

AS/NZS 3120:2021



Australian/New Zealand Standard™

Approval and test specification — Cord extension sockets



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- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Better Regulation Division (Fair Trading, Safework NSW, TestSafe)
- Consumer Electronics Suppliers Association
- Consumers Federation of Australia
- Electrical Regulatory Authorities Council, Australia
- Engineers Australia
- International Accreditation New Zealand
- Joint Accreditation System of Australia & New Zealand
- National Electrical Communications Association
- Plastics Industry Pipe Association of Australia
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Preface

This standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-004, Electrical Accessories, to supersede AS/NZS 3120:2011.

AS/NZS 3120:2011 incorporating Amendment 1 will also remain current for 24 months after the date of publication of this standard and after this time it will be superseded by AS/NZS 3120:2021. Regulatory authorities that reference this standard in regulation may apply these requirements at a different time. Users of this standard should consult with these authorities to confirm their requirements.

This standard is one of a series to be read in conjunction with AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*. This document includes undated references to AS/NZS 3112:2017 Figure 2.1. If AS/NZS 3112 is revised, users should refer to the AS/NZS 3112 figure titled “Dimensions of plugs”. The purpose of the series is to outline the conditions to be met to secure approval for the sale and use of electrical equipment. Only safety matters and related conditions are covered.

The objective of this standard is to set out essential safety requirements for cord extension sockets and inlet plugs intended for use at extra-low or low voltages, and inlet plugs with rated voltages not exceeding 250 V and current ratings not exceeding 20 A in accordance with the pin configurations given in AS/NZS 3112.

The essential safety requirements in AS/NZS 3820, *Essential safety requirements for electrical equipment*, that are applicable to inlet plugs and cord extension socket-outlets that are covered by this standard, taken in conjunction with any other relevant requirements affecting safety.

NOTE Inlet plugs were previously specified in AS/NZS 60320.1 as Group 2 appliance inlets.

This edition of the standard incorporates changes to the previous edition and includes the following technical and editorial changes to the content of the previous editions:

- (a) Alignment of cord retention tests with tests for cord retention of plugs in AS/NZS 3112
- (b) Removal of requirements for cord extension sockets outside the scope of this standard
- (c) Requirements added for locking sockets
- (d) Editorial changes to clearly define requirements

Section 1 Scope and general

1.1 Scope and application

1.1.1 Scope

This standard sets out essential safety requirements for cord extension sockets and inlet plugs, as defined in [Clause 1.3](#), intended for use at extra-low or low voltages, and inlet plugs with rated voltages not exceeding 250 V and current ratings not exceeding 20 A in accordance with the pin configurations given in AS/NZS 3112.

This standard does not apply to cord extension sockets that are enclosed within an appliance in such a way that they are not exposed to personal contact, or that are intended for use solely where they will be so enclosed.

1.1.2 Application

1.1.2.1 General requirements of AS/NZS 3100

This standard shall be read in conjunction with AS/NZS 3100. The appropriate provisions in AS/NZS 3100, as identified in [Clause 1.2](#), shall apply to the construction of a cord extension socket and an inlet plug.

1.1.2.2 Specific requirements of this standard

A cord extension socket and inlet plug shall be deemed to conform to this standard provided it conforms to all the requirements of this standard and passes the test specified herein.

NOTE Plugs, socket-outlets and connectors incorporating retaining means of the type specified in AS/NZS 3123, or similar, need not conform to all general dimensional requirements of this standard, provided the safe functioning of accessories in a particular system is not impaired and, where applicable, dimensions relevant to specified pin configurations are applied.

1.2 Normative references

The following standards are referred to in the text in such a way that some or all of their content constitutes a requirement of this standard:

AS 60529, *Degrees of protection provided by enclosures (IP Code)*

AS/NZS 3100, *Approval and test specification—General requirements for electrical equipment*

AS/NZS 3112, *Approval and test specification—Plugs and socket-outlets*

AS/NZS 3121, *Approval and test specification—Insulating mouldings*

AS/NZS 3123, *Approval and test specification—Plugs, socket-outlets and couplers for general industrial application*

AS/NZS 3133, *Approval and test specification—Air-break switches*

AS/NZS 60320.1, *Appliance couplers for household and similar general purposes, Part 1: General requirements (IEC 60320-1, Ed 2.1 (2001) MOD)*

AS/NZS 60335.1, *Household and similar electrical appliances—Safety, Part 1: General requirements (IEC 60335-1 Ed. 5.0(2010), MOD)*

1.3 Terms and definitions

For the purpose of this standard, the definitions below apply.