

## BSI Standards Publication

Aerospace series - Rod-end with bearing EN 4265 in corrosion resisting steel, external threaded shank - Dimensions and loads - Inch series



BS EN 6055:2019 BRITISH STANDARD

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## **National foreword**

This British Standard is the UK implementation of EN 6055:2019.

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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## **EUROPÄISCHE NORM**

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### **English Version**

# Aerospace series - Rod-end with bearing EN 4265 in corrosion resisting steel, external threaded shank - Dimensions and loads - Inch series

Série aérospatiale - Embout à rotule lisse suivant EN 4265, en acier résistant à la corrosion, avec filetage extérieur - Dimensions et charges - Série en inches

Luft- und Raumfahrt - Ösenkopf mit Gelenklager nach EN 4265 aus korrosionsbeständigem Stahl, mit Aussengewinde - Maße und Belastungen - Inch Reihe

This European Standard was approved by CEN on 12 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

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## **Contents**

		Page
Europ	pean foreword	3
Introduction		4
1	Scope	5
2	Normative references	5
3	Terms, definitions and symbols	6
4	Requirements	6
4.1	Configuration, dimensions, tolerances and mass	
4.2 4.3	Surface roughnessRight or left hand thread	
4.4	With or without longitudinal groove	
4.5	Material	
4.6	Surface treatment	10
4.7	Loads	
4.8	Clearance	12
4.9	Temperature range and lubricant	12
5	Designation	
6	Marking	
7	Technical specification	
8	Quality management systems	13
Anne	x A (normative) Verification of fatigue loads	14
<b>A.1</b>	Standard rod-end fatigue spectrum	14
<b>A.2</b>	Method	
Anne	x B (informative) Standard evolution form	
Biblic	ography	16

## **European foreword**

This document (EN 6055:2019) 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.

BS EN 6055:2019 **EN 6055:2019 (E)** 

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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.

## 1 Scope

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

- a spherical plain bearing, metal to metal, in corrosion resisting steel, wide series (EN 4265);
- 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 2133, Aerospace series — Cadmium plating of steels with specified tensile strength  $\leq 1450$  MPa, copper, copper alloys and nickel alloys

EN 2424, Aerospace series — Marking of aerospace products

EN 4265, Aerospace series — Bearing spherical plain, metal to metal in corrosion resisting steel — Wide series — Dimensions and loads — Inch series

EN 6099, Aerospace series — Rod-ends with plain bearing, metal to metal — Technical Specification

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

MIL-PRF-23827, Grease, aircraft and instrument, gear and actuator screw, NATO Code No.G-354 metric<sup>1</sup>

MIL-PRF-46010, Lubricant, solid film, heat cured, corrosion inhibiting, NATO Code-S-1738<sup>1</sup>

MIL-PRF-81322, Grease, aircraft, general purpose, wide temperature range, NATO Code-G-395<sup>1</sup>

NAS 559, Lock-rod end (key type)<sup>2</sup>

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<sup>2</sup>

TR 4475, Bearings and mechanical transmissions for airframe applications — Vocabulary<sup>3</sup>

<sup>1</sup> Published by: Department of Defense (DoD), the Pentagon, Washington, D.C., 20307, USA.

<sup>2</sup> Published by: Aerospace Industries Association of America, Inc. (AIA), 1250 Eye Street, N.W., Washington, D.C. 20005-3924, USA

<sup>3</sup> 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) (www.asd-stan.org).