SLOVENSKI STANDARD
SIST EN 6029:2017

01-marec-2017

Aeronavtika - Končniki, nastavljivi, enostavni (enoročični), UNJ-navojne ročice z dolžino navoja min. 1,5 x premer navoja, iz korozijsko odpornega jekla - Mere in obremenitve - Colska izvedba

Aerospace series - Rod-ends, adjustable, single fork with UNJ threaded shank min. engagement: 1,5 x thread diameter in corrosion resisting steel - Dimensions and loads - Inch series

Luft- und Raumfahrt - Einstellbare Gabelköpfe, einfach, UNJ-Gewindeschaft, min. Einschraubtiefe 1,5 x Gewindedurchmesser, aus korrosionsbeständigem Stahl - Maße und Belastungen - Inch-Reihe

Série aérospatiale - Embouts réglables à chape simple à tige filetée UNJ, implantation min. : 1,5 x diamètre de filetage en acier résistant à la corrosion - Dimensions et charges - Série en inches

Ta slovenski standard je istoveten z: **EN 6029:2017**

ICS:

49.035	Sestavni deli za letalsko in vesoljsko gradnjo	Components for aerospace construction

SIST EN 6029:2017 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 6029

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ICS 49.035

English Version

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

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

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European foreword

This document (EN 6029:2017) 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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

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1 Scope

This European Standard specifies the characteristics of adjustable rod ends in corrosion resisting steel, inch series, consisting of:

— a single fork ;

— a UNJ threaded shank with ;
  — min. engagement 1,5 times thread diameter and
  — longitudinal groove for locking purposes.

These rod ends are intended for use with control rods or rods for aerospace structures.

They shall be used in the temperature range – 54 °C and 150 °C.

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 2424, *Aerospace series — Marking of aerospace products*

EN 2601, *Aerospace series — Fork ends, adjustable — Technical specification*

EN 3161, *Aerospace series — Steel FE-PM3801 (X5CrNiCu17-4) — Air melted, solution treated and precipitation treated, bar a or D ≤ 200 mm, R_m ≥ 930 MPa*

ISO 3161:1999, *Aerospace — UNJ threads — General requirements and limit dimensions*

ISO 3353-1:2002, *Aerospace — Lead and runout threads — Part 1: Rolled external threads*

ISO 8074, *Aerospace — Surface treatment of austenitic stainless steel parts*

NAS 559, *Rod End Lock* [1)]

3 Required characteristics

3.1 Configuration – Dimensions – Tolerances – Masses

See Figure 1 and Table 1.

Dimensions and tolerances are expressed in millimetres (inches) and apply after passivation.

3.2 Surface roughness

See Figure 1. Values in micrometres (microinches) apply before passivation.

3.3 Materials

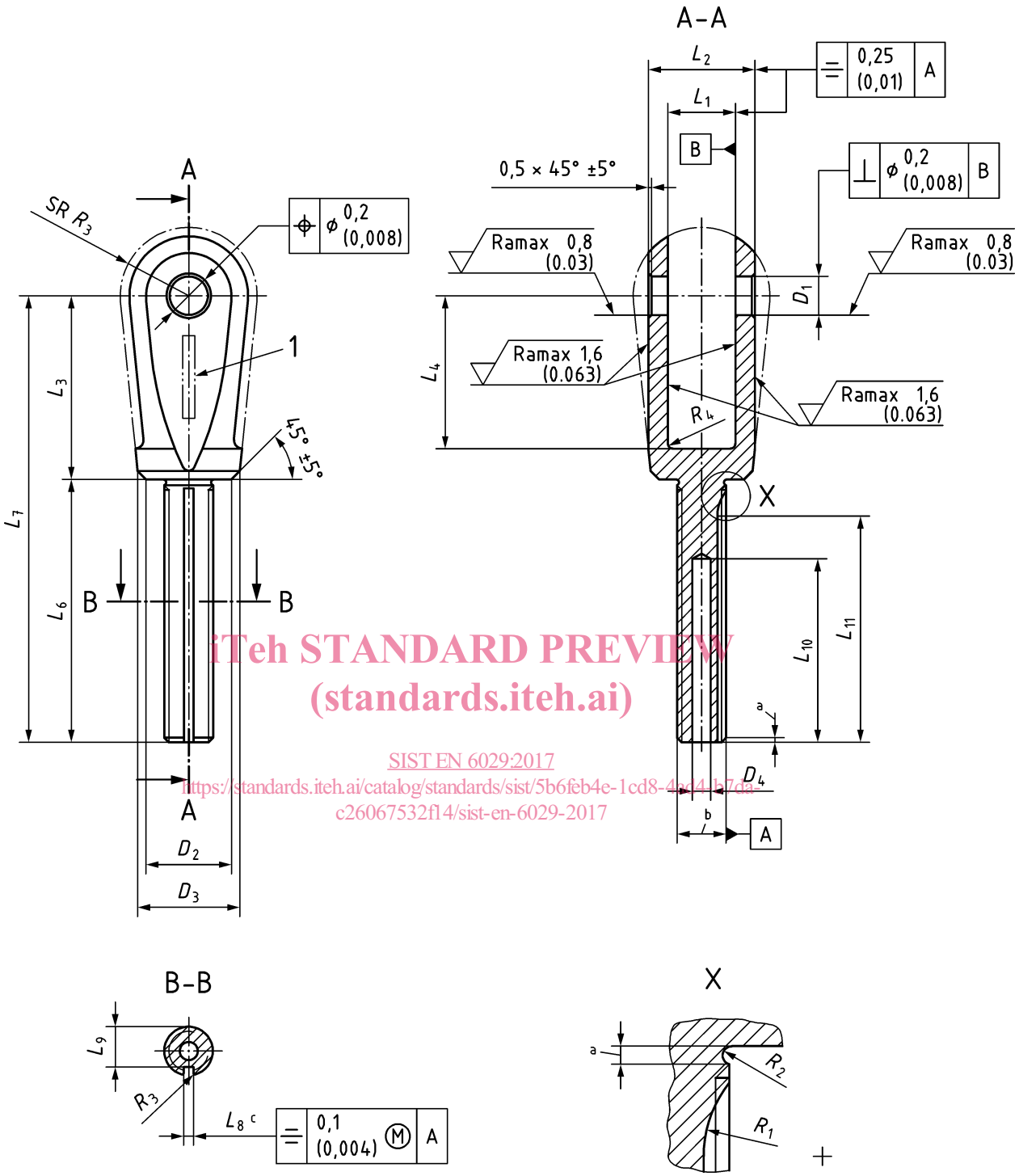
Steel EN 3161: 34 HRC to 42 HCR.

3.4 Surface treatment

Passivated according to ISO 8074.

Break sharp edges and corners and remove all burrs and slivers.

1) Published by: Aerospace Industries Association of America, Inc., 1250 Eye street, NW Washington, DC 20005, USA.



Key

R_3 $^{0,10}_{(0.004)}$ max.

1 Marking

a Thread run-out according to ISO 3353-1

b Pitch - Ø

c Groove as per NAS 559

Figure 1 — Configuration

Concentricity of 0,25 (0.01) between D_4 axis and A where "A" is the axis of the thread pitch diameter.

Table 1 — Dimensions, tolerances and mass (*1 of 3*)

Size code	Shank								
	Type of thread UNJF-3A according to ISO 3161	$ØD_4$ 0 − 0,3 (0.00 − 0.01)	L_6 + 1,0 0, (+ 0.04 0.00)	L_8 + 0,10 0 (+ 0.004 0.000)	L_9 0 − 0,10 (0.000 − 0.004)	L_{10} ± 0,5 (± 0.02)	L_{11} ± 0,5 (± 0.02)	R_1 ± 0,25 (± 0.010)	R_2
01	0.2500-28	–	33,0 (1.30)	1,60 (0.063)	5,11 (0.201)	–	27,0 (1.06)	6,48 (0.255)	0,5 to 0,8 (0.02 to 0.03)
02									
03									
10	0.3125-24		43,0 (1.69)		6,60 (0.260)		37,0 (1.46)		
11									
20	0.3750-24		51,5 (2.03)	2,40 (0.094)	7,90 (0.311)		45,5 (1.79)		
21									
22									
30	0.5000-20	4,0 (0.16)	58,0 (2.28)		11,07 (0.436)	50,0 (1.97)	52,0 (2.05)		
31									
40	0.5625-18		65,0 (2.56)		12,14 (0.478)	57,0 (2.24)	59,0 (2.32)		
41									
50	0.6250-18	6,0 (0.24)	69,0 (2.72)	3,20 (0.126)	13,70 (0.539)	61,0 (2.40)	61,5 (2.48)		
51									
60	0.7500-16	8,0 (0.31)	76,0 (2.99)		16,80 (0.661)	68,0 (2.68)	70,0 (2.76)		

Table 1 — Dimensions, tolerances and mass (*2 of 3*)

Size code	Fork									
	$ØD_1$	$ØD_2$	$ØD_3$	L_1	L_2	L_3	L_4	L_5	R_3	R_4
		± 0,3	± 0,25	+ 0,10 0	+ 0,20 0		+ 0,25 0	+ 0,20 0	+ 0,20 0	+ 1,0 0
	J7	(± 0.01)	(± 0.01)	(+ 0.004 0.000)	(+ 0.008 0.000)		(+ 0.010 0.000)	(+ 0.008 0.000)	(+ 0.01 0.00)	(+ 0.04 0.00)
01	4,826 (0.1900)	12,0 (0.47)	14,25 (0.559)	7,15 (0.281)	12,70 (0.500)	30,0 (1.18)	25,00 (0.984)	0,50 (0.020)	8,7 (0.34)	2,0 (0.08)
02		16,0 (0.63)	19,00 (0.748)	12,70 (0.500)	19,00 (0.748)	34,0 (1.34)	30,00 (1.181)		11,2 (0.44)	
03	6,350 (0.2500)	12,0 (0.47)	14,50 (0.571)	8,70 (0.343)	14,00 (0.551)	30,0 (1.18)	25,00 (0.984)			
10										
11		14,0 (0.55)	16,70 (0.657)	11,10 (0.437)	16,70 (0.657)					
20		12,0 (0.47)	14,00 (0.551)	9,00 (0.354)	14,00 (0.551)	28,0 (1.10)	23,00 (0.906)			
21		20,0 (0.79)	23,80 (0.937)	17,50 (0.689)	23,80 (0.937)	41,0 (1.61)	35,00 (1.378)		14,3 (0.56)	3,0 (0.12)
22		14,0 (0.55)	16,70 (0.657)	11,10 (0.437)	16,70 (0.657)	30,0 (1.18)	25,00 (0.984)		11,2 (0.44)	2,0 (0.08)
30		20,0 (0.79)	23,80 (0.937)	17,50 (0.689)	23,80 (0.937)	41,0 (1.61)	35,00 (1.378)		14,3 (0.56)	3,0 (0.12)
31	7,938 (0.3125)	25,0 (0.98)	28,50 (1.122)	20,60 (0.811)	28,50 (1.122)	50,0 (1.97)	44,00 (1.732)		19,4 (0.76)	
40	6,350 (0.2500)	20,0 (0.79)	23,80 (0.937)	17,50 (0.689)	23,80 (0.937)	41,0 (1.61)	35,00 (1.378)		14,3 (0.56)	
41	7,938 (0.3125)	25,0 (0.98)	28,50 (1.122)	20,60 (0.811)	28,50 (1.122)	50,0 (1.97)	44,00 (1.732)		19,4 (0.76)	
50	9,525 (0.3750)	31,0 (1.22)	35,00 (1.378)	23,80 (0.937)	39,90 (1.570)	58,0 (2.28)	51,00 (2.008)	0,80 (0.031)	22,0 (0.87)	
51	12,700 (0.5000)	34,0 (1.34)	38,00 (1.496)	25,40 (1.000)	38,10 (1.500)				24,2 (0.95)	
60	15,875 (0.6250)	47,0 (1.85)	41,00 (1.614)	28,60 (1.126)	41,20 (1.622)	67,0 (2.64)	59,00 (2.323)	1,00 (0.039)	27,7 (1.09)	4,0 (0.16)