



IOM RAF 10

Float Level Control Valve
2-Way Float Pilot
1"-16"



DESCRIPTION

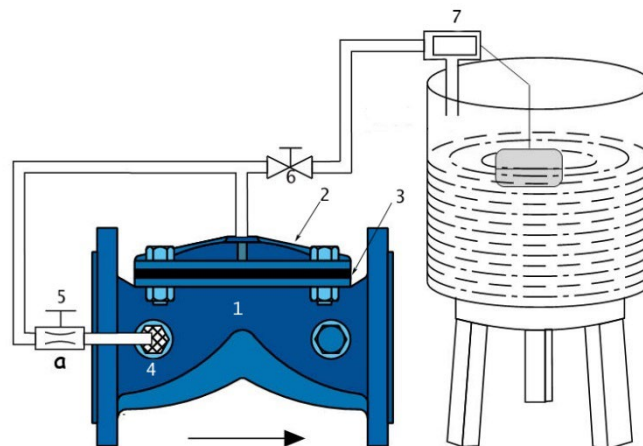
This modulating float level control valve is an automatic control valve designed to open as water level drops and close at the level determined by the float arm above the water.

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 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. Needle valve
6. Two-way valve
7. Two-way float pilot



OPERATING INSTRUCTIONS

1. Make sure that there is a flow demand from the tank and the float arm # 7 is completely dropped open.
2. Close needle valve # 5 all the way and then reopen it for 1-2 turns. The needle valve adjusts the hydraulic reaction speed. The more the needle valve is opened the quicker the reaction is. While adjusting the needle valve, please keep in mind that opening too much will impair the valve ability to open fully due to pressure buildup between the RAF control chamber and the float arm port.
3. Set float arm to the desired water level when the arm is at fully closed position (use adjusting screw at arm pivot). Make sure the float arm is well secured to the tank and will not swing.
4. Use a 3/8" nylon or copper tube to connect the 1/2" float arm valve # 7 to the 1/4" ball valve #6.
5. Open 2-way valve # 6. Water will flow freely out of the float arm valve and the RAF will open fully.
6. Hold the float arm by hand and lift to the close position. Water will stop flowing out of the float arm valve and a few seconds later the RAF will close drip tight.

To close the RAF manually, close 2-way valves # 6.

To maintain preset water level, open 2-way valves # 6.

MAINTENANCE

- No maintenance is 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-10

PROBLEM	CAUSE	CHECK	SOLUTION
The RAF does not open.	1. Valve # 6 is turned off.	1. Check state of valve.	1. Open valve #6.
	2. Blocked water connections.	2. No water is coming out of the float valve # 7.	2. Turn off water supply to the valve. Dismantle and clean all connections including valve's cover inlet and connecting tub between valve # 6 & float valve # 7. Reassemble and activate.
	3. The minimal pressure for RAF opening is too low. Keep in mind that the elevated water column from the RAF location to the float location must be added to the minimum pressure required to push the diaphragm open.	3. Check the minimal opening pressure per valve size in the RAF catalogue	3. Increase pressure as necessary or consult Raphael for a different float pilot type that will vent at valve elevation.
The RAF does not close	1. Float valve # 7 is stuck open or will not seal.	1. Check state of valve.	1. Clean or replace float valve as necessary.
	2. Blocked or stuck needle valve # 5.	2. Check state of valve.	2. Repeat adjustment and operating instructions from 1- 3.
	3. Foreign object on the sealing seat.	3. Constant small water flow downstream.	3. Turn off water supply to the valve. Remove cover and take away foreign object. Check that diaphragm body and cover are not damaged. Reassemble and activate.
	4. Blocked self-flushing filter (4).	4. No water is coming out of the float valve # 7 when open.	4. Turn off water supply to the valve. Remove filter. Clean and replace if needed. Clean water connections, reassemble and activate.