



CERTIFICATE OF COMPLIANCE

Certificate Number: SGSNA/21/CA/00004X

Contract Number: 801211
Certificate Project Number: BAS-CERT210100004

Certified Product: Vibration Monitoring Device
Trademarks: Chesterton
Model(s): Chesterton Connect
Technical Data: Ex ia IIB T4 Ga
Ex ia IIIB T166°C Da
Class I, Zone 0 AEx ia IIB T4 Ga
Zone 20 AEx ia IIIB T166°C Da
Class I, Division 1 Groups C and D T4
Class II, Division 1 Groups F and G T4
-20°C ≤ Tamb ≤ +85°C

Supply: Single Lithium Thionyl Chloride Battery: 3.6 V (nominal), 3.9 V (peak).

Certificate Holder: A.W. Chesterton Company
860 Salem Street, Groveland, Massachusetts, 01834, United States of America

This certificate supercedes previous certificates issued with the same certificate number. Certification is valid when products are indicated on the SGS directory of certified products at www.sgs.com or using the QR code below. The product is certified according to ISO/IEC Guide 17067, Conformity assessment - Fundamentals of product certification, System 3, and in accordance with:

UL 60079-0 Explosive Atmospheres – Part 0: Equipment – General Requirements – 7th Edition – Revision: March 26, 2019.

UL 60079-11 Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety “i” – 6th Edition – Revision: February 15, 2013.

CAN/CSA C22.2 No. 60079-0:19 Explosive Atmospheres – Part 0: Equipment – General Requirements (IEC 60079-11: 2017, MOD) – Revision: February 2019.

CAN/CSA C22.2 No. 60079-11:14 Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety “i” (IEC 60079-11, MOD) – Revision: February 2014.

Authorized by:

Effective date: 23 July 2021



Ron Sinclair
Certifier



Product description

The Chesterton Connect is a fixed vibration monitoring circuit with an external connection to permit connection to an external sensor in order to measure additional parameters. The equipment may be capable of measuring other parameters in its current design. The equipment is battery powered using a single 3.6 V Lithium Thionyl Chloride D-Type Cell. The cell is user replaceable and the equipment only permits the use of a Tekcell SB-D02 cell for the application. The equipment transmits data measured to a receiving device by means of a Bluetooth signal.

The Chesterton Connect is a two-part plastic assembly comprising of a base coloured grey and a blue lid with a transparent top that is light transmitting. The top cover screws on top of the base without the use of a tool. The base of the equipment contains a strong magnet and a rubberised boot for fixing the equipment in the designated location.

An M12 connector is available to permit the use of an external sensor. The external sensor is a special assembly of A.W Chesterton Company design and can only be obtained from A.W. Chesterton Company. If an external sensor is not used a special connector is provided that activates the equipment.

The M12 connector contains input parameters that are used to control the external sensors that may be connected to the device.

$U_o = 3.90 \text{ V}$
 $I_o = 850.97 \text{ mA}$
 $P_o = 706.96 \text{ mW}$
 $C_i = 974.86 \text{ }\mu\text{F}$
 $L_i = 8.97 \text{ }\mu\text{H}$

Conditions of Acceptability

1. The plastic enclosure is a potential electrostatic hazard. Clean only with a damp cloth and do not mount directly in a high velocity dust laden atmosphere.
2. Replace cells only with a Tekcell SB-D02 cell in a non-hazardous area.
3. The installer must make adequate arrangements in the installation in order to ensure that the main body and its contents are maintained in the ambient temperature range of the equipment.
4. Ordinary locations evaluation was not conducted. The certificate holder is responsible for maintaining an ordinary locations certification in good standing by an NRTL.

Certification Body

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