



for process or storage tanks

## Presentation

The valves in the HSV range are hygienic devices designed to protect tanks against negative pressure (vacuum breaker) and/or overpressure. They are fitted with technical tubing (washing function, sterile gas inlet). The blow-off from the pressure function is collected. The different pressure and vacuum flow cross-sections are specifically designed to protect the tanks against the sudden temperature variations induced by hot washing (and SIP) followed by cold rinsing.

SERVINOX has the tools to size a valve according to the characteristics of the tank (diameter, height), its resistance (pressure, vacuum) and the washing conditions (temperatures, flowrates).

### **Key features**

- Combined pressure and vacuum
- Specially designed to protect against thermal shock (hot/cold washing)
- Completely self-contained: no external controls required
- Hygienic design
- Simplified, cost-effective maintenance (no need for lifting equipment or special tools)
- On Numerous options available to suit your needs

## **Applications**

• Tanks not subject to PED with an operating pressure no greater than 0.5 bar

Tanks with an operating temperature not exceeding 120°C

Exclusively designed to convey gases





### **Technical features**

**Drip collector and insect filter** for vacuum

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

**Tank connection** with a 90° elbow: Welding **Pressure setting:** 50 to 500 mbar (non-PED)

Vacuum setting: -5 mbar

Operating temperature: +1°C to 140°C

**Orientation of the internal washing tube:** 180° (opposite the elbow)

Blow-off gas collection (pressurised): Welding

Inner surface finish: Ra 0.8 µm

### **Materials**

• Parts in contact with the product: Stainless steel 1.4307 (304L)

• Pressure valve: Stainless steel 1.4404 (316L)

• Vacuum valve: Stainless steel 1.4404 (316L)

• Sealing: EPDM (Ethylene Propylene Diene Monomer) seals

### **Dimensions in mm**

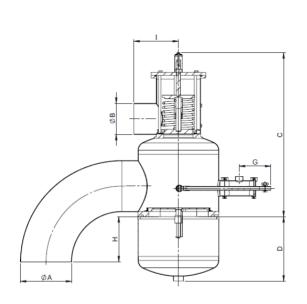
#### **HSV** pressure/vacuum

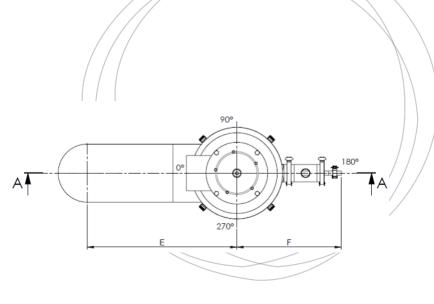
(the first diameter corresponds to the vacuum function, the second to the pressure function)

Sizes	A	В	С	D	E
DN 100/65	104*2	70*2	394	131	350
DN 150/100	154*2	104*2	485	129	400
DN 250/150	254*2	154*2	690	226	654
DN 320/150	324*2	154*2	815	271	807
DN 450/150	457*3	154*2	985	420	1118

Sizes	F	G	н	1
DN 100/65	335	156	304	120
DN 150/100	364	156	329	150
DN 250/150	457	156	402	220
DN 320/150	507	156	452	220
DN 450/150	630	156	572	220

Max. PED setting pressure			
5			
4			
3			
1,5			
NA			

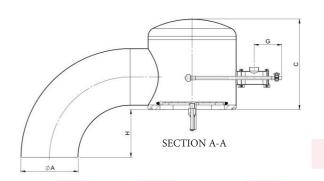


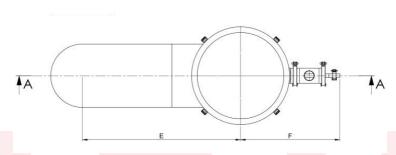


## **HSV** vacuum only

Sizes	A	В	С	D	E
DN 100/65	104*2	-	215	-	350
DN 150/100	154*2	-	295	-	400
DN 250/150	254*2	-	395	-	654
DN 320/150	324*2	-	516	-	807
DN 450/150	457*3	-	690	-	1118

Sizes	F	G	Н	I
DN 100/65	335	156	304	-
DN 150/100	364	156	329	-
DN 250/150	457	156	402	-
DN 320/150	507	156	452	-
DN 450/150	630	156	572	-





#### Frost protection option:

Sizes	Function PED	Vacuum function	Snow protection 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 500W - 230V	100W - 230V	450W - 230V
DN 450/150	2 x 500W - 230V	1500W - 230V	///-

# **Options**

- 3-A 58-01 certified valve
- Sensor support (pressure, temperature) on technical tubing
- Inductive vacuum opening detection
- Frost protection and snow protection system
- Lift-off cylinder for forced opening under pressure and/or vacuum
- Clamp or hygienic flange connections
- Other seals (specific operating conditions): FKM (Fluorocarbon rubber, eq. Viton®)
- Customised equipment: please contact us

# Warranty

12 months as from the date of dispatch (except for special conditions).

# Conformity

- In compliance with 3-A 58-01 (HSV-A version)
- Elastomer seals compliant with FDA CFR 21.177.2600 and Regulation (EC) 1935/2004
- Option: PED 2014/68/EU compliant for setting pressures above 500 mbar

