
Aerospace series - Rivets, solid, universal head, in aluminium alloy 5056A, anodized or chromated, inch based series

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Luft- und Raumfahrt - Vollniete mit Universalkopf, aus Aluminiumlegierung 5056A, anodisiert oder chromatiert, Zoll-Reihe

Série aérospatiale - Rivets ordinaires, à tête ronde aplatie, en alliage d'aluminium 5056A, anodisés ou chromatés, série base inches

<https://standards.iteh.ai/catalog/standards/sist/76aa76f9-6a80-473a-bc88-ab991de2d0ac/sist-en-2149-2001>

Ta slovenski standard je istoveten z: EN 2149:1996

ICS:

49.025.20	Aluminij	Aluminium
49.030.60	Kovice	Rivets

SIST EN 2149:2001

en

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EUROPEAN STANDARD

EN 2149

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 1996

ICS 49.040.20

Supersedes EN 2149:1992

Descriptors: aircraft industry, full rivet, round head rivet, aluminium alloy, anodized metal, dimension, designation, marking

English version

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aluminium alloy 5056A, anodized or chromated,
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ronde aplatie, en alliage d'aluminium 5056A,
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STANDARD PREVIEW
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This European Standard was approved by CEN on 1995-12-27. 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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Page 2
EN 2149:1996

Foreword

This European Standard has been prepared by the European Association of Aerospace Manufacturers (AECMA).

After inquiries and votes carried out in accordance with the rules of this Association, this Standard has successively received the approval of the National Associations and the Official Services of the members countries of AECMA, prior to its presentation to CEN.

This European Standard supersedes EN 2149:1992.

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 October 1996, and conflicting national standards shall be withdrawn at the latest by October 1996.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom

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opinion in accordance with the

standard

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INTERNATIONAL STANDARD ORGANIZATION



1 Scope

This standard specifies the characteristics of solid rivets, universal head, in aluminium alloy 5056A, anodized or chromated, inch based series, for maximum operating temperature 120 °C.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- EN 2000 Aerospace series - Quality assurance - EN aerospace products - Approval of the quality system of manufacturers
- EN 2101 Aerospace series - Chromic acid anodizing of aluminium and wrought aluminium alloys
- EN 2117 Aerospace series - Aluminium alloy 5056A-H32 wire for solid rivets - $D \leq 10$ mm ¹⁾
- EN 2284 Aerospace series - Sulphuric acid anodizing of aluminium and wrought aluminium alloys
- EN 2345 Aluminium and aluminium alloy rivets - Technical specification - Aerospace series ¹⁾
- EN 2424 Aerospace series - Marking of aerospace products
- EN 2437 Aerospace series - Chromate conversion coatings (yellow) for aluminium and aluminium alloys ²⁾

[SIST EN 2149:2001](https://standards.iteh.ai/catalog/standards/sist/76aa76f9-6a80-473a-bc88-ab991de2d0ac/sist-en-2149-2001)

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¹⁾ Published as AECMA Standard at the date of publication of the present standard

²⁾ In preparation at the date of publication of the present standard

3 Required characteristics

3.1 Configuration - Dimensions - Masses

See figure 1 and tables 2 and 3. Dimensions and tolerances are expressed in millimetres and apply after surface treatment.

3.2 Material

EN 2117

3.3 Surface treatment

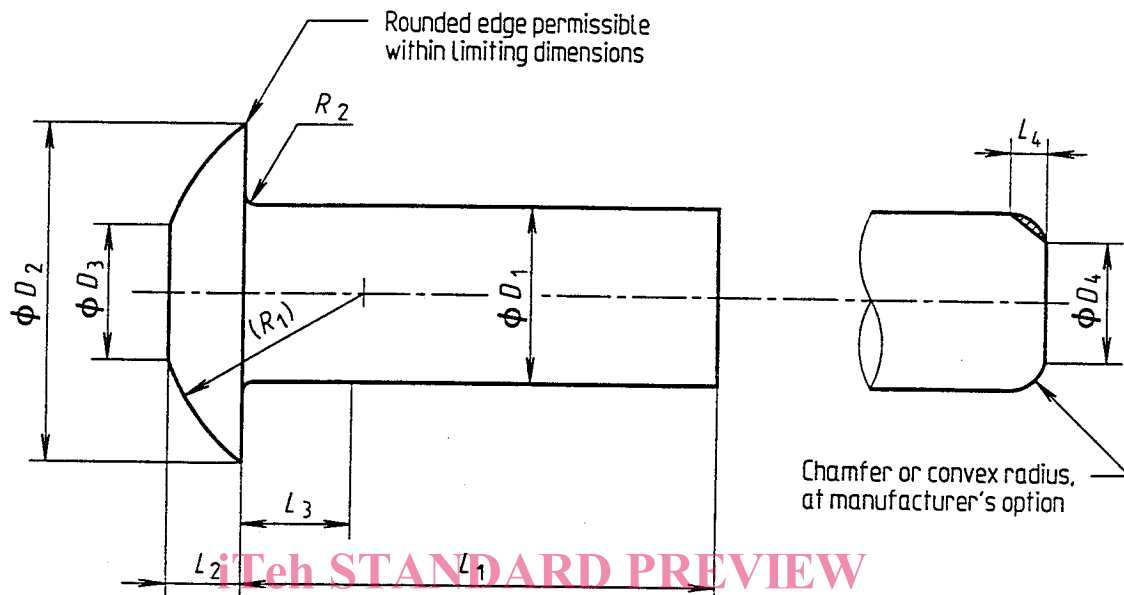
See table 1.

Table 1

Nature		Code
EN 2284B		A
EN 2437A1		B
EN 2101B ¹⁾	Self-colored rivets	— (hyphen)
	Green-colored rivets	F
1) For new products, it shall be replaced by EN 2284B.		

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Non-radiused tail
(code "N")Radiused tail
(code "R")

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Table 2

Diameter code	D_1 ¹⁾		D_2		D_3		D_4		L_2 + 0,2 0	L_3	L_4		R_1	R_2 ± 0,08
	max.	min.	max.	min.	max.	min.	max.	min.			max.	min.		
016	1,65	1,55	3,35	3,05	1,6	1,2	—	—	0,7	1,4	—	—	2	0,15
024	2,45	2,35	5	4,5	2,4	1,8	1,9	1,6	1		0,8	0,5	2,9	
032	3,25	3,15	6,7	6	3,2	2,4	2,6	2,3	1,4		1	0,7	3,9	
036	3,65	3,55	7,5	6,8	3,6	2,7	2,9	2,5	1,6	1,6	1,1		4,4	0,25
040	4,05	3,94	8,3	7,5	4	3	3,2	2,8	1,7		1,2	0,8	4,9	
048	4,85	4,73	10	9	4,8	3,6	3,8	3,3	2	2	1,5	1	5,9	
056	5,65	5,53	11,7	10,5	5,6	4,2	4,5	3,9	2,4		1,8	1,2	6,8	
064	6,45	6,33	13,3	12,1	6,4	4,8	5,1	4,5	2,7		2,1	1,4	7,8	
080	8,03	7,9	16,7	15,1	8	6	6,4	5,6	3,4		2,4	1,6	9,8	
096	9,63	9,5	20	18,1	9,6	7,2	7,7	6,7	4,1		3	2	11,7	

1) D_1 max. may increase by 0,03, over length L_3 .

Table 3

Diameter code	016		024		032		036		040		048		056		064		080		096	
	Mass ²⁾		1) N	Mass ²⁾	1) N	Mass ²⁾	1) N	Mass ²⁾	1) N	Mass ²⁾	1) N	Mass ²⁾	1) N	Mass ²⁾	1) N	Mass ²⁾	1) N	Mass ²⁾	1) N	Mass ²⁾
003	0,030																			
004	0,036	x	x	0,083	x	x	0,176	x	x	0,227										
005	0,041	x	x	0,095	x	x	0,198	x	x	0,254										
006	0,046	x	x	0,107	x	x	0,220	x	x	0,280										
007	0,052	x	x	0,119	x	x	0,242	x	x	0,306										
008	0,057	x	x	0,131	x	x	0,264	x	x	0,332										
009	0,063	x	x	0,143	x	x	0,286	x	x	0,358	x	0,443	x	0,478	x	0,556				
010	0,068	x	x	0,155	x	x	0,308	x	x	0,384	x	0,513	x	0,548	x	0,664	x	1,137	x	1,556
011	0,074	x	x	0,167	x	x	0,330	x	x	0,410	x	0,548	x	0,583	x	0,714	x	1,205	x	1,645
012	0,079	x	x	0,179	x	x	0,352	x	x	0,436	x	0,583	x	0,618	x	0,864	x	1,273	x	1,734
013	0,085	x	x	0,191	x	x	0,374	x	x	0,462	x	0,618	x	0,653	x	0,914	x	1,341	x	1,823
014	0,090	x	x	0,203	x	x	0,396	x	x	0,488	x	0,653	x	0,688	x	0,964	x	1,409	x	1,912
015	0,096	x	x	0,215	x	x	0,418	x	x	0,515	x	0,688	x	0,723	x	1,014	x	1,477	x	2,001
016	0,101	x	x	0,227	x	x	0,440	x	x	0,541	x	0,723	x	0,758	x	1,064	x	1,545	x	2,090
017		x		0,239	x	x	0,462	x	x	0,567	x	0,758	x	0,793	x	1,114	x	1,613	x	2,179
018		x		0,251	x	x	0,484	x	x	0,593	x	0,793	x	0,828	x	1,164	x	1,681	x	2,268
019		x		0,263	x	x	0,506	x	x	0,619	x	0,828	x	0,863	x	1,214	x	1,748	x	2,357
020		x		0,275	x	x	0,528	x	x	0,645	x	0,863	x	0,933	x	1,264	x	1,817	x	2,446
022		x		0,299	x	x	0,572	x	x	0,697	x	0,933	x	1,003	x	1,364	x	1,953	x	2,624
024		x		0,323	x	x	0,616	x	x	0,749	x	1,003	x	1,073	x	1,464	x	2,089	x	2,802
026		x		0,347	x	x	0,660	x	x	0,802	x	1,073	x	1,143	x	1,564	x	2,225	x	2,980
028		x		0,371	x	x	0,704	x	x	0,854	x	1,143	x	1,213	x	1,664	x	2,361	x	3,158
030		x		0,395	x	x	0,748	x	x	0,906	x	1,213	x	1,283	x	1,764	x	2,497	x	3,336
032		x		0,419	x	x	0,792	x	x	0,958	x	1,283	x	1,388	x	1,864	x	2,633	x	3,514
035		x		0,455	x	x	0,858	x	x	1,037	x	1,388	x	1,563	x	2,014	x	2,837	x	3,781
040							0,968	x		1,167	x	1,563	x	1,738	x	2,264	x	3,177	x	4,226
045										1,298	x	1,738	x	1,913	x	2,514	x	3,517	x	4,671
050												1,913	x	3,857	x	2,764	x	4,197	x	5,561
055														4,537	x	3,014	x	4,537	x	6,006
060																3,264	x	4,537	x	6,006

1) Tail end code (see figure 1)

2) Approximate values (kg/1 000 pieces), calculated on the basis of 2,76 kg/dm³, given for information purposes only