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



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	This Estonian standard EVS-EN 2287:2017 consists of the English text of the European standard EN 2287:2017.	
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 49.030.99

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## EUROPEAN STANDARD

## NORME EUROPÉENNE

## **EUROPÄISCHE NORM**

August 2017

**EN 2287** 

ICS 49.030.99

Supersedes EN 2287:1989

### **English Version**

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

Série aérospatiale - Bagues cylindriques 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 2 July 2017.

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.

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

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## **European foreword**

This document (EN 2287:2017) 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 February 2018, and conflicting national standards shall be withdrawn at the latest by February 2018.

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 2287:1989.

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## 1 Scope

This European Standard 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 °C to 163 °C and assembly with an interference fit into fixed and moving aerospace parts.

#### 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 2136, Aerospaces — Steel FE-PM 42, 900 MPa  $\leq$   $R_{\rm m} \leq$  1100 MPa, bars  $D_{\rm e} \leq$  100 mm<sup>1</sup>)

EN 2311, Aerospace series — Bushes with self-lubricating liners — Technical specification

EN 2539, Aerospace series — Steel FE-PM3801 (X5CrNiCu17-4) — Air melted — Solution annealed and precipitation treated — Bar, a or D  $\leq$  200 mm,  $R_{\rm m} \geq$  965 MPa<sup>2</sup>)

## 3 Required characteristics

## 3.1 Configuration - Dimensions - Masses

Configuration: according to Figure 1.

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

### 3.2 Surface roughness

According to Figure 1.

#### 3.3 Materials

Bush: Steel according to EN 2136 or EN 2539.

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

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<sup>1)</sup> Published as ASD-STAN Standard at the date of publication of this standard. http://www.asd-stan.org/

<sup>2)</sup> Published as ASD-STAN Prestandard at the date of publication of this standard.