

INTERNATIONAL STANDARD

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AMENDMENT 1
1999-08

Amendment 1

Fibre optic connector interfaces –

**Part 7:
Type MPO connector family**

Amendement 1

Interfaces de connecteurs pour fibres optiques –

*Partie 7:
Famille de connecteurs de type MPO*

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Международная Электротехническая Комиссия

PRICE CODE

F

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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/1213/FDIS	86B/1250/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.

A bilingual version of this publication may be issued at a later date.

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3 Interfaces

Add the following test after "interface 7-3: MPO adaptor interface – Push/pull":

Interface 7-4: MPO female plug connector flat interface – Push/pull

Interface 7-5: MPO male plug connector flat interface – Push/pull

The following standards are intermateable:

Female plugs	Adaptors	Male plugs
61754-7-1	61754-7-3	61754-7-2
61754-7-4	61754-7-3	61754-7-5

Add the following new figures and tables after table 3:

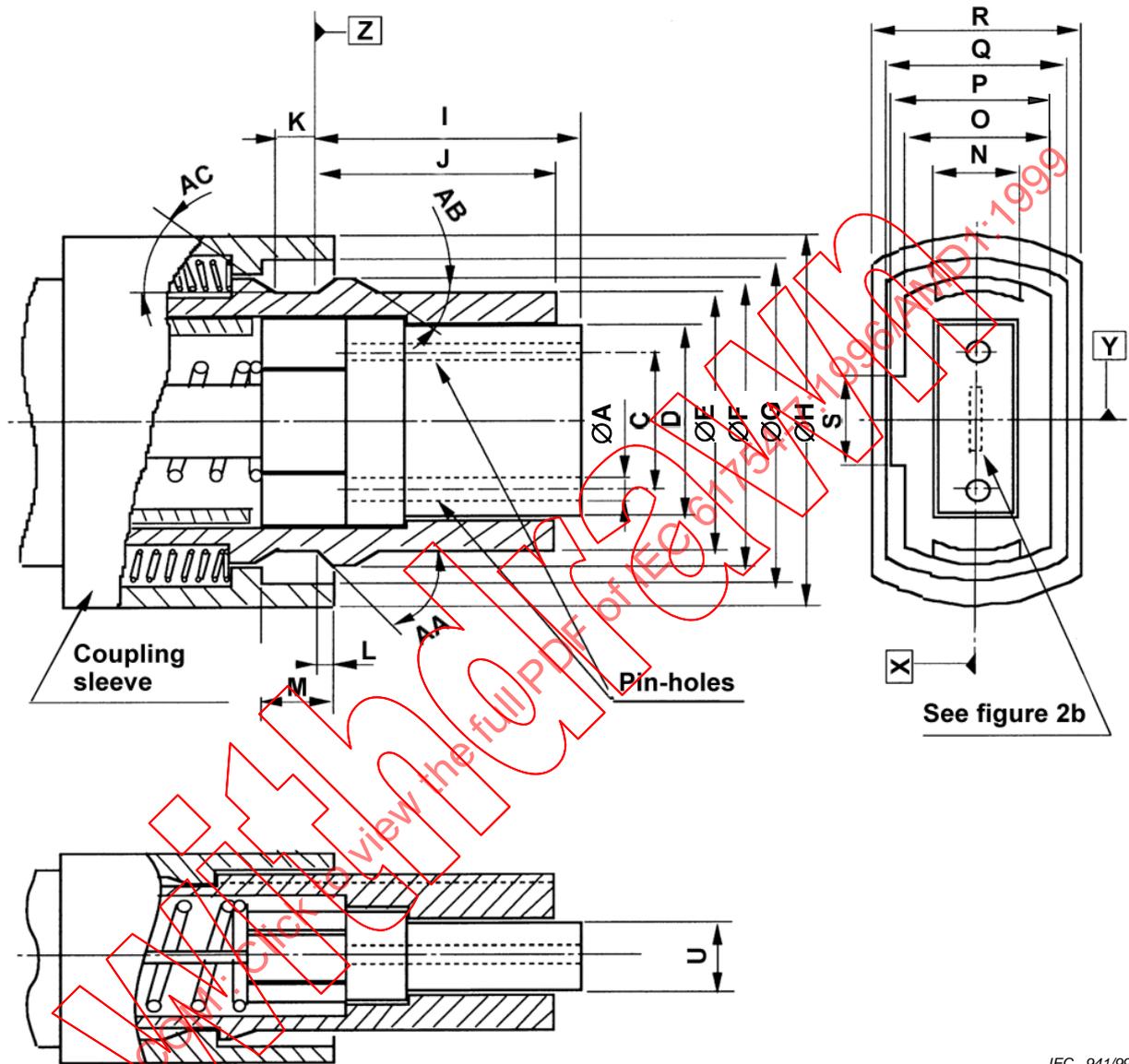


Figure 5 – MPO female plug connector flat interface

Table 4 – Dimensions of the MPO female plug connector flat interface

Reference	Dimensions		Notes
	Minimum	Maximum	
A	0,699 mm	0,701 mm	1
C	4,597 mm	4,603 mm	2
D	6,3 mm	6,5 mm	
E	8,34 mm	8,54 mm	
F	9,49 mm	9,59 mm	
G	10,85 mm	11,05 mm	
H	12,19 mm	12,59 mm	
I	8,8 mm	9,2 mm	3
J	7,9 mm	8,1 mm	
K	1,4 mm	–	
L	0,2 mm	0,8 mm	4 and 5
M	2,4 mm	2,6 mm	
N	2,8 mm	3,0 mm	
O	4,89 mm	4,99 mm	
P	5,59 mm	5,69 mm	
Q	5,7 mm	–	
R	–	7,7 mm	
S	2,9 mm	3,1 mm	
U	2,4 mm	2,5 mm	
AA	42°	45°	
AB	–	45°	
AC	–	45°	

NOTE 1 – Each pin-hole shall accept a gauge pin as shown in figure 2c to a depth of 5,5 mm with a maximum force of 1,7 N. In addition, two pin-holes of a plug shall accept a gauge as shown in figure 2d to a depth of 5,5 mm with a maximum force of 3,4 N.

NOTE 2 – Dimension C is defined as the distance between two pin-hole centres.

NOTE 3 – Dimension I is given for a fibre endface centre of a plug end when not mated. It is noticed that a ferrule is movable by a certain axial compression force, and therefore the dimension I is variable. Ferrule compression force shall be 7,8 N to 11,8 N when a position of the fibre endface from the datum Z is in the range of 8,2 mm to 8,4 mm.

NOTE 4 – Coupling sleeve shall be movable by a certain axial compression force. Dimension L is given for a coupling sleeve end when not mated. Coupling sleeve compression force shall be 2,9 N to 6,9 N when a position of the coupling sleeve endface from datum Z is in the range of 0 to 0,1 mm.

NOTE 5 – An adaptor coupling part shall be unlocked by a movement away from the adaptor of a coupling sleeve, when it is separate from the adaptor. When the coupling sleeve is moved for unlocking, a position of the coupling sleeve endface shall be larger than 2,0 mm in the left direction from the datum Z.

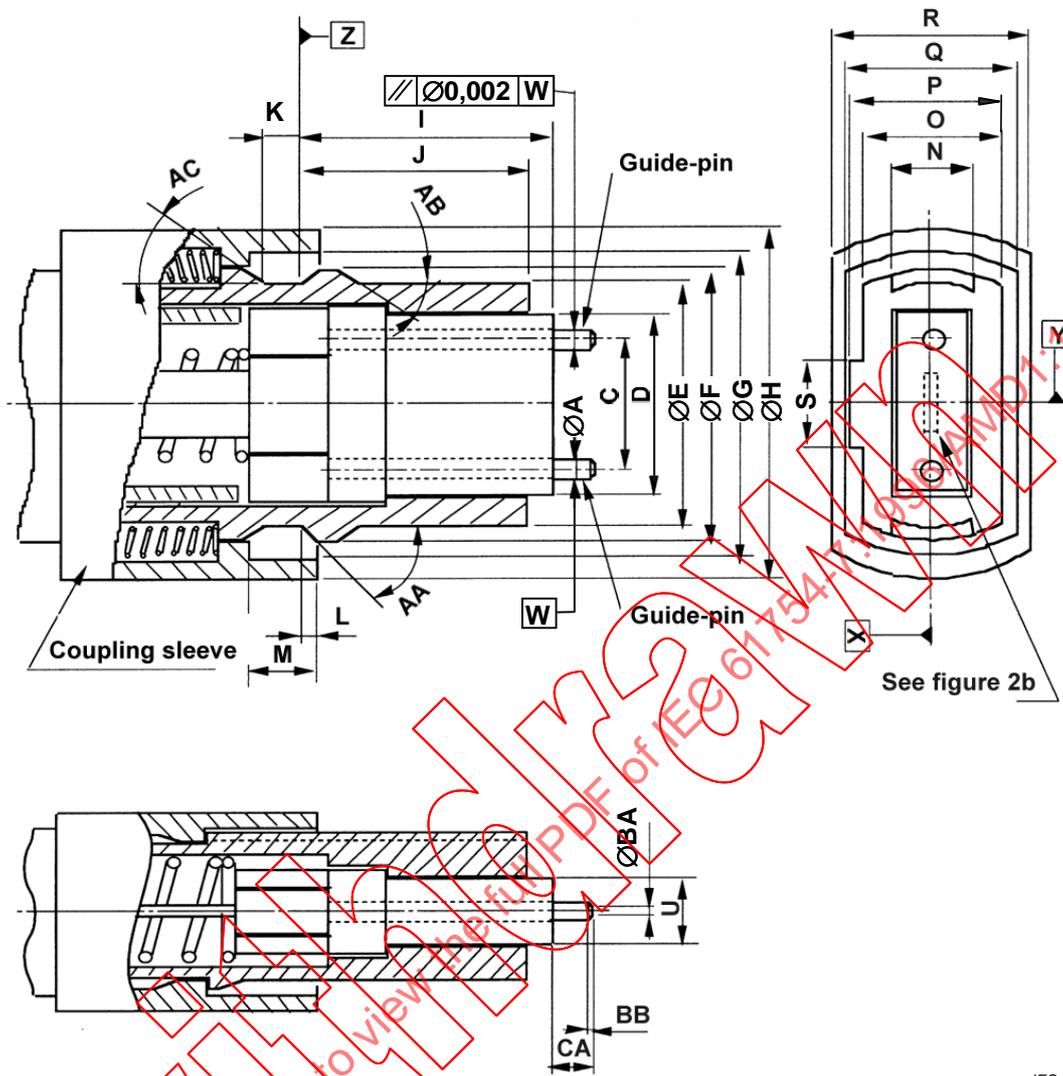


Figure 6 – MPO male plug connector flat interface

Table 5 – Dimensions of the MPO male plug connector flat interface

Reference	Dimensions		Notes
	Minimum	Maximum	
A	0,697 mm	0,699 mm	1
C	4,597 mm	4,603 mm	2
D	6,3 mm	6,5 mm	
E	8,34 mm	8,54 mm	
F	9,49 mm	9,59 mm	
G	10,85 mm	11,05 mm	
H	12,19 mm	12,59 mm	
I	8,8 mm	9,2 mm	3
J	7,9 mm	8,1 mm	
K	1,4 mm	-	
L	0,2 mm	0,8 mm	4 and 5
M	2,4 mm	2,6 mm	
N	2,8 mm	3,0 mm	
O	4,89 mm	4,99 mm	
P	5,59 mm	5,69 mm	
Q	5,7 mm	-	
R	-	7,7 mm	
S	2,9 mm	3,1 mm	
U	2,4 mm	2,5 mm	
AA	42°	45°	
AB	-	45°	
AC	-	45°	
BA	0,2 mm	0,4 mm	
BB	0,2 mm	0,5 mm	
CA	1,6 mm	3,3 mm	

NOTE 1 – Each guide-pin shall be retained with a minimum force of 3,4 N.

NOTE 2 – Dimension C is defined as the distance between two guide-pin centres.

NOTE 3 – Dimension I is given for a fibre endface centre of a plug end when not mated. It is noticed that a ferrule is movable by a certain axial compression force, and therefore the dimension I is variable. Ferrule compression force shall be 7,8 N to 11,8 N when a position of the fibre endface from the datum Z is in the range of 8,2 mm to 8,4 mm.

NOTE 4 – Coupling sleeve shall be movable by a certain axial compression force. Dimension L is given for a coupling sleeve end when not mated. Coupling sleeve compression force shall be 2,9 N to 6,9 N when a position of the coupling sleeve endface from datum Z is in the range of 0 to 0,1 mm.

NOTE 5 – An adaptor coupling part shall be unlocked by a movement away from the adaptor of a coupling sleeve, when it is separate from the adaptor. When the coupling sleeve is moved for unlocking, a position of the coupling sleeve endface shall be larger than 2,0 mm in the left direction from the datum Z.