

Safety Shut-Off Valves series VSA 1, 3, 6 bar

Gas safety solenoid shut-off valves series VSA High pressure, approved according to the Norm EN 161 with **CE** product identification and manufactured according to ATEX rule 94/9/CE - Zone 2 and 22 (II 3G - II 3D), are suitable for the automatic control of gases belonging to the first, second and third family.

On request there are versions for air. These valves, normally closed for continuous and cyclic operation, open by powering the coil and close quickly when there is no tension.



TECHNICAL FEATURES

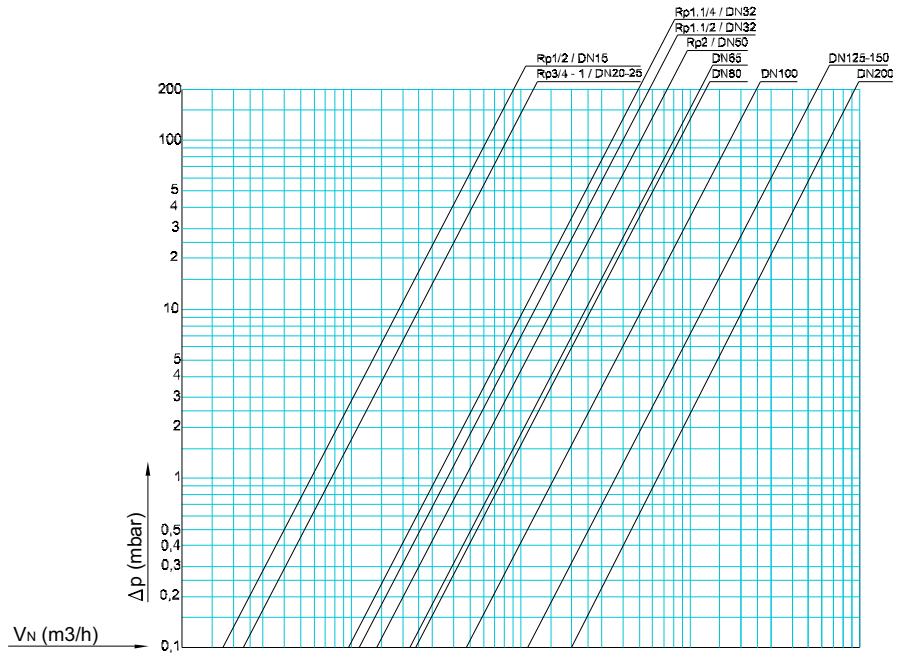
Valve body	Die-cast aluminium
Threaded connections	Rp 1/2 ÷ 2 according to EN10226
Flanged connections	DN25 ÷ 200 PN16 according to ISO 7005
Inlet pressure	1, 3 and 6 bar
Opening/closing time on quick version	< 1 second
Ambient temperature	-20 ÷ +60°C
Supply voltage	230V ac, 110V ac, 24V - 12V ac and dc (not for all diameters)
Frequency	50 ÷ 60 Hz - 50 Hz for 24V ac
Enclosure	IP 65
Supply voltage tolerance	-15% - +10%
Duty cycle	continuous

FEATURES

- Class A for Rp 1/2 ÷ 2 and DN25 ÷ 150; Class B for DN 200, Group 2 according to EN161
- Electromagnetic Compatibility - Directive 2004/108/CE
- Low voltage - Directive 2006/95/CE
- ATEX zones 2 and 22 (II 3G - II 3D) - Directive 94/9/CE
- Normally closed
- Quick and slow Opening and quick Closing
- PA resin encapsulated coils
- Pressure test points at inlet by both sides
- Accessories on request: limit switch, max. flow adjustment, rapid stroke



FLOW CHART



Aria	dv=1	1 2 3 4 5 6 8 10 2 3 4 5 6 8 100 2 3 4 5 6 8 1000 2 3 4 5 6 8 10000
Metano	dv=0,64	1 2 3 4 5 6 7 10 2 3 4 5 6 8 100 2 3 4 5 6 8 1000 2 3 4 5 6 8 10000
Methane		
Gas di città	dv=0,45	1 2 3 4 5 6 8 10 2 3 4 5 6 8 100 2 3 4 5 6 8 1000 2 3 4 5 6 8 10000
Town gas		
Propano	dv=1,56	1 2 3 4 5 6 8 10 2 3 4 5 6 8 100 2 3 4 5 6 8 1000 2 3 4 5 6 8 10000
Propane		
Butano	dv=2,09	1 2 3 4 5 6 8 10 2 3 4 5 6 8 100 2 3 4 5 6 8 1000 2 3 4 5 6 8 10000
Butane		
G.P.L.	dv=1,70	1 2 3 4 5 6 8 10 2 3 4 5 6 8 100 2 3 4 5 6 8 1000 2 3 4 5 6 8 10000
L.G.P.		

MODELS

VSA = Safety shut-off valve

Operation

- R** = quick
- RP** = quick with max. flow adjustment
- L** = slow
- LP** = slow with max flow adjustment
- LSP** = slow with max flow adjustment + rapid stroke

Max Pressure

- 10** = 1 bar
- 30** = 3 bar
- 60** = 6 bar

Nominal diameter threaded

- 15** = Rp 1/2
- 20** = Rp 3/4
- 25** = Rp 1
- 32** = Rp 1. 1/4
- 40** = Rp 1. 1/2
- 50** = Rp 2

Nominal diameter flanged

- 65** = DN 65
- 80** = DN 80
- 100** = DN 100
- 125** = DN 125
- 150** = DN 150
- 200** = DN 200

Supply voltage

- A** = 24V ac / 50 Hz
- B** = 110V ac / 50-60 Hz
- C** = 230V ac / 50-60 Hz
- E** = 24V dc excluded DN200
- F** = 12v dc (only for Rp 1/2 ÷ Rp 1)
- G** = 12V ac / 50 Hz (only for Rp 1/2 ÷ Rp 1)

Other accessories

- I** = signal lamp by valve feeding [in the connector]
- M** = limit micro-switch
- F** = flanged [only for Rp 1]
- B** = biogas version

VSA

LP

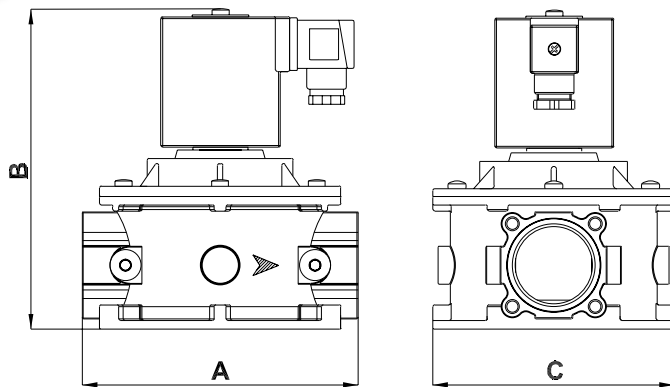
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25

C

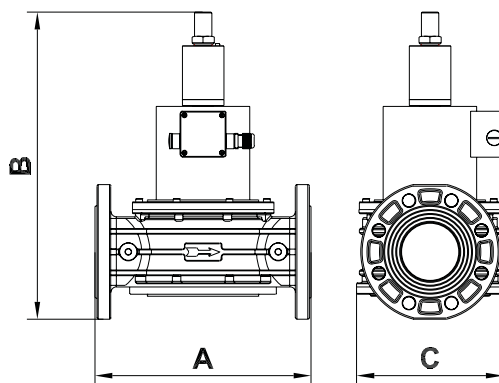
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SERIES VSA..... QUICK / SLOW OPENING THREADED



Pipe Rp	Max. pressure (bar)	Rating at 230 V (VA)	Dimension (mm) Model R			Weight (Kg)
			A	B	C	
1/2 - 3/4	1	18	70	137	74	0,85
	3 - 6	30 / 9				
1	1	18	70	137	74	0,80
	3 - 6	30 / 9				
1.1/4	1	89 / 25	160	210	140	3,6
	3 - 6			258		
1.1/2	1	89 / 25	160	210	140	3,6
	3 - 6			258		
2	1	89 / 25	160	210	140	3,6
	3 - 6			258		

SERIES VSA... QUICK / SLOW OPENING FLANGED




Pipe DN	Max. pressure (bar)	Rating at 230 V (VA)	Dimension (mm) Model R			Weight (Kg)
			A	B	C	
25	1	18	142	170	74	0,85
	3 - 6	30 / 9				
32 - 40 - 50	1	89 / 25	230	237	140	3,6
	3 - 6	55 / 15		261		
65	1 - 3 - 6	105 / 29	290	210	211	17
80			310	258		17,60
100		350	210	254	29,60	
125		124 / 36	480	258	322	34,00
150		480	210	322	45,00	
200		-----	600	920	552	102

WIRING INSTRUCTIONS



WARNING

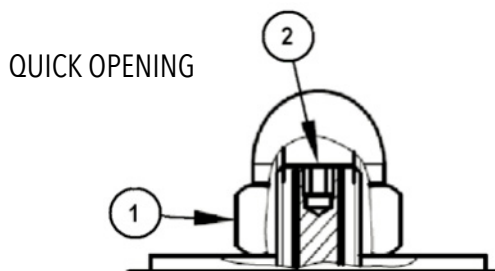
Installation, adjustment and maintenance of the valve must be carried out exclusively by skilled and authorized service technicians

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.

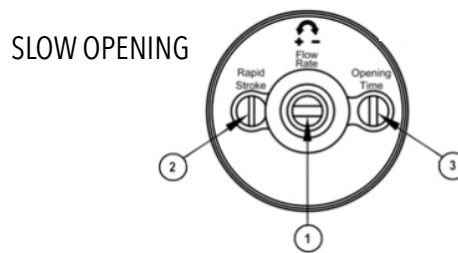
INSTALLATION AND OPERATING INSTRUCTIONS

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 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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