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 15.0027	issue No.:0	Certificate history:
Status:	**Current**		
Date of Issue:	**2015-03-13**	Page 1 of 4	

Applicant: **KOBOLD Messring GmbH**
Nordring 22-24
65719 Hofheim/Ts.
Germany

Electrical Apparatus: **Flow sensor type KAL-**** Ex with Flow monitor type KAL-E**-Ex**
Optional accessory:

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

Marking:	Flow sensor type KAL-**** Ex	Flow monitor type KAL-E**-Ex
	Ex ia IIB T4 Ga	[Ex ia Ga] IIB

Approved for issue on behalf of the IECEx Certification Body: H.-Ch. Simanski

Position: Head of Certification Body

Signature:
(for printed version)

Date: 13.3.2015

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.

Certificate issued by:

DEKRA EXAM GmbH
Dinnendahlstrasse 9
44809 Bochum
Germany

DEKRA
DEKRA EXAM GmbH

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Manufacturer: **KOBOLD Messring GmbH**
Nordring 22-24
65719 Hofheim/Ts.
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 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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/ExTR15.0023/00

Quality Assessment Report:

DE/BVS/QAR09.0001/06

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Schedule

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

General product information:

See Annex

CONDITIONS OF CERTIFICATION: NO

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EQUIPMENT(continued):

Parameters

1 Flow monitor type KAL-E**-Ex

1.1 Power supply circuit (terminals 15 and 16)

for type KAL-E*0-Ex			
Rated voltage		AC	230 V
Max. voltage	U_m	AC	253 V
for type KAL-E*1-Ex			
Rated voltage		AC	110 V
Max. voltage	U_m	AC	140 V
for type KAL-E*2-Ex			
Rated voltage		AC	24 V
Max. voltage	U_m	AC	30 V
for type KAL-E*4-Ex			
Rated voltage		AC	115 V
Max. voltage	U_m	AC	140 V
for type KAL-E*5-Ex			
Rated voltage		AC	42 V
Max. voltage	U_m	AC	60 V

1.2 Relay contact circuit (terminals 9 -11 and 12 - 14)

Switching voltage		AC	250 V
Switching current			2 A
Switching voltage		AC	125 V
Switching current			3 A
Switching voltage		DC	30 V
Switching current			3 A

2 Circuit to the sensor level of protection Ex ia IIB (terminals 6 and 8)

Voltage	U_o	DC	16 V
Curren	I_o		1.1 A

3 Ambient temperature range

for the flow monitor type KAL-E**-Ex	T_a	-20 °C up to +55 °C
for the flow sensor type KAL-****-Ex	T_a	-20 °C up to +85 °C

Annex: BVS_15_0027_KOBOLD_Annex.pdf

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Annex

General product information:

The flow sensor in conjunction with the flow monitor is used for continuously monitoring of liquid media.

The electrical components of the flow monitor are placed inside a plastic enclosure, which will be mounted outside the hazardous area. On top of the enclosure terminals for the connection of the intrinsically safe and the non-intrinsically safe circuits are located.

The electrical components of the flow sensor are completely encapsulated inside a metallic enclosure. The connection of the sensor is done by an up to 100 m long permanently connected cable with the relevant terminals of the flow monitor.

Instead of the *** in the complete denomination numerals will be inserted which characterize different versions:

Flow sensor type KAL-**** E

The numerals instead of the *** characterize the thread size, material of the enclosure and kind of mounting and have no influence on explosion protection.

If the flow sensor will be installed in areas requiring EPL Ga equipment, the connecting cable has to be fixed and installed in a way that electrostatic charges / discharges are excluded.

Flow monitor type KAL-E**-Ex

- Power supply
- function