WITT non-return valves for reliable protection against dangerous reverse gas flow. Every non-return valve 100% tested.

The best non-return valves in the world

**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 (Model NV200 – approx. 4 mbar, Model NV100 – approx. 30 mbar)
- no leaks – using of a spring loaded valve assembly with elastomer sealing
- stainless steel filter (100 µm – only Model NV200) 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
- 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 and body leak tightness 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 by competent staff (only NV200, G 1)

**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

**Model | Max. working pressure [bar] | Housing-Material | Seal-Material | Weight [g] | Connection [inch] | Order-No.**
--- | --- | --- | --- | --- | --- | ---
NV100 | Town gas (C), Natural gas (M), LPG (P), Hydrogen (H), Oxygen (O) | Brass | Elastomer | 190 | G 1/8 | 100145-001
| | | | | 190 | G 1/4 | 100145-002
| | | | | 190 | G 3/8 | 100145-003
NV200 | Compressed air (D) non-flammable gases | | | 745 | G 1/2 | 200037-008
| (Model NV100) | | | | 686 | G 3/4 | 200037-009
| (Model NV200) | | | | 589 | G 1 | 200037-010

Other connections available upon request

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NON-RETURN VALVES NV100 / NV200

NV100

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

Flow diagram for air (20 °C / 68 °F)
- Inlet pressure: \( P_v \) [bar]
- Opening pressure: 4 mbar

NV200

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

Flow diagram for air (20 °C / 68 °F)
- Inlet pressure: \( P_v \) [bar]
- Opening pressure: 30 mbar
NON-RETURN VALVE NV200
with smart-option

Top quality valves combined with high-tech sensors and electronic components – that’s the smart-option from WITT.

### Smart functions of non-return valve
- measurement of outlet pressure
- measurement of outlet gas temperature
- analogue 4 – 20 mA signals

### Technical Specifications

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Other connections available upon request.