



**MULTI- FUNCTIONAL  
COMBINATION AIR VALVE  
MODEL D-070, D-070 P**



*Accessories*

**Protective Screen**

Eliminates the infiltration of unwanted matter into the air valve. The screen prevents the penetration of debris or insects into the D-070 air valve. It is attached to the valve outlet and allows for the connection of a standard drain pip.

**Victaulic connection**

In diamaters: 4",6",8",12"

**MULTI-FUNCTIONAL COMBINATION AIR VALVE**  
**First and only air valve  
operating without an air/ vacuum float**

Utilizes the proven technology of a diaphragm used in control valves that operates automatically, with manual control, with scada remote control.

The nominal opening discharges all of the air at high flow rates during the filling of the line and protects the line by admitting air into the system during line drainage.

High velocity air or even air mixed with water spray will not prematurely close the air valve. Only water entry will seal the air valve.

When water enters the air valve, the diaphragm slowly closes the air valve, discharging water as the valve closes. This unique system greatly reduces line surges caused by sudden closure of traditional air & vacuum valves.

The air release element utilizes the patented rolling seal mechanism that guarantees continuous release of accumulated air while the system is under pressure.

The Air & Vacuum component of the valve is normally closed, thus preventing the entry of unwanted particles into the air valve while it is installed on the line.

*The New Generation of Air Valve  
Helps Reduce Water Hammer*

A unique patented air valve Prevents local water hammer and slam, thereby reducing surge effects in the pipeline.

*Technological breakthrough  
in air valve surge protection*

Unique design and operation. Exceptional solution for treating local water hammer. Ensures complete air discharge from the pipeline. Normally closed – prevents intrusion of debris and insects. The D-070 offers an unparalleled advancement in the field of air valve treatment for local water hammer and surge protection of water transmission systems. The air valve’s distinctive technology ensures optimal treatment of surge phenomenon and efficient pipeline air discharge. Combining innovative design and unique operation, the D-070 is the most cost effective solution for protecting your pipeline. The D-070 is another groundbreaking product from A.R.I., a company endowed with the knowledge, experience and reliability to provide you with advanced innovative solutions for the protection of your pipeline.





# D-070 D-070 P

## MULTI- FUNCTIONAL COMBINATION AIR VALVE



### Main Features

- Working pressure range:  
D-070 : 3 - 250 psi. Testing pressure: 360 psi.  
D-070 P : 3 - 150 PSI. Testing pressure: 250 psi.
- Maximum working temperature: 140° F.
- Maximum intermittent temperature: 194° F.
- Sizes: D-070 : 3", 4", 6", 8" and 12".  
D-070 P : 2", 3" (threaded or flanged)
- Valves are manufactured with flanged ends to meet ASA 150 standard or any requested standard.
- Valve coating: FBE coating according to the standard DIN 30677-2.
- Other coatings are available upon request.
- Internal components are corrosion-resistant.
- Prevents slam and reduces pressure surges in the air valve and the pipeline.
- Prevents the intrusion of debris and contaminants into the system.
- Valve is lightweight and small for easy installation; its operation simple and reliable.
- Built-in connection at the outlet for drainage.
- Smooth and gradual closing unaffected by water flow.
- Extremely quiet closing.
- Automatic air release component releases large quantities of air without becoming obstructed.

### Functions and Advantages

#### Flush Tap

**New – Flush both the air valve and pipeline without dismantling. You just open the ball valve!**

A new application for the Dynamic D-070 air valve, created with the addition of a small flushing ball valve. A.R.I.'s engineers mounted a small ball valve on the valve cover of the Dynamic D-070 Combination Air Valve. This ball valve serves as a control valve. Opening it triggers the opening of the large air/vacuum orifice, resulting in full passage high capacity water flow, depending on the valve's orifice diameter and the pressure in the pipe.

This additional function is applicable for the following uses:

- Prevention of lengthy water stagnation in the riser and/or dead-end pipe sections.
- Flushing of pipe sections.
- Enables adaptability to remote-control flushing.
- Testing the functionality of the air valve.

**Note:** To perform the flushing operation, you do not need to close the isolating valve under the D-070 or remove the D-070 from the pipeline. You just need to open the flush valve.

#### Vacuum Breaker

**model D-070 VB**

Unique vacuum breaker that operates without a float and utilizes the rolling diaphragm principle. Reacts quickly to admit large volumes of air into the water system, thus impeding down-surges and, consequently, positive pressure surges in the line. Allows for air intake only, without discharging air into the atmosphere. Normally closed when the line is not operating, thus preventing the infiltration of debris and insects into the water system. Lightweight and small for easy installation; its operation is simple and reliable.

#### One-Way Out Air Valve

**model D-070 V**

Unique air valve that operates without a float and utilizes the rolling diaphragm principle. The nominal opening discharges all of the air at high flow rates during the filling of the line. Only water entry will seal the air valve. When water enters the air valve, the diaphragm slowly closes the air valve, discharging water as the valve closes. This unique system greatly reduces line surges caused by sudden closure of traditional air & vacuum valves. Allows for air discharge only, without admitting air into the system. Normally closed when the line is not operating, thus preventing the infiltration of debris and insects into the water system. Lightweight and small for easy installation; its operation is simple and reliable.