



# Fusar Bassini Astorre e C. Snc

## ZEROGOVERNOR



### BALANCED ZERO REGULATOR

"Zerogovernor" regulators are used in both premix and nozzle-mix burner systems for maintaining a constant air-gas mixture.

"Zerogovernor" regulator will supply zero gas to a gas mixer (or premix burner) when its vent is open to the atmosphere.

When used with nozzle-mix burners, or with premix burner combustion systems, the vent of zerogovernor is cross-connected to the main air line downstream of the main control valve; regulator outlet pressure will equal air impulse pressure conveyed through the cross-connection; thus gas flow will remain proportional to air flow all firing rates.

### TECHNICAL DATA

Housing : Aluminium

Inside components: Aluminium, Brass, Stainless steel

Diaphragm : synthetic rubber

Temperature range : - 10 °C to + 60°C

Pressure : max 150 mbar

Flanged connections up to 2" DN65 – DN80

### INSTALLATION

All regulators are setted and sealed before shipment; if adjustment or repair is necessary, the regulator should be returned to the factory.

Mount regulator horizontally with diaphragm case below gas line and with arrow on body pointing in direction of the gas flow.

**Do not use Zerogovernor like block safety valve.**

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GAS BURNERS AND COMPONENTS FOR COMBUSTION SYSTEMS

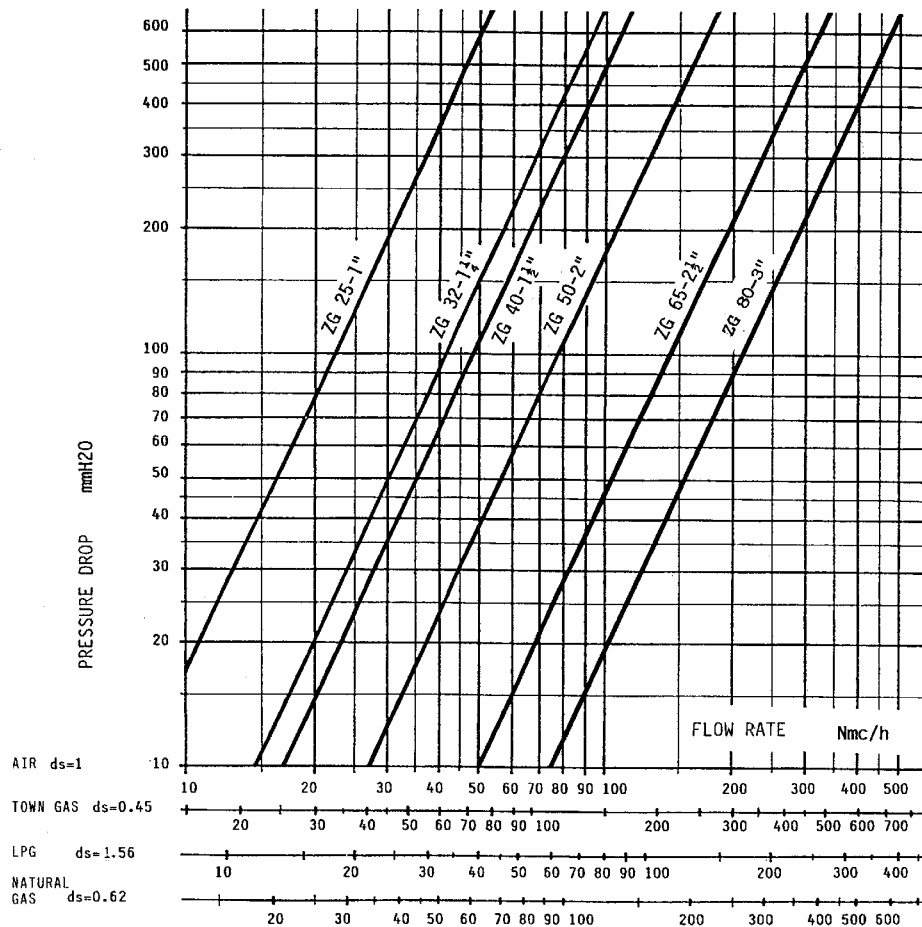
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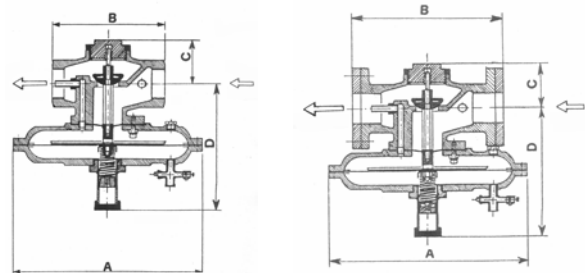
## ZEROGOVERNOR



We reserve the right to make technical changes designed to improve our products without prior notice.

### DIMENSIONS

Type	DN	Dimensions (mm)				Weight (kg.)
		A	B	C	D	
ZG25	1"	250	150	65	185	6,7
ZG32	1 1/4"	305	180	75	205	9,6
ZG40	1 1/2"	305	180	75	205	9,6
ZG50	2"	405	220	85	260	15
ZG65	2 1/2"	405	240	90	270	21
ZG80	3"	405	330	100	300	25



**CAUTION:** The combustion system must be designed and installed meeting the law regulations in force. If the installation, the use and the maintenance are not carried out correctly, severe damages to things or persons might occur.

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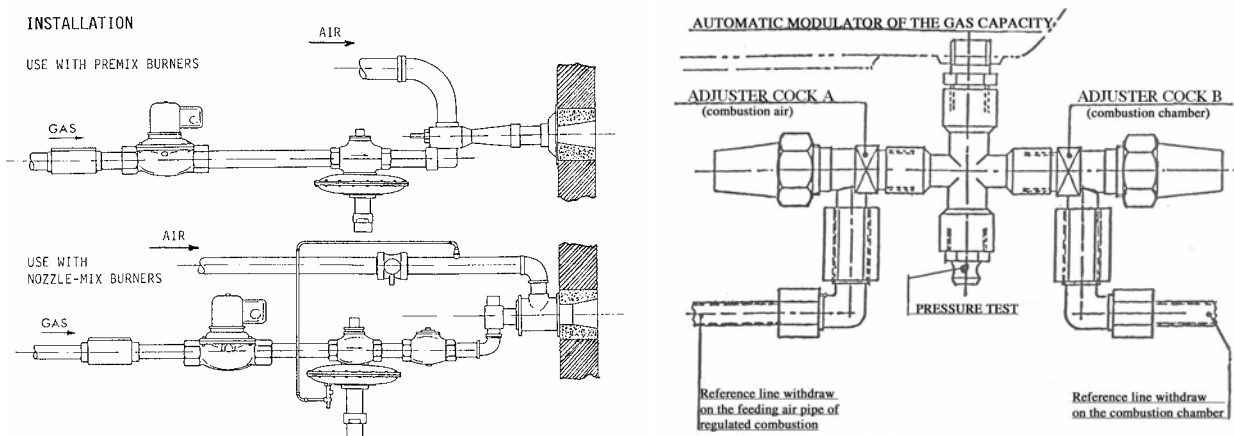


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### LINE OF IMPULSE TO TWO REFERENCES

- 1) Disconnect the automatic burner control units
- 2) Start the flue gas aspirator and the fan of the combustion air.  
Set the air butterfly valves of combustion to the maximum capacity and the flue gas aspirator to the maximum capacity required by the project.
- 3) Close completely the adjuster cock B (combustion chamber) and open completely the adjuster cock A (impulse of the air combustion). Read the value of the air impulse on the test pressure.
- 4) Open the adjuster cock B up to make decrease the air impulse value around 100-200 mm H<sub>2</sub>O
- 5) Bring the air valve regulator of combustion on the position  $\frac{1}{2}$  of the max. capacity of the air required by the burner.  
Insert the automatic burner control units and turn on the burner regulating the flame quality with the manual gas adjuster to the burner.
- 6) Measure the gas pressure inlet to the zerogovernor and close the adjuster cock A of the air impulse combustion up to bring the value of the impulse to the zerogovernor 100 mm under the pressure inlet of the zerogovernor.  
Example - Pressure inlet to the zerogovernor 600 mm H<sub>2</sub>O close the adjuster cock A until the value of the impulse to the zerogovernor of 100 mm H<sub>2</sub>O (600-100=500 mm H<sub>2</sub>O)
- 7) CAUTION If the gas pressure inlet to the zerogovernor is 100 mm H<sub>2</sub>O above to the value of the impulse when the burner works to the max. capacity can be omitted how much described to the paragraph 6
- 8) Bring the main burner on the max. capacity of HIGH FLAME and eventually ricalibrated the flame quality with the manual gas adjuster.
- 9) Verify that the burner's flame maintains the air-gas ratio pre-fixed, on the whole execution of the automatic regulation between the maximum capacity and the least capacity.



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