



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: IECEx IBE 14.0044X

Issue No: 1

Certificate history:

Issue No. 1 (2019-07-03)

Issue No. 0 (2015-01-19)

Status: **Current**

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Date of Issue: **2019-07-03**

Applicant: **Keller AG für Druckmesstechnik**
St. Gallerstrasse 119
8404 Winterthur
Switzerland

Equipment: **Piezoresistive pressure transmitter and temperature transmitter**

Optional accessory: *Serie 23SYEi, 23YEi, 23YMEi, 25YEi, 26YEi and 26YMEi as well as PT-25YEi*

Type of Protection: **intrinsic safety 'ia'**

Marking:

Serie 23SYEi, 23YEi, 23YMEi, 25YEi, 26YEi and 26YMEi:

Ex ia I Ma
Ex ia IIC T6...T4 Ga
Ex ia IIIC T130 °C Da

PT-25YEi:

Ex ia IIC T4 Ga

Approved for issue on behalf of the IECEx
Certification Body:

Dipl.-Ing. Alexander Henker

Position:

Head of Certification Body

Signature:
(for printed version)

Date:

2019-07-03

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

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



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Manufacturer: Keller AG für Druckmesstechnik
St. Gallerstrasse 119
8404 Winterthur
Switzerland

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 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/ExTR14.0061/00 DE/IBE/ExTR14.0061/01

Quality Assessment Report:

DE/EPS/QAR13.0004/08



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Serie 23SYEi Pressure Transmitter with threaded port and without internal sealing
Serie 23YEi Pressure Transmitter with threaded port and with internal sealing
Serie 25YEi Pressure Transmitter with threaded port and front-flush diaphragm
Serie 26YEi Level transmitter for hydrostatic pressure measurement
Serie 23YMEi Pressure Transmitter with threaded port and with internal sealing for mining with M1 approval
Serie 26YMEi Level transmitter for hydrostatic pressure measurement for mining with M1 approval

Serie PT-25YEi Temperature transmitter

Further details see attachment

SPECIFIC CONDITIONS OF USE: YES as shown below:

The ambient and medium temperature range varies according to the operating conditions and is specified in the manual.

The permissible operating pressures are specified in the manufacturer's documents.

The electric strength of the metallic enclosure is $\leq 250 V_{SS}$.

The safety and installation instructions in the operating manual have to be taken into account.

For all cable sensors additional safety and installation instructions have to be taken into account (regarding danger of electrostatic discharges).



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

A new type PT-25 YEi has been added.

Annex:

[Annex_IBE14.0044X_01.pdf](#)



IECEX Certificate of Conformity - Annex



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Technical data

Ambient temperature range	T_a	-40 °C to +40/ 50/ 65/ 100 °C depending on temperature class and type																
Power supply and data circuit (2-wire transmitter)	fixed cable or connecting plug																	
maximum input voltage	U_i	30 V																
maximum input current	I_i	200 mA																
maximum input power	P_i	0.64/ 1.1/ 1.33 W all pressure transmitter types T4 : <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Ambient temp. T_a</th> <th>Power P_i</th> </tr> </thead> <tbody> <tr> <td>40 °C</td> <td>1.33 W</td> </tr> <tr> <td>65 °C</td> <td>1.1 W</td> </tr> <tr> <td>100 °C</td> <td>0.64 W</td> </tr> </tbody> </table> 2- wire transmitter T6 : <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Ambient temp. T_a</th> <th>Power P_i</th> </tr> </thead> <tbody> <tr> <td>50 °C</td> <td>1.33 W</td> </tr> </tbody> </table> temperature transmitter T4 : <table border="1" style="margin-left: 20px;"> <thead> <tr> <th>Ambient temp. T_a</th> <th>Power P_i</th> </tr> </thead> <tbody> <tr> <td>50 °C</td> <td>1.33 W</td> </tr> </tbody> </table>	Ambient temp. T_a	Power P_i	40 °C	1.33 W	65 °C	1.1 W	100 °C	0.64 W	Ambient temp. T_a	Power P_i	50 °C	1.33 W	Ambient temp. T_a	Power P_i	50 °C	1.33 W
Ambient temp. T_a	Power P_i																	
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Ambient temp. T_a	Power P_i																	
50 °C	1.33 W																	
Ambient temp. T_a	Power P_i																	
50 °C	1.33 W																	
maximum internal capacitance	C_i	negligible																
maximum internal inductance	L_i	negligible																
Output (3-wire transmitter)																		
maximum output voltage	U_o	14.7 V																
maximum output current	I_o	149 mA																
maximum internal capacitance	C_i	528 nF (pressure transmitter) 2 nF (temperature transmitter)																
maximum internal inductance	L_i	negligible																
Characteristics of fixed cable:	L' wire	1.2 μ H/m																
	C' wire-wire	150 pF/m																
	C' wire-shield	250 pF/m																