



National Standards Authority of Ireland  
Údarás um Chaighdeáin Náisiúnta na hÉireann

IRISH STANDARD

**I.S. EN 50377-3-1:2008**

ICS 33.180.20

**"CONNECTOR SETS AND INTERCONNECT  
COMPONENTS TO BE USED IN OPTICAL  
FIBRE COMMUNICATION SYSTEMS -  
PRODUCT SPECIFICATIONS -- PART 3-1:  
TYPE SG TERMINATED ON IEC 60793-2-10  
CATEGORY A1A, A1B OR EQUIVALENT  
MULTIMODE FIBRE FOR CATEGORY C"**

National Standards  
Authority of Ireland  
Glasnevin, Dublin 9  
Ireland

Tel: +353 1 807 3800  
Fax: +353 1 807 3838  
<http://www.nsai.ie>

**Sales**

<http://www.standards.ie>

*This Irish Standard was  
published under the authority  
of the National Standards  
Authority of Ireland and  
comes into effect on:  
26 May 2008*

**NO COPYING WITHOUT NSAI  
PERMISSION EXCEPT AS  
PERMITTED BY COPYRIGHT  
.....**

© NSAI 2008

**Price Code I**

Údarás um Chaighdeáin Náisiúnta na hÉireann

*This page is intentionally left BLANK.*

English version

**Connector sets and interconnect components  
to be used in optical fibre communication systems -  
Product specifications -  
Part 3-1: Type SG terminated on IEC 60793-2-10 category A1a, A1b  
or equivalent multimode fibre for category C**

Jeux de connecteurs et composants  
d'interconnexion à utiliser  
dans les systèmes de communication  
par fibres optiques -  
Spécifications de produits -  
Partie 3-1: Type SG, reliés à des fibres  
multimodales des catégories A1a, A1b  
ou équivalent de la CEI 60793-2-10  
pour usage en catégorie C

Steckverbindersätze  
und Verbindungselemente  
für Lichtwellenleiter-  
Datenübertragungssysteme -  
Produktnormen -  
Teil 3-1: Bauart SG zum Anschluss an  
Mehrmodenfasern der Kategorien  
A1a, A1b oder dergleichen nach  
IEC 60793-2-10 für Kategorie C

This European Standard was approved by CENELEC on 2007-12-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 European Standard 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, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the 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

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 Unique Acceptance Procedure and was approved by CENELEC as EN 50377-3-1 on 2007-12-01.

This European Standard supersedes EN 50377-3-1:2001.

This document is updated to include the performance of the adaptor, and patch cord next to the pigtailed connector as defined in the previous version. It also includes latest attenuation and return loss grades as specified in IEC.

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) 2008-12-01
  - latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 2010-12-01
-

**Connector sets and interconnect components to be used in optical fibre communication systems - Product specifications**

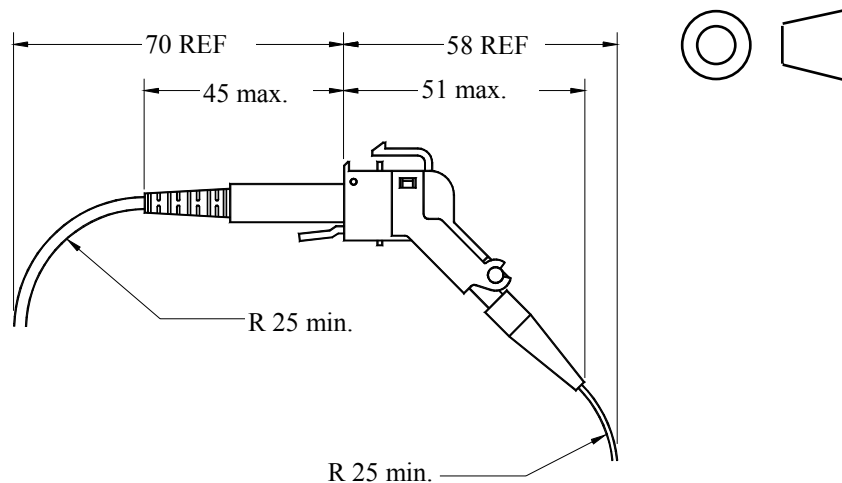
**Part 3-1: Type SG terminated on IEC 60793-2-10 category A1a, A1b or equivalent multimode fibre for category C**

Description		Performance	
Coupling mechanism:	Latched push-pull	Application:	For use in an IEC category C environment
Configuration:	Plug/socket	Attenuation grade: (random mate)	M: $\leq 0,75$ dB 95 % $\leq 0,5$ dB Mean $\leq 0,35$ dB
Fibre category:	EN 60793-2-10 Types A1a & A1b	Return loss grade: (random mate)	R: $\geq 20$ dB
Cable type:	See Table 2		

Related documents:

EN 50173	Information technology - Generic cabling systems
EN 60793-2	Optical fibres - Part 2: Product specifications - General (IEC 60793-2)
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 61753-022-2	Fibre optic interconnecting devices and passive components performance standard - Part 022-2: Fibre optic connectors terminated on multimode fibre for category C - Controlled environment (IEC 61753-022-2)
EN 186000-1	Generic Specification: Connector sets for optical fibres and cables - Part 1: Requirements, test methods and qualification approval procedures
ISO/IEC 11801	Information technology - Generic cabling for customers premises

Outline and maximum dimensions:



**Contents**

1	Scope .....	6
1.1	Product definition.....	6
1.2	Intermateability .....	6
1.3	Operating environment.....	6
1.4	Reliability.....	6
1.5	Quality assurance .....	6
2	Normative references.....	6
3	Description .....	7
3.1	Plug.....	7
3.2	Socket.....	8
3.3	Materials.....	8
3.4	Dimensions.....	8
3.5	Colour and marking.....	8
4	Variants .....	8
4.1	Terminated plug .....	8
4.2	Terminated socket .....	9
4.3	Identification of variants .....	9
5	Dimensional requirements.....	10
5.1	Outline dimensions.....	10
5.1.1	Plug variants .....	10
5.1.2	Socket variants .....	11
5.2	Mating face and other limit dimensions.....	12
5.2.1	Plug.....	12
5.2.2	Detail A: Plug fibre endtip geometry after termination .....	14
5.2.3	Socket .....	15
5.2.4	Detail B: Socket fibre endtip geometry after termination.....	17
6	Tests.....	17
6.1	Sample size.....	17
6.2	Test and measurement methods .....	18
6.3	Test sequence .....	18
6.4	Pass/fail criteria.....	18
7	Test report.....	18
8	Testing requirements .....	18
8.1	Dimensional requirements.....	18
8.2	Optical performance requirements.....	19
8.3	Mechanical performance requirements.....	20
8.4	Environmental performance requirements .....	23
	Annex A (normative) Sample size and product sourcing requirements.....	26
	Bibliography.....	27

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-