USER GUIDE



Manufacturer:

Dymax

Product Name:

T20010™ Micro-Dot Hand-held Epoxy Dispenser - Lever Actuated

Manufacturer Part Number:

T20010

Click here for more details on the T20010™ Micro-Dot Hand-held Epoxy Dispenser - Lever Actuated





Safety

General Safety Considerations

All users of Dymax fluid dispensing equipment should read and understand this user guide before assembling and using the equipment.

To learn about the safe handling and use of dispensing fluids, obtain and read the MSDS for each fluid before using the fluid.

Personal Protective Equipment

Operators are recommended to wear any personal protective equipment specified by their company's safety policy for the materials used during dispensing. Personal protective equipment should be in place and used at all times when handling any potentially hazardous materials.

Product Overview

Description of the Micro-Dot Syringe Dispenser

The Micro-Dot is a portable syringe dispenser. It offers positive-displacement accuracy for dispense volumes as small as 0.0003 mL. With the proper dispense tip selection, the Micro-Dot is suitable for dispensing a wide range of low-to-high viscosity fluids including pastes, lubricants, adhesives, sealants, and more.

The dispenser can be configured to dispense a set volume repeatedly with accuracy. The Micro-Dot utilizes a pre-packaged disposable syringe as its fluid reservoir, preventing any contact between the fluids and the dispenser eliminating fluid contamination during dispense.

Figure 1. Syringe Parts

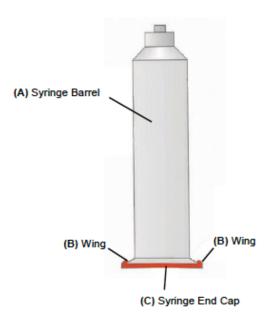
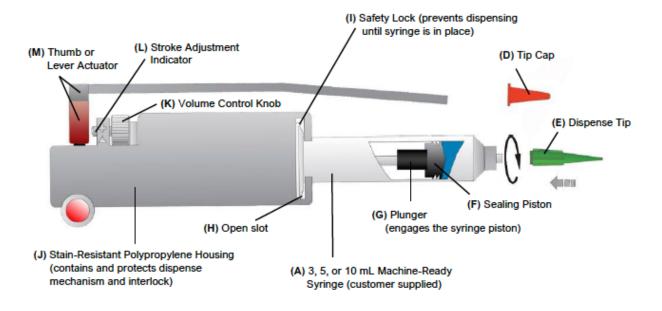


Figure 2.
Micro-Dot Component Diagram



Assembly and Setup

Unpacking and Inspecting Your Shipment

When your Micro-Dot syringe dispenser arrives, inspect the box for damage and notify the shipper of box damage immediately.

Open the box and check for equipment damage. If parts are damaged, notify the shipper and submit a claim for the damaged parts.

Check that the parts included in your order match those listed below. If parts are missing, contact your local Dymax representative or Dymax Customer Support to resolve the problem.

Parts Included in the Micro-Dot Syringe Dispenser

- Micro-Dot manual syringe dispense controller
- Sample dispensing kit
- Printed user guide

Figure 3. Micro-Dot (Thumb) PN T20000



Figure 4. Micro-Dot (Lever) PN T20010



Set-Up

Syringe Preparation

The Syringe End Cap (C) must be removed before connecting the Syringe (A) to the Micro-Dot dispenser. Remove the Syringe End Cap (C) by prying it upwards from under the Syringe Wings (B).

Inserting the Syringe Into the Micro-Dot

NOTE: The Micro-Dot has a built-in Safety Lock (I) and will not operate without a Syringe (A) in its proper position.

- The Micro-Dot Plunger (G) must be extended before the Syringe (A) is connected to the Micro-Dot. To extend the Plunger (G):
 - Hold the Micro-Dot body in your hand with the Plunger (G) pointed down.
 - Do not depress the Thumb or Lever Actuator (M) (doing so will lock the Plunger (G) and override the Safety Lock (I)).
 - If the Plunger (G) does not drop freely, grip the Plunger (G) and pull it from the Micro-Dot Housing (J).
- Insert the Plunger (G) into the Syringe Barrel (A).
- Rotate the Syringe (A) to align the Wings (B) with the Open Slot (H) at the end of the Micro-Dot body.
 - **CAUTION:** If Syringe (A) is over-filled, the Syringe cannot be inserted into the Micro-Dot with the Syringe Tip Cap (D) in place.
- Slide the Syringe (A) back until the Wings (B) contact the Micro-Dot Housing (J).
- 5. Firmly rotate the Syringe (A) counterclockwise until it stops.

Preparing the Syringe for Dispensing

- Remove the Syringe Tip Cap (D) by turning it counterclockwise.
- Attach the appropriate Dispense Tip (E) by inserting it onto the end of the Syringe (A) and turning clockwise until it stops. When selecting the correct Dispense Tip to use:
 - For best performance with the Micro-Dot, Taper Dispense Tips should be used with most fluids.
 - **CAUTION:** Taper Dispense Tips reduce the back pressure generated during dispensing that can lead to loss of repeatability or dripping following dispense.
 - Use smaller diameter Dispense Tips with low viscosities and larger
 Dispense Tips for higher viscosities and gel products.
 - Always use the largest diameter acceptable for your application.

Operation

NOTE: Disregard Step 1 if the Stroke Adjustment Indicator (L) is retracted at least half way from the bottom of the Thumb or Lever Actuator (M) to where it enters the Housing (J).

- Step 1. Rotate the Volume Control Knob (K) until the top of the Stroke
 Adjustment Screw (M) is approximately half way between the bottom of
 the Actuating Thumb Button or Lever (M) and the Housing (J).
- Step 2. Prime the Micro-Dot by depressing the Thumb or Lever Actuator (M) a few strokes until consistent drops of material are being dispensed. Touch the drops off on a disposable surface after each dispense.

The size of the adhesive dot can be adjusted by turning the Volume Adjustment Knob (K). Rotate the Volume Adjustment Knob towards the "+" symbol to increase dot size or in the opposite direction to decrease dot size.

Step 3. Between shots, the Micro-Dot should be stored upright to ensure that fluid does not leak around the piston. The single-position, inclined syringe stand from Dymax is recommended as it will also protect the dispense tip between uses.

Equipment Maintenance

Tip Replacement

To avoid clogging of dispensing tips, avoid prolonged periods of non-use. Should clogging occur, replace dispensing tips as needed.

Storage

To avoid accidental damage to the unit when storing without a Syringe (A), push the Plunger (G) into the Housing (J).

Troubleshooting

If you are experiencing a problem with your Micro-Dot Dispenser, please look through the following troubleshooting section.

Table 2.

Troubleshooting Chart for Micro-Dot Dispenser

Problem	Possible Cause	Corrective Action
Inconsistent Shots	Clogged or damaged tip	Replace tip
	Back pressure from using wrong tip for fluid type	Use appropriate tip for material. For assistance, call Dymax Application Engineering
	Leaking syringe piston	Increase tip size or replace syringe
	Presence of air bubbles in the syringe	Replace syringe
	Damaged Micro-Dot	Contact Dymax

Specifications

Property	Specification	
Dord Normalisma	T20000 Thumb Actuated	
Part Numbers	T20010 Lever Actuated	
Dispenser Type	Manual, positive-displacement syringe dispenser	
Dimensions (W x H x D)	4.5" x 0.87" x 2.13" (11.4 cm x 2.2 cm x 5.4 cm)	
Weight	2.8 oz (81.3 g)	
Minimum Shot Size	0.0003 mL (400 cP material with 25-gauge taper tip)	
Maximum Shot Size	0.170 mL (400 cP material with 14-gauge taper tip)	

Warranty

From date of purchase, Dymax Corporation offers a one-year warranty against defects in material and workmanship on all system components (excluding consumables) with proof of purchase and purchase date. Unauthorized repair, modification, or improper use of equipment may void your warranty benefits. The use of aftermarket replacement parts not supplied or approved by Dymax Corporation, will void any effective warranties and may result in damage to the equipment.

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