

Australian/New Zealand Standard™

**Electric cables—Polymeric insulated**

**Part 3: Multicore control cables**

### **AS/NZS 5000.3:2003**

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 29 November 2002 and on behalf of the Council of Standards New Zealand on 27 November 2002. It was published on 3 February 2003.

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**RECONFIRMATION**  
**OF**  
**AS/NZS 5000.3:2003**  
**Electric cables—Polymeric insulated**  
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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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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 10 October 2016.

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## NOTES

Australian/New Zealand Standard™

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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 2373.1:1995, *Electric cables for control and protection circuits, Part 1: Multicore control cables*.

The objective of this Standard is to provide construction, dimensions and tests for cables used for control, supervisory, protection and instrumentation circuits.

This Standard differs from the 1995 edition as follows:

- (a) The voltage designation has been changed from 0.6/1 kV to 450/750 V.
- (b) Insulation and non-metallic sheath thicknesses have been decreased.
- (c) A 0.5 mm<sup>2</sup> conductor size has been included.
- (d) Conductors are no longer restricted to a minimum of seven wires.
- (e) A compatibility test has been included as a type test.

In the preparation of this Standard, consideration was given to the following publications and acknowledgment is made of the assistance received.

NZS 6401, *Specification for PVC-insulated cables for electric power and lighting*

BS 6004, *Electric cables—PVC insulated, non-armoured cables for voltages up to and including 450/750 V, for electric power, lighting and internal wiring*

The term 'informative' has been used in this Standard to define the application of the appendix to which it applies. An 'informative' appendix is only for information and guidance.

## CONTENTS

	<i>Page</i>
1 SCOPE .....	4
2 REFERENCED DOCUMENTS .....	4
3 DEFINITIONS .....	4
4 VOLTAGE DESIGNATION .....	4
5 CONDUCTORS .....	4
6 INSULATION .....	5
7 ASSEMBLY OF CORES .....	5
8 BEDDING (OPTIONAL) .....	5
9 METALLIC SCREENS (OPTIONAL) .....	6
10 SEPARATION LAYER (OPTIONAL) .....	6
11 ARMOUR (OPTIONAL) .....	6
12 METALLIC SHEATH (OPTIONAL) .....	6
13 NON-METALLIC SHEATH .....	6
14 FURTHER PROTECTION (OPTIONAL) .....	6
15 MARKING .....	6
16 TESTS .....	7
17 GUIDE TO BENDING RADIUS .....	7

## APPENDICES

A PURCHASING GUIDELINES .....	8
B GUIDE TO BENDING RADIUS OF MULTICORE CONTROL CABLES .....	9

## STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

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**1 SCOPE**

This Standard specifies requirements for screened and unscreened insulated multicore control cable for voltages up to and including 450/750 V.

It applies to cables intended for use in control, supervisory, protection and instrumentation circuits. Control cables complying with this Standard may be used in power station and substation confines or in industrial applications.

It does not apply to cables used solely for telecommunication purposes.

Except where otherwise specified, the cables shall comply with the requirements of AS/NZS 5000.1.

NOTE: Purchasing guidelines are outlined in Appendix A.

**2 REFERENCED DOCUMENTS**

The following documents are referred to in this Standard:

AS/NZS	
1125	Conductors in insulated electric cables and flexible cords
3808	Insulating and sheathing materials for electric cables
5000	Electric cables—Polymeric insulated
5000.1	Part 1: For working voltages up to and including 0.6/1 kV
5000.2	Part 2: For working voltages up to and including 450/750 V

**3 DEFINITIONS**

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

**3.1 Control cable**

A cable used for control, measuring and protection circuits.

**3.2 Lay-up**

The assembly of cores.

**4 VOLTAGE DESIGNATION**

The rated voltage  $U_0/U$  recognized for the purpose of this Standard is 450/750 V.

**5 CONDUCTORS**

Conductors shall be of plain or tinned annealed copper and shall comply with the appropriate requirements in AS/NZS 1125.