



Operating Instructions

A-2600 SERIES AWWA SWING CHECK VALVE



500 West Eldorado Street

Decatur, Illinois 62522

www.muellercompany.com

! WARNING !

1. Read and follow all pertinent instructions carefully. Proper training and periodic review regarding the use of this equipment is essential to prevent possible serious injury and/or property damage.
2. Do not exceed the pressure ratings of any components or equipment. Exceeding the rated pressure may result in serious injury and/or property damage.
3. Safety goggles and other appropriate protective gear should be used. Failure to do so could result in serious injury.
4. Valves are to be handled by experienced installers. Valves should never be used as structural members and should be appropriately rigged for lifting. Valves are heavy and include various accessories which should be handled with caution.

INDEX

A-2600 SERIES AWWA SWING CHECK VALVE

| | Page |
|---|--------|
| Application and Installation..... | 3 |
| Operation | 3 |
| Maintenance and Troubleshooting | 4 |
| Repairs | 5 |
| 2”-12” Gravity Operated Swing Style Parts | 6 |
| 2”-36” Lever/Weight Style Parts | 7 & 8 |
| 2”-36” Lever/Spring Style Parts..... | 9 & 10 |
| Notes | 11 |



www.muellercompany.com

MUELLER® A-2600 SERIES AWWA SWING CHECK VALVE

Application and Installation

APPLICATION

Mueller® A-2600 Series AWWA Swing Check Valves are self-contained, free-swinging disc style (gravity), outside lever and weight, or outside lever and spring. Valves conform to all standards as set forth in AWWA C508. Suitable for use in wastewater, water and sewage applications.

SAFETY MEASURES

“Warning” and “Caution” messages indicate procedures that must be followed exactly to avoid equipment/property damage, physical injury or possibly death. Safety labels on the product indicate hazards that can cause equipment/property damage, physical injury or possibly death.

INSTALLATION

1. Check that valve end joints conform to the mating pipe and verify that ends are clean and sound. All 2600 Series valves are supplied with flat faced flanges with ANSI B16.1 Class 125 drilling. Do not mate these valves to pipe or fitting with raised face flanges.
2. Remove any material used to restrain the lever (if equipped) or pin during shipment and storage. Attach any outside closing mechanism (if equipped) in proper position manually.
3. Closing mechanism should be checked to ensure freedom of motion and proper operation.
4. When handling valve, do not use outside mechanisms for lifting.
5. It is necessary to install the valve in proper orientation with regard to flow direction as indicated by arrow on side of body.
6. Prepare pipe ends per pipe manufacture’s instruction and install valve as per appropriate instructions for the specified joint. All piping should be properly supported to avoid line stress being transferred to valve. Do not use valve as a jack to force pipeline into position.
7. Standard wrenches and/or sockets are to be used to tighten all nuts and bolts. Fasteners are to be tightened in a “star pattern” to ensure balanced loading of bolts.

STORAGE

All valves should be inspected at time of delivery for shipping damage, missing parts, and conformance with specifications.

Valves should be stored in a sheltered area, or covered with water-proof covering, to prevent contamination by weather or dirt. Valves should remain with original shipping containers or skids, or stored on a flat surface with weight supported evenly by the flange face. Do not store valves on the shaft ends or bushing housing. Protect rubber seated valves from ozone and hydrocarbons (solvents, paints and oils, etc.)

OPERATION

Once in the pipeline, the swing check valve will open and close as flow conditions dictate. The valve will open as the pressure on the upstream side of the disc overcomes the downstream side. The valve will close as the situation reverses itself or the pressure equalizes.

These valves are self-contained units. Outside levers, weights, springs or hinge pins should never be used to manually operate the valve or restrict its operation.

External shields and surrounding piping should not interfere with free operation of external apparatus of the valves.

MUELLER® A-2600 SERIES AWWA SWING CHECK VALVE

Maintenance and Troubleshooting

MAINTENANCE

! WARNING !

To prevent injury to operator or damage to valve and/or property, valve must be isolated and line pressure relieved from both sides of valve before opening valve cover or attempting any repairs to valve seals or mechanism. O-rings should not be changed or added on an active valve.

The system is designed to be trouble-free with minimum care. Frequency of inspection should be based upon the operational characteristics of the system, i.e. systems of high cycles should be inspected more frequently. At minimum semi-annual inspections are recommended.

A. Points of inspection should be at a minimum:

1. All end joints, cover joints and packing boxes for leakage.
2. Bolts for tightness.

3. Inspection of valve during operation is recommended so that outside linkage can be inspected for proper operation.
4. O-rings: inspection of packing box is required to assure no leakage is evident. If leakage exists, replace O-rings – do not tighten end plug in an attempt to stop leakage.
5. Inspection of interior of valve is not necessary unless improper operation is witnessed or leakage beyond the allowable rate is experienced. The interior of the valve and the internal components can be inspected by removing the valve cover. Cover gasket should be replaced any time this joint is broken. Never re-install a used cover gasket.

| TROUBLESHOOTING | | |
|-----------------------------------|---|---|
| Possible Malfunction | Symptoms/Cause | Corrective Action |
| Cover gasket leakage | Relaxed cover bolts tension | Tighten bolts in "star pattern." Should leakage continue, replace gasket. |
| Valve slams when closing (Spring) | Tension on Spring is loose. | Tighten Spring Adjustment Bolt |
| Valve slams when closing (Weight) | Weight is not located on Arm properly | Reposition Weight as necessary |
| Seat leakage | Seats dirty Disc Seat damaged | Remove inspection cover and flush Replace (also see below) |
| Leak by Hinge Pin | Cracked or broken O-rings | Replace O-ring(s) |
| Vibration/Noise | Flow rate too high Loose disc mounting Loose Lever | Correct application Tighten Stud/Nut Tighten Lever |
| End Gasket leakage | Pipe misalignment Unsupported pipe load Improper Gasket or installation Uneven tightening torque | Realign pipe Support pipe Replace/reinstall Retighten using "star pattern" |