Belgian Standard

EN 4694:2017

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Aerospace series - Tie rod with integrated bolts - Assembly code D, E and F

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EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN 4694**

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English Version

Aerospace series - Tie rod with integrated bolts - Assembly code D. E and F

Série aérospatiale - Bielle avec axes intégrés - Code assemblage D, E et F

Luft- und Raumfahrt - Zug-Druck Stange mit integrierten Bolzen - Zusammenbaucode D, E und F

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

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		NBN EN 4694:2017	
W first 7 pages	EN 4694:2017 (E)		
©2020 NBN. All rights reserved – PREVIEW first 7 pages	Cont		Page
@50	Europ	ean foreword	3
	Introd	uction	
	1	Scope	5
	2	Normative references	5
	3	Requirements	6
	4	Assembly code definitions	6
	5	Materials	8
	6	Locking clips	9
	7	Fork and eye ends	10
	8	Mass calculation of tie rods	18
	9	Marking	21
	10	Dimensions	22
	11	Designation	22
	12	Technical specification	22
	Annex	A (informative) Standard evolution form	23

European foreword

This document (EN 4694:2017) 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of an identical text or by endorsement, at the latest by April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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.

EN 4694:2017 (E)

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.

USA: US 8371767

China: CN 10104431

Japan: JP 4885140

Russia: RU 2389914

South Africa: ZA 2007/03913

Canada: 2584387

South Korea: 7011559

ASD-STAN takes no position concerning the evidence, validity and scope of this patent right.

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1 Scope

This 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 shafts¹⁾

DIN 65038-1, Aerospace — Steel, nickel- and cobalt-alloy bars — Technical specification¹⁾

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 treatment¹⁾

LN 9368-7, Aerospace — Designation of surface treatments — Part 7: Code numbers for methods of organic coating¹⁾

WL 1.4548 (all parts), Aerospace - Precipitation-hardening stainless chromium-nickel-copper steel with approx. 0,05C-16Cr-4Cu-4Ni¹)

WL 3.1354 (all parts), Aerospace — Wrought aluminium alloy with approx. 4,4Cu-1,5Mg-0,6Mn¹⁾

FAR/JAR/CS 25.853, Compartment Interiors²)

¹⁾ Published by: Beuth Verlag GmbH. <u>www.beuth.de</u>

²⁾ Published by: European Aviation Safety Agency, Postfach 101253, D-50452 Koeln, Germany