

Pressure regulator GV



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CHARACTERISTICS

- For reducing and stabilizing the gas pressure in pipeline.
- The pressure compensation device could reduce the effects of inlet pressure fluctuations.
- Zero shut-off (the post-valve line pressure remains stable in a zero-flow state).
- Medium: natural gas, LPG and other clean gases.

APPLICATIONS

Installed in the main gas pipelines or in pipelines in front of the ignition burners to reduce and stabilize the pipe pressure. It is also available in combustion air pipelines of the ignition burners or other clean gas pipelines.

SPECIFICATION

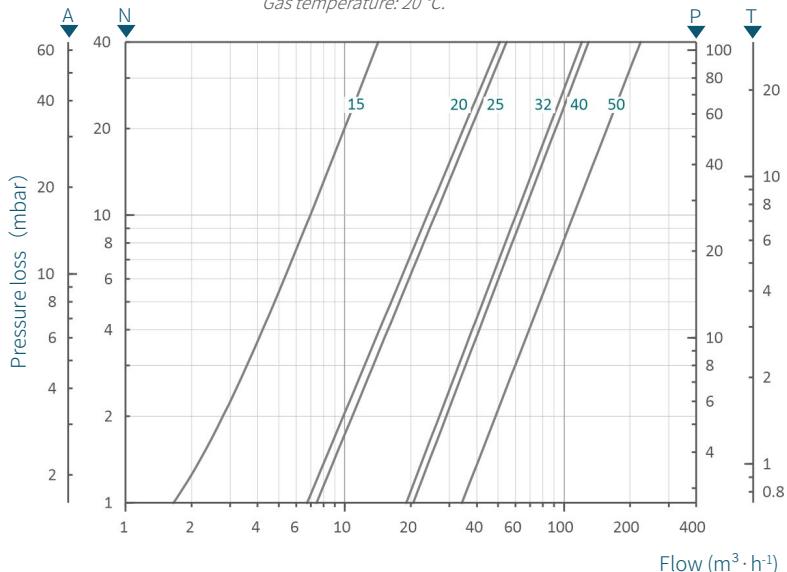
Pressure loss

0.4bar

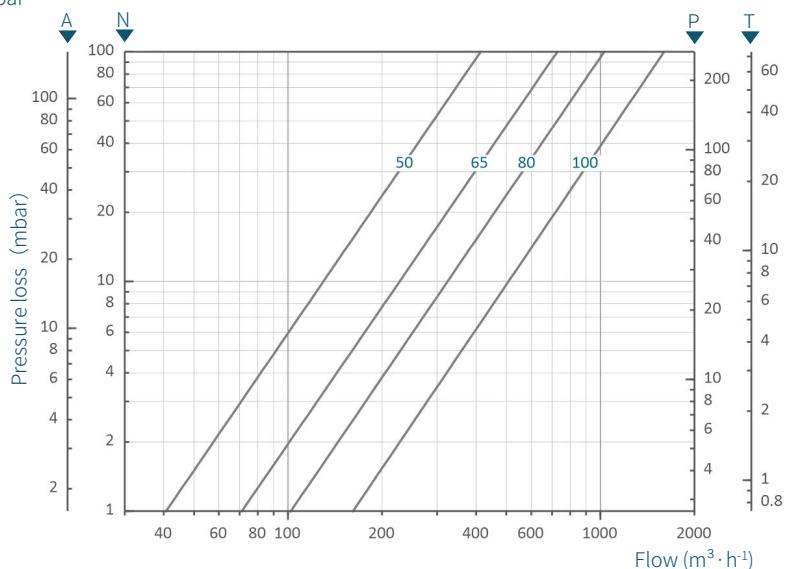
A: Air, 1.2 kg/m³, N: Natural gas, 0.75 kg/m³,

P: LPG, 2.0 kg/m³, T: Town gas, 0.55 kg/m³.

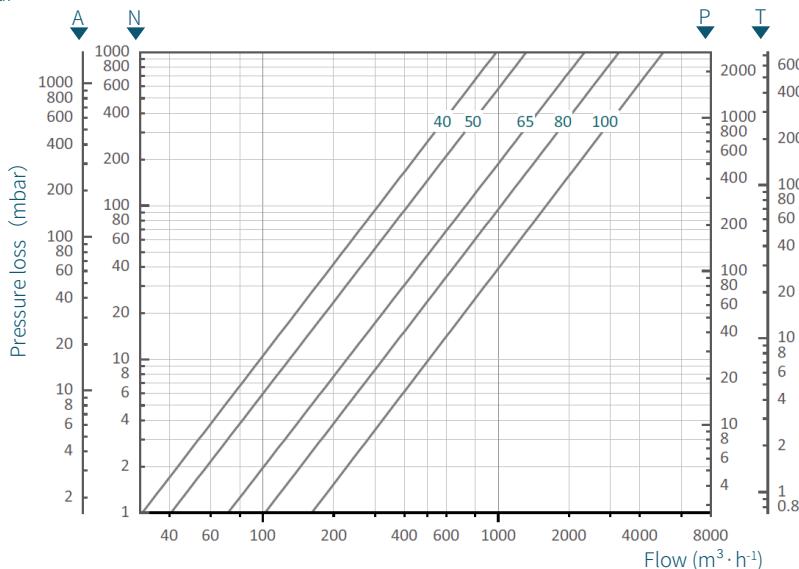
Gas temperature: 20 °C.



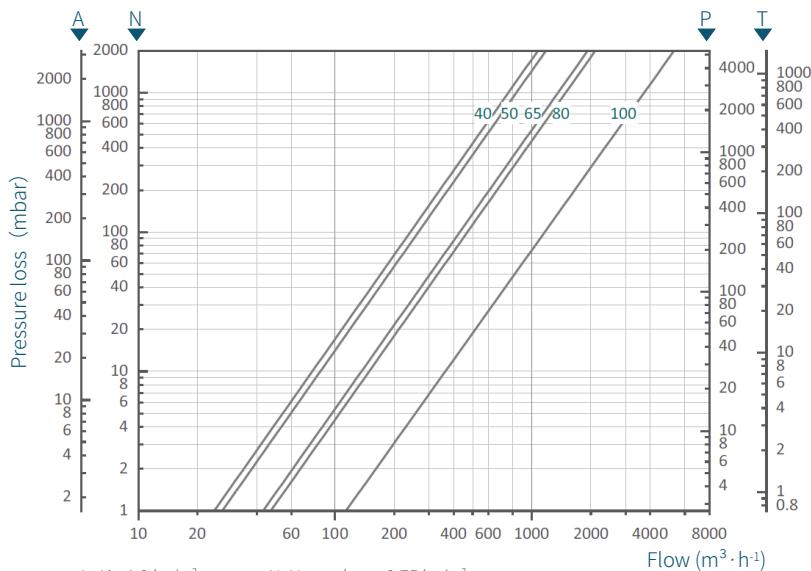
0.5bar



1 bar



4 bar

A: Air, 1.2 kg/m³N: Natural gas, 0.75 kg/m³P: LPG, 2.0 kg/m³T: Town gas, 0.55 kg/m³

Gas temperature: 20 °C.

Type table

Type	GV	20	R	0.4B
Dimensions	15: DN15	20: DN20	25: DN25	
	32: DN32	40: DN40	50: DN50	
Connection	R: Thread			
Max pressure	0.4B: 0.4bar			

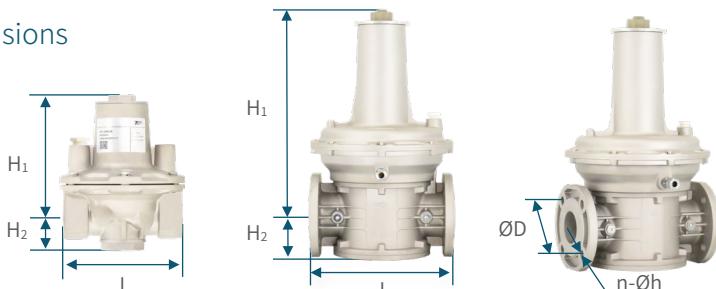
Type	GV	65	F	1B	F
Dimensions	40: DN40*	50: DN50	65: DN65	80: DN80	100: DN100
Connection	F: Flange				
Max pressure	0.5B: 0.5 bar	1B: 1 bar	4B: 4 bar		
Others	F: FKM diaphragm (0.5~1 bar)				

Type	Connection	Outlet pressure /mbar	
GV 15~50	Thread	15~80	
GV 40~100	Flange	50~80 (black)**	100~160 (red) 150~230 (yellow) 220~350 (green)

*GV 40 with flange connection can only withstand pressure of 1 bar or 4 bar.

**Springs with different outlet pressure adjustment ranges are distinguished by color markings on the springs.

Dimensions



Type	Connection	L/mm	H ₁ /mm	H ₂ /mm	Max. inlet pressure /mbar
GV 15R0.4B	Rp $\frac{1}{2}$ "	126	132	34	400
GV 20R0.4B	Rp $\frac{3}{4}$ "	126	132	34	400
GV 25R0.4B	Rp 1"	126	132	34	400
GV 32R0.4B	Rp $\frac{1}{4}$ "	157	149	46	400
GV 40R0.4B	Rp $\frac{1}{2}$ "	157	149	46	400
GV 50R0.4B	Rp 2"	202	168	52	400

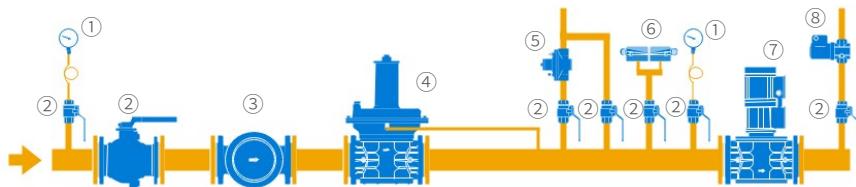
Type	Connection	L/mm	H ₁ /mm	H ₂ /mm	D/mm	h/mm	n
GV 40F	DN 40	200	303	70	110	18	4
GV 50F	DN 50	230	311	83	125	18	4
GV 65F	DN 65	310	440	89	145	18	4
GV 80F	DN 80	310	440	100	160	18	8
GV 100F	DN 100	350	500	115	180	18	8

For flange connections, the paired flanges conform to GB/T9119-2010 in PN 1.6 MPa.

GV..F1B and GV..F4B need $\phi 12$ copper pipes as feedback tubes.

SOLUTIONS

For gas main pipeline:



① Pressure gauge

② Gas manual shut-off valve

③ Gas filter SF

④ Gas pressure regulator GV

⑤ Relief valve SRV

⑥ Pressure switch GS

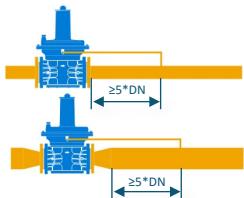
⑦ Normally open solenoid valve SOV

INSTALLATION

- The GV could be installed on the pipes in any direction, the spring dome must not face down. *Installation direction* 
- The arrow on the valve body indicates the flow direction, determine the installation direction according to the arrow.
- Ambient temperature: -15~60 °C, install away from heat sources.
- Reserve positions to adjust or replace the spring.

- GV..1B and GV..4B series needs extra feedback tubes. The inlet of feedback tube shall be installed at the $\geq 5^{\circ}\text{DN}$ straight segment downstream of the valve.

Feedback tube installation requirements



Attention

- The pipe must be purged before installing the valve, pay attention to the correct use of sealing materials, forbid foreign matters falling into the valve.
- Do not weld the pipe around the valve after installing to prevent foreign matters from blocking or damaging the valve.
- For easy maintenance, install a manual shut-off valve upstream.
- Install the filter SF upstream to protect the regulator from foreign matters.
- Pipe flow rate above 30 m/s may cause pipe vibration.
- Adjust the outlet pressure of valve by adjusting the spring, different pressure adjustment ranges need different springs.
- The pressure adjusting knob is at the top of spring dome, clockwise adjustment pressure increases.
- Do not exceed the max inlet pressure.
- Prohibit installing an automatic shut-off valve in front of the valve, and the manual shut-off valve upstream needs to open slowly to prevent the valve from overpressure damage.
- The media temperature: room temperature.



Maintenance

- Once a year. Increase the times of maintenance as is the case.