

STN	Letectvo a kozmonautika Skrutky s nízkou hlavou, špirálovou drážkou, neopracovaným drikom, strednou dĺžkou závitú, zo zliatiny titánu, anodizované, mazané MoS2 Trieda: 1 100 MPa (pri teplote okolia)/315 °C	STN EN 4848 31 3157
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Aerospace series - Screw, pan head, Spiral Drive Recess, coarse tolerance normal shank, medium length thread, in titanium alloy, anodized, MoS2 lubricated - Classification: 1 100 MPa (at ambient temperature)/315 C

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/22

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EUROPEAN STANDARD

EN 4848

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

**Aerospace series - Screw, pan head, Spiral Drive Recess,
coarse tolerance normal shank, medium length thread, in
titanium alloy, anodized, MoS2 lubricated - Classification:
1 100 MPa (at ambient temperature)/315 °C**

Série aérospatiale - Vis à tête cylindrique, empreinte en spirale, tige normale à tolérance large, filetage moyen, en alliage de titane, anodisée, lubrifiée au MoS2 - Classification : 1 100 MPa (à température ambiante)/315 °C

Luft- und Raumfahrt - Flachkopfschraube mit Spiral Antrieb, grobe Schafttoleranz, mittlere Gewindelänge, aus Titanlegierung, anodisiert, MoS2 geschmiert - Klasse: 1 100 MPa (bei Raumtemperatur)/315 °C

This European Standard was approved by CEN on 10 January 2022.

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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN 4848:2022 (E)

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European foreword

This document (EN 4848:2022) 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 September 2022, and conflicting national standards shall be withdrawn at the latest by September 2022.

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.

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 4848:2022 (E)**Introduction**

Aerospace and Defence Standardisation (ASD-STAN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent „Spiral Drive System for Threaded Fasteners“ EP1025370B1.

ASD-STAN takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured ASD-STAN that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ASD-STAN. Information may be obtained from:

Phillips Screw Company
301 Edgewater Drive, Suite 320
Wakefield, Massachusetts 01880
USA

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. ASD-STAN shall not be held responsible for identifying any or all such patent rights.

1 Scope

This document specifies the characteristics of externally threaded fasteners, pan head, Spiral Drive Recess, coarse tolerance normal shank, medium length thread, in titanium alloy, anodized, MoS₂ lubricated, for aerospace applications.

Classification: 1 100 MPa¹/315 °C².

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 2424, *Aerospace series — Marking of aerospace products*

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

EN 2808, *Aerospace series — Anodizing of titanium and titanium alloys*

EN 3021, *Aerospace series — Molybdenum disulphide dry film lubricants graphite and halogen free — Technical specification*

EN 3813, *Aerospace series — Titanium alloy TI-P64001 (Ti-6Al-4V) — Annealed — Bar and wire for forged fasteners — $D_e \leq 50$ mm*

EN 4609, *Aerospace series — Spiral drive recesses for threaded fasteners — Geometrical definition and technical requirements*

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*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹ Minimum tensile strength of the material at ambient temperature.

² Maximum temperature that the externally threaded fastener can withstand without continuous change in its original characteristics, after return to ambient temperature. The maximum temperature is determined by the material.