



SLOVENSKI STANDARD

SIST EN 3155-004:2019

01-junij-2019

Nadomešča:

SIST EN 3155-004:2009

**Aeronavtika - Električni kontakti za uporabo v veznih elementih - 004. del:
Kontakti, električni, moški, tip A, nagubani, razred T - Standard za proizvod**

Aerospace series - Electrical contacts used in elements of connection - Part 004:
Contacts, electrical, male, type A, crimp, class T - Product standard

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen -
Teil 004: Elektrische Stiftkontakte, Typ A, crimpbar, Klasse T - Produktnorm

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

Ta slovenski standard je istoveten z: EN 3155-004:2019

ICS:

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems
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SIST EN 3155-004:2019

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EUROPEAN STANDARD

EN 3155-004

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2019

ICS 49.060

Supersedes EN 3155-004:2007

English Version

Aerospace series - Electrical contacts used in elements of connection - Part 004: Contacts, electrical, male, type A, crimp, class T - Product standard

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie 004 : Contacts électriques, mâles, type A, à sertir, classe T - Norme de produit

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen - Teil 004: Elektrische Stiftkontakte, Typ A, crimpbar, Klasse T - Produktnorm

This European Standard was approved by CEN on 8 January 2018.

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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

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European foreword

This document (EN 3155-004:2019) 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 September 2019, and conflicting national standards shall be withdrawn at the latest by September 2019.

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 3155-004:2007.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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EN 3155-004:2019 (E)**1 Scope**

This European Standard specifies the required characteristics tests and tooling applicable to male electrical contacts 004, type A, crimp, class T, used in elements of connection according to EN 3155-002.

It shall be used together with EN 3155-001.

The associated female contacts are defined in EN 3155-005.

The contacts defined by this standard are not applicable for connector EN 2997 classes KV, SV, KF and SF (defined in EN 2997-002).

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 part), *Aerospace series — Elements of electrical and optical connection — Test methods*

EN 2997-001, *Aerospace series — Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures – 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak — Part 001: Technical specification*

EN 2997-002, *Aerospace series — Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures – 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak — Part 002: Specification of performance and contact arrangements*

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 3155-005, *Aerospace series — Electrical contacts used in elements of connection — Part 005: Contacts, electrical, female, type A, crimp, class T — Product standard*

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

SAE AS 22520, *Crimping tools, wire termination, general specification for* ¹⁾

SAE AS 81969/14, *Installing and removal tools, connector electrical contact, type III, class 2, composition B* ¹⁾

SAE AS 81969/30, *Installing and removal tools, connector electrical contact, type II, class 2, composition C for unwired contacts* ¹⁾

ISO 8843, *Crimp-removable contacts for electrical connectors — Identification system* ²⁾

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

²⁾ Published by: ISO International Organization for Standardization <http://www.iso.ch/>

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:

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

4 Required characteristics

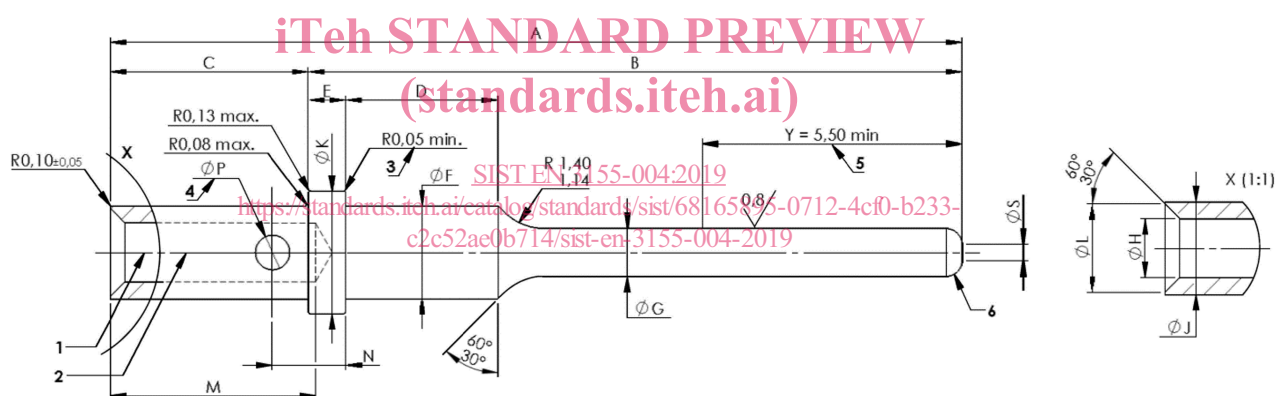
4.1 Specific characteristics

Type A contacts are for general application and class T corresponds to an operating temperature range from $-65\text{ }^{\circ}\text{C}$ to $260\text{ }^{\circ}\text{C}$.

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.



Key

- 1 White dot
- 2 Colour bands, see Table 2
- 3 Break allowed
- 4 One side only
- 5 See EN 3155-001 for Length of Selective Protection "LSP" definition
- 6 Approximately spherical

Figure 1 — Dimensions

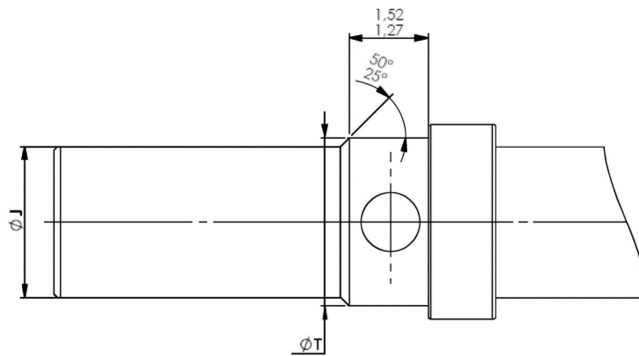


Figure 2 — Barrel, contacts 16-18 and 12-12

Table 1

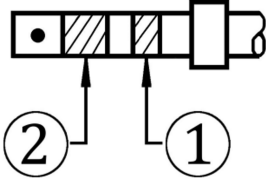
Size		A max.	B	C	D	E	F	G	H
Contact	Barrel								
20	20	18,29	13,94	4,34	3,30	0,84	1,98	1,04	1,27
			13,79	4,06	3,17	0,74	1,93	0,99	1,22
20	18	18,29	13,94	4,34	3,30	0,84	1,98	1,04	1,35
			13,79	4,06	3,17	0,74	1,93	0,99	1,30
16	16	20,85	14,33	6,53	3,30	1,22	2,62	1,61	1,73
			14,17	6,25	3,17	1,12	2,56	1,56	1,68
16	14	20,85	14,33	6,53	3,30	1,22	2,62	1,61	1,95
			14,17	6,25	3,17	1,12	2,56	1,56	1,90
16	18	20,85	14,33	6,53	3,30	1,22	2,62	1,61	1,35
			14,17	6,25	3,17	1,12	2,56	1,56	1,30
12	12	20,85	14,33	6,53	3,05	1,22	3,83	2,41	2,59
			14,17	6,25	2,92	1,12	3,76	2,36	2,49

Size		J	K	L	M	N	P	S	T	Mass g max.
Contact	Barrel									
20	20	1,98	2,62	1,68	4,75	1,73	0,81	0,51	—	0,30
		1,93	2,54	1,57	3,94	1,35	0,66	0,23	—	0,30
20	18	1,98	2,62	1,68	4,75	1,73	0,81	0,51	—	0,30
		1,93	2,54	1,57	3,94	1,35	0,66	0,23	—	0,30
16	16	2,62	3,38	2,26	7,21	2,16	1,07	0,81	—	0,65
		2,56	3,30	2,11	6,35	1,73	0,91	0,43	—	0,65
16	14	2,62	3,38	2,26	7,21	2,16	1,07	0,81	—	0,65
		2,56	3,30	2,11	6,35	1,73	0,91	0,43	—	0,65
16	18	1,98	3,38	1,68	7,21	2,16	1,07	0,81	2,62	0,65
		1,93	3,30	1,57	6,35	1,73	0,91	0,43	2,56	0,65
12	12	3,83	4,83	3,45	7,21	2,16	1,07	1,57	4,01	1,36
		3,76	4,75	3,30	6,35	1,73	0,91	1,19	3,94	1,36

4.3 Marking by colour code

See Table 2.

Table 2

Size		Colour identification bands according to ISO 8843		
				
Contact	Barrel	① Band 1	② Band 2 ^a	Dot
20	20	Red	Red	White
20	18	Red	Brown ^b	White
16	16	Blue	Blue	White
16	14	Blue	White ^c	White
16	18	Blue	Brown ^b	White
12	12	Yellow	Yellow	White

^a The width of the band 2 shall be twice the width of the band 1.
^b Violet colour band not to be used for new manufacture.
^c Orange colour band not to be used for new manufacture.
 As an alternative, when the two band colours are the same, only one band of 2 mm width minimum can be applied.

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4.4 Material, surface treatment

- Body material: copper alloy.
- Surface treatment: gold on appropriate undercoat in copper alloy. Thickness of protection not specified. Selective protection acceptable. (see Figure 1).