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**Aeronavtika - Vijaki, valjasta glava, križna zareza, široka toleranca, kratek navoj, iz titanove zlitine, anodizirane, mazane z MoS2 - Klasifikacija: 1100 MPa (pri temperaturi okolice)/315 °C**

Aerospace series - Screws, pan head, offset cruciform recess, coarse tolerance normal shank, short thread, in titanium alloy, anodized, MoS2 lubricated - Classification: 1 100 MPa (at ambient temperature)/315 °C

Luft- und Raumfahrt - Flachkopfschrauben mit Flügelkreuzschlitz, kurzes Gewinde, aus Titanlegierung, anodisiert, MoS2 geschmiert - Klasse: 1 100 MPa (bei Raumtemperatur)/315 °C

Série aérospatiale - Vis à tête cylindrique, à empreinte cruciforme déportée, tige normale à tolérance large, filetage court, en alliage de titane, anodisées, lubrifiées MoS2 - Classification : 1 100 MPa (à température ambiante)/315 °C

**Ta slovenski standard je istoveten z: prEN 2884**

**ICS:**

49.025.30	Titan	Titanium
49.030.20	Sorniki, vijaki, stebelni vijaki	Bolts, screws, studs

**oSIST prEN 2884:2020****en,fr,de**

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<https://standards.iteh.ai/catalog/standards/sist/3f93f6ea-e122-4c7a-82c1-b852f3c496cc/osist-pren-2884-2020>

EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 2884**

May 2020

ICS 49.030.20

Will supersede EN 2884:1996

English Version

**Aerospace series - Screws, pan head, offset cruciform  
recess, coarse tolerance normal shank, short thread, in  
titanium alloy, anodized, MoS2 lubricated - Classification:  
1 100 MPa (at ambient temperature)/315 °C**

Série aéronautique - Vis à tête cylindrique, à empreinte  
cruciforme déportée, tige normale à tolérance large,  
filetage court, en alliage de titane, anodisées, lubrifiées  
MoS2 - Classification : 1 100 MPa (à température  
ambiante)/315 °C

Luft- und Raumfahrt - Flachkopfschrauben mit  
Flügelkreuzschlitz, kurzes Gewinde, aus  
Titanlegierung, anodisiert, MoS2 geschmiert - Klasse: 1  
100 MPa (bei Raumtemperatur)/315 °C

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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 (prEN 2884:2020) 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 document is currently submitted to the CEN Enquiry.

This document will supersede EN 2884:1996.

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**prEN 2884:2020 (E)****1 Scope**

This document specifies the characteristics of screws, pan head, offset cruciform recess, coarse tolerance normal shank, short thread, in titanium alloy, anodized, MoS<sub>2</sub> lubricated.

Classification: 1 100 MPa<sup>1</sup>/315 °C<sup>2</sup>.

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

EN 2491, *Aerospace series — Molybdenum disulphide dry lubricants — Coating methods*

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

ISO 9152, *Aerospace — Bolts, with MJ threads, in titanium alloys, strength class 1 100 MPa — Procurement specification*

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

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

TR 3775, *Bolts and pins — Materials*<sup>3</sup>

**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/ui>
- IEC Electropedia: available at <http://www.electropedia.org/>

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<sup>1</sup> Minimum tensile strength of the material at ambient temperature.

<sup>2</sup> 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.

<sup>3</sup> Published as ASD-STAN Technical Report at the date of publication of this standard by AeroSpace and Defence Industries Association of Europe – Standardization (ASD-STAN) ([www.asd-stan.org](http://www.asd-stan.org))

## 4 Required characteristics

### 4.1 Configuration — Dimensions — Masses

See Figure 1 and Table 1.

Dimensions and tolerances are expressed in millimetres and apply after anodizing but before lubricating.

### 4.2 Tolerances of form and position

ISO 7913

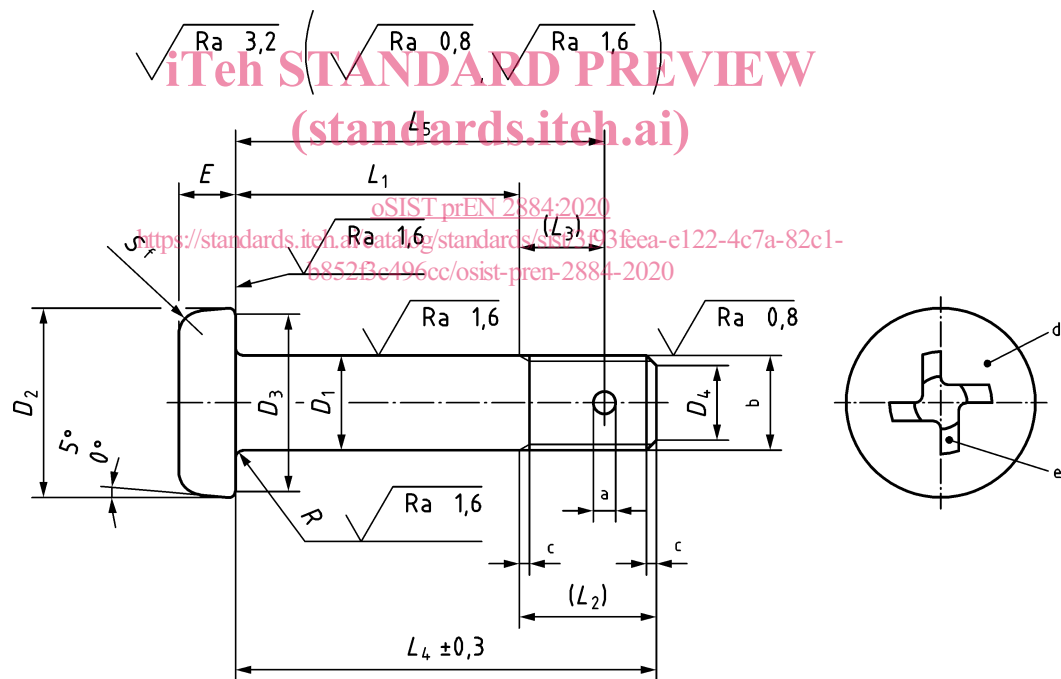
### 4.3 Materials

TR 3775 (titanium alloy, strength class 1 100 MPa).

### 4.4 Surface treatment

Lubrication:

- lubricant: see Clause 5;
- application: EN 2491: 5  $\mu\text{m}$  to 10  $\mu\text{m}$ .



#### Key

- a 1 hole  $\varnothing D_5$  (optional)
- b thread
- c conforms to ISO 3353-1
- d marking
- e drive see Clause 5
- f shape optional

Values in micrometres apply prior to surface treatment.

Break sharp edges 0,1 to 0,4

Figure 1

Table 1

Diameter code	Thread <sup>a</sup>	$D_1$	$D_2$	$D_3$	$D_4$		$D_5$	$E$		$L_1 \pm 0,2^{b,c}$		$L_2$	$L_3$	$R$		$S$		Mass <sup>d</sup>	
		h12	$\begin{matrix} 0 \\ -0,3 \end{matrix}$	min.	nom.	Tol.	H13	nom.	Tol.	Code	nom.			nom.	Tol.	max.	min.	e	f
030	MJ3 × 0,5 – 4h6H	3	6	4,7	2,3	$\begin{matrix} 0 \\ -0,5 \end{matrix}$	—	1,8	$\begin{matrix} 0 \\ -0,2 \end{matrix}$	002 to 030	2 to 30	6	—	0,4	$\begin{matrix} 0 \\ -0,2 \end{matrix}$	1,2	0,3	0,38	0,03
040	MJ4 × 0,7 – 4h6h	4	8	6,7	3		1,1	2,4		002 to 040	2 to 40	7,5	5				1,6	0,4	0,92
050	MJ5 × 0,8 – 4h6h	5	10	8,7	3,4	$\begin{matrix} 0 \\ -0,5 \end{matrix}$	1,5	3	$\begin{matrix} 0 \\ -0,2 \end{matrix}$	003 to 050	3 to 50	9	6	0,5	$\begin{matrix} 0 \\ -0,2 \end{matrix}$	2	0,5	1,88	0,09
060	MJ6 × 1 – 4h6h	6	12	10,7	4,2		3,6	003 to 060		3 to 60	10	7	0,7	2,4		0,6	3,10	0,13	
070	MJ7 × 1 – 4h6h	7	14	12,7	5,2	4,2	004 to 070	4 to 70	11		2,8			0,7	5,31	0,17			
080	MJ8 × 1 – 4h6h	8	16	14,7	6,2	4,8	004 to 080	4 to 80	11,5	7,5	3,2	0,8	7,23	0,23					
100	MJ10 × 1,25 – 4h6h	10	20	18,7	7,9	$\begin{matrix} 0 \\ -0,3 \end{matrix}$	2,4	6	$\begin{matrix} 0 \\ -0,3 \end{matrix}$	005 to 100	5 to 100	14,5	9	0,8	$\begin{matrix} 0 \\ -0,3 \end{matrix}$	4	1	14,24	0,35
120	MJ12 × 1,25 – 4h6h	12	24	22,7	9,8		7,2	006 to 120		6 to 120	16	10	0,9	4,8		1,2	25,17	0,50	



- 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  $4,45 \text{ kg/dm}^3$ , 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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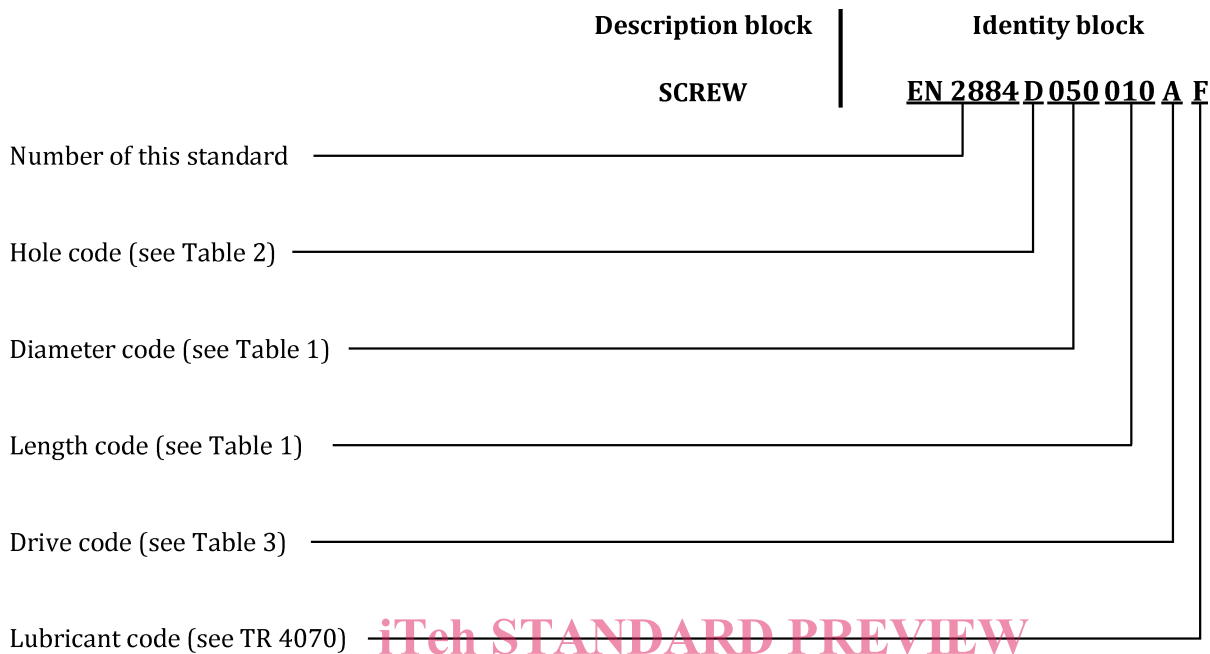
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## prEN 2884:2020 (E)

## 5 Designation

EXAMPLE



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

Table 2

Hole	Code
with	D
without	- (hyphen)

Table 3

Drive	Code
ISO 14275	R
ISO 14276 unribbed	A

## 6 Marking

See Table 4 and Figure 1, indented.

Table 4

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