

<b>STN</b>	<p><b>Letectvo a kozmonautika</b> <b>Kíbové ložiská z nehrdzavejúcej ocele so samomaznou vrstvou, s nízkym začiatočným krútiacim momentom a s nízkym koeficientom trenia, so zvýšeným zatážovacím cyklom pri nízkom kmitaní za rozdielnych prevádzkových podmienok</b> <b>Časť 3: Technická špecifikácia</b></p>	<b>STN EN 4854-3</b>
		31 4813

Aerospace series Bearing, spherical plain, in corrosion resisting steel with self-lubricating liner, low starting torque and low friction coefficient, elevated duty cycles under low oscillations at different operating conditions Part 3: Technical specification

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

Táto norma bola označená vo Vestníku ÚNMS SR č. 03/20

Obsahuje: EN 4854-3:2019

**130578**

**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 4854-3**

October 2019

ICS 49.035

English Version

**Aerospace series - Bearing, spherical plain, in corrosion  
 resisting steel with self-lubricating liner, low starting  
 torque and low friction coefficient, elevated duty cycles  
 under low oscillations at different operating conditions -  
 Part 3: Technical specification**

Série aéronautique - Rotules en acier résistant à la  
 corrosion à garniture autolubrifiante, faible couple de  
 démarrage et faible coefficient de frottement, cycles  
 d'endurances élevés sous faibles oscillations à  
 différentes conditions de fonctionnement, série large -  
 Partie 3 : Spécification Technique

Luft- und Raumfahrt - Gelenkkäger aus  
 korrosionsbeständigem Stahl mit selbstschmierender  
 Beschichtung, geringem Losbrechmoment und  
 niedrigem Reibungskoeffizienten, hohe Anzahl an  
 gering oszillierenden Belastungszyklen bei  
 unterschiedlichen Einsatzbedingungen - Teil 3:  
 Technische Lieferbedingungen

This European Standard was approved by CEN on 12 November 2018.

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**EN 4854-3:2019 (E)****European foreword**

This document (EN 4854-3:2019) 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.

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 required characteristics, inspection and test methods, qualification and acceptance conditions for spherical plain bearings in corrosion resisting steel with self-lubricating liner, low starting torque and low friction coefficient, elevated duty cycles under low oscillations at different operating conditions.

This standard applies whenever referenced.

These self-lubricating spherical plain bearings are intended for use in fixed or moving parts of the aircraft structure especially for control mechanism and operating systems. The bearings are designed subjected under low dynamic radial loads and slow rotations in the temperature range of  $-55^{\circ}\text{C}$  to  $120^{\circ}\text{C}$  ( $-67^{\circ}\text{F}$  to  $248^{\circ}\text{F}$ ).

The liner may be of a fabric or composite material bonded to the inside diameter of the outer ring or in a composite material moulded into a pre-formed cavity between the inner and outer rings.

## 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 4854-1, *Aerospace series — Bearing, spherical plain, in corrosion resisting steel with self-lubricating liner, low starting torque and low friction coefficient, elevated duty cycles under low oscillations at different operating conditions, narrow series — Part 1: Dimensions and loads*

EN 4854-2, *Aerospace series — Bearing, spherical plain, in corrosion resisting steel with self-lubricating liner, low starting torque and low friction coefficient, elevated duty cycles under low oscillations at different operating conditions, wide series — Part 2: Dimensions and loads*

EN 10204, *Metallic products — Types of inspection documents*

MIL-PRF-87257B, *Hydraulic Fluid, Fire Resistant; Low Temperature, Synthetic Hydrocarbon Base, Aircraft and Missile*

NSA307110, *Fluid — Hydraulic Phosphate Ester — Base Fire Resistant*

TR 4475, *Bearings and mechanical transmissions for airframe applications — Vocabulary<sup>1</sup>*

ASTM D 1655, *Specification for Aviation Turbine Fuels*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

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1 Published as ASD-STAN Technical Report at the date of publication of this standard by AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN) ([www.asd-stan.org](http://www.asd-stan.org)).