SERIES DGV DEGASSING VALVE FOR CONTINUOUS AUTOMATIC VENTING

All Plastic Design • United States Patent #7,481,238 B2

Acrylic body option, above, highlighting the inner workings of the float and patented armature. All models, such as the PVC valve below, have the same internal components.

FEATURES:

- Reduces replacement costs – no internal or external metal components; ideal for aggressive environments.
- Placed at the high point of a piping system, this innovative valve will vent gas as it occurs. A unique float/actuating lever allows the vent orifice to open when gas is present. After gas vents, liquid forces the vent to close. Whenever gas accumulates, the valve will re-open until the gas is vented.
- All-plastic construction designed for sodium hypochlorite, ozone systems, or any liquids prone to outgassing.
- Series DGV is designed for systems that continuously generate trace amounts of gasses. For system start-up requiring rapid expulsion of larger volume of air or gasses, see Series ARV.

INSTALLATION NOTES

Series DGV should be installed at the highest possible point in a piping system, and it must be oriented upright. In normal operation, residual liquid and/or vapor in the valve will be expelled or "spit" from the outlet vent. Therefore, it is recommended to pipe the outlet port to a safe area for hazardous liquids, or use a standpipe for non-hazardous liquids.

Important Note on DGV use with salt solutions and other liquids that may precipitate solids: Should the DGV be installed in liquids which have the possibility of precipitating solids out of solution, it is recommended to periodically clean the DGV in warm or cold water to remove debris and/or precipitated salts from the orifice and the seat. To disassemble use an appropriate spanner wrench inserted into the two 1/8" holes in the top of the valve, unscrew and remove the float/seat assembly. Then clean and re-assemble the DGV.

It is further recommended to keep a spare seal kit on hand. When the DGV is disassembled for cleaning, examine the spring o-ring (the o-ring retaining the seat and float arm) for elasticity and general overall condition. If lack of elasticity or general wear is evident, replace the seals.

SERIES DGV AUTOMATIC DEGASSING VALVE

SPECIFICATIONS AND DIMENSIONS

Body Materials Available: PVC, CPVC, Polypro, Acrylic or PVDF

Elastomers: FKM (Viton) or EPDM

Additional Wetted Material: Natural Polypropylene

Maximum Operating Pressure: PVC, CPVC, PVDF: 150 PSI; PP, Acrylic: 100 PSI

Minimum Specific Gravity: 0.9

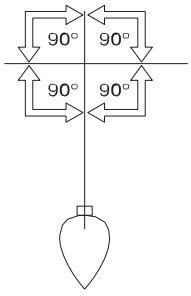
Dimensions: 4¼" high x 2¼" diameter

Vent Port: 1/8" NPT

System Connection: ½" NPT; valve must be oriented vertically.

Specifications and Dimensions subject to change.

APPLICATION NOTES



Function: Series DGV is an automatic, continuous venting valve that releases trace amounts of pipeline gas as it occurs. It will not evacuate a large volume of air such as at system start-up; for that application refer to Series ARV. If the air release and degassing functions can be accommodated at the same location in a piping system, refer to Series CARD combination air release & degassing valve.

Vacuum Venting: Although Series DGV, Series ARV and Series CARD are all normally-open valves, they should not be used in lieu of a vacuum breaker due to safety considerations, such as continual emission of corrosive vapors.

Pipeline Considerations: All automatic venting valves MUST be mounted vertically plumb as shown at left, vent at top, process connection at bottom.

ORDERING

Series DGV Part Numbers Pipe Size (NPT)	PVC	CPVC	Polypro	PVDF	ACRYLIC
1/2"	DGV050V-PV	DGV050V-CP	DGV050V-PP	DGV050V-PF	DGVO5OV-ACR

DGV (series) **050** (size) **V** (seal material) - **PV** (body material)
Part numbers shown are **FKM** seals. For **EPDM** seals, change **"V" to "EP."** For example, DGV050EP-PV.

- Standard connections are threaded. For other connection types, consult factory.

Photos are representative. Appearance may vary based on size/materials.