



SLOVENSKI STANDARD
SIST EN 61274-1:2008
01-marec-2008

BUXca Yý U.
SIST EN 61274-1:1997

Df]U[cX]b]_]fUXUdhf^]LnUcdh] bY_cbY_hcf^Y!`%`XY. FcXcj bUgdYWZ_UWUf#97
*%&+(!%&\$\$+L

Adaptors for fibre optic connectors - Part 1: Generic specification (IEC 61274-1:2007)

Kupplungen für Lichtwellenleiter - Teil 1: Fachgrundspezifikation (IEC 61274-1:2007)

Raccords de connecteurs de fibres optiques - Partie 1: Spécification générique (CEI 61274-1:2007)

ITeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 61274-1:2008
SIST EN 61274-1:2008
http://www.sist.si/standards/standards/61274-1:2008/49ac-9551-05b5d481912a/sist-en-61274-1-2008

ICS:

33.180.20

SIST EN 61274-1:2008

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 61274-1:2008

<https://standards.iteh.ai/catalog/standards/sist/47266f21-389f-49ac-9551-05b5d481912a/sist-en-61274-1-2008>

English version

**Adaptors for fibre optic connectors -
Part 1: Generic specification
(IEC 61274-1:2007)**

Raccords de connecteurs
de fibres optiques -
Partie 1: Spécification générique
(CEI 61274-1:2007)

Kupplungen für Lichtwellenleiter -
Teil 1: Fachgrundspezifikation
(IEC 61274-1:2007)

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.

<https://standards.iteh.ai/catalog/standards/sist/47266f21-389f-49ac-9551-0b034401712a/iec-61274-1:2008>

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

The text of document 86B/2486/FDIS, future edition 2 of IEC 61274-1, prepared by SC 86B, Fibre optic interconnecting devices and passive components, of IEC TC 86, Fibre optics, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61274-1 on 2007-12-01.

This European Standard supersedes EN 61274-1:1997.

The specific technical changes from EN 61274-1:1997 include the updating of the classification, specification system and standardization system.

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) 2008-09-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2010-12-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61274-1:2007 was approved by CENELEC as a European Standard without any modification. (standards.iteh.ai)

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

| | <u>SIST EN 61274-1:2008</u> |
|---------------|---|
| IEC 60874 | NOTE Harmonized in EN 60874 series (not modified). https://standards.iteh.ai/catalog/standards/sist/47266021-389f-49ac-9551-05b5d481912a/sist-en-61274-1-2008 |
| IEC 61274-1-1 | NOTE Harmonized as EN 61274-1-1:2006 (not modified). |
| IEC 61300-1 | NOTE Harmonized as EN 61300-1:2003 (not modified). |
| IEC 61300-2 | NOTE Harmonized in EN 61300-2 series (not modified). |
| IEC 61300-3 | NOTE Harmonized in EN 61300-3 series (not modified). |
| IEC 61754-2 | NOTE Harmonized as EN 61754-2:1997 (not modified). |
| IEC 61754-4 | NOTE Harmonized as EN 61754-4:1997 (not modified). |
| IEC 61754-13 | NOTE Harmonized as EN 61754-13:2006 (not modified). |

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-----------------|--|---------------|--------------------|
| IEC 60027 | Series | Letter symbols to be used in electrical technology | EN 60027 | Series |
| IEC 60050-731 | - ¹⁾ | International Electrotechnical Vocabulary (IEV) - Chapter 731: Optical fibre communication | - | - |
| IEC 60410 | - ¹⁾ | Sampling plans and procedures for inspection - by attributes | - | - |
| IEC 60617 | Data-base | Graphical symbols for diagrams | - | - |
| IEC 60695-11-5 | - ¹⁾ | Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance | EN 60695-11-5 | 2005 ²⁾ |
| IEC 60825-1 | - ¹⁾ | Safety of laser products - Part 1: Equipment classification and requirements | EN 60825-1 | 2007 ²⁾ |
| IEC 61300 | Series | Fibre optic interconnecting devices and passive components - Basic test and measurement procedures | EN 61300 | Series |
| IEC 61753 | Series | Fibre optic interconnecting devices and passive components performance standard | EN 61753 | Series |
| IEC 61753-1 | - ¹⁾ | Fibre optic interconnecting devices and passive components performance standard - Part 1: General and guidance for performance standards | EN 61753-1 | 2007 |
| IEC 61754 | Series | Fibre optic connector interfaces | EN 61754 | Series |
| IEC 61755 | Series | Fibre optic connector optical interfaces | EN 61755 | Series |
| IEC/TR 61930 | - ¹⁾ | Fibre optic graphical symbology | - | - |
| IEC/TR 61931 | - ¹⁾ | Fibre optic - Terminology | - | - |

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-----------------|--|--------------|--------------------|
| IEC QC 001002-2 | 1998 | IEC Quality Assessment System for Electronic Components (IECQ) - Rules of Procedure - Part 2: Documentation | - | - |
| IEC QC 001002-3 | 2005 | IEC Quality Assessment System for Electronic Components (IECQ) - Rules of Procedure - Part 3: Approval procedures | - | - |
| ISO 129-1 | - ¹⁾ | Technical drawings - Indication of dimensions - and tolerances - Part 1: General Principles | - | - |
| ISO 286-1 | - ¹⁾ | ISO system of limits and fits - Part 1: Bases of tolerances, deviations and fits | EN 20286-1 | 1993 ²⁾ |
| ISO 1101 | - ¹⁾ | Geometrical Product Specifications (GPS) - Geometrical tolerancing - Tolerances of form, orientation, location and run-out | EN ISO 1101 | 2005 ²⁾ |
| ISO 8601 | - ¹⁾ | Data elements and interchange formats - Information interchange - Representation of dates and times | - | - |

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 61274-1:2008

<https://standards.iteh.ai/catalog/standards/sist/47266f21-389f-49ac-9551-05b5d481912a/sist-en-61274-1-2008>

INTERNATIONAL
STANDARD
NORME
INTERNATIONALE

IEC
CEI

61274-1

Second edition
Deuxième édition
2007-04

Adaptors for fibre optic connectors –

**Part 1:
Generic specification**

**Raccords de connecteurs de fibres optiques –
(standards.iteh.ai)**

**Partie 1:
Spécification générique**

<https://standards.iteh.ai/catalog/standards/sist/47266f21-389f-49ac-9551-05b5d481912a/sist-en-61274-1-2008>



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

PRICE CODE
CODE PRIX

U

*For price, see current catalogue
Pour prix, voir catalogue en vigueur*

CONTENTS

| | |
|---|----|
| FOREWORD..... | 3 |
| INTRODUCTION..... | 5 |
| | |
| 1 Scope..... | 6 |
| 2 Normative references | 6 |
| 3 Terms and definitions | 7 |
| 4 Requirements | 9 |
| 4.1 Classification..... | 9 |
| 4.2 Documentation | 12 |
| 4.3 Standardization system | 15 |
| 4.4 Design and construction | 19 |
| 4.5 Quality | 20 |
| 4.6 Performance..... | 20 |
| 4.7 Identification and marking | 20 |
| 4.8 Packaging | 21 |
| 4.9 Storage conditions | 21 |
| 4.10 Safety | 21 |
| 5 Quality assessment procedures..... | 22 |
| 5.1 Primary stage of manufacture..... | 22 |
| 5.2 Structurally similar components..... | 22 |
| 5.3 Qualification Approval procedures..... | 22 |
| 5.4 Quality conformance inspection..... | 24 |
| 5.5 Certified records of released lots..... | 26 |
| 5.6 Delayed deliveries..... | 26 |
| 5.7 Delivery release before completion of group B tests | 26 |
| 5.8 Alternative test methods | 26 |
| 5.9 Unchecked parameters..... | 26 |
| | |
| Bibliography..... | 27 |
| | |
| Figure 1 – Standardization structure | 19 |
| | |
| Table 1 – Example of a typical adaptor classification | 10 |
| Table 2 – Three-level specification structure..... | 13 |
| Table 3 – Standards interlink matrix..... | 19 |

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ADAPTORS FOR FIBRE OPTIC CONNECTORS –**Part 1: Generic specification**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with an IEC Publication.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 61274-1 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This second edition cancels and replaces the first edition published in 1994, and constitutes a technical revision. The specific technical changes from the previous edition include the updating of the classification, specification system and standardization system.

The text of this standard is based on the following documents:

| | |
|---------------|------------------|
| FDIS | Report on voting |
| 86B/2486/FDIS | 86B/2524/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.

The QC number that appears on the front cover of this publication is the specification number in the IEC Quality Assessment System for Electronic Components (IECQ).

IEC 61274 consists of the following parts, under the general title *Adaptors for fibre optic connectors*:

Part 1: Generic specification

Part 1-1: Blank detail specification

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.

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

SIST EN 61274-1:2008

<https://standards.iteh.ai/catalog/standards/sist/47266f21-389f-49ac-9551-05b5d481912a/sist-en-61274-1-2008>

INTRODUCTION

This part of IEC 61274 is divided into five clauses.

Clauses 1, 2 and 3 contain general information pertaining to this generic specification.

Clause 4 is entitled "Requirements" and contains all the requirements to be met by adaptors covered by this standard. This includes requirements for classification, the IEC specification system, documentation, materials, workmanship, quality, performance, identification and packaging.

NOTE Clauses 1 to 4 are applicable generally and refer to all adaptor standards, while Clause 5 relates to IEC qualification alone.

Clause 5 is entitled "Quality assessment procedures" and contains all of the procedures which must be followed for proper quality assessment of products covered by this standard.

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

SIST EN 61274-1:2008

<https://standards.iteh.ai/catalog/standards/sist/47266f21-389f-49ac-9551-05b5d481912a/sist-en-61274-1-2008>

ADAPTORS FOR FIBRE OPTIC CONNECTORS –

Part 1: Generic specification

1 Scope

This part of IEC 61274 applies to fibre optic adaptors for all types, sizes and structures of optical fibre connectors. It includes:

- adaptor requirements;
- quality assessment procedures.

This standard does not cover test and measurement procedures, which are described in IEC 61300-1, IEC 61300-2 and IEC 61300-3.

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.

References made to a specific clause or subclause of a standard include all subclauses of the reference unless otherwise specified.

IECQ 001002-2:1998, *IEC Quality Assessment System for Electronic Components (IECQ) – Rules of procedure – Part 2: Documentation*

IECQ 001002-3:2005, *IEC Quality Assessment System for Electronic Components (IECQ) – Rules of procedure – Part 3: Approval procedures*

IEC 60027 (all parts), *Letter symbols to be used in electrical technology*

IEC 60050-731, *International Electrotechnical Vocabulary (IEV) – Chapter 731: Optical fibre communication*

IEC 60410, *Sampling plans and procedures for inspection by attributes*

IEC 60617, *Graphical symbols for diagrams*

IEC 60695-11-5, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

IEC 60825-1, *Safety of laser products – Part 1: Equipment classification, requirements and user's guide*

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 – Part 1: General and guidance for performance standards*

IEC 61754 (all parts), *Fibre optic connector interfaces*

IEC 61755 (all parts), *Fibre optic connector optical interfaces*