SLOVENSKI STANDARD
SIST EN 61754-6:1999

01-maj-1999

Fibre optic connector interfaces - Part 6: Type MU connector family (IEC 61754-6:1997)

Fibre optic connector interfaces -- Part 6: Type MU connector family

Steckgesichter von Lichtwellenleiter-Steckverbindern -- Teil 6: Bauart MU Steckverbinderfamilie

Interfaces de connecteurs pour fibres optiques -- Partie 6: Famille de connecteurs de type MU

Ta slovenski standard je istoveten z: **EN 61754-6:1997**

ICS:

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices

SIST EN 61754-6:1999 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 61754-6

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Fibre optic connector interfaces
Part 6: Type MU connector family
(IEC 61754-6:1997)

Interface de connecteurs pour fibres optiques
Partie 6: Famille de connecteurs de type MU
(CEI 61754-6:1997)

Lichtwellenleiter-Steckverbinderübergänge
Teil 6: Typ MU Steckverbinderfamilie
(IEC 61754-6:1997)

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Ref. No. EN 61754-6:1997 E

Foreword

The text of document 86B/881/FDIS, future edition 1 of IEC 61754-6, prepared by SC 86B, Fibre optic interconnecting devices and passive components, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61754-6 on 1997-07-01.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-04-01

Endorsement notice

The text of the International Standard IEC 61754-6:1997 was approved by CENELEC as a European Standard without any modification.

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IEC
61754-6

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First edition
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Interfaces de connecteurs pour fibres optiques –

Partie 6:
Famille de connecteurs de type MU

Fibre optic connector interfaces –

Part 6:
Type MU connector family

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Partie 6: Famille de connecteurs de type MU

IEC Publication 61754-6
(First edition - 1997)
Fibre optic connector interfaces –
Part 6: Type MU connector family

CORRIGENDUM 1

Page 8

Correction dans le texte anglais uniquement

Page 9

In the first table, between interface 6-4 and interface 6-2:
instead of **Not mate** *read* **Mate**

and equally, between interface 6-5 and interface 6-2:
instead of **Not mate** *read* **Mate**

Page 10

Figure 1

Dans le schéma Coupe transversale A-A:
au lieu de **Manchon de couplage** *lire* **Boîtier de déverrouillage**

Page 11

Figure 1

In the diagram Cross-section A-A:
instead of **Coupling sleeve** *read* **Delatch housing**

Page 12

Tableau 1

Dans la note 2, première ligne: au lieu de **Manchon de couplage** *lire* **Boîtier de déverrouillage**

Page 13

Table 1

In note 2, first line: instead of **Coupling sleeve** *read* **Delatch housing**

Page 14

Figure 2

Comme en figure 1, dans le schéma Coupe transversale A-A:
au lieu de **Manchon de couplage** *lire* **Boîtier de déverrouillage**

Page 15

Figure 2

Same as in figure 1, in the diagram Cross-section A-A:
instead of **Coupling sleeve** *read* **Delatch housing**

Page 16

Tableau 2

A la référence l, sous dimensions, minimum, au lieu de **6,65** *lire* **6,55** *afin d'unifier avec la dimension l pour fiche simple en page 12*

Dans la note 2, première ligne, comme dans le tableau 1: au lieu de **Manchon de couplage** *lire* **Boîtier de déverrouillage**

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Table 2

Reference l, under dimensions, minimum, instead of **6,65** *read* **6,55** *in order to harmonize with dimension l for simplex plug on page 13*

In note 2, first line, same as in table 1: instead of **Coupling sleeve** *read* **Delatch housing**

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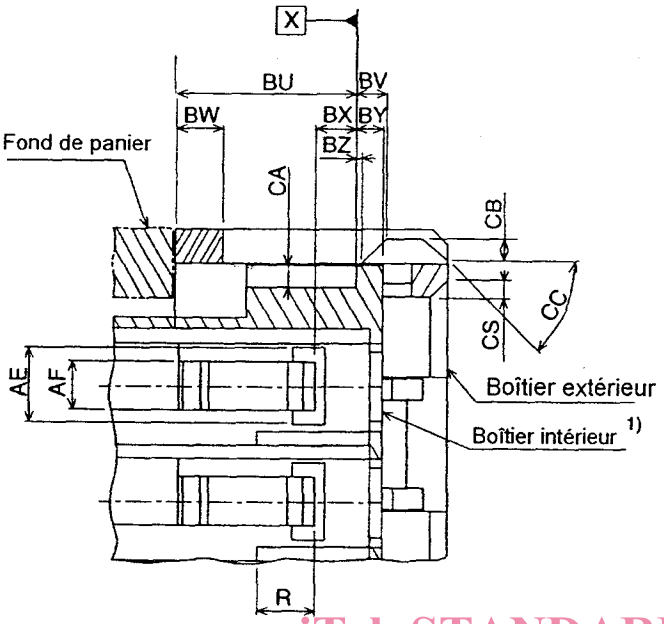
Figure 8

Coupe transversale G-G

Dans la partie supérieure gauche du schéma, prolonger de 5 mm le trait vertical qui limite la dimension BU pour obtenir:



Coupe transversale G-G

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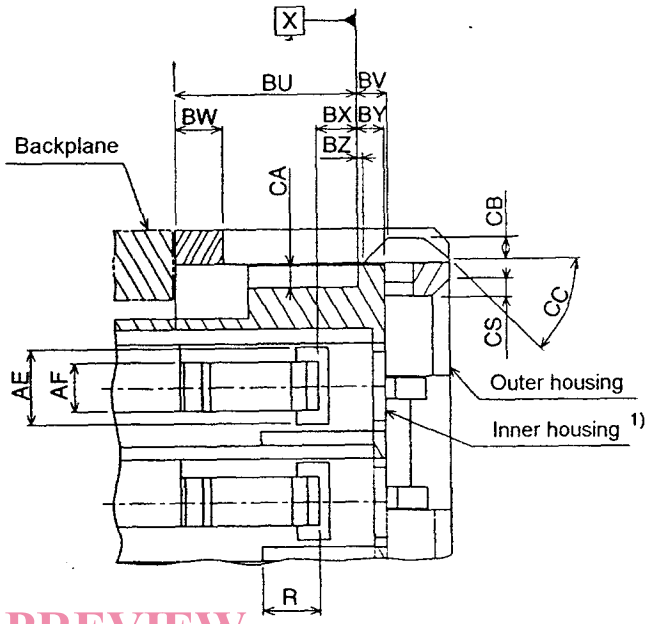
Figure 8

Cross-section G-G

In the top left part of the diagram, add 5 mm to the vertical line, limit for the dimension BU in order to obtain:



Cross-section G-G

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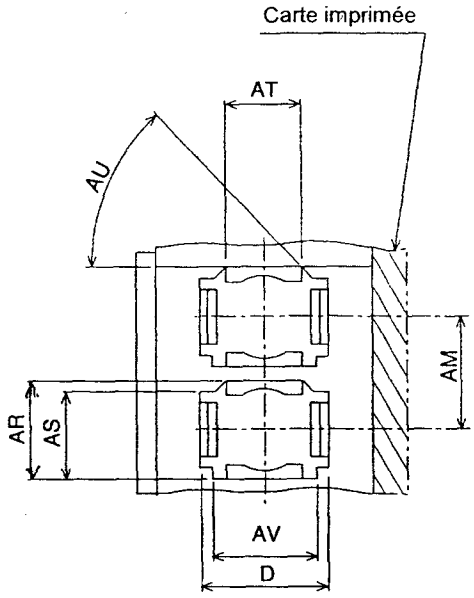
Figure 11

Vue agrandie de E

Dans la partie gauche du schéma, ajouter un trait fléché vertical indiquant la dimension AR afin d'obtenir:



Vue agrandie de E

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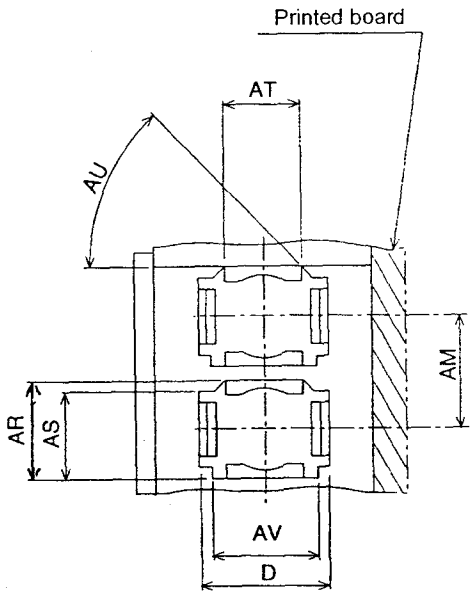
Figure 11

Expanded view E

Add a vertical line with arrows to show dimension AR so as to obtain:



Expanded view E

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FIBRE OPTIC CONNECTOR INTERFACES –

Part 6: Type MU connector family

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 61754-6 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

The text of this standard is based on the following documents:

FDIS	Report on voting
86B/881/FDIS	86B/983/RVD

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

Annexes A and B are for information only.

FIBRE OPTIC CONNECTOR INTERFACES –
Part 6: Type MU connector family

1 Scope

This part of IEC 61754 defines the standard interface dimensions for type MU family of connectors.

2 Description

The parent connector for type MU connector family is a miniature single-position plug which is characterized by a cylindrical, spring-loaded butting ferrule(s) of a 1,25 mm typical diameter, and a push-pull coupling mechanism. The optical alignment mechanism of the connectors is of a rigid hole or a resilient sleeve style.

3 Interfaces

This standard contains the following standard interfaces.

Interface 6-1: Simplex plug connector interface – Push/pull
Interface 6-2: Duplex plug connector interface – Push/pull
Interface 6-3: Simplex adaptor connector interface – Push/pull
Interface 6-4: Duplex adaptor connector interface – Push/pull
Interface 6-5: 8-port adaptor connector interface – Push/pull
Interface 6-6: Plug connector interface – for printed board housings
Interface 6-7: Sleeve holder interface – for printed board housings
Interface 6-8: 2-port backplane housing interface – Self-retentive
Interface 6-9: 2-port printed board housing interface – Self-retentive
Interface 6-10: 8-port backplane housing interface – Self-retentive
Interface 6-11: 8-port printed board housing interface – Self-retentive

The plugs of interfaces 6-1, 6-2 and 6-6 have a ferrule(s) with a spherically polished ferrule endface, and realize physical contact.

The type MU connector family comprises two types of connector set: MU-A connector set (see annex A) and MU-B connector set (see annex B). The MU-A connector set is a plug/adaptor configuration with a push-pull coupling mechanism. The MU-B connector set is a plug-in type back-plane connector configuration which is plug/backplane and printed board housings/plug for printed board housing/sleeve holder configuration and is equipped with a self-retentive mechanism.

The type MU-A connector set consists of simplex and duplex plugs, and simplex, duplex and 8-port adaptors. The plugs are common to the backplane connector housings of the type MU-B connector set.

The type MU-B connector set consists of 2-port and 8-port backplane and printed board connector housings, simplex and duplex plugs, plug for printed board connector housings, and sleeve holder. The plug for printed board connector housing is used as a jack together with the sleeve holder. The jack is attached into the printed board connector housing.

The following standard interfaces are intermateable.

Plugs	Adaptors		
	Interface 6-3	Interface 6-4	Interface 6-5
Interface 6-1	Mate	Mate	Mate
Interface 6-2	Not mate	Not mate	Not mate

Plugs	Connector housings			
	Backplane connector housing		Printed board connector housing	
	Interface 6-8	Interface 6-10	Interface 6-9	Interface 6-11
Interface 6-1	Mate	Mate	Not mate	Not mate
Interface 6-2	Mate	Mate	Not mate	Not mate
Interface 6-6 with Interface 6-7	Not Mate	Not Mate	Mate	Mate

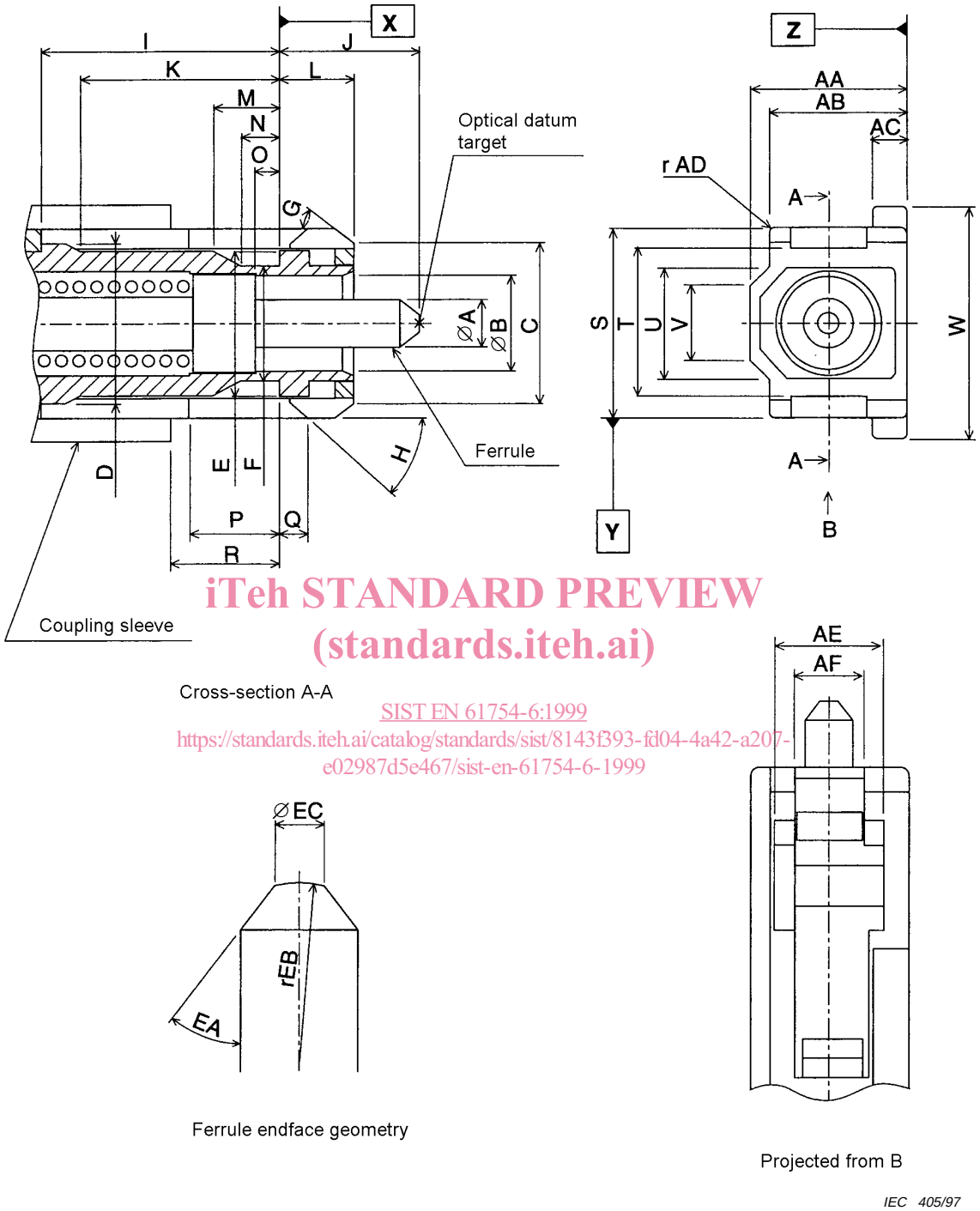

Figure 1 – Simplex plug connector interface

Table 1 – Dimensions of the simplex plug connector interface

Reference	Dimensions		Notes
	Minimum	Maximum	
A	1,2485 mm	1,2495 mm	1
B	2,6 mm	2,7 mm	
C	4,6 mm	4,8 mm	
D	4,65 mm	4,75 mm	
E	4,3 mm	4,4 mm	
F	3,3 mm	3,4 mm	
G	25°	35°	
H	25°	35°	
I	6,55 mm	–	2
J	4,2 mm	4,5 mm	3
K	5,5 mm	–	
L	2,4 mm	2,5 mm	
M	1,5 mm	–	
N	0,6 mm	–	
O	0,5 mm	–	
P	2,6 mm	–	2
Q	1 mm	1,1 mm	2 and 4
R	2,65 mm	2,9 mm	2
S	5,5 mm	5,6 mm	
T	4,3 mm	4,5 mm	
U	–	3,7 mm	
V	–	2,4 mm	
W	6,5 mm	6,6 mm	
AA	4,3 mm	4,4 mm	
AB	3,85 mm	3,95 mm	
AC	0,7 mm	0,9 mm	
AD	0,2 mm	–	Radius
AE	3 mm	–	
AF	2,2 mm	2,3 mm	
EA	40°	45°	
EB	10 mm	25 mm	Radius, 5
EC	0,45 mm	0,73 mm	

NOTES

1 A chamfer or radius is allowed to a maximum depth of 0,5 mm from the ferrule endface.

2 The coupling sleeve shall be movable toward the right and the left directions. These dimensions are given when the coupling sleeve is moved in its most right-direction position.

3 The dimension J is given for the plug endface when not mated. It is noticed that the ferrule is movable by a certain axial compression force with direct contacting endfaces, and therefore the dimension J is variable. Ferrule compression force shall be 5,5 N to 6,5 N when the position of the optical datum target from the datum X is moved in the range of 3,9 mm to 4,1 mm. In addition, the dimension J shall become less than 3,25 mm with a relatively large axial compression force.

4 The right-side position of Q shall become the left-side position to the plane defined by datum X when the coupling sleeve is moved to its most left-direction position.

5 Dome eccentricity of the spherically polished ferrule endface shall be less than 50 µm.