



BSI Standards Publication

## AEROSPACE SERIES

**Rivets, solid, universal head, inch diameters in metric units, aluminium alloys (colour coded) and nickel-copper alloy, cadmium plated or natural finish – Specification**

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## Summary of pages

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# Foreword

## Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 October 2019. It was prepared by Technical Committee ACE/12, *Aerospace fasteners and fastening systems*. A list of organizations represented on this committee can be obtained on request to its secretary.

## Supersession

BS 3SP 157-163:2019 supersedes BS 2SP 157-163:1973, which is withdrawn.

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## Hazard warnings

**CAUTION.** This British Standard features parts that have cadmium as a plating material which has been restricted and/or banned for use in many countries owing to environmental and health concerns; they should not be used in new product designs. Local officials should be consulted about any concerns on the use of cadmium-plated parts.

## 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.*

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

## 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.**

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## 1 Scope

This British Standard specifies rivets, solid, universal head, imperial diameters in metric units, aluminium alloys (colour coded) and nickel-copper alloy, cadmium plated or natural finish.

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## 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 L 37, *Specification for wire for solid cold-forged rivets of aluminium-copper-magnesium-silicon-manganese alloy (for use in the solution treated and naturally aged condition) (not exceeding 10 mm diameter) (Cu 4.4, Mg 0.5, Si 0.7, Mn 0.8) (2014A)*

BS L 58, *Specification for wire for solid, cold-forged rivets of aluminium-5% magnesium alloy (not exceeding 10 mm diameter)*<sup>1</sup>

BS L 86<sup>1</sup>, *Specification for wire for solid, cold-forged rivets of aluminium-copper-magnesium alloy (not exceeding 10 mm diameter) (Cu 2.5, Mg 0.3)*

BS EN 2116, *Aerospace series. Aluminium alloy 2017A-T42. Wire for solid rivets. D ≤ 10 mm*

BS EN 2133, *Aerospace series. Cadmium plating of steels with specified tensile strength ≤ 1450 MPa, copper, copper alloys and nickel alloys*

BS EN 4372, *Aerospace series. Heat resisting nickel alloy with copper NI-PD9001 (NiCu31). Wire for solid rivets. D ≤ 10 mm*

DSTAN DTD204, *Nickel-copper alloy cold drawn wire for rivets*

SAE AMS03-19, *Electro-deposition of cadmium*

SAE AMS03-25, *Sulfuric acid anodizing of aluminium and aluminium alloys*

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## 3 Terms and definitions

There are no terms and definitions listed in this document.

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## 4 Dimensions

Dimensions and tolerances shall be in millimetres and inch conversions in parentheses.

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## 5 Manufacture

5.1 Burrs and sharp edges shall be removed [0.25 (.010) max].

5.2 Head shall be concentric with shank within Ø 0.25 (.010).

NOTE 1 The snap profile recommended for use with these rivets is contained in [Annex A](#).

NOTE 2 Details of rivets are shown in [Figure 1](#).

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<sup>1</sup> Now withdrawn.