

IRISH STANDARD

I.S. EN 50377-5-1:2003

ICS 33.180.20

CONNECTOR SETS AND INTERCONNECT
COMPONENTS TO BE USED IN OPTICAL
FIBRE COMMUNICATION SYSTEMS -

PRODUCT SPECIFICATIONS

PART 5-1: TYPE EC TERMINATED ON IEC

60793-2 CATEGORY B1.1 SINGLEMODE

**FIBRE** 

National Standards Authority of Ireland Dublin 9 Ireland

Tel: (01) 807 3800 Tel: (01) 807 3838

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

May 23, 2003

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© NSAI 2003 Price Code I

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

## **EUROPEAN STANDARD**

### EN 50377-5-1

# NORME EUROPÉENNE

# **EUROPÄISCHE NORM**

March 2003

ICS 33.180.20

English version

# Connector sets and interconnect components to be used in optical fibre communication systems Product specifications Part 5-1: Type EC terminated on IEC 60793-2 category B1.1 singlemode fibre

Jeux de connecteurs et composants d'interconnexion à utiliser dans les systèmes de communication par fibres optiques – Spécifications de produit Partie 5-1: Type EC câblé sur une fibre unimodale de la catégorie B1.1 de la CEI 60793-2 Steckverbindersätze und Verbindungsbauelemente für Lichtwellenleiter-Datenübertragungssysteme – Produktnormen Teil 5-1: Bauart EC zum Anschluss von Einmodenfasern nach IEC 60793-2, Kategorie B1.1

This European Standard was approved by CENELEC on 2002-09-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and 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 connectors.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 50377-5-1 on 2002-09-01.

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) 2003-10-01

- latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 2005-09-01

Annexes designated "normative" are part of the body of the standard. Annexes designated "informative" are given for information only. In this standard, annexes A and B are normative.

# Connector sets and interconnected components to be used in optical fibre communication systems – Product specifications

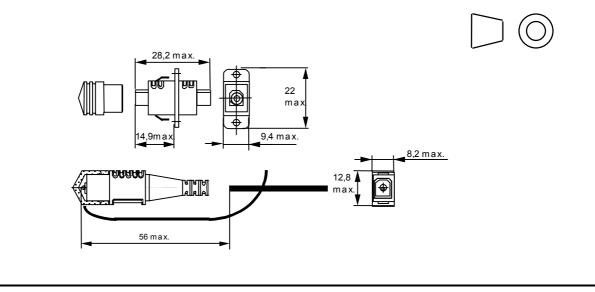
#### Part 5-1: EC terminated on IEC 60793-2 category B1.1 singlemode fibre

Description		Performance	
Coupling mechanism:	push/pull	Application:	EN 61753-2-1 category U and ETS 300 671 (see 1.3)
Configuration:	plug/adapter/plug	Attenuation Grades: (Random Mate)	P: $\leq 0.35$ dB mean. $\leq 1.0$ dB for $\geq 97$ % of measurements
Fibre Category:	IEC 60793-2 type B1.1		Q: $\leq$ 0,30 dB mean. $\leq$ 0,60 dB for $\geq$ 99 % of measurements
Cable Type	see Table 3	Return Loss:	≥ 60 dB

#### **Normative references:**

EN 50173 Information technology - Generic cabling systems EN 60794-2 Optical fibre cables -- Part 2: Indoor cables -- Sectional specification EN 61300 series Fibre optic interconnection devices and passive components - Basic test and measurement procedures EN 61753-2-1 Fibre optic connectors interconnecting devices and passive components performance standard -- Part 2-1: Fibre optic connectors terminated on singlemode fibre for category U - Uncontrolled environments EN 61754-8 Fibre optic connector interfaces – Part 8: Type CFO8 connector family ES 200 671 Transmission and Multiplexing (TM); Passive optical components; Optical fibre connectors for single mode optical fibre communication systems; Common requirements and conformance testing ETS 300 019-1-3 Equipment Engineering (EE); Environmental conditions and environmental tests for telecommunications equipment – Part 1-3: Classification of environmental conditions; Stationary use at weatherprotected locations IEC 60793-2 Optical fibres - Part 2: Product specifications

#### **Outline and maximum dimensions:**



## **CONTENTS**

1	Sco	pe	5	
1	1.1	Product definition	5	
1	1.2	Intermateability	5	
]	1.3	Operating environment	5	
]	1.4	Reliability	5	
]	1.5	Quality assurance	5	
2	Nor	mative references	6	
3	Des	cription	7	
3	3.1	Plug	7	
3	3.2	Adapter	7	
3	3.3	Materials	7	
3	3.4	Dimensions	7	
3	3.5	Colour and marking	7	
4	Var	iants	8	
2	4.1	Terminated plug	8	
4	4.2	Adapter	8	
4	4.3	Identification of variants	9	
5	Dim	ensional requirements	10	
	5.1 5.1.1 5.1.2	Outline dimensions  Plug variants  Adapter variants	10	
4	5.2	Mating face and other limit dimensions		
	5.2.1 5.2.2	Plug (see Figure 5)	14	
6		Adapter (see Figure 0)		
		Sample size		
	6.2	Test and measurement methods		
		Test sequence		
		Pass/fail criteria		
7 7		report		
		•		
8		ing requirements		
		Dimensional requirements		
		Optical performance requirements		
		Mechanical performance requirements		
		Environmental performance requirements		
		(normative) Sample size and product sourcing requirements		
An	ınex B	(normative) Reference connector details	27	



The is a new provider i arenade and chare publication at the limit below	This is a free preview.	Purchase the	entire publication	at the link below:
--	-------------------------	--------------	--------------------	--------------------

**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation