Assembly is ideal for field applications where compressed air is not available.

| Gun | Size | Handle | Retainer |
|----------|--------|--------|-------------|
| TS16-25 | 2.5 oz | TS16 | 918-030-000 |
| TS16-60 | 6 oz | TS16 | 918-031-000 |
| TS16-80 | 8 oz | TS16-2 | 918-034-000 |
| TS16-120 | 12 oz | TS16-2 | 918-032-000 |



Side-by-Side Dispensing Cartridges

Techcon Side-by-Side (SBS) Cartridges are precise metering containers for 2-component adhesives and sealants.

Available in 1:1, 2:1, 4:1 and 10:1 ratios, Techcon SBSs are made of Polypropylene (PP) to meet a wide range of chemical compatibility. Available in 50 ml, 200 ml, 400 ml and 490 ml sizes. Techcon SBS systems are fully sealed, ensuring thorough mixing and dispensing without air entrapment.

Key Features

- 50 ml, 200 ml, 400 ml, 490 ml sizes
- Available in 1:1, 2:1, 4:1 and 10:1 ratios
- Made of Polypropylene (PP)
- Safe and easy to use
- Leakproof, minimal waste volume
- Compatible with most cartridge guns for high-quality results

Key Industries

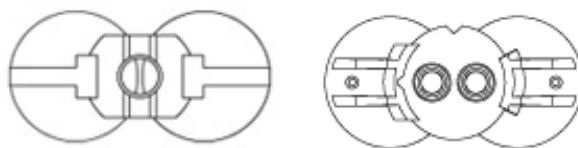
- Automotive
- Construction
- Electronics
- Industrial
- Medical Device



Side-by-Side Specifications

| | |
|------------------------|--|
| Capacities | 50 ml, 200 ml, 400 ml, 490 ml |
| Mix Ratios | 1:1, 2:1, 4:1, 10:1 (not all sizes) |
| Outlets Systems | Standard A-System, B-System** |
| Material | PP |
| Compatible with | Most standard cartridge guns |
| Sets include | Cartridges, caps, Plungers and O-rings |
| Quantities | 100 or 500 |

Techcon dual cartridges are available in two outlet configurations



Standard Outlets A-System Separate Outlets B-System

**Please Note: Techcon 200 ml and 400 ml SBS "A-System" outlets are similar to other supplier's "C-System" outlets. 400/490 ml "B-System" outlets are similar to other supplier's "F-System" outlets. Please confirm compatibility before purchase.

50 ml Part Numbers

| System | Ratio | Description | Pack of 100 | Pack of 500 |
|--------|-------|---------------------------------|---------------|---------------|
| A | 1:1 | 50 ml SBS Set, 1:1, PP, A-sys. | SBS50-A1-100 | SBS50-A1-500 |
| A | 2:1 | 50 ml SBS Set, 2:1, PP, A-sys. | SBS50-A2-100 | SBS50-A2-500 |
| B | 1:1 | 50 ml SBS Set, 1:1, PP, B-sys. | SBS50-B1-100 | SBS50-B1-500 |
| B | 2:1 | 50 ml SBS Set, 2:1, PP, B-sys. | SBS50-B2-100 | SBS50-B2-500 |
| B | 10:1 | 50 ml SBS Set, 10:1, PP, B-sys. | SBS50-B10-100 | SBS50-B10-500 |

200 ml Part Numbers (QTY 100)

| System | Ratio | Description | Part No. |
|--------|-------|---------------------------------|---------------|
| A | 1:1 | 200 ml SBS Set, 1:1, PP, A-sys. | SBS200-A1-100 |

400/490 ml Part Numbers (QTY 100)

| System | Ratio | Description | Part No. |
|--------|-------|----------------------------------|----------------|
| A | 1:1 | 400 ml SBS Set, 1:1, PP, A-sys. | SBS400-A1-100 |
| A | 2:1 | 400 ml SBS Set, 2:1, PP, A-sys. | SBS400-A2-100 |
| B | 1:1 | 400 ml SBS Set, 1:1, PP, B-sys. | SBS400-B1-100 |
| B | 2:1 | 400 ml SBS Set, 2:1, PP, B-sys. | SBS400-B2-100 |
| B | 4:1 | 400 ml SBS Set, 4:1, PP, B-sys. | SBS400-B4-100 |
| B | 10:1 | 490 ml SBS Set, 10:1, PP, B-sys. | SBS490-B10-100 |

PP = Polypropylene

Dual-Syringe Dispensers

TS-DSAD & TS-DCD Series



TS-DSAD & TS-DCD Series

Dual-Syringe Dispensers



TS-DSAD

Techcon TS-DSAD Dual-Syringe Dispensers are designed to accommodate 50 ml side-by-side syringes in ratios of 1:1, 2:1, 4:1 and 10:1.

TS-DSAD dispenses via pulsed air from a TS250 or TS350 Series Dispenser/Controller. A Robot Integration Bracket allows for semi-automated operation. And, TS-DSAD can be used with Techcon Disposable Material Path valves (TS5624DMP, TS5000DMP-DCX-SR, TS1212).

Key Features & Benefits

- Robust, stainless steel construction
- Hand-held or robot mounted operation
- Quick attachment/detachment of 50 ml side-by-side (SBS) dual-syringes
- Hanging ring for easy storage

TS-DSAD-50 Specifications

| | |
|----------------------------|-------------------------------|
| Size | 2.13" x 6.3" / 54 mm x 160 mm |
| Weight | 0.94 lbs / 425 g |
| Air Inlet | 1/8" NPT female |
| Activation Pressure | 0 - 100 psi / 0 - 6.9 bar |

TS-DSAD-50 Part Numbers

| P/N | Ratio | Back Type |
|----------------|-------|-------------|
| TS-DSAD-50-11 | 1:1 | Square Back |
| TS-DSAD-50-21 | 2:1 | Square Back |
| TS-DSAD-50-41 | 4:1 | Square Back |
| TS-DSAD-50-101 | 10:1 | Round Back |

TS-DSAD-50 Accessories

| P/N | Description |
|---------------|---|
| TSR-DSB50ML-3 | Robot Bracket for TS-DSAD-50 Dispensers |
| TSR-1212BKIT | Robot Bracket Kit for TS1212 Valves |
| TS8120 | Stand-alone Manual Vacuum Pickup Pen |

Typical Applications

Dispensing Gap Filler, Encapsulant and Structural Adhesive

TS-DCD Dual-Cartridge Dispensers

enable dispensing 2K materials from standard 200 ml and 400 ml side-by-side (SBS) dual cartridges. Both TS-DCD versions dispense from 1:1 and 2:1 ratio SBS cartridges out of the box. An included conversion kit enabled dispensing from 4:1 and 10:1 cartridges.

TS-DCD combines the simplicity and versatility of SBS cartridges with bench-mount support, air logic controls and everything needed to convert SBS dual cartridges into a benchtop potting, encapsulation, bonding and dispensing system.



TS-DCD

Key Features & Benefits

Low cost & simple operation / Reduced operator fatigue / Adjustable shot control / Precise ratio control / Handles a variety of viscosities

TS-DCD Specifications

| | TS-DCD200 | TS-DCD400 |
|------------------------------|--|--|
| Size | 33" x 12" x 12" 83.2 x 30.5 x 30.5 cm | 36" x 12" x 12" 91.4 x 30.5 x 30.5 cm |
| Weight | 3.52 lbs / 1.6 kg | 4.85 lbs / 2.2 kg |
| Pneumatic Connection | 1/4" / 6.35 mm OD | |
| Operating Pressure | 85 psi / 5.86 bar Max. | |
| Compressed Air Supply | 100 psi / 6.9 bar Max. | |

TS-DCD Part Numbers

| | |
|------------------|----------------------------------|
| TS-DCD200 | Dual-Cartridge Dispenser, 200 ml |
| TS-DCD400 | Dual-Cartridge Dispenser, 400 ml |

Key Benefits

Bench top hands-free dispensing of epoxies, urethanes, acrylics, silicones and other adhesives / Laboratory testing & inspection

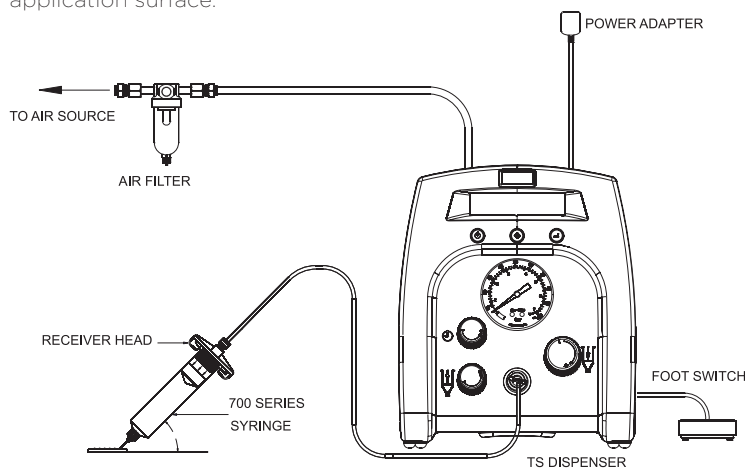
TS-DSAD-50 Configuration Chart

| Use | Controller | Valve | Accessories | Vacuum | Robot Bracket |
|-------------------------|-------------|------------------|--------------|--------|---------------|
| Hand-held | TS250/TS350 | n/a | n/a | n/a | n/a |
| Robot + Pinch Valve | TS555R | TS1212 | TSR-1212BKIT | TS8120 | TSR-DSB50ML-3 |
| Robot + Diaphragm Valve | TS555R | TS5624DMP | 5624DMP-FLB | TS8120 | TSR-DSB50ML-3 |
| Robot + Rotary Valve | TS577R | TS5000DMP-DCX-SR | n/a | TS8120 | TSR-DSB50ML-3 |

Tutorial Time-Pressure Dispensing

Time pressure dispensing is the most common dispensing method used today. Its popularity stems from the need for process control and that it is possible to dispense from disposable containers without the need for cleaning.

Our time-pressure dispensers deliver a measured amount of air pressure, for a measured amount of time, to a pre-filled syringe barrel. This controlled shot of air pressure forces material out of the delivery end of the barrel, through a dispensing tip and out to the application surface.



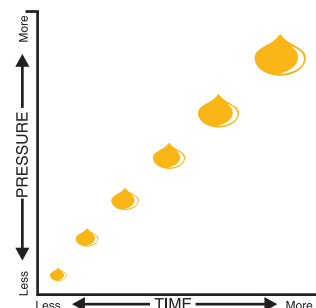
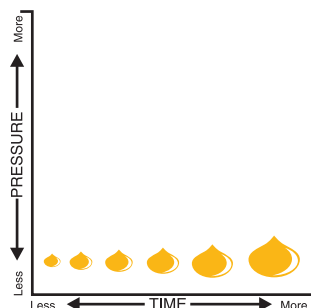
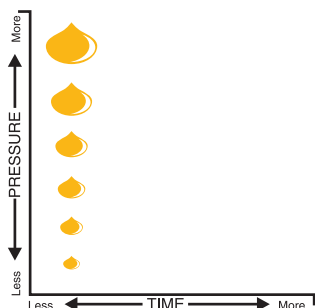
Basic Dispensing Guidelines

- Small Shot Size = small dispensing tip, low fluid pressure, short dispense time
- Large Shot Size = larger dispensing tip, higher fluid pressure, longer dispense time
- Low Viscosity Fluid = small dispensing tip, low pressure, time as required
- High Viscosity Fluid = larger dispensing tip (tapered dispensing tip recommended), high pressure, time as required
- Position syringe barrel at 45° angle
- Position the dispensing tip close to the work surface, then activate the dispense cycle and keep the syringe barrel in the same position until the cycle is completed
- If vacuum "suck-back" is needed, use only enough vacuum to draw back fluid into the dispense tip. Excessive vacuum could draw air into the fluid and draw fluid into the dispenser.

| Viscosity Chart | | Shot Size Chart | | |
|-----------------|-----------------|------------------|--------------|-------------------|
| Material | Viscosity (cps) | Dot Diameter | Dot Volume | Dot Size (actual) |
| Water | 1 | 0.010" (0.25 mm) | 0.0000043 cc | • |
| Milk | 3 | 0.020" (0.51 mm) | 0.00003 cc | • |
| Castor Oil | 1000 | 0.030" (0.76 mm) | 0.0001 cc | • |
| Maple Syrup | 5000 | 0.040" (1.02 mm) | 0.0003 cc | • |
| Honey | 10000 | 0.050" (1.27 mm) | 0.0005 cc | • |
| Chocolate Syrup | 25000 | 0.060" (1.52 mm) | 0.0009 cc | • |
| Ketchup | 50000 | 0.070" (1.78 mm) | 0.0015 cc | • |
| Sour Cream | 100000 | 0.080" (2.03 mm) | 0.0022 cc | • |
| Peanut Butter | 250000 | 0.090" (2.29 mm) | 0.0031 cc | • |
| Shortening | 1200000 | 0.100" (2.54 mm) | 0.0043 cc | • |

Factors Affecting Dispensing

- Pressure: Increasing fluid pressure will increase dot size and vice versa
- Time: Increasing dispense time will increase dot size and vice versa
- Dispensing Tip Size: Larger inside diameter (orifice) needle results in larger dot size and vice versa



Valve Application Guide



| | Pinch (TS1212) | Needle (TS5420) | Micro Needle (TS5440) | Mini Spool (TS5322) | HP Spool (TS941) | Diaphragm (TS5620) ¹ (TS5624DMP) ² | | Rotary DMP (TS5000- DMP) | Rotary (TS7000) | Spray (TS5540) | PC Pump (TS8100) | MMM (TS8200- MM) | Jet Valve (TS9800) |
|----------------------------------|-------------------|--------------------|-----------------------------|---------------------------|------------------------|--|----|--------------------------------|--------------------|-------------------|---------------------|------------------------|-----------------------|
| Catalog Page | 25 | 23 | 23 | 24 | 24 | 21 | 22 | 19 | 20 | 26 | 18 | 17 | 16 |
| Micro shots | ✗ | ♦ | ✓ | ♦ | ♦ | ♦ | ♦ | ♦ | ✓ | ✗ | ♦ | ✗ | ✓ |
| Dots | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ |
| Lines/Beads | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ |
| Potting & Encapsulation | ♦ | ♦ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ |
| Packaging/ Filling | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ♦ | ♦ | ✗ | ✓ | ✗ | ✗ |
| High Pressure | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| Sprayed | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | ✗ | ✗ | ✗ |
| Jetting | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ |
| Viscosity | | | | | | | | | | | | | |
| High | ✗ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ |
| Medium | ✗ | ✗ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ | ✓ | ✓ |
| Low | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✓ | ✓ |
| Application | | | | | | | | | | | | | |
| Activators | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| Alcohol | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| Anaerobics | ✓ | ✗ | ✗ | ✗ | ✗ | ✓ | ✓ | ✓ | ✗ | ✗ | ♦ | ✗ | ✗ |
| Brazing Paste | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | ✗ | ♦ | ✗ | ✗ |
| Conformal Coatings | ✗ | ♦ | ♦ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ♦ | ✗ | ♦ |
| Cyanoacrylates | ✓ | ✗ | ✗ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✗ |
| Epoxies | ♦ | ♦ | ♦ | ♦ | ♦ | ✗ | ♦ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ |
| Flux (liquid) | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| Flux (paste) | ✗ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ |
| Greases | ✗ | ✗ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ |
| Inks | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ |
| Lacquers | ♦ | ♦ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| Mold Releases | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ |
| Oils | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| Paints | ✓ | ✓ | ✓ | ♦ | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| Reagent | ♦ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| RTV Silicone | ✗ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ | ✗ | ✗ |
| Solder masks | ✓ | ♦ | ♦ | ✓ | ✓ | ✓ | ✓ | ✗ | ✗ | ✗ | ✓ | ✗ | ✓ |
| Solder pastes | ✗ | ✗ | ✗ | ♦ | ♦ | ✗ | ✗ | ♦ | ✓ | ✗ | ✓ | ✗ | ✗ |
| Solvents | ✓ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| Two-part adhesive | ✓ | ✗ | ✗ | ✗ | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✗ | ✓ | ✗ |
| UV cure/ adhesive (liquid) | ♦ | ✗ | ✓ | ♦ | ✗ | ✓ | ✓ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ |
| UV cure/ adhesive (gel) | ✗ | ✗ | ✓ | ✓ | ✗ | ✗ | ✗ | ✓ | ✓ | ✗ | ✓ | ✗ | ✓ |
| UV cure with anaerobic | ✓ | ✗ | ✗ | ✗ | ✗ | ✓ | ✓ | ✓ | ✗ | ✗ | ♦ | ✗ | ✗ |

Excellent - ✓

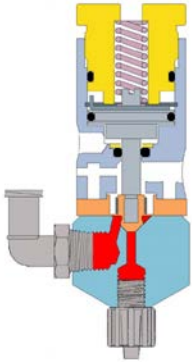
Average - ♦

Do not use - ✗

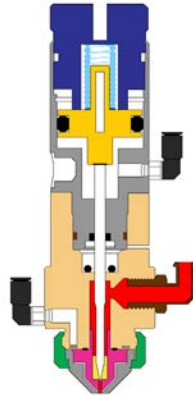
Disclaimer: The valve application guide is for reference only.
Please contact a Techcon applications engineer for accurate valve recommendations.

Valve Diagrams

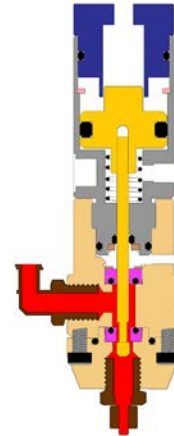
TS5620
Diaphragm Valve



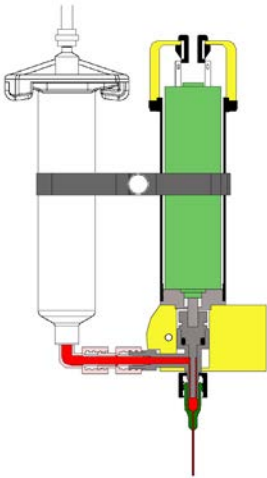
TS5540
Spray Valve



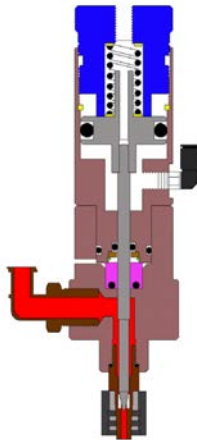
TS5322
Mini Spool Valve



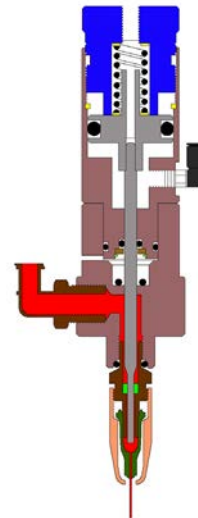
TS5000DMP-DCX
Diaphragm Valve



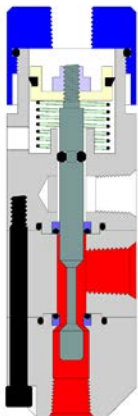
TS5420
Needle Valve



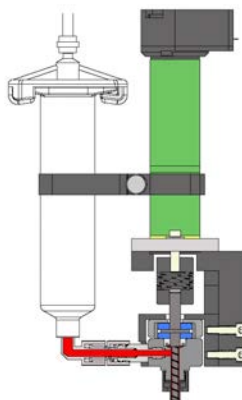
TS5440
Microshot Needle Valve



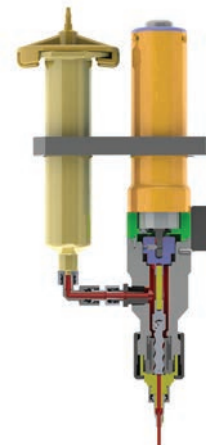
TS941
High Pressure Spool Valve



TS7000-DCX
IMP Rotary Valve



TS8100
PC Pump



APPENDIX

Cannula-Style Tips - Specifications

| | ID (inches) | ID (mm) | Width Line (mm) | Tip Height (mm) |
|------|-------------|---------|-----------------|-----------------|
| TT14 | 0.063 | 1.6 | 2.4 | 0.8 |
| TT16 | 0.047 | 1.19 | 1.785 | 0.595 |
| TT18 | 0.033 | 0.838 | 1.257 | 0.419 |
| TT20 | 0.023 | 0.58 | 0.87 | 0.29 |
| TT22 | 0.016 | 0.406 | 0.609 | 0.203 |
| TT25 | 0.010 | 0.254 | 0.381 | 0.127 |
| TT27 | 0.008 | 0.203 | 0.3045 | 0.101 |

Cartridge Conversion: Imperial & Metric

| Imperial | Metric | Metric Techkit Volume |
|----------|--------|-----------------------|
| 2.5 oz | 65 ml | 50 ml |
| 6 oz | 165 ml | 140 ml |
| 8 oz | 225 ml | 210 ml |
| 1/10 gal | 310 ml | 280 ml |
| 12 oz | 330 ml | |
| 20 oz | 600 ml | 550 ml |

Dispensing Tip Color Coding & Gauge

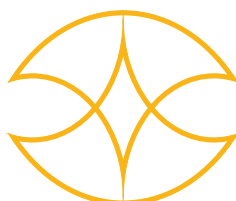
TE Series & TE Bent Series Tips

| Color | | Gauge | I.D. (inches) | I.D. (mm) |
|------------|--|-------|---------------|-----------|
| Olive | | 14 | 0.063 | 1.600 |
| Amber | | 15 | 0.054 | 1.371 |
| Green | | 18 | 0.033 | 0.838 |
| Pink | | 20 | 0.024 | 0.610 |
| Purple | | 21 | 0.020 | 0.508 |
| Blue | | 22 | 0.016 | 0.406 |
| Orange | | 23 | 0.013 | 0.330 |
| Red | | 25 | 0.010 | 0.254 |
| Clear | | 27 | 0.008 | 0.203 |
| Lavender | | 30 | 0.006 | 0.152 |
| Yellow | | 32 | 0.004 | 0.102 |
| Lime Green | | 34 | 0.0037 | 0.095 |

Abbreviations Commonly Used in this Catalog

| Abbreviation | Name |
|--------------|--|
| CA | Cyanoacrylate Adhesive |
| EPDM | Ethylene propylene diene monomer rubber |
| EPR | Ethylene Propylene Rubber |
| FFKM | Perfluoroelastomer |
| PE | Polyethylene |
| PEEK | Polyether ether ketone |
| PFE | Perfluoroelastomer |
| PP | Polypropylene |
| PU | Polyurethane |
| UHMWPE | Ultra-High Molecular Weight Polyethylene |

While both FFKM and PFE refer to the same type of material (perfluoroelastomer), "PFE" often specifically denotes the line of perfluoroelastomers manufactured by 3M Dyneon™.



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