

GV Series

CLASS 'A' GAS VALVES

DATA SHEET



APPLICATION

These series class 'A' gas valves are used for control and regulation of gaseous fluids in gas power burners, atmospheric gas boilers, melting furnaces, incinerators and other gas consuming appliances.

Models

GV Series solenoid gas valves:

threaded:

GVS20-230 (DN20, 3/4")	GVS50-230 (DN50, 2")
GVS25-230 (DN25, 1")	GVS65-230 (DN65, 2 1/2")
GVS32-230 (DN32, 1 1/4")	GVS80-230 (DN80, 3")
GVS40-230 (DN40, 1 3/4")	

flanged:

GVF65-230 (DN65, 2 1/2")	GVF100-230 (DN100, 4")
GVF80-230 (DN80, 3")	

All versions are provided with 1/4" bottom plug to accommodate a Closed Position Indication switch accessory (GVCPI).

Duty cycle

Coil suitable for permanent energization.

Opening time

Less than 1 second

Closing time

Less than 1 second

Maximum working frequency

20 cycles per minute

SPECIFICATIONS

Pipe sizes GVS series

Inlet and outlet 20 mm (3/4") up to 80 mm (3") internal parallel pipe thread according to ISO 7-1

Pipe sizes GVF series

Flanged connection DN65 (2 1/2"), DN80 (3"), and DN100 (4") according to PN16 ISO 7005-1.

Torsion and bending stress

Pipe connections meet group 2 according to EN161 requirements.

Ambient temperature

-15 °C ... 60 °C

Supply voltage

220 ... 240 Vac, 50/60 Hz

The applicable voltage is applied to the solenoid coil via a rectifying circuit.

Maximum operating pressure

200 mbar

Electrical connection

Plug connection according to PG 11.

Coil insulation solenoid valves

Insulation material according to class F.

Operational voltage range

The gas valve will function satisfactorily between 85% and 110% of rated voltage.

Enclosure

IP 54

Capacity in m³/h air at Dp = 2.5 mbar

DN20	14.8
DN25	16.7
DN32	38.5
DN40	47.1
DN50	66.7
DN65	94.2
DN80	131.0
DN100	225.0

Strainer

A strainer is incorporated in the gas valve.

Approvals

Class 'A' in accordance with EN161

Safety: EN60335 household and industrial

EMC standards for industrial and non-industrial appliances

Gas Appliance directive (90/396/EEC)

Low Voltage directive (73/23/EEC)

INSTALLATION

⚠ WARNING

- Take care that installer is a trained experienced service man.
- Turn off gas supply before starting installation.
- Disconnect power supply to prevent electrical shock and/or equipment damage.

Mounting position

The gas valve may be mounted in any position between plus or minus 90 degrees from the vertical.

Mounting location

The distance between the gas valve and the wall/ground, must be at least 30 cm.

Main gas connection threaded valves

- Take care that dirt cannot enter the gas valve during handling.
- Ensure the gas flows in the same direction as the arrow on the housing of the gas valve.
- Use a sound taper fitting with thread according to ISO 7-1 (BS 21, DIN 2999) or a piece of new properly reamed pipe, free from swarf.
- Do not thread or tighten the pipe or pipe fitting too far, otherwise valve distortion and malfunction could result.
- Apply a moderate amount of good quality thread compound to the pipe or fitting only, leaving the two end threads bare; PTFE tape may be used as an alternative.
- In order to tighten the pipe in the valve, do not use the actuator as a lever but use a suitable wrench operating on the wrench boss.

Main gas connection flanged valves

- Take care that dirt cannot enter the gas valve during handling.
- Ensure the gas flows in the same direction as the arrow on the housing of the gas valve.
- Ensure that the inlet and outlet flanges are in line and separated from each other enough to allow the valve to be mounted between them without damaging the gasket.
- Place gasket. If necessary, grease it slightly to keep it in place.
- Mount gas valve between flanges using the bolts for each flange.

⚠ WARNING

Tightness test after installation.

- Spray all pipe connections and gaskets with a good quality gas leak detection spray.
- Start the application and check for bubbles. If a leak is found in a pipe connection, remake the joint. A gasket leak can usually be stopped by tightening the mounting screws. Otherwise, replace the gas valve

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Electrical connection

⚠ CAUTION

- Switch off power supply before making electrical connections.
- Take care that wiring is in accordance with local regulations.

Use connection cable which can withstand 105 °C ambient.

Wiring

Follow the instructions supplied by the appliance manufacturer.

ADJUSTMENTS AND FINAL CHECKOUT

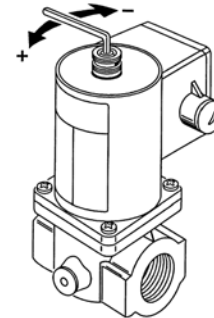
WARNING

⚠ Adjustments must be made by qualified persons only.

GVS80, GVF65, 80 (see fig. below)

Flow rate adjustment

- Remove the cap screw from top of the coil.
- Place a socket head wrench into the adjustment nut.
- Turn wrench counter-clockwise to increase or clockwise to decrease flow rate.
- Replace cap screw.




⚠ CAUTION

To ensure safe valve closure, it is essential that voltage supplied to the terminals is reduced to 0 volt.

Final checkout of the installation

Set appliance in operation after any adjustment and observe several complete cycles to ensure that all burner components function correctly.

DISPOSAL



WEEE Directive :

At the end of their useful life the packaging and product should be disposed of by a suitable recycling centre.

Do not dispose of with normal household waste.
Do not burn.