BREATHERS: Rebuildable Steel
For high-flow applications

APPLICATIONS:
• Bulk storage
• Chemical/harsh environments
• Hydraulic reservoir
• Diesel tank storage
The Overview

Rebuildable Steel: The Highlights

- Carbon or stainless steel housing
- Easy-to-replace desiccant bags remove moisture from incoming air
- Replaceable filter removes particles to 1-micron absolute ($\beta_{1000}$)
- Eliminates rust-forming condensation
- Prevents sludge deposits and water-contaminated fluid
- Reduces wear and tear on equipment, prolongs life

How It Works

This breather unit replaces the standard dust cap or OEM breather cap on equipment. As air is drawn into equipment through the breather, the pleated filter element removes solid particulate while the desiccant extracts moisture.

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

Customization of Materials

**Steel Housings:**
- Carbon Steel*
- 304 Stainless Steel
- 316 Stainless Steel

**Media:**
- Silica Gel*
- Activated Carbon
- Molecular Sieve
- Activated Alumina

**Gasket/Seal Material:**
- Buna-N*
- Viton®
- EPDM
- SBR Rubber

**Filter Material:**
- Microglass*
- Polyurethane Filter
- Plastisol Filter

*Standard Component

Product Specs.

<table>
<thead>
<tr>
<th>Product Specs.</th>
<th>DC- RS-3</th>
<th>DC- RS-5</th>
<th>DC- RS-9</th>
<th>DC- RS-15</th>
<th>DC- RS-25</th>
<th>DC- RS-50</th>
<th>DC- RS-75</th>
<th>DC- RS-100</th>
<th>DC- RS-150</th>
<th>DC- RS-200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height (in/cm)</td>
<td>11.5/29.2</td>
<td>13.75/34.9</td>
<td>18.25/45.4</td>
<td>19.25/48.9</td>
<td>22.5/57.1</td>
<td>31.25/79.4</td>
<td>39.75/101</td>
<td>31/78.7</td>
<td>36.75/93.3</td>
<td>42.75/106.6</td>
</tr>
<tr>
<td>Width (in/cm)</td>
<td>10.1/25.7</td>
<td>10.1/25.7</td>
<td>10.1/25.7</td>
<td>15.5/39.4</td>
<td>15.5/39.4</td>
<td>15.5/39.4</td>
<td>15.5/39.4</td>
<td>23.5/59.7</td>
<td>23.5/59.7</td>
<td>23.5/59.7</td>
</tr>
<tr>
<td>Approx. Dry Weight (lbs/kg)</td>
<td>16/7.26</td>
<td>20/9.07</td>
<td>27/12.25</td>
<td>49/22.23</td>
<td>64/29.03</td>
<td>100/45.36</td>
<td>144/65.32</td>
<td>190/86.18</td>
<td>253/114.76</td>
<td>315/142.88</td>
</tr>
<tr>
<td>Amnt. of Desiccant (lbs/kg)</td>
<td>3/1.36</td>
<td>5/2.27</td>
<td>9/4.08</td>
<td>15/6.80</td>
<td>25/11.34</td>
<td>50/22.68</td>
<td>75/34.02</td>
<td>100/45.36</td>
<td>150/68.04</td>
<td>200/90.72</td>
</tr>
<tr>
<td>Max. Adsorption Capacity (gal/L)</td>
<td>0.14/0.54</td>
<td>0.24/0.9</td>
<td>0.43/1.62</td>
<td>0.71/2.7</td>
<td>1.19/4.5</td>
<td>2.38/9</td>
<td>3.57/13.5</td>
<td>4.75/18</td>
<td>7.13/27</td>
<td>9.51/36</td>
</tr>
<tr>
<td>Max. Air Flow Rate</td>
<td>85 @ 0.5psid</td>
<td>85 @ 0.5psid</td>
<td>80 @ 0.5psid</td>
<td>205 @ 0.5psid</td>
<td>140 @ 0.5psid</td>
<td>115 @ 0.5psid</td>
<td>80 @ 0.5psid</td>
<td>270 @ 0.5psid</td>
<td>250 @ 0.5psid</td>
<td>240 @ 0.5psid</td>
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<tr>
<td>Operating Temp.</td>
<td>-20-220°F/-29-104°F</td>
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<tr>
<td>Connection Size</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>2&quot;</td>
<td>3&quot;</td>
<td>3&quot;</td>
<td>3&quot;</td>
<td>3&quot;</td>
<td>4&quot;</td>
<td>4&quot;</td>
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<tr>
<td>Body Material</td>
<td>Carbon steel, Polyurethane, Polypropylene, Microglass, Polycarbonate, Nomex, Buna-N (silica gel as hydrophilic agent)</td>
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<tr>
<td>*Desiccant weight may vary up to 0.5lbs for easy handling.</td>
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</table>
Info for Rebuild Kits

Rebuild Kit Components

Replacement Filter Element
Pleated filter element captures airborne contamination to 1-micron absolute.

Desiccant Bag Filter
Polypropylene bag has handles for easy removal and replacement.¹

Sight Glass Indicator
Silica gel changes color from blue to pink when the unit requires rebuilding.

Rebuild Parts & Accessories

<table>
<thead>
<tr>
<th>Model #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DC-RS-X-RK</td>
<td>Rebuildable Steel Breather Kits</td>
</tr>
<tr>
<td>DC-RS-X-F1</td>
<td>Rebuildable Steel Breather Microglass Filter Elements</td>
</tr>
<tr>
<td>DC-RS-X-D1</td>
<td>Rebuildable Steel Breather Desiccant Bag Sets</td>
</tr>
<tr>
<td>DC-RS-X-SG1</td>
<td>Rebuildable Steel Breather Sight Glass Cartridges</td>
</tr>
<tr>
<td>DC-RS-X-P1</td>
<td>Rebuildable Steel Breather Foam Pad Inserts</td>
</tr>
<tr>
<td>DC-RS-X-G1</td>
<td>Rebuildable Steel Breather Gasket Seals</td>
</tr>
</tbody>
</table>

**NOTE:** For part codes containing X, substitute the appropriate RS model number. (Example: the part code for a sight glass cartridge for the DC-RS-150 would be DC-RS-150-SG1.)

Des-Case recommends use of a pressure/relief valve on any tank or storage system.

¹ Desiccant bags for units above an RS-25 are packaged in 25lb increments for easy handling

By the Numbers

1–Pleated Filter Element
Filter element captures airborne contamination to 1-micron absolute ($\beta_{0.3} \geq 1000$).

2–Desiccant
Silica gel strips moisture from incoming air. Desiccant can be customized to mitigate a variety of chemicals or fumes.

3–Outside Sight Glass Indicator
Silica gel changes color from blue to light pink when the unit requires component replacement (or rebuilding).

4–Air Vents
Removable stickers keep breather inactive until installation.

5–Integrated Standpipe
Resilient construction provides durability and allows oil mist to coalesce and drain back into the reservoir.

6–Foam Pad
Foam filter captures any large particles and disperses incoming air evenly over filtration and drying areas.

7–Easy-to-Replace Desiccant Bag
Polypropylene bag has handles for easy removal.

8–Rugged Housing
Powder-coated carbon steel or stainless steel housing provides excellent protection against the elements.