BREATHERS

VentGuard®

The ideal solution to protect against moisture and particulate contamination in low-flow applications with intermittent operations

APPLICATIONS

• Gearboxes
• Low-Flow
• High-Humidity
• Washdown
Overview

**VentGuard® Breathers:**

Typical Industries

- Wind Energy
- Pulp & Paper
- Aviation
- Storage
- Manufacturing
- Petrochemical

**By the Numbers:**

1-Domed Cap
A domed cap allows for better washdown runoff

2-Integrated Nylon Standpipe
The integrated standpipe provides excellent vibration resistance and dissipates impact throughout the unit, eliminating weak points. It also allows even airflow distribution throughout the unit, eliminating inaccurate readings of desiccant saturation.

3-External Ribs
External ribs on shell to create greater durability and grip when installing or replacing breather

4-Integrated Drip Ring
An integrated drip ring keeps shedding water from entering the vent holes

5-Threaded Mounting
Easily replaces standard filler/breather cap with multi-fit connection or one of several adapters.

6-Larger, High-Capacity Check Valves
High-capacity check valves allow for increased airflow at low cracking pressure.

7-Filter Element
Polyester filter element removes airborne contamination to 3-micron absolute. Unique loops allow particles to release during system exhalation, helping to increase breather life.

8-Enhanced Seal
An enhanced seal eliminates potential for airflow bypass

**How It Works**

This breather unit replaces the standard dust cap or OEM breather cap on equipment. Check-valves on the bottom of the unit isolate the system until equipment needs to breather. As air is drawn into equipment through the breather, the layered filter elements remove particulate while the desiccant beads strip harmful moisture.

While in service or during shutdown, the desiccant beads attract moisture from inside the equipment reservoir, actively drying the equipment.
# Specifications

## Materials & Components:

**Housing:** Polycarbonate, Nylon 6/6 30% Glass Filled, Polypropylene  
**Seals (DC-VG-BB, DC-VG-1):** Buna-N, EPDM, PVC  
**Seals (DC-VG-2, DC-VG-3, DC-VG-4):** Buna-N, PVC  
**Filter Media:** Polyurethane, Polyester  
**Hydrophilic Media:** Silica gel

## Recommended Temperature Range:

-20°F to 200°F  
-29°C to 93°C

## Chemical Compatibility:

Compatible with all mineral oils, most synthetic oils and diesel (Contact Des-Case technical support for chemical compatibility inquiries)

## Certificates and Approvals:

Upon request

## Filter Efficiency:

\((3\mu\text{ absolute } (\beta_{3} > 200))\)

## Flow Rate

<table>
<thead>
<tr>
<th>Model</th>
<th>Suction / Return Rate (gpm / lpm)</th>
<th>Gearbox / Storage Tank Reservoir Size (Gallons / Liters)</th>
<th>Hydraulic Reservoir Size (Gallons / Liters)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-VG-BB</td>
<td>11 / 41</td>
<td>15 / 57</td>
<td>2 / 8</td>
</tr>
<tr>
<td>DC-VG-1</td>
<td>11 / 41</td>
<td>35 / 132</td>
<td>5 / 19</td>
</tr>
<tr>
<td>DC-VG-2</td>
<td>90 / 340</td>
<td>200 / 757</td>
<td>60 / 227</td>
</tr>
<tr>
<td>DC-VG-3</td>
<td>82 / 311</td>
<td>350 / 1325</td>
<td>100 / 379</td>
</tr>
<tr>
<td>DC-VG-4</td>
<td>75 / 283</td>
<td>500 / 1893</td>
<td>200 / 757</td>
</tr>
</tbody>
</table>

Please Note: This is intended as a general guideline for sizing only; other considerations, such as: humidity level, frequency of air flow, ambient temperatures, and chemical compatibility are very important in sizing a breather properly. Larger applications and special circumstances typically require the most thorough analysis. Please contact Des-Case for assistance in sizing a breather.

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![Graph](https://via.placeholder.com/150)

- **DC-VG-2**  
- **DC-VG-3**  
- **DC-VG-4**
## Specifications

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Style</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>Thread Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-VG-BB</td>
<td>Miniature</td>
<td>3.87 / 98</td>
<td>3.43 / 87</td>
<td>2.52 / 64</td>
<td>3/8&quot; Multi-Fit Male Thread with O-Ring Seal, Compatible with: 3/8&quot; NPT; 3/8&quot; BSPT; 3/8&quot; BSPP</td>
</tr>
<tr>
<td>DC-VG-1</td>
<td>Miniature</td>
<td>5.36 / 136</td>
<td>4.92 / 125</td>
<td>2.52 / 64</td>
<td></td>
</tr>
<tr>
<td>DC-VG-2</td>
<td>Standard</td>
<td>6.00 / 152</td>
<td>5.33 / 135</td>
<td>4.10 / 104</td>
<td>1&quot; Multi-Fit Male Thread with O-Ring Seal, Compatible with: 1&quot; NPT; 1&quot; NPSM; 1&quot; BSPT; 1&quot; BSPP</td>
</tr>
<tr>
<td>DC-VG-3</td>
<td>Standard</td>
<td>8.00 / 203</td>
<td>7.33 / 186</td>
<td>4.10 / 104</td>
<td></td>
</tr>
<tr>
<td>DC-VG-4</td>
<td>Standard</td>
<td>10.00 / 254</td>
<td>9.33 / 237</td>
<td>4.10 / 104</td>
<td></td>
</tr>
</tbody>
</table>