

TYPE-EXAMINATION CERTIFICATE

1. Type-examination Certificate (Module A)
2. Equipment or Protective System intended for use in potentially explosive atmospheres (Directive 2014/34/EU)



3. Type examination certificate Nr **ITS13ATEX17749X R.0**

4. **Product:** WDG-V
Zirconium Oxide Oxygen Combustible Analyzer

5. **Manufacturer:** Ametek Process & Analytical Instruments **Applicant:** Ametek Process & Analytical Instruments

6. **Address:** 150 Freeport Rd, Pittsburgh, PA 15238-3408, USA **Address:** 150 Freeport Rd, Pittsburgh, PA 15238-3408, USA

7. This product and any acceptable variation thereto are specified in the schedule to this certificate and therein referred to.
8. INTERTEK ITALIA S.p.A., certifies that the equipment or protective system has been found to comply with the essential Health and Safety Requirements relating to the design and construction of equipment and protective system intended for use in potentially explosive atmosphere, given in Annex II of the Directive.

The examination and tests results are recorded in confidential technical evaluation Intertek Report Nr. 104631821CRT-002 dated 6 July 2021.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN IEC 60079-0:2018 Incorporating corrigendum January 2020 and EN 60079-2:2014 Incorporating corrigendum July 2015 except in respect of those requirements referred to at item 16 of the Schedule.

10. If the sign X is placed after the certificate number, it indicates that the product is subject to Special Conditions for Safe Use specified in the schedule to this certificate.

11. This Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12. The marking of the product shall include the following:



II 3 G Ex pz IIC T3 Gc
-20°C ≤ Ta ≤ 60°C

15 July 2021

Certificate issue date



Todd L. Relyea
Certification Officer
Intertek Italia S.p.A.

This certificate has been issued by Intertek Italia S.p.A. on transfer from Intertek Testing & Certification Ltd. using the same issued original certificate number.



This Certificate is for the exclusive use of Intertek's client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this Certificate. Only the Client is authorized to permit copying or distribution of this Certificate and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek.

Intertek Italia S.p.A. Via Miglioli, 2/A - 20063 Cernusco sul Naviglio, Milano - Italy



SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER: ITS13ATEX17749X R.0

13. DESCRIPTION OF THE EQUIPMENT OR PROTECTIVE SYSTEM

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.

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

14. DRAWINGS AND DOCUMENTS

TITLE	DOCUMENT Nr	LEVEL	DATE
* CERTIFICATION DRAWING SENSOR ASSY WDG-V, WDG-VC, WDG-VCM, WDG-VM	9700-126-VE	K	05-30-21
WDG Essential Health & Safety Requirements	9000-164-VE	G	NA
User Manual	9000-133-VE	R	NA

Note: An * is included before the title of documents that are new or revised.

Copies of the above listed documents are kept at Intertek Italia S.p.A. archive.

15. SPECIAL CONDITIONS FOR SAFE USE

- The end user shall ensure that all flammable gasses that enter the enclosure for analysis do not rise above their Lower Explosive Limit so as to become combustible.
- 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.



SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER: ITS13ATEX17749X R.0

16. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS

The relevant essential Health and Safety Requirements have been identified and assessed in Intertek Report Nr. 104631821CRT-002 dated 6 July 2021.

17. ROUTINE (FACTORY) TESTS

- A functional safety test shall be carried out in accordance with EN 60079-2 Clause 17.1
- A leakage test shall be carried out in accordance with EN 60079-2 Clause 17.2



SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER: ITS13ATEX17749X R.0

18. DETAIL OF CERTIFICATE CHANGES

Variation 1

Details of Certificate changes Issue 1

- Added model descriptions for WDG-V, WDG-VC, WDG-VCM, WDG-VM
- Updated drawing 9700-126-VE to Rev. H

Variation 2 - 3

Details of Certificate Changes Issue 2-3

- 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-The following drawings have changed as part of this variation:

Variation 4 (This Revision): R.0

Performed under Intertek Report No. 104631821CRT-001 (This Report)

This variation comprises the following changes to the equipment:

- Initial release by Intertek Italia S.p.A. NB 2575 based on the assessment performed on MMM 202X and on the certificate legal ownership transferred from Intertek Testing & Certification Ltd. (NB 0359); the same issued original certificate number is used.
- Added Heavy Duty Mounting Option
- Updated Label Images
- Update Standards:
 1. From: EN 60079 0:2012+A11:2013
To: EN IEC 60079-0:2018 Incorporating corrigendum January 2020
 2. From: EN 60079-2:2007
To: EN 60079-2:2014 Incorporating corrigendum July 2015

The following drawings have changed as part of this variation:

TITLE:	DRAWING NO.:	REV. LEVEL:	DATE:
* CERTIFICATION DRAWING SENSOR ASSY WDG-V, WDG-VC, WDG-VCM, WDG-VM	9700-126-VE	K	05-30-21