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Aerospace series - Bush, plain, in corrosion resisting steel with self-lubricating liner - Dimensions and loads



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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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 and Accreditation.
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English Version

## Aerospace series - Bush, plain, in corrosion resisting steel with self-lubricating liner - Dimensions and loads

Série aérospatiale - Bague cylindrique en acier  
résistant à la corrosion à garniture autolubrifiante -  
Dimensions et charges

Luft- und Raumfahrt - Buchse ohne Flansch aus  
korrosionsbeständigem Stahl mit selbstschmierender  
Beschichtung - Maße und Belastungen

This European Standard was approved by CEN on 26 March 2021.

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 CEN-CENELEC 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 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.



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

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## European foreword

This document (EN 2287:2022) 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 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 March 2023, and conflicting national standards shall be withdrawn at the latest by March 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 2287:2017.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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## 1 Scope

This document specifies the characteristics of plain bushes in corrosion resisting steel with self-lubricating liner and the design recommendation of shafts and housings.

The bushes are intended for operation within the temperature range of  $-55\text{ °C}$  to  $163\text{ °C}$  and assembly with an interference fit into fixed and moving aerospace parts.

## 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 2311, *Aerospace series — Bushes with self-lubricating liner — Technical specification*

EN 3161, *Aerospace series — Steel FE-PM3801 (X5CrNiCu17-4) — Air melted, solution treated and precipitation treated, bar  $a$  or  $D \leq 200\text{ mm}$ ,  $R_m \geq 930\text{ MPa}$*

EN 3490, *Aerospace series — Steel FE-PM3901 (X15CrNi17-3) — Air melted — Hardened and tempered — Bar for machining —  $D_e \leq 200\text{ mm}$  —  $900\text{ MPa} \leq R_m \leq 1\,100\text{ MPa}$*

## 3 Terms and definitions

No terms and definitions are listed in this document.

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/>

## 4 Requirements

### 4.1 Configuration — Dimensions — Masses

Configuration: according to Figure 1.

Dimensions, masses: according to Figure 1 and Table 1.

### 4.2 Surface roughness

According to Figure 1.

### 4.3 Materials

Bush: Steel according to EN 3490 or EN 3161.

Liner: Self-lubricating wear resistant material consistent with the requirements of EN 2311.