



Add-on Device for Circulation of Water in Air Valves

Application

Water Supply

Description

The A.R.I. 4everFlow is an add-on device that circulates water in air valves. It prevents ice from forming inside the air valve at low temperatures and prevents bacterial growth in air valves.

Frost Protection

Uses the media stream as an energy source - ideal when no external energy source is available.
Prevents ice formation - a frozen valve can no longer protect the customer's line and might burst, causing flooding and damage.
For total protection, it is essential that there is constant flow.

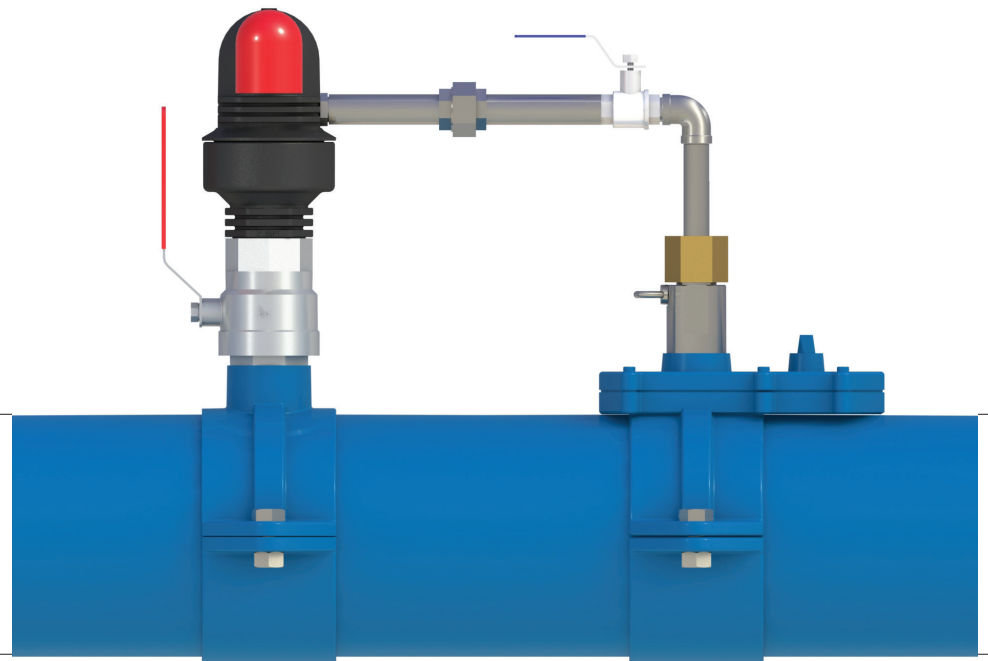
Hygiene

Complies with potable water regulations and standards - prevents dirt and bacterial growth inside the air valves.



Installation

- Areas susceptible to freezing
- Municipal water systems
- Industrial clean water systems



Main Features

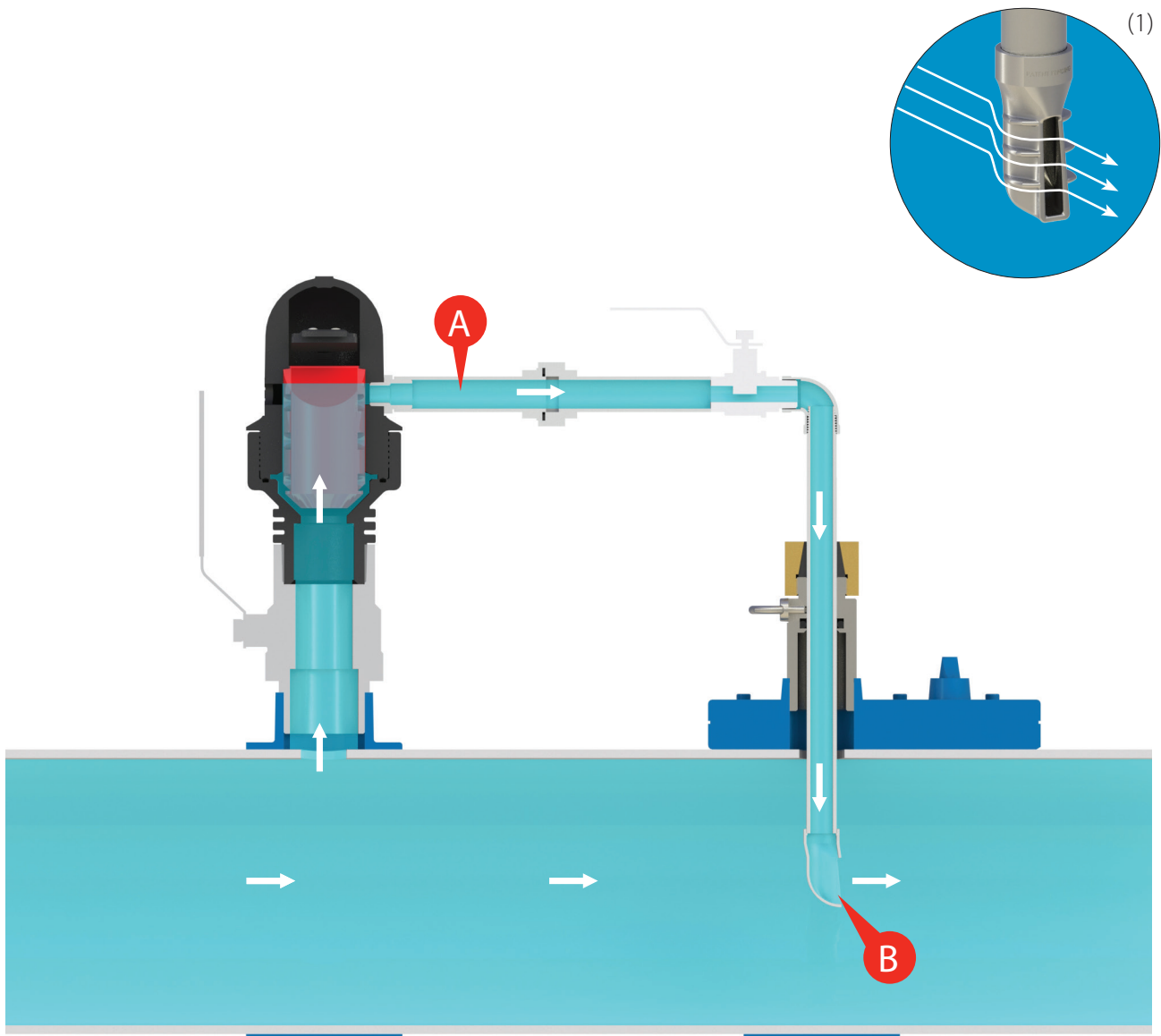
Applicable with A.R.I. D-040 and D-70-P air valves	•	
Suitable for new or existing installations	•	Solution for Frost and Hygiene problems
No external power needed	•	Relies on reliable Hydraulics principle - The Bernoulli's law
Non-corrosive and durable	•	All internal parts are made of stainless steel 316
Optional Bi-directional operation	•	The Pitot tube can circulate water in the air valve from the inside out or from the outside in

Principle of operation

The 4everFlow's advanced design is based on Bernoulli's law.

The Pitot tube expands at its end forcing the liquid to travel a longer distance around the Pitot perimeter (1). The longer traveling distance produces high liquid velocity at the Pitot end.

Bernoulli's Law refers to the reverse relationship between fluid velocity and measured pressure. Therefore, when the fluid velocity increases, the pressure simultaneously decreases, forming a lower pressure zone (B). The pressure differential between zones (A) and (B) is the driving force for the fluid to flow from (A) to (B), circulating the water in the air valve.



Technical Specifications



Supports pipe diameters up to 200 mm



Works reliably from a minimum flow speed of approx. 0.06 m/s.

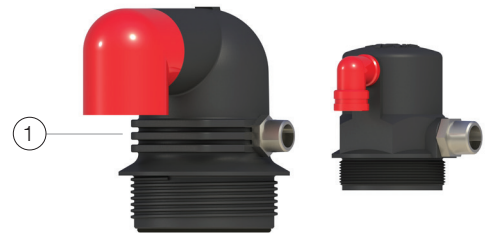


Working pressure range: 0.1 - 16 bar



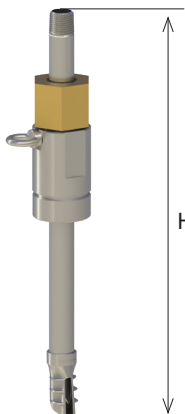
Maximum working temperature: 60° C.
Maximum intermittent temperature: 90° C.

Upon ordering, please specify: model, size, working pressure, thread/ flange standard and type of liquid.



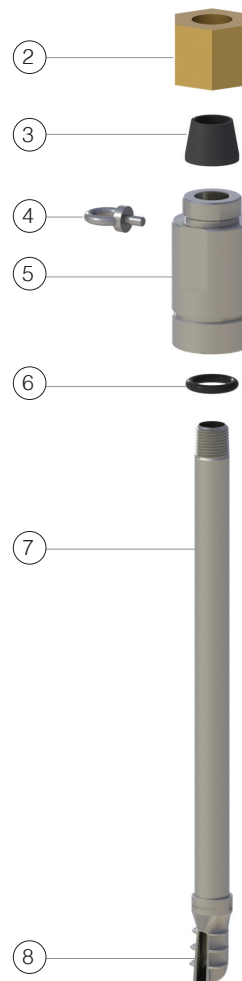
Parts List and Specification

Part	Material
1. D-040 / D-070-P Operating Valve Body + 1/2" connection	
2. Nut	Brass
3. Cone	Reinforced Nylon
4. Safety Ring	Stainless Steel SAE 316
5. Pitot Body	Stainless Steel SAE 316
6. O-Ring	NBR / EPDM
7. Pitot Tube	Stainless Steel SAE 316L
8. Pitot	Stainless Steel SAE 316



H - Pitot tube length according to the main pipe diameter

For optimal sizing and ordering please contact A.R.I.



Recomended Installations

