



# 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 ETL 13.0003X

Issue No: 4

Certificate history:

Issue No. 4 (2018-05-30)

Issue No. 3 (2016-11-30)

Issue No. 2 (2016-01-04)

Issue No. 1 (2014-06-30)

Issue No. 0 (2013-11-25)

Status: **Current**

Page 1 of 4

Date of Issue: **2018-05-30**

Applicant: **Ametek Process & Analytical Instruments**  
150 Freeport Road  
Pittsburgh, PA 15238  
**United States of America**

Equipment: **Zirconium Oxide Oxygen and Combustible Analyzer Model WDG-V**

*Optional accessory:*

Type of Protection: **Purge and Pressurization Type 'pz'**

Marking:

Ex pz IIC T3 Gc

Ex pz IIB+H<sub>2</sub> T3 Gc

-20°C < Ta < 60°C

IECEX ETL 13.0003X

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

Kevin J. Wolf

*Position:*

Certification Officer

*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:

**Intertek**  
165 Main Street  
Cortland NY 13045-2995  
United States of America



# IECEX Certificate of Conformity

Certificate No: IECEX ETL 13.0003X Issue No: 4

Date of Issue: 2018-05-30 Page 2 of 4

Manufacturer: **Ametek Process & Analytical Instruments**  
150 Freeport Road,  
Pittsburgh, PA 15238  
**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 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 60079-2 : 2007-02** Explosive Atmospheres - Part 2 Equipment protection by pressurized enclosure "p"  
Edition:5

*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:

US/ETL/ExTR13.0032/00 US/ETL/ExTR13.0032/01 US/ETL/ExTR13.0032/02  
US/ETL/ExTR13.0032/03 US/ETL/ExTR13.0032/04

### Quality Assessment Report:

NO/DNV/QAR10.0007/03 NO/DNV/QAR10.0007/02



# IECEX Certificate of Conformity

Certificate No: IECEx ETL 13.0003X

Issue No: 4

Date of Issue: 2018-05-30

Page 3 of 4

## Schedule

### EQUIPMENT:

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

The WDG-V\*\* is an Oxygen, Combustibles, and Methane gas analyzer. The oxygen measurement is made with a Zirconium Oxide cell heated to 680 degrees Celsius. The optional combustible and Methane measurements are made with catalytic bead detectors. The internal box temperature is maintained to 225 degrees Celsius. In use, the WDG-V is typically mounted on the side of a flue and measures the concentrations of resultant gasses of a combustion process. The method of protection for the analyzer in hazardous locations is a type pz purge and the gasses under analysis are never in their explosive range (LEL).

The following models are covered under this certificate: WDG-V: Oxygen only, WDG-VC: Oxygen and combustibles, WDG-VCM: Oxygen, Combustibles, and Methane, WDG-VM: Oxygen and Methane

Unit can be supplied with or without the loss of pressure switch option:

Ex coding IIC applies to option without pressure switch (Model designation OC3B)

Ex coding IIB + H<sub>2</sub> applies to option with pressure switch (Model designation OC3C)

See Annex for manufacturer's documents, purge parameters, IECEx certified equipment used and routine tests.

### SPECIFIC CONDITIONS OF USE: YES as shown below:

- Use only appropriately approved conduit fittings or cable fittings for conduit entry (IIC, IP40 minimum), no holes should be unplugged.
- The equipment does not incorporate cells or batteries.
- Internal temperature rises above T code.
- End user must take immediate action on loss of pressure to re-instate purge



# IECEX Certificate of Conformity

Certificate No: IECEx ETL 13.0003X

Issue No: 4

Date of Issue: 2018-05-30

Page 4 of 4

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

### Issue 2-3:

- Use only appropriately approved conduit fittings or cable fittings for conduit entry (IIC, IP40 minimum), no holes should be unplugged.
- The equipment does not incorporate cells or batteries.
- Internal temperature rises above T code.
- End user must take immediate action on loss of pressure to re-instate purge

### Issue 3-4:

- Updated drawing 9700-126-VE **from** revision H **to** revision J
- Updated drawing 9000-164-VE **from** revision D **to** revision F
- Updated drawing 9000-133-VE **from** revision A **to** revision R
- Removed drawings 7000-716-KE, 7000-717-KE, and 7000-769-KE (label drawings) from the drawings and documents list

## Annex:

[Annex 1 IECEx ETL 13\\_0003X Issue 4.pdf](#)



# IECEX Certificate of Conformity

Certificate No:	IECEX ETL 13.0003X	Issue No. 4
Annex No. 1		

## Manufacturer's Documents associated with Issue 0

Refer to Issue 0

### Purge Parameters:

Pressurization type: Ex pz  
Internal Free Volume: 30.0L  
Protective Gas: Clean, Dry Instrument Air Only (-20°C to 60°C), 30-50psi (207-345kPa)  
Overpressure: 0.15" (0.38cm) H2O MIN 1.5" (3.8cm) H2O MAX  
Maximum Leakage Rate: 15 LPM

### **Conditions of Manufacture (routine tests)**

- A functional safety test shall be carried out in accordance with IEC 60079-2, clause 17.1
- A leakage test shall be carried out in accordance with IEC 60079-2, clause 17.2

### **Optional Loss of Pressure Switch associated with issue 1 of this certificate:**

Dwyer Explosion-proof differential pressure switch series 1950G:

- IECEX DEX 11.0092X
  - Ex d IIB + H<sub>2</sub> T6 Gb;
  - Date of Issue: 2012-01-05;
  - Standards: IEC 60079-0:2007-10 Ed. 5 and IEC 60079-1:2007-04 Ed. 6
    - IEC 60079-0:2011 was considered for the loss of pressure switch, no further evaluation was deemed necessary as there are no technical differences between the IEC 60079-0: 2011 and 2007 versions.
- Manufacture manual 9000-133-VE includes directions for the end-user to properly install the pressure switch in accordance with the Dwyer Series 1950G manual and any applicable conditions of certification.

### **Model Number Nomenclature associated with issue 1 of this certificate:**

Ex pz IIC T3 Gc (model WDG-V\*\* OC3B)  
Ex pz IIB+H<sub>2</sub> T3 Gc (model WDG-V\*\* OC3C)

Certificate issued by:

**Intertek**  
3933 US Route 11 South  
Cortland NY 13045-2995  
United States of America





# IECEX Certificate of Conformity

<b>Certificate No:</b>	<b>IECEX ETL 13.0003X</b>	<b>Issue No. 4</b>
<b>Annex No. 1</b>		

## Manufacturer's Documents associated with Issue 1

Refer to Issue 1

## Manufacturer's Documents associated with Issue 2

Refer to Issue 2

## Manufacturer's Documents associated with Issue 3

Refer to Issue 3

## Manufacturer's Documents associated with Issue 4

Title:	Drawing No.:	Rev. Level:	Date:
Certification Drawing	9700-126-VE	J	04-19-18
WDG Essential Health & Safety Requirements	9000-164-VE	F	NA
User Manual	9000-133-VE	R	NA

Certificate issued by:

**Intertek**  
3933 US Route 11 South  
Cortland NY 13045-2995  
United States of America

