

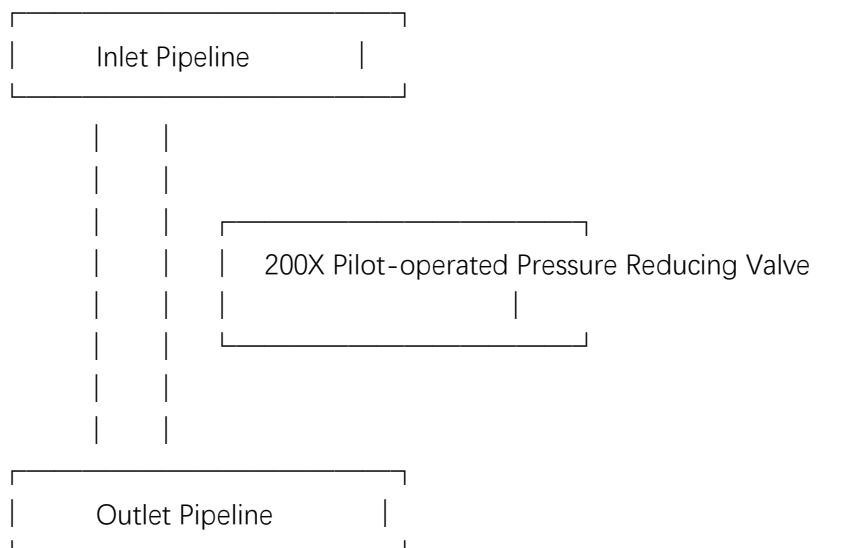
The following is the relevant introduction of the 200X pilot-operated pressure reducing valve:

### Product Introduction

- **Design Purpose:** It is designed for high-rise and super high-rise buildings. It is an ideal product for solving the requirements of large flow and high sensitivity in the domestic water supply and fire protection water supply systems of high-rise buildings.
- **Working Principle:** The flow rate of the medium is adjusted by regulating the opening degree of the closing member in the control valve body, and the pressure of the medium is reduced. At the same time, the opening degree of the closing member is adjusted with the action of the pressure behind the valve, so that the pressure behind the valve is maintained within the set range. Relying on the adjustment of the control and regulation system, the fluctuation of the pressure behind the valve is balanced with the spring force, so that the pressure behind the valve is constant within a certain error range.
- **Component Structure:** It is mainly composed of the valve body, main spring, main valve core, main valve seat, piston, pilot spring, pilot valve core, pilot valve seat, pilot piston and adjusting spring, etc.

### Typical Installation Schematic Diagram

plaintext



<-- Pay attention to the arrow direction of the valve body and install it according to the water flow direction -->

(Install a Y-type strainer near the pressure reducing valve on the inlet pipeline, and install gate valves on the inlet and outlet pipelines respectively)

### Maintenance and Troubleshooting

- **Maintenance**
  - **Regular Inspection:** Check whether all components are intact, including the valve body, valve cover, spring, etc., as well as the wear condition of vulnerable components such as seals, and replace the damaged components in a timely manner.

- **Clean the Valve Body:** Clean the dust, oil stains and rust on the surface of the valve body to keep the appearance clean. Regularly clean the strainer to prevent impurities from clogging and affecting the performance of the pressure reducing valve.
- **Lubricate Components:** Add lubricating grease to the moving components such as the valve stem to ensure its flexible rotation and prevent rusting and jamming.
- **Troubleshooting**
  - **Unstable Outlet Pressure:** It may be caused by excessive fluctuation of the inlet pressure, a fault in the pilot valve or spring fatigue. First, check whether the inlet pressure is within the specified range. If it exceeds, the inlet pressure needs to be stabilized. Then, check whether the pilot valve is blocked by impurities or has poor sealing, and clean or repair it. If the spring is fatigued, it needs to be replaced.
  - **The Valve Does Not Close Tightly:** It may be that the valve disc or valve seat is damaged, or there are impurities stuck. Check whether there are wear, scratches, etc. on the sealing surface of the valve disc and valve seat. If so, it needs to be repaired or replaced. Clean the impurities in the valve.
  - **The Valve Cannot Be Opened or Closed Normally:** It may be due to the jamming of the valve stem, a fault in the pilot valve or the blockage of the control pipeline. Carry out rust removal and lubrication treatment on the valve stem. Check the working condition of the pilot valve, and repair or replace the faulty components. Dredge the control pipeline.

#### **Performance Characteristics**

1. The structure is novel and reasonable, and the hydraulic principle control theory is reasonably applied.
2. It works stably and reliably, allows for large flow passage, and can meet the demand for large water volume in high-rise buildings, etc.
3. The valve disc opens quickly and closes slowly, there is no water hammer impact, and the closing time is adjustable, effectively protecting the pipeline system.
4. It has high precision in pressure reduction and stabilization, and a large adjustment range, and the outlet pressure can be precisely adjusted according to actual needs.
5. It has good sealing performance and a long service life, reducing the frequency of maintenance and replacement.
6. It is convenient for installation and maintenance, making it easy to install in the pipeline system and carry out later maintenance.

