

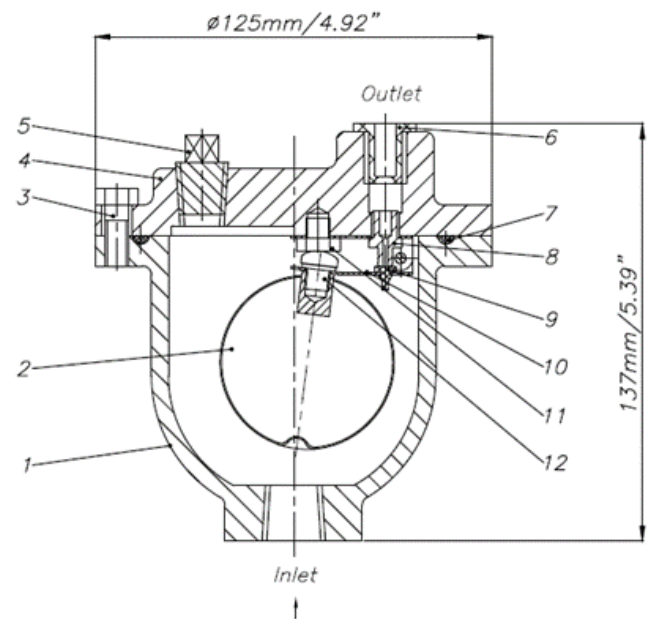
Size range: ½" - 1"



The ARV combination air valve automatically vents air, which accumulates at high points in a system during operation. The valve will also exhaust and admit quantities (volumes) of air during filling or draining operations and after emergency conditions such as a power failure. Both the air release and air / vacuum functions are needed to maintain pipeline efficiency while providing protection from adverse pressure.

Characteristics

- Fusion bonded coating interior and exterior meet or exceed all applicable of AWWA C550 standard.
- The valve is a float operated, resilient seated valve designed to handle clean fluids.
- NPT thread.
- A small orifice releases air under pressure during normal pipeline operation.
- The float is connected to the vent via a linkage mechanism which is capable of operating the vent under full pipeline pressure.



Working pressure & temperature

2,07 MPa / 20,7 bar / 300 psi rated at -10°C to 120°C.

Materials

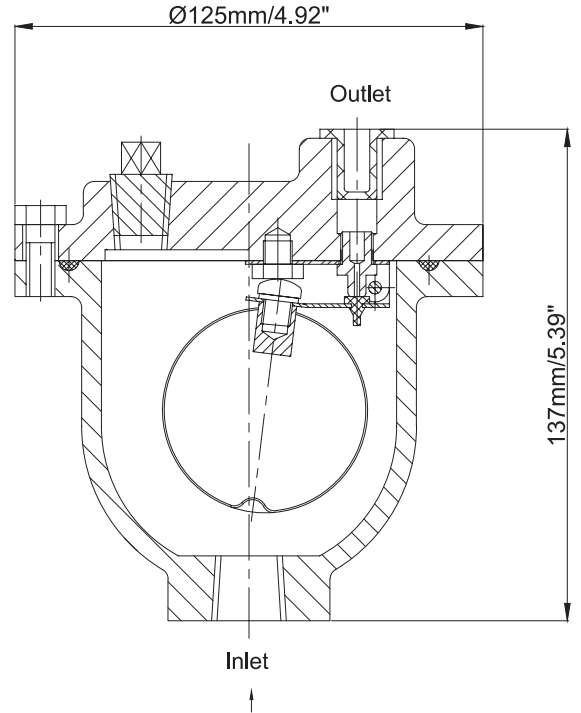
Item	Part name	Material	ASTM specifications	CN specification
1	Body	Gray cast iron	A126 Class 8	EN 1561 EN-GJL-250
2	Float ball	Stainless steel	A276 Type 304	EN 10088 X5CrNi18—10
3	Cover bolt	Carbon steel	A307 Grade B	Grade 8.8
4	Cover	Gray cast iron	A126 Class B	EN 1561 ENV-GJL-250
5	Plug	Malleable iron	A47 Grade 22010	EN 1562 EN-GJMB-300—6
6	Orifice button	Viton	/	/
7	Gasket	Rubber EPDM	D2000	EN 681
8	Exhaust nozzle	Stainless steel	A276 Type 304	EN 10088 X5CrNi18-10
9	Exhaust nozzle seat	Rubber EPDM	D2000	EN 681
10	Float arm	Stainless steel	A276 Type 304	EN 10088 X5CrNi18—10
11	Bolt	Stainless steel	F593 Grade 304	EN 10088 X5CrNi18—10
12	Screw	Stainless steel	F593 Grade 304	EN 10088 X5CrNi18—10

Dimensions

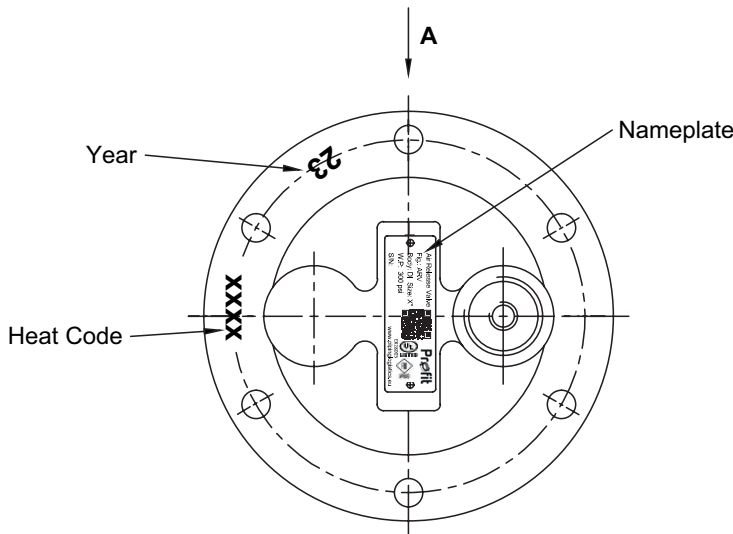
Size	Inlet size	Outlet size	Orifice size
1/2"	1/2" NPT	1/2" NPT	1/16"
3/4"	3/4" NPT	1/2" NPT	1/16"
1"	1" NPT	1/2" NPT	1/16"

Approvals

- FM approved to FM standard 1344.
- UL 2573 listed.



Marking nameplate and body



Air Release Valve
Fig.: ARV

○ Body: DI Size: X"
W.P: 300 psi
S/N:






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Installation, maintenance & operating instructions

Receiving and storage:

- Inspect valves upon receipt for damage in shipment.
- Handle all valves carefully without dropping.
- Valves should remain boxed, clean and dry until installed to prevent weather related damage.
For long term storage greater than six months, the valve must remain in the box and stored indoors.
- Do not expose valve to sunlight or ozone for an extended period.

Installation:

Products must be installed exclusively by qualified personnel and strictly following the instructions below. The installation of the valve is important for its proper operation.

- Valves must be installed at the system high points in the vertical position with the inlet down.
- During closure, some fluid discharge will occur so vent lines should extend to an open drain area in plant service.
- A shutoff valve (for example the profit THB-F) should be installed below the valve in the event servicing is required.

Operating and maintenance:

The valve works fully automatically, and does not require operation steps. If there is an shut off valve installed this needs to be in open position. The combination air valve requires no scheduled lubrication or maintenance.

If leakage occurs from the seat, the valve should be removed and inspected for wear or possible damage from foreign matter.

Trouble shooting:

Some possible problems and solutions are presented below to assist you in troubleshooting the valve assembly in an efficient manner.

- Leakage at bottom connection: tighten valve flanged connection. If leak persists, remove valve and replace gasket.
- Leakage at cover: tighten bolts or replace gasket.
- Valve leaks when closed: disassemble and inspect seats, orifice button and floats.
NOTE: floats can contain sand for weight but if water is detected, replace float.
- Valve not venting air: check that operating pressure does not exceed working pressure.
Disassemble valve if problem persists.

Disassembly:

The valve can be disassembled without removing it from the pipeline. Or for convenience, the valve can be removed from the line. All work on the valve should be performed by a skilled mechanic with proper tools. No special tools are required. **WARNING:** the valve must be drained before removing the cover or pressure may be released causing injury.

- Close inlet shutoff valve. Remove hood if needed. Remove the cover bolts on the top cover.
- Pry cover loose and lift off valve body.
- Clean and inspect all parts.
- If the seat is damaged, it should be replaced.

Reassembly:

All parts must be cleaned.

- Worn parts, gaskets and seals should be replaced during reassembly.
- Place the cover assembly on body and adjust the bolt holes position to insert the bolts.
- Insert the bolts and tighten.
- Slowly open inlet isolation valve.

GENERAL INFO

- Installers should be trained or experienced to install and understand the product.
- Read and understand all technical datasheets and installation instructions before attempting to install, remove or adjust any Profit piping products.
- Depressurise and drain the sprinkler installation system before attempting to install, remove or adjust any Profit piping products.
- Never work on piping systems that are pressurised and / or filled with water.
- Piping Logistics reserves the right to change specifications, designs and / or standard equipment without notice and without incurring in any obligations.
- Use the necessary Personal Protection Equipment (PPE) to avoid personal injury (helmet, safety shoes and goggles, Profit gloves).



Failure to follow these instructions could result in death or serious injury and property damage.

We advise to always store our products in closed and dry environments, the products do not need any specific maintenance once installed on an aboveground sprinkler installation.

REVISION TABLE

Date	△	Notes
07/02/2024		Initial release.