



BSI Standards Publication

Aerospace series –

Specification for nuts, hexagonal ordinary and slotted (Unified threads) in anodized aluminium

Publishing and copyright information

The BSI copyright notice displayed in this document indicates when the document was last issued.

The British Standards Institution 2018

Published by BSI Standards Limited 2018

ISBN 978 0 580 51231 2

ICS 49.030.10

The following BSI references relate to the work on this document:

Committee reference ACE/12

Draft for comment 17/30365828 DC; 18/30381967

Amendments/corrigenda issued since publication

Date	Text affected
September 2018	See Foreword
March 1985	See Foreword

Contents

	Page
Foreword	ii
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 General requirements	1
5 Material and manufacture	1
6 Dimensions	1
7 Screw threads	2
8 Protective finish	2
9 Identification and marking	2
10 Inspection procedure	2
<i>Figure 1 — Outline of Ordinary Nuts</i>	3
<i>Table 1 — Dimensions of Ordinary Nuts</i>	3
<i>Figure 2 — Outline of Slotted Nuts</i>	4
<i>Table 2 — Dimensions of Slotted Nuts</i>	4

Summary of pages

This document comprises a front cover, and inside front cover, pages i to ii, pages 1 to 4, an inside back cover and a back cover.

Foreword

Publishing information

This British Standard is published by BSI and came into effect on 8 November 1962. 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BS 3A 107:1962+A2:2018 supersedes BS 3A 107:1962 (incorporating Amendment No.1) which is withdrawn.

Information about this document

This amendment of BS 3A 107:1962 has been prepared to relate the standard to the relevant requirements of BS 4A 100.

The start and finish of text introduced or altered by Amendment No.2 is indicated in the text by tags **A2** and **A2**. Minor editorial changes are not tagged.

Use of this document

It has been assumed in the preparation of this British Standard 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.

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

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 the materials, dimensions and inspection procedure for machined aluminium alloy nuts with Unified hexagons and Unified threads for aircraft. It makes provision for ranges of ordinary and slotted nuts.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes provisions 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.

BS 4A 100, *Aerospace series – Specification for general requirements for bolts and free running nuts of tensile strength not exceeding 1 249 MPa*

BS L 168, *Specification for bars and extruded sections of aluminium – copper – magnesium – silicon – manganese alloy (Solution treated and artificially aged) (Not exceeding 200 mm diameter or minor sectional dimension)*

SAE AMS03-25, *Sulfuric Acid Anodising of Aluminium and Aluminium Alloys*

3 Terms and definitions

No terms and definitions are listed in this document.

4 General requirements

The nuts shall comply with the relevant requirements of BS 4A 100, in respect of manufacture, screw threads, A_2 protective finish A_2 , identification and marking.

5 Material and manufacture

A_2 5.1 The nuts shall be machined from bar which comply with the latest issue of BS L 168.

5.2 The nuts shall be configured as follows:

- a) for Ordinary Nuts, see Figure 1;
 - b) for Slotted Nuts, see Figure 2. A_2
-

6 Dimensions

6.1 Dimensions shall be in inches.

6.2 All finished nuts shall conform to the dimensions and tolerances given in Table 1 for Ordinary Nuts or Table 2 for Slotted Nuts.