



I Application

A check valve, or non return valve, is a valve that prevents the fluid from flowing backwards and ensures that it flows in only one direction. It can be used to prevent the loss of prime of the pump and water hammer. The valve is widely used in water loops.

I Operating principle

The check valve opens when the pressure of the fluid exceeds the pressure exerted by the spring. When the two pressures are compensated, the valve closes. A higher counterpressure will ensure the valve closes.

When there are two pumps operating alternately, the check valves are installed at the outlet of each pump to prevent the backflow when the pump is stopped. The obturation disc is provided with a perforation for a minimal circulation flow to avoid water stagnancy.

I Design and features

- Available sizes: DN 25/1" to 100/4"
- Easy assembly/disassembly with the clamp.
- Reduced size design.
- Connections: Clamp OD.
- Traceability of components.

I Materials

- | | |
|-----------------------------------|--------------------------------|
| Parts in contact with the product | AISI 316L (1.4404) |
| Other stainless steel parts | AISI 304 (1.4301) |
| Spring | AISI 302 (1.4319) |
| Gasket | EPDM according to FDA 177.2600 |
| Internal surface finish | Ra ≤ 0,5 μm |
| External surface finish | Machined (turned) |



Heat number



Option: a small perforation provides for a minimal flow



I Options

Gaskets: NBR, FPM or PTFE.
 Welding connections.
 Perforation in the obturation disc.
 Material and surface roughness certificates.
 ATEX version.

I Technical specifications

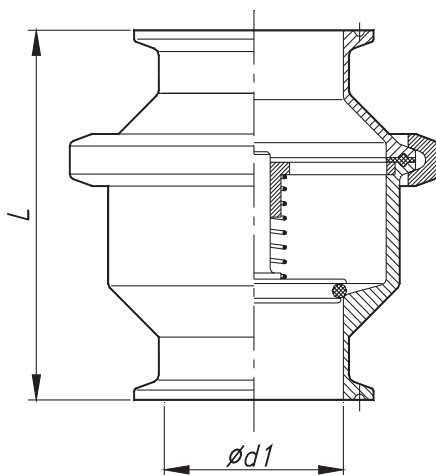
Sizes	DN 25 - DN 100	DN 1" - DN 4"
Max. working temperature		
EPDM gasket	-10 °C to +120°C	14 °F to 248 °F
	+ 140 °C (SIP, max. 30 min)	284 °F
Max. working pressure	10 bar	

Max. opening pressure [bar]:

DN	25	1"	32 / 40	1½"	50 / 100	2" / 4"
Spring	0,3		0,2			0,1

(Temperature and pressure values are indicative and depend on product and gasket type)

I General dimensions



Clamp OD according to ASME BPE

DN	d1	L	AISI 316L
1"	22,1	98	V7201-770650025S
1½"	34,8	105	V7201-770650040S
2"	47,5	110	V7201-770650050S
2½"	60,2	135	V7201-770650063S
3"	72,9	140	V7201-770650076S
4"	97,6	157	V7201-770650100S

(Dimensions in mm)



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