



Installation & Operating Manual



ART 6100 ON / OFF Float Control Valve

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ART 6100 Function

- Ball Valve
 - o The main function is to shut off the water between pipe system and pilot control pipe system.

- Needle Valve
 - o The main function is to adjust the valve opening speed.

ART 6100 Installation

- Installation of Albion ART 6100 should only be undertaken by competent professionals;
- Confirm that the product size and pressure meet the design requirement before installation commences;
- Ensure that the flow direction matches the flow direction arrow on the valve;
- Ensure that the pipework system has been flushed to remove any debris prior to installation;
- Sizes up to and including DN 100 can be installed either horizontally or vertically. Sizes DN 125 and above to be installed horizontally only;
- Ensure that sufficient space is available both upstream and downstream of the valve to allow suitable maintenance;
- Ensure the valve is in an open position prior to commissioning the valve;
- Ensure that the float is over 1.5 m away from the valve outlet, If there are chances of Water waves it is recommended to have a shield protecting the float system.
- Albion Art 6100 on/ off float control valve comes with On OFF pilot 600mm length with which water height gap which can be adjusted by 150mm for open and close.
- For the main valve to open there should be a minimum inlet pressure of 0.80 bar

ART 6100 Repair Instruction

Main valve will not close

Failure Mode	Repair Method
Float ball is too close to the inlet and impact by the wave of coming water	Float ball is far away from the water inlet or add the protective cover for the protection
Sealing position leakage	Tighten the nut or change the sealing parts
Needle valve doesn't work	Open the needle valve (anticlockwise) and flush the seat and clean any debris. Close the valve to the original position after 5 seconds
Main valve diaphragm broken	Change the diaphragm
Debris accumulated under the bottom of main valve	Disassemble, clean, check and change the damaged parts
Seat leakage	Replace seal
Joint leakage between the SS connection parts	Tighten the nut or change SS part

Main Valve will not open

Failure Mode	Repair Method
Needle valve open too much	Close the needle valve , then slowly open the needle valve till the outlet normally supply the water
Ball valve close	Open the ball valve
Float valve blocked	Disassemble, clean and check the float valve

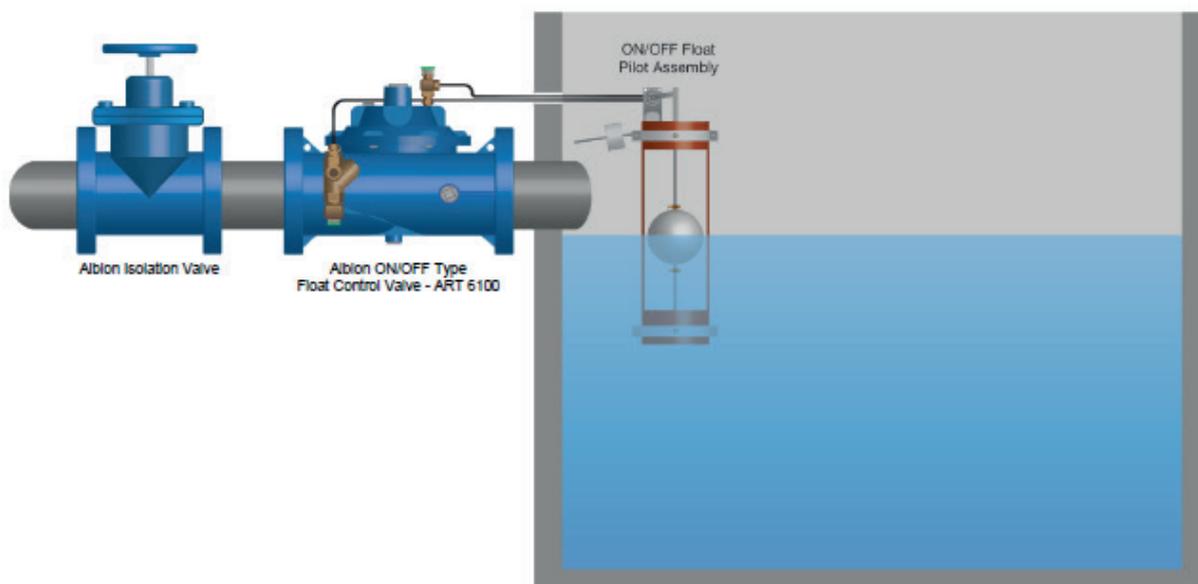
Working Principles

Main valve: -

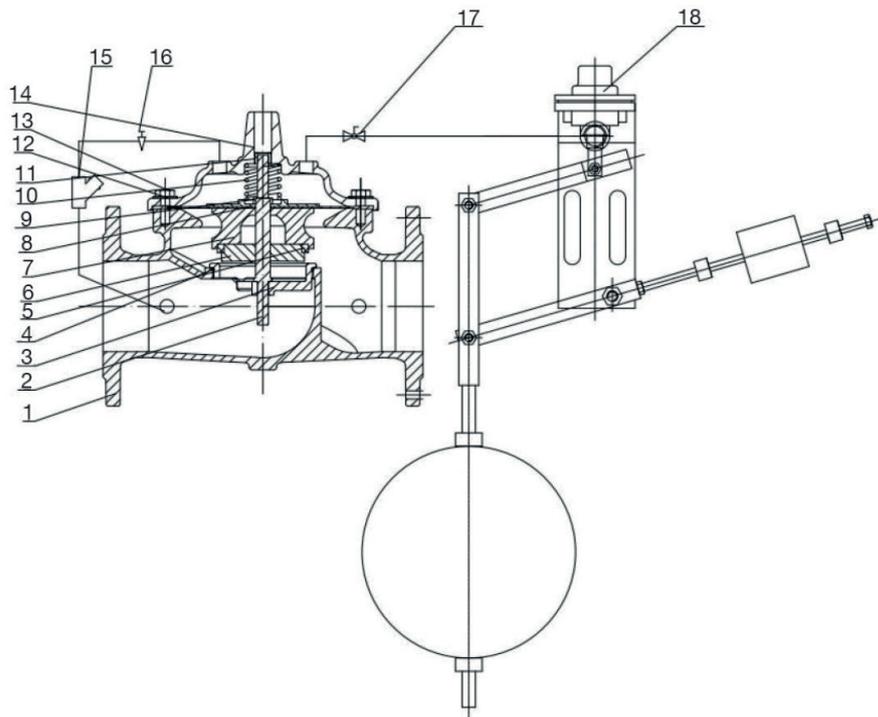
The float valve and needle valve are connected by a stainless steel pipe. When the water level drops the float ball drops the water of the main valve chamber and water discharges from the float valve. Albion ART 6100 on off float valve can be set at a maximum height difference of 150mm as mentioned above, so when the water level reaches the lower set level the main valve opens and water starts filling inside the tank and main valve will close once the upper set level of the float pilot is reached.

Means the main valve operates at 2 levels set by the float pilot. When the float pilot reaches the lower set level then the force of the upper chamber decreases, and the water inlet pressure pushes the disc to open the main valve which then allows water to flow. When the water level goes up and reaches the upper set level the float ball forces the valve to close, water comes in the main valve upper chamber until the pressure equal to the inlet pressure this then closes the main valve as the upper chamber force is bigger than the seat force.

Float Control Valve Installation Layout



Main Valve Part List



N.	Part Name	Materials
1	Body	Ductile Iron
2	Stem	Stainless Steel 304
3	Seat	Stainless Steel 304
4	O-Ring	NBR
5	Disc Ring	NBR
6	Disc Retainer	Ductile Iron
7	Disc Guide	Ductile Iron
8	Diaphragm	EPDM
9	Diaphragm Washer	Ductile Iron
10	Spring	Stainless Steel 304
11	Cover Bearing	Stainless Steel 304
12	Screw	Stainless Steel 304
13	Washer	Stainless Steel 304
14	Cover	Ductile Iron
15	Strainer	Stainless Steel 304
16	Needle Valve	Stainless Steel 304
17	Ball Valve	Stainless Steel 304
18	Float Control Valve	Stainless Steel 304



About Albion Valves (UK) Ltd

Albion has been supplying valves and fittings to the building services and industrial markets for the past 40 years.

Albion was created with the sole purpose of providing quality products at an affordable price. With a growing reputation for quality and reliability, Albion is now an established brand providing the industry with a trusted alternative to premium-priced products.

Our commitment to setting the highest standards in all areas of our business means, if you're looking for quality, service, delivery and choice — you'll find it's all at Albion.

Quality

Whatever you need, you can rest assured that if it comes from Albion it has been designed and manufactured to deliver optimum performance and is accredited with the necessary approvals. Our in-house quality department are always on hand too!

Service

We pride ourselves on our customer service – we have even won awards for it! Our cradle to grave approach means you will never be on your own!

Delivery

We know that time is money, and when a priority project depends on a part you can trust Albion to deliver – next day for all orders placed before 4:00PM.

Choice

We may have started out with a single brass ball valve, but our range has grown substantially since and we now consider ourselves to be a 'One Stop Shop' with our comprehensive range. It is becoming more and more apparent to the industry, that it really is all at Albion.