



ERG-H1 SERIES

HIGH PRESSURE GAS REGULATOR
with/without UPSO/OPSO

ERG-H1

The ERG-H1 series pressure regulator is used on the gas line to reduce the inlet pressure to the desired outlet pressure.

The pressure regulators of the ERG-H1 series are suitable for commercial and industrial use on systems where the maximum inlet pressure is up to 20 bar and the outlet pressure is up to 4 bar.

It is mainly used in the distribution of natural gas, LPG and for all non-corrosive gases. ERG-H1 is a single-stage regulator with an optional safety system given by the block valve for minimum and maximum pressure.

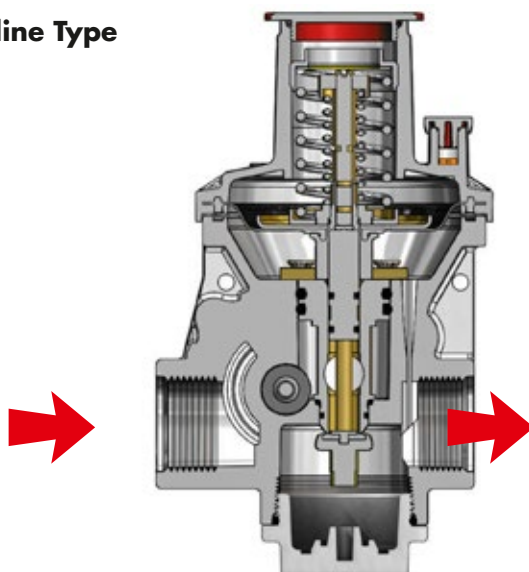
The regulators are manufactured according to the PED 2014/68 / UE Directive. The performances of the regulators comply with the EN 334 standard.

Features

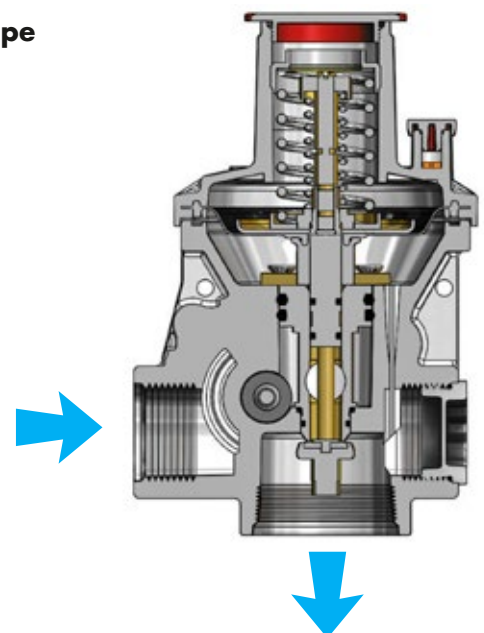
- For commercial or industrial medium and high pressure gas systems
- Maximum inlet pressure up to 20 bar
- Maximum output pressure **MPO**: from 100 to 800 mbar and **HPO**: from 800 to 4000 mbar
- Optional filter on the input
- The outlet pressure tolerance is $\pm 5-10\%$ (AC5 and AC10)
- The block pressure tolerance is max $+\% 30$ (SG30)
- Can be integrated with safety valve for minimum and maximum pressure block
- Online and team flow direction

Configurations

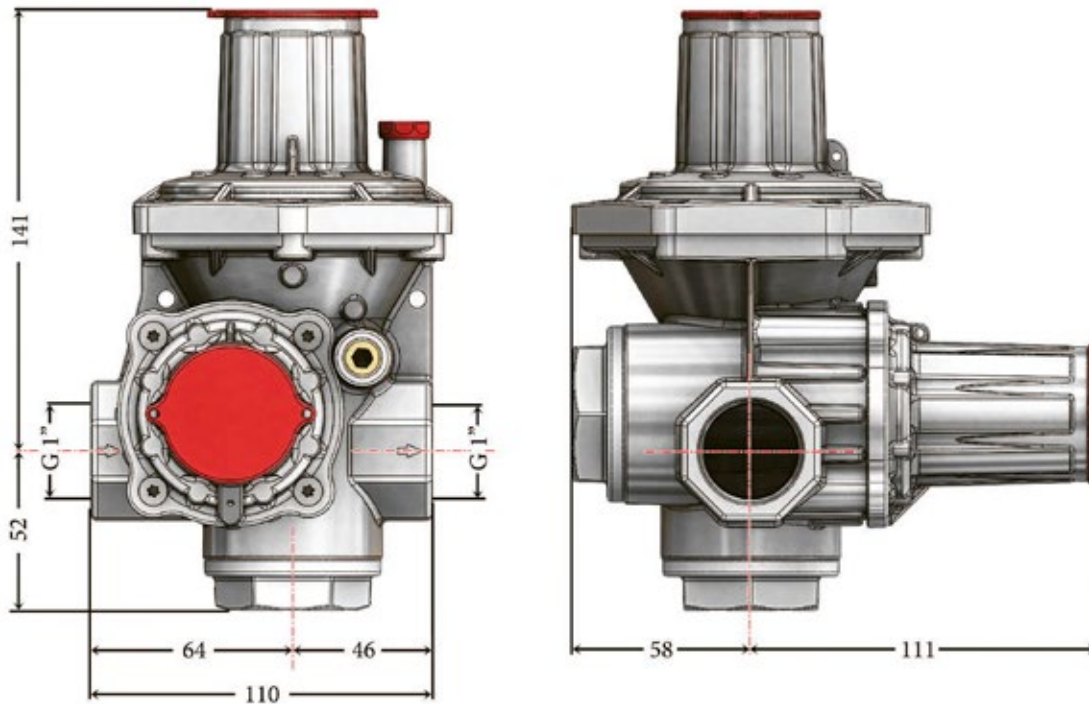
Inline Type



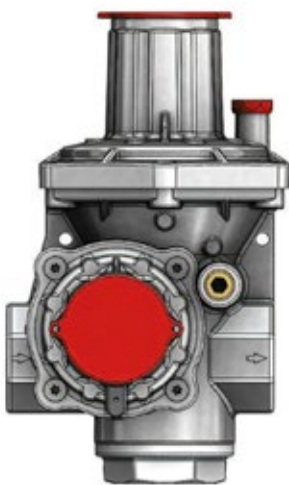
Angle Tipe



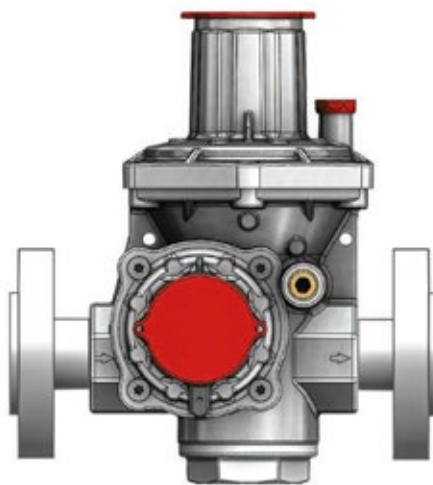
DIMENSIONS (in mm)



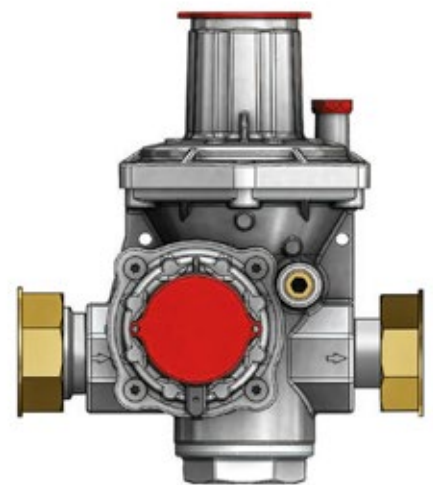
Connection types



Without connection



With Flanged connection



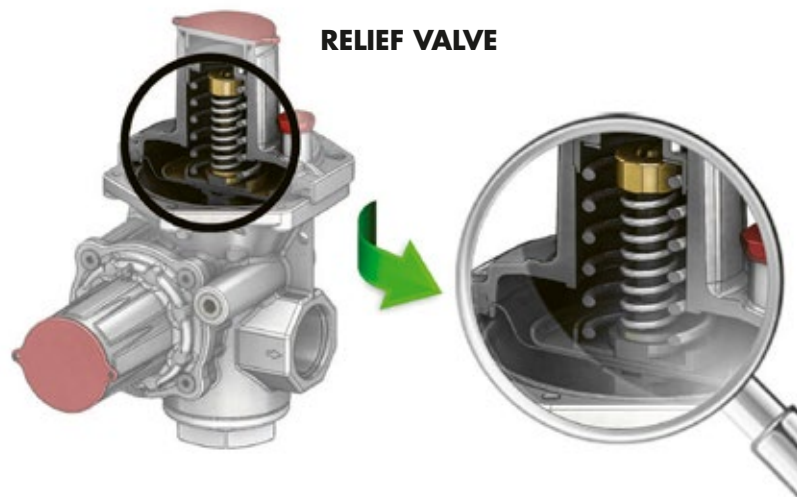
With Loose connection

SAFETY AND ACCESSORIES

Relief System

The regulator can be produced with a relief valve. The valve continuously monitors the outlet pressure and when it detects a pressure level higher than the regulator's nominal outlet pressure, it activates and discharges gas into the atmosphere.

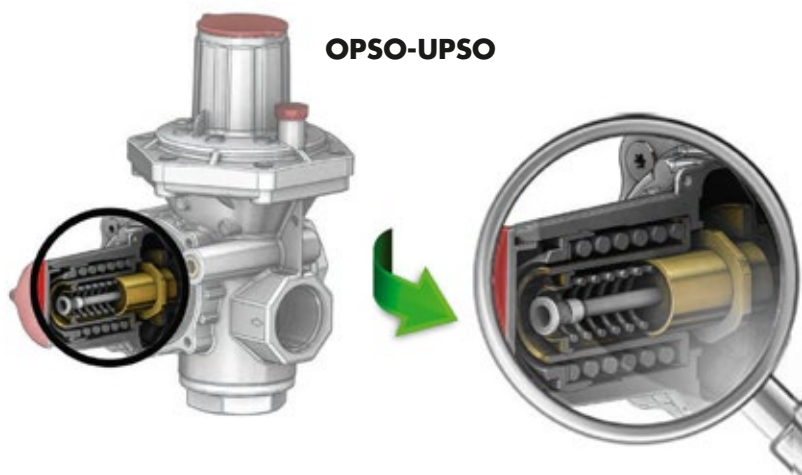
The relief valve has a limited discharge capacity. Usually the calibration point is less than the maximum pressure block calibration. Under certain conditions such as gas expansion during hot seasons, the valve is activated before the maximum pressure shutdown closes the gas lines. It prevents random shutdown with regard to the increase in pressure on the outlet side.



Over Pressure Shut-Off System

The system is very useful during the main failure situations and keeps the customer safe. The system functions as a safety valve and activates when the outlet pressure exceeds the OPSO calibration point. The OPSO system cuts off the gas and a manual reset is required to reactivate the regulator.

The system has an independent mechanism and closing device and continuously monitors changes in outlet pressure, the activation time is less than 2 seconds



Under Pressure Shut-Off System

- The system shuts off the gas when the outlet pressure drops below the UPSO calibration point
- The UPSO valve continuously monitors changes in outlet pressure. Scenarios such as breakage of the outlet pipe or consumption exceed the total capacity of the regulator or the lack of inlet pressure situations, etc ... the outlet pressure decreases and the UPSO valve cuts off the gas

Specifications

Gas type	: Natural Gas, LPG and Non-Corrosive Gases
Operating temperature	: -20... + 60°C (optional : -40... +60°C)
Installation	: Vertical and Horizontal Position
Maximum inlet pressure	: 6 bar, 10 bar, 20 bar
Outlet pressure range	: 100 mbar to 4000 mbar
Conforming	: 2014/68/EU PED Directive
Filter	: Hole diameter: 100 microns

Design

The ERG-H1 Series pressure regulator body consists of:

- Body and regulator cover and block valve
- Filter (optional)
- Calibration groups
- Relief valve
- Optional pressure test point
- Over pressure shut off OPSO
- Under pressure shut off UPSO
- Integrated bypass

Materials

- Body Aluminium or Steel
- Rubber components have gas approval according to EN 549
- Brass materials are suitable according to EN12164 - EN12165 Standard

Capacities

Flow Rate SCMh Methane	Pin bar
50	Pd + 0,3 bar
75	Pd + 0,5 bar
100	Pd + 1 bar
180	Pd + 2,5 bar
250	Pd + 3,5 bar

Pd = Outlet Pressure

Conversion to LPG capacity in kg/h = multiply by 1,2



Product range



Rotary piston gas meters



Turbine gas meters



Gas pressure regulators



Electronic volume correctors



Diaphragm gas meters



Smart meters

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