

A.R.I. VB-060

Aquestia
Directing the Flow



Industry

Disc-type, Spring-loaded Vacuum Breaker Series

Description

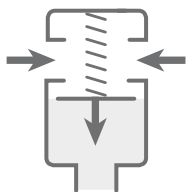
A.R.I. VB-060 is a normally closed, disc-type, spring-loaded full-bore Vacuum Breaker Series. It is designed to seal "drip-tight" and to open fully at minimal differential pressure, allowing intake of air into the pipeline or system when vacuum conditions occur; thus protecting the pipeline.

Applicable for: Desalination & Sea Water, Mines, Marine - Ballast Water, Oil & Gas, Food Industry, Power Plant Cooling, CBM, Hydro / Thermal Power.

Installation


- Pump stations
- Water transmission lines at points susceptible to vacuum / water column separation

Operation



Air Intake
Normally Closed

Features and Benefits

Flow cross sections	Equal to or greater than nominal port area
	Maximum intake flow
Simple product design	Easy to install and maintain, reduces downtime
	No need to disconnect the valve from the main line for maintenance
Aerodynamic design	Protects the line from negative pressure incidents
Unique spring-sealing mechanism	Dry spring mechanism, not in contact with the liquid
	Long-term maintenance-free operation
Screen protected outlet	Prevents intrusion of insects and debris
Construction materials	Non-corrosive and durable
 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

Technical Specifications

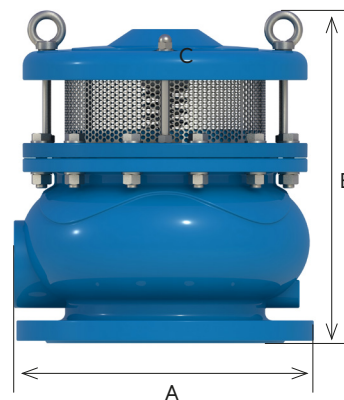
Size range	8" - 24"	
Working pressure range	VB-060 VB-060 + AV	0.01 bar 0.2 bar
Testing pressure	1.5 times maximum working pressure	
Temperature	Maximum working temperature: 60° C Maximum intermittent temperature: 90° C	
Valve coating	Fusion bonded epoxy coating in compliance with standard DIN 30677-2	
Upon ordering, please specify: model, size, working pressure, thread/flange standard and type of liquid		

Valve Selection Options

Models	A.R.I. VB-060 A.R.I. VB-060+D-050 A.R.I. VB-060+D-060 A.R.I. VB-060+D-070 A.R.I. VB-060+D-46	
Valve connection	Flanged ends to meet various requested standards	
Standard materials	Cast Ductile Iron body	
Pressure rating	8"-10", 14"-24"	16 bar
	12"	25 bar

Dimensions and Weight

Size	Dimensions (mm)		Weight (kg)
	A	B	
8" (200mm)	345	420	64
10" (250mm)	410	430	90
12" (300mm)	485	530	130
14" (350mm)	560	600	190
16" (400mm)	635	690	240
20" (500mm)	770	820	430
24" (600mm)	920	1045	660

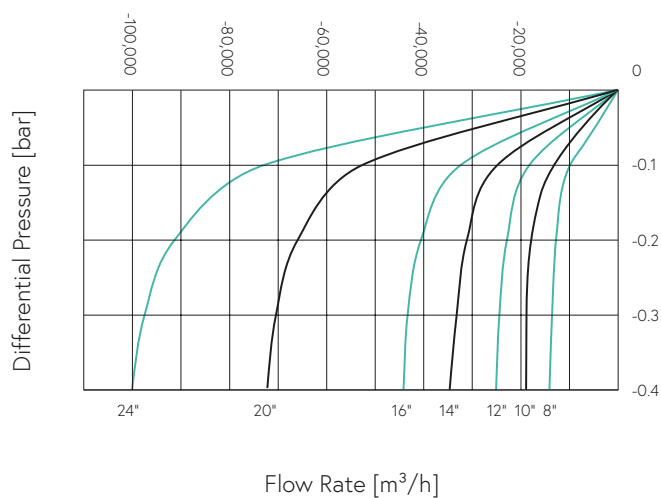


NOTE

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

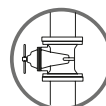
Flow Charts

Air Intake



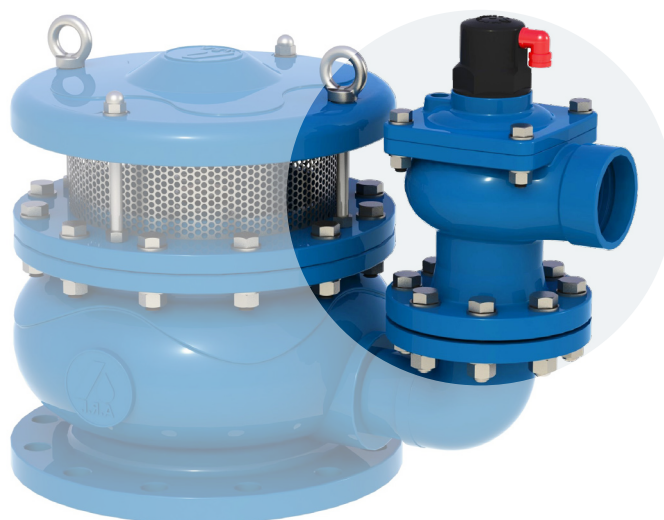
The isolation valve installed under the air valve must be fully open to prevent damage or malfunction and ensure performance within the specifications of the air valve.

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



Air Valve Selection Options

Vacuum Breaker	Air Valve			
Size	Model	Working Pressure (bar)	Orifice Area (mm ²)	Remarks
8" - 12" 14"-16"	A.R.I. D-050 2"	16	794	Metal valve
	A.R.I. D-060 2"	16	1960	Metal valve
	A.R.I. D-070 2"	16	1963	Nylon valve
	A.R.I. D-46 2"	16	2122	Nylon valve
14"-16"	A.R.I. D-050 3"	16	1960	Metal valve
	A.R.I. D-060 3"	16	5030	Metal valve
	A.R.I. D-070 3"	16	5153	Metal / Nylon valve
	A.R.I. D-46 3"	16	5027	Metal valve
20" - 24"	A.R.I. D-050 4"	16	5030	Metal valve
	A.R.I. D-060 4"	16	7850	Metal valve
	A.R.I. D-070 3"	16	7850	Metal / Nylon valve
	A.R.I. D-46 4"	16	7854	Metal valve



Parts List and Specifications

No.	Part	Material
1	Screen Cover Assembly	
1a	Screen Cover	Cast Ductile Iron
1b	Bolt, Nut & Washer	Stainless Steel 316
1c	Lifting Ring	Stainless Steel 316
1d	Screen	Stainless Steel 316
2	Cover Assembly	
2a	Nut	Stainless Steel 316
2b	Spring Lock	Stainless Steel 316
2c	Spring	Stainless Steel 316
2d	Guide Rod	Stainless Steel 316
2e	Cover Bearing	Bronze / Teflon
2f	Domed Nut & Washer	Stainless Steel 316
2g	Threaded Rod	Stainless Steel 316
2h	Circlip	Stainless Steel 316
3	Disc Assembly	
3a	Bolt	Stainless Steel 316
3b	Retainer	Stainless Steel 316
3c	Rubber Seal	EPDM
3d	Disc	Cast Ductile Iron
4	Body Assembly	
4a	O-ring	EPDM
4b	Body	Cast Ductile Iron

