

Air valves high pressure

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 $\frac{3}{4}$ " & 1" (**A30 / A71**). Allows efficient release of air pockets from pressurized pipes
- **Combination** air release valves $\frac{3}{4}$ ", 1" & 2" (**C30 / C30-C / C70**). 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
- Surge Protection (anti-slam)

Models:

- Plastic PN16
- Metal PN16

Options:

- Metal PN25 and PN40
- Drinking water service standards
- Inflow prevention (only combination air and vacuum release valve)
- Surge Protection (anti-slam) (only combination air and vacuum release valve)





Air and vacuum release valves high pressure A30

Technical data

Specifications:

Connection: 3/4", 1" BSP (male)
 Working pressure: 0,1 - 16 bar; option 0,02 bar (A31)
 Max. temperature: 60°C

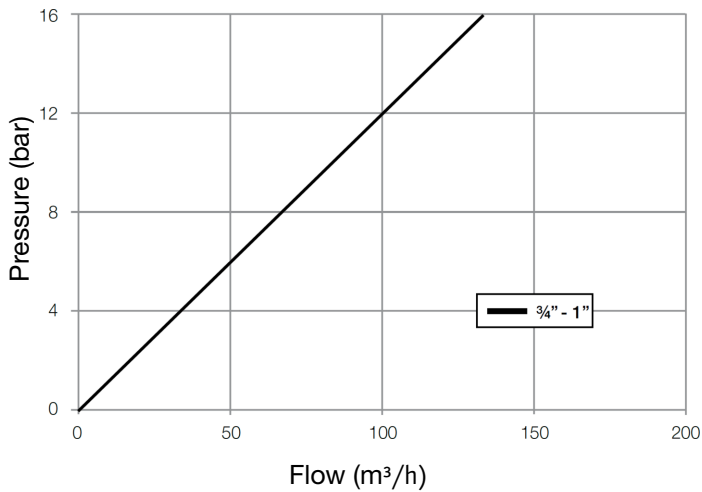
Materials:

Body: glass-fibre-reinforced polyamide (for drinking water)
 Float: polypropylene (for drinking water)
 Seals: EPDM (for drinking water)



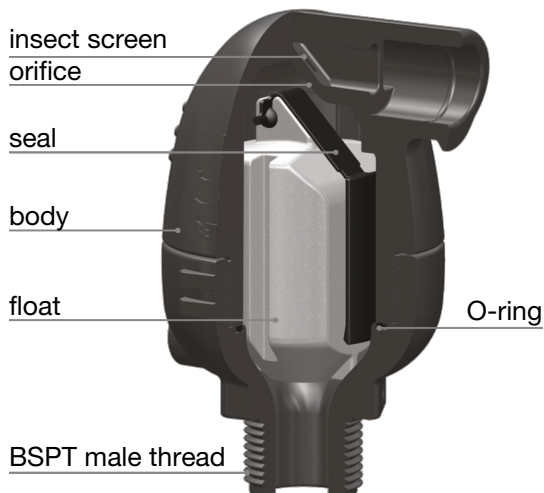
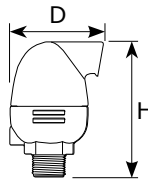
Flow diagram:

Venting kinetic:



Dimensions and weights:

Model		3/4"	1"
Orifice	mm²	9,6	9,6
Height H	mm	136	136
Diameter D	mm	95	95
Weight	kg	0,35	0,35



Air and vacuum release valves high pressure C30

Technical data

Specifications:

Connection: 3/4", 1", 2" BSP (male)
 Working pressure: 0,1 - 16 bar
 Max. temperature: 60°C

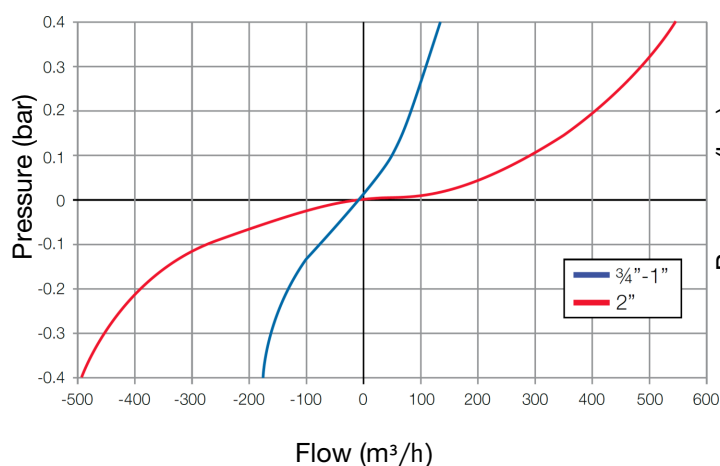
Materials:

Body: glass-fibre-reinforced polyamide (for drinking water)
 Float: polypropylene (for drinking water)
 Seals: EPDM (for drinking water)

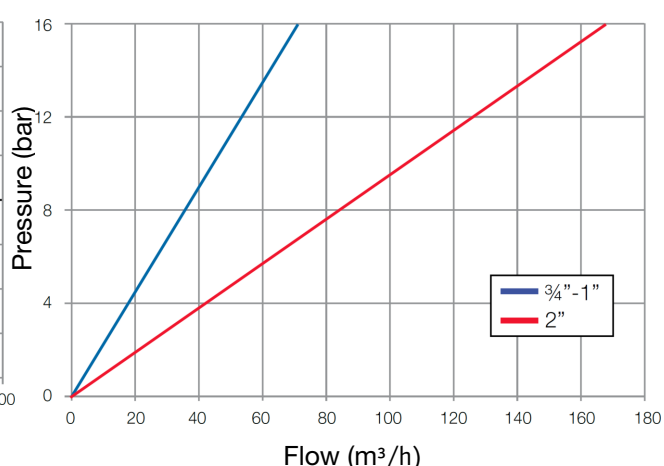


Flow diagram:

Venting kinetic:

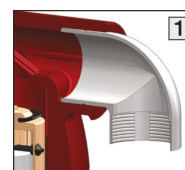
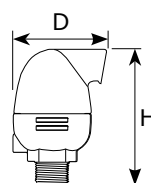


Venting automatic:

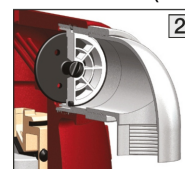


Dimensions and weights:

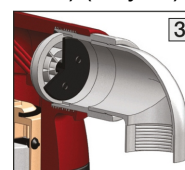
Model		3/4"	1"	2"
Orifice autom.	mm ²	5,5	5,5	12,2
Orifice kinetic	mm ²	320	320	1590
Height H	mm	160	160	230
Diameter D	mm	97	97	143
Weight	kg	0,44	0,45	1,3



Knee for drainage connection (only 2")



Surge protection (anti-slam) (only 2")



Inflow prevention (only 2")

insect screen

kinetic orifice

dynamische seal

kinetic plug

body

BSPT male thread

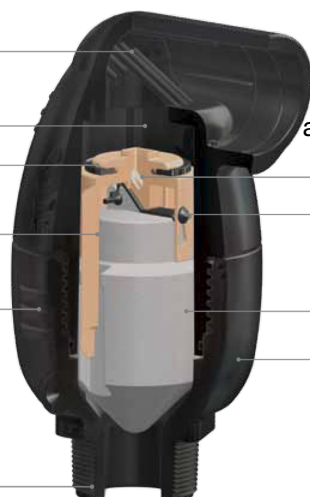
1 2 3

automatic orifice

peel seal

float

O-ring





Air and vacuum release valves high pressure C30-C

Technical data

Specifications:

Connection: 2" BSP (male) option: flange
 Working pressure: 0,1 - 16 bar
 Max. temperature: 60°C

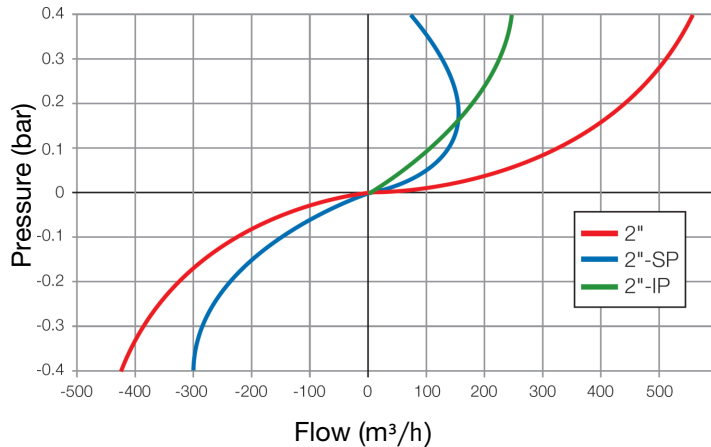
Materials:

Body: cast, ductile Iron with epoxy coating (for drinking water)
 Float: polypropylene (for drinking water)
 Kinetic plug: glass-fibre-reinforced polyamide (for drinking water)
 Seals: EPDM (for drinking water)

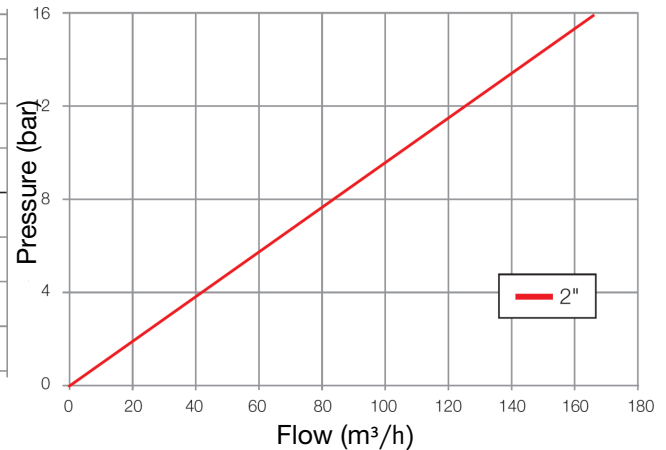


Flow diagram:

Venting kinetic:

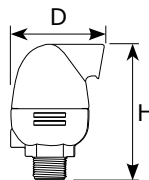


Venting automatic:



Dimensions and weights:

Model		2"
Orifice automatic	mm ²	12,2
Orifice kinetic	mm ²	1590
Height H	mm	248
Diameter D	mm	157
Weight	kg	6,20



insect screen

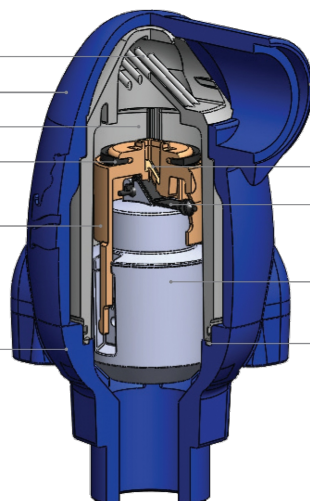
body

kinetic orifice

seal

kinetic plug

BSPT male thread



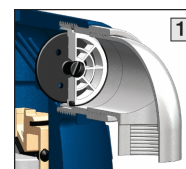
1 2

automatic orifice

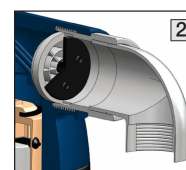
seal

float

O-ring



Surge protection (anti-slam)



Inflow prevention



UVAR

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 No liability accepted for errors or misprints

Air and vacuum release valves high pressure A71

Technical data

Specifications:

Connection: 3/4", 1" BSP (male)
 Working pressure: 0,02 - 16 bar option: up to 25 bar
 Max. temperature: 60°C

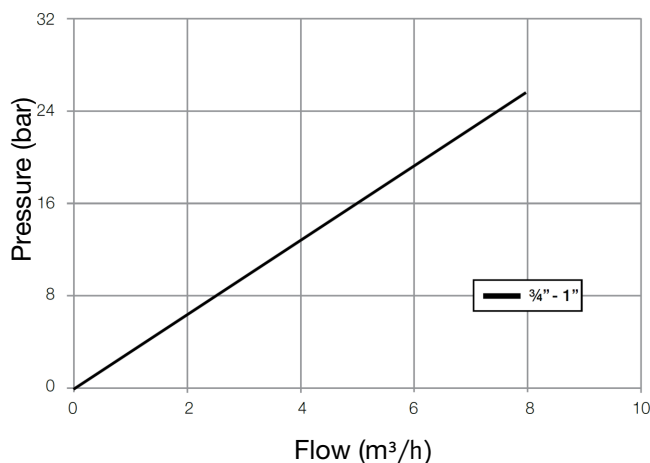
Materials:

Body: stainless steel 316 (for drinking water)
 Float: polypropylene (for drinking water)
 Seals: EPDM (for drinking water)



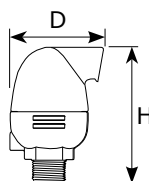
Flow diagram:

Venting automatic:



Dimensions and weights:

Model		3/4"	1"
Orifice PN16	mm ²	0,6	0,6
Orifice PN25	mm ²	0,4	0,4
Height H	mm	132	132
Diameter D	mm	86	86
Weight	kg	1,5	1,5



auto. orifice

auto. orifice seal

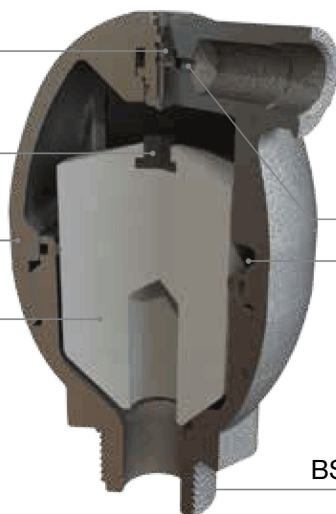
body

float

O-ring

O-ring

BSPT male thread





Air and vacuum release valves high pressure C70

Technical data

Specifications:

Connection: 2", 3", 4", 6", 8" flange option: thread (2")
 Working pressure: 0,1 - 16 bar option: up to 25/40 bar
 Max. temperature: 60°C

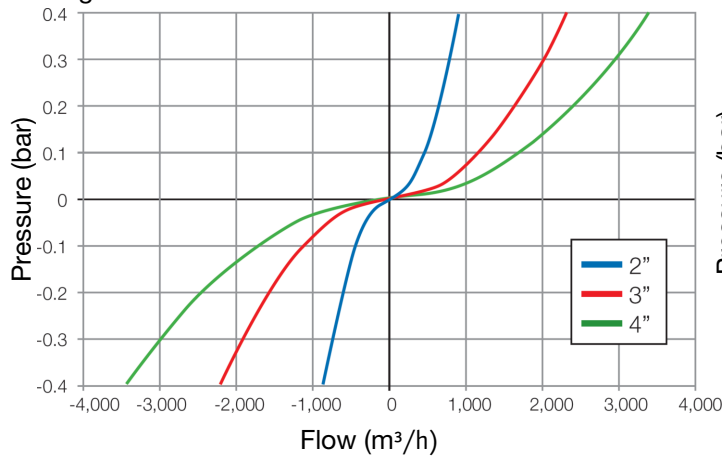
Materials:

Body: cast, ductile Iron with epoxy coating (for drinking water)
 option: stainless steel, bronze
 Float: polypropylene (for drinking water)
 Seals: EPDM (for drinking water)

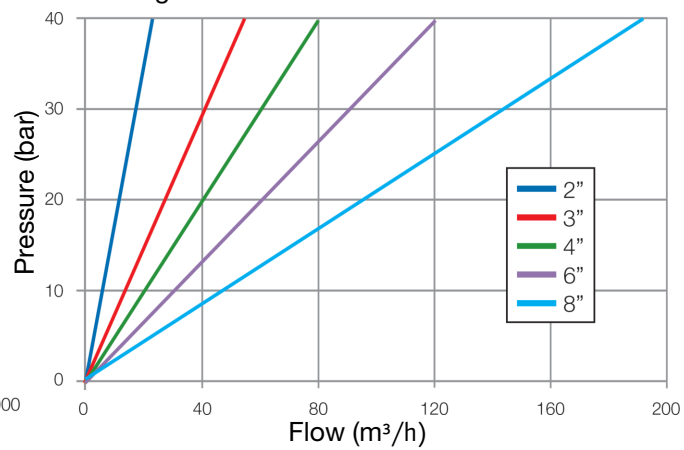


Flow diagram:

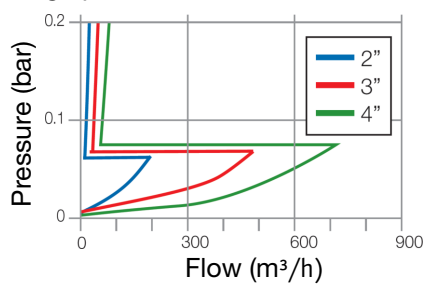
Venting kinetic:



Venting automatic:



Surge protection:



Options: Side



Down



Mushroom

Dimensions and weights:

Model		2"	3"	4"	6"	8"
Orifice autom. PN16	mm ²	1,1	2,5	3,1	9,1	11,2
Orifice autom. PN25	mm ²	0,6	1,5	2,0	5,7	7,5
Orifice autom. PN40	mm ²	0,4	1,0	1,3	3,5	4,8
Surge protection	mm ²	79	201	314	707	1.257
Orifice kinetic	mm ²	1.963	5.027	7.854	17.671	31.416

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