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 BVS 13.0058X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2018-02-12) Issue 0 (2013-05-29)
Date of Issue:	2020-12-07		
Applicant:	**Sigrist-Photometer AG** Hofurlistrasse 1 6373 Ennetbürgen **Switzerland**		
Equipment:	**Sensor type ColorPlus Ex**		
Optional accessory:			
Type of Protection:	**Flameproof Enclosures "d", Equipment with Equipment Protection Level (EPL) Ga**		
Marking:	Ex db IIC T*) Ga/Gb *) see "General product information"		

Approved for issue on behalf of the IECEx Certification Body: **Dr Franz Eickhoff**

Position: **Lead Auditor and officially recognised expert**

Signature: (for printed version)

Date: 2020-12-07

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:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

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Manufacturer: **Sigrist-Photometer AG**
Hofurlistrasse 1
6373 Ennetbürgen
Switzerland

Additional 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-26:2014-10 Explosive atmospheres – Part 26: Equipment with Equipment Protection Level (EPL) Ga
Edition:3.0

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/BVS/ExTR13.0064/02

Quality Assessment Report:

DE/BVS/QAR18.0001/00

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

Subject and Type
Sensor type ColorPlus Ex

Description
The Sensor ColorPlus Ex is used for absorption measurements in liquids. The unit consists of a sending and receiving module. These are connected by means of a signal cable. Both modules have their electronic section, which accommodates the printed boards, delimited from the environment
(Zone 1 / EPL Gb) and the medium (Zone 0 / EPL Ga) by the flameproof enclosure. The light signal produced by a light source in the sending module transmitted into the medium by means of a sapphire bushing that is sealed in the metal. The diffusion-tight sapphire bushing safeguards that the required segregation is maintained between the zones. Having passed the medium, the signal enters another sealed bushing before it reaches the sensor unit in the receiving module. The measuring signal is conditioned in the receiving module electronics system and is transmitted by a cable to a control unit, which must be installed outside the potentially explosive area. The control unit is not covered by this IECEx certificate.

Parameters
Electrical parameters

Nominal voltage	24 V DC
Nominal power	14 W
Max. media pressure	20 bar

Thermal parameters
Temperature class is dependent on the medium temperature:

Temperature class	Media temperature
T6	-20 °C … +80 °C
T5	-20 °C … +95 °C
T4	-20 °C … +130 °C
T3	-20 °C … +195 °C

SPECIFIC CONDITIONS OF USE: YES as shown below:
In case of the parts forming the joint shall be replaced or repaired, the dimensions information of the flameproof joints must be obtained from the manufacturer, because the gap length of the flameproof joint of this apparatus are in parts longer and the gap width are in parts smaller than required by Table 3 of
IEC 60079-1:2014.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Updating of the standard IEC 60079-0:2011 to IEC 60079-0:2017
- Change of the type name to ColorPlus Ex
- Modification of the mounted electronic