ERG-EH SERIES GAS PRESSURE REGULATOR WITH SAFETY SHUT-OFF DEVICE and

ERG-H SERIES GAS PRESSURE REGULATOR WITHOUT SAFETY SHUT-OFF DEVICE

GAS PRESSURE REGULATORS INSTRUCTIONS FOR INSTALLATION, USE AND MAINTENANCE

"Please Read Carefully Before all Operations and Follow. Do not Perform Transactions Not Indicated"

"Maintain for Future Use."

"The products should be installed only by authorized persons."

"This product should be installed in conformity to the rules in force and this guide."

Rev.3– 17.02.2025

ESKA VALVE A.Ş
Sakarya 1. Organize Sanayi Bölgesi Mahallesi, 11. Cadde, No: 6-8, Arifiye/Sakarya/Turkey
Telephone: +90 (264) 502 54 34-35-83 Fax: +90 (264) 502 54 84 E-mail: info@eskavalve.com
Web: www.eskavalve.com

The right to make changes in this manual according to technical developments is reserved. The 2014/68/EU Pressure Equipment Directive has been implemented and prepared accordingly.

1-GENERAL WARNINGS AND REQUIRED CHECKS

Please read this instruction carefully before all operations and do not do any unspecified operations, use the product according to this instruction and the information on its label, otherwise the product may not work properly, injuries and material damage may occur. All operations written in this manual should only be carried out by expert personnel who have been approved by the authorized officials.

End users and unauthorized persons should read this instruction, comply with all safety rules that may concern them, in no case should they interfere with the product or line, should not tamper with and/or try to change settings and physically enter, detect malfunctions or gas leaks during use, etc. In such cases, they should close the inlet valve in front of the regulator and inform the relevant experts who have been approved by the authorized officials.

Do not start operations before acquiring and reading this instruction. If you cannot acquire this instruction, there are issues that are not understood, unknown or unclear before starting any operation, or if you cannot perform the operations and have problems even though the information in the instruction is followed during the operations, contact the authorities.

For all operations in this instruction and throughout the usage; be advised to use appropriate tools and methods. In all processes and use, make sure that the products or their boxes are not dropped, thrown, shaken, exposed to excessive load, force and impact, not crushed, not placed on weight, external parts and external protrusions are not damaged, heavy loads are not placed on them and they are not knocked over.

Before, during or after any process and during the entire use of the product; be advised on obtaining the necessary legal permissions, informing and warning all parties that may be involved in the transactions, taking all necessary safety measures, including personal protection, taking actions in accordance with the current legislation, regulations, technical standards and rules accepted by gas companies, taking all necessary measures against the risk of fire, not inhaling, taking precautions against danger combinations, taking adequate precautions against possible ejection of liquids in the line, not inserting foreign objects into the discharge hole, if any, substances that are likely to cause explosion and fire such as fire, sparks and cigarettes due to the product contains flammable gas in the area and near the product ensure that it is not available or used.

Except for the parts supplied with the product and its box, non-original and parts that are not supplied by our company should not be used. Contact us to procure spare parts when necessary. All necessary procedures and precautions should be taken considering that it may be exposed to natural events including earthquake, flood, etc. At the end of service life of an item, the products should be replaced with new ones. For the recycling of the products removed from the line at the end of their service life, the manufacturer or the relevant companies in compliance with the legislation should be contacted.

Keep this instruction in a safe area after all operations. The manufacturer is not responsible for situations like failure, damage, accident, etc. occurring due to non-compliance with the rules and information in this instruction. Do not exceed the technical limits in this instruction.

For ERG-EH series; do not try to dislodge the shut-off lance 18 of the product during use and at any stage in this manual, do not allow it to be exposed to mechanical damage, do not move it unnecessarily, and do not apply excessive force.

Since ERG-H series products do not have a safety shut-off device that closes them at excessively high and low outlet pressures, additional precautions should be taken regarding unwanted excessive pressure increases and decreases that may occur at the line outlet in case these products are used.

2-OPERATING CONDITIONS AND TECHNICAL SPECIFICATIONS:

The gas pressure regulator helps the devices that come after itself on the gas line function safety. Gas pressure regulators reduce the inlet pressure to the desired/set outlet pressure and maintain the outlet pressure within the tolerance range.

Gas pressure regulators can have a relief system if requested in the order. There may be a temporary discharge of gas to the atmosphere from the auxiliary equipment of the regulators. In this case, all necessary precautions regarding the gas to be discharged must be taken before installation. The details of the safety shut off systems (OPSO-UPSO) (only for ERG-EH series) and the evacuation system, if there is any, on the product are shown in Figure-A1.

In addition, ERG-EH series products; In case the outlet pressure rises and/or drops to undesirable levels above the safety setting pressure, it automatically detects this situation and automatically cuts off the gas in the line and remains closed until it is re-established manually. These regulators have a high pressure and/or low pressure gas safety shut-off device.

Gas pressure regulators are single stage and spring loaded.

The technical specification ranges of the products are as follows. These values are outlet flow from product to product, may vary within itself depending on the factors like outlet pressure, inlet pressure range, etc.. The final technical information of the product is indicated on the label on the product. Under no circumstances should the product be used outside of the following limitations.

Model - Series: ERG-EH Series (With Safety Shut Off Device) and ERG-H Series (Without Safety Shut Off Device)
Field of Use: Gas line applications
Appropriate Fluids: Group 1 Gas Phase (Natural Gas, LPG etc. Non Corrosive Fluids)
Maximum Allowable Pressure (PS): PS1, PS2, PS3, PS4, PS5 / PSD1
Connection: DN15, DN20, DN25, DN32, DN40, DN50 Gear (modular connection on request)
Operating Temperature Range: -10 °C; 60 °C or -20 °C; 60 °C
Weight: For ERG-EH; DN15-DN20-DN25: 1.7 kg, DN32-DN40-DN50: 3,8kg
For ERG-H; DN15-DN20-DN25: 1.5 kg, DN32-DN40-DN50: 3,6kg
Connection Wise: Inline
Accuracy Class - Outlet Pressure Tolerance: AC5/AC10
Locking Pressure Class: SG10/SG20/SG30
Accuracy Group: AG10/AG20 (only for ERG-EH series)
Outlet Pressure Adjustment Range (Wd-Wh): 12-500 mbar
High Pressure Safety Shutdown Adjustment Range (Wdo) 35-1150 mbar (only for ERG-EH series)
Low Pressure Safety Shutdown Adjustment Range (Wdu) :8-125 mbar (only for ERG-EH series)
Working Pressure Range (bpu-bpe): 0,1-5 Bar
Materials: Body and Cover Aluminum Cast Alloy EN 1706, Brass Parts EN 12164-EN12165
Applied Regulations: 2014/68/AT Pressure Vessels Regulation (PED)

DN15-DN20-DN25

DN32-DN40-DN50

Figure – A1

3-ASSEMBLY

Before assembly, determine and make sure that the product should be used, check the pressure and other information on the label on the product, check that the right choice has been made, examine the label information with great care, especially because it symbolizes the product, and check the auxiliary parts that may be on or inside the product and box (make the necessary verifications by comparing the protection caps 1 and 19, protection plugs on the connections if any, pressure adjustment seals, if any, discharge protection plug), the line to be installed, as well as the line and the product features, and make sure that they are verified. (operating pressure range, outlet pressure, fluid, flow rate, environmental conditions, line and fluid cleanliness, mutual connection type and diameter selections, line and product dimensions suitability, etc.)

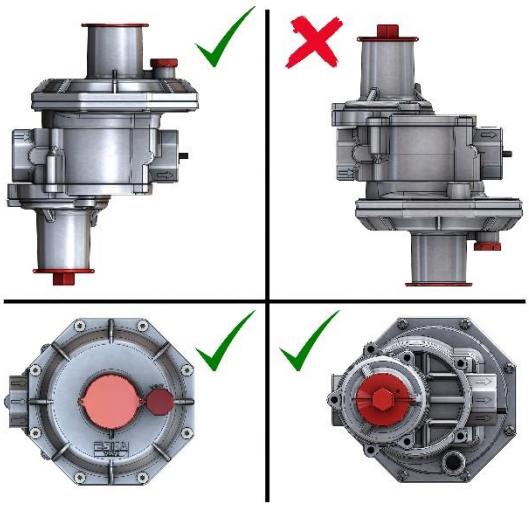
The line to be installed must have an inlet and outlet shutoff valve before and after the regulator. Before and during installation, make sure that there is no compressed pressurized gas trapped between the line and the product, the gas supply is shut off and the possibility of opening is completely avoided. Before assembly, check that there is no damage to the product. Before installation, it should be checked that the line pressure is within the inlet pressure range specified on the product label and that the regulator capacity will not be exceeded during use. Before assembly, sufficient buffer zones should be left at the line outlet after the regulator. Necessary measures should be taken to prevent noise and vibration from the line. There should be no axial misalignment on the line to be mounted. Before assembly, take appropriate measures to reduce bending and torsional loads caused by pipes and vibration at the line entrance and exit, ensure that there are no diameter contractions and expansions in short distances at the product entrance and exit on the line to be installed considering test, maintenance, disassembly etc. , in any case, check that the inlet pressure of the product is and will be higher than the outlet pressure of the product, clean the inside of the pipe with compressed air while the product is not yet attached to the line, and purify the pipeline from foreign objects such as welding particles, dirt etc., in general, check the line and the system for pressure and tightness, In order to filter the gas before the gas pressure regulator, ensure that an external filter is installed in order to filter the gas before the gas pressure regulator, directly external environment and external corrosion conditions of the products by taking the necessary precautions so that it is not exposed to possible external damage and impact. (sun, atmosphere, rain, snow, humidity, water, external chemicals, etc.).

To start the assembly; If there is, remove the inlet-outlet connection protection plugs manually, adjust the flow direction of the product so that the arrow on the product body points to the outlet side and the gas flow direction. Adjust to the appropriate position as indicated in Figure- A2, and if the fluid is LPG, adjust it to the appropriate position by ensuring that the regulator outlet side faces downwards. Tighten the and outlet connections sufficiently by using suitable wrenches, making sure that they do not cause external leakage without applying excessive load, force and impact. After tightening, check that the connections are fully seated in their sockets, that there are no mechanical problems such as cracks etc. make sure that in the connections, that there is no mechanical stress on the product due to the line, pipe and connection.

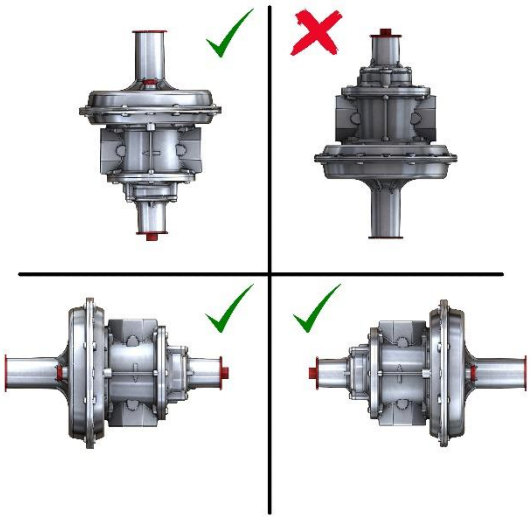
Relevant limitations on counter forces and moments originating from pipes and connections must be observed. If fasteners larger than the connection diameter on the body of the product are attached to the inlet and outlet of the product for assembly, forces and moments exceeding the values required by the main connection diameter on the body should not be applied and limitations should not be exceeded.

The products should not be used in floor type applications.

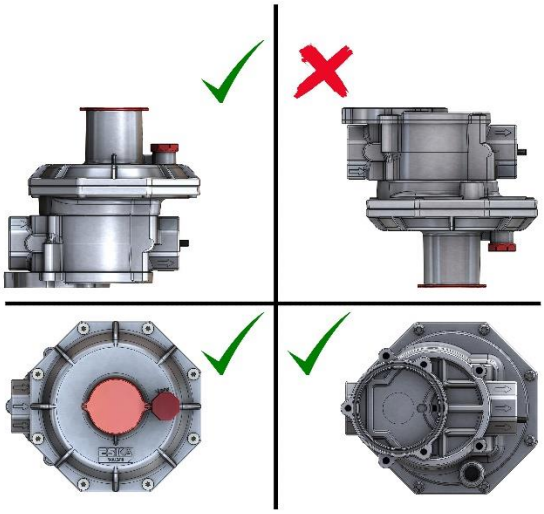
When necessary (use of the regulator in closed areas, etc.), an exhaust line should be connected to the breather console of the regulator. This connection must be at least DN10 threaded. A threaded adapter that may be required for this connection should be requested and used. Gas pressure regulators with evacuation system should not be installed and used in closed areas without taking the necessary precautions (for example, transporting and mixing the gas to be discharged to the outside atmosphere conditions with a pipe of at least DN 10, etc.) to transport the gas to be evacuated to the safe area (atmosphere).



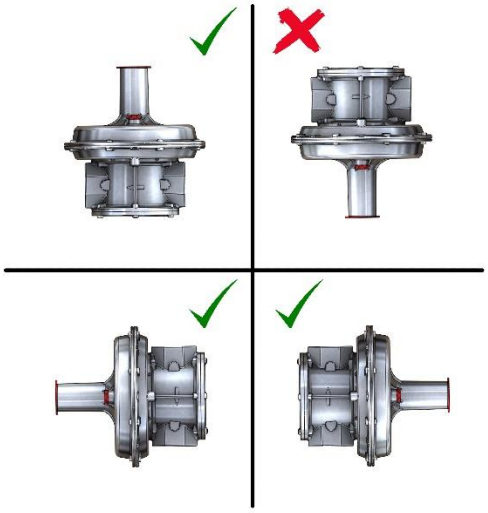
ERG-EH Series DN15-DN20-DN25



ERG-EH Series DN32-DN40-DN50

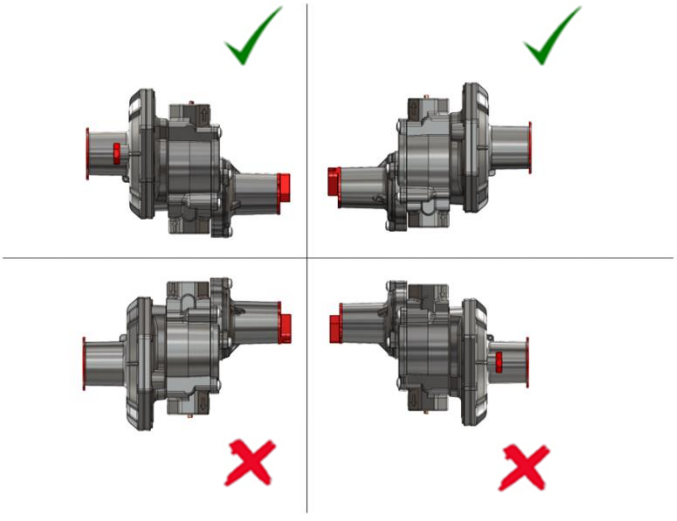


ERG-H Series DN15-DN20-DN25

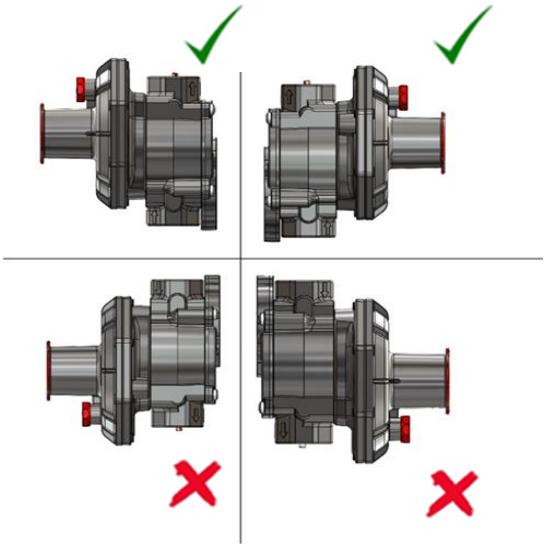


ERG-H Series DN32-DN40-DN50

Figure-A2



ERG-EH Series DN15-DN20-DN25

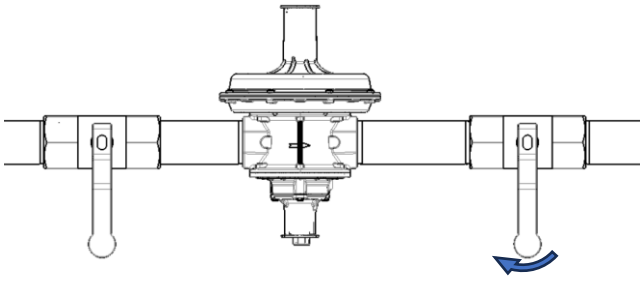
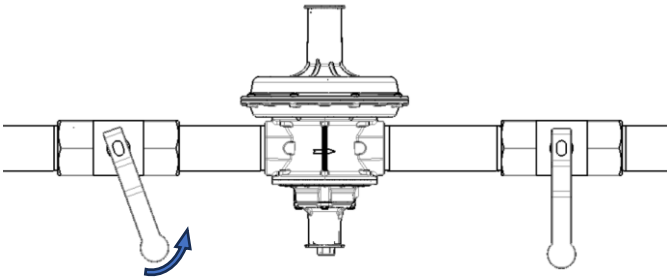
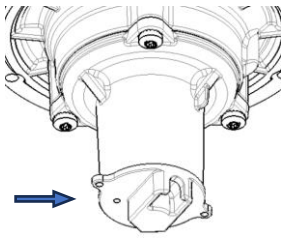
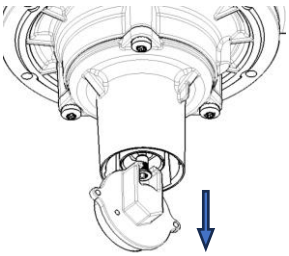
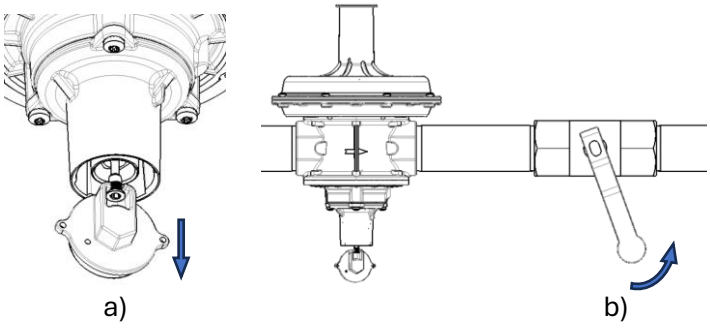


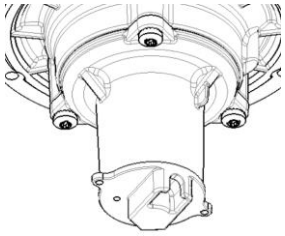
ERG-H Series DN15-DN20-DN25

4-INSTALLATION, START-UP AND OPERATING

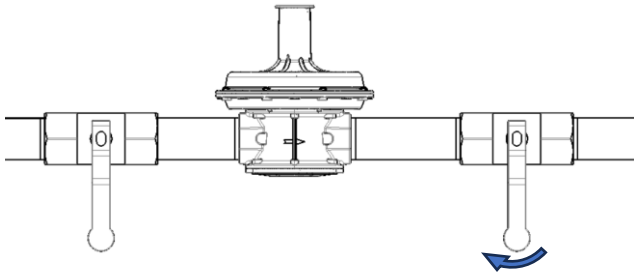
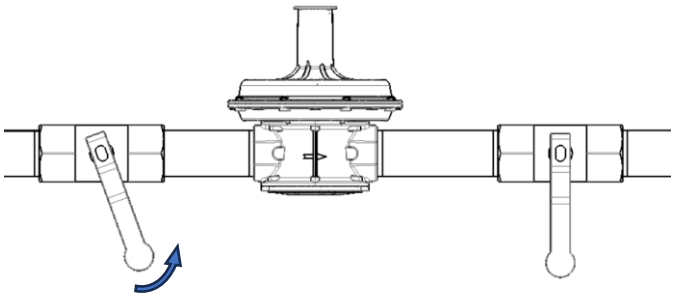
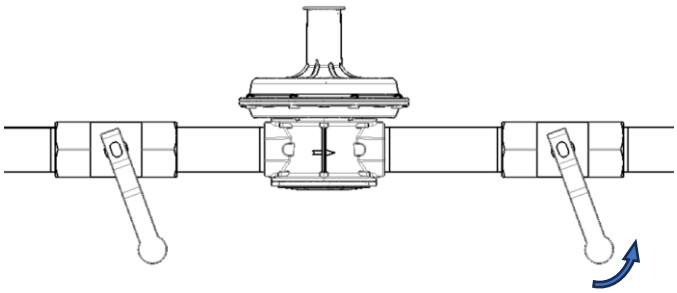
Before installation, check and ensure that all users and people on the outlet side are not using (devices are turned off), do not change the factory settings. Factory settings have been adjusted according to the desired values in the order specification and are indicated on the label. Adjustment devices are sealed if requested in the order specification.

Installation Instructions of ERG-EH series;

1. Close the outlet valve of the regulator.	
2. Slightly open the inlet valve of the regulator.	
3. Remove the slam shut cap.	
4. Gently pull the reset lever and wait for a while to allow the pressure to balance. This allows the inlet pressure to gradually pass into the outlet chamber, thanks to the easy reset feature of the device.	
5. a) Pull the reset lever (21) all the way and hold it. b) Slowly open the valve on the outlet of the regulator.	

6. Then, screw the slam shut cap (19) back into its original position. Fully open the inlet and outlet valves.	

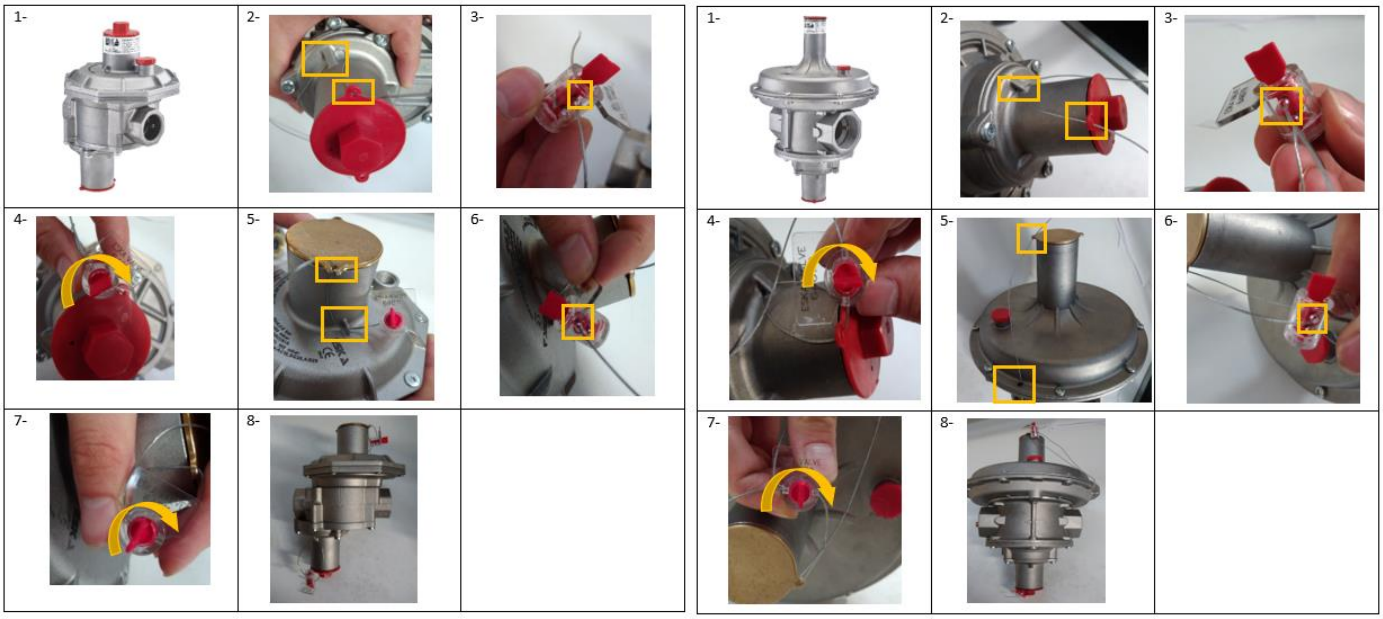
Installation Instructions of ERG-H series;

1. Close the outlet valve of the regulator.	
2. Slightly open the inlet valve of the regulator.	
3. Open the regulator outlet valve a very small amount and wait for the pressure to stabilize. Then open the inlet and outlet valves fully.	

After ERG-EH and ERG-H Series products are installed; if there is an evacuation system in the product, check that the released gas can mix with the atmosphere and its gas tightness with appropriate foam, detector, etc., inform gas users about the use of gas.

Depending on the temperature difference during the installation process or seasonal transitions, there may be instantaneous gas escape from the discharge section of the product and this is normal. It is important that the gas outlet in question does not continue, if it continues, it can be considered that there is a malfunction in the product.

If the installation process does not take place, please contact us.



ERG-H / ERG-EH DN15-DN20-DN25 ERG-H / ERG-EH DN32-DN40-DN50

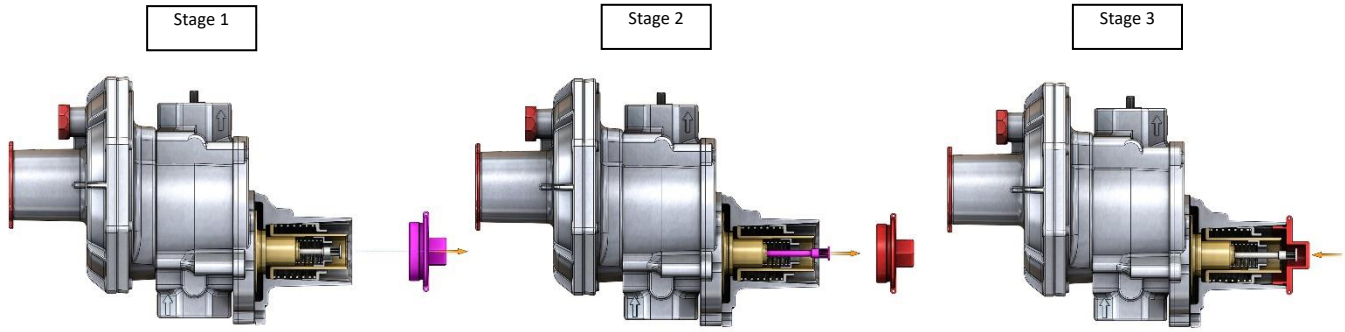
Figure-A3 Sealing Illustration

After Installation;
Outlet pressure, accuracy class, locking class and internal leakage, discharge pressure, high and/or low pressure shut-off pressures, accuracy classes and internal tightness should be checked.
While performing these operations, take all necessary precautions to prevent the gas discharge or external leakage from the regulator from creating a dangerous atmosphere.

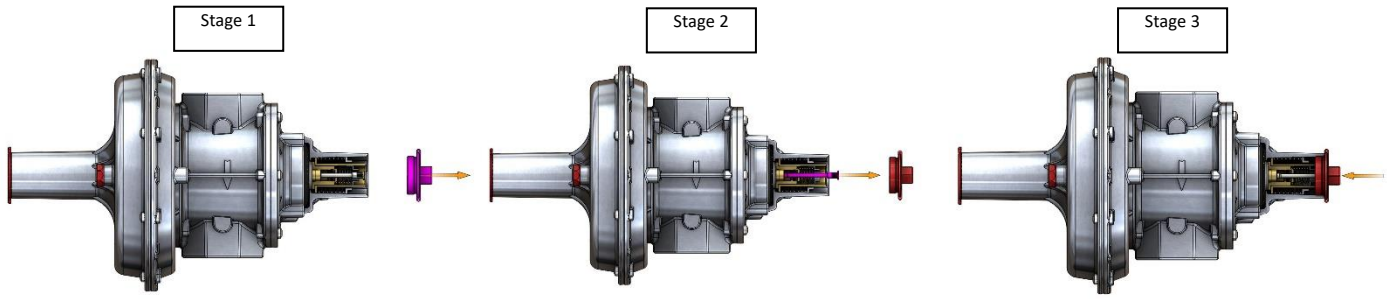
Close the outlet valve completely,
On the outlet line; connect the relevant pressure gauge and pressure generation source to the appropriate test valve between the regulator and the outlet valve in a tight and secure manner,
By creating an artificial gas consumption in the regulator line, measure the outlet pressure and check its compliance within tolerances.
Then set the artificial capacity to zero, wait for a while and check the locking class and internal leakage.
Check the discharge pressure of the regulator by gradually increasing the pressure with the pressure builder source,
By continuing to increase the pressure, that the shut-off lance no 18 closing will be observed, and the high pressure closing pressure, accuracy class and internal leakage at this value will be tested.
Close the inlet valve, reinstall the product, gradually evacuate the gas in the outlet pipeline, observing that the shut-off lance 18 is closed, the low pressure closing pressure, accuracy class and internal leakage at this value are tested.
Disconnect the pressure source, close the test valves, check that there are no external leaks in the line and the product, and reinstall the device following the rules in this instruction.

NOTE: Never touch the outlet valve while creating artificial capacity. Do not apply a pressure higher than 1.5 times the outlet pressure for ERG-H and 1.2 times the OPSO pressure for ERG-EH to the product in reverse.

In ERG-EH series, if the gas pressure regulator is closed for various reasons during operation, the inlet and outlet valves should be closed, the problem should be determined by the relevant authorities (if necessary, the product should be removed from the line), if the problem cannot be determined, the manufacturer should be contacted and reassembled according to the above rules after the problem is solved and should be reinstalled. During operation, the outlet pressure may increase due to the fact that the gas is not clean and due to foreign objects in the line, internal leakage, vent line clogging, product malfunction etc. and the high pressure safety shut-off device of the product may close and the gas may be cut off. During operation, if the outlet pressure of the regulator drops excessively for various reasons and reaches the set safety pressure, the low pressure safety shutdown system is activated and the gas passage can be closed. In both cases, it is necessary to redo the installation process.
Note: In no case, operations that will cause a pressure of more than 6 bar to the inlet connection port of the product and more than 1 bar to the upper cover part where the outlet pressure settings of the product are made should not be performed and this situation should not be allowed to occur.



ERG-EH Series DN15-DN20-DN25



ERG-EH Series DN32-DN40-DN50

Figure-A4

5-SETTINGS

When necessary for various reasons, the product's outlet pressure and, if any, safety shutdown pressure settings (for ERG-EH series) should be made as follows.
The settings should not be changed more than ± 10% and/or beyond the limits on the label.
Seals, if any, are removed on the relevant adjustment parts of the product. Adjustment mechanisms and springs should not be over-compressed and forced while making pressure adjustments. In order to see the values of the settings, connect the pressure gauge or manometer to a suitable test valve in the pipe between the regulator and the outlet valve and monitor the pressure by making consumption within an appropriate artificial capacity range. In all adjustments to be made, a pressure increase in clockwise rotations and a decrease in pressure in counterclockwise rotations are provided. In ERG-EH series, when the adjusted outlet pressures are increased, the safety pressures should increase, and when they are decreased, the safety pressures should decrease.
To change the outlet set pressure; If there is, remove the relevant seal, remove the cap 1 by turning it counterclockwise manually, turn the adjusting screw 2 in the appropriate direction with the appropriate hexagon wrench, mark the adjusted pressure.
To change the high pressure safety pressure in ERG-EH series; if there is, remove the relevant seal, remove the cap 19 by turning it counterclockwise manually, turn the adjusting ring 16 in the appropriate direction with the appropriate hexagonal wrench, mark the adjusted pressure.
To change the low pressure safety pressure in ERG-EH series; if there is, remove the relevant seal, remove the cap 19 manually by turning it counterclockwise, turn the adjusting ring 14 in the appropriate direction with the appropriate hexagonal wrench, mark the adjusted pressure.
After the adjustment changes, check with appropriate methods that the technical specifications and limits in this manual and on the label on the product are not exceeded. It is recommended to seal the adjustment devices so that the settings are not changed after the relevant pressure settings are made or for the products that are put into use in the field. The seal in the box, if any, can be used for this process.

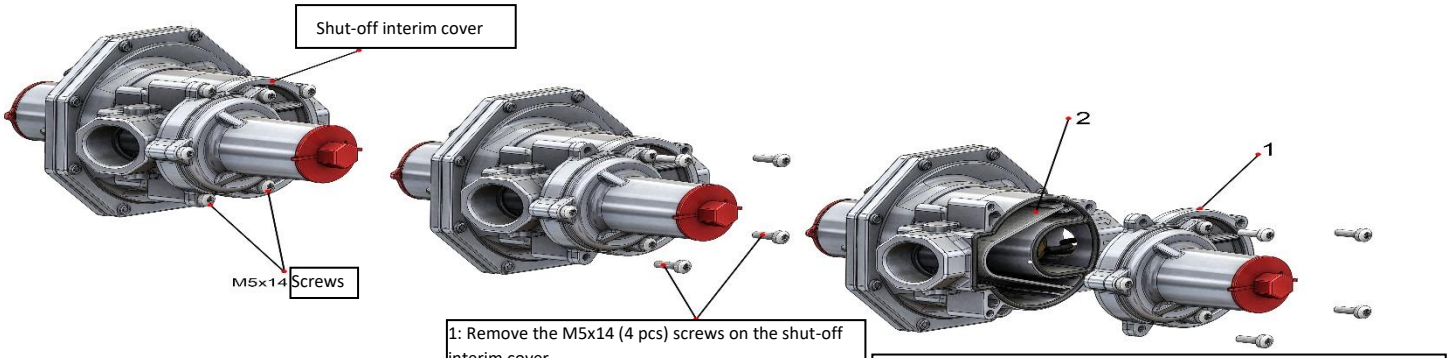
6-PERIODIC MAINTENANCE AND INSPECTION

For the regulator to work healthy and securely, periodic maintenance-inspection are recommended. The periodic maintenance and inspection frequencies should not exceed the period indicated by the gas institution or the legislation. The maintenance period should be adjusted according to the working conditions.

In all operations, the rules in this guide should be followed. In any situation, do not abruptly discharge in order to clean the line after the regulator or to perform maintenance-inspection on the product.

For periodic maintenance, remove it from the line in conformity to the removal rules in these instructions. Remove the cover screws on the regulator with proper tools not to cause stress and remove the covers by hand. (If the cover screws have seals like paint-lacquering etc. on, do not perform these operations and maintenance, and send the product to our firm.) Do not remove the parts in the removed covers, keep the covers as a whole together with the parts within and clean them with a clean cloth slowly.

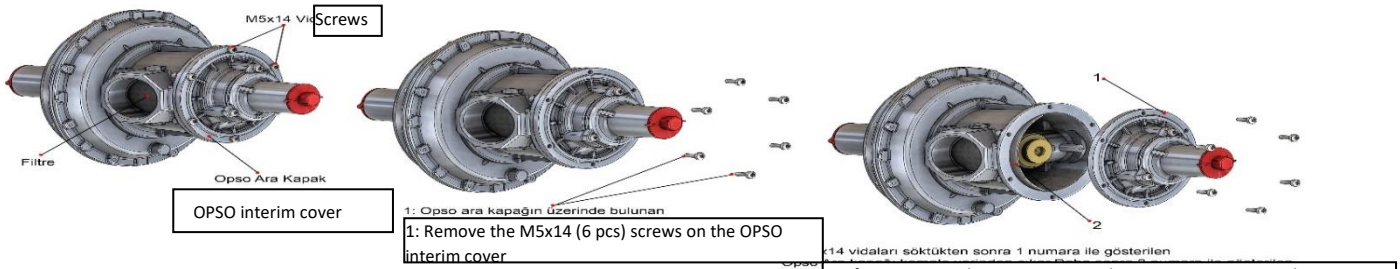
ERH-EH filter change (DN15-DN20-DN25)



1: Remove the M5x14 (4 pcs) screws on the shut-off interim cover

2: After removing the M5x14 (4 pcs) screws the shut-off interim cover shown in number 1 can be removed completely from it position. Then pull the filter shown in number 2 by hand and slowly remove from its installed

ERH-EH filter change (DN32-DN40-DN50)



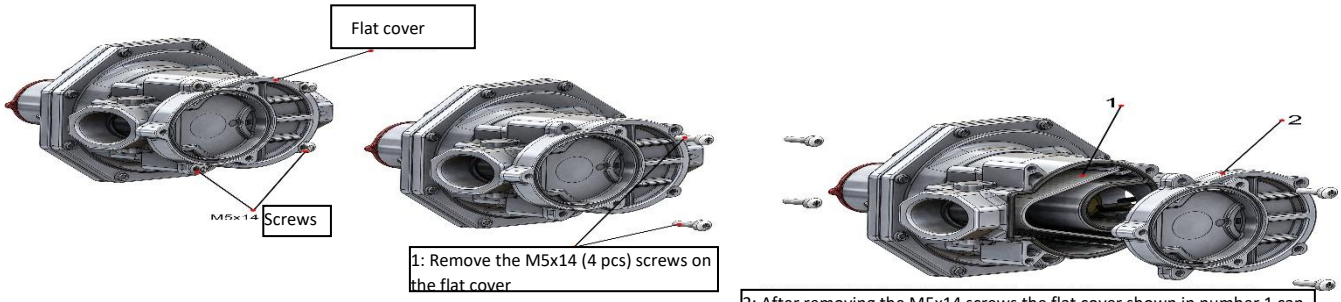
OPSO interim cover

1: Opso ara kapağın üzerinde bulunan

1: Remove the M5x14 (6 pcs) screws on the OPSO interim cover

2: After removing the M5x14 screws the OPSO interim cover shown in number 1 can be removed completely from it position. Then pull the filter shown in number 2 by hand and slowly remove from its installed position

ERH-H Filter Change (DN15-DN20-DN25)



1: Remove the M5x14 (4 pcs) screws on the flat cover

2: After removing the M5x14 screws the flat cover shown in number 1 can be removed completely from it position. Then pull the filter shown in number 2 by hand and slowly remove from its installed position

ERG-H Filter Change (DN32-DN40-DN50)

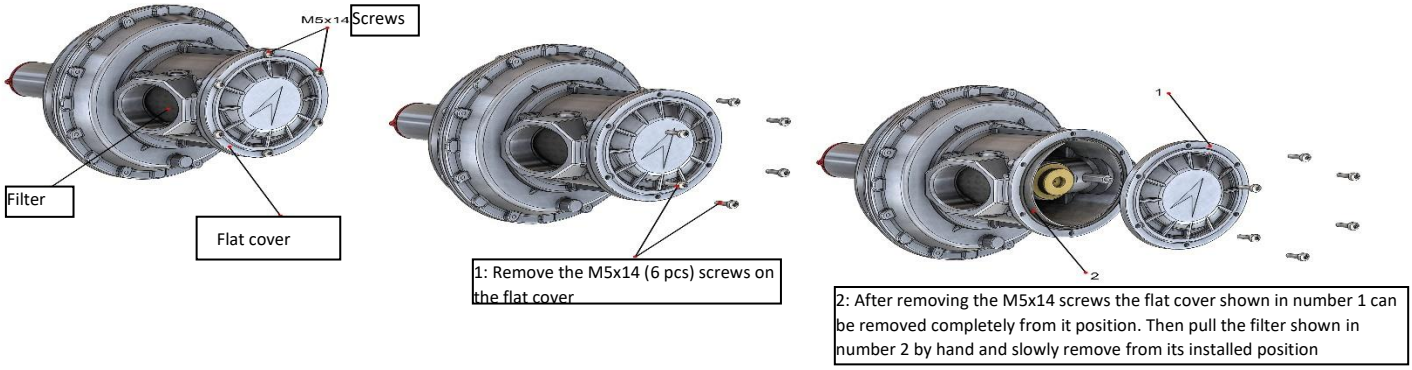


Figure-A5

After the filter change operation, using the same cover screws, via tightening the screws in opposite sides without causing stress and by aligning the holes, without applying extreme force, install them back to their place, make sure that they are not loose and there is no mechanical damage. Install the product with completed maintenance on the line according to these instructions and operate.

In any case, do not perform maintenance while the product is installed on the line.

For periodic maintenance, check that the entry and exit valves are open and there is pressure at exit. Via using proper foam, liquid or detector etc. methods, check all the external sections including connections and ensure that there are no leaks and that there is no extreme noises and vibration on the line and the product. In addition, review the process of “exit pressure, high pressure shut-off, low pressure shut-off, discharge functions testing” explained in the installation section of these instructions via taking all the security measures.

After the related maintenance and inspection operations, check that all accessories and apparatus like shut-off protection cover no. 19 (for ERG-EH series), pressure adjustment seals – if any, discharge protection stopper, discharge filter etc. are installed on the product.

Note: In any case, ensure in any condition to cause a gas release to the atmosphere from the product or the line that it is not in closed space, no dangerous atmosphere is formed and shall not form, the necessary lines are opened to the atmosphere.

During the periodic maintenance and inspection, if any problems are detected, according to the rules indicated in the malfunction section, the operations can be conducted. If the product do not run, contact the manufacturer firm.

7-CUT-OUT, REMOVAL AND REPLACING

Before, during and after all removing and replacing, follow all the rules indicated in this guide and conduct the required operations. Before an during the removal and replacement operations, provide that there is no pressurized gas compress in the line the product is on and between the line and the product, that the gas feed is closed and prevented completely to be opened.

Close the entry and exit valves on the line in front and back of the regulator, discharge the compress gas left between the line and the product safely and gradually from the section between the gas pressure regulator and the exit valve in accordance with the legislation. Remove the entry and exit connections of the product from the line using proper wrenches via turning, without applying extreme load and force. If a new product replacement is to be performed, install the new product in accordance with these instructions and operate.

8-MALFUNCTION – REPAIR – PROBLEMS AND SOLUTIONS

Before, during and after all malfunction operations follow all the rules indicated in this guide and conduct the required operations, especially take necessary precautions regarding the informing of the final users and against pressurized gas dangers.
In suspicion of a malfunction, it is recommended that you perform the operations indicated on table 1 according to the problem type, if you wish not to perform these operations or if the problem is not resolved even though you did,

without intervening further with the product, without trying to open it up or repair it, uninstall it from the line following the uninstallation rules indicated and send it to our firm, install a new product on the line. In any case, do not perform any repair, modification or restoration operations to intervene with the internal parts of the product. The repair and restoration should be performed on empty systems and even on uninstalled products.

MALFUNCTION TYPE	PROBABLE CAUSE	SOLUTION
Regulator is not working as intended or Faulty interventions	The pressure setting wished to be adjusted on the line can be out of the range of spring on the regulator.	Change spring.
	The settings of the springs on the regulator could be done wrong.	Set the spring.
	The flow capacity of the line may be exceeding the product capacity:	Change the product
	On the product-line-signal pipe: the signal lines may be installed not properly, clogged, bended, leaking or in turbulence field.	Replace the signal line.
	Exit pressure can be out of the shut-off setting range.	Readjust the Shutoff's OPSO or UPSO setting again according to the exit pressure.
	Regulation shaft can be malfunctioning.	Replace the regulation shaft.
	The ventilation, discharge hole can be clogged or restricted.	Clean the ventilation-discharge hole and take measures.
In the regulator, at Q=0 flow rate, the exit pressure continuously rises and when discharge pressure is reached, it gets stable and leaks.	Replaceable Orifice mouth can be damaged.	Replace the orifice
	Regulation valve can be damaged, worn, torn etc..	Replace the valve
	Balancing diaphragm can be damaged.	Replace the balancing diaphragm
	One of the O-rings at the regulation valve mechanism-set can be damaged.	Replace the o-rings
	There can be dirt, burr etc. in between the regulation valve and the orifice.	Clean.
	Moving parts can be contaminated with foreign material.	Clean the moving parts.
	Trigger mechanism can be damaged.	Replace the mechanism.
While flow rate increases in the regulator, increase in the exit pressure	Regulation diaphragm can be damaged..	Replace the regulation diaphragm
	Balancing diaphragm can be damaged.	Replace the balancing diaphragm
	There can be narrowing at the fittings connected to the regulator exit.	Replace with the fittings conforming to the line size. (ensure that the gas speed in the line is ≤25 m/s)
No gas in the regulator	No gas may be coming to the product.	Check the gas facility before the regulator.
	Shutoff can be closed.	Unlock the Shutoff.
	There may be no entry pressure.	Check the entry pressure.
	There can be icing due to humidity.	Check whether the water that may penetrate the line or the product is frozen.
	Filter can be clogged.	Check the filter, if needed, replace the filter cartridge.
	Moving regulation mechanism parts can be stuck due to dirt in the line.	Clean the moving parts and their bushings.
Regulator gives wrong exit pressure	There can be the wrong regulator spring	Replace with the proper spring.
	Desired exit pressure can be outside the exit pressure range of the product.	Change the regulator model.
	Entry pressure can be low.	Check the gas facility or select the right regulator.
	The use in the line can be different from the desired number.	Accurately measure the use (flow rate) in the line, compare the product, if needed change the regulator.
	On the product-line-signal pipe: the signal lines may be installed not properly, clogged, bended, leaking or in turbulence field.	Replace the signal line.
While no flow in the regulator; exit pressure is equal to the entry pressure. or while there is flow in the regulator; exit pressure is equal to the entry pressure or gas coming out of the air intake connection at the regulator.		
	The signal lines may be clogged, closed or bent.	Replace the signal line and ensure it is open.
	Regulation diaphragm can be damaged..	Replace the regulation diaphragm
	Balancing diaphragm can be damaged.	Replace the balancing diaphragm
	Control plate socket can be damaged.	Replace the control plate socket.
	There can be a jam at the moving parts.	Check the moving parts and their bushings, and resolve the jam.
	Shutoff's o-rings can be damaged.	Replace the Shutoff's o-rings
	o-rings at the regulator can be damaged.	Replace the regulator's o-rings
	o-rings at the regulator can be damaged.	Replace the regulator's o-rings
	Replaceable Orifice mouth can be damaged.	Replace the orifice
	Regulation valve can be damaged, worn, torn etc..	Replace the valve
	Regulator can be connected in reverse	Connect the regulator in the correct flow direction
When the flow rate is increased at the regulator, the exit pressure exceeds the	The capacity usage may be exceeding the capacity of the regulator.	Check that the product is not selected wrong regarding the flow rate and exit pressure, if necessary replace the regulator model

accuracy class tolerance. **or** Low exit pressure at the regulator outside the tolerances	The sizes of the gas lines can be wrong.	Render the normal width of the pipeline to a conforming size.
	Gas filter before the regulator can be dirty.	Maintain the gas filter, replace the filter.
	The moving parts of the regulator can be damaged.	Replace the regulator.
	The signal line can be closed.	Check the signal line
	Shutoff can be damaged.	Check the Shutoff.
	Entry pressure can be wrong.	Check the entry pressure.
	Exit setting pressure can be set wrong.	Measure the exit setting pressure, if needed correct it.
Shutoff not opening /not activated. **or** Shutoff not starting / not running.	On the product-line-signal pipe: the signal lines may be installed not properly, clogged, bended, leaking or in turbulence field.	Replace the signal line.
	Signal pressure can be out of the setting pressure range.	Set the Shutoff's closing pressure or exit pressure.
	The setting springs can be incompatible.	Replace the setting spring.
	Shutoff setting range is our of exit pressure.	Change shutoff
Shutoff not closing.	Signal line can be not installed or incorrectly installed.	Connect/install signal line.
	Signal line can be clogged	Clean the signal line.
	Signal line can be leaking	Render signal line airtight.
	Signal line can be bended	Replace the signal line.
	Signal pressure can be left outside the setting range.	Set the closing pressure of Shutoff.
	Setting springs can be not proper.	Replace setting springs.
	It can be due to a jam in the machine.	Replace Shutoff.
	Shutoff Diaphragm can be malfunctioning.	Replace Shutoff Diaphragm.
Shutoff closes but internally leaks. **or** Shutoff not completely closing	Replaceable Orifice mouth can be damaged.	Replace the orifice
	Shutoff valve can be damaged or worn.	Replace Shutoff valve.
	One of the O-rings at the shutoff valve mechanism-set can be damaged.	Replace the o-rings
	There can be dirt, burr etc. in between the shutoff valve and the orifice.	Clean.
	Moving parts can be contaminated with foreign material.	Clean the moving parts.
	Trigger mechanism can be damaged.	Replace the Shutoff.
Fluctuation at the exit pressure of the regulator	Friction at the balancing mechanism.	Clean the elements of the balancing mechanism.
	Regulation upper cover stopper and breathing accessory may not be in place.	Install the cover and the accessories.
Exit pressure continuously dropping.	External leak may happen.	Find the leak and seal it. Replace the related part or contact the manufacturer firm.
	Entry pressure insufficient	Check and set conforming to the product
	Regulator filter can be clogged.	Check and replace if needed
	Signal lines can be closed, clogged or bent.	Replace the signal line and ensure it is open.
	Jamming at the moving parts of the regulator.	Resolve the jam.
External leak on the product	Connections may be not tightened completely.	Inspect for any loose connections or screws, if any, tighten conforming to the rules. (if there are seals on the screws do not perform this)
	Product-line connection can be incomplete.	If there is a leak at the exit connection mouth, remove the product from the line, remove the exit gasket by hand, if no visual problems can be seen install it back, and install the product back on the line
	Regulation membrane set can be damaged.	Replace the operation diaphragm set.
	Dirt in the discharge valve.	Clean the discharge valve.
	O-rings can be malfunctioning	Replace the o-rings
	Leak on the body and covers	Replace the product
Leak on the discharge system of the regulator	Discharge setting spring can be loose.	Adjust or replace the spring.
	Dirt on the discharge gasket.	Replace the discharge gasket.
	There can be discharge due to thermal expansion	If leak does not continue this condition is normal, there is no need for an intervention.
Regulator is not discharging	Mechanical locking	Replace with a new product.
Noise and oscillation on the product	Mounting position can be wrong.	Check whether the mounting position is correct.
	Fluctuations at the entry pressure.	Check whether there are Fluctuations at the entry pressure.
	There can be diameter flaws at the exit pipeline.	At the exit side, check if there are unwanted size diameter etc. narrowing within close distance. Check if the product and line size are same.
	Narrowing or dislocation of signal lines	Check and replace if needed.
	Problems or jamming on the moving parts.	Clean or replace, if needed, the moving parts.
General faults	SSD assemble lever can be damaged or defective.	Check if there are any impact marks or bending on the SSD assemble lever. Try to reassemble the product. Replace with a new product
	Sudden stop of use	Check if there is a pressure increase at the exit flow due to sudden stop of boiler, heater etc.
	Diameter narrowing at the exit line.	Check if extreme diameter narrowing at the exit line.

	Exit setting pressure can be set wrong.	Measure the exit setting pressure and correct if faulty.
	Diameter narrowing at exit sense line.	Check if there is a narrowing at exit sense line.
	SSD setting pressure can be set wrong.	Measure the SSD setting pressure and correct if faulty.
	The product can be incorrectly assembled.	Try to reassemble the product.
	Problem can be not detected.	Replace with new product.

9-DIMENSIONS, LINE CONNECTIONS AND PART INFORMATION

Dimensions are in mm.

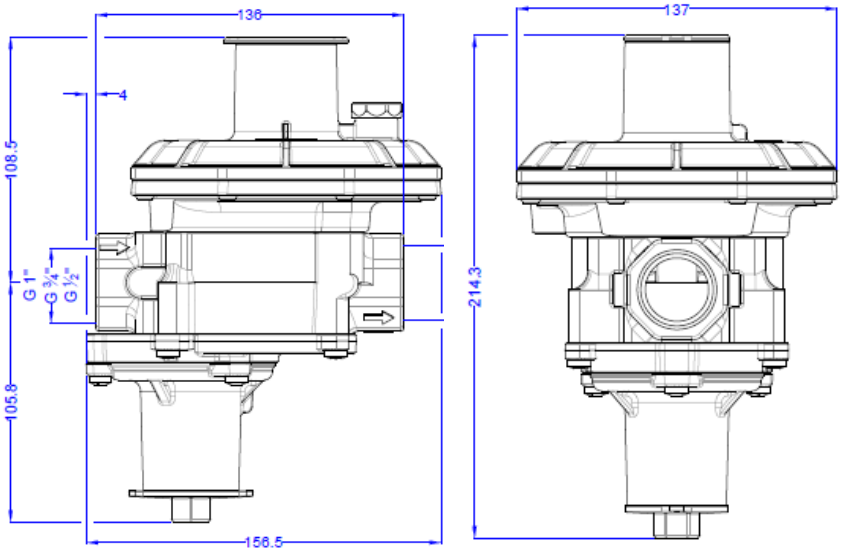


Figure-A6 (For ERG-EH Series Products DN15-DN20-DN25)

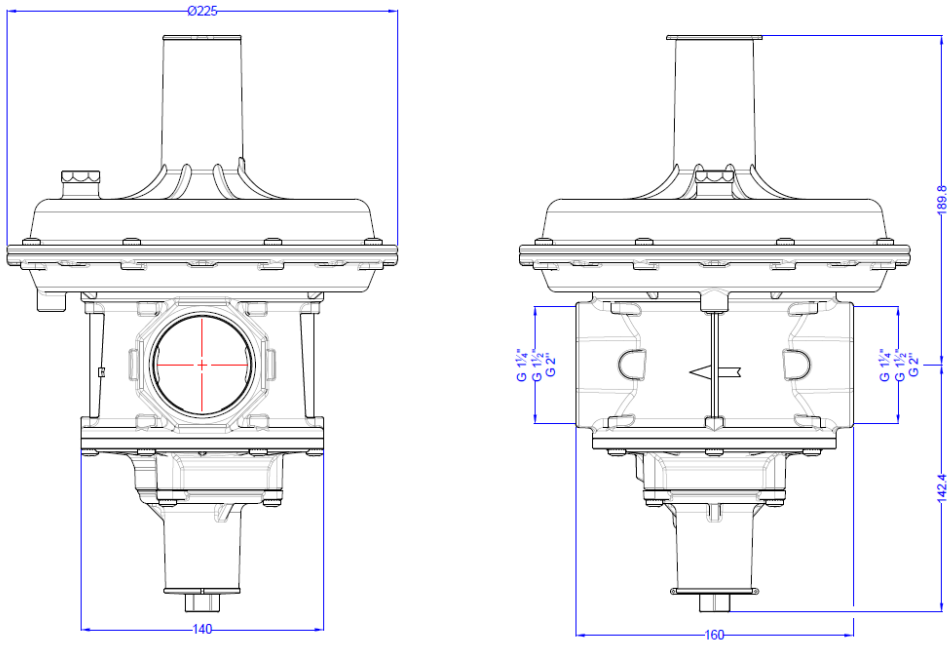


Figure-A7 (For ERG-EH Series Products DN32-DN40-DN50)

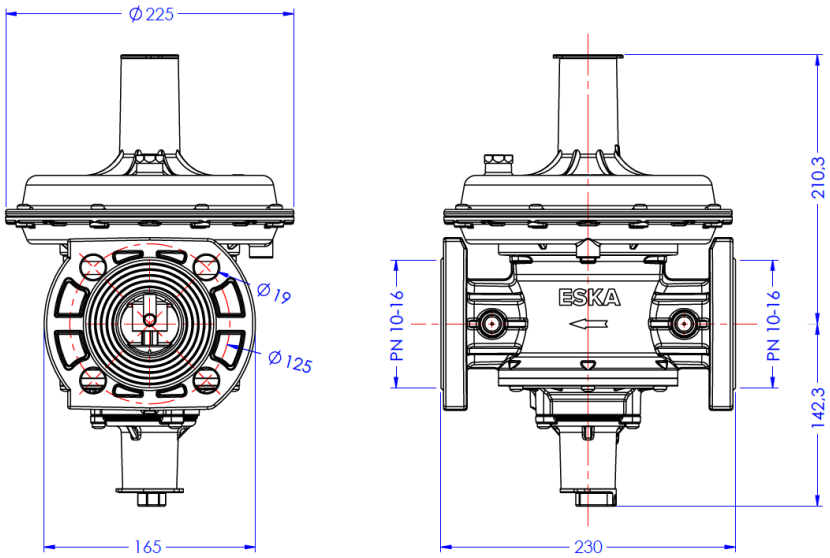


Figure-A8 (For ERG-H Series Flanged Products DN50)

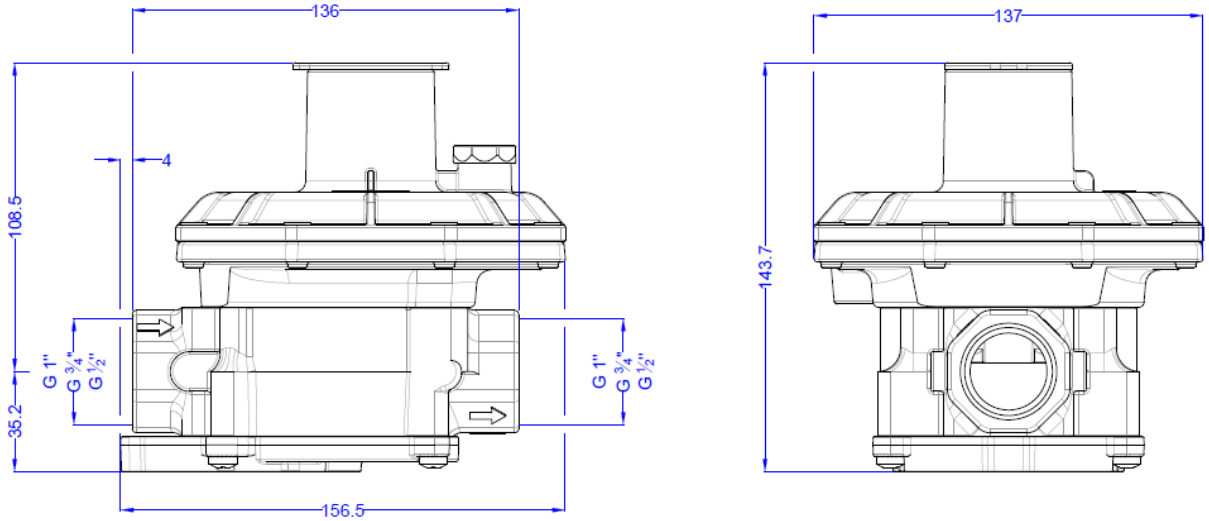


Figure-A8 (For ERG-H Series Products DN15-DN20-DN25)

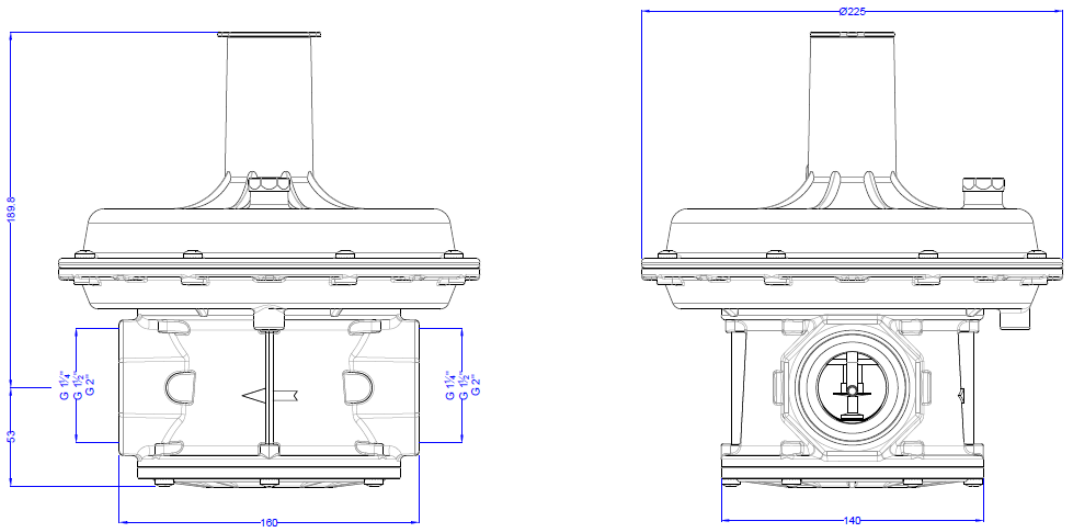


Figure-A9 (For ERG-H Series Products DN32-DN40-DN50)

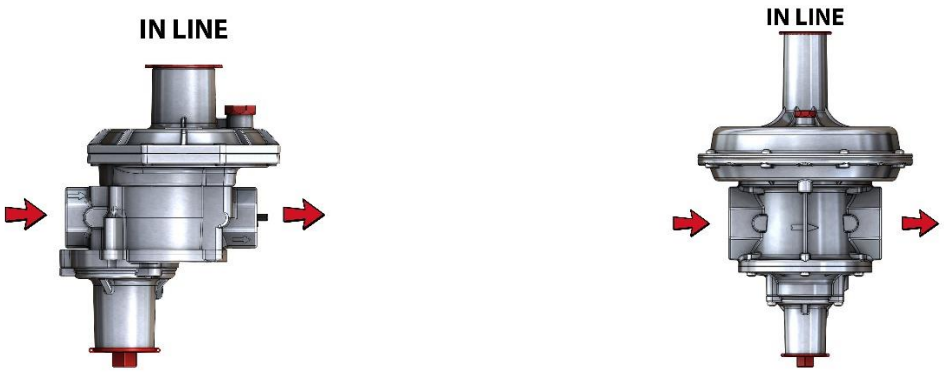
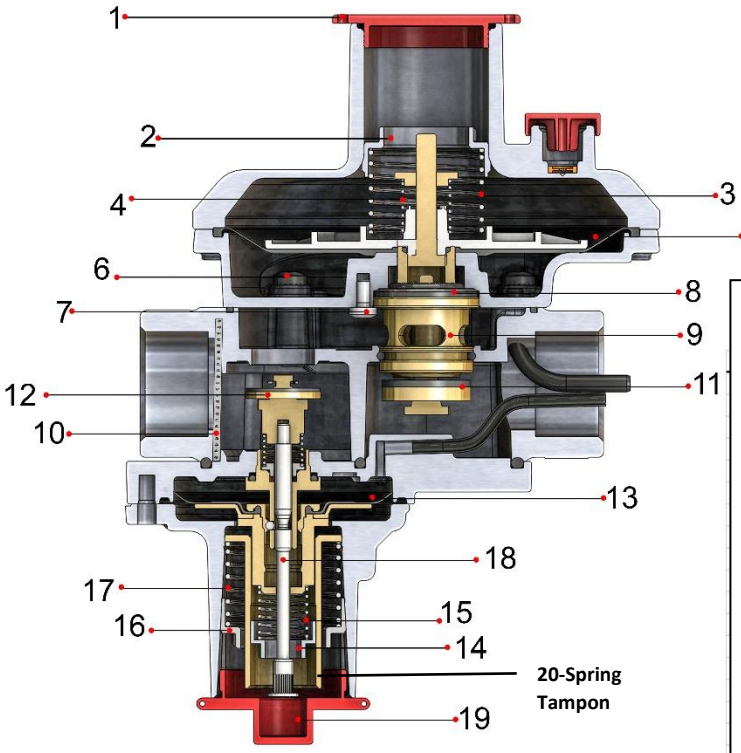


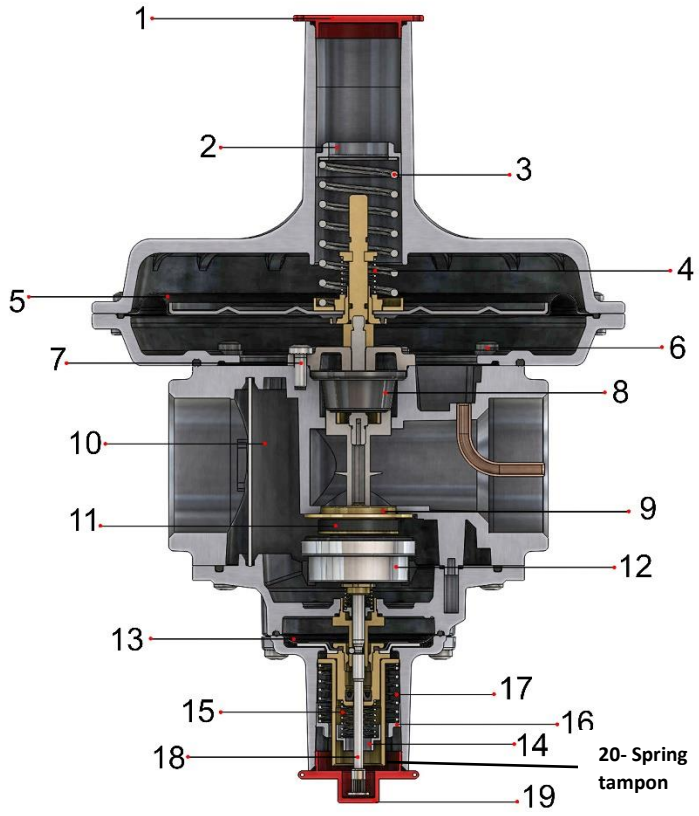
Figure-A10 (For ERG-EH Series Products)

Figure-A11 (For ERG-H Series Products)



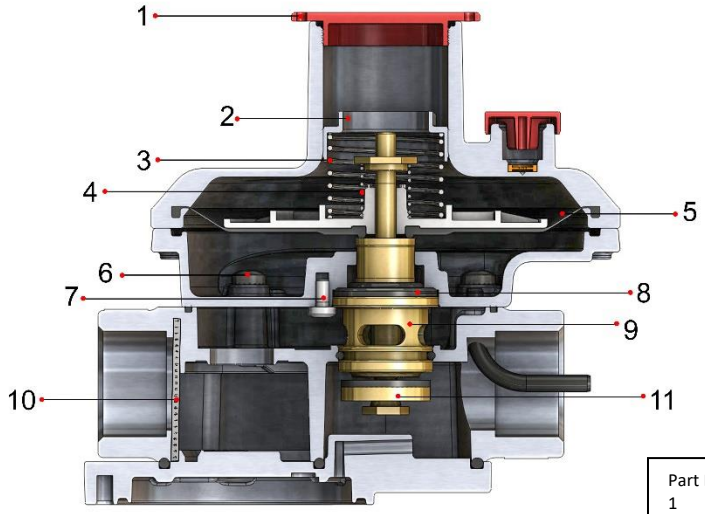
Part Number	Part Name
1	Upper Cover Stopper
2	Regulation Setting Screw
3	Regulation Spring
4	Temper Spring
5	Regulation diaphragm
6	M5x14 Screw
7	M5x14 Screw
8	Balance Diaphragm
9	Orifice
10	Filter
11	Valve
12	OPSO Valve
13	OPSO Diaphragm
14	UPSO Setting Screw
15	UPSO Spring
16	OPSO Setting Screw
17	OPSO Spring
18	Shut-off Spear
19	Shut-off Safety Cover
20	Spring Tampon
21	Cocking Handle

Figure-A12 ERG-EH Series DN15-DN20-DN25



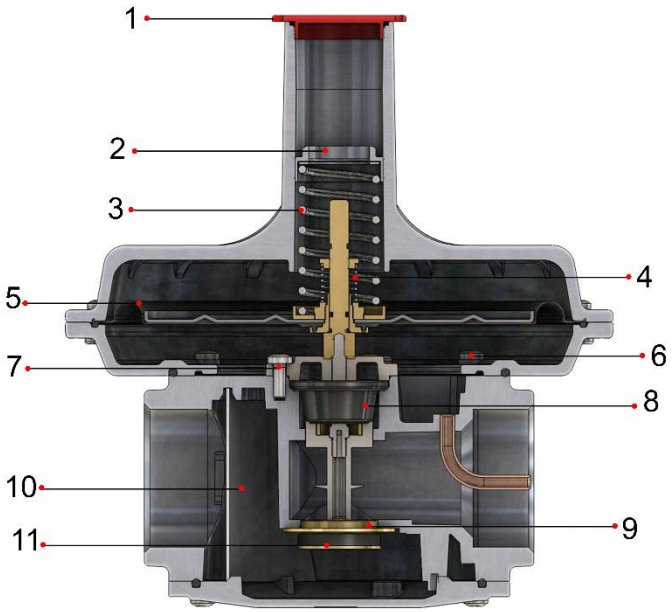
Part Number	Part Name
1	Upper Cover Stopper
2	Regulation Setting Screw
3	Regulation Spring
4	Temper Spring
5	Regulation diaphragm
6	M5x14 Screw
7	M5x14 Screw
8	Balance Diaphragm
9	Orifice
10	Filter
11	Valve
12	OPSO Valve
13	OPSO Diaphragm
14	UPSO Setting Screw
15	UPSO Spring
16	OPSO Setting Screw
17	OPSO Spring
18	Shut-off Spear
19	Shut-off Safety Cover
20	Spring Tampon
21	Cocking Handle

Şekil-A13 ERG-EH Series DN32-DN40-DN50



Part Number	Part Name
1	Upper Cover Stopper
2	Regulation Setting Screw
3	Regulation Spring
4	Temper Spring
5	Regulation diaphragm
6	M5x14 Screw
7	M5x14 Screw
8	Balance Diaphragm
9	Orifice
10	Filter
11	Valve

Şekil-A14 ERG-H Series DN15-DN20-DN25



Part Number	Part Name
1	Upper Cover Stopper
2	Regulation Setting Screw
3	Regulation Spring
4	Temper Spring
5	Regulation diaphragm
6	M5x14 Screw
7	M5x14 Screw
8	Balance Diaphragm
9	Orifice
10	Filter
11	Valve

Şekil-A15 ERG-H Series DN32-DN40-DN50

10-LABEL INFORMATION

ERG-EH Series DN15-DN20-DN25-DN32-DN40-DN50 and ERG-H Series DN32-DN40-DN50

ESKA	ESKA VALVE A.Ş. Sakarya-TURKEY www.eskavalve.com	CE 2354	
Gas Pressure Regulator			
Model No - Series		PS / PSD	/ 1 bar
DN		bpu-bpe	bar
Type	DS	Wds	mbar
TS		Wdso	mbar
Serial No		Wdsu	mbar
Pro. Date		DvRf	mbar
AC-SG-AG (%)		Pds-Pas	mbar

ERG-H Series DN15-DN20-DN25

ESKA	ESKA VALVE A.Ş. Sakarya-TURKEY www.eskavalve.com		
Gas Pressure Regulator			
Model No - Series		PS / PSD	/ 1 bar
DN		bpu-bpe	bar
Type	DS	Wds	mbar
TS		DvRf	mbar
Serial No		Pds-Pas	mbar
Pro. Date			mbar
AC-SG (%)			mbar

Note: At ERG-H series products on DN15-20-25 diameters CE mark shall not be placed.

Pds-Pas : Exit Setting Pressure
TS : Operational Ambient Temperature Range
PS : Permitted Maximum Pressure
PSD : For Sections with different Strength Maximum Strength Pressure
bpu-bpe : Entry Pressure Range
DN : Connection Diameter
Wds : Exit Pressure Range
Wdso : High Pressure Safety Shut Off Range
Wdsu : Low Pressure Safety Shut Off Range
AC : Accuracy Class – Outlet Pressure Tolerance
SG : Locking Pressure Class
AG : Accuracy Group

11-STORAGE – KEEPING- HANDLING- TRANSPORTATION – LOADING – SHIPMENT

Do not remove the products from their original boxes and packages until usage shall start, to not replace their boxes and packages with others. Store and keep the products and spare parts in closed and ventilated areas, under clean room conditions. During transport, shipment and storage protect the products from rain, water, snow, extreme hot and cold etc. Ensure that the floors where the operations take place are flat and clean, and not wet and slippery. During transport do not overload or lift extreme. Give special care to extrusions and external parts.

ESKA

CE

EU DECLARATION OF CONFORMITY

AB UYGUNLUK BEYANI

According to Pressure Equipment Directive (2014/68/EU)

Basınçlı Ekipmanlar Yönetmeliği'ne Göre (2014/68/AB)

Declaration Number *(Deklarasyon No)*	DEC_013_R01
Manufacturer and Owner Of Certificate *(Üretici ve Sertifika Sahibi Adı)*	ESKA VALVE A.Ş.
Trade Mark *(Ticari Marka)*	ESKA VALVE / ESKA
Manufacturer Adress and Place *(Üretici Adresi ve Üretici Yeri)*	Sakarya 1. Organize Sanayi Bölgesi Mahallesi, 11. Cadde, No:6-8, Arifiye/Sakarya/Türkiye
Product Description *(Ürün Tanımı)*	ERG-EH Series Gas Pressure Regulator With Safety Shutoff Valve *ERG-EH Serisi Emniyet Kapatmalı Gaz Basınç Regülatörü* ERG-H Series Gas Pressure Regulator Without Safety Shutoff Valve *ERG-H Serisi Emniyet Kapatmasız Gaz Basınç Regülatörü*
Product Model / Type / Serie *(Ürün Modeli / Tipi / Seri)*	ERG-H and ERG-EH Series *ERG-H ve ERG-EH Serisi*
Product Information *(Ürün Bilgileri)*	PS1, PS2, PS3, PS4, PS5, PS6, PSD1, TS : -10;60°C, -20;60°C or on request with (-40;60°C), DN50 Flange Connection PN16 or Class 150 and DN15, DN20, DN25, DN32, DN40, DN50 for ERG-EH, DN50 Flange Connection PN16 or Class 150 and DN32,DN40,DN50 for ERG-H, Thread Connection (on request with modular connection), AC 5/10, SG 10/20/30, AG 10/20 (only for ERG-EH) *PS1, PS2, PS3, PS4, PS5, PS6, PSD1, TS : -10;60°C, -20;60°C veya istek üzerine (-40;60°C), DN50 Flanşlı Bağlantı PN16 yada Class 150 ve DN15, DN20, DN25, DN32, DN40, DN50 ERG-EH için, DN50 Flanşlı Bağlantı PN16 yada Class 150, DN32,DN40,DN50 ERG-H için Dişli Bağlantı (istek üzerine modüler bağlantı), AC 5/10, SG 10/20/30, AG 10/20 (yalnızca ERG-EH)*
Declaration Issue Date *(Deklarasyon Yayın Tarihi)*	13.08.2024
The name of the Notified Body and No *(Onaylanmış Kuruluşun Adı ve Numarası)*	TÜV NORD Turkey Teknik Kontrol ve Belgelendirme Incorporated Company – NB 2354
EU Conformity Assessment Method *(AB Uygunluk Değerlendirme Yöntemi)*	2014/68/EU PED Category IV, Modul B+D
Modul B Certificate No / Valid Until **Modul D Certificate No / Valid Until**	CR-PED-TUVNORD-24/1810-R00 / 13.08.2034 CR-PED-TUVNORD-24/1819-R00 / 15.08.2027
Declaration *(Deklarasyon)*	Up defined in our products, we declare that meets the essential safety requirements of the directives to in this document. This declaration of conformity has been published under the responsibility of Eska Valve A.Ş. *Yukarı da tanımlanan üzerinde seri no olan ürünlerimizin, bu belgede belirtilen yönetmeliklerin temel güvenlik gerekliliklerini karşıladığını beyan ederiz. Bu uygunluk beyanı Eska Valve A.Ş. nin sorumluluğu altında yayınlanmıştır.*
Note *(Not)*	The compliance with Directives applies only to the product if the product is integrated in a system or combined with other units .The system manufacturer is responsible fort he compliance of the complete system with Directives. By altering the device without approval the declaration would invalidate. *Ürünün bir sistemle entegre olarak ya da diğer bir birimle birleştirilerek kullanıldığı durumlarda direktiflerle uyumluluk yalnızca ürünü kapsar. Sistem üreticisi sistemin tamamının direktiflere uyumluluğundan sorumludur. Onayımız alınmadan cihaz üzerinde değişiklik yapıldığında bu beyan geçerli değildir.*

Manufacturers Authorized Signature
(Üretici İmza Yetkilisi)
Erhan SARDAL
General Manager *(Genel Müdür)*
Sakarya/Türkiye, 13.08.2024

ESKA
VALVE ANONİM ŞİRKETİ
Sakarya 1. Organize San. Bölg. Mah.
11. Cad. No: 6/8 Arifiye-SAKARYA
Alifuat Cebesoy V.D. 380 110 2771
Mersis No: 0380-1102-7710-0001

EU DECLARATION OF CONFORMITY

AB UYGUNLUK BEYANI

According to Pressure Equipment Directive (2014/68/EU)

Basınçlı Ekipmanlar Yönetmeliği'ne Göre (2014/68/AB)

Declaration Number *(Deklarasyon No)*	DEC_014_R00
Manufacturer and Owner Of Certificate *(Üretici ve Sertifika Sahibi Adı)*	ESKA VALVE A.Ş.
Trade Mark *(Ticari Marka)*	ESKA VALVE / ESKA
Manufacturer Adress and Place *(Üretici Adresi ve Üretici Yeri)*	Sakarya 1. Organize Sanayi Bölgesi Mahallesi, 11. Cadde, No:6-8, Arifiye/Sakarya/Türkiye
Product Description *(Ürün Tanımı)*	ERG-H Series Gas Pressure Regulator Without Safety Shutoff Valve *ERG-H Serisi Emniyet Kapatmasız Gaz Basınç Regülatörü*
Product Model / Type / Serie *(Ürün Modeli / Tipi / Seri)*	ERG-H Series *ERG-H Serisi*
Product Information *(Ürün Bilgileri)*	PS1, PS2, PS3, PS4, PS5, PS6, PSD1, TS : -10;60°C, -20;60°C or on request with (-40;60°C), DN15, DN20, DN25 Thread Connection (on request with modular connection), AC 5/10, SG 10/20/30 *PS1, PS2, PS3, PS4, PS5, PS6, PSD1, TS : -10;60°C, -20;60°C veya istek üzerine (-40;60°C), DN15, DN20, DN25 Dişli Bağlantı (istek üzerine modüler bağlantı), AC 5/10, SG 10/20/30*
Declaration Issue Date *(Deklarasyon Yayın Tarihi)*	01.11.2020
EU Conformity Assessment Method *(AB Uygunluk Değerlendirme Yöntemi)*	2014/68/EU PED Sound Engineering Practice (SEP)
Declaration *(Deklarasyon)*	We declare that our products with a serial number as defined above meet the requirements 2014/68/EU PED- Pressure Equipment Directive Article 4 item 3 . These equipments designed and manufactured in accordance with the sound engineering practice (SEP) of a Member State in order to ensure safe use. However, These equipments should not bear the CE mark in accordance with Article 4 item 3. *Yukarı da tanımlanan üzerinde seri no olan ürünlerimizin, 2014/68/AB-Basinçli Ekipmanlar Direktifi Madde 7 (3) uyarınca güvenli kullanımı sağlamak için geçerli genel kabul görmüş mühendislik uygulamasına (SEP) uygun olarak tasarımlanmış ve imal edilmiştir. Bununla birlikte 2014/68/AB-Basinçli Ekipmanlar Direktifi Madde 7 (3) gereği bu ekipmanlara CE işareti taşımaması gerektiğini beyan ederiz.*
Note *(Not)*	The compliance with Directives applies only to the product if the product is integrated in a system or combined with other units .The system manufacturer is responsible fort he compliance of the complete system with Directives. By altering the device without approval the declaration would invalidate. *Ürünün bir sistemle entegre olarak ya da diğer bir birimle birleştirilerek kullanıldığı durumlarda direktiflerle uyumluluk yalnızca ürünü kapsar. Sistem üreticisi sistemin tamamının direktiflere uyumluluğundan sorumludur. Onayımız alınmadan cihaz üzerinde değişiklik yapıldığında bu beyan geçerli değildir.*

Manufacturers Authorized Signature
(Üretici İmza Yetkilisi)
Erhan SARDAL
General Manager *(Genel Müdür)*
Sakarya/Türkiye, 01.11.2020

ESKA
VALVE ANONİM ŞİRKETİ
Sakarya 1. Organize San. Bölg. Mah.
11. Cad. No: 6/8 Arifiye-SAKARYA
Alifuat Cebesoy V.D. 380 110 2771
Mersis No: 0380-1102-7710-0001

WARRANTY CERTIFICATE

Manufacturer or Importer Firm's;

Title: ESKA VALVE A.Ş.
Address: Sakarya 1. Organize Sanayi Bölgesi Mahallesi, 11. Cadde, No: 6-8, Arifiye/Sakarya/Turkey
Telephone: +90 (264) 502 54 34-35-83
Fax: +90 (264) 502 54 84
E-Mail: info@eskavalve.com
Authorized Signature:
Company Stamp:

Vendor Firms;

Title:
Address:
Telephone:
Fax:
E-Mail:
Authorized Signature:
Company Stamp:

Products

Type: Gas Pressure Regulator
Brand: ESKA / ESKA VALVE
Model: ERG-EH and ERG-H
Warranty Period: 2 years
Maximum Repair Period 20 workdays
Invoice Date and Number:
Date of Delivery to the Consumer:
Place of Delivery to the Consumer:
Banderol and Serial No:

WARRANTY TERMS

1) The warranty period starts on the date of delivery of the product and is 2 years.

2) The entire product, including all of its parts, are under the warranty.

3) In case the product being replaced with the equivalent free from defects may bring forth disproportional hardships, the consumer may use one of the rights of withdrawing from contract or price discount proportional to the defect. In determination of disproportionality, the price of the goods without defects, the importance of the defect and whether using other optional rights shall be a problem for the consumer are considered. In cases where the consumer selects withdrawal from the contract or price discount proportional to the defect, all or discounted amount of the product price shall immediately be returned to the consumer. In case that the consumer chooses the option for the product shall be replaced with its equivalent without defects, the seller, manufacturer or importer are obliged to fulfill the request of replacing the product with its equivalent without defects within maximum thirty workdays after receiving such a request.

4) In case the consumer choses the right for free of charge repair among these rights, the seller is obliged to perform the repair of the product without requesting any fees under labor, replaced part price or any other title. The consumer may utilize the right for free of charge repair against the manufacturer or the importer. The seller, importer and manufacturer are severally responsible for the consumer to use this right.

5) In case the consumer choses the right for free of charge repair; if the product malfunctions again within the Warranty period – the repair period is exceeded – it is indicated in a report by the authorized service station, seller, manufacturer or importer that the repair is not possible; the consumer may request from the seller the return of the product, price discount in the rate of the defect or if possible, request that the product is replaced with the equivalent without defect. The seller may not reject the request of the consumer. In case this request is not fulfilled, the seller, manufacturer and importer are severally responsible.

6) The maximum repair period of the product is 20 workdays. This period starts, within the warranty period, on the date of notification of the related malfunction to the service station or the seller, and outside the warranty period, on the date the product is delivered to the service station. In case the product malfunctions within the warranty period, the period of repair is added to the warranty period. Whether usage errors are present in the malfunctions should be indicated on a report issued within the maximum repair period related to the product by the service stations, and in case that there are no service stations, by one of the products seller, importer or manufacturer and a copy of this report should be given to the consumer. The warranty period of the replaced product during the warranty period shall be limited to the remaining warranty period of the purchased product.

7) The malfunctions due to the use of the product contradictory to the matters given in the user manual or due to use errors are excluded from the warranty scope.

8) The consumer, in disputes that may occur related to the use of the rights based on the warranty, may apply to the Consumer Arbitration Consul or the Consumer Court at the location of the transaction of consumer was performed or at the residential area.