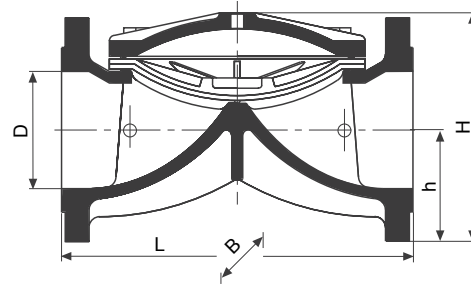


FLOAT LEVEL CONTROL VALVE

RAF 10



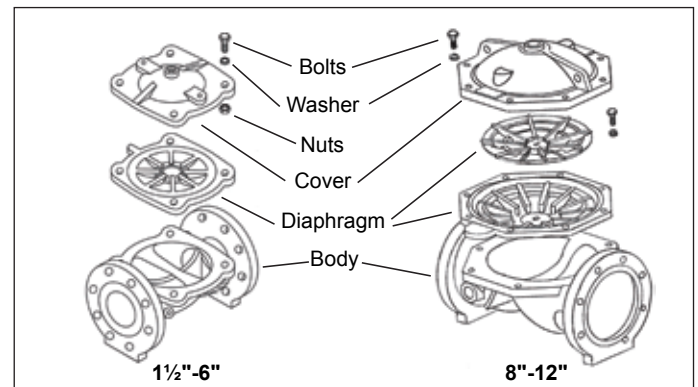
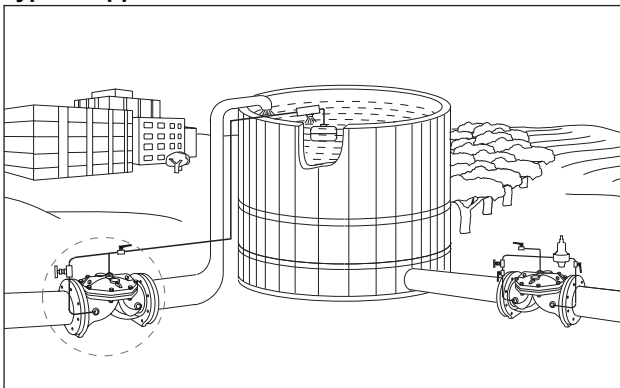
Description

RAF 10 is used to maintain a preset water level in a reservoir or water tank in a simple, economic manner. The RAF valve is activated by the line pressure. The RAF 10 stays open as long as the water level in the reservoir is below the preset level. As the water level rises & lifts the float, the valve gradually closes.

Nom. Dia.		L	H	B	h	Weight	Connections
mm	inch	mm				kg	
* 40	1 1/2	159	80	96	29	1.8	Thread/Grooved
* 50	2	190	100	125	38	3.9	Thread/Grooved
* 50	2	190	159	165	76	7.9	Flange
65	2 1/2	216	110	125	46	5.0	Thread/Grooved
65	2 1/2	216	173	185	80	10.1	Flange
80-50-80	3-2-3	230	125	125	50	5.0	Thread/Grooved
80-50-80	3-2-3	230	175	200	100	11.0	Flange
80-65-80	3-2 1/2-3	244	127	138	50	5.4	Thread/Grooved
80-65-80	3-2 1/2-3	216	192	200	92	11.4	Flange
80	3	290	138	200	50	10.4	Thread/Grooved
* 80	3	283	200	200	100	17.5	Flange
100-80-100	4-3-4	283	222	222	111	20.1	Flange
100	4	346	220	230	60	16.5	Thread/Grooved
* 100	4	305	220	230	99	25.5	Flange
125-100-125	5-4-5	305	243	250	120	29.5	Flange
150-100-150	6-4-6	325	285	285	143	35.8	Flange
* 150	6	406	295	300	142	49.5	Flange
* 200	8	470	383	354	160	71.0	Flange
250	10	635	430	464	197	109.0	Flange
300	12	749	474	480	234	140.0	Flange

* Note : Standard Stock

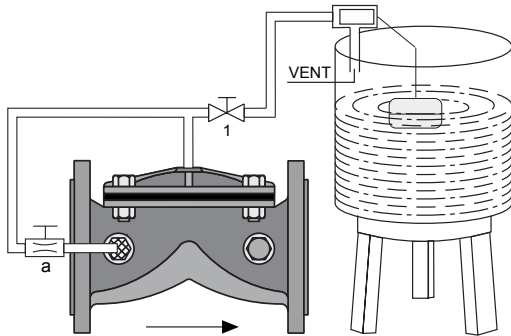
Typical Application



RAF 10 - Float Level Control Valve controls the water level of a water tank. The valve can also be located above the water level. Use RAF 10 for reservoirs and water tanks level control in any situation that maximum water level should be maintained. No need for energy other than line pressure. RAF 10 is best fit in remote sites. Due to its simple design, it is virtually maintenance free.

FLOAT LEVEL CONTROL VALVE

RAF 10



RAF 10 Float Level Control Valve

RAF 10 Control mode

RAF Float level control Valve is activated by line pressure and controlled by a two-way float pilot. The pilot vent is opened or closed according to the float level. The float is located inside the reservoir as shown. The vertical water level changes are amplified by a lever and conveyed to the float. The float valve will close when water level reaches its preset.

Automatic Operation:

When the water level is low, the lever drops due to the float weight. The vent is open. The control chamber of the RAF is drained through the vent. The diaphragm of the RAF is forced upward by the line pressure. The RAF opens and reservoir is being filled. As the float lever moves upward, due to the rising water level inside the water tank, the vent closes mechanically. The RAF is then closed by the line pressure, forcing its diaphragm downwards.

Recommended Working Conditions Range

Nom. Dia.		Inlet Pressure, Bar		*Kv factor Fully opened Valve	Control Chamber Volume	
mm	inch	Min.	Max.	RAF	Liter	Gallon
* 40	1.5	0.8	16	40	0.06	0.016
* 50	2	0.7	16	70	0.08	0.021
65	2.5	0.7	16	100	0.16	0.042
80-50-80	3-2-3	0.7	16	72	0.08	0.021
80-65-80	3-2.5-3	0.7	16	130	0.16	0.042
* 80	3	0.6	16	170	0.3	0.079
100-80-100	4-3-4	0.6	16	170	0.3	0.079
* 100	4	0.4	16	290	0.7	0.185
125-100-125	5-4-5	0.4	16	290	0.7	0.185
150-100-150	6-4-6	0.4	16	300	0.7	0.185
* 150	6	0.4	16	490	1.5	0.396
* 200	8	0.4	16	790	3.5	0.924
250	10	0.3	16	1400	7.6	2.006
300	12	0.3	16	1800	7.6	2.006

$Q = Kv\sqrt{\Delta P}$
 ΔP = Head loss across the valve, bars

Q = Flow rate, m³/h
 $Cv = 1.16Kv$

* Note : Standard Stock

Recommended Flow

Nom. Dia.		Flow Rate m ³ /h	
mm	inch	Min.	Max.
40	1.5	3	25
50	2	5	45
65	2.5	5	70
80-50-80	3-2-3	5	50
80-65-80	3-2, 5-3	5	70
80	3	5	90
100-80-100	4-3-4	5	90
100	4	10	150
125-100-125	5-4-5	10	150
150-100-150	6-4-6	10	150
150	6	15	320
200	8	40	550
250	10	80	950
300	12	100	1200

Technical Specifications

- Body and Cover: Cast iron with Rilsan (Nylon 11) coating. Epoxy or enamel coating are available by request.
 - Bolts, Nuts and Washers: Zinc plated Steel.
 - Diaphragm: Natural Rubber reinforced with Nylon Fabric.
- Working Pressure: Up to 16 bars.
 Temperature Rating: -10°C to 80°C

Standard RAF 10:

- Basic RAF valve Rilsan Coated
- Self-cleaning screen filter
- Brass Pilot P-10
- Brass float arm
- Stainless Steel float
- Cock valve
- Needle valve
- Reinforced plastic tubing

Please Specify:

- Maximum Operating Pressure (Closed valve)
- Minimum & Maximum flow rates.
- Maximum water level

Adjustment

Adjust the needle valve a to allow a sufficiently short closure time. Preset the the pilot to the reservoir's desired maximum water level.

Special Features:

- Enamel coating
- Large capacity external filter
- Stainless steel pilot P-10T
- Stainless steel float arm
- Copper or stainless steel tubing

