

The following is the product introduction, typical installation schematic diagram, maintenance and troubleshooting, as well as performance characteristics of the resilient seated gate valve specially designed for drinking water:

Product Introduction

The resilient seated gate valve for drinking water is a valve product specifically designed to meet the requirements of drinking water systems. It mainly consists of a valve body, a gate, a valve stem, a resilient seat, and other components. The valve body is usually made of high-quality materials such as ductile iron or stainless steel, which have excellent corrosion resistance to ensure that it will not contaminate the drinking water during long-term use. The gate is precisely machined to ensure a tight seal with the resilient seat. The resilient seat is made of food-grade rubber materials that comply with relevant health standards, which can effectively prevent leakage and ensure the hygiene and safety of drinking water. This type of valve is mainly used in urban water supply networks, water treatment plants, and various buildings' drinking water pipelines to control the flow of drinking water.

Typical Installation Schematic Diagram

1. **Installation Location:** It is preferably installed on a horizontal pipeline. If installed vertically, attention should be paid to ensuring that the gate can move up and down freely without being affected by external forces.
2. **Pipeline Connection:** The valve is connected to the pipeline through flanges. Before installation, ensure that the flanges of the valve and the pipeline are aligned, and appropriate gaskets are installed between the flanges to ensure a tight seal.
3. **Surrounding Facilities:** A certain amount of space should be reserved around the valve for easy operation and maintenance. Pressure gauges can be installed before and after the valve to monitor the water pressure. Also, it is advisable to install a bypass pipeline and relevant control valves in some cases to facilitate maintenance and replacement of the valve without affecting the normal water supply.

Maintenance and Troubleshooting

- **Maintenance:**
 - **Regular Inspection:** Regularly check the valve for any signs of leakage, especially around the flanges and the connection between the gate and the resilient seat. Check the condition of the valve stem, ensuring that it is not corroded or deformed, and the threads are in good condition.
 - **Lubrication:** Lubricate the valve stem regularly to ensure smooth operation. Use lubricants that are suitable for use in drinking water systems and meet relevant health requirements.
 - **Cleaning:** Keep the valve body clean, and remove any debris or sediment that may accumulate on the surface of the valve. For valves installed in pipelines with poor water quality, it may be necessary to clean the internal parts of the valve periodically.
- **Troubleshooting:**
 - **Leakage:** If leakage occurs at the flanges, check whether the bolts are tightened evenly and whether the gaskets are damaged. If leakage occurs between the gate and the resilient seat, it may be due to wear of the resilient seat or damage to the gate. In this case, the relevant parts need to be

replaced.

- **Difficult Operation:** If the valve is difficult to open or close, it may be due to lack of lubrication of the valve stem, corrosion of the valve stem, or foreign objects blocking the movement of the gate. Check and solve the corresponding problems according to the specific situation.

Performance Characteristics

1. **Excellent Sealing Performance:** The use of a resilient seat made of food-grade rubber materials can effectively prevent leakage, ensuring the stable operation of the drinking water system and the safety of water quality.
2. **Corrosion Resistance:** The valve body is made of high-quality corrosion-resistant materials, which can adapt to different water quality environments and has a long service life, reducing the frequency of replacement and maintenance.
3. **Hygienic and Safe:** All materials in contact with drinking water comply with relevant health standards, ensuring that the valve will not contaminate the drinking water and meet the strict requirements of drinking water hygiene.
4. **Good Flow Characteristics:** The design of the valve ensures a smooth flow passage, reducing the resistance to water flow and minimizing energy consumption during the water supply process.
5. **Easy to Operate and Maintain:** The structure of the valve is simple, and the operation is convenient. Regular maintenance is relatively easy, which can reduce the workload and cost of operation and maintenance of the drinking water system.

