

Pressure, vacuum-relief
& thermal shock safety valve 3-A
for process or storage tank
HSV-A®



Optional :



Sealing :



OVERVIEW :

The valves in the HSV range are hygienic equipment intended to protect tanks against vacuums (vacuum breaker) and/or excess pressure. They are fitted with a technical tube (washing function, sterile air intake). The pressurised function blow-off is collected. The passage sections, different for pressure and vacuum, are specifically designed to protect the tanks against sudden temperature variations resulting from hot washing (and SIP) followed by a cold rinse.

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 :

- ▲ Valve certified 3-A 58-01
- ▲ Combined pressure and vacuum
- ▲ Specially designed for protection against thermal shocks (hot/cold washes)
- ▲ Fully autonomous (no external control required for its operation)
- ▲ Hygienic design
- ▲ Simplified and cost-effective maintenance (with no lifting or special tools)
- ▲ Numerous options available according to requirements

APPLICATIONS :

- ▲ Tanks not subject to PED compliance where the service pressure is less than 0.5 bar
- ▲ Tanks subject to PED compliance where the service pressure is more than 0.5 bar (special version available on option)
- ▲ Tanks where the service temperature does not exceed 120 °C
- ▲ Exclusively designed to transport gases

NA

TECHNICAL SPECIFICATIONS :

Drip collector and anti-insect filter in vacuum

Sizes: DN 100/65, DN 150/100, DN 250/150, DN 320/150 and DN 450/150

Connection on the tank by 90° elbow-joint: To weld, male, female, clamp, flange

Pressure setting: 50 to 500 mbar (non PED) or in PED version according to size

Vacuum-relief setting: - 5 mbar

Service temperature: +10 °C to 140 °C

Internal washing tube orientation: 180° (opposite the elbow-joint)

Blow-off collection (pressurised): To weld

Materials:

- Parts in contact with the product: 1.4307 (304L) stainless steel
- Non-return pressure valve: 1.4404 (316L) stainless steel
- Non-return vacuum valve: 1.4404 (316L) stainless steel
- Sealing: EPDM (Ethylene Propylene Diene Monomer) gaskets

Inside surface state: Ra 0.8 µm

DIMENSIONS IN MM :

Sizes	A	B	C	D	E
DN 100/65	104*2	70*2	440	136	351
DN 150/100	154*2	104*2	625	184	392
DN 250/150	254*2	154*2	801	320	655
DN 320/150	324*2	154*2	912	398	807
DN 450/150	457*3	154*2	1116	547	1124

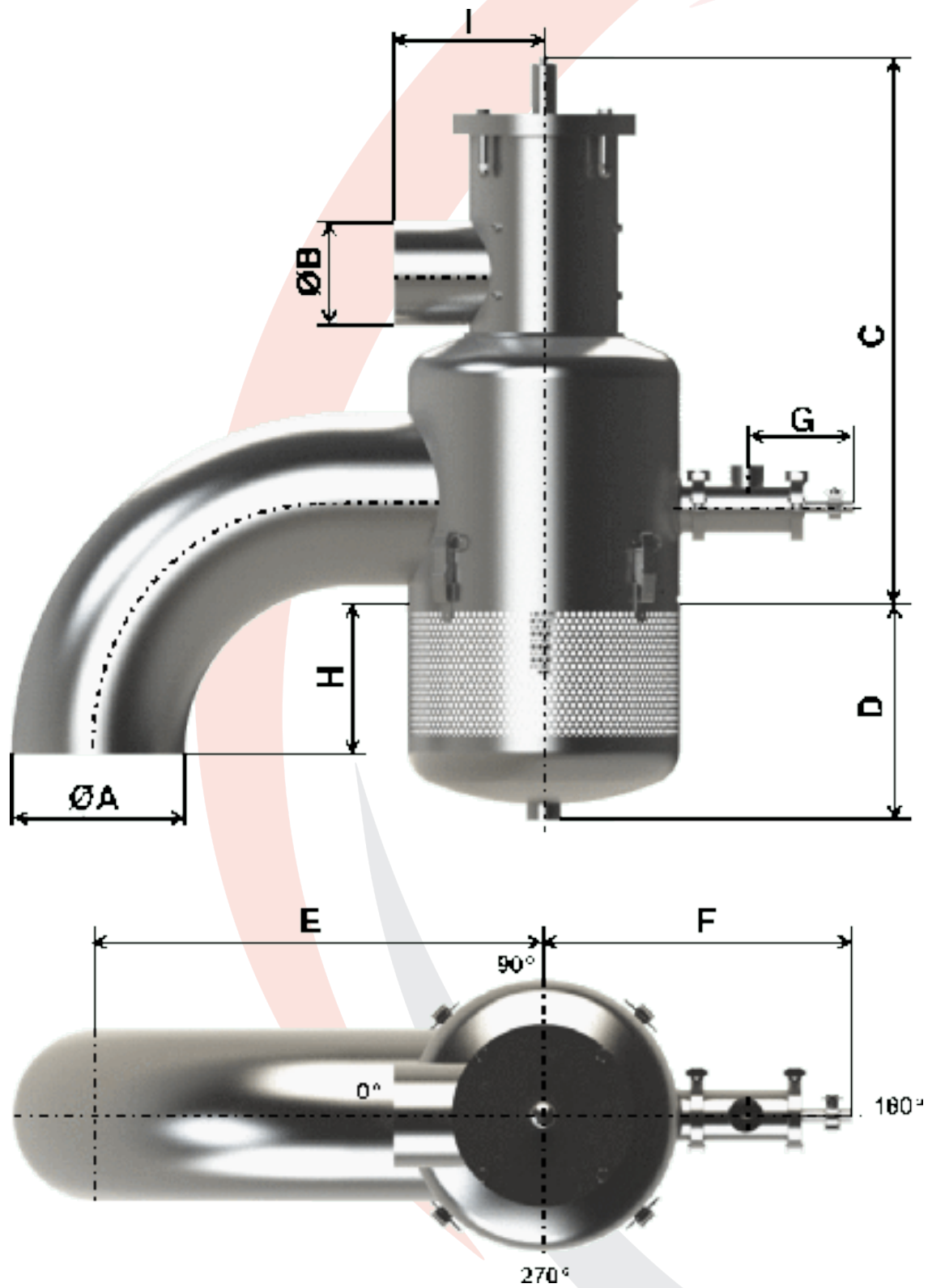
Sizes	F	G	H	I	PED max pressure calibration
DN 100/65	363	146	131	120	
DN 150/100	364	146	129	150	
DN 250/150	437	146	224	220	
DN 320/150	507	156	271	220	
DN 450/150	630	156	423	220	

FREEZE PROTECTION OPTION :

Sizes	Pressure function	Vacuum-relief function	Anti-snow system option (vacuum)
DN 100/65	-	-	-
DN 150/100	2 x 500W – 230V	500W – 230V	-
DN 250/150	2 x 600W – 230V	500W – 230V	450W – 230V
DN 320/150	2 x 600W – 230V	1000W – 230V	450W – 230V
DN 450/150	2 x 600W – 230V	1500W – 230V	-

Non contractual document and pictures, subject to change with no prior notice.

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



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OPTIONS :

- Non 3-A HSV model (service temperatures from +10°C to +100°C)
- PED compliance for pressure settings above 500 mbar
- Probe support (pressure, temperature) on technical tube
- Inductive opening detection in vacuum
- Freeze protection and anti-snow system
- Loosening cylinder for forced pressurised and/or vacuum opening
- Hygienic clamp or flange connections
- Other gaskets (specific service conditions) : FKM (Fluorocarbon rubber, eq. Viton®)
- Customised equipment: please contact us

GUARANTEE :

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

COMPLIANCE :

- Compliant with **3-A 58-01**
- Elastomer gaskets compliant with **FDA CFR 21.177.2600** and **1935/2004/EC ruling**
- Optional: European PED **2014/68/EC** compliance for pressure settings above 500 mbar

SERVINOX follows the recommendations of international guidelines and standards relative to hygienic design and construction, in particular those of the EHEDG.

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