

Connected VentGuard™ Breathers

Take a proactive approach to water ingress ion with the market's first connected and most accurate breather.



Ordering Codes

| | | |
|----|-------|-------|
| DC | | |
| | BOX 1 | BOX 2 |

| Module Type [Box 1] | |
|---------------------|-------------|
| Code | Description |
| IL | Wireless |
| IL-M8 | Wired |

| Breather Model [Box 2] | |
|------------------------|-------------------|
| Code | Description |
| VG-1 | VentGuard™ Series |
| VG-4 | VentGuard™ Series |

Breather Specifications

MATERIALS & COMPONENTS:

- **Filter Media:** Polyurethane, polyester
- **Hydrophilic Agent:** Silica gel
- **All Other Materials:** Polycarbonate, nylon, polypropylene, Buna-N, silicon, EPDM

CHEMICAL COMPATIBILITY:

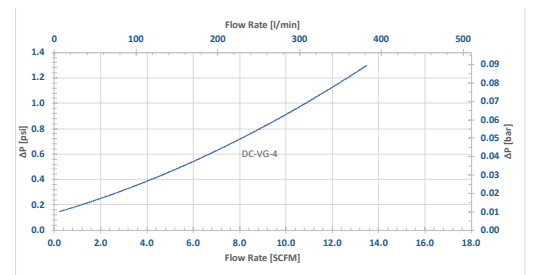
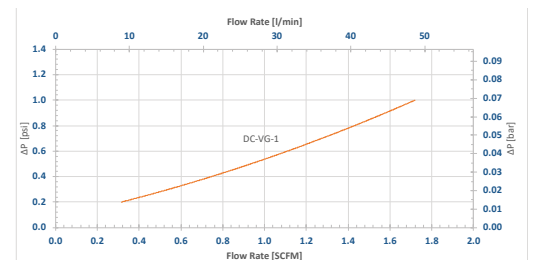
Compatible with all mineral oils, most synthetic oils and diesel (Contact Des-Case technical support for chemical compatibility inquiries)

PERFORMANCE SPECIFICATIONS:

| Product Specifications | VG-1 | VG-4 |
|------------------------------------------------------------|--------------------------------------|----------------------|
| Airflow at 1psid | 1 cfm / 41 l/min | 11cfm / 311 l/min |
| Filter Efficiency | 3 µm absolute ($\beta_3 \geq 200$) | |
| Temperature Range | -4°F to 130°F / -20°C to 54°C | |
| Water Adsorption Capacity (Maximum Water Retention) | 50 ml / 2 fl. oz | 353 ml / 11.3 fl. oz |
| Application Sizing Recommendations | | |
| Gearbox / Storage Tank | 35 gal / 132 L | 500 gal / 1893 L |
| Hydraulic Reservoir | 5 gal / 19 L | 200 gal / 757 L |
| Suction / Return Rate | 11 gpm / 41 l/min | 82 gpm / 311 l/min |

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.

AIRFLOW:



Advantages:

- Monitor critical assets 24/7
- Extend breather life by up to 20%
- Monitor difficult to reach locations
- Proactive diagnostic tool
- Access data anywhere in real time
- Shorten lube routes

Typical Industries:

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

Wireless Module

WIRELESS MODULE MATERIALS & COMPONENTS:

- **Casing:** Polycarbonate, Steel (ball plunger)
- **Cap:** Thermoplastic elastomers (TPE), Steel (screws)
- **Circuit Board:** LED lights, FR4 Fiberglass
- **Batteries:** 1.5V alkaline AAA (Manganese Dioxide, Zinc, Potassium Hydroxide, Graphite)

MODULE BATTERY & POWER:

- **Supply Source:** Three AAA Batteries (each rated 1.5 V DC, Max 1200 mAh)
- **Supply Voltage:** 4.5 V DC
- **Operational Current Rating:** 30 mA
- **Life Expectancy:** 2 years (use and temperature dependent)

MODULE ENVIRONMENT:

- 13.56 MHz RFID (Module & Sensor-board Communication)
- Intended for indoor and outdoor use
- Altitude up to 5000 meters
- **Maximum Relative Humidity:** 100% at up to 130°F (54°C)
- Dustproof / Waterproof (IP66)
- **Hazardous Ratings:** Not rated for hazardous locations
- FCC, CE, Reach, RoHS, Anatel

CONNECTIVITY / DATA OUTPUT:

- 2.402 - 2.480 GHz 4.0 Low Energy Wireless Connection
- Communication Range: up to 100ft (30m) line of sight

DEVICE COMPATIBILITY:

Android

- Android OS 5.0 and higher

Apple

- iOS 10.0 and higher

DATA STORAGE:

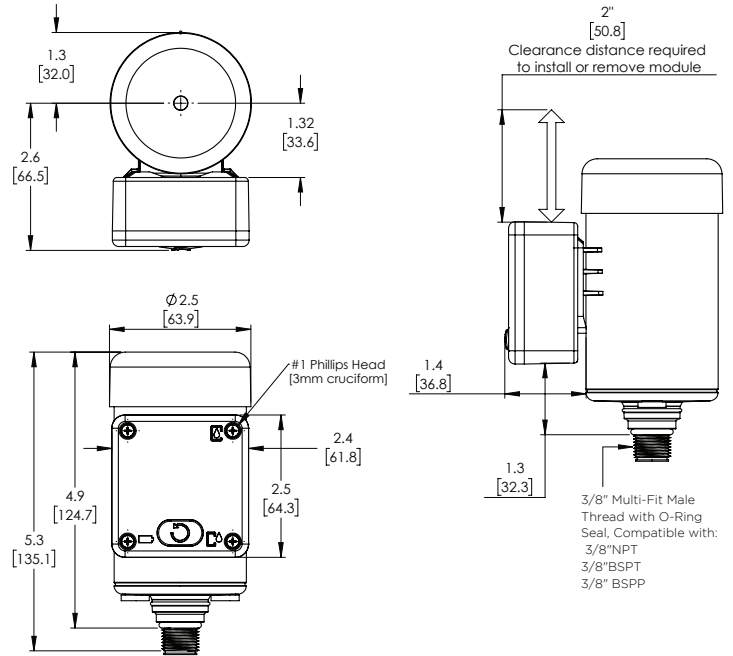
- Data readings every 60 minutes
- Stores 365 days of hourly data points

APP DOWNLOAD:



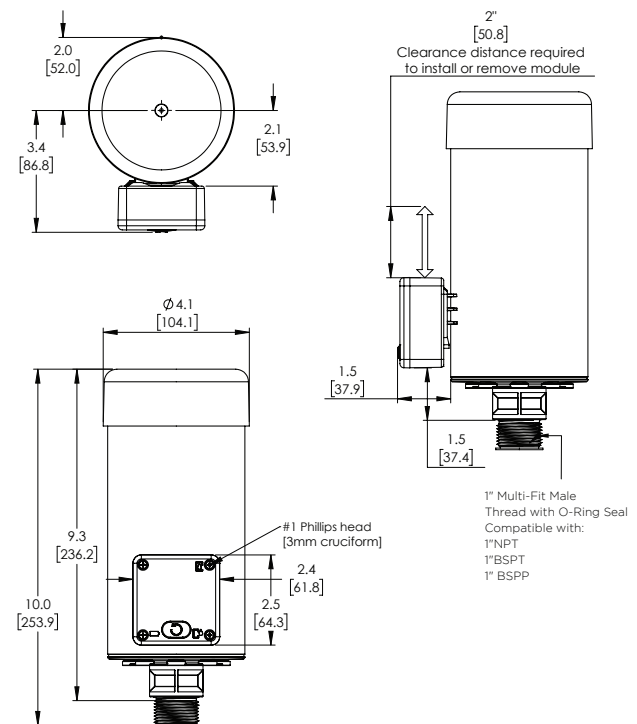
DC-IL-VG-1 DIMENSIONS

Note: All dimensions are in Inches/[mm]



DC-IL-VG-4 DIMENSIONS

Note: All dimensions are in Inches/[mm]



Wired Module

WIRED MODULE MATERIALS & COMPONENTS:

- **Casing:** Polycarbonate, Steel (ball plunger)
- **Cap:** Thermoplastic elastomers (TPE), Steel (screws)
- **Circuit Board:** LED lights, FR4 Fiberglass
- **M8 Connector:** Polyamide 67 GF30, Silicone and Nickel Plated Copper Alloy

WIRED MODULE POWER:

- **Supply Voltage:** 9-28 V DC
- **Operational Current Rating:** 30 mA

WIRED MODULE ENVIRONMENT:

- 13.56 MHz RFID (Module & Sensor-board Communication)
- Intended for indoor and outdoor use
- Altitude up to 5000 meters
- **Maximum Relative Humidity:** 100% at up to 54°C (129°F)
- Dustproof / Waterproof (IP66)
- **Hazardous Ratings:** Not rated for hazardous locations
- FCC, CE, Reach, RoHS

CONNECTIVITY / DATA OUTPUT:

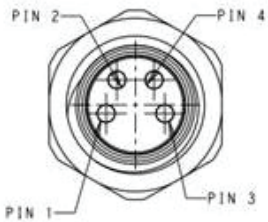
- A Coding - M8, 4 Pin Male
- **Serial:** RS485 Half Duplex

DATA STORAGE:

- Data readings every 60 minutes
- Stores 365 days of hourly data points

POWER / DATA CABLE:

- 4 Position Connector with wire leads x 3 m Connected Breather Cable Assembly (sold separately)
- **Standard:** IEC 61076-2-104

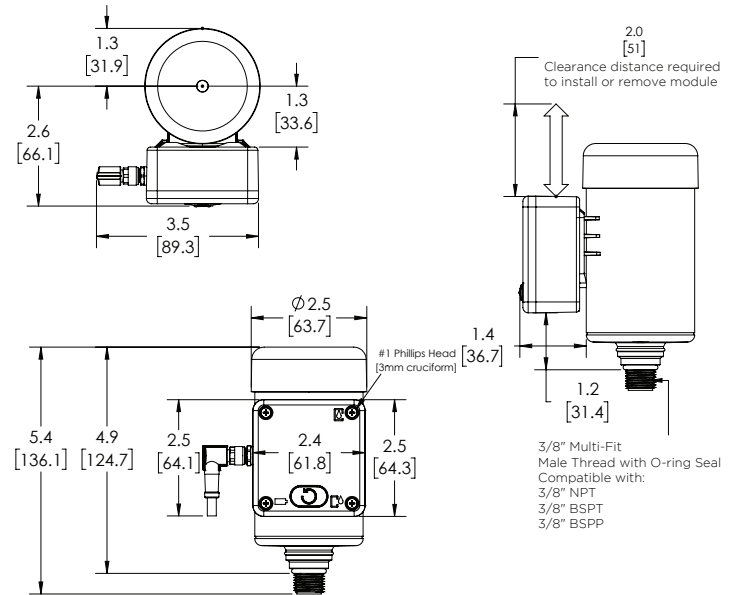


(A Coding – M8, Male 4 Pin)

| | | |
|--------------|-------|--------------|
| Pin 1 | Brown | 9-28V DC |
| Pin 2 | White | TXA (Low) |
| Pin 3 | Black | DC Reference |
| Pin 4 | Blue | TXB (High) |
| (Mark State) | | |

DC-IL-M8-VG-1 DIMENSIONS

Note: All dimensions are in Inches/[mm]



DC-IL-M8-VG-4 DIMENSIONS

Note: All dimensions are in Inches/[mm]

