DES-CASE®

descase.com

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
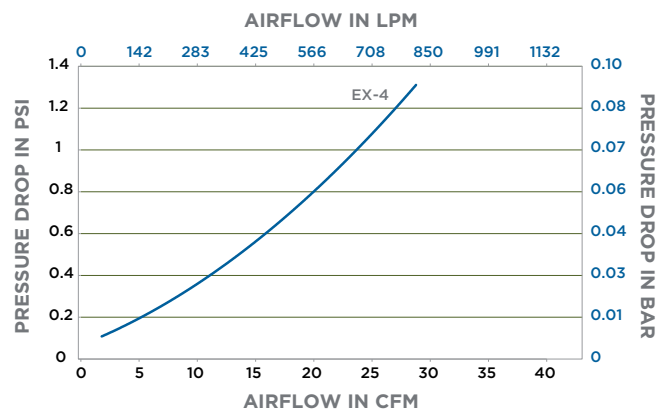
CHEMICAL COMPATIBLITY:

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

PERFORMANCE SPECIFICATIONS:

Product Specifications	EX-4
Airflow at 1psid	24cfm / 680lpm
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)	27fl. oz / 798ml
Application Sizing Recommendations	
Gearbox / Storage Tank	1000gal / 3785L
Hydraulic Reservoir	400gal / 1514L
Suction / Return Rate	180gpm / 680lpm

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

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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
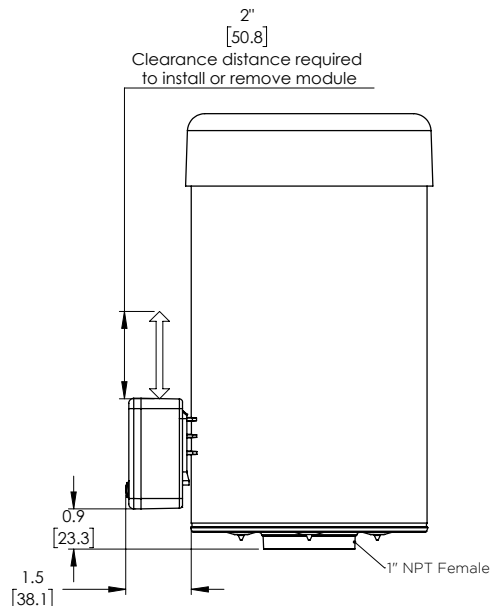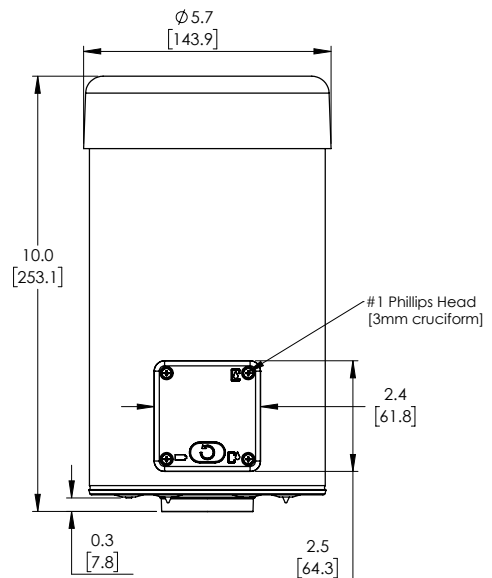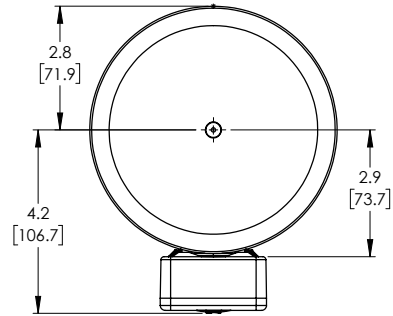
Apple
- iOS 10.0 and higher

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

APP DOWNLOAD:

Download on the App Store

GET IT ON Google Play

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 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
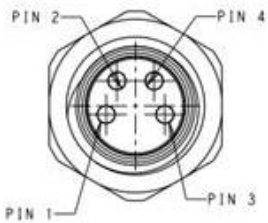
CONNECTIVITY / DATA OUTPUT:
- A Coding - M8, 4 Pin Male
- **Serial:** RS485 Half Duplex

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-EX-4 DIMENSIONS
Note: All dimensions are in inches/[mm]

2.8 [71.9]
4.2 [106.3]
2.9 [73.7]
3.5 [89.3]

⌀ 5.7 [143.9]
10.0 [253.1]
2.5 [64.1]
2.4 [61.8]
#1 Phillips Head [3mm cruciform]
2.5 [64.3]
0.4 [9.7]

2.0 [50.8]
Clearance distance required to install or remove module
0.9 [23.4]
1" NPT Female
1.5 [38]

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