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BSI Standards Publication

**Aerospace series - Rod-end with bearing per
EN 4614 with self lubricating liner in corrosion
resisting steel with external threaded shank
- Dimensions and loads - Inch series**

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National foreword

This British Standard is the UK implementation of EN 6056:2019.

The UK participation in its preparation was entrusted to Technical Committee ACE/12, Aerospace fasteners and fastening systems.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Compliance with a British Standard cannot confer immunity from legal obligations.

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Amendments/corrigenda issued since publication

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EUROPÄISCHE NORM

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English Version

Aerospace series - Rod-end with bearing per EN 4614 with self lubricating liner in corrosion resisting steel with external threaded shank - Dimensions and loads - Inch series

Série aérospatiale - Embout à rotule lisse suivant EN 4614, en acier résistant à la corrosion, à garniture autolubrifiante, avec filetage extérieur - Dimensions et charges - Série en inches

Luft- und Raumfahrt - Ösenkopf mit Gelenklager nach EN 4614 mit selbstschmierender Beschichtung aus korrosionsbeständigem Stahl mit Außengewinde - Maße und Belastungen - Inch Reihe

This European Standard was approved by CEN on 5 November 2018.

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: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 6056:2019) 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 November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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.

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.

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Introduction

This document is published at edition P2. Former P1 and drafts may exist of Airbus development only but without any ASD-STAN official publication. In consequence configuration management discrepancies with these unofficial documents are under Airbus responsibility.

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1 Scope

This European standard specifies the characteristics of adjustable rod-ends consisting of:

- a self-aligning ball bearing with self-lubricating liner (EN 4614);
- a rod-end with threaded shank with an optional longitudinal groove for locking purposes.

They are intended for use in fixed or moving parts of the aircraft structure and their control mechanisms.

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 2068, *Aerospace series — Rod ends with self-lubricating, self-aligning bearings — Technical specification*

EN 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength $\leq 1\,450$ MPa, copper, copper alloys and nickel alloys*

EN 2424, *Aerospace series — Marking of aerospace products*

EN 4614, *Aerospace series — Spherical plain bearing in corrosion resisting steel with self-lubricating liner, wide series — Dimensions and loads — Inch series*

ISO 1132-1, *Rolling bearings — Tolerances — Part 1: Terms and definitions*

ISO 3161, *Aerospace — UNJ threads — General requirements and limit dimensions*

ISO 3353-1, *Aerospace — Lead and runout threads — Part 1: Rolled external threads*

ISO 3353-2, *Aerospace — Lead and runout threads — Part 2: Internal threads*

ISO 8074, *Aerospace — Surface treatment of austenitic stainless steel parts*

NAS 559, *Lock-rod end (key type)*¹

SAE AMS 5643, *Steel, corrosion resistant, bars wire, forgings, tubing and rings 16Cr-4.0Ni-0.30(Cb+Ta)-4.0Cu solution heat treated, precipitation hardenable*

TR 4475, *Bearings and mechanical transmissions for airframe applications — Vocabulary*²

1 Published by: Aerospace Industries Association of America, Inc. (AIA), 1250 Eye Street, N.W., Washington, D.C. 20005-3924, USA.

2 Published as ASD-STAN Technical Report at the date of publication of this European standard by AeroSpace and Defence industries Association of Europe – Standardization (ASD-STAN) (see www.asd-stan.org).