A.R.I. D-060

Aquestia
Directing the Flow

Waterworks

Full-bore, Combination Air Valve Series

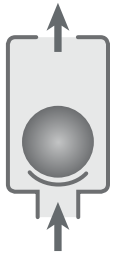
Description

A.R.I. D-060 is a full-bore Combination Air Valve Series. Installed on liquid transmission systems, the Air Valve is designed to improve hydraulic operation by protecting the pipeline, increasing pipeline efficiency, and reducing energy requirements. The Air Valve provides high-capacity air release and intake.

Installation

- Pump stations: downstream of the pump and the check valve
- Downstream and upstream of shut-off valves
- Downstream of deep-well pumps
- On long constant-sloped pipeline segments
- At peaks along the pipeline and at peaks relative to hydraulic gradient
- At end lines
- Before water meters
- On strainers and filters
- Municipal and industrial water conveyance systems

Operation



Air Discharge

Air Intake

Automatic
Air Release

A.R.I. D-060

Aquestia
Directing the Flow

Features and Benefits

Flow cross-sections	Equal to or greater than nominal port area
Simple product design	Easy to install and maintain, reduces downtime
Aerodynamic design	High-capacity air discharge, no premature closure
	Reduces water hammer impact
	Saves energy and increases system efficiency
Unique orifice seat / seal design	Long-term maintenance-free operation
Screen protected outlet	Prevents intrusion of insects and debris
Construction materials	Non-corrosive and durable
Automatic air release valve rolling seal	Leak-free sealing over a wide range of pressure differentials
Automatic air release valve orifice	High flow air release, lessens obstruction by debris
ATEX certified air valves	ATEX certified air valves are optional by customer request. Certification is conditional upon the customer connecting the designated part on the product to a dedicated ground connection point
NSF/ANSI/CAN 61 certified & listed	For drinking water system component
NSF/ANSI 372 certified & listed	Conforms with lead content requirements for "lead-free" plumbing

Technical Specifications

Size range	1"- 10" 2" – 8" (D-065 only)
Working pressure range	A.R.I. D-060L 0.05 - 16 bar (PN16) A.R.I. D-060 0.2 - 16 bar (PN16) A.R.I. D-060-C 0.2 - 16 bar (PN16) A.R.I. D-062 0.2 - 25 bar (PN25) A.R.I. D-065 0.2 - 40 bar (PN40)
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	

A.R.I. D-060

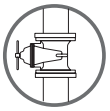
Aquestia
Directing the Flow

Valve Selection Options

Models	A.R.I. D-060 | A.R.I. D-060 C | A.R.I. D-060 L | A.R.I. D-062 | A.R.I. D-065
Valve connection	Threaded male BSPT/NPT (1"-2") Flanged ends to meet various requested standard (2"-10")
Standard materials	Cast ductile iron body
Optional add-on components	One-way out attachment, allows for air discharge only, prevents air intake One-way in attachment, allows air intake only, not allowing air discharge
Pressure rating	PN16 A.R.I. D-060 | A.R.I. D-060 C | A.R.I. D-060 L PN25 A.R.I. D-062 PN40 A.R.I. D-065
Additional product configurations	SB Underground Air Valve System

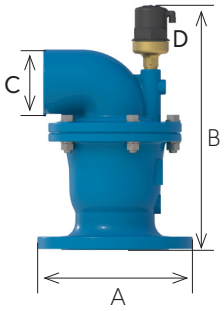
A.R.I. D-060 | A.R.I. D-060 L | A.R.I. D-060 C A.R.I. D-062 | A.R.I. D-065

The isolation 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.

A.R.I. D-060



Aquestia
Directing the Flow

Dimensions and Weight

FL - Flanged THR - Threaded

Model	Size	Dimensions (mm)		Connections		Weight (kg)	Orifice Area (mm²)	
		max. A	B	C	D		A / V	Auto.
A.R.I. D-060								
Horizontal Outlet	1" (25mm) THR	158	303	1½" Female	1/8" Female	4.4	507	12
	2" (50mm) THR	190	380	2" Female	1/8" Female	10	1960	12
	2" (50mm) FL	190	367	2" Female	1/8" Female	12.4	1960	12
	3" (80mm) FL	230	423	3" Female	1/8" Female	19.5	5030	12
	4" (100mm) FL	272	480	4" Female	1/8" Female	30	7850	12
	6" (150mm) FL	440	720	6" Female	1/8" Female	90	17662	12
Screen Cover	2" (50mm) THR	215	323		1/8" Female	10	1960	12
	2" (50mm) FL	215	336		1/8" Female	11	1960	12
	3" (80mm) FL	249	387		1/8" Female	18	5030	12
	4" (100mm) FL	286	431		1/8" Female	25	7850	12
	6" (150mm) FL	375	588		1/8" Female	74	17662	12
	8" (200mm) FL	463	630		1/8" Female	110	31400	12
	10" (250mm) FL	586	788		1/8" Female	140	49087	12
A.R.I. D-060 C / D-062								D-060 C | D-062
Horizontal Outlet	1" (25mm) THR	152	291	1½" Female	1/8" Female	5.3	507	12 | 9
	2" (50mm) THR	190	388	2" Female	1/8" Female	11	1960	12 | 9
	2" (50mm) FL	190	375	2" Female	1/8" Female	13.4	1960	12 | 9
	3" (80mm) FL	230	431	3" Female	1/8" Female	21	5030	12 | 9
	4" (100mm) FL	272	488	4" Female	1/8" Female	31	7850	12 | 9
	6" (150mm) FL	437	720	6" Female	1/8" Female	91	17662	12 | 9
Screen Cover	2" (50mm) THR	210	357		1/8" Female	10	1960	12 | 9
	2" (50mm) FL	210	325		1/8" Female	12	1960	12 | 9
	3" (80mm) FL	243	393		1/8" Female	19	5030	12 | 9
	4" (100mm) FL	280	438		1/8" Female	25	7850	12 | 9
	6" (150mm) FL	375	596		1/8" Female	75	17662	12 | 9
	8" (200mm) FL	463	638		1/8" Female	110	31400	12 | 9
	10" (250mm) FL	586	788		1/8" Female	140	49087	12 | 9
A.R.I. D-065								
Horizontal Outlet	1" (25mm) THR	197	455	1½" Female	1/2" BSP Female	9	507	15
	2" (50mm) THR	218	531	2" Female	1/2" BSP Female	15	1960	15
	2" (50mm) FL	218	518	2" Female	1/2" BSP Female	17	1960	15
	3" (80mm) FL	256	575	3" Female	1/2" BSP Female	24	5030	15
	4" (100mm) FL	292	631	4" Female	1/2" BSP Female	35	7850	15
	6" (150mm) FL	471	820	6" Female	1/2" BSP Female	94	17662	15
Screen Cover	2" (50mm) THR	246	500		1/2" BSP Female	13.5	1960	15
	2" (50mm) FL	246	487		1/2" BSP Female	15.5	1960	15
	3" (80mm) FL	280	536		1/2" BSP Female	22	5030	15
	4" (100mm) FL	317	580		1/2" BSP Female	30	7850	15
	6" (150mm) FL	382	775		1/2" BSP Female	32	17662	15
	8" (200mm) FL	472	813		1/2" BSP Female	110	31400	15

NOTE

Dimension A in the picture and in the table shows the maximum product width. This width can be reduced by changing the cover direction. All product weights are approximate, due to the differences in flange standards, materials and variable accessories.

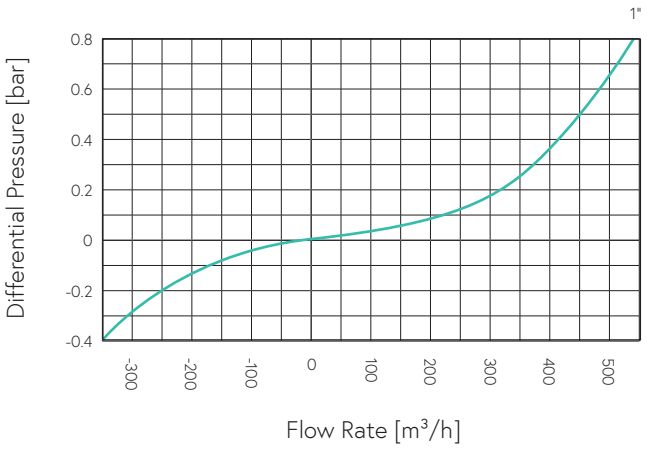
A.R.I. D-060

Aquestia
Directing the Flow

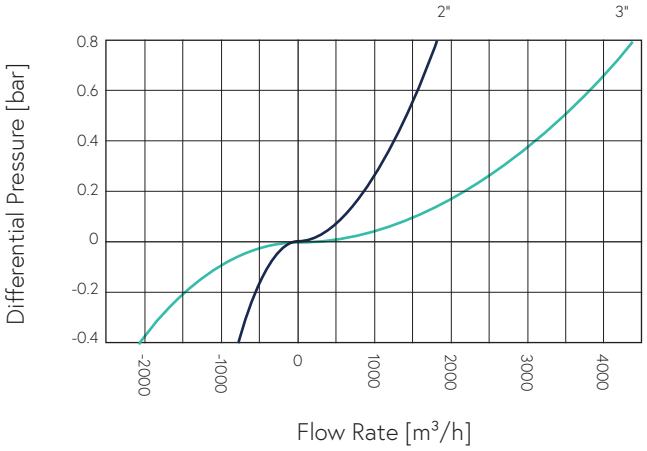
Flow Charts

Horizontal Outlet Models

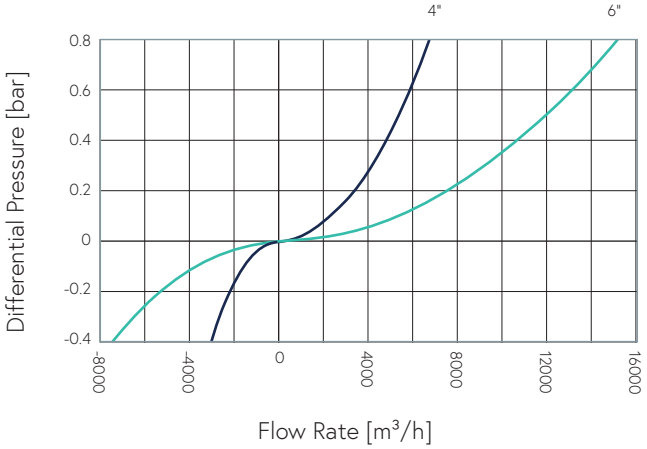
Air & Vacuum Flow Rate



Air & Vacuum Flow Rate

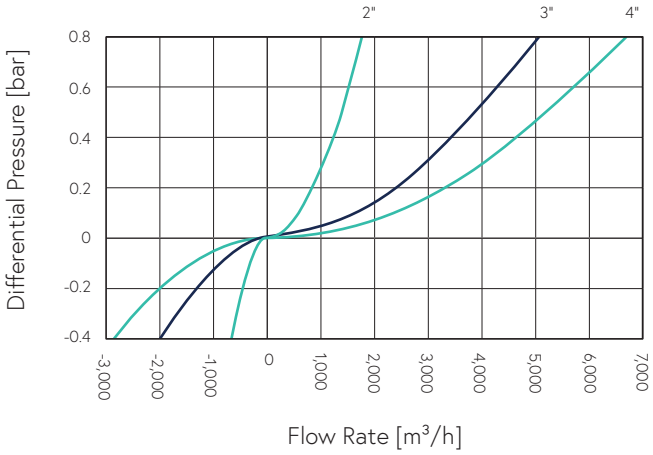


Air & Vacuum Flow Rate

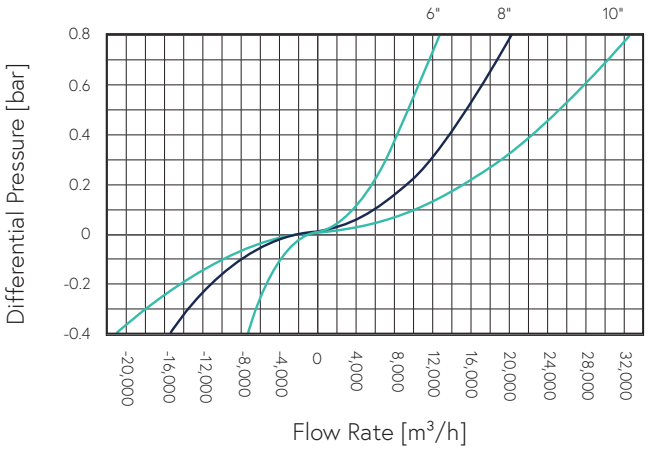


Screen Cover Models

Air & Vacuum Flow Rate



Air & Vacuum Flow Rate

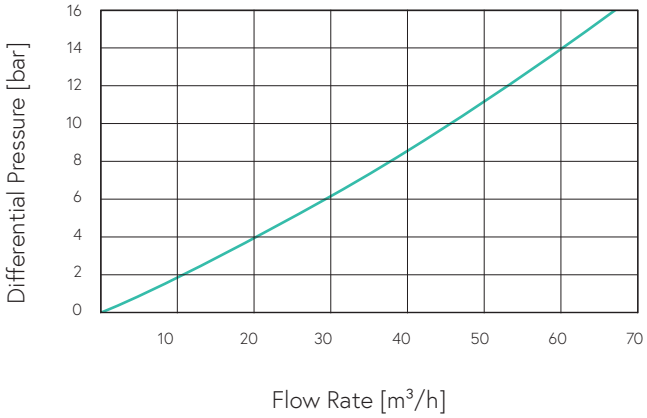


A.R.I. D-060

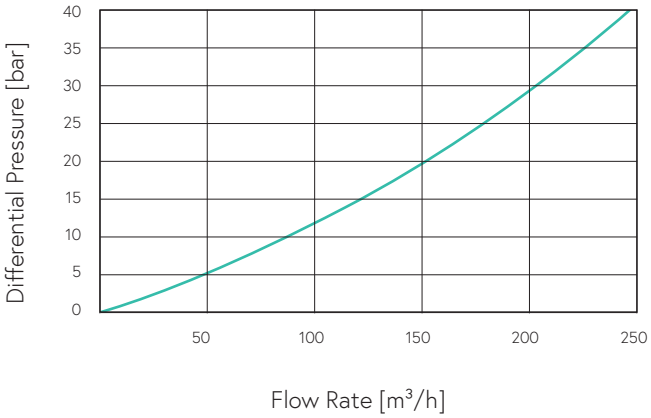
Aquestia
Directing the Flow

Flow Charts

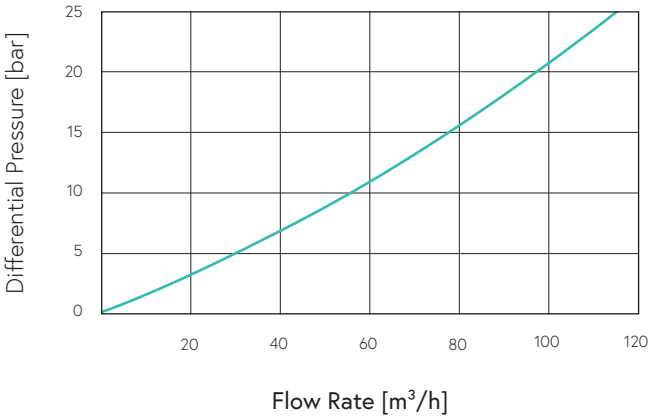
PN16 Automatic Air Release Flow Rate



PN40 Automatic Air Release Flow Rate



PN25 Automatic Air Release Flow Rate

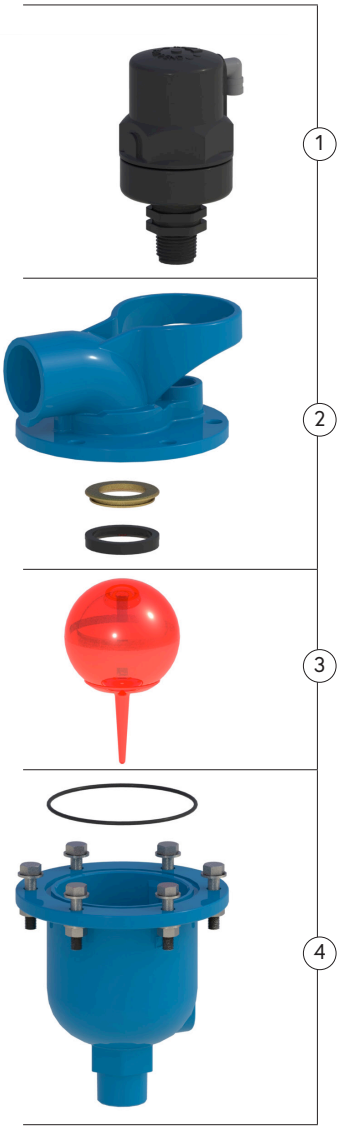


A.R.I. D-060

Aquestia
Directing the Flow

Parts List and Specifications | 1" Horizontal Outlet Models

No.	Part	Material
1	Automatic Assembly Options:	
	A.R.I. S-050	Brass, Reinforced Nylon,Polypropylene, EPDM
	A.R.I. S-050 L	Brass, Reinforced Nylon,Polypropylene, EPDM
	A.R.I. S-050 C	Ductile Iron, Brass, Reinforced Nylon, Polypropylene, EPDM
	A.R.I. S-052	Ductile Iron, Brass, Reinforced Nylon, Polypropylene, EPDM
	A.R.I. S-015	Ductile Iron, Reinforced Nylon, Polypropylene, Stainless Steel 316, EPDM
2	Cover Assembly	
2a	Cover	Ductile Iron
2b	Orifice Seat	Stainless Steel 316
2c	Orifice Seal	EPDM
3	Float	Polycarbonate/Stainless Steel 316
4	Body Assembly	
4a	O-ring	EPDM
4b	Bolts, Nuts & Washers	Steel/Stainless Steel 316
4c	Body	Ductile Iron

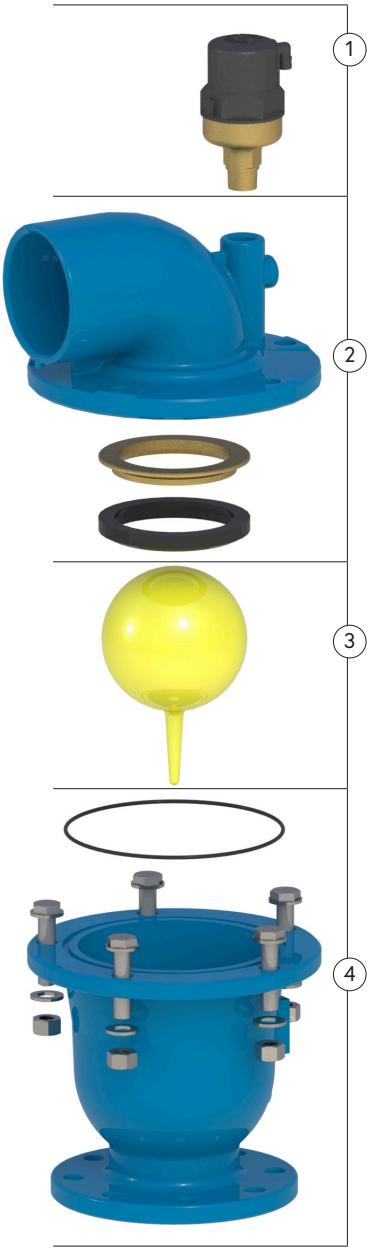


A.R.I. D-060

Aquestia
Directing the Flow

Parts List and Specifications | 2"-6" Horizontal Outlet Models

No.	Part	Material
1	Automatic Assembly Options:	
	A.R.I. S-050	Brass, Reinforced Nylon,Polypropylene, EPDM
	A.R.I. S-050 L	Brass, Reinforced Nylon,Polypropylene, EPDM
	A.R.I. S-050 C	Ductile Iron, Brass, Reinforced Nylon, Polypropylene, EPDM
	A.R.I. S-052	Ductile Iron, Brass, Reinforced Nylon, Polypropylene, EPDM
	A.R.I. S-015	Ductile Iron, Reinforced Nylon, Polypropylene, Stainless Steel 316, EPDM
2	Cover Assembly	
2a	Cover	Ductile Iron
2b	Orifice Seat	Stainless Steel 316
2c	Orifice Seal	EPDM
3	Float	Polycarbonate/Stainless Steel 316
4	Body Assembly	
4a	O-ring	EPDM
4b	Bolts, Nuts & Washers	Steel/Stainless Steel 316
4c	Body	Ductile Iron



A.R.I. D-060

Aquestia
Directing the Flow

Parts List and Specifications | 2"-10" Screen Cover Models

No.	Part	Material
1	Automatic Assembly Options:	
	A.R.I. S-050	Brass, Reinforced Nylon,Polypropylene, EPDM
	A.R.I. S-050 L	Brass, Reinforced Nylon,Polypropylene, EPDM
	A.R.I. S-050 C	Ductile Iron, Brass, Reinforced Nylon, Polypropylene, EPDM
	A.R.I. S-052	Ductile Iron, Brass, Reinforced Nylon, Polypropylene, EPDM
	A.R.I. S-015	Ductile Iron, Reinforced Nylon, Polypropylene, Stainless Steel 316, EPDM
2	Cover Assembly	
2a	Screen Cover	Polypropylene/Ductile Iron
2b	Screen	Stainless Steel 316
2c	Bolts, Nuts & Washers	Stainless Steel 316
2d	Cover	Ductile Iron
2e	Orifice Seat	Stainless Steel 316
2f	Orifice Seal	EPDM
3	Float	Polycarbonate/Stainless Steel 316
4	Body Assembly	
4a	O-ring	EPDM
4b	Bolts, Nuts & Washers	Steel/Stainless Steel 316
4c	Body	Ductile Iron

www.aquestia.com
info@aquestia.com