

# NON-RETURN VALVE ULTRA 32

## Special version model 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.**

**ULTRA 32 is based on ULTRA 30 and is customized according to the requirements of the customer - ideal for special requirements. A modular system which allows flexible material combinations for housing and sealings.**

### Combination possibilities

- housing available in brass, stainless steel or aluminium
- sealings of NBR, CR, FKM, EPDM, FFKM for example
- with or without dirt filter in gas inlet

### Benefits

- precisely tailored design for special requirements. For example corrosive environments, acetylene, ultra-lightweight construction, temperatures above 158°F
- 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. 0.07 PSI)
- 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
- 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

### 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

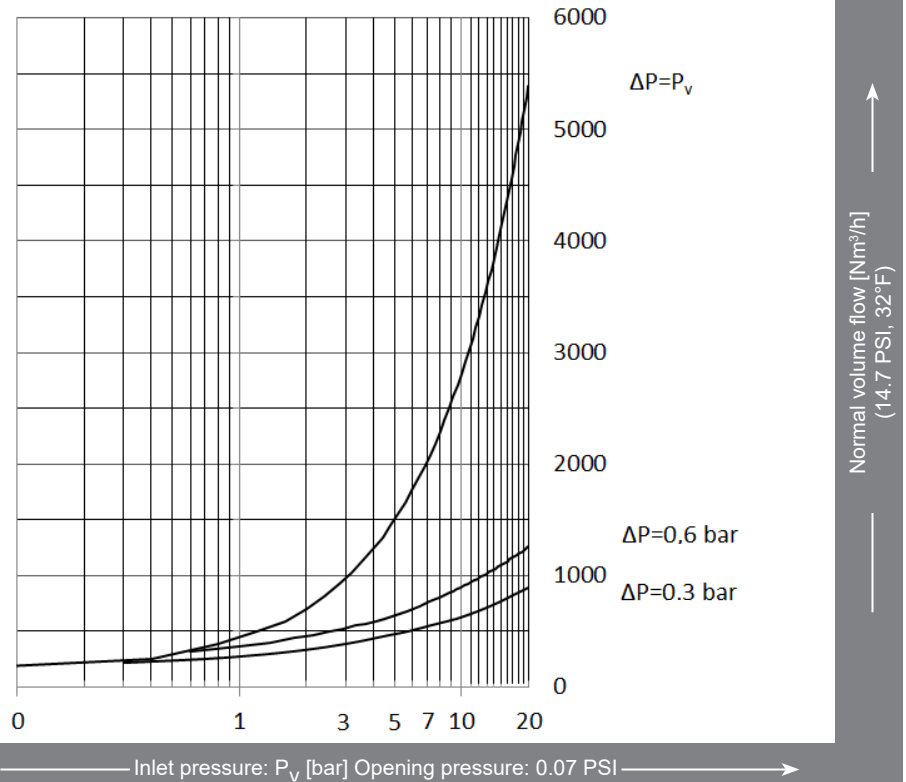
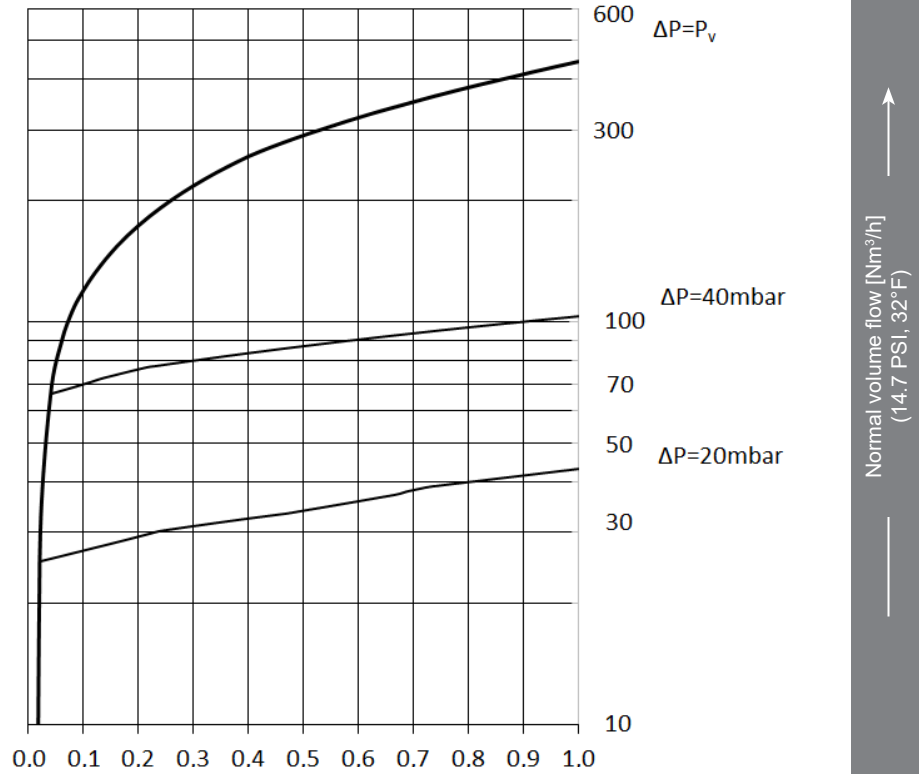
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## ULTRA 32

Flow without filter  
approx. 10% higher

Flow diagram for air (68°F)



Conversion factors:

Natural gas	x 1.25
Ethylene	x 1.02
Methane	x 1.33
Propane	x 0.80
Oxygen	x 0.95
Town gas	x 1.54
Hydrogen	x 3.75

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## Examples for material combinations housing / elastomers

This overview shows only some possible material combinations and connections.  
 The modular system of ULTRA 32 offers many other diverse materials and combination possibilities.  
 Tell us your requirements and you will receive your individual non-return valve, precisely tailored to your application.

Model	Max. working pressure	[PSI]	Filter 100 µm	Material			Connection [inch]	Order-No.	
				Seals		Housing			Valve
				O-Ring	Valve				
ULTRA 32	Acetylene (A)	22	✓	EPDM	EPDM	Brass 2.0401 CuZn39Pb3	PEEK	G 1.1/2	upon request
	Argon (Ar), Helium (He), Hydrogen (H), Nitrogen (N2), Carbon Monoxide (CO), Oxygen (O), Compressed air (D)	290							
	Carbon dioxide (CO2)	232	✓	NBR	CR	Stainless steel 1.4305 X8 CrNiS 18-9 AISI 303	PEEK	KF DN25 G 1.1/2	033-010
	Town gas (C), Ethylene (E), Natural gas (M), Hydrogen (H), Nitrogen (N2), Carbon Monoxide (CO), Oxygen (O), Compressed air (D)	290							

Other gases and connections available upon request  
 Operating temperatures are depending to pressure, gas and seal material. Please do not hesitate to contact us.