



**NSAI**  
Standards

Irish Standard  
I.S. EN 6097:2019

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

**I.S. EN 6097:2019**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN 6097:2019 is the adopted Irish version of the European Document EN 6097:2019, 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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EUROPEAN STANDARD

EN 6097

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2019

ICS 49.035

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.

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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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EUROPÄISCHES KOMITEE FÜR NORMUNG

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

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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.

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**EN 6097:2019 (E)**

**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.



## 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  $D \leq 200$  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 metric*<sup>1</sup>

MIL-PRF-46010, *Lubricant, solid film, heat cured, corrosion — inhibiting, NATO Code-S-1738*<sup>1</sup>

MIL-PRF-81322, *Grease, aircraft, general purpose, wide temperature range, NATO Code G-395*<sup>1</sup>

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

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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](http://www.asd-stan.org)).

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