

Pressure safety valve with counterweight for process or storage tank

OVERVIEW:

The valves in the BOT range are PED certified security equipment intended to protect tanks containing group 2 gases against excess pressures (service pressure above 0.5 bar). The valve blow-off can be collected.

The valve comprises a cylindrical body and a lever mounted stainless steel counterweight, used for pressure calibration. In the event of excess pressure, the ball allows the fluid to escape to a secondary network.

As a rule, the valve is set to a pressure equal to the service pressure. Sealing is through a stainless steel ball up to 165 °C or an Arnite® ball up to 80 °C on contact with an elastomer lip seal.

SERVINOX possesses design tools to dimension a valve with respect to tank characteristics (diameter, height), resistance (pressure and vacuum) and washing conditions (temperature, flow-rate).

KEY BENEFITS :

- Fully autonomous (no external control required for its operation)
- Calibration by counterweight, ensuring excellent long-lasting reliability
- Cost-effective maintenance, with no impact on the calibration

APPLICATIONS :

- Manufacture and storage of food and non-food products in a controlled atmosphere (dairy products, beverages, waters, creams and other cosmetic products, fine chemicals, etc.)
- Tanks subject to PED compliance where the service pressure is more than 0.5 bar
- Exclusively designed to transport gases

TECHNICAL SPECIFICATIONS:

Sizes: DN25, DN32, DN38, DN40, DN50, DN51 Tank connection: Male, female, clamp, flange from DN25 to DN50 in SMS and DIN standards Service temperature: from 0 °C to 165 °C Pressure range: 0.5 to 6 bar KD: 0.10 Maximum back-pressure: 0.5 bar State of the inside surface: Ra to 0.8 μm

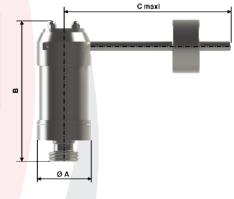
Materials:

- Parts in contact with the product: 1.4404 (316L) stainless steel
- Other parts: Stainless steel 1.4301 (304L) and nickel-plated brass
- Sealing: VMQ (Silicone) or FKM seals (Fluorocarbon rubber, eq. Viton®)

DIMENSIONS IN MM (pproximate values only) :

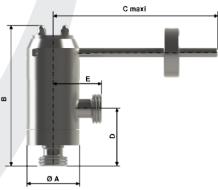
Models 51 (max 80°) and 61 (max 165°): Straight lower connection and blow-off not collected

DIN Sizes	DN 25	DN 32	DN 40	DN 50	
Α	69	69	88	88	
В	183	183	203	203	
С	453	453	462	462	
SMS					
Sizes	DN 25	DN 38	DN 51		
	DN 25 65	DN 38 88	DN 51 88		
Sizes					



Models 52 (max 80°) and 62 (max 165°): Straight lower connection and blow-off collected

DIN Sizes	DN 25	DN 32	DN 40	DN 50
Α	60	60	99	99
В	183	183	203	203
С	453	453	465	465
D	77	77	85	85
SMS Sizes	DN 25	DN 38	DN 51	
Α	63	77	77	
В	183	203	203	
С	453	465	465	

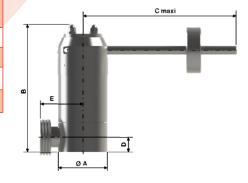


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DIN Sizes	DN 25	DN 32	DN 40	DN 50
Α	60	60	71	71
В	175	175	202	202
С	453	453	465	465
D	21	21	25	25
SMS				
Sizes	DN 25	DN 38	DN 51	
Sizes A	DN 25 63	DN 38	DN 51	
A	63	77	77	

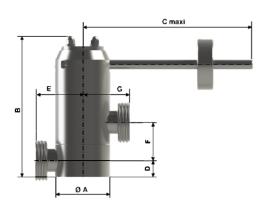
Models 53 (max 80°) and 63 (max 165°): Side connection and blow-off not collected



Models 54 (max 80°) and 6<mark>4 (max 16</mark>5°): Side connection and blow-off collected

DIN Sizes	DN 25	DN 32	DN 40	DN 50
Α	60	60	99	99
В	175	175	202	202
С	453	453	465	465
D	48	48	59	59
E	21	21	25	25
F	60	60	99	99

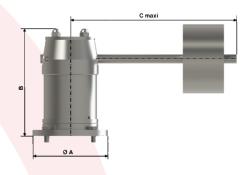
SMS Sizes	DN 25	DN 38	DN 51
Α	63	77	77
В	175	202	202
С	453	465	465
D	48	59	59
Е	21	25	25
F	63	77	77



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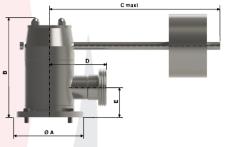
Models 55 (max 80°) and 65 (max 165°): Straight flange connection and blow-off not collected (assembly on buffer)

DIN Sizes	DN 25	DN 40
Α	100	120
В	155	170
С	453	465
SMS Sizes	DN 25	DN 38
	DN 25	DN 38 120
Sizes		



Models 56 (max 80°) and 66 (max 165°): Straight flange connection and blow-off collection (assembly on buffer)

Sizes	DIN		SMS		
Sizes	DN 25	DN 40	DN 25	DN 38	T
Α	100	120	100	120	
В	155	170	155	170	m
С	453	465	453	465	
D	50	52	50	52	
E	60	99	63	77	



OPTIONS :

- Specific surface state on request (inside and/or outside)
- Arnite® ball (service temperatures below 80 °C)
- Loosening cylinder to allow the passage of CIP liquid inside the valve (not in operation)
- Forced opening detection by loosening cylinder
- Blow-off collection
- Other gaskets (specific service conditions): EPDM (Ethylene-Propylene-Diene Monomer) (service temperatures below 120°C)

GUARANTEE:

12 months from the date of shipment (except in the case of special conditions)

COMPLIANCE :

- European PED 2014/68/EC compliant
- Elastomer gaskets compliant with FDA CFR 21.177.2600 and 1935/2004/EC ruling

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Only the commercial offer and the technical manual supplied with the equipment may be used for technical and legal purposes.

