



NSAI
Standards

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:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:

This document is based on:
EN 4266:2013

Published:
12 April, 2013

This document was published
under the authority of the NSAI
and comes into effect on:
12 April, 2013

ICS number:

49.035

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

ICS 49.035

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.

CEN members are the national standards bodies of 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	5
4 Symbols and abbreviations	5
5 Requirements	5
5.1 Configuration, dimensions, tolerances and mass	5
5.2 Surface roughness.....	5
5.3 Material	5
5.4 Surface treatment.....	6
5.5 Loads and clearances	6
6 Designation	14
7 Marking	14
8 Technical specification	14

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.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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 $\leq 1\,450$ 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*

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⁾

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/>.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-