



SLOVENSKI STANDARD
SIST EN 2885:2023

01-april-2023

Aeronavtika - Vijaki, valjasta glava, križna zareza, široka toleranca, kratek navoj, iz legiranega jekla, kadmironi - Klasifikacija: 900 MPa (pri okoljski temperaturi)/235 °C

Aerospace series - Screw, pan head, offset cruciform recess, coarse tolerance normal shank, short thread, in alloy steel, cadmium plated - Classification: 900 MPa (at ambient temperature)/235 °C

Luft- und Raumfahrt - Flachkopfschraubn mit Flügelkreuzschlitz, kurzes Gewinde, aus legiertem Stahl, verkadmet - Klasse: 900 MPa (bei Raumtemperatur)/235 °C

Série aérospatiale - Vis à tête cylindrique, à empreinte cruciforme déportée, tige normale à tolérance large, filetage court, en acier allié, cadmiées - Classification: 900 MPa (à température ambiante)/235 °C

Ta slovenski standard je istoveten z: EN 2885:2023

ICS:

49.025.10	Jekla	Steels
49.030.20	Sorniki, vijaki, stebelni vijaki	Bolts, screws, studs

SIST EN 2885:2023

en,fr,de

EUROPEAN STANDARD

EN 2885

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2023

ICS 49.030.20

Supersedes EN 2885:1996

English Version

**Aerospace series - Screw, pan head, offset cruciform
recess, coarse tolerance normal shank, short thread, in
alloy steel, cadmium plated - Classification: 900 MPa (at
ambient temperature)/235 °C**

Série aérospatiale - Vis à tête cylindrique, à empreinte
cruciforme déportée, tige normale à tolérance large,
filetage court, en acier allié, cadmiées - Classification:
900 MPa (à température ambiante)/235 °C

Luft- und Raumfahrt - Flachkopfschraubn mit
Flügelkreuzschlitz, kurzes Gewinde, aus legiertem
Stahl, verkadmet - Klasse: 900 MPa (bei
Raumtemperatur)/235 °C

This European Standard was approved by CEN on 7 July 2019.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



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 (EN 2885:2023) 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 document has received the approval of the National Associations and the Official Services of the member countries of ASD-STAN, 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 August 2023, and conflicting national standards shall be withdrawn at the latest by August 2023.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 2885:1996.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

[SIST EN 2885:2023](https://standards.iteh.ai/catalog/standards/sist/7aa52639-2042-429e-92da-0d65dc280b51/sist-en-2885-2023)

<https://standards.iteh.ai/catalog/standards/sist/7aa52639-2042-429e-92da-0d65dc280b51/sist-en-2885-2023>

EN 2885:2023 (E)**1 Scope**

This document specifies the characteristics of screws, pan head, offset cruciform recess, coarse tolerance normal shank, short thread, in alloy steel, cadmium plated.

Classification: 900 MPa¹/235 °C².

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 2133, *Aerospace series — Cadmium plating of steels with specified tensile strength $\leq 1\,450$ MPa, copper, copper alloys and nickel alloys*

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

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defence Organizations*

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

ISO 5855-2, *Aerospace — MJ threads — Part 2: Limit dimensions for bolts and nuts*

ISO 7689, *Aerospace — Bolts, with MJ threads, made of alloy steel, strength class 1 100 MPa — Procurement specification*

ISO 7913, *Aerospace — Bolts and screws, metric — Tolerances of form and position*

ISO 14275, *Aerospace — Drives, internal, offset cruciform, ribbed — Metric series*

ISO 14276, *Aerospace — Drives, internal, offset cruciform — Metric series*

TR 3775, *Aerospace series — Bolts and pins — Materials³*

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:

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

¹ Minimum tensile strength of the material at ambient temperature.

² Maximum temperature that the screw can withstand without continuous change in its original characteristics, after return to ambient temperature. The maximum temperature is determined by the surface treatment.

³ Published as ASD-STAN Technical Report at the date of publication of this European standard by AeroSpace and Defence Industries Association of Europe - Standardization (ASD-STAN) (www.asd-stan.org).

4 Required characteristics

4.1 Configuration – Dimensions – Masses

According to Figure 1 and Table 1.

Dimensions and tolerances are expressed in millimetres and apply after surface treatment.

4.2 Tolerances of form and position

According to ISO 7913.

4.3 Materials

According to TR 3775 (alloy steel, strength class 900 MPa).

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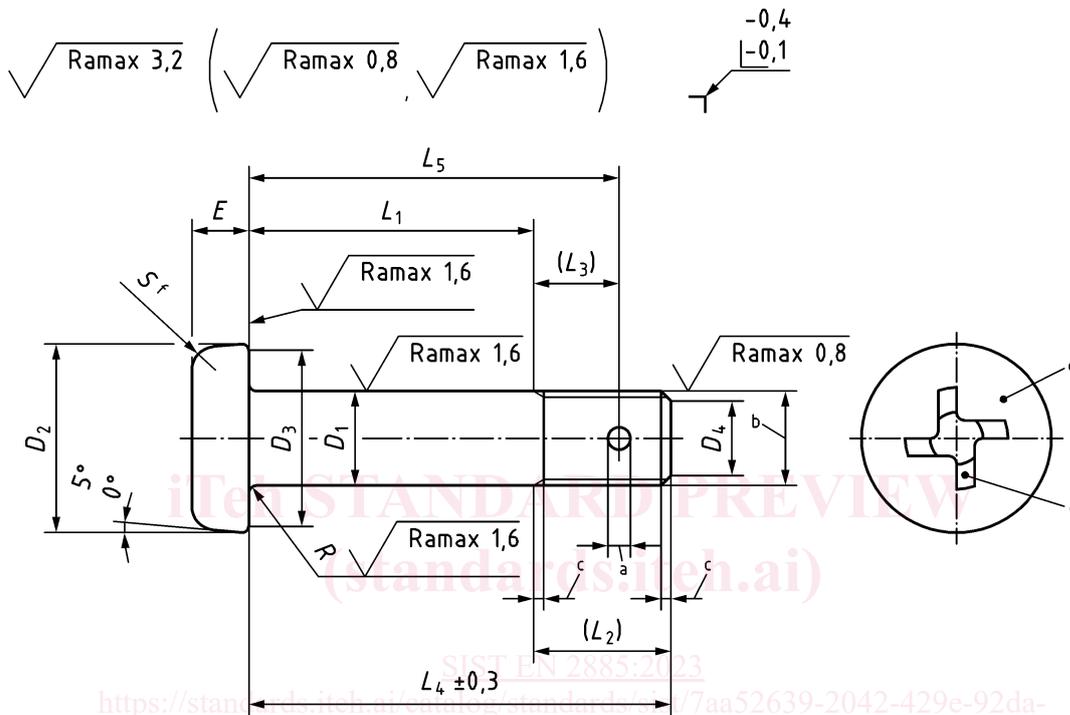
4.4 Surface treatment

According to EN 2133, 8 µm to 14 µm, on all surfaces which can be contacted by a 20 mm diameter ball. On all other surfaces, a continuous deposit shall be present, but no value is specified.

Black colour option: code B.

Values in micrometres apply prior to surface treatment.

Break sharp edges 0,1 mm to 0,4 mm.



Key

- a 1 hole $\varnothing D_5$ (optional)
- b Thread
- c Conform to ISO 3353-1
- d Marking
- e Drive, see Table 3.
- f Shape optional.

Figure 1 - Screw, pan head, offset cruciform recess

Table 1 – Dimensions and masses

Diameter code	Thread ^a	$\varnothing D_1$	$\varnothing D_2$	$\varnothing D_3$	$\varnothing D_4$		$\varnothing D_5$	E	
		h12	0 -0,3	min.	nom.	tol.	H13	nom.	tol.
030	MJ3×0,5 – 4h6h	3	6	4,7	2,3	0 -0,5	—	1,8	0 -0,2
040	MJ4×0,7 – 4h6h	4	8	6,7	3		1,1	2,4	
050	MJ5×0,8 – 4h6h	5	10	8,7	3,4	±0,5	1,5	3	
060	MJ6×1 – 4h6h	6	12	10,7	4,2		1,9	3,6	0 -0,3
070	MJ7×1 – 4h6h	7	14	12,7	5,2			4,2	
080	MJ8×1 – 4h6h	8	16	14,7	6,2		4,8		
100	MJ10×1,25 – 4h6h	10	20	18,7	7,9		2,4	6	
120	MJ12×1,25 – 4h6h	12	24	22,7	9,8			7,2	

Diameter code	$L_1 \pm 0,2^{b,c}$		L_2	L_3	R		S		Mass ^d	
	Code	nom.			nom.	tol.	max.	min.	e	f
030	002 to 030	2 to 30	6	—	0,4	0 -0,2	1,2	0,3	0,67	0,06
040	002 to 040	2 to 40	7,5	5			1,6	0,4	1,63	0,10
050	003 to 050	3 to 50	9	6	0,5		2	0,5	3,31	0,15
060	003 to 060	3 to 60	10	7	0,7		2,4	0,6	5,47	0,22
070	004 to 070	4 to 70	11				2,8	0,7	9,36	0,30
080	004 to 080	4 to 80	11,5	7,5	3,2		0,8	12,76	0,40	
100	005 to 100	5 to 100	14,5	9	0,8		4	1	25,12	0,61
120	006 to 120	6 to 120	16	10	0,9	0 -0,3	4,8	1,2	44,39	0,89

^a In accordance with ISO 5855-2.

^b Increments:

1 for $L_1 \leq 30$;

2 for $30 < L_1 \leq 100$;

4 for $L_1 > 100$.

^c If greater lengths are required, they shall be chosen using the above increments. The length code corresponds to the length L_1 , completed by one or two zeros to the left, where necessary, to obtain a three digit code.

^d Approximate values (kg/1 000 pieces), calculated on the basis of 7,85 kg/dm³, given for information purposes only. They apply to screws without hole.

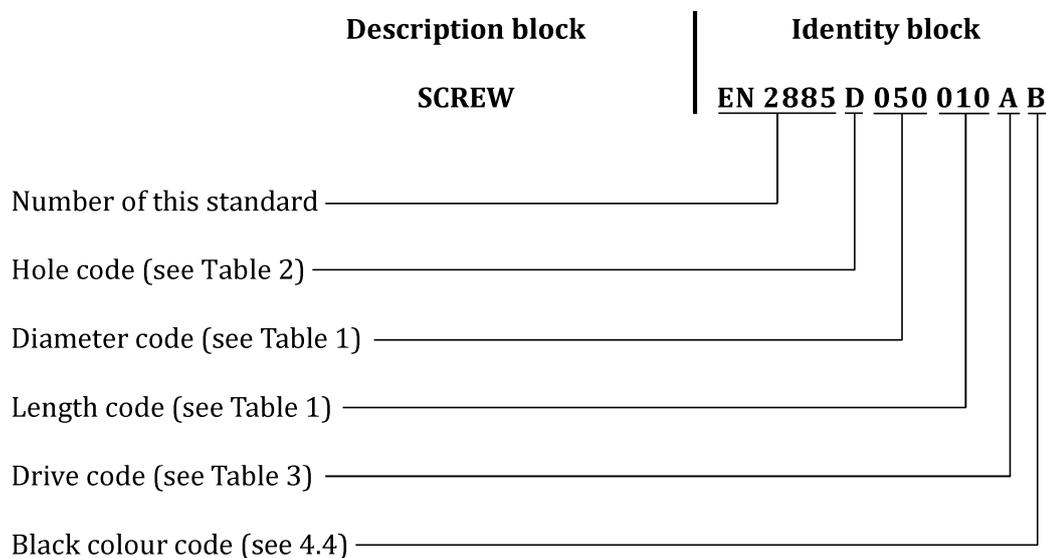
^e Value for head and first L_4 .

^f Increase for each additional millimetre of L_4 .

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5 Designation

EXAMPLE



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

Table 2 - Hole codes

Hole	Code
with	D
without	— (hyphen)

Table 3 - Drive codes

Drive	Code
ISO 14275 ribbed	R
ISO 14276 unribbed	A

6 Marking

According to Table 4 and Figure 1, indented.

Table 4 - Marking

Diameter code	EN 2424 Style
030 and 040	N
050 to 120	C + MJ