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 16.0059** Page 1 of 5 Certificate history:

Status: **Current** Issue No: 0

Date of Issue: 2017-02-14

Applicant: **FAUDI Aviation GmbH**
formerly FAUDI Aviation Sensor GmbH
Scharnhorststraße 7 B
35260 Stadtallendorf
Germany

Equipment: **AFGUARD® transmitter type AFG0/xxxxx/x and AFG2/xxxxx/x**

Optional accessory:

Type of Protection: **Equipment protection by intrinsic safety "i", Equipment with Equipment Protection Level (EPL) Ga**

Marking:

AFG0/xxxxx/x	AFG2/xxxxx/x
Ex ia/ib IIB T4 Ga/Gb	Ex ic IIB T4 Gc
Ex ia IIB T4 Ga / Gb	

Approved for issue on behalf of the IECEx Certification Body: **J. Koch**

Position: **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:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
On the safe side.

IECEx Certificate of Conformity

Manufacturer: **FAUDI Aviation GmbH**
formerly FAUDI Aviation Sensor GmbH
Scharnhorststraße 7 B
35260 Stadtallendorf
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

IEC 60079-26:2014 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/ExTR13.0127/01

Quality Assessment Report:

DE/BVS/QAR12.0003/01

IECEx Certificate of Conformity

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

General product information:

The AFGUARD® transmitters type AFG0/xxxxx/x and type AFG2/xxxxx/x are intrinsically safe apparatus and have been tested according to the European Directive 94/9/EG and 2014/34/EU (ATEX).
The tests were based on the European standard EN 60079-0:2012, EN 60079-11:2012, and EN 60079-26:2015.
The number of the Certificates are BVS 09 ATEX E 012 and BVS 09 ATEX E 115.
Numbers of the associated test reports: BVS PP 09.2120 EU and BVS PP 09.2137 EG.
The listed AFGUARD® transmitters type AFG0/xxxxx/x and type AFG2/xxxxx/x have been extracted from the above ATEX certificates and were subjected to assessment according to IECEx-Scheme.
Listing of all components used referring to older standards: Not applicable

SPECIFIC CONDITIONS OF USE: NO

IECEx Certificate of Conformity

Equipment (continued):

Description

See Annex

IECEx Certificate of Conformity

Additional information:
Ratings:

Supply and signal circuit
intended for connection to an intrinsically safe 4 to 20 mA current loop,
type of protection Ex ia IIB or Ex ib IIB or Ex ic IIB

1	Voltage	U_i	DC	30	V
	Current	I_i		100	mA
	Power	P_i		750	mW
	Effective internal capacitance	C_i		negligible	
	Effective internal inductance	L_i		negligible	
2	Optical radiation				
	Wave length		840 nm ≤ f ≤ 920		nm
	Permanent optical power		≤	12	mW
	Radiation power		≤	1.025	mW/mm²
	Light pulse energy		≤	53	µJ
	Light pulse duration		≤	10	µs
	Pulse rate		≤	1	ms
3	Ambient temperature range:			-30 °C ≤ T_a ≤ 60 °C	

The optical radiation of the transmitter was assessed on the basis of IEC 60079-28:2015; an ignition risk does not exist.

Annex:

BVS_16_0059_Faudi_Annex.pdf

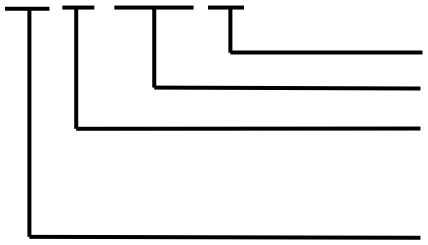
IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 16.0059**
Annex

Type Code

AFGUARD® type AFG x/xxxxx/x

Engraved Serial No:
AFG X / XXXXX / X



Year of construction

Serial number (5-digits)

0 = Ex-Version EPL Ga/Gb (Zone 1/2)
2 = Ex-Version EPL Gc (Zone 2)

Product name

Description

The AFGUARD® transmitter type AFG x/xxxxx/x is used for particle or free water contamination measuring purposes in fuel pipes.

AFGUARD® type AFG 0/xxxxx/x:

The AFGUARD® transmitter comes with an electronic housing made of light alloy, stainless steel or conductive synthetic material (surface resistance ≤ 10^9 Ω) and an integrated optical sensor.

The electronic enclosure contains PCB, partly embedded in casting compound.
The intrinsically safe supply- and signal circuit is fitted with a connector.

The mounting assembly of the integrated optical sensor head is made of stainless steel independently of the material of the electronic housing and is designated for mounting in the boundary wall between areas requiring EPL Ga or EPL Gb apparatus and less hazardous areas.

The marking 'Ex ia/ib IIB T4 Ga/Gb' applies to the AFGUARD® transmitter in case of being supplied by means of an intrinsically safe 2-wire supply- and signal circuit providing level of protection 'Ex ib IIB'.

The marking 'Ex ia IIB T4 Ga/Gb' applies to the AFGUARD® transmitter in case of being supplied by means of an intrinsically safe 2-wire supply- and signal circuit providing level of protection 'Ex ia IIB'.

AFGUARD® type AFG 2/xxxxx/x:

The AFGUARD® transmitter comes with an electronic housing made of light alloy, stainless steel or conductive synthetic material (surface resistance ≤ 10^9 Ω) and an integrated optical sensor.

The electronic enclosure contains PCB, partly embedded in casting compound.

The intrinsically safe supply- and signal circuit is fitted with a connector.

The mounting assembly of the integrated optical sensor head is made of stainless steel independently of the material of the electronics enclosure.