



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 09ATEX2041X** Issue: **6**

4 Equipment: **FT152 2-Wire Optic Retain Sensor**

5 Applicant: **Dixon Bayco**

6 Address: **7280 Union Center Boulevard
West Chester
OH 45014
United States of America**

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., Notified Body Number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2018 EN 60079-11:2012

10 If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.

12 The marking of the equipment shall include the following:



II 1G

Ex ia IIB T4 Ga; Ta = -40°C to +70°C

Project Number 80011218

Signed: J A May

Title: Director of Operations

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CSA Group Netherlands B.V.
Utrechtseweg 310,
6812 AR, Arnhem,
Netherlands



SCHEDULE

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13 DESCRIPTION OF EQUIPMENT

The FT152 2-Wire Optic Retain Sensor is a bottom retain (low level liquid) detection 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:

Ui	=	13.7 V	Ii	=	180 mA
Pi	=	1 W	Ci	=	0 uF
Li	=	2 µH			

Variation 1 - This variation introduced the following changes:

- i. A number of changes to various drawings including:
 - R6 changed from 56kΩ to 39kΩ.
 - Addition of some informative text. This text does not affect compliance with the applied standards
- ii. The Applicant's address was changed from 4740T Interstate Drive, Cincinnati, Ohio, 45246, USA to that shown on page 1.

Variation 2 - This variation introduced the following changes:

- i. A change in the value of resistor R6 from 39k to 18k was endorsed.
- ii. A change of label material due to obsolescence was approved.
- iii. The encapsulant has now been fully specified.
- iv. Marking to include Li changed from 0 mH to.
- v. The introduction of two models based upon cable length 24 inch, and 60 inch the latter terminated with a plug.

Variation 3 - This variation introduced the following change:

- i. The corporate logo was added to the label.

Variation 4 - This variation introduced the following change:

- i. Product Instructional manual document number 10590 has been updated to latest issue dated 27th of January 2020. The manufacturer documents had been updated accordingly.
- ii. The following assessment has been conducted appropriately to demonstrate compliance with the latest technical knowledge, where EN 60079-0:2006 and EN 60079-11:2007 had been replaced by EN 60079-0:2018 and EN 60079-11:2012.
- iii. EN 60079-26:2007 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.
- iv. 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.
- v. Conditions of Manufacturer had been removed from the affected certificate (Sira 09ATEX2041X) and highlighted in report R80011218A section 1.11.
- vi. The manufacturer's address has been updated.



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14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report no.	Comment
0	20 July 2009	R52A16755F	The release of the prime certificate.
1	21 April 2011	R52A16755F/01	Re issued to allow report R52A16755F/01 to replace R52A16755F
2	19 August 2011	R23939A/00	<ul style="list-style-type: none">• A typographical error in the marking was corrected.• The introduction of Variation 1.
3	18 September 2014	R70006530A	The introduction of Variation 2.
4	27 April 2015	R70024621A	The introduction of Variation 3.
5	15 October 2019	1652	This Issue covers the following changes: <ul style="list-style-type: none">• Transfer of certificate Sira 09ATEX2041X from Sira Certification Service to CSA Group Netherlands B.V..• EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i>
6	26 February 2020	R80011218A	The introduction of Variation 4.

15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)

15.1 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.

15.2 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.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

Certificate Annexe



Certificate Number: Sira 09ATEX2041X
 Equipment: FT152 2-Wire Optic Retain Sensor
 Applicant: Dixon Bayco

Issue 0

Drawing No.:	Sheets	Rev.	Date: (Sira Stamp)	Description
FT152_ATEX	1 of 1	A	17 Mar 09	FT152 Retain Sensor ATEX Approved for Europe
10134	1 of 1	C	17 Mar 09	Retain Sensor Cover Plate
10378_ATEX	1 of 1	A	17 Mar 09	FT152 Retain Sensor SMT Schematic
10381_ATEX	1 of 1	A	17 Mar 09	PCB, Blank FT152 Retain Sensor SMT
10474-1_ATEX	1 of 3	A	17 Mar 09	FT152 Retain Sensor SMT Top Assembly
10474-2_ATEX	2 of 3	A	17 Mar 09	FT152 Retain Sensor SMT Bottom Assembly
10474-3_ATEX	3 of 3	A	17 Mar 09	FT152 Part List
10471NY	1 of 1	B	17 Mar 09	Retain Housing
10472SS	1 of 1	A	17 Mar 09	Retain Prism Carrier - Machining
10475PL	1 of 1	A	17 Mar 09	Sleeve
10587	1 of 1	B	17 Mar 09	ATEX Marking – FT152

Issue 1 -No new drawings were introduced.

Issue 2

Drawing No.	Sheets	Rev.	Date (Sira stamp)	Title
10134	1 of 1	D	18 Aug 11	Retain sensor cover plate
10471NY	1 of 1	C	18 Aug 11	Retain housing
10472SS	1 of 1	B	18 Aug 11	Retain prism carrier – machining
10474-1_ATEX	1 of 3	B	18 Aug 11	FT 152 Retain Sensor SMT Top Assembly
10474-2_ATEX	2 of 3	B	18 Aug 11	FT 152 Retain Sensor SMT Bottom assembly
10474-3_ATEX	3 of 3	B	18 Aug 11	FT 152 Retain sensor SMT parts list
10475PL	1 of 1	B	18 Aug 11	Sleeve
10378_ATEX	1 of 1	B	18 Aug 11	FT152 Retain sensor SMT schematic

Issue 3

Drawing	Sheets	Rev	Date (Sira stamp)	Title
10378_ATEX	1 of 1	C	28 Jul 14	FT152 RETAIN SENSOR SMT SCHEMATIC
10474-1_ATEX	1 of 3	C	28 Jul 14	FT152 RETAIN SENSOR SMT TOP ASSEMBLY
10474-2_ATEX	2 of 3	C	28 Jul 14	FT152 RETAIN SENSOR SMT BOTTOM ASSEMBLY
10474-3_ATEX	3 of 3	C	28 Jul 14	FT152 RETAIN SENSOR SMT PARTS LIST ASSEMBLY
10474-PP-1_ATEX	1 of 3	A	28 Jul 14	FT 152_ATEX RETAIN SENSOR PLUG/PLAY, TOP ASSEMBLY
10474-PP-2_ATEX	2 of 3	A	28 Jul 14	FT 152_ATEX RETAIN SENSOR PLUG/PLAY, BOTTOM ASSEMBLY
10474-PP-3_ATEX	3 of 3	A	28 Jul 14	FT 152_ATEX RETAIN SENSOR PLUG/PLAY, PARTS LIST
10587	1 of 1	C	27 Aug 14	LABEL, RETAIN SENSOR FT152 TYPE
10713SSPL_ATEX	1 of 1	A	17 Sep 14	RETAIN SENSOR SUB-ASS FOR FT152 SERIES ATEX
10713SSPL-PP_AX	1 of 1	A	17 Sep 14	RETAIN SENSOR SUB-ASS FOR FT152PL-PP_AX SERIES ATEX
FT152_ATEX	1 of 1	B	28 Jul 14	FT152 RETAIN SENSOR ATEX APPROVED FOR EUROPE
FT152P_ATEX	1 of 1	A	27 Aug 14	FT 152_ATEX RETAIN SENSOR PLUG/PLAY,
10619_ATEX	1 of 1	E	25 Jul 14	PROBE PLUG - 2 WIRE

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 Netherlands

Certificate Annexe



Certificate Number: Sira 09ATEX2041X
Equipment: FT152 2-Wire Optic Retain Sensor
Applicant: Dixon Bayco

Issue 4

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
10587	1 of 1	D	02 Apr 15	LABEL, RETAIN SENSOR FT152 TYPE

Issue 5 – No new drawings were introduced.

Issue 6

Drawing	Sheets	Rev.	Date (Date stamp)	Title
10587	1 of 1	F	28 Jan 20	Label, Retain Sensor FT152 Type
10590	1 to 2	27 Jan 20	28 Jan 20	Instruction Manual 10590 ATEX Supplemental Instruction Sheet For Sensors FT152

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