

# IOM RAF 62

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

**RAPHAEL VALVES INDUSTRIES**

## DESCRIPTION

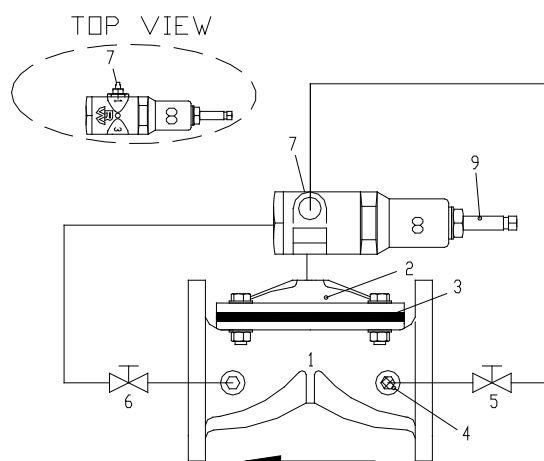
This pressure-reducing valve is an automatic control valve designed to reduce a higher upstream pressure into a preset lower downstream pressure, and to maintain this pressure constantly regardless of flowrate or upstream pressure fluctuations.

## 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

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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.
7. 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.

**To open 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

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- 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.

## TROUBLESHOOTING RAF 62

PROBLEM	CAUSE	CHECK	SOLUTION
The valve does not open.	<ol style="list-style-type: none"> <li>1. Valve 6 is turned off.</li> <li>2. Blocked water connections.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check state of valve.</li> </ol>	<ol style="list-style-type: none"> <li>1. Open valve 6.</li> <li>2. 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 style="list-style-type: none"> <li>1. Valve 5 is turned off.</li> <li>2. Clogged or stuck needle valve.</li> <li>3. Blocked self-flushing filter #4.</li> <li>4. Foreign object on seal seat.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check state of valve.</li> <li>2. Check state of valve.</li> <li>4. Constant downstream water flow.</li> </ol>	<ol style="list-style-type: none"> <li>1. Open valve 5.</li> <li>2. Repeat adjustment and operating instructions from 1 to 3.</li> <li>3. Turn off water supply to the valve. Remove filter and clean or replace it if needed. Reassemble and activate.</li> </ol> <p>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.</p>
Unstable pressure.	<ol style="list-style-type: none"> <li>1. Needle valve is improperly adjusted.</li> <li>2. Blocked or damaged pilot.</li> <li>3. Blocked water connections.</li> </ol>	<ol style="list-style-type: none"> <li>1. Irregular downstream pressure.</li> <li>2. Irregular downstream pressure.</li> <li>3. Irregular downstream pressure.</li> </ol>	<ol style="list-style-type: none"> <li>1. Repeat adjustment and operation instructions from 1 to 6.</li> <li>2. 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>3. Turn off water supply to the valve. Dismantle and clean connections. Reassemble and activate.</li> </ol>

**RAPHAEL**, founded in 1949, is the first Israeli manufacturer of water control valves. RAPHAEL's research department constantly strives to introduce new and innovative products and solutions for water control systems including water works, fire-protection and irrigation systems.



Waterworks



Fire Protection



Irrigation



Smart Solutions

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