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ESKA

GENERAL
CATALOGUE



ESKA VALVE is gas equipment producer (Gas Pressure Regulators, Gas Filters and Valves) in Turkey since 1968. Our certified products are being used in civic and industrial areas all around the world.

For 50 years, our product portfolio, operations and ESKA VALVE family has grown and still keep growing. Ingenuity, reliability and hard work led us to be the market leader in Turkey and expanded our international operations in more than 30 countries in global scale. By the time you read this text , probably we will be reaching out another locations and placing our products into grids.

By examining, following and applying 133 national and international standards from our R&D Department library, and with our Quality Department's deep commitment to test each and every product on over 100 inspection-test points have made us to produce annually more than 1.000.000 accurate and reliable unit products which 52 gas distribution companies trust worldwide .

Hope to gain your trust and see you in our ever-growing family.

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DIRECT ACTING GAS PRESSURE REGULATOR

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ERG-H6
SERIES

ERG-H6 Series pressure regulator is used on gas line to reduce inlet pressure to desired outlet pressure.

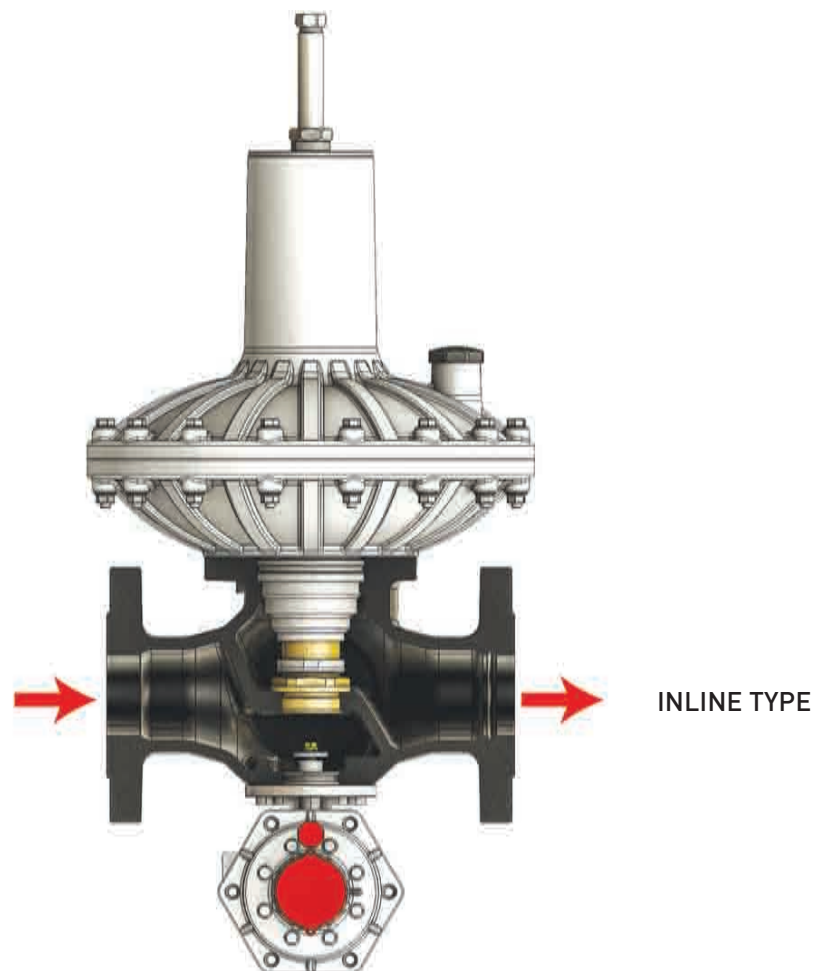
It is mainly used in Distribution of Natural Gas and also suitable to use with non-corrosive gases. ERG-H6 is a single stage direct acting regulator with an optional security systems such as relief valve UPSO and OPSO

Monitor version is also available.

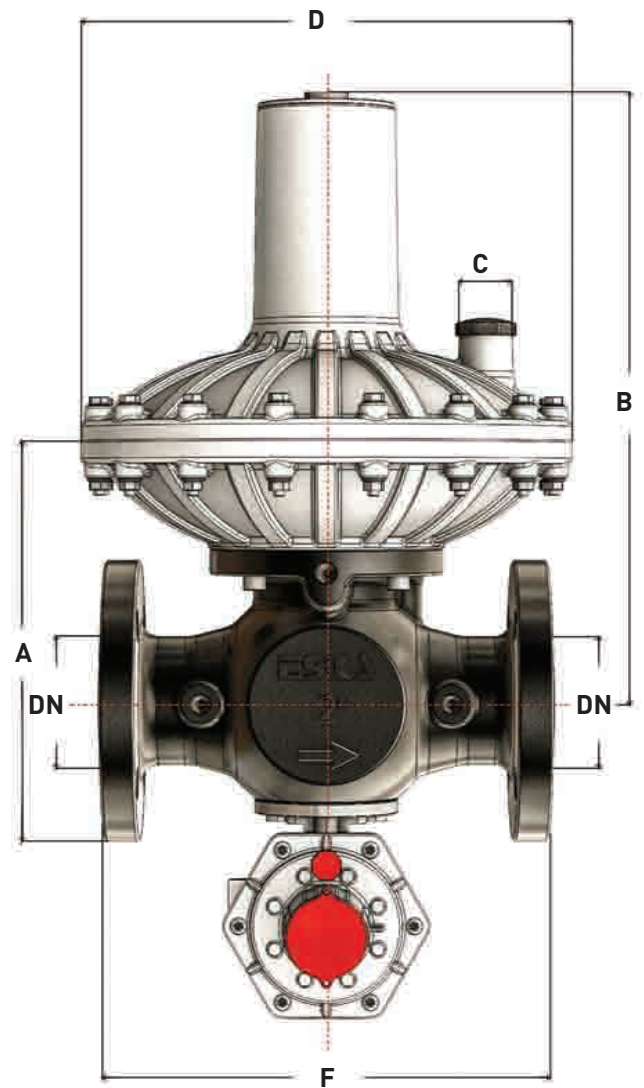
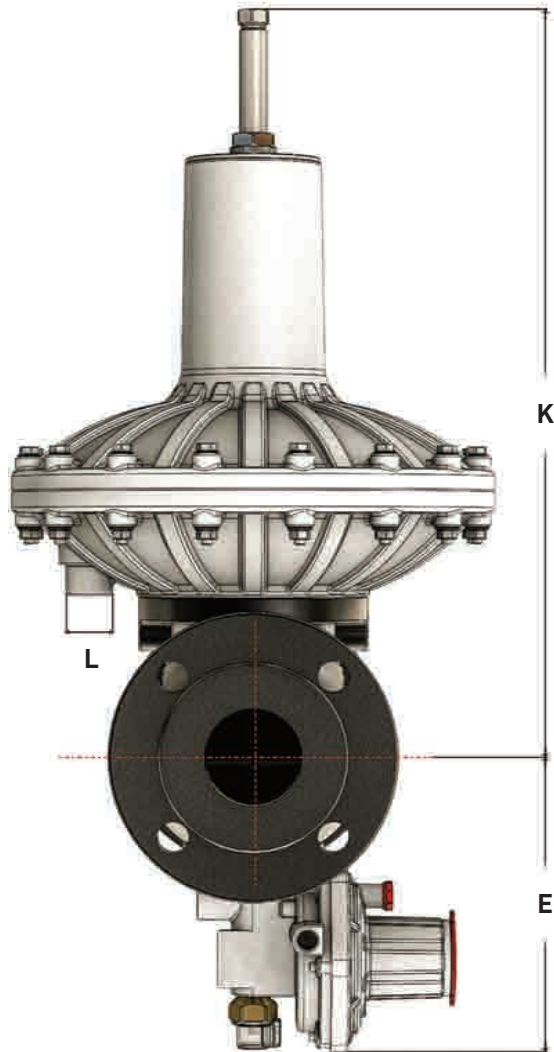
FEATURES

- For medium and high pressure domestic or industrial second group gas lines.
- Max inlet pressure 0,3 to 20 bar.
- Max outlet pressure 15-4500 mbar.
- Outlet pressure tolerance is $\pm 5-10$ (AC5 & AC10)
- Lock up pressure tolerance is max $+10$ (SG30 and SG20 is possible also)
- Can be integrated with Relief valve & UPSO & OPSO
- Temperature class as a standard -20 to $+60$ Celcius Degree. Low temperature series has ability to work under as low as -40 Celcius Degree.
- Flow direction inline type.

CONFIGURATIONS



DIMENSIONS



DN	A	B	C	D	E	F	K	L
25	227	345	G 1/2"	280	175	183	430	G 1/4"
32	227	345	G 1/2"	280	175	183	430	G 1/2"
40	227	345	G 1/2"	280	175	223	430	G 1/2"
50	227	345	G 1/2"	280	175	255	430	G 1/2"

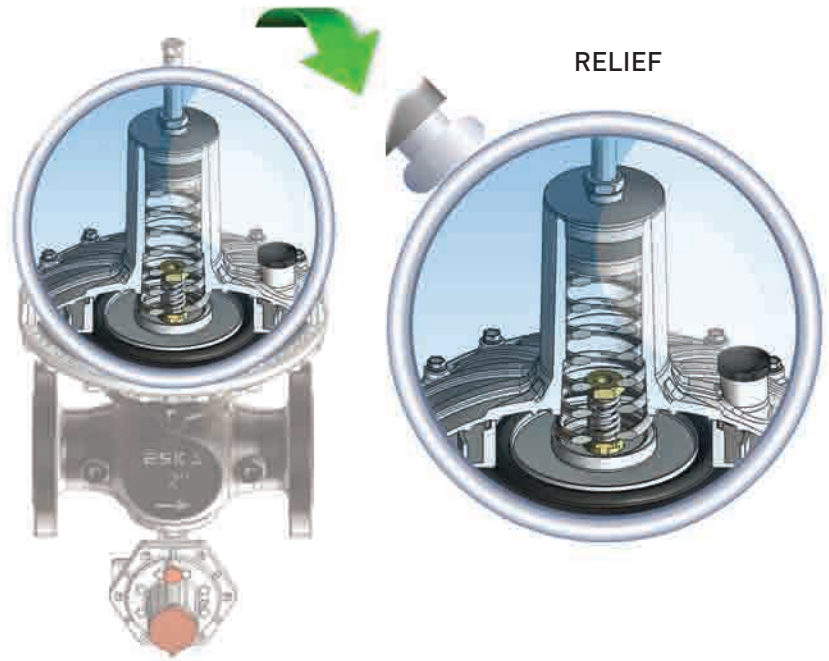
SAFETY AND ACCESSORIES

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.

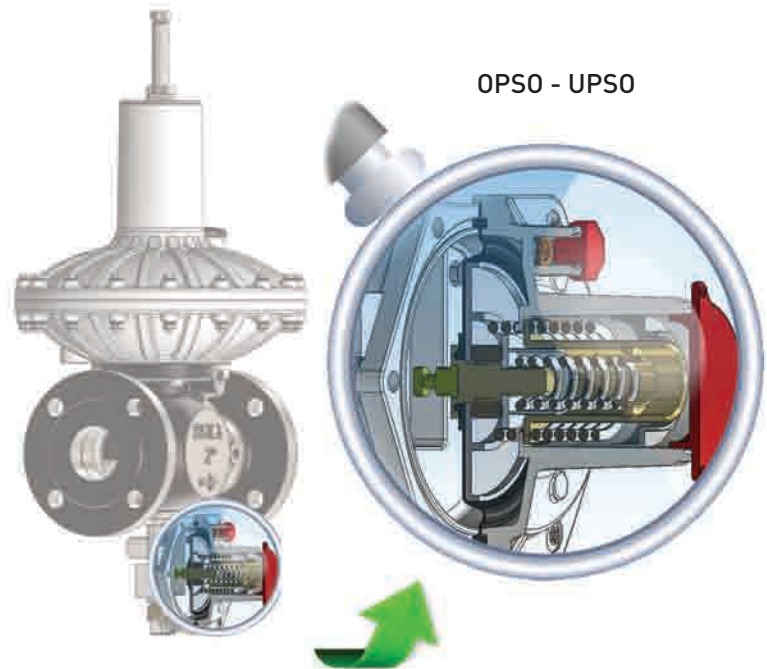
Relief valve can be recalibrated by using proper tools.



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-H6 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	: 20 bar
Outlet pressure range	: 15 mbar to 4,5 bar
Conforming	: 2014/68/EU
Type	: IS
Fail Mode	: Fail to Open
DN	: 1" (25) - 1"1/2 (40) - 2" (50)

DESIGN

The ERG-H6 Series pressure regulator body consists of :

- Valve housing
- Set up tool
- Breather consol.
- Over pressure shut off OPSO
- Under pressure shut off UPSO
- Furthermore the truly "top entry design" allows an easy periodical maintenance without removing body from the line.
- High flow rate coefficient
- High accuracy, even at maximum flow rates
- Reduced response times,
- Periodical maintenance without disassembling the body from the pipework,

MATERIALS

- Body is ductile cast iron
- Rubber components have gas approval according to EN 549
- Orifice is Brass
- Head covers is die cast alluminium EN AC-AISI 12

CAPACITIES

	LP Version			MP Version		
	25	40	50	25	40	50
Norminal Diameter	25	40	50	25	40	50
CG Flow Coffivient	275	665	792	326	704	781
KG Flow Coffivient	290	695	833	343	739	820
K1 Body Shape Factor	98	98	91	101	98	100

Sizing of regulators is usually made on the basis of Cg valve and KG flow rate coefficients. Flow rates at the fully open position and the various operating

Q = flow rate in Scm/h

Pe = Absolute Upstream Pressure in bar

Pa = Absolute Downstream Pressure in bar

When the Cg and KG values of the regulator are known, as well as Pe and Pa, the flow rate can be calculated as follows:

1- in non-critical conditions: (Pe \leftarrow 2 x Pa)

$$Q = 0,52 \times C_g \times Pe \times \text{sen} \left(K1 \times \sqrt{\frac{Pe - Pa}{Pe}} \right) \quad Q = KG \times \sqrt{Pa \times (Pe - Pa)}$$

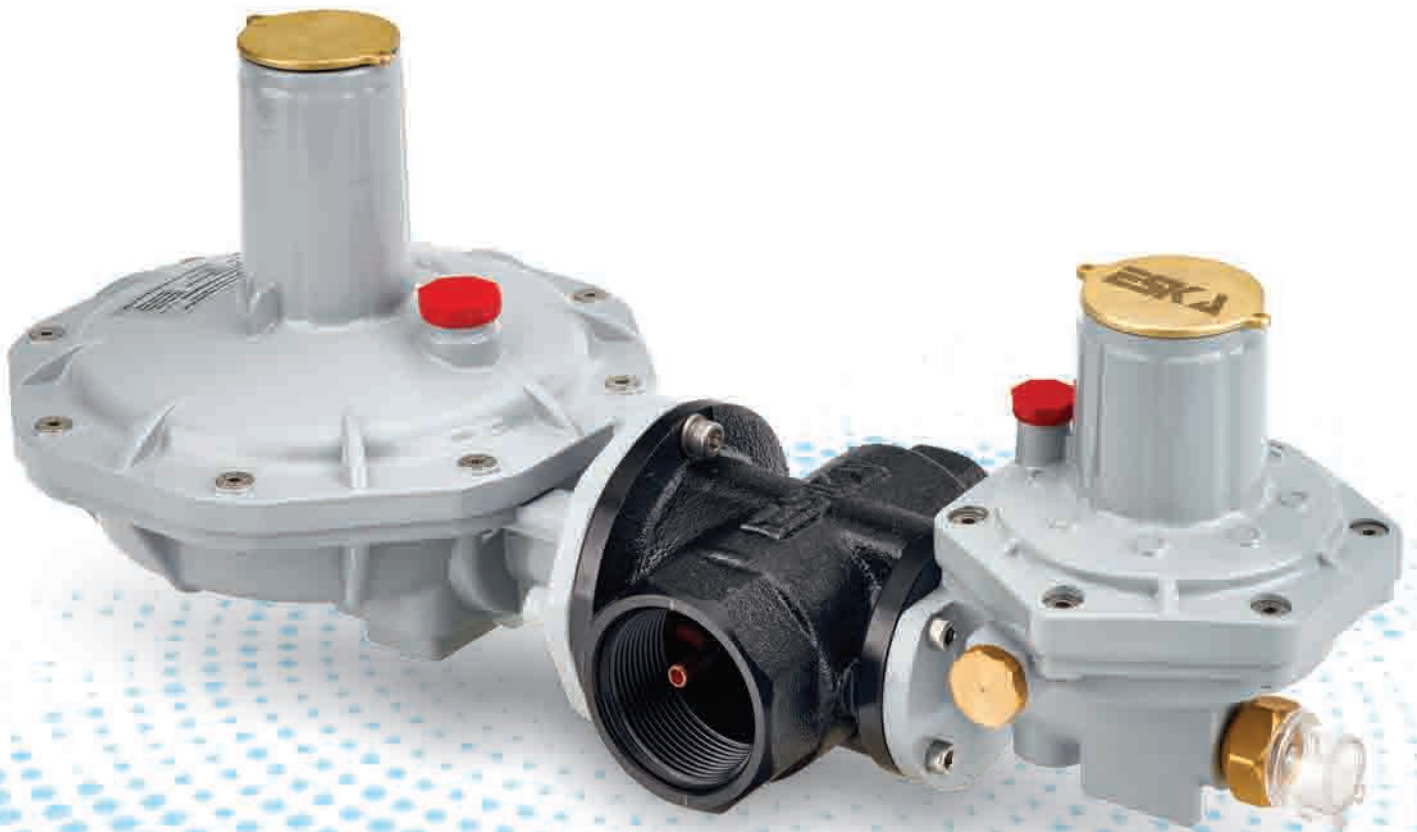
2- in critical conditions: (Pe ∇ 2 x Pa)

$$Q = \frac{KG}{2} \times Pe$$

$$Q = 0,52 \times C_g \times Pe$$

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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.

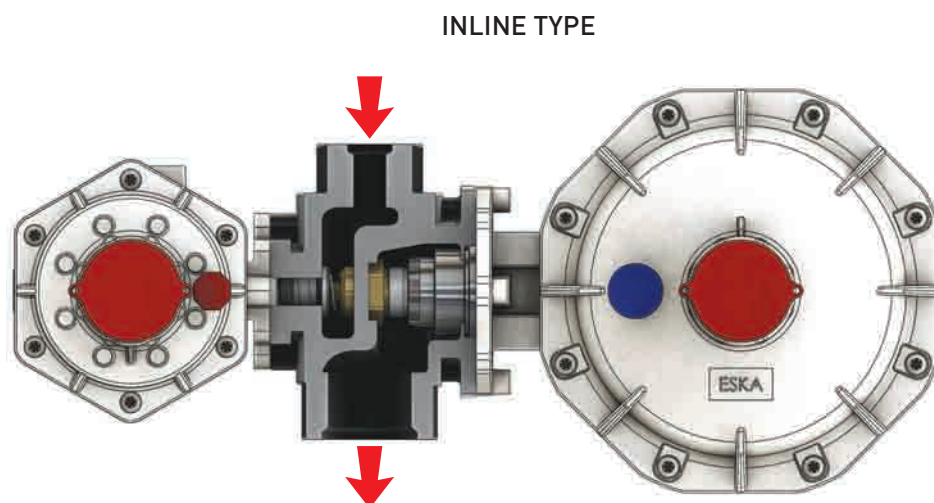
ERG-H5 series pressure regulators are suitable for commercial usage like Gas Skids where the maximum inlet pressure up to 20 bar and outlet pressure up to 2,5 bar.

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

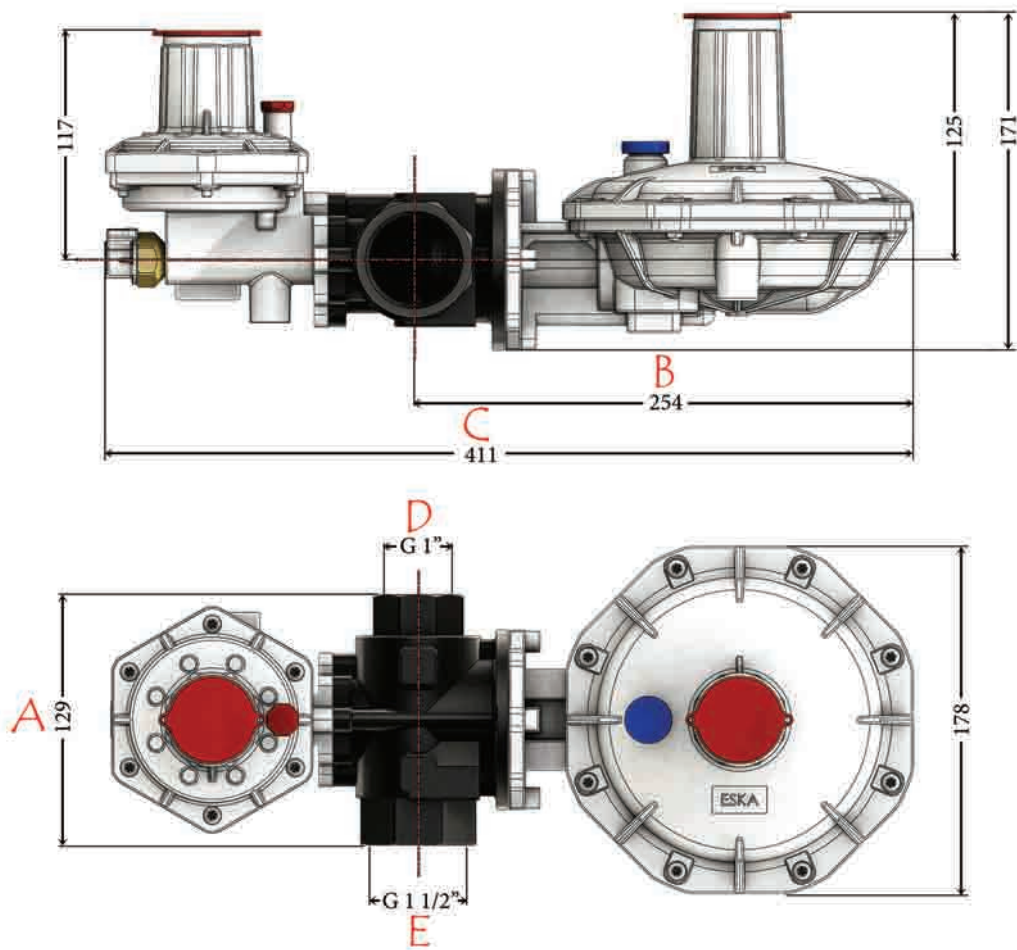
FEATURES

- 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 $\pm 5-10$ (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



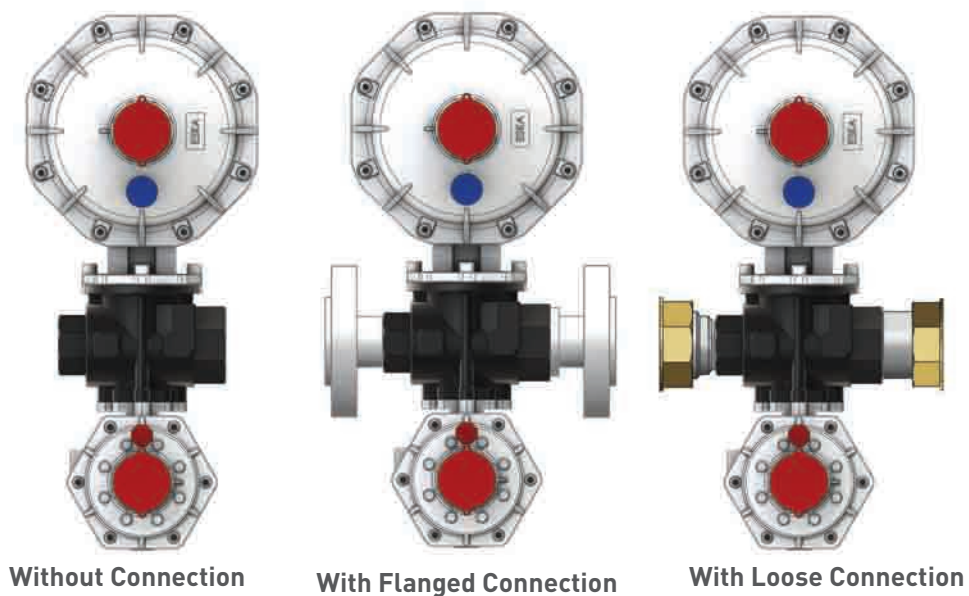
DIMENSIONS



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



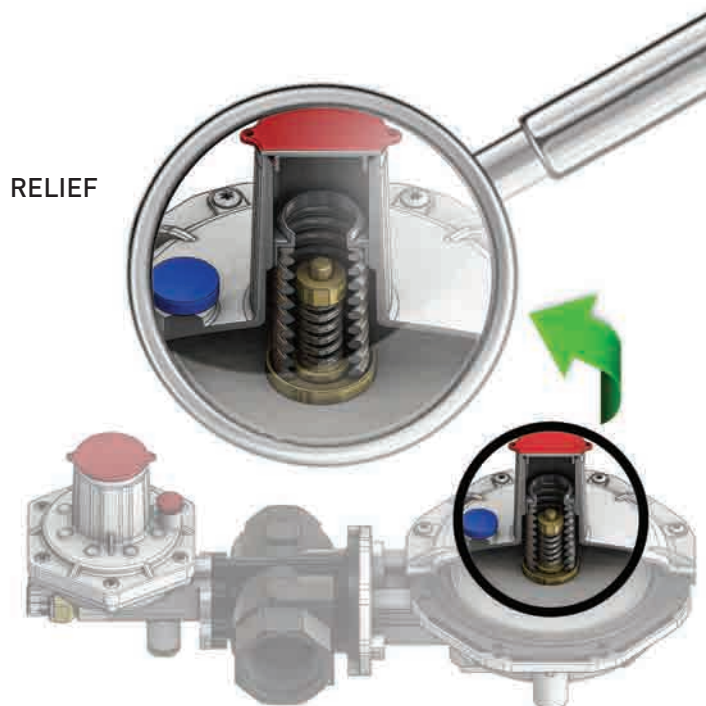
SAFETY AND ACCESSORIES

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.

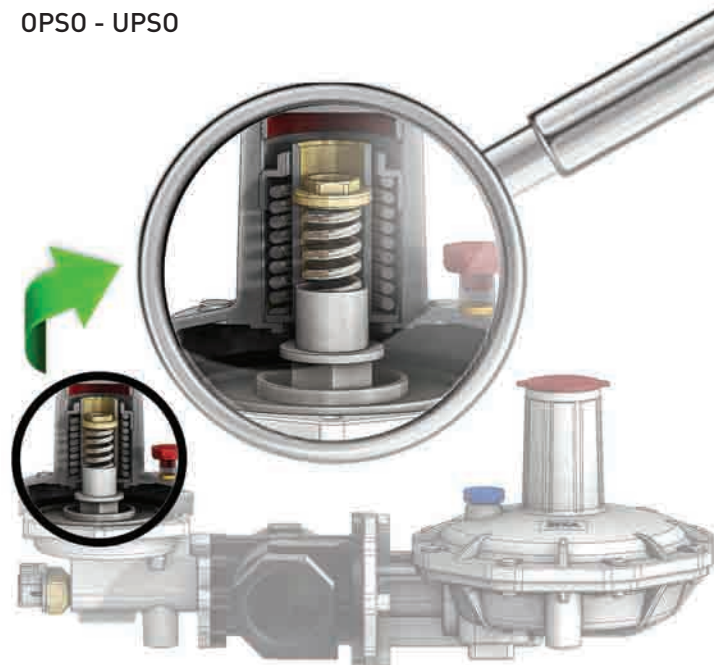


Over Pressure Shut-Off System

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.

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				Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20	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+0,5bar	45	70	90	Outlet Pressure+0,5bar	90	130	140
Outlet Pressure+1bar	70	115	130	Outlet Pressure+1bar	140	170	190	Outlet Pressure+1bar	70	130	140	Outlet Pressure+1bar	130	190	220
Outlet Pressure+2,5bar	90	115	130	Outlet Pressure+2,5bar	230	280	280	Outlet Pressure+2,5bar	110	190	220	Outlet Pressure+2,5bar	180	280	280
Outlet Pressure+5bar	80	130	150	Outlet Pressure+5bar	280	280	280	Outlet Pressure+5bar	130	230	280	Outlet Pressure+5bar	330	330	330

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

Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version				Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20	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+0,5bar	45	70	90	Outlet Pressure+0,5bar	90	130	140
Outlet Pressure+1bar	70	115	130	Outlet Pressure+1bar	140	170	190	Outlet Pressure+1bar	70	130	140	Outlet Pressure+1bar	130	190	220
Outlet Pressure+2,5bar	90	115	130	Outlet Pressure+2,5bar	230	280	280	Outlet Pressure+2,5bar	110	190	220	Outlet Pressure+2,5bar	180	280	280
Outlet Pressure+5bar	80	130	150	Outlet Pressure+5bar	280	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				Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20	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+0,5bar	65	100	105	Outlet Pressure+0,5bar	90	150	170
Outlet Pressure+1bar	150	170	190	Outlet Pressure+1bar	160	240	270	Outlet Pressure+1bar	150	160	170	Outlet Pressure+1bar	150	230	270
Outlet Pressure+2,5bar	130	190	190	Outlet Pressure+2,5bar	340	370	400	Outlet Pressure+2,5bar	280	330	330	Outlet Pressure+2,5bar	500	500	500
Outlet Pressure+5bar	120	150	170	Outlet Pressure+5bar	340	400	450	Outlet Pressure+5bar	190	235	280	Outlet Pressure+5bar	500	500	500

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				Outlet Pressure 15-100 mbar LP Version				Outlet Pressure 100-300 mbar MP Version			
Inlet Pressure	AC5	AC10	AC20	Inlet Pressure	AC5	AC10	AC20	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+0,5bar	65	100	105	Outlet Pressure+0,5bar	90	150	170
Outlet Pressure+1bar	150	170	190	Outlet Pressure+1bar	160	240	270	Outlet Pressure+1bar	150	160	170	Outlet Pressure+1bar	150	230	270
Outlet Pressure+2,5bar	130	190	190	Outlet Pressure+2,5bar	340	370	400	Outlet Pressure+2,5bar	280	330	330	Outlet Pressure+2,5bar	500	500	500
Outlet Pressure+5bar	120	150	170	Outlet Pressure+5bar	340	400	450	Outlet Pressure+5bar	190	235	280	Outlet Pressure+5bar	500	500	500

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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.

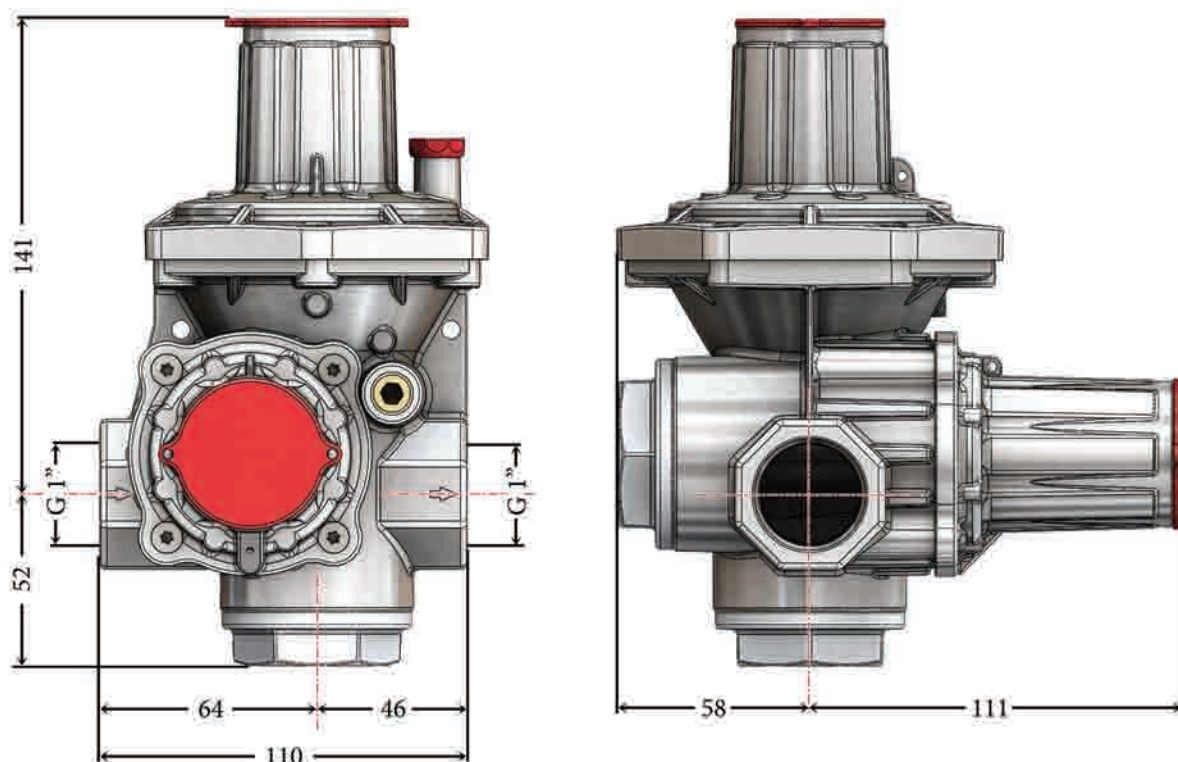
It is mainly used in Distribution of Natural Gas and also suitable to use with non-corrosive gases. ERG-H1 is a single stage regulator with an optional security systems such as relief valve, UPSO and OPSO.

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

FEATURES

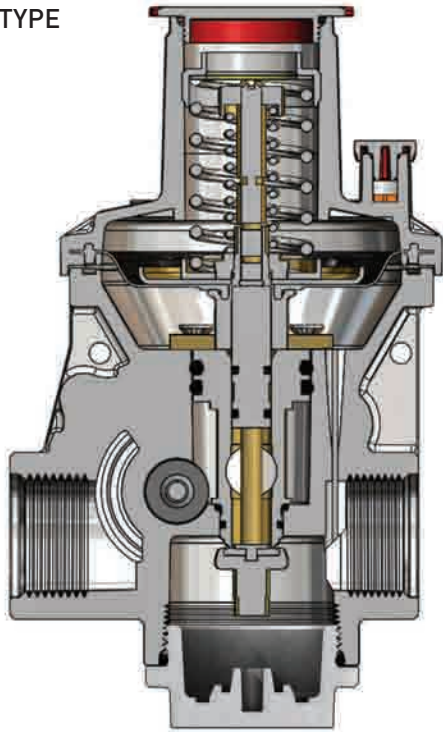
- For medium and high pressure domestic or industrial second group gas lines.
- Max inlet pressure 1 to 20 bar.
- Max outlet pressure MPO: 100 to 800 and HPO : 800 to 4 bar.
- Optional filter on inlet.
- Outlet pressure tolerance is $\pm\%5-10$ (AC5&AC10)
- Lock up pressure tolerance is max $+\%30$ (SG30)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

DIMENSIONS

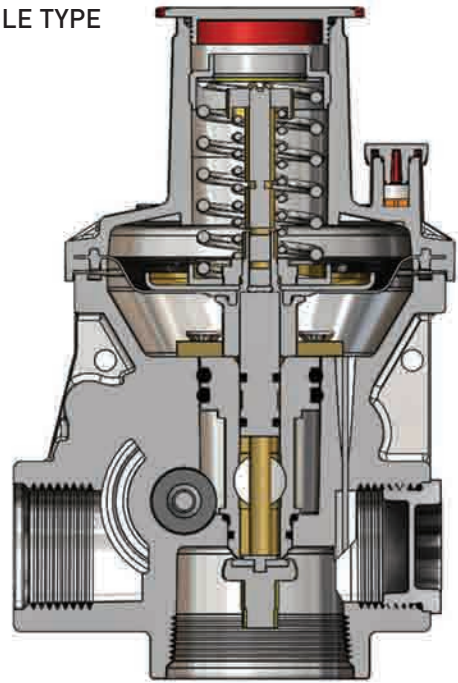


CONFIGURATIONS

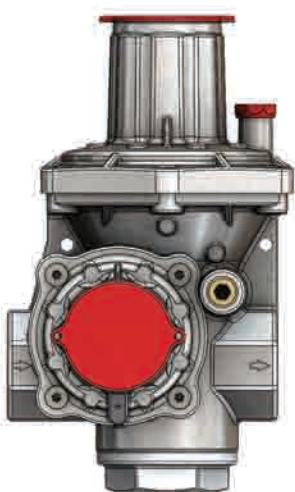
INLINE TYPE



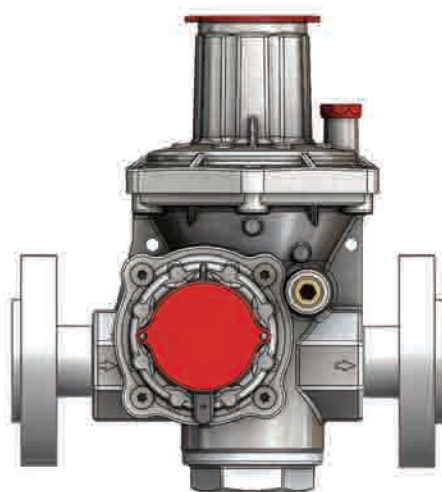
ANGLE TYPE



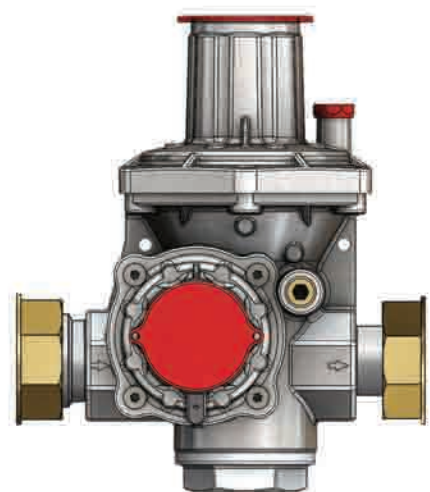
CONNECTION TYPES



Without Connection



With Flanged Connection



With Loose Connection

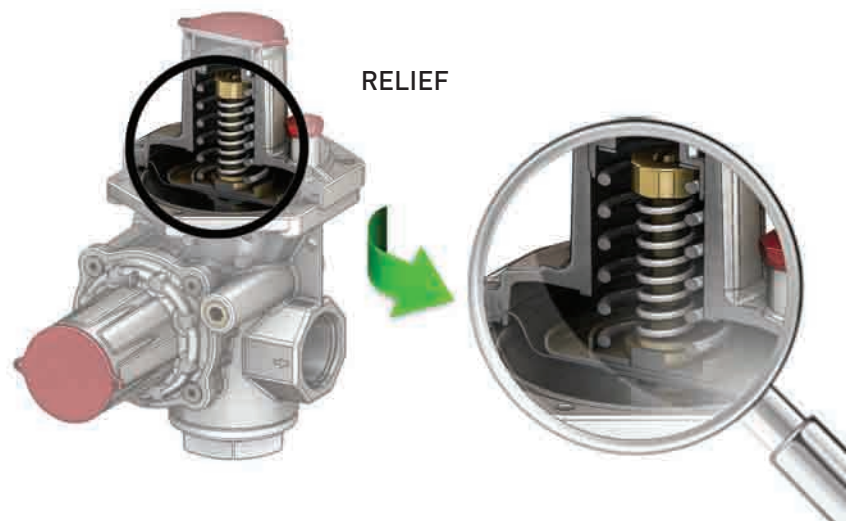
SAFETY AND ACCESSORIES

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.

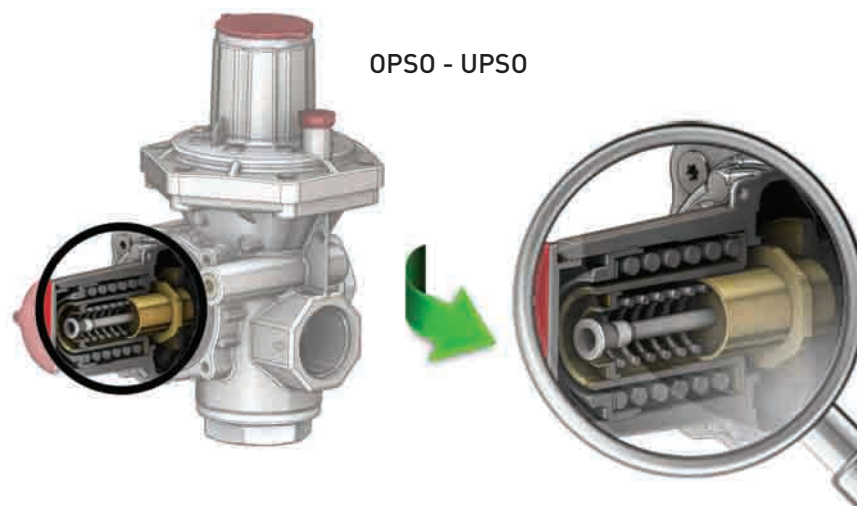
Relief valve can be recalibrated by using proper tools.



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, Steel or Iron
- 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



DOUBLE STAGE

GAS PRESSURE REGULATOR

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ERG-S
SERIES

ERG-S Series double stage pressure regulator is used on gas line to reduce inlet pressure to desired outlet pressure. It is suitable for both commercial and domestic usage where can be directly installed to gas meters with high operational reliability and accurate outlet pressure accuracy.

Simple installation procedure.

Due to different inlet and outlet connection range, ERG-S Series can be used along with pipe diameter from DN15 to DN50 with different thread standards as well as BSP, BSPT, NPT, NPP.

The modular concept of ERG-S and wide range availability of inlet and outlet connections allow to match particular customer requirements.

The regulators are manufactured according to **Ped Directive 2014/68/EU**. The functional tests are performed according to **EN334**.

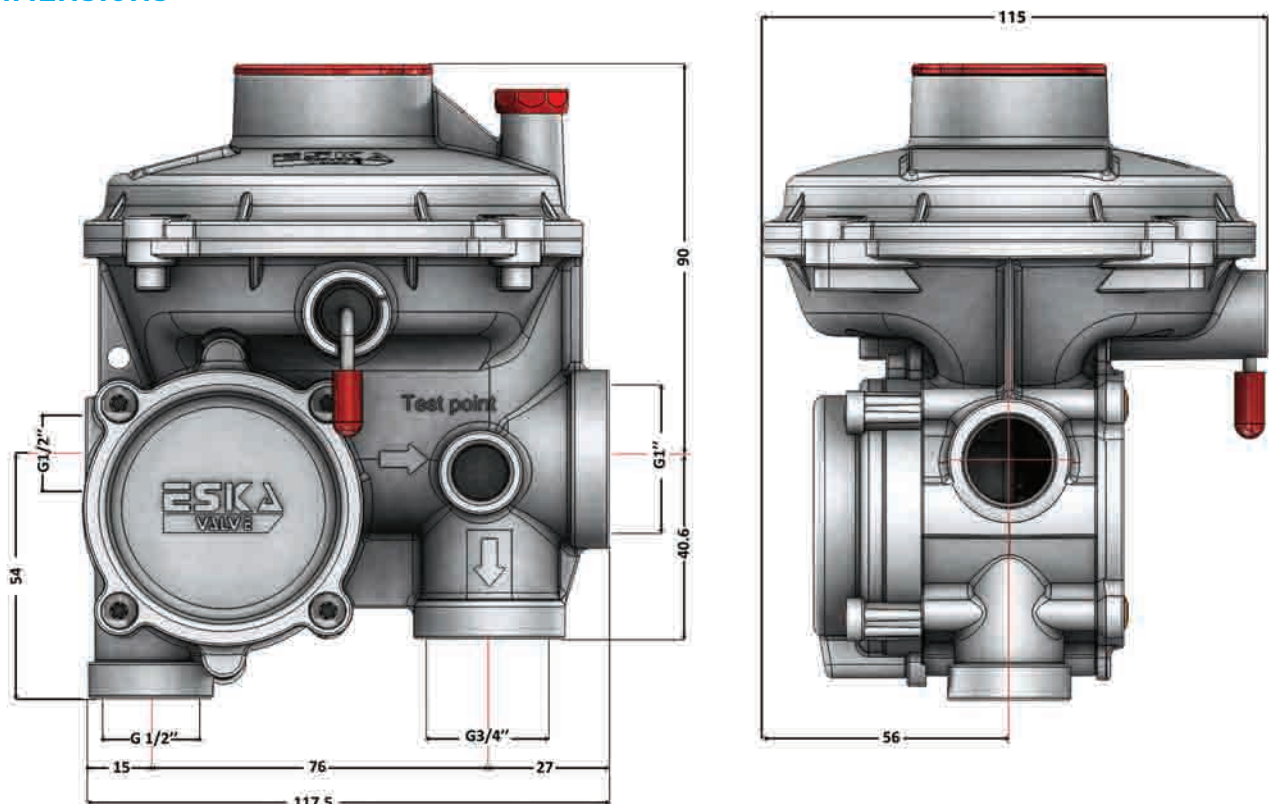
FEATURES

- For medium pressure domestic or commercial second group gas lines.
- Optional metallic mesh filter for easy change and guarantees longer operation life of regulator.
- Outlet pressure tolerance is +%10 (AC10) up +- %5 (AC5)
- Lock-up pressure tolerance is +%20 (SG20) up to 100 mbar outlet pressure, more than 100 mbar outlet pressure SG20 and SG10 possible.
- Up to 6 bar inlet pressure.
- 18 - 500 mbar outlet pressure range with interchangeable springs

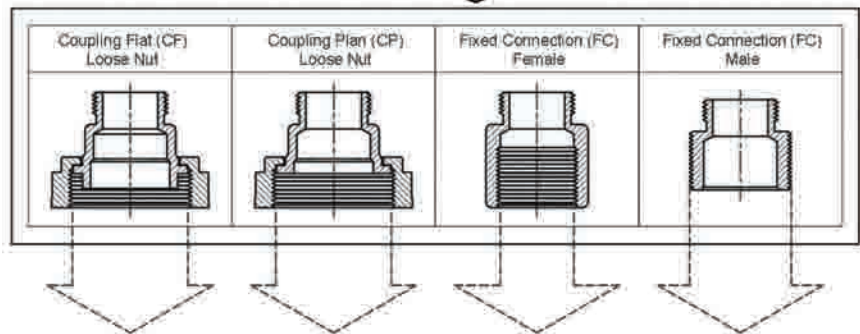
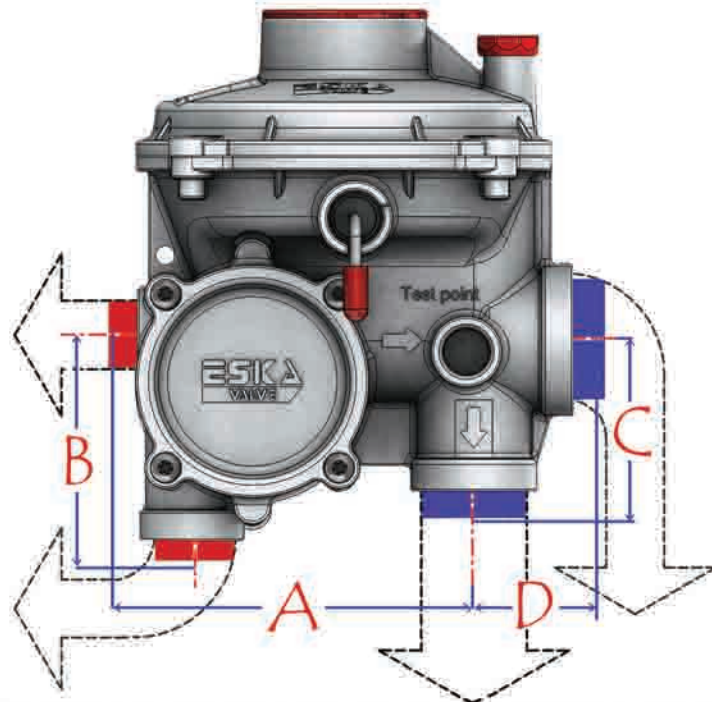
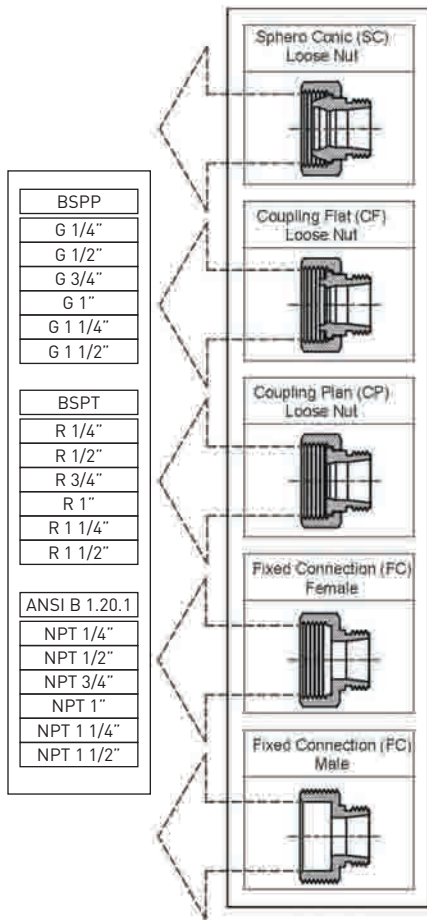
Optional ;

- Incorporated Under Pressure Shut Off Valve.
- Internal Relief Valve

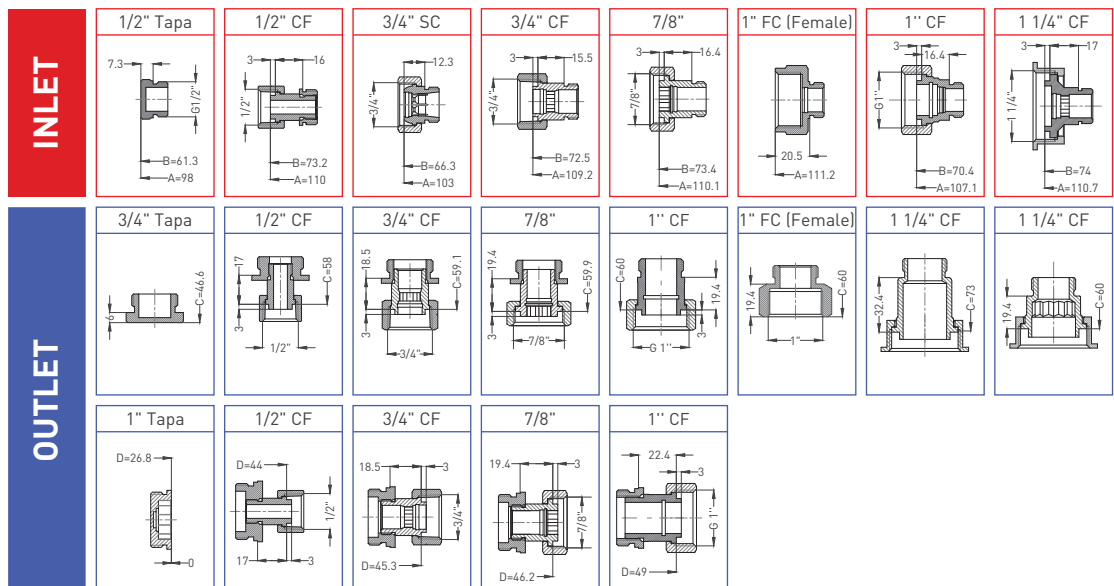
DIMENSIONS



CONNECTION TYPES



BSPP	BSPT	ANSI B 1.20.1
G 1/4"	R 1/4"	NPT 1/4"
G 1/2"	R 1/2"	NPT 1/2"
G 3/4"	R 3/4"	NPT 3/4"
G 1"	R 1"	NPT 1"
G 1 1/4"	R 1 1/4"	NPT 1 1/4"
G 1 1/2"	R 1 1/2"	NPT 1 1/2"



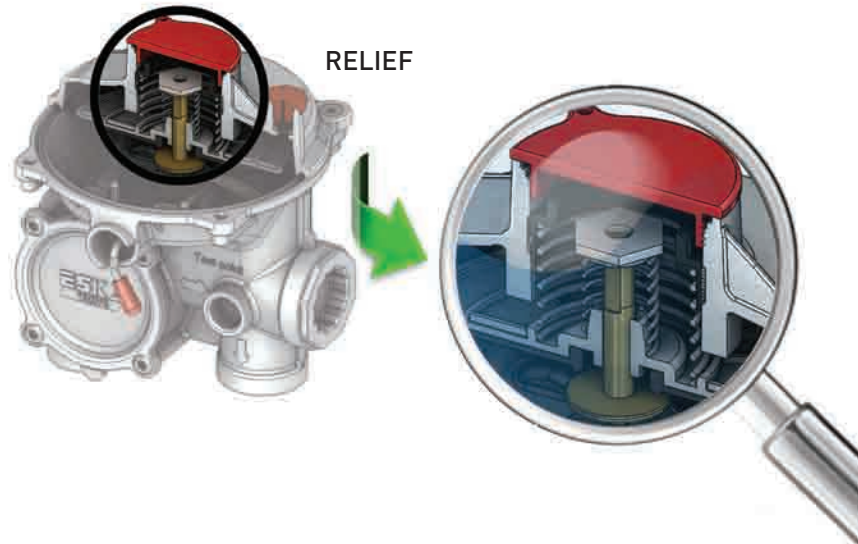
SAFETY AND ACCESSORIES

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.

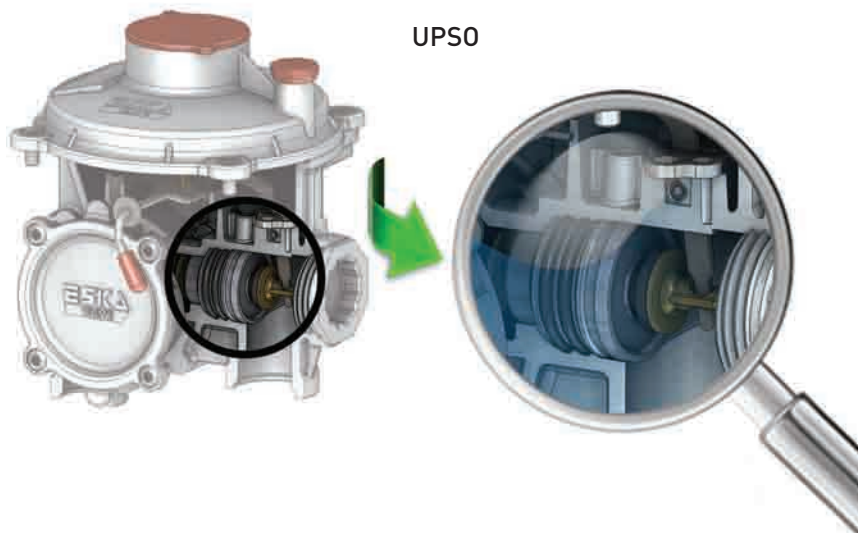


Under Pressure Shut-Off System.

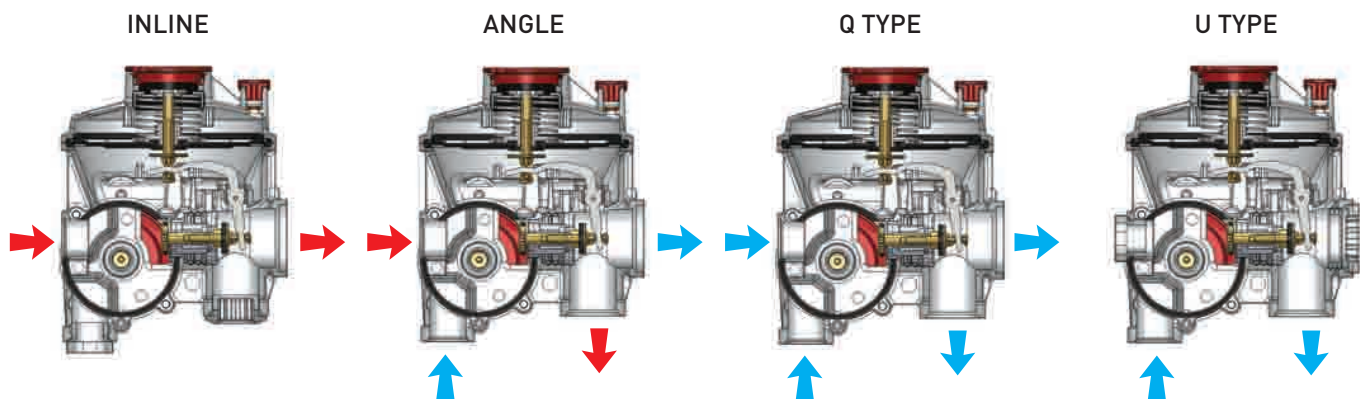
UPSO system on ERG- S series regulator acts under those circumstances;

- When there is no pressure inlet side.
- When the consumption exceed regulator's maximum capacity. ($101\%Q$ to $150\%Q$)
- When the pressure drop outlet side due to consumption.

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.



CONFIGURATIONS



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
Minimum inlet pressure	: Depending on customer request can start as low as 0,1 bar.
Outlet pressure range	: 18 to 500 mbar.
Filter	: Included

DESIGN

The ERG-S Series pressure regulator body may consists of:

- Valve housing
- Connections
- Filter
- Ventilation console
- Outlet pressure test point
- Integrated security valves (UPSO / Relief)

MATERIALS

- Body and covers Aluminum according to EN1706 standard.
- Rubber components are Nitril Rubber comply to EN 549.
- Brass materials are suitable according to EN12164 - EN12165 Standard.
- Filter material is metallic mesh filter.

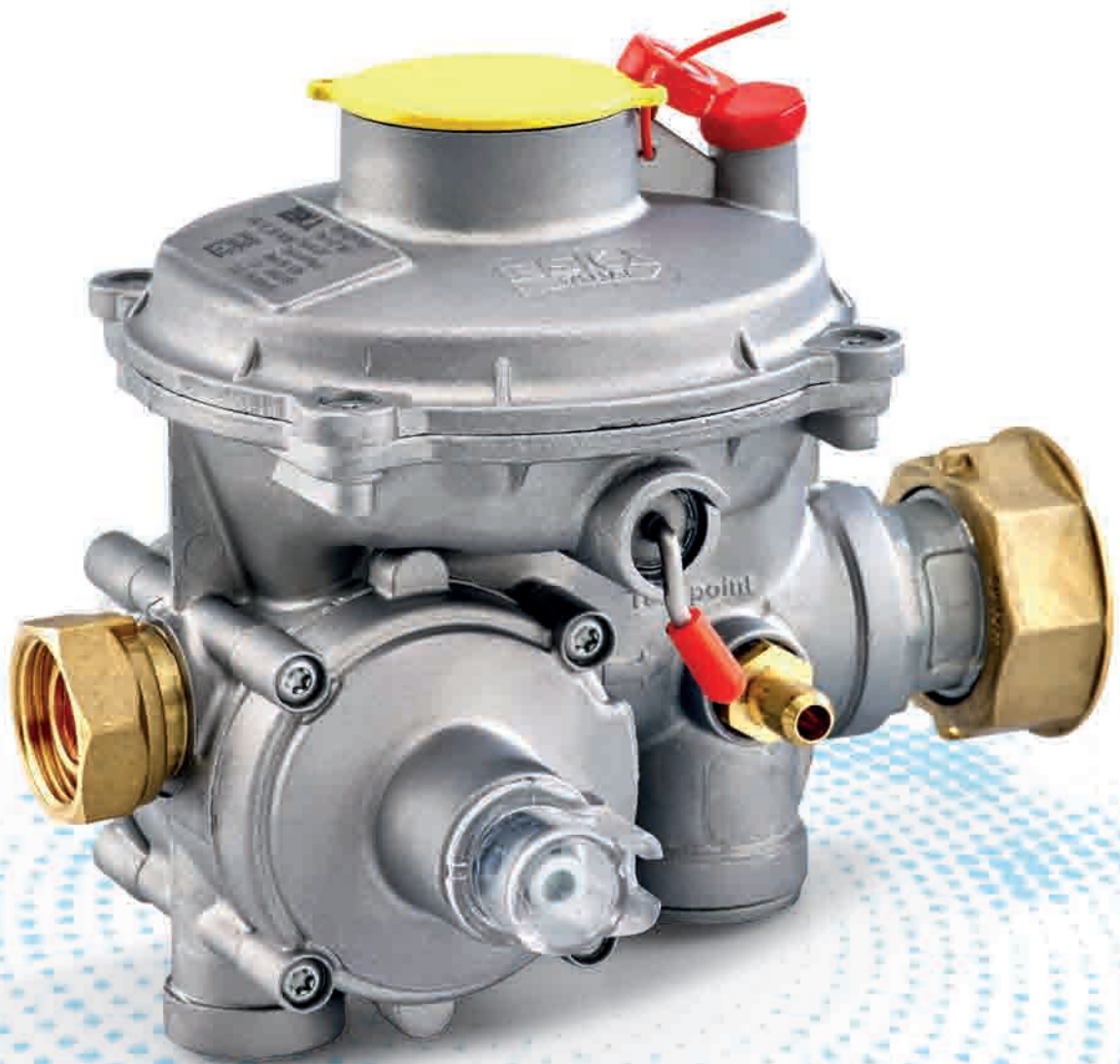
MODELS

MODEL	FLOW RATE			UNIT WEIGHT (kgs)	BOX SIZE (LxWxH cm)	PACKAGING (pieces/ carton)	CARTON SIZE (LxWxH cm)	CARTON (weight)	TOTAL CARTON (weight)
	LPO 18-75 mbar	MPO 75-150 mbar	HPO 150-500 mbar						
ERG-S 06	6			1,10	15x14.5x16	16	33x58x35	0.65kg	18.2 kg
ERG-S 10	10			1,10	15x14.5x16	16	33x58x35	0.65kg	18.2 kg
ERG-S 25	25			1,10	15x14.5x16	16	33x58x35	0.65kg	18.2 kg
ERG-S 50	50			1,10	15x14.5x16	16	33x58x35	0.65kg	18.2 kg

BESIDE STANDARD FLOW RATES ABOVE, 1,6 / 2,5 / 15 / 30 / 40 / 60 / 65 SCMH ARE AVAILABLE UPON REQUEST.

ESKA

www.eskavalve.com



ERG-SE
SERIES

ERG-SE Series double stage pressure regulator is used on gas line to reduce inlet pressure to desired outlet pressure. It is suitable for both commercial and domestic usage where can be directly installed to gas meters with high operational reliability and accurate outlet pressure accuracy.

Simple installation procedure.

Due to different inlet and outlet connection range, ERG-SE Series can be used along with pipe diameter from DN15 to DN50 with different thread standards as well as BSP, BSPT, NPT, NPP.

The modular concept of ERG-SE and wide range availability of inlet and outlet connections allow to match particular customer requirements.

The regulators are manufactured according to **Ped Directive 2014/68/EU**. The functional tests are performed according to **EN334**.

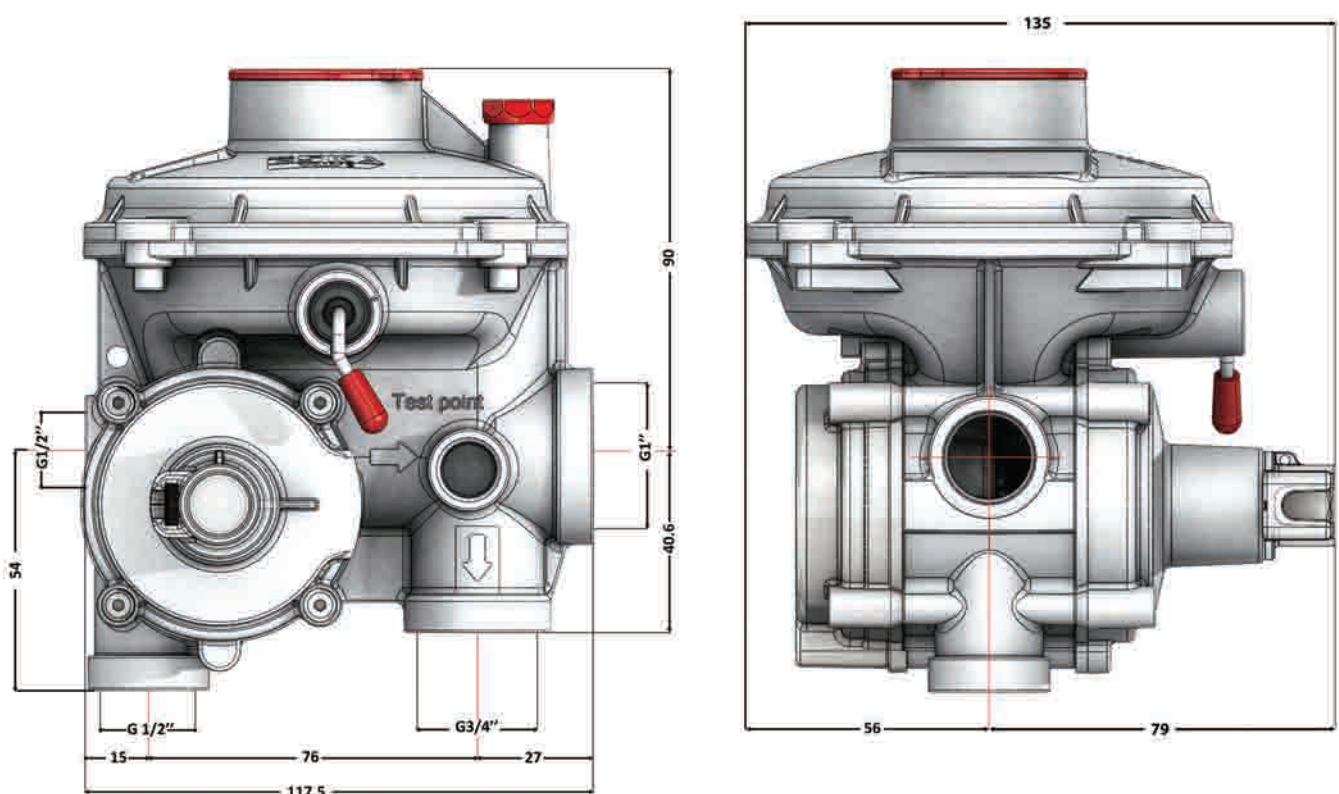
FEATURES

- For medium pressure domestic or commercial second group gas lines.
- Optional metallic mesh filter for easy change and guarantees longer operation life of regulator.
- Outlet pressure tolerance is +%10 (AC10) up +- %5 (AC5)
- Lock-up pressure tolerance is +%20 (SG20) up to 100 mbar outlet pressure, more than 100 mbar outlet pressure SG20 and SG10 possible.
- Up to 6 bar inlet pressure.
- 18 - 500 mbar outlet pressure range with interchangeable springs

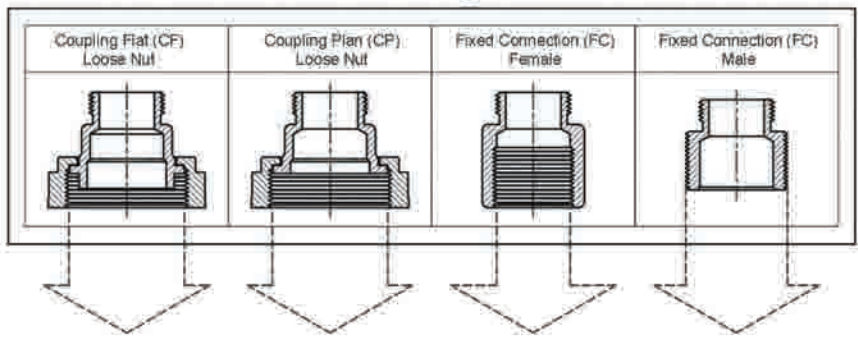
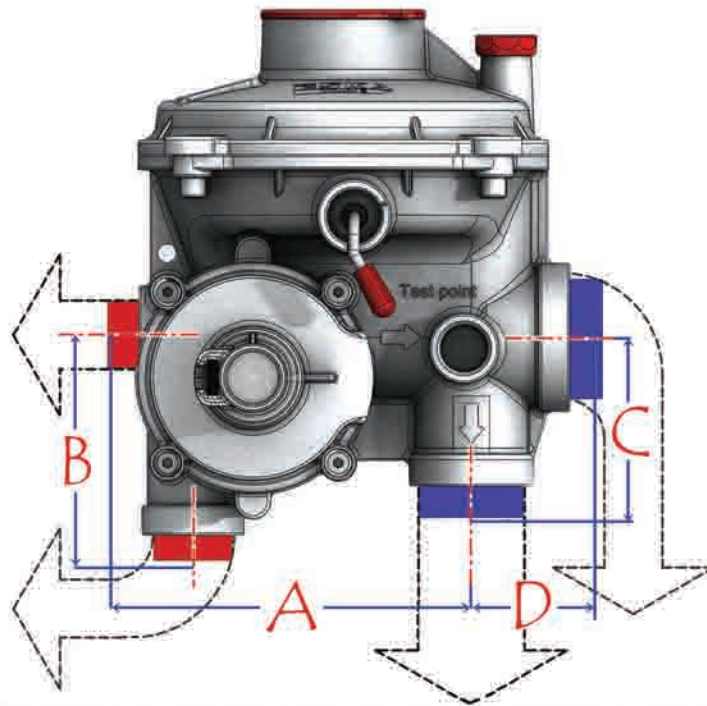
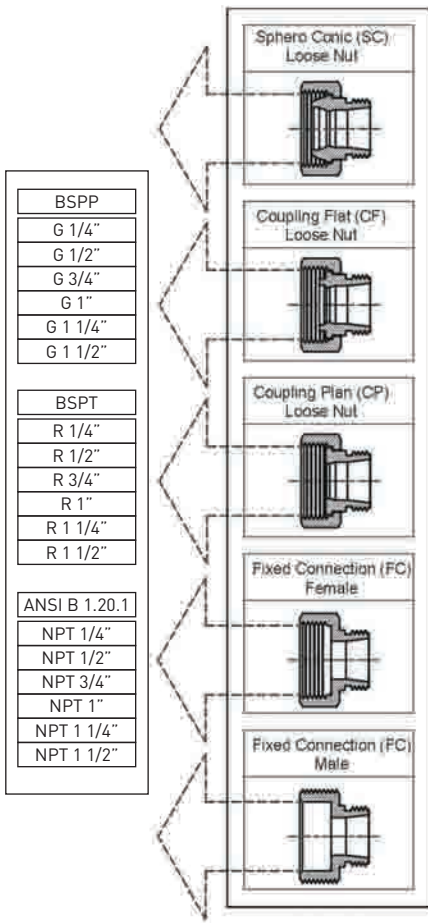
Optional ;

- Incorporated Over Pressure Shut Off Valve.
- Incorporated Under Pressure Shut Off Valve.
- Internal Relief Valve

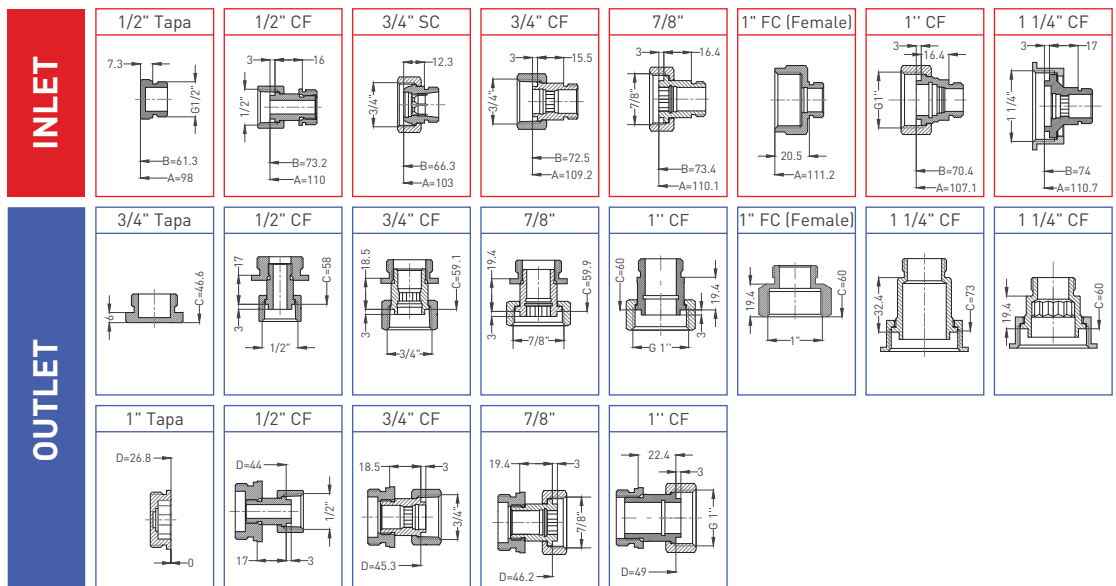
DIMENSIONS



CONNECTION TYPES



BSPP	BSPT	ANSI B 1.20.1
G 1/4"	R 1/4"	NPT 1/4"
G 1/2"	R 1/2"	NPT 1/2"
G 3/4"	R 3/4"	NPT 3/4"
G 1"	R 1"	NPT 1"
G 1 1/4"	R 1 1/4"	NPT 1 1/4"
G 1 1/2"	R 1 1/2"	NPT 1 1/2"



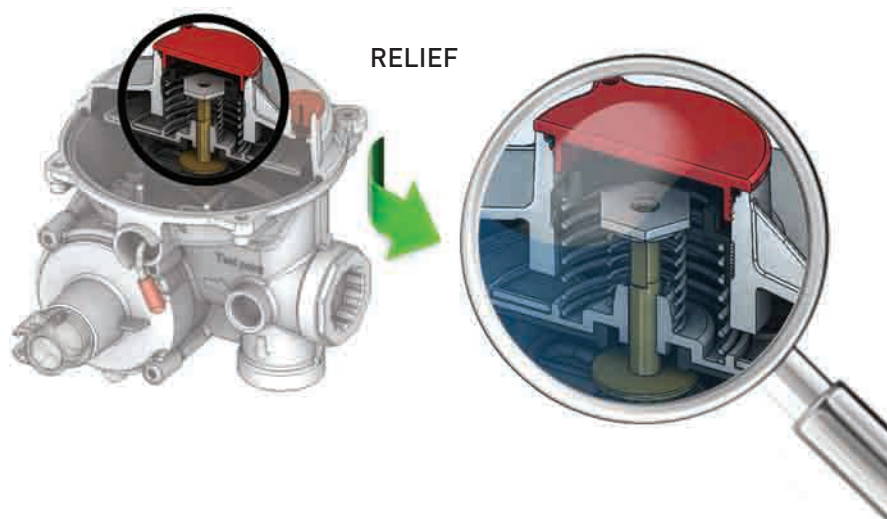
SAFETY AND ACCESSORIES

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.

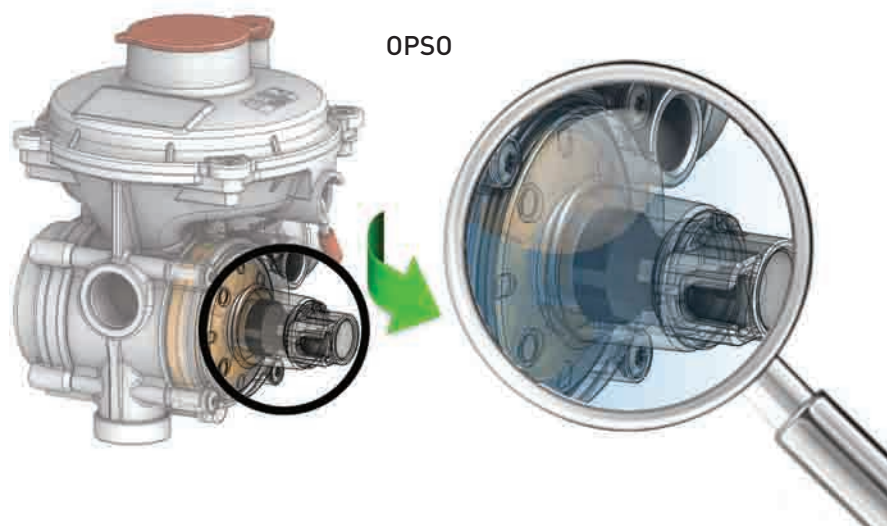
Relief valve can be recalibrated by using proper tools.



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.

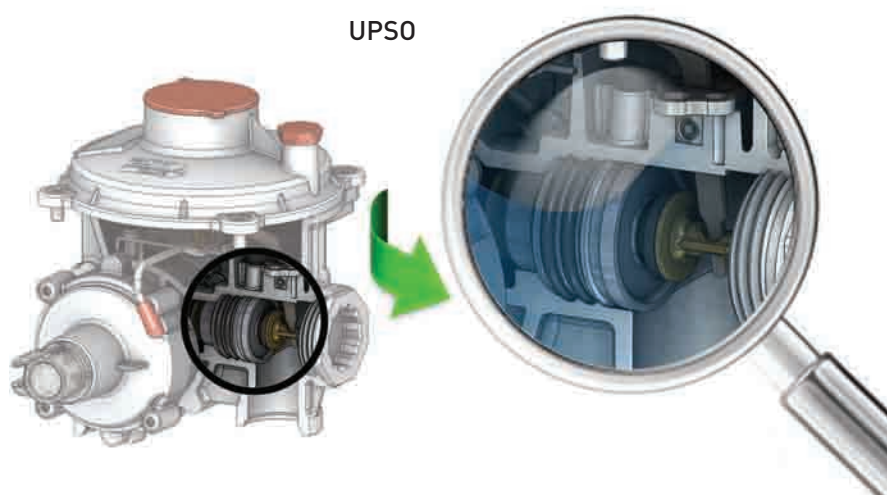


Under Pressure Shut-Off System.

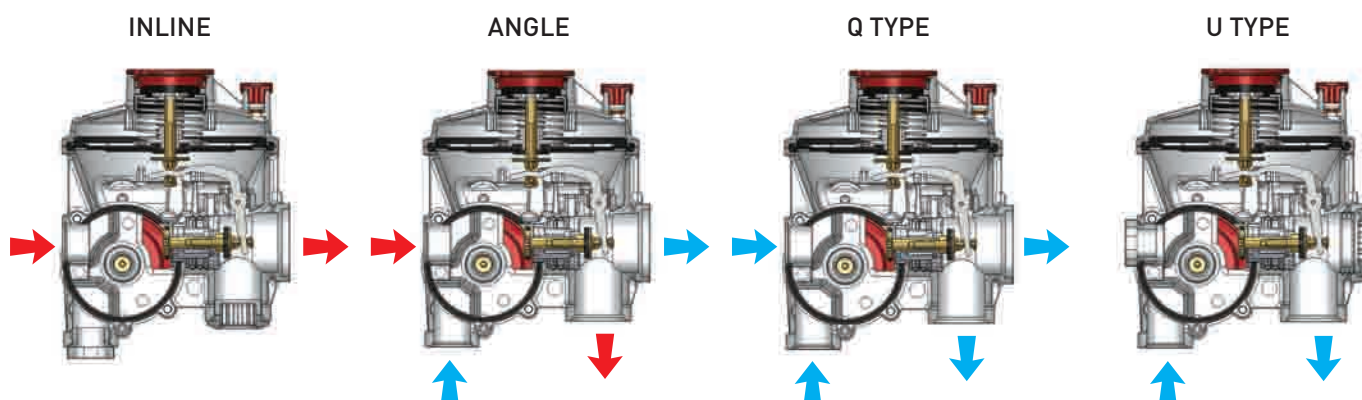
UPSO system on ERG- SE series regulator acts under those circumstances;

- When there is no pressure inlet side.
- When the consumption exceed regulator's maximum capacity. [%101*Q to %150*Q]
- When the pressure drop outlet side due to consumption.

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.



CONFIGURATIONS



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
Minimum inlet pressure	: Depending on customer request can start as low as 0,1 bar.
Outlet pressure range	: 18 to 500 mbar.
Filter	: Included

DESIGN

The ERG-SE Series pressure regulator body may consists of:

- Valve housing
- Connections
- Filter
- Ventilation console
- Outlet pressure test point
- Integrated security valves (OPSO / UPSO / Relief)

MATERIALS

- Body and covers Aluminum according to EN1706 standard.
- Rubber components are Nitril Rubber comply to EN 549.
- Brass materials are suitable according to EN12164 - EN12165 Standard.
- Filter material is metallic mesh filter.

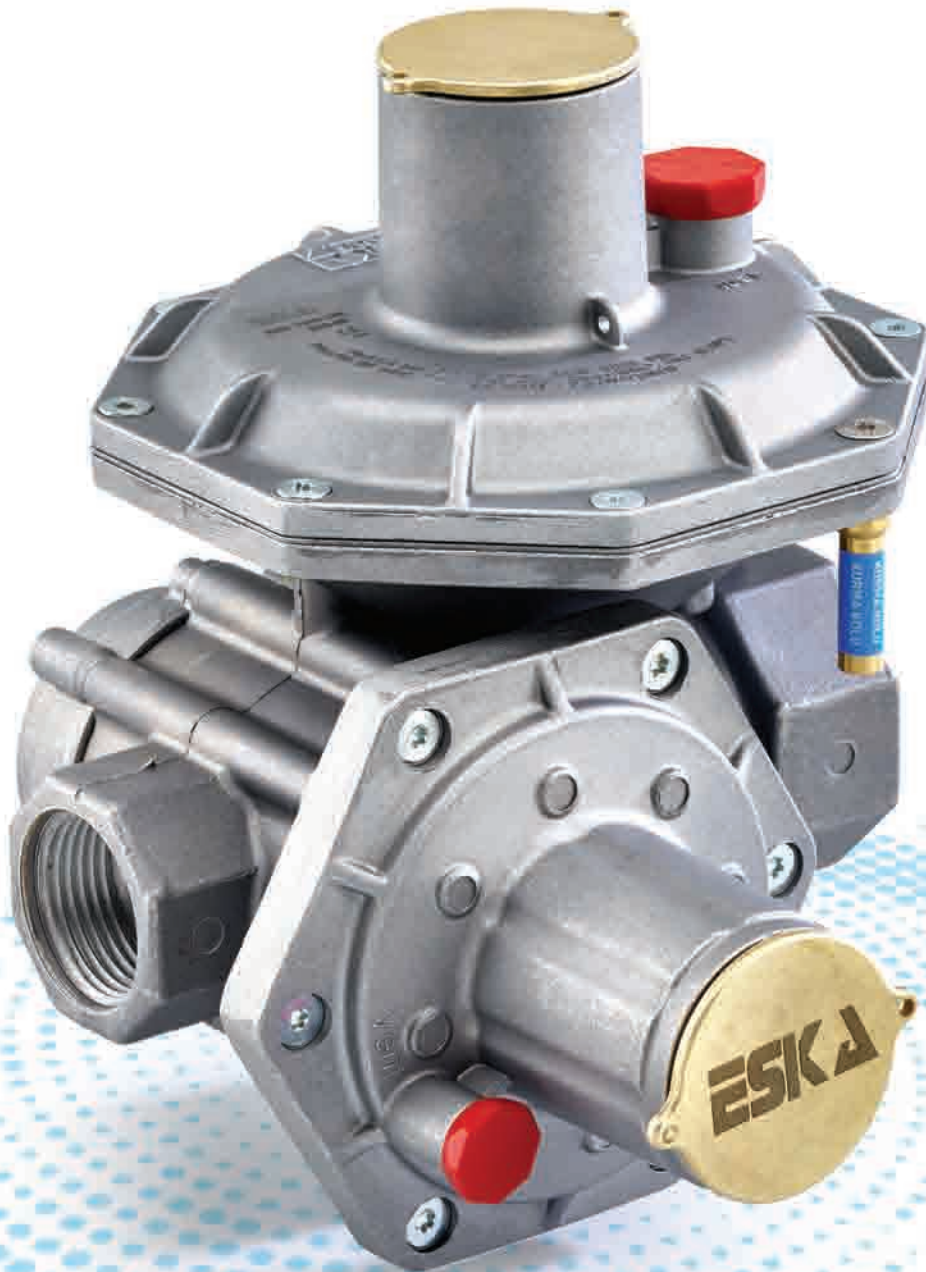
MODELS

MODEL	FLOW RATE			UNIT WEIGHT (kgs)	BOX SIZE (LxWxH cm)	PACKAGING (pieces/ carton)	CARTON SIZE (LxWxH cm)	CARTON (weight)	TOTAL CARTON (weight)
	LPO 18-75 mbar	MPO 75-150 mbar	HPO 150-500 mbar						
ERG-SE 06	6			1,15	15x14.5x16	16	33x58x35	0.65kg	19.5 kg
ERG-SE 10	10			1,15	15x14.5x16	16	33x58x35	0.65kg	19.5 kg
ERG-SE 25	25			1,15	15x14.5x16	16	33x58x35	0.65kg	19.5 kg
ERG-SE 50	50			1,15	15x14.5x16	16	33x58x35	0.65kg	19.5 kg

BESIDE STANDARD FLOW RATES ABOVE, 1,6 / 2,5 / 15 / 30 / 40 / 60 / 65 SCMH ARE AVAILABLE UPON REQUEST.

ESKA

www.eskavalve.com



ERG-SR
SERIES

ERG-SR Series pressure regulator is used on gas line to reduce inlet pressure to desired outlet pressure. It is suitable for both commercial and residential usage where can be directly installed to gas meters with high operational reliability and accurate outlet pressure accuracy.

Simple installation procedure. Direction of the line can be inline or angle.

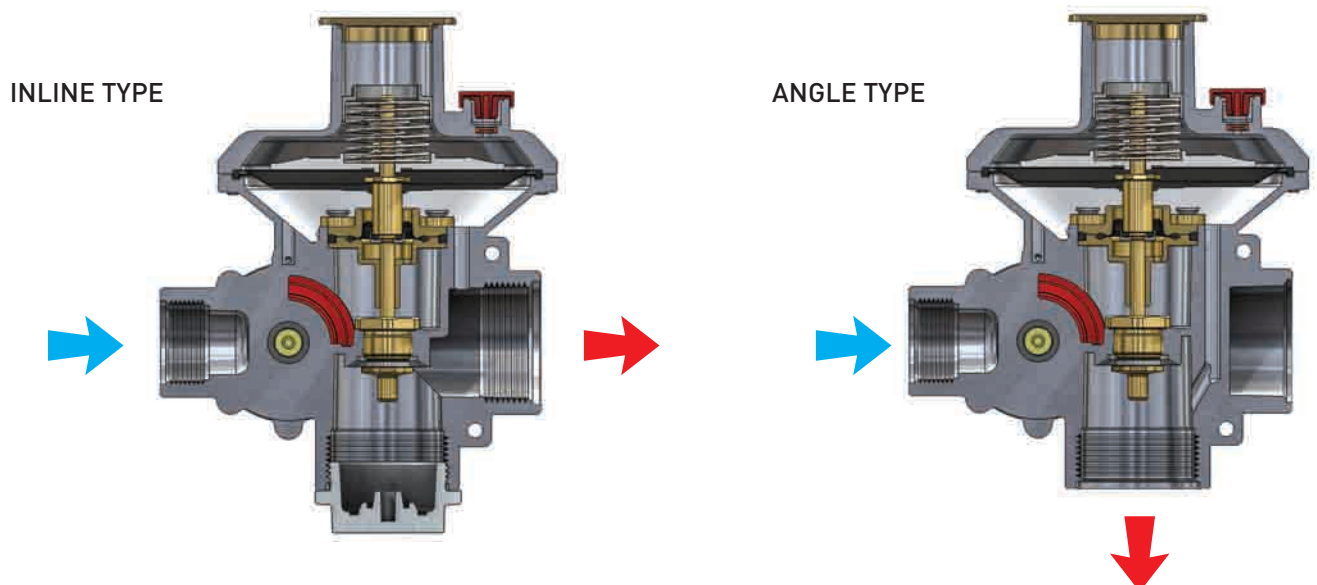
Due to different inlet and outlet connection range, ERG-SR Series can be used along with pipe diameter from DN20 to DN50 with different thread standards as well as BSP, BSPT, NPT, NPP. (Also, can be added to flange connection.)

The regulators are manufactured according to **Ped Directive 2014/68/EU**. The functional tests are performed according to **EN334**.

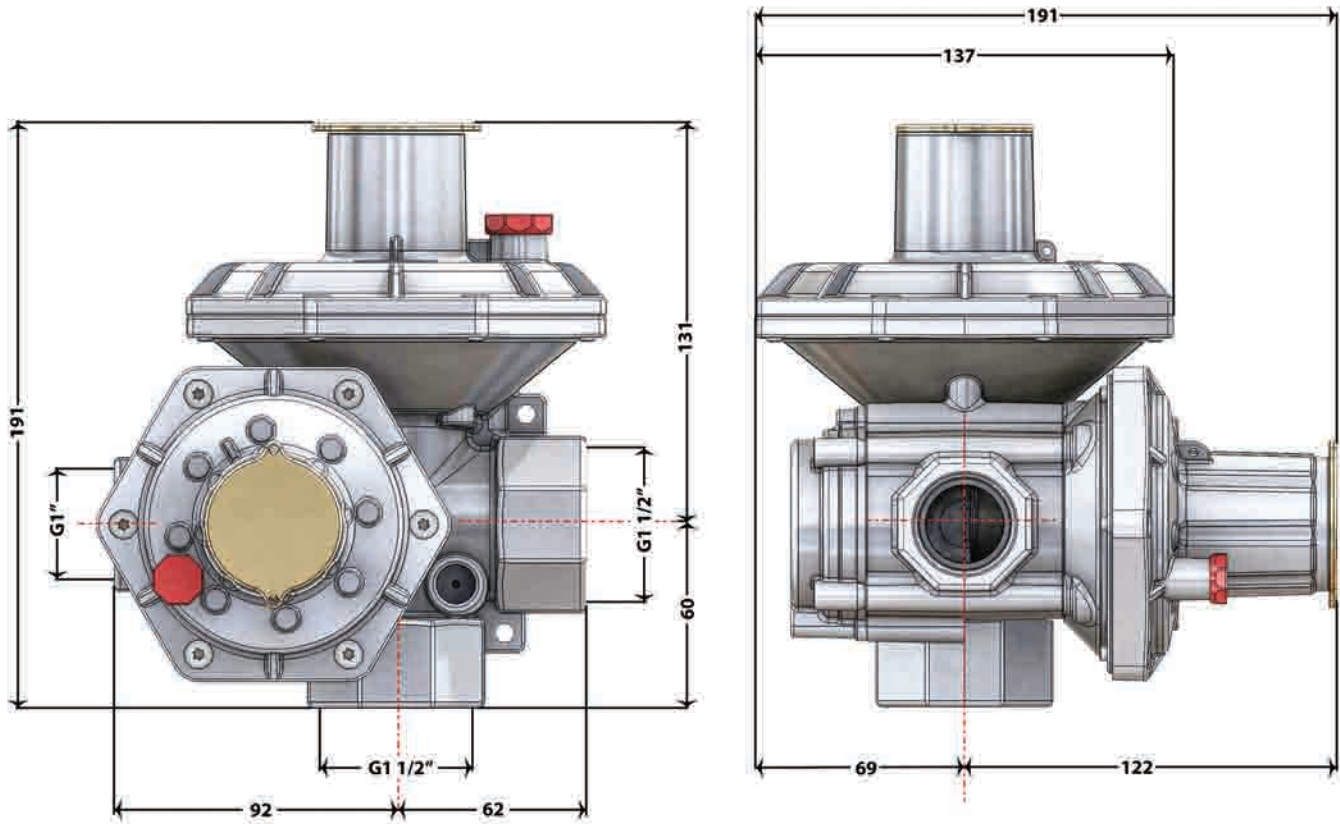
FEATURES

- For medium pressure domestic or commercial second group gas lines.
- Optional metallic mesh filter for easy change and guarantees longer operation life of regulator.
- Outlet pressure tolerance is +%10 (AC10) up +- %5 (AC5)
- Lock-up pressure tolerance is +%20 (SG20) up to 100 mbar outlet pressure, more than 100 mbar outlet pressure SG20 and SG10 possible.
- Up to 6 bar inlet pressure.
- 15 - 360 mbar outlet pressure range with interchangeable springs
- OPS0 pressure range 35 - 520 mbar
- UPS0 pressure range 8 - 250 mbar

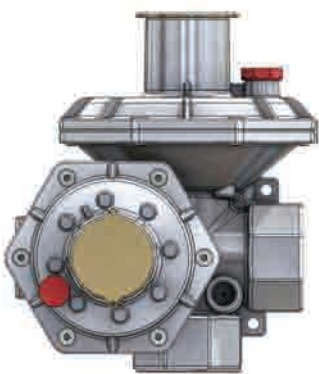
CONFIGURATIONS



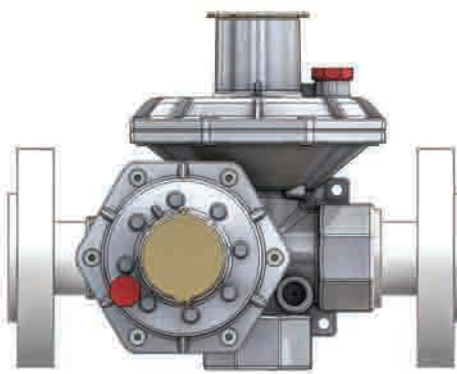
DIMENSIONS



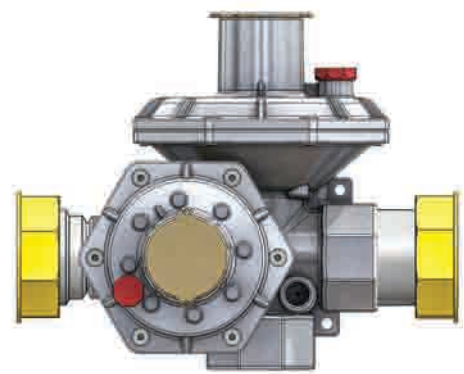
CONNECTION TYPES



Without Connection



With Flanged Connection



With Loose Connection

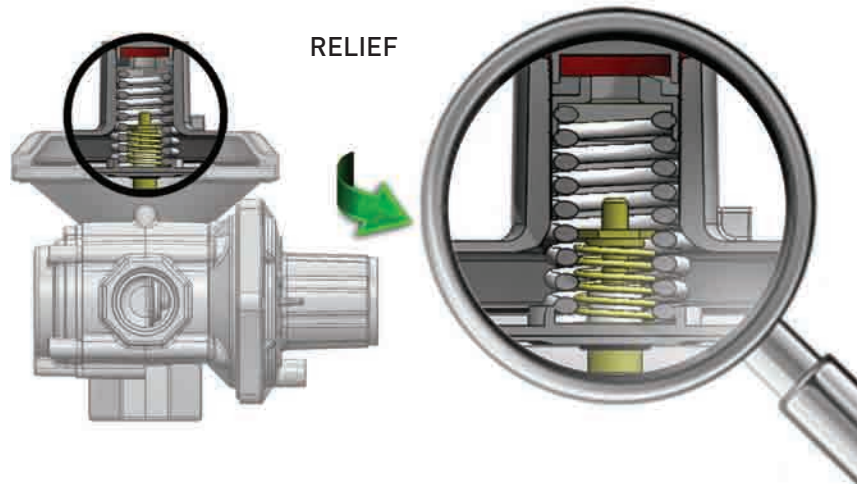
SAFETY AND ACCESSORIES

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.

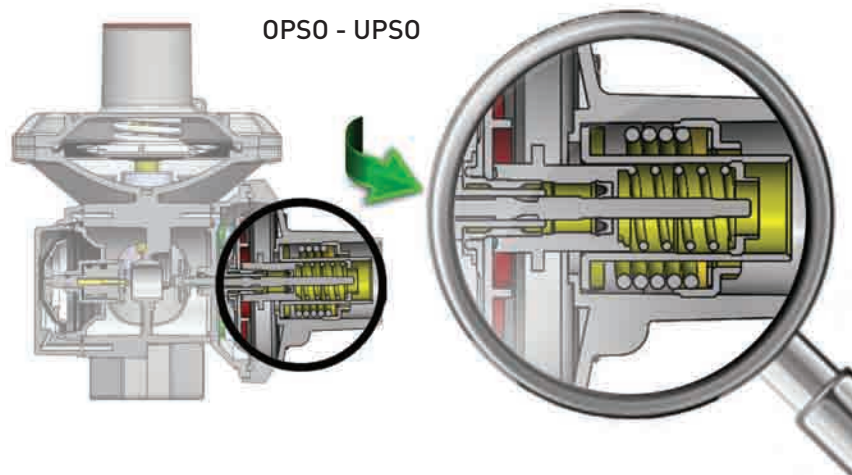
Relief valve can be recalibrated by using proper tools.



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 set 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 the activation time is below 2 seconds.



Under Pressure Shut-Off System.

UPSO system on SR 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
Outlet pressure range	: 15 to 360 mbar.
Referring	: Ped 2014/68/EU
Filter	: Included

DESIGN

The ERG-SR Series pressure regulator body consists of:

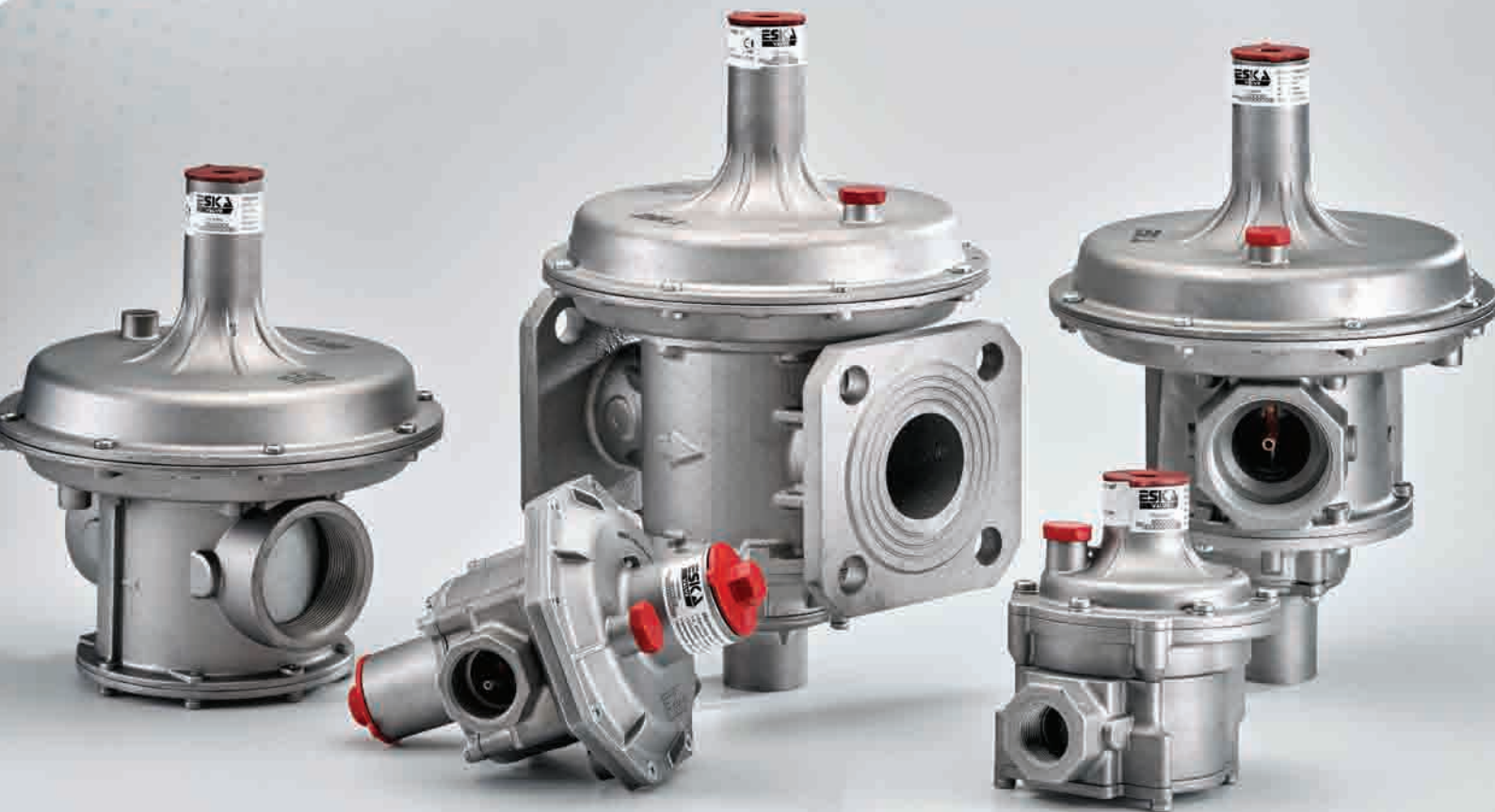
- Loose nut or body thread or flanged connection
- Filter
- Ventilation console
- Outlet pressure test point
- Integrated security valves

MATERIALS

- Body and covers Aluminum comply with EN1706 standard.
- Rubber components comply with EN549.
- Brass materials comply with EN12164 Standard.
- Filter material is metallic mesh filter.

MODELS

MODEL	NOMINAL CAPACITY	REQUIRED MINIMUM INLET PRESSURE BAR (PSI)
ERG-SR 50	50 STM3/H	OUTLET PRESSURE + 0.5
ERG-SR 75	75 STM3/H	OUTLET PRESSURE + 0.5
ERG-SR 100	100 STM3/H	OUTLET PRESSURE + 0.5



SINGLE STAGE

GAS PRESSURE REGULATOR

ESKA

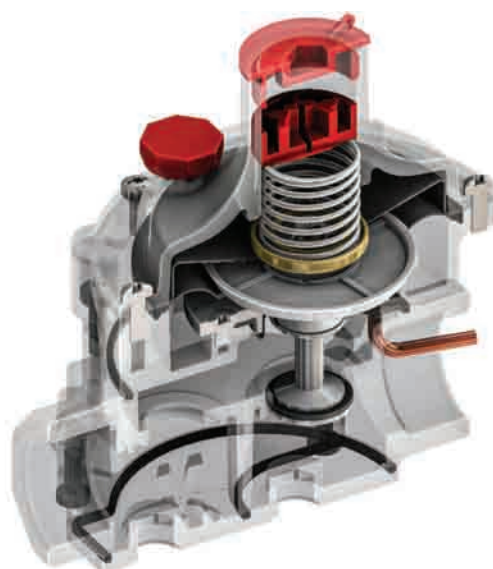
www.eskavalve.com



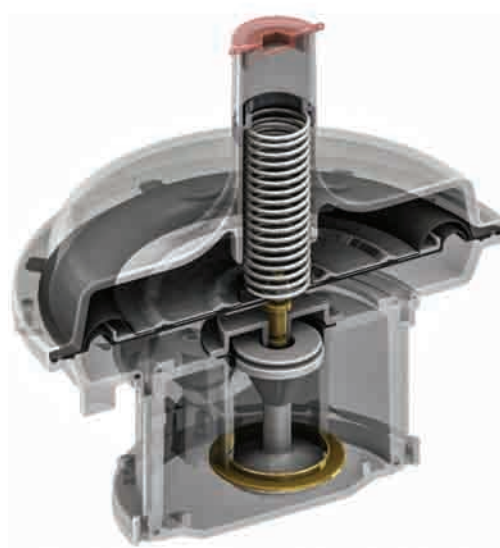
ERG
SERIES

INTRODUCTORY

ERG series gas pressure regulators are used in the gas lines in order to reduce maximum 1 bar input pressure to the desired output pressure between 16 and 150 mbar. The range of the output pressure can be set with the choice of a different spring.



ERG 1015 - 1020 - 1025

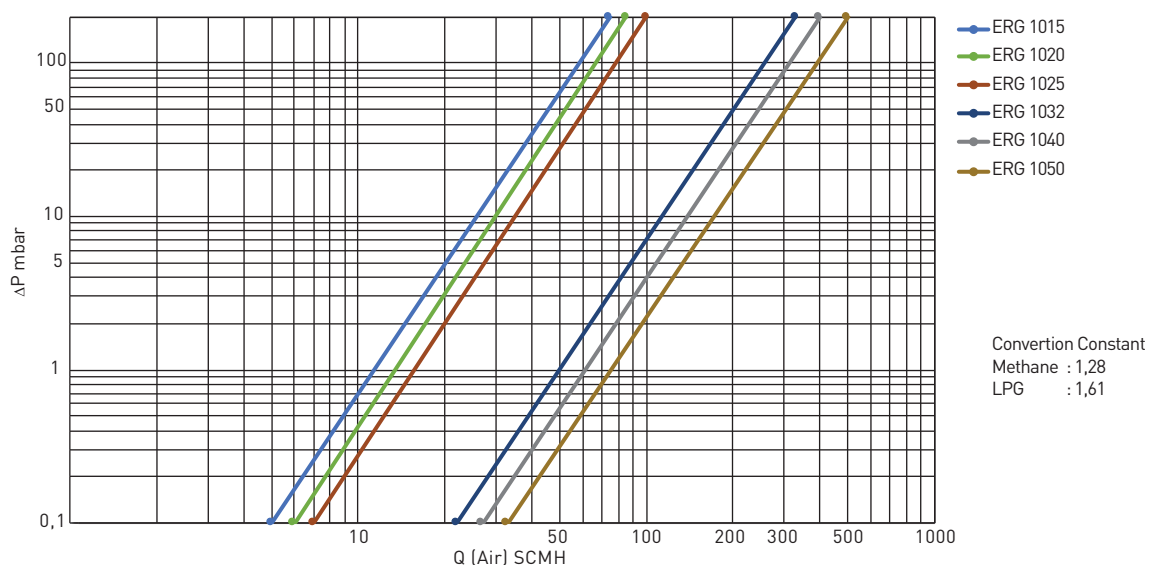


ERG 1032 - 1040 - 1050

TECHNICAL INFORMATION

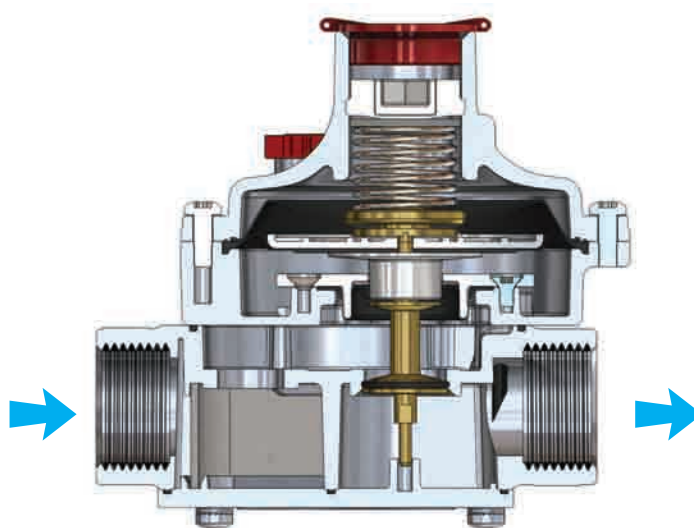
- Usage : City gas networks and gas pipelines in industrial areas
- Medium : Non-corrosive gases such as Natural Gas (Methane), LPG, Town Gas, Air, etc...
- Pressure Class : PN1
- Connection or Port Size : 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" Threaded (Female)
- Inlet Pressure Range : 50 mbar up to 1 bar
- Outlet Pressure Range : 16 mbar up to 150 mbar
- Filter : Optional
- Number of Stages : Single Stage
- Accuracy Class : AC 10 ($\pm 10\%$) (On Request AC5, AC15, AC20)
- Lock Up Pressure Class : SG30 (+ 30%) (On Request SG10, SG20)
- Ambient Temperature : -20°C up to 60°C (On request -40 °C)
- Material Standard : Aluminum-EN 1706 / Brass-EN 12164 and EN 12165 / Rubber-EN 549
- According to Directives : 2014/68/EU

ERG SERIES CAPACITY GRAPH



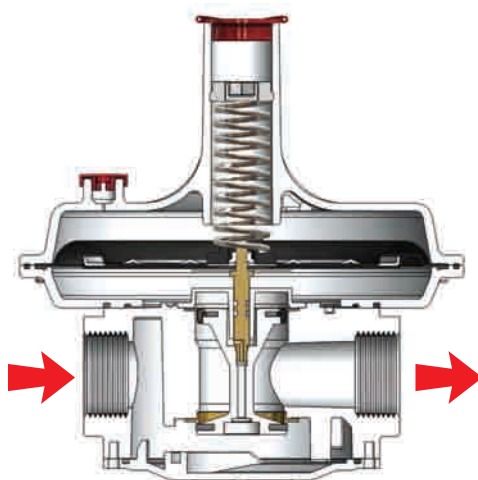
CONFIGURATIONS

INLINE



ERG 1015 - 1020 - 1025

INLINE

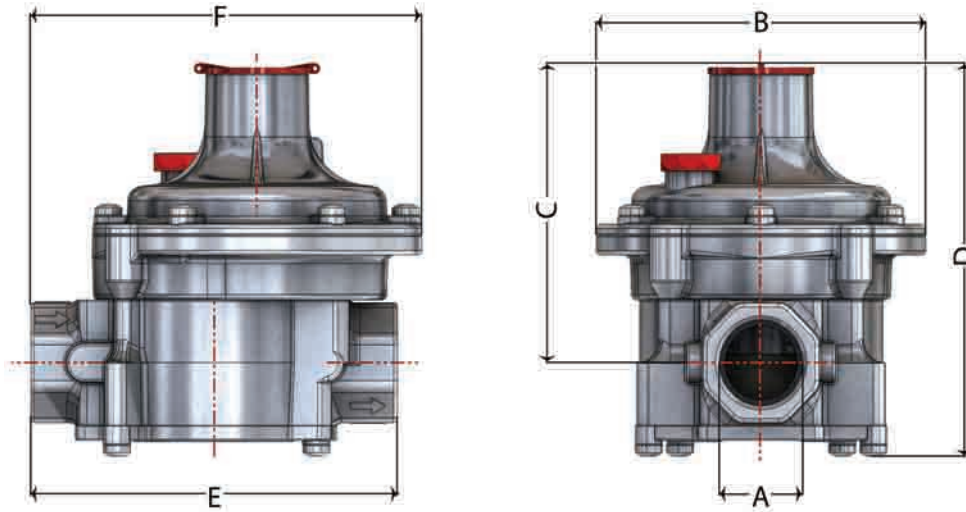


ERG 1032 - 1040 - 1050

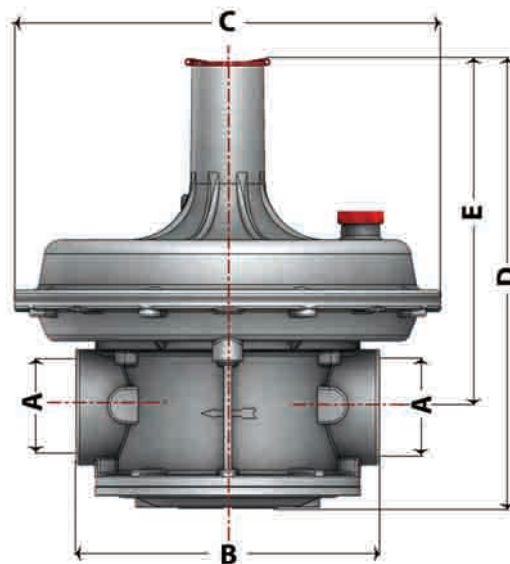
CONNECTION	OUTLET PRESSURE (21mbar)
1/2"	20 m ³ /h
3/4"	25 m ³ /h
1"	35 m ³ /h
1 1/4"	85 m ³ /h
1 1/2"	100 m ³ /h
2"	120 m ³ /h

FLOW RATE TABLE (FOR NATURAL GAS) AT INLET PRESSURE 300 mbar ACCURACY CLASS AC10

DIMENSIONS



MODEL	A	B	C	D	E	F
ERG 1015	1/2"	122	107	141	136	145
ERG 1020	3/4"	122	107	141	136	145
ERG 1025	1"	122	107	141	136	145



MODEL	A	B	C	D	E
ERG 1032	1 1/4"	160	225	237	183
ERG 1040	1 1/2"	160	225	237	183
ERG 1050	2"	162	225	259	192

ESKA

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ERG-E
SERIES

INTRODUCTORY

ERG-E series gas pressure regulators are used in the gas lines in order to reduce maximum 1 bar input pressure to the desired output pressure between 16 and 150 mbar. The range of the output pressure can be set with the choice of a different spring. The regulator with safety stopping gets automatically active and stops the gas flow in case that the input pressure gets higher or lower than the adjusted value in order to ensure the safety of the devices used in the system thanks to the safe stopping system it includes.



ERG-E 1015 - 1020 - 1025

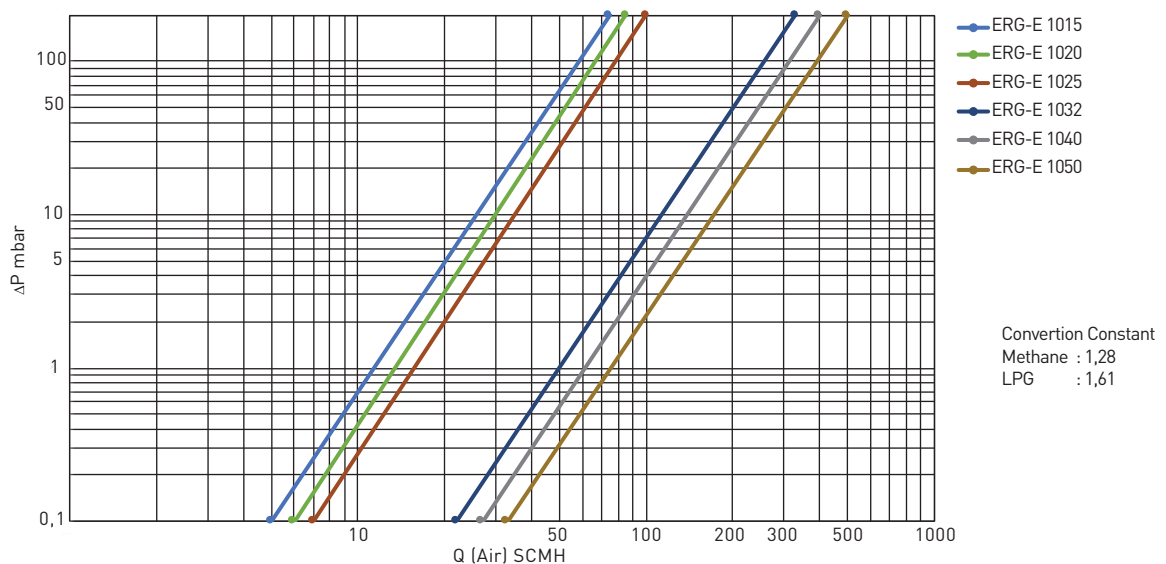


ERG-E 1032 - 1040 - 1050

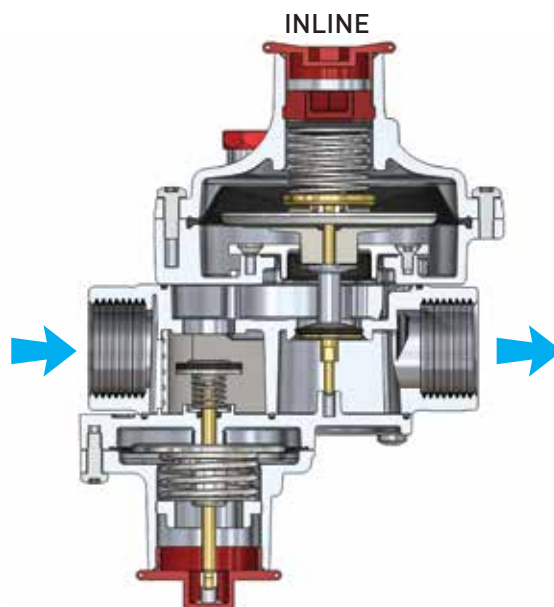
TECHNICAL INFORMATION

- Usage : City gas networks and gas pipelines in industrial areas
- Medium : Non-corrosive gases such as Natural Gas (Methane), LPG, Town Gas, Air, etc...
- Pressure Class : PN1
- Connection or Port Size : 1/2", 3/4", 1", 1 1/4", 1 1/2", 2" Threaded (Female)
- Inlet Pressure Range : 50 mbar up to 1 bar
- Outlet Pressure Range : 16 mbar up to 150 mbar
- Filter : Optional
- Number of Stages : Single Stage
- Accuracy Class : AC 10 ($\pm 10\%$) (On Request AC5, AC15, AC20)
- Lock Up Pressure Class : SG30 (+ 30%) (On Request SG10, SG20)
- Ambient Temperature : -20°C up to 60°C (On request -40 °C)
- OPSO Pressure Range : 30 mbar up to 200 mbar
- OPSO Pressure Tolerance : 20%
- UPSO Pressure Range : 12 mbar up to 40 mbar
- UPSO Pressure Tolerance : 20%
- Shut Off Time : Less than 1 second
- Structural Additional Features : With Shutoff
- Material Standard : Aluminum-EN 1706 / Brass-EN 12164 and EN 12165 / Rubber-EN 549
- According to Directives : 2014/68/EU

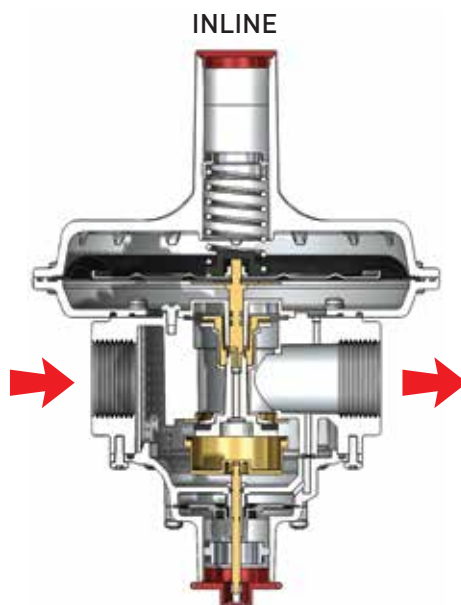
ERG-E SERIES CAPACITY GRAPH



CONFIGURATIONS AND CONNECTION TYPES



ERG-E 1015 - 1020 - 1025

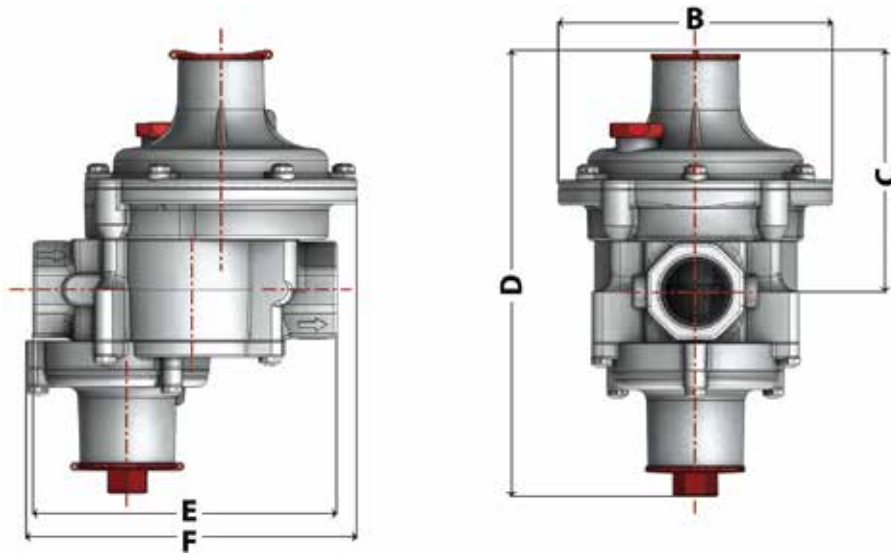


ERG-E 1032 - 1040 - 1050

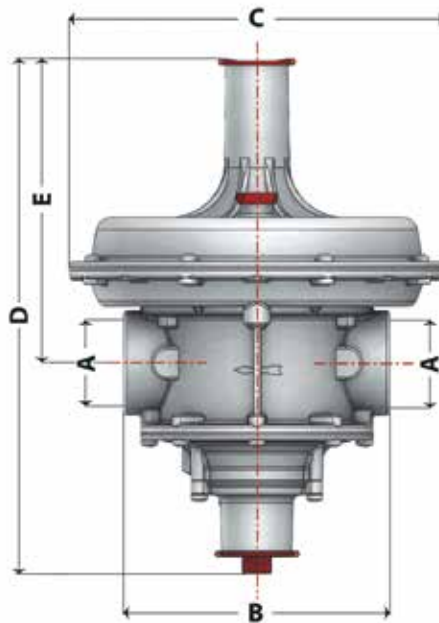
CONNECTION	OUTLET PRESSURE (21mbar)
1/2"	20 m ³ /h
3/4"	25 m ³ /h
1"	35 m ³ /h
1 1/4"	85 m ³ /h
1 1/2"	100 m ³ /h
2"	120 m ³ /h

FLOW RATE TABLE (FOR NATURAL GAS) AT INLET PRESSURE 300 mbar ACCURACY CLASS AC10

DIMENSIONS



MODEL	A	B	C	D	E	F
ERG-E 1015	1/2"	122	106	198	136	146
ERG-E 1020	3/4"	122	106	198	136	146
ERG-E 1025	1"	122	106	198	136	146



MODEL	A	B	C	D	E
ERG-E 1032	1 1/4"	160	225	311	183
ERG-E 1040	1 1/2"	160	225	311	183
ERG-E 1050	2"	162	225	333	192

ESKA

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ERG-EH
SERIES

INTRODUCTORY

ERG-EH series gas pressure regulators are used in the gas lines in order to reduce maximum 5 bar input pressure to the desired output pressure between 16 and 500 mbar. The range of the output pressure can be set with the choice of a different spring. The regulator with safety stopping gets automatically active and stops the gas flow in case that the input pressure gets higher or lower than the adjusted value in order to ensure the safety of the devices used in the system thanks to the safe stopping system it includes.

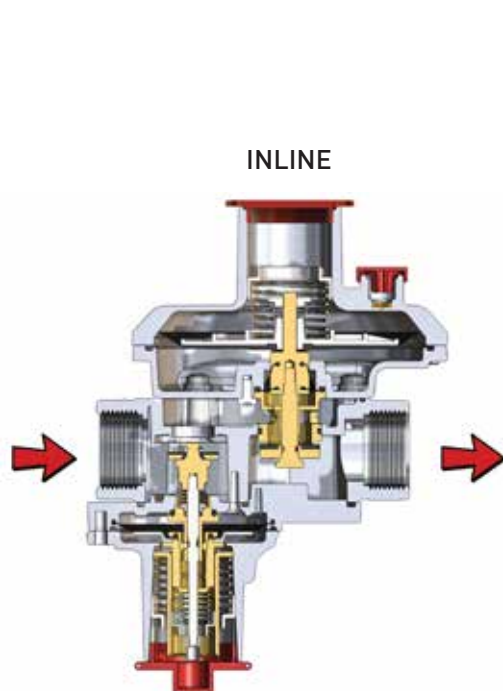


ERG-EH 1015 - 1020 - 1025

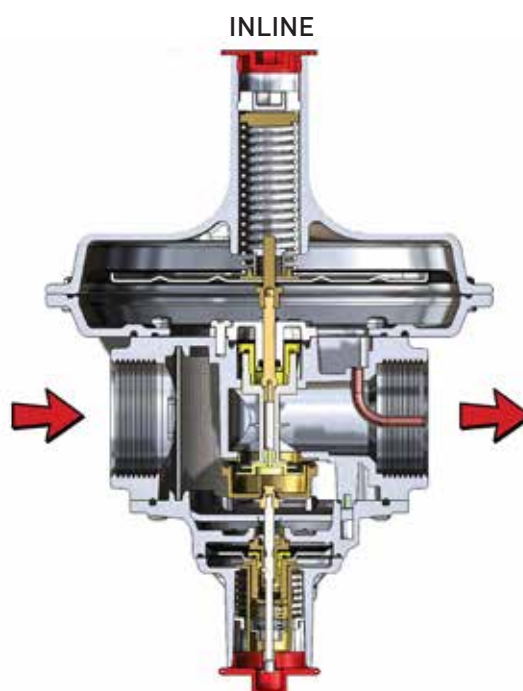


ERG-EH 1032 - 1040 - 1050

CONFIGURATIONS



ERG-EH 1015 - 1020 - 1025



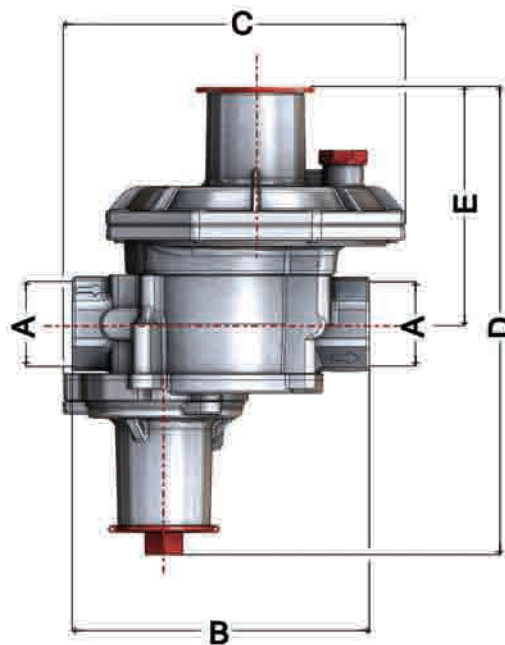
ERG-EH 1032 - 1040 - 1050

TECHNICAL INFORMATION

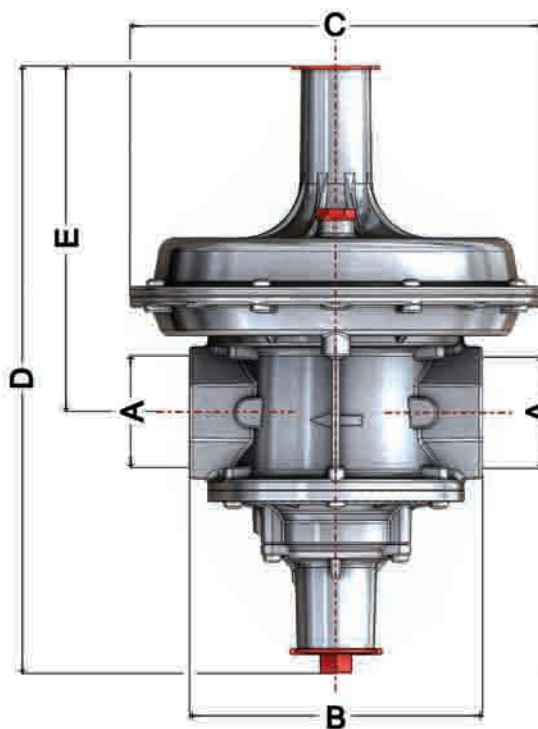
- Usage : City gas networks and gas pipelines in industrial areas
- Medium : Non-corrosive gases such as Natural Gas (Methane), LPG, Town Gas, Air, etc...
- Pressure Class : PN5
- Connection or Port Size : 3/4", 1", 1 1/4", 1 1/2", 2" Threaded and (Flanged)
- Inlet Pressure Range : 500 mbar up to 5 bar
- Outlet Pressure Range : 16 mbar up to 500 mbar
- Filter : Optional
- Number of Stages : Single Stage
- Accuracy Class : AC 10 ($\pm 10\%$) (On Request AC5, AC15, AC20)
- Lock Up Pressure Class : SG30 (+ 30%) (On Request SG10, SG20)
- Ambient Temperature : -20°C up to 60°C (On request -40 °C)
- OPSO Pressure Range : 30 mbar up to 200 mbar
- OPSO Pressure Tolerance : 20%
- UPSO Pressure Range : 12 mbar up to 150 mbar
- UPSO Pressure Tolerance : 20%
- Shut Off Time : Less than 1 second
- Structural Additional Features : With Shutoff
- Material Standard : Aluminum-EN 1706 / Brass-EN 12164 and EN 12165 / Rubber-EN 549
- According to Directives : 2014/68/EU
- Capacity : Up to 1000m³/h



DIMENSIONS



MODEL	A	B	C	D	E
ERG-EH 1015	1/2"	136	156	215	110
ERG-EH 1020	3/4"	136	156	215	110
ERG-EH 1025	1"	136	156	215	110



MODEL	A	B	C	D	E
ERG-EH 1032	1 1/4"	160	225	332	183
ERG-EH 1040	1 1/2"	160	225	332	183
ERG-EH 1050	2"	160	225	332	183