### **Double Orifice Air Release Valve Manufacturer in India**

Speciality Valve stands out as a leading manufacturer of <u>Double Orifice Air Release Valves in India</u>, serving regions such as Karnataka, Uttar Pradesh, and Andhra Pradesh. These specialised valves, equipped with two separate orifices, efficiently release trapped air in pipelines and water distribution systems, preventing the formation of air pockets and ensuring smooth fluid flow.



### What is a Double Orifice Air Release Valve?

A <u>Double Orifice Air Release Valve</u> is an innovative combination of a small and large orifice air valve housed within a compact cylindrical structure.

# **Functionality of a Double Orifice Air Release Valve:**

Purpose: These valves are designed to automatically release accumulated air during normal pipeline operations. They facilitate rapid pipe filling and draining by allowing air to escape or enter the system efficiently.

## Unique Design Features:

- Dual Orifices: The valve incorporates two orifices for air release. One orifice is positioned at the top, while the other is at the bottom of the valve.
- Aerokinetic Design: The innovative design prevents premature closure due to air rushing out of the system. It ensures that the valve closes only after all air has left the system and water has entered the chamber.
- Materials and Coatings: Ductile iron components are coated with GSK-approved fusion-bonded epoxy for high durability. Other internal parts are made of corrosion-resistant materials such as AISI 316 stainless steel or ABS. Seals are composed of WRAS-approved EPDM rubber with excellent compression set properties.
- No Moving Parts Touching Internal Coating: The valve design ensures that no moving parts come into contact with the internal coating.

#### Parts:

1. Body: The main structure housing internal components.

- 2. Float Assembly: Facilitates buoyant movement for efficient air release.
- 3. Orifices: Dual openings for effective air expulsion and vacuum prevention.
- 4. Sealing Mechanism: Ensures tight closure when needed.
- 5. Valve Cover: Protects internal components and facilitates maintenance.
- 6. Pressure Relief Mechanism: Safeguards against excessive pressure.
- 7. Mounting Flange: Enables secure installation in the pipeline.

# **Advantages of Double Orifice Air Release Valve:**

- 1. Improved Air Removal: Efficiently eliminates trapped air for optimal system performance.
- 2. Prevention of Vacuum Formation: The second orifice acts as a vacuum breaker, avoiding negative pressure issues.
- 3. Reduced Water Hammer: Mitigates water hammer effects for enhanced pipeline integrity.
- 4. Enhanced System Efficiency: Ensures consistent fluid flow by expelling unwanted air.
- 5. Extended Pipeline Lifespan: Contributes to the longevity of the pipeline infrastructure.
- 6. Reliability: Provides consistent and reliable air release in diverse operational conditions.
- 7. Versatility: Suitable for various industries and applications requiring air release.
- 8. Easy to Maintain: Designed for straightforward maintenance procedures.

# Industrial usage of Double Orifice Air Release Valve:

Water and Wastewater Treatment Plants: Ensures efficient air release, contributing to optimal performance in treatment processes.

Power Generation Industry: Facilitates reliable air expulsion, enhancing operational stability in power generation systems.

Oil and Gas Industry: Contributes to the prevention of air pockets, ensuring smooth fluid flow in oil and gas pipelines.

Chemical Processing Industry: Maintains system efficiency by expelling unwanted air, crucial for chemical processing operations.

Mining Industry: Addresses air release needs, promoting consistent fluid flow in mining applications.

Paper and Pulp Industry: Enhances system reliability by preventing air pockets in paper and pulp processing pipelines.

Maritime and Shipping Industry: Contributes to pipeline integrity by efficient air release in maritime and shipping applications.

Automotive Industry: Ensures reliable air expulsion, supporting consistent fluid flow in automotive manufacturing processes.

Petrochemical Industry: Crucial for preventing vacuum formation, promoting safety and efficiency in petrochemical operations.

Aerospace Industry: Supports reliable air release, maintaining operational integrity in aerospace applications.

### **Description:**

1. Body Material: Ductile iron, cast iron, WCB, WCC, WC6, LCB, LCC.

2. Size: 1/2" to 8"

3. Pressure No: PN6 to PN25

4. Class: 150 to 3005. Ends: Flanged

**Visit us:** <a href="https://www.specialityvalve.com/product-category/double-orifice-air-release-valve/">https://www.specialityvalve.com/product-category/double-orifice-air-release-valve/</a>

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