SLOVENSKI STANDARD
SIST EN 3724:2004

01-maj-2004

Aerospace series - Bolts, double hexagon head, relieved shank, long thread, in titanium alloy TI-P64001, MoS2 coated - Classification: 1 100 MPa (at ambient temperature)

Aerospace series - Bolts, double hexagon head, relieved shank, long thread, in titanium alloy TI-P64001, MoS2 coated - Classification: 1 100 MPa (at ambient temperature)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Série aérospatiale - Vis a tete bihexagonale, a tige réduite, filetage long, en alliage de titane TI-P63, revetues MoS2 - Classification:1 100 MPa (a température ambiante)

SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

Ta slovenski standard je istoveten z: **EN 3724:2003**

ICS:

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

SIST EN 3724:2004 **en**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

SIST EN 3724:2004

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

SIST EN 3724:2004

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3724

February 2003

ICS 49.030.20

English version

Aerospace series - Bolts, double hexagon head, relieved shank, long thread, in titanium alloy TI-P64001, MoS_2 coated - Classification: 1 100 MPa (at ambient temperature)

This European Standard was approved by CEN on 19 August 2003.

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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

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.

SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

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

Management Centre: rue de Stassart, 36 B-1050 Brussels

© 2003 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 3724:2003 E

SIST EN 3724:2004

Contents

page

Foreword 3

1 Scope and field of application 4

2 Normative references 4

3 Required characteristics 5
3.1 Configuration - Dimensions - Tolerances – Masses 5
3.2 Material 5
3.3 Surface coating 5

4 Designation 9

5 Marking 9

6 Technical specification 9

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

SIST EN 3724:2004

Foreword

This document EN 3724:2003 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, Slovak Republic, Spain, Sweden, Switzerland and United Kingdom.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

SIST EN 3724:2004

1 Scope and field of application

This standard specifies the characteristics of double hexagon headed bolts with relieved shank and long thread, in titanium alloy TI-P64001, MoS_2 coated, for aerospace applications.
Classification: 1 100 MPa [1)].

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, *Aerospace - Rolled threads for bolts - Lead and runout requirements.*

ISO 4095, *Aerospace - Bihexagonal drives - Wrenching configuration - Metric series.*

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

EN 2424, *Aerospace series - Marking of aerospace products.*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

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

EN 3457, *Aerospace series - Titanium alloy TI-P64001 - Not heat treated - Reference heat treatment - Solution treated and aged - Grade 2 forging stock for fasteners – D ≤ 25 mm* [2)].

SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

EN 3813, *Aerospace series - Titanium alloy TI-P64001 – Annealed - Bar and wire for forged fasteners - $D_e \leq 25$ mm* [3)].

EN 3818, *Aerospace series - Bolts with MJ threads, in titanium alloy TI-P64001 - Classification = 1 100 MPa (at ambient temperature) - Technical specification.*

1) Minimum tensile strength of the material at ambient temperature

2) Published as AECMA pre-standard at the date of publication of the present standard

3) In preparation at the date of publication of the present standard

SIST EN 3724:2004

3 Required characteristics

3.1 Configuration - Dimensions - Tolerances – Masses

See Figure 1 and Tables 1 and 2. Dimensions and tolerances are in millimetres. These values are to be applied before surface coating.

3.2 Material

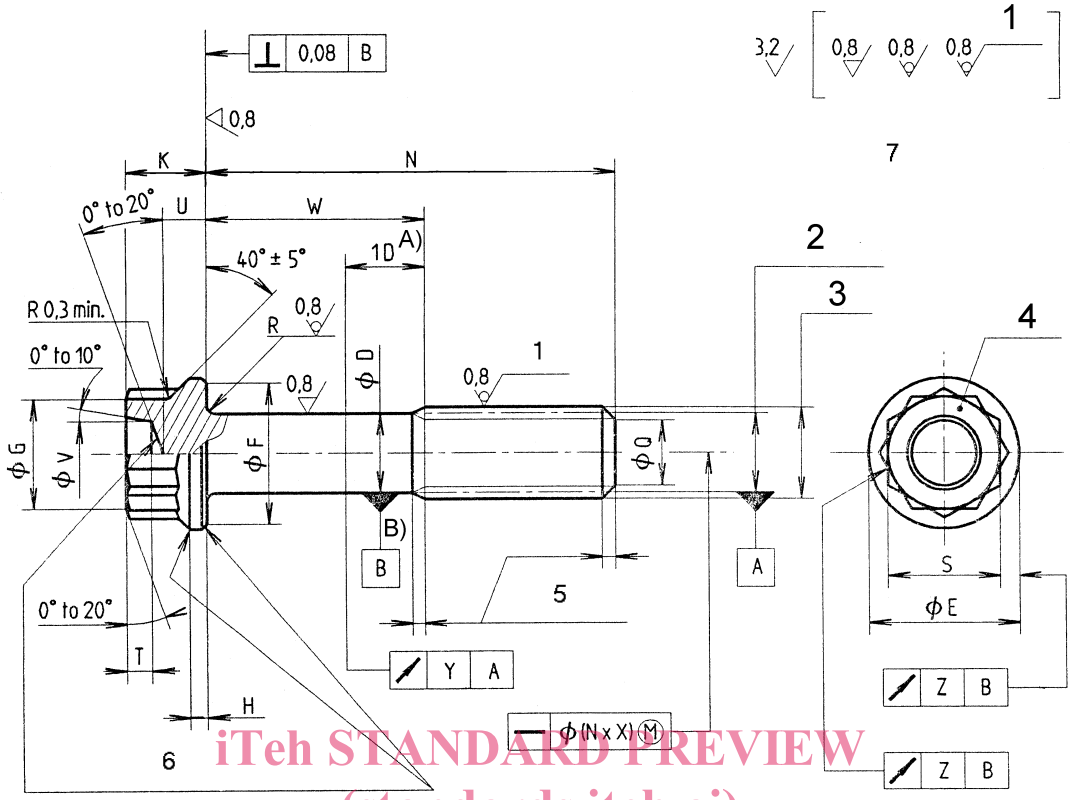
EN 3457 or EN 3813.

3.3 Surface coating

EN 2491.

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

SIST EN 3724:2004



iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 3724:2004
https://standards.iteh.ai/catalog/standards/sist/4dfbbd47-0621-438b-bdad-bc6616f2fb96/sist-en-3724-2004

A) When the length of the shank is less than one times the nominal value of the shank diameter D, the run-out is measured at a distance equal to half the actual shank length.
B) For bolts having a shank length less than one times the nominal value of the shank diameter D, and for those threaded to head, the pitch diameter axis shall be used as the datum.

Key
1 Rolled
2 Pitch diameter
3 Thread
4 Marking
5 In accordance with ISO 3353
6 Shape in this area at manufacturers option
7 Remove sharp edges 0,1 to 0,4

Figure 1

Table 1

Thread [a]		D	E	F	G	H	K	Q	R		S [b]	T	U		V		X	Y	Z
Code	Designation	± 0,13	max.	min.	min.	min.	h15	± 0,5	max.	min.		min.	max.	min.	max	Min.			
050	MJ5×0,8-4H6H	4,48	9,1	8,3	6,8	1	5,5	3,5	0,5	0,3	7	2	2,9	2,5	3,7	3,2	0,003	0,12	0,13
060	MJ6×1,0-4H6H	5,35	10,6	9,8	7,8	1,2	6	4,2	0,7	0,5	8	2,3	3,2	2,8	4,6	4,1			0,15
070	MJ7×1,0-4H6H	6,35	12,1	11,3	8,8	1,4	6,5	5,2			9	2,6	3,7	3,3	5,4	4,9		0,15	0,18
080	MJ8×1,0-4H6H	7,35	13,6	12,8	9,8	1,6	7	6,2			10	2,8	4,1	3,7	5,7	5,2			0,2
100	MJ10×1,25-4H6H	9,19	16,7	15,7	11,8	2	8	7,9	0,8	0,6	12	3,1	5,1	4,7	7,2	6,7	0,0025	0,18	0,25
120	MJ12×1,25-4H6H	11,19	19,9	18,8	13,7	2,4	9,2	9,9	0,9		14	3,5	6	5,6	8,5	8			0,3

[a] In accordance with ISO 5855-2
[b] Bihexagonal wrenching configuration in conformity with ISO 4095 over length T min.

Table 2

Thread code		050			060			070			080			100			120		
Length code	N	W max.	W min.	Mass [a]	W max.	W min.	Mass [a]	W max.	W min.	Mass [a]	W max.	W min.	Mass [a]	W max.	W min.	Mass [a]	W max.	W min.	Mass [a]
008	8	2,1	1,7	1,76															
010	10			1,90	2,7	2,2	2,72	2,7	2,2	3,84	2,7	2,2	5,14						
012	12			2,04			2,92			4,12			5,51						
014	14			2,17			3,12			4,40			5,89	3,3	2,7	9,53			
016	16			2,31			3,32			4,68			6,26			10,12	3,4	2,8	15,87
018	18			2,46			3,52			4,96			6,64			10,71			16,74
020	20	4	2,5	2,60			3,72			5,24			7,02			11,30			17,61
022	22	6	4,5	2,74	4	2,5	3,92			5,52			7,39			11,88			18,48
024	24	8	6,5	2,88	6	4,5	4,12	4	2,5	5,80			7,77			12,46			19,35
026	26	10	8,5	3,02	8	6,5	4,32	6	4,5	6,08	4	2,5	8,14			13,05			20,22
028	28	12	10,5	3,16	10	8,5	4,52	8	6,5	6,36	6	4,5	8,52			13,64			21,09
030	30	14	12,5	3,30	12	10,5	4,72	10	8,5	6,65	8	6,5	8,90	4	2,7	14,23			21,96
032	32	16	14,5	3,44	14	12,5	4,92	12	10,5	6,93	10	8,5	9,27	6	4,5	14,82			22,83
034	34	18	16,5	3,58	16	14,5	5,12	14	12,5	7,21	12	10,5	9,65	8	6,5	15,40	4	2,8	23,71
036	36	20	18,5	3,71	18	16,5	5,32	16	14,5	7,49	14	12,5	10,03	10	8,5	15,99	6	4,5	24,58
038	38	22	20,5	3,85	20	18,5	5,52	18	16,5	7,77	16	14,5	10,41	12	10,5	16,58	8	6,5	25,45
040	40	24	22,5	3,99	22	20,5	5,71	20	18,5	8,05	18	16,5	10,78	14	12,5	17,16	10	8,5	26,32
042	42	26	24,5	4,13	24	22,5	5,91	22	20,5	8,33	20	18,5	11,16	16	14,5	17,75	12	10,5	27,19
044	44	28	26,5	4,27	26	24,5	6,12	24	22,5	8,61	22	20,5	11,53	18	16,5	18,34	14	12,5	28,06
046	46	30	28,5	4,41	28	26,5	6,31	26	24,5	8,89	24	22,5	11,91	20	18,5	18,93	16	14,5	28,94
048	48	32	30,5	4,55	30	28,5	6,51	28	26,5	9,17	26	24,5	12,29	22	20,5	19,52	18	16,5	29,80
050	50	34	32,5	4,69	32	30,5	6,71	30	28,5	9,45	28	26,5	12,66	24	22,5	20,10	20	18,5	30,68
052	52	36	34,5	4,83	34	32,5	6,91	32	30,5	9,73	30	28,5	13,04	26	24,5	20,69	22	20,5	31,54
054	54	38	36,5	4,97	36	34,5	7,11	34	32,5	10,02	32	30,5	13,41	28	26,5	21,27	24	22,5	32,42
056	56	40	38,5	5,11	38	36,5	7,31	36	34,5	10,30	34	32,5	13,79	30	28,5	21,86	26	24,5	33,29
058	58	42	40,5	5,25	40	38,5	7,51	38	36,5	10,58	36	34,5	14,17	32	30,5	22,45	28	26,5	34,16
060	60	44	42,5	5,39	42	40,5	7,71	40	38,5	10,86	38	36,5	14,54	34	32,5	23,01	30	28,5	35,03
062	62	46	44,5	5,53	44	42,5	7,91	42	40,5	11,14	40	38,5	14,92	36	34,5	23,63	32	30,5	35,90
064	64	48	46,5	5,67	46	44,5	8,11	44	42,5	11,42	42	40,5	15,30	38	36,5	24,21	34	32,5	36,77
066	66	50	48,5	5,81	48	46,5	8,31	46	44,5	11,70	44	42,5	15,67	40	38,5	24,80	36	34,5	37,64
068	68	52	50,5	5,95	50	48,5	8,51	48	46,5	11,98	46	44,5	16,05	42	40,5	25,38	38	36,5	38,51
070	70	54	52,5	6,09	52	50,5	8,71	50	48,5	12,26	48	46,5	16,43	44	42,5	25,97	40	38,5	39,38

[a] Mass ≈ quoted in Kg/1 000 parts

iTeh STANDARD PREVIEW (standards.iteh.ai)