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 SIR 15.0066X**

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Certificate history:

Status: **Current**

Issue No: 4

Issue 3 (2022-11-22)
Issue 2 (2019-02-18)
Issue 1 (2015-09-23)
Issue 0 (2015-07-24)

Date of Issue: 2024-06-28

Applicant: **KEM Kueppers Elektromechanik GmbH**
Liebigstraβe 5
Karlsfeld Bavaria 85757
Germany

Equipment: **FlowPod**

Optional accessory:

Type of Protection: **Flameproof and Dust Protection by Enclosure**

Marking: Ex db IIC T5
Ex tb IIIC 80°C
Refer to Annexe for ambient temperature

Approved for issue on behalf of the IECEx Certification Body: **Michelle Halliwell**

Position: **Director Operations, UK & Industrial Europe**

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:

CSA Group Testing UK Ltd
Unit 6, Hawarden Industrial Park
Hawarden, Deeside CH5 3US
United Kingdom

IECEx Certificate of Conformity

Manufacturer: **KEM Kueppers Elektromechanik GmbH**
Liebigstraβe 5
Karlsfeld Bavaria 85757
Germany

Manufacturing locations: **KEM Küppers Elektromechanik GmbH**
Wettzellerstrasse 22
Bad Kotzting 93444
Germany

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

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

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 Reports:

GB/SIR/ExTR15.0203/00 GB/SIR/ExTR15.0245/00 GB/SIR/ExTR19.0031/00
GB/SIR/ExTR22.0191/00 GB/SIR/ExTR24.0071/00

Quality Assessment Report:

DE/TPS/QAR12.0003/12

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

Direct Mount FlowPod
The FlowPod is used to measure the flow of process liquids with the measurement electronics and display housed in the stainless steel enclosure body. The sensor assembly is contained in the meter cap which is connected to the enclosure body with a stainless steel union. The enclosure body is an Ex d certified IME Type 8080SM flameproof enclosure with certification IECEx SIR 07.0111U which has two cable entries for the connection of suitably certified cable entry devices, adaptors or blank plugs. The FlowPod meets the ingress protection requirements of IP66/IP68 (2m) and is rated, 12 – 30 V, 2 W maximum.

Refer to Annexe for additional EQUIPMENT information and CONDITIONS OF MANUFACTURE.

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The flamepaths of the KEM “FLOWPOD SENSOR ADAPTOR”, certified under IECEx SIR 16.0089U, shall not be repaired.
2. CAUTION – USE FASTENERS WITH YIELD STRESS ≥ 450 MPa for models with KEM “FLOWPOD SENSOR ADAPTOR”. - This condition shall be considered for the combinations of the FlowPod or junction box with the Flowpod Sensor Adaptor, certified under IECEx SIR 16.0089U.
3. For the Stand-alone FlowPod Option the end-user shall use suitably certified Ex d cable glands, suitable for the operating temperature range of -40 °C to +85 °C to which they may be subjected in service.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, Issue 4, recognises the following change; refer to the certificate annex to view a comprehensive history:

1. To update the company name and address on the certificate:
   From: Litre Meter Ltd. Hart Hill Barn Granborough Rd North Marston Buckinghamshire MK18 3RZ United Kingdom
   To: KEM Kueppers Elektromechanik GmbH, Liebigstraße 5 Karlsfeld Bavaria 85757 Germany

Annex:

IECEx SIR 15.0066X Annexe Issue 4.pdf

EQUIPMENT (continued)

The full equipment description is shown as follows:

Direct Mount FlowPod
The FlowPod is used to measure the flow of process liquids with the measurement electronics and display housed in the stainless-steel enclosure body. The sensor assembly is contained in the meter cap which is connected to the enclosure body with a stainless-steel union. The enclosure body is an Ex d certified IME Type 8080SM flameproof enclosure with certification IECEx SIR 07.0111U which has two cable entries for the connection of suitably certified cable entry devices, adaptors or blank plugs. The FlowPod meets the ingress protection requirements of IP66/IP68 (2m) and is rated, 12 – 30 V, 2 W maximum.

Direct Mount FlowPod as option with KEM sensor
For use in gas atmospheres, the sensor assembly and the stainless-steel union can be replaced by an Ex d certified "FLOWPOD SENSOR ADAPTOR" by KEM Küppers Elektromechanik GmbH with certification IECEx SIR 16.0089U.

Remote Mounting Option
The FlowPod enclosure body can be mounted remotely from the sensor with a junction box fitted in place of the FlowPod enclosure body on the meter cap. The stainless-steel junction box is an Ex d certified IME Type 1080SM flameproof enclosure with certification IECEx SIR 09.0006U.

Remote Mounting Option with KEM sensor
The remote mounting option is also possible with the "FLOWPOD SENSOR ADAPTOR" by KEM Küppers Elektromechanik GmbH.

Stand-alone FlowPod Option
The FlowPod enclosure body can also be mounted remotely from the sensor with a cable gland fitted in place of the sensor.

Ambient Temperature

Ambient temperature range for equipment marked with Ex tb:	Ta = -20 °C to +75 °C
Extended ambient temperature range for stainless steel FlowPod and junction box marked with Ex db:	Ta = -40 °C to +75 °C
Ambient temperature range for aluminium FlowPod marked with Ex db (not subjected to a routine overpressure test):	Ta = -20 °C to +75 °C
Extended ambient temperature range for aluminium Flowpod marked with Ex db (subjected to a routine overpressure test):	Ta = -40 °C to +75 °C

Conditions of Manufacture

1. The equipment covered by this certificate incorporates previously certified devices; it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices, and the manufacturer shall inform Sira of any modifications of the devices that may impinge upon the explosion safety design of the equipment.
2. The manufacturer shall conduct a routine overpressure test for the FlowPod enclosure manufactured from aluminum together with the sensor cap at a minimum of 32.1 bar according to clause 16 of IEC 60079-1, if marked with a minimum ambient temperature of -40 °C.

CSA Group Testing UK Ltd.
Unit 6 Hawarden Industrial Park,
Hawarden Deeside CH5 3US, UK.

Full certificate change history

Issue 1 – this Issue introduced the following changes:

1. The introduction of alternative stainless-steel grades for the meter cap.
2. The addition of a lock nut to the sensor assembly.
3. The recognition of minor, editorial amendments to Drawing K0013-CERT-003-F.

Issue 2 – this Issue introduced the following changes:

1. Change the lower ambient temperature limit from -20 °C to -40 °C for the stainless steel FlowPod, the junction box and the aluminium FlowPod, subjected to a routine overpressure test, marked with Ex db.
2. Optional combination of the component certified 'KEM Sensor' certified under IECEx SIR 16.0089U for the Ex db versions of the equipment, with the subsequent addition of the suffix 'X' to the certificate number.
3. Introduce an alternate pcb design for the FlowPod and the junction box.
4. The introduction of the direct mount option and junction box made of aluminium as alternative to the stainless-steel options.
5. Introduce a stand-alone Flowpod option.

Issue 3 – this Issue introduced the following change:

1. The introduction of an additional manufacturing location:

KEM Küppers Elektromechanik GmbH
Wettzellerstrasse 22
93444 Bad Kötzting
Deutschland

Issue 4 – this Issue introduced the following change:

1. To update the company name and address on the certificate:

From:	To:
Litre Meter Ltd	KEM Kueppers Elektromechanik GmbH
Hart Hill Barn	Liebigstraße 5
Granborough Rd	Karlsfeld
North Marston	Bavaria 85757
Buckinghamshire	Germany
MK18 3RZ	
United Kingdom	

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