



SLOVENSKI STANDARD
kSIST FprEN 4693:2016

01-maj-2016

Aeronavtika - Zglobna ročica z vgrajenim sornikom - Montažne kode A, B in C

Aerospace series - Tie rod with integrated bolts - Assembly code A, B and C

Luft- und Raumfahrt - Zug-Druck Stange mit integrierten Bolzen - Zusammenbaucode A, B und C

Série aérospatiale - Bielle avec axes intégrés - Code assemblage A, B et C

Ta slovenski standard je istoveten z: FprEN 4693

ICS:

49.035

Sestavni deli za letalsko in
vesoljsko gradnjo

Components for aerospace
construction

kSIST FprEN 4693:2016

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English Version

Aerospace series - Tie rod with integrated bolts - Assembly code A, B and C

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Luft- und Raumfahrt - Zug-Druck Stange mit integrierten Bolzen - Zusammenbaucode A, B und C

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

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European foreword

This document (FprEN 4693:2016) 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 document is currently submitted to the Formal Vote.

Introduction

Aerospace and Defence Standardization (ASD-STAN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent.

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1 Scope

This European Standard specifies the dimensions and tolerances of rod assemblies for aerospace applications with two adjustable ends with integrated bolts for interior and sub structure in the temperature range -55 °C to 85 °C. The rod ends should not be screwed completely apart.

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.

DIN 6799, *Retaining washers for shafts* ¹⁾

DIN 65038-1, *Aerospace — Steel, nickel- and cobalt-alloy bars — Technical specification* ¹⁾

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

EN 3311, *Aerospace series — Titanium alloy TI-P64001 (Ti-6Al-4V) — Annealed — Bar for machining — D < 110 mm*

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

EN 4691-1, *Aerospace series — Tie rod with integrated bolts — Part 1: Technical specification*

EN 4692, *Aerospace series — Tie rod with integrated bolts — Locking clip*

EN 10088-3, *Stainless steels — Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 2768-2, *General tolerances — Part 2: Geometrical tolerances for features without individual tolerance indications*

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

LN 9368-4, *Aerospace — Designation of surface treatments — Part 4: Code numbers for methods of anodic treatment* ¹⁾

LN 9368-7, *Aerospace — Designation of surface treatments — Part 7: Code numbers for methods of organic coating* ¹⁾

WL 1.4548 (all parts), *Aerospace — Precipitation-hardening stainless chromium-nickel-copper steel with approx. 0,05C-16Cr-4Cu-4Ni* ¹⁾

WL 3.1354 (all parts), *Aerospace — Wrought aluminium alloy with approx. 4,4Cu-1,5Mg-0,6Mn* ¹⁾

FAR/JAR/CS 25.853, *Compartment Interiors* ²⁾

¹⁾ Published by: Beuth Verlag GmbH. www.beuth.de

²⁾ European Aviation Safety Agency, Postfach 101253, D-50452 Koeln, Germany.

3 Requirements

3.1 Configuration, dimensions, tolerances and masses

3.1.1 Configuration

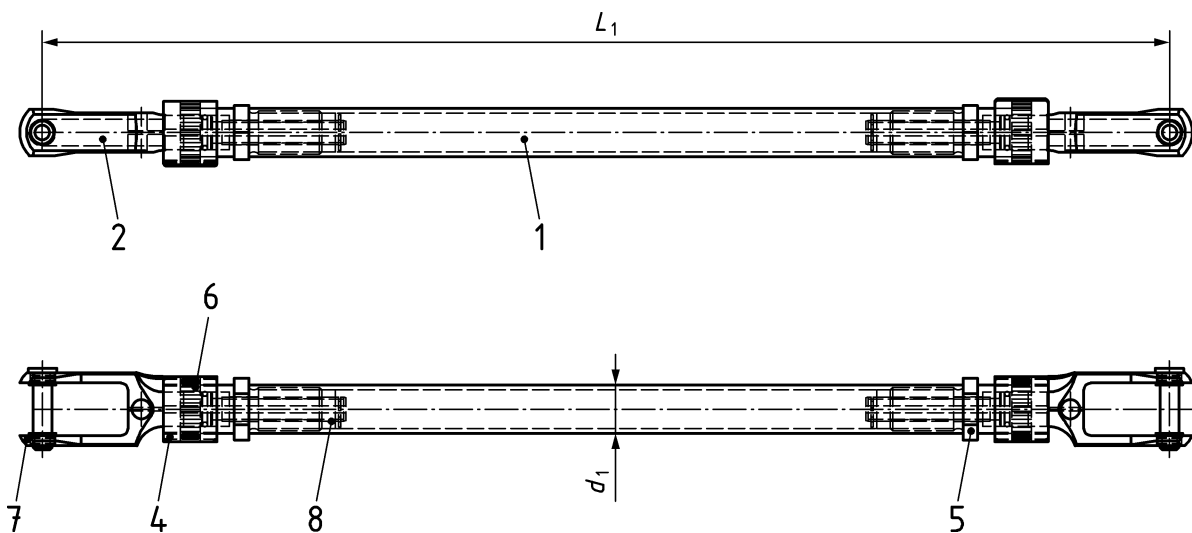
The configuration shall be in accordance with Figure 1, Figure 2 and Figure 3.

3.1.2 Dimensions, tolerances and masses

Dimensions are in millimetres, tolerances and masses in accordance to Table 4, Table 5, Table 6, Table 7 and Table 8. General tolerances shall be in accordance to ISO 2768-mK. Missing dimensions are manufacturing options.

4 Assembly code definitions

Assembly code A, B and C are shown in Figure 1, Figure 2 and Figure 3. For assembly code A, B and C: $d_1 = 20$ mm and adjustable range for $L_1 = \pm 12,7$ mm.



Key

1 - 2 - 4 - 5 - 6 - 7 and 8 The position numbers and the materials are shown in Table 1 and Table 2.

Figure 1 — Assembly code A