



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 IBE 17.0020X	Page 1 of 3	Certificate history:
Status:	Current	Issue No: 0	
Date of Issue:	2017-08-24		
Applicant:	Buehler Technologies GmbH Harkortstrasse 29 40880 Ratingen Germany		
Equipment:	Level-switches type NS 10/G2-2K-VA-ATEX-M12/xxx-SK221 and NT 61-Z0-ATEX		
Optional accessory:			
Type of Protection:	Intrinsic safety		
Marking:	Ex ia IIC T4 Ga Ex ia IIIC 100°C Da [NS 10/G2-2K-VA-ATEX-M12/xxx-SK221] Ex ia IIIC 70°C Da [NT 61-Z0-ATEX]		

Approved for issue on behalf of the IECEx
Certification Body:

Dipl.-Ing. Alexander Henker

Position:

Deputy Head of Certification Body

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:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
Germany





IECEx Certificate of Conformity

Certificate No.: **IECEx IBE 17.0020X**

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Date of issue: 2017-08-24

Issue No: 0

Manufacturer: **Buehler Technologies GmbH**
Harkortstrasse 29
40880 Ratingen
Germany

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 60079-0:2011](#) Explosive atmospheres - Part 0: General requirements
Edition:6.0

[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 Report:

[DE/IBE/ExTR16.0040/00](#)

Quality Assessment Report:

[DE/BVS/QAR16.0002/01](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx IBE 17.0020X**

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Date of issue: 2017-08-24

Issue No: 0

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The Level-switches are used as remote tank level indicator. It works with a stainless steel pipe containing reed-switches. The pipe is surrounded by a floater who is equipped with a permanent magnet. That magnet acts to reed-switches that allow a control of tank level.

Parameters of intrinsic safety:

Level-switch

Ui	30 V
Ii	50 mA
Pi	100 mW
Li	negligible
Ci	negligible

Temperature-switch

Ui	30 V
Ii	50 mA
Pi	100 mW
Li	negligible
Ci	negligible

Resistance-thermometer PT100

Ui	30 V
Ii	50 mA
Pi	100 mW
Li	negligible
Ci	negligible

Alternative marking for resistance-thermometer PT100

Ui	9 V
Ii	22 mA
Li	negligible
Ci	negligible

SPECIFIC CONDITIONS OF USE: YES as shown below:

See "Installation and Operating Instructions" for intrinsic safe values and complete Ex-marking.



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INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

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Certificate No.: IECEx IBE 17.0020X

Issue No: 1

Certificate history:

Issue No. 1 (2018-01-25)

Issue No. 0 (2017-08-24)

Status: **Current**

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Date of Issue: **2018-01-25**

Applicant: **Bühler Technologies GmbH**
Harkortstrasse 29
40880 Ratingen
Germany

Equipment: **Level-switches type NS 10/G2-2K-VA-ATEX-M12/xxx-SK221, NS 10/G2-XK-VA-ATEX-M12/YYYY-VZZ and NT 61-Z0-ATEX**

Optional accessory:

Type of Protection: **Intrinsic safety**

Marking:

Ex ia IIC T4 Ga

Ex ia IIIC 100°C Da [NS 10/G2-2K-VA-ATEX-M12/xxx-SK221]

new variants: [NS 10/G2-XK-VA-ATEX-M12/YYYY-VZZ]

Ex ia IIIC 70°C Da [NT 61-Z0-ATEX]

Approved for issue on behalf of the IECEx
Certification Body:


Dipl.-Ing. Alexander Henker

Position:

Deputy Head of Certification Body

Signature:
(for printed version)

Date:


2018-01-25

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Certificate issued by:

IBExU Institut für Sicherheitstechnik GmbH
Certification Body
Fuchsmühlenweg 7
09599 Freiberg
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IECEx Certificate of Conformity

Certificate No: IECEx IBE 17.0020X

Issue No: 1

Date of Issue: 2018-01-25

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Manufacturer: **Bühler Technologies GmbH**
Harkortstrasse 29
40880 Ratingen
Germany

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

Edition:6.0

*This Certificate **does not** indicate compliance with electrical 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 Report:

DE/IBE/ExTR16.0040/00

DE/IBE/ExTR16.0040/01

Quality Assessment Report:

DE/BVS/QAR16.0002/01



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Certificate No: IECEx IBE 17.0020X

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

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Parameters of intrinsic safety:

Level-switch

Ui	30 V
Ii	50 mA
Pi	100 mW
Li	negligible
Ci	negligible

Temperature-switch

Ui	30 V
Ii	50 mA
Pi	100 mW
Li	negligible
Ci	negligible

Resistance-thermometer PT100

Ui	30 V
Ii	50 mA
Pi	100 mW
Li	negligible
Ci	negligible



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Alternative marking for resistance-thermometer PT100

Ui	9 V
Ii	22 mA
Li	negligible
Ci	negligible

SPECIFIC CONDITIONS OF USE: YES as shown below:

See "Installation and Operating Instructions" for intrinsic safe values and complete Ex-marking.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

NS-10 only:

- The type designation or type key has been changed and additional placeholders have been added: the length identifier was changed from three digits to four digits and new three-digit variant designation was implemented.
- One or two contacts can be used both as normally closed and normally open contacts in any combination.
- The protective earth conductor (PE) can be connected either via the plug connector or via the screws to the earthed metal container.
- The seal to the container may be provided by the user.

Example:

NS 10/G2-XK-VA-ATEX-M12/YYYY-VZZ

*xxx: indicates length of the immersion pipe in mm

*XK: indicates the number of temperature-switches (1K .. 2K)

*YYYY: length of immersion pipe in mm

*VZZ: indicates the variant-number (V1...V99)