

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 Valve discharges air during the filling or charging of the system and admits air into the system during system drainage, valve or pump shut-off or 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 the drainage, pump shut-off or at water column separation.

High velocity air will not blow the float shut. Water 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 starts to fill, the valve functions according to the following stages:

1. Entrapped air is discharged by the valve.
2. The liquid enters the valve, lifting the float and sealing the valve.

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

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

Main Features

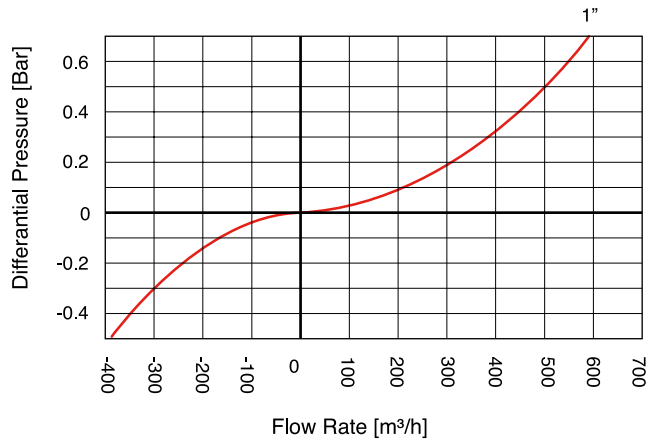
- Working pressure range:
 - K-060 0.2-16 bar
 - K-062 0.2-25 bar
 - K-064 0.2-40 bar
- Testing pressure for the air valve is 1.5 times its working pressure.
- Maximum working temperature: 60° C.
- Maximum intermittent temperature: 90° C.
- All main flow cross-sections are equal or greater than the nominal 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 velocity 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

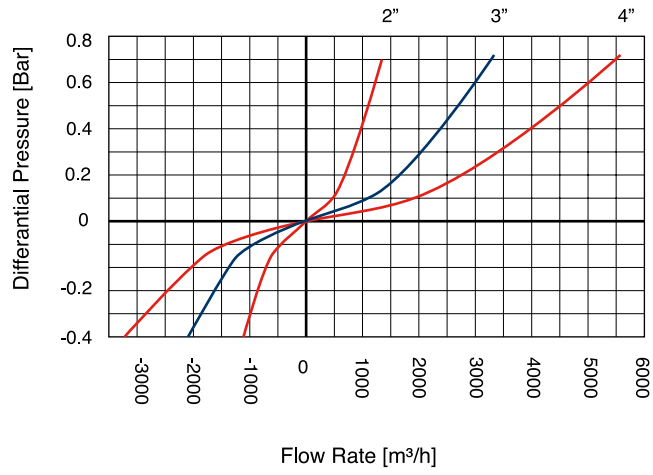
- Size Range: 1"-10" (25mm-250mm) for all models in the series.
- These valves are manufactured with flanged ends to meet any requested standard.
- The 2" valve is also available with a threaded BSP or NPT connection.
- Valve coating: baked epoxy coating according to the standard DIN 30677-2.
- Other 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.
- 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.

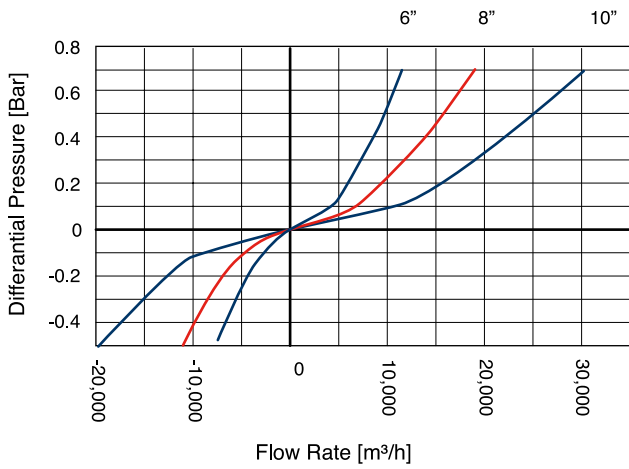
AIR & VACUUM FLOW RATE



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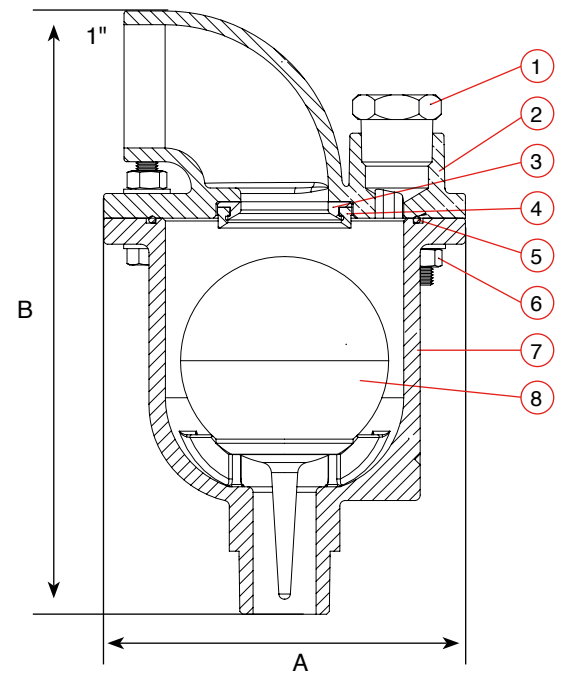
DIMENSIONS AND WEIGHTS

Nominal Size	Dimensions mm		Connection C	Weight Kg.	Orifice Area mm ²
	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 ²
	A	B		
2" (50mm) Threaded	180	231	10	1960
2" (50mm) Flanged	185	218	10	1960
3" (80mm)	219	272	18	5030
4" (100mm)	262	332	27	7850
6" (150mm)	378	569	77	17662
8" (200mm)	463	664	116	31400
10" (250mm)	586	849	244	49087

1" PARTS LIST AND SPECIFICATION

No. Part	Material
1. Plug	Brass ASTM B124
2. Cover	Ductile Iron ASTM A-536 60-40-18
3. Orifice Seat	Bronze
4. Orifice Seal	E.P.D.M
5. O-Ring	BUNA-N
6. Bolt, Nut & Washer	Steel, Zinc Cobalt Plated
7. Body	Ductile Iron ASTM A-536 60-40-18
8. Float	Polycarbonate / Stainless Steel SAE 304



2" - 10" PARTS LIST AND SPECIFICATION

No. Part	Material
1. Domed Nut & Washer	Stainless Steel SAE 304
2. Screen Cover	2"-4" Ductile Iron/ Cast Iron 6"-10" Polyethylene / Cast Iron / Sphero Nodular
3. Threaded Rod	Stainless Steel SAE 304
4. Screen	Stainless Steel SAE 304
5. Cover	Ductile Iron ASTM A-536 60-40-18
6. Bolt, Nut & Washer	Steel, Zinc Cobalt Coated
7. Plug	Brass ASTM B124
8. Orifice Seat	Bronze
9. Orifice Seal	E.P.D.M.
10. O-Ring	BUNA-N
11. Float	PN16, PN 25 Polycarbonate / Stainless Steel SAE 304 PN 40 2"-4" Polycarbonate / Stainless Steel SAE 304 PN 40 6"-10" Stainless Steel
12. Body	Ductile Iron ASTM A-536 60-40-18

