



**SLOVENSKI STANDARD**  
**oSIST prEN 4265:2024**  
**01-november-2024**

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**Aeronavtika - Ležaj, krogelni, drsni, kovina na kovino, iz korozijsko odpornega jekla - Široki tip - Mere in obremenitve - Colske serije**

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

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

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

**Ta slovenski standard je istoveten z: prEN 4265**

[oSIST prEN 4265:2024](https://standards.sist.eu/standards/sist/4265/2024/osist-pr-en-4265-2024)

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**ICS:**

21.100.01	Ležaji na splošno	Bearings in general
49.035	Sestavni deli za letalsko in vesoljsko gradnjo	Components for aerospace construction

**oSIST prEN 4265:2024**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 4265**

August 2024

ICS 49.035

Will supersede EN 4265:2013

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.

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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

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

<b>Contents</b>		Page
<b>European foreword</b> .....		<b>3</b>
<b>1</b>	<b>Scope</b> .....	<b>4</b>
<b>2</b>	<b>Normative references</b> .....	<b>4</b>
<b>3</b>	<b>Terms and definitions</b> .....	<b>4</b>
<b>4</b>	<b>Symbols and abbreviations</b> .....	<b>5</b>
<b>5</b>	<b>Requirements</b> .....	<b>5</b>
<b>5.1</b>	<b>Configuration, dimensions, tolerances and mass</b> .....	<b>5</b>
<b>5.2</b>	<b>Surface roughness</b> .....	<b>5</b>
<b>5.3</b>	<b>Material</b> .....	<b>5</b>
<b>5.4</b>	<b>Surface treatment</b> .....	<b>5</b>
<b>5.5</b>	<b>Loads and clearances</b> .....	<b>5</b>
<b>6</b>	<b>Designation</b> .....	<b>14</b>
<b>7</b>	<b>Marking</b> .....	<b>14</b>
<b>8</b>	<b>Technical specification</b> .....	<b>14</b>
<b>Bibliography</b> .....		<b>15</b>

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## 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.

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**prEN 4265:2024 (E)****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 —  $D_e \leq 150\text{ mm}$*

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,<sup>1</sup> *Aerospace series — Bearings and mechanical transmissions for airframe applications — Vocabulary*

TR 4661,<sup>1</sup> *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/>

<sup>1</sup> Published as ASD-STAN Technical Report at the date of publication of this document, ([www.asd-stan.org](http://www.asd-stan.org)).