INSTALLATION AND OPERATING MANUAL

953.001.0236 Version: 04.2025

AFRISO

AFRISO Sp. z o.o.
Szałsza, ul. Kościelna 7
42-677 Czekanów
www.afriso.pl

Zespół Obsługi Klienta
Tel. +48 (0) 32 330 33 55
info@afriso.pl

Automatic air vent PrimoVent with Aquastop

NOTE!

The product may only be used if you have fully read and understood these operating instructions. The manual is also available on the AFRISO websites in the Internet.

WARNING!

Product may only be installed, commissioned, and dismantled by trained personnel.

Changes and modifications carried out by unauthorised persons may cause danger and are prohibited for safety reasons.

Risk of scalding by hot medium! Perform all installation and maintenance work after the system has cooled down.

APPLICATION

The automatic air vent is designed to remove air from closed heating systems in accordance with PN-EN 12828. We recommend installing it with a stop valve or another type of shut-off valve.

PREDICTABLE INCORRECT APPLICATION

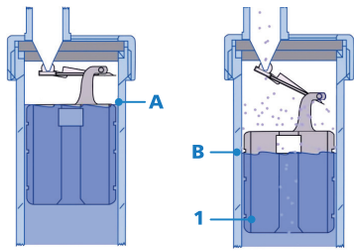
Automatic air vents are not intended for use with the following liquids and gases:

- drinking water,
- a mix of water and glycol with a glycol concentration greater than 50%,
- water vapour,
- oil,
- petrol.

DESCRIPTION

A float is mounted in the centre of the air vent housing and connected to a lever. When there is no air in the system (i.e. the medium level in the air vent is high), the float remains in the upper position and the lever keeps the vent opening in the air vent cover closed. If air enters the system, it accumulates in the air vent, causing the medium level to drop. As a result, the float moves downward and pulls the lever, which opens the vent opening. The air is then released to the outside.

When the air is removed, the medium level rises, causing the float to lift and press the lever against the vent opening, thereby closing it.



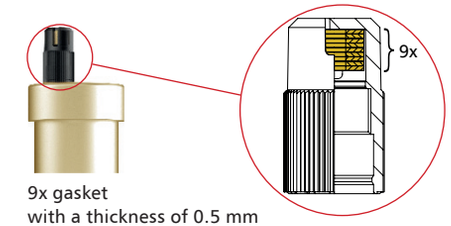
A. High water level – no air venting
B. Low water level – automatic air venting
1. Float

AIR VALVE WITH AQUASTOP SYSTEM

The Aquastop system prevents the medium from leaking out of the system in the event the vent becomes leaky, for example due to dirt.

The Aquastop valve contains nine moisture-absorbing gaskets. When these gaskets become saturated with the medium, they expand and seal the vent outlet.

Once air reappears in the vent and the gaskets begin to dry, they shrink in volume, allowing air to be vented from the system again.



9x gasket
with a thickness of 0.5 mm

MOUNTING

The vertical air vent should be installed in an upright position at the highest point of the system and at all locations where there is a risk of air pockets. For correct installation, follow the instructions below:

1. Before installing the air vent, flush the system to remove any dirt and pre-fill it with the medium.
2. If a stop valve is supplied with the air vent, screw it in using a wrench and tighten it. Seal the thread between the system connection and the stop valve with a suitable seal (e.g. PTFE).
3. Screw the air vent into the stop valve by hand, without using any additional tools.

The connection is sealed by an O-ring located on the air vent connection. After installation, the air vent automatically removes any remaining air from the system.

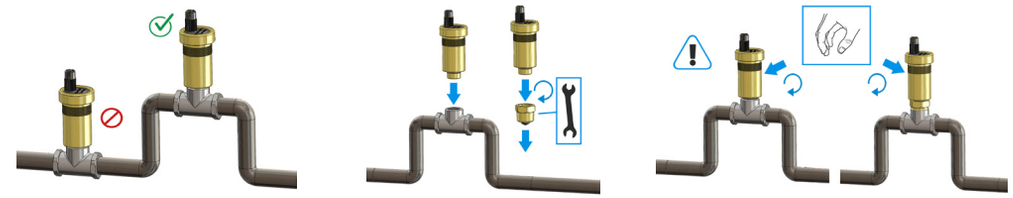


Fig. 1. Mounting of a vertical air vent

The angle air vent may only be installed on radiators that are specifically designed for this purpose. To ensure proper installation, follow the steps below:

1. Cut off the radiator from the system by closing the connection valves.
2. Drain all medium from the radiator.
3. Seal the thread of the air vent with a suitable sealing material and install it in the designated connection at the top of the radiator.
4. Reopen the radiator's connection valves to refill it with the medium.
5. Check the air vent and its connection for any leaks.

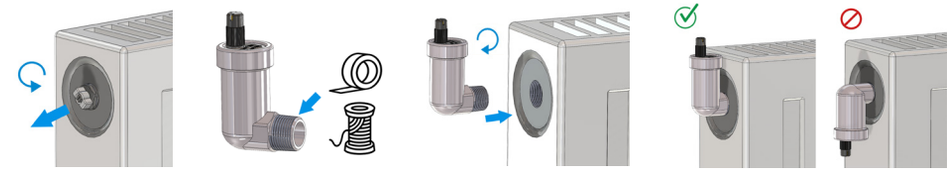


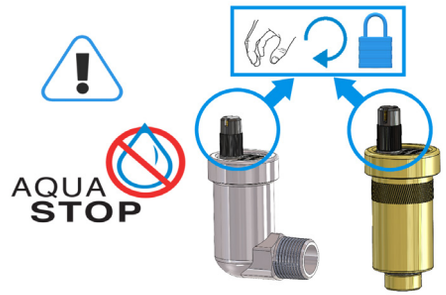
Fig. 2. Mounting of the angled air vent

ATTENTION! PrimoVent air vents are not intended for venting the entire system. When venting the entire system or filling it with medium, the air vent valve must be shut off.

OPERATION

The quality of the medium directly affects the proper functioning of air vents. The system should be filled with treated water or a properly prepared mix of water and glycol. The use of filters and dirt separators is strongly recommended.

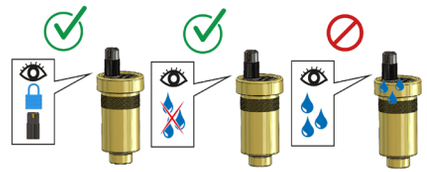
ATTENTION! The Aquastop valve nut should be tightened when the air vent is operating correctly. If the Aquastop valve is fully unscrewed, the gaskets may fall out.



The use of a stop valve allows the air vent to be replaced without draining the medium from the system. In the event of a malfunction, remove the air vent from the system. Open the housing and clean the internal mechanism using clean water and a detergent.

Ensure that the gaskets in the Aquastop valve are completely dry before reassembly. After reinstalling the air vent, check all connections for tightness. Make sure the Aquastop valve is fully tightened.

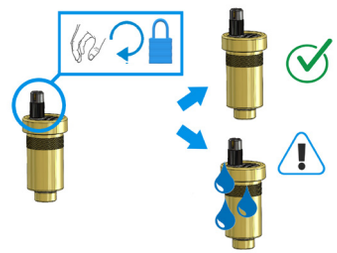
Do not perform any maintenance on the system while the automatic air vent is in operation. Before draining the system, all automatic air vents must be removed. Failure to do so may result in permanent damage to the components.



MAINTENANCE

Automatic air vents are maintenance-free devices. However, it is necessary to periodically (at least once a year) check the tightness of the system connections and visually inspect the condition of the air vent and its associated fittings.

If a leak is observed beneath the valve, remove the air vent and clean it according to the procedure described in the “Operation” section.



TECHNICAL DATA

Parameter / part	Value / material
Operating pressure	• 77 710 10, 77 735 10, 77 735 61, 77 753 00: max 12 bar • 77 729 10: max 8 bar
Operating temperature	• 77 710 10, 77 735 10, 77 735 61, 77 753 00: -20÷110°C, temporarily 120°C, but not longer than 2 hours • 77 729 10: -20÷95°C
Connection	• 77 710 10, 77 735 10, 77 735 61, 77 729 10: G3/8” • 77 753 00: R1/2”
Stop valve connection	R1/2” (only in versions 77 735 10, 77 735 61, 77 729 10)
Housing material	• 77 710 10, 77 735 10: brass • 77 735 61, 77 753 00: nickel-plated brass • 77 729 10: glass-reinforced polyamide
Cover material	glass-reinforced plastic
Compatible media	water, mixt of water and glycol with a maximum concentration of 50%

APPROVALS AND CERTIFICATES

Automatic air vents with Aquastop are subject to the Pressure Directive 2014 /68/EU and are not CE marked in accordance with Article 4.3 (recognised engineering practice).

DECOMMISSIONING, DISPOSAL

1. Dismount the product.
2. Dispose of the product according to local directives and guidelines.

The product is built from recyclable materials. If you have any questions or problems with disposal, please contact the appropriate distributor or manufacturer’s point.

WARRANTY

Product guarantee in accordance with the general conditions of sale and delivery.

CUSTOMER SATISFACTION

For AFRISO customer satisfaction is paramount. If you have any questions, suggestions or product problems, please contact us.