

STN	Letectvo a kozmonautika Nastaviteľné kĺbové hlavice s dvojradowým naklápacím guľkovým ložiskom a stopkou so závitom z nehrdzavejúcej ocele so zmenšenou vnútornou radiálnou vôľou Rozmery a zaťaženia	STN EN 4036 31 4778
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Aerospace series - Rod end, adjustable, with self-aligning double row ball bearing and threaded shank, in corrosion resisting steel, reduced internal radial clearance - Dimensions and loads

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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EUROPEAN STANDARD

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English Version

**Aerospace series - Rod end, adjustable, with self-aligning
double row ball bearing and threaded shank, in corrosion
resisting steel, reduced internal radial clearance -
Dimensions and loads**

Série aérospatiale - Embout réglable à roulement à rotule sur deux rangées de billes et tige filetée, en acier résistant à la corrosion, jeu interne radial réduit -
Dimensions et charges

Luft- und Raumfahrt - Einstellbarer Ösenkopf mit zweireihigem Pendelkugellager und Gewindenschaft aus korrosionsbeständigem Stahl, reduzierte radiale Lagerluft - Maße und Belastungen

This European Standard was approved by CEN on 13 February 2021.

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

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EN 4036:2021 (E)

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European foreword

This document (EN 4036:2021) 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 document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2021, and conflicting national standards shall be withdrawn at the latest by September 2021.

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 will supersede EN 4036:2006.

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

EN 4036:2021 (E)**1 Scope**

This document specifies the characteristics of adjustable rod ends with self-aligning double row ball bearing with reduced internal radial clearance and threaded shank in corrosion resisting steel, designed to withstand only slow rotations and oscillations under load.

They consist of:

- a rod end comprising:
- circumferential groove to identify location;
- either seals or shields;
- an optional longitudinal groove for locking purpose;
- an inner ring with balls.

These rod ends are intended for use with flight control rods or rods for aerospace structures.

They are intended to be used in the temperature range: -54 °C to 150 °C .

However, being lubricated with the following greases:

- very high pressure grease, ester type (code A), operational range -73 °C to 121 °C ; or
- very high pressure grease, synthetic hydrocarbons, general purpose (code B), operational range -54 °C to 177 °C (see EN 2067);

their field of application when lubricated with code A grease is limited to 121 °C .

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 2030, *Aerospace series — Steel X105CrMo17 (1.3544) — Hardened and tempered — Bars — $De \leq 150\text{ mm}$*

EN 2067, *Aerospace series — Rod ends with self-aligning ball bearings — Technical specification*

EN 2226, *Aerospace series — Steel X105CrMo17 (1.4125) — Hardened and tempered — Hand and die forgings — $De \leq 150\text{ mm}$*

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

EN 3490, *Aerospace series — Steel FE-PM3901 (X15CrNi17-3) — Air melted — Hardened and tempered — Bar for machining — $De \leq 200\text{ mm}$ — $900\text{ MPa} \leq Rm \leq 1\,100\text{ MPa}$*

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

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

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*

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

ISO 8075, *Aerospace — Surface treatment of hardenable stainless steel parts*

TR 3775, *Aerospace series — Bolts and pins — Materials*¹

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

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