

ELECTROMAGNETIC SAFETY VALVES SLOW OPENING AND RAPID CLOSING TYPE VM-L SERIES

FEATURES

- Pressure: 360 mbar
- Adjustable capacity: 0-100 %
- Voltage rating: 115/230 V 50/60 Hz
- Voltage (by request): 24/12 V AC/DC
- Tension tolerance: from -15% to +10%
- Ambient temperature: from -15° to +60°
- Opening time: from 4 to 25 s
- Closing time: < 1 second
- Coil orientation: 360°
- Protections: IP 54
- Cable-press: PG 11
- Antidust filter: incorporated
- Pipe taps: 1/4" upon 2 sides
- Limit switch: by request
- The solenoid valve has also been certified by GASKET n° CE-0063AQ1350 in according to EN161.

INSTALLATION

In any position (with the coil from an upright to a horizontal position). It is recommended to verify the accordance between the flow direction and that of the arrow indicated on the valve, to keep such a distance from the walls that air can circulate freely, to check the exact alignment of connection pipes; do not use the coil as a lever arm, but for this purpose use the special seats on the valve body.



CE 0063AQ1350

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ELECTRIC CONNECTION AND COIL REPLACEMENT

The connection must be carried out by removing the protection cap and connecting the line to of the rectifier clips placed in the connection box. After having closed gas and disconnect power, remove the coil by unscrewing the shock-absorber placed on its top. It is recommended not to force the rod laterally to verify the cleaning and the central position of the two sealing O.R. The coils damaged by atmo-

spheric discharges often have only one or several burnt diodes. If the resistance at the end of winding is about 2000 Ohm by 1/2", 1000 Ohm by 3/4"-1", 600 Ohm by 1.1/4"-1.1/2"-2" when the output cables are unsoldered, it is sufficient replace the rectifier to get the coil working.



Headquarters
Esa S.r.l.
Via E. Fermi 40 I-24035 Curno (BG) - Italy
Tel. +39.035.6227411 - Fax +39.035.6227499
esa@esacombustion.it - www.esapyronics.com

International Sales
Pyronics International S.A./N.V.
Zoning Ind., 4ème rue B-6040 Jumet - Belgium
Tel +32.71.256970 - Fax +32.71.256979
marketing@pyronics.be

ADJUSTMENT OF A RAPID STROKE MODE FOLLOWED BY SLOW STROKE MODE

At the moment of testing the valves are regulated with completely slow stroke mode of about 14 seconds. The adjustment must be carried out acting on the outer screw placed under the cap on the shock-absorber; fixed with snap ring to be adjusted with wrench 6 mm for

1/2"-3/4"-1" and 7 mm for 1.1/4"-1.1/2"-2". Every turn anti-clockwise releases a 1 mm length of initial rapid stroke. Closing time and plunger (with max. capacity) remain unchanged.

CAPACITY ADJUSTMENT

At the moment of testing the valves are adjusted with max. capacity. The adjustment must be carried out by acting on the inner screw (with screwdriver). With the valves open (in tension) and keeping the outer screw fixed with wrench, turn the screw slowly until you feel the resistance against the core. Starting from this position, every turn clockwise reduces the capacity of about 20% at 1/2", 12% at 3/4"-

1", 8% at 1.1/4"-1.1/2"-2". If you carry out both adjustments, it is better to operate according to the order described above. It is better not to carry out rapid stroke adjustments lower than 1 mm. and capacity adjustments lower than about 40% of connection pipes capacity.

OPENING TIME ADJUSTMENT

Screw on the side of shock-absorber. The standard time of 12-14 seconds is valid for almost all appliances. It is obtained with about 2 turns at 1/2"-3/4"-1" and 1 turn a half for 1.1/4"-1.1/2"-2" anti-clockwise starting from completely closed screw. Starting from this position every quarter of turn clockwise increases the time of about

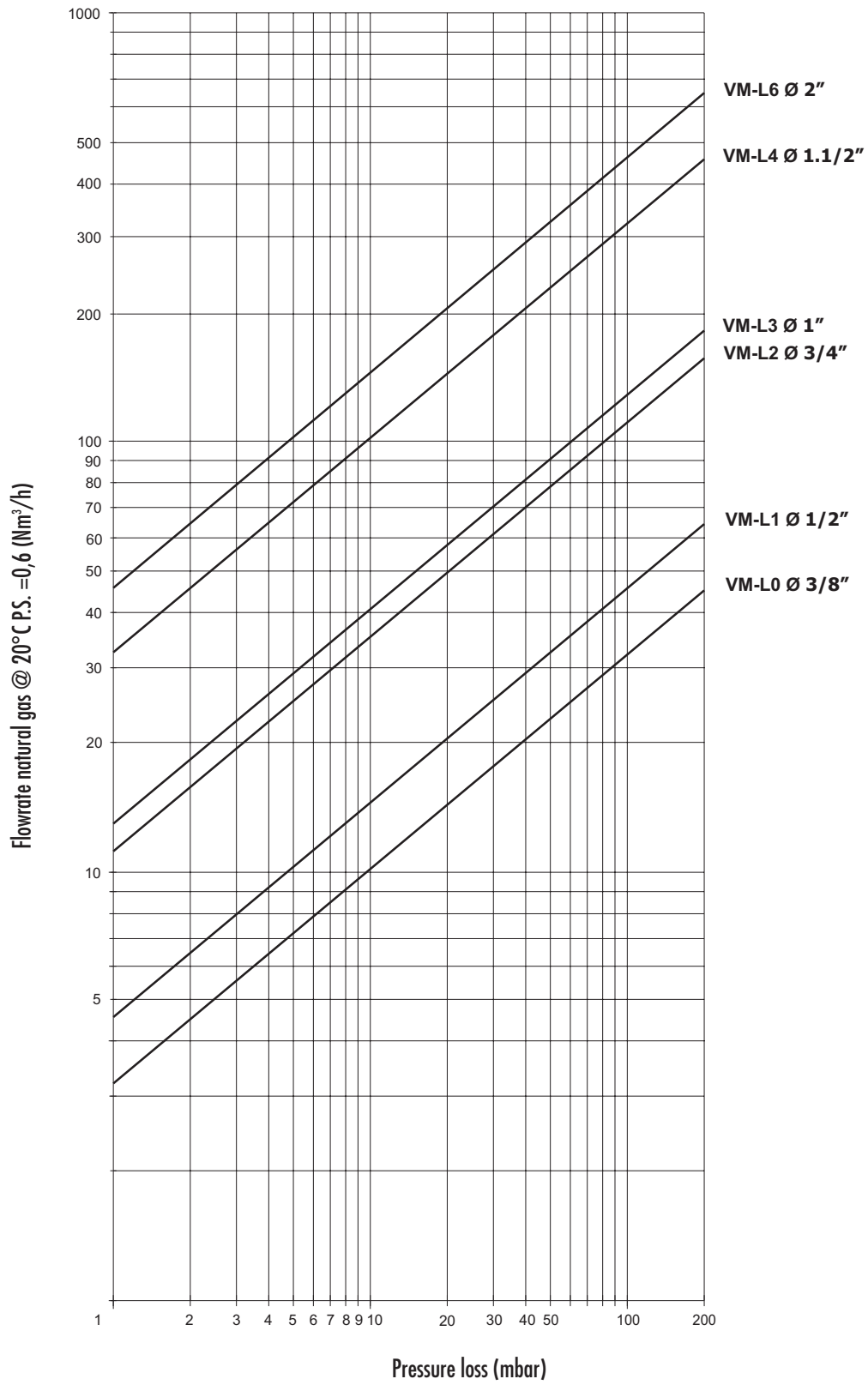
2-3 seconds and every rotation of a quarter of a turn anti-clockwise reduces it as much. It is recommended to avoid forcing the limit switch and any adjustments higher than 25 seconds because they can create turbulences at the moment of starting.

CLEANING AND MAINTENANCE

Dust and foreign bodies can be easily removed from filter or from gas passage seat by removing the coil and unscrewing the 4 screws which fix the counter-flange to the valve body. Possible assembling

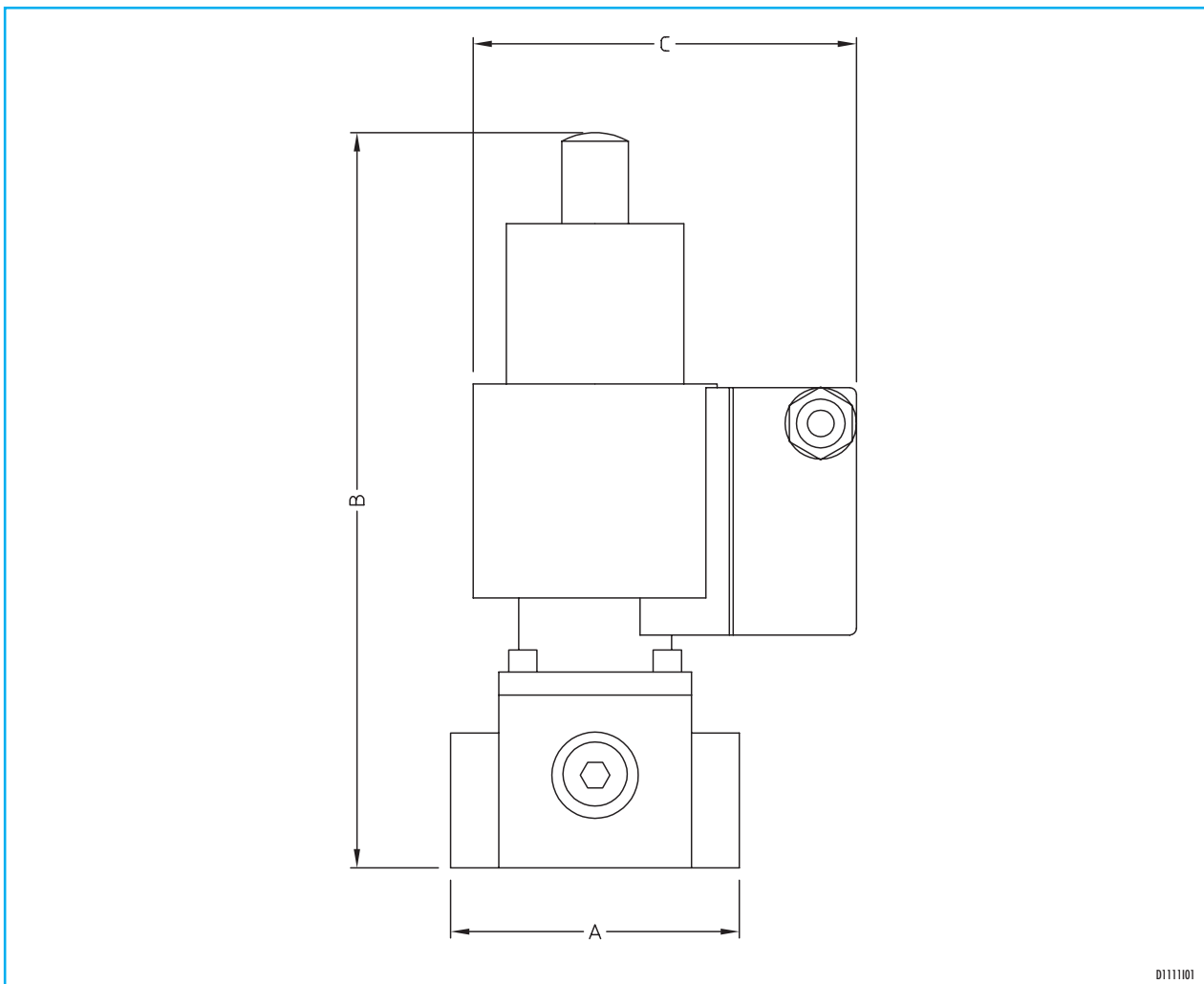
problems caused by sliding clamps can be solved by winding them for some instants on a cylindrical body with a diameter lower than the core, in order to make the exact placing easier.

CAPACITY TABLE



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DIMENSIONS



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Model	VM-L0	VM-L1	VM-L2	VM-L3	VM-L4	VM-L6
Threaded connections	G - 3/8"	G - 1/2"	G - 3/4"	G - 1"	G - 1.1/2"	G - 2"
A mm	77	77	96	96	153	156
B mm	196	196	222	222	290	302
C mm	96	96	108	108	128	128
Closing strenght kg/f	1.2	1.2	2.5	2.5	5.5	6.5
Power consupcion	20	20	45	45	20/80 *	20/80 *
Working pressure mbar	360	360	360	360	360	360
Mass kg	1.8	1.8	2.7	2.7	6	6.3

* On function/On opening