

Double solenoid Valve series VSS - VSD

Double solenoid valve model VSS is made of two single solenoid valves assembled together, with both valves quick opening or with one quick and one slow opening. This valves combination offer a compact pack of two solenoid valves joined by a hidden nipple among the valves thread.

The flanged solenoid valve of series VSD have a single body valve and a double opposite seats and two coils. These valves can also be supplied with quick or slow opening operation.

Solenoid valves VSS and VSD are certified **CE** and manufactured according to EN161 and are suitable for application of gas belonging to the first, second and third family. They are also in conformity with directive ATEX 94/9/CE - Zone 2 e 22 (II3G e II3D).



TECHNICAL FEATURES

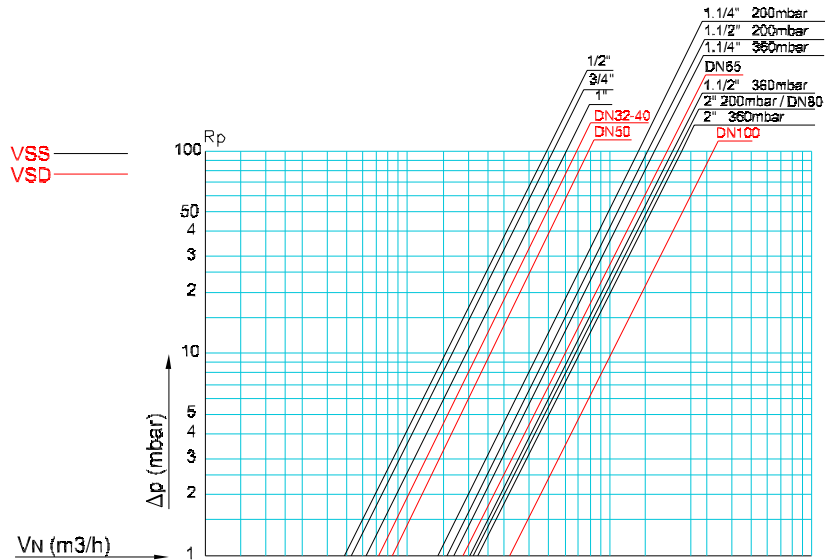
Valve body	Die-caste aluminium
Thread connection VSS	Rp 1/2 ÷ Rp 2 according to EN10226
Flanged connection VSD	DN32 ÷ DN100 PN16 according to ISO 7005
Max pressure VSS	200 and 360 mbar, 1, 3 and 6 bar
Max pressure VSD	500 mbar and 1 bar
Open/closing time quick version	< 1 second
Ambient temperature	-20 ÷ +60°C
Supply voltage	230V ac, 110V ac, 24V ac and dc
Frequency	50 ÷ 60 Hz - 50 Hz for 24V ac
Enclosure	IP 65 - IEC 529
Supply voltage tolerance	-15% - +10%
Duty cycle	Continuos

FEATURES

- Class A according to EN161, Group 2
- Electromagnetic Compatibility - Directive 2004/108/CE
- Low voltage - Directive 2006/95/CE
- Normally closed
- Quick and slow Opening and quick Closing
- Pressure test points at inlet by both sides
- Special version for biogas
- Accessories on request: max. flow adjustment, rapid stroke, LED connectors



FLOW CHART



Gas	dv	Scale 1	Scale 2	Scale 3
Aria Air	dv=1	1-1000	1-1000	1-1000
Metano Methane	dv=0,64	1-1000	1-1000	1-1000
Gas di città Town gas	dv=0,45	1-1000	1-1000	1-1000
Propano Propane	dv=1,56	1-1000	1-1000	1-1000
Butano Butane	dv=2,09	1-1000	1-1000	1-1000
G.P.L. L.P.G.	dv=1,70	1-1000	1-1000	1-1000

MODELS

VSS = Double solenoid valve in series
VSD = Double seat flanged solenoid valve

Operation

- A** = Quick/Quick with max flow adj.
- B** = Quick/Slow with max flow adj. and rapid stroke

Max Pressure

- 2** = 200 mbar
- 3** = 360 mbar
- 5** = 500 mbar
- 10** = 1 bar
- 30** = 3 bar
- 60** = 6 bar

Diameter

- 15** = Rp 1/2
- 20** = Rp 3/4
- 25** = Rp 1
- 32** = Rp 1. 1/4 or DN32
- 40** = Rp 1. 1/2 or DN40
- 50** = Rp 2 or DN50
- 65** = DN65
- 80** = DN80
- 100** = DN100

Supply voltage

- A** = 24V ac / 50 Hz
- B** = 110V ac / 50-60 Hz
- C** = 230V ac / 50-60 Hz
- E** = 24V dc

Accessories

- I** = Led light in the connector
- M** = Micro-switch
- BG** = Biogas version

VSS

B

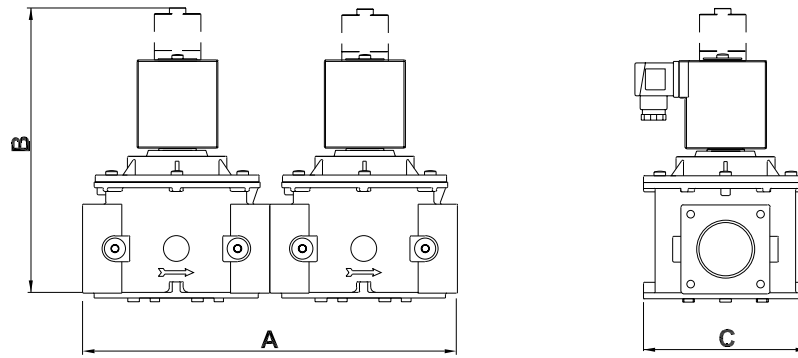
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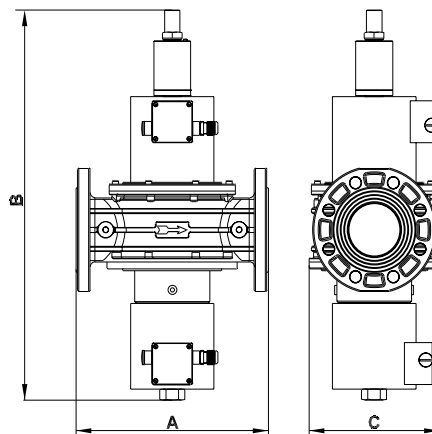
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M

MODELS AND RATING



Connections Rp	Max. pressure (mbar)	Rating at 230 V (VA)	Dimensions (mm)				Weight (Kg)
			A	B		C	
				R/Rp	R/LSP		
1/2	200	18	140	150	190	73	2,10
	360	30 / 9					
3/4	200	18	140	150	190	73	2,10
	360	30 / 9					
1	200	18	140	150	190	73	2,10
	360	30 / 9					
1.1/4	200	89 / 25	320	200	262	140	7,2
	360			210	275		7,6
1.1/2	200	89 / 25	320	200	262	140	7,2
	360			210	275		7,6
2	200	89 / 25	320	225	290	140	7,6
	360			235	300		




Connections DN	Max. pressure (mbar)	Rating at 230 V (VA)	Dimensions (mm)				Weight (Kg)
			A	B		C	
				R/RP	R/LSP		
32-40-50	0,5 - 1	178/50	230	345	350	165	7,5
65	0,5 - 1	580/150	290	490	510	215	30
80	0,5 - 1		310	490			30
100	0,5 - 1	540/140	350	665	690	254	45

WIRING INSTRUCTIONS



WARNING

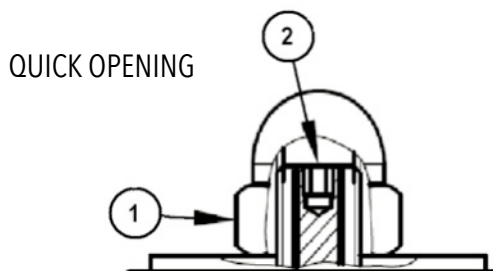
Installation, adjustment and maintenance of the valve must be carried out exclusively by skilled and authorized service technicians

1. Before electric wiring, check that the main voltage matches with the power supply voltage stated on the product label.
2. Disconnect power before wiring.
3. By wiring connector, use terminals and cables as reported in the Instruction leaflet in the package.
4. Connect the power supply to terminals 1 and 2 and the ground wire to terminal .
5. Using energy saving Green connector with 12V and 24V dc comply with polarity.

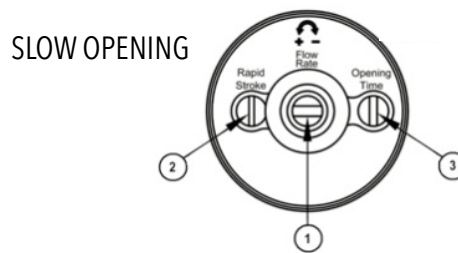
INSTALLATION AND OPERATING INSTRUCTIONS

1. Make sure that all operating data indicated on the safety shut-off valve label correspond to those of the system.
2. Before installing the safety shut-off valve, quit the gas supply and make sure that the pipeline is free from impurities. The pipeline must be vibration-free.
3. The flow direction indicated by the arrow on the valve body must be respected, facing towards the user appliance. The safety valve can be installed either horizontally or vertically, provided that the coil is not turned downwards.
4. By installing on threaded device, check the pipeline length: overlong threads may damage the body of the device when joined.
5. When installing the safety shut-off valve in pipework do not use the coil as a lever, but the correct wrench.
6. The sealing material must be applied to the external thread of the pipeline only and not to the internal thread of the safety shut-off valve.

ADJUSTMENT OF MAX. FLOW RATE - OPENING TIME AND RAPID





QUICK OPENING





SLOW OPENING

1. Coil fastening nut
2. Flow rate adjustment

Unscrew the nut and spin the internal screw clockwise  to reduce and counter clockwise to  increase the flow rate. For sizes \geq DN65 disconnect power, in order to avoid any mechanical stress on the screw.

1. Flow rate adjustment
2. Rapid stroke adjustment
3. Opening time adjustment

Spin the screws clockwise  to reduce each worth and counter clockwise  to increase each worth.

All the reported data are subject to be changed without notice.

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