



**SLOVENSKI STANDARD**  
**oSIST prEN 3155-003:2023**

**01-marec-2023**

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**Aeronavtika - Električni kontakti za vezne elemente - 003. del: Kontakti, električni, ženski, tip A, kodrasti, razred S - Standard za proizvod**

Aerospace series - Electrical contacts used in elements of connection - Part 003: Contacts, electrical, female, type A, crimp, class S - Product standard

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen - Teil 003: Elektrische Buchsenkontakte, Typ A, crimpbar, Klasse S - Produktnorm

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie 003 : Contacts électriques, femelles, type A, à sertir, classe S - Norme de produit

<https://standards.iteh.ai/catalog/standards/sist/dc9a5d4e-1bc8-471b-8d25-4d2bd0998099/osist-pr-en-3155-003-2023>

**Ta slovenski standard je istoveten z: prEN 3155-003**

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**ICS:**

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems
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**oSIST prEN 3155-003:2023**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**DRAFT**  
**prEN 3155-003**

December 2022

ICS 49.060

Will supersede EN 3155-003:2019

English Version

**Aerospace series - Electrical contacts used in elements of  
connection - Part 003: Contacts, electrical, female, type A,  
crimp, class S - Product standard**

Série aérospatiale - Contacts électriques utilisés dans  
les organes de connexion - Partie 003 : Contacts  
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de produit

Luft- und Raumfahrt - Elektrische Kontakte zur  
Verwendung in Verbindungselementen - Teil 003:  
Elektrische Buchsenkontakte, Typ A, crimpbar, Klasse  
S - Produktnorm

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee ASD-STAN.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

**Warning** : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

<b>Contents</b>	<b>Page</b>
<b>European foreword</b> .....	<b>3</b>
<b>4.1 Specific characteristics</b> .....	<b>5</b>
<b>4.2 Dimensions and mass</b> .....	<b>5</b>
<b>4.3 Marking by colour code</b> .....	<b>11</b>
<b>4.4 Material, surface treatment</b> .....	<b>11</b>
<b>4.5 Permissible cables</b> .....	<b>12</b>
<b>4.6 Tooling</b> .....	<b>13</b>
<b>4.7 Cable stripping</b> .....	<b>16</b>
<b>4.8 Tests</b> .....	<b>16</b>
<b>4.9 Gauges</b> .....	<b>20</b>
<b>Bibliography</b> .....	<b>21</b>

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[oSIST prEN 3155-003:2023](https://standards.iteh.ai/catalog/standards/sist/dd9a5d4e-fbc8-47fb-8d25-4d2bd0998099/osist-pren-3155-003-2023)

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## European foreword

This document (prEN 3155-003:2022) 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 document 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 is currently submitted to the CEN Enquiry.

This document will supersede EN 3155-003:2019.

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**prEN 3155-003:2022 (E)****1 Scope**

This document specifies the required characteristics, tests and tooling applicable to female electrical contacts 003, type A, crimp, class S used in elements of connection according to EN 3155-002.

It is used together with EN 3155-001.

The associated male contacts are defined in EN 3155-008.

**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 3545-001, *Aerospace series — Connectors, electrical, rectangular, with sealed and non-sealed rear, plastic housing, locking device, operating temperatures -55 °C to 175 °C — Part 001: Technical specification*

EN 4165-001, *Aerospace series — Connectors, electrical, rectangular, modular — Operating temperature 175 °C continuous — Part 001: Technical specification*

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

ISO 8843,<sup>1)</sup> *Aircraft — Crimp-removable contacts for electrical connectors — Identification system*

SAE-AS22520,<sup>2)</sup> *Crimping tools, wire termination, general specification for*

SAE-AS81969,<sup>2)</sup> *Installing and removal tools, connector electrical contact, general specification for*

TR 4837,<sup>3)</sup> *Aerospace series — Applicable crimping tools for electrical contact product standards EN 3155-003, EN 3155-008 and EN 3155-009 for contact size # 10 and barrel size # 10 only*

TR 4843,<sup>4)</sup> *Aerospace series — Applicable crimping tools for electrical contact product standards EN 3155-003, EN 3155-008 and EN 3155-009 for contact size #20 and barrel size #22 only*

**3 Terms and definitions**

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

<sup>1)</sup> Published by: ISO International Organization for Standardization <http://www.iso.ch/>.

<sup>2)</sup> Published by: SAE International (US) <https://www.sae.org/>.

<sup>3)</sup> Published as ASD-STAN Technical Report at the date of publication of this standard by AeroSpace and Defence industries Association of Europe - Standardization (ASD-STAN) ([www.asd-stan.org](http://www.asd-stan.org)).

<sup>4)</sup> In preparation at the date of publication of this document.

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

- ISO Online browsing platform: available at <https://www.iso.org/obp/>
- IEC Electropedia: available at <https://www.electropedia.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 °C to 200 °C.

### 4.2 Dimensions and mass

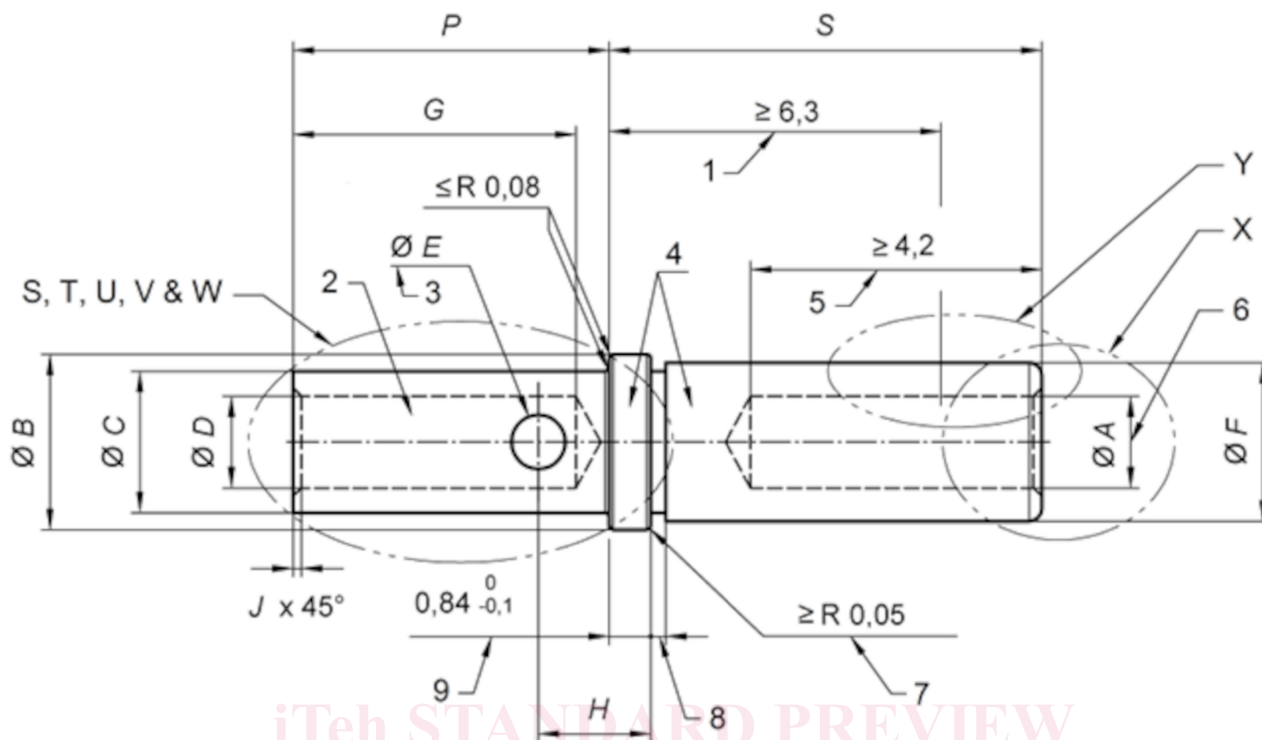
See Figure 1 to Figure 8 and Table 1.

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

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◎	Ø 0,1
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◎	Ø 0,08
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Concentricity between Ø C and Ø D for size 22 & 23 contacts

◎	Ø 0,025
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Concentricity between Ø C and Ø D for all size contacts except size 22 & 23

**Key**

- 1 Position of the first point and the maximum length of electrical contact (point at which a square ended minimum gauge pin of the same basic diameter as the mating contact first engages the female contact spring member) (See EN3155-001 for active area definition)
- 2 Colour bands, see Table 2
- 3 One side only
- 4 Manufacturer identification
- 5 This dimension represents the length to allow full pin engagement
- 6 Ø A represents the bore
- 7 Break allowed
- 8 Clearance between sleeve and body of the contact 0,15 max. for contact size 22 & 23, 0,25 max. for other contacts
- 9 Not applicable for barrel size 22, contact size 22 & 23 (the arrow should point on dimension H)

**Figure 1 — Connector contact**



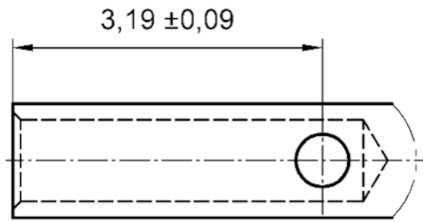
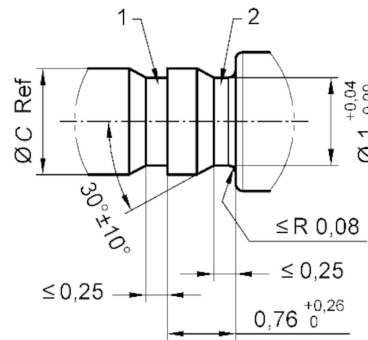


Figure 2 — Detail S - Contact size 22 and 23, barrel size 22



Key

- 1 Identification groove (optional)
- 2 Retention groove

Figure 3 — Detail T - Contact size 22 and 23, barrel size 22

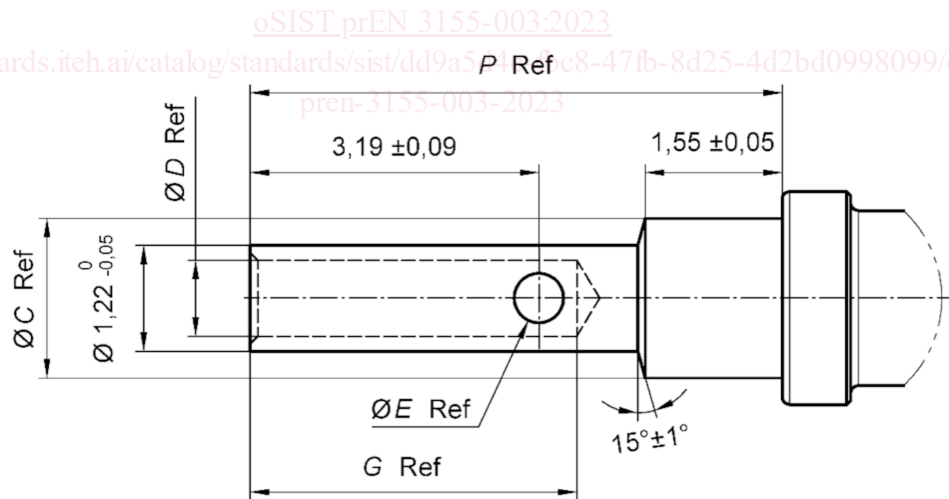


Figure 4 — Detail U - Contact size 20, barrel size 22

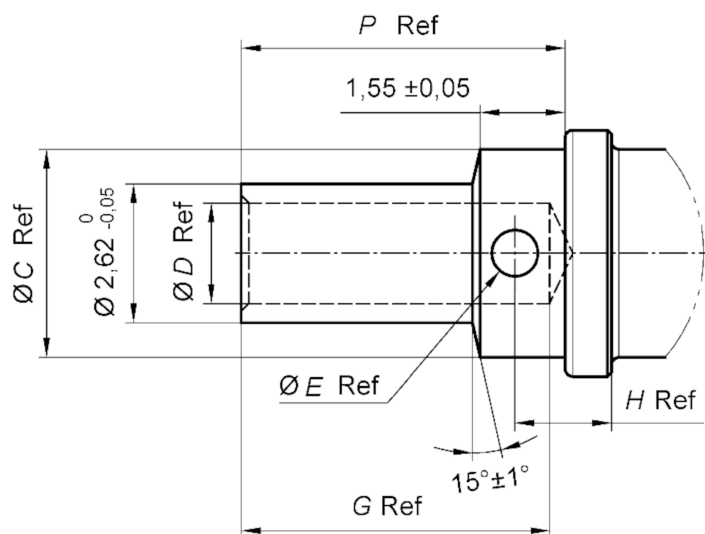


Figure 5 — Detail V - Contact size 12, barrel size 14

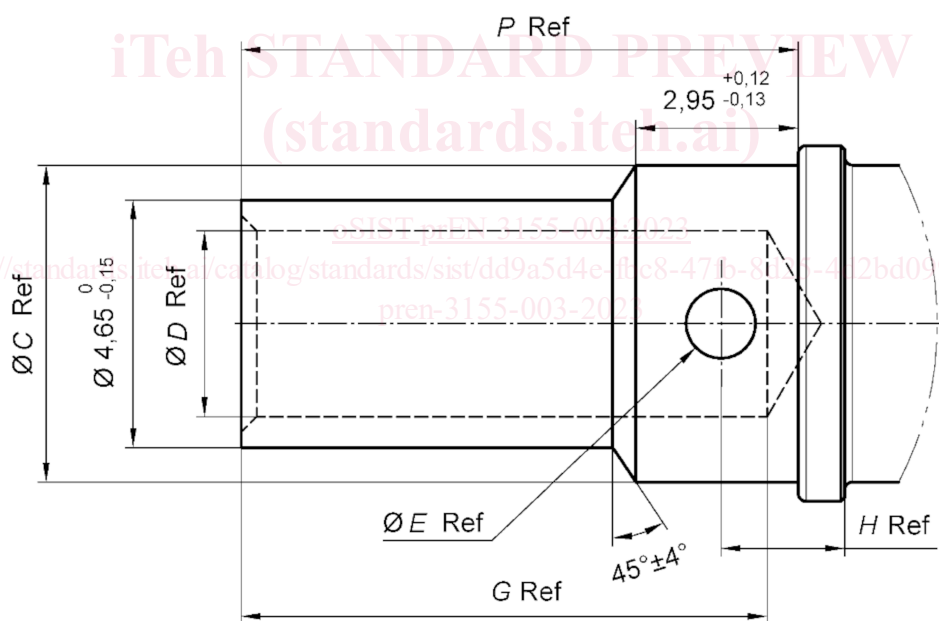
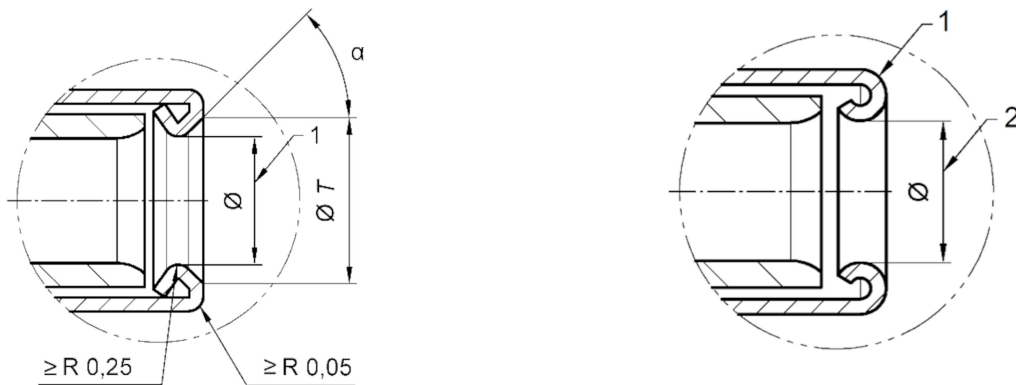


Figure 6 — Detail W - Contact size 10

**Optional design**



**Key**

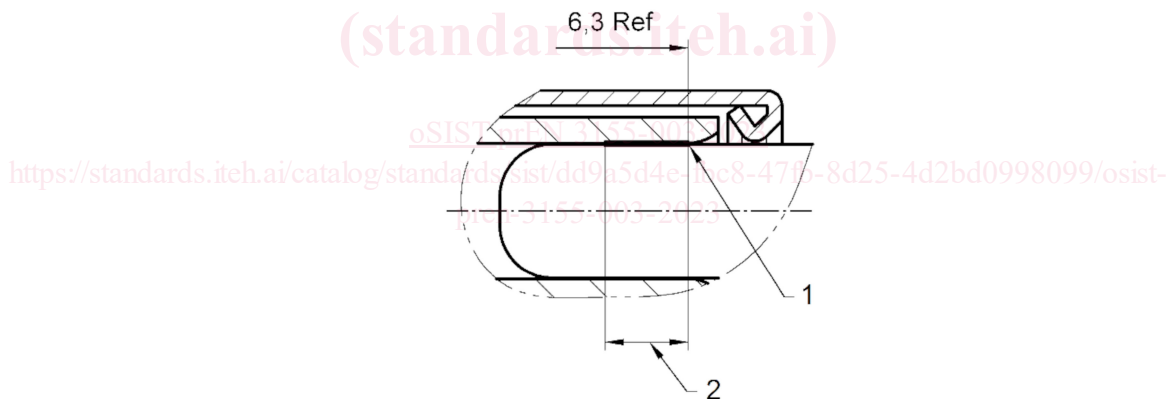
1 The max entry diameter shall be compliant with the value defined in EN 3155-001 test EN 2591-502 "Restricted entry"

**Key**

1 One full radius permissible  
 2 The max entry diameter shall be compliant with the value defined in EN 3155-001 test EN 2591-502 "Restricted entry"

**Figure 7 — Detail X**

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**Key**

- 1 Position of the first point and the maximum length of electrical contact (point at which a square ended minimum gauge pin of the same basic diameter as the mating contact first engages the female contact spring member)
- 2 Female active area: See EN 3155-001 for definition

**Figure 8 — Detail Y - Active area**