

ESKA

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ERG-H1 SERIES

ERG-H1 Series pressure regulator is used on gasline to reduce inlet pressure to desired outlet pressure.

ERG-H1 series pressure regulators are suitable for commercial usage like Gas Skids where the maximum inlet pressure up to 20 bar and outlet pressure up to 4bar.

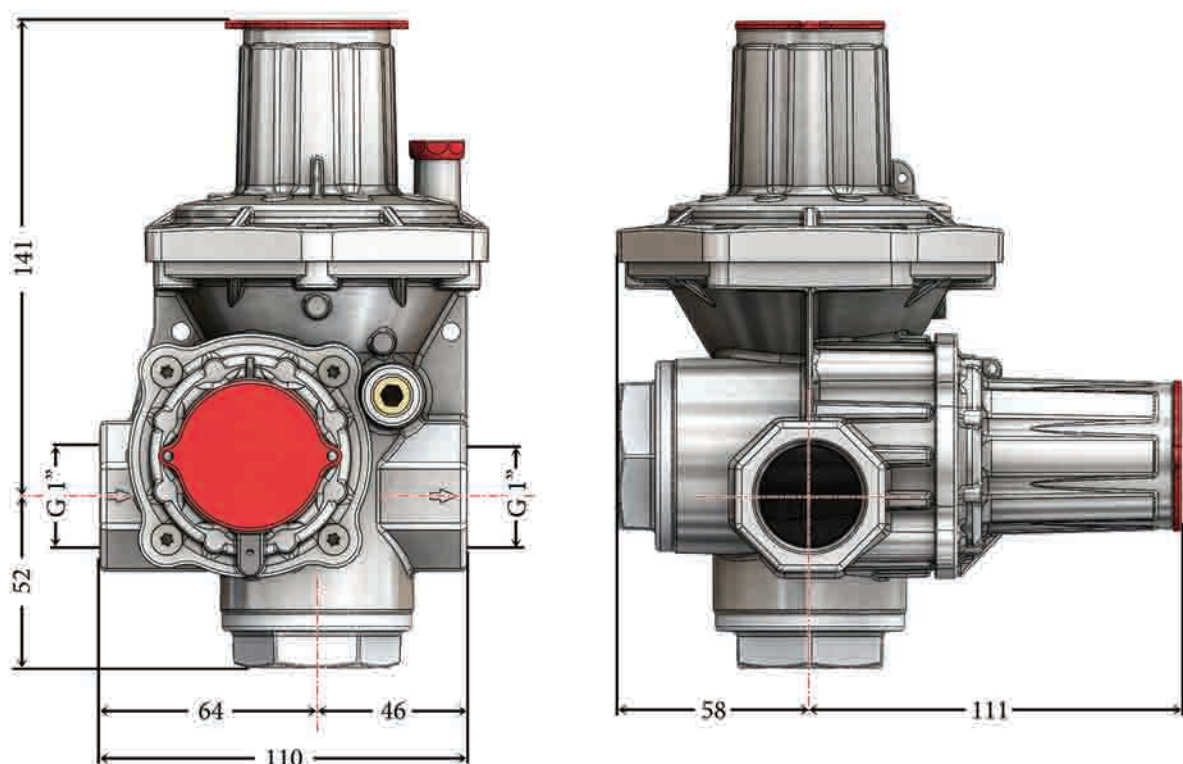
It is mainly used in Distribution of Natural Gas and also suitable to use with non-corrosive gases. ERG-H1 is a single stage regulator with an optional security systems such as relief valve, UPSO and OPSO.

The regulators are manufactured according to **Ped Directive 2014/68/EU**. The performance of the regulators complies with **EN 334**

FEATURES

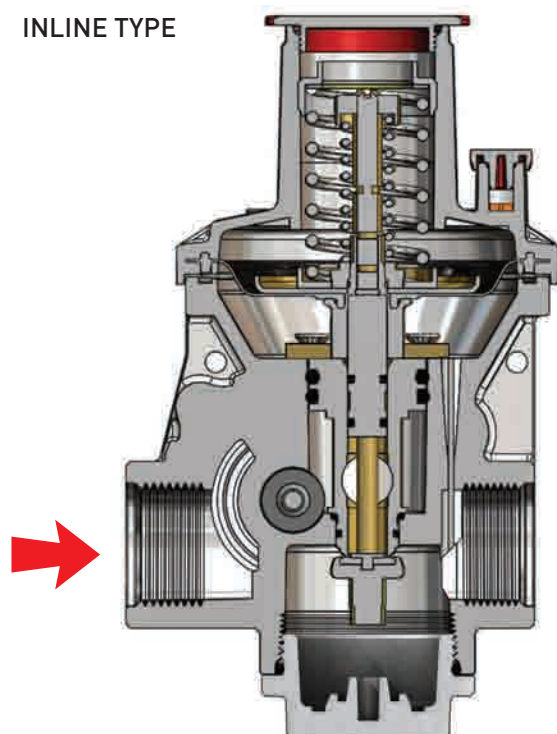
- For medium and high pressure domestic or industrial second group gas lines.
- Max inlet pressure 1 to 20 bar.
- Max outlet pressure MPO: 100 to 800 and HPO : 800 to 4 bar.
- Optional filter on inlet.
- Outlet pressure tolerance is $\pm 5-10$ (AC5&AC10)
- Lock up pressure tolerance is max $+30$ (SG30)
- Can be integrated with Relief valve & UPSO & OPSO
- Flow direction inline and angle type.

DIMENSIONS

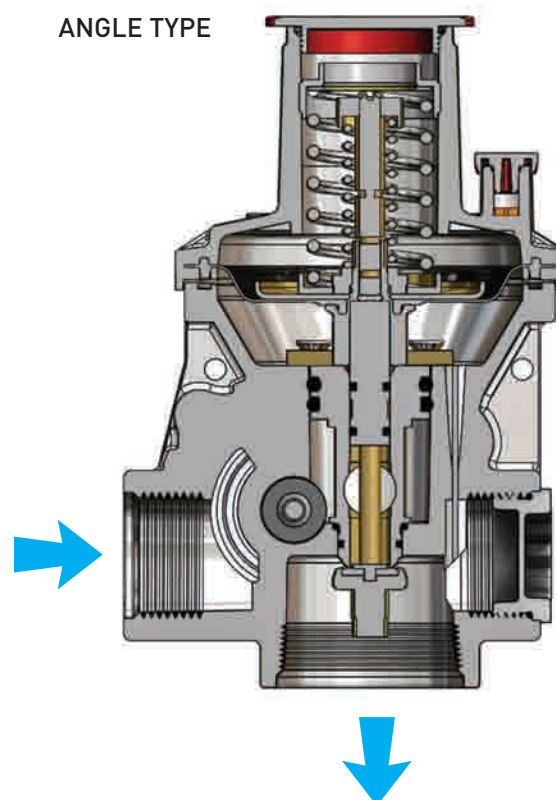


CONFIGURATIONS

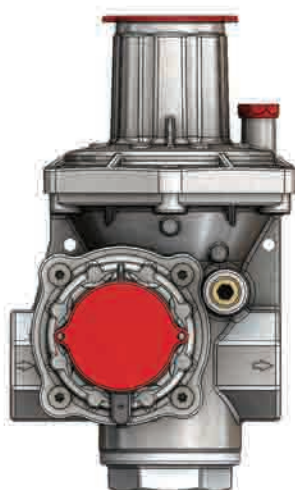
INLINE TYPE



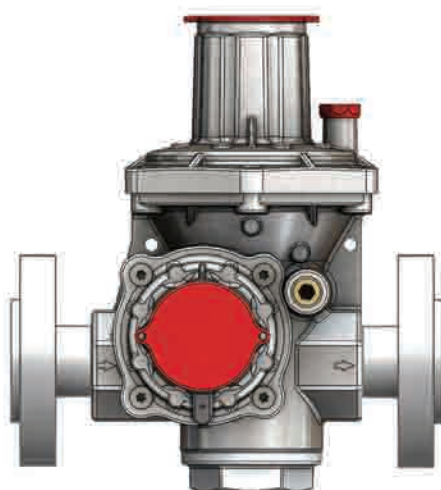
ANGLE TYPE



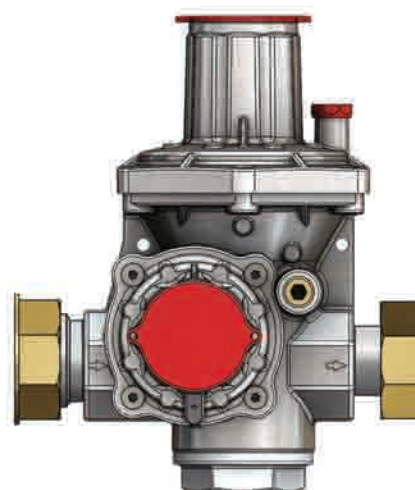
CONNECTION TYPES



Without Connection



With Flanged Connection



With Loose Connection

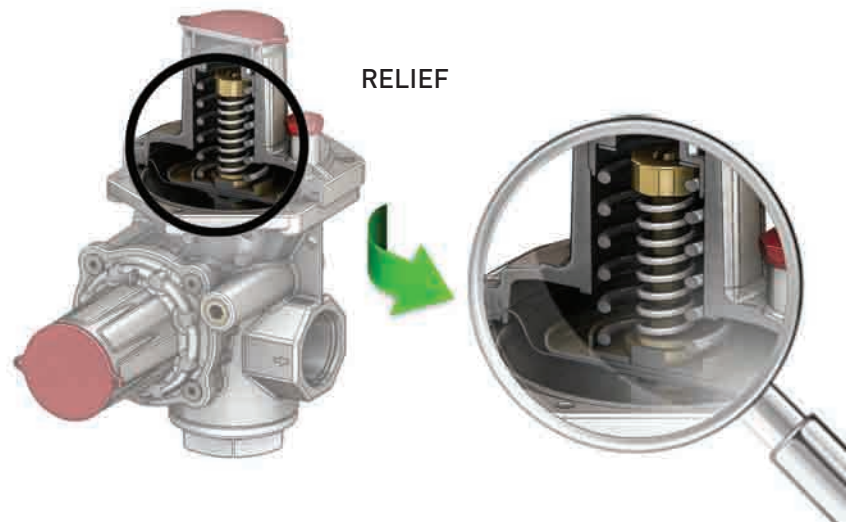
SAFETY AND ACCESSORIES

Relief System

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

Relief valve has limited discharge capacity. Usually calibration point is lower than OPSO system. Under certain conditions such as gas expansion during hot weather seasons, Relief Valve is activated before OPSO closes the gas lines. It prevents random shut-off regarding pressure increase on outlet side.

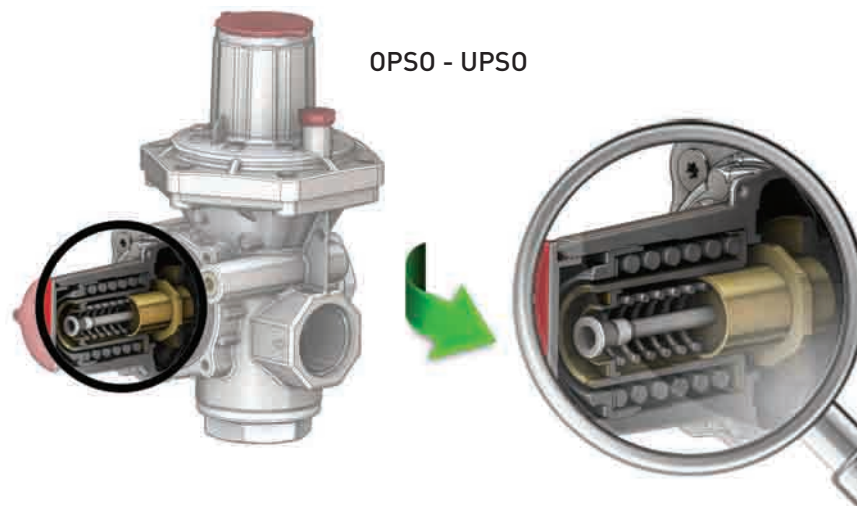
Relief valve can be recalibrated by using proper tools.



Over Pressure Shut-Off System

OPSO system is very useful during major breakdown situations and keeps the customer side safe. System works as a security valve and activates itself when the outlet pressure passes OPSO calibration point. OPSO system cuts the gas off, and manual reset is needed to activate the regulator again.

System has an independent shut-off mechanism and orifice and it monitors outlet pressure changes continuously, so activation time is below 2 seconds.



Under Pressure Shut-Off System.

- UPSO system on ERG-H1 series regulator is pressure based. It cuts the gas off when the outlet pressure drops below the UPSO calibration point.
- UPSO valve continuously monitors outlet pressure changes. Scenarios like, pipeline breakdown on outlet sides, or consumption is exceeding the total capacity of regulator or lack of inlet pressure situations etc...the outlet pressure drops and the regulator cuts the gas off once UPSO system is activated.

SPECIFICATIONS

| | |
|------------------------|--|
| Medium | : Natural Gas, LPG and Non-Corrosive Gases |
| Operating temperature | : -20... + 60°C (optional : -40... +60°C) |
| Assembly | : Vertical and Horizontal Position |
| Maximum inlet pressure | : 6 bar (Optional 10 bar, 20 bar) |
| Outlet pressure range | : 100 mbar to 4 bar. |
| Conforming | : 2014/68/EU |
| Filter | : As a standard 100 micron pore diameter. |

DESIGN

The ERG-H1 Series pressure regulator body consists of :

- Valve housing
- Internal thread
- Filter
- Set up tool
- Breather consol.
- Optional pressure test point.
- Over pressure shut off OPSO
- Under pressure shut off UPSO
- Integrated bypass

MATERIALS

- Body Aluminum
- Rubber components have gas approval according to EN 549
- Brass materials are suitable according to EN12164 - EN12165 Standard.

CAPACITIES

| Flow Rate SCMH Methane | Pin mbar |
|------------------------------|--------------|
| 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