NON-RETURN VALVE 654

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

654-ES   **654**

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 (approx. 30 mbar)
- no leaks – using of a spring loaded valve assembly with elastomer sealing
- 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
- compact design, small mounting dimensions

Operation / Usage

- non-return valves are used to protect equipment and pipelines against dangerous reverse gas flow
- WITT non-return valves may be mounted in any position / orientation
- the maximum ambient / working temperature is 70 °C / 158 °F

42 mm (1.65 inches)

SW 14 mm (AF 0.55 inches)

Maintenance

- annual testing of the non-return valve and body leak tightness is recommended
- WITT is happy to supply special test equipment
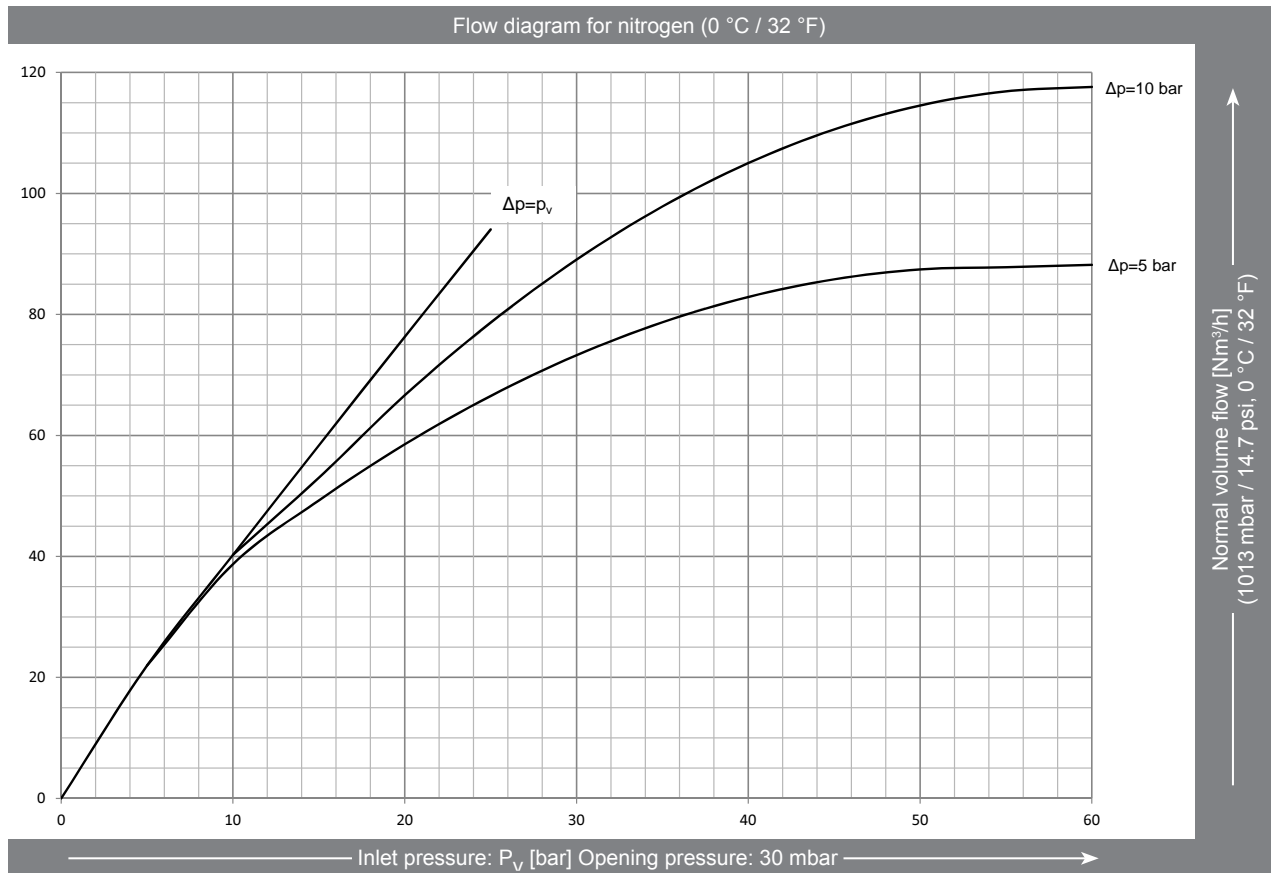- non-return valves are only to be serviced by the manufacturer
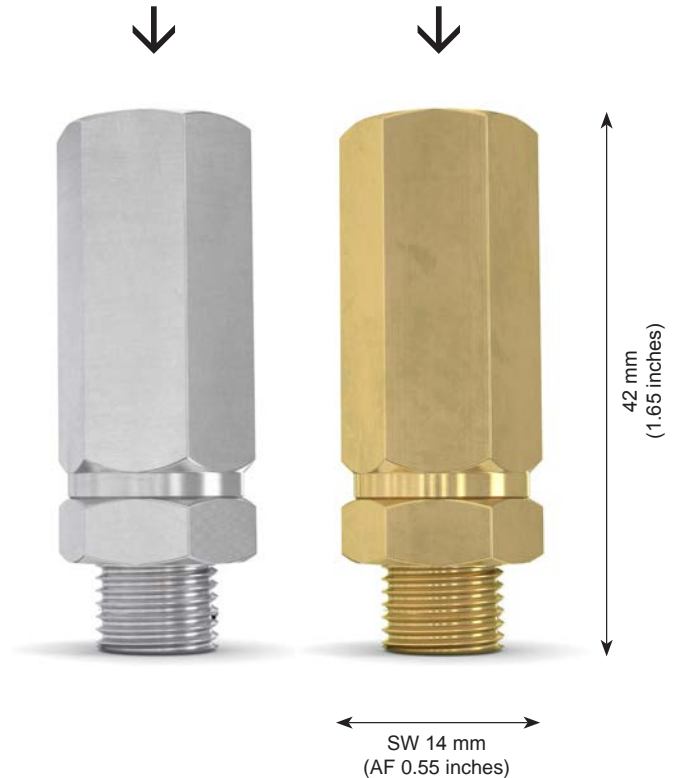
Approvals

Company certified according to ISO 9001 and PED 97/23/EC Module H
Cleaned for Oxygen Service according to:
- EIGA IGC Doc 13/12/E: Oxygen Pipeline and Piping Systems

Model	Max. working pressure [bar]		Seal-Material	Housing-Material	Weight [g]	Connection [inch]	Order-No.
654	Ethylene (E) LPG (P) Natural gas (M) Town gas (C) Hydrogen (H)	60	Elastomer CR	Brass CuZn39Pb3	39	G 1/8 RH	120003037
	Oxygen (O)	30					
	Compressed air (D)	60					
	Ethylene (E) LPG (P) Natural gas (M) Town gas (C) Hydrogen (H)	60	Elastomer FPM				120003040
	Compressed air (D)	60					
654-ES	Ethylene (E) LPG (P) Natural gas (M) Town gas (C) Hydrogen (H)	60	Elastomer NBR	Stainless steel 4.4305			120403033
	Oxygen (O)	30					
	Compressed air (D)	60					

Other gases or connections available on request

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Flow diagram for nitrogen (0 °C / 32 °F)

Δp=10 bar

Δp=5 bar

Δp=p_v

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

Inlet pressure: P_v [bar] Opening pressure: 30 mbar

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