SLOVENSKI STANDARD
SIST EN 61978-1:2014

01-oktober-2014

Nadomešča:
SIST EN 61978-1:2010

Optični spojni elementi in pasivne komponente - Optični pasivni kompenzatorji barvne razpršenosti - 1. del: Rodovna specifikacija (IEC 61978-1:2014)

Fibre optic interconnecting devices and passive components - Fibre optic passive chromatic dispersion compensators - Part 1: Generic specification

Dispositifs d'interconnexion et composants passifs à fibres optiques - Compensateurs de dispersion chromatique passifs à fibres optiques - Partie 1: Spécification générique

Ta slovenski standard je istoveten z: **EN 61978-1:2014**

ICS:

33.180.20	Povezovalne naprave za optična vlakna	Fibre optic interconnecting devices

SIST EN 61978-1:2014 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

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EN 61978-1

August 2014

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English Version

Fibre optic interconnecting devices and passive components - Fibre optic passive chromatic dispersion compensators - Part 1: Generic specification (IEC 61978-1:2014)

Dispositifs d'interconnexion et composants passifs à fibres optiques - Compensateurs de dispersion chromatique passifs à fibres optiques - Partie 1: Spécification générique (CEI 61978-1:2014)

Lichtwellenleiter - Verbindungselemente und passive Bauteile - Passive Lichtwellenleiter - Kompensatoren mit chromatischer Dispersion - Teil 1: Fachgrundspezifikation (IEC 61978-1:2014)

This European Standard was approved by CENELEC on 2014-06-27. 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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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

Foreword

The text of document 86B/3639/CDV, future edition 3 of IEC 61978-1, 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 approved by CENELEC as EN 61978-1:2014.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2015-03-27
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2017-06-27

This document supersedes EN 61978-1:2010.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61978-1:2014 was approved by CENELEC as a European Standard without any modification.

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

IEC 60068 Series	NOTE	Harmonized as EN 60068 Series.
IEC 60869-1	NOTE	Harmonized as EN 60869-1.
IEC 60874 Series	NOTE	Harmonized as EN 60874 Series.
IEC 60974 Series	NOTE	Harmonized as EN 60974 Series.
IEC 61073-1	NOTE	Harmonized as EN 61073-1.
IEC 61300-1	NOTE	Harmonized as EN 61300-1.
IEC 61300-2 Series	NOTE	Harmonized as EN 61300-2 Series.
IEC 61300-3 Series	NOTE	Harmonized as EN 61300-3 Series.
IEC 61753 Series	NOTE	Harmonized as EN 61753 Series.
IEC 61754 Series	NOTE	Harmonized as EN 61754 Series.
IEC 61754-4	NOTE	Harmonized as EN 61754-4.
IEC 61754-13	NOTE	Harmonized as EN 61754-13.
IEC 61754-15	NOTE	Harmonized as EN 61754-15.
IEC 62005 Series	NOTE	Harmonized as EN 62005 Series.

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 When an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu

Publication	Year	Title	EN/HD	Year
IEC 60027 series		Letter symbols to be used in electrical technology	-	-
IEC 60050-731	-	International Electrotechnical Vocabulary (IEV) - Chapter 731: Optical fibre communication	-	-
IEC 60617 series	-	Standard data element types with associated classification scheme for electric components	-	-
IEC 60695-11-5	-	Fire hazard testing - Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance	EN 60695-11-5	-
IEC 60793-2-50	2012	Optical fibres - Part 2-50: Product specifications - Sectional specification for class B single-mode fibres	EN 60793-2-50	2013
IEC 60825 series	-	Radiation safety of laser products, equipment classification, requirements and user's guide	EN 60825 series	-
IEC 61300 series		Fibre optic interconnecting devices and passive components - Basic test and measurement procedures	EN 61300 series	-
IEC 61300-3-38	-	Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-38:Examinations and measurements - Group delay, chromatic dispersion and phase ripple	EN 61300-3-38	-
IEC Guide 102	-	Electronic components - Specification structures for quality assessment (Qualification approval and capability approval)	-	-
ISO 129-1	-	Technical drawings - Indication of dimensions and tolerances - Part 1: General principles	-	-
ISO 286-1	-	Geometrical product specifications (GPS) – ISO coding system for tolerances on linear sizes – Part 1: Basis of tolerances, deviations and fits	EN ISO 286-1	-
ISO 1101	-	Geometrical Product Specifications (GPS) – Geometrical tolerancing – Tolerances of form, orientation, location and run-out	-	-

Publication	Year	Title	EN/HD	Year
ISO 8601	-	Data elements and interchange formats - Information interchange - Representation of dates and times	-	-
IEC/TR 61930	-	Fibre optic graphical symbology	-	-

IEC 61978-1

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INTERNATIONAL STANDARD

colour inside

Fibre optic interconnecting devices and passive components – Fibre optic passive chromatic dispersion compensators – Part 1: Generic specification

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CONTENTS

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FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC PASSIVE CHROMATIC DISPERSION COMPENSATORS –

Part 1: Generic specification

FOREWORD

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International Standard IEC 61978-1 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

This third edition cancels and replaces the second edition, published in 2009, and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) introduction of new terms and definitions;

b) revision of classifications;

c) addition of Annex E.

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

CDV	Report on voting
86B/3639/CDV	86B/3710/RVC

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.

A list of all parts in the IEC 61978 series, published under the general title *Fibre optic interconnecting devices and passive components – Fibre optic passive chromatic dispersion compensators,* can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability 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.

A bilingual version of this publication may be issued at a later date.

IMPORTANT – The "colour inside" logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this publication using a colour printer.

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – FIBRE OPTIC PASSIVE CHROMATIC DISPERSION COMPENSATORS –

Part 1: Generic specification

1 Scope

This part of IEC 61978 applies to fibre optic passive chromatic dispersion compensators, all exhibiting the following features:

– they are optically passive;

– they have an optical input and an optical output for transmitting optical power;

– the ports are optical fibres or optical fibre connectors;

– they are wavelength sensitive;

– they may be polarization sensitive.

This standard establishes uniform requirements for the passive chromatic dispersion compensator.

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.

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

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

IEC 60617 (all parts), *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 60793-2-50:2012, *Optical fibres – Part 2-50: Product specifications – Sectional specification for class B single-mode fibres*

IEC 60825 (all parts), *Safety of laser products*

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

IEC 61300-3-38, *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-38: Examinations and measurements – Group delay, chromatic dispersion and phase ripple*

IEC TR 61930, *Fibre optic graphical symbology*