



ERG-H5 SERIES

GAS PRESSURE
BALANCED REGULATOR
With/without UPSO/OPSO

ERG-H5

The ERG-H5 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-H5 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 2.5 bar.

It is mainly used in the distribution of natural gas, LPG and for all non-corrosive gases. ERG-H5 is a single stage direct acting regulator with an optional safety system given by the UPSO/OPSO valve for minimum and maximum pressure.

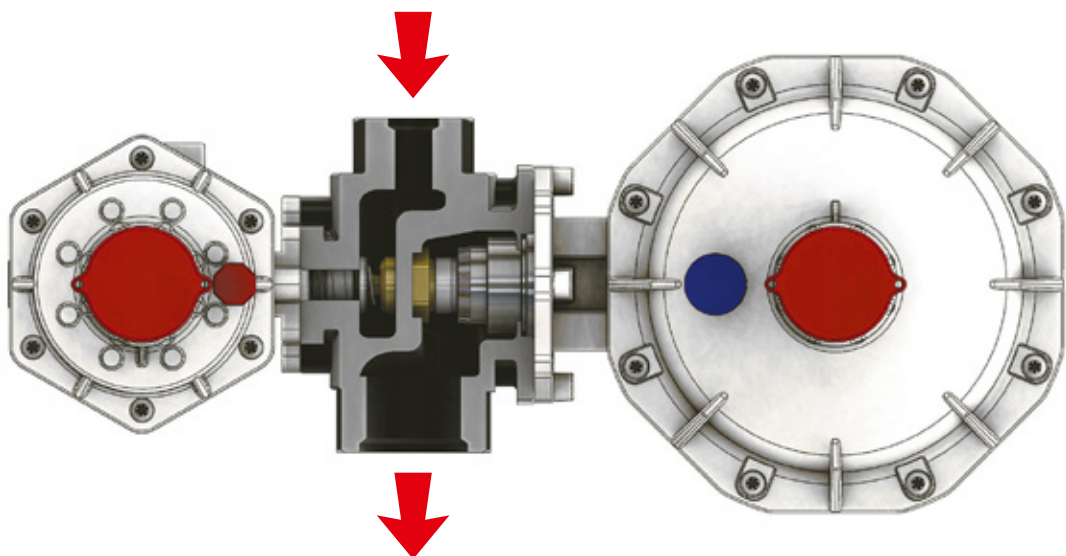
The regulators are manufactured according to the PED 2014/68 / UE Directive. The performances of the regulators comply with the EN 334 standard.

Features

- For medium and high pressure domestic or industrial second group gas lines.
- Max inlet pressure 20 bar.
- Max outlet pressure LPO: 15 to 100 mbar, MPO: 100 to 300 mbar, HPO: 300 to 2,5 bar
- Optional filter on inlet.
- Outlet pressure tolerance is $\pm 5-10$ (AC5 & AC10)
- Lock up pressure tolerance is max $+30$ (SG30, SG10 and SG20 is possible also)
- Can be integrated with Relief valve & UPSO & OPSO
- Temperature class as a standard -20 to +60 Centigrade Degree. Low temperature series has ability to work under as low as -40 Centigrade Degree.
- Flow direction inline

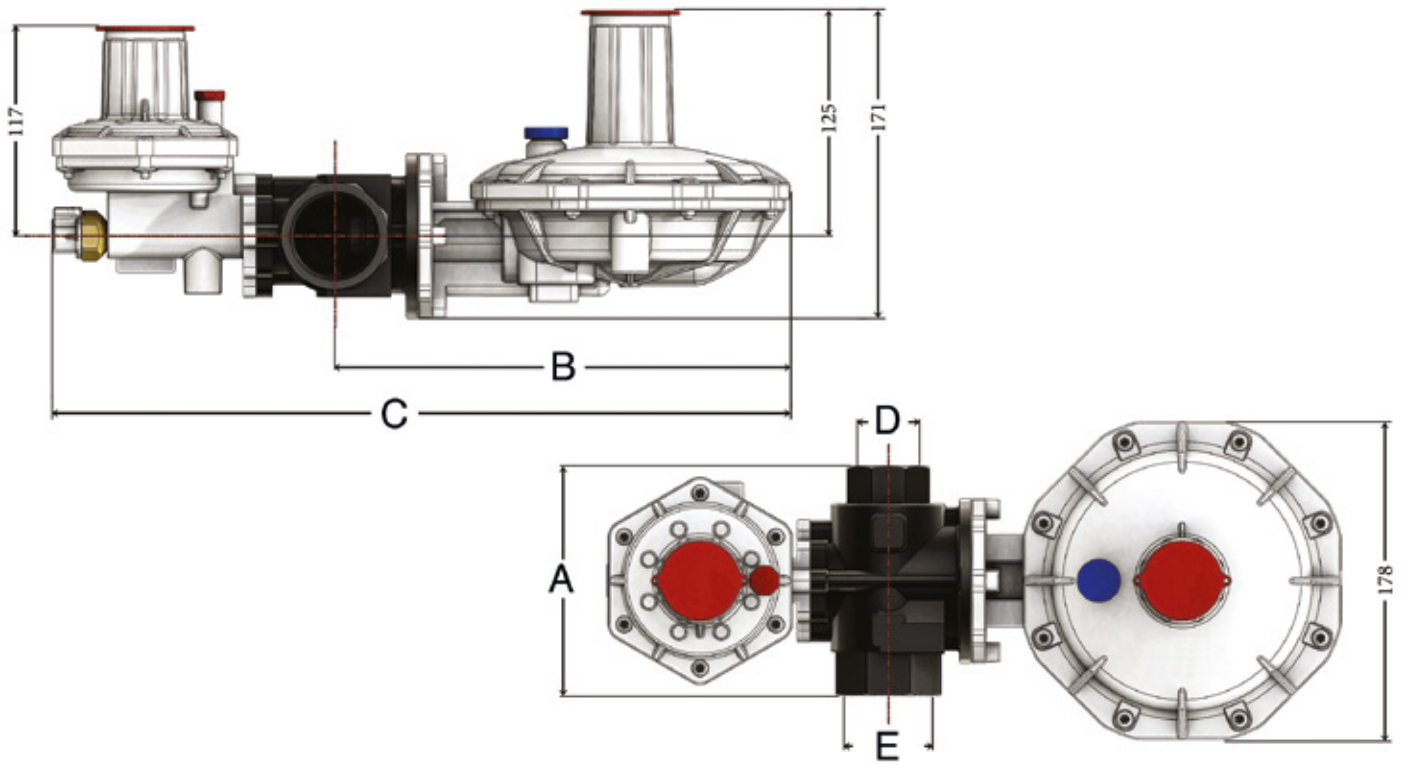
Configurations

Inline Type



DIMENSIONS (in mm)

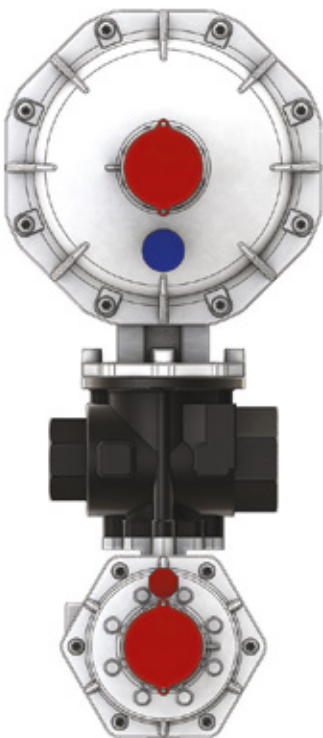
ERG-H5



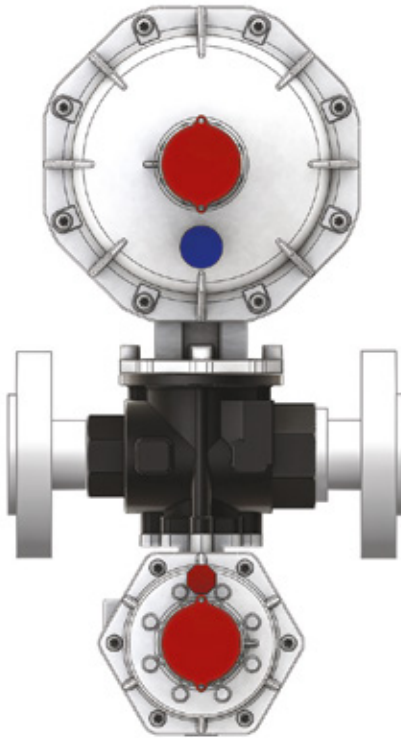
MODEL	A	B	C	D	E
ERG-H5 (1" - 1")	100	249	402	1"	1"

MODEL	A	B	C	D	E
ERG-H5 (1" - 1 1/2")	129	254	411	1"	1 1/2"

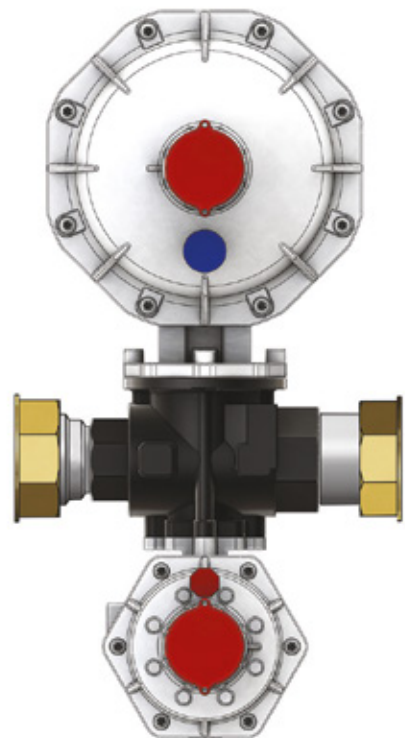
Connection types



Threaded connection



Flanged connection



Loose connection

SAFETY AND ACCESSORIES

Relief System

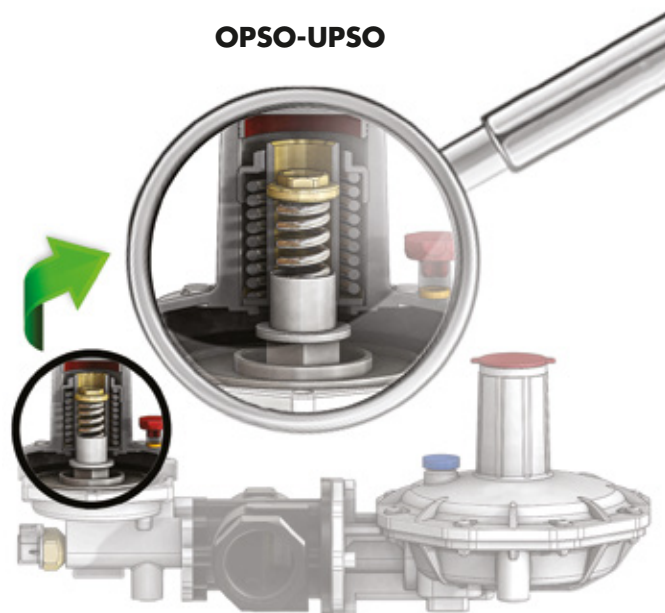
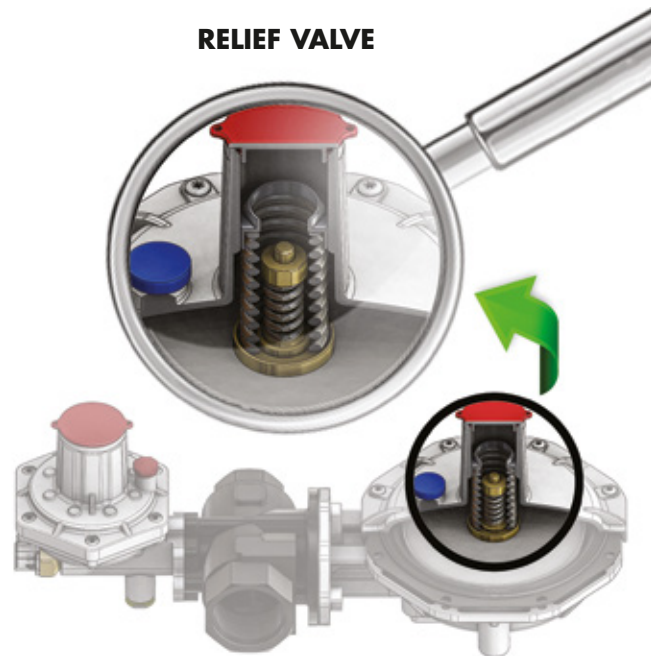
The regulator can be produced with a relief valve. The valve continuously monitors the outlet pressure and when it detects a pressure level higher than the regulator's nominal outlet pressure, it activates and discharges gas into the atmosphere.

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

Specification

Gas type	: Natural Gas, LPG and Non-Corrosive Gases
Flow rate	: Up to 500 m ³ /h
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	: 15 mbar to 2500 mbar
Conforming	: 2014/68/EU PED
Filter	: 100 microns

Design

The ERG-H5 Series pressure regulator body consists of:

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

Materiali

- Cast iron body, aluminum covers
- Rubber components have gas approval according to EN 549
- Brass materials are suitable according to EN12164 - EN12165 Standard

Models / Capacities

1"-1" with internal sensing line active

Outlet Pressure 15-100 mbar Version LP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	70	85	95
Outlet Pressure + 1 bar	70	115	130
Outlet Pressure + 2,5 bar	90	115	130
Outlet Pressure + 5 bar	80	130	150

Outlet Pressure 100-300 mbar Version MP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	100	120	130
Outlet Pressure + 1 bar	140	170	190
Outlet Pressure + 2,5 bar	230	280	280
Outlet Pressure + 5 bar	280	280	280

1"-1" with internal and external sensing line active

Outlet Pressure 15-100 mbar Version LP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	45	70	90
Outlet Pressure + 1 bar	70	130	140
Outlet Pressure + 2,5 bar	110	190	220
Outlet Pressure + 5 bar	130	230	280

Outlet Pressure 100-300 mbar Version MP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	90	130	140
Outlet Pressure + 1 bar	130	190	220
Outlet Pressure + 2,5 bar	180	280	280
Outlet Pressure + 5 bar	330	330	330

1"-1 1/2" with internal sensing line active

Outlet Pressure 15-100 mbar Version LP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	70	90	100
Outlet Pressure + 1 bar	150	170	190
Outlet Pressure + 2,5 bar	130	190	190
Outlet Pressure + 5 bar	120	150	170

Outlet Pressure 100-300 mbar Version MP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	110	140	160
Outlet Pressure + 1 bar	160	240	270
Outlet Pressure + 2,5 bar	340	370	400
Outlet Pressure + 5 bar	340	400	450

1"-1 1/2" with internal and external sensing line active

Outlet Pressure 15-100 mbar Version LP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	65	100	105
Outlet Pressure + 1 bar	150	160	170
Outlet Pressure + 2,5 bar	280	330	330
Outlet Pressure + 5 bar	190	235	280

Outlet Pressure 100-300 mbar Version MP			
Inlet Pressure	AC5	AC10	AC20
Outlet Pressure + 0,5 bar	90	150	170
Outlet Pressure + 1 bar	150	230	270
Outlet Pressure + 2,5 bar	500	500	500
Outlet Pressure + 5 bar	500	500	500

Product range



Rotary piston gas meters



Turbine gas meters



Gas pressure regulators



Electronic volume correctors



Diaphragm gas meters



Smart meters

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