Irish Standard
I.S. EN 4266:2013

Aerospace series - Bearing spherical plain, metal to metal, in corrosion resisting steel, cadmium plated - Wide series - Dimensions and loads - Inch series

I.S. EN 4266:2013

Incorporating amendments/corrigenda/National Annexes issued since publication:

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EUROPEAN STANDARD

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English Version

Aerospace series - Bearing spherical plain, metal to metal, in corrosion resisting steel, cadmium plated - Wide series - Dimensions and loads - Inch series

Série aérospatiale - Rotules lisses métal à métal en acier à la corrosion, cadmiées - Série large - Dimensions et charges - Séries en inches

Luft- und Raumfahrt - Gelenklager, Metall auf Metall, aus korrosionsbeständigem Stahl, verkadmet - Breite Reihe - Maße und Belastungen - Inch Reihe

This European Standard was approved by CEN on 17 March 2011.

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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Foreword

This document (EN 4266:2013) 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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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

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1 Scope

This European Standard specifies the characteristics of spherical plain bearings, metal to metal, in corrosion resisting steel, cadmium plated and chromated, wide series, inch series for aerospace applications.

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 – 54 °C to 150 °C. As they are lubricated by means of the following greases:

— Code A: Grease as per MIL-PRF-23827C, operating temperature range – 73 °C to 121 °C;

— Code B: Grease as per MIL-PRF-81322G, 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-46010G or equivalent (anti-seizing protection).

The slide hole treatment either at the outer ring or inner ring.

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.

prEN 2030, *Aerospace series — Steel FE-PM3501 (X105CrMo17) — Hardened and tempered — Bars D = 150 mm*

EN 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength ≤ 1 450 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 ≤ 200 mm, R_m ≥ 930 MPa*

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* [1)]

MIL-PRF-23827C, *Grease — Aircraft and instrument — Gear and actuator screw — NATO code number G-354* [2)]

MIL-PRF-46010G, *Lubricant — Solid film — Heat cured — Corrosion inhibiting — NATO code number S-1738* [2)]

MIL-PRF-81322G, *Grease — Aircraft — General purpose — Wide temperature range — NATO code number G-395* [2)]

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1) Published as ASD-STAN Technical Report at the date of publication of this standard (www.asd-stan.org).

2) Published by: Department of Defense (DoD), http://www.defenselink.mil/.