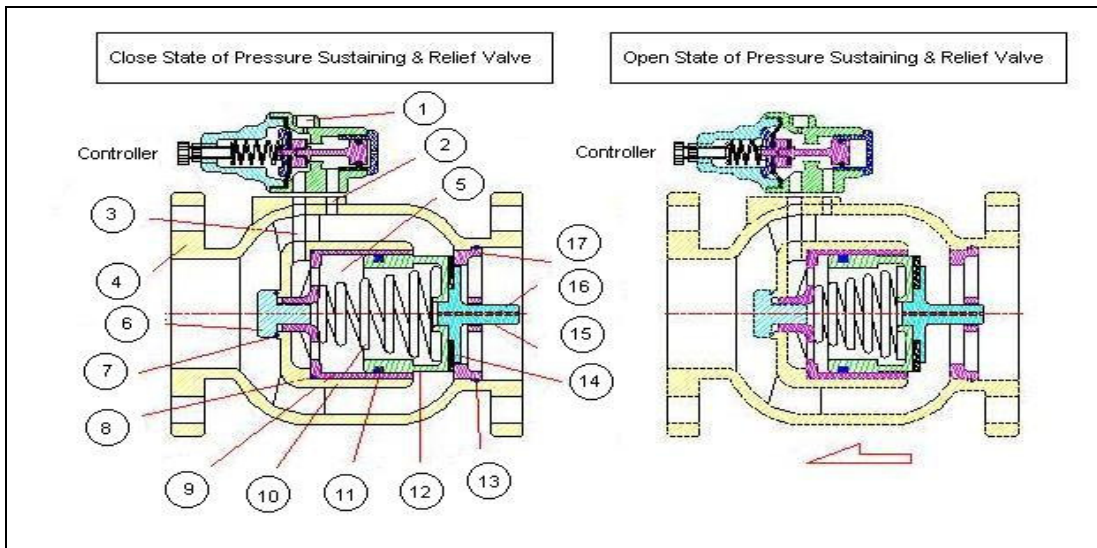




### The Installation of Pressure Sustaining & Relief Valve:

- The valve body of main valve becomes functional by an inlet-guiding hole. This hole transfers pressure to pressure chamber. When enough pressure accumulates in the pressure chamber, it generates pushing force that makes the piston close to valve seat and generates the closing motion. There is another outlet-guiding hole in the pressure chamber. When the hole opens, the pressure in pressure chamber dissipates and valve gate is pushed open by coming water pressure.
- **Pressure Sustaining Valve:** Uses the sub-valve to control the main valve. When the inlet pressure reaches the setting range of the sub-valve, the sub-valve will open and the pressure in the pressure chamber of the main valve dissipates and the main valve opens. It means that the outlet will outflow the water only when the inlet reaches the setting pressure.
- **Purpose of Pressure Sustaining Valve:** Uses to maintain the pressure of the main pipe of tap-water. When the pressure of the pipe of tap-water reaches the setting pressure, it will automatically open the gate to protect the water used by downstream people.
- **Purpose of Pressure Relief Valve:** A safety valve. The principle is the same as that of pressure sustaining valve; the only difference is the pressure setting. The main purpose is to protect the pipe when the pressure reaches the limit, and then it will automatically open to release pressure.



NO.	ITEM NAME	NO.	ITEM NAME
1.	Pressure gauge hole	10.	Spring
2.	Controller outlet hole	11.	U-ring
3.	Outlet guiding hole (Controller inlet hole)	12.	Piston
4.	Valve	13.	O-ring
5.	Pressure chamber	14.	Sealing
6.	Cylinder bolt	15.	Shaft
7.	O-ring	16.	Inlet guiding hole
8.	O-ring	17.	Seat
9.	Cylinder		



## **Breakdown Elimination**

### **I · No water flow from the Valve Gate:**

1. Check the installation direction of the main valve and see whether the inlet pressure is too low. The valve's minimum pressure shall be over 0.3kg/cm. (You may check from the Controller Pressure Gauge.)
2. Check if the controller pressure setting is too high. If so, anti-clockwise the adjusting screw to the lowest pressure.
3. Dismantle the controller and check outlet-guiding hole. If the water flow is smooth and the hole can not outflow water, it may be caused by the over low pressure or the impurities blocked inside the cylinder.
4. The valve gate immediately opens when dismantling the controller shows that the controller is blocked or defective.

### **II · Valve Gate cannot be closed:**

1. Dismantle the controller and block the outlet-guiding hole to check the valve gate can be closed or not. If the valve gate still can not be closed, it may be caused by the blocked inlet-guiding hole or the impurities blocked in the valve gate. Under this situation, please dismantle and maintain the valve body.
2. Dismantle the controller and block the outlet-guiding hole to check the valve gate can be closed or not. If the valve gate can be closed, it means the controller is defective or the adjusted pressure is too low.