AS 3158—2004
Reconfirmed 2016

Australian Standard™

Electric cables—Glass fibre insulated—For working voltages up to and including 0.6/1 (1.2) kV

STANDARDS AUSTRALIA

This Australian Standard was prepared by Committee EL-003, Electric Wires and Cables. It was approved on behalf of the Council of Standards Australia on 16 January 2004 and published on 20 February 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 NSW
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Electricity Supply Association of Australia
Institution of Engineers Australia
Ministry of Economic Development (New Zealand)
National Electrical and Communications Association

This Standard was issued in draft form for comment as DR 03415.

STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 3158—2004
Electric cables—Glass fibre insulated—For working voltages up to and including 0.6/1 (1.2) 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.

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.

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 Standard™

Electric cables—Glass fibre insulated—For working voltages up to and including 0.6/1 (1.2) kV

Originated as part of AS C158—1965.
Previous edition AS 3158—1994.
Third edition 2004.

Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 5749 9

PREFACE

This Standard was prepared by the Joint Standards Australia /Standards New Zealand Committee EL-003, Electric Wires and Cables. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard. It supersedes AS 3158—1994, *Approval and test specification—Electric cables—Glass fibre insulated for working voltages up to and including 0.6/1 kV*.

The objective of this Standard is to provide manufacturers and suppliers with construction details, dimensions and tests for cables, flexible cables and flexible cords insulated with glass fibre for use in electrical installations at working voltages up to and including 0.6/1 (1.2) kV.

This Standard differs from the 1994 edition in the following significant ways:

(a) Glass fibre insulated flexible cords have been included.

(b) The insulation thickness for cables with 4 mm^2 conductor sizes has been increased to 1.0 mm to align with the insulation thickness of the equivalent flexible cord.

(c) The tables of dimensions 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.

Statements expressed in mandatory terms in notes to tables and figures are deemed to be requirements of this Standard.

CONTENTS

STANDARDS AUSTRALIA

Australian Standard

Electric cables—Glass fibre insulated—For working voltages up to and including 0.6/1 (1.2) kV

1 SCOPE

This Standard specifies construction, dimensions and tests for cables, flexible cables and flexible cords insulated with glass fibre for use in electrical installations at working voltages up to and including 0.6/1 (1.2) kV.

NOTE: Purchasing guidelines are contained in Appendix A.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS	
2706	Numerical values—Rounding and interpretation of limiting values
AS/NZS	
1125	Conductors in insulated electric cables and flexible cords
1660	Test methods for electric cables, cords and conductors
1660.1	Part 1: Conductors and metallic components
1660.2.1	Part 2.1: Insulation, extruded semi-conductive screens and non-metallic sheaths —Methods for general application
1660.3	Part 3: Electrical tests
1660.4	Part 4: Complete cable and flexible cord
1660.5.6	Part 5.6: Fire tests—Test for combustion propagation
ASTM	
B355	Standard specification for nickel-coated soft or annealed copper wire

3 DEFINITIONS

For the purposes of this Standard the definitions given in the referenced Standards and those below apply:

3.1 Approximate value

A value which is neither guaranteed nor checked.

3.2 Core (of cable)

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

3.3 Direction of lay

The slope of the helically laid-up cores of a multicore cable, when the cable is held vertically.

It is right-hand when the slope is in the direction of the central part of the letter Z, and left-hand when the slope is in the direction of the central part of the letter S.

