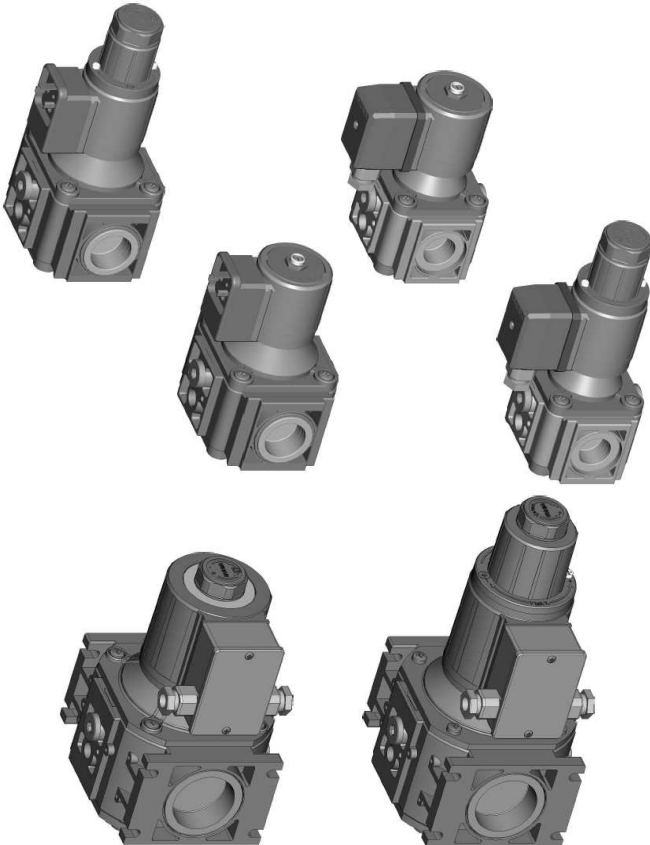


**EGN25* ..
EGN30* ..
EGN40* ..
SERIES**

**GAS SOLENOID VALVES WITH 3/4", 1"
AND 1 1/2" CONNECTIONS AND
OPERATING PRESSURE UP TO 500 mbar**



GENERAL DESCRIPTION

This series of solenoid valves is of normally closed type, suitable for domestic and industrial applications, supplied in alternate or direct current and inclusive of an inbuilt rectifier circuit enabling to make actions as noiseless as possible; a metal mesh filter on the inlet prevents the entrance of foreign matters > 1 mm.

It is possible to have a fast opening or a slow opening valve (obtained by a special hydraulic shock-absorber), with flow adjustment and fast opening initial flow adjustment.

All versions can be connected by means of suitable fixing brackets, provided with by-pass solenoid valves and pressure test points upstream and downstream.

Gas valves of this series, conforming to EN161, have a CE type Certificate (CE Reg. N° 63AQ0626) in accordance to European Directives 90/396 and 93/68.

TECHNICAL FEATURES

| | |
|------------------------|--|
| Class: | A |
| Group: | 2 |
| Supply voltage (1): | 230 Vac / 50-60 Hz 110 Vac / 50-60 Hz |
| Operating temperature: | -10°C / +60°C |
| Closing time: | ≤ 1s |
| Opening time: | ≤ 1s (quick opening versions only) |
| Protection rating: | GMO IP54 GFD IP54 |
| Mounting: | vertical and horizontal |
| Body: | die-cast aluminium |
| Core hitch: | PG9 |

(1) Versions with different supply voltage are available.

INSTALLATION

- Respect the applicable national and European standards (e.g. EN 60335-1) regarding electrical safety.
- Assemble the valve to the installation so that the arrow on the valve body has the same direction as the fuel flow.
- During the assembly of the valve to the installation piping, avoid twisting on the sheath and always use an hexagonal key to be fitted to the valve body.
- Make sure that no foreign matters have entered the valve body.
- Make sure that the max. fuel input pressure never exceeds the value appearing on the label.

SOLENOID VALVE CONNECTIONS

It is possible to connect two valves by two fixing brackets and an O-ring to ensure the sealing. The whole system is blocked by two screws, as shown in Fig. 1. This method allows to avoid the expensive use of threaded junctions.

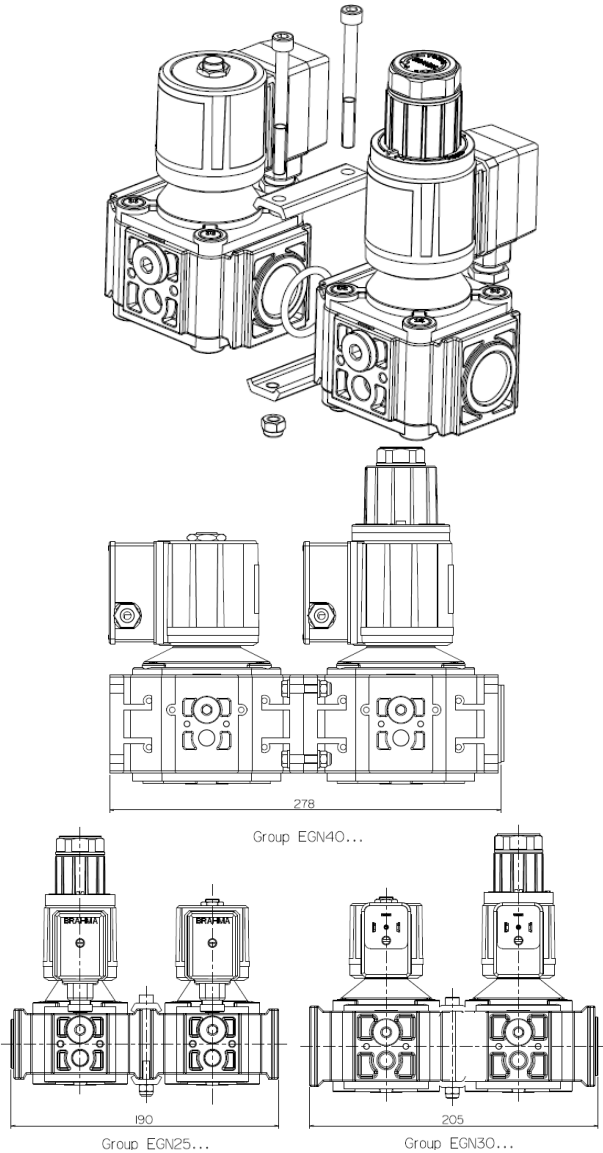


Fig. 1

DIRECTIONS FOR EGN25*L... EGN30*L... AND EGN40*L... VALVE ADJUSTMENT

Flow adjustment

To adjust the gas flow, remove one of the two screws used to fasten the lag group (the non-enamelled one, marked with 4 in Fig. 2) and rotate the whole group clockwise to reduce the flow or in the opposite direction to increase it.

Opening time adjustment

After removing the top protection, by rotating it counter-clockwise, act on the adjustment screw marked with 1 in Fig. 2; by rotating it clockwise the opening time becomes longer, by rotating it in the opposite direction the opening time becomes shorter.

Quick release initial flow adjustment

After removing the top protection by rotating it counter-clockwise, if you rotate the nut marked with 2 in Fig. 2 clockwise, the initial release will be reduced; if you rotate the same nut counter-clockwise, the initial release will be increased.

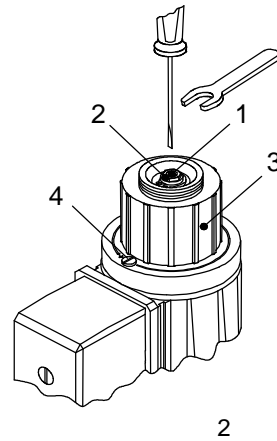


Fig.

DIRECTIONS FOR EGN25*SR... EGN30*SR... AND EGN40*SR... VALVE ADJUSTMENT

Flow adjustment

After removing the top protection by rotating it counter-clockwise, rotate the screw marked with 1 in Fig. 3 clockwise to reduce the flow, rotate it in the opposite direction to increase the same.

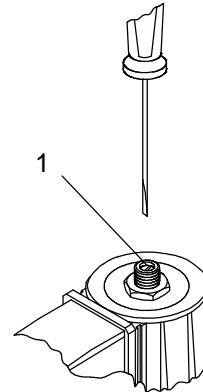


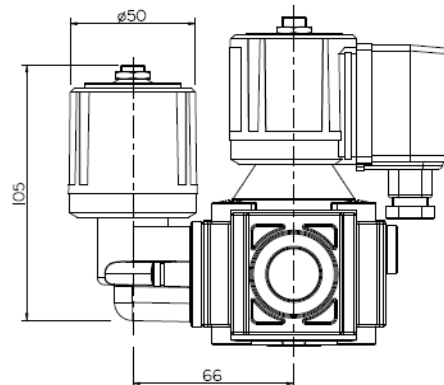
Fig. 3

SOLENOID VALVES WITH BY-PASS

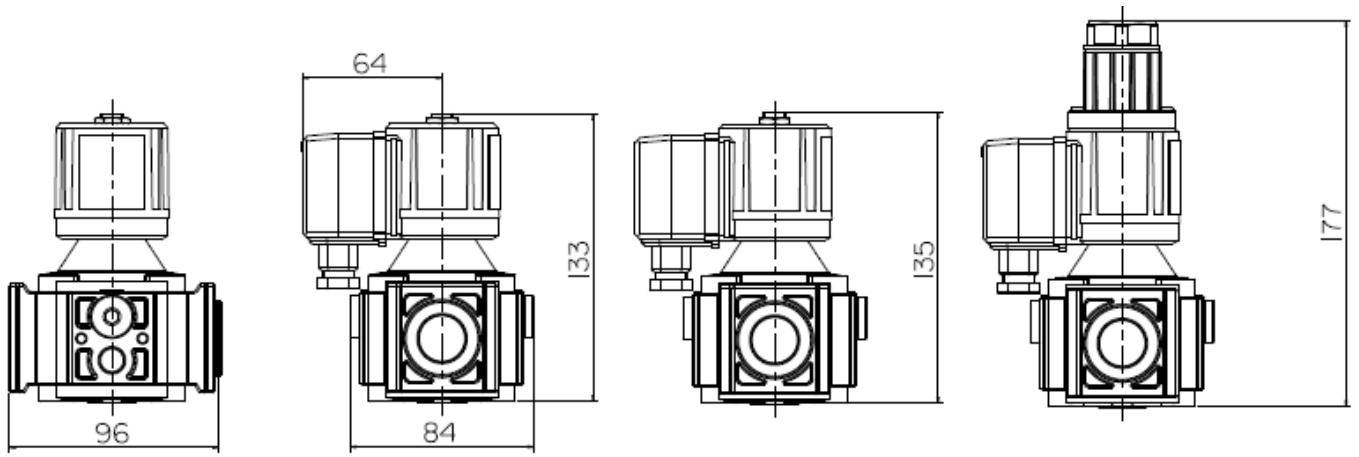
All versions of EGN25*... EGN30*... and EGN40*... valves can be equipped with a by-pass valve (with orifice diameter 11 mm) directly fitted on the body. In this way the installation of a separated by-pass valve is avoided.

Both to the main valve and to the by-pass valve, flow is given from the same inlet gas pipe, even if they have different electrical controls.

The by-pass valve can be provided with fast or slow opening and can be with or without flow adjuster, but it is anyway inclusive of an inside rectifier circuit enabling to use suitable attenuators to make its actions as noiseless as possible.



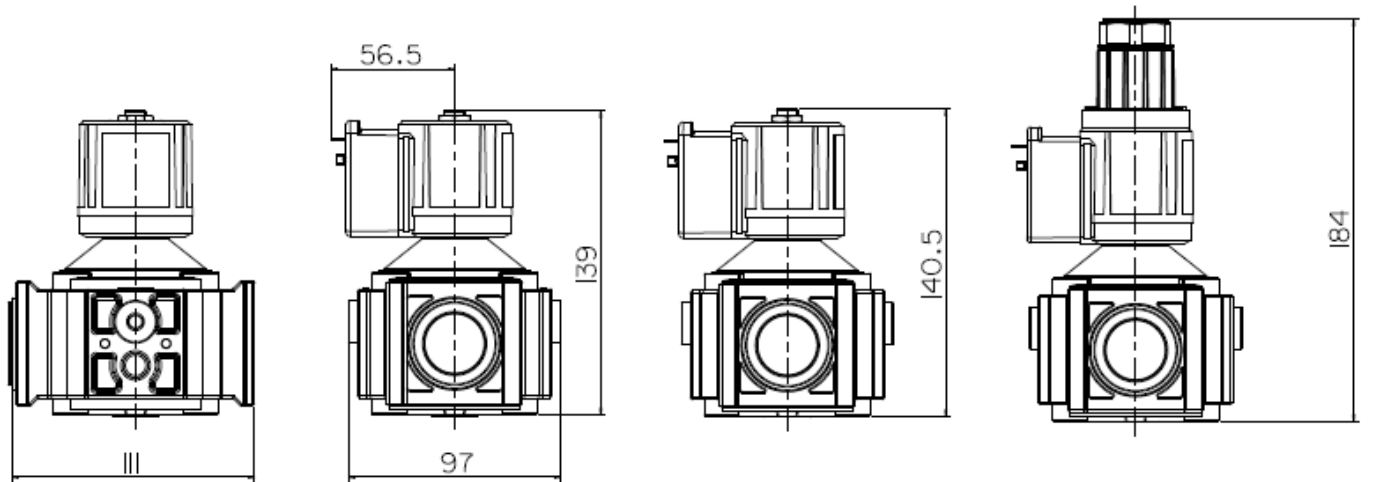
OVERALL DIMENSIONS



EGN25*S+GMO

EGN25*SR+GMO

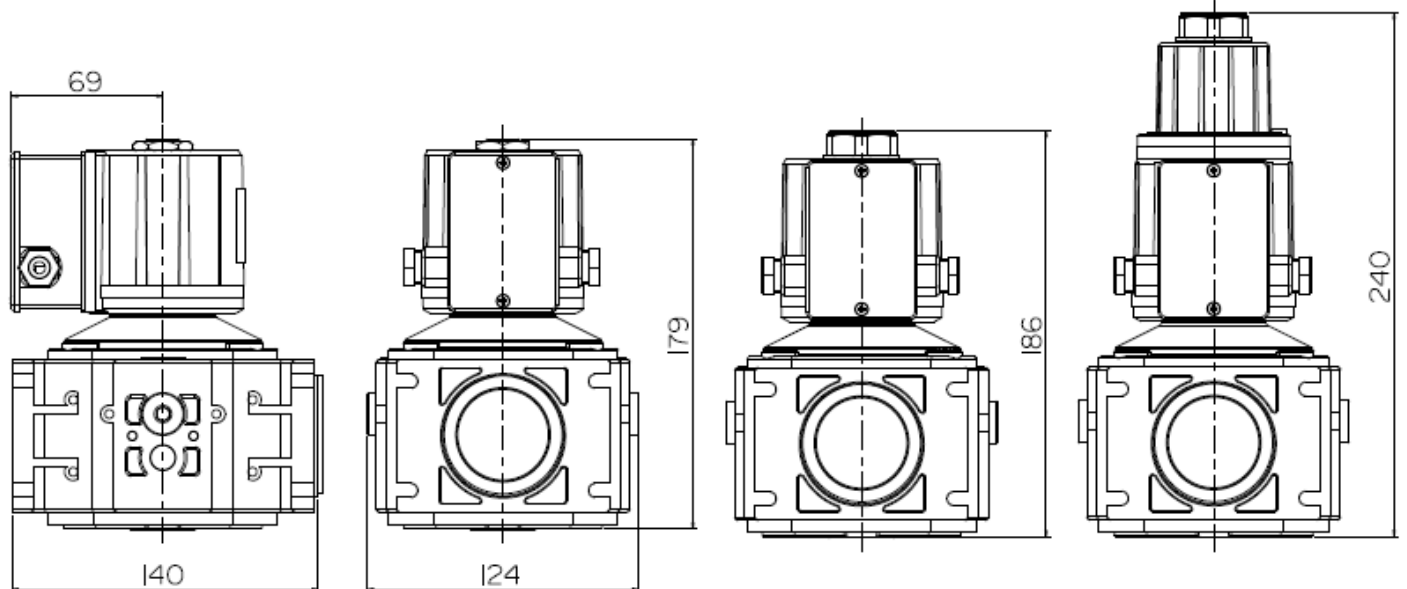
EGN25*L+GMO



EGN30*S+GFD

EGN30*SR+GFD

EGN30*L+GFD



EGN40*S+GMO

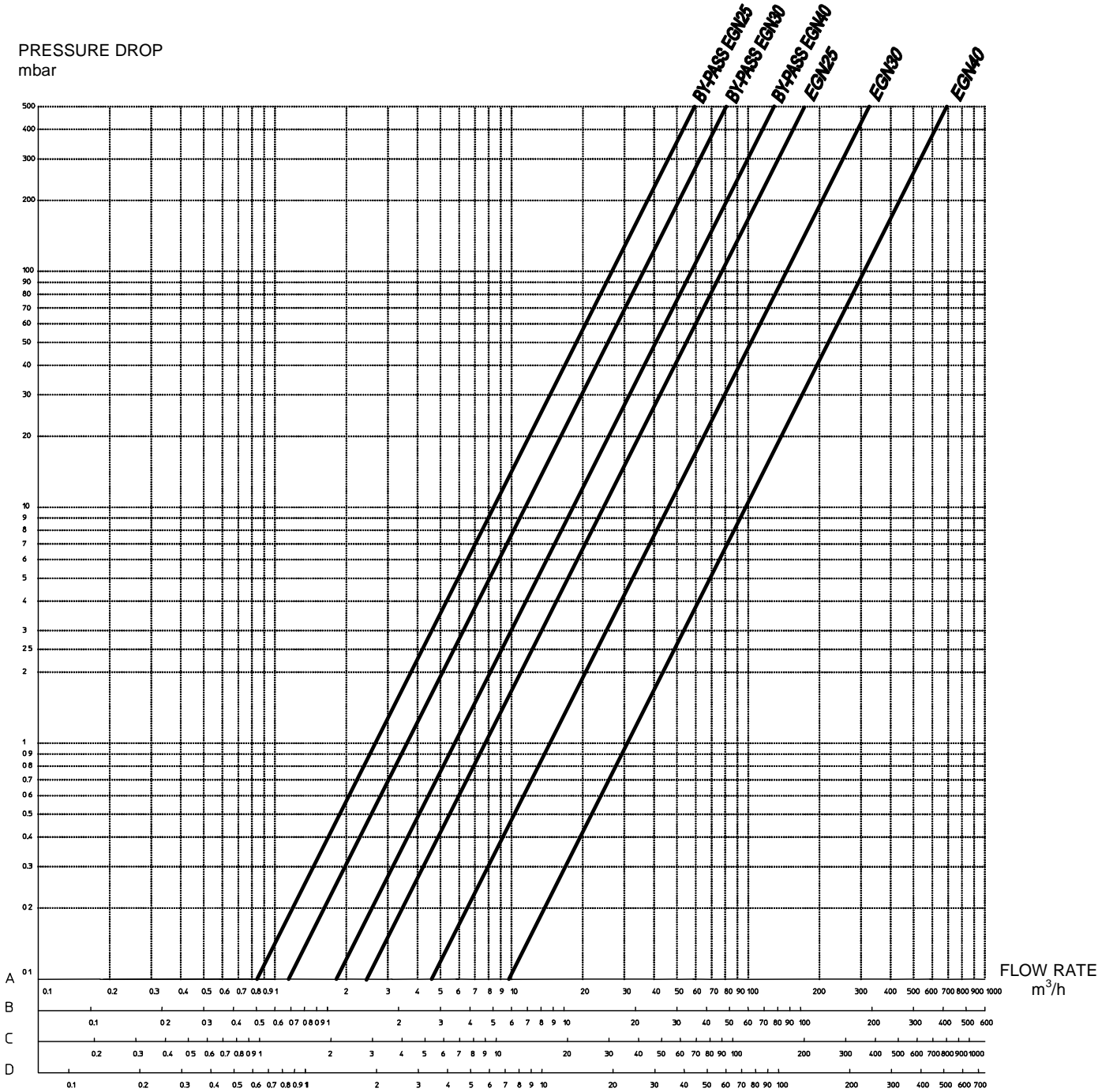
EGN40*SR+GMO

EGN40*L+GMO

Note:
 "GFD" and "GMO" connections do not affect the gas valve overall dimensions, which remain the same.

DIAGRAM

PRESSURE DROP
mbar



- A : Standard flow rate m³/h of NATURAL GAS relative density 0.554
- B : Standard flow rate m³/h of LPG relative density 1.54
- C : Standard flow rate m³/h of TOWN GAS relative density 0.411
- D : Standard flow rate m³/h of AIR relative density 1

TYPE REFERENCES

EGN30 * S R P * S R S 15* G FD 8 P D 230/50-60

Type _____

| Type | Description |
|-------|-----------------------------------|
| EGN25 | G3/4" inlet-outlet Ø25 orifice. |
| EGN30 | G1" inlet-outlet Ø30 orifice. |
| EGN40 | G1 1/2" inlet-outlet Ø40 orifice. |

Opening type (fast/slow) _____

| Type | Description |
|------|--|
| S | Fast opening valve. |
| L | Slow opening valve (this version is inclusive of flow adjuster). |

Flow adjustment _____

Valve fitted with equipment for flow adjustment.

Pressure test point _____

Valve inclusive of pressure test point with G1/4" connections.

Valve fitted with BY-PASS _____

By-pass valve supply voltage and connections are the same as the main gas valve; therefore both "GMO" or both "GFD".

By-pass type _____

| Type | Description |
|------|------------------------------------|
| S | Fast opening. |
| SR | Fast opening with flow adjustment. |
| L | Slow opening with flow adjustment. |

Supply voltage _____

| Type | Description |
|-----------|--------------------|
| 110/50-60 | 110 Vac / 50-60 Hz |
| 230/50-60 | 230 Vac / 50-60 Hz |

Gas pressure switch position _____

| Type | Description |
|------|-------------|
| D | Right |
| S | Left |

Gas pressure switch type _____

| Type | Description |
|------|--------------------|
| P | Fixed setting |
| PR | Adjustable setting |

Pressure test point position _____

| Type | Description |
|------|------------------|
| 5 | Downstream left |
| 6 | Downstream right |
| 7 | Upstream left |
| 8 | Upstream right |

Connection type _____

| Type | Description |
|------|--|
| FD | Connection with fast-on DIN |
| MO | Connection with terminal board. (EGN25-EGN40 version only) |

Winding type _____

| Type | Descrizione |
|------|--|
| C | Supply in direct current. |
| G | Supply in alternate current, but valve operates in direct current thanks to an inbuilt rectifier circuit. ("MO" and "FD" connection versions only) |

By-pass model _____

| Type | Description |
|------|--|
| | Standard by-pass |
| 15 | By-pass using EG15 valve (EGN30 version only) |
| 25 | By-pass using EGN25 valve (EGN40 version only) |

By-pass position _____

| Type | Description |
|------|-------------|
| D | Right |
| S | Left |

SUMMARY TABLE

| Type | Operating pressure (mbar) | Orifice diameter (mm) | Connection | Coil | Consumption | Consumption | Flow |
|----------|---------------------------|-----------------------|------------|----------|-------------|-------------|---------------------------|
| | | | | | (W) 230Vac | (W) 110Vac | (m³/h gas with ΔP2.5mbar) |
| EGN25*S | 0 ÷ 500 | 25 | G3/4" | BE10*G.. | 20VA | 18VA | 13 |
| EGN25*SR | 0 ÷ 500 | 25 | G3/4" | BE10*G.. | 20VA | 18VA | 13 |
| EGN25*L | 0 ÷ 500 | 25 | G3/4" | BE10*G.. | 20VA | 18VA | 13 |
| EGN30*S | 0 ÷ 500 | 30 | G1" | BE10*G.. | 20VA | 18VA | 23 |
| EGN30*SR | 0 ÷ 500 | 30 | G1" | BE10*G.. | 20VA | 18VA | 23 |
| EGN30*L | 0 ÷ 500 | 30 | G1" | BE10*G.. | 20VA | 18VA | 23 |
| EGN40*S | 0 ÷ 500 | 40 | G1 1/2" | BE8*G.. | 48W | 48W | 50 |
| EGN40*SR | 0 ÷ 500 | 40 | G1 1/2" | BE8*G.. | 48W | 48W | 50 |
| EGN40*L | 0 ÷ 500 | 40 | G1 1/2" | BE8*G.. | 48W | 48W | 50 |

(1) In the versions equipped with by-pass valve type "L" the standard operating pressure range is 0÷250 mbar

ATTENTION → Company Brahma S.p.A. takes no responsibility for any damage resulting from Customer tampering with the device.

BRAHMA S.p.A.

Via del Pontiere, 31
37045 Legnago (VR) – ITALY
Tel. +39 0442 635211 - Fax +39 0442 25683
<http://www.brahma.it>
E-mail : brahma@brahma.it

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