



## Connected VentGuard™ Breathers

Take a proactive approach to water ingress 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, PVC, Buna-N, silicon, EPDM

### CHEMICAL COMPATIBILITY:

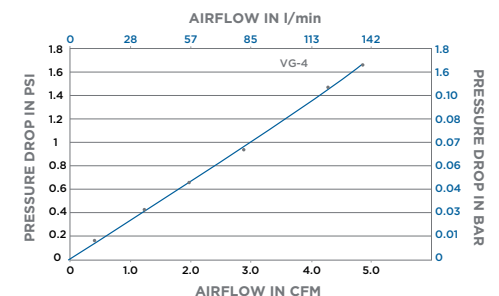
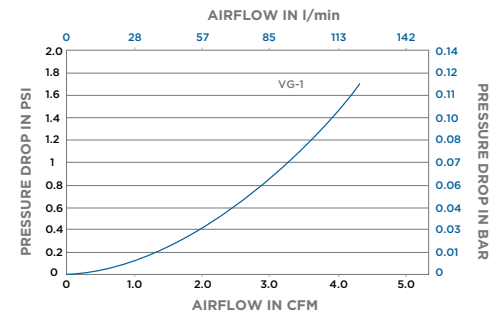
Compatible with all mineral oils, most synthetic oils and diesel (Contact Des-Case technical support for chemical compatibility inquiries)

### PERFORMANCE SPECIFICATIONS:

Product Specifications	VG-1	VG-4
<b>Airflow at 1psid</b>	1cfm / 41lpm	3cfm / 85lpm
<b>Filter Efficiency</b>	3 µm absolute ( $\beta_3 \geq 200$ )	
<b>Temperature Range</b>	-4°F to 130°F / -20°C to 54°C	
<b>Water Adsorption Capacity (Maximum Water Retention)</b>	50ml / 2fl. oz	353ml / 11.3 fl. oz
Application Sizing Recommendations		
<b>Gearbox / Storage Tank</b>	35gal / 132L	500gal / 1893L
<b>Hydraulic Reservoir</b>	5gal / 19L	200gal / 757L
<b>Suction / Return Rate</b>	11gpm / 41lpm	19gpm / 85lpm

**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 Bluetooth 4.0 Low Energy
- Communication Range: up to 100ft (30m) line of sight

## DEVICE COMPATIBILITY:

### Android

- Bluetooth 4.0 and higher
- Android OS 5.0 and higher

### Apple

- iOS 10.0 and higher

## DATA STORAGE:

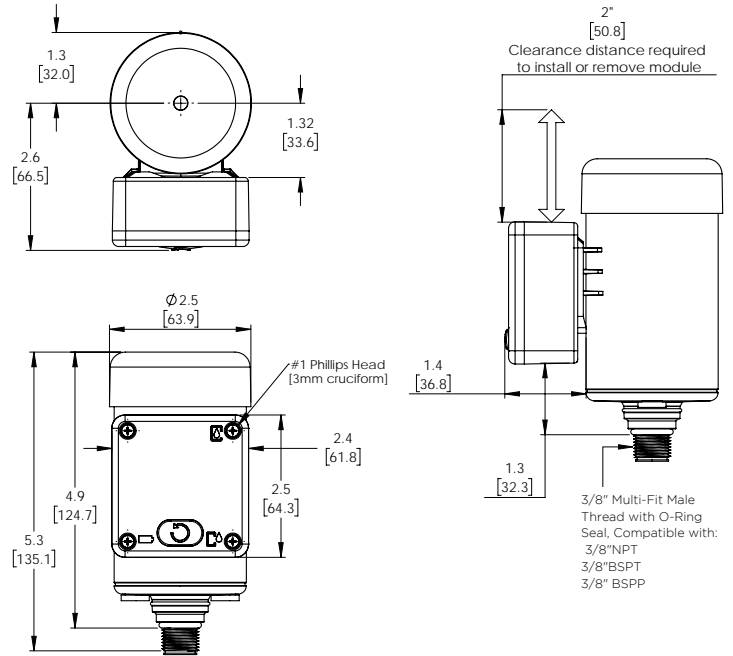
- Data readings every 60 minutes
- Stores 365 days of hourly data points

## APP DOWNLOAD:



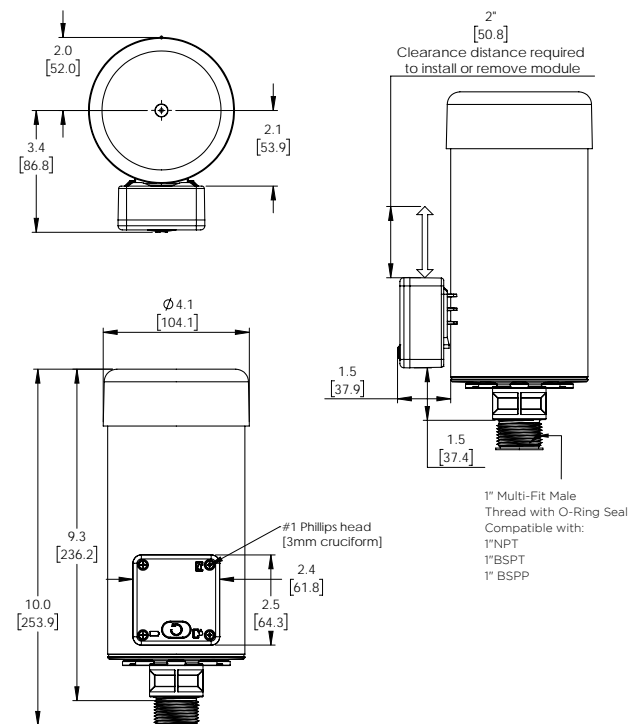
## DC-IL-VG-1 DIMENSIONS

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:

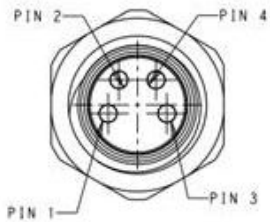
- A Coding - M8, 4 Pin Male
- **Serial:** RS485 Half Duplex

## 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

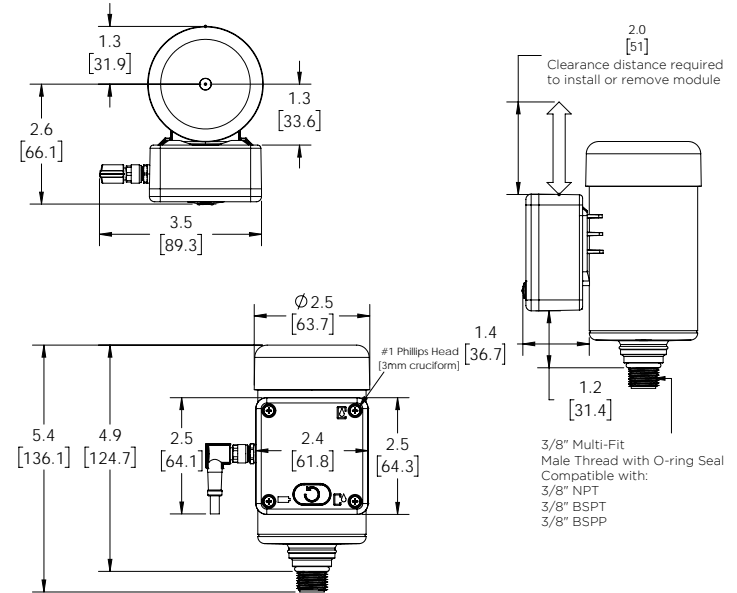


(A Coding – M8, Male 4 Pin)

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]

