# Aerospace series - Bearings, precision ball in corrosion resisting steel for instruments and equipment - Technical specification

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#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
2130:2002 sisaldab Euroopa standardi EN
2130:2001 ingliskeelset teksti.

Käesolev dokument on jõustatud 19.04.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 2130:2002 consists of the English text of the European standard EN 2130:2001.

This document is endorsed on 19.04.2002 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This standard specifies the required characteristics, inspection and test methods, qualification and acceptance conditions for precision ball bearings, in corrosion resisting steel, with a nominal bore diameter < = 8 mm, used for aerospace instruments and equipment. It is applicable whenever referenced.

#### Scope:

This standard specifies the required characteristics, inspection and test methods, qualification and acceptance conditions for precision ball bearings, in corrosion resisting steel, with a nominal bore diameter < = 8 mm, used for aerospace instruments and equipment. It is applicable whenever referenced.

ICS 49.035

**Võtmesõnad:** acceptance testing, corrosion-resistant s, measurement, non-des, nondestructive tests, packages, packing, precision ball bearings, precision bearings, quality assurance, rolling bearings, space transport, steels, testing, tolerances, tolerances (measurement)

### EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

**EN 2130** 

October 2001

ICS 49.035

#### **English version**

## Aerospace series - Bearings, precision ball in corrosion resisting steel for instruments and equipment - Technical specification

Série aérospatiale - Roulements à billes de précision en acier résistant à la corrosion pour instruments et équipements - Spécification technique

Luft- und Raumfahrt - Präzisionskugellager aus korrosionsbeständigem Stahl für Instrumente und Geräte -Technische Lieferbedingungen

This European Standard was approved by CEN on 15 January 2001.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

#### **Foreword**

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

After inquiries 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 AECMA, 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 April 2002, and conflicting national standards shall be withdrawn at the latest by April 2002.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

#### 1 Scope

This standard specifies the required characteristics, inspection and test methods, qualification and acceptance conditions for precision ball bearings, in corrosion resisting steel, with a nominal bore diameter  $\leq 8$  mm, used for aerospace instruments and equipment.

It is applicable whenever referenced.

#### 2 Normative references

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies (including amendments).

ISO 1132-1	Rolling bearings – Tolerances – Part 1: Terms and definitions
ISO 2859-1	Sampling procedures for inspection by attributes – Part 1 : Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection
ISO 3290	Rolling bearings – Balls – Dimensions and tolerances
EN 2079	Aerospace series – Bearings, precision ball, with flange in corrosion resisting steel, for instruments and equipment – Dimensions and loads
EN 3042	Aerospace series – Quality assurance – EN aerospace products – Qualification procedure
EN 3446	Aerospace series – Bearings, precision ball without flange in corrosion resisting steel, for instruments and equipment – Dimensions and loads
EN 10204	Metallic products – Types of inspection documents

#### 3 Definitions

For the purposes of this standard, the following definitions apply:

#### 3.1 Precision ball bearing

#### 3.1.1 Shielded rolling bearing

A bearing whose rolling elements and raceways are protected with shields attached to one of the rings and separated from the other by a small space.

#### 3.1.2 Sealed rolling bearing

A bearing whose rolling elements and raceways are completely enclosed by seals attached to the outer ring and rubbing on the other.