Lennunduse ja kosmonautika seeria. Ilma koostepesata korrosioonikindlast terasest siledad liigendliugelaagrid. Mõõtmed ja koormused

Aerospace series - Bearings-spherical plain in corrosion resisting steel without assembly slot - Dimensions and loads

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 2335:2000 sisaldab Euroopa standardi EN 2335:1988+AC1:1988 ingliskeelset teksti.	This Estonian standard EVS-EN 2335:2000 consists of the English text of the European standard EN 2335:1988+AC1:1988.
Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 11.01.2000 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

ICS 49.035

aeronautikatööstus, korrosioonikindel teras, liigendlaager, mõõtmed, silelaager, staatiline koormus

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 2335

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Key words : Aeronautical industry, plain bearing, spherical bearing, corrosion resisting steel, dimensions, static loads.

English version

Aerospace series
Bearings-spherical plain
in corrosion resisting steel
without assembly slot
Dimensions and loads

Série aérospatiale
Rotules lisses
en acier résistant à la corrosion
sans encoche d'assemblage
Dimensions et charges

Luft- und Raumfahrt
Gelenklager
aus korrosionsbeständigem Stahl
ohne Einführnut
Maße und Belastungen

This European Standard was accepted by CEN on 1987-11-16. CEN members are bound to comply with the requirements of CEN 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 Central Secretariat 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 CEN Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat : Rue Bréderode 2, B—1000 Bruxelles

Brief history

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After enquiries and votes carried out in accordance with the rules of this Association, this draft has successively received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to C.E.N.
According to the Common CEN/CENELEC Rules, following countries are bound to implement this European Standard:

1 Scope

This standard specifies the characteristics of spherical plain bearings :

- without assembly slot
- with and without swaging grooves
- with and without grease holes
- with and without lubrication grooves
- in corrosion resisting steel

intended for fixed and moveable structural elements in aircraft and their control mechanisms.

2 Field of application

The spherical plain bearings defined by this standard are to be used within the temperature range -54 to +150 °C.

However, because of lubrication with the following greases (see EN 2337) :

- ester type extreme pressure grease (code A) limits of use -73 to +121°C or
- synthetic hydrocarbon extreme pressure grease, for general purpose (code B) limits of use -54 to +177 °C,

the field of application in the case of lubrication with grease A is limited to 121 °C.

In both cases the spherical surface of the outer ring shall be smeared with a dry film lubricant (anti-seize treatment).

3 References

ISO 1132-1980, Rolling bearings - Tolerances - Definitions

EN 2030 , Steel FE-PM43 - Hardened and tempered - Bars D $\leq$ 150 mm - Aerospace series

EN 2136 , Steel FE-PM42 - 900 MPa $\leq$ Rm < 1100 MPa - Bars $D_e \leq$ 100 mm Aerospace series

EN 2337 , Aerospace series - Spherical plain bearings - Technical specification [1)]

EN 2539 , Aerospace series - Steel FE-PM61 - Rm $\geq$ 960 MPa - Bars $D_e \leq$ 90 mm [1)]

4 Symbols and definitions

The tolerance symbols and their definitions are in accordance with ISO 1132.

Δ_{dmp} : difference between a single plane mean bore diameter and the nominal bore diameter

Δ_{ds} : difference between a single bore diameter and the nominal bore diameter

Δ_{Dmp} : difference between a single plane mean outside diameter and the nominal outside diameter

Δ_{Ds} : difference between a single outside diameter and the nominal outside diameter

α : maximun angle of tilt of the outer ring with respect to the inner ring with the spherical raceway of the outer ring being completely in contact with the inner ring.

1) In preparation.