SLOVENSKI STANDARD
SIST EN 3155-012:2009

01-januar-2009

Aeronavtika - Elektriļ ni kontakti za uporabo v veznih elementih - 012. del: Kontakti, elektriļ ni, triaksialni, velikost 8, moģki, tip D, za spajkanje, razred R - Standard za proizvod

Aerospace series - Electrical contacts used in elements of connection - Part 012: Contacts, electrical, triaxial, size 8, male, type D, solder, class R - Product standard

Luft- und Raumfahrt - Elektrische Kontakte zur Verwendung in Verbindungselementen - Teil 012: Elektrische triaxiale Stiftkontakte, Größe 8, Typ D, zum Löten, Klasse R - Produktnorm

Série aérospatiale - Contacts électriques utilisés dans les organes de connexion - Partie 012 : Contacts électriques, triaxiaus, taille 8, mâles, type D, à souder, classe R - Norme de produit

Ta slovenski standard je istoveten z: EN 3155-012:2006

ICS:

49.060	Letalska in vesoljska elektriļ na oprema in sistemi	Aerospace electric equipment and systems

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EUROPEAN STANDARD

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English Version

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

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Foreword

This European Standard (EN 3155-012:2006) 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of an identical text or by endorsement, at the latest by January 2007, and conflicting national standards shall be withdrawn at the latest by January 2007.

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0 Introduction

The contacts defined by this standard are derived from and interchangeable with those of MIL-C-39029/90A. They are also interchangeable with those of standard EN 3155-010.

1 Scope

This standard specifies the required characteristics and tests applicable to size 8, male triaxial electrical contacts 012, 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 3155-011 and EN 3155-013.

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 (series), *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 3155-010, *Aerospace series — Electrical contacts used in elements of connection — Part 010: Contacts, electrical, triaxial, size 08, male, type D, crimp, class R — Product standard*

EN 3155-011, *Aerospace series — Electrical contacts used in elements of connection — Part 011: Contacts, electrical, triaxial, size 8, female, type D, crimp, class R — Product standard*[1)]

EN 3155-013, *Aerospace series — Electrical contacts used in elements of connection — Part 013: Contacts, electrical, triaxial, size 8, female, type D, solder, class R — Product standard*

EN 3375-003, *Aerospace series — Cables, electrical, for signal data transmissions — Part 003: Cables, bifilar, single braid — Product standard*

EN 3375-004, *Aerospace series — Cables, electrical, for signal data transmissions — Part 004: Cables, bifilar, double braid — Product standard*

EN 3375-005, *Aerospace series — Cables, electrical, for signal data transmissions — Part 005: Cables, bifilar, double braid, high immunity — 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-39029/90A; *Contact, electrical connector, concentric twinax, pin, size 8*[2)]

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

MIL-I-81969/14, *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 0-148*[2)]

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

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

SAE AS 1241A, *Fire resistant phosphate ester hydraulic fluid for aircraft (March 83)*[3)]

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1) In preparation at the date of publication of this standard.
2) Published by: Department of Defense (DOD), the Pentagon, Washington DC 20301 USA.
3) Published by Society of Automotive Engineers, Inc. (SAE), 400 Commonwealth Drive Warrendale, PA 15096-0001.

3 Definitions

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

4 Required characteristics

4.1 Specific characteristics

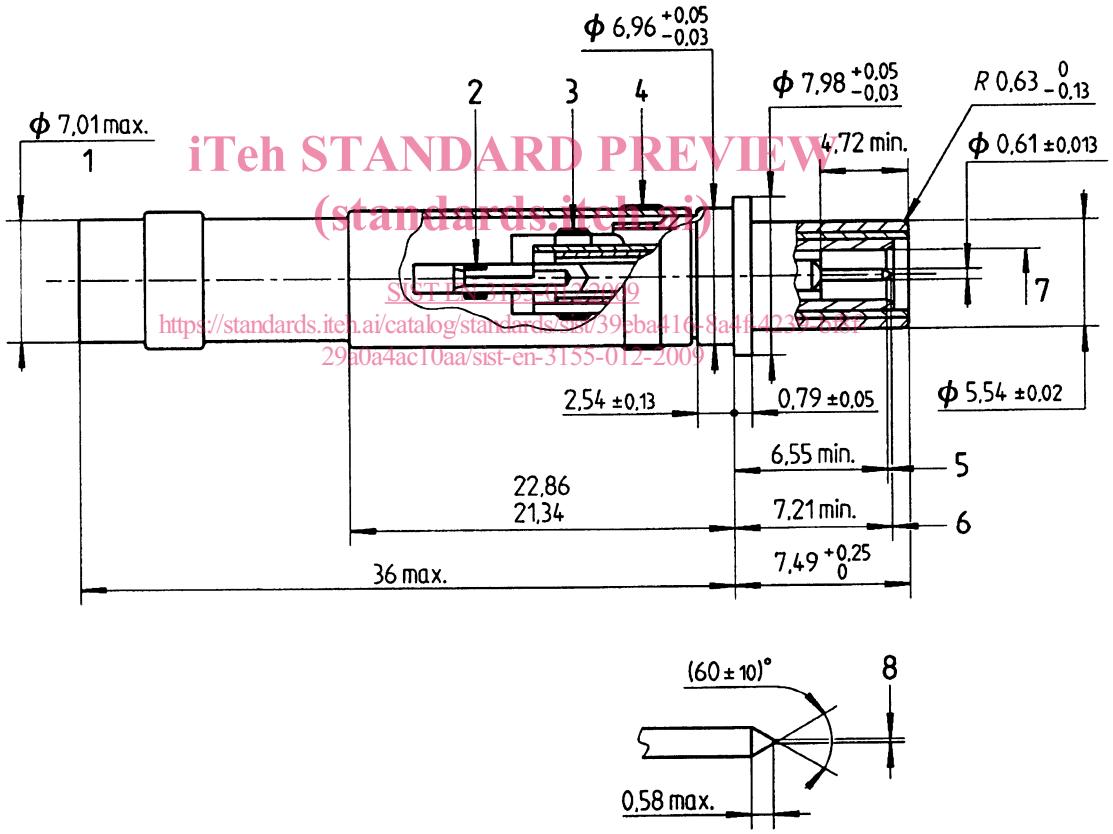
Type D contacts are contacts with screening feature, class R corresponds to an operating temperature range from – 65 °C to 150 °C. They may be delivered in different conditions defined in Table 9 of EN 3155-001.

4.2 Dimensions and mass

See Figure 1 for dimensions.

Dimensions and tolerances are given in millimetres.

Contact mass: 3,50 g max.



Key
1 Diameter of outside after wiring
2 Core/centre contact solder zone
3 Core/intermediate contact solder zone
4 Braid/outer contact solder zone
5 Point of contact with a flat ended gauge pin of diameter 2,870 ± 0,005
6 End of contact centre pin
7 Diameter compatible with intermediate pin diameter 2,870 ± 0,025
8 Permitted flat ∅ 0,2 max.

Figure 1

4.3 Material, surface treatment

4.3.1 Material

Body: copper alloy

4.3.2 Protective coating

Gold on appropriate undercoat for copper alloy parts.

Thickness not specified.

4.3.3 Dielectric

ETFE Fluoropolymer

4.3.4 Heat-shrinkable tubing

Radiation cross-linked polyvinylidene fluoride.

4.4 Permissible cables

See Table 1.

Table 1

Permissible cable group codes	Cable reference
A	EN 3375-003
B	EN 3375-004
C	EN 3375-005

4.5 Stripping of cables and wiring method

See Figure 2 to Figure 17.

Pre-position the screening feature ferrule on the cable

Dimensions in millimetres

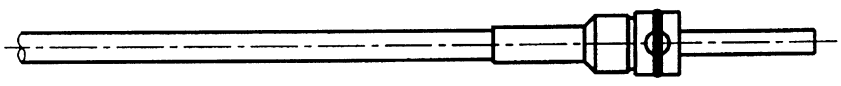


Figure 2

Expose the braid by stripping the insulation

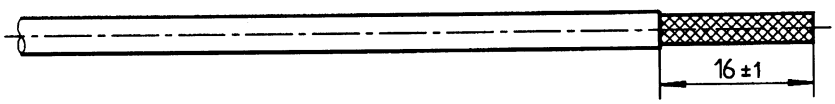


Figure 3

Pick up and roll back the braid. Pick up and roll back the first braid.

Single braid
EN 3375-003

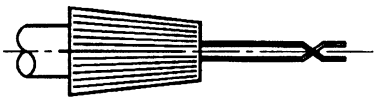


Figure 4

Double braid
EN 3375-004

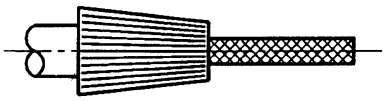


Figure 5

Double braid — Mu metal
EN 3375-005

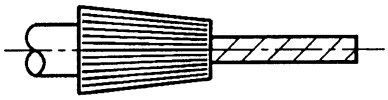


Figure 6

Cut the Mu metal strip

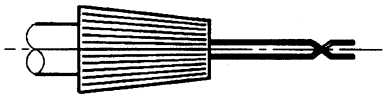


Figure 7

Pick up and roll back the second braid

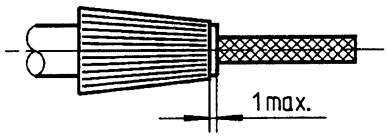


Figure 8

Align the two wires of the pair
Cut the filler
Strip the conductors

Flux (RMA flux) and tin plate the conductors with Sn63 Pb37
Re-cut the conductors to the lengths indicated (white and coloured wires of the pair).

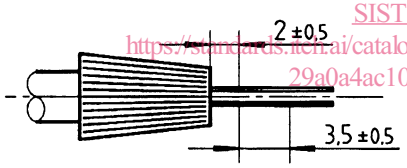
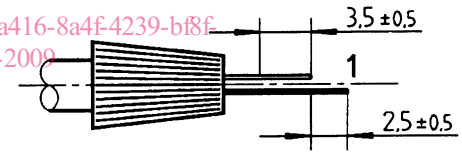


Figure 9



Key
1 White colour

Figure 10