



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 09.0015X** Page 1 of 4 Certificate history:
Status: **Current** Issue No: 4 [Issue 3 \(2015-05-06\)](#)
Date of Issue: 2020-02-26 [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: **FT152 2-Wire Optic Retain 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:

Neil 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

sira
CERTIFICATION





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Date of issue: 2020-02-26

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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/ExTR09.0105/00](#)
[GB/SIR/ExTR15.0119/00](#)

[GB/SIR/ExTR11.0213/00](#)
[GB/SIR/ExTR20.0026/00](#)

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

Quality Assessment Report:

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



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The FT152 2-Wire Optic Retain Sensor is a bottom retain detection (low level liquid) sensor that has a 1/2" NPT mounting. The main sensor portion is stainless steel and the wiring box is manufactured from glass filled Nylon plastic to prevent corrosion, and is removable to facilitate installation. The sensor wires enter/exit the wiring box via side ports and terminate at the sensor PCB that is fully encapsulated within the stainless steel tube.

The plastic wiring box is manufactured from 33% Glass Filled Supertough Nylon DuPONT ZYTEL 80G33L which is coloured black.

The safety description is as follows:

$U_i = 13.7V$ $I_i = 180mA$ $P_i = 1W$ $C_i = 0\mu F$ $L_i = 2\mu H$

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. The apparatus is intended for fixed installations and the precautions to avoid risk from electrostatic discharge is highlighted in the installation instructions. The apparatus is marked with an 'X' as per the requirements of Clause 7.3.2 part e) of IEC 60079-0. Additionally the apparatus is marked with the electrostatic charge warning given in item g) of clause 29.8.
2. 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 FT152 Sensor is being installed, particularly in locations that specifically require Group II, Category 1G equipment.



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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:
 - a. R6 changed from 56k Ω to 39k Ω .
 - b. Addition of some informative text. This text does not affect compliance with the applied standards.
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 value of resistor R6 was changed from 39 k Ω to 18 k Ω .
2. A change of the label material was approved.
3. The encapsulant material has now been fully specified.
4. The marking was amended to include Li which has changed from 0 mH to 2 μ H, this was recognised in the product description.
5. The introduction of two models based upon cable length 24 inch and 60 inch, the latter terminated with a plug.

Issue 3 - this Issue introduced the following changes:

1. The corporate logo was added to the label.

Issue 4 - this Issue introduced the following changes:

1. Product Instructional manual document number 10590 has been updated to latest issue dated 27th of January 2020. The manufacturer documents had been updated accordingly.
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 FT152 2-Wire Retain (Low Level Liquid) Sensor Probe to FT152 2-Wire Optic Retain Sensor. The product description has been updated accordingly.
5. The manufacturer's address has been updated.