

BS 3288-1:2014



BSI Standards Publication

Insulator and conductor fittings for overhead power lines

Part 1: Performance and general requirements

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Foreword

Publishing information

This part of BS 3288 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 December 2014. It was prepared by Technical Committee PEL/11, *Overhead lines*. A list of organizations represented on this committee can be obtained on request to its secretary.

Supersession

This part of BS 3288 supersedes BS 3288-1:1997, which is withdrawn.

Information about this document

BS 3288 applies primarily to fittings for overhead electric power lines. The various parts of BS 3288 specify the performance, general requirements and dimensional requirements for insulator and conductor fittings. The general and dimensional requirements may be applied to similar fittings used on overhead railway electrification systems and in substations. This British Standard is not applicable to fittings exclusively intended for use on aerial bundled conductor systems or to low voltage connectors.

BS 3288-1 is part of a series that contains the following current parts:

- Part 2: *Specification for a range of fittings;*
- Part 3: *Dimensions of ball and socket couplings of string insulator units.*

The original suite of standards also contained BS 3288-4 but this has been superseded by BS EN 60372.

Use of this document

It has been assumed in the preparation of this part of BS 3288 that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is "shall".

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Requirements in this standard are drafted in accordance with *Rules for the structure and drafting of UK standards*, subclause J.1.1, which states, "Requirements should be expressed using wording such as: 'When tested as described in Annex A, the product shall ...'". This means that only those products that are capable of passing the specified test will be deemed to conform to this standard.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This British Standard specifies performance and general requirements for insulator and conductor fittings for use on overhead power lines. It defines the relevant tests and test procedures together with the acceptance criteria.

The tests and test procedures may also be applied to similar fittings, outside the scope of this standard, intended for use in:

- the overhead equipment of electric traction lines;
- substations.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 3288-2, *Insulator and conductor fittings for overhead power lines – Part 2: Specification for a range of fittings*

BS 3288-3, *Insulator and conductor fittings for overhead power lines – Part 3: Dimensions of ball and socket couplings for string insulator units*

BS 4727, *Glossary of electrotechnical, power, telecommunications, electronics, lighting and colour terms*

BS 4872-1:1982, *Specification for approval testing of welders when welding procedure is not required – Part 1: Fusion welding of steel*

BS EN 1562, *Founding – Malleable cast irons*

BS EN 1563, *Founding – Spheroidal graphite cast irons*

BS EN 60372:2004, *Locking devices for ball and socket couplings of string insulator units – Dimensions and tests*

BS EN 61284, *Overhead lines – Requirements and tests for fittings*

BS EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*

BS EN ISO 15620, *Welding – Friction welding of metallic materials*

PD 970, *Wrought steels for mechanical and allied engineering purposes – Requirements for carbon, carbon manganese and alloy hot worked or cold finished steels*

3 Terms and definitions

For the purposes of this British Standard, the definitions given in BS 4727 and the following apply.

3.1 cap and pin insulator

insulator comprising an insulating part having the form of a disc or bell, with or without ribs on its lower surface, and fixing devices consisting of an outside cap and an inside pin attached axially

3.2 clamp

any fitting which can be fixed onto a conductor