

AS 60372:2022



STANDARDS
Australia



Locking devices for ball and socket couplings of string insulator units — Dimensions and tests (IEC 60372:2020, MOD)



AS 60372:2022

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- Australian Industry Group
- Civil Aviation Safety Authority
- Communications, Electrical and Plumbing Union — Electrical Division
- Department of Regional NSW
- Electrical Regulatory Authorities Council
- Energy Networks Australia
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Locking devices for ball and socket couplings of string insulator units — Dimensions and tests (IEC 60372:2020, MOD)

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Preface

This Standard was prepared by the Standards Australia Committee EL-010, Overhead Lines, to supersede AS 60372:2010.

The objective of this document is to specify requirements for locking devices used with ball and socket couplings of string insulator units and used with the corresponding metal fittings standardized in AS 60120, when they are supplied separately.

The object of this document is as follows:

- (a) To define the shapes and some standard dimensions for locking devices.
- (b) To define the test methods for locking devices.
- (c) To state the acceptance conditions for supply.
- (d) To give other dimensions for guidance of manufacturing only.

This document is an adoption with national modifications, and has been reproduced from, IEC 60372:2020, *Locking devices for ball and socket couplings of string insulator units — Dimensions and tests*. The modifications are additional requirements and are set out in Appendix ZZ, which has been added at the end of the source text.

Appendix ZZ lists the modifications to IEC 60372, for the application of this document in Australia.

As this document has been reproduced from an International document, the following applies:

- (i) In the source text “this international Standard” should read “this document”.
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The terms “normative” and “informative” are used in Standards to define the application of the appendices or annexes to which they apply. A “normative” appendix or annex is an integral part of a Standard, whereas an “informative” appendix or annex is only for information and guidance.

NOTES

CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Shapes and dimensions.....	7
4.1 General.....	7
4.2 Shapes of the locking devices.....	7
4.2.1 Split-pin.....	7
4.2.2 W-clip.....	7
4.3 Dimensions of locking devices	7
4.3.1 The split-pins (standard and alternative type)	7
4.3.2 The W-clips	8
5 Test.....	9
5.1 Classification of tests	9
5.2 Qualification tests	10
5.2.1 Test items and the samples	10
5.2.2 Hardness test	10
5.2.3 Verification of resistance of bending	10
5.2.4 Corrosion resistance test.....	11
5.3 Sample tests and sampling	12
5.3.1 Sample tests.....	12
5.3.2 Sampling	12
5.3.3 Visual examination	13
5.3.4 Verification of dimensions.....	13
5.3.5 Hardness test	14
5.3.6 Verification of resistance to bending (for split-pins only)	14
5.4 Re-test procedure	14
Annex A (normative) Gauge for W-clips	15
Annex B (normative) Other dimensions of split-pins	17
Annex C (informative) Method of using the locking devices.....	18
C.1 Overview.....	18
C.2 Method of using the locking devices – Split-pin.....	18
C.3 Method of using the locking devices – W-clip.....	18
Bibliography.....	19
Figure 1 – Shape of split-pins	8
Figure 2 – Shape of W-clips.....	9
Figure 3 – Arrangement of verification of resistance of bending	11
Figure 4 – Verification of <i>L</i>	13
Figure A.1 – Gauge for W-clips.....	15
Figure A.2 – Symbol marks for dimensions of W-clips	16
Figure B.1 – Other dimensions of the split-pins	17
Figure C.1 – Positions of split-pin	18
Figure C.2 – Positions of W-clip.....	18

Table 1 – Dimensions of the split-pins	8
Table 2 – Dimensions of W-clips	9
Table 3 – Radii of verification of resistance of bending	11
Table 4 – Size of the sample and acceptance number Ac	12
Table 5 – Specifications of K and D_4 in Figure 4	13
Table A.1 – Dimensions of the gauge for W-clips	16
Table B.1 – Other dimensions of the split-pins	17

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOCKING DEVICES FOR BALL AND SOCKET COUPLINGS OF STRING INSULATOR UNITS – DIMENSIONS AND TESTS

FOREWORD

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International Standard IEC 60372 has been prepared by IEC technical committee 36: Insulators.

This fourth edition cancels and replaces the third edition published in 1984. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Two new designated size of couplings, 36 and 40, were introduced;
- b) According to the results of the questionnaire (36/424/Q), the relevant content of the 28B W-clip was deleted;
- c) Annex A is informative, Annex B is normative, Annex C is informative.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
36/485/FDIS	36/493/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

LOCKING DEVICES FOR BALL AND SOCKET COUPLINGS OF STRING INSULATOR UNITS – DIMENSIONS AND TESTS

1 Scope

This international standard is applicable to locking devices used with ball and socket couplings of string insulator units and used with the corresponding metal fittings standardized in IEC 60120, when they are supplied separately.

When these locking devices are supplied with an insulator or fitting, they are considered as an integral part of it. In this case, the relevant test is to be included with those of insulators, as specified in IEC 60383-1 and IEC 61325. On request, a certificate is to be delivered confirming that the tests on locking devices as specified in this document have been carried out. The locking devices are usually supplied with the insulator or corresponding metal fittings.

The object of this document is

- to define the shapes and some standard dimensions for locking devices,
- to define the test methods for locking devices,
- to state the acceptance conditions for supply,
- to give other dimensions for guidance of manufacturing only.

The object of this document does not include the specification of the nature of the material, and the material covered by the scope of this document does not have a surface coating for corrosion protection. However, the material which will give rise to significant contact corrosion(chemical reaction) between the locking device and the ball and socket coupling does not covered by this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-471, *International Electrotechnical Vocabulary (IEV) – Part 471: Insulators*

ISO 6506-1, *Metallic materials – Brinell Hardness – Test Part 1: Test Method*

ISO 6507-1, *Metallic materials – Vickers Hardness – Test Part 1: Test Method*

ISO 6508-1, *Metallic materials – Rockwell Hardness – Test Part 1: Test Method*

3 Terms and definitions

For the purposes of this document, the terms and definitions of IEC 60050-471 and the following apply.