



Check Valves

Installation, Operation & Maintenance of Check Valves

1.- USE

Check Valves are designed for low-pressure drop and positive prevention of backflow. It is suitable for use with either gas or liquid systems.

The valve opens when pressure in the direction of flow (indicated by an arrow on the body of the valve) is strong enough to unseat the movable body (poppet, ball, cone,...). Flow in the reverse direction, along with spring tension, tends to seal the movable body against the valve seat.

We manufacture three types of check valves: poppet, 3-pieces and wafer type. Each one needs different treatments.

2.- INSTALLATION

2.1.- THREADED CHECK VALVE INSTALLATION

- Valves must be installed in the direction of flow as indicated by the arrow on the body.
- Pipe connections should be free of dirt and metal shavings.
- Several wraps of PTFE tape is recommended for use of pipe joint sealant.
- To provide a leak proof joint, the pipe should be threaded into the end connection "hand tight", using a wrench to tighten the joint an additional 1/2 to 1-1/2 turns past hand tight. Tightening beyond this point may induce excessive stress that could cause failure.

2.2.- SOLDER CHECK VALVE INSTALLATION

- Proper preparation of tubing prior to installation is critical to get a joint. The tubing must be cut square, de-burred, and cleaned with a solvent.
- Ensure connecting pipes are correctly positioned and supported to avoid any strain on the valves.
- Never exceed the 70 ampere of current intensity for welding.
- Wrap the valve body with a damp cloth. (Only for VR-01 Valve)
- Apply heat directing the flame away from the body or center of the valve. Excessive heat can damage the tailpiece-to-body seal (Only for VR-01)
- Ensure ends match and clean carefully the contact's surface. Weld the valve to the pipe.

2.3.- WAFER CHECK VALVE INSTALLATION

- Valves must be installed in the direction of flow as indicated by the arrow on the body.
- These kind of valves are designed to work between flanges regardless of the position. The outer diameter of the valve centres itself by the flange bolts.
- The flange facings have to be in a parallel position to each other. The facings need to be clean and undamaged.
- Use joints between valve and flanges appropriate to the service and center it conveniently.
- Don't force the union of the system between flanges with the screws when space exists among them.

3.- OPERATION

- Because of the nature of our check valves, their operation is automatic. Don't requires any manipulation.
- It must be taken into account that the valve opening is directly affected by the position in which is mounted (flow downward, horizontally or rising).



4.- MAINTENANCE

- All of our check valves are maintenance-free. For safety reasons and in order to avoid unnecessary periods of interruption the operator is advised to examine functionality and reliability of the valves within reasonable and regular intervals (periods to be defined by the operator).
- To replace the valves wait until the system is depressurized and cold.
- When using dangerous fluids, before to replacement, drain the system completely.

CAUTION: Do not disassemble valve while under pressure.



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