



SLOVENSKI STANDARD
SIST EN 6081:2016

01-november-2016

Aeronavtika - Kovice, univerzalna glava, ozka toleranca - Colska izvedba

Aerospace series - Rivet, universal head, close tolerance - Inch series

Luft- und Raumfahrt - Vollniet, Universalkopf, enge Toleranz - Zoll-Reihe

Série aérospatiale - Rivets de précision, tête universelle - Série en inches

Ta slovenski standard je istoveten z: EN 6081:2016

[SIST EN 6081:2016](https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-af20-72bb1a226799/sist-en-6081-2016)

<https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-af20-72bb1a226799/sist-en-6081-2016>

ICS:

49.030.60 Kovice Rivets

SIST EN 6081:2016 **en,fr,de**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 6081:2016](#)

<https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-af20-72bb1a226799/sist-en-6081-2016>

EUROPEAN STANDARD

EN 6081

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2016

ICS 49.030.60

English Version

Aerospace series - Rivet, universal head, close tolerance - Inch series

Série aérospatiale - Rivets de précision, tête universelle
- Série en inches

Luft- und Raumfahrt - Vollniet, Universalkopf, enge
Toleranz - Zoll-Reihe

This European Standard was approved by CEN on 2 January 2016.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

<https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-af20-72bb1a226799/sist-en-6081-2016>



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents		Page
European foreword.....		3
1	Scope	4
2	Normative references	4
3	Requirements.....	5
3.1	Configuration, dimensions, tolerances and mass	5
3.2	Material and surface treatment.....	5
4	Designation.....	7
5	Marking	8
5.1	Material identification.....	8
5.2	Manufacturers identification	8
6	Technical specification.....	8
6.1	Titanium alloy rivet.....	8
6.2	Aluminium alloy rivet.....	8

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 6081:2016](https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-af20-72bb1a226799/sist-en-6081-2016)

<https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-af20-72bb1a226799/sist-en-6081-2016>

European foreword

This document (EN 6081:2016) 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 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 March 2017, and conflicting national standards shall be withdrawn at the latest by March 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

ITEH STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 6081:2016

<https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-af20-72bb1a226799/sist-en-6081-2016>

EN 6081:2016 (E)**1 Scope**

This European Standard specifies the dimensions, tolerances and mass of rivets with universal head, close tolerance, inch series, for aerospace application.

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.

EN 2115, *Aerospace series — Aluminium alloy 2117-T42 — Wire for solid rivets — $D \leq 10$ mm* ¹⁾

EN 2116, *Aerospace series — Aluminium alloy 2017A-T42 — Wire for solid rivets — $D \leq 10$ mm* ²⁾

EN 2117, *Aerospace series — Aluminium alloy AL-P5056A (5056A)-H32 — Wire for solid rivets — $D \leq 10$ mm* ²⁾

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

EN 3115, *Aerospace series — Aluminium alloy 7050-T73 — Wire for solid rivets — $D \leq 10$ mm* ³⁾

EN 6104, *Aerospace series — Rivets, solid, in aluminium or aluminium alloy — Inch series — Technical specification* ³⁾

EN 6118, *Aerospace series — Process specification — Aluminium base protection for fasteners* ¹⁾

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

SAE AMS 4982, *Titanium alloy wire 44.5 Cb* ⁴⁾

MIL-C-5541, *Chemical conversion coatings on aluminium and aluminium alloys* ⁵⁾

NASM 5674, *Rivets, structural, aluminium alloy, titanium columbium alloy, general specification for* ⁶⁾

¹⁾ In preparation at the date of publication of this European Standard.

²⁾ Published as ASD-STAN standard at the date of publication of this European Standard.

³⁾ Published as ASD-STAN Prestandard at the date of publication of this European Standard.

⁴⁾ Published by: Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096-0001.

⁵⁾ Published by: Department of Defense (DoD), the Pentagon, Washington, D.C. 20301.

⁶⁾ Published by: Aerospace Industries Association of America, Inc. (AIA), 1250 Eye Street, N.W., Washington, D.C. 20005-3924, USA

3 Requirements

3.1 Configuration, dimensions, tolerances and mass

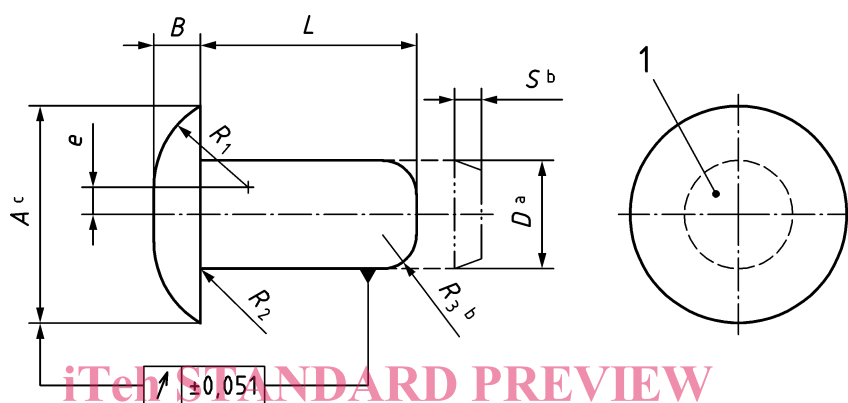
The configuration shall conform with Figure 1.

The dimensions, tolerances and mass shall conform with Figure 1 and Tables 1, 2 and 3.

Dimensions and tolerances are expressed in millimetres.

3.2 Material and surface treatment

See Table 3.



Key

1 marking (see Clause 5)

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

^b Chamfered ends with radius to the R_3 dimensions of a 20° chamfer to “S” dimension.

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

Figure 1 — Configuration

Table 1

Diameter code	D Nominal diameter + 0,03 - 0,03	A		B + 0,25 0	e Ref.	R_1	R_2	R_3 ± 0,25	S ± 0,25
		max.	min.						
2	1,60	3,35	3,05	0,7	0,4	1,4	0,1 to 0,15	0,48	0,41
3	2,38	4,95	4,65	1,0	0,6	2,1		0,74	0,58
4	3,18	6,58	6,22	1,4	0,8	2,7		0,99	0,79
5	3,97	8,18	7,82	1,7	1,0	3,4		1,24	0,99
6	4,76	9,78	9,42	2	1,2	4,2		1,5	1,19
7	5,56	11,41	10,99	2,4	1,4	4,9		1,75	1,37
8	6,36	13,01	12,59	2,7	1,6	5,5		1,98	1,57
10	7,93	16,21	15,79	3,4	2,0	6,9		2,49	1,98
12	9,53	19,51	18,59	4,1	2,4	8,3		2,97	2,39

Table 2 — Length code and masses

Length ^{a,b}		Diameter code								
		2	3	4	5	6	7	8	10	12
code	$L \pm 0,25$	Mass ^c kg/ 1 000 parts								
		03	4,76	0,04	0,08	0,15	-	-	-	-
04	6,35	0,04	0,10	0,19	0,31	-	-	-	-	-
05	7,94	0,05	0,12	0,22	0,37	0,54	0,96	-	-	-
06	9,53	0,06	0,14	0,26	0,42	0,62	1,07	1,45	-	-
07	11,11	0,07	0,16	0,29	0,48	0,70	1,18	1,59	2,19	-
08	12,70	0,08	0,18	0,33	0,53	0,78	1,29	1,74	2,41	3,67
09	14,29	0,09	0,20	0,37	0,59	0,86	1,39	1,88	2,63	3,99
10	15,88	0,10	0,22	0,40	0,65	0,94	1,50	2,02	2,85	4,31
12	19,05	0,12	0,26	0,47	0,76	1,10	1,72	2,31	3,29	4,95
14	22,23	0,14	0,30	0,55	0,87	1,26	1,94	2,59	3,73	5,59
16	25,40	0,16	0,34	0,62	0,98	1,42	2,16	2,87	4,17	6,23
18	28,58	-	-	0,69	1,09	1,58	2,37	3,16	4,61	6,87
20	31,75	-	-	0,72	1,15	1,66	2,48	3,30	4,83	7,19
22	34,93	-	-	0,76	1,20	1,74	2,59	3,44	5,05	7,51
24	38,10	-	-	0,80	1,26	1,82	2,70	3,58	5,27	7,83
28	44,45	-	-	-	1,31	1,90	2,81	3,73	5,50	8,15
32	50,80	-	-	-	1,37	1,98	2,92	3,87	5,72	8,47
40	63,50	-	-	-	-	-	3,03	4,01	5,94	8,79
48	76,20	-	-	-	-	-	-	4,15	6,16	9,11

^a Intermediate lengths can be created, e.g. 11/16 inch (11,2 mm) corresponds to length code 11.

^b Additional 0,8 mm (1/32 inch) length increments may be obtained by adding code 5 after the last digit of part number

^c Mass = 2,79 kg/dm³

Table 3

Diameter code									Surface treatment	Density kg/dm ³	Multiplier of mass (see Table 2)	Material code
2	3	4	5	6	7	8	10	12				
Material												
Aluminium alloy 2117-T4 per EN 2115									-	2,75	0,98	AD
-	Aluminium alloy 2017A-H13 per EN 2116								Yellow chromated per MIL-C-5541, class 1A	2,79	1	D
-		Aluminium alloy 5056A-H32 per EN 2117								2,64	0,95	B
-	Aluminium alloy AL-P7050 per EN 3115									2,82	1,01	KE
-	Titanium alloy 44.5 Cb heat treat: annealed per AMS 4982									-	5,8	2,08
									IVD per EN 6118	V		

4 Designation

EXAMPLE

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Description block

Identity block

RIVET EN 6081:2016

EN6081D6-06-5

<https://standards.iteh.ai/catalog/standards/sist/822515bf-2c90-4529-a20-72bb1a226799/sist-en-6081-2016>

Number of this standard _____

Material code (see Table 3) _____

Diameter code (see Table 1) _____

Length code (see Table 2) (1/16 of an inch)* _____

Additional length code (see Table 2) _____
(1/16 of an inch plus 1/32 inch)*

* For supplying purpose only, see footnotes ^a and ^b in Table 2.

NOTE If necessary, the code I9005 shall be placed between the description block and the identity block.