

# Hybrid Breathers – Hydroguard™

Hybrid technology breather for specialty applications



## Overview

From the expansion chamber system to the check valves, every element of Des-Case's patented Hydroguard™ breather has been designed to stand up to a wide variety of industries and applications taking advantage of Des-Case's contamination control expertise.

Hydroguard™ breathers by Des-Case attack the source of contamination, allowing your equipment and lubricants to run longer and harder.

## Benefits of Des-Case Breathers

- Prevents:
  - Water contamination in oil and related fluids.
  - Rust and corrosion inside the container.
  - Chemical reactions or spoilage.
- Increased oil and oil filter life.
- Reduced abrasive wear, downtime, and repair costs.
- Improved lubricant performance.
- More reliable equipment performance.

## Hybrid Breather Features

- Ideal for gearboxes, washdowns, and high humidity areas
- Desiccant, particulate filtration ensures incoming air is dry and clean
- Expansion chamber system isolates lubes from all levels of ambient humidity
- Check valves ensure no excess pressure/vacuum builds

**DES-CASE**  
CORPORATION

Keeping contamination under control.®

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## Expansion Chamber

The diaphragm allows for expansion/contraction of the air within the casing as a result of temperature variations during steady-state operations.

## Foam Pad

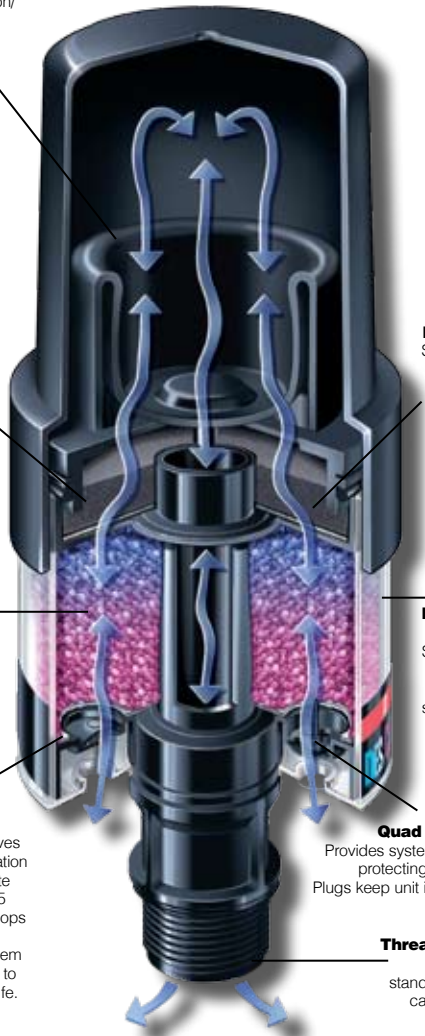
Reduces oil mist exhalation. Ensures outgoing air is evenly disbursed through the filters and desiccant, providing maximum efficiency through "backflushing."

## Water Vapor Adsorbent

Silica gel absorbs water from incoming air. Indicates condition by change of color from blue to pink.

## Filter Element

Patented polyester filter element removes airborne contamination to 3-micron absolute (74% efficient at 0.5 micron). Unique loops allow particles to release during system exhalation, helping to increase breather life.



## Filter Element

Second polyester filter element protects against any migration of desiccant.

## Resilient Polycarbonate Body\*

Shock-absorbing, clear casing provides reliable service and easy maintenance.

## Quad Check Valves

Provides system pressurization, protecting system integrity. Plugs keep unit inactive until use.

## Threaded Mounting

Easily replaces standard filler/breather cap with one of two adapters.

\*The end user is responsible for ensuring chemical compatibility for specific applications.

# Hydroguard™

Features	Benefits
Integrated Nylon Standpipe	Allows for greater chemical compatibility and vibration resistance.
Polycarbonate Body	Shock-absorbing, clear casing provides reliable service and easy maintenance.
Threaded Mounting	Easily and securely replaces standard filler/breather cap with one of two adapters.
Foam Pad	Disperses air evenly over filter media and silica gel
Patented Polyester Filter	Captures particles as small as 0.5 micron (73.5% efficiency), 3-micron absolute ( $\beta_3 > 200$ )
Silica Gel/Desiccant	Removes water from incoming air, extending fluid and system life
Expansion Chamber	Creates a nearly sealed system
Quad Check Valves	Provides slight system pressurization, protects system integrity (0.25 psi cracking pressure)

Model Number	DC-HG-8
Unit Height	9.75" / 24.76 cm
Unit Diameter	4.1" / 10.41 cm
Amount of Silica gel (oz./g)	10.4 oz. / 240 g
Adsorption Capacity (fl.oz/mL)	4.05 fl. oz. / 120 mL
Max. Flow Rate (cfm)	2.5 @ 1 PSID
Filtration ( $\mu$ absolute)	3
Op. Temp. Range ( $^{\circ}$ F/ $^{\circ}$ C)	-20/-28.9 to 200/93
Hydrophilic Agent	Silica Gel
Filter Media	Polyester
Connection Size	1"

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