



# 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](http://www.iecex.com)

Certificate No.:  issue No.:

Status:

Date of Issue: **2015-09-24** Page 1 of 3

Applicant: **AW-Lake Company**  
8809 Industrial Dr  
Franksville  
Wisconsin 53126  
**United States of America**

Electrical Apparatus: **RT-30Ex Transmitter and HUB-41Ex Adaptor**  
*Optional accessory:*

Type of Protection: **Flameproof**

Marking: **Ex d IIB+H<sub>2</sub> T5 Gb**  
**Ta = -40°C to +60°C**

*Approved for issue on behalf of the IECEx* **A C Smith**  
*Certification Body:*

*Position:* **Certification Manager**

*Signature:*  
*(for printed version)*

*Date:*

2015-09-24

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:

**SIRA Certification Service**  
**CSA Group**  
Unit 6, Hawarden Industrial Park  
Hawarden  
Deeside  
CH5 3US  
United Kingdom

**sira**  
CERTIFICATION



**CSA  
Group**



# IECEX Certificate of Conformity

Certificate No.: IECEX SIR 15.0101X

Date of Issue: 2015-09-24

Issue No.: 0

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Manufacturer: **AW-Lake Company**  
8809 Industrial Dr  
Franksville  
Wisconsin 53126  
**United States of America**

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 60079-1 : 2007-04** Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition: 6

*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:

GB/SIR/ExTR15.0250/00

##### Quality Assessment Report:

US/ETL/QAR15.0011/00



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Certificate No.: IECEx SIR 15.0101X

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## Schedule

### EQUIPMENT:

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

#### **RT-30Ex transmitter**

The RT-30Ex is a meter-mounted digital flow monitor housed in a single access enclosure (Ex d connecting head) or dual access enclosure (Ex d 'Universal instrument housing'). A large LCD graphic display provides easy to read indication of flow rate. The enclosure contains 2 printed wiring boards – A display board and a terminal connection board with processor and I/O board. These are interconnected by a ribbon cable. Refer to the Annexe for further information

### CONDITIONS OF CERTIFICATION: YES as shown below:

1. The meter body temperatures must not exceed 85°C for temperature class T5 for explosive gas atmospheres.

**Annexe to:** IECEx SIR 15.0101X Issue 0

**Applicant:** AW-Lake Company

**Apparatus:** RT-30Ex Transmitter  
HUB-41Ex Adaptor



The full description is repeated for clarity.

### **RT-30Ex transmitter**

The RT-30Ex is a meter-mounted digital flow monitor housed in a single access enclosure (Ex d connecting head) or dual access enclosure (Ex d 'Universal instrument housing'). A large LCD graphic display provides easy to read indication of flow rate. The enclosure contains 2 printed wiring boards – A display board and a terminal connection board with processor and I/O board. These are interconnected by a ribbon cable.



RT-30Ex

The Hub Adapter (swivel union assembly) comprises of 4 pieces: the swivel union top, bottom, collar and a sliding probe tube. The Hub Adapter houses the Hall Pickup assembly (wired probe tube pictured below) which is connected to the process pipe per control drawing RT30990 via 3/8"-18 NPT Male threads. The swivel union top connects to the RT-30Ex Transmitter or HUB-41Ex adaptor Flameproof Ex d enclosure via 1/2"-14 NPT Male threads. The top and bottom parts are held together by the swivel collar via a 1 3/8"-18 UNEF 2A/2B threaded union.



HUB Adaptor or 'Swivel Union Assembly' (photo not scaled)

**Date:** 24 September 2015

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**Form 9530 Issue 1**

### **Sira Certification Service**

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**Annexe to:** IECEx SIR 15.0101X Issue 0

**Applicant:** AW-Lake Company

**Apparatus:** RT-30Ex Transmitter  
HUB-41Ex Adaptor



### HUB-41Ex adaptor description

When an Ex d connecting head is assembled to the "swivel union assembly" instead of an Ex d enclosure, the unit becomes a HUB-41Ex Adapter found between a remotely mounted RT-30Ex transmitter and the process pipe. The Ex d connecting head for the HUB-41Ex is identified as model XD-AD by Limatherm (IECEX FTZ 14.0003U).



HUB-41Ex (photos not scaled)

Control drawing RT30990 details several meter body connection options between the equipment and the meter body in the final installation. This control drawing addresses the minimum partition wall thickness, meter body connecting threads and alternative welding found under pressure. Two Styles of sensor ports are identified in the control drawing each rated for a Maximum Process Pressures within the meter body.

### Conditions Of Manufacture

- i. The equipment incorporates previously Ex d certified enclosures, as shown in the table below. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with this device, and the manufacturer shall inform CSA Sira of any modifications of the device that may impinge upon the explosion safety design of the product.

| Part number  | Description  | Certificate Number | Applicable requirements                      |
|--------------|--|--------------------|--|
| XD-ID100win  | "Universal instrument housing" two compartment aluminium enclosure with interconnecting port, one window cover and one blank cover | IECEX FTZ 10.0019U | Ed. 6 of IEC 60079-0<br>Ed. 6 of IEC 60079-1 |
| XD-ID100     |  |                    |  |
| XD-100H      |  |                    |  |
| XD-ID100Hwin |  |                    |  |
| XD-I         | "Universal instrument housing" aluminium enclosure with single internal compartment, one window cover and one blank cover          | IECEX FTZ 12.0017U | Ed. 6 of IEC 60079-0<br>Ed. 6 of IEC 60079-1 |
| XD-Iwin      |  |                    |  |
| XD-IH        |  |                    |  |
| XD-IHwin     |  |                    |  |
| XD-ILwin     | "Connecting head"<br>Aluminium enclosure with one blank cover  | IECEX FTZ 14.0003U |  |
| XD-AD        |  |                    |  |

- ii. Each manufactured meter body, identified in control drawing RT30990 Rev F approved 14 July 2015, must withstand a pressure test of 1.5 times the maximum working pressure.
- iii. The meter body must have the sensor port manufactured according to Control Drawing RT30990 Revision level F, including construction material as noted on the drawing. The end user must be supplied with this control drawing RT30990 for proper installation of the sensor.

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