SLOVENSKI STANDARD
oSIST prEN 61754-36:2022

01-marec-2022

Optični spojni elementi in pasivne komponente - Vmesniki za optične konektorje - 36. del: Skupina konektorjev vrste SAC

Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 36: Type SAC connector family

Dispositifs d'interconnexion et composants passifs fibroniques - Interfaces de connecteurs fibroniques - Partie 36: Famille de connecteurs de type SAC

Ta slovenski standard je istoveten z: prEN 61754-36:2022

ICS:

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices

oSIST prEN 61754-36:2022 **en**

86B/4549/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:	
IEC 61754-36 ED1	
DATE OF CIRCULATION:	CLOSING DATE FOR VOTING:
2021-12-31	**2022-03-25**
SUPERSEDES DOCUMENTS:	
86B/4487/CD, 86B/4514A/CC	

IEC SC 86B : FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS

SECRETARIAT:	SECRETARY:
Japan	Mr Shigeru Tomita
OF INTEREST TO THE FOLLOWING COMMITTEES:	PROPOSED HORIZONTAL STANDARD: ☐ Other TC/SCs are requested to indicate their interest, if any, in this CDV to the secretary.

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TITLE:

Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 36: Type SAC connector family

PROPOSED STABILITY DATE: 2032

NOTE FROM TC/SC OFFICERS:

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC CONNECTOR INTERFACES –

Part 36: Type SAC connector family

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The text of this International Standard is based on the following documents:

FDIS	Report on voting
86B/XX/FDIS	86B/XX/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

107 This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

108 The committee has decided that the contents of this document will remain unchanged until the
109 stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to
110 the specific document. At this date, the document will be

111 • reconfirmed,
112 • withdrawn,
113 • replaced by a revised edition, or
114 • amended.

INTRODUCTION

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC CONNECTOR INTERFACES –

Part 36: Type SAC connector family

1 Scope

This document defines the standard mechanical interface dimensions for the type of SAC family of connectors.

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.

IEC 61754-1, *Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 1: General and guidance*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 61754-1 apply.

ISO and IEC maintain terminological databases for use in standardization at following addresses:

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

3.2 Abbreviated items

QSFP-DD Quad Small Form Factor Pluggable Double Density (form factor).

4 Description

The parent connector for type SAC connector family is a miniature duplex connector set of plug/adaptor/plug configuration which is characterized by:

- A 1,25 mm nominal diameter ferrule;
- The connector plug includes two cylindrical, spring-loaded ferrules;
- The connector has a push-pull coupling mechanism at both small sides;
- The optical alignment mechanism of the connectors is a rigid bore sleeve or a resilient sleeve.

5 Interfaces

This standard contains the following standard interfaces:

Interface 36-1: duplex plug connector interface- Physical Contact (PC)

Interface 36-2: duplex adaptor interface

Interface 36-3: duplex plug connector interface- Angled PC, 8°

Interface 36-4: duplex active device receptacle interface

Interface 36-5: quadruplex adaptor interface.

NOTE This interface is designed to fit SC simplex connector adaptor footprint according to IEC 61754-4 series.

Interface 36-6: quadruplex active device receptacle interface

NOTE All future variants connecting more than two duplex plug connectors on each side to use the minimum specified pitch.

The intermateability between plugs, adaptors, and receptacles are given in Table 1.

Duplex plug connector reference planes are shown in Figure 1.

Refer to IEC 61755-3 and IEC 63267-3 series for information on end-face geometry requirements on PC and Angled PC interfaces, respectively.

183 **Table 1 – Plug to Adaptor/Receptacle Intermateability**

Plug Interfaces	Adaptor Interfaces		Active Device Receptacle Interfaces	
	36-2	**36-5**	**36-4**	**36-6**
36-1	Mate	Mate	Mate	Mate
36-3	Mate	Mate	Not mate[a]	Not mate[a]
[a)] If the active device is designed to accommodate Angled PC, this will be mateable.				

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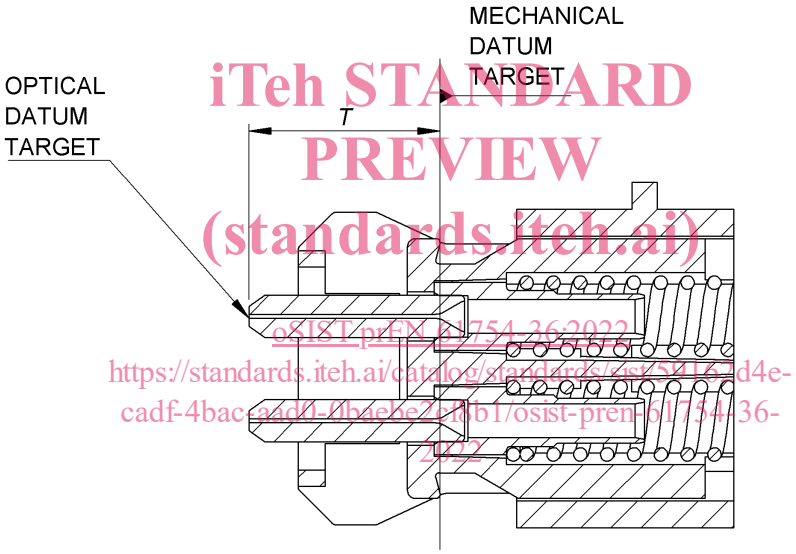

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187 **Figure 1 – Duplex plug connector datum target**

188 Refer to Annex A for oriented fibre core locations.

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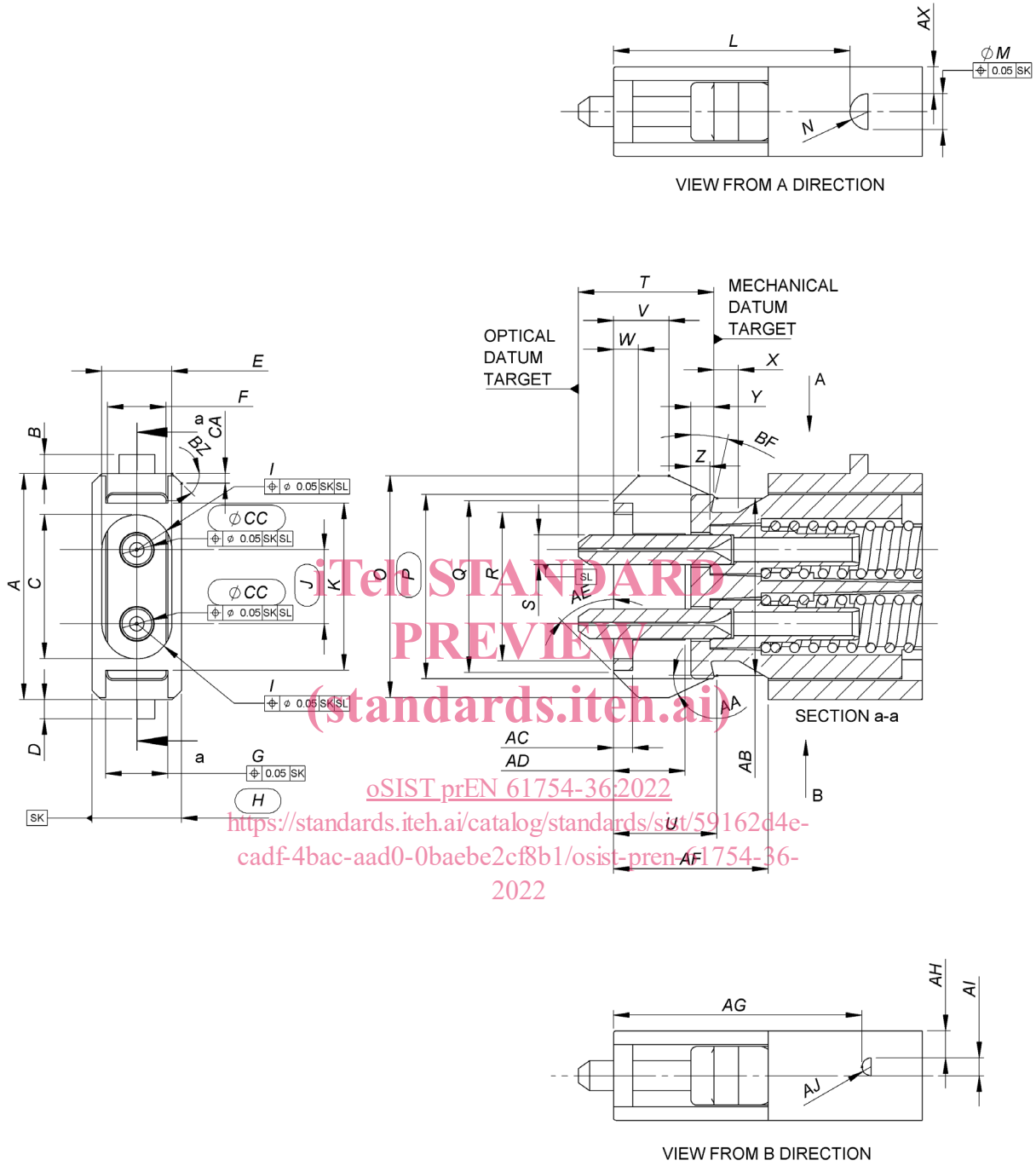
190 The plug optical interface dimensions are shown in Figure 2 as well as in Table 2. The
191 dimensions of Angled PC plug optical interface are shown in Figure 3 and Table 3.



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194 **Figure 2 – Plug connector interface**

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