



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 BVS 16.0010** issue No.: **0** Certificate history:

Status: **Current**

Date of Issue: **2016-03-11** Page 1 of 4

Applicant: **holthausen elektronik GmbH**
Wevelinghoven 38
41334 Nettetal
Germany

Electrical Apparatus: **Transmitter type ESW-small Ex-i M 10-****
Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i"**

Marking: **Ex ia IIC T4 Gb**

Approved for issue on behalf of the IECEx
Certification Body:

H.-Ch. Simanski

Position:

Head of Certification Body

Signature:
(for printed version)

Date:

11.3.2016

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:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
DEKRA EXAM GmbH



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Manufacturer: **holthausen elektronik GmbH**
Wevelinghoven 38
41334 Nettetal
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/BVS/ExTR16.0014/00](#)

Quality Assessment Report:
[DE/TUR/QAR12.0002/01](#)



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Subject and Type

Transmitter Type ESW-small Ex-i M 10-**

In the complete type designation, the asterisks are replaced by numerals indicating different variations of the transmitter which differ in measuring range, frequency range and signal evaluation.

These variants are not relevant for explosion protection.

Description

The transmitter type ESW-small Ex-i M 10-** is an electronic vibration monitor. It is mounted to the monitored machine with a threaded bolt and transforms the vibrations into a 4-20 mA-current signal.

The transmitter is a passive intrinsically safe apparatus and is suitable for use in areas requiring EPL Gb.

All circuits have level of protection IIC ia.

The transmitter has a stainless steel enclosure with removable lid.

The electronic is molded inside the enclosure. An indication-LED is protruding from the encapsulation; it is visible after unscrewing the lid of the enclosure.

The transmitter is supplied via a permanently connected cable (max. 20 m length).

CONDITIONS OF CERTIFICATION: NO





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Additional information:

Parameters

1 Electrical data

Supply and signal circuit

permanently connected cable, wires white (+) and brown (-)

Max. input voltage	U_i	DC	28.8	V
Max. input current	I_i		125	mA
Max. input power	P_i		1	W

The effective capacitance C_i and effective inductance L_i of the apparatus are composed of the (concentrated) capacitance and inductance of the apparatus and the parameters of the connected cable:

of the connected cable:

Effective concentrated capacitance	10	nF
Effective concentrated inductance	30	μ H
Cable capacitance	211	nF/km
Cable inductance	0.65	mH/km

2 Ambient temperature range

T_a -40 °C...50 °C