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**Aerospace series - Screws, 100° countersunk head, six lobe recess, threaded to head, in titanium alloy TI-P64001, anodized, MoS2 coated - Classification: 900 MPa (at ambient temperature)/350 °C**

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Série aérospatiale - Vis a tête fraisée 100°, à empreinte six lobes, filetées sous tête en alliage de titane TI-P63, anodisées, revêtues MoS2 - Classification: 900 MPa (à température ambiante)/350°C

**Ta slovenski standard je istoveten z: EN 4323:2003**

**ICS:**

49.030.20 Sorniki, vijaki, stebelni vijaki Bolts, screws, studs

**SIST EN 4323:2004**

**en**

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 4323**

February 2003

ICS 49.030.20

English version

Aerospace series - Screws, 100° countersunk head, six lobe recess, threaded to head, in titanium alloy TI-P64001, anodized, MoS2 coated - Classification: 900 MPa (at ambient temperature)/350 °C

This European Standard was approved by CEN on 14 September 2002.

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 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 Management Centre has the same status as the official versions.

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

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COMITÉ EUROPÉEN DE NORMALISATION  
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## Foreword

This document EN 4323:2003 has been prepared by the European Association of Aerospace Manufacturers (AECMA).

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 AECMA, 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 2003, and conflicting national standards shall be withdrawn at the latest by August 2003.

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

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### 1 Scope

This standard specifies the characteristics of screws with 100° countersunk head with six lobe recess, threaded to head, in TI-P64001, anodized, MoS<sub>2</sub> coated, for aerospace applications.

Classification: 900 MPa <sup>1)</sup> / 350 °C <sup>2)</sup> <https://standards.iteh.ai/catalog/standards/sist/1d2d9bc8-b093-494b-8cf5-d45905788273/sist-en-4323-2004>

### 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 (including amendments).

- |            |   |
|------------|---|
| ISO 3353   | <i>Aerospace - Lead and runout threads.</i>   |
| ISO 5855-2 | <i>Aerospace - MJ threads - Part 2: Limit dimensions for bolts and nuts.</i>  |
| EN 2424    | <i>Aerospace series - Marking of aerospace products.</i>  |
| EN 2491    | <i>Aerospace series - Molybdenum disulphide dry lubricants - Coating methods.</i>   |
| EN 3457    | <i>Aerospace series - Titanium alloy TI-P63 - Not heat treated - Reference heat treatment: solution treated and aged - Grade 2 forging stock for fasteners D ≤ 25 mm <sup>3)</sup>.</i> |

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1) Minimum test strength of the material at ambient temperature

2) Maximum test temperature of the parts

3) Published as AECMA Prestandard at the date of publication of this standard

**EN 4323:2003 (E)**

- EN 3813 *Aerospace series - Titanium alloy TI-P64001 - Annealed - Bar and wire for forged fasteners -  $D_e \leq 25$  mm – Use condition: Solution treated and aged -  $R_m \geq 1\,100$  MPa<sup>4)</sup>.*
- EN 3818 *Aerospace series - Bolts with MJ threads, in titanium alloy TI-P64001 - Classification: 1 100 MPa (at ambient temperature) - Technical specification<sup>3)</sup>.*
- EN 3911 *Aerospace series - Six lobe recess - Geometrical definition<sup>3)</sup>.*

**3 Required characteristics****3.1 Configuration – Dimensions – Tolerances – Masses**

See Figure 1 and Tables 1 and 2. Dimensions and tolerances are in millimetres. They apply after anodizing but before MoS<sub>2</sub> coating.

**3.2 Materials**

EN 3457 or EN 3813

**3.3 Surface treatment**

EN 2491

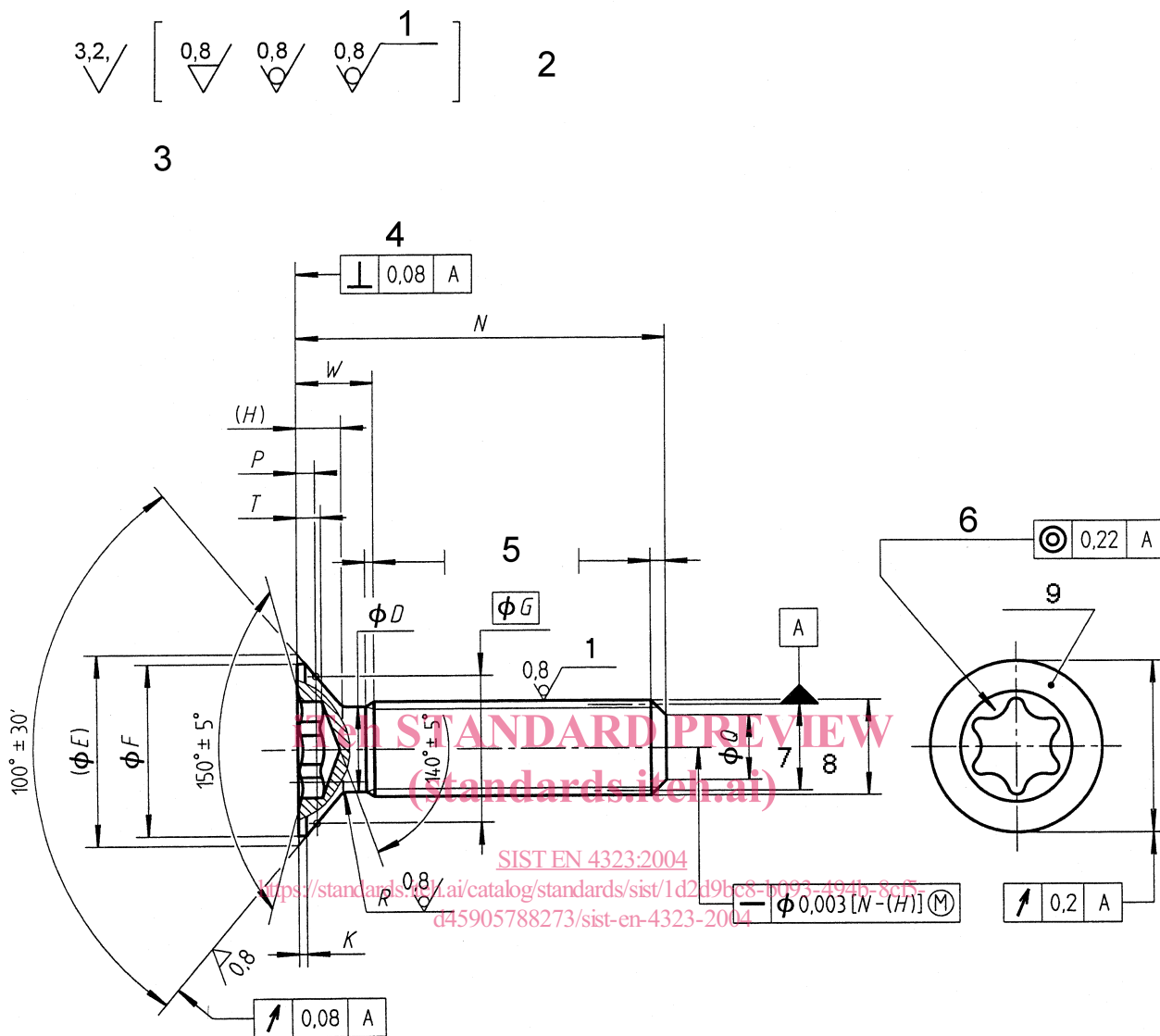
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4) In preparation at the date of publication of this standard



**Key**

- 1 Rolled
- 2 Values apply before anodizing and MoS<sub>2</sub> coating
- 3 Remove sharp edges 0,1 to 0,4
- 4 Not concave
- 5 In accordance with ISO 3353
- 6 Six lobe recess to EN 3911
- 7 Pitch diameter
- 8 Thread
- 9 Marking

Figure 1

## EN 4323:2003 (E)

Table 1

Thread <sup>a</sup>		$D$ $\pm$ 0,13	$E^b$	$F$ min.	$G$	$H^b$	$K$ min.	$P$ 0 -0,08	$Q$		$R$		$T$		$W$		Recess		
Code	Designation								nom.	Tol.	max.	min.	nom.	Tol.	max.	min.			
030	MJ3x0,5-4h6h	2,68	6	5,4	4,5	1,4	0,06	0,63	2,3	0 -0,5	0,4	0,2	0,80	+0,1 0	2,4	2,15	EN 3911- 10		
040	MJ4x0,7-4h6h	3,55	8	7,2	5,78	1,87	0,08	0,93	3				1				3,27	2,92	EN 3911- 25
050	MJ5x0,8-4h6h	4,48	10	9	7,71	2,38	0,1	0,96	3,4	$\pm$ 0,5	0,5	0,3	1,1	+0,15 0	3,98	3,58	EN 3911- 27		
060	MJ6x1-4h6h	5,35	12	10,8	9	2,81		1,26	4,2		0,7	0,5	1,5				5,1	4,6	EN 3911- 30
070	MJ7x1-4h6h	6,35	14	12,8	10,28	3,23		1,57	5,2		5,5	5	EN 3911- 40						

<sup>a</sup> In accordance with ISO 5855-2  
<sup>b</sup> Corresponds to maximum condition

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Table 2

Length code	N ± 0,3	Thread code				
		030	040	050	060	070
		Mass <sup>a</sup>	Mass <sup>a</sup>	Mass <sup>a</sup>	Mass <sup>a</sup>	Mass <sup>a</sup>
006	6	0,22	0,33			
008	8	0,33	0,53	0,69		
010	10	0,44	0,73	1,02	1,34	1,94
012	12	0,55	0,93	1,35	1,78	2,54
014	14	0,66	1,13	1,68	2,22	3,14
016	16	0,77	1,33	2,01	2,66	3,74
018	18	0,88	1,53	2,34	3,10	4,34
020	20	0,99	1,73	2,67	3,54	4,94
022	22	1,10	1,93	3,00	3,98	5,54
024	24	1,21	2,13	3,33	4,42	6,14
026	26	1,32	2,33	3,66	4,86	6,74
028	28	1,43	2,53	3,99	5,30	7,34
030	30	1,54	2,73	4,32	5,74	7,94
032	32	1,65	2,93	4,65	6,18	8,54
034	34	1,76	3,13	4,98	6,62	9,14
036	36	1,87	3,33	5,31	7,06	9,74
038	38	1,98	3,53	5,64	7,50	10,34
040	40	2,09	3,73	5,97	7,94	10,94
042	42	2,20	3,93	6,30	8,38	11,54
044	44	2,31	4,13	6,63	8,82	12,14
046	46	2,42	4,33	6,96	9,26	12,74
048	48	2,53	4,53	7,29	9,70	13,34
050	50	2,64	4,73	7,62	10,14	13,94
052	52	2,75	4,93	7,95	10,58	14,54
054	54	2,86	5,13	8,28	11,02	15,14
056	56	2,97	5,33	8,61	11,46	15,74
058	58	3,08		8,94	11,90	16,34
060	60			9,27	12,34	16,94
062	62			9,60	12,78	17,54
064	64			9,93	13,22	18,14
066	66			10,26	13,66	18,74
068	68			10,59	14,10	19,34
070	70			10,92	14,54	19,94
072	72				14,98	20,54
074	74				15,42	21,14
076	76				15,86	21,74
078	78				16,30	22,34
080	80				16,74	22,94
082	82				17,18	23,54
084	84				17,62	24,14
086	86					24,74
088	88					25,34
090	90					25,94
092	92					26,54
094	94					27,14
096	96					27,74
098	98					28,34

<sup>a</sup> Mass ≈ quoted in kg/1000 parts