



SLOVENSKI STANDARD

SIST EN 3155-060:2009

01-januar-2009

Aeronavtika - Električni kontakti za uporabo v veznih elementih - 060. del:
Kontakti, električni, koaksialni, velikost 12, moški, tip D, za spajkanje, razred R -
Standard za proizvod

Aerospace series - Electrical contacts used in elements of connection - Part 060:
Contacts, electrical, coaxial, size 12, male, type D, solder, class R - Product standard

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen -
Teil 060: Elektrische koaxiale Stiftkontakte Größe 12, Typ D, zum Löten, Klasse R -
Produktnorm

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie
060 : Contacts, électriques, coaxiaux, taille 12, mâle, type D, à souder, class R - Norme
de produit

Ta slovenski standard je istoveten z: EN 3155-060:2006

ICS:

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

EN 3155-060

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2006

ICS 49.060

English Version

**Aerospace series - Electrical contacts used in elements of
connection - Part 060: Contacts, electrical, coaxial, size 12,
male, type D, solder, class R Product standard**

Série aérospatiale - Contacts électriques utilisés dans les
organes de connexion - Partie 060 : Contacts, électriques,
coaxiaux, taille 12, mâle, type D, à souder, class R - Norme
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Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung
in Verbindungselementen - Teil 060: Elektrische Koaxial
Stiftkontakte Größe 12, Typ D, zum Lötten, Klasse R -
Produktnorm

This European Standard was approved by CEN on 9 March 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.

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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Contents

Page

Foreword	3
Introduction	4
1 Scope	4
2 Normative references	4
3 Definitions	5
4 Required characteristics	5
4.1 Specific characteristics	5
4.2 Dimensions and mass	5
4.3 Marking by colour code	5
4.4 Material, surface treatment	5
4.5 Permissible cables	6
4.6 Stripping of cables and wiring method	7
4.7 Tooling	8
4.8 Tests	9
4.9 Gauge	12
5 Designation	13
6 Marking	13
7 Technical specification	13

[SIST EN 3155-060:2009](https://standards.itech.ai/catalog/standards/sist/927b0306-f1eb-4ac4-b282-a432bbe650dc/sist-en-3155-060-2009)
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Foreword

This European Standard (EN 3155-060:2005) has been prepared by the AeroSpace and Defense 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 January 2007, and conflicting national standards shall be withdrawn at the latest by January 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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EN 3155-060:2006 (E)**Introduction**

The contacts defined by this standard are derived from those of MIL-C-39029/28 and are intermateable with those of MIL-C-39029/27 and MIL-C-39029/75.

1 Scope

This standard specifies the required characteristics, tests and tooling applicable to size 12, male coaxial, electrical contacts, type D, solder, class R, 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 3155-061.

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 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* ¹⁾

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

<https://standards.iteh.ai/catalog/standards/sist/927b0306-f1eb-4ac4-b282-322b16551c3e/en-3155-060-2009>

EN 3155-061, *Electrical contacts used in elements of connection – Part 061: Contacts, electrical, coaxial, size 12, female, type D, solder, class R – Product standard*

MIL-A-8243D, *Anti-icing and deicing-defrosting fluids* ²⁾

MIL-C-25769J, *Cleaning compound, aircraft surface, alkaline water base* ²⁾

MIL-C-39029/27, *Contacts, electrical connector, socket, crimp, removable, shielded, size 12, (for MIL-C-38999 Series II connectors)* ²⁾

MIL-C-39029/28, *Contacts, electrical connector, pin, crimp, removable, shielded, size 12, (for MIL-C-38999 Series I, II, III, IV connectors)* ²⁾

MIL-C-39029/75, *Contacts, electrical connector, socket, crimp, removable, shielded, size 12, (for MIL-C-38999 Series I, III, IV connectors)* ²⁾

MIL-H-5606E, *Hydraulic fluid, petroleum base, aircraft, missile and ordnance* ²⁾

MIL-I-81969B, *Installing and removal tools, connector electrical contact, type II, class 2, composition C* ²⁾

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

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

MIL-I-81969/08B, *Installing and removal tools, connector electrical contact, types I and II, class 2, composition A* ²⁾

MIL-I-81969/14C, *Installing and removal tools, connector electrical contact, type III, class 2, composition B* ²⁾

MIL-L-7808J, *Lubricating oil, aircraft turbine engine, synthetic base, NATO code number O-148* ²⁾

MIL-L-7870A, *Lubricating oil, general purpose, low temperature* ²⁾

MIL-L-23699C, *Lubricating oil, aircraft turbine engines, synthetic base* ²⁾

MS3197, *Gage pin for socket contact engagement test* ²⁾

QQ-S-571F, *Solder, electronic (96 to 485 °C)* ²⁾

SAE AS 1241A, *Fire Resistant Phosphate Ester Hydraulic Fluid for Aircraft (March 83)* ³⁾

TR 6058, *Aerospace series – Cable code identification list* ⁴⁾

3 Definitions

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

4 Required characteristics

4.1 Specific characteristics

Type D contacts are contacts with screening feature, class R corresponds to an operating temperature range from -65 °C to 150 °C.

4.2 Dimensions and mass

See Figure 1 for dimensions.

Dimensions and tolerances are given in millimetres.

Contact mass: 0,56 g max.

4.3 Marking by colour code

Not applicable.

4.4 Material, surface treatment

4.4.1 Material

Body: copper alloy.

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

³⁾ Published by: Society of Automotive Engineers, Inc. (SAE), 400 Commonwealth Drive Warrendale, PA 15096-0001.

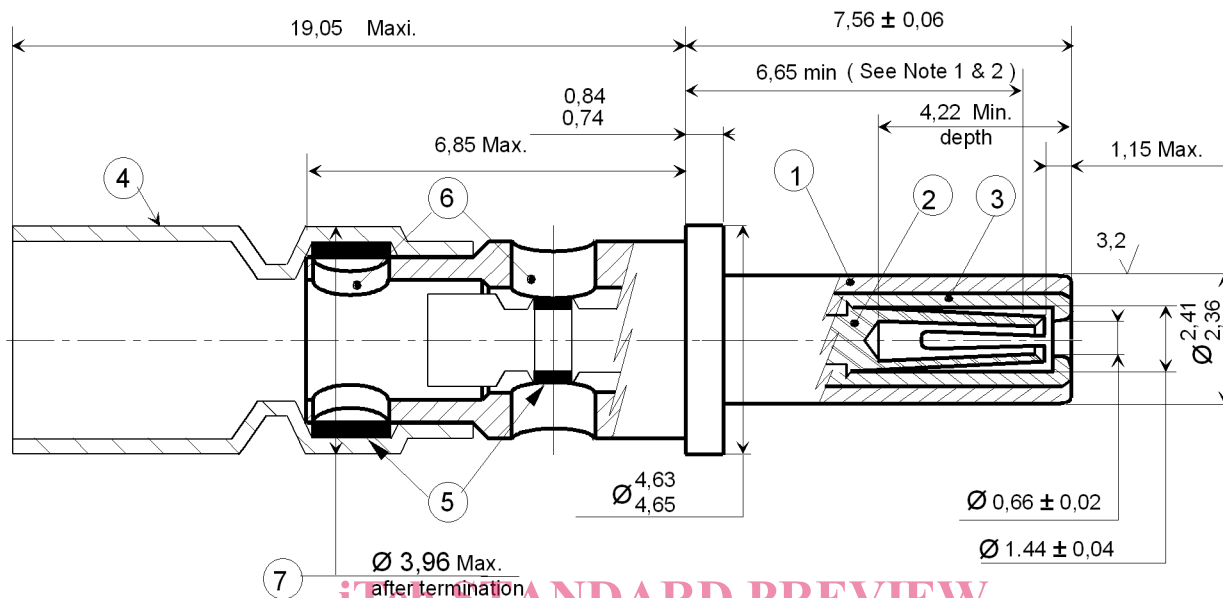
⁴⁾ Published as ASD Technical Report at the date of publication of this standard.

EN 3155-060:2006 (E)

4.4.2 Protective coating

Gold on appropriate undercoat for copper alloy parts

Thickness not specified.



Key

- | | |
|-------------------------------|----------------------------|
| ① Male external contact body | ⑤ Solder rings |
| ② Female central contact body | ⑥ Inspection windows |
| ③ Dielectric | ⑦ Diameter after shrinking |
| ④ Heat shrinkable tubing | |

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

NOTE 2 Mates with 0,52/0,495 male contact diameter

Figure 1

4.4.3 Dielectric

ETFE fluoropolymer.

4.4.4 Heatshrinkable tubing

Radiation crosslinked polyvinylidene fluoride.

4.4.5 Solder rings

Sn63 as per QQ-S-571.

4.5 Permissible cables

The cables should have dimensions within the values specified in Table 1.

4.6 Stripping of cables and wiring method

Dimensions are in millimetres. See Figures 2, 3 and 4.

Table 1

Dimensions in millimetres

4.6.1.1.1 Cable diameter		min.	max.
Jacket	A	—	3,80
Shield	B	2,54	2,97
Dielectric	C	1,27	2,62
Conductor	D	0,23	0,89
Permissible cable code according to TR 6058		XE, XY, WL	

4.6.2 Assembly instructions

Strip cable as shown on Figures 2 or 3 or 4.

Insert cable into contact until it is fully seated.

Heat contact with appropriate tools as shown on Figure 5 until solder melts and flows and strain relief tubing conforms to cable.

4.6.3 Preparation of coaxial cable

Depending upon dielectric diameter value there are three possibilities.

4.6.3.1 Cable preparation for straight shield

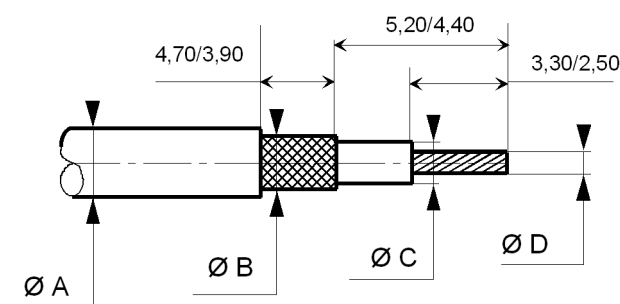


Figure 2

4.6.3.2 Preparation for coaxial cable with small dielectric diameter

When dielectric diameter is $\leq \varnothing C$ min. Table 1 (1,27 mm):

- strip the cable as shown on Figure 4;
- slip a dielectric barrier between the shield braid and the cable dielectric to bring the diameter within the value specified in Table 1.