AS/NZS 60702.1:2005
IEC 60702-1, Ed. 3 (2002)

AS/NZS 60702.1:2005

Australian/New Zealand Standard™

Mineral insulated cables and their terminations with a rated voltage not exceeding 750 V

Part 1: 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 28 October 2005 and on behalf of the Council of Standards New Zealand on 4 November 2005.
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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)
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Part 1: 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/NZS 3187:1995, *Approval and test specification—Mineral-insulated metal-sheathed cables.*

The objective of this Standard is to specify the construction dimensions and tests for mineral-insulated metal-sheathed cables with rated voltages of 500 V and 750 V.

This Standard is identical with, and has been reproduced from IEC 60702-1, Ed. 3 (2002), *Mineral insulated cables and their terminations with a rated voltage not exceeding 750 V, Part 1: Cables*.

Variations to IEC 60702-1, Ed. 3 (2002) are indicated at the appropriate places throughout this standard. Strikethrough (~~example~~) identifies IEC text, tables and figures which, for the purposes of this Australian/New Zealand Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

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

(a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.

(b) In the source text IEC 60702-1 should read AS/NZS 60702.1.

(c) A full point should be substituted for a comma when referring to a decimal marker.

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1 Scope

This standard applies to mineral insulated general wiring cables with copper or copper alloy sheath and copper conductors and with rated voltages of 500 V and 750 V. Provision is made for a corrosion-resistant extruded outer covering over the copper sheath, when required. This outer covering is not specified for the purpose of electrical insulation of the metal sheath.

Requirements for terminations for use with these cables are specified in IEC 60702-2.

The purpose of this standard is to specify mineral insulated cables that are safe and reliable when properly used, to state the manufacturing requirements and characteristics to achieve this, and to specify methods for checking conformity with those requirements.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

IEC 60227-1:1993, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V – Part 1: General requirements*

IEC 60228:1978, *Conductors of insulated cables*

~~IEC 60331-21:1999, Tests for electric cables under fire conditions – Circuit integrity – Part 21: Procedures and requirements – Cables of rated voltage up to and including 0,6/1,0 kV~~

AS/NZS 1660.5.5, Test methods for electric cables, cords and conductors, Method 5.5: Fire tests—Circuit integrity

~~IEC 60332-1:1993, Tests on electric cables under fire conditions – Part 1: Test on a single vertical insulated wire or cable~~

AS/NZS 1660.5.6, Test methods for electric cables, cords and conductors, Method 5.6: Fire tests—Test for vertical flame propagation for a single insulated wire or cable

~~IEC 60702-2:2002, Mineral insulated cables and their terminations with a rated voltage not exceeding 750 V – Part 2: Terminations~~