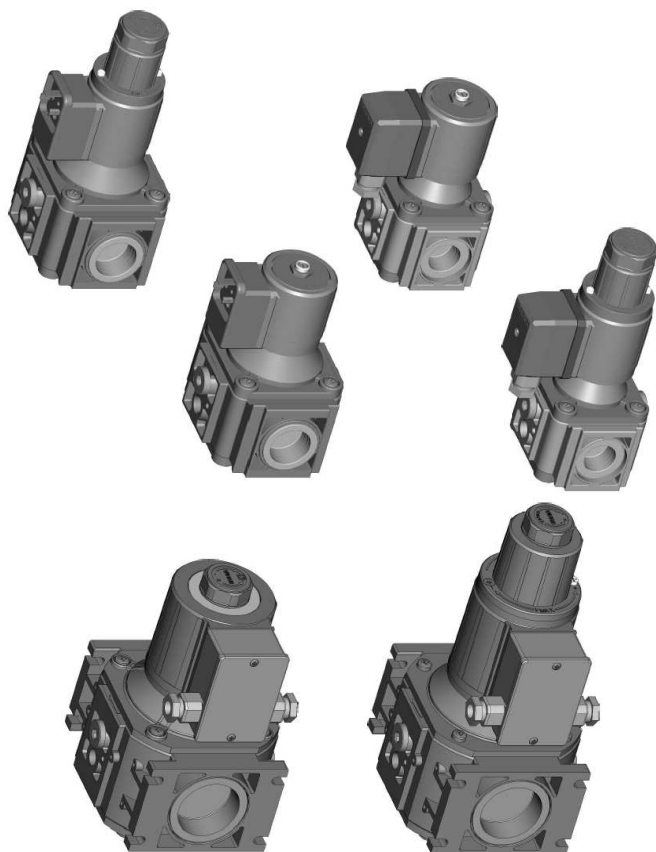


EGN25* .. EGN30* .. EGN40* .. SERIES

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.

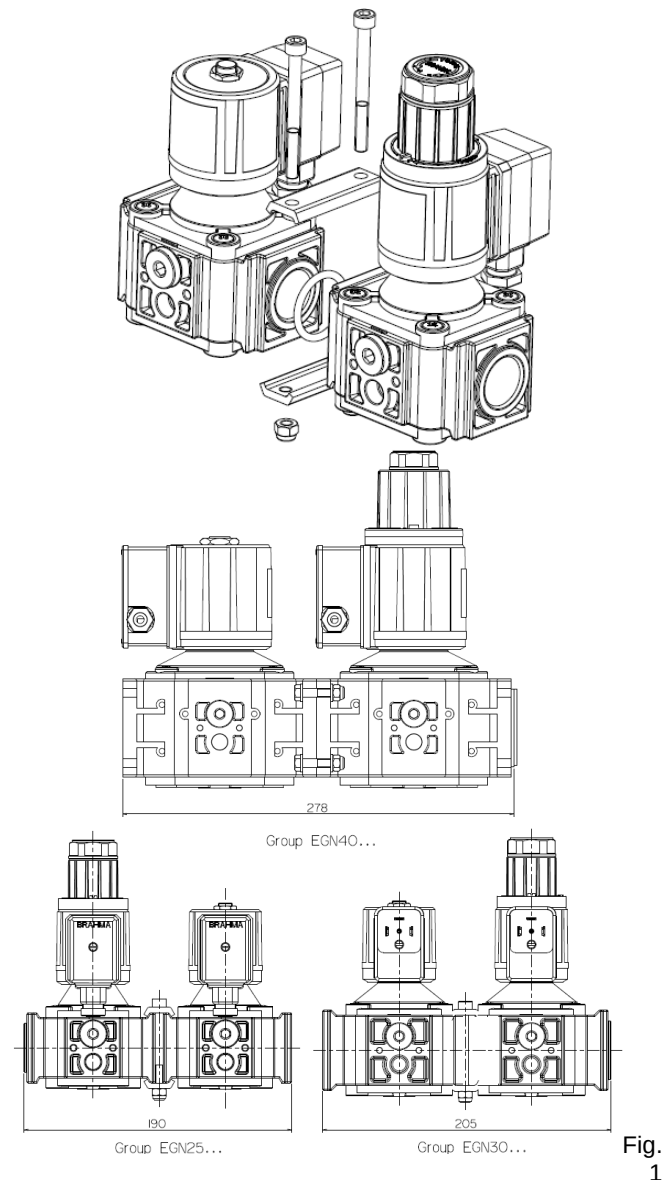


Fig. 1

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.

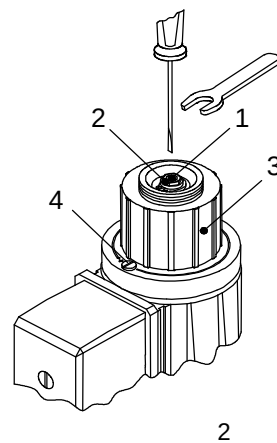


Fig.

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.

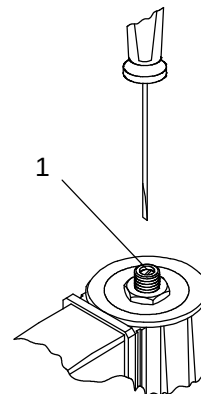


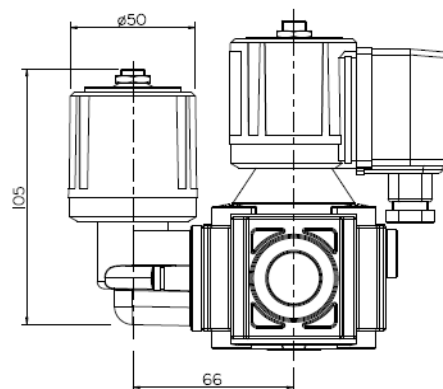
Fig. 3

SOLENOID VALVES WITH BY-PASS

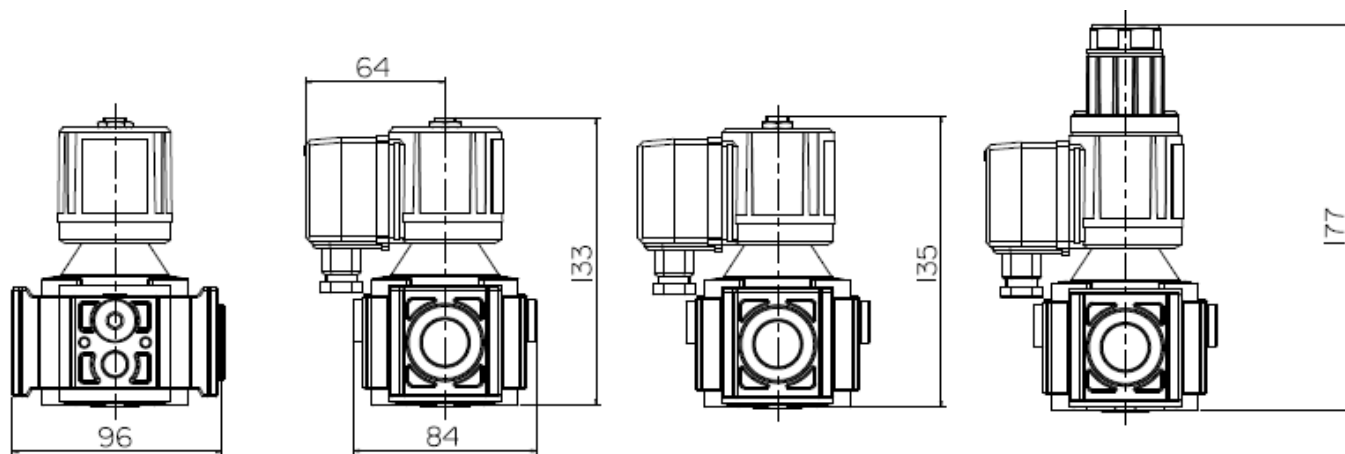
All versions of EGN25*... EGN30*... and EGN40*... valves can be equipped with a by-pass valve (with orifice diameter 11 mm) directly fitted on the body. In this way the installation of a separated by-pass valve is avoided.

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.



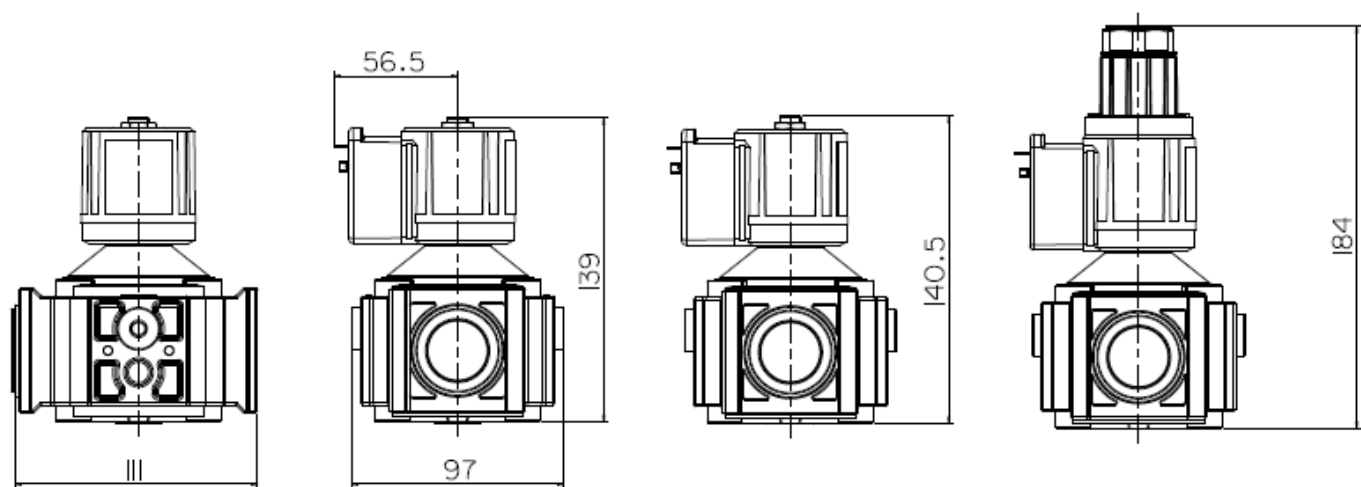
OVERALL DIMENSIONS



EGN25*S*GMO

EGN25*SR*GMO

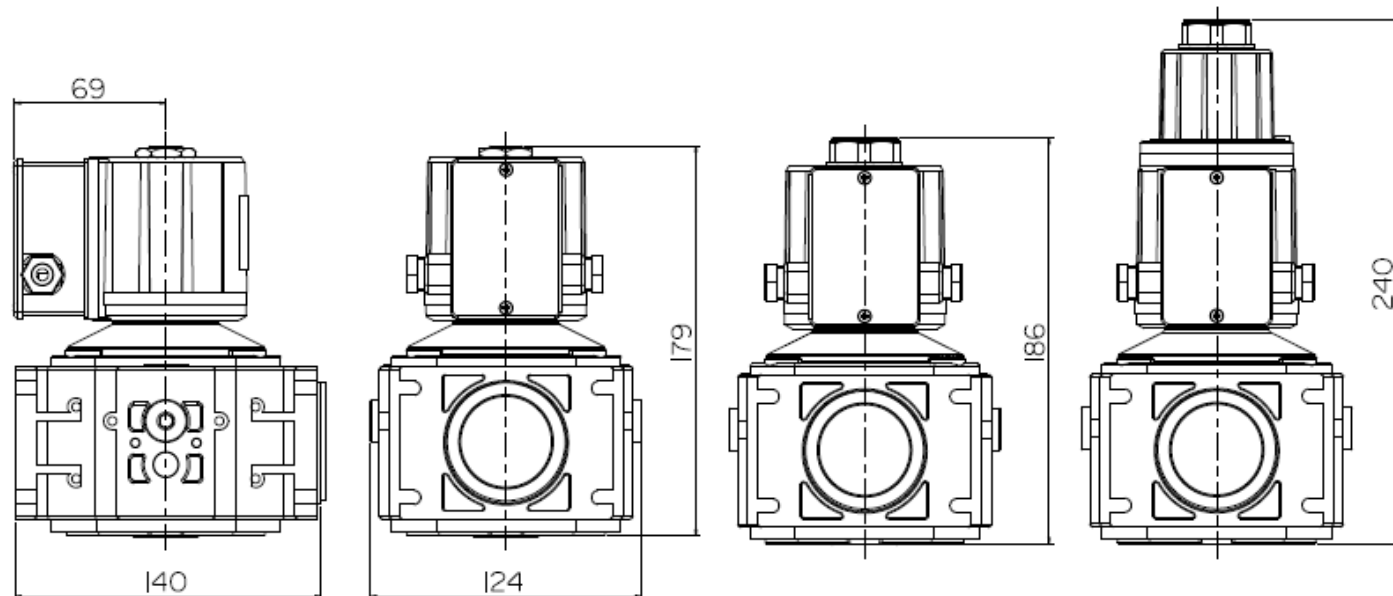
EGN25*L*GMO



EGN30*S*GFD

EGN30*SR*GFD

EGN30*L*GFD



EGN40*S*GMO

EGN40*SR*GMO

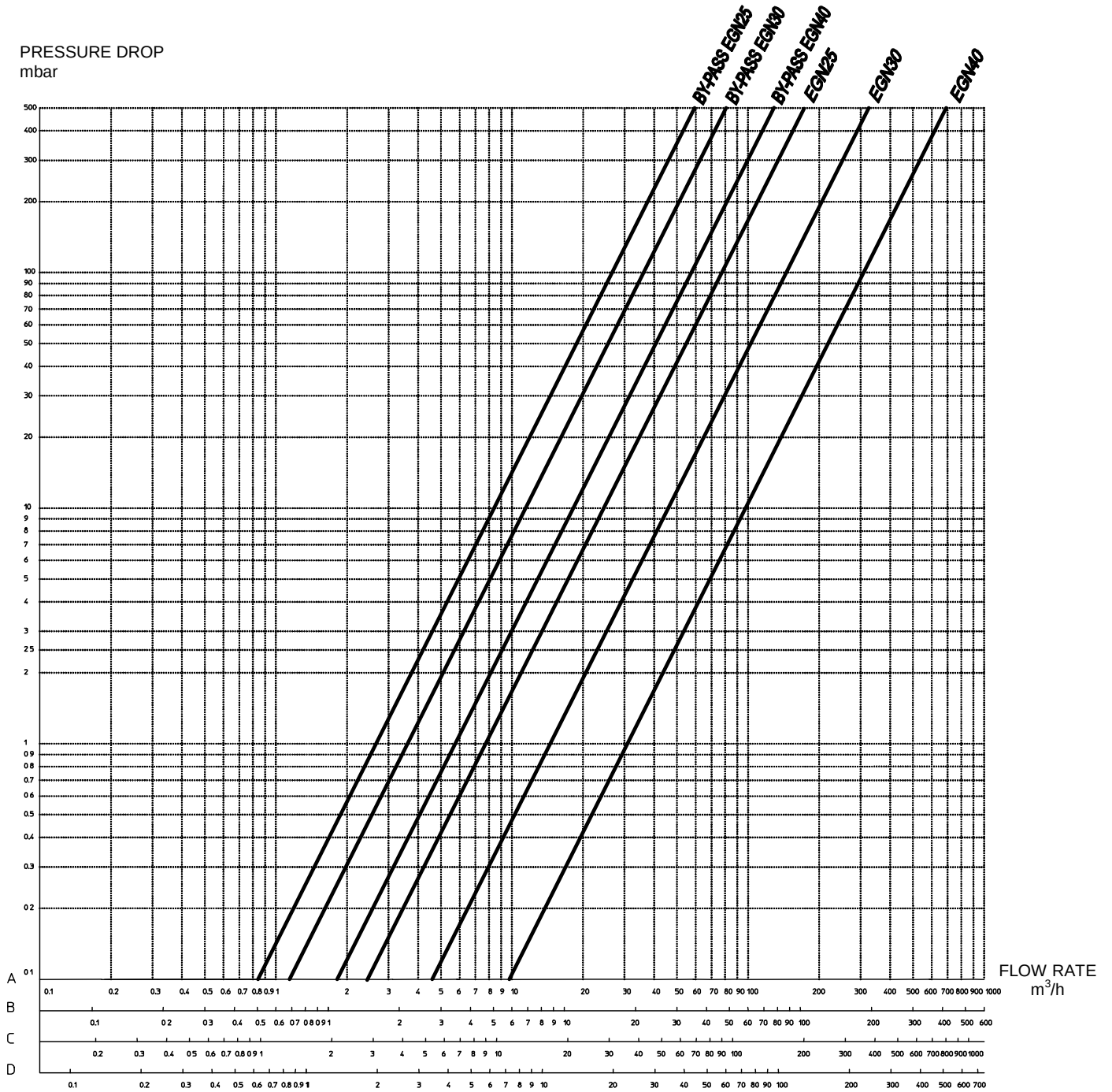
EGN40*L*GMO

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 (W) 230Vac	Consumption (W) 110Vac	Flow (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