



**SLOVENSKI STANDARD**  
**SIST EN 61754-4:1997/A1:2001**  
**01-februar-2001**

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**Fibre optic interfaces - Part 4: Type SC connector family (IEC 61754-4:1997/A1:1999)**

Fibre optic connector interfaces -- Part 4: Type SC connector family

Steckgesichter von Lichtwellenleiter-Steckverbindern -- Teil 4: Bauart SC Steckverbinderfamilie

Interfaces de connecteurs pour fibres optiques -- Partie 4: Famille de connecteurs du type SC

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[SIST EN 61754-4:1997/A1:2001](https://standards.iTeh.ai/catalog/standards/sist/7511bb4e-0078-42d4-8992-16200934496f/sist-en-61754-4-1997-a1-2001)

**Ta slovenski standard je istoveten z: EN 61754-4:1997/A1:1999**

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**ICS:**

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices
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**SIST EN 61754-4:1997/A1:2001**                      **en**

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English version

**Fibre optic connector interfaces**  
**Part 4: Type SC connector family**  
(IEC 61754-4:1997/A1:1999)

Interface de connecteurs pour  
fibres optiques  
Partie 4: Famille de connecteurs  
du type SC  
(CEI 61754-4:1997/A1:1999)

Steckgesichter von  
Lichtwellenleiter-Steckverbindern  
Teil 4: Bauart SC Steckverbinderfamilie  
(IEC 61754-4:1997/A1:1999)

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This amendment A1 modifies the European Standard EN 61754-4:1997; it was approved by CENELEC on 1999-08-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

## 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**

### Foreword

The text of document 86B/1200/FDIS, future amendment 1 to IEC 61754-4, 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 amendment A1 to EN 61754-4:1997 on 1999-08-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2000-05-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2002-08-01

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### Endorsement notice

The text of amendment 1:1999 to the International Standard IEC 61754-4:1997 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC  
61754-4

1997

AMENDEMENT 1  
AMENDMENT 1  
1999-06

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Amendement 1

**Interfaces de connecteurs pour  
fibres optiques –**

**Partie 4:**  
**Famille de connecteurs du type SC**  
**(standards.iteh.ai)**

Amendment 1 <https://standards.iteh.ai/catalog/standards/sist/7511bb4e-0078-42d4-8992-f6200974496f/sist-en-61754-4-1997-a1-2001>  
**Fibre optic connector interfaces –**

**Part 4:**  
**Type SC connector family**

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Commission Electrotechnique Internationale  
International Electrotechnical Commission  
Международная Электротехническая Комиссия

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## FOREWORD

This amendment has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

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

FDIS	Report on voting
86B/1200/FDIS	86B/1235/RVD

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

Page 19

Add the following new clauses 4, 5 and 6:

### 4 SC duplex connector interfaces

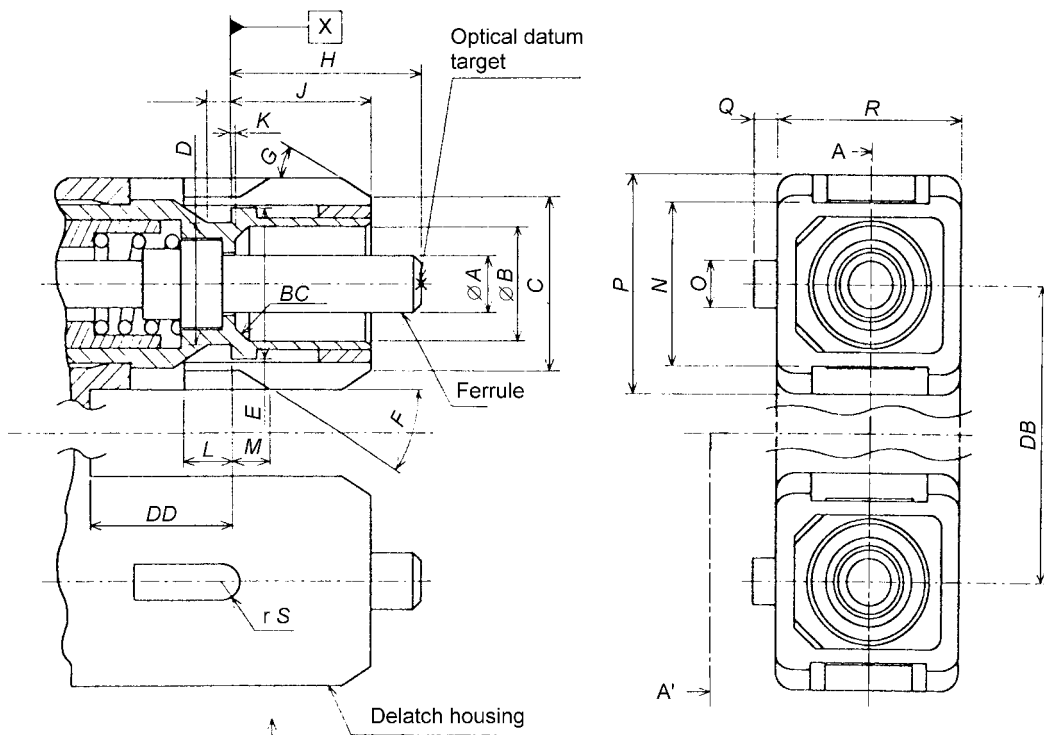
The standard interfaces contained in this clause are the following:

- interface 61754-4-3: duplex plug connector interface – push/pull, PC;
- interface 61754-4-4: duplex adaptor connector interface – push/pull.

The duplex plug connector of interface 61754-4-3 has ferrules with a spherically polished ferrule endface, and realises physical contact (PC).

The following standard interfaces are intermateable. It, however, shall be noted that in order to obtain the designated optical performance, any plug shall be connected to a counterpart plug whose ferrule end is polished to the same condition.

Plugs (polishing condition)	Adaptors	
	Interface 61754-4-2	Interface 61754-4-4
Interface 61754-4-1(PC)	Mate	Mate
Interface 61754-4-3(PC)	Not mate	Mate



Partial cross-section A-A  
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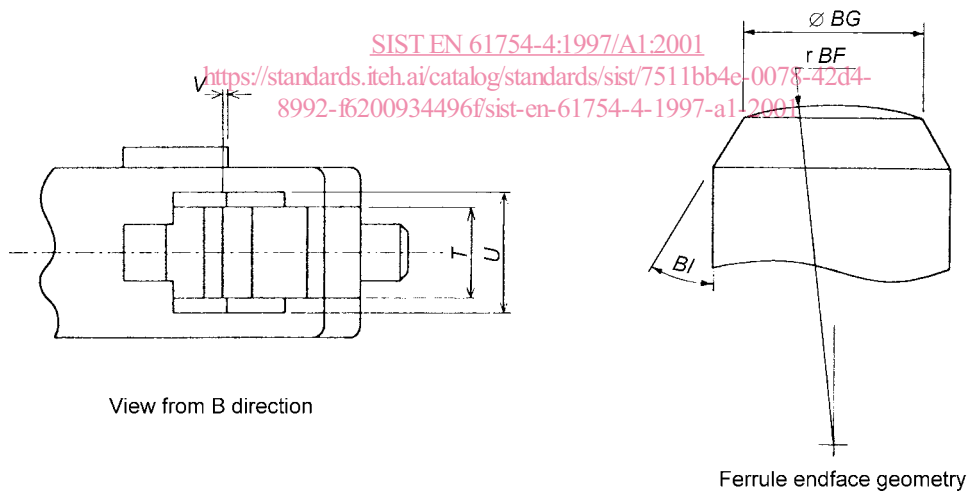


Figure 3 – Duplex plug connector interface

**Table 3a – Dimensions of the duplex plug connector interface**

Reference	Dimensions mm		Notes
	Minimum	Maximum	
A			1, see table 3b
B	4,80	4,90	
C	6,80	7,40	
D	4,90	5,30	
E	6,70	6,80	
F	19°	23°	
G	25°	35°	
H	7,15	7,50	2
I	0,80	1,20	
J	5,30	5,50	
K		0,05	3
L	2,11	2,50	4
M	2,0	2,80	4 and 5
N	6,60	6,80	
O	1,60	1,80	
P	8,79	8,89	6
Q	0,80	1,00	
R	7,29	7,39	
S	0,80	0,90	Radius
T	4,05	4,15	
U	5,40	5,60	
V	0,5	0,5	4
BC	0	0,5	45 degree chamfer
BF	10	25	Radius, 7
BG	–	–	Diameter, see table 3b
BI	25°	35°	
DB	–	–	8, 9
DD	7,00	–	

NOTE 1 – A chamfer or radius is allowed to a maximum depth of 1,2 mm from the ferrule endface.

NOTE 2 – Dimension H is given for plug endface when not mated. It is movable by a certain axial compression force, with direct contacting endfaces, and therefore dimension H is variable. Ferrule compression force shall be 7,8 N to 11,8 N when the dimension H is 7 mm ± 0,1 mm.

NOTE 3 – The negative dimension indicates that the position of the inside bottom plane is left-direction relative to the reference plane.

NOTE 4 – The delatch housing shall be movable towards right and left direction. These dimensions are given when the delatch housing is moved in its extreme right-direction position.

NOTE 5 – Dimension M should be below 0 mm, when the delatch housing is moved to its most left-direction position.

NOTE 6 – The delatch housing may be a rigid sleeve. When two simplex plugs are retained together by a flexible sleeve, the dimension P shall be from 8,89 mm to 8,99 mm.

NOTE 7 – Dimension BF shall be measured over a diameter of 0,25 mm around the ferrule axis. The dome eccentricity of the spherical polished endface should be less than 50 µm.

NOTE 8 – The delatch housing may be a rigid sleeve. When two simplex plugs are retained together by a sleeve or a clamp with a clearance, the dimension DB shall be 12,7 mm as a basic dimension.

NOTE 9 – The ferrules should be capable of taking up a common axis with the duplex adapter alignment sleeves.



**Table 3b – Grade**

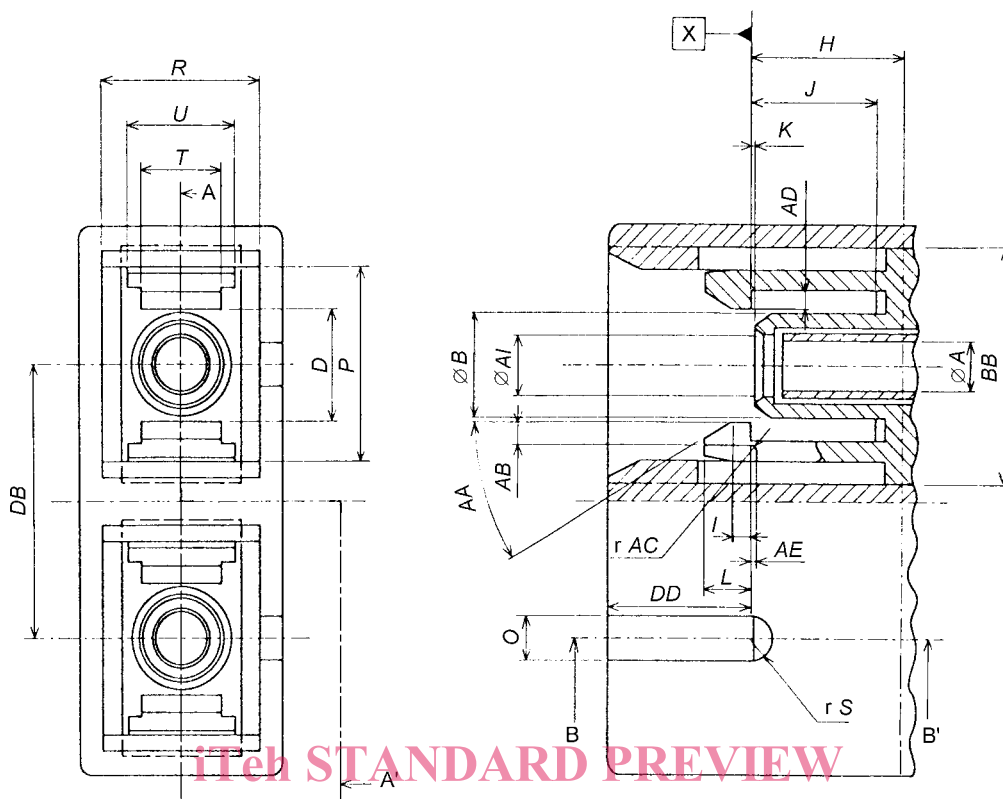
Grade	Dimensions mm				Notes
	A		BG		
	Minimum	Maximum	Minimum	Maximum	
1	2,4985	2,4995	1,75	2,20	See note
2	2,4980	2,4995	1,75	2,20	See note
3	2,4985	2,4995	1,90	2,20	See note
4	2,4980	2,4995	1,90	2,20	See note
5	2,497	2,4995	1,75	2,20	See note
6	2,497	2,4995	1,90	2,20	See note

NOTE – Add the grade number to the interface reference number.

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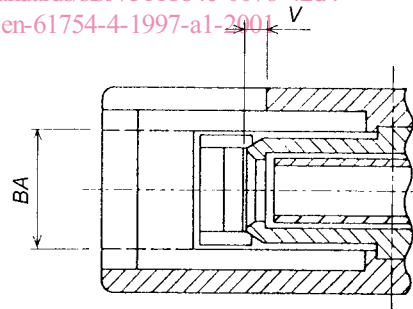


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Partial cross-section A-A'

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Cross-section B-B'

IEC 851/99

Figure 4a – Duplex adaptor connector interface

**Table 4a – Dimensions of the duplex adaptor connector interface**

Reference	Dimensions mm		Notes
	Minimum	Maximum	
A			See table 4b
B	4,39	4,69	
D	4,9	5,5	
H	6,9	7,1	
I	0,4	0,8	
J	5,51	5,90	
K	0,06	1,00	
L	1,9	2,1	
O	2,0	2,2	
P	9,00	9,10	
R	7,40	7,50	
S	1,0	1,1	Radius
T	3,80	4,04	
U	5,0	5,3	
V	0,6	1,6	
AA	27°	33°	
AB	0,8	1,0	
AC	0,4	0,6	Radius
AD	0,7	0,8	
AE	0,4	0,6	
AI	2,7	2,8	
BA	5,4	5,6	See note
BB	10,8	11,2	See note
DB	12,65	12,75	
DD	–	6,99	

NOTE – It may be of a structure as shown by a dash line in figure 4a.