SLOVENSKI STANDARD
SIST EN 3155-077:2020

01-februar-2020

Nadomešča:
SIST EN 3155-077:2012

Aeronavtika - Električni kontakti za uporabo v veznih elementih - 077. del: Kontakti, električni, ženski, tip A, stisljivi, razred R - Standard za proizvod

Aerospace series - Electrical contacts used in elements of connection - Part 077: Contacts, electrical, female, type A, crimp, class R - Product standard

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen - Teil 077: Elektrische Buchsenkontakte, Typ A, crimpbar, Klasse R - Produktnorm

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie 077 : Contacts électriques, femelles, type A, à sertir, classe R - Norme de produit

Ta slovenski standard je istoveten z: **EN 3155-077:2019**

ICS:

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

SIST EN 3155-077:2020 **en,fr,de**

EUROPEAN STANDARD

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English Version

Aerospace series - Electrical contacts used in elements of connection - Part 077: Contacts, electrical, female, type A, crimp, class R - Product standard

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This European Standard was approved by CEN on 14 July 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.

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

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

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European foreword

This document (EN 3155-077:2019) 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 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 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 3155-077:2012.

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.

Introduction

The contacts defined by this document are to be used in connectors defined by EN 4644-001.

The contact #22 defined by this document are derived from those of SAE AS 39029-12 and are intermateable with those of SAE AS 39029-11.

1 Scope

This document specifies the required characteristics, tests and tooling applicable to female contacts size 22, 20, 16, 12, 8 and 5, type A, crimp, class R, used in elements of connection according to EN 3155-002.

It should be used together with EN 3155-001.

The associated male contacts are defined in EN 3155-076.

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 and copper alloys 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 3155-076, *Aerospace series — Electrical contacts used in elements of connection — Part 076: Contacts, electrical, male, type A, crimp, class R*

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

EN 4644-001, *Aerospace series — Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous — Part 001: Technical specification*

EN 4644-012, *Aerospace series — Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous — Part 012: Receptacle, size 1, class A, C and E — Product standard*

EN 4644-021, *Aerospace series — Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous — Part 021: Plug, size 2, without mounting holes, class A, C and E — Product standard*

EN 4644-024, *Aerospace series — Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous — Part 024: Receptacle size 2, class A, C and E — Product standard*

ISO 8843, *Aircraft — Crimp-removable contacts for electrical connectors — Identification system* [1)]

SAE-AS22520, *Crimping tools, wire termination, general specification for* [2)]

1) Published by: ISO International International Standardisation Organisation http://www.iso.ch/

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

SAE-AS39029-11, *Contacts, electrical connector, pin, crimp removable* 2)

SAE-AS39029-12, *Contacts, electrical connector, socket, crimp removable* 2)

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

TR 4874, *Aerospace series — Applicable crimping tool for electrical contacts product standards EN 3155-076 and EN 3155-077* 3)

3 Terms, definitions and abbreviations

For the purposes of this document, the terms, definitions and abbreviations 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/

4 Requirements

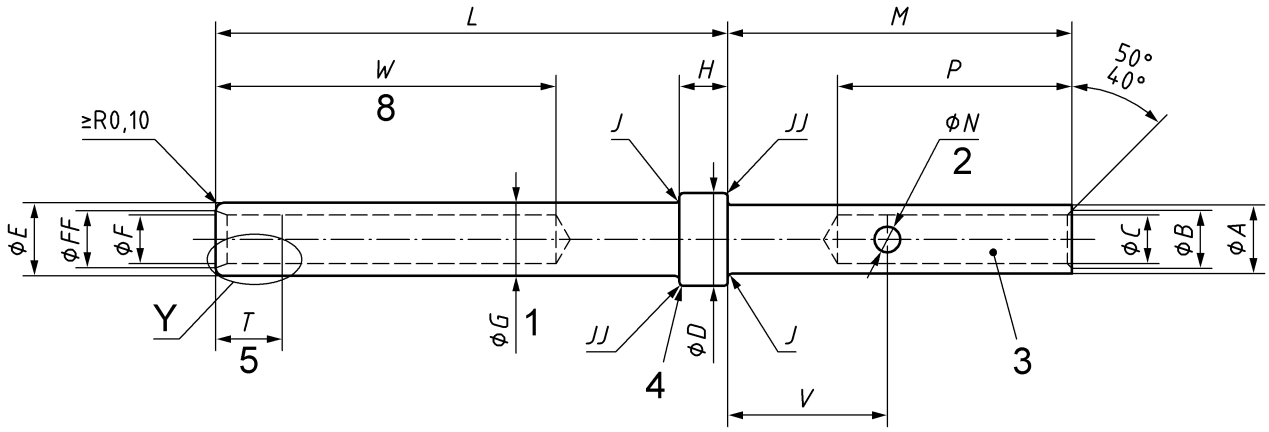
4.1 Specific characteristics

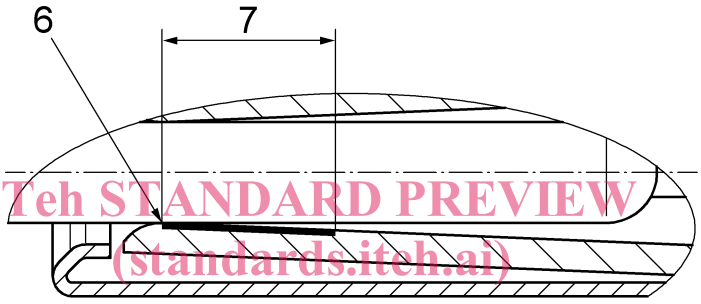
Type A contacts are for general application and class R with a specific operating temperature range from – 65 °C to 175 °C.

3) In preparation at the date of publication of this document.

4.2 Dimensions and mass

See Figure 1 to Figure 3 and Table 1.





Detail Y

Key

1 Beginning at the interface where the sleeve meets the barrel of the contact.

2 1 (one) side only

3 Area for colour band marking (see Table 2).

4 No sharp angle on front side of the contact shoulder.

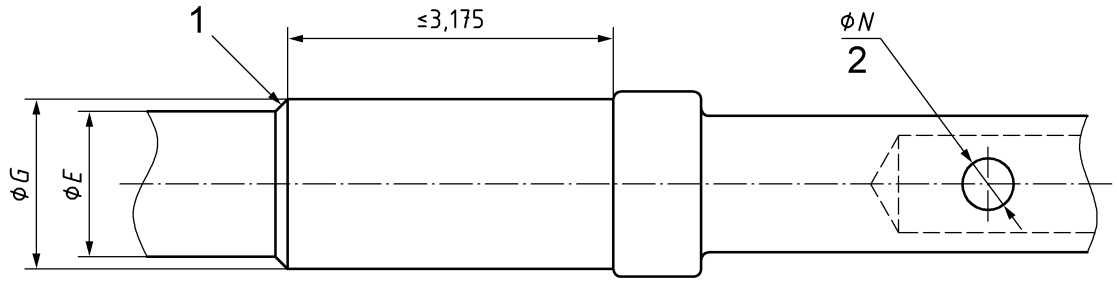
5 Distance between socket contact extremity and point 6.

6 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 EN 3155-001 for active area definition).

7 Female active area: See EN 3155-001 for definition.

8 This dimension represents the length to allow full pin engagement.

Figure 1



Key

1 Chamfer or radius
2 1 (one) side only

Figure 2 — Size 22 crimp barrel

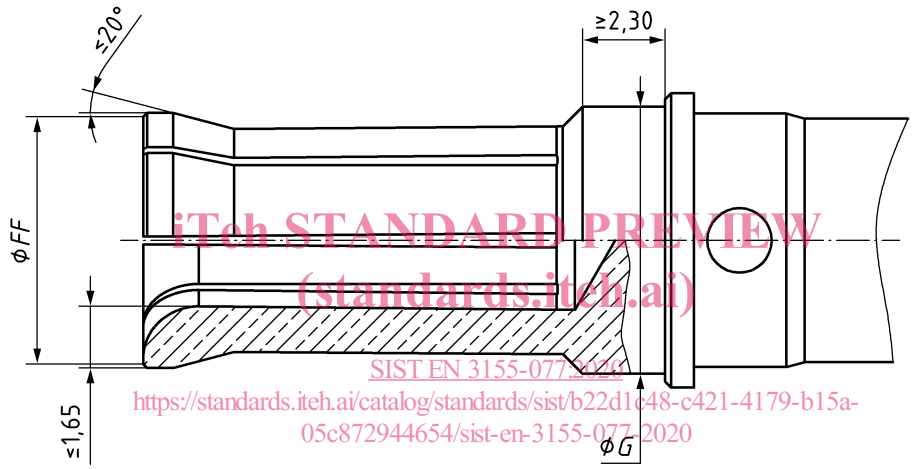
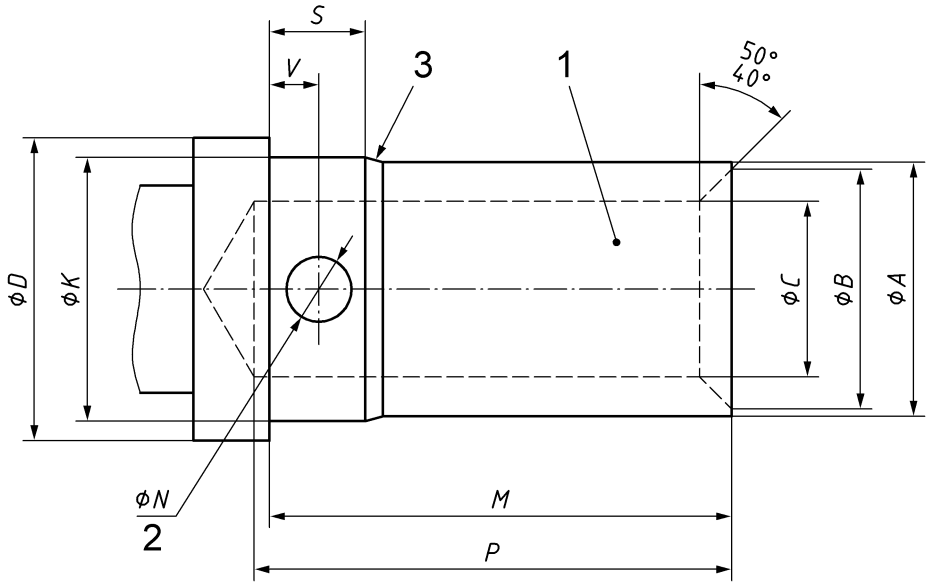


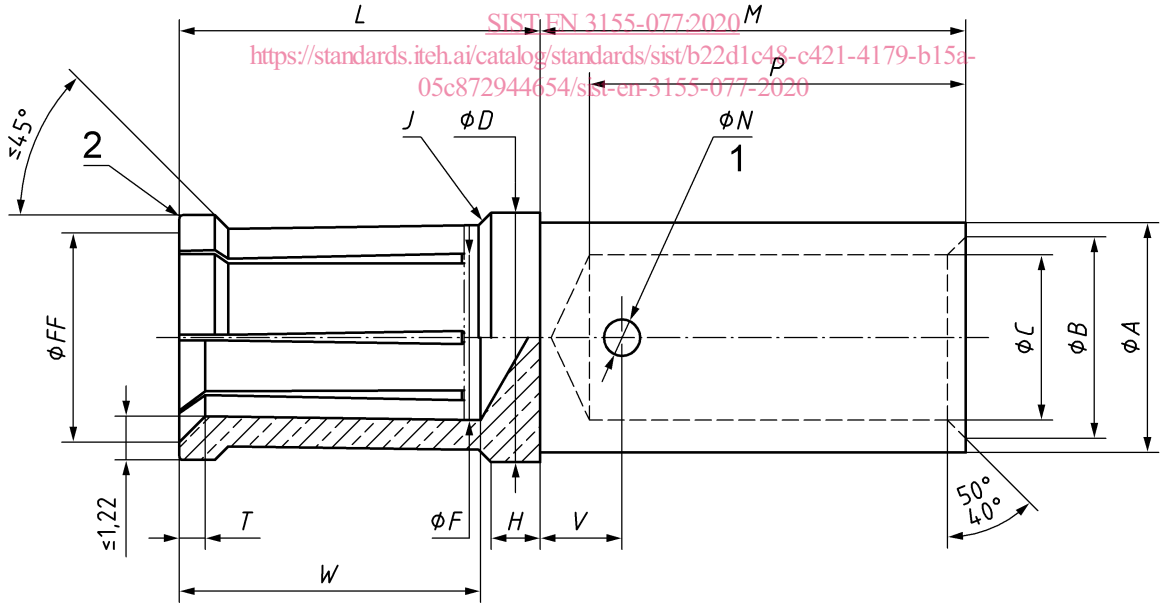
Figure 3 — Contact 8-8 mating side detail



Key

1 Area for colour band marking (see Table 2)
2 1 (one) side only
3 Chamfer or radius

Figure 4 — Contact 16-16, 12-12, 8-8 crimp barrel detail



Key

1 1 (one) side only
2 No sharp angle

Figure 5 — Contact 5-8