

# SLOVENSKI STANDARD

## SIST EN 3155-027:2016

01-januar-2016

Nadomešča:

SIST EN 3155-027:2008

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**Aeronavtika - Električni kontakti za uporabo v veznih elementih - 027. del:  
Kontakti, električni, ženski, tip A, nagubani, razred R - Standard za proizvod**

Aerospace series - Electrical contacts used in elements of connection - Part 027:  
Contacts, electrical, female, type A, crimp, class R - Product standard

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Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen -  
Teil 027: Elektrische Buchsenkontakte, Typ A, crimpbar, Klasse R - Produktnorm

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

**Ta slovenski standard je istoveten z: EN 3155-027:2015**

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**ICS:**

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

**EN 3155-027**

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2015

ICS 49.060

Supersedes EN 3155-027:2006

English Version

## Aerospace series - Electrical contacts used in elements of connection - Part 027: Contacts, electrical, female, type A, crimp, class R - Product standard

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie 027: Contacts électriques, femelles, type A, à sertir, classe R - Norme de produit

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen - Teil 027: Elektrische Buchsenkontakte, Typ A, crimpbar, Klasse R - Produktnorm

This European Standard was approved by CEN on 8 June 2015.

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.



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

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

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## European foreword

This document (EN 3155-027:2015) 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 April 2016, and conflicting national standards shall be withdrawn at the latest by April 2016.

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.

This document supersedes EN 3155-027:2006.

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 3155-027:2015 (E)

## Introduction

The contacts defined by this standard are derived from those of SAE-AS39029/94 and intermateable with those of SAE-AS39029/93.

## 1 Scope

This European Standard specifies the required characteristics and tests applicable to female contacts 027, type A, crimp, class R, used in elements of connection according to EN 3155-002.

The associated male contacts are defined in EN 3155-026.

## 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 2083, *Aerospace series — Copper and copper alloy conductors for electrical cables — Product standard*

EN 2591\*, *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 3155-026, *Aerospace series — Electrical contacts used in elements of connection — Part 026: Contacts, electrical, male, type A, crimp, class R — Product standard*

EN 3682-001, *Aerospace series — Connectors, plug and receptacle, electrical, rectangular, interchangeable insert type, rack to panel, operating temperature 150 °C continuous — Part 001: Technical specification*

ISO 8843, *Aircraft — Crimp-removable contacts for electrical connectors — Identification system*

MIL-C-22520/2, *Crimping tools, terminal, hand, wire termination for wire barrel sizes 20 through 28* <sup>1)</sup>

MIL-C-22520/7, *Crimping tools, terminal, hand, wire termination for wire barrel sizes 16, 20 and 22* <sup>1)</sup>

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

SAE-AS22520/1, *Crimping tools, terminal, hand, wire termination for wire barrel sizes 12 through 20* <sup>2)</sup>

SAE-AS39029, *Contacts, electrical connector, general specification for* <sup>2)</sup>

SAE-AS39029/93, *Contacts, electrical connector, pin, crimp removable, (for DOD-C-83527, connectors)* <sup>2)</sup>

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\* All parts quoted in this standard.

1) Published by: DoD National (US) Mil. Department of Defense <http://www.defenselink.mil/>

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

SAE-AS39029/94, *Contacts, electrical connector, socket, crimp removable, (for DOD-C-83527, connectors)* <sup>2)</sup>

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

SAE-AS81969/1, *Installing and removal tools, connector electrical contact, type III, class 2, composition C* <sup>2)</sup>

SAE-AS81969/28, *Installing and removal tools, connector electrical contact, type II, class 2, composition C* <sup>2)</sup>

### 3 Terms and definitions

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

## 4 Required characteristics

### 4.1 Specific characteristics

Type A contacts are for general application and class R corresponds to an operating temperature range from – 65 °C to 150 °C.

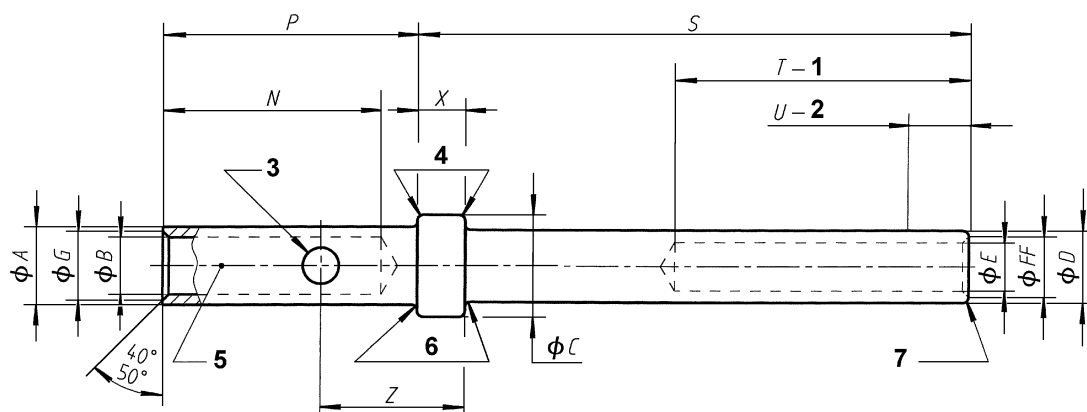
### 4.2 Dimensions and mass

See Figures 1 and 2 and Table 1

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

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$\text{⊗ } \emptyset 0,05$   $\emptyset$  General concentricity

Contact size 22 and 20  $\text{⊗ } \emptyset 0,10$   $\emptyset A$   $\text{⊗ } \emptyset 0,08$   $\emptyset B$

Contact size 16 and 12  $\text{⊗ } \emptyset 0,15$   $\emptyset A$   $\text{⊗ } \emptyset 0,10$   $\emptyset B$

**Key**

- 1  $T$ , see Note 2
- 2  $U$ , see Note 1
- 3 Hole  $\emptyset H$
- 4 Radius  $K$
- 5 Colours bands, see Table 2
- 6 Radius  $J$
- 7 Radius 0,1 min.

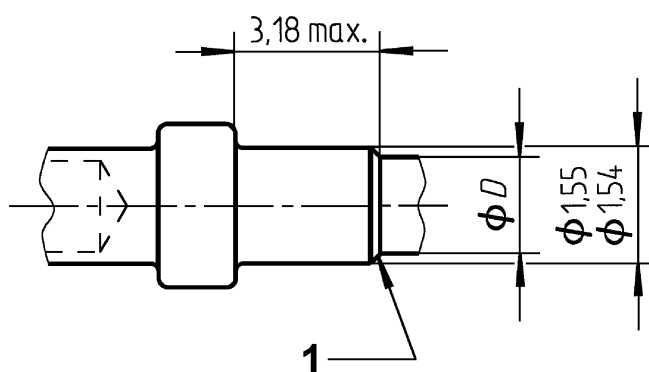
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NOTE 1 Point at which a square ended gauge pin of the same diameter as the mating contact first engages the female contact spring member.

NOTE 2 This dimension represents both the length of the bore  $\emptyset E$  which includes the active zone of protection (ref. EN 3155-001, 5.3.2).

**Figure 1 — Contact dimensions**

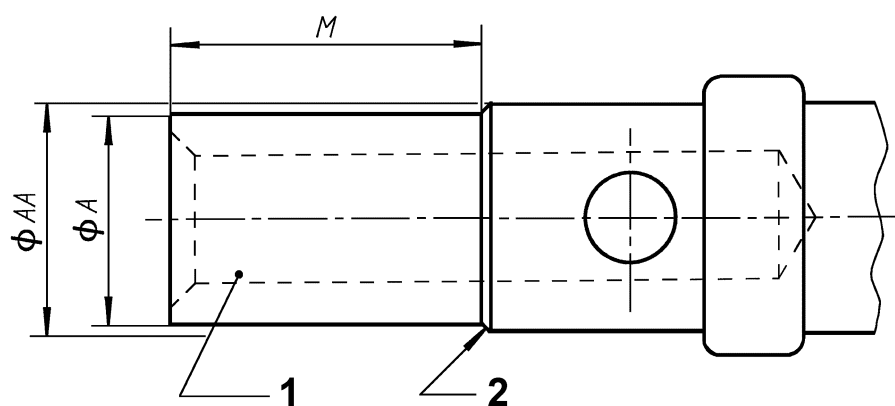


**Key**

- 1 Chamfer or radius

**Figure 2 — Barrel, contacts 22-22**



**Key**

- 1 Colour bands, see Table 2
- 2 Chamfer or radius

**Figure 3 — Barrel, contacts 12-12, 16-16 and 20-20 (optional)**

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