

# K-060

PN 16

# K-062

PN 25

# K-064

PN 40



## Air & Vacuum Air Valve for High Flow

### Description

The K-060 series Air & Vacuum Valves are designed to automatically discharge or admit large volumes of air during the filling or draining of a pipeline or piping system. This valve will open to relieve negative pressures valve at pump shut-off and at water column separation.

### Applications

- Municipal and industrial water conveyance systems.
- Water pipelines vulnerable to vandalism and/or water theft.
- Water systems found in remote areas.
- Water systems with high pressure demands (K-062, K-064).

### Operation

The air & vacuum valve discharges air at high flow rates during the filling of the system and admits air at high flow rates during drainage, pump shut-off or at water column separation. High velocity air will not blow the float shut. Liquid entry will cause the sealing of the valve.

At any time during system operation, should internal pressure of the system fall below atmospheric pressure, air will enter the system.

The smooth discharge of air prevents pressure surges and other destructive phenomena.

The intake of air in response to negative pressure protects the system from destructive vacuum conditions and prevents damage caused by water column separation. Air entry is essential to efficiently drain the system.

### As the system fills and is pressurized, the air valve functions in the following stages:

1. Air is discharged by the valve.
2. Liquid enters the valve, lifting the float which pushes the sealing mechanism to its sealing position.

### When internal pressure falls below atmospheric pressure (negative pressure):

1. The float will drop down, immediately opening the air & vacuum orifice.
2. Air will enter the system.

### Main Features

- Working pressure range:
  - K-060 0.2-16 bar
  - K-062 0.2-25 bar
  - K-064 0.2-40 bar
- Testing pressure for the air valve is 1.5 times its working pressure.
- Maximum working temperature: 60°C.
- Maximum intermittent temperature: 90°C.
- All main flow cross-sections are equal or greater than the nominal port area.
- Aerodynamic design enables high flow rates of air both at intake and at discharge.
- Reliable operation reduces water hammer incidents.
- Dynamic design allows for high capacity air discharge while preventing premature closure.
- Special orifice seat design: bronze and E.P.D.M. rubber, assures long-term maintenance-free operation.
- Screen protected outlet.
- The upper screen is protected with a protective cover.
- FBE coating, both interior & exterior, according to the international standard DIN 30677-2.

### Valve Selection

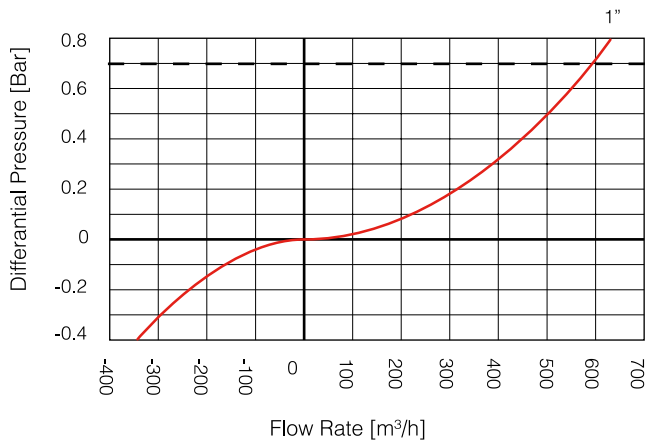
- Size Range: 1"-10" (25mm-250mm) for all models in the series.
- These valves are manufactured with flanged ends to meet any requested standard.
- The 2" valve is also available with a threaded BSP or NPT connection.
- Valve coating: baked epoxy coating according to the standard DIN 30677-2.
- Other coatings are available upon request.
- The K-060 series air & vacuum air valve is also available as a combination air valve for Models D-060, D-060-C, D-062, D-065, with the addition of an Automatic Air Release valve.
- The K-060-I series air & vacuum valve can be supplied with an optional In-only check valve attachment, allowing for air intake only; prevents air discharge.

### Note

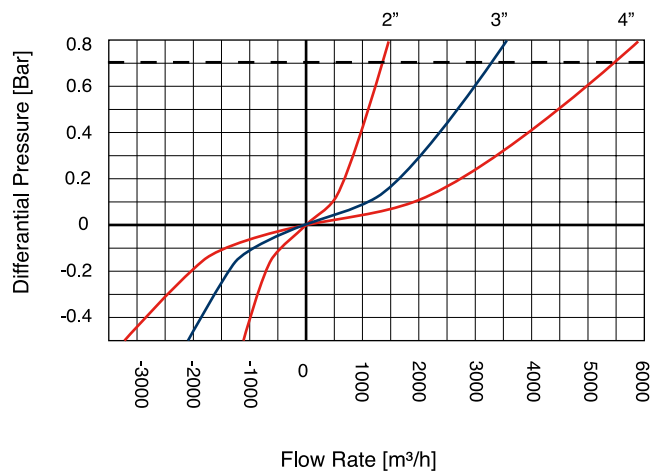
For best suitability, it is recommended to send the fluid chemical properties along with the valve request.

Upon ordering, please specify: model, size, working pressure, threads standard and type of liquid.

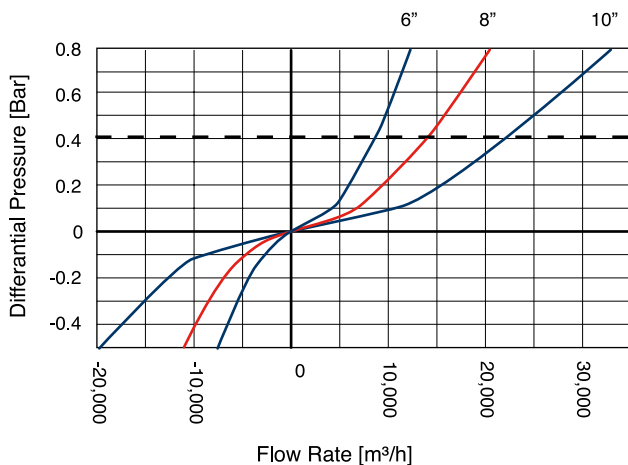
## AIR & VACUUM FLOW RATE



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— — — Max. recommended design air discharge

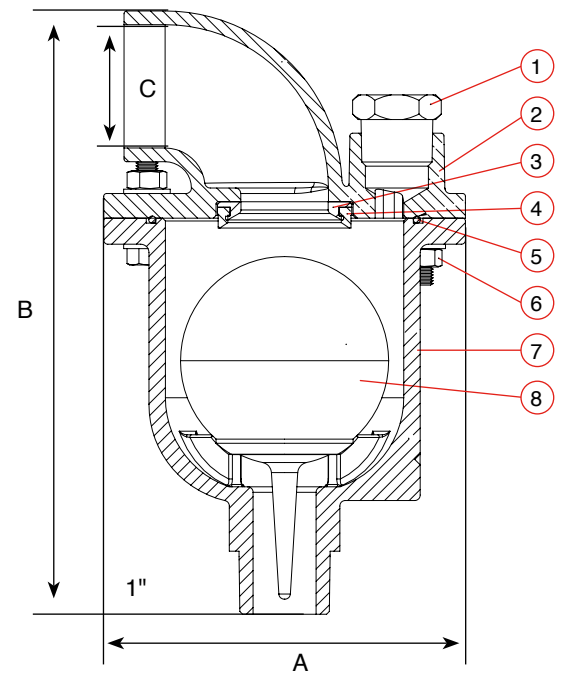
## DIMENSIONS AND WEIGHTS

Nominal Size	Dimensions mm		Connection C	Weight Kg.	Orifice Area mm <sup>2</sup>
	A	B			
1" (25mm) Threaded	132	220	1½" Female	3.8	506.7
1" (25mm) Flanged	132	220	1½" Female	4.8	506.7

Nominal Size	Dimensions mm		Weight Kg.	Orifice Area mm <sup>2</sup>
	A	B		
2" (50mm) Threaded	185	231	9.7 - 10	1960
2" (50mm) Flanged	185	218	9.7 - 10	1960
3" (80mm)	219	286	17 - 18	5030
4" (100mm)	262	346	25.5 - 27	7850
6" (150mm)	375	507	72.5 - 77	17662
8" (200mm)	463	641	107.7 - 116	31400
10" (300mm)	586	788	231.7 - 244	49087

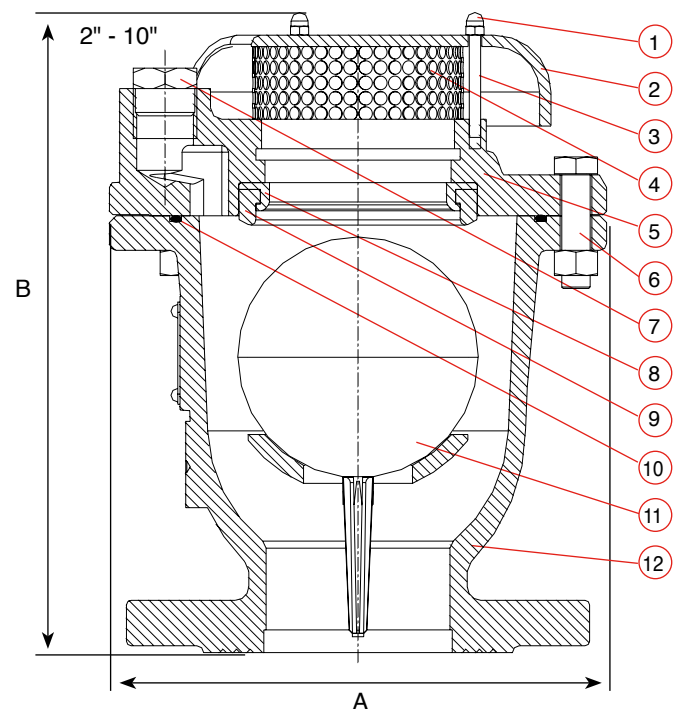
## 1" PARTS LIST AND SPECIFICATION

No. Part	Material
1. Plug	Brass
2. Cover	Ductile Iron
3. Orifice Seat	Bronze
4. Orifice Seal	EPDM
5. O-Ring	BUNA-N
6. Bolt, Nut & Washer	Steel, Zinc Cobalt Plated
7. Body	Ductile Iron
8. Float	Polycarbonate / Stainless Steel 304



## 2" - 10" PARTS LIST AND SPECIFICATION

No. Part	Material
1. Domed Nut & Washer	Stainless Steel 304
2. Screen Cover 2"-4"	Ductile Iron
6"-10"	Polyethylene / Sphero Nodular
3. Threaded Rod	Stainless Steel 304
4. Screen	Stainless Steel 304
5. Cover	Ductile Iron
6. Bolt, Nut & Washer	Steel, Zinc Cobalt Coated
7. Plug	Brass
8. Orifice Seat	Bronze
9. Orifice Seal	EPDM
10. O-Ring	BUNA-N
11. Float PN16, PN 25	Polycarbonate / Stainless Steel 304
PN 40 2"-4"	Polycarbonate / Stainless Steel 304
PN 40 6"-10"	Stainless Steel
12. Body	Ductile Iron



# K-060

