



Eaton offers a desiccating breather that replaces and outperforms standard breathers, equalizing gearbox internal pressure in response to altitude and/or temperature changes. The improved performance involves drawing incoming air through a molecular sieve that traps outside moisture within a crystalline structure. In addition, a system of check valves insures that all inlet air flows through the desiccant cartridge while gearbox exhaust is vented directly to the atmosphere, eliminating all internal moisture.

Moisture supported internal corrosion in helicopter gearboxes is a serious, high-maintenance problem. Depending on the type of mission and more importantly, the environment, moisture collects in various amounts. Aircraft in ship-based or shore-based service, where humidity is high, are particularly vulnerable. Moisture collects in the recesses of surfaces of critical gears and bearings and promotes corrosion.

Over time the desiccant cartridge will start to saturate depending on aircraft utilization. To provide advance warning of this condition, an integral moisture indicator

changes color when approximately two-thirds of the cartridge capacity is reached. This allows sufficient time for maintenance personnel to replace the disposable cartridge at scheduled intervals.

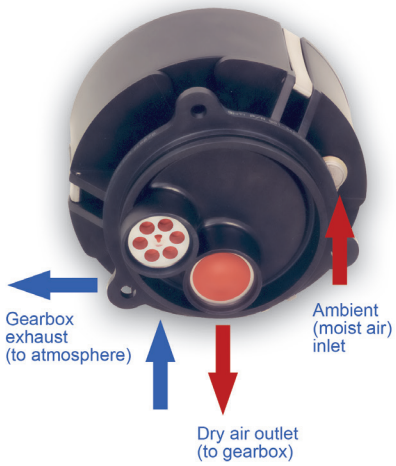
#### Features

- Low cost replaceable/disposable cartridge
- Durable, impact resistant composite housing
- Reliable, accurate, intuitive moisture indicator
- Performance fully qualified at 180°F (82°C)
- Simple, quick installation with standard tools

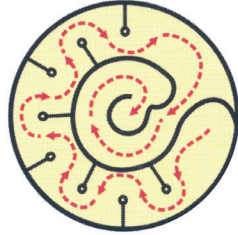
#### Benefits

- Prevents corrosion of gearbox components
- Captures/retains 100% of incoming moisture
- Performs in high vibration and shock conditions
- Universal cartridge mounts to customized base
- Cost-effective moisture control solution

## The Desiccant Breather



When ambient pressure exceeds gearbox pressure, moisture laden air is drawn into the breather cartridge. After cycling through the desiccant maze, the dried air is delivered to the gearbox.



Three low pressure check valves ensure that moist air flows through the desiccant cartridge while gearbox exhaust is vented directly to the atmosphere.