SLOVENSKI STANDARD
SIST EN 2791:2001

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Aerospace series - Rod ends, adjustable, single fork and threaded shank with engagement: 1,5 x thread diameter - Dimensions and loads

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Luft- und Raumfahrt - Einstellbare Gabelköpfe einfach, mit Gewindeschaft mit Einschraubtiefe von 1,5 x Gewinde-Durchmesser - Maße und Belastungen

Série aérospatiale - Embouts réglables a chape simple et a tige filetée a implantation: 1,5 x le diametre de filetage - Dimensions et charges

Ta slovenski standard je istoveten z: **EN 2791:1991**

ICS:

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

SIST EN 2791:2001 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 2791

UDC : 629.7.02 : 621.827.1 : 621.85.053.004.1

Key words : Aircraft industry, flight control, rod ends, threaded shanks, dimensions, static loads

English version

Aerospace series
Rod ends, adjustable, single fork and threaded shank with engagement : 1,5 x thread ϕ
Dimensions and loads

Série aérospatiale
Embouts réglables à chape simple et à tige filetée à implantation : 1,5 x ϕ filetage
Dimensions et charges

Luft- und Raumfahrt
Einstellbare Gabelköpfe einfach, mit Gewindeschaft mit Einschraubtiefe von 1,5 x Gewinde-ϕ
Maße und Belastungen

This European Standard was accepted by CEN on 1990-12-06. CEN members are bound to comply with the requirements of CEN 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 Central Secretariat or to any CEN member.

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CEN

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

Central Secretariat : Rue de Stassart, 36, B—1050 Bruxelles

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 member countries of AECMA, prior to its presentation to CEN.

According to the Common CEN/CENELEC Rules, the following countries are bound to implement this European Standard : Austria, Belgium, Denmark, Finland, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

1 Scope and field of application

This standard specifies the characteristics of adjustable rod-ends consisting of :

- a single fork ;
- a threaded shank comprising :
  . a circumferential groove to identify engagement ;
  . an optional longitudinal groove for locking purposes.

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

The cadmium plating restricts the application to a temperature not exceeding 235 °C.

2 References

ISO 3353	Aerospace construction - Rolled threads - Run-out and lead threads
ISO 5855/2	Aerospace - MJ Threads - Part 2 : Limit dimensions for bolts and nuts
EN 2133	Cadmium plating of steels with maximum specified tensile strength equal to or less than 1450 MPa and copper and copper alloys - Aerospace series [1]
EN 2137	Steel FE-PL75 - 1100 MPa $\leqslant R_m \leqslant$ 1250 MPa - Bars $D_e \leqslant$ 100 mm - Aerospace series [1]
EN 2438	Steel FE-PL62 - 900 MPa $\leqslant R_m \leqslant$ 1100 MPa - Bars $D_e \leqslant$ 40 mm - Aerospace series 1)
EN 2515	Aerospace series - Rod ends, ajustable, single fork and threaded shank - Dimensions and loads
EN 2601	Aerospace series - Fork ends - Technical specification [2].

3 Required characteristics

3.1 Dimensions - Tolerances - Mass

Configuration : see figure.

Dimensions, tolerances and mass : see figure and table, values after cadmium plating.

3.2 Surface roughness

See figure, values before cadmium plating.

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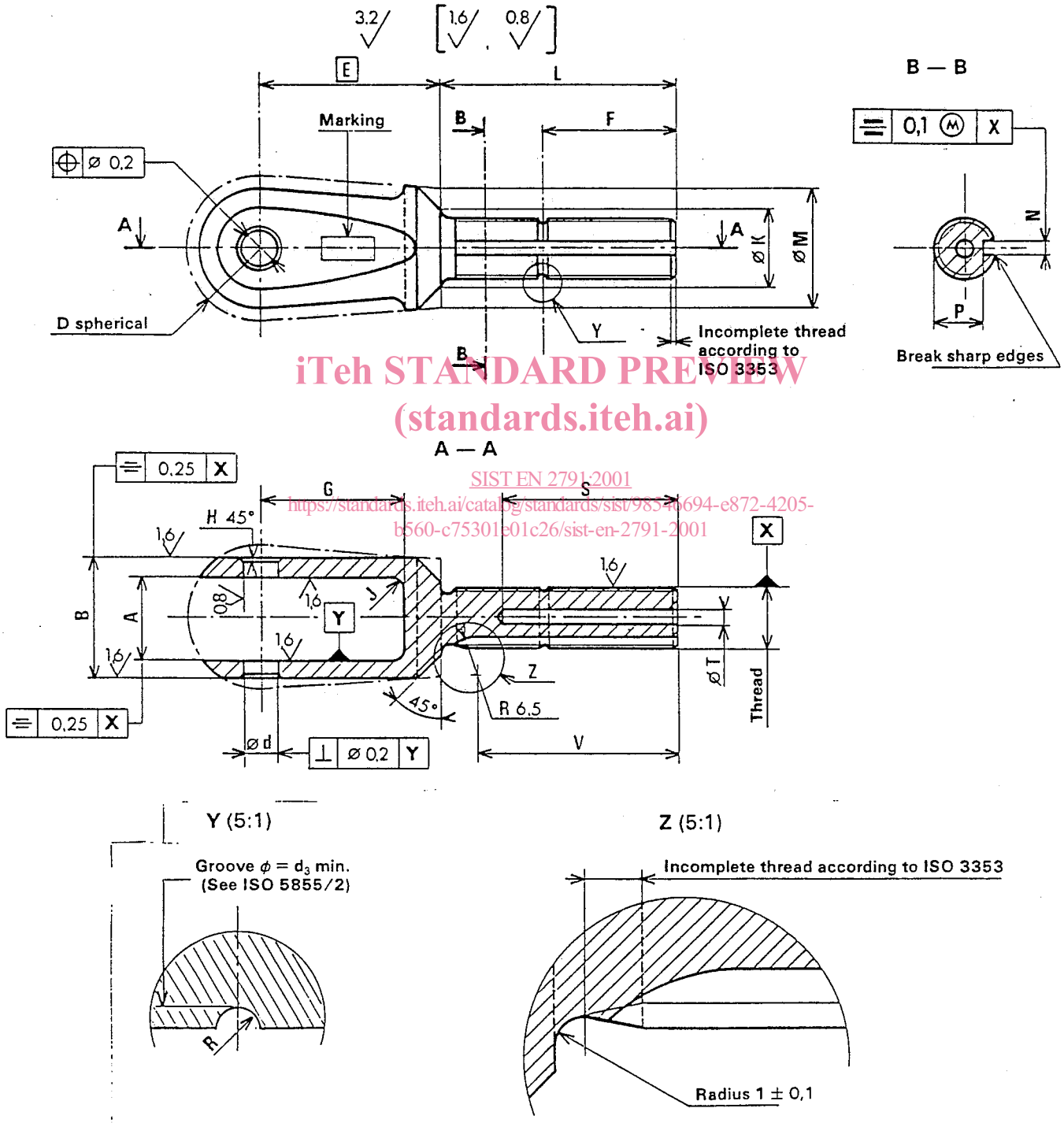
1) Published as AECMA standard at the date of publication of the present standard.
2) In preparation at the date of publication of the present standard.

3.3 Material

Steel EN 2137 or EN 2438.

3.4 Surface treatment

Cadmium plating EN 2133, except on the bore **d**, 7 μm to 20 μm, except thread 5 μm to 10 μm.



NOTE : The circumferential groove and the longitudinal groove over distance **F** shall be painted red.

Figure

Table

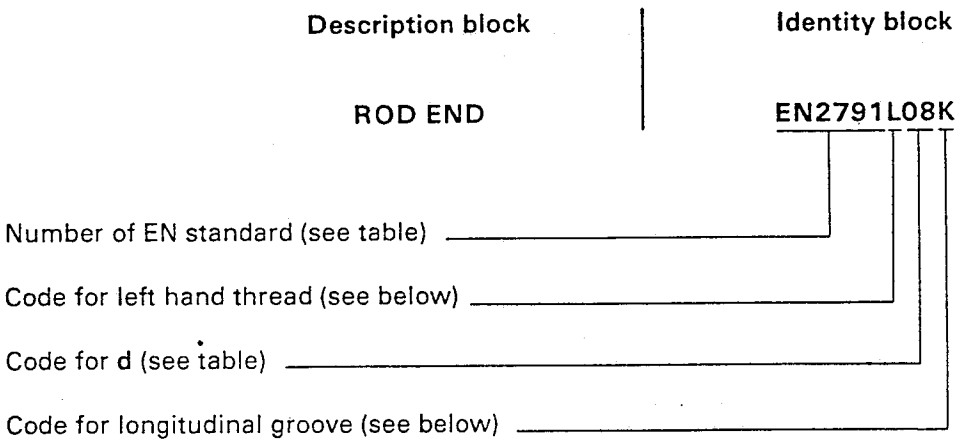
Dimensions in millimetres

Fork											Shank									Rod end		
d		A	B	D	E	G	H	J	K	M	Thread [1] designation	F [2]	L	N	P	R	S	T	V	Ultimate load	Mass	Reference to be used for the designation
Code	Nominal diameter J7	+0,1 0	+0,2 0	+0,2 0		±0,25	±0,1	+1 0	±0,25	±0,25		min.	+1 0	+0,1 0	0 −0,1		0 −1	0 −0,25	max.	kN	g ≈	
06	6	14	20,2	12,2	30	24	0,5	2	13	19,2	MJ10 x 1,25 - 4h6h	23	39	2,4	8,0	0,8	-	-	33	40	54	EN 2791
08	8	15	22,2	13,9	36	30	0,8	2	15	21,5	MJ12 x 1,25 - 4h6h	27	44	2,4	10,2	0,8	-	-	38	58	81	EN 2791
10	10	20	28,2	17,8	41	34	0,8	3	17	27,0	MJ14 x 1,5 - 4h6h	31	50	3,2	12,2	1,0	40	4	44	83	132	EN 2515 [3]

1) According to ISO 5855 - Part 2 ; manufacturing method : rolled
2) F is also the minimum length of engaged thread ; it includes thickness of lock washers and height of nut.
3) The reference EN 2791 has been used in the pre-standard.

4 Designation

Each rod end shall only be designated as in the following example :



Where the following codes are applied :

L = left-hand thread
R = right-hand thread
K = with groove
T = without groove

NOTE 1 : In the pre-standard the identity block was EN279108L.

NOTE 2 : If necessary, the originator's code I9005 may be introduced between the description block and the identity block.

5 Marking

In addition to the manufacturer's own marking, each rod end (see figure) and its packaging shall be marked, using the identity block specified in clause 4.

6 Technical specification

See EN 2601.