

# A.R.I. D-025L

**Aquestia**  
Directing the Flow



Wastewater

## Combination Air Valve for Wastewater

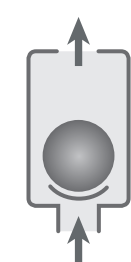
### Description

The D-025L is a reduced bore compact combination air valves installed on a wastewater transmission system to increase pipeline efficiency and reduce energy requirements by improving the hydraulic operation of the system. A continuous air gap in the valve body separates the wastewater from the sealing mechanism.

### Installation

- Wastewater & water treatment plants
- Wastewater and effluent water transmission lines

### Operation



Air Discharge



Air Intake



Automatic  
Air Release



One Way out



One Way In



Non Slam

## Features and Benefits

Conical body shape & unique design	maximum air gap / minimum body length
Built-in continuous air gap	separates the liquid from the sealing mechanism
Float assembly and sealing mechanism linkage	free movement, turbulence will not unseal the sealing mechanism
Funnel-shaped lower body	residue matter falls back into the system pipeline
Rolling Seal Mechanism	leak-free sealing over wide range of pressure differentials
Body and internal parts - high-strength UV resistant reinforced composite and rubber materials	non-corrosive and durable
Screened threaded outlet	compatible for vent pipe connection, prevents insect intrusion
Dynamic design	high capacity air discharge, no premature closure
Tap	releases pressure and drains valve prior to maintenance

## Technical Specifications

Size Range	2" - 4"
Sealing pressure range	0.05 - 16 bar (PN 16) Testing pressure: 1.5 times maximum working pressure
Temperature	Maximum working temperature: 60° C Maximum intermittent temperature: 90° C
Valve coating	Fusion bonded epoxy coating in compliance with standard DIN 30677-2

Upon ordering, please specify: model, size, working pressure, thread / flange standard and type of liquid

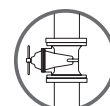
## Valve Selection Options

- Connections: threaded BSP/NPT, flanged
- Flanged ends to meet any requested standard
- Standard: reinforced nylon body, optional: stainless steel
- Optional Add-on Components:
  - One-way, Out-only attachment, allows for air discharge only, prevents air intake
  - Vacuum Breaker, In-only attachment, allows for air intake only, prevents air discharge
  - Non-Slam discharge-throttling attachment, allows for free air intake, throttles air discharge
- Additional Product Configurations:
  - SB Underground Air Valve System
  - ARISENSE Air Valve Monitoring System



The valve installed under the air valve must be fully open to prevent damage or malfunction and ensure performance within the specifications of the air valve.

For complete installation instructions, please refer to the IOM document.



## Non-Slam Add-on Component Data Table for Variable Orifices

Size	Discharge orifice (mm)	Total NS area (mm <sup>2</sup> )	NS orifice (mm)	Switching point (bar)	Flow at 0.4 bar (m <sup>3</sup> /h)
2" (50mm)	37.5	12.6	4	Spring loaded normally closed	23
3" (80mm)					
4" (100mm)					

## Dimensions and Weight

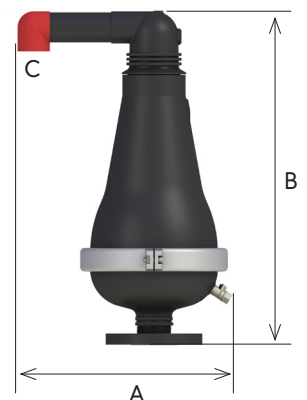
Size	Dimensions (mm)		Connections	Weight (kg)		Orifice Area (mm <sup>2</sup> )	
	maximum A	B		C	RN	ST ST	A / V
2" (50mm) THR	365	566	1½" BSP F	16.5	12.6	804	12
2" (50mm) FL	365	571	1½" BSP F	17.5	15.0	804	12
3" (80mm) THR	365	566	1½" BSP F	16.9	12.9	804	12
3" (80mm) FL	365	571	1½" BSP F	18.5	16.3	804	12
4" (100mm) FL	365	582	1½" BSP F	19.5	17.9	804	12

THR - Threaded

FL - Flanged

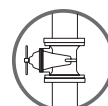
### NOTE

All product weights and dimensions are approximate, due to the differences in flange standards, materials and variable accessories.



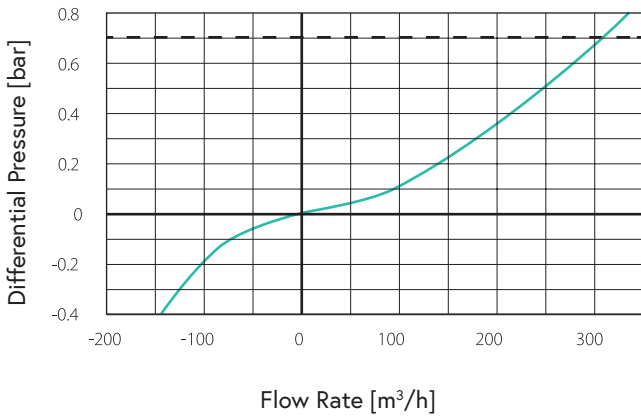
The valve installed under the air valve must be fully open to prevent damage or malfunction and ensure performance within the specifications of the air valve.

For complete installation instructions, please refer to the IOM document.

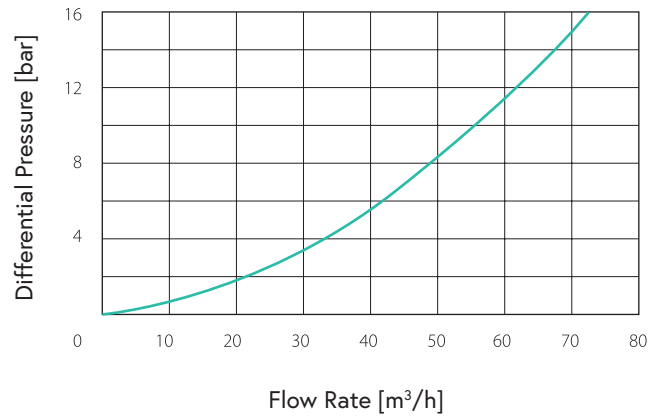


## Flow Charts

Air & Vacuum Flow Rate



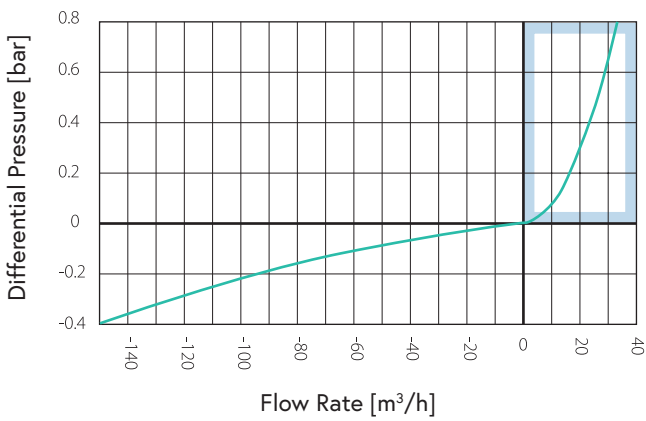
Automatic Air Release Flow Rate



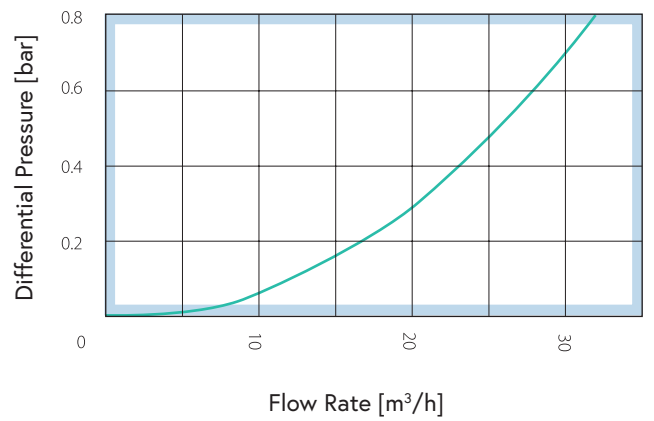
--- Max. recommended design air discharge

## D-25 L NS

Air & Vacuum Flow Rate



Air Discharge Flow Rate



## Parts List and Specification

Part	Material
<b>1. Air Valve Body Assembly</b>	
1a. Body	Reinforced Nylon
1b. Extension	Polypropylene / Cast Stainless Steel
1c. Discharge Elbow	Polypropylene
1d. Non-Slam Component (Optional)	Reinforced Nylon / Polypropylene + Acetal + Stainless Steel
<b>2. Seal Assembly</b>	
2a. Rolling Seal Assembly	Nylon + EPDM + Stainless Steel
2b. Float Connector	Foamed Polypropylene
2c. Clamping Stem	Reinforced Nylon
<b>3. Body Assembly</b>	
3a. O-Ring	BUNA-N
3b. Body	Reinforced Nylon / Cast Stainless Steel
<b>4. Float Assembly</b>	
4a. Domed Nut	Stainless Steel 316
4b. Stopper	Polypropylene
4c. Spring	Stainless Steel 316
4d. Float & Rod	Foamed Polypropylene + Stainless Steel 316
<b>5. Base Assembly</b>	
5a. O-Ring	BUNA-N
5b. Clamp Assembly	Cast Stainless Steel
5c. Base	Reinforced Nylon / Cast Stainless Steel
5d. Tap	Bronze / Stainless Steel 316
5e. Flange (Optional)	Reinforced Nylon / Cast Stainless Steel



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