

Aerospace series - Bushes, plain, aluminium alloy, with self-lubricating liner - Dimensions and loads

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 2285:2017 sisaldab Euroopa standardi EN 2285:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 2285:2017 consists of the English text of the European standard EN 2285:2017.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 03.05.2017.	Date of Availability of the European standard is 03.05.2017.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 49.030.99

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Aerospace series - Bushes, plain, aluminium alloy, with self-lubricating liner - Dimensions and loads

Série aérospatiale - Bagues cylindriques en alliage d'aluminium à garniture autolubrifiante - Dimensions et charges

Luft- und Raumfahrt - Buchsen aus Aluminium-Legierung mit selbstschmierender Beschichtung - Maße und Belastungen

This European Standard was approved by CEN on 2 January 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.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Required characteristics	4
3.1 Configuration — Dimensions — Masses.....	4
3.2 Surface roughness.....	4
3.3 Materials.....	4
3.4 Surface treatment.....	5
4 Designation.....	8
5 Marking.....	8
6 Technical specification.....	8
7 Design recommendation.....	9
Annex A (informative) Standard evolution form.....	10

European foreword

This document (EN 2285:2017) 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 European 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 November 2017, and conflicting national standards shall be withdrawn at the latest by November 2017.

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 2285:1989.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the characteristics of plain bushes in aluminium alloy 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 121 °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 2086, *Aerospace series — Aluminium alloy AL-P2618A — T851 — Hand and die forgings — $a \leq 150\text{ mm}$*

EN 2101, *Aerospace series — Chromic acid anodizing of aluminium and wrought aluminium alloys*

EN 2284, *Aerospace series — Sulphuric acid anodizing of aluminium and wrought aluminium alloys*

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

EN 2701, *Aerospace series — Aluminium alloy (2024) — Solution treated, water quench, cold worked and naturally aged (T3) — Drawn tube for structures — $0,6 \leq a \leq 12,5\text{ mm}^1$*

EN 2704, *Aerospace series — Aluminium alloy AL-P2024 — AlCu4Mg1 — T3511 — Drawn bars — $D_e \leq 75\text{ mm}^2$*

3 Required characteristics

3.1 Configuration — Dimensions — Masses

Configuration: according to Figure 1.

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

Dimensions apply after surface treatment.

3.2 Surface roughness

According to Figure 1.

3.3 Materials

Bush: Aluminium alloy according to EN 2086, EN 2701 or EN 2704.

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

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

²⁾ Published as ASD-STAN Prestandard at the date of publication of this European Standard. <http://www.asd-stan.org/>