AS/NZS 1026:2004
Reconfirmed 2017

Australian/New Zealand Standard™

Electric cables—Impregnated paper insulated—For working voltages up to and including 19/33 (36) kV

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 13 February 2004 and on behalf of the Council of Standards New Zealand on 5 March 2004. It was published on 29 April 2004.

The following are represented on Committee EL-003:

Australasian 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
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Ministry of Economic Development (New Zealand)
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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 02316.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION

OF
AS/NZS 1026:2004
Electric cables—Impregnated paper insulated—For working voltages up to and including 19/33 (36) kV

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.

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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™

Electric cables—Impregnated paper insulated—For working voltages up to and including 19/33 (36) kV

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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 1026—1992 and NZS/AS 1026—1992, *Electric cables—Impregnated paper insulated—Working voltages up to and including 33 kV*.

The objective of this Standard is to specify the construction, dimensions and tests for paper insulated and lead alloy sheathed cables for working voltages up to and including 19/33 (36) kV.

In the preparation of this Standard, consideration was given to IEC 60055-1, *Paper insulated metal-sheathed cables for rated voltages up to 18/30 kV (with copper or aluminium conductors and excluding gas-pressure and oil-filled cables)* Part 1: *Tests on cables and their accessories*, IEC 60055-2, *Paper-insulated metal-sheathed cables for rated voltages up to 18/30 kV (with copper or aluminium conductors and excluding gas-pressure and oil-filled cables)* Part 2: *General and construction requirements* and BS 6480, *Impregnated paper-insulated lead or lead alloy sheathed electric cables of rated voltage up to and including 33 000 V*. The Standards Australia/Standards New Zealand Committee concurs with the comment in the Foreword of BS 6480 that, because of different local and regional requirements, it has not been possible to adopt the IEC Publication as a national Standard. Consequently, the construction and voltage ratings of cables in the Australian/New Zealand Standard have not been changed from the previous edition and are identical with corresponding cables in BS 6480.

Acknowledgment is made of the content extracted from BS 6480 and IEC 60055.

This Standard differs from the 1992 edition in the following significant ways:

(a) The Standard is published as a Joint Australian/New Zealand Standard.

(b) 0.6/1 (1.2) kV single-core, two-core and three-core cable constructions and all 1.9/3.3 (3.6) kV cable constructions have been deleted.

(c) Bedding and armour have been designated as optional processes.

(d) PE and LLDPE have been included as additional extruded bedding and non-metallic sheathing materials.

(e) Extruded bedding and non-metallic sheathing materials have been referenced to AS/NZS 3808.

(f) An internal cable pressure test has been included.

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

Electric cables—Impregnated paper insulated—For working voltages up to and including 19/33 (36) kV

1 SCOPE

This Standard specifies requirements for non-draining mass-impregnated paper insulated and lead alloy sheathed cables for working voltage up to and including 19/33 (36) kV. Provision is made for extruded or lapped non-metallic protective coverings over the lead alloy sheath, with or without galvanized steel wire armour. Some typical constructions are shown in Figure 1.

NOTES:

1 Recommendations for selection and operation are given in Appendix A and those for installation are given in Appendix B.

2 Purchasing guidelines are provided in Appendix C.

The following cables are included in this Standard:

(a) 0.6/1 (1.2) kV four-core.

(b) 3.8/6.6 (7.2) kV single-core and three-core belted construction.

(c) 6.35/11 (12) and 11/11 (12) kV single-core and three-core belted or screened construction.

(d) 12.7/22 (24) kV and 19/33 (36) kV single-core and three-core screened or three-core separately leaded (SL).

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

1931 High voltage testing techniques

1931.1 Part 1: General definitions and test requirements

1931.2 Part 2: Measuring systems

3983 Metal drums for insulated electric cables and bare conductors

AS/NZS

1125 Conductors in insulated electric cables and flexible cords

1660 Test methods for electric cables, cords and conductors

1660.1 Method 1: Conductors and metallic components

1660.2.1 Method 2.1: Insulation, extruded semi-conductive screens and non-metallic sheaths—Methods for general application

1660.3 Method 3: Electrical tests

2857 Timber drums for insulated electric cables and bare conductors

2893 Electric cables—Lead and lead alloy sheaths—Composition

3008 Electric installations—Selection of cables

3008.1 Part 1: Cables for alternating voltages up to and including 0.6/1 kV

3808 Insulating and sheathing materials for electric cables