



**I Application**

The NLS valve is an overflow pneumatically actuated single seat valve designed for the pharmaceutical industry. It is widely used as a bypass valve for the positive displacement pumps, it is also used to protect the equipment in case of excessive pressure. It is widely used in the loops of purified water (PW) or water for injections (WFI). The valve is normally installed at the end of the line to maintain pressure at the end of the loop. As a result, the points of use in this area are provided with pressure. These valves are also used to prevent pump cavitation by creating a counterpressure during acceleration when the end-of-line flow rate is not sufficient.

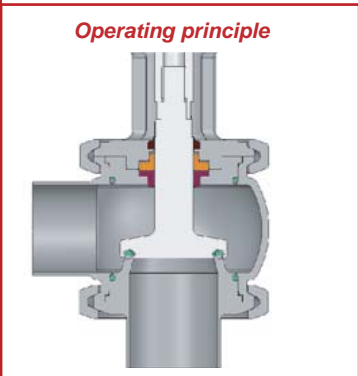
**I Operating principle**

The spring pressure forces the valve to close, the pressure can be adjusted by a screw on the top of the valve. When the configured pressure is exceeded, the valves opens. The valve is provided with a pneumatic seat lift, it allows the CIP liquid pass through during the CIP process.

**I Design and features**

- Sanitary design according to 3A standards.
- 360° adjustable body.
- Compact design.
- Pneumatic seat lifter.
- Pressure range: 0 to 6 bar.
- Easy assembly/disassembly by loosening the clamp.
- Standard connections: Clamp OD.
- Traceability of components.

Operating principle



**I Materials**

Parts in contact with the product	AISI 316L
Other st.st. parts	AISI 304L
Gasket	EPDM according to FDA 177.2600
Internal surface finish	Ra ≤ 0,5 µm
External surface finish	bright polish

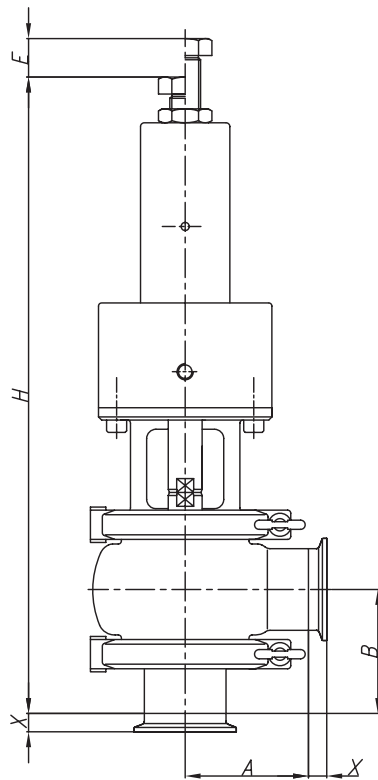
**I Options**

- Steam barrier (if shaft sterilisation is required).
- Jacketed body.
- Spring up to 10 bar.
- Range of springs offers various operating pressure ranges.
- Gaskets: NBR or FPM.
- Connections: weld.
- Material and surface finish certificates.



**I Technical specifications**

Available sizes	DN 1" - DN 3"	
Operating temperature	-10 °C to +121 °C (EPDM)	14 °F to 250°F
	+140 °C (SIP, max. 30 min)	284 °F
Max. operating pressure	10 bar	145 PSI
Compressed air pressure	6-8 bar	87-116 PSI
Air supply connections	G1/8" (BSP)	



DN	A	B	E	D	H	X
1"	50	55	35	86	325	13
1½"	60	65	35	86	345	
2"	70	80	25	112	405	
2½"	80	90	35	145	415	
3"	90	100	35	145	455	



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