Air and vacuum release valves



Air and vacuum release valves:

Air bubbles in a pipeline system lead to reduced capacity and can damage installations. The situations described below can result in air in the pipeline system:

- Starting up the pump
- During the filling of the installation, air can be trapped in the system
- Turbulence at pump suction
- (Per volume unit of water (at 20°C), 2% of air enters the system. In case of pressure and temperature variations, it is possible that the air does not remain in solution.)

To protect the installation against vacuum damage a kinetic or combination air release valve can be used.

The **Bermad** range of air and vacuum release valves comprises of 3 different types. Depending on the installation requirements one of the following types should be installed:

- Automatic air release valves ³/₄" & 1" (A10). Allows efficient release of air pockets from pressurized pipes
- **Kinetic** air release valves ³/₄", 1" & 2" (**K10**). Evacuates air during pipeline filling and enables large volume air intake in the event of network draining
- Combination air release valves ¾", 1" & 2" (C10). It evacuates air during pipeline filling, allows efficient release of air pockets from pressurized pipes, and enables large volume air intake in the event of network draining

Features:

- Dynamic sealing Prevents leakage under low pressure conditions (0.1 bar)
- Large air-flow capacity.
- Advanced aerodynamic design with a straight-flow body allowing higher than ever before flow rates
- Cavitation and surge protection (anti-slam)

Model:

• Plastic PN10

Options:

- Plastic PN16
- Drinking water mark
- Inflow prevention (only combination air and vacuum release valve 2")
- Surge Protection (anti-slam) (only combination air and vacuum release valve 2")





Air and vacuum release valves A10 Technical data

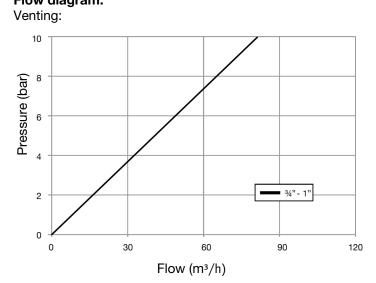
Specifications:

Connection: Working pressure: Max. temperature: ¾", 1" BSP (male) 0,1 - 10 bar 60°C

Materials:

Body: Float: Seals: glass-fibre-reinforced polyamide polypropylene EPDM

Flow diagram:



Dimensions and weights:

	_			
Model		3⁄4"	1	
Orifice	mm²	8,8	8,8	
Height H	mm	136	136	
Diameter D	mm	95	95	
Weight	kg	0,35	0,36	









Air and vacuum release valves K10 Technical data

Specifications:

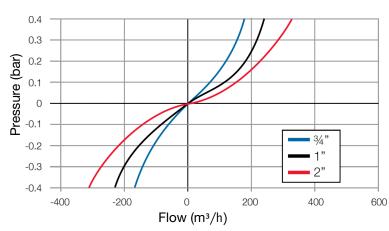
Connection: Working pressure: Max. temperature: ³4", 1", 2" BSP (male) 0,1 - 10 bar 60°C

Materials:

Body: Float: Seals: glass-fibre-reinforced polyamide polypropylene EPDM

Flow diagram:

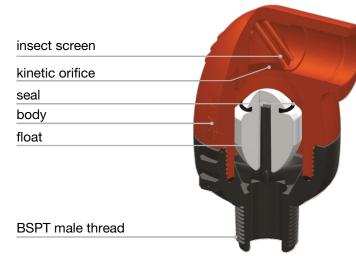
Venting:





Dimensions and weights:

Model		3⁄4"	1"	2"	
Orifice	mm²	320	320	755	
Height H	mm	109	109	130	
Diameter D	mm	76	76	93	
Weight	kg	0,17	0,17	0,28	



insect screen	
body kinetic orifice	
seal	
float carrier plate	
BSPT female	

NUM UVAR

Subject to modifications No liability accepted for errors or misprints



Air and vacuum release valves C10 Technical data

Specifications:

Connection: Working pressure: Max. temperature:

Materials:

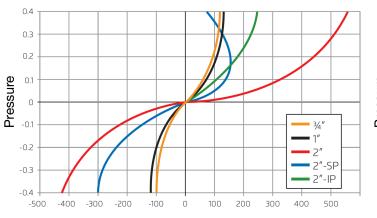
Body: Float: Kinetic plug: Polypropylene:

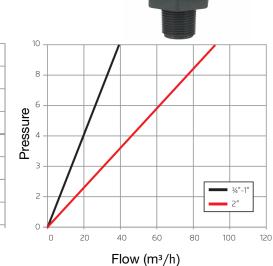
Flow diagram:

Venting:

³4", 1", 2" BSP (male) 0,1 - 10 bar 60°C

glass-fibre-reinforced polyamide polypropylene glass-fibre-reinforced polyamide EPDM





Flow (m³/h) Dimensions and weights:

Model		3⁄4"	1"	2"	
Orifice autom.	mm²	5,5	5,5	12,2	$ \land \uparrow \uparrow$
Orifice kinetic	mm²	320	320	1590	
Height H	mm	160	160	230	
Diameter D	mm	97	97	143	
Weight	kg	0,44	0,45	1,30	
insect screen				123	
body			_		
kinetic orifice				autor	natische
seal					orifice
kinetice plug		SN I.			seal
		*			
					float
					O-ring
		J.			
BSPT male thread					

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Knee for drainage connection (only 2")



Surge Protection (antislam) (only 2")



Inflow prevention (only 2")

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