

# Connected Extended Series® Breathers

Take a proactive approach to water ingression 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				
EX-4	Extended Series®			

# **Breather Specifications**

### **MATERIALS & COMPONENTS:**

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

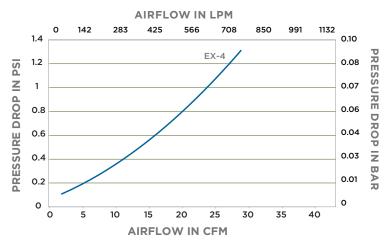
### **CHEMICAL COMPATIBILITY:**

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

### ¹PERFORMANCE SPECIFICATIONS:

Product Code	EX-4			
Temperature Range	-4°F to 130°F (-20°C to 54°C)			
Filter Efficiency	3 µm absolute			
Water Adsorption Capacity (Maximum Water Retention)	27fl. oz (798ml)			
<sup>2</sup> Application Sizing Recommendations				
Max. Airflow at ∆P 1 psi [.07 bar]	24cfm (680l/min)			
Gearbox, Storage Tank	1000gal (3785L)			
Hydraulic Reservoir	400gal (1514L)			
Suction / Return Rate	180gpm (680l/min)			

## AIRFLOW:



'NOTE: Small variations in the manufacturing process can be common and will be within the allowable engineering tolerances.

**2NOTE:** 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.

## **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 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

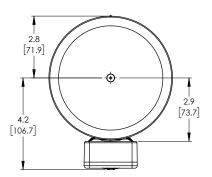
## **APP DOWNLOAD:**

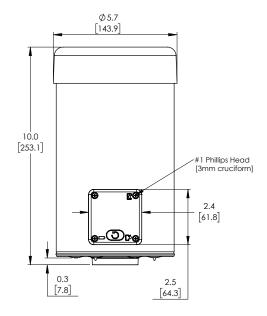


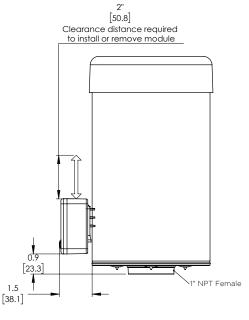


#### **DC-IL-EX-4 DIMENSIONS**

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 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

## **CONNECTIVITY / DATA OUTPUT:**

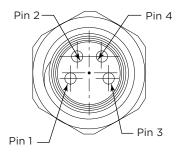
- A Coding M8, 4 Pin Male
- RS485 Half Duplex

### **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	Blue	DC Reference		
Pin 4	Black	TXB (High)		
(Mark State)				

#### **DC-IL-M8-EX-4 DIMENSIONS**

Note: All dimensions are in inches/[mm]

