SLOVENSKI STANDARD
SIST EN 4552:2015

01-oktober-2015

Nadomešča:
SIST EN 4552:2004

Aeronavtika - Cevni priključki 37° iz toplotnoodpornega jekla - Neposredno vijačeni, varjeni - Colska izvedba

Aerospace series - Pipe coupling 37°, spherical, in heat resisting steel - Straight nipples, welded end - Inch series

Luft- und Raumfahrt - Rohrverschraubung 37°, aus hochwarmfestem Stahl - Gerade Verschraubungen zum Anschweißen - Inch-Reihe

Série aérospatiale - Système de raccordement sphérique 37°, en acier résistant à chaud - Mamelons droits à souder - Série inch

Ta slovenski standard je istoveten z: **EN 4552:2015**

ICS:

49.080	Letalski in vesoljski hidravlični sistemi in deli	Aerospace fluid systems and components

SIST EN 4552:2015 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 4552

July 2015

ICS 49.080

Supersedes EN 4552:2003

English Version

Aerospace series - Pipe coupling 37°, spherical, in heat resisting steel - Straight nipples, welded end - Inch series

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This European Standard was approved by CEN on 7 February 2015.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 4552:2015 E

Contents

European foreword

This document (EN 4552:2015) 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of an identical text or by endorsement, at the latest by January 2016, and conflicting national standards shall be withdrawn at the latest by January 2016.

This document supersedes EN 4552:2003.

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1 Scope

This standard specifies the characteristics of swivel nuts for inch series pipe couplings, 37°, in heat resisting steel, for aerospace applications.

Nominal pressure: Class D in accordance with ISO 6771.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 3468, *Aerospace series — Steel FE-PA13 — Softened — 500 ≤ Rm ≤ 700 MPa — Forgings — De ≤ 100 mm* [1)]

EN 3487, *Aerospace series — Steel FE-PA3601 (X6CrNiTi18-10) — Air melted — Softened — Bar for machining — a or D ≤ 250 mm — 500 MPa ≤ R_m ≤ 700 MPa*

EN 4549, *Aerospace series — Pipe coupling, in heat resisting steel or in heat resisting nickel alloy — Coupling end, welded — Design configuration — Inch series*

EN 4550-1, *Aerospace series — Pipe coupling, 37° — Design configuration — Inch series — Part 1: Male sealing ends, spherical*

EN 4560, *Aerospace series — Pipe coupling 37°, spherical, up to 21 000 kPa — Inch series — Technical specification*

ISO 3161, *Aerospace — UNJ threads — General requirements and limit dimensions*

ISO 6771, *Aerospace — Fluid systems and components — Pressure and temperature classifications*

3 Required characteristics

3.1 Configuration – Dimensions – Tolerances – Masses

See Figure 1 and Figure 2 and Table 1 to Table 4. Dimensions and tolerances are in millimetres.

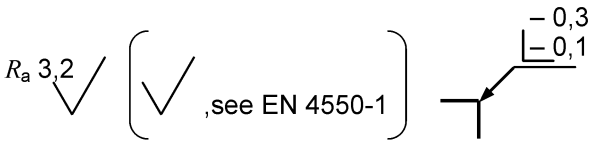
Table 1

Code	Locking wire hole option
N	without locking wire hole
Y	with 2 locking wire holes

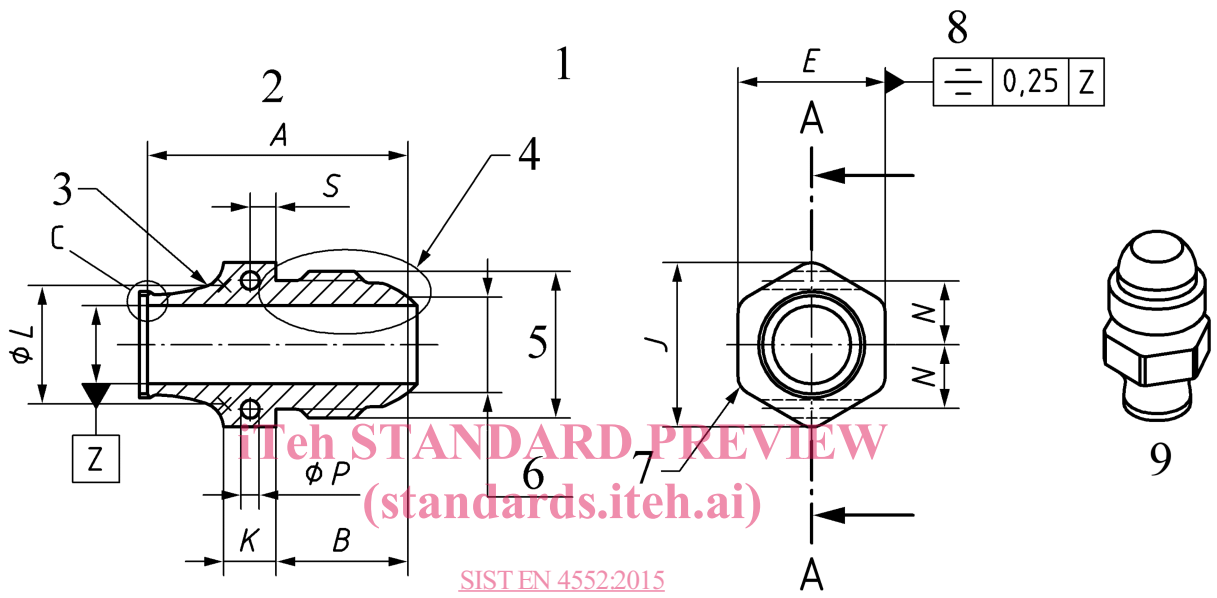
1) Published as ASD-STAN Prestandard at the date of publication of this standard (http://www.asd-stan.org/).

3.2 Materials

EN 3468 with minimum hardness HB > 140 or EN 3487 with minimum hardness HB > 140.



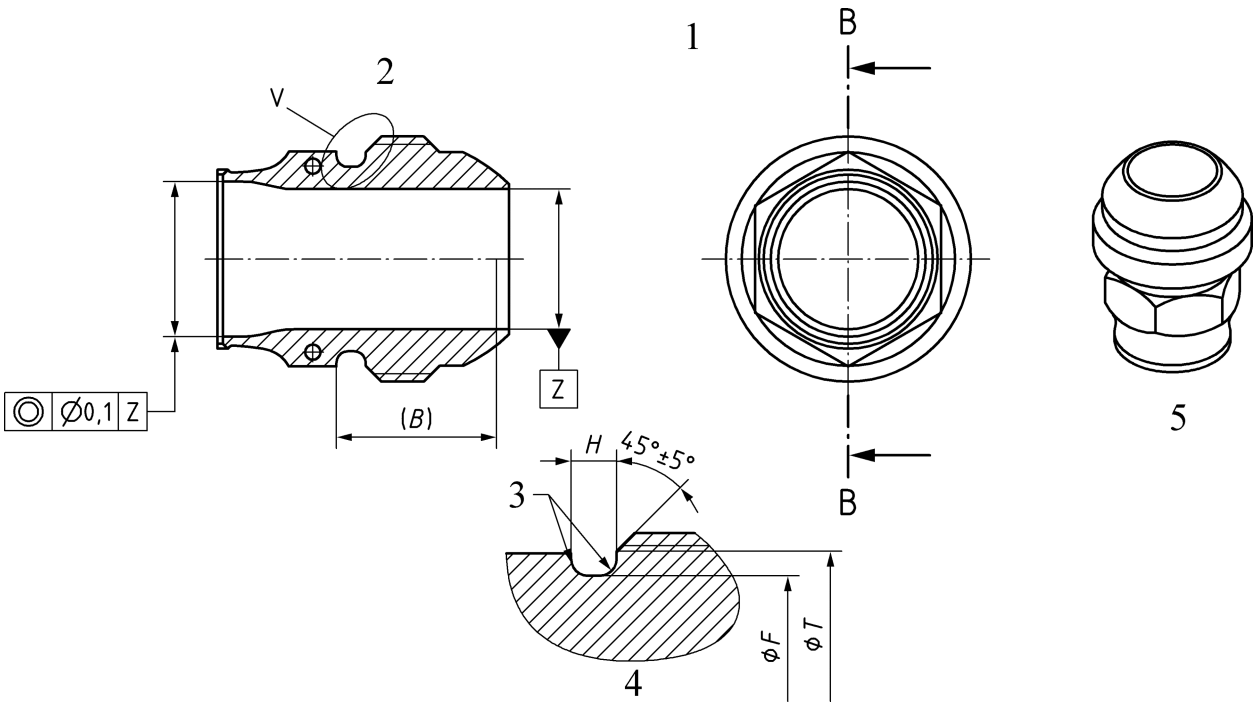
Thread's surface will be achieved by normal methods of manufacture.



Key

1 Style A
2 Section A-A
3 R 2,5 to R 4,1
4 D except dimension B
5 Thread
6 (∅ E per EN 4550-1)
7 3 positions
8 Marking
9 3 D view

Figure 1 — Hexagonal larger than thread



Key

1 Style B otherwise same as style A
2 Section B-B
3 R 0,80 to R 1,80
4 Detail V
5 3 D view

Figure 2 — Hexagonal smaller than thread

Table 2

Dimensional code [a]	Nominal diameter	Wall thickness of tube	Thread [b]	*A* ± 0,25	*B* ± 0,25	*C*	*D*	*E* + 0,05 − 0,25	*J* min.	Style	*K* ± 0,25	*L* min.	*L* max.	Mass [c]
A03	4,763	0,711	375 0-24UNJ-3A	21,60	11,45	EN4549A003	EN 4550-1-03	8,70	9,50	A	2,54	5,90	7,20	6,80
B03		0,889				EN4549B003								
A04	6,350	0,711	437 5-20UNJF-3A	22,80	12,65	EN4549A004	EN 4550-1-04	11,10	12,24			7,50	8,80	9,55
B04		0,889				EN4549B004								
A05	7,924	0,711	500 0-20UNJF-3A	23,40	13,20	EN4549A005	EN 4550-1-05	12,70	14,02			9,00	10,30	11,80
B05		0,889				EN4549B005								
A06	9,525	0,711	562 5-18UNJF-3A	25,80	13,10	EN4549A006	EN 4550-1-06	14,30	15,80		5,08	10,60	11,90	16,35
B06		0,889				EN4549B006								
A08	12,700	0,711	750 0-16UNJF-3A	27,10	14,40	EN4549A008	EN 4550-1-08	15,90	17,63	B		13,80	15,00	24,50
B08		0,889				EN4549B008								
A10	15,875	0,711	875 0-14UNJF-3A	29,45	16,75	EN4549A010	EN 4550-1-10	19,05	21,23			17,00	18,20	34,50
B10		0,889				EN4549B010								
A12	19,050	0,711	1.062 5-12UNJ-3A	31,10	18,40	EN4549A012	EN 4550-1-12	20,65	23,06			20,10	21,40	42,70
B12		0,889				EN4549B012								
A16	25,400	0,711	1.312 5-12UNJ-3A	32,60	19,90	EN4549A016	EN 4550-1-16	27,00	30,25			26,50	27,70	59,50
B16		0,889				EN4549B016								

[a] This code corresponds to:
- tube wall thickness (*A*: 0,711 mm; *B*: 0,889 mm);
- nominal diameter given in 16th of inches within two digits.

[b] Quoted in inches in accordance with ISO 3161.

[c] Mass ≈ quoted in kg/1 000 parts.