



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 13.0154X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 3	Issue 2 (2022-03-30)
Date of Issue:	2024-01-12		Issue 1 (2021-10-19)
Applicant:	Positek a Division of Variohm Eurosensor Ltd Hermes House Andoversford Link Andoversford Cheltenham GL54 4LB United Kingdom		Issue 0 (2014-04-16)
Equipment:	Series EX07 Position Sensor.		
Optional accessory:			
Type of Protection:	Intrinsically Safe		
Marking:	Model E Ex ia IIC T4 Ga Ex ia IIIC T135°C Da Ta = -40°C to +80°C Model X Ex ia IIC T4 Ga Ta = -40°C to +80°C Model M Ex ia IIC T4 Ga Ex ia IIIC T135°C Da Ex ia I Ma Ta = -40°C to +80°C		

Approved for issue on behalf of the IECEx
Certification Body:

Michelle Halliwell

Position:

Director Operations, UK & Industrial Europe

Signature:
(for printed version)

Date:
(for printed version)

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom





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Issue No: 3

Manufacturer: **Positek a Division of Variohm Eurosensor Ltd**
Hermes House
Andoversford Link
Andoversford
Cheltenham GL54 4LB
United Kingdom

Manufacturing locations: **Positek a Division of Variohm Eurosensor Ltd**
Hermes House
Andoversford Link
Andoversford
Cheltenham GL54 4LB
United Kingdom

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/CSAE/ExTR22.0080/00](#)
[GB/SIR/ExTR24.0008/00](#)

[GB/SIR/ExTR14.0091/00](#)

[GB/SIR/ExTR21.0106/00](#)

Quality Assessment Report:

[GB/SIR/QAR10.0029/08](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Series EX07 Position Sensors comprises of a range of Rotary and Linear inductive position sensors. Each sensor incorporates the Positek EX07 Electronics System, which is used to excite the coils.

The electronic components are mounted on a printed circuit board and the sensing coils are either configured on a printed wiring board or wound onto a former.

The apparatus utilises an enclosure into which the electrical components are located. The enclosure construction varies as follows:

- Model series X and E, metal or plastic and metal enclosure of at least ingress protection level IP20 for Groups II & III; (EPL Ga and Da)
- Model series M, metal enclosure of at least ingress protection level IP54 for Group I; (EPL Ma).

The apparatus is to be powered via a suitably-certified isolator.

Refer to the Annexe for the entity parameters.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The apparatus does not meet the 500V r.m.s dielectric strength test between circuit and frame, in accordance with clause 6.3.13 of IEC 60079-11:2011. This must be taken into consideration on installation.
2. When using a Sensor that has an integral cable in a dust application, the free end of the cable shall be appropriately terminated for the zone of use.
3. Maximum permitted cable parameters:
 - Capacitance ≤ 200 pF/m.
 - Inductance ≤ 0.81 μ H/m.
 - Length ≤ 1000 m.Under certain extreme circumstances, the non-metallic and isolated metal parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. This is particularly important if the equipment is installed in a zone 0 location. In addition, the equipment shall only be cleaned with a damp cloth.
- 4.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

This issue, Issue 3, recognises the following changes; refer to the certificate annex to view a comprehensive history:

1. Change of Applicants additional manufacturing location name and address as follows:
From: Positek a Division of Variohm Eurosensor Ltd, L6 Andoversford link, Andoversford Industrial estate, Andoversford, Cheltenham, Gloucester, GL54 4LB
To: Positek a Division of Variohm Eurosensor Ltd, Hermes House, Andoversford Link, Andoversford, Cheltenham, GL54 4LB

Annex:

[IECEX SIR 13.0154X Issue 3 Annexe.pdf](#)

Annexe to: IECEx SIR 13.0154X Issue 3

Applicant: Positek a division of Variohm Eurosensor Ltd.

Apparatus: Series EX07 Position Sensor



The EX07 has the following entity parameters:

Parameter	Value
U _i	11.4 V
I _i	0.2 A
P _i	0.51 W
C _i without integral cable	1.16 uF
C _i with integral cable (Max. length)	1.36 uF (1000 m)
L _i without integral cable	50 uH
L _i with integral cable (Max. length)	860 uH (1000 m)

Full certificate change history

Issue 1 – this Issue introduced the following changes:

1. The certificate holder and manufacturer's name was changed:

From	To
Positek Limited	Positek a division of Variohm Eurosensor Ltd.
2. The body responsible for quality (ATEX only) was changed from 0518 to 2813 as shown on the label drawings.

Issue 2 – this Issue introduced the following changes:

1. Update nameplate drawing LB24-10 to add UKCA certificate information
2. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed. 6 was replaced by IEC 60079-0:2017 Ed. 7.

Issue 3 – this Issue introduced the following change:

1. Change of Applicants additional manufacturing location name and address as follows:

From	To
Positek a Division of Variohm Eurosensor Ltd, L6 Andoversford link Andoversford Industrial estate Andoversford, Cheltenham Gloucester, GL54 4LB	Positek a Division of Variohm Eurosensor Ltd Hermes House Andoversford Link Andoversford Cheltenham, GL54 4LB