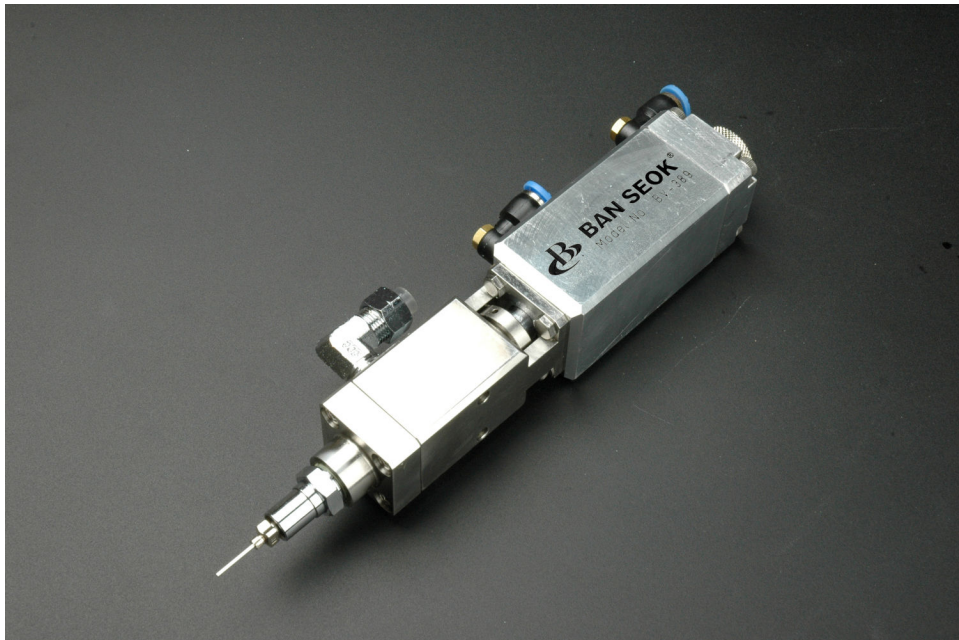




BV-389 Valve Manual



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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

BV-389 valve

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 210 bars, do not exceed!



While under warranty, the unit must be repaired by an authorized Banseok service representative.

1.4 Features

- Maximum working fluid pressure: 210 bars (3045 psi)
- Maximum cylinder air pressure: 6 bars (87 psi)
- Bubble free, no-drip dispensing
- High resolution stroke adjustment
- Needle Shut-Off

1.5 Usage

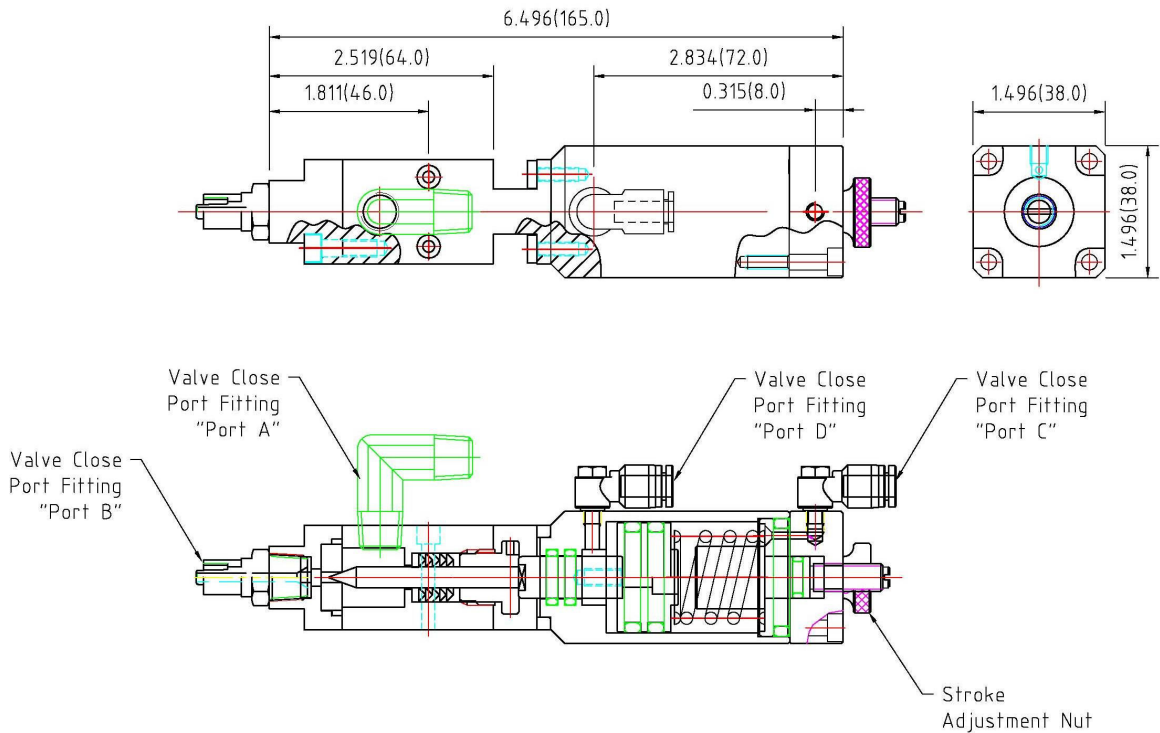
210 Bar/ 3mm Dispense Valve is a double acting dispense valve that is used to dispense high viscosity silicone, MS polymer and urethane products. It is a stainless steel body, needle off dispense valve which can operate at fluid pressures up to 210 bars.

2. Description

2.1 Specification

Pneumatic Supply	Min. 4 Bars (min. 58 psi) Max. 6 Bars (max. 87 psi)
Quality	Filtered 10µm, oil free, non-condensing
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	¼ NPT Female
Fluid Pressure	Max. 3045 psi (210 bars)
Weight	0.840 kg

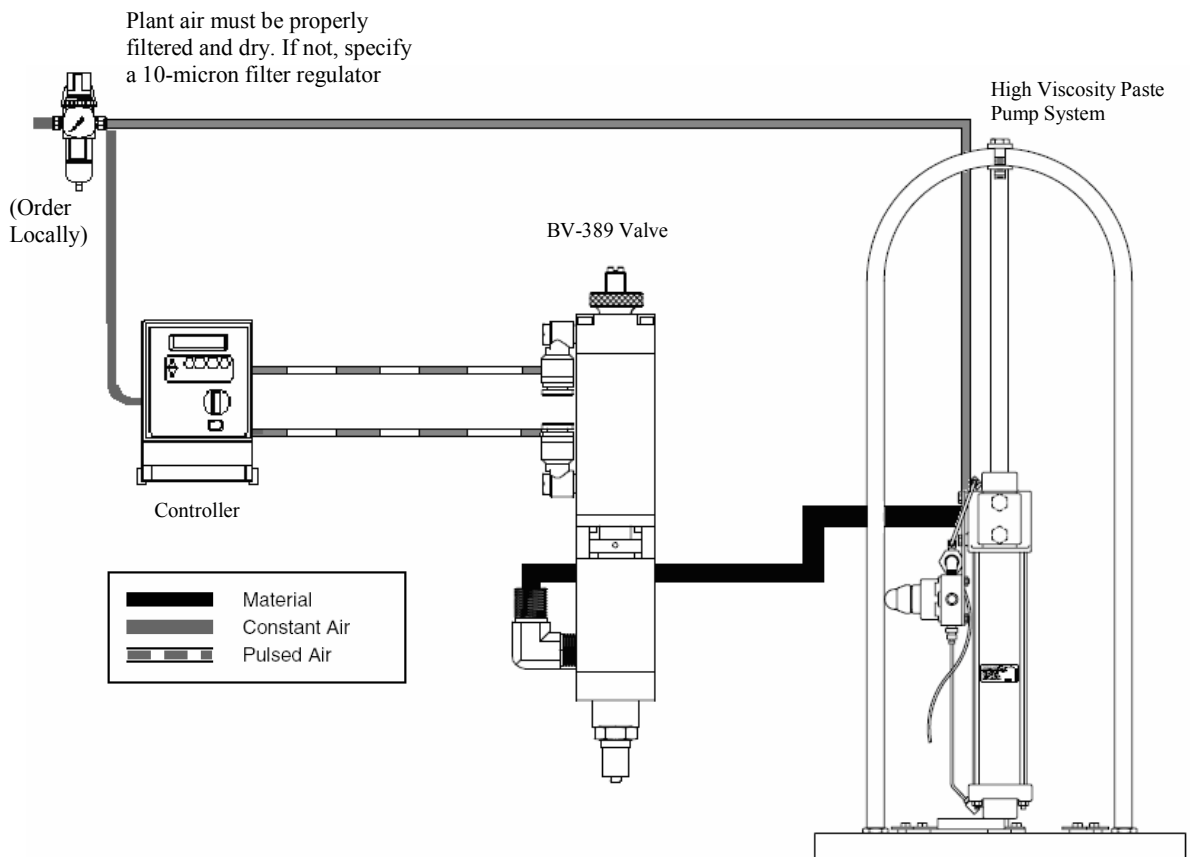
2.2 Valve Components and Dimension



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 Banseok customer service department at 82-2-469-1239

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 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 58 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	Product feedline not correctly connected	Correctly connect the product feedline
	Pneumatic hose not correctly connected	Correctly connect the pneumatic hose
	Controller incorrectly adjusted	Check the controller (see operating instructions for the controller)
	Valve operating pressure is too low	Increase air pressure to 58psi (4 bar) minimum
	The dispensing tip is clogged	Replace the tip
	Curing in the product feedline and/or in the dispensing valve	Replace the product feedline and clean dispensing valve head
Air bubble in product	Air in the dispensing valve/product feedline	Purge the product feedline, dispensing valve and dispensing tip
Inconsistent deposits	The air pressure controlling the valve and/or Pump System is fluctuating	Check to be make sure the air pressures are constant
	The open time of the valve timer must be constant	Check to be sure the valve controller is providing a consistent output

7. Accessories and Spare Parts

Spare Parts	
	Fluid Outlet Tip Adapter
	Fluid Inlet Fitting
	Air Input Fitting Kit

8. Exploded view

① Bolt	SUS	M4X12L(Lench)	⑭ Piston	SUS303	
② Adapter Packing	TEFLON		⑮ O-RING	NBR	P26
③ Chamber Cap	SUS303		⑯ Washer	SUS	
④ Needle Seat	TEFLON		⑰ Bolt	SUS	M5X12L(Lench)
⑤ Fluid Chamber	SUS303		⑱ Adjustment Screw	SUS303	
⑥ Fluid Fitting			⑲ O-RING	Silicon	P 9
⑦ Bolt	SUS	M4X12L(축각머리)	⑳ Spring	SUS302	
⑧ Packing Unit	TEFLON		㉑ O-RING	Silicon	P28
⑨ Packing Retainer	SUS303		㉒ Drive Body Cap	A6061	
⑩ O-RING	VITON	P12.5	㉓ Bolt	SUS	M3X15L(Lench)
⑪ Filling			㉔ Adjustment Nut	SUS303	
⑫ Cylinder	A6061				
⑬ Needle					

