

Australian/New Zealand Standard™

Electrical apparatus for explosive gas atmospheres

Part 1: Flameproof enclosures 'd'

AS/NZS 60079.1:2005

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 8 April 2005 and on behalf of the Council of Standards New Zealand on 15 April 2005. This Standard was published on 28 April 2005.

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AS/NZS 60079.1:2005

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Part 1: Flameproof enclosures 'd'

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Electrical Equipment in Hazardous Areas, to supersede AS/NZS 60079.1:2002.

This Standard is identical with, and has been reproduced from IEC 60079-1, Ed.5.0(2003), *Electrical apparatus for explosive gas atmospheres – Part 1: Flameproof enclosures “d”*.

The objective of this Standard is to set out the requirements for the construction and testing of electrical apparatus with type of protection ‘d’, intended for use in explosive gas atmospheres.

This Standard is to be read in conjunction with AS/NZS 60079.0, the requirements of which apply to electrical apparatus with flameproof enclosures.

This edition contains the following significant technical changes with regard to the previous edition:

- (a) Revisions to Clause 5 regarding the use of corrosion inhibiting grease, and regarding electroplating of joint surfaces.
- (b) Revisions to Clause 5 regarding gaps whose dimensions are less than required in the tables, and regarding taper threaded joints.
- (c) Revisions to Clause 13 regarding entries for flameproof enclosures.
- (d) Revisions to Clause 13 regarding cable glands and conduit entries.
- (e) Revisions to Clause 14 regarding test voltage for motors.
- (f) Revisions to Clause 15 regarding type tests for apparatus used at an ambient temperature below -20°C , or at an ambient temperature above 60°C .
- (g) Revisions to Clause 16 regarding routine tests for apparatus used at an ambient temperature below -20°C .
- (h) Revisions to Clause 19 regarding non-metallic enclosures.
- (i) Revisions to Annex C regarding Ex blanking elements and thread adapters.
- (j) Addition of a new normative Annex D regarding empty flameproof enclosures as Ex components.
- (k) Addition of a new normative Annex E regarding cells and batteries.

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- (iii) A full point substitutes 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>
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
4 Apparatus grouping and temperature classification	4
5 Flameproof joints	4
5.1 General requirements	4
5.2 Non-threaded joints	5
5.3 Threaded joints	11
5.4 Gaskets (including O-rings).....	12
5.5 Apparatus using capillaries	14
6 Cemented joints	14
6.1 General.....	14
6.2 Mechanical strength.....	14
6.3 Width of cemented joints.....	14
7 Operating rods	14
8 Supplementary requirements for shafts and bearings	14
8.1 Joints of shafts	14
8.2 Bearings	17
9 Light-transmitting parts	17
10 Breathing and draining devices which form part of a flameproof enclosure	18
10.1 Openings for breathing or draining	18
10.2 Composition limits.....	18
10.3 Dimensions	18
10.4 Elements with measurable paths.....	18
10.5 Elements with non-measurable paths.....	18
10.6 Removable devices	19
10.7 Mounting arrangements of the elements	19
10.8 Mechanical strength.....	19
10.9 Breathing devices and draining devices when used as Ex components	19
11 Fasteners, associated holes and closing devices	22
12 Materials and mechanical strength of enclosures – Materials inside the enclosures	24
13 Entries for flameproof enclosures.....	25
13.1 Cable glands.....	25
13.2 Conduit sealing devices	26
13.3 Plugs and sockets and cable couplers	26
13.4 Bushings.....	27
14 Verification and tests	27

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