AS/NZS 2276.1:2004
Reconfirmed 2017

Australian/New Zealand Standard™

Cables for traffic signal installations

Part 1: Multicore power cables

STANDARDS AUSTRALIA

STANDARDS NEW ZEALAND
Paerewa Aotearoa

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-003, Electric Wires and Cables. It was approved on behalf of the Council of Standards Australia on 10 June 2004 and on behalf of the Council of Standards New Zealand on 25 June 2004.
It was published on 13 August 2004.

The following are represented on Committee EL-003:

Australian Railway Association
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Canterbury Manufacturers Association New Zealand
Department of Defence (Australia)
Department of Mineral Resources, N.S.W.
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Energy Supply Association of Australia
Engineers Australia
Ministry of Economic Development (New Zealand)
National Electrical and Communications Association

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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 Standards may also be withdrawn.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.

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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 International or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 03068.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION

OF
AS/NZS 2276.1:2004
Cables for traffic signal installations
Part 1: Multicore power cables

RECONFIRMATION NOTICE

Technical Committee EL-003 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 10 October 2016.

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The following are represented on Technical Committee EL-003:

Australian Cable Makers' Association
Australian Industry Group
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
National Electrical and Communications Association
Queensland University of Technology

NOTES

Australian/New Zealand Standard™

Cables for traffic signal installations

Part 1: Multicore power cables

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-003, Electric Wires and Cables to supersede AS 2276.1—1992 and NZS/AS 2276.1—1992.

The objective of this Standard is to provide manufacturers and suppliers with construction, dimensions and tests for underground multicore power cables for the interconnection of traffic signal posts and/or the associated control equipment.

This Standard is part of a series comprising three parts as follows:

AS/NZS

2276	Cables for traffic signal installations
2276.1	Part 1: Multicore power cables (this Standard)
2276.2	Part 2: Feeder cable for vehicle detectors
2276.3	Part 3 : Loop cable for vehicle detectors

This Standard differs from the 1992 edition as follows:

(a) It has been published as a joint Australian/New Zealand Standard.

(b) Insulation and sheath materials have been referenced to AS/NZS 3808.

(c) The application of a sacrificial layer is recommended where a polyamide jacket has been provided.

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

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard
Cables for traffic signal installations

Part 1: Multicore power cables

1 SCOPE

This Standard specifies requirements for polyvinyl chloride (PVC) insulated and sheathed underground multicore power cable rated at 0.6/1 (1.2) kV for the interconnection of traffic signal posts and/or the associated control equipment.

NOTE: Purchasing guidelines are contained in Appendix A.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS/NZS	
1125	Conductors in insulated electric cables and flexible cords
1660	Test methods for electric cables, cords and conductors
1660.2.1	Method 2.1: Insulation, extruded semiconductive screens and non-metallic sheaths—Methods for general application
1660.3	Method 3: Electrical tests
1660.5.6	Method 5.6: Fire tests—Test for combustion propagation
3808	Insulating and sheathing materials for electric cables

3 DEFINITIONS

For the purpose of this Standard, the relevant definitions given in the referenced Standards and those below apply:

3.1 Core

The conductor with its insulation but not including any protective covering.

3.2 Lay-up

Assembling of cores in a helical configuration.

3.3 Length of lay

The axial distance between successive turns of the helix formed by a core of a multicore cable.

3.4 Maximum continuous conductor temperature

The maximum temperature at which the conductor of the cable may be operated continuously and which is the temperature resulting from the combined effect of the ambient temperature and the current loading of the conductor.

3.5 Pitch circle diameter

The diameter of a circle which passes through the mid-points of the laid-up cores of a layer.