



# 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.:           | IECEX FMG 05.0001X   | Issue No: 6 | <u>Certificate history:</u> |
| Status:                    | <b>Current</b>   | Page 1 of 4 | Issue No. 6 (2013-08-14)    |
| Date of Issue:             | <b>2013-08-14</b>  |             | Issue No. 5 (2013-04-15)    |
| Applicant:                 | <b>AMETEK Drexelbrook</b><br>205 Keith Valley Rd, Horsham, Pennsylvania 19044<br><b>United States of America</b> |             | Issue No. 4 (2013-02-21)    |
| Electrical Apparatus:      | <b>US-11, US-12, US-21, US-22, UT-21/40224300-004 USonic Two Wire<br/>Sonic Continuous Transmitter</b>           |             | Issue No. 3 (2012-06-25)    |
| <i>Optional accessory:</i> |  |             | Issue No. 2 (2011-11-22)    |
| Type of Protection:        | <b>Intrinsically Safe "ia"</b>   |             | Issue No. 1 (2008-12-23)    |
| Marking:                   | Ex ia IIC T5<br>IP65 (US-11, US-12, UT-21/40224300-004)<br>IP66, IP68 (US-21, US-22, UT-21/40224300-004)         |             | Issue No. 0 (2005-11-08)    |

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

James E Marquedant

*Position:*

Group Manager - Electrical

*Signature:  
(for printed version)*

*Date:*

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:

**FM Approvals LLC**  
1151 Boston-Providence Turnpike  
Norwood, MA 02062  
United States of America





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Manufacturer: **AMETEK Drexelbrook**  
205 Keith Valley Rd, Horsham, Pennsylvania 19044  
**United States of America**

Additional Manufacturing  
location(s):  
**Ametek Drexelbrook**  
205 Keith Valley Road  
Horsham, PA 19044-1499  
United States of America

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:

|   |   |
|---|---|
| <b>IEC 60079-0 : 2011</b><br>Edition:6.0  | Explosive atmospheres - Part 0: General requirements                                |
| <b>IEC 60079-11 : 2011</b><br>Edition:6.0 | Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"       |
| <b>IEC 60079-26 : 2006</b><br>Edition:2   | Explosive atmospheres - Part 26: Equipment with equipment protection level (EPL) Ga |

*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:

|                                       |                                       |                                       |
|---------------------------------------|---------------------------------------|---------------------------------------|
| <a href="#">US/FMG/ExTR12.0017/00</a> | <a href="#">US/FMG/ExTR12.0017/01</a> | <a href="#">US/FMG/ExTR12.0017/02</a> |
| <a href="#">US/FMG/ExTR12.0017/03</a> | <a href="#">US/FMG/ExTR12.0018/00</a> | <a href="#">US/FMG/ExTR12.0019/00</a> |

#### Quality Assessment Report:

[CA/CSA/QAR06.0008/04](#)



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## Schedule

### EQUIPMENT:

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

The Model US-11 and US-12 USonic Two Wire Sonic Continuous Transmitter is available in two different styles, a polymeric enclosure with display and 2" NPT probe or a polymeric enclosure with display and 2" BSP probe. The USonic Two Wire Sonic Continuous Transmitter has a rated input voltage range of 12 to 30 Vdc. The device outputs a 4-20 mA signal proportional to the distance being measured. The transmitter has a maximum operating temperature of 70°C. The Model US-11 and US-12 USonic Two Wire Sonic Continuous Transmitter are similar in construction to the Model US-21 and US-22 USonic Two Wire Sonic Continuous Transmitter. The only difference is the US-11 and US-12 utilize a polymeric enclosure. The electronics are identical, only the Display Board layout differs to fit in the polymeric enclosure. The Model US-21 and US-22 USonic Two Wire Sonic Continuous Transmitter is available in two different styles, a cast aluminum enclosure with display and 2" NPT probe or a cast aluminum enclosure with display and 2" BSP probe. The USonic Two Wire Sonic Continuous Transmitter has a rated input voltage range of 12 to 30 Vdc. The device outputs a 4-20 mA signal proportional to the distance being measured. The transmitter has a maximum operating temperature of 70°C. The USonic sensor probes are totally encapsulated and are constructed of an external CPVC (Chlorinated Polyvinyl Chloride) material. An aluminum 3/4 inch NPT nipple that is connected to the CPVC sensor probe provides metal to metal thread engagement between the sensor probes and the electronic housing. The back end of the nipple and sensor probe assemblies is potted using Stycast 2651-40 with Catalyst 9 material. The sensor probes are not for use in atmospheres containing Esters or Ketones. . The UT-21/40224300-004 is the same as the US-21 except for the memory on the microprocessor is increased, the software has been modified and there is a foil shield added inside the probe assembly for EMC purposes.

### CONDITIONS OF CERTIFICATION: NO

ELECTROSTATIC HAZARD DO NOT RUB WITH DRY CLOTH



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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Added Test Report Addendum US/FMG/ExTR12.0017/03. There were no changes to the equipment only manufacturing notes on the documents were revised.