



SLOVENSKI STANDARD

SIST EN 3155-016:2020

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Nadomešča:

SIST EN 3155-016:2009

**Aeronavtika - Električni kontakti za uporabo v veznih elementih - 016. del:
Kontakti, električni, moški, tip A, stisljivi, razred S - Standard za proizvod**

Aerospace series - Electrical contacts used in elements of connection - Part 016:
Contacts, electrical, male, type A, crimp, class S - Product standard

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen -
Teil 016: Elektrischer Buchsenkontakt, Typ A, crimpbar, Klasse S - Produktnorm

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie
016 : Contacts électriques, mâles, type A, à sertir, classe S - Norme de produit

Ta slovenski standard je istoveten z: EN 3155-016:2019

ICS:

| | | |
|--------|---|---|
| 49.060 | Letalska in vesoljska električna oprema in sistemi | Aerospace electric equipment and systems |
|--------|---|---|

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EUROPEAN STANDARD

EN 3155-016

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Supersedes EN 3155-016:2006

English Version

Aerospace series - Electrical contacts used in elements of connection - Part 016: Contacts, electrical, male, type A, crimp, class S - Product standard

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie 016 : Contacts électriques, mâles, type A, à sertir, classe S - Norme de produit

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen - Teil 016: Elektrischer Buchsenkontakt, Typ A, crimpbar, Klasse S - Produktnorm

This European Standard was approved by CEN on 26 August 2019.

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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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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European foreword

This document (EN 3155-016:2019) 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 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2020, and conflicting national standards shall be withdrawn at the latest by June 2020.

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

This document supersedes EN 3155-016:2006.

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

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EN 3155-016:2019 (E)**1 Scope**

This document specifies the required characteristics, tests and tooling applicable to male electrical contacts, type A, crimp, class S, used in elements of connection according to EN 3155-002.

It shall be used together with EN 3155-001.

The tests as applied in this standard do not permit the full qualification and shall be completed with associated components.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 2083, *Aerospace series — Copper or copper alloy conductors for electrical cables — Product standard*

EN 2591 (all parts), *Aerospace series — Elements of electrical and optical connection — Test methods*

EN 3155-001, *Aerospace series — Electrical contacts used in elements of connection — Part 001: Technical specification*

EN 3155-002, *Aerospace series — Electrical contacts used in elements of connection — Part 002: List and utilization of contacts*

EN 3708-001, *Aerospace series — Modular interconnection systems — Terminal junction systems — Part 001: Technical specification*

EN 4008-007, *Aerospace series — Elements of electrical and optical connection — Crimping tools and associated accessories — Part 007: Positioner for crimping tool M22520/2-01 — Product standard*

EN 4008-008, *Aerospace series — Elements of electrical and optical connection — Crimping tools and associated accessories — Part 008: Positioner for crimping tool M22520/7-01 — Product standard*

EN 4434, *Aerospace series — Copper or copper alloy lightweight conductors for electrical cables — Product standard (Normal and tight tolerances)*

SAE-AS22520, *Crimping tools, wire termination, general specification for¹⁾*

SAE-AS81969, *Installing and removal tools, connector electrical contact, general specification for¹⁾*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 3155-001 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

1) Published by: SAE National (US) Society of Automotive Engineers <http://www.sae.org/>

4 Required characteristics

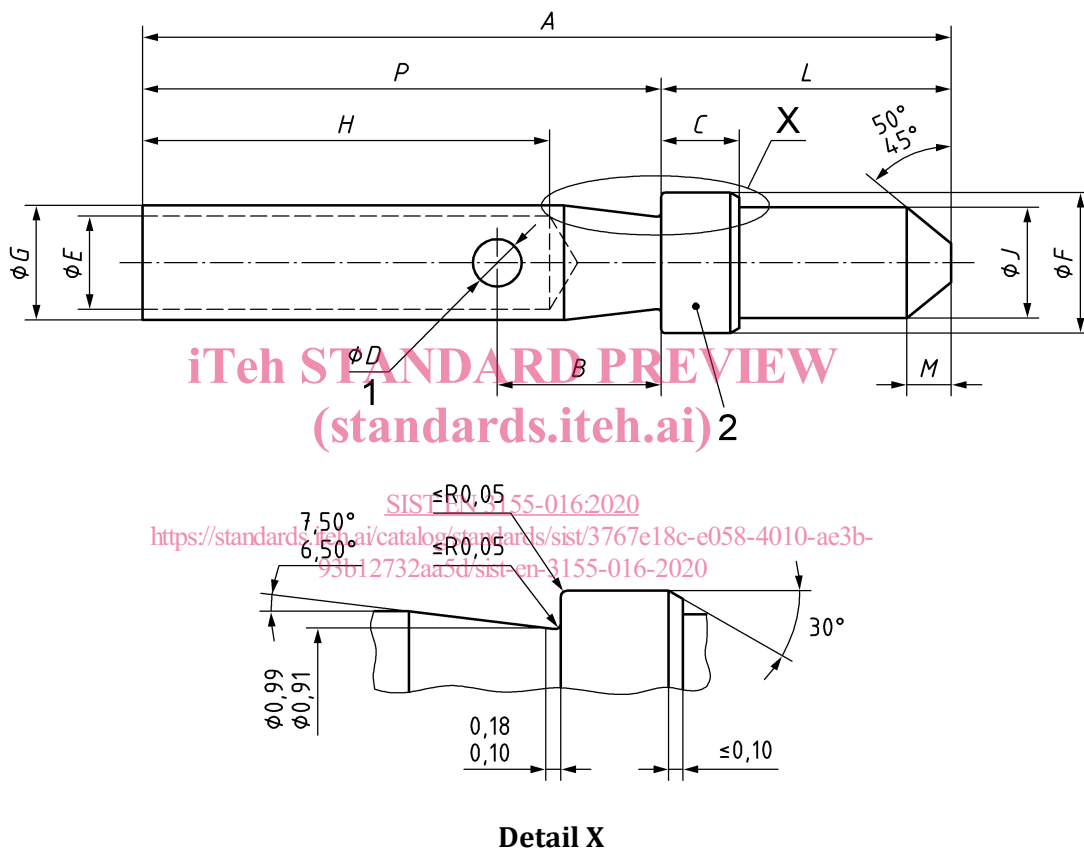
4.1 Specific characteristics

Type A contacts are for general application and class S corresponds to an operating temperature range from $-65\text{ }^{\circ}\text{C}$ to $200\text{ }^{\circ}\text{C}$.

4.2 Dimensions, mass

See Figure 1, Figure 2 and Table 1.

Dimensions and tolerances are given in millimetres and apply after surface treatment.



Key

1 1 (one) side only

2 Location of the traceability round punch mark

NOTE 1 for size 22,

| | | | |
|---|--------------------|-----------------|-----------------|
| ◎ | $\varnothing 0,08$ | $\varnothing E$ | $\varnothing G$ |
|---|--------------------|-----------------|-----------------|

NOTE 2 for all other sizes,

| | | | |
|---|--------------------|---------------------|---------------------|
| ◎ | $\varnothing 0,08$ | $\varnothing E$ (M) | $\varnothing G$ (M) |
|---|--------------------|---------------------|---------------------|

Figure 1 — Male contact, size 22

Table 1 — Connector contact

| Size | | A | B | C | Ø D | Ø E | Ø F | Ø G | H | Ø J | L | M | N | P | Ø R | Mass g max. |
|---------|--------|--------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|
| Contact | Barrel | (Ref.) | | | | | | (Ref.) | | | | | | | (Ref.) | |
| 22 | 22 | 8,33 | 1,70 1,65 | 0,83 0,73 | 0,63 0,37 | 0,94 0,85 | 1,50 1,45 | 1,22 1,14 | 4,20 3,70 | 1,17 1,12 | 3,03 2,79 | 0,45 0,35 | - | 5,30 5,18 | - | 0,07 |
| 20 | 20 | 7,37 | 0,88 0,64 | 0,83 0,73 | 0,82 0,66 | 1,27 1,22 | 2,62 2,54 | 1,98 1,93 | 4,70 4,00 | 1,98 1,93 | 3,03 2,79 | 0,45 0,35 | 1,67 1,57 | 4,34 4,06 | 1,80 1,70 | 0,16 |
| 20 | 18 | 7,37 | 0,88 0,64 | 0,83 0,73 | 0,82 0,66 | 1,35 1,30 | 2,62 2,54 | 1,98 1,93 | 4,70 4,00 | 1,98 1,93 | 3,03 2,79 | 0,45 0,35 | 1,67 1,57 | 4,34 4,06 | 1,80 1,70 | 0,16 |
| 16 | 16 | 9,95 | 0,88 0,64 | 1,22 1,12 | 1,07 0,91 | 1,73 1,68 | 3,38 3,30 | 2,62 2,57 | 7,20 6,40 | 2,62 2,57 | 3,42 3,18 | 0,45 0,35 | 2,06 1,88 | 6,53 6,25 | 2,34 2,18 | 0,34 |
| 12 | 12 | 10,92 | 0,88 0,64 | 1,22 1,12 | 1,07 0,91 | 2,59 2,49 | 4,83 4,75 | 3,84 3,76 | 7,20 6,40 | 3,84 3,76 | 4,39 4,15 | 0,56 0,46 | 3,10 3,00 | 6,53 6,25 | 3,45 3,31 | 0,80 |

4.3 Marking

Dimple on front part of contact, see Figure 2.

4.4 Material, surface treatment

- Body material : copper alloy
- Surface treatment : gold over an appropriate undercoat, thickness of protection see EN 3155-001.

4.5 Permissible cables

See Table 2.

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