NON-RETURN VALVES NV300 / NV400

WITT non-return valves for reliable protection against dangerous reverse gas flow. 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 pressures NV300 – approx. 3.5 mbar, NV400 – 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
- 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

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

Approval
- 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
  - EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems

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<td>NV300</td>
<td>Town gas (C), Natural gas (M) and LPG (P), Hydrogen (H), Oxygen (O), Compressed air (D) non-flammable gases</td>
<td>16</td>
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<td>NV400</td>
<td>Flashback resistant to DIN EN ISO 5175-1 combustion with air Natural gas (M) (Model NV400)</td>
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<td>Brass</td>
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Other connections available upon request
NON-RETURN VALVES NV300 / NV400

NV300

Flow diagram for air (20 °C / 68 °F)

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

Conversion factors:
- Butane: \( x \times 0.68 \)
- Natural Gas: \( x \times 1.25 \)
- Methane: \( x \times 1.33 \)
- Propane: \( x \times 0.80 \)
- Oxygen: \( x \times 0.95 \)
- Town gas: \( x \times 1.54 \)
- Hydrogen: \( x \times 3.75 \)

NV400

Flow diagram for air (20 °C / 68 °F)

Inlet pressure: \( P_v \) [bar] Opening pressure: 3 mbar

Conversion factors:
- Butane: \( x \times 0.68 \)
- Natural Gas: \( x \times 1.25 \)
- Methane: \( x \times 1.33 \)
- Propane: \( x \times 0.80 \)
- Oxygen: \( x \times 0.95 \)
- Town gas: \( x \times 1.54 \)
- Hydrogen: \( x \times 3.75 \)