

Description

The Solenoid Valve is used to flush field and filters and as zone valves. It is electrically operated. It is normally closed, and in the event of a power failure the valve will close.

Geoflow's automatic water control valves are designed for vertical or horizontal installation. The Wye 'Y' valve body design includes a full bore seat with unobstructed flow path, free of any in-line ribs, supporting cage, or shafts. Its unitized Flexible Super Travel (FST) diaphragm and guided plug provide a significantly 'look through' passage from end to end resulting in ultra-high flow capacity with minimal pressure loss.

The combination of a long travel guided valve plug, peripherally supported diaphragm, and replaceable valve seal provides:

- No chattering or slamming closed
- Accurate and stable regulation with smooth motion
- Low operating pressure requirements
- No diaphragm erosion and distortion
- Chemical resistant

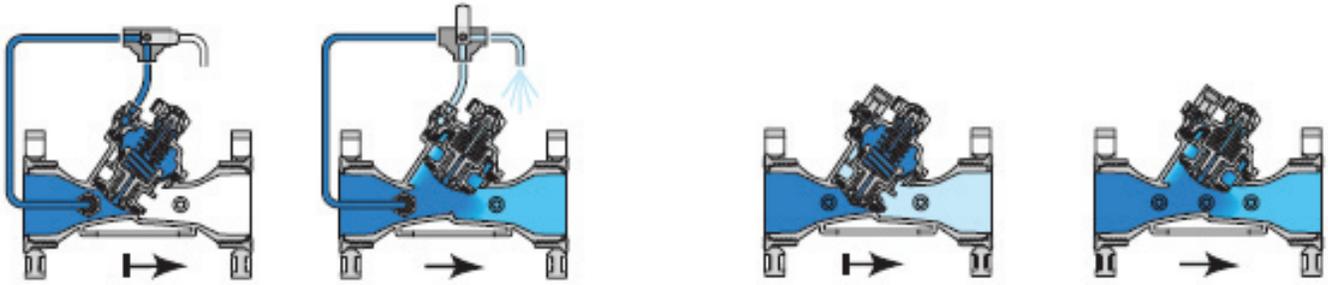


SVLVB200 and
SVLVB300

SVLVB100 and
SVLVB150

	SVLVB-100	SVLVB 150	SVLVB 200	SVLVB 300
Inlet/Outlet Size (FNPT)	1"	1.5"	2"	3"
Length (L)	4.3"	6.3"	9.0"	12.2"
Height (H)	4.5"	7.2"	7.4"	11.0"
Width (W)	3.0"	5.0"	5.4"	
R	7/8"	1-3/8"	1-5/8"	4.0"
Weight	12.5 oz	2.2 lbs.	2.97 lbs.	8.8 lbs
Valve pattern	Globe	Globe	Wye 'Y'	Wye 'Y'
Operating range	10 - 150 psi	10 - 150 psi	7 - 140 psi	7 - 140 psi
Max pressure	180 deg F	180 deg F	180 deg F	180 deg F
Materials				
Body & cover	Nylon reinforced	Nylon reinforced	Glass filled nylon	Glass filled nylon
Metal parts	Stainless steel	Stainless steel	Stainless steel	Stainless steel
Diaphragm	Natural rubber	Natural rubber	NBR (Buna-N), nylon reinforced fabric	NBR (Buna-N), nylon reinforced fabric
Seals	NBR & NR	NBR & NR	NBR (Buna-N)	NBR (Buna-N)

On/Off Modes



3-Way Control

Line pressure applied to the control chamber of the valve creates a hydraulic force that moves the valve to the closed position and provides drip tight sealing. Discharging pressure from the control chamber to the atmosphere causes the line pressure under the plug to open the valve.

2-Way Internal Control

Line pressure enters the control chamber through the internal restriction. The closed solenoid causes pressure to accumulate in the control chamber, thereby shutting the valve. Opening the Solenoid releases more flow from the control chamber than the restriction can allow in. This causes pressure in the control chamber to drop, allowing the valve to open.

Installation

The manual bleed lever should always be in the VERTICAL position and the dial on top should be free spinning. Clockwise rotation closes valve.

Pressure Loss through valves (in psi)

Recommended minimum pressure differential: 7 psi

Electrical data:

Wiring requires a single lead from the controller to each solenoid valve, plus a common neutral to all solenoids. Type UF wire, UL listed, is recommended for all hookups.

Standard 24V ACV (50-60Hz)

Current Holding 0.24A 5.76 VA

Current Inrush 0.46A 11.04VA

Maximum allowable loss 4.8 Volts for the 24V AC system

Contact Geoflow for optional voltages or larger valves

Maximum Length of wire run – Controller to Valve

# Wire	Resistance Ohm / 1000'	Maximum Run
#18	6.39	800 Ft.
#16	4.02	1,275 Ft.
#14	2.58	2,000 Ft.
#12	1.62	3,200 Ft.
#10	1.02	5,100 Ft.
#8	0.641	8,000 Ft.
#6	0.403	12,750 Ft.
#4	0.253	20,500 Ft.
#2	0.158	32,500 Ft.

Maximum Voltage loss with a valve with a three way Solenoid is 4.8 Volts

[1] Cover Ring

The cover ring fastens valve cover to body, stiffening and strengthening the valve body, enabling simple maintenance. A cover ring key is available.

[2] Pilot Adaptor

The pilot adaptor allows us to connect the mini-pilot valve or the Galit hydraulic relay to the valve body.

[3] Valve Cover

The cover's strong construction meets rough service conditions. Optional cover types (3"; DN80 and smaller valves) are capable of accepting a Flow Stem, a Flow Stem + Position Indicator, and a 2-Way Solenoid (2W-N1 Electric Type).

[4] Auxiliary Closing Spring

One single high grade stainless steel spring provides a wide operation range, ensuring low opening pressure and secured closing.

[5] Plug Assembly

The unitized Flexible Super Travel (FST) plug assembly combines a long travel guided valve plug, peripherally supported diaphragm, and replaceable diaphragm and valve seal. The diaphragm fully meets the valve's operating pressure range requirements.

[5.1] Diaphragm Holder

[5.2] Diaphragm

[5.3] Plug

[5.4] Plug Seal

[6] hYflow 'Y' Valve Body

Glass-filled nylon construction meets rough service conditions with high chemical and cavitation resistance.

End-to-end "look-through" design and full bore seat with unobstructed flow path, free of any in-line ribs, supporting cage, or shafts, enables ultra-high flow capacity with minimal pressure loss.

[7] End Connections

Adaptable on-site to a wide range of end connection types and sizes:

[7.1] Flanges: Plastic or metal "Corona" with elongated slots enable meeting diverse flange standards ISO, ANSI and JIS.

[7.2] Flange adaptor external thread

[7.3] Internal threads

[8] Flange Adapter

Articulated flange connections isolate the valve from line bending and pressure stresses.

[9] Valve Legs

Stabilize the valve and serve also as mounting brackets.

