Type Examination Certificate

1. **TYPE EXAMINATION CERTIFICATE**

2. **Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU**

3. **Type Examination Certificate Number: ITS13ATEX17749X Issue3**

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

5. **Manufacturer:** AMETEK PROCESS & ANALYTICAL INSTRUMENTS

6. **Address:** 150 Freeport Road
Pittsburgh, PA 15238
USA

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

8. Intertek Testing and Certification Limited, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of the products intended for use in potentially explosive atmospheres given in Annex II to the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

   The examination and test results are recorded in confidential Intertek Reports 103478315CRT-001a and 103478315CRT-001b dated 29 May 2018.

9. Compliance with the Essential Health and Safety Requirements has been assured by compliance with EN 60079-0:2012 and EN 60079-2:2007 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 equipment or protective system 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 of the specified product and not to specific items subsequently manufactured.

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

    II 3 G Ex pz IIC T3 Gc

    -20°C ≤ Ta ≤ 60°C

Intertek Testing & Certification Limited
Intertek House, Cleeve Road, Leatherhead, Surrey, KT22 7SB
Tel: +44 (0)1372 370900 Fax: +44 (0)1372 370977
www.intertek.com
Registered No 3272281 Registered Office: Academy Place, 1-9 Brook Street, Brentwood, Essex, CM14 5NQ.

Kevin J. Wolf
Certification Officer
29 May 2018

SCHEDULE

TYPE EXAMINATION CERTIFICATE NUMBER ITS13ATEX17749X Issue 3

13. Description of 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 (-20ºC to 60ºC), 30-50psi (207-345kPa)
Overpressure: 0.15" (0.38cm) H20 MIN 1.5" (3.8cm) H20 MAX
Maximum Leakage Rate: 15 LPM

14. Report Number

Intertek Report Ref: 102738492CRT-002 dated 3rd January 2017

15. Conditions of Certification

(a). Specific Conditions of 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.

(b). Conditions of Manufacture - Routine 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 Issue 3

16. Essential Health and Safety Requirements (EHSRs)

Compliance with the Essential Health and Safety Requirements (EHSRs) is not affected by this variation.

17. Drawings and Documents

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

.

18. 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

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-KE, 7000-717-KE, and 7000-769-KE (label drawings) from the drawings and documents list