



NSAI
Standards

Irish Standard
I.S. EN 3820:2017

Aerospace series - Metric bolts, normal hexagon head, coarse tolerance normal shank, short thread, in titanium alloy, anodized, MoS₂ lubricated - Classification: 1 100 MPa (at ambient temperature)/315 °C

I.S. EN 3820:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 3820:2017 is the adopted Irish version of the European Document EN 3820:2017, Aerospace series - Metric bolts, normal hexagon head, coarse tolerance normal shank, short thread, in titanium alloy, anodized, MoS2 lubricated - Classification: 1 100 MPa (at ambient temperature)/315 °C

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EUROPEAN STANDARD

EN 3820

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2017

ICS 49.030.20

Supersedes EN 3820:2006

English Version

**Aerospace series - Metric bolts, normal hexagon head,
coarse tolerance normal shank, short thread, in titanium
alloy, anodized, MoS2 lubricated - Classification: 1 100
MPa (at ambient temperature)/315 °C**

Série aéronautique - Vis métriques à tête hexagonale
normale, fût normal à tolérance large, filetage court, en
alliage de titane, anodisées, lubrifiées MoS2 -
Classification : 1 100 MPa (à température
ambiante)/315 °C

Luft- und Raumfahrt - Metrische Sechskantschrauben,
kurzes Gewinde, aus Titanlegierung, anodisiert, MoS2-
geschmiert - Klasse: 1 100 MPa (bei
Raumtemperatur)/315 °C

This European Standard was approved by CEN on 26 June 2017.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 3820:2017) 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 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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 3820:2006.

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

EN 3820:2017 (E)**1 Scope**

This standard specifies the characteristics of bolts, normal hexagonal head, coarse tolerance normal shank, short thread, in titanium alloy, anodized, MoS₂ lubricated.

Classification: 1 100 MPa¹⁾ / 315 °C²⁾.

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.

EN 2424, *Aerospace series — Marking of aerospace products*

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

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defence Organizations*

EN 9133, *Aerospace series — Quality management systems — Qualification procedure for aerospace standard parts*

ISO 3193, *Aerospace — Bolts, normal hexagonal head, normal shank, short or medium length MJ threads, metallic material, coated or uncoated, strength classes less than or equal to 1100 MPa — Dimensions*

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 1100 MPa — Procurement specification*

TR 3775, *Aerospace series — Bolts and pins — Materials*³⁾

TR 4070, *Aerospace series — Molybdenum disulphide coatings — List of commercial products*³⁾

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 maximum temperature is determined by the surface treatment.

3) Published as ASD-STAN Technical Report at the date of publication of this standard.
<http://www.asd-stan.org/>

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