

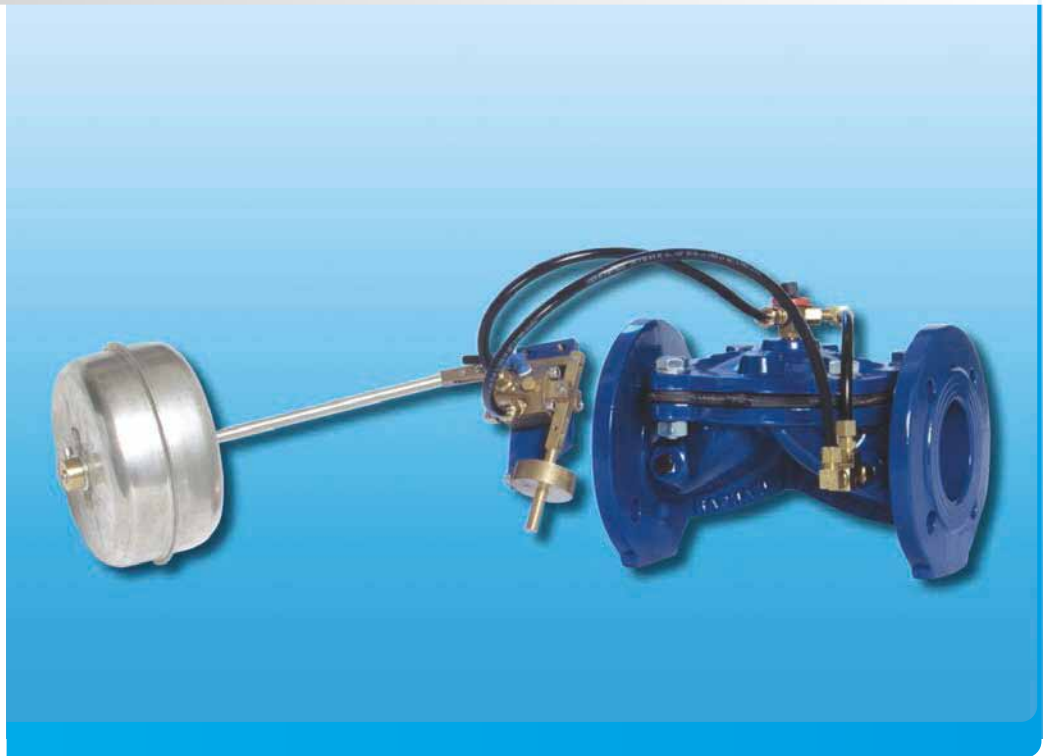
RAF GENERAL PURPOSE HYDRAULIC VALVES

RAF 13 Bi - level Float Control Valve

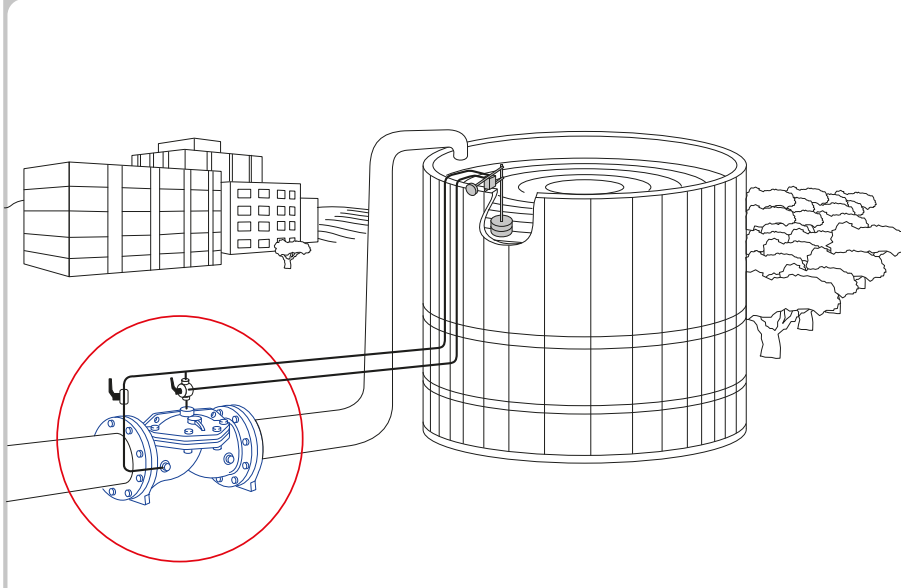
Description

RAF 13 is used to control filling of water reservoirs and tanks. The RAF 13 is a non-modulating service valve, operating as an on/off valve. The RAF valve is activated by the line pressure only and controlled by a float pilot. The valve will open at a low preset water level and close at a preset high water level, different than the opening level. The RAF 13 allows filling and draining of a reservoir or a water tank in a level range that can be easily changed.

The RAF13 stays in its last position (fully open or fully closed) as long as the water level is in between minimum and maximum preset levels.



Typical Application



Use RAF 13 for reservoirs and water tanks for level control in any situation that water level controlled. No need for energy other than line pressure. RAF 13 is best fit where On/Off, non-modulating valve operation is essential.

Recommended Flow

Nominal Diameter		Flow Rate Max.m ³ /h	
mm	Inch	Normal	Intermittent
40	1.5	25	35
50	2	45	60
65	2.5	60	80
80-50-80	3-2-3	50	60
80-65-80	3-2.5-3	70	100
80	3	90	120
100-80-100	4-3-4	90	120
100	4	150	180
125-100-125	5-4-5	150	200
150-100-150	6-4-6	150	200
150	6	320	400
200	8	550	750
250	10	950	1150
300	12	1200	1700

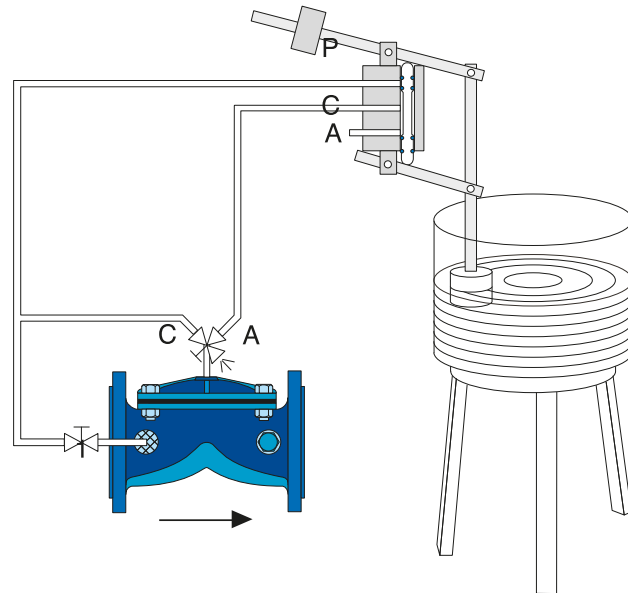
RAF 13 control mode

RAF 13 Float level control Valve is activated by line pressure and controlled by a three-way float pilot. The float is located inside the reservoir as shown. The vertical water level changes are conveyed to the float.

Automatic Operation:

When the water level reduces the float slides down on the rod due to its weight. When it reaches the minimum preset level indicated by the lower stopper attached to the Pilot's rod, the pilot's vent port is connected to the control chamber of the RAF. The diaphragm of the RAF is forced upwards by line pressure, the RAF opens and reservoir is filled.

When water level rises, the float slides upwards on the rod. The valve in this case will remain open until maximum preset level (upper stopper) is reached. At maximum level the float forces upper stopper up. The control chamber is connected then through the pilot to pressure supply. The line pressure forces the RAF diaphragm downward and the valve closes, cutting water supply to the reservoir.



RAF 13 - Bi-level Float Control Valve

Manual Operation:

To open the valve overriding the float place the Selecting Cock in **Open** position.

To close the valve overriding the float place the Selecting Cock in **Close** position.

Adjustment

After installing the float pilot adjust the upper stopper to maximum required water level, fixing it to the rod. Adjust in the same manner the lower stopper in the required minimum water level. Place the selecting Cock in **auto** position. The float should not suffer fluctuations caused by the waves in the reservoir. The float should be protected from the water inlet of the reservoir or water tank and as distant as possible

Please Specify:

- Maximum Operating Pressure (Closed valve).
- Minimum & Maximum Flow rates.
- Maximum water level.
- Float rod length if not standard.

Standard RAF 13:

Basic RAF valve Rilsan Coated

Self-cleaning screen filter

Brass Pilot P-73

Stainless Steel float

Stainless Steel Float rod (Standard 1m.)

Selecting Cock valve (3 port ball valve)

Reinforced plastic tubing

Special Features:

Enamel coating

Large capacity external filter

Stainless Steel Pilot P-73T

-

Stainless steel rod extension

-

Copper or stainless steel tubing