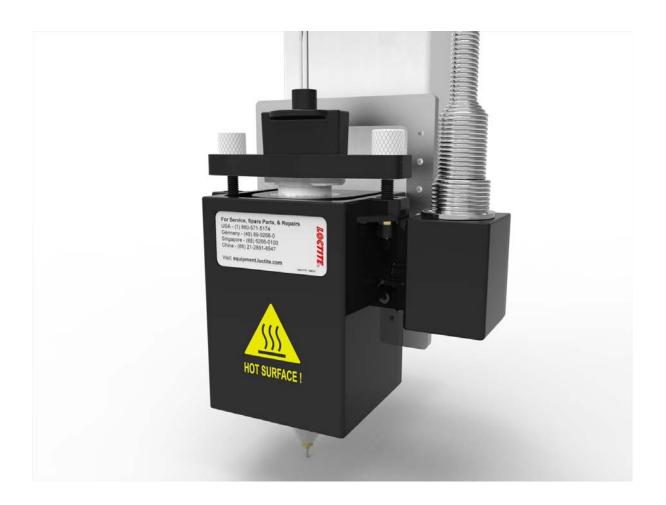


# **EQUIPMENT Operation Manual**



# **Loctite® EQ HM20 PUR Dispense Head**

**Part Number: 2016756** 

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#### **Please Observe the Following** 1.

#### 1.1 Emphasized Sections



# **⚠** WARNING!

Refers to safety regulations and required 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.

### 1.2 Items Supplied

- 1 HM20 PUR Dispense Head
- 1 Mounting Plate to Loctite<sup>®</sup> Benchtop Robot
- 1 Dispense tip sample kit
- 1 PUR Dispensing Head Cable

#### **Additional Items Required (Need to Purchase Separately)**

HM20 PUR Controller, Part Number 2033850

#### **1.3** For Your Safety

For safe and successful operation of the unit, read these instructions completely. If the instructions are not observed, the manufacturer can assume no responsibility. Be sure to retain this manual for future reference.



# **⚠** WARNING!

Always wear temperature resistance gloves before touch the housing of dispensing head.



# ⚠ WARNING!

Never remove the cover of the unit without first switching the power off and unplugging the power cord.



# ⚠ WARNING!

Damage to the power cord or the housing can result in contact with live electrical parts. Check the power cord and housing before each use. If the power cord or unit is damaged, do not operate.

The unit may be repaired only by a Loctite® authorized service technician.

# 1. Please Observe the Following (continued)

## 1.4 Field of Application, (Intended Usage)

This Loctite® EQ HM20 PUR Dispense Head is designed for use with the Loctite® EQ HM20 PUR Controller. The system is designed for use with Loctite® brand PUR hotmelt adhesive products at manual or semi-automation workstations, such as in workshops, laboratories, industrial installations and production lines. It is a self-contained dispense system, which can also be integrated with Loctite® Benchtop Robots.

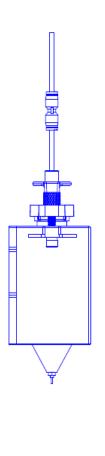
# 2. Description

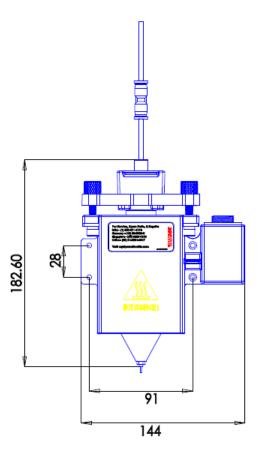
## 2.1 Theory of Operation

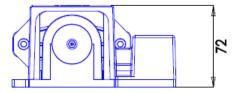
When the unit is switched on, electrical power is supplied to the temperature controller and timer. The system will reach the pre-set temperature (time varies with different pre-set temperatures typically within 10-15 minutes). The dispensing parameters (temperature, pressure and dispensing time) must be determined before use. The dispensing parameters depend on the properties of the adhesive product.

The timed exposure cycle starts by momentarily depressing the footswitch or when an externally operated device such as Loctite® Benchtop Robot or PLC makes a relay closure across pins 1 and 9 of the nine pin footswitch connection on the rear panel. In the manual operating mode, the dispensing pressure remains open for as long as the footswitch is depressed or alternate external device maintains contact between pins 1 and 9.

# 2. Description







# 3. Installation

# 3.1 Unpacking and Inspection

Carefully remove the system from its shipping carton and inspect it for any signs of damage. Any damage should be reported immediately to the carrier. Refer to the list of supplied parts (see page 4) and compare to the contents. Report any missing or damaged parts promptly to the local Henkel office or distributors.

## 3.2 Connecting the Unit

- Use only the cable and hose sets supplied.
- Connect the electric wire with connector to either "Heater 1 Connector" or "Heater 2 Connector" of the PUR-Controller-30ml Syringe.
- Connect air pressure supply to the "Air Out" of the PUR-Controller-30ml Syringe.

# 4. Operating the Unit

### **4.1** Electrical Connections (With no AC Power to Unit)

- 1. Plug the PRE HEATER 5 pin connector to either the HEATER 1 or HEATER 2 connector located on the rear panel of the HM20 PUR Controller 2033850. Make sure that the connections are secure.
- 2. For manual operation, plug the footswitch into the 9 pin D-sub connector marked "XS1" located on the rear panel of the HM20 PUR Controller 2033850.
- 3. For automated control, connect external PLC to pins one and nine of the "XS1".
- 4. When in the manual operating mode, the dispense head will remain dispensing as long as continuity is maintained across pins one and nine. When in timed mode continuity must be made across pins 1 and 9 only momentarily for the dispensing to start for the amount of time selected on the front panel timer.

#### 4.2 Dispense Tip Selection

A sample of each size dispense tip that Henkel offer is included with each dispense head. Choose the size tip that provides the desired flow rate for your application.

#### Notice:

Use only with all stainless steel body dispensing tip.

#### **5.** Care and Maintenance

## **5.1** Care

- This unit should be stored in a level, dry location at ambient condition out of direct sunlight.
- Occasionally the o-ring at the syringe adapter should be lubricated with the silicone grease 88722. This will prolong the life.

#### 5.2 Maintenance

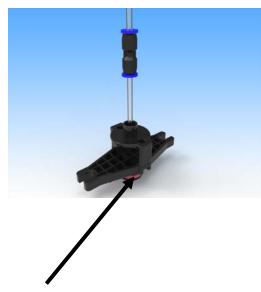
The unit requires no special maintenance.

Clean, dry, filtered air must be used. If it is not, the dirty air will contaminate the adhesive.

Notice: If the required air quality is not achieved, install a Loctite<sup>®</sup> filter regulator. In the US order a 5  $\mu$ m filter using Part Number 985397. In Europe or Asia, order a 10  $\mu$ m filter using Part Number 97120.

# 5.3 Spare Parts

Loctite Part Number	Description
1483249	Needle—All SS, 1/2" 18G
1500889	Needle—All SS, 1/2" 19G
1483250	Needle—All SS, 1/2" 20G
1483262	Needle—All SS, 1/2" 21G
1483264	Needle—All SS, 1/2" 23G
1483265	Needle—All SS, 1/2" 25G
8902749	PUR Dispensing Head Cable
1667508	SD15 Heat Controller
2033849	HM20 PUR Needle Preheater



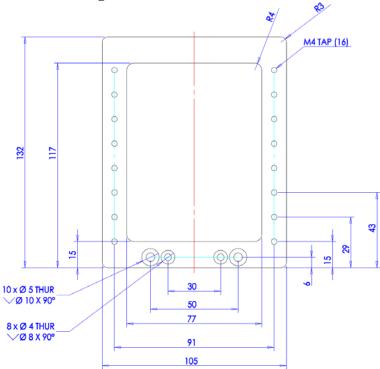
Syringe adaptor O-ring - NBR 22x3

# 6. Troubleshooting

Symptom	Possible Corrective Action(s)
Difficult to insert the syringe adapter to the syringe	Clean up the adhesive on the syringe adapter
	2. Lubricant the O-Ring on the syringe adapter by silicone grease 88722
No adhesive comes out	1. Confirm that the unit is connected to the "AIR OUT" of the controller and the controller is pressurized
	2. Confirm that the unit is connected to Heat 1 or Heat 2 on the controller
	3. Check the dispensing tip to make sure it is not clogged.

# 7. Mounting on Loctite® Benchtop Robot

# **7.1** Mounting Plate Dimension





## 8. Warranty

#### For Loctite® EQ HM20 PUR Dispense Head

Henkel expressly warrants that all products referred to in this Instruction Manual for Loctite® EQ HM20 PUR Dispense Head (hereafter called "Products") shall be free from defects in materials and workmanship. Liability for Henkel shall be limited, at its option, to replacing those Products which are shown to be defective either in materials or workmanship or to credit to the purchaser the amount of the purchase price thereof (plus freight and insurance charges paid therefore by the user). The purchaser's sole and exclusive remedy for breach of warranty shall be such replacement or credit.

A claim of defect in materials or workmanship in any Products shall be allowed only when it is submitted to Henkel in writing within one month after discovery of the defect or after the time the defect should reasonably have been discovered and in any event, within twelve months after the delivery of the Products to the purchaser. No such claim shall be allowed in respect of Products which have been neglected or improperly stored, transported, handled, installed, connected, operated, used or maintained or in the event of unauthorized modification of the Products including, where products, parts or attachments for use in connection with the Products are available from Henkel, the use of products, parts or attachments which are not manufactured by Henkel.

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