



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx ITS 11.0050X

Issue No: 1

Certificate history:

Issue No. 1 (2015-09-24)

Issue No. 0 (2012-02-29)

Status: **Current**

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Date of Issue: **2015-09-24**

Applicant: **CONTINENTAL DISC CORPORATION**
3160 West Heartland Drive
Liberty
Missouri 64068-3385
United States of America

Equipment: **BDI-FLX Burst Disc Indicator**

Optional accessory:

Type of Protection: **Intrinsic Safety Ex ia**

Marking:

IECEX ITS 11.0050X

BDI-FLX 2W-IS Interface Cable:

Ex ia IIC T4 Ga

Ex ia III C T135°C Da

-40°C ≤ Ta ≤ +70°C

BDI-FLX Burst Disc Sensor:

Ex ia IIC Tx Ga

Ex ia III C Tx Da

-40°C ≤ Ta ≤ +204°C

*Approved for issue on behalf of the IECEx
Certification Body:*

A T Austin

Position:

Certification Officer

*Signature:
(for printed version)*

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

Intertek Testing & Certification Limited
ITS House, Cleeve Road,
Leatherhead,
Surrey, KT22 7SB
United Kingdom





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Manufacturer: **CONTINENTAL DISC CORPORATION**
3160 West Heartland Drive
Liberty
Missouri 64068-3385
United States of America

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

[GB/ITS/ExTR11.0061/00](#) [GB/ITS/ExTR11.0061/01](#)

Quality Assessment Report:

[GB/ITS/QAR11.0011/02](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The **Continental Disc Corporation BDI-FLX** is a burst disc indicator system powered from an intrinsically safe interface (with galvanic isolation or from a zener barrier) for location in zone 0 or zone 20 hazardous areas. The burst disc indicator includes a resistive sensor element which changes resistance in response to bending, and therefore provides warning of the rupture disc's burst. An interface unit mounted in close proximity to the sensor converts the sensor signal into a signal to be interpreted by a switch amplifier or similar device in the non-hazardous area.

Intrinsic safety Parameters:

$U_i = 12 \text{ V dc}$
 $I_i = 60 \text{ mA}$
 $P_i = 180 \text{ mW}$
 $C_i = 1.11 \mu\text{F}$
 $L_i = 0$

SPECIFIC CONDITIONS OF USE: YES as shown below:

Temperature Class of the BDI-FLX sensor is marked as Tx, since the surface temperature is controlled by the process temperature being monitored. The sensor itself exhibits negligible temperature rise.

When located in an area requiring EPL Ga (e.g. a Zone 0 hazardous area), the user shall ensure that electrostatic charging of the interface enclosure cannot occur.

When located in an area requiring EPL Gb or Gc (e.g. Zone 1 or Zone 2), the interface enclosure represents an electrostatic hazard and the enclosure shall only be cleaned using a damp cloth. Solvents shall not be used.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Certificate Issue 1:

Update to the certification drawings.

Conditions of certification clarified.

QAR updated.