



Waterworks

Reduced bore, Non-slam, Combination Air Valve Series

Description

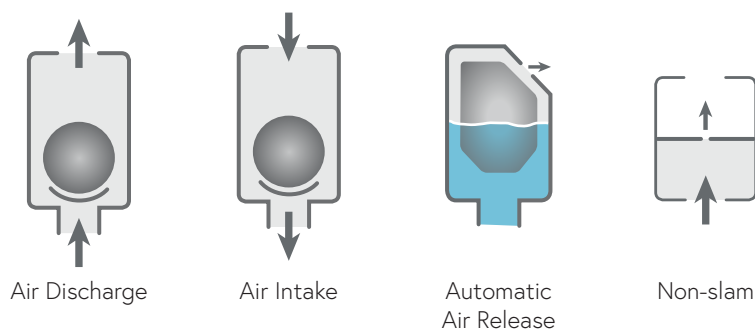
DAV-MS-KA-SA is a non-slam, reduced bore, surge-dampening Combination Air Valve Series. Installed on liquid transmission systems, the Air Valve is designed to improve hydraulic operation by protecting the pipeline, increasing pipeline efficiency and reducing energy requirements.

The Air Valve provides both high-capacity vacuum protection and efficient surge suppression.

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
- At end lines
- Before water meters
- On strainers and filters
- Municipal and industrial water conveyance systems

Operation



Features and Benefits

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
 NSF/ANSI/CAN 61 certified & listed	For drinking water system component
NSF/ANSI 372 certified & listed	Conforms with lead content requirements for "lead-free" plumbing

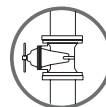
Technical Specifications

Size range	3" - 12"
Working pressure range	0.1 - 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

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

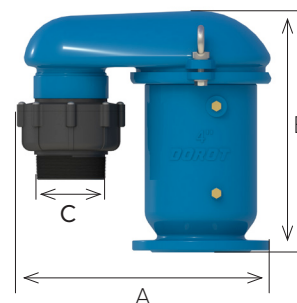
Valve connection	Flanged ends to meet various requested standards
Standard materials	Cast Steel body and cover
Pressure rating	PN16 PN25 PN40



Dimensions and Weight

Size	Dimensions (mm)		Connections	Weight (kg)	Orifice Area (mm ²)	
	max. A	B			A / V	Auto.
3" (50mm) FL	259	273.5	2" BSP Male	11.2	1960	0.78
4" (80mm) FL	340	355	3" BSP Male	21	5000	1.77
6" (100mm) FL	404	395	4" BSP Male	30.4	7855	3.14
8" (150mm) FL	644	486.5	2X 4" BSP Male	61	17670	7.06
10" (200mm) FL	450	690	-	91	31415	9.62
12" (250mm) FL	604	920	-	217	49090	19.63

FL - Flanged

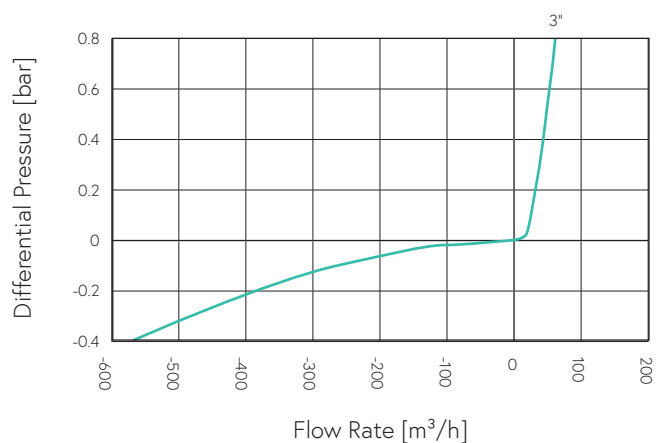


NOTE

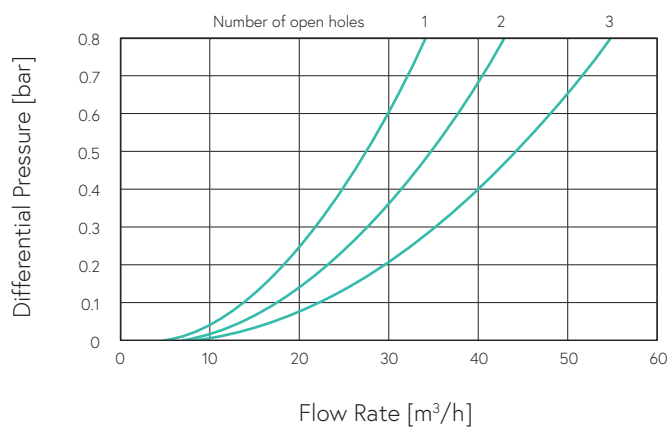
Dimension A in the image and in the table shows the maximum product width. This width can be reduced by changing the cover direction. All product weights are approximate, due to the differences in flange standards, materials and variable accessories.

Flow Charts

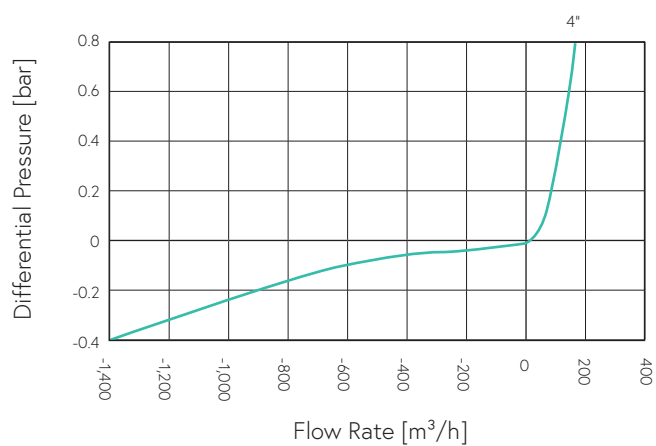
Air & Vacuum Flow Rate



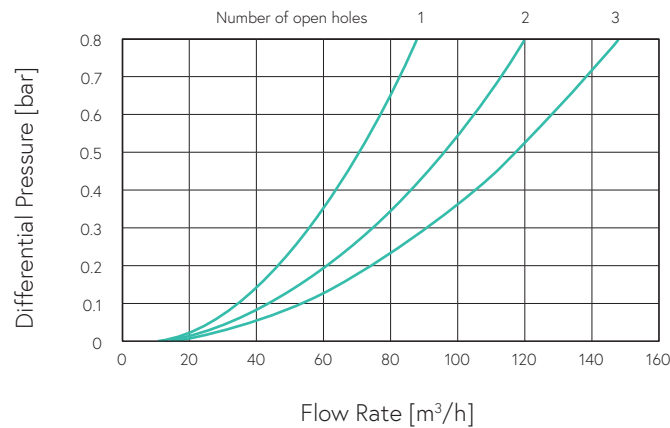
Air Discharge



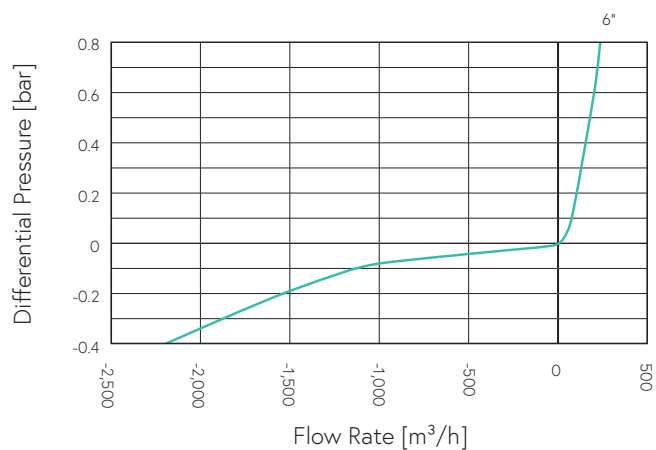
Air & Vacuum Flow Rate



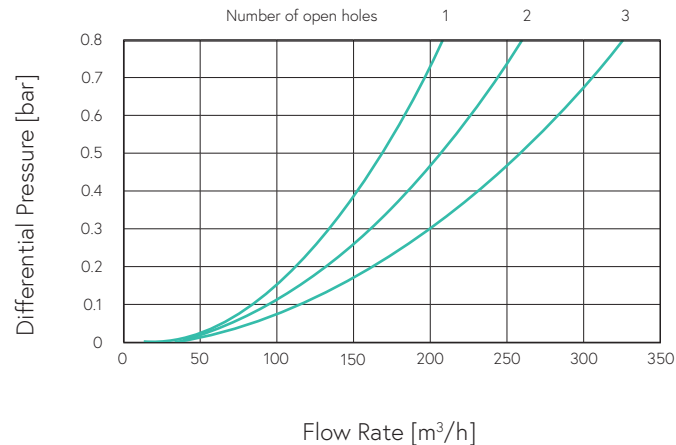
Air Discharge



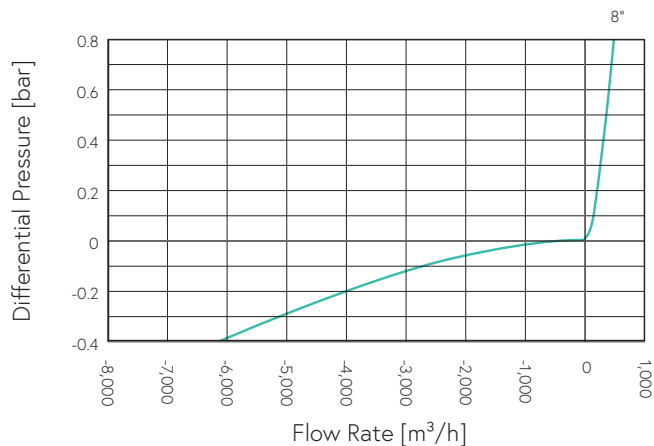
Air & Vacuum Flow Rate



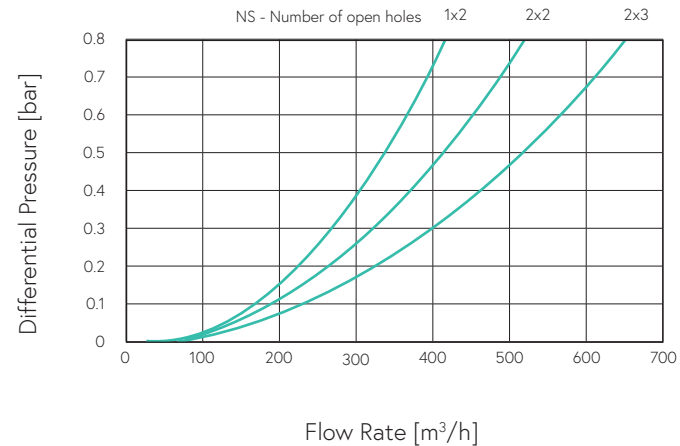
Air Discharge



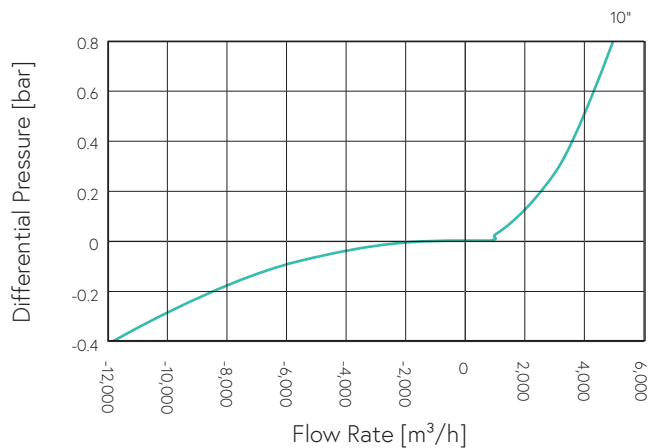
Air & Vacuum Flow Rate



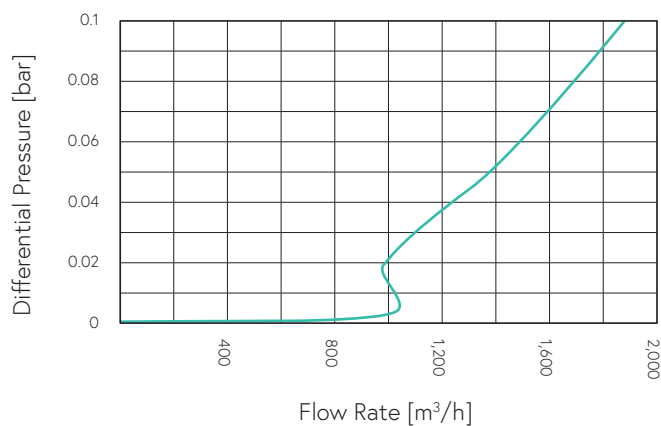
Air Discharge



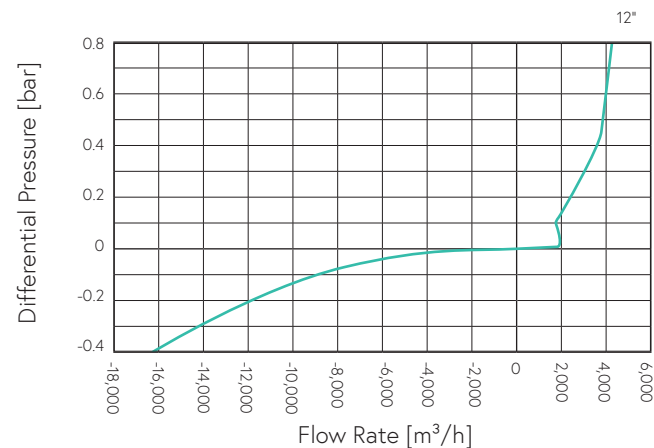
Air & Vacuum Flow Rate



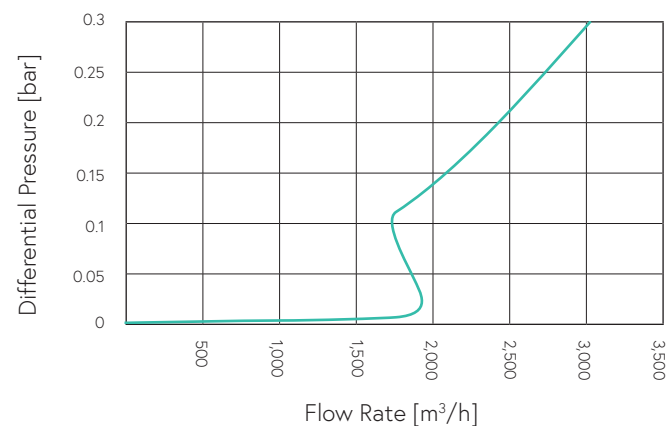
Air Discharge Switching Region



Air & Vacuum Flow Rate

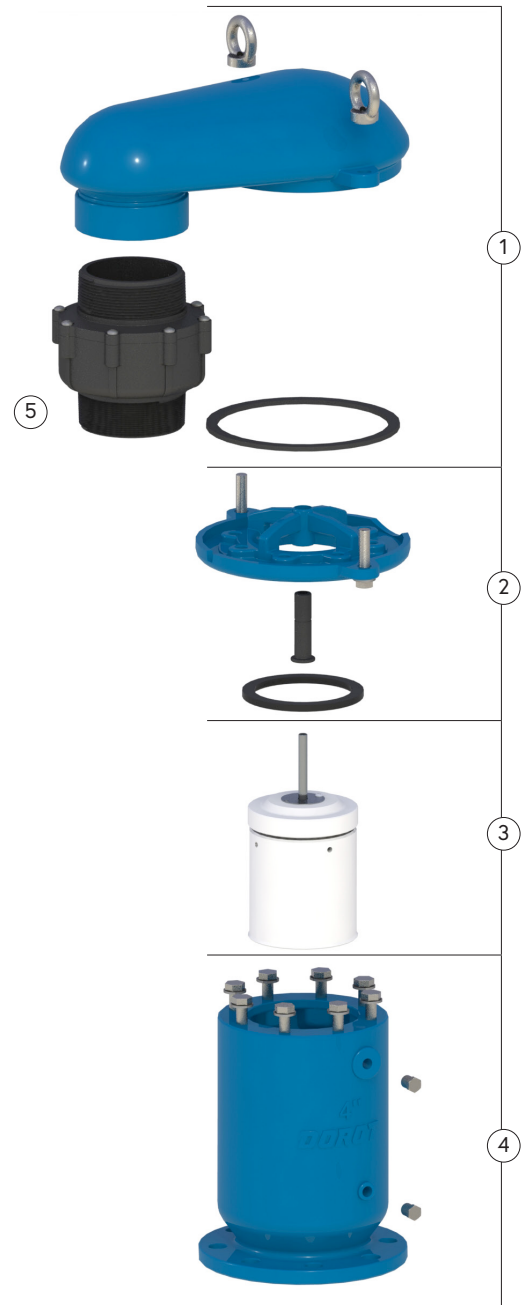


Air Discharge Switching Region



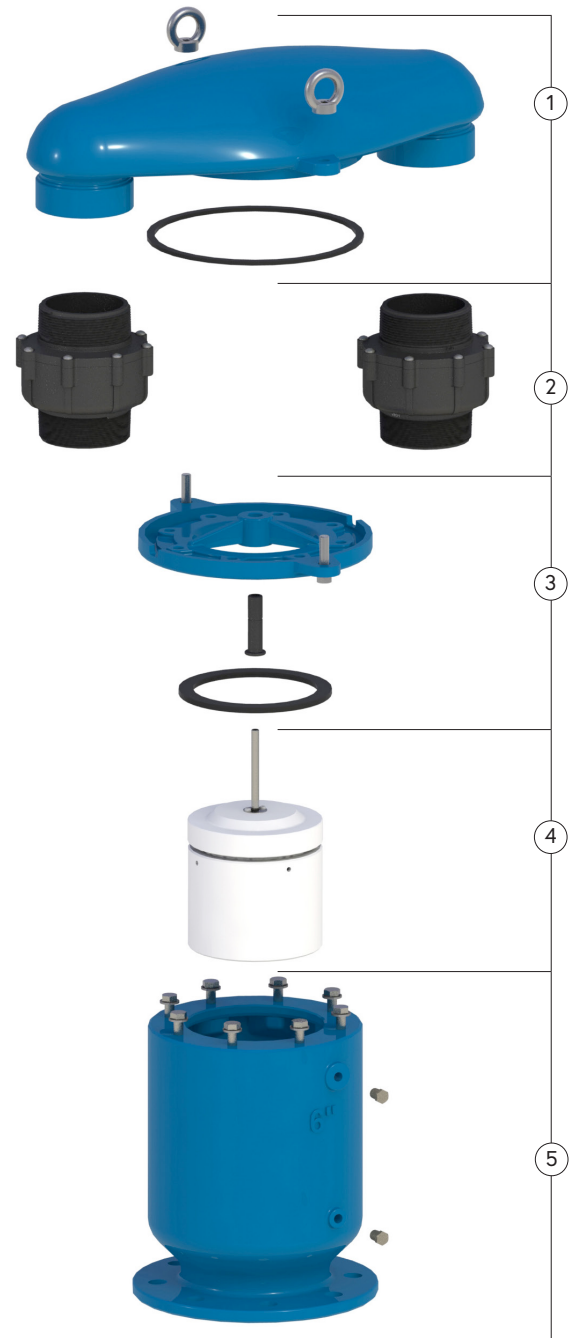
Parts List and Specifications | 3"-6"

No.	Part	Material
1	Cover Assembly	
1a	Lifting Nut	Stainless Steel 304
1b	Cover	Ductile Iron
1c	Cover Seal	NBR, EPDM
2	Plate Assembly	
2a	Plate	Ductile Iron
2b	Guiding Insert	Acetal (POM)
2c	Bolts & Washers	Stainless Steel 316
2d	Plate Seal	NBR, EPDM
3	Air Release / Air & Vacuum Assembly	
3a	Top Guiding Shaft	Stainless Steel 316
3b	Float	Polyethylene
3c	Nozzle Seal	NBR, EPDM
4	Body Assembly	
4a	Bolts & Washers	Stainless Steel 316
4b	Bottom Guiding Shaft	Stainless Steel 316
4c	Body	Ductile Iron
4d	Plug	Stainless Steel 316
5	Non-slam Component	Polypropylene 2"-3" body Reinforced Nylon 4" body



Parts List and Specifications | 8"

No.	Part	Material
1	Cover Assembly	
1a	Lifting Nut	Stainless Steel 304
1b	Cover	Ductile Iron
1c	Cover Seal	NBR, EPDM
2	Non-slam Component	Reinforced Nylon body
3	Plate Assembly	
3a	Plate	Ductile Iron
3b	Guiding Insert	Acetal (POM)
3c	Bolts & Washers	Stainless Steel 316
3d	Plate Seal	NBR, EPDM
4	Air Release / Air & Vacuum Assembly	
4a	Top Guiding Shaft	Stainless Steel 316
4b	Float	Polyethylene
4c	Nozzle Seal	NBR, EPDM
5	Body Assembly	
5a	Bolts & Washers	Stainless Steel 316
5b	Bottom Guiding Shaft	Stainless Steel 316
5c	Body	Ductile Iron
5d	Plug	Stainless Steel 316



Parts List and Specifications | 10"-12" Screen Cover Models

No.	Part	Material
1	Cover Assembly	
1a	Bolts & Washers	Stainless Steel 316
1b	Cover	Ductile Iron
1c	Screen	Stainless Steel 304
2	SA Assembly	
2a	Plug	Galvanized Steel
2b	SA Housing	Ductile Iron
2c	Shaft Guide	Stainless Steel 304
2d	Shaft	Brass
2e	SA Disc	Acetal (POM)
3	Plate Assembly	
3a	Plate	Ductile Iron
3b	Guiding Insert	Acetal (POM)
3c	Bolts & Washers	Stainless Steel 316
3d	Lifting Nut	Stainless Steel 304
3e	Plate Seal	NBR, EPDM
4	Air Release / Air & Vacuum Assembly	
4a	Top Guiding Shaft	Stainless Steel 316
4b	Float	Polyethylene
4c	Nozzle Seal	NBR, EPDM
5	Body Assembly	
5a	Bottom Guiding Shaft	Stainless Steel 316
5b	Body	Ductile Iron
5c	Plug	Stainless Steel 316

