

**Lennunduse ja kosmonautika seeria. Isemääriva  
kattega korrosioonikindlast terasest silepuksid.  
Mõõtmed ja koormused**

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 2287:2000 sisaldab Euroopa standardi EN 2287:1989 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 11.01.2000 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 2287:2000 consists of the English text of the European standard EN 2287:1989.

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.

The standard is available from Estonian standardisation organisation.

ICS 49.030.99

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E/S

December 1989

UDC : 629.7.02+05:621.887-408.2-72.004.1:669.14.018.89

Key words : Aeronautical industry, bush, corrosion resisting steel, liner, self-lubricating piece, dimension.

English version

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

Série aéronautique  
Bagues cylindriques  
en acier résistant à la corrosion  
à garniture autolubrifiante  
Dimensions et charges

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

This European Standard was accepted by CEN on 1988-11-03. 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.

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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 inquiries and votes carried out in accordance with the rules of this Association, this Standard has successively received the approval of the National Associations and the Official Services of the member countries of AECMA, prior to its presentation to CEN.

According to the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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## 1 Scope

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

## 2 Field of application

The bushes are intended for operation within the temperature range of  $-55\text{ }^{\circ}\text{C}$  to  $+150\text{ }^{\circ}\text{C}$  and assembly with an interference fit into fixed and moving aerospace parts.

## 3 References

EN 2136, Steel FE-PM42 -  $900\text{ MPa} \leq R_m \leq 1100\text{ MPa}$  - Bars  $D_e \leq 100\text{ mm}$  - Aerospace series 1)

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

EN 2539, Aerospace series - Steel FE-PM61 - Solution annealed and precipitation hardened -  $R_m \geq 960\text{ MPa}$  - Bar  $D_e \leq 120\text{ mm}$  2)

## 4 Required characteristics

### 4.1 Configuration - Dimensions - Tolerances - Masses

Configuration : see figure 1.

Dimensions, tolerances and masses : see figure 1 and table 1.

### 4.2 Surface roughness

See figure 1.

### 4.3 Materials

Bush : Steel EN 2136 or EN 2539

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

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1) Published as AECMA standard.  
2) Published as AECMA pre-standard.