

**Aerospace series - Ball bearings, rigid in corrosion  
resisting steel cadmium plated, for control cable pulleys  
- Dimensions and loads**

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## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN 3182:2012 sisaldab Euroopa standardi EN 3182:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 3182:2012 consists of the English text of the European standard EN 3182:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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ICS 49.035

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ICS 49.035

English Version

## Aerospace series - Ball bearings, rigid in corrosion resisting steel cadmium plated, for control cable pulleys - Dimensions and loads

Série aérospatiale - Roulements à billes, rigides en acier résistant à la corrosion cadmiés, pour poulies de câbles de commande - Dimensions et charges

Luft- und Raumfahrt - Hartkugellager aus korrosionsbeständigem Stahl, verkadmet, für Seilrollen für Steuerseile - Maße und Belastungen

This European Standard was approved by CEN on 24 September 2011.

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## Foreword

This document (EN 3182:2012) 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of an identical text or by endorsement, at the latest by September 2012, and conflicting national standards shall be withdrawn at the latest by September 2012.

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## 1 Scope

This European Standard specifies the characteristics of ball bearings fitted with shields or seals, for aircraft control cable pulleys.

The pulley bearings defined in this standard shall be used from  $-54\text{ °C}$  to  $150\text{ °C}$ .

However, being lubricated with the following greases:

- very high pressure grease, ester type (code A), operational range  $-73\text{ °C}$  to  $121\text{ °C}$  or
- very high pressure grease, synthetic hydrocarbons, general purpose (code B), operational range  $-54\text{ °C}$  to  $177\text{ °C}$  (refer to EN 2062);

their field of application when lubricated with code A grease shall be limited to  $121\text{ °C}$ .

## 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.

EN 2030, *Aerospace series — Steel FE-PM3501 (X105CrMo17) — Hardened and tempered — Bar  $D \leq 150\text{ mm}$* <sup>1)</sup>

EN 2062, *Fully non-metallic body pulleys, with bearing, for control cables - Technical specification - Aerospace series*<sup>1)</sup>

EN 2133, *Aerospace series - Cadmium plating of steels with specified tensile strength  $\leq 1\,450\text{ MPa}$ , copper, copper alloys and nickel alloys*

## 3 Definitions

Rigid bearings full complement (with or without cage), and one or two rows of balls.

## 4 Symbols and abbreviations

$\Delta ds$  = the deviation of a single bore diameter

$\Delta Ds$  = the deviation of a single outside diameter

$\Delta dmp$  = single plane mean bore diameter

$\Delta Dmp$  = single plane mean outside diameter

$C_S$  = permissible static radial load

$K_{ia}$  = radial runout of assembled bearing inner ring

$K_{ea}$  = radial runout of assembled bearing outer ring

$S_{ia}$  = assembled bearing inner ring face runout with raceway (groove)

$S_{ea}$  = assembled bearing outer ring face runout with raceway (groove)

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1) Published as ASD-STAN pre-standard at the date of publication of the present standard.