

## SLOVENSKI STANDARD

SIST EN 3155-016:2009

01-januar-2009

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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: Elektrische Stiftkontakte, Typ A, crimpbar, Klasse S - Produktnorm

**SISTEN STANDARD PREVIEW**

**(standards.iteh.ai)**

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

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**Ta slovenski standard je istoveten z:** **EN 3155-016:2006**

**ICS:**

49.060 Ščap\ ašč Á^•[ |b\ æ Aerospace electric  
^|^\ dā} ašč ] |^{ ašč Áač{ ašč equipment and systems

**SIST EN 3155-016:2009**

**en**

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN 3155-016**

August 2006

ICS 49.060

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 24 June 2006.

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 Central Secretariat or to any CEN member.

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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 Central Secretariat has the same status as the official versions.

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

This European Standard (EN 3155-016:2006) 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 February 2007, and conflicting national standards shall be withdrawn at the latest by February 2007.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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## Introduction

The electrical contacts (except size 22) are derived from those of NAS 1749.

### 1 Scope

This standard 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 referenced documents are indispensable for the application 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\*, Aerospace series — Elements of electrical and optical connection — Test methods.**

<https://standards.iteh.ai/catalog/standards/sist/0f1695e0-4d5d-47d2-89a4>

**EN 3155-001, Aerospace series — Electrical contacts used in elements of connection — Part 001: Technical specification.<sup>1)</sup>**

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

**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.**

**MIL-DTL-22520, Crimping tools, terminal, hand or power actuated, wire termination, and tool kits general specification for.<sup>2)</sup>**

**MIL-I-81969, Installing and removal tools, connector electrical contact, general specification for.<sup>2)</sup>**

**NAS 1749, Contact, electrical, pin.<sup>3)</sup>**

\* All parts quoted in this standard.

1) Published as AECMA Prestandard at the date of publication of this standard.

2) Published by: Department of Defense (DOD), The Pentagon, Washington D.C. 20301, USA.

3) Published by: National Standards Association, Inc., 1321, Fourteenth Street, N.W. Washington D.C. 20005, USA.

### 3 Terms and definitions

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

### 4 Required characteristics

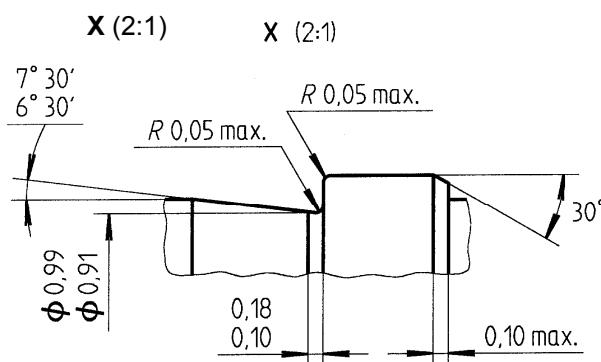
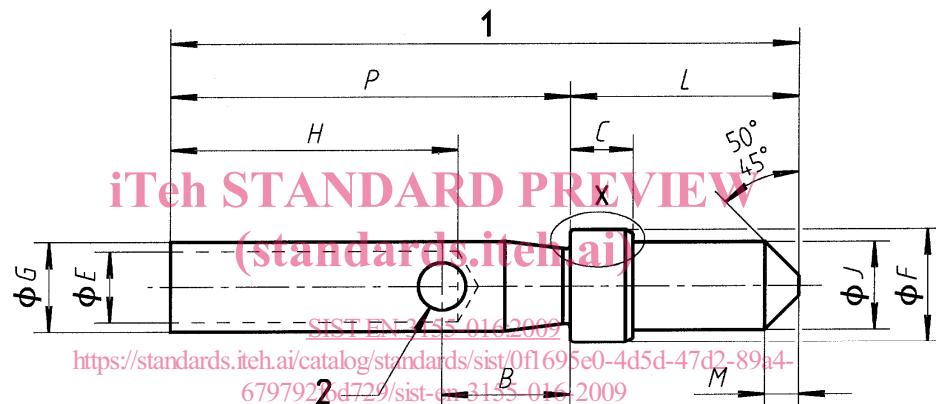
#### 4.1 Specific characteristics

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

#### 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  $A$  (Reference)
- 2 Diameter  $D$  (one side only)

NOTE 1 for size 22,

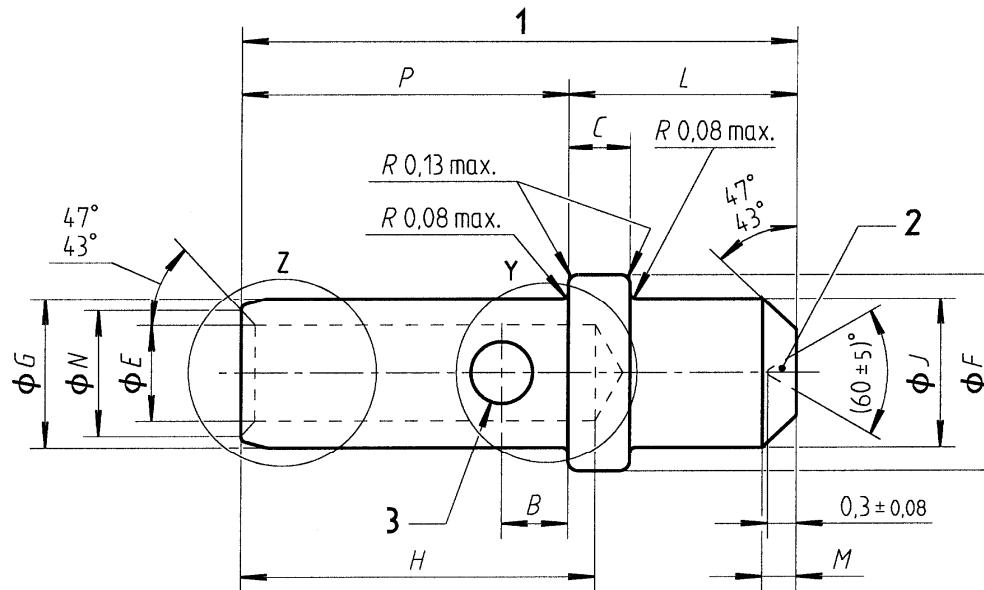
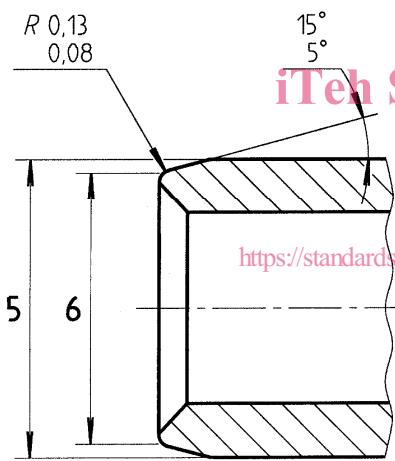
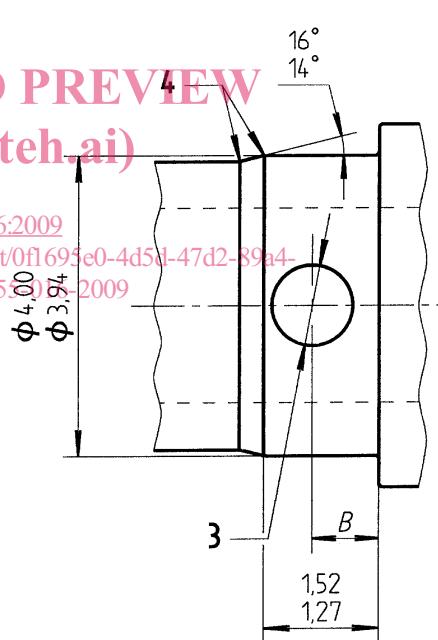
$\emptyset 0,08$   $\emptyset E$   $\emptyset G$

NOTE 2 for all other sizes,

$\emptyset 0,08$   $\emptyset E$   $\emptyset G$

Figure 1 — Male contact, size 22

## EN 3155-016:2006 (E)

**Z (2:1)****Y (10:1) <sup>a</sup>****Key**

- 1  $A$  (Reference)
- 2 Dimple on for contact 20-20
- 3 Diameter  $D$  (one side only)
- 4 Blend radius
- 5  $G$  (Reference)
- 6  $R$  (Reference)
- <sup>a</sup> Size 12 crimp barrel

**Figure 2 — Male contact, sizes 20, 16 and 12**

**Table 1**

<b>Size</b>		<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>J</i>	<i>L</i>	<i>M</i>	<i>N</i>	<i>P</i>	<i>R</i>	<b>Mass g max.</b>
Contact	Barrel	(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	3,81 3,71	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	10,82	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****iTeh STANDARD PREVIEW**Dimple on front part of contact, see Figure 2. ([standards.iteh.ai/](https://standards.iteh.ai/))**4.4 Material, surface treatment** [SIST EN 3155-016:2009](#)<https://standards.iteh.ai/catalog/standards/sist/0f1695e0-4d5d-47d2-89a4->

- Body material : copper alloy 92f6d729/sist-en-3155-016-2009
- Surface treatment : gold on an appropriate undercoat, thickness of protection not specified

**4.5 Permissible cables**

See Table 2.