Australian/New Zealand Standard[™]

Electric flexible cords





AS/NZS 3191:2003

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 4 September 2003 and on behalf of the Council of Standards New Zealand on 30 September 2003. It was published on 30 October 2003.

The following are represented on Committee EL-003:

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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 3191:1996, *Approval and test specification—Electric flexible cords*.

The objective of the Standard is to specify construction, dimensions and tests for flexible cords insulated with thermoplastic or crosslinked PVC, thermoplastic or crosslinked elastomers or glass fibre which, dependent on cord type, are designed for working voltages up to and including 250/250 V, 250/440 V or 0.6/1 kV.

The nominal cross-sectional areas of the conductors specified in this Standard are identical with the values recommended in IEC 60228, *Conductors of insulated cables*.

Where the equivalent cords exist in IEC Standards, the dimensions for insulation and sheath thicknesses have been adopted in this Standard. This is the case for thermoplastic PVC and crosslinked elastomer insulated flexible cords, where these dimensions are identical with the values for the corresponding cords in IEC 60227, *Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V* and IEC 60245, *Rubber insulated cables—Rated voltages up to and including 450/750 V* respectively. The temperature ratings and hence properties of insulation and sheath materials for these dimensionally equivalent cords, however, are quite different.

There are no current equivalent IEC Standards for flexible cords insulated with crosslinked PVC, thermoplastic elastomer or glass fibre.

This Standard differs from the 1996 edition as follows:

- (a) References to the maximum continuous conductor temperature of flexible cords have been deleted.
- (b) Insulation and sheathing materials have been referenced to AS/NZS 3808.
- (c) The approximate overall diameters provided in the tables of dimensions have been deleted.
- (d) The clauses of construction have been rearranged into a more logical sequence.
- (e) Composite screen constructions have been deleted.
- (f) Textile braided thermoplastic elastomer insulated and thermoplastic PVC insulated flexible cords have been deleted.
- (g) Thermoplastic fluoropolymer insulated flexible cords have been deleted.

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.

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