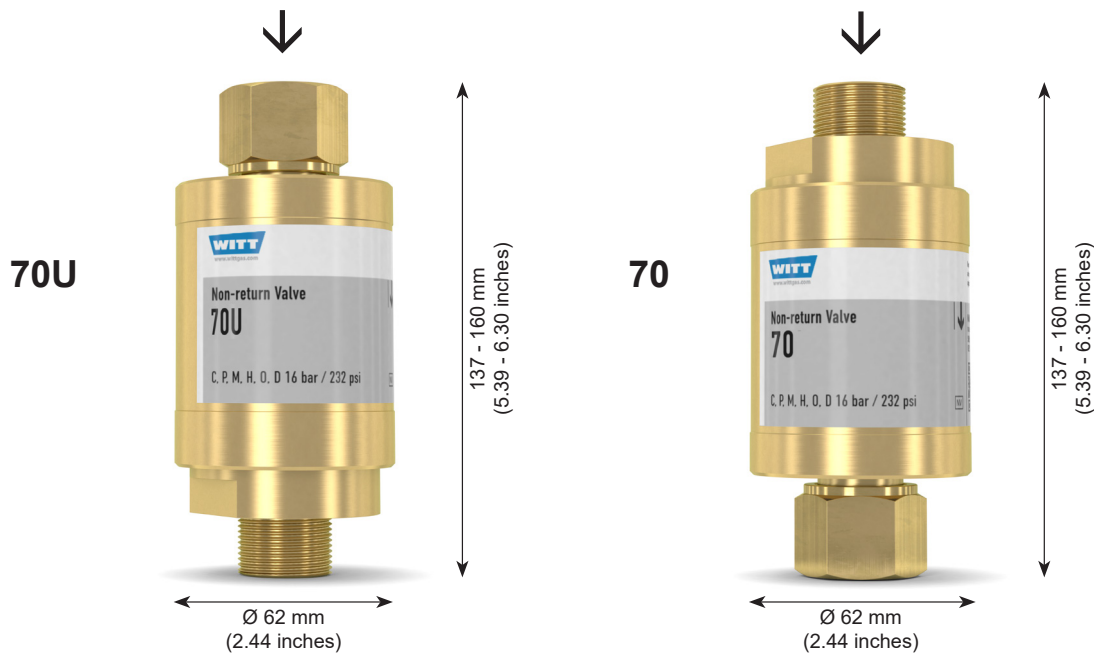


NON-RETURN VALVES 70 / 70U



WITT non-return valves for reliable protection against dangerous reverse gas flow. 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 pressures (approx. 4 mbar)
- brass filter protects the non-return valve against flashbacks, 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
- 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/ LPG with air

- 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

Approvals

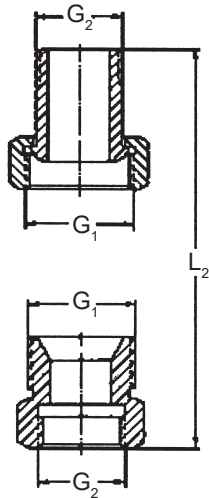
Company certified according to ISO 9001 and PED 2014/68/EU Module H

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]	Material	Weight [g]	Length [mm]	Connection [inch]	Order-No.
70	Town gas (C), Natural gas (M) and LPG (P), Hydrogen (H), 16.0 Oxygen (O), Compressed air (D) non-flammable gases	Brass Elastomer Bronze	1 255	137	G 3/4	123-009
			1 414	146	G 1	123-012
			1 590	149	G 1.1/4	123-014
			1 679	160	G 1.1/2	123-015
70U	Flashback resistant to DIN EN ISO 5175-1 combustion with air LPG (P) 0.5 Natural gas (M) 4.0	Brass Elastomer Bronze	1 256	137	G 3/4	123-016
			1 398	146	G 1	123-018
			1 558	149	G 1.1/4	123-056
			1 679	160	G 1.1/2	123-045

Other connections available upon request



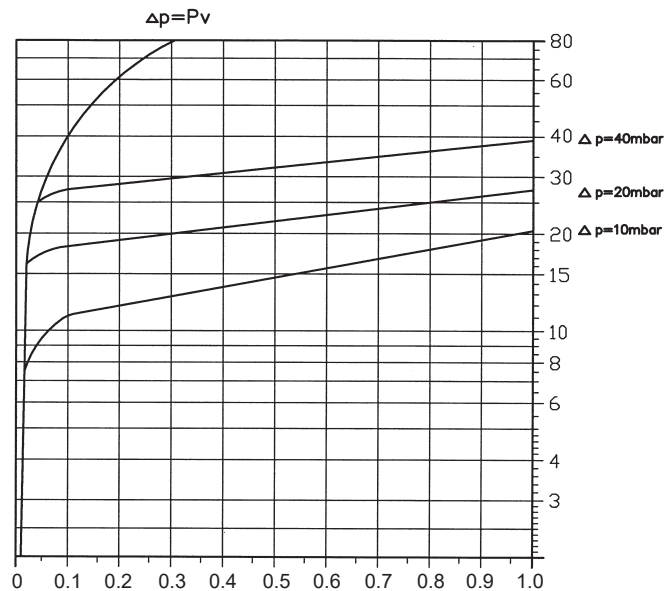
Cone connection for installation of pipeline Model 70/70U

Connection EN 560 G ₁ [inch]	Connection EN 560 G ₂ [inch]	Installation dimension with non-return valve L ₂ [mm]	Order-No.
G 3/4 RH	G 1/2 RH	186	043000000
G 1 RH	G 3/4 RH	202	043000100
G 1.1/4 RH	G 1 RH	208	043000200
G 1.1/2 RH	G 1.1/4 RH	224	043000300

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

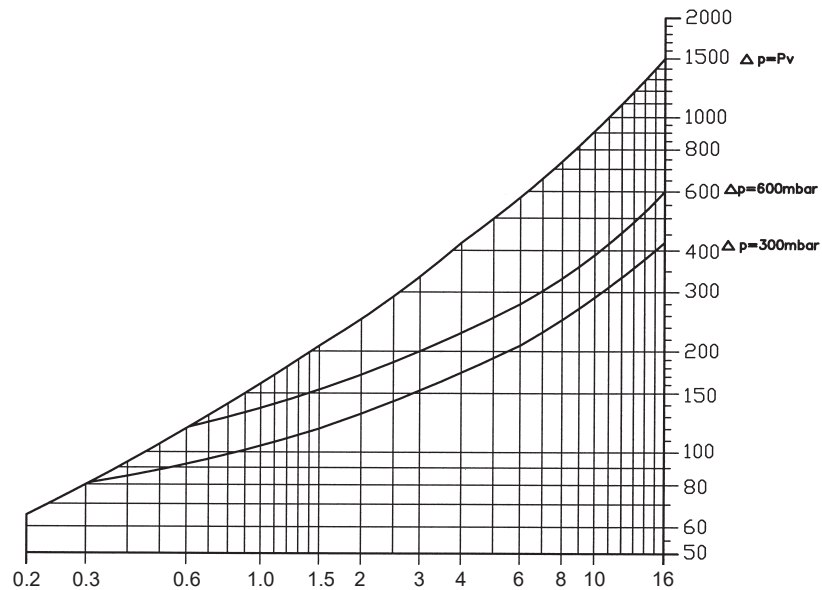
Flow diagram for air (20 °C / 68 °F)



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

Inlet pressure: P_V [bar] Opening pressure: 4 mbar

Flow diagram for air (20 °C / 68 °F)



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

Inlet pressure: P_V [bar] Opening pressure: 4 mbar

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