

NON-RETURN VALVE ULTRA 30



WITT non-return valves for reliable protection against dangerous reverse gas flow. Flow-optimised valve system causes very low pressure drop at minimal noise emission. 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 drop – using complex valve assembly with low opening pressures (approx. 5 mbar)
- stainless steel filter (100 µm) in the gas inlet protects the non-return valve against dirt contamination, extending the service life
- flow-optimised valve system for:
 - ultra low pressure drop
 - minimal noise emission
- no leaks – using of a spring loaded valve assembly with elastomer sealing
- in accordance to DIN EN ISO 5175-2
- available in brass or stainless steel
- 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
- in ambient temperatures above -20 °C / 68 °F and below +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

Approvals

Company certified according to ISO 9001 and PED 2014/68/EU Module H

CE-marked according to:
- PED 2014/68/EU

Designed for Oxygen Service in accordance with EIGA 13/20 and CGA G-4.4: Oxygen Pipeline and Piping Systems
Cleaned for Oxygen Service in accordance with EIGA 33/18 and CGA G-4.1: Cleaning of Equipment for Oxygen Service

Model	Max. working pressure [bar]	Filter 100 µm	Material				Connection [inch]	Order-No.
			Seals		Housing	Valve		
			O-Ring	Valve				
ULTRA 30	Carbon dioxide (CO2)	16.0	NBR	CR	Brass 2.0401 CuZn39Pb3	PEEK	G 1.1/2	033-001
	Argon (Ar), Helium (He), Town gas (C), Ethylene (E), Natural gas (M), Hydrogen (H), Nitrogen (N2), Carbon Monoxide (CO), Oxygen (O), Compressed air (D)	20.0					G 1.1/2	033-007
	Carbon dioxide (CO2)	16.0	NBR	CR	Stainless steel 1.4305 X8 CrNiS 18-9 AISI 303	PEEK	G 1.1/2	033-006
							1.1/2" NPT	033-008

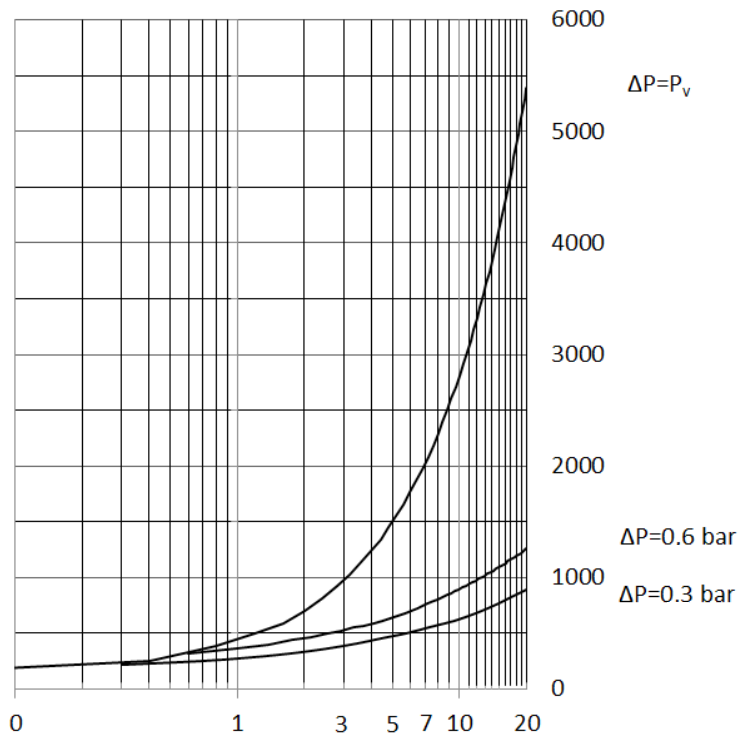
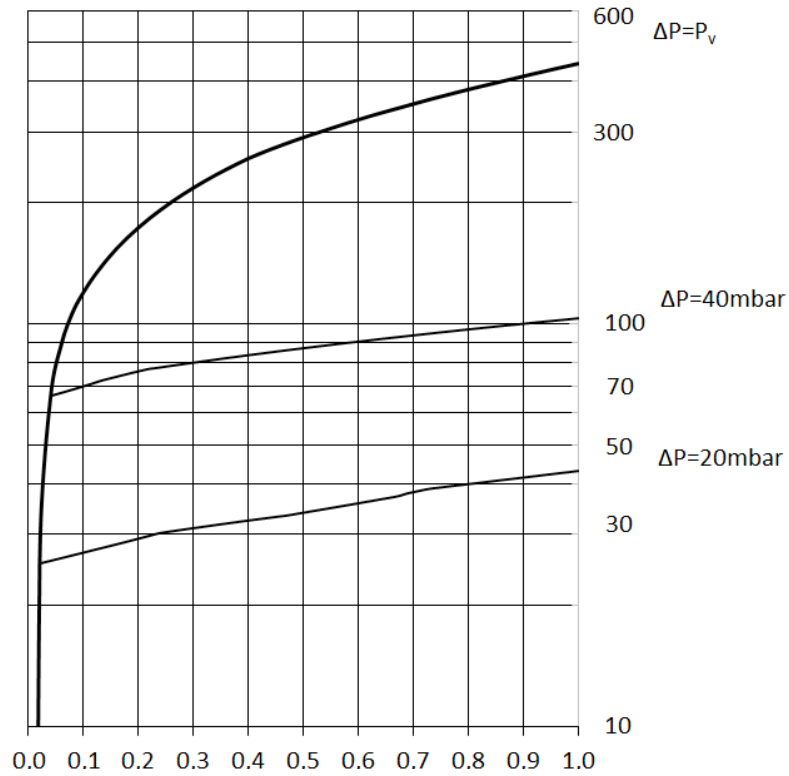
Other gases and connections available upon request

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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: approx. 5 mbar —————>

↑ Normal volume flow [Nm³/h]
(1013 mbar / 14.7 psi, 0 °C / 32 °F)

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