# Aerospace series - Washers, lock, with radial serrations in alloy steel, cadmium plated for flight control rods - Dimensions

Aerospace series - Washers, lock, with radial serrations in alloy steel, cadmium plated for flight control rods - Dimensions



# EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN	This Estonian standard EVS-EN
2327:2006 sisaldab Euroopa standardi EN	2327:2006 consists of the English text of
2327:2006 ingliskeelset teksti.	the European standard EN 2327:2006.
Käesolev dokument on jõustatud	This document is endorsed on 29.06.2006
29.06.2006 ja selle kohta on avaldatud	with the notification being published in the
teade Eesti standardiorganisatsiooni	official publication of the Estonian national
ametlikus väljaandes.	standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala:	Scope:
This standard specifies the characteristics	This standard specifies the characteristics
of lock washers with radial serrations	of lock washers with radial serrations
primarily intended for flight control rods.	primarily intended for flight control rods.
These lock washers are intended to	These lock washers are intended to
immobilise the rod end in relation to the	immobilise the rod end in relation to the
rod body, whilst allowing a precise	rod body, whilst allowing a precise
positional adjustment.	positional adjustment.
	4

## ICS 49.030.50

Võtmesõnad: control devices, flight control, machine components, manipulating, marking, materials, measurement, radial, radial serrations, separating parts, serrations (mechanical components), space transport, splines, steels, tolerances, tolerances (measurement), washers

# **EUROPEAN STANDARD** NORME EUROPÉENNE **EUROPÄISCHE NORM**

# EN 2327

May 2006

ICS 49.030.50

Supersedes EN 2327:1987

**English Version** 

# Aerospace series - Washers, lock, with radial serrations in alloy steel, cadmium plated for flight control rods - Dimensions

Série aérospatiale - Freins à stries radiales en acier allié, cadmiés pour bielles de commandes de vol - Dimensions Luft- und Raumfahrt - Sicherungen, radial verzahnt, aus legiertem Stahl, verkadmet für Bediengestänge von Flugsteuerungen - Maße

This European Standard was approved by CEN on 26 October 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

# Contents

#### Page

2 Normative references 4   3 Required characteristics 4   4 Designation 6   5 Marking 7   6 Qualification 7   7 Qualification 7	Fore	word
3 Required characteristics   4 Designation   5 Marking   7 Qualification   7 Qualification	1	Scope
4 Designation 6   5 Marking 7   6 Qualification 7   7 Qualification 7	2	Normative references4
5 Marking	3	Required characteristics4
§ Quelification	4	Designation6
The is a provide way of the prov	5	Marking7
	6	Qualification
2		This a preview denerated by the
	2	

## Foreword

This European Standard (EN 2327:2006) has been prepared by the European Association of Aerospace Manufacturers - Standardization (AECMA-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 AECMA, 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 2006, and conflicting national standards shall be withdrawn at the latest by November 2006.

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

This European Standard supersedes EN 2327:1987.

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

å Gre kand, Pc

#### 1 Scope

This standard specifies the characteristics of lock washers with radial serrations primarily intended for flight control rods.

These lock washers are intended to immobilise the rod end in relation to the rod body, whilst allowing a precise positional adjustment.

#### Normative references 2

The following referenced documents are indispensable for the application 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 2133, Aerospace series – Cadmium plating of steels with specified tensile strength  $\leq$  1 450 MPa, copper, copper alloys and nickel alloys.

EN 2438, Steel FE-PL62 – 900 MPa  $\leq R_m \leq 1$  100 MPa – Bars  $D_e \leq 40$  mm – Aerospace series. <sup>1)</sup>

EN 2439, Steel FE-PL62 – 900 MPa  $\leq R_m \leq 1$  100 MPa – Forgings  $D_e \leq 40$  mm – Aerospace series. <sup>1)</sup>

EN 9133, Aerospace series — Quality management systems — Qualification procedure for aerospace standard parts.

#### **Required characteristics** 3

### 3.1 Dimensions – Mass

Configuration shall correspond to Figures 1, 2 and 3.

The dimensions and masses shall conform with values quoted in Tables 1 and 2. 

Dimensions apply after cadmium plating.

### 3.2 Surface roughness

 $R_{\rm a}$  = 3,2 µm. This value applies prior to cadmium plating.

### 3.3 Material

Steel according to EN 2438. Steel according to EN 2439.

### 3.4 Surface treatment

Cadmium plated according to EN 2133, 10 µm to 20 µm.

<sup>1)</sup> Published as AECMA Standard at the date of publication of this standard