

Irish Standard I.S. EN 61300-2-55:2017

Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-55: Tests - Strength of mounted adaptor

© CENELEC 2017 No copying without NSAI permission except as permitted by copyright law.

I.S. EN 61300-2-55:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R.~xxx: Standard~Recommendation-recommendation~based~on~the~consensus~of~an~expert~panel~and~subject~to~public~consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:

Published:

EN 61300-2-55:2017

2017-06-09

This document was published under the authority of the NSAI and comes into effect on:

ICS number:

33.180.20

2017-06-27

Northwood, Santry

NOTE: If blank see CEN/CENELEC cover page

Sales:

NSAI T +353 1 807 3800 1 Swift Square, F +353 1 807 3838

F +353 1 807 3838 T +353 1 857 6730 E standards@nsai.ie F +353 1 857 6729

Dublin 9 W NSAI.ie W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

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

National Foreword

I.S. EN 61300-2-55:2017 is the adopted Irish version of the European Document EN 61300-2-55:2017, Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 2-55: Tests - Strength of mounted adaptor

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

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

This page is intentionally left blank

This is a free page sample. Access the full version online. I.S. EN 61300-2-55:2017

EUROPEAN STANDARD

EN 61300-2-55

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2017

ICS 33.180.20

English Version

Fibre optic interconnecting devices and passive components -Basic test and measurement procedures - Part 2-55: Tests -Strength of mounted adaptor (IEC 61300-2-55:2017)

Dispositifs d'interconnexion et composants passifs fibroniques - Procédures fondamentales d'essais et de mesures - Partie 2-55: Essais - Résistance du raccord monté (IEC 61300-2-55:2017) Lichtwellenleiter Verbindungselemente und passive Bauteile - Grundlegende Prüf- und Messverfahren - Teil 2-55: Prüfungen - Stabilität der Befestigung eines montierten Adapters (IEC 61300-2-55:2017)

This European Standard was approved by CENELEC on 2017-04-13. 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, Serbia, 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

EN 61300-2-55:2017

European foreword

The text of document 86B/4054/FDIS, future edition 1 of IEC 61300-2-55, 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 61300-2-55:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at (dop) 2018-01-13 national level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with (dow) 2020-04-13 the document have to be withdrawn

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

Endorsement notice

The text of the International Standard IEC 61300-2-55:2017 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 61753-1 NOTE Harmonized as EN 61753-1.

EN 61300-2-55:2017

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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	EN/HD	Year
IEC 61300-1	-	Fibre optic interconnecting devices passive components - Basic test		-
		measurement procedures - Part 1: Ge and guidance		
IEC 61300-3-1	-	Fibre optic interconnecting devices passive components - Basic test measurement procedures Part Examinations and measurements - V examination	and 3-1:	-

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

This page is intentionally left blank



IEC 61300-2-55

Edition 1.0 2017-03

INTERNATIONAL STANDARD

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –

Part 2-55: Tests – Strength of mounted adaptor





THIS PUBLICATION IS COPYRIGHT PROTECTED Copyright © 2017 IEC, Geneva, Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either IEC or IEC's member National Committee in the country of the requester. If you have any questions about IEC copyright or have an enquiry about obtaining additional rights to this publication, please contact the address below or your local IEC member National Committee for further information.

IEC Central Office Tel.: +41 22 919 02 11 3, rue de Varembé Fax: +41 22 919 03 00

CH-1211 Geneva 20 info@iec.ch Switzerland www.iec.ch

About the IEC

The International Electrotechnical Commission (IEC) is the leading global organization that prepares and publishes International Standards for all electrical, electronic and related technologies.

About IEC publications

The technical content of IEC publications is kept under constant review by the IEC. Please make sure that you have the latest edition, a corrigenda or an amendment might have been published.

IEC Catalogue - webstore.iec.ch/catalogue

The stand-alone application for consulting the entire bibliographical information on IEC International Standards, Technical Specifications, Technical Reports and other documents. Available for PC, Mac OS, Android Tablets and iPad

IEC publications search - www.iec.ch/searchpub

The advanced search enables to find IEC publications by a variety of criteria (reference number, text, technical committee,...). It also gives information on projects, replaced and withdrawn publications.

IEC Just Published - webstore.iec.ch/justpublished

Stay up to date on all new IEC publications. Just Published details all new publications released. Available online and also once a month by email.

Electropedia - www.electropedia.org

The world's leading online dictionary of electronic and electrical terms containing 20 000 terms and definitions in English and French, with equivalent terms in 16 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.

IEC Glossary - std.iec.ch/glossary

65 000 electrotechnical terminology entries in English and French extracted from the Terms and Definitions clause of IEC publications issued since 2002. Some entries have been collected from earlier publications of IEC TC 37, 77, 86 and CISPR.

IEC Customer Service Centre - webstore.iec.ch/csc

If you wish to give us your feedback on this publication or need further assistance, please contact the Customer Service Centre: csc@iec.ch.



IEC 61300-2-55

Edition 1.0 2017-03

INTERNATIONAL STANDARD

Fibre optic interconnecting devices and passive components – Basic test and measurement procedures –

Part 2-55: Tests - Strength of mounted adaptor

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 33.180.20 ISBN 978-2-8322-4076-2

Warning! Make sure that you obtained this publication from an authorized distributor.

- 2 - IEC 61300-2-55:2017 © IEC 2017

CONTENTS

F(DREW	ORD	4	
1	Sco	pe	6	
2	Nor	mative references	6	
3	Terr	ns and definitions	6	
4	Gen	eral description	6	
5		aratus		
_	5.1	Loading method		
	5.1.	G		
	5.1.			
	5.1.			
	5.2	Force generator	8	
	5.3	Force gauge	8	
	5.4	Holding fixture	8	
	5.5	Fixture	8	
	5.6	Timer		
6	Pro	cedure	9	
	6.1	General description	9	
	6.2	Pre-conditioning	9	
	6.3	Initial examination and measurement		
	6.4	Mount DUT		
	6.5	Conditioning		
	6.6	Recovery		
_	6.7	Final examination and measurement		
7		erity		
8		ails to be specified		
		(normative) Fixture information		
Bi	bliogra	phy	15	
Fi	gure 1	– Example of test apparatus for method A	7	
Fi	gure 2	– Example of test apparatus for method B	8	
Fi	gure A	.1 – Fixture cut-out information for SC simplex adaptor	11	
Fi	gure A	.2 – Fixture cut-out information for SC duplex adaptor	11	
Fi	gure A	.3 – Fixture cut-out information for LC simplex adaptor	12	
Fi	aure A	.4 – Fixture cut-out information for LC duplex (square flange) adaptor	12	
	_	.5 – Fixture cut-out information for LC duplex (rectangular flange) adaptor		
	•	.6 – Fixture cut-out information for LC quad (rectangular flange) adaptor		
		.7 – Fixture cut-out information for MPO adaptor		
г	guie A	7 - Fixture cut-out information for MFO adaptor	13	
Ta	able 1 -	- Recommended severity value	9	
Ta	able A.	1 – Dimensions for SC simplex adaptor	11	
Table A.2 – Dimensions for SC duplex adaptor				
		3 – Dimensions for LC simplex adaptor		
		4 – Dimensions for LC duplex (square flange) adaptor		

This is a free page sample. Access the full version online. I.S. EN 61300-2-55:2017

IEC 61300-2-55:2017 © IEC 2017	- 3 -	
Table A.5 – Dimensions for LC duplex (rect	angular flange) adaptor	13
Table A.6 – Dimensions for LC quad (recta	ngular flange) adaptor	13
Table A.7 – Dimensions for MPO adaptor		14

-4 -

IEC 61300-2-55:2017 © IEC 2017

INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-55: Tests - Strength of mounted adaptor

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 itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 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 61300-2-55 has been prepared by subcommittee 86B: Fibre optic interconnecting devices and passive components, of IEC technical committee 86: Fibre optics.

The text of this International Standard is based on the following documents:

FDIS	Report on voting	
86B/4054/FDIS	86B/4067/RVD	

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

IEC 61300-2-55:2017 © IEC 2017

- 5 -

A list of all parts in the IEC 61300 series, published under the general title *Fibre optic interconnecting devices and passive components – Basic test and measurement procedures,* can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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

- 6 - IEC 61300-2-55:2017 © IEC 2017

FIBRE OPTIC INTERCONNECTING DEVICES AND PASSIVE COMPONENTS – BASIC TEST AND MEASUREMENT PROCEDURES –

Part 2-55: Tests - Strength of mounted adaptor

1 Scope

This part of IEC 61300 describes the test procedure to measure the mounting strength of an optical adaptor or receptacle to a fixture.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 61300-1, Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 1: General and guidance

IEC 61300-3-1, Fibre optic interconnecting devices and passive components – Basic test and measurement procedures – Part 3-1: Examinations and measurements – Visual examination

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

4 General description

The device under test (DUT) is an optical connector adaptor or receptacle mounted to a fixture. A force is applied to the adaptor or receptacle at the specified rate until the required load has been reached.

5 Apparatus

5.1 Loading method

5.1.1 General

The test apparatus shall be capable of applying an axial load to the DUT. Two methods for applying the load are shown in Figure 1 and Figure 2.



Product Page

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