

# VG4000 Series

## CLASS "A" SAFETY SOLENOID VALVE VG4000A1



### FEATURES

- Normally Closed valve.
- Manual opening when electrically energized.
- Closing time: <1 sec.
- Wrench boss as well on inlet side as on outlet side for pipe fitting incorporated in the valve housing.
- 2 auxiliary pressure taps with Rp 1/4" threaded connections, both on the inlet pressure side.
- Coil field replaceable.
- Coil suitable for permanent energization.
- Coil turnable over 360°.
- Internal fine mesh screen.

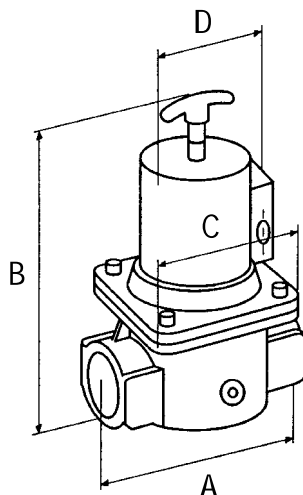


Fig. 14. Dimensional drawing VG4000A1 Series

### APPLICATION

These series manually operated safety solenoid valves are used in gas leak detection systems.

### SPECIFICATION

**Model**  
VG4000A1

**Dimensions**  
See figure and table below.

**Pipe sizes**  
Inlet and outlet 1 1/4" up to 3" internal parallel pipe thread according to ISO 7-1.

**Mounting and orientation**  
The valve may be assembled on the pipeline within plus or minus 90 degrees of the vertical axis and 30 cm. air space around the coil assy.

**Capacity**  
See capacity curves VG4000 Series on page 66 and 67.

**Maximum operating pressure**  
Rp 1 1/4" to Rp 2" : 500 mbar  
Rp 2 1/2" to 3" : 360 mbar.

**Torsion and bending stress**  
Pipe connections meet group 2, according to EN161 requirements

**Supply voltage**  
Line voltage: 220 ... 240 Vac, 50/60 Hz  
110 Vac, 50/60 Hz  
24 ... 28 Vdc  
24 Vac, 50/60 Hz  
12 Vdc

**Ambient temperature range**  
-15 ... 60 °C

**Electrical connection**  
Plug connection according to PG11.

**Coil insulation solenoid valves**  
Insulation material according to class F.

**Enclosure**  
IP54  
IP65 on request.

**Valve body**  
Aluminium alloy die-cast

**Bottom plug**  
Rp 1/4" for Closed Position Indication (CPI) switch.

**Strainer**  
AISI 303 steel.

**Closing spring**  
AISI 302 steel.

**Seals and gaskets**  
Hydrocarbon resistant NBR rubber type.

**Standards and Approvals**  
The VG4000A1 Series safety relief solenoid valves conform with the following EC directives:

- Gas Appliance Directive (90/396/EEC)  
PIN: CE-0063AS1865
- Low Voltage Directive (73/23/EEC)

**Table 16. VG4000A1 Series, electrical operated Normally Closed safety solenoid valve with manual reset.**

| O.S. Number | Rated Voltage (Vac) | Connect. (inch) | Passing DN | Maximum Operating Pressure (mbar) | Overall Dimensions (mm) |     |     |     | Power Cons. (W) | Enclosure | Weight (kg) | Bottom Plug |
|-------------|---------------------|-----------------|------------|-----------------------------------|-------------------------|-----|-----|-----|-----------------|-----------|-------------|-------------|
|             |                     |                 |            |                                   | A                       | B   | C   | D   |                 |           |             |             |
| VG4032A1006 | 220 ... 240         | 1 1/4           | 32         | 500                               | 150                     | 210 | 110 | 88  | 4.3             | IP54      | 2           | ✓           |
| VG4032A1022 | 110                 | 1 1/4           | 32         | 500                               | 150                     | 210 | 110 | 88  | 4               | IP54      | 2           | ✓           |
| VG8032A1002 | 24                  | 1 1/4           | 32         | 500                               | 150                     | 210 | 110 | 88  | 4               | IP54      | 2           | ✓           |
| VG8032A1010 | 24 ... 28 Vdc       | 1 1/4           | 32         | 500                               | 150                     | 210 | 110 | 88  | 4               | IP54      | 2           | ✓           |
| VG8032A1028 | 12 Vdc              | 1 1/4           | 32         | 500                               | 150                     | 210 | 110 | 88  | 4.5             | IP54      | 2           | ✓           |
| VG4040A1009 | 220 ... 240         | 1 1/2           | 40         | 500                               | 150                     | 210 | 110 | 88  | 4.3             | IP54      | 2           | ✓           |
| VG4040A1025 | 110                 | 1 1/2           | 40         | 500                               | 150                     | 210 | 110 | 88  | 4               | IP54      | 2           | ✓           |
| VG8040A1005 | 24                  | 1 1/2           | 40         | 500                               | 150                     | 210 | 110 | 88  | 4               | IP54      | 2           | ✓           |
| VG8040A1013 | 24 ... 28 Vdc       | 1 1/2           | 40         | 500                               | 150                     | 210 | 110 | 88  | 4.5             | IP54      | 2           | ✓           |
| VG8040A1021 | 12 Vdc              | 1 1/2           | 40         | 500                               | 150                     | 210 | 110 | 88  | 4.5             | IP54      | 2           | ✓           |
| VG4050A1008 | 220 ... 240         | 2               | 50         | 500                               | 170                     | 285 | 135 | 123 | 15.3            | IP54      | 4.2         | ✓           |
| VG4050A1024 | 110                 | 2               | 50         | 500                               | 170                     | 285 | 135 | 123 | 13              | IP54      | 4.2         | ✓           |
| VG8050A1004 | 24                  | 2               | 50         | 500                               | 170                     | 285 | 135 | 123 | 14              | IP54      | 4.2         | ✓           |
| VG8050A1012 | 24 ... 28 Vdc       | 2               | 50         | 500                               | 170                     | 285 | 135 | 123 | 16              | IP54      | 4.2         | ✓           |
| VG8050A1020 | 12 Vdc              | 2               | 50         | 500                               | 170                     | 285 | 135 | 123 | 18              | IP54      | 4.2         | ✓           |
| VG4065A1006 | 220 ... 240         | 2 1/2           | 65         | 360                               | 225                     | 330 | 170 | 123 | 15.3            | IP54      | 7.5         | ✓           |
| VG4065A1030 | 220 ... 240         | 2 1/2           | 65         | 360                               | 225                     | 330 | 170 | 123 | 15.3            | IP65      | 7.5         | ✓           |
| VG4065A1022 | 110                 | 2 1/2           | 65         | 360                               | 225                     | 330 | 170 | 123 | 13              | IP54      | 7.5         | ✓           |
| VG8065A1002 | 24                  | 2 1/2           | 65         | 360                               | 225                     | 330 | 170 | 123 | 14              | IP54      | 7.5         | ✓           |
| VG8065A1010 | 24 ... 28 Vdc       | 2 1/2           | 65         | 360                               | 225                     | 330 | 170 | 123 | 16              | IP54      | 7.5         | ✓           |
| VG8065A1028 | 12 Vdc              | 2 1/2           | 65         | 360                               | 225                     | 330 | 170 | 123 | 17              | IP54      | 7.5         | ✓           |
| VG4080A1005 | 220 ... 240         | 3               | 80         | 360                               | 225                     | 330 | 170 | 123 | 15.3            | IP54      | 7.5         | ✓           |
| VG4080A1021 | 110                 | 3               | 80         | 360                               | 225                     | 330 | 170 | 123 | 13              | IP54      | 7.5         | ✓           |
| VG8080A1001 | 24                  | 3               | 80         | 360                               | 225                     | 330 | 170 | 123 | 14              | IP54      | 7.5         | ✓           |
| VG8080A1019 | 24 ... 28 Vdc       | 3               | 80         | 360                               | 225                     | 330 | 170 | 123 | 16              | IP54      | 7.5         | ✓           |
| VG8080A1027 | 12 Vdc              | 3               | 80         | 360                               | 225                     | 330 | 170 | 123 | 17              | IP54      | 7.5         | ✓           |
| VG4080A1021 | 110                 | 3               | 80         | 360                               | 225                     | 330 | 170 | 120 | 13              | IP54      | 7.5         | ✓           |
| VG8080A1001 | 24                  | 3               | 80         | 360                               | 225                     | 330 | 170 | 120 | 14              | IP54      | 7.5         | ✓           |
| VG8080A1019 | 24 ... 28 Vdc       | 3               | 80         | 360                               | 225                     | 330 | 170 | 120 | 16              | IP54      | 7.5         | ✓           |
| VG8080A1027 | 12 Vdc              | 3               | 80         | 360                               | 225                     | 330 | 170 | 120 | 17              | IP54      | 7.5         | ✓           |