

DOROT DAV-P-KA

Aquestia
Directing the Flow



Irrigation

Reduced Bore, Combination Air Valve

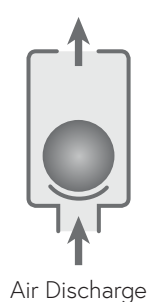
Description

DOROT DAV-P-KA Series, is a reduced bore Combination Air Valve. 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.

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

Operation



Air Discharge



Air Intake



Automatic
Air Release

Features and Benefits

Reliable operation	Reduces water hammer impact, saves energy and increases system efficiency
Dynamic design	High capacity air discharge
	Easy to install and simple to maintain
Unique orifice seat/seal design	Long-term maintenance-free operation
Accessible discharge outlet	For connecting a vent pipe
Construction materials	UV resistant, non-corrosive and durable
Rolling seal	Leak-free sealing over a wide range of pressure differentials

Technical Specifications

Size range	½" – 2"
Working pressure range	0.1 - 16 bar (PN16)
Testing pressure	1.5 times maximum working pressure
Temperature	Maximum working temperature: 60° C Maximum intermittent temperature: 80° C

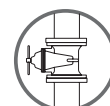
Upon ordering, please specify: model, size, working pressure, thread/flange standard and type of liquid

Valve Selection Options

Valve connection	Threaded male BSPT/NPT Flanged ends to meet various requested standards
Standard materials	Reinforced Nylon, Polypropylene
Optional add-on components	One-way Out attachment, allows for air discharge only, prevents air intake One-way In attachment, allows air intake only, not allowing air discharge Non-slam, discharge-throttling attachment, allows full air intake, throttles air discharge (2" only)
Pressure rating	PN16

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.

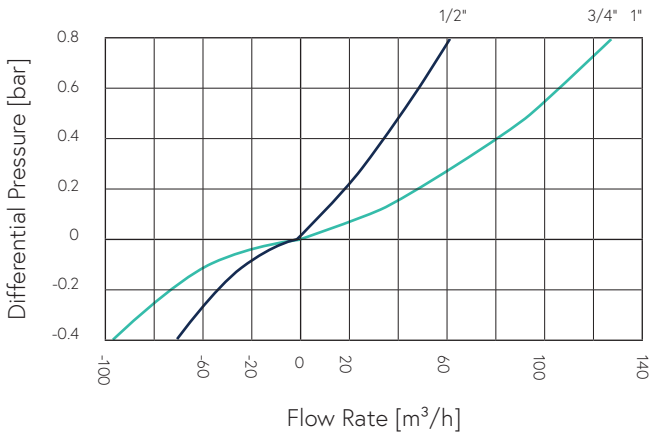
For complete installation instructions, please refer to the IOM document.



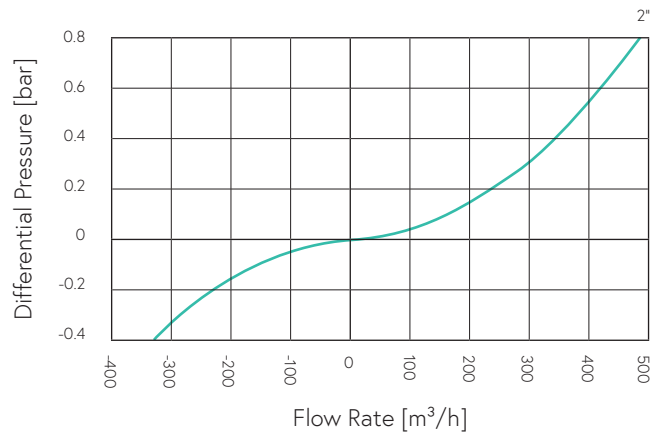
Flow Charts

DOROT DAV-P-KA

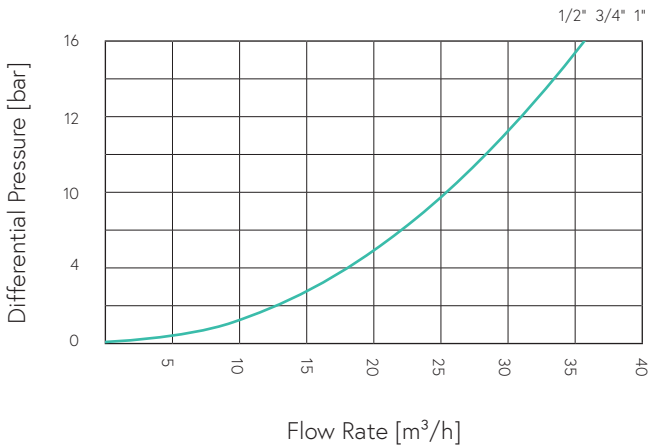
Air & Vacuum Flow Rate



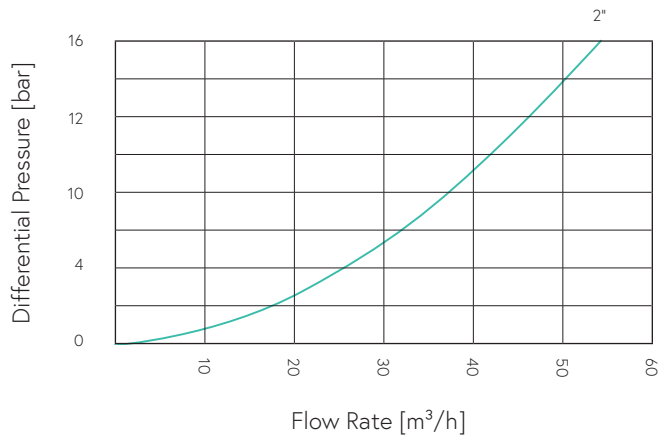
Air & Vacuum Flow Rate



Automatic Air Release Flow Rate

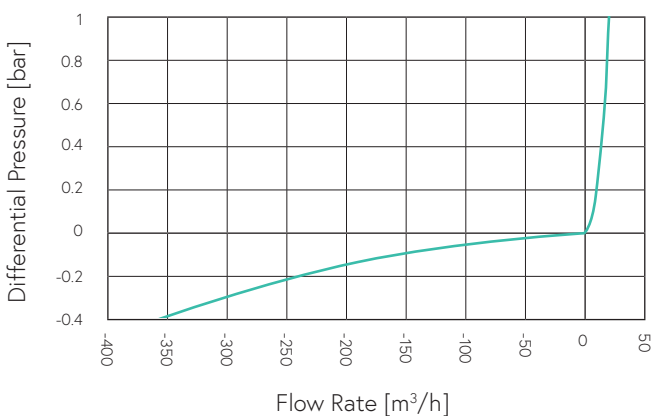


Automatic Air Release Flow Rate

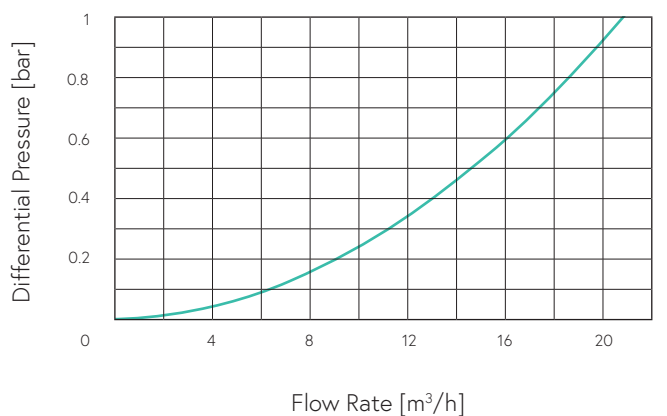


DOROT DAV-P-KA-SA (Non-slam)

Air & Vacuum Flow Rate

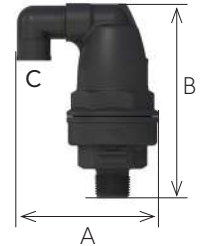


Air Discharge Flow Rate



Dimensions and Weight

Size	Dimensions (mm)		Connections	Weight (kg)	Orifice area (mm ²)	
	max. A	B			C	A / V
1/2" (15mm), 3/4" (20mm) 1" (25mm) THR	134	183	3/4" BSP Female	0.5	314	12.85
2" (50mm) THR	187	249	1½" BSP Female	1.0	908	12.85
2" (50mm) FL	215	262	1½" BSP Female	1.5	908	12.85



NOTE

Dimension A in the picture 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.

FL - Flanged THR - Threaded

Parts List and Specifications

No.	Part	Material
1	Cover Assembly	
1a	Discharge Outlet	Polypropylene
1b	One-way or Non-slam Check Valve (optional)	Polypropylene
1c	Cover	Reinforced Nylon / Polypropylene
2	Air Release / Air & Vacuum Assembly	
2a	Orifice Seal	EPDM
2b	Slider	Reinforced Nylon
2c	Float	Foamed Polypropylene
2d	Rolling Seal	EPDM
2e	O-ring	EPDM
3	Base	Reinforced Nylon / Brass / Polypropylene
4	Flange Assembly (optional)	
4a	O-ring	NBR
4b	Flange	Reinforced Nylon

