

DAV-P-A

The valve is designed for an efficient release of entrapped air from the pipeline, while the network is at normal working pressure.

Due to the relatively large orifice, compare to other Automatic valves in the market, it can also release the air through initial filling of a small-diameter pipe, or admit air into it while it is drained.

Properties:

An Automatic air valve, that enables the release of dissolved air that accumulate in the pipeline. The valve will release the air at normal operation pressures of the pipeline.

The Float is made of naturally-buoyant material (specific weight lower than 1).

The float activates a sealing stripe, that closes the outlet when the water will fill the valve body.

On accumulation of air in the valve, loss of buoyancy causes the float to drop and to pull the strip, thus opening of the air outlet.

The Hydraulic sealing of the orifice will provides a drip-tight closure at a pressure of 2mwc (3psi).

Operation:

Releasing entrained air from the pipeline. Small quantities of diluted air accumulate in high peaks of the pipeline and in the peak of the valve.

The pressurized air expels the water. The descending water level moves the main float with it. At a certain position the main float pulls down the small seal, that partially opens the nozzle.

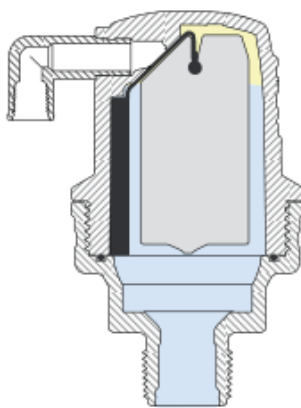
The pressurized air can escape, the water level rises and the nozzle re-closes.



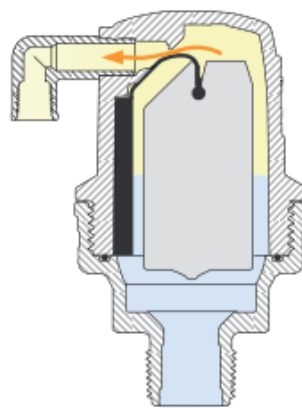
Technical Specifications:

- Operating pressure 0.2 to 16 bars
- 1/2", 3/4", 1" BSP or NPT threaded base - as per the customer's choice
- Structure materials: Cover: GRP (UV resistant), Base: GRP or Brass
- Internal parts: corrosion resistant, reinforced plastic materials and synthetic rubber
- The valve allows the discharge of 28m³/h of air at pipe pressure of 1.0 bar, when fully-open

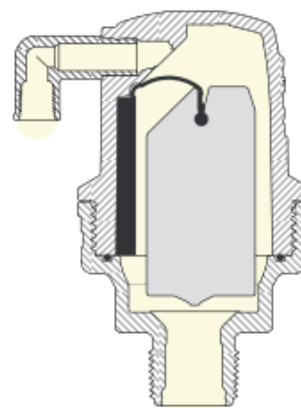
Principle of operation:



Pipe is full of water



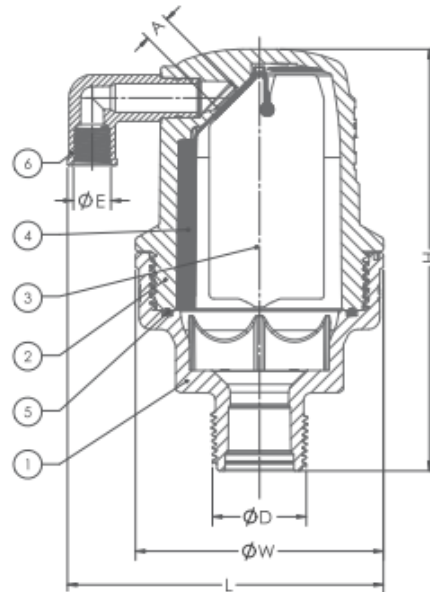
Dissolved air is accumulated in the valve, released when the float drops down



Pipe is aerated

Parts list and specifications:

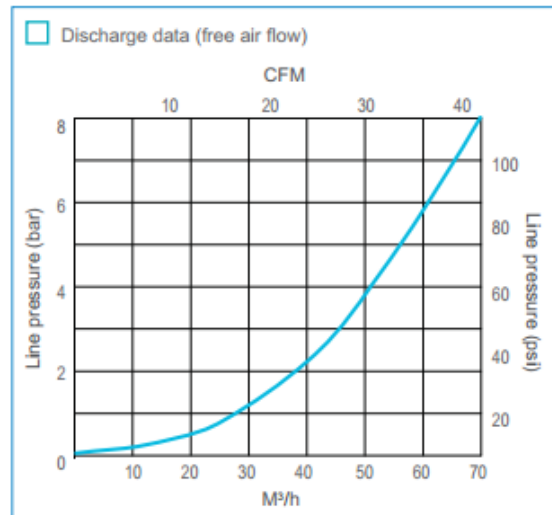
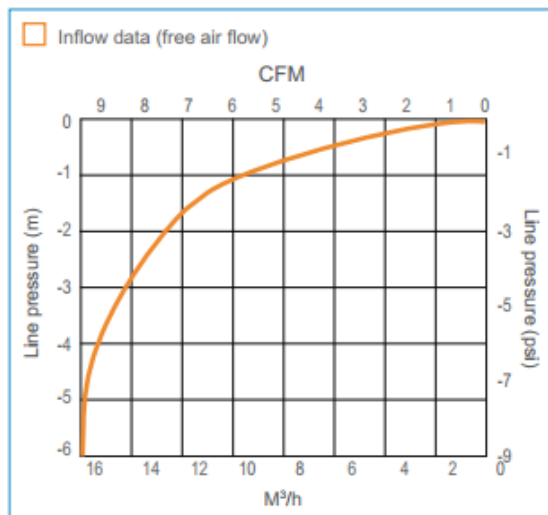
Part	Description	Material
1	Base	Glass Reinforced Nylon Optional: Brass
2	Cover	Glass Reinforced Nylon
3	Float	Foamed Polypropylene
4	Seal	Silicon
5	O ring	NBR
6	Drainage Elbow	Polypropylene



Dimensions:

Valve	12 mm / 1/2"		19 mm / 3/4"		25 mm / 1"	
	SI	US	SI	US	SI	US
H - Height	147 mm	5 3/4"	147 mm	5 3/4"	147 mm	5 3/4"
W - Width	86 mm	3 1/3"	86 mm	3 1/3"	86 mm	3 1/3"
D - Thread	1/2" BSP	1/2" NPT	3/4" BSP	3/4" NPT	1" BSP	1" NPT
A - Nozzle Area	12.85 mm ²	0.02 in ²	12.85 mm ²	0.02 in ²	12.85 mm ²	0.02 in ²
L - Total Width	110 mm	4 1/3"	110 mm	4 1/3"	110 mm	4 1/3"
E - Drainage Diameter	1/4" BSP	1/4" BSP	1/4" BSP	1/4" BSP	1/4" BSP	1/4" BSP
Weight	400 g	0.88 lbs.	400 g	0.88 lbs.	400 g	0.88 lbs.

Performance:



DAV-P-K

This valve has been designed for efficient discharge and intake of air in water transport systems, filtering systems, containers, and other places where confined air could impair the system's operation.

The valve is appropriate for:

- Expelling the air at high flow velocity during the initial filling of the system
- Introducing large quantities of air when the pipe drains, maintaining atmospheric pressures in the pipe and preventing collapse and cavitation damage to the conduits

Properties:

Leak-proof sealing at all conditions, including low system pressure. The aerodynamic design of the float provides air flow at a very high velocity. The float does not close before the water has reached the valve. Threaded outlet elbow allows various possibilities of drain connection. The valve design contains a very limited number of parts, allowing easy dismantling for maintenance.

Operation:

The DAV-P-K valve has two modes of operation:

Discharge of large quantities of air at a high flow velocity when the conduit is being filled. When the water arrives to the valve, the float rises up and closes the outlet.

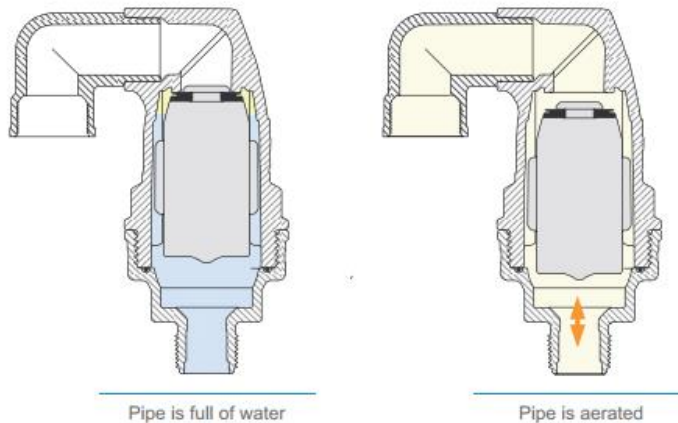
Introduction of air into the pipeline when the internal pressure is sub-atmospheric. The pressure difference forces the float to drop to "opened" position, allowing large volumes of air to flow into the pipe.



Technical Specifications

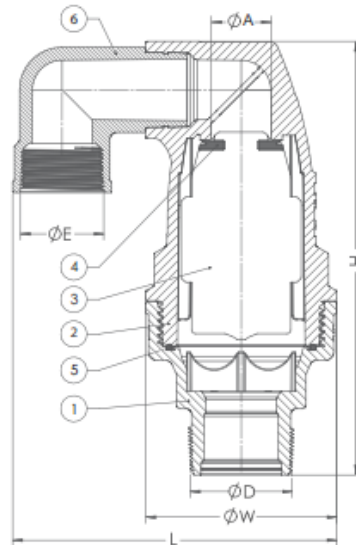
- Operating pressure of 0.2 to 16 bars
- 1", 2" BSP or NPT threaded base - as per the customer's choice
- Structure materials: Cover: GRP (UV resistant), Base: GRP or Brass
- Internal parts: corrosion resistant plastic materials and synthetic rubber
- The valve allows the discharge of 700m³/h of air at pipe pressure of 0.5 bar

Principle of operation:



Parts list and specifications:

Part	Description	Material
1	Body	Glass Reinforced Nylon Optional: Brass
2	Bonnet	Glass Reinforced Nylon
3	Float	Foamed Polypropylene
4	Kinetic Seal	EPDM Rubber
5	O ring	NBR
6	Drainage Elbow	Polypropylene



Dimensions:

Valve	12 mm / 1/2"		19 mm / 3/4"		25 mm / 1"		50 mm / 2"	
	SI	US	SI	US	SI	US	SI	US
H - Height	183 mm	7 1/4"	183 mm	7 1/4"	183 mm	7 1/4"	249 mm	9 7/8"
W - Width	86 mm	3 1/3"	86 mm	3 1/3"	86 mm	3 1/3"	110 mm	4 1/3"
D - Thread	1/2" BSP	1/2" NPT	3/4" BSP	3/4" NPT	1" BSP	1" NPT	2" BSP	2" NPT
A - Nozzle Area	314 mm ²	0.49 in ²	314 mm ²	0.49 in ²	314 mm ²	0.49 in ²	908 mm ²	1.41 in ²
L - Total Width	134 mm	5 1/4"	134 mm	5 1/4"	134 mm	5 1/4"	187 mm	7 3/8"
E - Drainage Diameter	3/4" BSP	3/4" BSP	3/4" BSP	3/4" BSP	3/4" BSP	3/4" BSP	1 1/2" BSP	1 1/2" BSP
Weight	470 g	1.04 lbs.	470 g	1.04 lbs.	470 g	1.04 lbs.	1052 g	2.32 lbs.

Performance:

