



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Certificate No.: **IECEX SIR 09.0013X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 6 [Issue 5 \(2017-02-07\)](#)
Date of Issue: 2020-02-20 [Issue 4 \(2015-10-02\)](#)
[Issue 3 \(2015-05-06\)](#)
[Issue 2 \(2014-10-14\)](#)
[Issue 1 \(2011-08-26\)](#)
[Issue 0 \(2009-08-18\)](#)
Applicant: **Dixon Bayco**
7280 Union Center Boulevard
West Chester
OH 45014
United States of America
Equipment: **FT101 5-Wire Optic Overfill Sensor**
Optional accessory:
Type of Protection: **Intrinsic Safety "ia"**
Marking: Ex ia IIB T4 Ga; Ta = -40°C to +70°C

Approved for issue on behalf of the IECEx
Certification Body:

N Jones

Position:

Certification Manager

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 www.iecex.com or use of this QR Code.



Certificate issued by:

SIRA Certification Service
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom





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Date of issue: 2020-02-20

Issue No: 6

Manufacturer: **Dixon Bayco**
7280 Union Center Boulevard
West Chester
OH 45014
United States of America

Additional
manufacturing
locations:

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 equipment 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

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

This Certificate **does not** indicate compliance with 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 Reports:

[GB/SIR/ExTR09.0103/00](#)
[GB/SIR/ExTR15.0119/00](#)
[GB/SIR/ExTR20.0024/00](#)

[GB/SIR/ExTR11.0213/00](#)
[GB/SIR/ExTR15.0241/00](#)

[GB/SIR/ExTR14.0238/00](#)
[GB/SIR/ExTR17.0020/00](#)

Quality Assessment Report:

[GB/SIR/QAR09.0010/11](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The FT101 5-Wire Optic Overfill Sensor provides overfill control for both mobile and permanently mounted liquid storage vessels. The FT101 enclosure is manufactured from cast aluminum with a 2 inch NPT mounting thread, heavy-duty stainless steel sections, and Viton® seals. The sensor is installed in a 2 inch NPT tapped hole or 2-3/8 inch hole using the gasket and locking nut provided. The sensor contains a single PCB contained within a fully potted cavity and has 5 permanently connected wires.

The safety description for the sensor is:

$U_i = 18V$ $I_i = 400mA$ $P_i = 1W$ $C_i = 0\mu F$ $L_i = 0\mu H$

The Manufacturer shall comply with the following condition of manufacture:

1. A routine dielectric strength test of 500V r.m.s as required. by clause 10.3 of IEC 60079-11:2011 Edition 6 shall be conducted on each unit. The voltage shall be increased steadily to the specified value in a period of not less than 10 s and then maintained for at least 60 s. The applied voltage shall remain constant during the test. The current flowing during the test shall not exceed 5 mA r.m.s. at any time.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. As aluminium is used at the accessible surface of this equipment ignition sources due to impact and friction sparks could occur in the event of rare incidents. This shall be considered when the FT101 Sensor is being installed, particularly in locations that specifically require Group II, EPL Ga equipment.
2. The assessed enclosure should not be subjected to strong impact that may lead to high risk of mechanical danger.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Issue 1 – this Issue introduced the following changes:

1. A number of changes to various drawings including:
 - * Part number 10006 changed to 10006D.
 - * Changes to component values and tolerances of existing resistors in a range of circuits.
 - * Change of label material.
 - * Addition of some informative text. This text does not affect compliance with the applied standards.
 - * A change to a thread dimension on the sensor housing.
2. The Applicant's address was changed from 4740T Interstate Drive, Cincinnati, Ohio, 45246, USA to that shown on page 1.

Issue 2 - this Issue introduced the following changes:

1. The integrated circuit package U1 was changed from a through hole to a surface mount type.
2. The encapsulant material has now been fully specified.

Issue 3 – this Issue introduced the following change:

1. The corporate logo was added to the label.

Issue 4 – this Issue introduced the following change:

1. It was recognised that the manufacturer can now supply the user with a new overfill sensor unit that will replace the one in the FT101 5-Wire Overfill Sensor Probe already in their possession. The new sensor unit is designated as equipment name FT100, its construction is the same as the existing sensor unit and it bears an explanatory label that clearly states that it is part of an FT101, IECEx SIR 09.0013X.

Issue 5 – this Issue introduced the following change:

1. The wiring colours were modified.

Issue 6 - this Issue introduced the following changes:

1. Drawing Number 10183 has been updated from revision G to revision H, to recognize changing the type of holes from bolt holes to thru holes in the sensor housing.
2. The following assessment has been conducted appropriately to demonstrate compliance with the latest technical knowledge, where IEC 60079-0:2004 Edition 4 and IEC 60079-11:2006 Edition 5 had been replaced by IEC 60079-0:2017 Edition 7 and IEC 60079-11:2011 Edition 6.
3. IEC 60079-26:2006 Edition 2 and the reference to IEC 60079-0:2007 (used for guidance in respect of marking) had been removed from the certificate. Superseded with the latest versions of the relevant applicable standards.
4. The Product Name has been amended from FT101 5-Wire Overfill Sensor Probe to FT101 5-Wire Optic Overfill Sensor. The product description has been updated accordingly.
5. The manufacturer's address has been updated.