




BV-600C/Actuator dispensing valve

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1. Safety

-  Before installation and using our dispensing valve BV-600C, please be carefully aware of this user manual

1.1 For your safety

- ✓ If the fluid splashes up to your eyes or skin, it can cause a serious injury.
- ✓ Handle with extreme care not to be in contact with liquid in case of nozzle exchange or cleaning.
- ✓ Make sure that pressure must be released before the nozzle is removed when you exchange a nozzle.

1.2 Valve Overuse Hazard

- ✓ If a valve is damaged due to over-pressure, unauthorized alteration of parts, and overuse, it may cause a danger by exploding or leaking (explosion or leakage may occur).
- ✓ Do not make any kind of unauthorized alterations. We are not responsible for any repairs, after-sales service caused by them.
- ✓ This valve operates delivery air pressure under 7kgf/cm². Do not exceed this operation pressure.
- ✓ The fluid pressure must not exceed 21kgf/cm². Or it can cause serious damages and disorder.

1.3 Others

- ✓ High pressure material can be leaked if a hose is damaged or worn.
- ✓ Check a hose for any worn-downs, damages, or swollen before use.
- ✓ Please change a hose immediately if any malfunction is found.
- ✓ Prevent leakage from loosened joints by tightening before use.

2. Specification

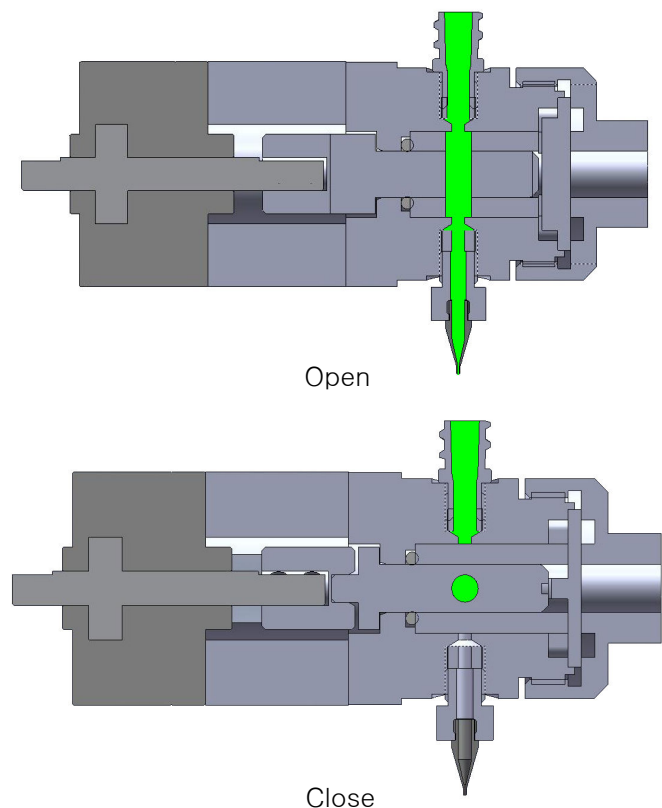
Method of Operation	Suck-Back type
Material of wetting part	Ceramic, SUS303
Volume	8ℓ/min
Type of Operation	A,B
Liquid Input	PT 5/16", M6
Applied Materials	EMI Silicone, Silicone, Rubber
Maximum fluid pressure	21 kg/cm ²
Output variation	± 2.0 %

3. Principle

The air from open port(D) makes the actuator(17) rotate clockwise. And then the shaft(12) is rotated clockwise and the inner hole of the shaft is aligned vertically with the inner hole of the housing(10). And the fluid can flow downward.

The air from close port(C) makes the actuator rotate counterclockwise. And then the shaft is rotated counterclockwise and the inner hole of the shaft is blocked against the inner hole of the housing. And the fluid stop flowing.

Rotated shaft does not make snake head of start and end point. The height of line which is dispensed is quite constant.

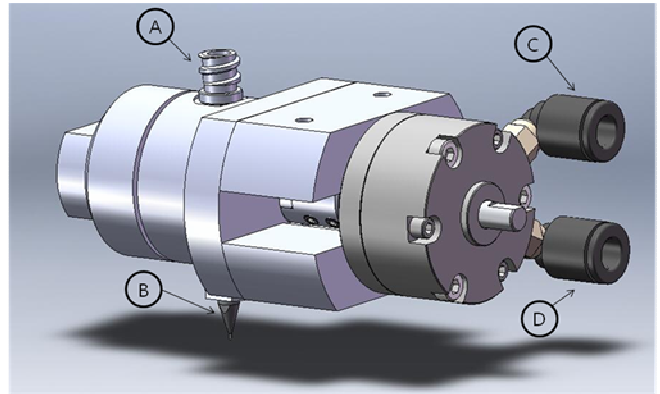


4. Installation & Operation

4.1 Connecting Lines

1) Connecting Air-pressure lines

- Straightly insert the tube into the air fitting until it gets installed inside.
- Valve open line(D) is connected to the “open” port on the TAD-200V(controller).
- Valve close line(C) is connected to the “air out” port on the TAD-200V(controller).
- Pull the tube gently in order to make sure that it is safe.



2) Connecting Fluid Line

- The inlet of Fluid line(A) fits Barrels which are made by Banseok. If you want to use the fluid line, you can change the lure-lock adapter(3) with M6 tapped fitting.

3) Caution

- When you cut the tube, make the severed side a right angled out and the use of a tube-cutter is recommended.

4.2 Operation

1) Preparing to use

- If the fluid line is connected, open the fluid line and valve open air line(D) of the valve.
- Keep dispensing until the consistent drippings in order to eliminate the air and grease to prevent from curing in the valve.
- And then stop dispensing.

2) Control of the dispensing volume

- Adjust the pressure of fluid inlet.
- Change the nozzle tip(B) to be compatible to preventing from air bubbles.

5. Maintenance & Cleaning

5.1 Storing after use

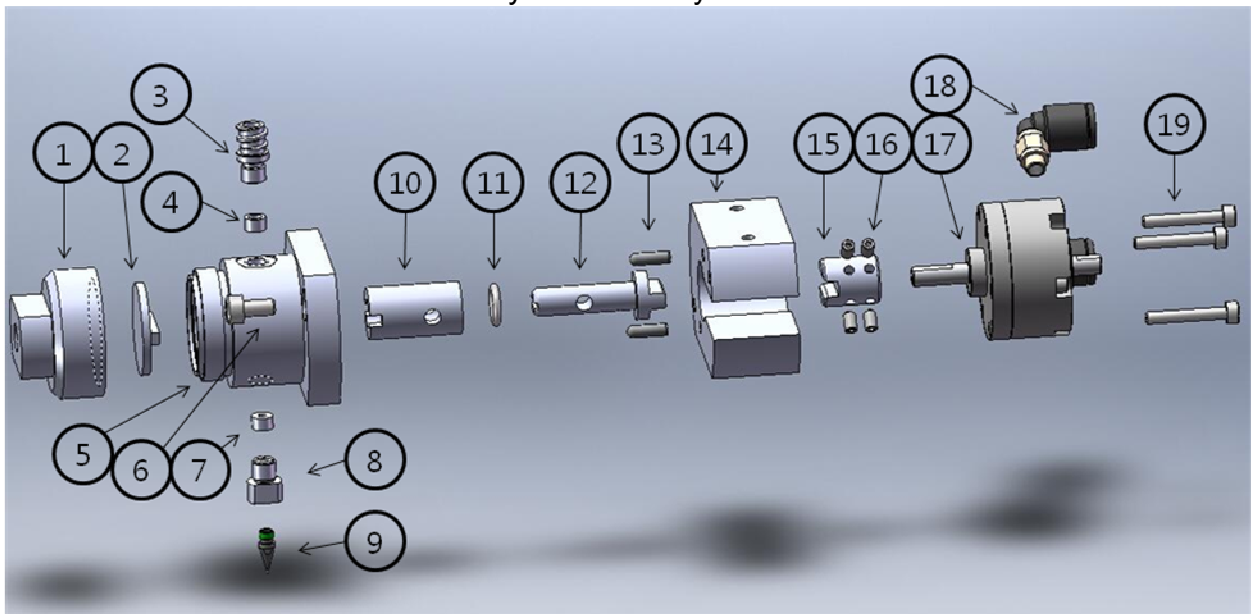
- To avoid the nozzle tip contact air, put an end-cap on the nozzle or keep a nozzle in the grease.
- Perform the cleaning process(see Chapter 5.4).

5.2 Check items while operating

- Make sure that air supply is in good condition.
- Check other connecting appliances that are properly turned off.
- Be sure that end of nozzle is not clogged with hardened fluid.

5.3 Exploded view

- The user's arbitrary disassembly is not recommended.



1	Cap	SUS303	11	O-ring	Viton
2	Packing holder	Ceramic	12	Shaft	Ceramic
3	Lure-lock adapter	SUS303	13	Pin	SUS303
4	Packing 2	Teflon	14	Holder	A6061
5	Body	SUS303	15	Coupling	A6061
6	Bolt	SUS303	16	Bolt	SUS303
7	Packing 1	Teflon	17	Actuator	Rotary
8	Nozzle holder	SUS303	18	Air fitting	Φ6
9	Precision nozzle	SUS303	19	Bolt	SUS303
10	Housing	Ceramic			

5.4 Cleaning

- Stop providing liquid and release pressure in the fluid chamber.
- Connect the cleaning line to fluid inlet port and add pressure.
- According to chapter 4.2, dispense cleaning liquid instead of fluid.

5.5 List of spare parts

No.	Name	No.	Name
4	Packing 2	11	O-ring P7
7	Packing 1		

6. Trouble shooting

Item	Cause	Treatment
No dispensing	The actuator(17) does not work.	Check the air line.
	The fluid is cured.	Clean the valve.(see chapter 5.4)
	The fluid does not supply.	Pressure the fluid reservoir.
		Supply the fluid.
	The controller is turned off.	Turn on the controller.
Fluid leakage from packing 2(4)	The lure-lock adapter (3) is unfasten.	Clean the valve. (see chapter 5.4) And then replace packing 2(4), fasten the adapter (3).
	The lifetime of packing 2(4) is end.	
Fluid leakage from nozzle holder(9)	The nozzle holder(8) is unfasten.	Clean the valve.(see chapter 5.4) And then replace packing 1(7), fasten the nozzle holder(8).
	The lifetime of packing 1(7) is end.	
Fluid leakage from holder(14)	The lifetime of O-ring(11) is end.	Clean the valve.(see chapter 5.4) And then replace o-ring(11).

7. Outside view

