

Basic Troubleshooting

Valve Not Closing

There are several reasons why a valve would continue running or why you might see water continuing to flow. Please review the following checklist before trying more advanced troubleshooting.

- ☐ Is the power from the controller unplugged or batteries dead?
- ☐ Is the external bleed screw emitting water externally? If so, hand tighten.
- ☐ Are the valves opened manually (solenoid not closed to off position)?

If the valve continues to weep after reviewing the list above, proceed with common troubleshooting techniques.

Debris Under Diaphragm

The most common reason for a valve to remain on, or weep, is debris. New installations without proper flushing, recent mainline repair, or well water can cause debris to flow into the valve and get caught between the diaphragm and the seat. Check for debris using the following steps:

1. Remove the bonnet of the valve by loosening all bonnet bolts and lifting the bonnet up. The screws will remain captive in the bonnet.
2. Remove the diaphragm.
3. Run your finger around the white diaphragm support ring inside the valve body to check for any damage that may prevent the diaphragm from seating correctly. Replace if issue is found.
4. Examine the bottom of the diaphragm for debris. If debris is lodged in the diaphragm seal or deep indentations are found, replace the diaphragm.
5. Rinse the diaphragm and the diaphragm seat and reassemble, orienting the diaphragm on the valve body so that the solenoid port lines up correctly.

Damage to the Diaphragm

The valve can remain in the “open” position if the diaphragm becomes punctured. Follow the steps at left and inspect the diaphragm (Step 3) looking for obvious tears or punctures.

Search for tears
or punctures



Diaphragm Top View

Check for damage or gouges



Diaphragm Support Ring

Check for lodged
debris or dents



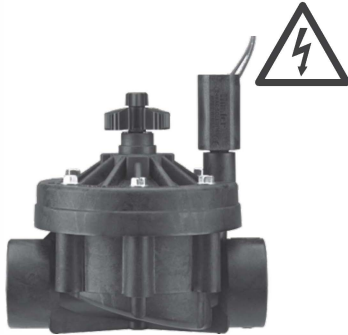
Diaphragm Bottom View

Valve Not Opening

There are several reasons why a valve might not open.

Insufficient Voltage

If the valve does not receive an appropriate level of voltage or the wire distance is too long, you may experience issues opening the valve.



Check Flow Control

1. Flow control should be adjusted for every system to maximize efficiency. Sometimes it can be inadvertently closed. Check by rotating the handle clockwise. If it will not turn, the flow control is completely down and the diaphragm is unable to fully open.
2. Turn the handle counterclockwise to make adjustments.

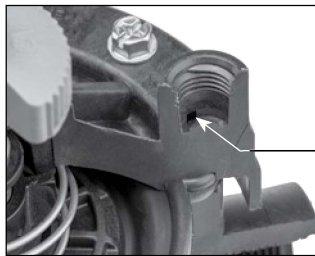


Flow Control Knob

Clogged Solenoid Exhaust Ports

There is an entry port from the valve upper chamber to the solenoid and an exhaust port from the solenoid to downstream in the valve. If either port gets clogged with debris, the valve may not open or open fully.

1. Attempt to turn on the valve using the external bleed screw. If it turns on, there may be a port issue.
2. Remove the solenoid (or Accu Sync assembly if installed).
3. Insert a thin piece of metal or 18 AWG (0.8 mm²) station wire (small paperclip size) down the center port in the solenoid chamber.
4. Insert the same piece down the side outlet port of the solenoid chamber.
5. Re-thread the solenoid or Accu Sync assembly onto the valve bonnet.



Solenoid Port