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 SEV 19.0021X**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 2	Issue 1 (2020-03-10) Issue 0 (2019-08-07)
Date of Issue:	2021-06-17		

Applicant: **Huba Control AG**
Industriestrasse 17
5436 Würenlos
Switzerland

Equipment: **Pressure Measuring Transducer 519.************

Optional accessory: ---

Type of Protection: **ia**

Marking: For pressure range 0 … 0.4 to 2.5 bar:
Ex ia IIC T4 Ga
Ex ia IIIC T_{200}130 °C Da

For pressure range 0 … 4 to 60 bar:
Ex ia IIC T4 Ga/Gb
Ex ia IIIC T_{200}130 °C Da/Db

Approved for issue on behalf of the IECEx Certification Body: **Martin Plüss**

Position: **Manager Product Certification**

Signature: (for printed version)

Date: 2021-06-17

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:

Eurofins Electric & Electronic Product Testing AG
Luppmenstrasse 3
CH-8320 FEHRALTORF
Switzerland

eurofins | E&E

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Date of issue: 2021-06-17 Issue No: 2

Manufacturer: **Huba Control AG**
Industriestrasse 17
5436 Würenlos
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 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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:

CH/SEV/ExTR19.0022/02

Quality Assessment Report:

CH/SEV/QAR12.0006/05

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

The pressure measuring transducer (PMT) 519 – 4-20 mA shall get the ATEX and IECEx approval. The PMT is built up with electronics and a ceramic pressure measuring cell (pressure range 0 … 0.4 to 60 bar relative) integrated in a stainless-steel case with process connection which is sealed.
The drawing below shows the setup. It shows the PMT with a M12x1 plug connector and a G 1/2" process connection and the PMT with a DIN EN 175301-803-A plug connector and a G 1/2" doubled sealed process connection.

Classification of installation and use:	stationary
Ingress protection:	IP65 for DIN version IP67 for M12x1 versionIP65
Rated ambient temperature range (°C):	-25 °C to +85 °C
Rated ambient temperature range (°C) for Ex Components	N/A

Ratings:

U_i	≤	30 V dc
I_i	≤	100 mA
P_i	≤	750 mW
C_i	=	22 nF
L_i	=	0 µH

Additional information see Annexe

SPECIFIC CONDITIONS OF USE: YES as shown below:
For the type with DIN connector the test for impact according to IEC 60079-0 Clause 26.4.2 was done only with low impact energy. The connector must be protected from impacts with high impact energy.

The device must be installed and operated only in an environment of overvoltage category II (or better) according to IEC 60664-1.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This CoC replaces CoC IECEx SEV 19.0021X Issue No: 1 due to:

1. The product variant plan has changed.
2. The designation of the used wires has changed.
3. Drawings have been updated.

Annex:

IECEx SEV 19.0021X app i2.pdf

Annexe to: **IECEx SEV 19.0021X** **Issue No.: 2**

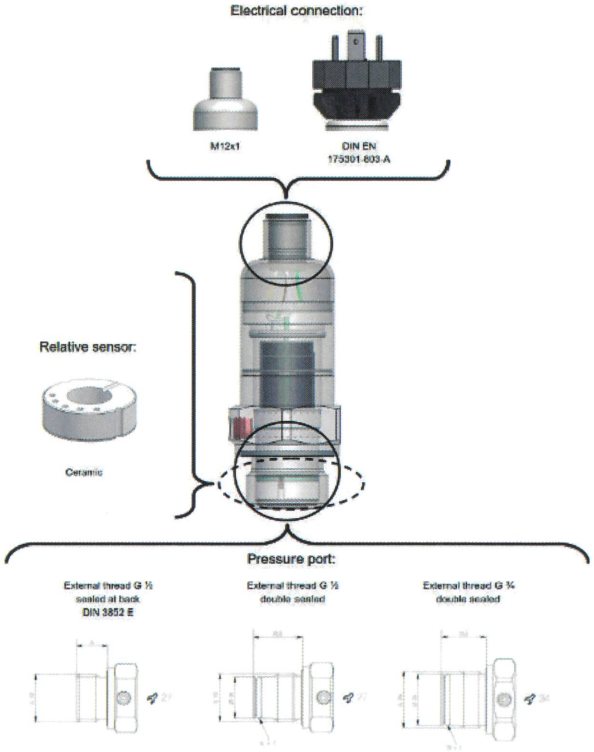
Applicant Name: **Huba Control AG**

Equipment: **Pressure measuring transducer**

General product information:

The pressure measuring transducer (PMT) 519 - 4-20 mA shall get the ATEX and IECEx approval. The PMT is built up with electronics and a ceramic pressure measuring cell (pressure range 0 … 0.4 to 60 bar relative) integrated in a stainless-steel case with process connection which is sealed.

The drawing below shows the setup. It shows the PMT with a M12x1 plug connector and a G 1/2" process connection and the PMT with a DIN EN 175301-803-A plug connector and a G 1/2" doubled sealed process connection.



To measure pressure, static pressure is applied to the process connection and to the pressure measuring cell. The relative pressure measurement is made with a pressure equalisation element that leads to the sensor and transfers the air pressure from outside. A diaphragm prevents pollution. The PMT is mounted over thread connection according to industry norm into a process connection, with which only the process connection and the ceramic measuring cell are directly exposed to the media. The physical parameter pressure is measured with the Wheatstone measuring bridge that measures a voltage signal proportional to the pressure which is amplified in the electronics of the pressure transducer and converted into a 4-20 mA output signal.

The power supply must be a certified intrinsically safe current circuit „ia".

The power supply, the measuring signal, and the voltage equalising wire are operated by the connection plug. The following electrical connections have been realised.

- M12x1
- DIN EN 175301-803-A (named DIN A plug)

Ambient temperature range:

Operation temperature ambient: -25 ≤ Ta ≤ +85 °C
Operation temperature media: -25 ≤ Ta ≤ +85 °C

Part number code:

519.x xx x x 4 x xx 1 x x

- Calibration certificate (optional)
- Pressure tolerance (optional)
- Material:
  1 – 1.4404 / AISI 315L
- Pressure connection
- Electrical connection:
  1 – DIN EN 17301-803-A
  3 – M12x1
- Output and Supply:
  4 – 4...20 mA, two wire
- Type:
  2 – Ex without zone separation
  3 – Ex with zone separation
- Sealing material:
  0 – FKM/FPM
  1 – EPDM
- Pressure range
- Type of pressure measuring:
  9 – relative pressure
  D – relative pressure with increase accuracy