Irish Standard
I.S. EN 50411-3-8:2016

Fibre organizers and closures to be used in optical fibre communication systems - Product specifications - Part 3-8: Fibre management system, terminal equipment box type 1 for category C

I.S. EN 50411-3-8:2016

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

I.S. EN 50411-3-8:2016 is the adopted Irish version of the European Document EN 50411-3-8:2016, Fibre organizers and closures to be used in optical fibre communication systems - Product specifications - Part 3-8: Fibre management system, terminal equipment box type 1 for category C

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 50411-3-8

January 2016

ICS 33.180.20; 33.180.99

English Version

Fibre organizers and closures to be used in optical fibre communication systems - Product specifications - Part 3-8: Fibre management system, terminal equipment box type 1 for category C

Organiseurs et boîtiers de fibres destinés à être utilisés dans les systèmes de communication par fibres optiques - Spécifications de produits - Partie 3-8: Système de gestion des fibres, boîtier d'équipement terminal de type 1 pour la catégorie C

LWL-Spleißkassetten und -Muffen für die Anwendung in LWL-Kommunikationssystemen - Produktspezifikationen - Teil 3-8: Faser Management System, Kasten für Endeinrichtungen Typ 1 für Kategorie C

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 50411-3-8:2016) has been prepared by CLC/TC 86BXA "Fibre optic interconnect, passive and connectorised components".

The following dates are fixed:

latest date by which this document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2016-10-12
latest date by which the national standards conflicting with this document have to be withdrawn	(dow)	2018-10-12

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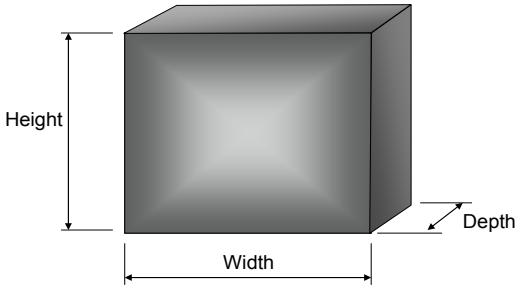
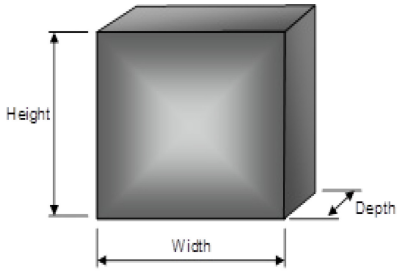
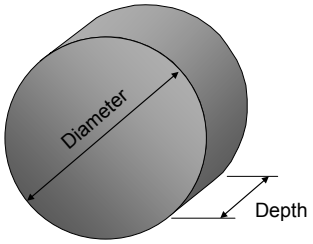
Fibre organizers and closures to be used in optical fibre communication systems – Product specifications

Part 3-8: Fibre management system, terminal equipment box type 1 for category C

Description		Performance
Construction:	Wall mounted box	**Applications**: Optical Fibre Terminal Equipment Box including the ONT/CPE for indoor controlled environments EN 61753-1 Category C
Cable Fixing:	Mechanical	
Connectors:	EN 50377 series EN 60603-7 Series	
Fibre types:	EN 60793-2-50 B1 and B6	**Sealing performance:** IP 40
Fibre management:	Integrated in box	

Related documents:

EN 60529	Degrees of protection provided by enclosures (IP Code) (IEC 60529)
EN 60793-2-50	Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres (IEC 60793-2-50)
EN 61753-1	Fibre optic interconnecting devices and passive components – Part 1: General and guidance for performance standard (IEC 61753-1)
EN 61300 series	Fibre optic interconnecting devices and passive components – Basic test and measurement procedures (IEC 61300 series)

Shape		Maximum outline dimensions
Rectangular shape		Width: 300 mm Height: 150 mm Depth: 100 mm
Square shape		Width: 210 mm Height: 210 mm Depth: 50 mm
Circular		Diameter: 250 mm Depth: 100 mm

1 Scope

1.1 Product definition

This European Standard specifies the dimensional, optical, mechanical and environmental performance requirements of a Terminal Equipment Boxes for the FTTX networks. The Terminal Equipment Box will house the ONT/CPE (electronics) and it protects the optical fibres, splices and connectors from direct contact with the user. Optionally it can contain the network test interface, the power supply and the batteries.

The performance of the electronics, power supply or batteries are not part of this document. These are covered by another EN document, EN 50700.

This specification contains the initial, start of life optical, mechanical and environmental performance requirements of the optical fibre termination in a Terminal Equipment Box, in order for it to be categorized as an EN standard product.

1.2 Operating environment

The tests selected combined with the severity and duration is representative of indoor and outside plant for above ground environments defined by:

EN 61753-1 Category C Controlled environment

1.3 Reliability

Whilst the anticipated service life expectancy of the product in this environment is 20 years, compliance with this specification does not guarantee the reliability of the product. This should be predicted using a recognised reliability assessment programme.

1.4 Quality assurance

Compliance with this specification does not guarantee the manufacturing consistency of the product. This should be maintained using a recognised quality assurance programme.

1.5 Allowed fibre types

All EN 60793-2-50 fibres can be stored in the Terminal Equipment Box with a minimum storage radius of 20 mm (up to a length of maximum 2 m).

Smaller storage radii down to 15 mm are possible with the EN 60793-2-50 B6_a fibre types, but in this case the reduction in mechanical reliability should be taken into account (see Annex A).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 50377 (all parts), *Connector sets and interconnect components to be used in optical fibre communication systems — Product specifications*

EN 50700, *Information technology — Premises distribution access network (PDAN) cabling to support deployment of optical broadband networks*

EN 60529, *Degrees of protection provided by enclosures (IP Code) (IEC 60529)*