



GHR-M SERIES

GHR-M

INTRODUCTION

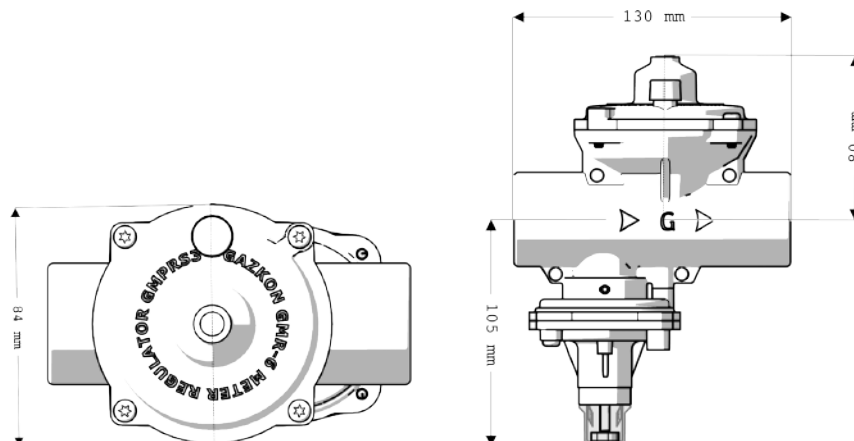
The Gazkon model GHR is a direct action, spring controlled, pressure reduction regulator. Normally used for the supply of gas to residential complexes, commercial applications, small industries (burner, boiler and process applications) and smaller antenna networks.

As standard the GHR regulators can be used on natural gas, LPG and most clean dry gasses.



Inlet Pressure	0,3 - 1 bar
Outlet Pressure	0,1 - 1 bar
AC / RG	10 / 20
Ambient Temperature	-20°C to +60°C
Inlet Connection	1"
Outlet Connection	1"
Capacity Range	50/100/150 m ³ /h

DIMENSION AND WEIGHTS



OPERATING PRINCIPLE

The Gazkon GHR is a pressure regulator with control of the outlet pressure achieved by a combination of a balanced valve plug, orifice, adjustable spring and a diaphragm assembly. Gas flow is between the regulator valve plug and the orifice. Tight shut-off is ensured by the spring force pushing the regulator valve plug against the orifice.

Pressure control is achieved by the diaphragm sensing changes in the outlet pressure (which receives on its lower side the outlet pressure, and on the topside the spring load), and the spring (adjusted to the desired outlet pressure setting) moving the valve plug to the correct position to maintain the required outlet pressure.

Accuracy is ensured independent of any changes in inlet pressure or changing flows, by the balanced valve plug assembly.

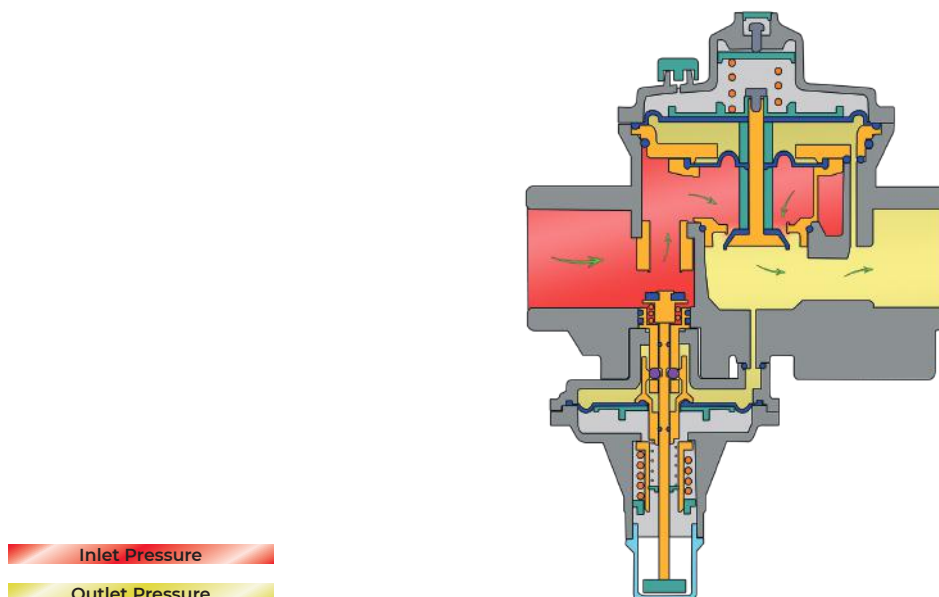
Opening; Flow increases, the pressure in the regulator outlet reduces. This reduced pressure is sensed under the main diaphragm. The force of the spring setting is now higher than the required outlet pressure.

Due to the force of the spring pushing downwards via the linkage mechanism, the regulator OPENS, returning the outlet pressure to the required level.

Closing; Flow decreases, outlet pressure increases on the outlet side of the regulator and below the diaphragm. The force of the pressure under the diaphragm is now higher than that of the spring causing the diaphragm to move higher, the regulator CLOSES.

Regulator Outlet Pressure Adjustment

Remove the top cap to get access to the spring adjuster. Slowly turn adjuster to increase (clockwise) / decrease (anti-clockwise) the outlet pressure to the required value. Refit the end cap after setting to required outlet pressure.



START-UP

Before start-up, make sure that all utility connections are securely closed and proceed as follows. SSV device fitted an internal impulse connection.

- 1) Close outlet valve and slightly open inlet valve.
- 2) In order to reset the SSV, slowly unscrew the SSV cap. The Gazkon SSV is fitted an internal by-pass for to allow for easy resetting. Check that there is gas flow and outlet pressure increases. Then pull head to latch SSV operational.
- 3) Screw back cap to original position. Without refitting of end cap the SSV will not operate.
- 4) Make sure that device remains in the open / reset position. (Figure 3)
- 5) Very slowly open the outlet valve and wait until the outlet pressure is stabilized and then open outlet valve fully.

SSV ADJUSTMENT

The maximum (OPCO) and minimum (UPCO) trip values are independently set by separate springs.

- 1) It is advised to make this adjustment while regulator in operation.
- 2) Use special spanner supplied.
- 3) Adjust over pressure (OPCO) setting first.
- 4) Unscrew external and internal end caps.
- 5) Adjust the outer nut to increase / decrease the OPCO setting.
- 6) Adjust the inner nut to increase /decrease the UPCO setting.
- 7) After adjustments, refit end caps.

MATERIALS

BODY AND HEADS	Die-Cast Aluminum
INTERNAL PARTS	Brass / Plastic
DIAPHRAGM NITRILE	Nitrile Rubber