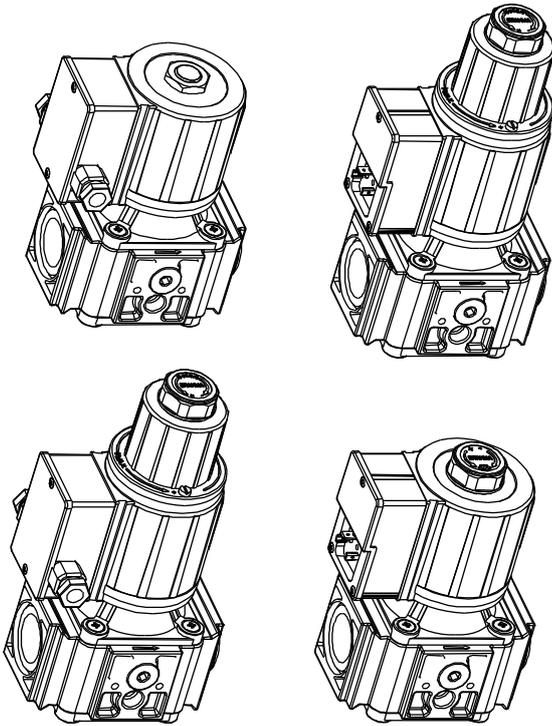


EG25* ... EG30* ... SERIES

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 shock-absorber), 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.

- **EC**- type certification in accordance with the new European **Gas Appliances Regulation (EU) 2016/426 (GAR)**;
- conformity to **EC** Low-voltage directive 2014/35/EU

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 degree:	GMO IP54 GFD IP54
Mounting:	vertical and horizontal
Body:	die-cast aluminium
Core hitch:	PG9

(1) Versions with different supply voltages are available.

DIRECTIONS FOR INSTALLATION AND MAINTENANCE

- This valve is a safety appliance and should not be modified. The manufacturer's responsibility and guarantee are invalidated in case the device is tampered with by the user.
 - The applicable national regulation and European standards (Ex. EN 60335-1 and EN 60335-2-102) related to the electrical safety must be respected;
 - 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 wrench 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.
 - All operations (installation, maintenance, etc.) must be carried out by a qualified technician.
 - Before any connection operation, completely isolate the system from power supply (multi-pole disconnection). Place the system safely to avoid accidental switch-on and make sure there is no voltage. If the system is not switched off, there is a risk of electric shock.
 - During and after any operation (installation, maintenance, etc.), make sure that the type and code are the ones provided, check the correct functioning and the internal and external thickness of the valve.
 - In the event of a fall or impact, the valves must not be started, as safety functions may be compromised even if no damage is visible to the outside.
 - Faulty valves or damaged must be unplugged from power supply and cannot be used.
 - The valve has a designed lifetime* based on the endurance tests in the standard EN 161. A summary of the conditions has been published by the European Control Manufacturers Association (Afecor) (www.afecor.org). The designed lifetime is based on use of the valve according to the manufacturer's technical notes. After reaching the designed lifetime in terms of the number of burner startup cycles, or the respective time of usage, the valve has to be replaced by authorized personnel.
- * The designed lifetime is not the warranty time specified in the Terms of Delivery.

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.

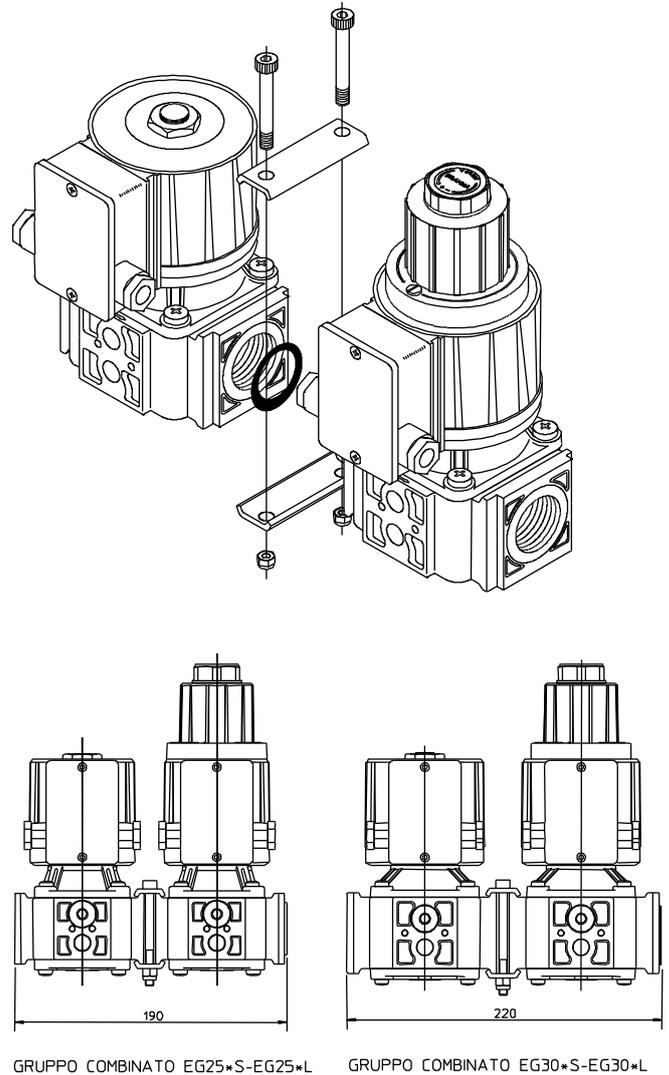


Fig. 1

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 it 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 it 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.

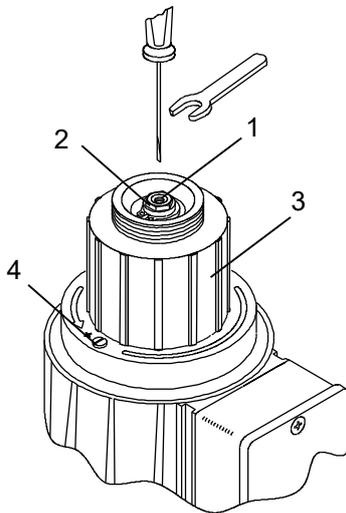


Fig. 2

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

Flow adjustment

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

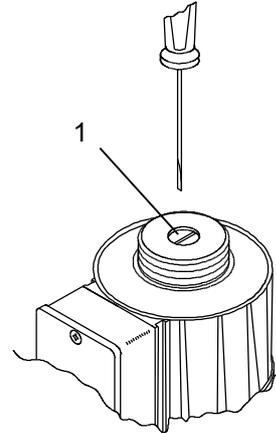


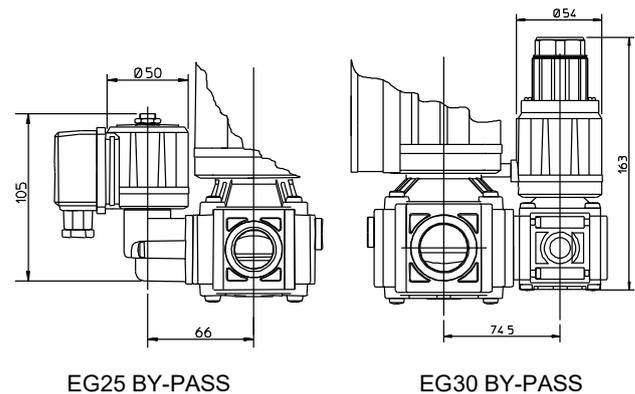
Fig. 3

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.

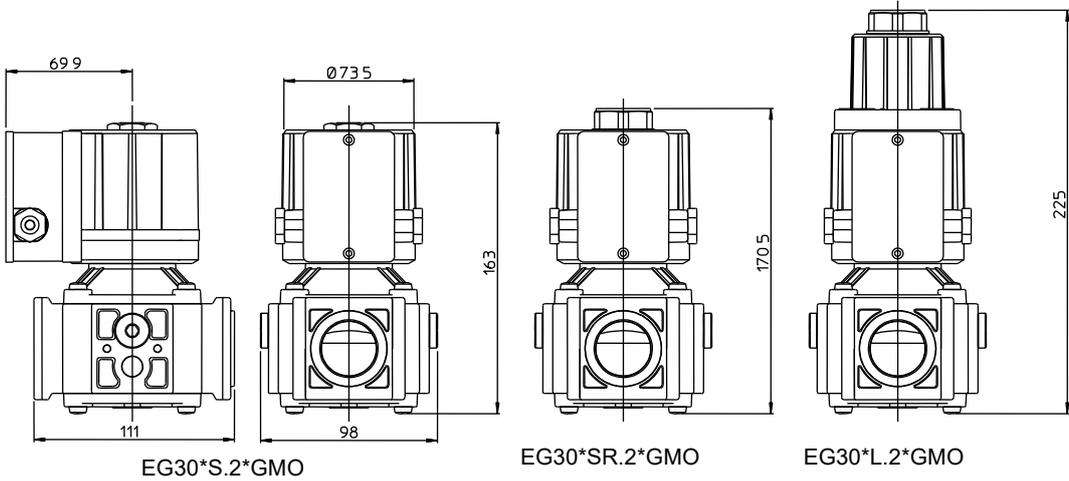
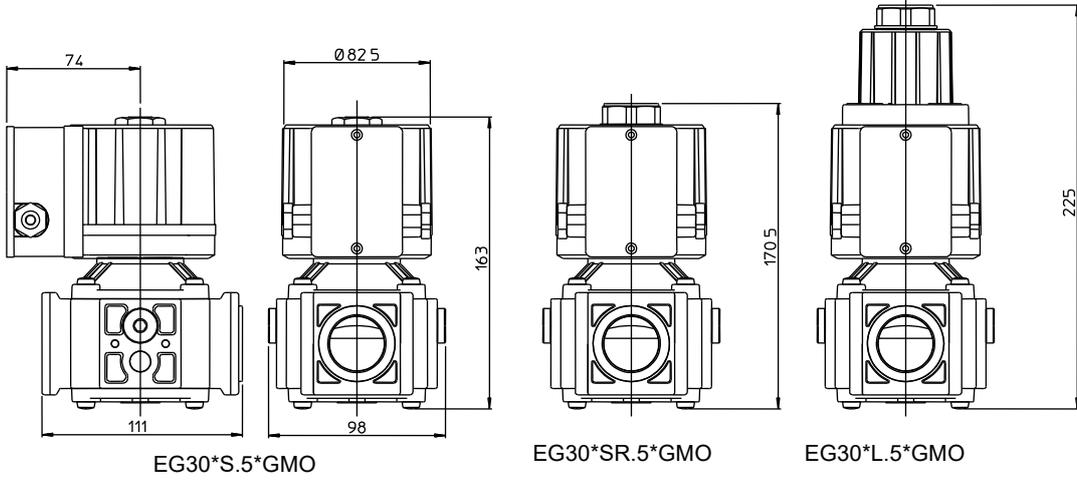
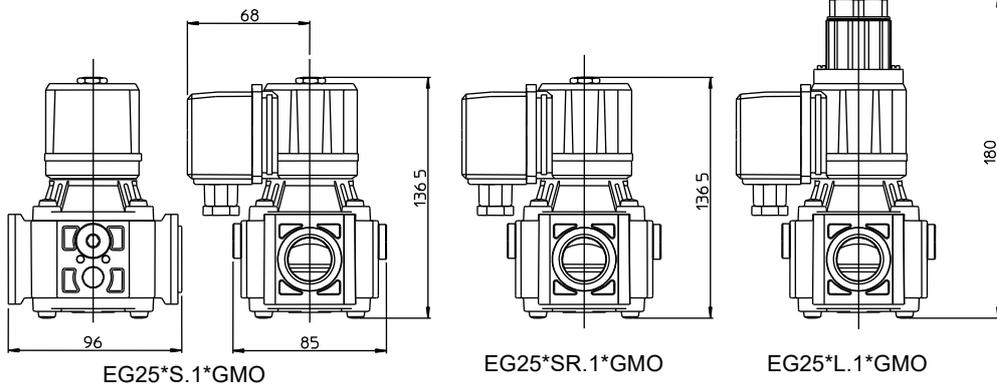
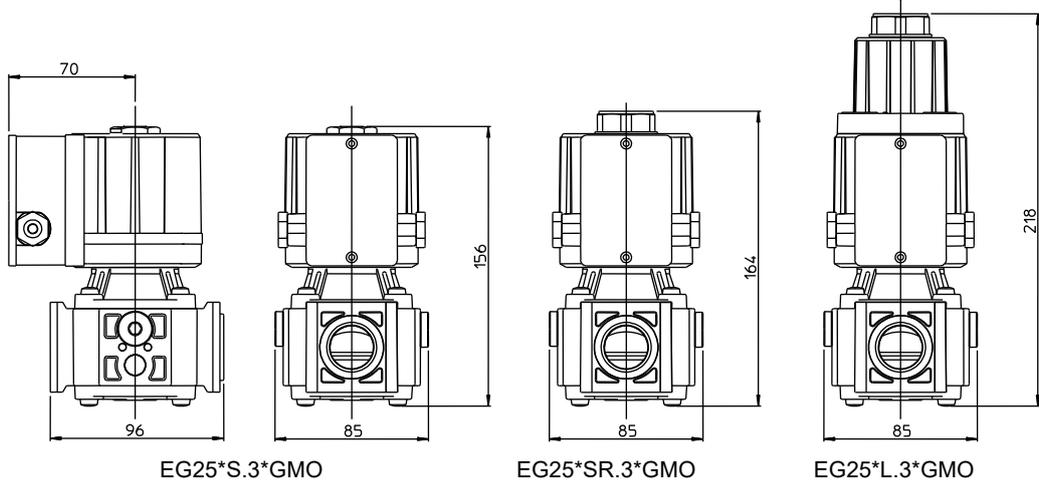
By-pass valve can have fast or slow opening, and can be with or without flow adjuster, but anyway inclusive of an inside rectification circuit, which permitted to use suitable attenuators, to make its actions as silent as possible.



EG25 BY-PASS

EG30 BY-PASS

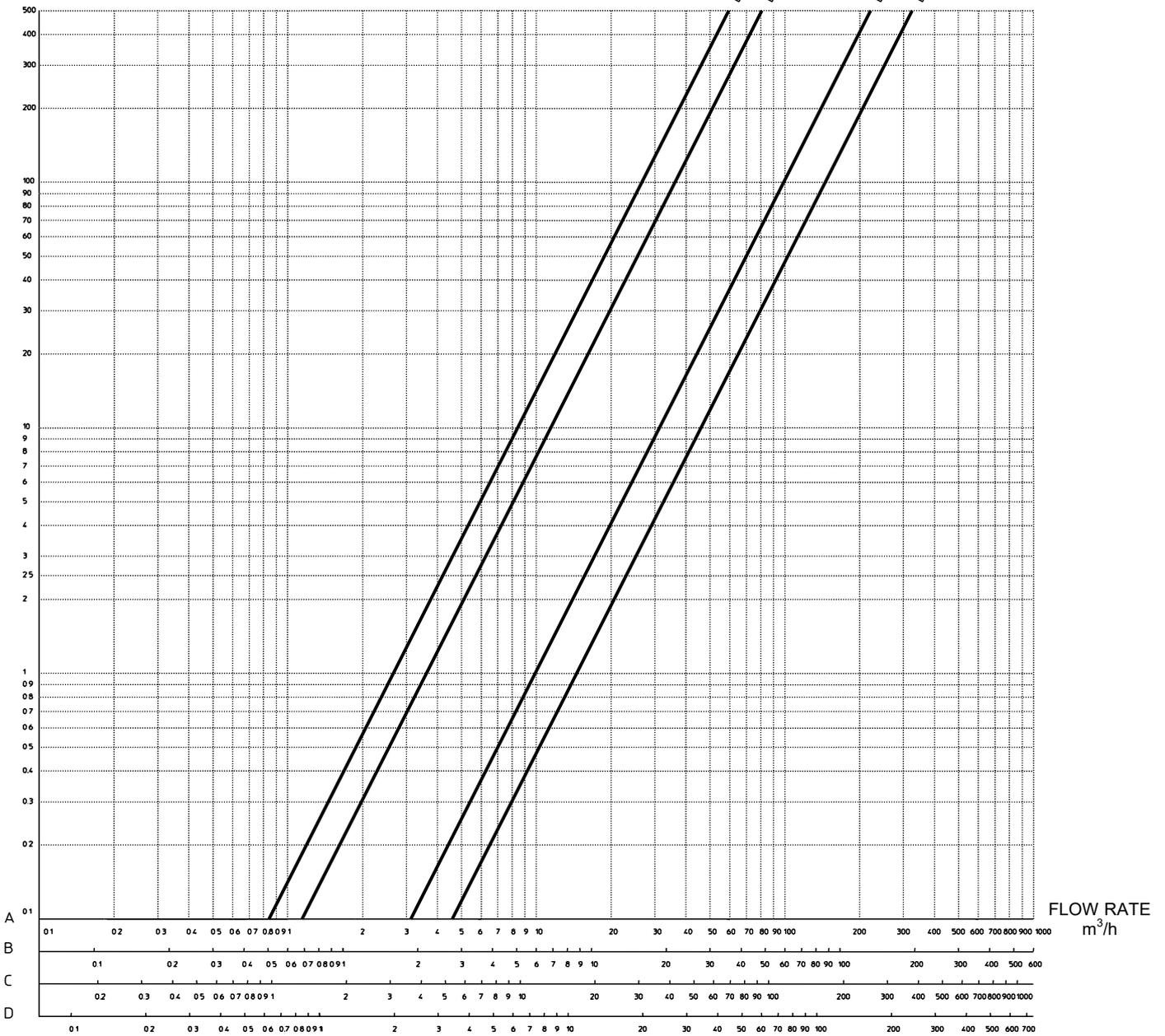
OVERALL DIMENSIONS



Note:
"GFD" and "GMO" connections don't affect the gas valve's 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

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

Type

Type	Description
EG25	G3/4" inlet-outlet Ø25 orifice.
EG30	G1" inlet-outlet Ø30 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 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

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

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
MO	Connection with terminal board.

Winding type

Type	Description
C	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

Type	DN	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	20	0 + 100	25	G3/4"	1280	BE10*G..	20VA	18VA	15
EG25*S.3	20	0 + 500	25	G3/4"	2170	BE8*G..	33W	34W	15
EG25*SR.1	20	0 + 100	25	G3/4"	1275	BE10*G..	20VA	18VA	15
EG25*SR.2	20	0 + 500	25	G3/4"	2180	BE8*G..	33W	34W	15
EG25*L.1	20	0 + 50	25	G3/4"	1390	BE10*G..	25VA	<i>in progress</i>	15
EG25*L.3	20	0 + 350	25	G3/4"	2415	BE8*G..	33W	34W	15
EG30*S.2	25	0 + 350 (1)	30	G1"	2350	BE8*G..	33W	34W	23
EG30*S.5	25	0 + 500 (1)	30	G1"	2780	BE9*G..	35W	33W	23
EG30*SR.2	25	0 + 350 (1)	30	G1"	2360	BE8*G..	33W	34W	23
EG30*SR.5	25	0 + 500 (1)	30	G1"	2800	BE9*G..	35W	33W	23
EG30*L.2	25	0 + 200	30	G1"	2600	BE8*G..	33W	34W	23
EG30*L.5	25	0 + 350 (1)	30	G1"	3050	BE9*G..	35W	33W	23

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



NOTES FOR PRODUCT DISPOSAL

The device contains electronic components and cannot therefore be disposed of as normal household waste. For the disposal procedure, please refer to the local rules in force for special waste.

ATTENTION --> Company Brahma S.p.A. declines any responsibility for any damage resulting from Customer tampering with the device.

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