

SLOVENSKI STANDARD

SIST EN 3631:2015

01-januar-2015

Nadomešča:
SIST EN 3631:2008

Aeronavtika - Cevna napeljava, s prirobnicami, kotna 90° - Tesnilke O za cevi z debelino 0,8 mm

Aerospace series - Fluid fittings, flanged, 90° elbowed - Sealing by O-ring for 0,8 mm thick tubes

Luft- und Raumfahrt - Rohrverbindungen mit Flansch, 90° - O-Ring-Dichtung für Rohre mit einer Dicke von 0,8 mm

Série aéronautique - Raccords à bride à 90° - Étanchéité par joint torique pour tubes de 0,8 mm d'épaisseur <https://standards.iteh.ai/catalog/standards/sist/c09b1fdf-3252-4dc5-8e80-78abf22c3c1a/sist-en-3631-2015>

Ta slovenski standard je istoveten z: EN 3631:2014

ICS:

49.080

Letalski in vesoljski
hidravlični sistemi in deli

Aerospace fluid systems and
components

SIST EN 3631:2015

en,fr,de

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 3631

October 2014

ICS 49.080

Supersedes EN 3631:2008

English Version

Aerospace series - Fluid fittings, flanged, 90° elbowed - Sealing
by O-ring for 0,8 mm thick tubes

Série aérospatiale - Raccords à bride à 90° - Étanchéité par
joint torique pour tubes de 0,8 mm d'épaisseur

Luft- und Raumfahrt - Rohrverbindungen mit Flansch, 90° -
O-Ring-Dichtung für Rohre mit einer Dicke von 0,8 mm

This European Standard was approved by CEN on 4 January 2014.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

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Foreword

This document (EN 3631:2014) 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 supersedes EN 3631:2008.

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 April 2015, and conflicting national standards shall be withdrawn at the latest by April 2015.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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EN 3631:2014 (E)**1 Scope**

This European Standard specifies the characteristics of the fluid fittings, flanged, 90° elbowed, sealing by O-ring, for 0,8 mm thick tubes.

NOTE Flanged fitting installation hole and assembly, see EN 3633 and TR 3634.

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 2157-3, *Aerospace series — Steel — Forging stock and forgings — Technical specification — Part 3: Pre-production and production forgings*

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

EN 3482, *Aerospace series — Steel FE-PA13 — Annealed — Reference heat treatment: softened — Forging stock $D_e \leq 100$ mm*¹⁾

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

EN 3633, *Aerospace series — Installation hole for fluid fittings, flanged*

EN 3635, *Aerospace series — Weld lip — Geometrical configuration*

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defence Organizations*

TR 3634, *Aerospace series — Fluid fittings, flanged — Assembly recommendations*²⁾
<https://standards.iteh.ai/catalog/standards/sist/c09b1fdf-3252-4dc5-8e80-78abf22c3c1a/sist-en-3631-2015>

3 Required characteristics**3.1 Configuration, dimensions, tolerances****3.1.1 Configuration**

See Figure 1 to Figure 8.

3.1.2 Dimensions and tolerances

See Figure 1 to Figure 8 and Table 1 to Table 5.

3.2 Material

EN 3487 or EN 3482.

Fittings can be machined or forged according to EN 2157-3.

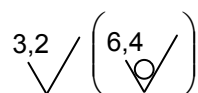
4 Forging flanged fitting, Type A

See Figure 1 and Figure 2 and Table 1 and Table 2.

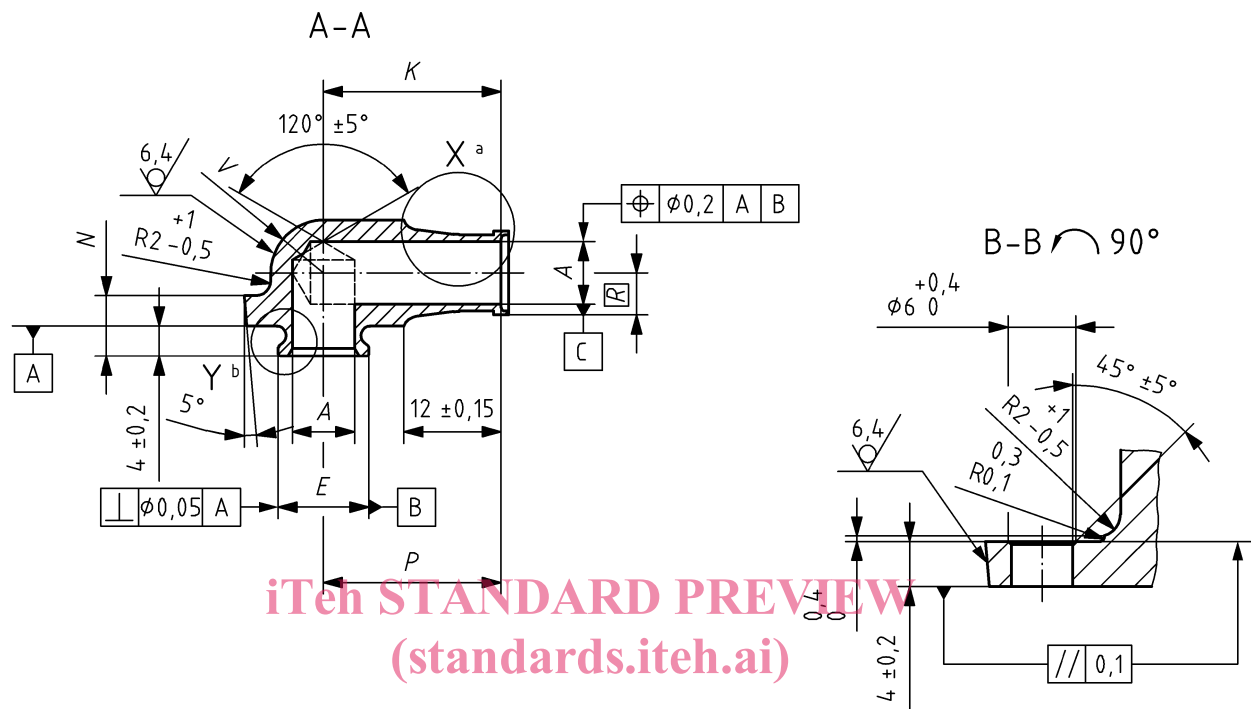
¹⁾ Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

²⁾ Published as ASD-STAN Technical Report at the date of publication of this standard (www.asd-stan.org).

Dimensions in millimetres

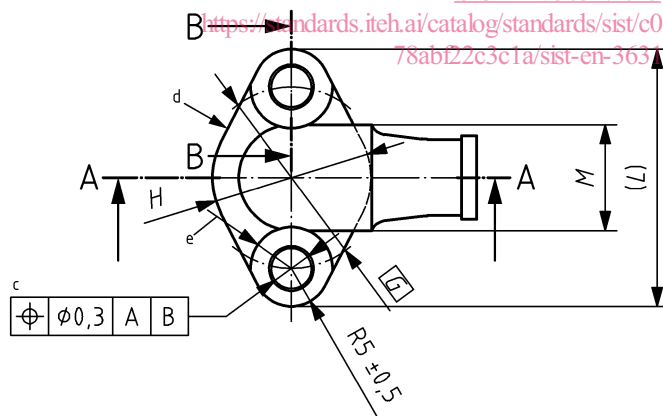


Break sharp edges 0,1 mm to 0,3 mm



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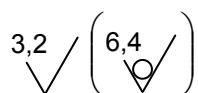


Key

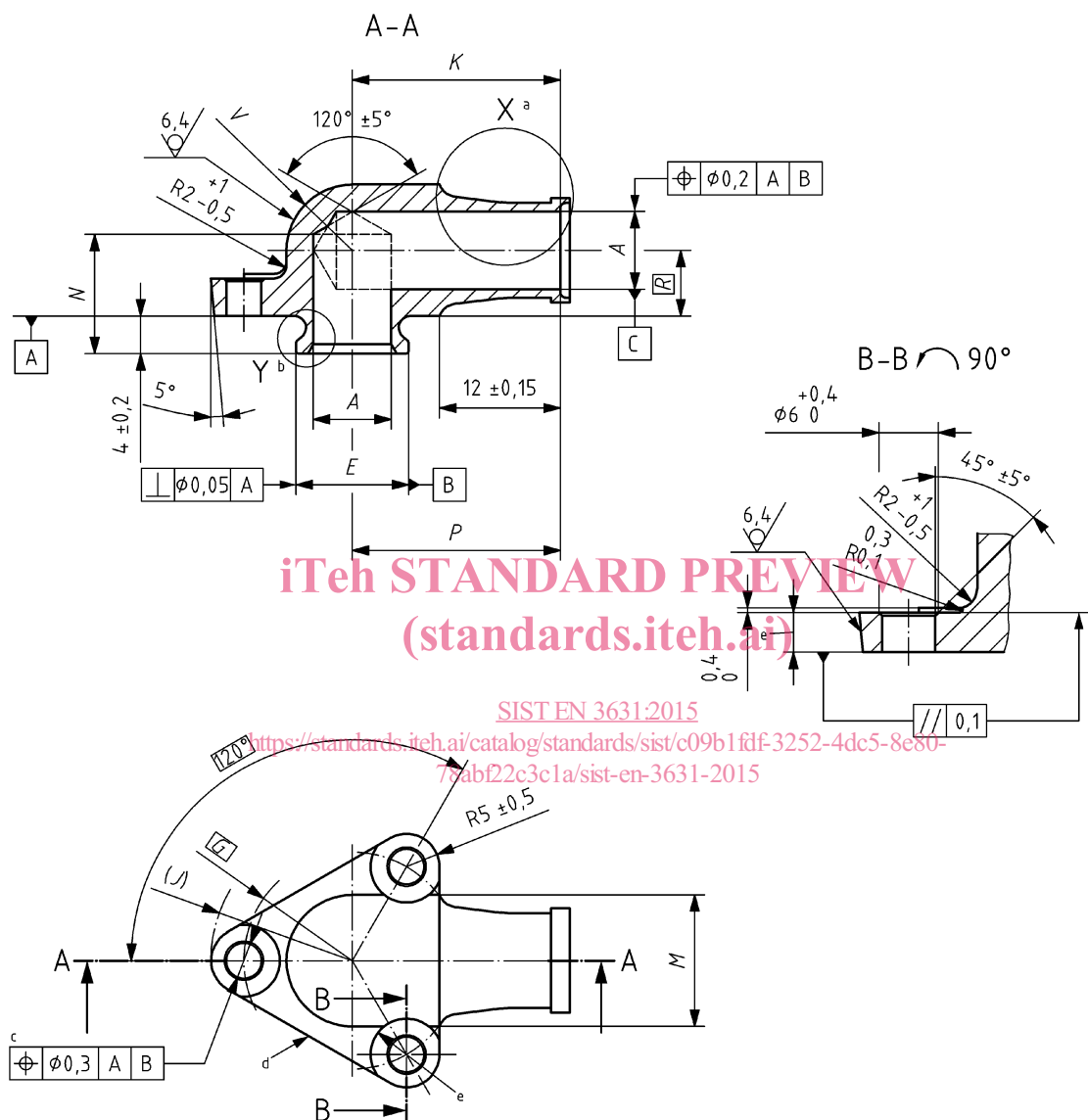
- a See Figure 8
- b See Figure 7
- c Two holes $\varnothing 5,4^{+0,2}_0$
- d Marking
- e Two identical $\varnothing 11$ spot facings or straight profile

Figure 1

Dimensions in millimetres



Break sharp edges 0,1 mm to 0,3 mm



Key

For tube $\varnothing = 32$ these spot facings do not overlap fitting body

- a See Figure 8
- b See Figure 7
- c Three equidistant holes $\varnothing 5,4^{+0,2}_0$
- d Marking
- e Three identical $\varnothing 11$ spot facings

Figure 2

Table 1

Dimensions in millimetres

Diameter code	Hole code	Tube (0,8 thick)	A		E - 0,05 - 0,15	G	H + 0,7 - 0,3	K 0 - 0,5	L	M + 0,7 - 0,3	N 0 - 0,5	P ± 0,15	R	V + 0,35 - 0,15
			nom.	tol. H11										
040	2	Ø 4	Ø 2,3	+ 0,075 0	Ø 6	Ø 18	Ø 15	20	28	Ø 8	8,4	19,5	4	4
060		Ø 6	Ø 4,3		Ø 8	Ø 20	Ø 17	21,4	30	Ø 10	9,9	20,5	5	5
080		Ø 8	Ø 6,3	+ 0,09 0	Ø 10	Ø 22	Ø 19	22,8	32	Ø 12	11,3	21,5	6	6
100		Ø 10	Ø 8,3		Ø 12	Ø 24	Ø 21	24,2	34	Ø 14	12,7	22,5	7	7
120		Ø 12	Ø 10,3	+ 0,11 0	Ø 14	Ø 26	Ø 23	25,5	36	Ø 16	14	23,5	8	8
140		Ø 14	Ø 12,3		Ø 16	Ø 28	Ø 25	26,5	38	Ø 18	15	24,5	9	9
160		Ø 16	Ø 14,3		Ø 18	Ø 30	Ø 27	27,5	40	Ø 20	16	25,5	10	10

Table 2

Dimensions in millimetres

Diameter code	Hole code	Tube (0,8 thick)	A		e ± 0,2	E - 0,05 - 0,15	G	J	K 0 - 0,5	M + 0,7 - 0,3	N 0 - 0,5	P ± 0,15	R	V + 0,35 - 0,15
			nom.	tol. H11										
140	3	Ø 14	Ø 12,3	+ 0,11 0	4	Ø 16	Ø 31	Ø 41	26,5	Ø 18	15	24,5	9	9
160		Ø 16	Ø 14,3			Ø 18	Ø 33	Ø 43	27,5	Ø 20	16	25,5	10	10
180		Ø 18	Ø 16,3			Ø 20	Ø 36	Ø 46	28,5	Ø 22	17	26	11	11
200		Ø 20	Ø 18,3	+ 0,13 0	5	Ø 22	Ø 38	Ø 48	29	Ø 24	18	26,5	12	12
220		Ø 22	Ø 20,3			Ø 24	Ø 40	Ø 50	30	Ø 26	19,5	27	13	13
250		Ø 25	Ø 23,3			Ø 27	Ø 46	Ø 56	31	Ø 29	21	28,5	14,5	14,5
280		Ø 28	Ø 26,3			Ø 30	Ø 52	Ø 62	32,5	Ø 32	23	30	16	16
320		Ø 32	Ø 30,3	+ 0,16 0		Ø 34	Ø 60	Ø 70	35	Ø 36	25	32	18	18