

EQUIPMENT Operation Manual





Loctite® 150Bar/3mm Dispense Valve IDH Number 1153502

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1. Please Observe the Following

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 150Bar/3mm Dispense Valve
- 2 2 meters air line tubing
- 1 Fluid Outlet Tip Adapter (Attached to Valve)
- 1 Fluid Inlet Fitting (Attached to Valve)
- 2 Air Input Fitting (Attached to Valve)
- 1 Operation Manual

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.

- Observe general safety regulations for the handling of chemicals!
- Observe manufacturer's instructions! Request a safety data sheet for the product used!
- When working with pressurized air, wear protective glasses!
- This valve operates under maximum air pressure input is 6 bars, do not exceed!
- This valve operates under maximum fluid pressure is 150 bars, do not exceed!
- While under warranty, the unit must be repaired by an authorized Loctite[®] brand service representative.

1.4 Features

- Maximum working fluid pressure: 150 bars (2175 psi)
- Maximum cylinder air pressure: 6 bars (85 psi)
- Bubble free, no-drip dispensing
- High resolution stroke adjustment
- Needle Shut-Off

1.5 Usage

The Loctite[®] 150 Bar/ 3mm Dispense Valve is a double acting dispense valve that is used to dispense high viscosity silicone, MS polymer and urethane products. It is a stainless steel body, needle off dispense valve which can operate at fluid pressures up to 150 bars.

2. Description

2.1 Specification

Pneumatic Supply	Min. 4 Bars (min. 55 psi)		
	Max. 6 Bars (max. 85 psi)		
Quality	Filtered 10µm, oil free, non-condensing		
	If the required quality is not achieved, install a Loctite [®]		
	filter regulator 97120		
Size	6.220" length x 1.181" width x 1.181" height		
	(158 x 30 x 30 mm)		
Free Flow Orifice	0.118" diameter (3 mm)		
Inlet Thread	¹ /4-19 BSPT		
Fluid Pressure	Max. 2175 psi (150 bars)		
Weight	0.683 kg		

2.2 Valve Components and Dimension



3. 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 parts supplied (page 1), and compare to the contents. Report any missing parts promptly to the Loctite[®] customer service department at 1-800-LOCTITE (562-8483)

4. Typical System Setup



5. Setup and Operation

5.1 Connection

Connect the 4 mm O.D. airline to the air fitting "port D" and the other end of airline will be connected to the normally opened port of solenoid valve.

Connect the 4 mm O.D. airline to the air fitting "port C" and the other end of airline will be connected to the normally closed port of solenoid valve.

Connect the fluid reservoir feed tube to the fluid inlet "port A" and tighten it well.

Make sure the tube was cut at a right angled cut. Tube cutter is recommended

5.2 Operation

With the Semi-Automatic Controller 97101 set up and connected to the valve, and the High Viscosity Paste Pump System connected as shown on page 5, load the High Viscosity Paste Pump System per High Viscosity Paste Pump System Operating Manual instructions.

CAUTION: Always treat a pressurized reservoir with respect, and check air gauge to ensure pressure is at zero before opening.

After filling, check to be certain the system is sealed.

Before proceeding, check the following:

- 1. Be sure all the connections are tight.
- 2. Set the valve control air pressure at a minimum of 60 psi (4 Bars).
- 3. Actuate the valve long enough to fill the valve, start liquid flow and purge air from the dispensing tip. If a small tip is used, it may need to be removed from the valve during purging. Then fill the tip hub with fluid and install on the tip adapter so it is free of air.

To open the valve:

- 1. Apply air pressure to OPEN air port (Port D) on the valve, and remove pressure from the CLOSE (Port C) air port on the valve.
- 2. Maintain air pressure on the OPEN (Port D) air port to keep the valve open.

To close the valve:

- 1. Apply air pressure to CLOSE air port (Port C) on the valve, and remove pressure from the OPEN (Port D) air port on the valve.
- 2. Maintain air pressure on the CLOSE (Port C) air port to keep the valve open.

5. Setup And Operation

5.3 Shutdown

1. To prevent the nozzle from coming in contact with air, put an end-cap on the nozzle or keep the nozzle in the grease.

5.4 Returning to Operation

- 1. Remove the end-cap from the nozzle.
- 2. If needed, purge the product feedline and dispensing valve

Returning to Operation After Longer Periods of Non-use.

- 1. Remove the Luer-Lock tip cap
- 2. Purge the product feedline and dispensing valve

6. Troubleshooting

Problem	Possible Cause	Correction
No product or too little	Product feedline not correctly	Correctly connect the
product	connected	product feedline
	Pneumatic hose not correctly	Correctly connect the
	connected	pneumatic hose
	Controller incorrectly adjusted	Check the controller (see
		operating instructions for the
		controller)
	Valve operating pressure is too	Increase air pressure to 60psi
	low	(4 bar) minimum
	The dispensing tip is clogged	Replace the tip
	Curing in the product feedline	Replace the product feedline
	and/or in the dispensing valve	and clean dispensing valve
		head
Air bubble in product	Air in the dispensing	Purge the product feedline,
	valve/product feedline	dispensing valve and
		dispensing tip
Inconsistent deposits	The air pressure controlling the	Check to be make sure the air
	valve and/or Pump System is	pressures are constant
	fluctuating	
	The open time of the valve	Check to be sure the valve
	timer must be constant	controller is providing a
		consistent output

7. Accessories and Spare Parts



Number	Loctite [®] Item Number	Description
1	1119605 Fluid Outlet Tip Adapter	
2	1553588	Fluid Inlet Fitting
3	1153500	Air Input Fitting Kit
4	1153498	Actuator Seal Kit – O-Ring, Viton
5		Actuator Seal Kit – O-Ring, Buna-N
6		Actuator Seal Kit – O-Ring, Silicone
7		Actuator Seal Kit – O-Ring, Silicone
8	Call 860-571-5174 For	Needle, Tool Steel
	Quote	
9	1153492	Shaft Seal Kit – Packing for 8, PTFE
10		Outlet Seal Kit – Adapter Packing, PTFE
11		Outlet Seal Kit – Needle Seat, PTFE

8. Warranty

EQUIPMENT WARRANTY For Loctite[®] 150Bar/3mm Dispense Valve

Henkel expressly warrants that all products referred to in this Instruction Manual Dispense Valve 1153502 (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.

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No Products shall be returned to Henkel for any reason without prior written approval from Henkel. Products shall be returned freight prepaid, in accordance with instructions from Henkel.

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Henkel Corporation One Henkel Way Rocky Hill, CT 06067-3910 USA	Henkel Canada Corporation 2225 Meadowpine Boulevard Mississauga, Ontario L5N 7P2 CANADA	Henkel Corporation Automotive/Metals H.Q. 32100 Stephenson Hwy, Madison Heights, MI 48071 USA
Henkel Capital, S.A. de C.V. Calzada de la Viga s/n Fracc. Los Laureles Loc. Tulpetlac, C.P. 55090 Ecatepac de Morelos, MEXICO	Henkel Singapore Pte Ltd Blk 5002 Ang Mo Kio Ave 5 #03-12 TECHplace 2, 569871 SINGAPORE	Henkel (China) Company Ltd. No. 928 Zhang Heng Road, Zhangjiang, Hi-Tech Park, Pudong, Shanghai, China 201203
Henkel Loctite Korea 8F, Mapo Tower, 418, Mapo-dong, Mapo-gu, Seoul, 121-734, KOREA	Henkel Japan Ltd. 27-7 Shin Isogo-cho, Isogo-ku Yokohama, 235-0017 JAPAN	www.equipment.loctite.com

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