NON-RETURN VALVE NV400
intermediate flange version

WITT non-return valves for reliable protection against dangerous reverse gas flow. Now available also with welding neck flanges for simple installing and removing. Every non-return valve 100% tested.

Benefits
● a spring loaded non-return valve prevents back feeding of gases which could lead to unwanted gas mixtures
● low pressure drops – using complex valve assembly with low opening pressure – approx. 3.0 mbar
● no leaks – using of a spring loaded valve assembly with elastomer sealing
● stainless steel filter (100 μm) in the gas inlet protects the non-return valve against dirt contamination, extending the service life
● dirt filter in gas inlet are replaced quickly and easily
● diverse applications – useful for many technical gases
● reduce installation costs – the spring loaded valve is not affected by gravity and may be installed in any orientation
● non-return valve as „intermediate flange version“ guarantees quick and uncomplicated removal and installation at replacement and annual testing
● maximum flexibility – screwed non-return valve as well as installed between flanges. Complete (non-return valve + flange-set) or as add-on kit available.
● spacer tubes around threaded rods (M16) for secure centering of non-return
● flange connection with weld-on connecting according to EN 1092-1 Type11
● equal length in brass and stainless steel non-return valves for optimal interchangeability and combination with flange-kits (as well as DN40 and DN50)

Operation / Usage
● non-return valves are used to protect equipment and pipelines against dangerous reverse gas flow.
● use is possible for applications according to EN 746-2
● non-return valves are tested to DIN EN ISO 5175-2. They may also used as a safety device to protect against flashbacks (proved in accordance to DIN EN ISO 5175-1 point 6.7) from combustion natural gas with air
● WITT non-return valves may be mounted in any position / orientation
● the maximum ambient / working temperature is 70 °C / 158 °F

Maintenance
● annual testing of the non-return valve, body leak tightness and flow capacity is recommended
● WITT is happy to supply special test equipment
● non-return valves are only to be serviced by the manufacturer. The dirt filter may be replaced according to model by competent staff

Approvals
Company certified according to ISO 9001 and PED 2014/68/EU Module H
CE-marked according to
- PED 2014/68/EU
Cleaned for Oxygen Service according to:
- EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems
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intermediate flange version

Flow diagram for air (20 °C / 68 °F)

Conversion factors:
Butane x 0,68
Natural Gas x 1,25
Methane x 1,33
Propane x 0,80
Oxygen x 0,95
Town gas x 1,54
Hydrogen x 3,75

Inlet pressure: \( P_v \) [bar] Opening pressure: 3.5 mbar

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<tbody>
<tr>
<td>NV400</td>
<td></td>
<td>Town gas (C), Natural gas (M), LPG (P), Hydrogen (H), Oxygen (O), Compressed air (D) non-flammable gases Flashback resistant to DIN EN ISO 5175-1 combustion with air Natural gas (M) (Model NV400)</td>
<td>Housing: Brass or Stainless steel Flange: Stainless steel (1.4541) Elastomer (depending on gas) Threaded rods: Stainless steel (1.4301)</td>
<td>228 144 42 43.1</td>
<td>DN40</td>
<td>Brass: 038S-040MS Stainless steel: 038S-040ES</td>
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<td>236 144 46 54.5</td>
<td>DN50</td>
<td>Brass: 038S-050MS Stainless steel: 038S-050ES</td>
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<td>NV400</td>
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<td>G 1.1/2 F</td>
<td>Brass: 038-024 Stainless steel 038-014</td>
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<tr>
<td>Complete with intermediate flange</td>
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<td></td>
<td>40 bar</td>
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<td>Intermediate flange set (for retrofitting without NV)</td>
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<td>966034500</td>
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Other connections available upon request