

# BREATHERS

## Rebuildable Steel

For high-flow applications



### APPLICATIONS

- Bulk storage
- Chemical/harsh environments
- Hydraulic reservoir
- Diesel tank storage



# 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 ( $\beta_{\geq 1000}$ )
- 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

### Gasket/Seal Material:

Buna-N\*  
Viton\*  
EPDM  
SBR Rubber

### Media:

Silica Gel\*  
Activated Carbon  
Molecular Sieve  
Activated Alumina

### Filter Material:

Microglass\*  
Polyurethane Filter  
Plastisol Filter

\*Standard Component

## Product Specs.

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

\*Desiccant weight may vary up to 0.5lbs for easy handling.

# Info for Rebuild Kits

## Rebuild Kit Components

### Replacement Filter Element

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



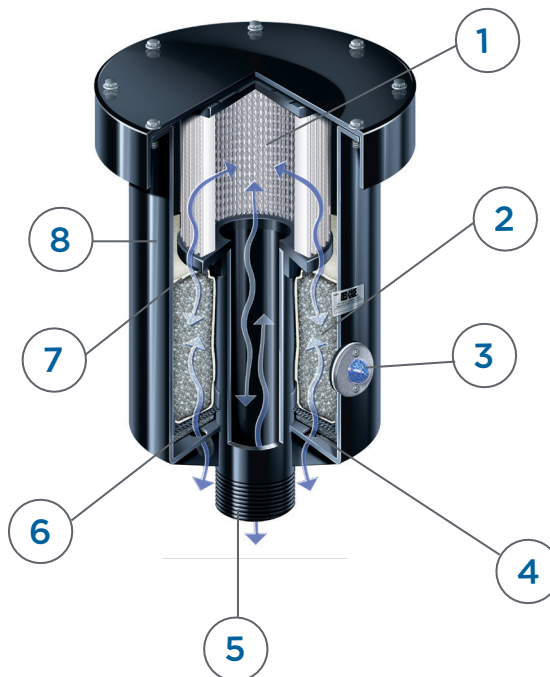
### Desiccant Bag Filter

Polypropylene bag has handles for easy removal and replacement.<sup>1</sup>



### Sight Glass Indicator

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



## Rebuild Parts & Accessories

Model #	Description
DC-RS-X-RK	Rebuildable Steel Breather Kits
DC-RS-X-F1	Rebuildable Steel Breather Microglass Filter Elements
DC-RS-X-D1	Rebuildable Steel Breather Desiccant Bag Sets
DC-RS-X-SG1	Rebuildable Steel Breather Sight Glass Cartridges
DC-RS-X-P1	Rebuildable Steel Breather Foam Pad Inserts
DC-RS-X-G1	Rebuildable Steel Breather Gasket Seals

**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.**

<sup>1</sup> 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 ( $\beta_{1\mu} \geq 1000$ ).

### 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.