

Manual Reset Gas Valves

Features



- EN 161, Class A, Group 2 European approval
- Various AC and DC solenoid voltage options
- Available in a both flanged and screwed

Specification

Power supply	230Vac, 24Vac/dc
Voltage tolerance	-15% to +10 %
Consumption	12 to 45W (see table)
Protection	IP 54
Cable Entry	PG 11
Connections:	
GRC ..15 to 50	Female Screwed
GRC ..65 to 100	Flanged PN16
Opening time	4 seconds
Closure time	≤ 1 s
Ambient temp.	-15 °C to + 60 °C
Coil temp.	Approx. 70 °C
Construction:	
Valve body	Die cast Aluminium
Seals	NBR (UNI 4916 -74)
Pressure spring	AISI 302 Steel
Plug	Chromium-Plated Fe 37 Steel

Product Codes

Screwed valves:

VS-GRC-815	1/2" BSP	230Vac coil
VS-GRC-820	3/4" BSP	230Vac coil
VS-GRC-825	1" BSP	230Vac coil
VS-GRC-832	1 1/4" BSP	230Vac coil
VS-GRC-840	1 1/2" BSP	230Vac coil
VS-GRC-850	2" BSP	230Vac coil
VS-GRC-415	1/2" BSP	24Vac/dc coil
VS-GRC-420	3/4" BSP	24Vac/dc coil
VS-GRC-425	1" BSP	24Vac/dc coil
VS-GRC-432	1 1/4" BSP	24Vac/dc coil
VS-GRC-440	1 1/2" BSP	24Vac/dc coil
VS-GRC-450	2" BSP	24Vac/dc coil

Flanged valves:

VS-GRC-865	65mm PN16	230Vac coil
VS-GRC-880	80mm PN16	230Vac coil
VS-GRC-8100	100mm PN16	230Vac coil

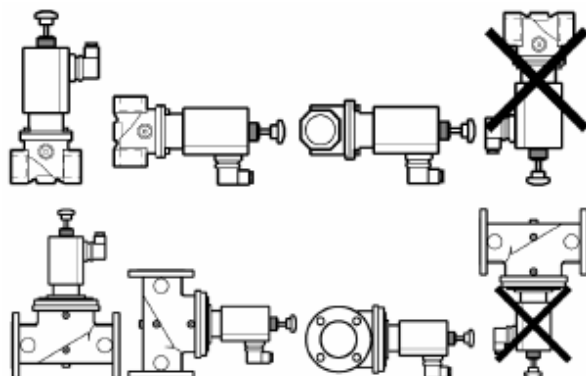
Technical Overview

The VS-GRC series is a range of normally closed manual reset gas solenoid valves. Typically used for emergency shut off applications, upon power failure the valve will close until power has been restored and the manual reset mechanism has been activated.

The valve is reset by removing the protective black cover on the top of the solenoid and pulling the brass knob until the mechanism locks open.

Installation

1. The valve should be installed downstream of the gas meter and outside the area traversed by the gas pipe work.
2. The valve must be protected from rain if installed outside.
3. Pipe work must be clean and free of any residues from soldering, tapping or threading.
4. Valve body is marked with an arrow which indicates the direction of gas flow. Ensure correct orientation.
5. Valve must not be installed with the coil facing downwards. Please see diagram below.
6. Ensure there is sufficient space for circulation of air around the valve and for maintenance access.
7. Use only the valve body for leverage when installing. Levering against the solenoid may cause damage to the coil and the valve stem.



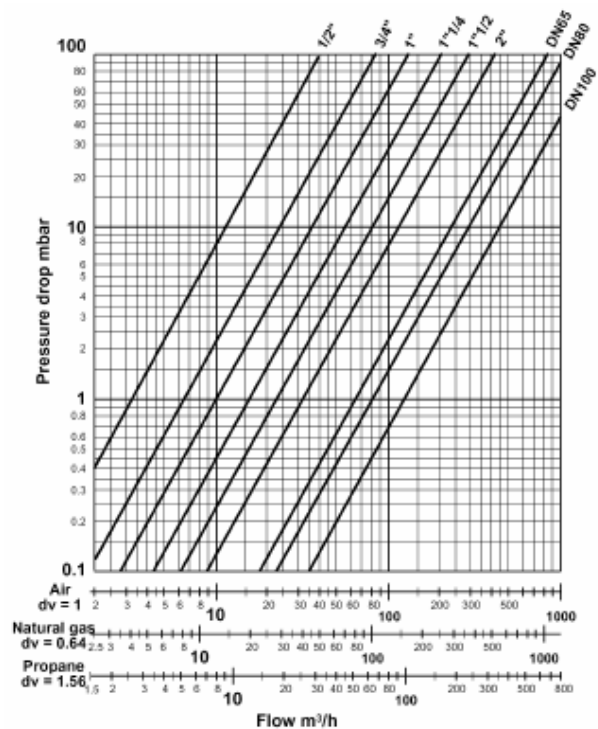
Connections

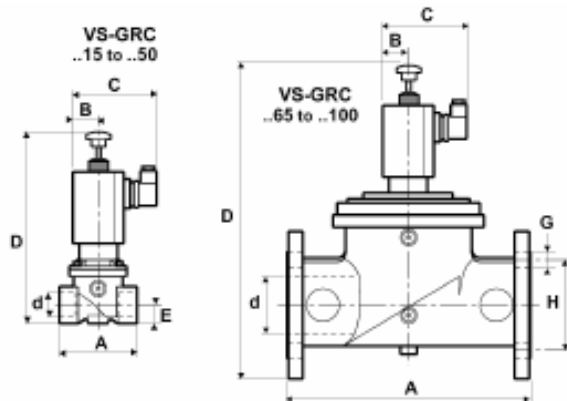
The power cable must be connected to the two poles of the rectifier terminal block housed in the wiring box.

The 24V valves at the junction box there are two inputs marked with the symbols "L, N", e " +, -". AC supplies should be connected to 'L' and 'N' whilst DC connects to '+' and '-' observing the correct polarity.

During normal operation of the gas valve the surface temperature of the coil can reach 70 °C.

Pressure Drop



Dimensions


Type	d DN	A mm	B mm	C mm	D mm	E mm	G mm	H mm	Wt kg
..15	1/2"	77	22	83	164	18	-	-	1.1
..20	3/4"	96	22	83	180	25	-	-	1.5
..25	1"	96	22	83	180	25	-	-	1.5
..32	1"1/4	153	22	83	220	35	-	-	2.4
..40	1"1/2	153	22	83	220	35	-	-	2.4
..50	2"	156	22	83	230	39	-	-	2.7
..65	65	305	22	83	340	90	4 x18	145	7.6
..80	80	305	22	83	340	90	8 x18	160	7.6
..100	100	350	40	110	405	130	8 x18	180	17

Specification

Product Code	Connection DN	Supply Voltage	Power W	P. max ⁽¹⁾ mbar	Orifice Dia. mm	Flow m ³ /h ⁽²⁾		Certification (Min of Interior)
						0.5mbar	1 mbar	
VS-GRC-815	screw 1/2"	230 V ~	25	500	18	2.8	4	3704/1217/87/215
VS-GRC-415	screw 1/2"	24 V ~/-	25	500	18	2.8	4	
VS-GRC-820	screw 3/4"	230 V ~	25	500	27	5.5	8	3704/1217/87/215
VS-GRC-420	screw 3/4"	24 V ~/-	25	500	27	5.5	8	
VS-GRC-825	screw 1"	230 V ~	25	500	27	8.3	13	3704/1217/87/215
VS-GRC-425	screw 1"	24 V ~/-	25	500	27	8.3	13	
VS-GRC-832	screw 1"1/4	230 V ~	25	500	45	14	20	3704/1217/87/215
VS-GRC-432	screw 1"1/4	24 V ~/-	25	500	45	14	20	
VS-GRC-840	screw 1"1/2	230 V ~	25	500	45	19	28	3704/1217/87/215
VS-GRC-440	screw 1"1/2	24 V ~/-	25	500	45	19	28	
VS-GRC-850	screw 2"	230 V ~	25	500	56	27	40	3704/1217/87/215
VS-GRC-450	screw 2"	24 V ~/-	25	500	56	27	40	
VS-GRC-865	flange 65	230 V ~	25	500	80	55	80	
VS-GRC-880	flange 80	230 V ~	25	500	80	73	100	
VS-GRC-8100	flange 100	230 V ~	45	500	100	110	160	

(1) Maximum working pressure

(2) Natural gas flow with pressure drop of 0.5 mbar or 1 mbar