

Automatic Reset Gas Valve

Features

- EN 161, Class A, Group 2 European approval
- Various 230Vac or 24Vac solenoid voltage options
- Optional closed position switch available



Specification

Power supply	230Vac / 24Vac (see product codes)
Voltage tolerance	-15% to +10 %
Media	Methane, air, town gas & LPG
Consumption	See table on page 5
Protection	IP 65
Connections:	
15 to 50mm	Screwed to EN 10226
65 to 150mm	Flanged PN16 to ISO 7005
Closure time	≤ 1 s
Max. closing pressure:	
15 to 50mm	200mbar
65 to 150mm	360mbar
Ambient temp.	-15 °C to + 60 °C
Coil temperature	Approx. 70 °C
Valve body material	Die cast Aluminium
Approval	EN 161, Class A, Group 2

Product Codes

Screwed valves:

VS-GCA-415	½" BSP, 24Vac coil
VS-GCA-420	¾" BSP, 24Vac coil
VS-GCA-425	1" BSP, 24Vac coil
VS-GCA-432	1¼" BSP, 24Vac coil
VS-GCA-440	1½" BSP, 24Vac coil
VS-GCA-450	2" BSP, 24Vac coil

VS-GCA-815	½" BSP, 230Vac coil
VS-GCA-820	¾" BSP, 230Vac coil
VS-GCA-825	1" BSP, 230Vac coil
VS-GCA-832	1¼" BSP, 230Vac coil
VS-GCA-840	1½" BSP, 230Vac coil
VS-GCA-850	2" BSP, 230Vac coil

Flanged valves:

VS-GCA-865	65mm PN16, 230Vac coil
VS-GCA-880	80mm PN16, 230Vac coil
VS-GCA-8100	100mm PN16, 230Vac coil
VS-GCA-8125	125mm PN16, 230Vac coil
VS-GCA-8150	150mm PN16, 230Vac coil

Accessories:

VS-FCA-1	CPI kit for 15-20mm valves
VS-FCA-2	CPI kit for 25mm valves
VS-FCA-3	CPI kit for 32-40mm valves
VS-FCA-4	CPI kit for 50mm valves
VS-FCA-5	CPI kit for 65-80mm valves
VS-FCA-6	CPI kit for 100mm valves
VS-FCA-7	CPI kit for 125-150mm valves

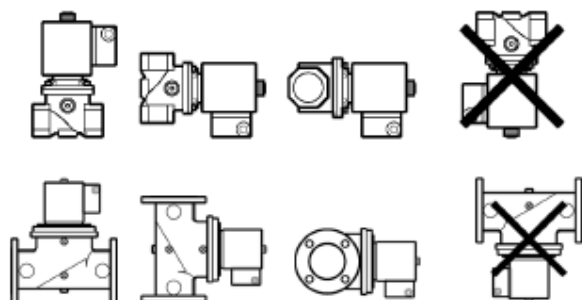
Technical Overview

The VS-GCA series is a range of normally closed gas solenoid valves. When powered on, the gas valve will open without manual intervention and when powered down will shut off.

The valve can be fitted with a optional closed position indicator switch

Installation

1. The gas supply must be shut off before installation.
2. Check that the line pressure **DOES NOT EXCEED** the maximum pressure stated on the product label.
3. They must be installed with the arrow (on the body of the device) facing towards the user appliance. They will function equally effectively if installed vertical. They must not be installed upside down (with the coil underneath).
4. During installation take care not to allow debris or scraps of metal to enter the device.
5. If the device is threaded check that the pipeline thread is not too long; overlong threads may damage the body of the device when screwed into place. Do not use the coil for leverage when screwing into position; use the appropriate tool.
6. If the device is flanged check that the inlet and outlet counter flanges are perfectly parallel to avoid unnecessary mechanical stresses on the body of the device. Also calculate the space needed to fit the seal. If the gap left after the seal is fitted is too wide, do not try to close it by over-tightening the device's bolts.
7. Always check that the system is gas-tight after installation.



Connections

1. Before making electrical connections, check that the mains voltage is the same as the power supply voltage stated on the product label.
2. Disconnect the power supply before wiring.
3. Wire the connector with H05RN-F 3X1 mm² cable outside Ø from 8.3 a 9.5 mm, taking care to ensure that the device has IP65 protection.
4. Connect the power supply to terminals 1 and 2 and the ground wire to terminal.

The coil is also suitable for permanent power supply. In case of continuous duty, it is absolutely normal for the coil to heat up. The coil should not be touched with bare hands after it has been continuously powered for more than 20 minutes. Before maintenance work, wait for the coil to cool or use suitable protective equipment.

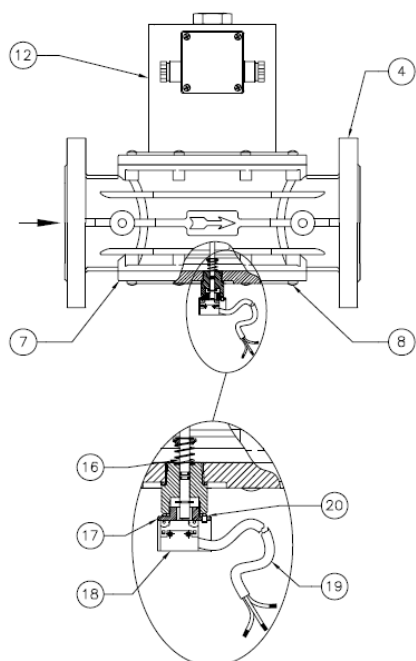
During normal operation of the gas valve the surface temperature of the coil can reach 70 °C.

Closed Position Switch (optional)

The VS-GCA solenoid valves can be equipped by a closed position indicator switch. This will allow to check remote if the solenoid valve is open or closed.

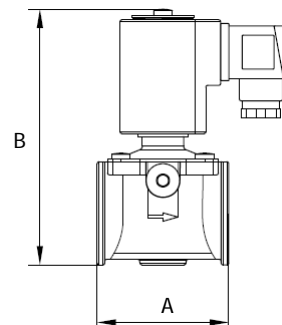
Black cable	Common
Red cable	Signal with micro switch at rest
White cable	Signal with micro switch pushed

1. The gas supply must be shut off before installation.
2. Unscrew the fixing screws (8) of the bottom (7) and take it off from the valve body (4).
3. Fix by the screws (8) the new bottom (7), equipped with micro switch, to valve body (4) being sure that the O-Ring is inside the special guide.
4. Connect electrically the micro switch (18).
5. To calibrate micro switch (18) unscrew the fixing security dowels (20) and put (screwing or unscrewing it) the support (17) so that when the solenoid valve is completely closed the micro switch pin (16) is pushed.
6. Fix the support (17) in that position locking the security dowels (20).
7. Now the kit is installed. Open and close the solenoid valve (giving and cutting the tension) 2-3 times to check the right signal of the micro switch.

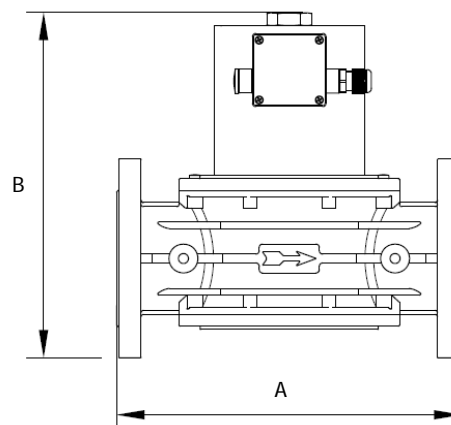


Dimensions

Screwed:

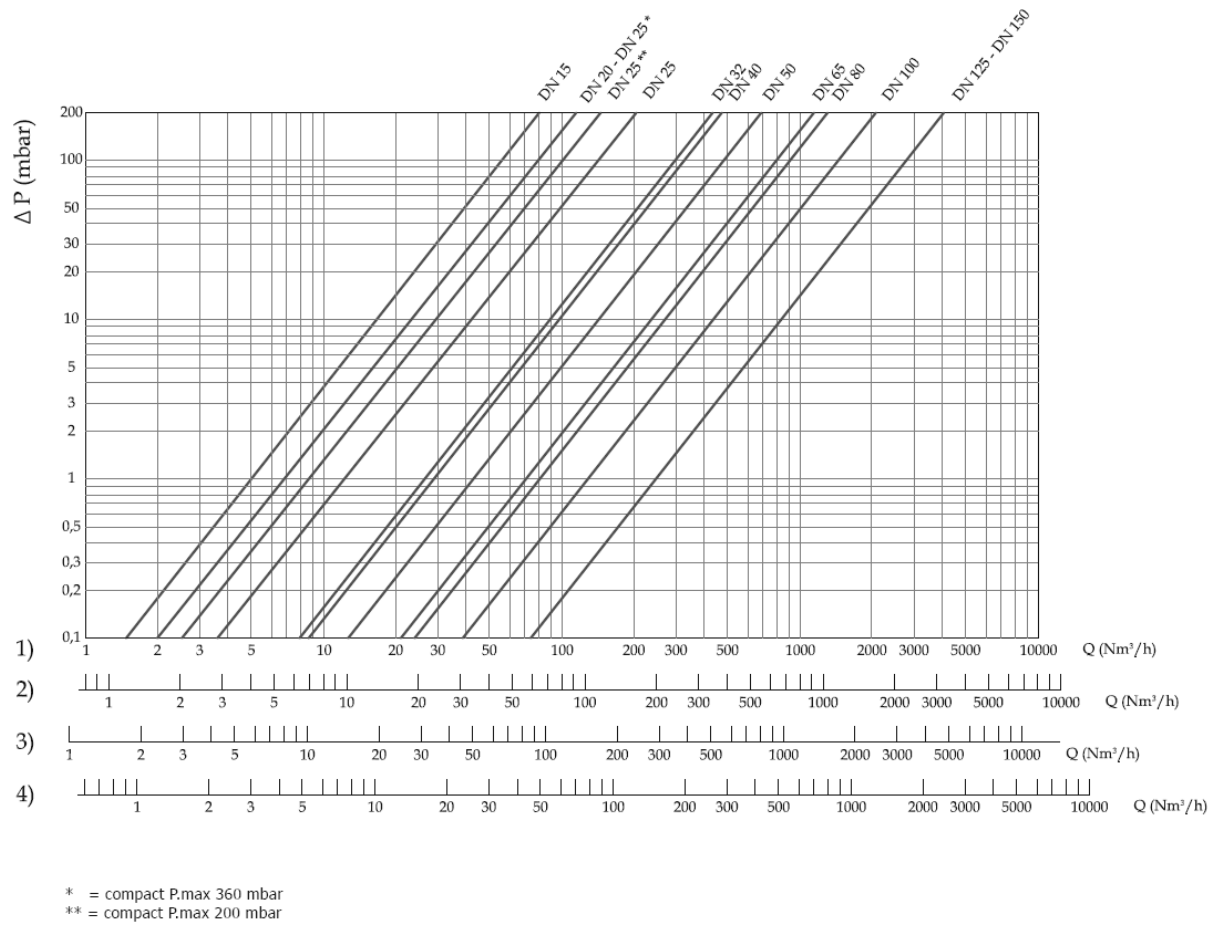


Flanged:



Connection	A (mm)	B (mm)	Weight (kg)
DN 15	70	137	0.8
DN 20	70	137	0.8
DN 25	70	137	0.8
DN 32	160	210	5.9
DN 40	160	210	5.8
DN 50	160	235	6.1
DN 65	290	321	17.0
DN80	310	328	18.0
DN 100	350	389	34.2
DN 125	480	570	58.0
DN 150	480	570	60.0

Pressure Drop



Specification

Product Code	Connection DN	Supply Voltage	Power W	P. max ⁽¹⁾ mbar	Flow m ³ /h ⁽²⁾	
					0.5mbar	1 mbar
VS-GCA-815	Screwed ½"	230Vac	19	200	5	7
VS-GCA-415	Screwed ½"	24Vac	14	200	5	7
VS-GCA-820	Screwed ¾"	230Vac	19	200	6.5	8.7
VS-GCA-420	Screwed ¾"	24Vac	14	200	6.5	8.7
VS-GCA-825	Screwed 1"	230Vac	14/31*	200	8.7	11
VS-GCA-425	Screwed 1"	24Vac	4/27*	200	8.7	11
VS-GCA-832	Screwed 1 ¼"	230Vac	32/97*	200	16	25
VS-GCA-432	Screwed 1 ¼"	24Vac	17/68*	200	16	25
VS-GCA-840	Screwed 1 ½"	230Vac	32/97*	200	16	25
VS-GCA-440	Screwed 1 ½"	24Vac	17/68*	200	16	25
VS-GCA-850	Screwed 2"	230Vac	32/97*	200	28	41
VS-GCA-450	Screwed 2"	24Vac	17/68*	200	28	41
VS-GCA-865	Flanged 65	230Vac	29/105*	360	37	51
VS-GCA-880	Flanged 80	230Vac	29/105*	360	37	51
VS-GCA-8100	Flanged 100	230Vac	36/124*	360	83	125
VS-GCA-8124	Flanged 125	230Vac	36/124*	360	170	240
VS-GCA-8150	Flanged 150	230Vac	36/124*	360	170	240

(1) Maximum working pressure

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

* Power absorbed by start-up