ESKA

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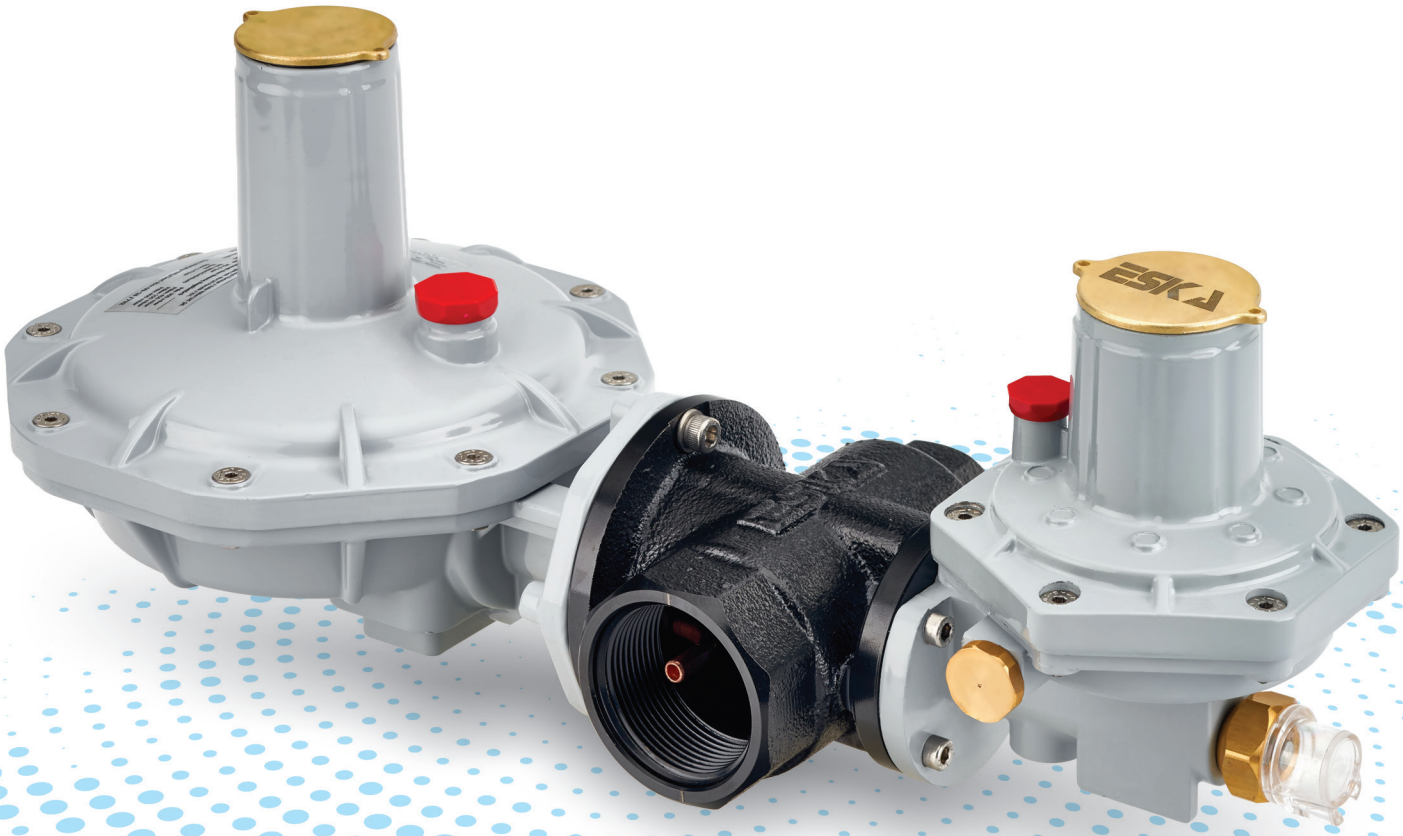


ERG-H5 SERIES

ERG-H5 Series pressure regulator which is used on gas line to reduce inlet pressure to desired outlet pressure.

ERG-H5 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 2,5 bar.

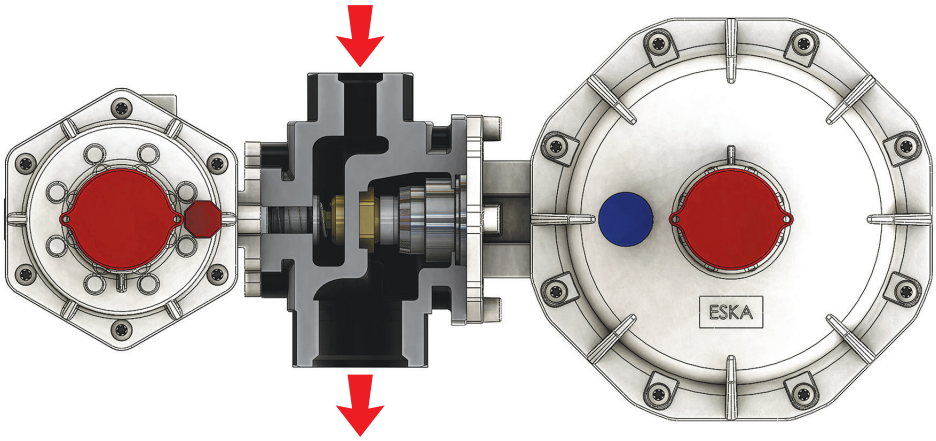
It is mainly used in Distribution of Natural Gas and also suitable to use with non-corrosive gases. ERG-H5 is a single stage direct acting regulator with a optional security systems such as relief valve UPSO and OPSO

FEATURES

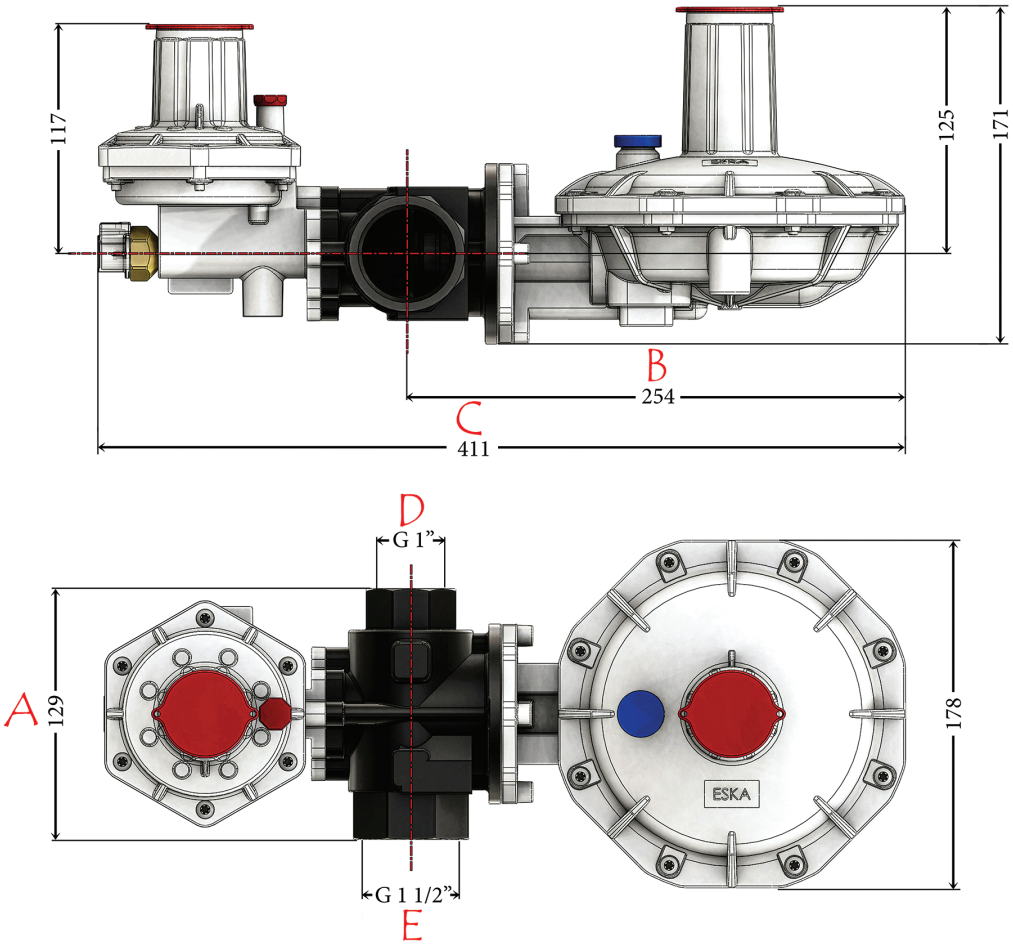
- For medium and high pressure domestic or industrial second group gas lines.
- Max inlet pressure 1 to 20 bar.
- Max outlet pressure LPO : 15 to 100 mbar MPO : 100 to 300 mbar HPO : 300 to 2,5 bar
- Optional filter on inlet.
- Outlet pressure tolerance is ±%5-10 (AC5 & AC10)
- Lock up pressure tolerance 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 Cantigrade Degree. Low temperature series has ability to work under as low as -40 Centigrade Degree.
- Flow direction inline

CONFIGURATIONS

INLINE TYPE



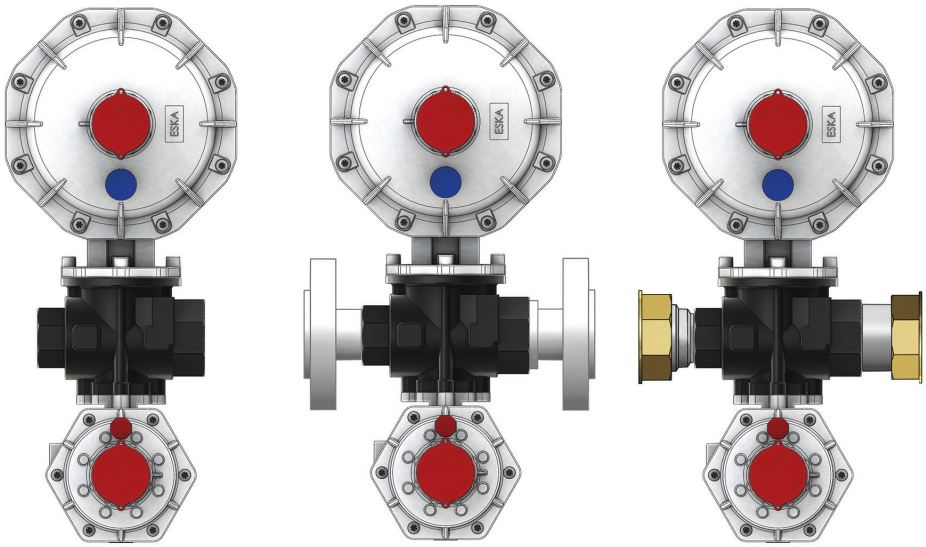
DIMENSIONS



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



Without Connection

With Flanged Connection

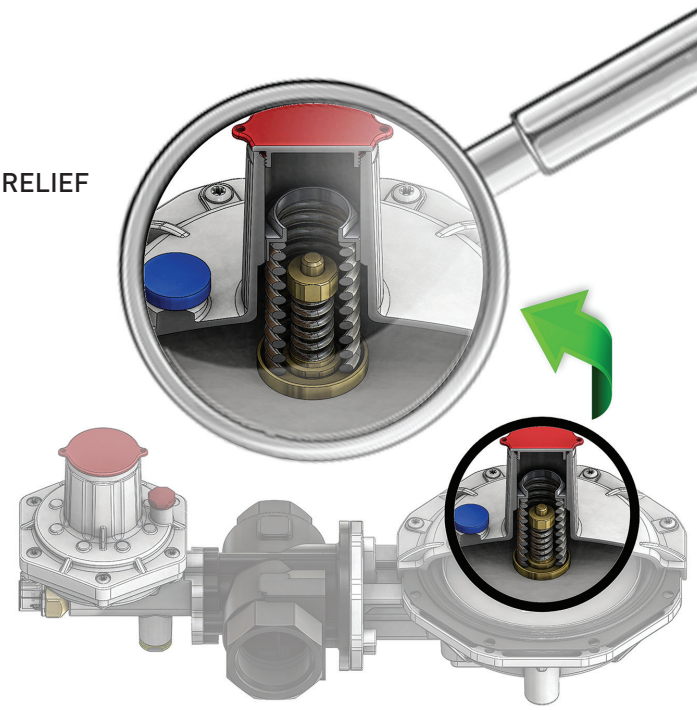
With Loose Connection

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.

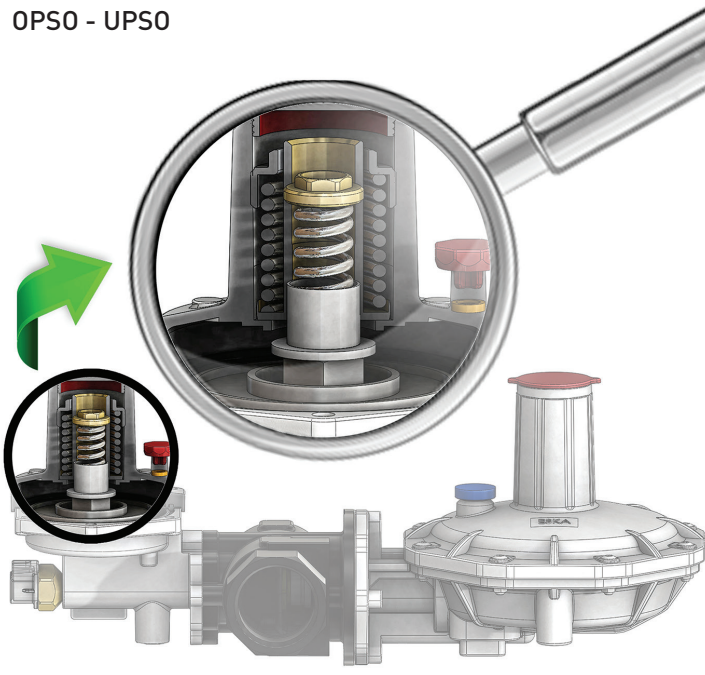
RELIEF



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.

OPSO - UPSO



Under Pressure Shut-Off System.

- UPSO system on ERG-H5 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	: 15 mbar to 2,5 bar
Conforming	: 2014/68/EU
Filter	: As a standard 100 micron pore diameter.

DESIGN

The ERG-H5 Series pressure regulator body consists of :

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

MATERIALS

- Body Steel or Iron
- 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 LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20
Outlet Pressure+0,5bar	70	85	95	Outlet Pressure+0,5bar	100	120	130
Outlet Pressure+1bar	70	115	130	Outlet Pressure+1bar	140	170	190
Outlet Pressure+2,5bar	90	115	130	Outlet Pressure+2,5bar	230	280	280
Outlet Pressure+5bar	80	130	150	Outlet Pressure+5bar	280	280	280

1"-1" WITH INTERNAL AND EXTERNAL SENSING LINE ACTIVE

Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20
Outlet Pressure+0,5bar	45	70	90	Outlet Pressure+0,5bar	90	130	140
Outlet Pressure+1bar	70	130	140	Outlet Pressure+1bar	130	190	220
Outlet Pressure+2,5bar	110	190	220	Outlet Pressure+2,5bar	180	280	280
Outlet Pressure+5bar	130	230	280	Outlet Pressure+5bar	330	330	330

1"-1 1/2" WITH INTERNAL SENSING LINE ACTIVE

Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20
Outlet Pressure+0,5bar	70	90	100	Outlet Pressure+0,5bar	110	140	160
Outlet Pressure+1bar	150	170	190	Outlet Pressure+1bar	160	240	270
Outlet Pressure+2,5bar	130	190	190	Outlet Pressure+2,5bar	340	370	400
Outlet Pressure+5bar	120	150	170	Outlet Pressure+5bar	340	400	450

1"-1 1/2" WITH INTERNAL AND EXTERNAL SENSING LINE ACTIVE

Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20
Outlet Pressure+0,5bar	65	100	105	Outlet Pressure+0,5bar	90	150	170
Outlet Pressure+1bar	150	160	170	Outlet Pressure+1bar	150	230	270
Outlet Pressure+2,5bar	280	330	330	Outlet Pressure+2,5bar	500	500	500
Outlet Pressure+5bar	190	235	280	Outlet Pressure+5bar	500	500	500