



1½" - 2" Solenoid Valve User Guide

Reliable performance for automatic irrigation system control.



POELSANARÇ
For installation tips, other language options and more

Product Operating Principle

The solenoid valve is designed to control water flow in automatic irrigation systems by means of an electrical signal. When voltage (9V or 24V) is applied to the coil, it creates an electromagnetic effect that moves the internal plunger. This movement directs the diaphragm and opens or closes the valve. When voltage is removed, the system returns to the closed position.

Operating Range

Type	Size	LxWxH	Flow Range	Pressure Rating (Bar)
9V	1½"	109x140x195	5-27 m³/saat - 75-450 lt/dk	10
24V	1½"	109x140x195	5-27 m³/saat - 75-450 lt/dk	10
9V	2"	130x164x218	5-34 m³/saat - 75-570 lt/dk	10
24V	2"	130x164x218	5-34 m³/saat - 75-570 lt/dk	10

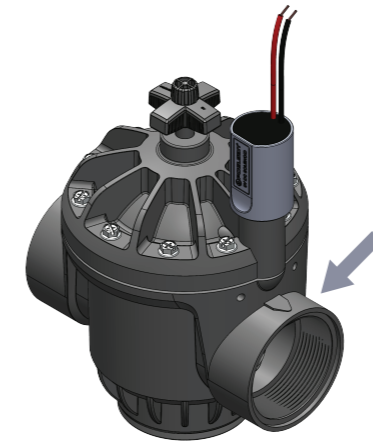
Parts No	Parts List
1	Valve Body
2	Solenoid Coil
3	Valve Cover
4	Screw
5	Flow Control Screw
6	Bleed Screw
7	Valve Flow Control Handle
8	Spring
9	Diaphragm Spring
10	Diaphragm Seat
11	Bottom Cover
12	Bottom Cover O-Ring

Warnings

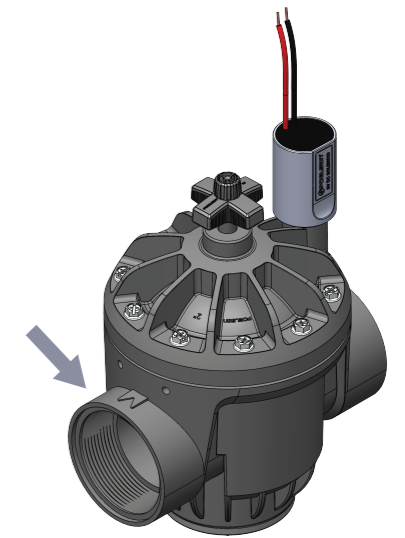
- Always isolate electrical connections from water during installation and maintenance.
- Do not operate the valve outside the specified pressure and voltage ratings.
- Do not energize the solenoid coil when it is not mounted on the valve.
- Operate the coil only at the voltage specified on it.
- Do not install the valve with the coil facing downward. This may cause water leakage and coil failure.
- Fully release system pressure before removing the valve.
- Avoid damaging sensitive internal parts during installation and maintenance.
- Adjust flow when there is no pressure (water off). Do not use the adjustment screw to shut off the valve.

Before Operating the Valve

- Ensure all valves on the inlet line are open.
- Check all pipe connections and ensure proper sealing.
- If the water source contains sand or sediment, use an appropriate filter before the valve.



Arrow Indicating the Valve's Flow Direction



Product Installation

- The arrow on the valve body indicates the direction of water flow. During installation, mount the valve in accordance with the flow direction.
- Position the solenoid valve appropriately on the inlet or outlet line of the system.
- Wrap Teflon tape 3-4 turns clockwise around the threads of the male adapter or fitting.
- Do not overtighten fittings to avoid damaging the threads; hand-tightening is recommended.
- Do not use excessive Teflon tape on valve inlet and outlet connections. Excess tape may cause thread stress and damage.

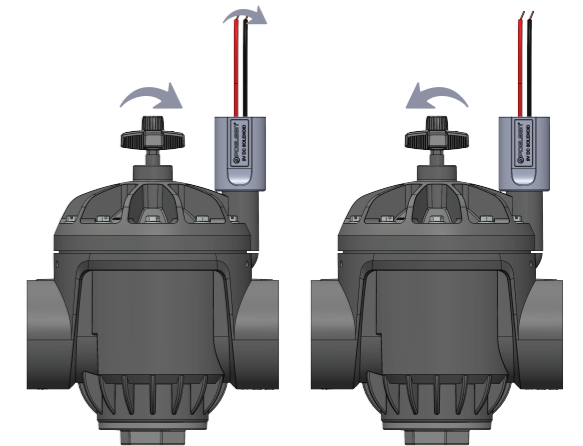
Product Maintenance

Open the solenoid valve by referring to the exploded view diagrams. Carefully inspect the removed parts and clean them with compressed air.

Thoroughly clean the diaphragm, diaphragm spring, and the internal body of the valve. Remove all debris and sediment accumulated on these components.

To open the valve automatically, loosen the bleed screw or turn the solenoid coil counterclockwise. (Figure 1)

To close the valve manually, turn the flow control handle clockwise. (Figure 2)



Troubleshooting

Problem	Solution
Valve does not fully close	Ensure the solenoid coil is fully tightened. Check the tightness of the bleed screw and other screws. Remove the bleed screw to flush the valve with water. If performance does not improve, shut off the water. Remove the cover screws and lift the cover. Remove the diaphragm and clean it with clean water or compressed air. Reassemble the diaphragm and cover.
Valve does not open	Check the water supply, control panel power, and connection equipment. Turn off the water supply. Remove the cover screws and take off the cover. If there is any debris or sediment inside, clean it. Reassemble the unit and test it. If the problem persists, turn off the water supply and remove the solenoid. Replace it with a known working solenoid and test again. If the valve still does not work, replace the solenoid valve.
Valve opens and closes repeatedly	Check system water pressure. If pressure exceeds 80 psi (5.5 bar), install a pressure regulator upstream of the valve.

