



EU-Type Examination Certificate (1)

Equipment or protective system intended for use in potentially explosive atmospheres - Directive 2014/34/EU (2)

SEV 21 ATEX 0551 X (3)Certificate number:

Product: Inductive proximity switch IFRM**X*** (4)

(5)Manufacturer: Baumer Electric AG

Hummelstrasse 17, 8501 Frauenfeld, Switzerland Address: (6)

- The equipment and any acceptable variation thereto is specified in the schedule to this certificate (7)and the documents therein referred to.
- Eurofins, notified body No. 1258, in accordance with article 17 of Directive 2014/34/EU of the (8)European parliament and of the council, dated 26 February 2014, certifies that this product has been found to comply with the essential health and safety requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no 21CH-00652.X01

Compliance with the essential health and safety requirements has been assured by compliance

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

Except in respect of those requirements listed at item 18 of the schedule.

- If the sign «X» is placed after the certificate number, it indicates that the product is subjected to special conditions for safe use specified in the schedule to this certificate. The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.
- This EU type examination certificate relates only to design and construction of the specified product. Further requirements of this directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.
- The marking of the product shall include the following:

II 1G Ex ia IIC T6...T5 Ga

Eurofins Electric & Electronic Product Testing AG Notified Body ATEX

Martin Plüss **Product Certification**

Fehraltorf, 2021-09-27

Issue: 0





(13)

Appendix

(14) EU-Type Examination Certificate no. SEV 21 ATEX 0551 X

(15) Description of product

BAUMER proximity switches of the IFRM**X** series serve for the detection of parts made of metal with regard to the characteristics of distance, counting, speed, etc. They are used under normal atmospheric conditions.

Classification of installation and use:

stationary

Ingress protection:

IP67

Rated ambient temperature range (°C):

-20 °C to 40 °C / 60 °C

Rated ambient temperature range (°C) for Ex Components:

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Electrical data:

Supply circuit:

Type of protection Intrinsic Safety Ex ia IIC

Only for connection to a certified intrinsically safe circuit.

Maximum values:

 $\begin{array}{lll} U_i &=& 13.5 \ V \\ I_i &=& 37 \ \text{mA} \\ P_i &=& 125 \ \text{mW} \\ \text{linear characteristic} \end{array}$

 $C_i = 50 \text{ nF}$ $L_i = 0.2 \text{ mH}$

Instructions for operation:

When installing the inductive proximity sensor, the sensor must be included in the equipotential of the installation site by assembly.

If the sensor or their connecting cables are installed in the wall to the hazardous area with Ga requirements, the installation must be tight and at least the degree of protection by enclosure IP67 according to IEC 60529.

If the sensors are installed into the hazardous area with EPL Ga requirements, the installation of the sensor and the installation of the connecting cables must be secure.

(16) Report number

21CH-00652.X01





(17) "Special conditions for safe use" / "Schedule of limitations"

The dependence of the temperature class allocation to the ambient temperature corresponds to the following table.

Temperature class	T6	T5
Permissible ambient temperature range	-20 °C ≤ T _{amb} ≤ +40 °C	-20 °C ≤ T _{amb} ≤ +60 °C

(18) Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause Subject None

(19) Drawings and Documents

See test report "Manufacturer's Documents"

