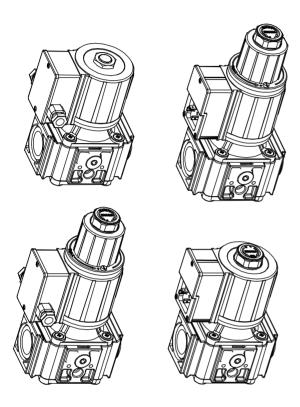


## EG25\* ... EG30\* ... SERIES

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



#### **GENERAL DESCRIPTION**

This series of solenoid valves are of normally closed type, suitable for civil and industrial applications, supplied with alternate or direct current and inclusive of inside rectification circuit which permitted to make actions as silent as possible; a wire-net filter on the inlet avoids the entrance of dirt of > 1 mm.

There is the possibility to have a fast opening or a slow opening valve (obtained by special hydraulic shockabsorber), with flow adjustment and fast opening initial flow adjustment.

All versions can be connected with suitable fixing brackets, provided with by-pass solenoid valves and pressure plugs 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:  $\leq 1s$ 

Opening time: ≤ 1s (quick opening versions only)

GMO IP54

GFD IP54

Mounting: vertical and horizontal Body: die-cast aluminium

Core hitch: PG9

(1) Versions with different supply voltages are available.

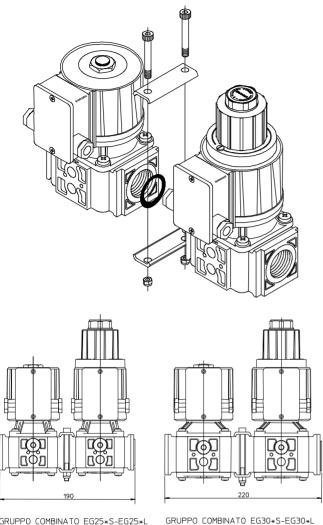
## **INSTALLATION**

Protection degree:

- Respect the applicable national and European standards (e.g. EN60335-1) 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 VALVES CONNECTIONS

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



GRUPPO COMBINATO EG25\*S-EG25\*L

#### DIRECTIONS FOR EG25\*L... AND EG30\*L... VALVES **ADJUSTMENT**

## Flow adjustment

To adjust the gas flow, you have to remove one of the two screws used to fasten the lag group (the not enamelled one, marked with 4 in Fig. 2) and rotate clockwise the whole group to reduce the flow or in the opposite direction to increase it.

## Opening time adjustment

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

## Quick release initial flow adjustment

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

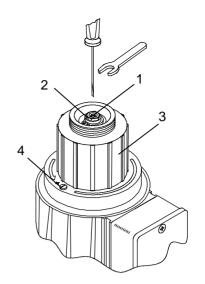


Fig. 2

#### DIRECTIONS FOR EG25\*SR... AND EG30\*SR... VALVES **ADJUSTMENT**

## Flow adjustment

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

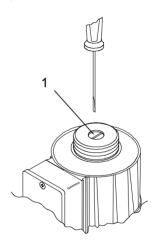


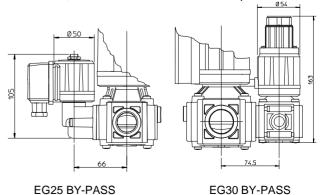
Fig. 3

## **SOLENOID VALVES WITH BY-PASS**

All versions of EG25\*... and EG30\*... valves can be equipped with a by-pass valve (with orifice diameter 11 mm) directly fitted on the body. In this way it is avoided the installation of a separated by-pass valve.

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

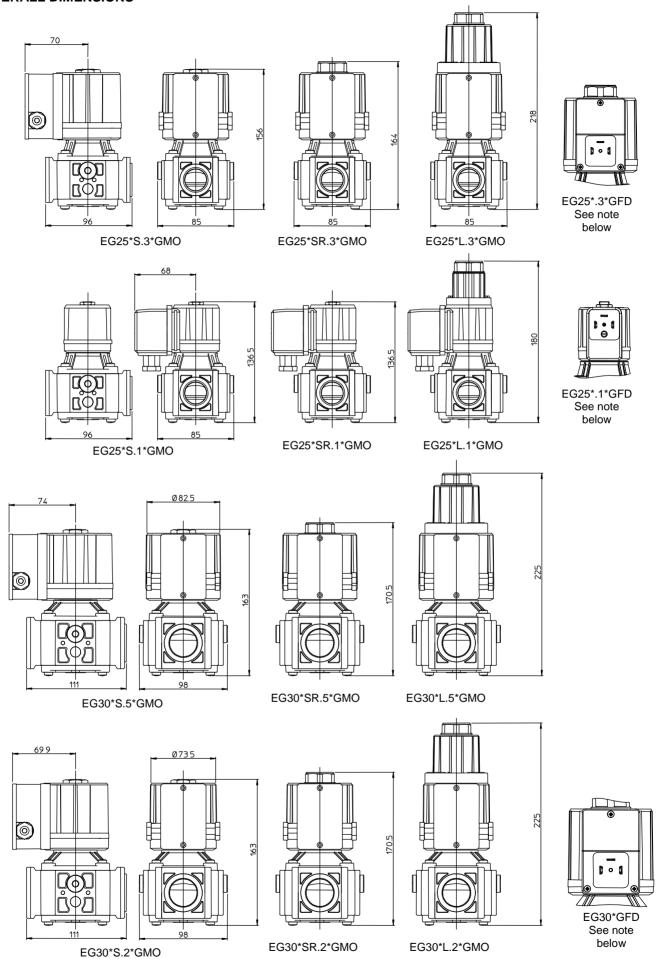
By-pass valve can have fast or slow opening, and can be with or without flow adjuster, but anyway inclusive of an inside rectification circuit, which permitted to use suitable attenuators, to make its actions as silent as possible.



2708 r02

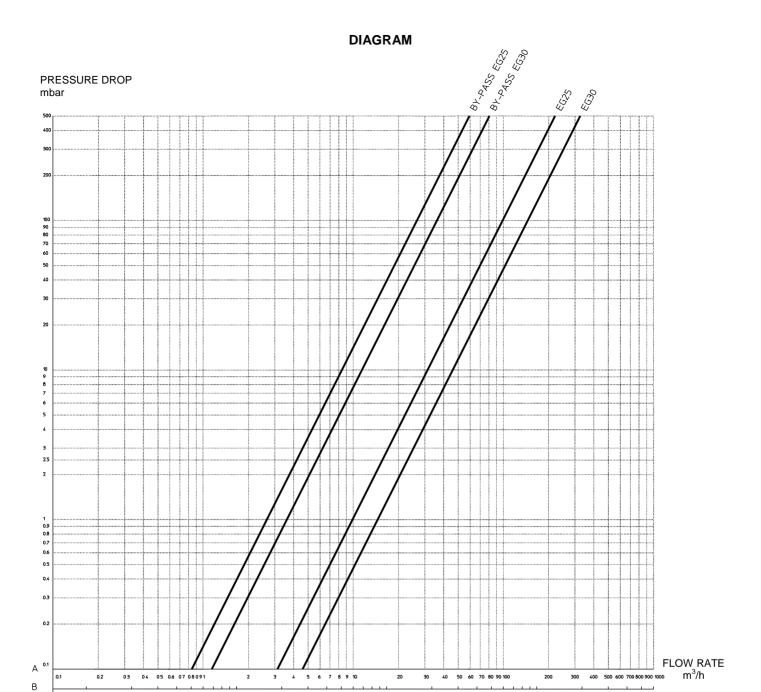
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## **OVERALL DIMENSIONS**



"GFD" and "GMO" connections don't affect the gas valve's overall dimensions, which remain the same.

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0.3 0.4 0.5 0.6 0.7 0.8 0.9 1 A: Standard flow rate m<sup>3</sup>/h of NATURAL GAS relative density 0.554

0.3 04 05 06 0.7 0.8 0.9 1

2

B: Standard flow rate m<sup>3</sup>/h of LPG relative density 1.54

0.3 0.4 0.5 0.6 0.7 0.8 0.9 1

- C: Standard flow rate m<sup>3</sup>/h of TOWN GAS relative density 0.411
- D : Standard flow rate m<sup>3</sup>/h of AIR relative density 1

02

0.2

0.1

0.2

C

D

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4 5 6 7 8 9 10

4 5 6 7 8 9 10

4 5 6 7 8 9 10

20

40 50 60 70 80 90 100

30

400 500 600

200

300

400 500 600 700 800 900 1000

300 400 500 600 700

40 50 60 70 80 90 100

40 50 60 70 80 90 100

## **TYPE REFERENCES**

## EG30 \* S R P 2 \* S R S 15 \* G FD 8 P D 230/50-60

#### Туре Type Description G3/4" inlet-outlet Ø25 EG25 orifice G1" inlet-outlet Ø30 EG30 orifice Opening type (fast/slow) Description Type Fast opening valve Slow opening valve (this L version is inclusive of flow adjuster). Flow adjustment Valve fitted with equipment for flow adjustment. Pressure plug

Valve inclusive of pressure plug with

G1/4" connections.

Operating pressure range

See summary table

Valve fitted with BY-PASS

By-pass valve supply voltage and connections are the same of 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

Туре	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
Р	Fixed setting
PR	adjustable setting

## Test pressure point position

Type	Description
5	Outlet left
6	Outlet right
7	Inlet left
8	Inlet right

#### Connection type

Type	Description					
FD	Connection with fast-on DIN					
МО	Connection with terminal board.					

## Winding type

Type	Descrizione				
С	Supply in direct current.				
G	Supply in alternate current, but				
	valve operates in direct current				
	thanks to an embodied				
	rectification bridge.				
	("MO" and "FD" connection				
	versions only)				

## By-pass model (EG30 only version)

Type	Description					
	Standard By-pass					
15	By-pass made up EG15 valve					

#### By-pass position

Type	Description
D	Right
S	Left

#### **SUMMARY TABLE**

Туре	Operating pressure (mbar)	Orifice diameter (mm)	Connection	Weight (g)	Coil	Consumption (W) 230Vac	Consumption (W) 110Vac	Flow (m³/h gas with ΔP2.5mbar)
EG25*S.1	0 ÷ 100	25	G3/4"	1280	BE10*G	20VA	18VA	15
EG25*S.3	$0 \div 500$	25	G3/4"	2170	BE8*G	33W	34W	15
EG25*SR.1	0 ÷ 100	25	G3/4"	1275	BE10*G	20VA	18VA	15
EG25*SR.3	$0 \div 500$	25	G3/4"	2180	BE8*G	33W	34W	15
EG25*L.1	0 ÷ 50	25	G3/4"	1390	BE10*G	25VA	in progress	15
EG25*L.3	$0 \div 350$	25	G3/4"	2415	BE8*G	33W	34W	15
EG30*S.2	0 ÷ 350 (1)	30	G1"	2350	BE8*G	33W	34W	23
EG30*S.5	$0 \div 500 (1)$	30	G1"	2780	BE9*G	35W	33W	23
EG30*SR.2	$0 \div 350(1)$	30	G1"	2360	BE8*G	33W	34W	23
EG30*SR.5	$0 \div 500 (1)$	30	G1"	2800	BE9*G	35W	33W	23
EG30*L.2	0 ÷ 200	30	G1"	2600	BE8*G	33W	34W	23
EG30*L.5	0 ÷ 350 (1)	30	G1"	3050	BE9*G	35W	33W	23

<sup>(1)</sup> 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. declines any responsibility for any damage resulting from the Customer's interfering with the device.

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