

STN	Letectvo a kozmonautika Kíbové ložiská z nehrdzavejúcej ocele, úzky rad Rozmery a zaťaženia Palcový rad	STN EN 6046 31 4831
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Aerospace series - Bearing, spherical, plain, in corrosion resisting steel - Narrow series - Dimensions and loads - Inch series

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

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

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English Version

Aerospace series - Bearing, spherical, plain, in corrosion resisting steel - Narrow series - Dimensions and loads - Inch series

Série aérospatiale - Rotule lisse en acier résistant à la
corrosion - Série étroite - Dimensions et charges - Série
en inches

Luft- und Raumfahrt - Gelenklager aus
korrosionsbeständigem Stahl - Schmale Reihe - Maße
und Belastungen - Inch-Reihe

This European Standard was approved by CEN on 19 August 2019.

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

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European foreword

This document (EN 6046:2020) 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of an identical text or by endorsement, at the latest by September 2020, and conflicting national standards shall be withdrawn at the latest by September 2020.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.

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EN 6046:2020 (E)**Introduction**

This document is published at edition P7. Former editions P1 to P6 and drafts may exist for Airbus development only but without any ASD-STAN official publication. In consequence configuration management discrepancies with these unofficial documents are under Airbus responsibility.

1 Scope

This European standard specifies the characteristics of inch based spherical plain bearing, metal to metal, in corrosion resisting steel, narrow series.

They are intended for use in fixed or moving parts of the aircraft structure and their control mechanisms.

They shall be used in the temperature range as determined by the grease capability as below:

- code A: grease as per MIL-PRF-23827 Type I, operating temperature range -73 °C to 121 °C ;
- code B: grease as per MIL-PRF-81322, operating temperature range -54 °C to 177 °C .

The range of application for bearings lubricated with grease per code A is limited to 121 °C .

In both cases the spherical surface of the outer or inner ring have to be provided with a dry-film lubricant as per MIL-PRF-46010 or equivalent (anti-seizing protection).

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 2030, *Aerospace series — Steel X105CrMo17 (1.3544) — Hardened and tempered — Bars — $D_e \leq 150\text{ mm}$*

EN 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength $\leq 1\,450\text{ MPa}$, copper, copper alloys and nickel alloys*

EN 2337, *Aerospace series — Spherical plain bearings — Technical specification*

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

EN 3161, *Aerospace series — Steel FE-PM3801 (X5CrNiCu17-4) — Air melted, solution treated and precipitation treated, bar a or $D \leq 200\text{ mm}$, $R_m \geq 930\text{ MPa}$*

MIL-PRF-23827, *Grease, Aircraft and Instrument, Gear and Actuator Screw*¹

MIL-PRF-81322, *Grease, aircraft, general purpose, wide temperature range*¹

MIL-PRF-46010, *Lubricant, Solid Film, Heat Cured, Corrosion Inhibiting NATO Code — S-1738*¹

ISO 1132-1, *Rolling bearings — Tolerances — Part 1: Terms and definitions*

ISO 8075, *Aerospace — Surface treatment of hardenable stainless steel parts*

TR 4475, *Aerospace series — Bearings and mechanical transmissions for airframe applications — Vocabulary*²

1 Published by: Department of Defense (DoD), the Pentagon, Washington, D.C., 20307, USA.

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