

Trouble-Shooting:

Symptoms	Cause	Remedy
Valve fails to open	<ol style="list-style-type: none"> 1. Hydraulic control command. 2. Not sufficient inlet pressure. 3. Not sufficient flow. 4. Adjusting screws. 	<ol style="list-style-type: none"> 1. Check existence of hydraulic command in the relay. 2. Check for sufficient inlet pressure- 3. Create demand/flow, confirm pilot setting- 4. Check that the Pilot adjusting screw is not loose.
Valve fails to close	<ol style="list-style-type: none"> 1. Hydraulic Control command. 2. Control circuit is clogged. 3. Debris- 4. Diaphragm- 	<ol style="list-style-type: none"> 1. Check existence of hydraulic command in the relay. 2. Check for any debris trapped in the valve control circuit. 3. Check for any debris trapped in the valve body. 4. Check diaphragm is not leaking-
Valve fails to regulate	<ol style="list-style-type: none"> 1. Not sufficient inlet pressure 2. Not sufficient flow 3. Pilots setting- 4. Air trapped in the control chamber- 	<ol style="list-style-type: none"> 1. Check for sufficient inlet pressure 2. Create demand/flow, confirm pilot setting 3. Check Pilot setting- 4. Release air trapped in the control chamber by loosening cover tube fitting at the highest point.

Preventive maintenance:

1. System operating conditions that effect on the valve should be checked periodically to determent the required preventative maintenance schedule.
2. Maintenance instructions:
 - 2.1. Tools required:
 - 2.1.1. Metric and imperial wrenches
 - 2.1.2. Anti-seize grease
 - 2.1.3. Visual inspection to locate leaks and external damages
 - 2.2. Functional inspection including: closing, opening and regulation.
 - 2.3. Close upstream and downstream isolating valves (and external operating pressure when used)
 - 2.4. Once the valve is fully isolated vent pressure by loosening a plug or a fitting.
 - 2.5. Open the screw nuts and remove the cover unit from the valve body. Disassemble necessary control tubs.
 - 2.6. It is highly recommended to stock a reserve parts assembly for each size. This allows minimum system field work. And system down time.
 - 2.7. Disassemble the cover and examine the inside parts carefully for signs of wear, corrosion, or any other abnormal conditions.
 - 2.8. Replace worn parts and all the Elastomers. Lubricate the bolts and screws threads with Anti seize grease.
 - 2.9. Winterizing /freezing prevention: drain the valve & the valve accessories (pilot, solenoid) on time.

Spare Parts

Bermad has a convenient and easy to use ordering guide for valve spare-parts and control system components. For solenoid valves refer to model and S/N on solenoid tags.

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