# IOM RAF 62°

## Pressure Reducing Control Valve 2-Way Metal Pilot 2" – 4"







Apr-24

#### DESCRIPTION

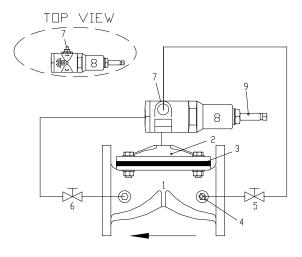
This pressure-reducing valve is an automatic control valve designed to reduce a higher upstream pressure into a preset lower downstream pressure, and to maintain this pressure constantly regardless of flowrate or upstream pressure fluctuations.

#### **INSTALLATION**

- Before installing the valve, flush the pipeline to remove scale, dirt and other particles that might affect the valve's performance.
- Install the valve as indicated by the arrow on the valve's cover, showing flow direction.
- It is recommended to install isolation valves (butterfly valves type B8) upstream and downstream the control valve.
- Close 2-way valve # 6. Open 2-way valve # 5 and turn on the water supply to the valve.
- Check for leaks; tighten bolts & fittings if necessary.

#### **PARTS LIST**

- 1. Body
- 2. Cover
- 3. Diaphragm
- 4. Self-Flushing "Finger" Filter
- 5. 2-Way Valve
- 6. 2-Way Valve
- 7. Needle Valve
- 8. 2-Way Pressure Reducing Brass Pilot P-162
- 9. Pressure Adjusting Screw



#### **OPERATING INSTRUCTIONS**

- 1. Make sure that there is a downstream flow demand.
- 2. Loosen security nut and close needle valve # 7 all the way and then reopen it for 1-2 turns. Lock it with the locking nut. The needle valve # 7 adjusts the hydraulic reaction speed. The more the needle valve # 7 is opened, the quicker the reaction is. While adjusting the needle valve, please keep in mind that too quick of a reaction may cause a water hammer.
- 3. Loosen security nut and turn adjusting screw # 9 counterclockwise, so that there is no pressure on the pilot's spring.
- 4. Open 2-way valve # 6.
- 5. Turn adjusting screw # 9 clockwise, until valve will start to open.
- 6. To increase downstream pressure, continue to turn adjusting screw # 9 clockwise one (1) turn at a time, allowing some time between turns for the valve to respond. Check downstream pressure until required pressure is achieved. Tighten security nut on the adjusting screw # 9.
- To decrease downstream pressure, turn adjusting screw # 9 counterclockwise one (1) turn at a time, allowing some time between turns for the valve to respond. Check downstream pressure until required pressure is achieved. Tighten security nut on the adjusting screw # 9.

<u>To open</u> the main valve completely, close the 2-way valve # 5 and turn the adjusting screw # 9 clockwise all the way. Please note that by so doing the pressure downstream will be as high as the pressure upstream.

To close the main valve, close 2-way valves # 6 and open 2-way valve # 5.

#### MAINTENANCE

- No maintenance is required.
- Check downstream pressure. Adjust if required.
- It is recommended that the valve be easily accessible as well as clearly marked to prevent damage.
- In freezing climates, the valve should be dismantled, and water drained during the winter months.

### **TROUBLSHOOTING RAF 62**

PROBLEM	CAUSE	СНЕСК	SOLUTION
The valve does not open.	<ol> <li>Valve 6 is turned off.</li> <li>Blocked water connections.</li> </ol>	1. Check state of valve.	<ol> <li>Open valve 6.</li> <li>Turn off water supply to the valve. Dismantle and clean connections in valve and pilot. Reassemble and activate.</li> </ol>
The valve does not close.	<ol> <li>Valve 5 is turned off.</li> <li>Clogged or stuck needle valve.</li> <li>Blocked self- flushing filter #4.</li> <li>Foreign object on seal seat.</li> </ol>	<ol> <li>Check state of valve.</li> <li>Check state of valve.</li> <li>Constant downstream water flow.</li> </ol>	<ol> <li>Open valve 5.</li> <li>Repeat adjustment and operating instructions from 1 to 3.</li> <li>Turn off water supply to the valve. Remove filter and clean or replace it if needed. Reassemble and activate.</li> <li>Turn off water supply to valve. Remove cover and diaphragm. Remove foreign object. Check that diaphragm body and cover are not damaged. Reassemble and activate.</li> </ol>
Unstable pressure.	<ol> <li>Needle valve is improperly adjusted.</li> <li>Blocked or damaged pilot.</li> <li>Blocked water connections.</li> </ol>	<ol> <li>Irregular downstream pressure.</li> <li>Irregular downstream pressure.</li> <li>Irregular downstream pressure.</li> </ol>	<ol> <li>Repeat adjustment and operation instructions from 1 to 6.</li> <li>Turn off water supply to the valve. Dismantle and clean drain connections in pilot. Check that membrane and O-rings are not damaged. Reassemble and activate.</li> <li>Turn off water supply to the valve. Dismantle and clean connections. Reassemble and activate.</li> </ol>