

STN	Systémy elektroinštalačných rúrok na uloženie káblov Časť 22: Osobitné požiadavky Ohybné systémy elektroinštalačných rúrok	STN EN IEC 61386-22 37 0000
------------	---	---

Conduit Systems for cable management - Part 22: Particular requirements - Pliable conduit systems

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/21

Obsahuje: EN IEC 61386-22:2021, IEC 61386-22:2021

Oznámením tejto normy sa od 17.05.2024 ruší
STN EN 61386-22 (37 0000) z decembra 2004

133620

EUROPEAN STANDARD

EN IEC 61386-22

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2021

ICS 29.120.10

Supersedes EN 61386-22:2004 and all of its
amendments and corrigenda (if any)

English Version

**Conduit Systems for cable management - Part 22: Particular
requirements - Pliable conduit systems
(IEC 61386-22:2021)**

Systèmes de conduits pour la gestion du câblage –
Partie 22: Exigences particulières - Systèmes de conduits
cintrables
(IEC 61386-22:2021)

Elektroinstallationsrohrsysteme für die Kabel- und
Leitungsverlegung - Teil 22: Besondere Anforderungen für
biegsame Elektroinstallationsrohrsysteme
(IEC 61386-22:2021)

This European Standard was approved by CENELEC on 2021-05-17. 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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, 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: Rue de la Science 23, B-1040 Brussels

EN IEC 61386-22:2021 (E)**European foreword**

The text of document 23A/951/FDIS, future edition 2 of IEC 61386-22, prepared by SC 23A "Cable management systems" of IEC/TC 23 "Electrical accessories" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 61386-22:2021.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2022-05-17 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2024-05-17 document have to be withdrawn

This document supersedes EN 61386-22:2004 and all of its amendments and corrigenda (if any).

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.

This document has been prepared under a mandate given to CENELEC by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For the relationship with EU Directive(s) see informative Annex ZZ, which is an integral part of EN 61386-1:2008/A1:2019.

Endorsement notice

The text of the International Standard IEC 61386-22:2021 was approved by CENELEC as a European Standard without any modification.



IEC 61386-22

Edition 2.0 2021-04

INTERNATIONAL STANDARD

**Conduit systems for cable management –
Part 22: Particular requirements – Pliable conduit systems**



**THIS PUBLICATION IS COPYRIGHT PROTECTED****Copyright © 2021 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
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
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 corrigendum or an amendment might have been published.

IEC publications search - webstore.iec.ch/advsearchform

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 once a month by email.

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: sales@iec.ch.

IEC online collection - oc.iec.ch

Discover our powerful search engine and read freely all the publications previews. With a subscription you will always have access to up to date content tailored to your needs.

Electropedia - www.electropedia.org

The world's leading online dictionary on electrotechnology, containing more than 22 000 terminological entries in English and French, with equivalent terms in 18 additional languages. Also known as the International Electrotechnical Vocabulary (IEV) online.



IEC 61386-22

Edition 2.0 2021-04

INTERNATIONAL STANDARD

**Conduit systems for cable management –
Part 22: Particular requirements – Pliable conduit systems**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

ICS 29.120.10

ISBN 978-2-8322-9666-0

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

CONTENTS

FOREWORD	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 General requirements	5
5 General conditions for tests	5
6 Classification	5
7 Marking and documentation	5
8 Dimensions	6
9 Construction	7
10 Mechanical properties	7
11 Electrical properties	9
12 Thermal properties	9
13 Fire hazard	9
14 External influences	9
15 Electromagnetic compatibility	9
Annex A (normative) Classification coding for conduit systems	13
Annex B (normative) Determination of material thickness	13
Annex C (normative) Additional test requirements for conduit systems already complying with IEC 61386-1:2008	13
Annex AA (informative) Calculation for minimum and maximum rate of increase of force for 10.2.4	14
Figure 101 – Bending test apparatus	10
Figure 102 – Gauge for checking the minimum inside diameter of the conduit system after impact, bending, and resistance to heat tests	11
Figure 103 – Assembly of conduit and terminating conduit fitting for bonding test	12
Figure AA.1 – Graph showing force against time for 750 N force	14
Table 101 – Thread lengths	6
Table 102 – Maximum entry diameter and minimum entry length details	7
Table AA.1 – Minimum and maximum rate of increase of force for 10.2.4	15

INTERNATIONAL ELECTROTECHNICAL COMMISSION

CONDUIT SYSTEMS FOR CABLE MANAGEMENT –

Part 22: Particular requirements – Pliable conduit systems

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 61386-22 has been prepared by subcommittee 23A: Cable management systems, of IEC technical committee 23: Electrical accessories:

This second edition cancels and replaces the first edition published in 2002. This edition constitutes a technical revision.

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

- a) Annex AA has been added to provide guidance on the application of a constantly increasing force.

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

FDIS	Report on voting
23A/951/FDIS	23A/956/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.

A list of all the parts in the IEC 61386 series, published under the general title *Conduit systems for cable management*, can be found on the IEC website.

This document is to be used in conjunction with IEC 61386-1:2008 and IEC 61386-1:2008/AMD1:2017.

This document supplements or modifies the corresponding clauses of IEC 61386-1:2008 and IEC 61386-1:2008/AMD1:2017. Where a particular clause or subclause of IEC 61386-1:2008 and IEC 61386-1:2008/AMD1:2017 is not mentioned in this document, that clause or subclause applies as far as is reasonable. Where this document states "addition", "modification" or "replacement", the relevant text of IEC 61386-1:2008 and IEC 61386-1:2008/AMD1:2017 is to be adapted accordingly.

Subclauses, tables and figures which are in addition to those in IEC 61386-1:2008 and IEC 61386-1:2008/AMD1:2017 are numbered starting with 101. Annexes which are additional to those in IEC 61386-1:2008 and IEC 61386-1:2008/AMD1:2017 are lettered AA, BB, etc.

In this document, the following print types are used:

- Requirements proper: in roman type.
- *Test specifications: in italic type.*
- Explanatory matter: in smaller roman type.

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.

CONDUIT SYSTEMS FOR CABLE MANAGEMENT –

Part 22: Particular requirements – Pliable conduit systems

1 Scope

Clause 1 of IEC 61386-1:2008 is applicable, except as follows:

Addition:

This part of IEC 61386 specifies the requirements for pliable conduit systems including self-recovering conduit systems.

2 Normative references

Clause 2 of IEC 61386-1:2008 and of IEC 61386-1:2008/AMD1:2017 are applicable, except as follows:

Addition:

IEC 61386-1:2008, *Conduit systems for cable management – Part 1: General requirements*
IEC 61386-1:2008/AMD1:2017

koniec náhľadu – text ďalej pokračuje v platenej verzii STN