SLOVENSKI STANDARD
SIST EN 4531-101:2012

01-september-2012

Nadomešča:
SIST EN 4531-101:2009

Aeronavtika - Konektorji, optični, okrogli, z enim ali več zatiči, priključeni z navojnim obročkom - Izravnani kontakti - 101. del: Optični kontakt za kabel EN 4641-100 - 55 °C do 125 °C - Standard za izdelek

Aerospace series - Connectors, optical, circular, single and multipin, coupled by threaded ring - Flush contacts - Part 101: Optical contact for EN 4641-100 cable - 55 °C to 125 °C - Product standard

Luft- und Raumfahrt - Optische Rundsteckverbinder mit Schraubkupplung - Bündige Kontakte - Teil 101: Optischer Kontakt für EN 4641-100 Lichtwellenleiterkabel - 55 °C bis 125 °C - Produktnorm

Série aérospatiale - Connecteurs optiques circulaires à accouplement par bague filetée - Contacts affleurants - Partie 101 : Contact optique pour câble EN 4641-100 - 55 °C à 125 °C - Norme de produit

Ta slovenski standard je istoveten z: **EN 4531-101:2012**

ICS:

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

SIST EN 4531-101:2012 **en**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 4531-101

May 2012

ICS 49.060

Supersedes EN 4531-101:2007

English Version

Aerospace series - Connectors, optical, circular, single and multipin, coupled by triple start threaded ring - Flush contacts - Part 101: Optical contact for EN 4641-100 cable - 55 °C to 125 °C - Product standard

Série aérospatiale - Connecteurs optiques circulaires à accouplement par bague filetée à trois filets - Contacts affleurants - Partie 101 : Contact optique pour câble EN 4641-100 - 55 °C à 125 °C - Norme de produit

Luft- und Raumfahrt - Optische Rundsteckverbinder mit dreigängiger Schraubkupplung - Bündige Kontakte - Teil 101: Optischer Kontakt für Kabel nach EN 4641-100, - 55 °C bis 125 °C - Produktnorm

This European Standard was approved by CEN on 10 September 2011.

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.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Contents

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Foreword

This document (EN 4531-101:2012) 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 November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

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 4531-101:2007.

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, 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.

1 Scope

This European Standard defines the performance and dimensions of optical PC profiled contact for 62,5 µm/125 µm fibre and (1,8 ± 0,1) mm diameter cable EN 4641-100.

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 2591 (all parts), *Aerospace series — Elements of electrical and optical connection — Test methods*

EN 4531-001, *Aerospace series — Connectors, optical, circular, single and multipin, coupled by triple start threaded ring — Flush contacts — Part 001: Technical specification*

EN 4533 (all parts), *Aerospace series — Fibre optic systems — Handbook* [1)]

EN 4641-100, *Aerospace series — Cables, optical 125 µm diameter cladding — Part 100: Tight structure 62,5/125 µm core GI fibre 1,8 mm outside diameter — Product standard* [1)]

TR 4646, *Aerospace series — Termination procedure for EN 4531 optical contact* [2)]

MIL-I-81969/8-10, *Installing and removal tools, connector electrical contact, types I and II, class 2, composition A* [3)]

3 Termini dimensions

See Figure 1.

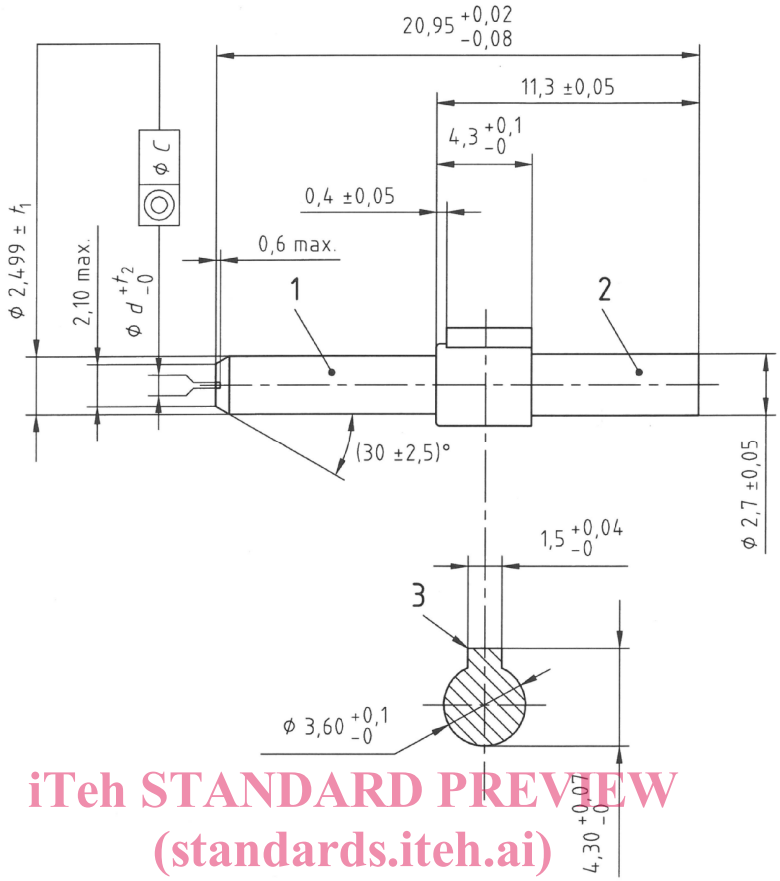
Dimensions and tolerances are in millimetres.

Dimensions of t_1, t_2, c and d of Figure 1 are detailed Table 1.

1) Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

2) Published as ASD-STAN Technical Report at the date of publication of this standard (www.asd-stan.org).

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



Key

1 Ferrule
2 Flange
3 Chamfer or radius = 0,05 min./0,2 max.

Figure 1

Table 1

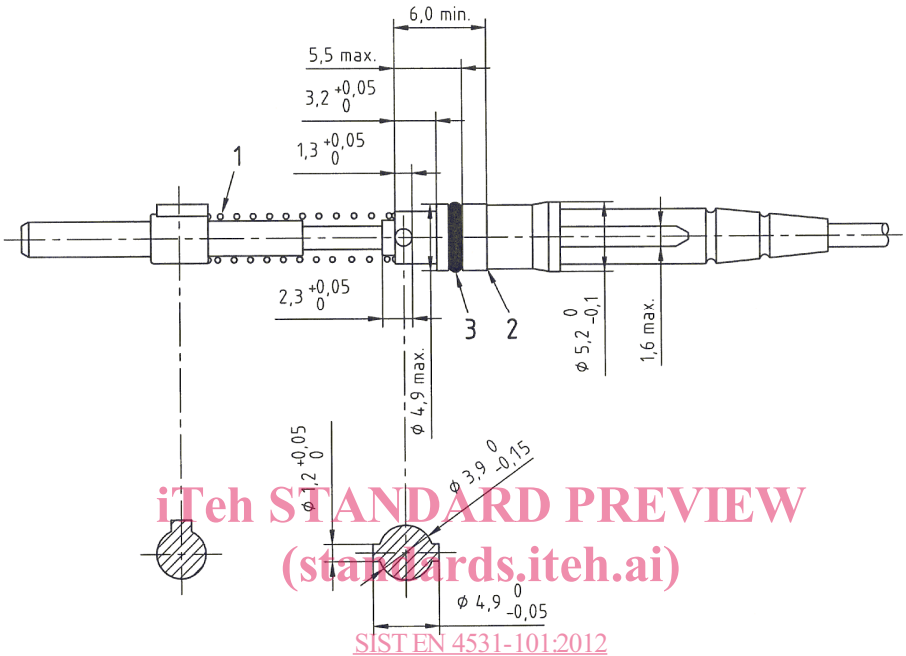
EN 4531–	Cable	Optical fibre type µm	Outer diameter mm	c µm	d µm	t_1 µm	t_2 µm
101	EN 4641-100	62,5/125	1,8 ± 0,1	3	127	1	3

4 General dimensions of the optical termini

4.1 Contact dimension

See Figure 2.

Dimensions and tolerances are in millimetres.



Key

1 Spring force when spring length is 13,5 mm = 9 N min.
When spring length is 8,5 mm, spring force shall be between 13 N and 15 N
Spring is never compressed to joined coils
2 Beginning of bending
3 O-ring

Figure 2

4.2 Boot dimension

4.2.1 Long version

See Figure 3 and Table 2.

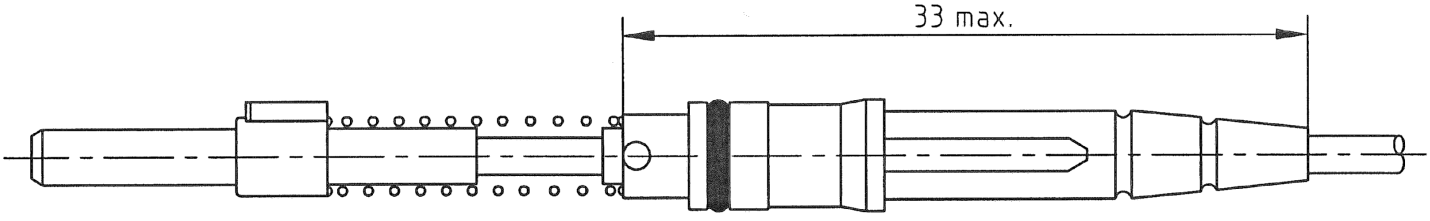


Figure 3

4.2.2 Short version

See Figure 4 and Table 2.

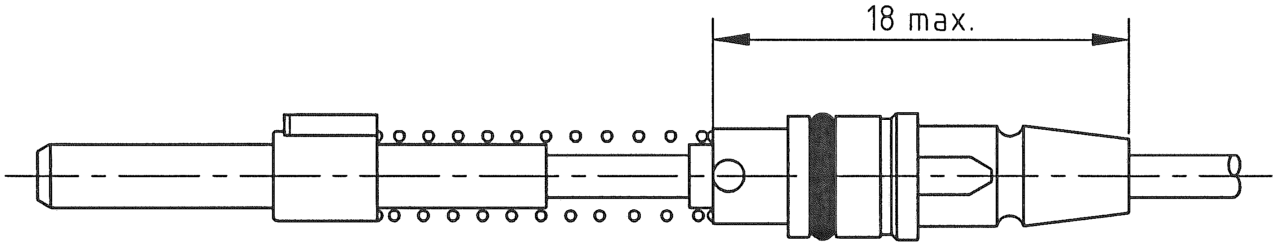


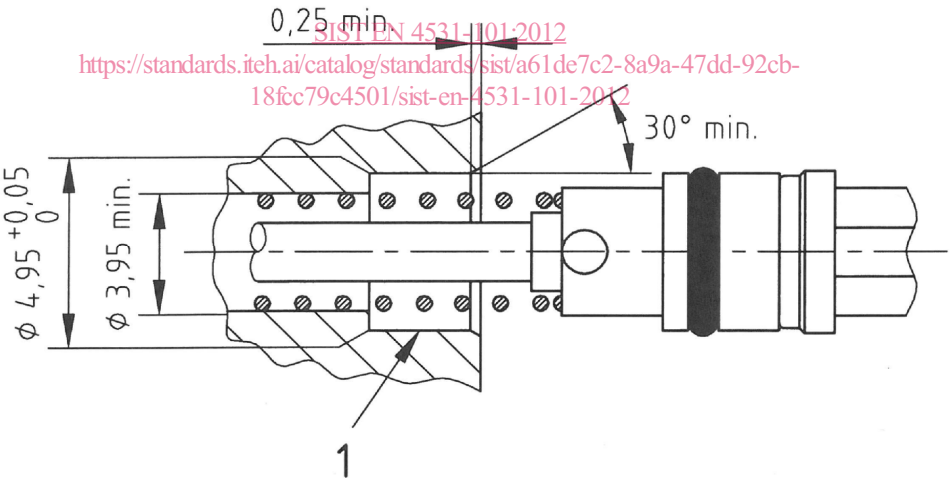
Figure 4

Table 2

	Boot code
Long boot	L
Short boot	S

4.3 Contact cavity description

See Figure 5.



Key

1 Sealing area of the contact O-ring

Figure 5