



BV-322M

Dispensing Valve User Manual



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1. Warning Report



Before installation and using our dispensing valve BV-300, please be fully aware of this user manual.

■ Fluid Leakage Hazard

- If the fluid splashes up to your eyes or skin, it can also 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.

■ Valve Overuse Hazard

- If a valve is damaged due to excessive 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 under max material delivery air pressure **4kgf/cm²**.
Do not exceed this operation pressure.

■ 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

■ **BV-322M VALVE (Needle Type)** : There is no remaining pressure and very good for cutting off the liquid with using thin general plastic hub needles or metal needles.

Operation Style	Needle Off
Materials of Liquid Applying Part	SUS 304
Volume	8 ℓ / min
Type of Operation	B
In Pressure	4kg/cm ²
Liquid Input	PT 1/8 “
Applied Materials	Grease Silicone, Bond UV

3. Install and Operating

1. Installation

1) Connecting a Air-Pressure Line

- Straightly insert the tube into the air fitting until it gets installed inside.
- Pull the tube gently in order to make sure that it is safe.

2) Connecting Fluid Line

- The inlet of Fluid line fits in PT1/8" line.

3) Caution

- ① When you cut the tube, make the severed side a right angled out and the use of a tube-cutter is recommended.
- ② Install the fluid line in oblique with the air line in order to minimize the intervention.

2. Operating

1) How to Use

- ① Open the fluid line and air line of the valve.
- ② Keep dispensing until the consistent drippings are made from the nozzle and stop dispensing.

2) Control of the deposit volume

Refer to the following directions so as to control the flow of liquid and the size of bubbles.

- ① Adjust the pressure of fluid inlet of the valve.
- ② Use the nozzles with different sizes in order to control the size of bubbles and to make fluid with different viscosity.
- ③ For more precise controlling, adjust the stopper handle(No.12) of the valve. When it's done, lock the nut No.11.

3) How to Keep after Use

- ① To avoid a nozzle's air contact, put an end-cap on the nozzle or keep a nozzle in the grease.
- ② Follow ① Cleaning of 4.Maintenance 2)Cleaning while cleaning.

4) Caution

Do not exceed the liquid pressure of 40kgf/cm and the air pressure of **4kgf/cm** so as to reduce the risk of over-pressure, which can cause serious damages and disorder

4. Maintenance and Cleaning

1. Maintenance

1) Things to Check while Operating

- ① Make sure that air supply is in good condition.
- ② Check other appliances that are properly powered.
- ③ Be sure the end of nozzle is not clogged with fluid.

2) How to Disassemble

The user's arbitrary disassembly is not recommended.

First follow the steps for air-pressure release then separate the nozzle from the air tube completely.

3) How to Assemble

The user's arbitrary disassembly is not recommended.

First follow the steps for air-pressure release then separate the nozzle from the air tube completely.

4) Replacement Span for Parts

- ① The List of Parts that requires replacement.
 - O-Ring set(P1,P2,P3)
 - Packing Seal(7)
 - Valve Seat(17)

2. Cleaning

1) How to Clean

- ① Stop providing liquid and disassemble.
- ② Connect the cleaning line to fluid supply line and add pressure.
- ③ Follow the operation guide of 3-2 and dispense cleaning liquid instead of fluid.

2) Caution

To minimize possible damage on skin or eyes by fluid, please strictly follow the procedure for air-release before part-replacement or valve-cleaning.

3) How to Release Air Pressure

- ① Cut off the supply of air and fluid into the dispensing valve.
- ② With the valve facing In a round container, open the valve and dispense liquid to remove the pressure.

5. Troubleshooting

1. No Fluid Flow

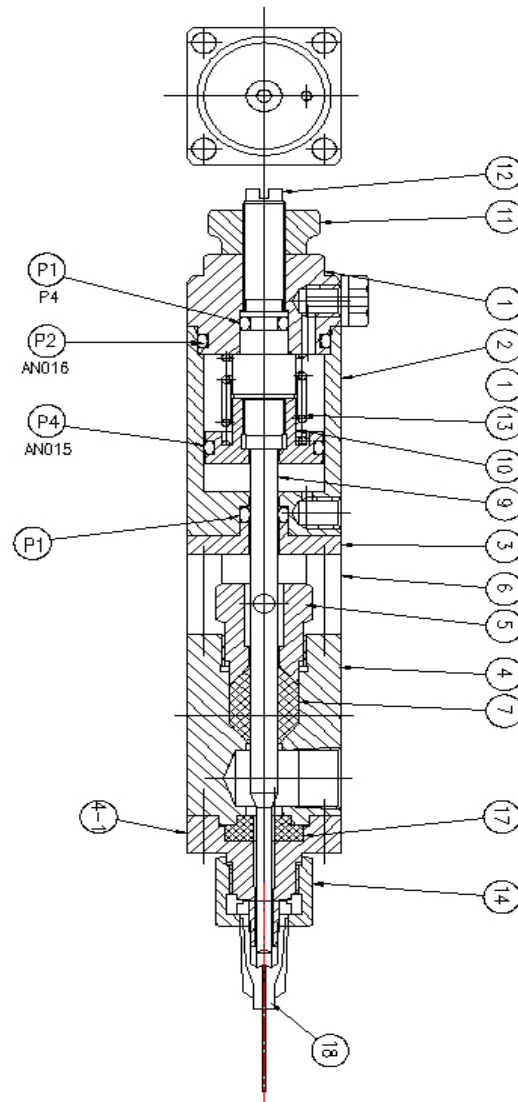
- 1) Check to see if SHAFT is in proper operation.
- 2) Make sure that fluid is not hardened.
- 3) Check to see if fluid needs to be refilled.
- 4) Be sure that the controller as well as other appliances are properly powered.
- 5) Check the air supply.
- 6) Make sure no shift is made in air line.

2. Fluid Leakage

- 1) If fluid leaks from the nozzle, remove the needle adapter No. 14 and clean up dirt in Seat Cap(Ni,4-1) or replace the Valve Seat 17.
- 2) If fluid leakage occurs in the Packing Pusher Hole No 5, replace the Teflon Packing in it.
- 3) If leakage is due to the Shaft worn-out, replace No.9.

6. Technical Data

1. Dimension



NO.	DESCRIPTION	Q'TY	MATERIAL	REMARK
1	END CAP-1	1	AL6061	
2	CYLINDER BODY	1	AL6061	
3	END CAP-2	1	AL6061	
4	BODY	1	SUS303	
4-1	SEAT CAP	1	SUS303	
5	PACKING PUSHER	1	SUS303	
6	SPACE BAR	2	SUS303	
7	PACKING	1	TEFLON	
9	SHAFT	1	SUS420	
10	PISTON	1	SUS303	
11	LOCK NUT	1	SUS303	
12	STOPPER	1	SUS303	
13	SPRING	1	SUS스프링강	
14	NEEDLE ADAPTER-1	1	SUS303	
17	VALVE SEAT-2	1	ACETAL	
18	Plastic Nozzle	1		
P1	O-RING	P4	2	NBR
P2	O-RING	AN016	1	NBR
P3	O-RING	AN015	1	NBR

6. Technical Data

2. 3D View

