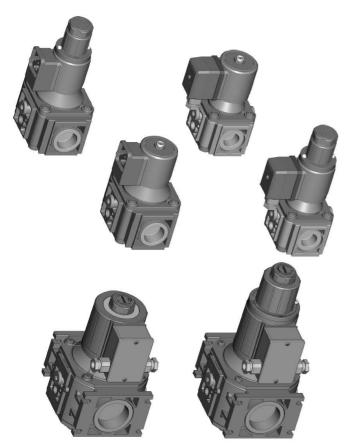


EGN25* .. EGN30* .. EGN40* .. SERIES

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:	Α
Group:	2
Supply voltage (1):	230 Vac / 50-60 Hz
	110 Vac / 50-60 Hz
Operating temperature:	-10℃ / +60℃
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

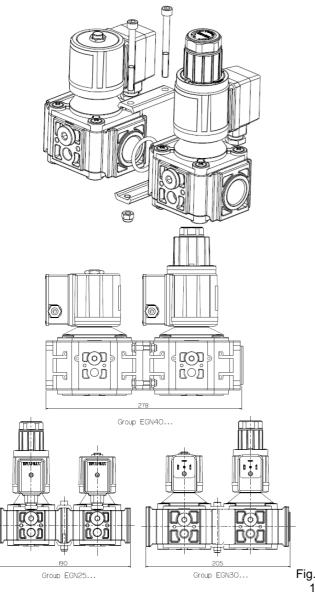
(1) Versions with different supply voltage are available.

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.



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 counterclockwise, 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 counterclockwise, 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.

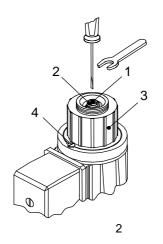


Fig.

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

Flow adjustment

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

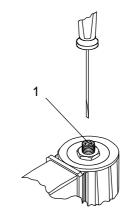


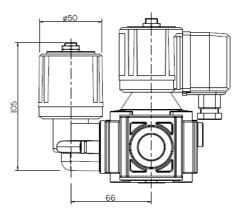
Fig. 3

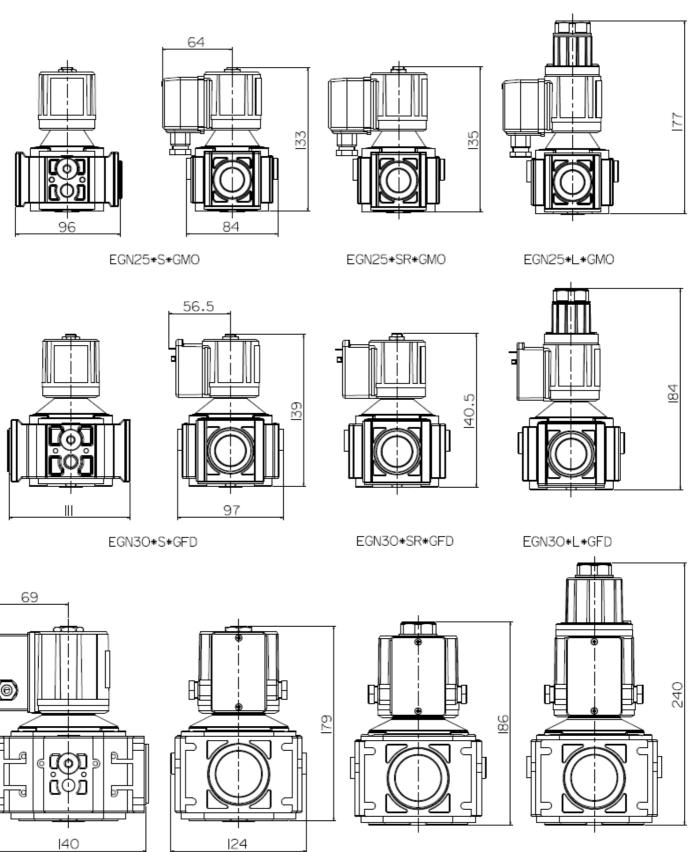
SOLENOID VALVES WITH BY-PASS

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.





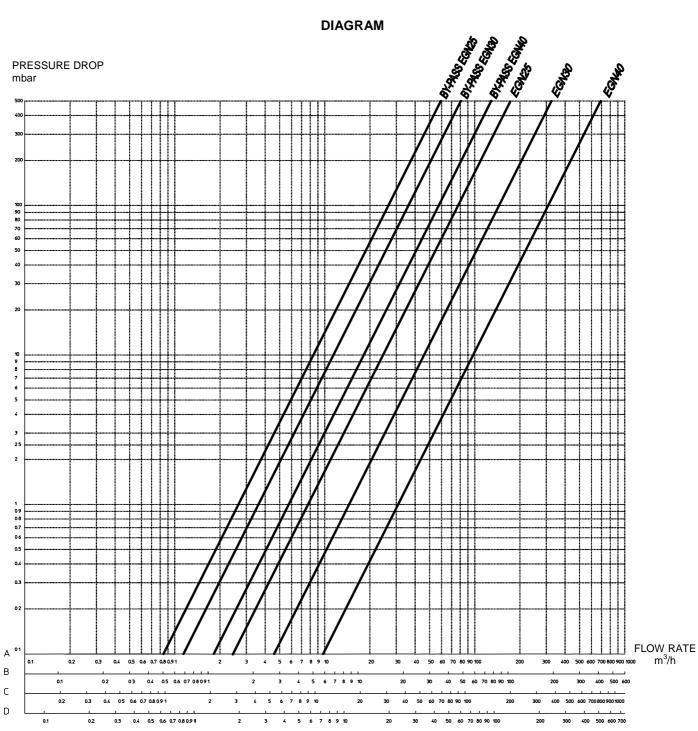
EGN40*S*GMO

EGN40*SR*GMO

EGN40*L*GMO

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

DIAGRAM



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	RE	ERE	ENCES					
<u>EGN30</u> * <u>S</u> <u>R</u> <u>P</u> * <u>S</u> <u>I</u>	<u>R S</u>	1 <u>5</u> *	G	<u>FD 8</u>	Ρ	D	230/	50-60	
								Supply v	roltage
Type								Туре	e Description
Type Description								110/50	
EGN25 G3/4" inlet-outlet Ø25								230/50	-60 230 Vac / 50-60 Hz
Office.								Gas pres	ssure switch position
EGN30 orifice.								Туре	Description
EGN40 G1 1/2" inlet-outlet Ø40								D	Right
orifice.								S	Left
Opening type (fast/slow)								Gas pressure switch type	
Type Description								Туре	Description
S Fast opening valve.								Р	Fixed setting
Slow opening valve (this								PR	Adjustable setting
L version is inclusive of flow adjuster).								Pressure	e test point position
								Туре	Description
Flow adjustment								5	Downstream left
Valve fitted with equipment for flow								6	Downstream right
adjustment.								7	Upstream left
								8	Upstream right
Pressure test point								Connect	ion type
Valve inclusive of pressure test point with G1/4" connections.								Туре	Description
point with G1/4 connections.								FD	Connection with fast-on DIN
Valve fitted with BY-PASS								МО	Connection with terminal board. (EGN25-EGN40 version only)
By-pass valve supply voltage and connections are the same as the main gas valve; therefore								Winding	type
both "GMO" or both "GFD".								Туре	Descrizione
								C	Supply in direct current.
By-pass type Type Description S Fast opening. SR Fast opening with flow								G	Supply in alternate current, but valve operates in direct current thanks to an inbuilt rectifier circuit. ("MO" and "FD" connection versions only)
L Slow opening with flow								· By-pass	• • • •
adjustment.								Туре	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
								Туре	Description
								D	Right
								S	Left
SUMMARY TABLE									-

SUMMARY TABLE

Туре	Operating pressure (mbar)	Orifice diameter (mm)	Connection	Coil	Consumption (W) 230Vac	Consumption (W) 110Vac	Flow (m³/h gas with ∆P2.5mbar)
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