SLOVENSKI STANDARD
SIST EN 4396:2008

01-junij-2008

Aeronavtika - Gredne matice, samozapiralne, iz toplotnoodpornega jekla FE-PA92HT (A286), posrebrene

Aerospace series - Shaft-nuts, self-locking, in heat resisting steel FE-PA92HT (A286), silver plated

Luft- und Raumfahrt - Wellenmuttern, selbstsichernd, aus hochwarmfestem Stahl FE-PA92HT (A286), versilbert

Série aérospatiale - Écrous d'arbre, à freinage interne, en acier résistant à chaud FE-PA92HT (A286), argentés

Ta slovenski standard je istoveten z: **EN 4396:2008**

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49.030.30 Matice Nuts

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English Version

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

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Foreword

This document (EN 4396:2008) 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 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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

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1 Scope

This standard specifies the characteristics of self-locking shaft-nuts, in FE-PA2601, silver plated, metric, chiefly used for axial location of bearing inner rings on shafts.

Maximum test temperature of the parts: 450 °C

NOTE These parts are designed to be used with 4g6g external threads.

2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 5855-1, *Aerospace — MJ threads — Part 1: General requirements.*

EN 2171 [1)], *Heat resisting steel FE-PA92-HT — $R_m \geq 900$ MPa — Bars — Aerospace series.* [2)]

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

EN 2786, *Aerospace series — Electrolytic silver plating of fasteners.*

EN 3299, *Aerospace series — Shaft-nuts and threaded rings, self-locking, right- or left-hand MJ threads, in heat resisting steel FE-PA2601 (A286), silver plated — Technical specification.*

EN 4317, *Aerospace series — Heat resisting alloy FE-PA2601 (X6NiCrTiMoV26-15) — Non heat treated — Forging stock — a or $D \leq 200$ mm.*

EN 4318, *Aerospace series — Heat resisting alloy FE-PA2601 (X6NiCrTiMoV26-15) — Solution treated and precipitation treated — Bar and section — $D_e \leq 100$ mm — $R_m \geq 960$ MPa.*

3 Required characteristics

3.1 Configuration - Dimensions - Tolerances - Masses

See Figure 1 and Table 1. Dimensions and tolerances are in millimetres. They apply after silver plating.

3.2 Material

EN 2171

3.3 Surface treatment

EN 2786

Thickness:

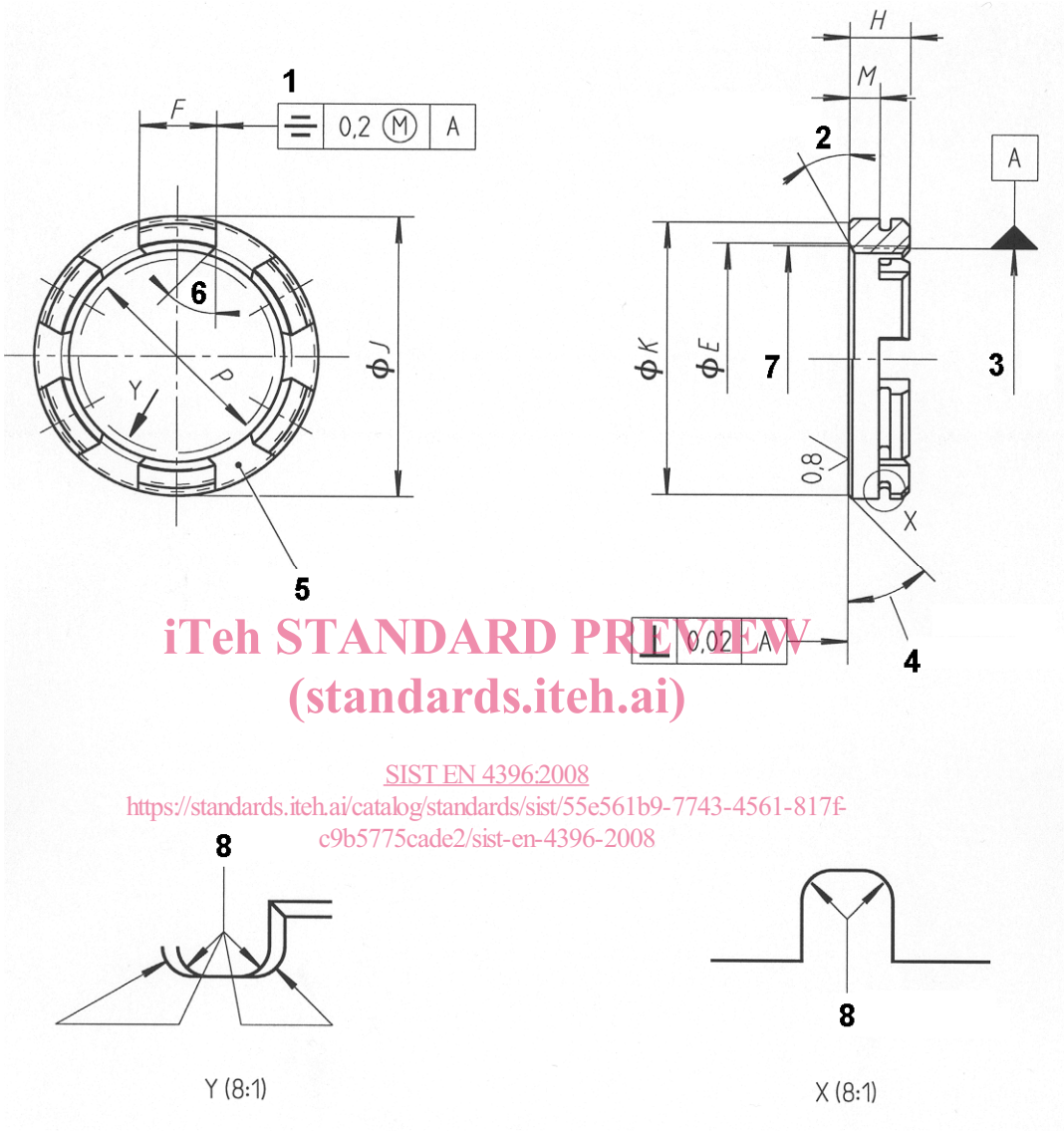
— external surfaces: 5 µm to 15 µm;
— thread: 5 µm min. shall be measured at the pitch diameter.

1) Inactive for new design, see EN 4317 and EN 4318.

2) Published as ASD Standard at the date of publication of this standard.

6,3 [0,8] Values applicable before silver plating.
Thread surface will be as achieved by normal methods of manufacture.

Remove sharp edges 0,1 to 0,4.



Key

1 $N \times$ equally spaced scallops
2 30° to 60°
3 Pitch diameter
4 40° to 50°
5 Marking
6 Chamfer at the manufacturer's discretion
7 Thread
8 R 0,5 to 0,7

Details of form not stated and self-locking feature are left to the manufacturer's discretion.

Figure 1

Table 1

Thread [a]		*E*	*F*	*H*	*J*	*K*	*M*	*N*	*P* [b]	Mass
Code	Designation	± 0,2	0 / − 0,2	+ 0,2 / − 0,1	± 0,1	± 0,2	± 0,1		min.	kg/1 000 parts ≈
012	MJ12×1,25-4H5H	12,5	6	7	19	18	3,5	4	10	7,5
013	MJS13×1,25-4H5H	13,5	7	7,5			3,8		11	8
014	MJ14×1,5-4H5H	14,5	8		20	19			11,7	8,5
015	MJ15×1,5-4H5H	15,5			21	20			12,7	8,9
016	MJ16×1,5-4H5H	16,5			22	21			13,7	9,3
017	MJ17×1,5-4H5H	17,5			23	22			14,7	9,7
018	MJ18×1,5-4H5H	18,5	9		24	23			15,7	10,1
019	MJS19×1,5-4H5H	19,5			25	24			16,7	10,5
020	MJ20×1,5-4H5H	20,5	10		26	25			17,7	11
021	MJS21×1,5-4H5H	21,5			27	26			18,7	11,8
022	MJ22×1,5-4H5H	22,5							19,7	12,6
023	MJS23×1,5-4H5H	23,5			29	28			20,7	13,4
024	MJ24×1,5-4H5H	24,5	11		30	29			21,7	14,2
025	MJ25×1,5-4H5H	25,5	12		31	30			22,7	15
026	MJ26×1,5-4H5H	26,5	8	8	33	32	4	6	23,7	15,5
027	MJ27×1,5-4H5H	27,5	9		34	33			24,7	16,5
028	MJ28×1,5-4H5H	28,5			35	34			25,7	17,5
029	MJS29×1,5-4H5H	29,5			36	35			26,7	18
030	MJ30×1,5-4H5H	30,5	10		37	36			27,7	19
031	MJS31×1,5-4H5H	31,5			38	37			28,7	19,8
032	MJ32×1,5-4H5H	32,5			39	38			29,7	20,5
033	MJ33×1,5-4H5H	33,5			40	39			30,7	21,5
034	MJS34×1,5-4H5H	34,5			41	40			31,7	22,5
035	MJ35×1,5-4H5H	35,5			42	41			32,7	23
036	MJ36×1,5-4H5H	36,5	11		43	42			33,7	23,5
037	MJS37×1,5-4H5H	37,5			44	43			34,7	24,5
038	MJ38×1,5-4H5H	38,5			45	44			35,7	25,5
039	MJ39×1,5-4H5H	39,5	12		46	45			36,7	26,5
040	MJ40×1,5-4H5H	40,5			48	47			37,7	27

[a] In conformity with ISO 5855-1 in none self-locking zone.

[b] Minimum diameter of internal envelope circle after realizing self-locking feature.