

## EU - Type Examination Certificate

- (1)
- (2) Equipment and protective systems intended for use in potentially explosive atmospheres – **Directive 2014/34/EU**
- (3) EU - Type Examination Certificate Number

**EPS 18 ATEX 1 016 X**

**Revision 1**

- (4) Equipment: Inclination sensor, type: SB2I
- (5) Manufacturer: SEIKA Mikrosystemtechnik GmbH
- (6) Address: Söllerweg 1  
87487 Wiggensbach-Ermengerst  
Germany
- (7) This equipment and any acceptable variation thereto are specified in the annex to this certificate and the documentation therein referred to.
- (8) Bureau Veritas Consumer Products Services Germany GmbH, notified body No. 2004 in accordance with Article 21 given in the Directive 2014/34/EU of the European Parliament and of the Council of 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 and protective systems intended for use in potentially explosive atmospheres, given in Annex II of the Directive. The examination and test results are recorded in the confidential documentation under the reference number 09TH0381.
- (9) Compliance with the essential health and safety requirements has been assured by compliance with:

**EN IEC 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 special conditions for safe use specified in the annex to this certificate.
- (11) This EU - Type Examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 2014/34/EU. Further requirements of this Directive apply to the manufacture of this equipment and its placing on the market. Those requirements are not covered by this certificate.
- (12) The marking of the equipment shall include the following:

II 2G Ex ia IIC T4 Gb

II 2D Ex ia IIIC T135°C Db



Certification department of explosion protection

Ulrich Feike

Tuerkheim, 2024-02-05

Certificates without signature and seal are void. This certificate is allowed to be distributed only if not modified. Extracts or modifications must be authorized by Bureau Veritas Consumer Products Services Germany GmbH.

(13)

## Annex

(14) **EU - Type Examination Certificate EPS 18 ATEX 1 016 X**

**Revision 1**

(15) Description of equipment:

The SB21 is a pressure die cast aluminum sensor housing with two integrated sensors for measuring inclinations and/or accelerations. As well as the sensor, the box contains two independent signal conditioners, each with a 4-20 mA, 2-wire output and two separate voltage supplies feeding off the corresponding current loop, one for each sensor.

Electrical data:

The intrinsically safe sensor (zone 1) shall only be connected to certified intrinsically safe circuits. The following maximum values per channel shall not be exceeded:

$U_i = 30 \text{ V}$   
 $I_i = 78 \text{ mA}$   
 $C_i = 24 \text{ nF}$   
 $L_i = 66 \text{ }\mu\text{H}$

(16) Reference number: 09TH0381

(17) Special conditions for safe use:

Ambient temperature range:  $-40 \text{ }^\circ\text{C} \leq T_a \leq +85 \text{ }^\circ\text{C}$

(18) Essential health and safety requirements:

Met by compliance with standards.

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Tuerkheim, 2024-02-05



Ulrich Feike