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BSI Standards Publication

Aerospace series - Bearing, spherical plain, metal to metal, extra wide inner ring in corrosion resisting steel - Dimensions and loads - Inch series

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National foreword

This British Standard is the UK implementation of EN 6097:2019.

The UK participation in its preparation was entrusted to Technical Committee ACE/12, Aerospace fasteners and fastening systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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EUROPÄISCHE NORM

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English Version

Aerospace series - Bearing, spherical plain, metal to metal, extra wide inner ring in corrosion resisting steel - Dimensions and loads - Inch series

Série aérospatiale - Rotule lisse, métal à métal, bague
intérieure extra large en acier résistant à la corrosion -
Dimensions et charges - Séries en inches

Luft- und Raumfahrt - Gelenklager, Metall auf Metall,
extra breiter Innenring aus korrosionsbeständigem
Stahl - Maße und Belastungen, Inch-Reihe

This European Standard was approved by CEN on 5 November 2018.

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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Contents

	Page
European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms, definitions and symbols.....	6
4 Requirements.....	6
4.1 Configuration, dimensions, tolerances and mass.....	6
4.2 Surface roughness.....	6
4.3 Material.....	12
4.4 Surface treatment	12
4.5 Swaging groove	12
4.6 Loads.....	13
4.7 Clearances.....	14
4.8 Temperature range, grease and lubricant.....	14
5 Designation.....	15
6 Marking.....	15
7 Technical specification.....	15
8 Quality management system.....	15
Annex A (informative) Standard evolution form.....	16
Bibliography.....	17

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European foreword

This document (EN 6097:2019) 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 November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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.

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Introduction

This document is published at edition P2. Former P1 and drafts may exist of Airbus development only but without any ASD-STAN official publication. In consequence configuration management discrepancies with these unofficial documents are under Airbus responsibility.

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1 Scope

This European standard specifies the characteristics of inch based spherical plain bearings, metal to metal, in corrosion resisting steel, extra wide inner ring inch series.

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

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.

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

EN 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength $\leq 1\,450$ 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, $R_m \geq 930$ MPa*

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

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

MIL-PRF-23827, *Grease, aircraft and instrument, gear and actuator screw, NATO code No.G-354 metric¹*

MIL-PRF-46010, *Lubricant, solid film, heat cured, corrosion — inhibiting, NATO Code-S-1738¹*

MIL-PRF-81322, *Grease, aircraft, general purpose, wide temperature range, NATO Code G-395¹*

TR 4475, *Aerospace series — Bearings and mechanical transmissions for airframe applications — Vocabulary²*

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

2 Published as ASD-STAN Technical Report 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).