

A.R.I. K-060



Industry

Full-bore, Air & Vacuum Air Valve Series

Description

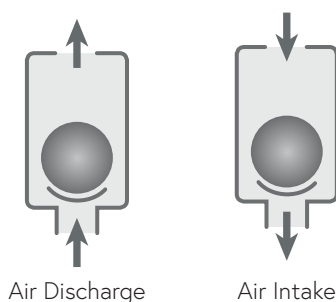
A.R.I. K-060 is a full-bore Air & Vacuum Air Valve Series. Valve operation includes venting air from a filling pipeline and also vacuum breaking (air intake) of a draining pipeline, to optimize pipeline hydraulic efficiency and flow.

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

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
- Desalination plants - along the process water lines and RO membranes
- Mining sites along the process water lines

Operation



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

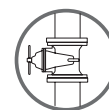
Technical Specifications

Size range	1" - 10" (K-065 UP TO 8")	
Working pressure range	A.R.I. K-060	0.05 - 16 bar (PN16)
	A.R.I. K-062	0.2 - 25 bar (PN25)
	A.R.I. K-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 (applied on Cast Steel and Cast Ductile Iron valves)	

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

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.



Valve Selection Options

Models	A.R.I. K-060 A.R.I. K-062 A.R.I. K-065
Valve connection	Threaded male BSPT/NPT (1"-2") Flanged ends to meet various requested standards (2"-10")
Construction materials	Cast Ductile Iron, Cast Steel, Cast Stainless Steel 316, Cast Super Duplex, Cast Nickel Aluminum Bronze, additional materials upon request
Optional add-on components	One-way Out attachment, allows for air discharge only, prevents air intake One-way In attachment, allows air intake only, prevents air discharge
Pressure rating	PN16 A.R.I. K-060 PN25 A.R.I. K-062 PN40 A.R.I. K-065
Additional product configurations	SB Underground Air Valve System



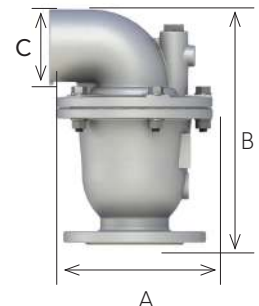
Horizontal Outlet



Screen Cover

Dimensions and Weight

Model	Size	Dimensions (mm)		Connections	Weight (kg)	Orifice Area (mm ²)
		max. A	B			
Horizontal Outlet	1" (25mm) TRH	144	220	1½" Female	4.7	507
	2" (50mm) TRH	190	265	2" Female	10.8	1960
	2" (50mm) FL	190	252	2" Female	13	1960
	3" (80mm) FL	230	330	3" Female	20.5	5030
	4" (100mm) FL	272	395	4" Female	32.3	7850
	6" (150mm) FL	408	720	6" Female	95.6	17662
Screen Cover	2" (50mm) FL	185	231	-	4.1	1960
	2" (50mm) FL	185	218	-	11.6	1960
	3" (80mm) FL	219	286	-	19.4	5030
	4" (100mm) FL	262	346	-	29	7850
	6" (150mm) FL	375	507	-	83	17662
	8" (200mm) FL	463	641	-	123	31400
	10" (250mm) FL	586	788	-	262	49087



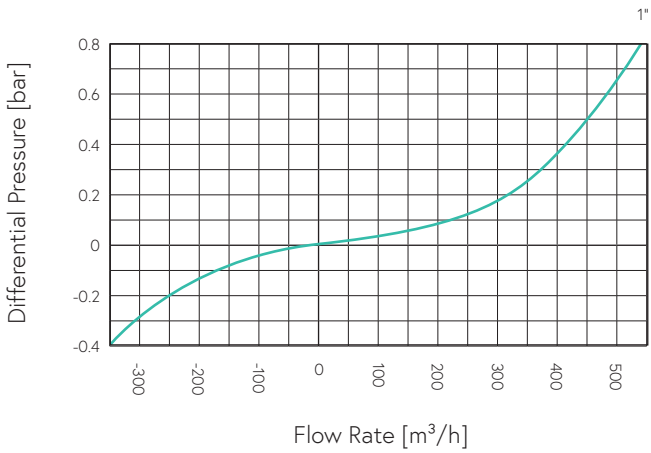
FL - Flanged THR - Threaded FL - Flanged THR - Threaded

NOTE

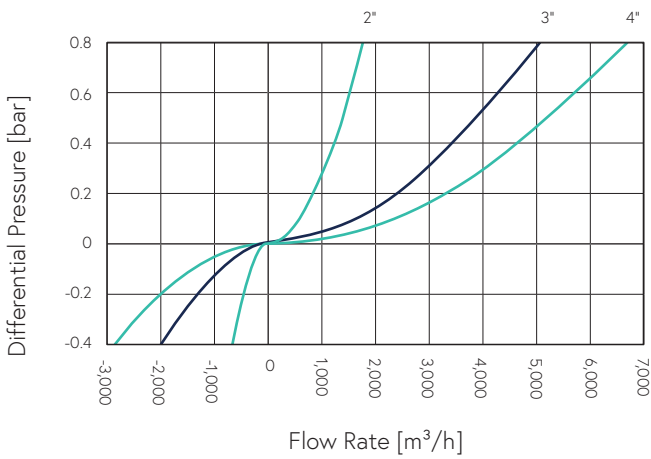
Dimension A in the picture and in the table shows the maximum product width. This width can be reduced by changing the cover direction. All product weights are approximate, due to the differences in flange standards, materials and variable accessories.

Flow Charts

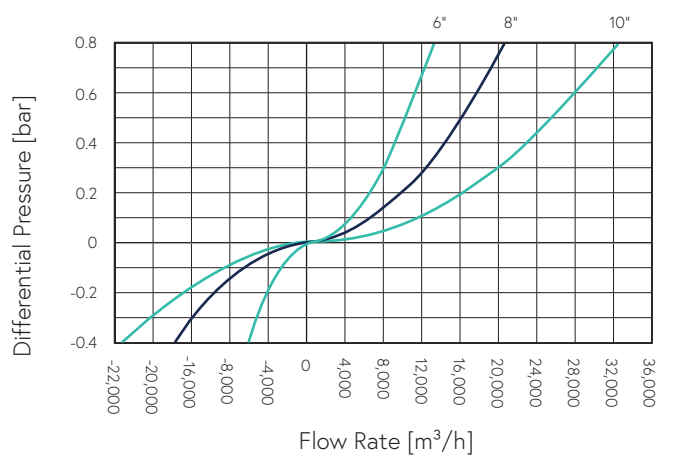
Air & Vacuum Flow Rate



Air & Vacuum Flow Rate



Air & Vacuum Flow Rate



1" Horizontal Outlet Models Parts List and Specifications

No.	Part	Material
1	Cover Assembly	
1a	Plug	Stainless Steel 316 / Super Duplex
1b	Cover	Stainless Steel 316 / Super Duplex
1c	Orifice Seat	Stainless Steel 316 / Super Duplex
1d	Orifice Seal	EPDM / VITON
2	Float	Polycarbonate/Stainless Steel 316/Super Duplex
3	Body Assembly	
3a	O-ring	EPDM / VITON
3b	Bolts, Nuts & Washers	Steel/Stainless Steel 316
3c	Body	Stainless Steel 316 / Super Duplex



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

No.	Part	Material
1	Cover Assembly	
1a	Plug	Stainless Steel 316 / Super Duplex
1b	Cover	Stainless Steel 316 / Super Duplex
1c	Orifice Seat	Stainless Steel 316 / Super Duplex
1d	Orifice Seal	EPDM / VITON
2	Float	Polycarbonate/Stainless Steel 316/Super Duplex
3	Body Assembly	
3a	O-ring	EPDM / VITON
3b	Bolts, Nuts & Washers	Steel/Stainless Steel 316
3c	Body	Stainless Steel 316 / Super Duplex



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

No.	Part	Material
1	Cover Assembly	
1a	Screen Cover	Polypropylene/Stainless Steel 316
1b	Screen	Stainless Steel 316
1c	Bolts, Nuts & Washers	Stainless Steel 316
1d	Plug	Stainless Steel 316 / Super Duplex
1e	Cover	Stainless Steel 316 / Super Duplex
1f	Orifice Seat	Stainless Steel 316 / Super Duplex
1g	Orifice Seal	EPDM / VITON
2	Float	Polycarbonate/Stainless Steel 316/Super Duplex
3	Body Assembly	
3a	O-ring	EPDM / VITON
3b	Bolts, Nuts & Washers	Steel/Stainless Steel 316
3c	Body	Stainless Steel 316 / Super Duplex

