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INTERNATIONAL STANDARD

Fibre optic interconnecting devices and passive components – Interface standard for closures – Part 1: General and guidance

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – INTERFACE STANDARD FOR CLOSURES –

Part 1: General and guidance

FOREWORD

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International Standard IEC 61758-1 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/2683/FDIS	86B/2712/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.

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

A list of all parts of the IEC 61758 series, published under the general title *Fibre optic interconnecting devices and passive components – Interface standard for closures,* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – INTERFACE STANDARD FOR CLOSURES –

Part 1: General and guidance

1 Scope

This part of IEC 61758 provides general information and guidance on the subject of closures. It includes references, general closure and interface descriptions and definitions.

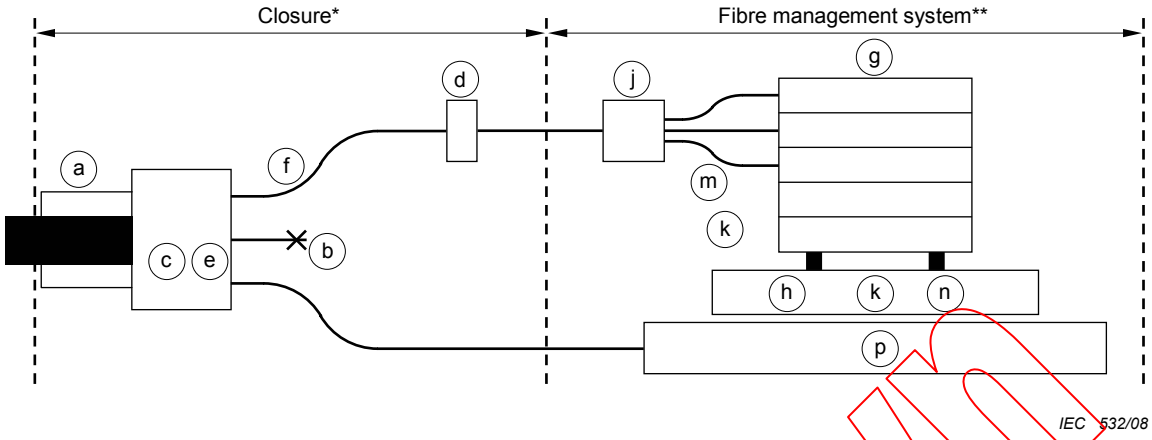
This standard defines the following general interfaces for closures:

- interface to cables;
- interface to FMS;
- interface to parts other than FMS or cables;
- interface to external sitings (pits, manholes etc.)

This specification covers all types of closures. The performance requirements are given in IEC 61753-111 series (in preparation).

This closure standard allows both single mode and multi-mode fibre to be used, and covers all IEC standard optical fibre cables as listed in Clause 2, with their various fibre capacities, types and designs.

Figure 1 shows and defines the interface between the closure and the fibre management system.



Key

Closure functions*

(a) Cable sealing
(b) Cable anchorage
(c) Cable blockage
(d) Cable gas blocking
(e) Distribution element
(f) Identification

* Example of Closure

FMS functions**

(g) Organiser/splice tray(s)
(h) Fibre storage
(j) Distribution element
(k) Passive components
(m) Guiding elements
(n) Connectors
(p) Cable element storage

** Example of FMS

Figure 1 – Closure and FMS functions

2 Normative references

The following referenced documents are indispensable for the application 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 60068-3-3, *Environmental testing – Part 3: Guidance – Seismic test methods for equipment*

IEC 60721-2-6, *Classification of environmental conditions – Part 2: Environmental conditions appearing in nature – Earthquake vibration and shock*

IEC 60793-2 (all parts), *Optical fibres – Part 2: Product specifications*

IEC 60794-2 (all parts), *Optical fibre cables – Part 2: Indoor cables*

IEC 60794-3 (all parts), *Optical fibre cables – Part 3: Outdoor cables*

IEC 60825-2, *Safety of laser products – Part 2: Safety of optical fibre communication systems (OFCS)*

IEC 61300 (all parts), *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures*

IEC 61753 (all parts), *Fibre optic interconnecting devices and passive components performance standard*

IEC 61753-1, *Fibre optic interconnecting devices and passive components performance standard – Part 1 – General and guidance for performance standards*

IEC 61756-1, *Fibre optic interconnecting devices and passive components – Interface standard for fibre management systems – Part 1: General and guidance*

IEC/TR 62222, *Fire performance of communication cables installed in buildings*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

3.1.1
ancillary components
components that are used for functions other than optical transmission

3.1.2
closure
all external housings except outdoor cabinets

3.1.3
enclosure
indoor housings (cabinets, cases, distribution frames) and outdoor cabinets

3.1.4
housing
closure or enclosure

3.1.5
intervention
opening the cover, modifying, adding, removing or repairing fibre circuits, splices, connectors or other components between the incoming and outgoing cables of an existing fibre management system

3.1.6
optical node
a point of intervention in the network, e.g. at each opening of a cable jacket or at the end of the cable

NOTE Nodes in this specification are parts of the physical network containing closures and fibre management systems capable of performing their expected function in the network, while exposed to the environment that they are intended to reside in.

3.1.7
fibre management system
system to control, protect and store fibres from the incoming to the outgoing fibres

[IEC 61756-1, definition 3.1.4]

3.1.8
active optical component
optical component or assembly which makes use of quantum-mechanical effects or generates optical gain of signal power, or directly modulates optical signals

NOTE 1 Examples include optical amplifiers.