



Suzhou Alpine Flow Control Co., Ltd.



IOM

AFC-A6DV Double chamber solenoid control valve

Installation

Operation

Maintenance



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INSTALLATION / OPERATION / MAINTENANCE

A6DV solenoid control valve

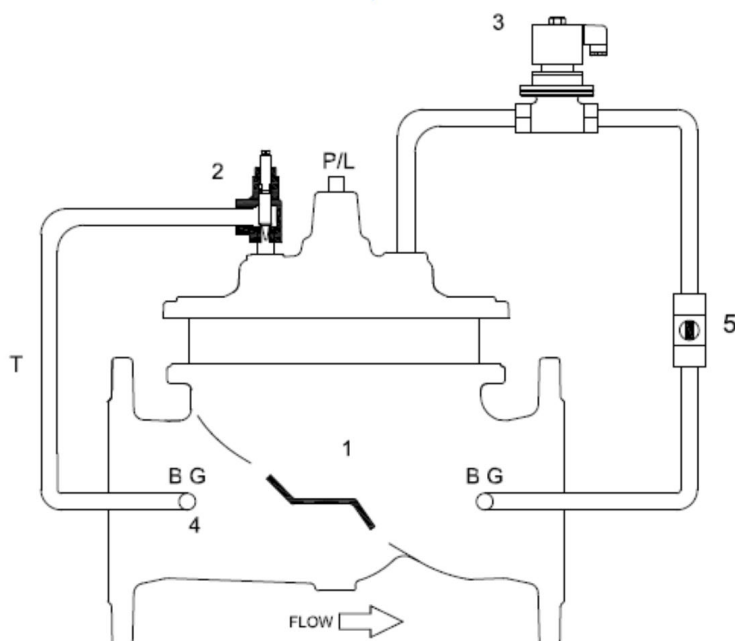
Installation

1. Confirm the flow direction of pipeline corresponds the arrow on the A6DV
2. Leave enough space for installation, adjusting and disassembly.
3. Install the Isolation valves at both inlet and outlet of A6DV.
4. Install the Strainer before A6DV.
5. The valve functions better if the valve is installed horizontally. If valve size is DN200 and bigger, the valve has to be installed horizontally.

Operation

Remove all air from the valve

1. Open all ball valves in pilot system.
2. Open the isolation valves before and after the A6DV, to allow flow
3. Close (5) ball valve to test the main valve. The valve should close
4. Open (5) and energize the (3) solenoid to test the main valve. If (3) opens, the main valve should open. If (3) closes, the main valve should close



Standard Configuration

1. Main valve
2. Needle Valve
3. Solenoid valve (NC/NO)
4. Strainer
5. Ball valve

Optional Configuration

- B. Ball valve
- G. Pressure gauge
- P. Position Indicator
- L. Limit switch

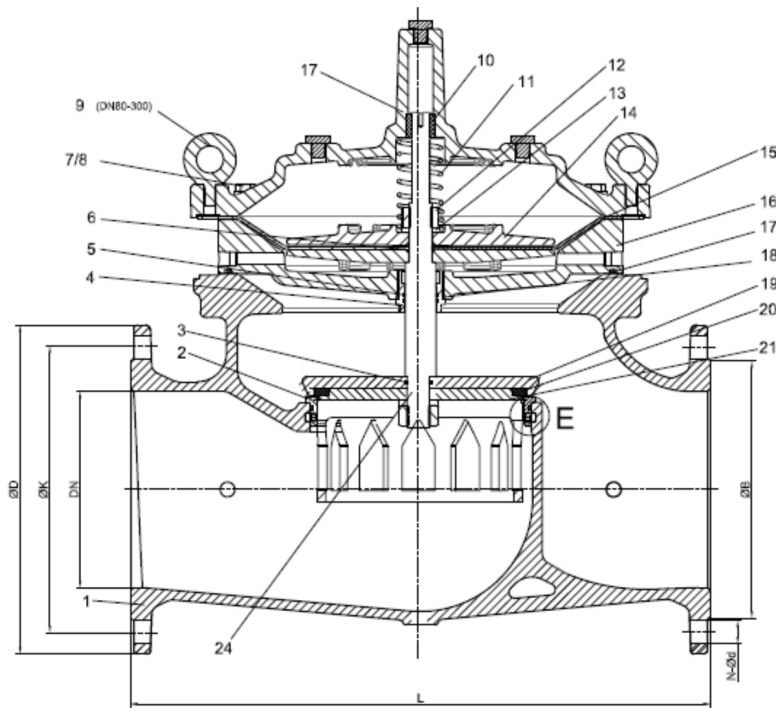
Maintenance

1. If any problem comes from the malfunction, the main valve leaks, then check 2 systems, one is main valve system and the other is pilot system (including control tube and solenoid valves).
2. Check the control system whether the tubing is leaking, if it leaks, replace the tubes or tighten all the connection tubes and fix it.
3. Check the solenoid valves by electrical control. If the solenoid valve is failed, need to replace it.
4. If all the pilot system are in good condition and the main valve still leaks thru main valve, then go for main valve trouble shooting.

Table1 Trouble shooting

SYMPTOM	NO.	PROBABLE CAUSE	SOLUTION
Main valve fails to open	1	No pressure at valve inlet	Check inlet pressure
	2	Main valve spare parts inoperative	Disassemble, clean stem, replace defective parts
	3	Solenoid valve not opening:	Check voltage and make sure solenoid valve is good condition
	4	Ball valve in pilot system closed	Open it
	5	Solenoid valve Mechanical block	Disassemble and clean
Main valve fails to close	1	Foreign matter between disc and seat, Scale on stem.	Disassemble main valve, remove matter, clean parts and replace defective parts
	2	Needle valve closed	Open it properly
	3	Worn disc	Disassemble and replace
	4	Worn Diaphragm	Disassemble and replace
	5	Solenoid valve Mechanical block	Disassemble and clean
	6	Solenoid valve not opening:	Check voltage and make sure solenoid valve is good condition

Main Valve Drawing



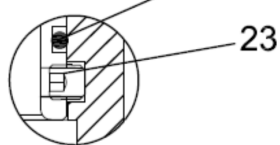
NO.	Part Name	Material
1	Body	GJS 500-7
2	Seat-Vport	SUS304
3	O-Ring	NBR
4	Bush	C61900
5	O-Ring	NBR
6	O-Ring	NBR
7	Bolt	A2
8	Washer	A2
9	Rings	Commercial
10	Bush	C61900
11	Spring	SUS304
12	Caulking Nut	A4
13	Spring Washer	A2
14	Fixing holder	GJS 500-7
15	Diaphragm	EPDM+Nylon Fabric
16	Middle body	GJS500-7
17	O-Ring	NBR
18	O-Ring	NBR
19	Disc Holder	SUS304
20	Seal	EPDM
21	Seat Retainer-Vport	SUS304
22	O-Ring	NBR
23	Screw	A2
24	Stem	A2

E

DN50-150



DN200-300



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