

AS/NZS 3112:1993

Australian/New Zealand Standard

**Approval and test specification—
Plugs and socket-outlets**

AS/NZS 3112:1993

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/4, Electrical Accessories and Standards New Zealand Committee ESC 604/2, Electrical Accessories. It was approved on behalf of the Council of Standards Australia on 3 June 1993 and on behalf of the Council of Standards New Zealand on 21 April 1993. It was published on 13 September 1993.

The following interests are represented on Committee EL/4:

Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Department of Public Works, N.S.W.
Electrical Supply Association of Australia
The Plastics Industry Association
Railways of Australia Committee
Regulatory authorities (Electrical)

The following interests are represented on Standards New Zealand Committee ESC 604/2:

New Zealand Electrical Institute
New Zealand Manufacturers Federation
New Zealand regulatory authorities

Review of Standards. To keep abreast of progress in industry, Joint Australian/New Zealand Standards are subject to periodic review and are kept up to date by the issue of amendments or new editions as necessary. It is important therefore that Standards users ensure that they are in possession of the latest edition, and any amendments thereto.

Full details of all Joint Standards and related publications will be found in the Standards Australia and Standards New Zealand Catalogue of Publications; this information is supplemented each month by the magazines 'The Australian Standard' and 'Standards New Zealand', which subscribing members receive, and which give details of new publications, new editions and amendments, and of withdrawn Standards.

Suggestions for improvements to Joint Standards, addressed to the head office of either Standards Australia or Standards New Zealand, are welcomed. Notification of any inaccuracy or ambiguity found in a Joint Australian/New Zealand Standard should be made without delay in order that the matter may be investigated and appropriate action taken.

This Standard was issued in draft form for comment as DR 50002.

AS/NZS 3112:1993

Australian/New Zealand Standard

Approval and test specification— Plugs and socket-outlets

First published in Australia as AS C112—1937.
Second edition 1940.
Third edition 1951.
Fourth edition 1958.
Fifth edition 1964.
Revised and redesignated as AS 3112—1981.
Second edition 1987.
Third edition 1990.
First published in New Zealand as part of NZSS 198—1939.
Second edition 1951.
Third edition 1958.
Fourth edition 1967.
NZSS 2147 first published 1967.
NZSS 198—1967 and NZSS 2147—1967 revised,
amalgamated and redesignated in part as NZS 6216:1989.
AS 3112—1990 and NZS 6216:1989 jointly revised and
designated as Joint Standard AS/NZS 3112:1993.

Incorporating:
Amdt 1—1994
Amdt 2—1995
Amdt 3—1995
Amdt 4—1999

PUBLISHED JOINTLY BY:

STANDARDS AUSTRALIA
1 The Crescent,
Homebush NSW 2140 Australia

STANDARDS NEW ZEALAND
Level 10, Radio New Zealand House,
155 The Terrace,
Wellington 6001 New Zealand

ISBN 0 7262 8329 0

PREFACE

This Standard is issued as a Joint Standard under the terms of the Active Cooperation Agreement between Standards Australia and Standards New Zealand.

This Standard was prepared by the Standards Australia Committee on Electrical Accessories and by the Standards New Zealand Committee on Electrical Accessories to supersede AS 3112—1990 and NZS 6216:1989.

This Standard is one of a series of Approval and Test Specifications issued by Standards Australia and Standards New Zealand. In Australia, these specifications are to be read in conjunction with AS 3100, *Approval and test specification—General requirements for electrical equipment*. In New Zealand, they are to be read in conjunction with NZS 6200, *General requirements for electrical apparatus and material*. The purpose of these Specifications is to outline conditions which must be met to secure approval for the sale and use of electrical equipment. Only safety matters and related conditions are covered.

Where there is a published Australian/New Zealand harmonized or Joint Standard referenced in this Standard, the New Zealand Standard number is given in parenthesis following the Australian Standard number.

This Standard was revised to introduce the following technical and editorial changes:

- (a) The introduction of requirements for the exposed ends of plugs pins in Clause 2.2.3.
- (b) Modification of Clause 2.8.1 to cater for round pins.
- (c) Clause 2.8.4, Clause 2.10 and Clause 2.12.6, additions for plug with round pins.
- (d) Dimensions for plugs with round pins added to Figure 2.1.
- (e) Clause 2.8.4 and Figure 2.1, Note 1, modified for plugs intended only for use in New Zealand.
- (f) Clause 2.12.5.1 modified for plugs intended only for use in New Zealand.
- (g) Dimensions for pin entry apertures for round pins added to Table 3.1.
- (h) Modification to the socket-outlet faceplate requirements in Clause 3.6.3. Figure 3.4 added.
- (i) Changes to Clause 3.8.1 for socket-outlets for use with plugs having round pins.
- (j) Requirements for shuttered socket-outlets added.
- (k) Appendices F and G added.

In Australia, this Standard supersedes AS 3112—1990 from date of publication with the exception of the following:

- (i) The dimensional change to the major axis for flat live pin apertures of 10A and 15A socket-outlets in Table 3.1 which become applicable on 6 August 1994.
- (ii) Clauses 3.6.2 and 3.6.3 which form part of the Specification on 6 August 1994.

In New Zealand, it supersedes NZS 6216:1989 one year from the date of publication of this Specification.

This Standard does not provide all the necessary conditions for a contract.

CONTENTS

Page

SECTION 1 SCOPE AND GENERAL

| | |
|--------------------------------|---|
| 1.1 SCOPE | 5 |
| 1.2 APPLICATION | 5 |
| 1.3 REFERENCED DOCUMENTS | 5 |
| 1.4 DEFINITIONS | 6 |

SECTION 2 PLUGS

| | |
|---|----|
| 2.1 TERMINALS AND INTERNAL CONNECTIONS | 7 |
| 2.2 PLUG PINS | 7 |
| 2.3 INSULATING MATERIALS | 7 |
| 2.4 NON-REWIRABLE PLUGS | 8 |
| 2.5 MEANS OF ENTRY AND CORD ANCHORAGE FOR FLEXIBLE CORD | 8 |
| 2.6 RADIO INTERFERENCE SUPPRESSION DEVICES | 9 |
| 2.7 FINGER-GRIP | 9 |
| 2.8 RATINGS AND DIMENSIONS OF LOW VOLTAGE PLUGS | 9 |
| 2.9 INTERNAL CONNECTIONS | 10 |
| 2.10 ARRANGEMENT OF EARTHING CONNECTIONS | 10 |
| 2.11 FUSES | 10 |
| 2.12 MARKING | 10 |
| 2.13 DUSTPROOF PLUGS | 15 |
| 2.14 TESTS ON PLUGS | 15 |

SECTION 3 SOCKET-OUTLETS

| | |
|--|----|
| 3.1 TERMINALS AND INTERNAL CONNECTIONS | 23 |
| 3.2 PROHIBITED ARRANGEMENTS | 23 |
| 3.3 SOCKET-OUTLET CONTACTS | 23 |
| 3.4 INSULATING MATERIALS | 24 |
| 3.5 RADIO INTERFERENCE SUPPRESSORS | 25 |
| 3.6 DIMENSIONS | 25 |
| 3.7 ARRANGEMENT OF EARTHING CONNECTIONS | 27 |
| 3.8 PREVENTION OF CONTACT WITH LIVE PINS | 27 |
| 3.9 FUSES | 28 |
| 3.10 FLOOR SOCKET-OUTLETS | 28 |
| 3.11 SWITCHED SOCKET-OUTLETS | 28 |
| 3.12 SHUTTERED SOCKET-OUTLETS | 29 |
| 3.13 MARKING | 29 |
| 3.14 DUSTPROOF SOCKET-OUTLETS | 30 |
| 3.15 TESTS FOR SOCKET-OUTLETS | 30 |

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-