

Australian/New Zealand Standard™

**Accessories for electric cables—  
Test requirements**

**Part 1: Power cables with extruded  
insulation for rated voltages from  
1.9/3.3 (3.6) kV up to and including  
19/33 (36) kV**



Standards Australia



STANDARDS  
NEW ZEALAND  
Pūrongo Aotearoa

## **AS/NZS 4805.1:2001**

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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 July 2001 and on behalf of the Council of Standards New Zealand on 8 June 2001. It was published on 12 September 2001.

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The following interests are represented on Committee EL-003:

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Department of Defence, Australia  
Department of Minerals and Energy, N.S.W.  
Electrical Contractors Association of New Zealand  
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# Australian/New Zealand Standard™

## **Accessories for electric cables— Test requirements**

### **Part 1: Power cables with extruded insulation for rated voltages from 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV**

First published as AS/NZS 4805.1:2001.

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Jointly published by Standards Australia International Ltd, GPO Box 5420, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 4032 4

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-003, Electric Wires and Cables.

The objective of this Standard is to specify the type test requirements on accessories for power cables with extruded insulation and with rated voltages from 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV.

This Standard is published in two parts. These are:

### AS/NZS

4805 Accessories for electric cables—Test requirements

4805.1 Part 1: Power cables with extruded insulation for rated voltages from 1.9/3.3(3.6) kV up to and including 19/33(36) kV (this Part)

4805.2 Part 2: Impregnated paper insulated metal sheathed cables for rated voltages from 1.9/3.3(3.6) kV up to and including 19/33(36) kV (excluding gas-pressure and oil-filled cables)

In the preparation of these Standards IEC 60502-4, *Power cables with extruded insulation and their accessories for rated voltages from 1 kV ( $U_m = 1,2$  kV) up to 30 kV ( $U_m = 36$  kV) Part 4: Test requirements on accessories for cables with rated voltages from 6 kV ( $U_m = 7,2$  kV) up to 30 kV ( $U_m = 36$  kV), and 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* were considered. The structure of these IEC Standards did not lend itself to straight adoption so the production of a two part Australian/New Zealand Standard was considered appropriate.*

This first part adopts the content of IEC 60502-4. The second part adopts only part of the content of IEC 60055-1 as this IEC Standard covers tests on cables as well as accessories.

The term ‘normative’ has been used in this Standard to define the application of an appendix to which it applies. A normative appendix is an integral part of a Standard.

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

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## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

**Australian/New Zealand Standard****Accessories for electric cables—Test requirements**

Part 1: Power cables with extruded insulation for rated voltages from 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV

## SECTION 1 SCOPE AND GENERAL

**1.1 SCOPE**

This Standard specifies the requirements for type testing of accessories for power cables with rated voltages from 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV, complying with AS/NZS 1429.1 or IEC 60502-2.

The accessories covered by this Standard are listed below:

- (a) Indoor and outdoor terminations of all designs, including terminal boxes.
- (b) Straight joints, branch joints, transition joints and stop-ends of all designs, suitable for use underground or in air.
- (c) Screened or unscreened plug-in type or bolted-type separable connectors.

NOTE: Joints connecting cables with extruded insulation to paper-insulated cables are not included. The requirements for these accessories are dealt with in AS/NZS 4805.2.

Accessories for particular cables, such as unscreened aerial, submarine or ship cables, are not included.

Approval to this Standard is obtained by carrying out the appropriate tests as specified in Clause 3.1. By agreement with the purchaser, accessories which the manufacturer can demonstrate to have provided satisfactory service experience do not need to be type tested.

It is not necessary to repeat these tests, once successfully completed, unless changes are made in the materials, design or manufacturing process which might affect the performance characteristics.

Test methods are included in IEC 61442.

**1.2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

## AS/NZS

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|--------|--|
| 1429   | Electric cables—Polymeric insulated  |
| 1429.1 | Part 1: For working voltages 1.9/3.3 (3.6) kV up to and including 19/33 (36) kV  |
| 4805   | Accessories for electric cables—Test requirements  |
| 4805.2 | Part 2: Impregnated paper insulated metal sheathed cables for rated voltages from 1.9/33(36) kV up to and including 19/33 (36) kV (excluding gas-pressure and oil-filled cables) |