

A.R.I. S-050

 **Aquestia**
Directing the Flow



Waterworks

Automatic Air Release Valve

Description

The A.R.I. S-050 Series is an automatic Air Release Valve that releases accumulated air from a pressurized system, improving pipeline hydraulic efficiency by reducing head losses and improving flow.

Installation

- On pumps
- On liquid transmission pipelines
- After filters & pressure reducers

Operation




Automatic Air Release



One Way Out

Features and Benefits

Rolling seal	leak-free sealing over a wide range of pressure differentials
One-size orifice	covers a wide pressure range (up to 25 bar)
Nylon strainer	prevents plugging from debris
All parts are suitable for corrosive liquid and environment	non-corrosive and durable parts
Lightweight, small dimensions	easily installed, even on polymeric piping systems, simple to maintain
Unique body and float design	seals at very low pressures(S-050 L)
Continual air gap	separates the liquid from the sealing mechanism (S-050 L)
ATEX certified air valves 	certification is conditional on the customer connecting the designated part on the product to a dedicated ground connection point.

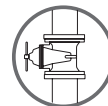
Technical Specifications

Size range	½" ¾" 1"	
Sealing pressure range	A.R.I. S-050 L A.R.I. S-050 A.R.I. S-050 L A.R.I. S-050 A.R.I. S-050 L A.R.I. S-050 C A.R.I. S-052	0.02 - 6 bar (PN6) 0.1 - 10 bar (PN10) 0.2 - 16 bar (PN16) 0.2 - 25 bar (PN25)
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 (Model A.R.I. S-050 C, A.R.I. S-052)	

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

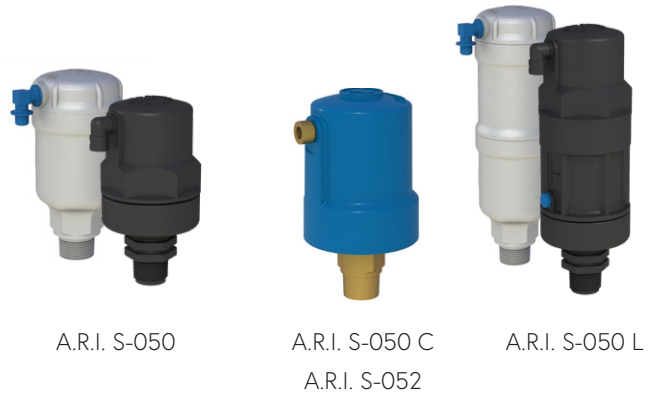
The valve installed under the air valve must be fully open to prevent damage or malfunction and ensure performance within the specifications of the air valve.

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



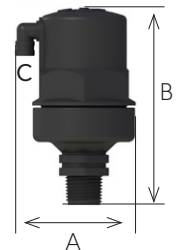
Valve Selection Options

Models	A.R.I. S-050 A.R.I. S-050 L Specifically designed to operate with liquids containing small suspended solids A.R.I. S-050 C Protecting Shell A.R.I. S-052 Protecting Shell
Valve connection	Threaded male BSPT/NPT
Standard materials	Reinforced Nylon, Polypropylene, Stainless Steel 316, Cast Ductile Iron Shell
Optional add-on components	One-way Out attachment, allows for air discharge only, prevents air intake
Pressure rating	PN6 A.R.I. S-050 L PN10 A.R.I. S-050 A.R.I. S-050 L PN16 A.R.I. S-050 A.R.I. S-050 L A.R.I. S-050 C PN25 A.R.I. S-052



Dimensions and Weight

Model	Dimensions (mm)		Connections	Weight (kg)	Orifice Area (mm ²)
	max. A	B			
Nylon Models					
S-050	87	143	1/8" BSP Female	0.3	12
S-050 L	88	223	1/8" BSP Female	0.34	12
Metal Models					
S-050 C	85	148	1/8" BSP Female	1.65	12
S-052	85	148	1/8" BSP Female	1.65	9



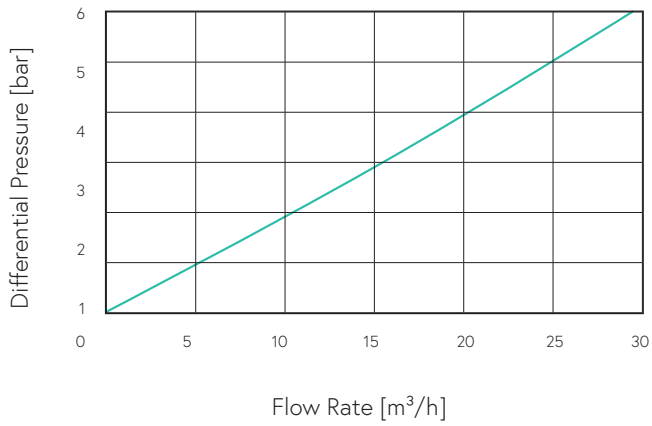
NOTE

Dimension A in the picture and in the table shows the maximum product width.

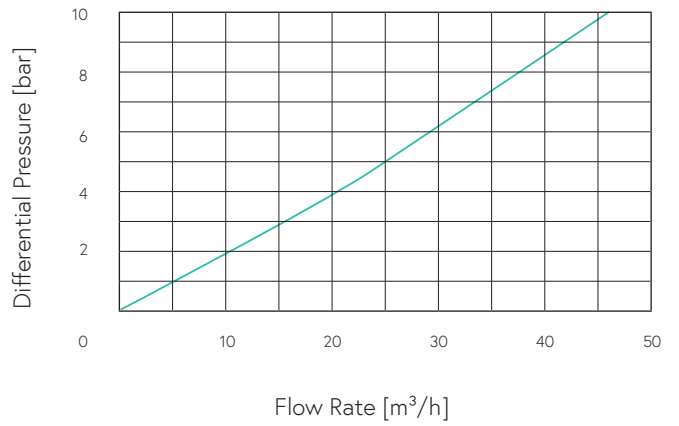
All product weights are approximate, due to the differences in flange standards, materials and variable accessories.

Flow Charts

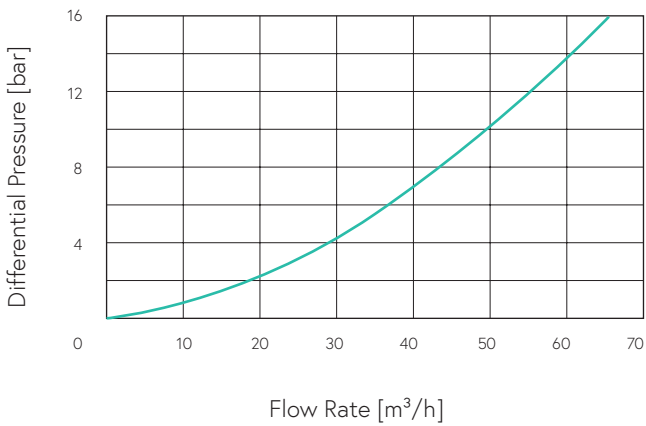
PN6 Automatic Air Release Flow Rate



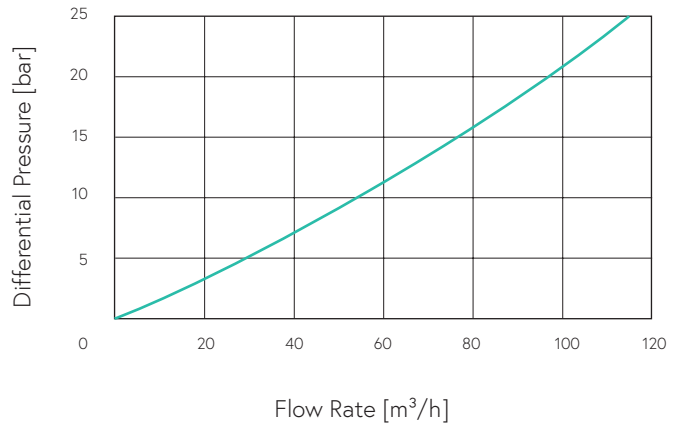
PN10 Automatic Air Release Flow Rate



PN16 Automatic Air Release Flow Rate



PN25 Automatic Air Release Flow Rate



Parts List and Specifications

No.	Part	Material
1	Cover Assembly	
1a	Discharge Outlet	Polypropylene
1b	Body	Reinforced Nylon / Polypropylene
2	Air Release Assembly	
2a	Clamping Stem	Reinforced Nylon / Polypropylene
2b	Float	Foamed Polypropylene
2c	Rolling Seal	EPDM
3	Base Assembly	
3a	O-Ring	NBR
3b	Base	Reinforced Nylon / Polypropylene / Stainless Steel
3c	Strainer	Reinforced Nylon

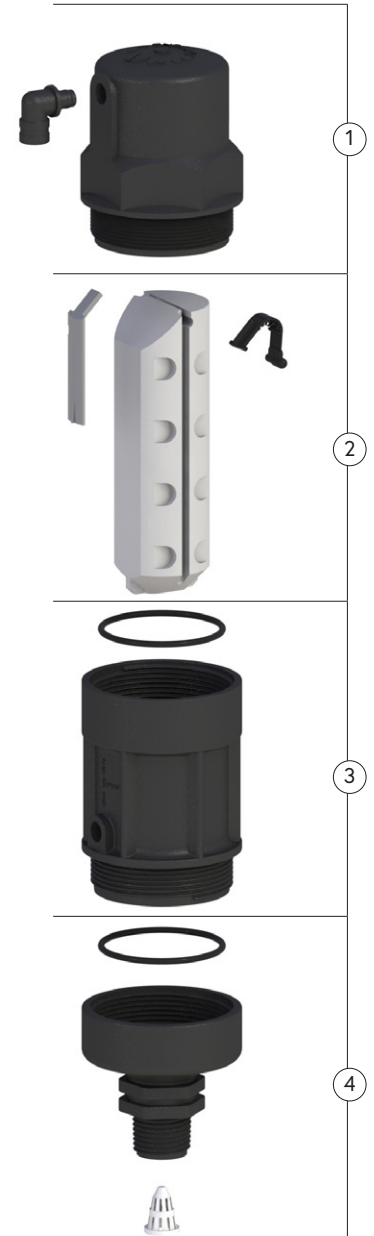
NOTE
Polypropylene for PN10 models only



Parts List and Specifications

No.	Part	Material
1	Cover Assembly	
1a	Discharge Outlet	Polypropylene
1b	Body	Reinforced Nylon / Polypropylene
2	Air Release Assembly	
2a	Clamping Stem	Reinforced Nylon / Polypropylene
2b	Float	Foamed Polypropylene
2c	Rolling Seal	EPDM
3	Extension Assembly	
3a	Extension	Reinforced Nylon / Polypropylene
3b	O-Ring	NBR
4	Base Assembly	
4a	O-Ring	NBR
4b	Base	Reinforced Nylon / Polypropylene
4c	Strainer	Reinforced Nylon

NOTE
Polypropylene for PN10 models only



Parts List and Specifications

No.	Part	Material
1	Cover Assembly	
1a	Discharge Outlet	Brass
1b	O-Ring	NBR
1c	Shell	Ductile Iron
2	Body	Reinforced Nylon
3	Air Release Assembly	
3a	Clamping Stem	Reinforced Nylon / Polypropylene
3b	Float	Foamed Polypropylene
3c	Rolling Seal	EPDM
3d	O-Ring	NBR
4	Base	Brass / Stainless Steel

