



## 1 EU-TYPE EXAMINATION CERTIFICATE

2 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: Sira 15ATEX1190X Issue: 5

4 Equipment: FlowPod

5 Applicant: Litre Meter Limited

6 Address: Hart Hill Barn

Granborough Rd North Marston Buckinghamshire MK18 3RZ

MK18 3RZ United Kingdom

7 This equipment and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

CSA Group Netherlands B.V., notified body number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2012/A11:2013

EN 60079-1:2014

EN 60079-31:2014

- If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to Specific Conditions of Use identified in the schedule to this certificate.
- This EU-Type Examination Certificate relates only to the design and construction of the specified equipment. If applicable, further requirements of this Directive apply to the manufacture and supply of this equipment.
- 12 The marking of the equipment shall include the following:



II 2 G D Ex db IIC T5 Ex tb IIIC 80 °C Tamb = -20°C to +75°C

Signed: Michelle Halliwell

Title: Director of Operations



Project Number 80147539

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#### **SCHEDULE**

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#### 13 DESCRIPTION OF EQUIPMENT

#### **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 Sira 07ATEX1331U 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 Sira 16ATEX1261U.

#### **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 Sira 09ATEX1023U.

#### 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.

## Variation 1 - This variation introduced the following changes:

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

## Variation 2 - This variation introduced the following changes:

- i. 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 Fx db.
- ii. Optional combination of the component certified 'KEM Sensor' certified under Sira 16ATEX1261U for the Ex db versions of the equipment, with the subsequent addition of the suffix 'X' to the certificate number.
- iii. Introduce an alternate pcb design for the FlowPod and the junction box.
- iv. The introduction of the direct mount option and junction box made of aluminium as alternative to the stainless steel options.
- v. Introduce a stand-alone Flowpod option.





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Variation 3 - This variation introduced the following change:

 Reinstatement of changes which have been introduced under Sira 15ATEX1190X issue 2 (Report R70182181A), which have been omitted under Sira 15ATEX1190 issue 3.

Variation 4 - This variation introduced the following change:

 The introduction of an additional manufacturing location: KEM Küppers Elektromechanik GmbH Wettzellerstrasse 22 93444 Bad Kötzting Deutschland

## 14 DESCRIPTIVE DOCUMENTS

## 14.1 Drawings

Refer to Certificate Annexe.

#### 14.2 Associated Reports and Certificate History

Issue	Date	Report number	Comment
0	24 July 2015	R70006282A	The release of the prime certificate.
1	23 September 2015	R70044344A	The introduction of Variation 1.
2	18 February 2019	R70182181A	This Issue covers the following changes:
			<ul> <li>EC Type-Examination Certificate in accordance</li> </ul>
			with 94/9/EC updated to EU Type-Examination
			Certificate in accordance with Directive
			2014/34/EU. (In accordance with Article 41 of Directive
			2014/34/EU, EC Type-Examination Certificates referring to
			94/9/EC that were in existence prior to the date of
			application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with
			Directive 2014/34/EU. Variations to such EC Type-
			Examination Certificates may continue to bear the original
			certificate number issued prior to 20 April 2016.)
			The introduction of Variation 2.
3	15 October 2019	1543	Transfer of certificate Sira 15ATEX1190 from Sira
			Certification Service to CSA Group Netherlands B.V.
4	26 March 2021	R80068897A	The introduction of Variation 3.
5	22 November 2022	R80147539A	The introduction of Variation 4.

- 15 SPECIFIC CONDITIONS OF USE (denoted by X after the certificate number)
- 15.1 The flamepaths of the KEM "FLOWPOD SENSOR ADAPTOR", certified under Sira 16ATEX1261U, shall not be repaired.
- 15.2 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 Sira 16ATEX1261U.





#### **SCHEDULE**

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- 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.
- 16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

- 17 CONDITIONS OF MANUFACTURE
- 17.1 The use of this certificate is subject to the Regulations Applicable to Holders of CSA Group Netherlands B.V. certificates.
- 17.2 Holders of EU-Type Examination Certificates are required to comply with the conformity to type requirements defined in Article 13 of Directive 2014/34/EU.
- 17.3 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 CSA of any modifications of the devices that may impinge upon the explosion safety design of the equipment.
- 17.4 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 EN 60079-1, if marked with a minimum ambient temperature of -40°C.

# **Certificate Annexe**

Certificate Number: Sira 15ATEX1190X

Equipment: FlowPod

Applicant: Litre Meter Limited



## Issue 0

Drawing	Sheets	Rev.	Date (Sira Stamp)	Title
K0013-CERT-001	1 of 1	F	8 Jul 15	FlowPod General Arrangement
K0013-CERT-002	1 of 1	С	8 Jul 15	FlowPod Arrangement
K0013-CERT-003	1 of 1	Ε	8 Jul 15	FlowPod Union Arrangement
K0013-CERT-004	1 of 1	В	8 Jul 15	FlowPod Arrangement
K0013-CERT-005	1 of 1	С	8 Jul 15	Junction Box Mount
K0013-CERT-006	1 of 1	Α	8 Jul 15	Junction Box Mount

#### Issue 1

Drawing	Sheets	Rev.	Date (Sira stamp)	Description
K0013-CERT-003-F	1 of 1	F	26 Aug 15	FlowPod Union Arrangement

## Issue 2

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
K0013-CERT-001	1 of 1	G	23 Jan 19	FlowPod General Arrangement
K0013-CERT-002	1 of 1	D	23 Jan 19	FlowPod Arrangement
K0013-CERT-005	1 of 1	D	23 Jan 19	Junction Box Mount
K0013-CERT-009	1 of 1	Α	23 Jan 19	KEM Junction Box Mount
K0013-CERT-010	1 of 1	Α	23 Jan 19	KEM Non EXi FlowPod Arrangement
K0013-CERT-011	1 of 1	Α	23 Jan 19	FlowPod Arrangement
K0013-CERT-012	1 of 1	Α	23 Jan 19	FlowPod Arrangement
K0013-CERT-015	1 of 1	Α	23 Jan 19	PCB Junction Box Mount
K0013-MA-016	1 of 1	Α	23 Jan 19	KEM PCB Junction Box
K0013-CERT-017	1 of 1	Α	23 Jan 19	KEM EXi FlowPod Arrangement
K0013-CERT-018	1 of 1	Α	23 Jan 19	KEM Int Non EXi FlowPod Arrangement
K0013-CERT-019	1 of 1	Α	23 Jan 19	Junction Box Mount
K0013-CERT-020	1 to 3	Α	23 Jan 19	KEM Sensor Thread Arrangement
K0013-CERT-021	1 of 1	В	23 Jan 19	KEM FlowPod And Junction Box Label
K0013-CERT-022	1 of 1	Α	23 Jan 19	FlowPod Stand Alone

Issues 3, 4 and 5. No new drawings were introduced.

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