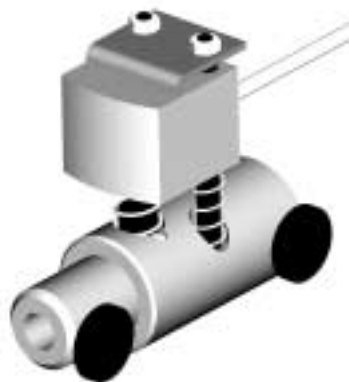


# LOCTITE®

Operating Manual

Mixer Pinch Valve

**97141**



# Content

## English

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## 1.1 Emphasized Sections



### Warning

Refers to safety regulations and requires safety measures that protect the operator or other persons from injury or danger to life.



### Caution

Emphasizes what must be done or avoided so that the unit or other property is not damaged.



### Notice

Gives recommendations for better handling of the unit during operation or adjustment as well as for service activities.

The numbers printed in bold in the text refer to the corresponding position numbers in the illustration on page 5.



As a result of technical development, the illustrations and descriptions in this operating manual can deviate in detail from the actual unit delivered.

## 1.2 For Your Safety



For safe and successful operation of the unit, read these instructions completely. The manufacturer cannot be held responsible for damage or injury of any kind because of misuse or improper application or because of failure to observe safety instructions or warnings.

Be sure to retain this manual for future reference.

Get a technical data sheet for the LOCTITE-product used at [www.loctite.com](http://www.loctite.com).

## 1.3 Items Supplied

- Mixer Pinch Valve 8964771
- Barbed tubing connector T-type 8964777
- Plastic tubing 4x0.75 mm, length 1 m 8964781

## 1.4 Field of Application (Intended Use)

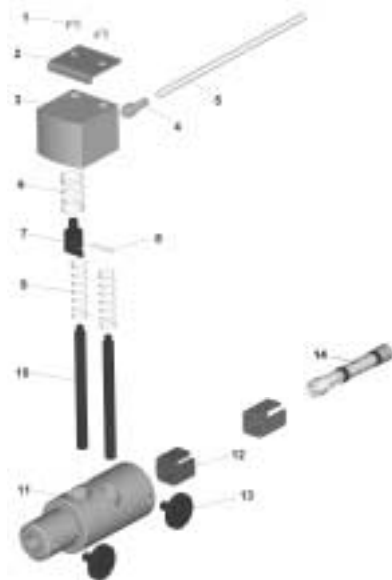
The Mixer Pinch Valve 97141 is suitable for the exact dispensing of LOCTITE 2-part epoxies out of 200 / 400 ml cartridges using a static mixer 984570 with or without support tube 97542 or static mixer 894569 without support tube. Drooling is reliably prevented.

Always keep clean and observe minimum instructions to maintain a long useful life of the valve.

Useable viscosities are 100 mPas up to paste-like.

The Mixer Pinch Valve 97141 has been thoroughly tested before leaving Loctite. No more adjustments are necessary prior to setting up dispense operation. The Mixer Pinch Valve has to be connected to the switched pressurized air that controls the product pressure of the cartridge dispenser.

Activating the footswitch of the syringe controller will open the valve and pressurize the cartridge dispenser. After that the product flows through the static mixer and Pinch Valve Insert 97541 out of the nozzle.



- 1 **Nut**
- 2 **Clamping sheet metal**, to fix the pneumatic cylinder.
- 3 **Pneumatic cylinder**, short stroke.
- 4 **Threaded nipple**, to connect the pneumatic tube.
- 5 **Pneumatic tube**, 4 x 0,75 mm, length 1 m.
- 6 **Pressure spring**, to close the valve.
- 7 **Piston head**, to squeeze the tube.
- 8 **Adjusting pin**, to orient the piston head.
- 9 **Pressure spring**, to move the pneumatic cylinder.
- 10 **Guide pin**, to guide the pneumatic cylinder.
- 11 **Valve body**
- 12 **Reduction sheet metal**, to use the static mixer 984570 or 984569 without a support tube.
- 13 **Knurled screw**, to fix the pinch tube insert and clamp the valve to the support tube.
- 14 **Pinch Tube Insert 97541** (not included).

### 3

## Technical Data

Air Quality If the required quality is not achieved, install a LOCTITE filter regulator	Filtered 10 µm, oil-free, non-condensing  Accessory Order No. 97120
Max. Air Pressure	6 bar (87 PSI)
Min. Air Pressure	1 bar (15 PSI)
Weight:	0.210 kg
Length of Pneumatic Tube	~ 1 m (~3,3 ft)

### 4

## Setup and Operation

### 4.1 Setup in general

Product flow rate has to be regulated by the product pressure of the cartridge dispenser using a syringe dispenser, e.g. 97005. Activating the footswitch of the syringe controller will open the Mixer Pinch Valve and pressurize the cartridge dispenser. After that the product flows through the static mixer and Pinch Valve Insert 97541 out of the nozzle.

The Valve function is: Opening by pressurized air and closing by spring force

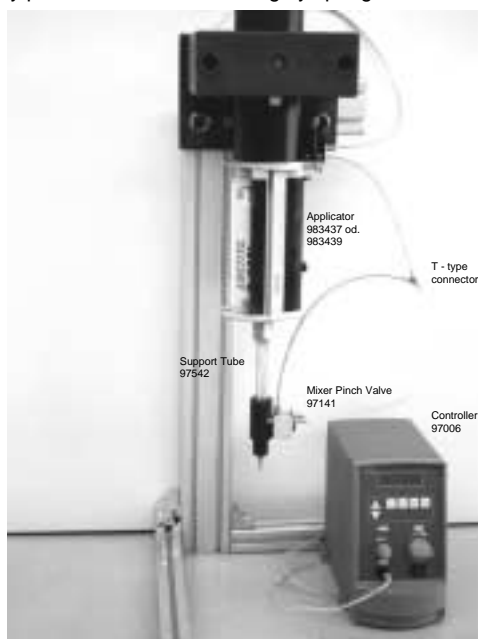
Connect pneumatic tube (5), using the T-type connector, to the switched pressurized air that controls the product pressure of the cartridge dispenser.

Screw the Pinch Tube Insert (14) onto the static mixer 984570 or 984569 tightly until only two steps are visible (see aside) and mount it onto the cartridge. The thread at the static mixer will be made by the Pinch tube insert (14).

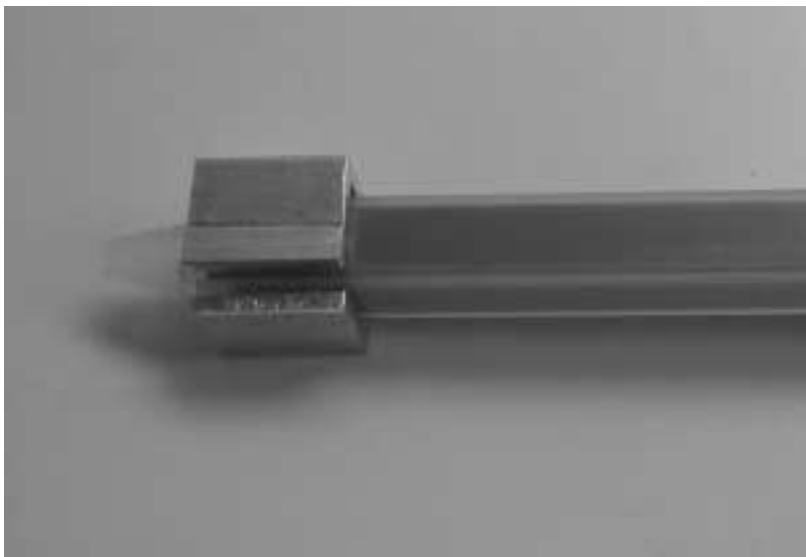
Slide the Mixer Pinch Valve (14) over the Pinch Tube Insert (14) and clamp it to the static mixer using the knurled screw (13).

Lock the pneumatic cylinder (3) by pressing it tightly down until the pneumatic cylinder (3) touches the valve body (11).

Set air pressure to required product amount by the regulator of the syringe controller, e.g. 97005. See operating manual of the syringe controller. At least 1 bar air pressure is required.

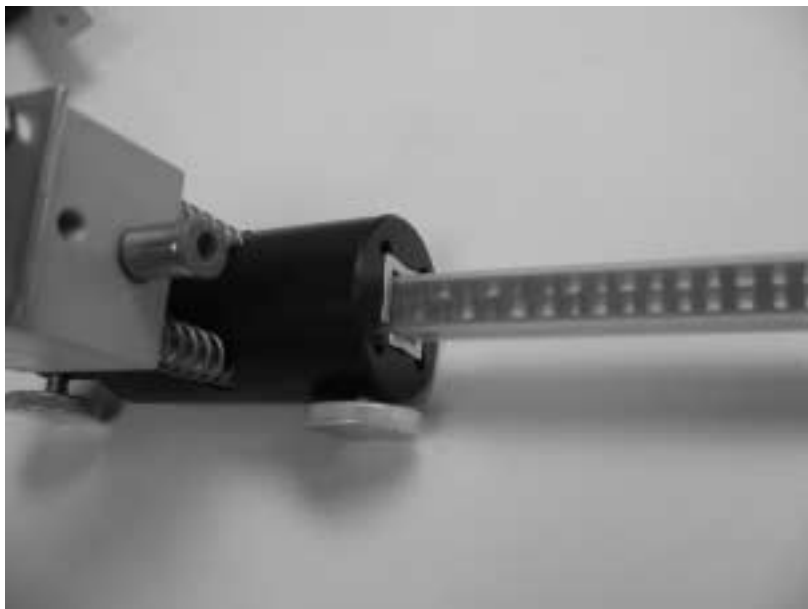


## 4.2 Setup with 984570, Static Mixer 200/400 ml



## 4 Setup and Operation

### 4.2 Setup with 984570, Static Mixer 200/400 ml



## 4.3 Setup with 984569, Static Mixer 50 ml





## 4 Setup and Operation

### 4.3 Setup with 984569, Static Mixer 50 ml



## 4

## Setup and Operation

### 4.4 Operation

Only the product pressure of the cartridge dispenser using the regulator of the syringe controller can regulate the product flow rate.

- Press the footswitch of the syringe controller. Dispense operation starts.

You will notice that a bit product is pressed out when the Mixer Pinch Valve closes. This is because of the displacement during the valve closing. This product amount is always the same.

### 4.5 Shutdown

- Switch of the syringe controller
- Unlock the pneumatic cylinder by lifting the clamping sheet metal
- Slide the Pinch Tube Valve off the static mixer and Pinch Tube Insert and clean the valve.

### 4.6 Return to Operation

- Proceed as in chapter 4.1 described.

## 5

## Cleaning and Changing

### 5.1 Cleaning Mixer Pinch Valve

The Mixer Pinch Valve have to be kept clean, especially the through hole, in order to allow the pushing onto the Pinch Tube Insert 97541 and the movement of the piston head. Make sure that no product is located or remains in the Mixer pinch Valve.


Recommended cleaning agent are ACETONE and DOWANOL<sup>®</sup> DPM.

### 5.2 Changing Pinch Tube Insert 97541

- Unlock the pneumatic cylinder by lifting the clamping sheet metal
- Drag the Mixer Pinch Valve down from the static mixer 984570 or 984569 and the Pinch Tube Insert 97542.
- Screw the Pinch Tube Insert 97541 on the static mixer 984570 or 984569 tightly and mount it onto the cartridge. The Pinch tube Insert will make the thread on the static mixer.
- Push the Mixer Pinch Valve onto the Pinch Tube Insert and clamp it to the static mixer using the knurled screw.
- Lock the pneumatic cylinder by pressing it tightly down until the pneumatic cylinder touches the valve body.

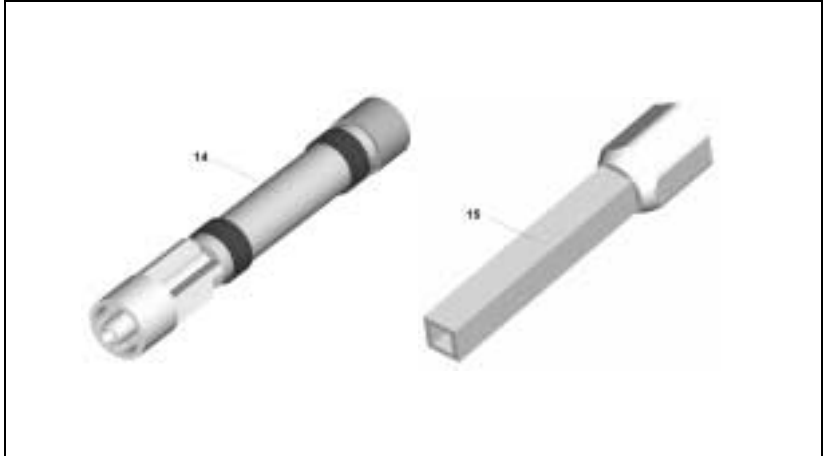
Type of malfunction	Possible causes	Correction
Drooling of the product after the dispensing.	<ul style="list-style-type: none"> <li>The pneumatic cylinder is not completely pressed down and does not touch the valve body. The Pinch Tube Insert is not completely squeezed off.</li> </ul>	<ul style="list-style-type: none"> <li>Press the pneumatic cylinder completely down until it touches the valve body. See chapter 4.1 and 5.2</li> </ul>
The Pinch Tube Insert 97541 is pushed out of the valve during dispensing.	<ul style="list-style-type: none"> <li>The Pinch Tube Insert was not clamped using the knurled screw.</li> </ul>	<ul style="list-style-type: none"> <li>Change at least the Pinch Tube Insert. See also chapter 5.2</li> <li>Clean the Mixer Pinch. See chapter 5.1</li> </ul>
The piston head does not move.	<ul style="list-style-type: none"> <li>Product is cured in the Mixer Pinch Valve.</li> <li>Air pressure is too low.</li> </ul>	<ul style="list-style-type: none"> <li>Clean the Mixer Pinch Valve. See chapter 5.1</li> <li>Make sure that the air pressure is at least 1 bar</li> </ul>
Product flow out between static mixer and Pinch Tube Insert.	<ul style="list-style-type: none"> <li>The Pinch Tube Insert is not tightly enough screwed on the static mixer.</li> </ul>	<ul style="list-style-type: none"> <li>Screw on the Pinch Tube Insert more tightly. Clean the Mixer Pinch Valve. See chapter 5.1</li> </ul>
No product is dispensed.	<ul style="list-style-type: none"> <li>Product is cured in the static mixer.</li> <li>The Pinch Tube Insert is cured.</li> </ul>	<ul style="list-style-type: none"> <li>Change static mixer. See chapter 5.2</li> <li>Change Pinch Tube Insert. See chapter 5.2</li> </ul>

## 7.1 Manufacturer's Declaration

Declaration of Conformity	
The Manufacturer	Henkel Loctite Deutschland GmbH Arabellastraße 17 D-81925 München
declares that the unit designated in the following is, as a result of its design and construction, in accordance with the European regulations, harmonized standards and national standards listed below.	
Designation of the unit	Mixer Pinch Valve
Unit number	97141
Applicable EC Regulations	EC Directive of Machinery 98/37/EEC including change 98/79/EC
Date/Manufacturer's signature	07/25/2003 / General Manager  F. Lühr
For changes to the unit that were not approved by Loctite, this declaration loses its validity.	

## 7.2 Spare Parts for the Mixer Pinch Valve 97141

Pos. No.	Description	Loctite Order No.
14	Pinch Tube Insert	97541
15	Support Tube	97542



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