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Irish Standard
I.S. EN 50377-13-2:2011

Connector sets and interconnect components to be used in optical fibre communication systems - Product specifications -- Part 13-2: Type LX.5-PC DUPLEX terminated on IEC 60793-2-50 category B1.1 and B1.3 singlemode fibre, with full zirconia ferrule category U

I.S. EN 50377-13-2:2011

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EUROPEAN STANDARD

EN 50377-13-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2011

ICS 33.180.20

English version

**Connector sets and interconnect components to be used in optical fibre communication systems -
Product specifications -
Part 13-2: Type LX.5-PC DUPLEX terminated on IEC 60793-2-50 category B1.1 and B1.3 singlemode fibre, with full zirconia ferrule category U**

Jeux de connecteurs et composants d'interconnexion à utiliser dans les systèmes de communication par fibres optiques -
Spécifications de produits -
Partie 13-2: Type LX.5-PC duplex raccordé sur des fibres unimodales de catégorie B1.1 et B1.3 de la CEI 60793-2-50, avec férule en zircone plein de catégorie U

Steckverbindersätze und Verbindungselemente für Lichtwellenleiter-Datenübertragungssysteme -
Produktnormen -
Teil 13-2: Bauart LX.5-PC-Duplex zum Anschluss an Einmodenfasern der Kategorien B1.1 und B1.3 nach IEC 60793-2-50 mit Zirkonium-Ferrule für die Kategorie U

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CENELEC

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

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Foreword

This European Standard was prepared by the Technical Committee CENELEC TC 86BXA, Fibre optic interconnect, passive and connectorised components.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50377-13-2 on 2011-01-02.

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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) 2012-01-02

 - latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2014-01-02
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**Connector sets and interconnect components to be used in optical fibre communication systems –
Product specifications**

**Part 13-2: Type LX.5-PC DUPLEX terminated on IEC 60793-2-50 category B1.1 and B1.3
singlemode fibre, with full zirconia ferrule category U**

Description		Performance	
Coupling mechanism:	Latched push-pull	Application:	For use in EN category U (Uncontrolled environment)
Configuration:	Plug/adaptor/plug	Attenuation grades: (random mate)	B: $\leq 0,12$ dB mean $\leq 0,25$ dB for > 97 % of measurements
Fibre category:	EN 60793-2-50, Types B1.1 and B1.3		C: $\leq 0,25$ dB mean $\leq 0,50$ dB for > 97 % of measurements
Cable type:	see Table 3	Return loss grades:	2: ≥ 45 dB

Related documents:

EN 60794-2, *Optical fibre cables – Part 2: Indoor cables – Sectional specification* (IEC 60794-2)

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

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

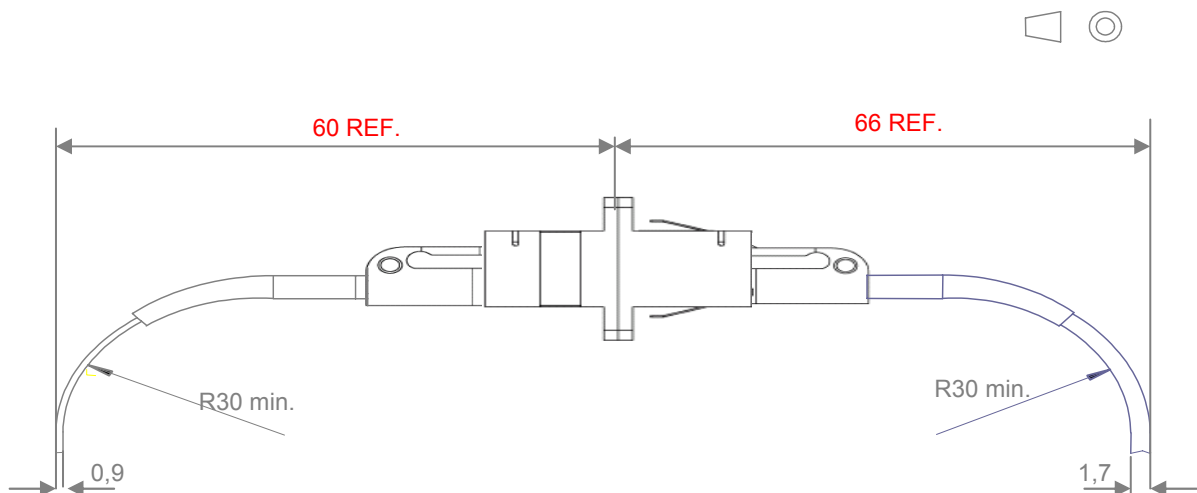
EN 61754-23, *Fibre optic connector interfaces – Part 23: Type LX.5 connector family* (IEC 61754-23)

EN 61755-1, *Fibre optic connector optical interfaces – Part 1: Optical interfaces for single mode non-dispersion shifted fibres – General and guidance* (IEC 61755-1)

EN 61755-3-1, *Fibre optic connector optical interfaces – Part 3-1: Optical interface, 2,5 mm and 1,25 mm diameter cylindrical full zirconia PC ferrule, single mode fibre* (IEC 61755-3-1)

ETSI TS 100 671, *Transmission and Multiplexing (TM); Passive optical components; Optical fibre connectors for single mode optical fibre communication systems; Common requirements and conformance testing*

Outline and maximum dimensions:



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1 Scope

1.1 Product definition

This European Standard contains the initial, start of life dimensional, optical, mechanical and environmental performance requirements which a terminated and assembled singlemode resilient alignment sleeve LX.5 PC connector set (plug/ adaptor/ plug) should meet in order for it to be categorised as an EN standard product.

Since different variants and grades of performance are permitted, product marking details are given in 3.6.

1.2 Intermateability

Although all products conforming to the requirements of this European Standard will intermate, the resulting level of random attenuation performance will only be ensured in accordance with Table 1. The intention is that this will be true irrespective of the manufacturing source(s) of the product.

When intermating plug variants having different attenuation grades, the resulting level of attenuation cannot be assured to be any better than the worst attenuation grade.

The intermating of a grade C plug with a grade B plug will result in an uncertain level of random attenuation performance.

Table 1 – Ensured level of random attenuation

Plug attenuation grade	C	B
C	C	C
B	C	B

1.3 Operating environment

The tests selected combined with the severities and durations are representative of a category U environment described in EN 61753-1.

1.4 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.

1.5 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.

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