

Series 34

Air Release Valves



This product meets Federal Mandate for Lead Content Limit

- Ductile Iron Body
- Stainless Steel Trim and Float
- Easily serviced without removal from pipeline
- Working pressures to 800 psi
- Engineered for drip tight seal at low pressures

Cla-Val Series 34 Air Release Valves are designed to vent entrained air that collects at high points in a pipeline. This valve continuously eliminates air from a system by releasing small quantities of air before large air pockets can occur. In many installations, continuing accumulations of air in the pipeline (lacking air release valves); cause flow capacity to slowly decrease; power consumption slowly increases; un-noticeable at first, until flow drops dramatically, even stopping due to air blocks in the piping. Another problem resulting from excessive air accumulation is unexplained pipeline rupture. These ruptures are passed off as the result of ground settling or defective pipe, Where as in reality its large air pockets that greatly increase pressure surges (normally occurring) when flow stops and starts causing the rupture. During normal pipeline operation, air accumulation at the high point will displace the liquid within the air valve and lower the water level in relation to the float. As level of the liquid lowers, where the float is no longer buoyant, the float drops and opens the valve orifice seat and permitting accumulated air to be exhausted to atmosphere. After air is released, the liquid level in the air valve rises and closes the valve orifice seat. This cycle automatically repeats as air accumulates inside the air release valve, thereby preventing the formation of air pockets.

Installation

Series 34 Air Release Valves are typically installed at high-points in pipelines and at regular intervals, of approximate 1/2 mile, along uniform grade line pipe.

Mount the unit in the vertical position on top of the pipeline with an isolation valve installed below each valve in the event servicing is required. A vault with adequate air venting and drainage is recommended.

Note:

Vacuum check valves can be supplied on the discharge of all size air release valves to prevent air re-entering the system; during negative pressure conditions

Purchase Specifications

The air release valve shall be of the float operated, simple lever or compound lever design, and capable of automatically releasing accumulated air from a fluid system while the system is pressurized and operating.

An adjustable designed orifice button shall be used to seal the valve discharge port with drip-tight shut-off. The orifice diameter must be sized for use within a given operating pressure range to insure maximum air venting capacity.

The float shall be of all stainless steel construction and guaranteed to withstand the designed system surge pressure without failure. The body and the cover shall be ductile iron and valve internal parts shall be stainless steel and Viton™ or Buna-N® (standard) for water tight shut-off.

The air release valve shall be manufactured per ANSI/AWWA C512-04 Series 34 from Cla-Val in Newport Beach, CA, USA.

Product Specifications

Sizes

1/2", 3/4", 1", 2", 3" NPT

Pressure Ratings (see note)

150 psi
175 psi
300 psi
800 psi

Temperature Range

Water to 180°F

Note: Specify when operating pressure below 10 PSI

Materials

Body and Cover:
Ductile Iron ASTM 536 65-45-12

Float:

Stainless Steel

Internal Parts:

Stainless Steel

Seal:

Viton™ or Buna-N® (Standard)

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