

DAV-P-1-A 1" Automatic Air Valve

Description

This valve has been designed for an efficient discharge of large air volumes from small water network systems, filters, containers, and other devices where trapped air may impair the system's operation.

The valve is appropriate for:

- **Expelling** the air at high flow velocity during the initial filling of the systems
- **Introducing** air when the pipe drains, maintaining atmospheric pressures in the pipe, preventing collapse and cavitation damage to the conduits
- **Relieving** the entrained air from the water, while the network is pressurized

Properties

The valve, with its unique Y-shaped duct, allows the discharge and the introduction of air. Its aerodynamic performance is superior to competitor valves of the same diameter.

The valve design contains a very limited number of parts, allowing easy dismantling for maintenance.

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 connection — 1" BSP or NPT according to the customer's choice.

Operation

The DAV-P-1-A valve has three 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 main 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 main float to drop to "opened" position, allowing the air to flow into the pipe.

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

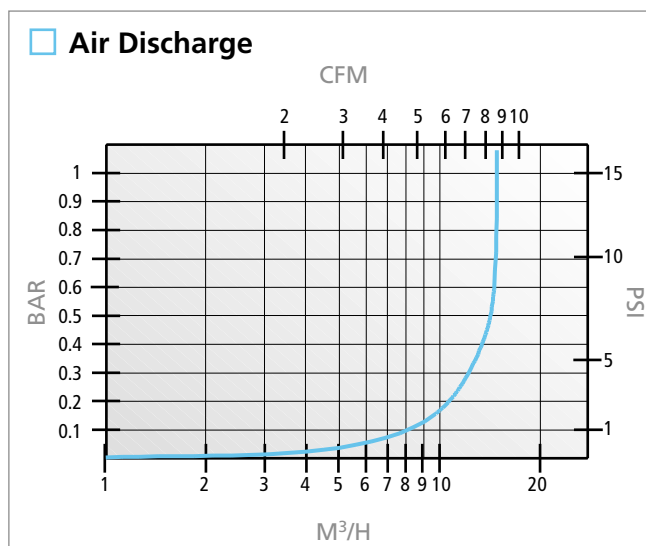
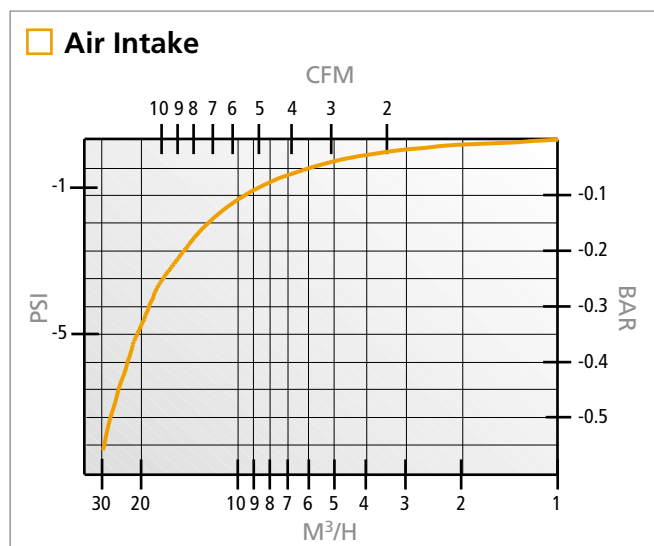
- Operating pressure of 0.2 to 16 bars
- 1" BSP or NPT threaded base — as per the customer's choice
- Air flow, even at a critical velocity created by pipeline pressure of 0.9 bar, will not cause premature closure of the valve
- Structure materials: Body: Glass-reinforced, UV resistant Polyamide (GRP)
 - Internal parts: corrosion resistant plastic materials and synthetic rubber
- The valve allows the discharge of 15 m³/hour of air at pipe pressure of 1.0 bar, when fully-open



DAV-P-1-A 1" Automatic Air Valve

Performance

Air intake/discharge

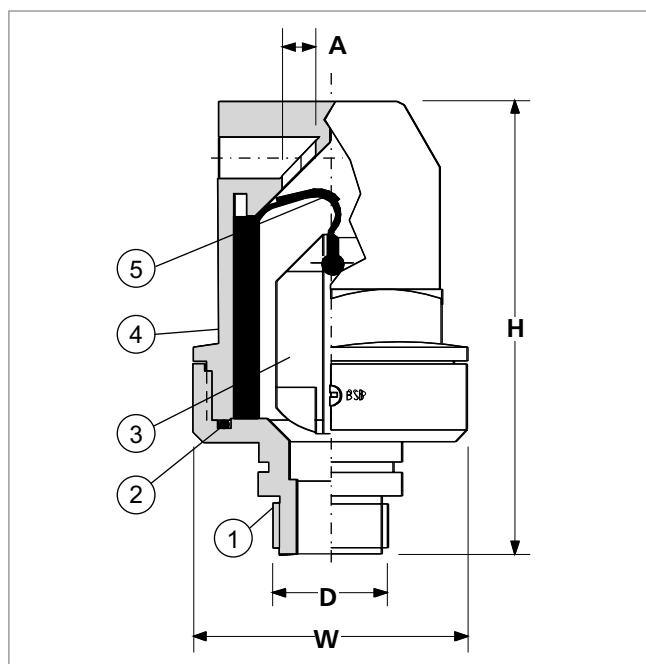


Dimensions

Dimension	SI	US
H - Height	133 mm	5¼ in.
W - Width	102 mm	4 in.
D - Threaded Attachment	2" BSP	2" NPT
A - Nozzle Area	25 mm ²	0.04 in ²
Weight	0.29 kg	0.64 Lbs.

Part Specifications

Part	Description	Material
1	Base	GRP
2	O-ring	NBR rubber
3	Float	Polypropylene
4	Body	GRP
5	Valve seal	EPDM rubber



DAV-P-1-K 1" Kinetic Air Valve

Description

This valve has been designed for an efficient discharge of air from small water network systems, filters, containers, and other devices where trapped air may 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** air when the pipe drains, maintaining atmospheric pressures in the pipe, preventing collapse and cavitation damage to the conduits

Properties

The valve, allows the discharge and the introduction of air. Its aerodynamic performance is superior to valves of the same diameter.

Leak-proof sealing at all conditions, including low system pressure.

A filter is installed at the air exit of the valve- to prevent foreign materials, such as leaves or insects, from entering when it is open.

The design is comprised of only 5 parts, thereby allowing a simple and easy disassembly for maintenance.

Threaded Connection – 1" BSP or NPT according to the customer's choice.

Operation

The DAV-P-1-K valve has two modes of operation:

Discharging 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" BSP or NPT threaded base – as per the customer's choice
- Air flow, even at a critical velocity created by pipeline pressure of 0.9 bar, will not cause premature closure of the valve
- Structure materials: Body: Glass- reinforced, UV resistant Polyamide (GRP)
- Internal parts: corrosion resistant plastic materials and synthetic rubber
- Particularly large nozzle design allows the discharge of 170 m³/hour of air, at pipe pressure of 0.5 bar

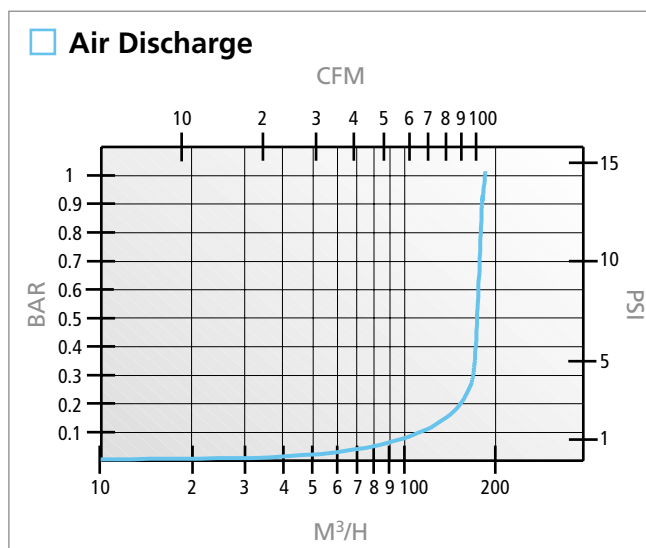
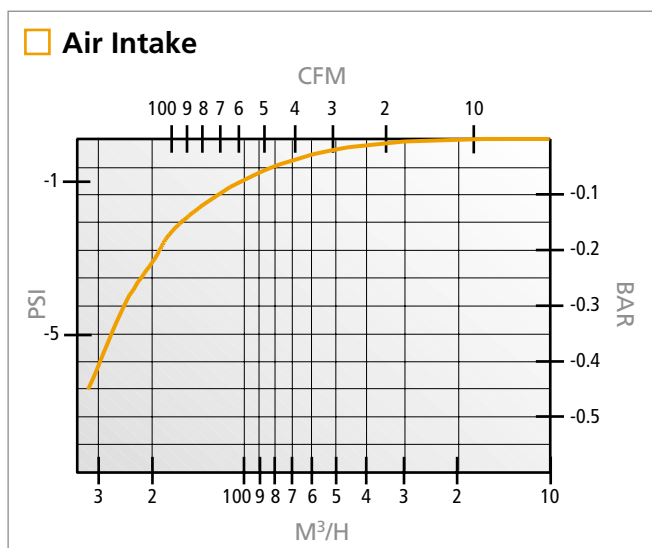


DAV-P-1-K

1" Kinetic Air Valve

Performance

Air intake/discharge

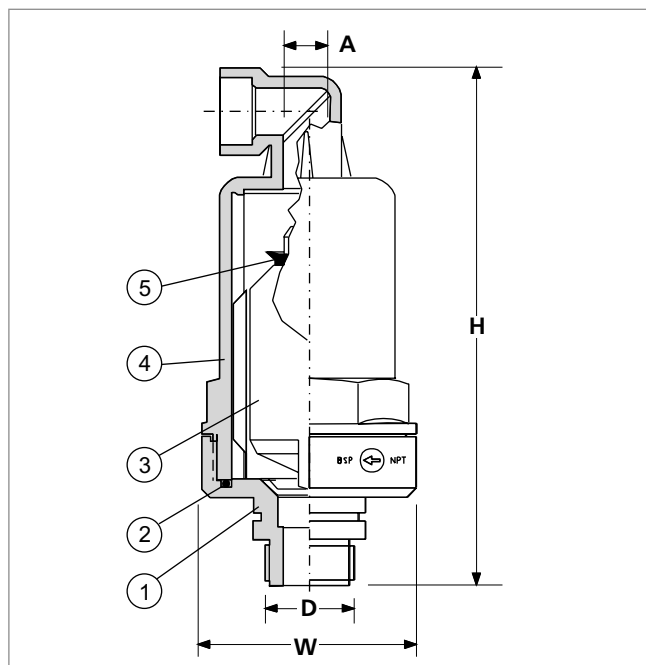


Dimensions

Dimension	SI	US
H - Height	273 mm	10¾ in
W - Width	80 mm	31/8 in.
D - Threaded Attachment	1" BSP	1" NPT
A - Nozzle Area	314 mm²	0.487 in²
Weight	0.725 kg	1.6 Lbs.

Part Specifications

Part	Description	Material
1	Base	GRP
2	O-ring	NBR rubber
3	Float	Polypropylene
4	Body	GRP
5	Valve seal	EPDM rubber



DAV-P-2-K 2" Kinetic Air Valve

Description

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-2-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
- 2" BSP or NPT threaded base — as per the customer's choice
- Air flow, even at a critical velocity created by pipeline pressure of 0.9 bar, will not cause premature closure of the valve
- Structure materials: Body: Glass-reinforced, UV resistant Polyamide (GRP)
- Internal parts: corrosion resistant plastic materials and synthetic rubber
- The valve allows the discharge of 470 m³/hour of air at pipe pressure of 0.5 bar

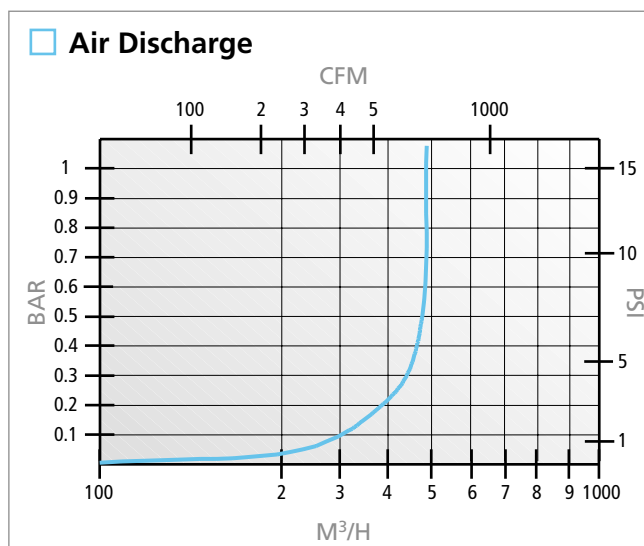
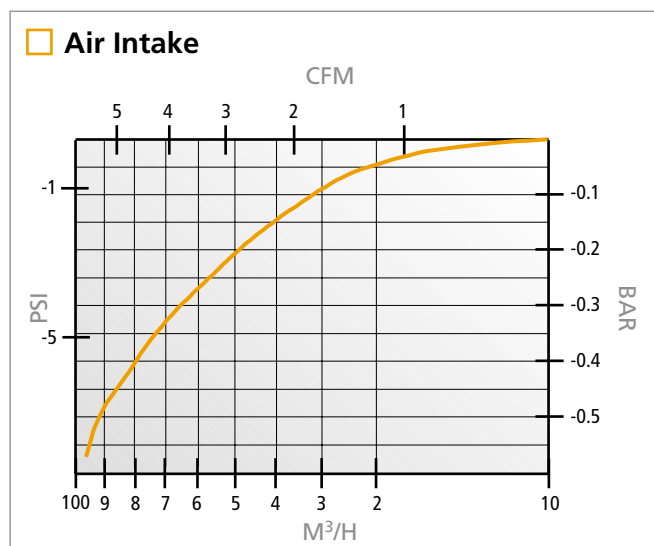


DAV-P-2-K

2" Kinetic Air Valve

Performance

Air intake/discharge

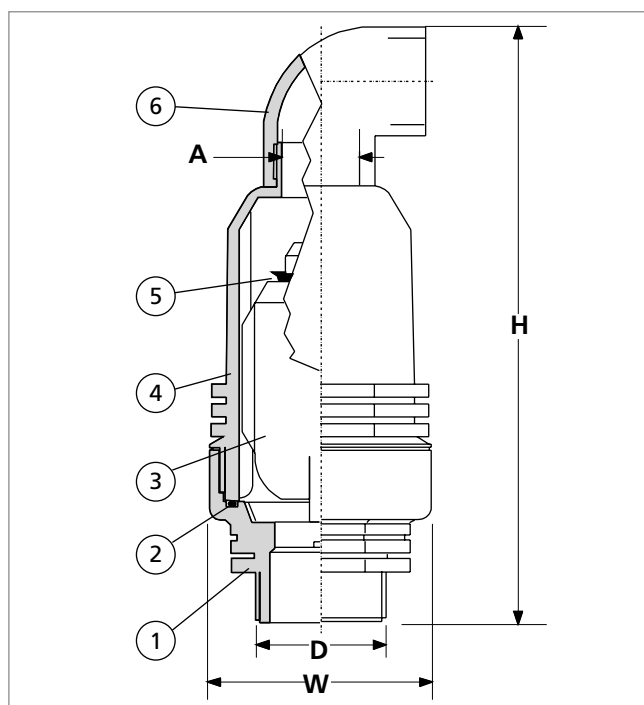


Dimensions

Dimension	SI	US
H - Height	269mm	10 ⁹ / ₁₆ in
W - Width	102 mm	4 in
D - Threaded Attachment	2" BSP	2" NPT
A - Kinetic Nozzle Area	855 mm ²	132.5 in ²
Weight	0.725 kg	1.6 Lbs.

Part Specifications

Part	Description	Material
1	Base	GRP
2	O-ring	NBR rubber
3	Float	Polypropylene
4	Body	GRP
5	seal	EPDM rubber
6	Outlet elbow	GRP



DAV-P-2-KA 2" Combination Air Valve

Description

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 systems
- **Introducing** large quantities of air when the pipe drains, maintaining atmospheric pressures in the pipe and preventing collapse and cavitation damage to the conduits
- **Relieving** the entrained air from the water, while the network is pressurized

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 an easy dismantling for maintenance.

Operation

The DAV-P-2-KA valve has three 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 main 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 main float to drop to "opened" position, allowing the air to flow into the pipe.

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

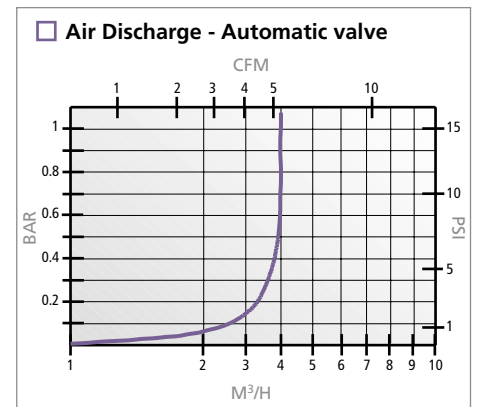
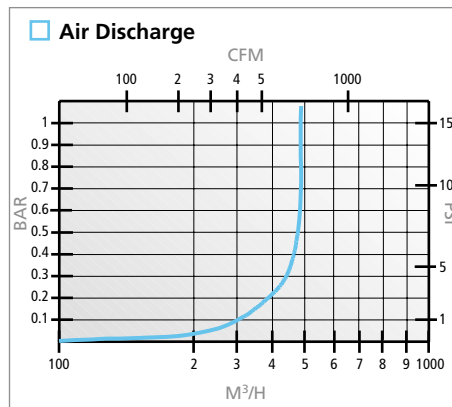
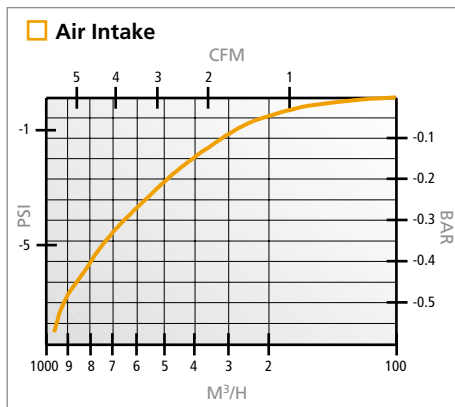
- Operating pressure of 0.2 to 16 bars
- 2" BSP or NPT threaded base — as per the customer's choice
- Air flow, even at a critical velocity created by pipeline pressure of 0.9 bar, will not cause premature closure of the valve
- Structure materials: Body: Glass-reinforced, UV resistant Polyamide (GRP)
- Internal parts: corrosion resistant plastic materials and synthetic rubber
- The valve allows the discharge of 470 m³/hour of air at pipe pressure of 0.5 bar, when fully-open



DAV-P-2-KA 2" Combination Air Valve

Performance

Air intake/discharge



Dimensions

Dimension	SI	US
H - Height	269mm	10 ⁹ / ₁₆ in
W - Width	102 mm	4 in
D - Threaded Attachment	2" BSP	2" NPT
a - Automatic nozzle area	7 mm ²	.0108 in ²
A - Kinetic Nozzle Area	855 mm ²	132.5 in ²
Weight	0.725 kg	1.6 Lbs.

Part Specifications

Part	Description	Material
1	Base	GRP
2	O-ring	NBR rubber
3	Body	GRP
4	Kinetic float	Polypropylene
5	Automatic seal	EPDM rubber
6	Automatic float	GRP
7	Kinetic seal	EPDM rubber

