SLOVENSKI STANDARD
oSIST prEN 6069:2019

01-januar-2019

Aeronavtika - Kovice, 100° zmanjšana ugrezna glava, ozka toleranca - Palčne mere

Aerospace series - Rivet, 100° reduced flush head, close tolerance - Inch series

Luft- und Raumfahrt - Vollniet, 100° reduzierter Senkkopf, enge Toleranz - Inch-Reihe

Série aérospatiale - Rivets de précision, tête fraisée réduite 100° - Série en inches

Ta slovenski standard je istoveten z: **prEN 6069**

ICS:

49.030.60 Kovice Rivets

oSIST prEN 6069:2019 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 6069

October 2018

ICS 21.060.40

Will supersede EN 6069:2009

English Version

Aerospace series - Rivet, 100° reduced flush head, close tolerance - Inch series

Série aérospatiale - Rivets de précision, tête fraisée réduite 100° - Série en inches

Luft- und Raumfahrt - Vollniet, 100° reduzierter Senkkopf, enge Toleranz - Inch-Reihe

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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 (prEN 6069:2018) 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 is currently submitted to the CEN Enquiry.

This document will supersede EN 6069:2009.

Introduction

This document is published at Airbus agreed version prEN 6069 edition P4. Former issue 1 to 3 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 document specifies the dimensions, tolerances and mass of rivets with 100° reduced flush head, close tolerance, inch series, for aerospace application.

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 2115, *Aerospace series - Aluminium alloy 2117-T42 - Wire for solid rivets – D ≤ 10 mm*

EN 2116, *Aerospace series - Aluminium alloy 2017A-T42 - Wire for solid rivets – D ≤ 10 mm*

EN 2117, *Aerospace series - Aluminium alloy AL-P5056A (5056A)-H32 - Wire for solid rivets – D ≤ 10 mm*

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

EN 2941, *Aerospace series - Nickel alloy rivets - Technical specification*

EN 3115, *Aerospace series - Aluminium alloy 7050-T73 - Wire for solid rivets – D ≤ 10 mm*

EN 4372, *Aerospace series - Heat resisting nickel alloy with copper NI-PD9001 (NiCu31) - Wire for solid rivets – D ≤ 10 mm*

prEN 6104, *Aerospace series - Rivets, solid, in aluminium or aluminium alloy - Inch series - Technical Specification*[1]

prEN 6118, *Aerospace series - Process specification - Aluminium base protection for fasteners*[1]

ISO 8080, *Aerospace - Anodic treatment of titanium and titanium alloys - Sulfuric acid process*

AMS 4982, *Titanium alloy wire 44.5 Cb*[2]

MIL-DTL-5541, *Military specification, Chemical conversion coatings on aluminium and aluminium alloys*[3]

MIL-A-8625, *Military specification, Anodic coatings for aluminium and aluminium alloys*[2]

NAS 9800, *Head protrusion gaging, 100° flush head fasteners, gage block, gage diameters and stylus*[4]

NASM 5674, *Rivets, structural, aluminium alloy, titanium columbium alloy, general specification Fo*[3]

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1 Under preparation. Published as ASD Prestandard at the date of publication of this standard.

2 Published by: Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096-0001, USA.

3 Published by: Department of Defense (DoD), the Pentagon, Washington, D.C., 20307, USA.

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

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 Requirements

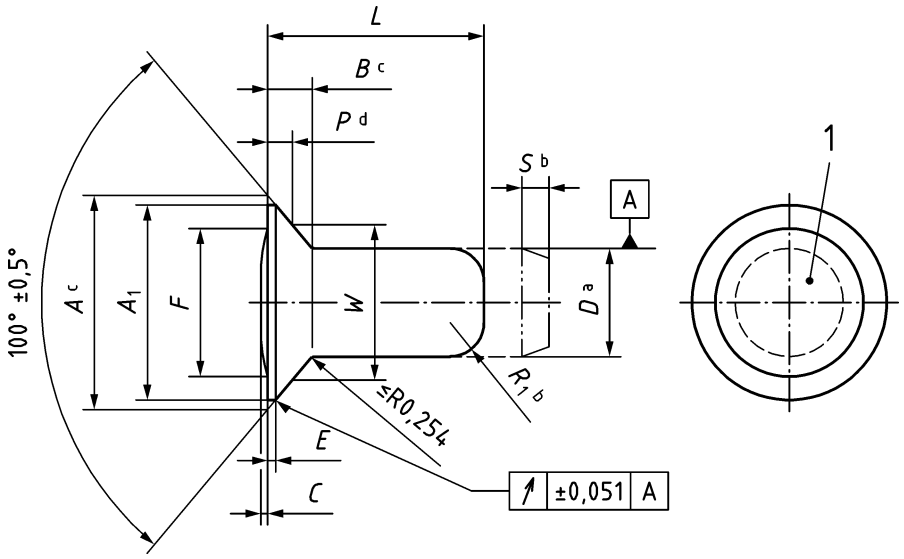
4.1 Configuration, dimensions, tolerances and mass

The configuration shall conform to Figure 1.

The dimensions, tolerances and mass shall conform to Figure 1 and Table 1, Table 2, and Table 3.

Dimensions and tolerances of oversizes (for repair purposes only) shall conform to Figure 1 and Table 2 and Table 3.

Dimensions and tolerances are expressed in millimetres.



Key

1 Marking (see Clause 6)

a 0,025 mm shank diameter increase is permissible within 2,54 mm of the based of the head

b Chamfered ends with radius to the R_1 dimensions or a 20° chamfer to dimension "*S*"

c Maximum head diameters are to theoretical sharp corners as measured by projection

d Measurement method for inspection of head characteristics in accordance with NAS 9800

NOTE Angular misalignment of rivet head to rivet shank axis 0,5° max.

Figure 1 — Configuration

Table 1 — Dimensions and tolerances

Diameter code	*D* Nominal diameter ±0,03	*A* max.	*A* min.	A_1 min.	*B* Ref.	*C* +0,05 0	*E*	*F* ±0,13	*P* max.	*P* min.	R_1 ±0,25	*S* ±0,25	*W* max.	*W* min.
3	2,38	3,709	3,623	3,263	0,54	0,08	0,08 to 0,15	2,31	0,291	0,248	0,74	0,58	3,028	3,023
4	3,18	4,923	4,835	4,475	0,71			3,53	0,336	0,291	0,99	0,79	4,135	4,130
5	3,97	6,226	6,141	5,781	0,93			4,83	0,457	0,412	1,24	0,99	5,151	5,146
6	4,76	7,635	7,543	7,183	1,19	0,10		5,15	0,610	0,559	1,50	1,19	6,200	6,195
7	5,56	8,880	8,790	8,430	1,38			7,00	0,670	0,612	1,75	1,37	7,310	7,305
8	6,36	10,014	9,907	9,547	1,51			8,15	0,677	0,618	1,98	1,57	8,420	8,415

Table 2 — Dimensions and tolerances for oversize rivets

Diameter code	D	A		A_1	B	C	E	F	P		R_1	S	W	
	±0,03	max.	min.	min.	Ref.	+0,05 0		±0,13	max.	min.	±0,25	±0,25	max.	min.
5X	4,37	6,630	6,540	6,18	0,93	0,08	0,08 to 0,15	5,10	0,628	0,578	1,24	0,99	5,151	5,146
6X	5,16	8,040	7,950	7,59	1,19	0,10		6,25	0,781	0,728	1,50	1,19	6,200	6,195
7X	5,96	9,280	9,190	8,83	1,38			7,25	0,836	0,782	1,75	1,37	7,310	7,305