

SMS valves and accessories

Model **61413** Check valve, male ends EPDM gaskets - 316L stainless steel



Specifications

Dimensions: DN25 to DN104 (1" to 4")

Connections: SMS thread in accordance with DIN 405

Max. operating pressure: 10 bar

Temperature: -20°C to +130°C

Material: 316L stainless steel

EPDM gaskets

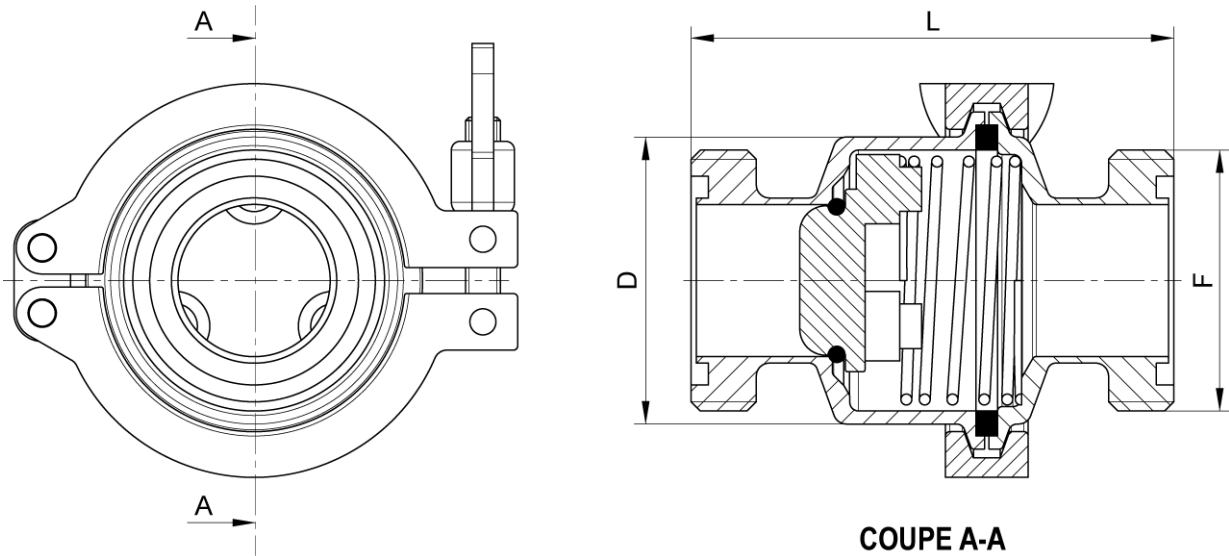
FKM gaskets on request



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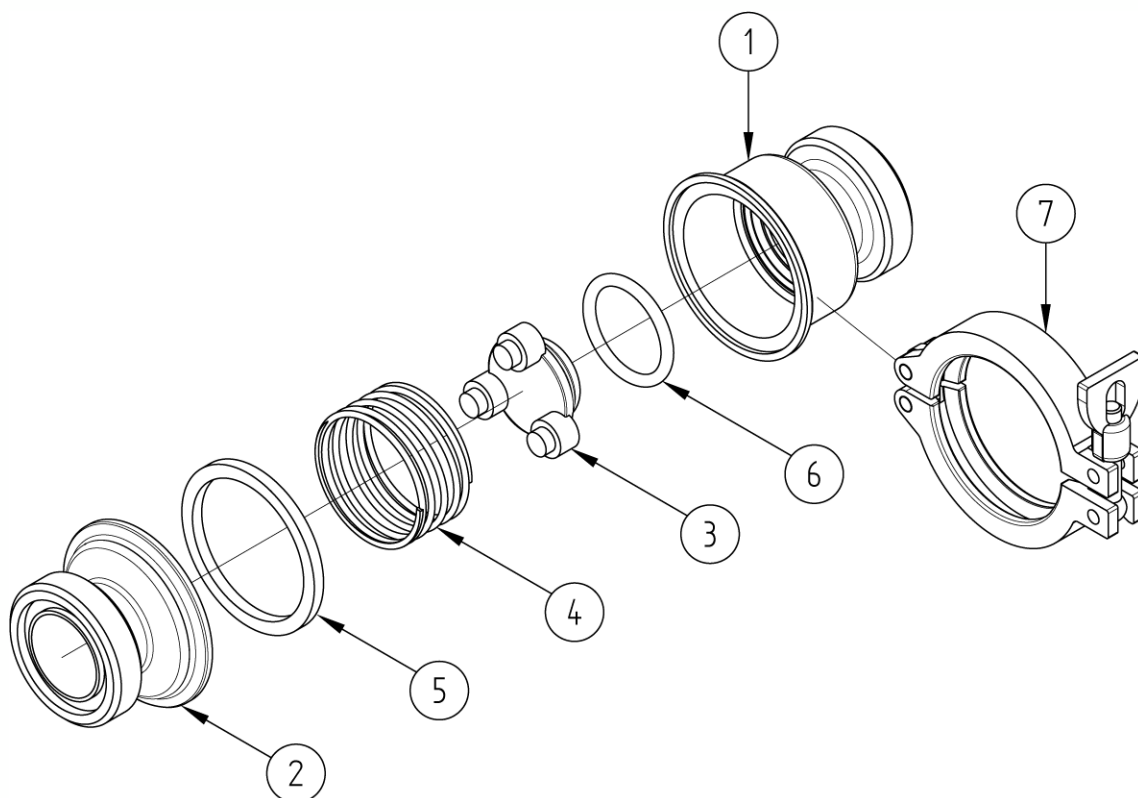
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61413-B VI021



| DN (mm) | NB (inches) | D (mm) | F (mm) | L (mm) | Opening pressure (mbar) | Weight (kg) | Part number SS 316L |
|------------|----------------|-----------|-----------|-----------|-------------------------------|----------------|---------------------------|
| 25 | 1" | 40 | 40x1/6" | 93 | 112 | 0.65 | 661413-25SG |
| 38 | 1 1/2" | 66 | 60x1/6" | 111 | 70 | 1.42 | 661413-38SG |
| 51 | 2" | 83 | 70x1/6" | 122.5 | 22 | 2.09 | 661413-51SG |
| 63 | 2 1/2" | 96 | 85x1/6" | 133 | 22 | 2.64 | 661413-63SG |
| 76 | 3" | 120 | 98x1/6" | 137.5 | 48 | 3.60 | 661413-76SG |
| 104 | 4" | 152 | 125x1/4" | 215 | - | 8.87 | 661413-104 |

| Fluid flow velocity (m/s) | Pressure drop (mbar) | | | |
|------------------------------|----------------------|------|------|------|
| | DN38 | DN51 | DN63 | DN76 |
| 1.5 | 180 | 90 | 160 | 100 |
| 2.5 | 280 | 200 | 195 | 200 |



| N° | Part Name | Material |
|----|----------------|----------------------|
| 1 | LOWER BODY | AISI 316L |
| 2 | UPPER BODY | AISI 316L |
| 3* | CHECK VALVE | AISI 316L |
| 4* | SPRING | AISI 316L |
| 5 | FLAT GASKET | EPDM OR FKM |
| 6 | O-RING | EPDM OR FKM |
| 7 | CLAMP COLLAR** | 304L STAINLESS STEEL |

*For DN38 to DN76 valves, the spring is held onto the check valve by spot welds.

**Nut for DN104

Assembly and maintenance instructions

Installation

When you install the check valve make sure that the arrow on it is pointing in the direction in which fluids will pass through it.

You can install it vertically (for fluids moving upwards) or horizontally.

To make sure that the check valve can work optimally:

You must install the check valve sufficiently far away from any zones of turbulence generated by the piping (elbows, reductions, etc.) or by any another apparatus (pumps, etc.). You can do this by installing straight pipes (that are each at least 4 to 5 times longer than the check valve's DN) in front of and behind the check valve.

Check that there is enough space and there are enough valves to isolate this section so that you can carry out maintenance operations where you are planning to install the check valve.

Check that the installation is clean and free from foreign bodies that could damage the check valve.

Check that all piping is perfectly aligned and that the piping support structure is dimensioned so that the check valve is not subject to any external stresses. The piping support structure must only support the pipes, not the check valve.

Clean the installation so that there are no foreign bodies in the piping.
Check that the check valve can move smoothly.

Pressure test the installation according to the relevant standards, but do not exceed the check valve's specifications.

Maintenance

The check valve does not require any specific maintenance if it is used in normal operating conditions. Depending on the fluid passing through the valve, you may need to change the gasket regularly.

You may need to change the check valve due to wear and tear, or if a fluid has damaged the valve and caused a leak or malfunction.
If this is the case see the "Assembly / Disassembly" section below.

Assembly / Disassembly

The maintenance and removal/installation of the check valve must be carried out by personnel who are qualified and trained for this type of intervention.



Warning: Before you work on the check valve, check that the installation has been stopped and that the piping is empty and is not pressurised.

Warning: If the check valve is used with fluids that have a temperature above 60°C then people could burn themselves if they touch it.

Warning: Beware of hazardous materials - follow the instructions provided by the suppliers.

Unscrew the clamp **7**.

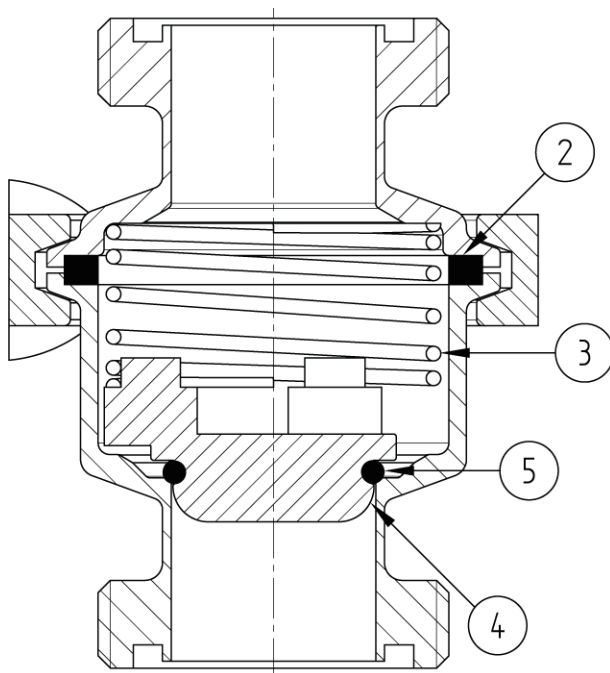
Separate the upper and lower parts (**1** and **2**) of the check valve in order to remove the gaskets **5** and **6**, the spring **4** and the check valve **3**.

Clean and inspect all of the parts of the check valve. Replace any worn parts. You are strongly advised to replace any sealing parts that have been disassembled.

Follow the disassembly steps in reverse to reassemble the check valve.

Pressure test the check valve and check the check valve's movement before you put the installation back into service.

Spare parts



| DN (mm) | NB (inches) | N° | Part number | Material |
|------------|----------------|----|-------------|-----------|
| 25 | 1" | 2 | JPL46365E | EPDM |
| | | 2 | JPL46365V | FKM |
| | | 3 | RCA25 | AISI 316L |
| | | 4 | PCAR025 | AISI 316L |
| | | 5 | JTO12E | EPDM |
| | | 5 | JTO12V | FKM |
| 38 | 1"1/2 | 2 | JPL715605E | EPDM |
| | | 2 | JPL715605V | FKM |
| | | 3 | RCA38 | AISI 316L |
| | | 4 | PCAR038 | AISI 316L |
| | | 5 | JTO21E | EPDM |
| | | 5 | JTO21V | FKM |
| 51 | 2" | 2 | JPL845725E | EPDM |
| | | 2 | JPL845725V | FKM |
| | | 3 | RCA51 | AISI 316L |
| | | 4 | PCAR051 | AISI 316L |
| | | 5 | JTO28E | EPDM |
| | | 5 | JTO28V | FKM |
| 63 | 2"1/2 | 2 | JPL100905E | EPDM |
| | | 2 | JPL100905V | FKM |
| | | 3 | RCA63 | AISI 316L |
| | | 4 | PCAR063 | AISI 316L |
| | | 5 | JTO32E | EPDM |
| | | 5 | JTO32V | FKM |
| 76 | 3" | 2 | JPL1241145E | EPDM |
| | | 2 | JPL1241145V | FKM |
| | | 3 | RCA38 | AISI 316L |
| | | 4 | PCAR038 | AISI 316L |
| | | 5 | JTO36E | EPDM |
| | | 5 | JTO36V | FKM |

Please contact us for details for the DN104 valve.

Standards and compliance

- This valve complies with European Pressure Equipment Directive (PED) 2014/68/EU Article 4 paragraph 3 (formerly 97/23/EC Article 3 paragraph 3).
- This valve complies with EC Directive 1935/2004.

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