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Responsible committee: ACE/12 Aerospace fasteners and fastening systems

Interested committees:

Title: Draft BS EN 4265 BS Aerospace series - Bearing spherical plain, metal to metal in corrosion resisting steel - Wide series
- Dimensions and loads - Inch series.

Please notify the secretary if you are aware of any keywords that might assist in classifying or identifying the standard or if the content of this standard

- i) has any issues related to 3rd party IPR, patent or copyright
- ii) affects other national standard(s)
- iii) requires additional national guidance or information

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Introduction

This draft standard is based on national and international discussions. Your comments on this draft are invited and will assist in the preparation of the consequent standard.

For international standards, comments will be reviewed by the relevant UK national committee before sending the consensus UK vote and comments to the international committee, which will then decide appropriate action. If the international standard is approved, it is usual for the text to be published as a British Standard.

For national standards, comments will be reviewed by the relevant UK national committee and the resulting standards published as a British Standard.

UK Vote

Please indicate whether you consider the UK should submit a negative (with supporting technical reasons) or positive vote on this draft. Please indicate if you are aware of any reason why this draft standard should not be published as a British Standard.

Submission of Comments

- **Annotated drafts are not acceptable and will be rejected.**
- All comments should be submitted online at <https://standardsdevelopment.bsigroup.com/>. You will need to register in order to comment.

Template for comments and secretariat observations

Date: xx/xx/20xx	Document: ISO/DIS xxxx
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1	2	(3)	4	5	(6)	7
MB	Clause No./ Subclause No./Annex (e.g. 3.1)	Paragraph/ Figure/Table/Note	Type of comment	Comment (justification for change) by the MB	Proposed change by the MB	Secretariat observations on each comment submitted
	3.1	Definition 1	ed	Definition is ambiguous and needs clarifying.	Amend to read '...so that the mains connector to which no connection...'	
	6.4	Paragraph 2	te	The use of the UV photometer as an alternative cannot be supported as serious problems have been encountered in its use in the UK.	Delete reference to UV photometer.	

English Version

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

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

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

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

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Contents		Page
European foreword		3
1	Scope.....	4
2	Normative references.....	4
3	Terms and definitions	4
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.....	5
5.5	Loads and clearances.....	5
6	Designation	14
7	Marking	14
8	Technical specification	14
Bibliography		15

European foreword

This document (prEN 4265:2024) 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 document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, prior to its presentation to CEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 4265:2013.

This document includes the following significant technical changes with respect to EN 4265:2013:

- Value for the outer diameter for diameter code 05 in Table 1 corrected;
- Reference on TR 4661 for alternative materials added.

1 Scope

This document specifies the characteristics of spherical plain bearings, metal to metal, in corrosion resisting steel, passivated, 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 are used in the temperature range $-54\text{ }^{\circ}\text{C}$ to $150\text{ }^{\circ}\text{C}$. As they are lubricated by means of the following greases:

Code A: Grease as per MIL-PRF-23827C, operating temperature range $-73\text{ }^{\circ}\text{C}$ to $121\text{ }^{\circ}\text{C}$.

Code B: Grease as per MIL-PRF-81322G, operating temperature range $-54\text{ }^{\circ}\text{C}$ to $177\text{ }^{\circ}\text{C}$.

The range of application for bearings lubricated with grease per code A is limited to $121\text{ }^{\circ}\text{C}$.

In both cases it is important to provide the spherical surface of the outer or inner ring 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 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 — $D \leq 150\text{ mm}$*

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 $D \leq 200\text{ mm}$, $R_m \geq 930\text{ MPa}$*

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

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

TR 4475,¹ *Aerospace series — Bearings and mechanical transmissions for airframe applications — Vocabulary*

TR 4661,¹ *Aerospace series — Bearings, flight controls — Materials and surface treatments*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in TR 4475 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org/>

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