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.
- Spacing 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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NV400 Complete with intermediate flange | 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) | Housing: Brass or Stainless steel Flange: Stainless steel (1.4541) Elastomer (depending on gas) Threaded rods: Stainless steel (1.4301) | 228 144 42 43.1 | DN40 | Brass: 038S-040MS Stainless steel: 038S-040ES |
NV400 Intermediate flange set (for retrofitting without NV) | 40 bar | 236 144 46 54.5 | DN50 | Brass: 038S-050MS Stainless steel: 038S-050ES |

Other connections available upon request

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: 3.5 mbar