

AS/NZS 2229:2004
(Incorporating Amendment No. 1)

AS/NZS 2229:2004

Australian/New Zealand Standard™

**Fuel dispensing equipment for
explosive atmospheres**



AS/NZS 2229:2004

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 25 March 2004 and on behalf of the Council of Standards New Zealand on 2 April 2004.
This Standard was published on 16 April 2004.

The following are represented on Committee EL-014:

Auckland Regional Chamber of Commerce and Industry
Australian Association of Certification Bodies
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australian Gas Association
Australian Industry Group
Australian Institute of Petroleum
Department of Mineral Resources, New South Wales
Department of Mines and Energy, Queensland
Electricity Supply Association of Australia
Institute of Electrical Inspectors
Institute of Instrumentation and Control Australia
Institution of Engineers Australia
Ministry of Economic Development (New Zealand)
National Electrical and Communications Association
New Zealand Association of Marine, Aviation and Power Engineers
New Zealand Employers and Manufacturers Association
New Zealand Hazardous Areas Electrical Coordinating Committee
Regulatory authorities (electrical)
WorkCover New South Wales

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 99900 to DR 99903.

AS/NZS 2229:2004
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Fuel dispensing equipment for explosive atmospheres

Originated in Australia as AS C123—1939.
Originated in New Zealand as NZS 6109.1-1988 and NZS 6109.2-1988.
Previous Australian edition AS 2229.1—1982 and AS 2229.2—1988.
AS 2229.1—1982, AS 2229.2—1988, NZS 6109.1-1988
and NZS 6109.2-1988 revised, amalgamated and redesignated
as AS/NZS 2229:2004.
Reissued incorporating Amendment No. 1 (August 2006).

COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 6167 4

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Electrical equipment in hazardous locations to supersede AS 2229 Electrical equipment for explosive atmospheres—Electrical systems of dispensing equipment, Part 1-1982 and Part 2-1988 and NZS 6109 Electrical systems of dispensing equipment for explosive atmospheres, Part 1-1988 and Part 2-1988

This Standard applies to dispensing equipment for flammable liquids, LP gas and CNG dispensing equipment.

It prescribes general requirements in respect of design, construction and marking and includes a section on testing. It is intended for the guidance of manufacturers, users, statutory authorities and associated interests and for use in association with AS/NZS 3000 and New Zealand Electricity Regulations. This Standard does not cover modifications to equipment but readers should be aware that any modifications may require re-certification of the fuel dispenser.

Where Australian and New Zealand requirements or details vary they are shown within this Standard separated by a forward slash – “/”.

The major differences between this edition and the previous Standards are as follows:

- (a) Revision of previous disparate standards (AS 2229 and NZS 6109) into a joint document;
- (b) Extension of the scope to include mechanical equipment;
- (c) Inclusion of specific requirements for CNG dispenser construction;
- (d) Revision of the requirements for vapour barriers; and
- (e) Revision of the hazardous area classification - now included in AS/NZS 2430.3:1997.

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

CONTENTS

SECTION	PAGE
Preface	4
1 Scope and general	7
1.1 Scope	7
1.2 Application	7
1.3 Referenced documents	7
1.4 Definitions	9
1.5 Group designation, temperature and type	10
2 Design and construction	11
2.1 General	11
2.2 Delivery hose protection	11
2.3 Housing	11
2.4 Electrical equipment	12
2.5 Earthing and bonding	12
2.6 Cabling to intrinsically safe equipment	12
2.7 Electrical socket-outlets	12
2.8 Vapour barriers	12
3 Specific requirements for flammable liquids dispensers	14
3.1 General	14
3.2 Pump control	14
3.3 Dispensing hose	14
3.4 Safe break devices	14
3.5 Nozzle	15
3.6 Hose couplings	15
3.7 Delineation of hazardous area zones	15
4 Specific requirements for LP gas dispensers	17
4.1 General	17
4.2 Control switch	17
4.3 Dispensing hose	17
4.4 Dispensing nozzle	17
4.5 Breakaway couplings	17
4.6 Control valves	17
4.7 Over-speed detection	17
4.8 Venting and valve discharges	17
4.9 Hydraulic compartment	17
4.10 Delineation of hazardous area zones	17
5 Specific requirements for compressed natural gas dispensers	19
5.1 General	19
5.2 Equipment within housing	19
5.3 Control devices	19
5.4 Delineation of hazardous area zones	22



This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-