BS EN 3740:2019

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BSI Standards Publication

Aerospace series — Bolts, shouldered, thin hexagonal head, close tolerance shank, short thread, in titanium alloy, anodized, MoS2 coated — Classification: 1 100 MPa (at ambient temperature)/315 °C

National foreword

This British Standard is the UK implementation of EN 3740:2019. It supersedes BS EN 3740:1997, which is withdrawn.

The UK participation in its preparation was entrusted to 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.

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

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

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Amendments/corrigenda issued since publication

Date Text affected

<u>EN 27/1</u>

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EUROPÄISCHE NORM

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Supersedes EN 3740:1996

English Version

Aerospace series - Bolts, shouldered, thin hexagonal head, close tolerance shank, short thread, in titanium alloy, anodized, MoS2 coated - Classification: 1 100 MPa (at ambient temperature)/315 °C

Série aérospatiale - Axes épaulés, à tête hexagonale basse, tige à tolérance serrée, filetage court, en alliage de titane, anodisés, lubrifiés MoS2 - Classification : 1 100 MPa (à température ambiante)/315 °C Luft- und Raumfahrt - Sechskant-Passschrauben, kleiner Kopf, enge Schafttoleranz, kurzes Gewinde, aus Titanlegierung, anodisiert, MoS2-geschmiert - Klasse: 1 100 MPa (bei Raumtemperatur)/315 °C

This European Standard was approved by CEN on 10 June 2019.

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European foreword

This document (EN 3740:2019) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2020, and conflicting national standards shall be withdrawn at the latest by April 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 3740:1996.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European standard specifies the characteristics of bolts, should ered, thin hexagonal head, close tolerance shank, short thread, in titanium alloy, ano dized, MoS_2 dryfilm coated, for aerospace applications.

Classification: 1 100 MPa¹/315 °C².

These bolts are intended to be used with washers according to EN 2414 and nuts according to EN 3230.

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.

EN 2414, Aerospace series — Washers, chamfered, with counterbore, in alloy steel, cadmium plated

EN 2424, Aerospace series — Marking of aerospace products

EN 2491, Aerospace series — Molybdenum disulphide dry lubricants — Coating methods

EN 3230, Aerospace series — Nuts, hexagon, slotted/castellated, reduced height, normal across flats, in steel, cadmium plated — Classification: 900 MPa (at ambient temperature)/235 °C

EN 4016, Aerospace series — Oversized bolts³

ISO 3353-1, Aerospace — Lead and runout threads — Part 1: Rolled external threads

ISO 5855-2, Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts

ISO 7913, Aerospace — Bolts and screws, metric — Tolerances of form and position

ISO 9152, Aerospace — Bolts, with MJ threads, in titanium alloys, strength class 1 100 MPa — Procurement specification

TR 3775, Aerospace series — Bolts and pins — Materials⁴

TR 4070, Aerospace series — Molybdenum disulphide coatings — List of commercial products⁴

¹ Minimum tensile strength of the material at ambient temperature.

² Maximum temperature that the bolt can withstand without continuous change in its original characteristics, after return to ambient temperature. The minimum temperature is determined by the surface treatment.

³ Published as ASD-STAN Prestandard at the date of publication of this European standard by AeroSpace and Defence Industries Association of Europe - Standardization (ASD-STAN) (www.asd-stan.org).

⁴ Published as ASD-STAN Technical Report at the date of publication of this European standard by AeroSpace and Defence Industries Association of Europe - Standardization (ASD-STAN) (www.asd-stan.org)