

VE4000 Series

CLASS "A" SOLENOID VALVE VE4000B1



FEATURES

- Normally Closed valve. (spring loaded valve disc, closed when de-energized).
- Adjustable flow rate regulator on top of the coil.
- Opening/closing time: <1 sec.
- Maximum working frequency: 20 cycles/min.
- 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.

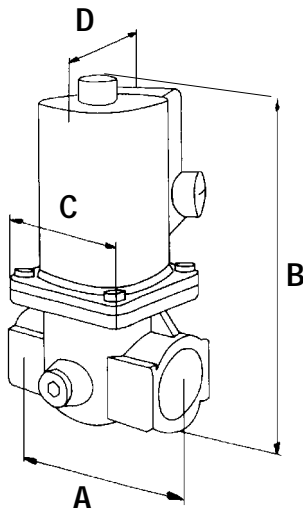


Fig. 2. Dimensional drawing VE4000B1 Series

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.

SPECIFICATION

Model

VE4000B1

Dimensions

See figure and table below.

Pipe sizes

Inlet and outlet 3/8" up to 2" 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 VE4000 Series on page 66 and 67.

Maximum operating pressure:

Rp 3/8" to Rp 1/2" types up to 360 mbar

Rp 3/4" to Rp 3" types, 200 or 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 Vac, 50/60 Hz

24 ... 28 Vdc

Ambient temperature range

-15 ... 60 °C

Electrical connection

Plug connection according to PG11.

Optional : Male DIN plug connector according to ISO4400

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

Valve plunger

Chrome plated Fe 360B steel sliding on anti-friction bearing.

Seals and gaskets

Hydrocarbon resistant NBR rubber type.

Optional : Viton rubber type

Standards and Approvals

Class "A" valve in accordance with EN161 standards.

The VE4000 Series gas valves conform with the following EC directives:

- Gas Appliance Directive (90/396/EEC)
PIN: CE-0063AP3075/1
- Low Voltage Directive (73/23/EEC)
- Electro Magnetic Compatibility Directive (89/336/EEC)

Table 2. VE4000B1 Series, Class “A” Normally Closed solenoid valve, ON/OFF with flow rate adjuster.

| O.S. Number | Rated Voltage (Vac) | Connect. (inch) | DN | Maximum Operating Pressure (mbar) | Overall Dimensions (mm) | | | | Power Cons. (W) | Enclosure | Weight (kg) | Bottom Plug | CPI switch | DIN |
|-------------|---------------------|-----------------|----|-----------------------------------|-------------------------|-----|-----|-----|-----------------|-----------|-------------|-------------|------------|-----|
| | | | | | A | B | C | D | | | | | | |
| VE4010B1005 | 220 ... 240 | 3/8 | 10 | 360 | 72 | 121 | 52 | 85 | 14 | IP54 | 1.1 | - | - | - |
| VE4010B1013 | 110 | 3/8 | 10 | 360 | 72 | 121 | 52 | 85 | 14 | IP54 | 1.1 | - | - | - |
| VE8010B1027 | 24 ... 28 Vdc | 3/8 | 10 | 360 | 72 | 121 | 52 | 85 | 17 | IP54 | 1.1 | - | - | - |
| VE8010B1019 | 24 ... 28 Vdc | 3/8 | 10 | 360 | 72 | 121 | 52 | 85 | 17 | IP65 | 1.1 | - | - | - |
| VE8010B1001 | 24 | 3/8 | 10 | 360 | 72 | 121 | 52 | 85 | 14 | IP54 | 1.1 | - | - | - |
| VE4015B1004 | 220 ... 240 | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 14 | IP54 | 1.1 | - | - | - |
| VE4015B1038 | 220 ... 240 | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 14 | IP65 | 1.1 | - | - | - |
| VE4015B1061 | 220 ... 240 | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 14 | IP54 | 1.1 | - | - | ✓ |
| VE4015B1012 | 110 | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 14 | IP54 | 1.1 | - | - | - |
| VE4015B1053 | 110 | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 14 | IP65 | 1.1 | - | - | - |
| VE8015B1026 | 24 ... 28 Vdc | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 17 | IP54 | 1.1 | - | - | - |
| VE8015B1018 | 24 ... 28 Vdc | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 17 | IP65 | 1.1 | - | - | - |
| VE8015B1000 | 24 | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 14 | IP54 | 1.1 | - | - | - |
| VE8015B1034 | 24 | 1/2 | 15 | 360 | 72 | 121 | 52 | 85 | 14 | IP65 | 1.1 | - | - | - |
| VE4020B1004 | 220 ... 240 | 3/4 | 20 | 200 | 86 | 168 | 70 | 96 | 20 | IP54 | 1.9 | ✓ | - | - |
| VE4020B1046 | 220 ... 240 | 3/4 | 20 | 360 | 86 | 168 | 70 | 96 | 20 | IP54 | 1.9 | ✓ | - | - |
| VE4020B1012 | 110 | 3/4 | 20 | 200 | 86 | 168 | 70 | 96 | 18 | IP54 | 1.9 | ✓ | - | - |
| VE4020B1087 | 110 | 3/4 | 20 | 360 | 86 | 168 | 70 | 96 | 18 | IP54 | 1.9 | ✓ | - | - |
| VE4020B1061 | 110 | 3/4 | 20 | 200 | 86 | 168 | 70 | 96 | 18 | IP65 | 1.9 | ✓ | - | - |
| VE8020B1026 | 24 ... 28 Vdc | 3/4 | 20 | 200 | 86 | 168 | 70 | 96 | 24 | IP54 | 1.9 | ✓ | - | - |
| VE8020B1000 | 24 | 3/4 | 20 | 200 | 86 | 168 | 70 | 96 | 21 | IP54 | 1.9 | ✓ | - | - |
| VE8020B1034 | 24 | 3/4 | 20 | 200 | 86 | 168 | 70 | 96 | 24 | IP65 | 1.9 | ✓ | - | - |
| VE4025B1003 | 220 ... 240 | 1 | 25 | 200 | 100 | 168 | 75 | 96 | 20 | IP54 | 2.0 | ✓ | - | - |
| VE4025B1045 | 220 ... 240 | 1 | 25 | 360 | 100 | 168 | 75 | 96 | 20 | IP54 | 2.0 | ✓ | - | - |
| VE4025B1011 | 110 | 1 | 25 | 200 | 100 | 168 | 75 | 96 | 18 | IP54 | 2.0 | ✓ | - | - |
| VE4025B1060 | 110 | 1 | 25 | 200 | 100 | 168 | 75 | 96 | 18 | IP65 | 2.0 | ✓ | - | - |
| VE4025B1078 | 110 | 1 | 25 | 360 | 100 | 168 | 75 | 96 | 18 | IP54 | 2.0 | ✓ | - | - |
| VE4025B1094 | 110 | 1 | 25 | 360 | 100 | 168 | 75 | 96 | 18 | IP65 | 2.0 | ✓ | ✓ | - |
| VE8025B1025 | 24 ... 28 Vdc | 1 | 25 | 200 | 100 | 168 | 75 | 96 | 24 | IP54 | 2.0 | ✓ | - | - |
| VE8025B1041 | 24 ... 28 Vdc | 1 | 25 | 200 | 100 | 168 | 75 | 96 | 24 | IP65 | 2.0 | ✓ | - | - |
| VE8025B1009 | 24 | 1 | 25 | 200 | 100 | 168 | 75 | 96 | 21 | IP54 | 2.0 | ✓ | - | - |
| VE8025B1017 | 24 | 1 | 25 | 360 | 100 | 168 | 75 | 96 | 21 | IP65 | 2.0 | ✓ | - | - |
| VE8025B1033 | 24 | 1 | 25 | 200 | 100 | 168 | 75 | 96 | 24 | IP65 | 2.0 | ✓ | - | - |
| VE4032B1009 | 220 ... 240 | 1 1/4 | 32 | 200 | 150 | 233 | 110 | 118 | 40 | IP54 | 5.8 | ✓ | - | - |
| VE4032B1041 | 220 ... 240 | 1 1/4 | 32 | 360 | 150 | 233 | 110 | 118 | 41 | IP54 | 5.8 | ✓ | - | - |
| VE4032B1017 | 110 | 1 1/4 | 32 | 200 | 150 | 233 | 110 | 118 | 47 | IP54 | 5.8 | ✓ | - | - |
| VE4032B1074 | 110 | 1 1/4 | 32 | 360 | 150 | 233 | 110 | 118 | 48 | IP54 | 5.8 | ✓ | - | - |
| VE8032B1013 | 24 ... 28 Vdc | 1 1/4 | 32 | 200 | 150 | 233 | 110 | 118 | 67 | IP54 | 5.8 | ✓ | - | - |
| VE8032B1005 | 24 | 1 1/4 | 32 | 200 | 150 | 233 | 110 | 118 | 53 | IP54 | 5.8 | ✓ | - | - |
| VE4040B1002 | 220 ... 240 | 1 1/2 | 40 | 200 | 150 | 233 | 110 | 118 | 40 | IP54 | 5.8 | ✓ | - | - |
| VE4040B1044 | 220 ... 240 | 1 1/2 | 40 | 360 | 150 | 233 | 110 | 118 | 41 | IP54 | 5.8 | ✓ | - | - |
| VE4040B1010 | 110 | 1 1/2 | 40 | 200 | 150 | 233 | 110 | 118 | 47 | IP54 | 5.8 | ✓ | - | - |
| VE4040B1069 | 110 | 1 1/2 | 40 | 360 | 150 | 233 | 110 | 118 | 40 | IP54 | 5.8 | ✓ | - | - |
| VE4040B1093 | 110 | 1 1/2 | 40 | 360 | 150 | 233 | 110 | 118 | 40 | IP65 | 5.8 | ✓ | ✓ | - |
| VE8040B1024 | 24 ... 28 Vdc | 1 1/2 | 40 | 200 | 150 | 233 | 110 | 118 | 67 | IP54 | 5.8 | ✓ | - | - |
| VE8040B1008 | 24 | 1 1/2 | 40 | 200 | 150 | 233 | 110 | 118 | 53 | IP54 | 5.8 | ✓ | - | - |
| VE4050B1001 | 220 ... 240 | 2 | 50 | 200 | 170 | 260 | 135 | 118 | 41 | IP54 | 6.4 | ✓ | - | - |
| VE4050B1043 | 220 ... 240 | 2 | 50 | 360 | 170 | 260 | 135 | 118 | 60 | IP54 | 6.4 | ✓ | - | - |
| VE4050B1019 | 110 | 2 | 50 | 200 | 170 | 260 | 135 | 118 | 48 | IP54 | 6.4 | ✓ | - | - |
| VE4050B1068 | 110 | 2 | 50 | 360 | 170 | 260 | 135 | 118 | 63 | IP54 | 6.4 | ✓ | - | - |
| VE4050B1084 | 110 | 2 | 50 | 360 | 170 | 260 | 135 | 118 | 63 | IP65 | 6.4 | ✓ | - | - |
| VE8050B1015 | 24 ... 28 Vdc | 2 | 50 | 200 | 170 | 260 | 135 | 118 | 64 | IP54 | 6.4 | ✓ | - | - |
| VE8050B1007 | 24 | 2 | 50 | 200 | 170 | 260 | 135 | 118 | 48 | IP54 | 6.4 | ✓ | - | - |
| VE4065B1017 | 220 ... 240 | 2 1/2 | 65 | 200 | 242 | 238 | 200 | 149 | 62 | IP54 | 6.4 | ✓ | - | - |
| VE4065B1032 | 220 ... 240 | 2 1/2 | 65 | 360 | 242 | 238 | 200 | 163 | 118 | IP54 | 6.4 | ✓ | - | - |
| VE4065B1025 | 110 | 2 1/2 | 65 | 200 | 242 | 238 | 200 | 149 | 60 | IP54 | 6.4 | ✓ | - | - |
| VE4065B1041 | 110 | 2 1/2 | 65 | 360 | 242 | 238 | 200 | 163 | 125 | IP54 | 6.4 | ✓ | - | - |
| VE4080B1016 | 220 ... 240 | 3 | 80 | 200 | 242 | 238 | 200 | 163 | 118 | IP54 | 6.4 | ✓ | - | - |
| VE4080B1024 | 110 | 3 | 80 | 200 | 242 | 238 | 200 | 163 | 125 | IP54 | 6.4 | ✓ | - | - |