

Australian/New Zealand Standard™

Explosive atmospheres

Part 29.2: Gas detectors—Selection, installation, use and maintenance of detectors for flammable gases and oxygen



AS/NZS 60079.29.2:2008

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Equipment for Explosive Atmospheres. It was approved on behalf of the Council of Standards Australia on 16 November 2007 and on behalf of the Council of Standards New Zealand on 16 November 2007. This Standard was published on 19 February 2008.

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Part 29.2: Gas detectors—Selection, installation, use and maintenance of detectors for flammable gases and oxygen

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres, to supersede AS/NZS 61779.6.

The objective of this Standard is to provide guidance on, and recommended practice for, the selection, installation, safe use and maintenance of electrically operated group II apparatus intended for use in industrial and commercial safety applications for the detection and measurement of flammable gases complying with the requirements of AS/NZS 60079.29.1.

This Standard is identical with, and has been reproduced from IEC 60079-29-2, Ed. 1.0 (2007), *Explosive atmospheres – Part 29-2: Gas detectors—Selection, installation, use and maintenance of detectors for flammable gases and oxygen*.

This first edition of AS/NZS 60079.29.2 supersedes AS/NZS 61779.6 and constitutes a technical revision.

The main changes with respect to the superseded document are listed below:

- (a) Introduction was modified to provide a reference table for application of the particular document sections to specific job related functions.
- (b) Clause 4, *Basic information on the properties, behaviour, and detection of gases and vapours* was added for user guidance on characteristics of gases and vapours.
- (c) Clause 5, *Measuring principles*, Clause 6, *Selection of apparatus*, Clause 7, *Behaviour of gas releases*, Clause 8, *Design and installation of fixed gas detection systems*, Clause 9, *Use of portable and transportable flammable gas detection apparatus*, Clause 10, *Training of operational personnel*, and Clause 11, *Maintenance, routine procedures and general administrative control* were modified to reflect the text from EN 50073 and Chapter 14 of HB 13:2007.
- (d) Annex A, *Flammable limits (LFL and UFL) of certain flammable gases and vapours* was removed and replaced by a detailed review of measuring principles.
- (e) Annex B, *Environmental parameters* was added to provide a summary of the minimum required environmental parameters for gas detection apparatus.

This part of AS/NZS 60079.29 is to be used in conjunction with the following Standards:

- (i) AS/NZS 60079.0, *Electrical apparatus for explosive gas atmospheres, Part 0: General requirements*.
- (ii) AS/NZS 60079.29.1, *Explosive atmospheres, Part 29.1: Gas detectors—Performance requirements of detectors for flammable gases*.

As this Standard is reproduced from an International Standard, the following applies:

- (A) In the source text ‘IEC 60079-29-2’ should read ‘AS/NZS 60079.29.2’.
- (B) A full point should be substituted for a comma when referring to a decimal marker.

The terms ‘normative’ and ‘informative’ are used to define the application of the annex to which they apply. A normative annex is an integral part of a Standard, whereas an informative annex is only for information and guidance.

CONTENTS

| | <i>Page</i> |
|--|-------------|
| Introduction | v |
| 1 Scope | 1 |
| 2 Normative references | 2 |
| 3 Terms and definitions | 3 |
| 4 Basic information on the properties, behaviour, and detection of gases and vapours | 8 |
| 4.1 Detecting gases and vapours – General | 8 |
| 4.2 Some common properties of gases and vapours | 10 |
| 4.3 The differences between detecting gases and vapours | 11 |
| 4.4 Oxygen deficiency | 15 |
| 5 Measuring principles | 17 |
| 5.1 Catalytic sensors | 17 |
| 5.2 Thermal conductivity sensors | 19 |
| 5.3 Infrared sensors | 21 |
| 5.4 Semiconductor sensors | 22 |
| 5.5 Electrochemical sensors | 23 |
| 5.6 Flame ionization detectors (FID) | 25 |
| 5.7 Flame temperature analysers (FTA) | 26 |
| 5.8 Photo ionisation detector (PID) | 26 |
| 5.9 Paramagnetic oxygen detector | 28 |
| 6 Selection of apparatus | 28 |
| 6.1 General | 29 |
| 6.2 Selection criteria | 29 |
| 6.3 Miscellaneous factors affecting selection of apparatus | 33 |
| 7 Behaviour of gas releases | 34 |
| 7.1 Nature of a release | 34 |
| 7.2 Buildings and enclosures | 36 |
| 7.3 Unventilated buildings and enclosures | 36 |
| 7.4 Ventilated buildings and enclosures | 36 |
| 7.5 Natural ventilation | 37 |
| 8 Design and installation of fixed gas detection systems | 38 |
| 8.1 Basic considerations for the installation of fixed systems | 38 |
| 8.2 Location of detection points | 39 |
| 8.3 Access for calibration and maintenance | 42 |
| 8.4 Additional considerations for sample lines | 42 |
| 8.5 Summary of considerations for the location of sensors or sampling points | 43 |
| 8.6 Installation of sensors | 44 |
| 8.7 Integrity and safety of fixed systems | 44 |
| 8.8 Timing of installation during construction operations | 45 |
| 8.9 Commissioning | 45 |
| 8.10 Operating instructions, plans and records | 46 |

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