

Safety Relief Valve



RLT Series

Safety Relief Valves According to 2014/68/EU

PRODUCT DESCRIPTION

The RLT relief valve is a safety device which vents gas when the system pressure exceeds the set value due to temporary events such as expansion due to rise in gas temperature or downstream pressure shocks caused by sudden changes of flow rate etc.

- Reduced overpressure, even with quite high flow rates,
- Fast response,
- Easy maintenance,
- Internal impulse,
- Access to the setting spring adjustment can be sealed if required,
- High setting pressure available,
- Periodical maintenance without disassembling the body from the pipework.

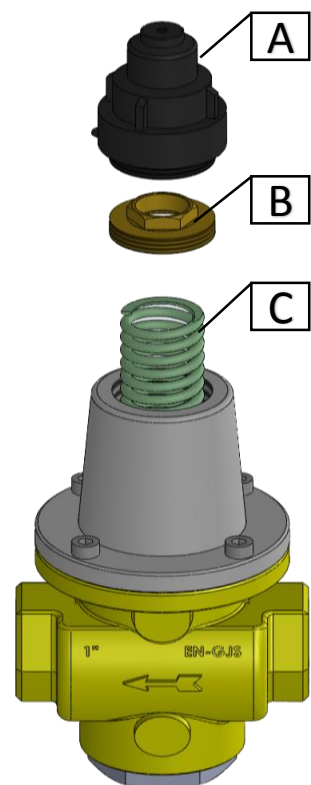
APPLICATION

The relief valves, type RLT, does not contain any non-ferrous metals and is suitable for gases up to max. 0.1 vol.% H₂S, dry. Suitable for gases of families 1, 2, 3 and other neutral gaseous media.

SETTING OF THE RELIEF RLT SERIE

1. Check pressure gauge, that inlet pressure should be suitable for the gas system.
2. Check the filter cartridge, cartridges must be clean and undeformed.
3. Check the manual relief valve if is in closed position.
4. Open inlet main valve slowly.

Increase the gas pressure, until want to start relief pressure;
'A' Turn the cap and remove. Turn the 'B' adjustment screw in an anticlockwise direction with 24 tube spanner until the evacuation begins. Screw the 'B' cover. Reduce the line pressure to the operating pressure



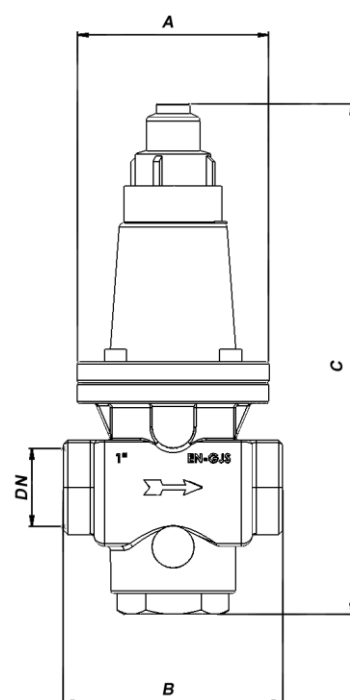
Type RLT

TECHNICAL DATA	RLT25/1b	RLT25/6b	RLT25/16b
Max allowable pressure (PS)	1 bar	6 bar	16 bar
Set Range Pressure	16 – 500 mbar	500 - 2000	2 – 16 bar
Accuracy class (AG)	%2,5	%5	%5
Diameter	Rp. 1/4" – 2" (Threaded ISO7/1)		
Operating Temperature	-20°C / +60°C		
Material	Body AISi Cover AISi Diaphragms NBR Orifice Brass		Body EN GJS Cover AISi Diap. NBR Orifice Brass
Fail Mode	Fail to Open		

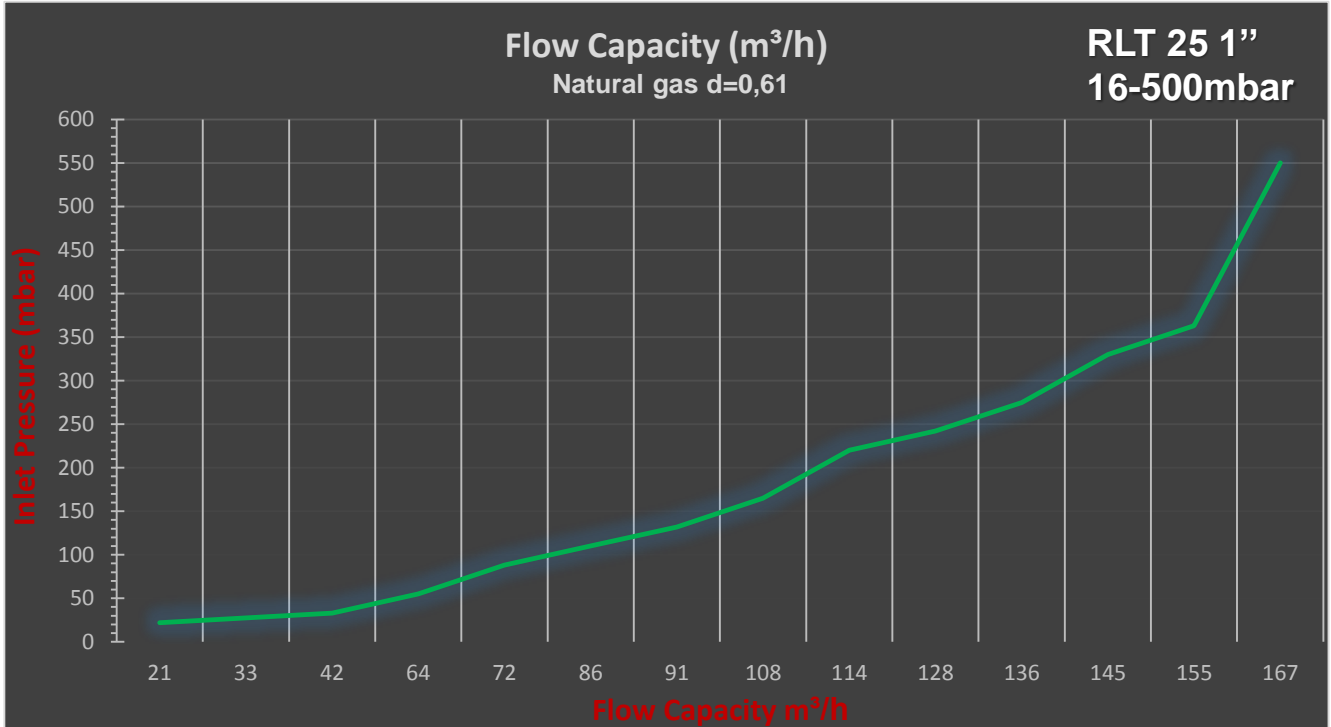


All dimensions are in mm

DIMENSIONS AND WEIGHTS					
Code	DN	A	B	C	
RLT 8	1/4" x 1/4"	45	81	-	
RLT 15	1/2" x 1/2"	140	120	197	
RLT 20	3/4" x 3/4"	140	120	197	
RLT 25	1" x 1"	140	120	197	
RLT 25/16b	1" x 1"	91	104	250	
RLT 32	1 1/4" x 1 1/4"	225	160	194	
RLT 40	1 1/2" x 1 1/2"	225	160	194	
RLT 50	2" x 2"	225	160	258	



FLOW RATE DIAGRAM



Flow with Other Gases

In the tables above, the flow is in (n)m³/h natural gas

With a density 0.61 and temperature 15°C. To convert to other gas flow, using the following formula:

$$Q \text{ (Scm/h Natural gas)} \times F_c = Q \text{ (Scm/h Xgas)}$$

EXAMPLE:

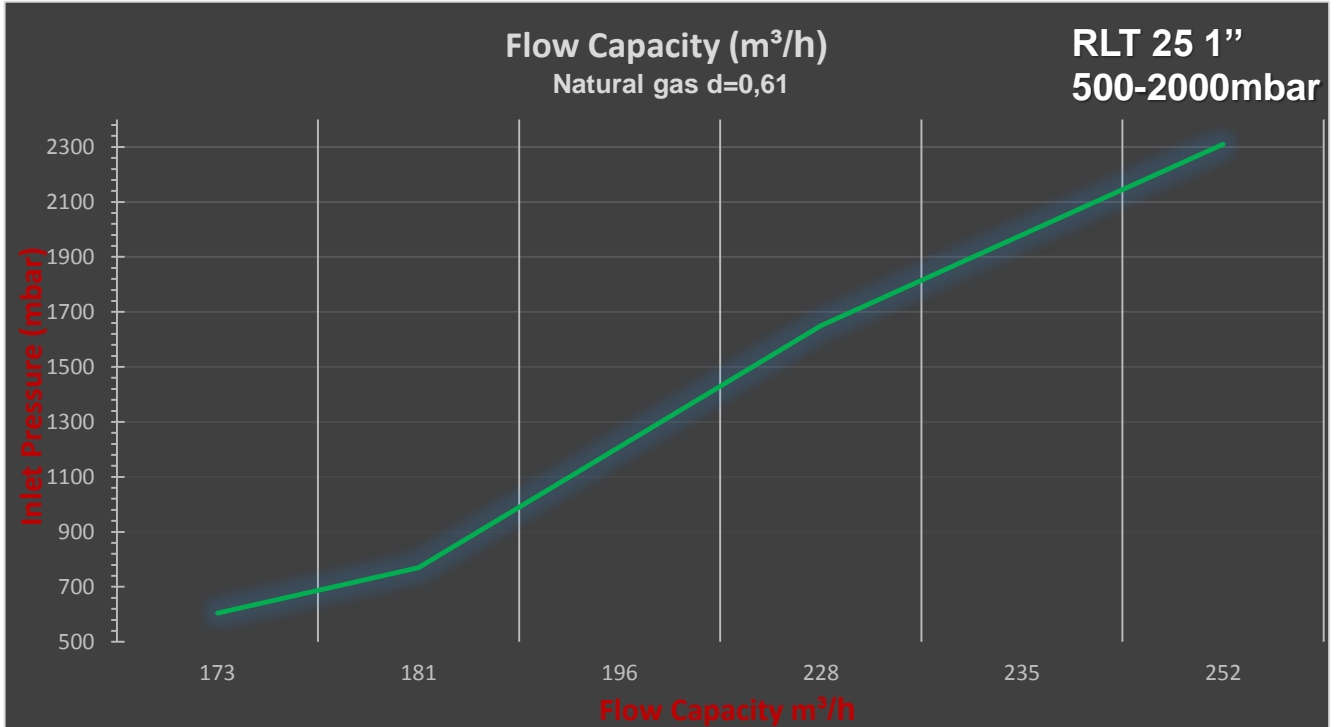
$$Q \text{ (Scm/h Natural gas)} \times 0.78 = Q \text{ (Scm/h Air)}$$

$$1 \text{ Scm/h Natural gas} = 0.78 \text{ Scm/h Air}$$

Correction Factor Fc at 15°C	
Propane	0.64
Butane	0.55
Oxygen	0.76
Air	0.78
Nitrogen	0.81
Biogas	0.85
Town gas	1.23
Hydrogen	3.04

Type RLT

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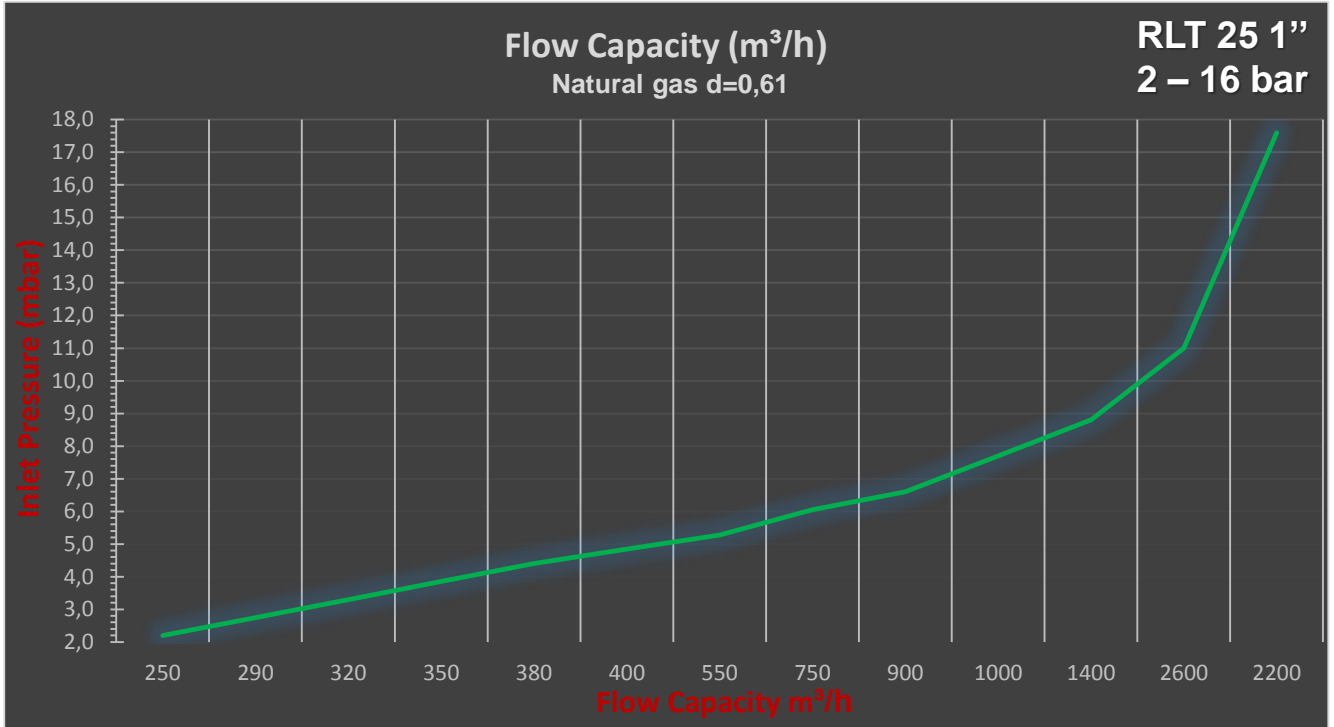
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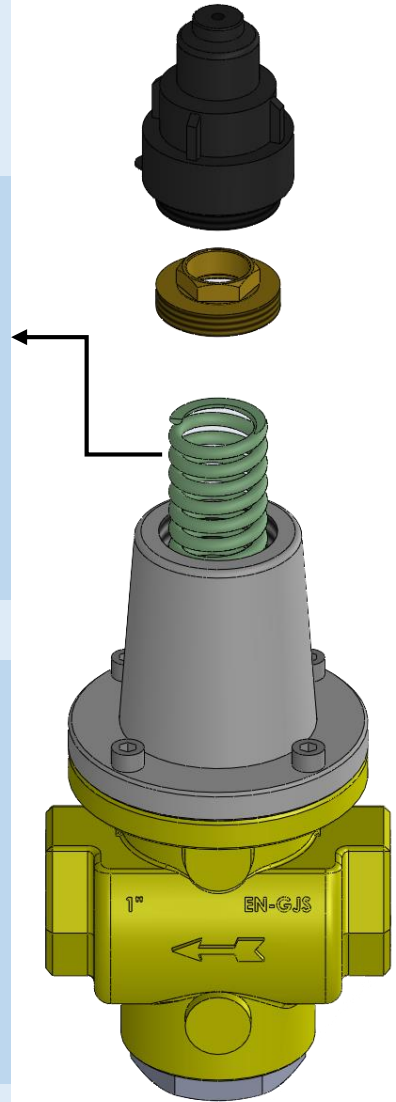
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SPRING SETTING RANGE AND DIMENSIONS

MODEL TYPE	CONNECTION SIZE	SETTING RANGE	SPRING DIMENSIONS d x De x L x t
RLT 8/1b	1/4"	40 ÷ 90	0.8 x 17 x 40 x 6
		80 ÷ 180	0.9x17x45x7
		100 ÷ 360	1 x 17 x 40 x 6
RLT 15 /1b RLT 20 /1b RLT 25 /1b	1/2" 3/4" 1"	16 ÷ 37	1.6 x 29 x 100 x 12
		30 ÷ 110	2.2 x 29 x 100 x 12
		100 ÷ 160	2.5 x 29 x 140 x 18.5
		140 ÷ 215	2.5 x 29 x 155 x 16
		215 ÷ 500	3,5 x 29,8 x 98 x11,5
		200 ÷ 1000	4 x 29 x 98 x 8
		700 ÷ 2100	4,6 x 29,4 x 95 x 9
RLT 25/6b	1"	500 ÷ 2000	4,6 x 29,4 x95 x 9
RLT 25/16b	1"	2000 ÷ 2800	2.8 x 30 x 60 x 9
		2600 ÷ 3600	3.2 x 30 x 60 x 9
		2800 ÷ 4000	3.5 x 30 x 60 x 9
		3600 ÷ 5000	3.7 x 30 x 60 x 9
		4000 ÷ 6000	4.0 x 30 x 60 x 9
		6000 ÷ 8000	4.5 x 30 x 60 x 9
		8000 ÷ 16000	5.0 x 30 x 60 x 9
RLT 32/1b RLT 40/1b	1 1/4" 1 1/2"	30 ÷ 110	2.2 x 29 x 100 x 12
		100 ÷ 170	2.5 x 29 x 140 x 16
		160 ÷ 300	2.5 x 29 x 155 x 16
RLT 50/1b	2"	260 ÷ 500	3.5 x 29.8 x 98 x 11
		35 ÷ 135	3.5 x 29.8 x 98 x 11.5
		130 ÷ 200	3.5 x 29.8 x 150 x 16
		200 ÷ 400	3.5 x 29.8 x 98 x 11.5
		320 ÷ 500	4.6 x 29.4 x 95 x 9



d: Wire dia.
De: Outside dia.
L: Length
t: Total number of turns

Type RLT

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Gas Pressure Regulators



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Type RLT