

Lamedad polüvinüülkloriidmantliga paindkaablid

Flat polyvinyl chloride sheathed flexible cables

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50214:2007 sisaldab Euroopa standardi EN 50214:2006 + AC:2007 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 17.01.2007 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 22.11.2006.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 50214:2007 consists of the English text of the European standard EN 50214:2006 + AC:2007.

This standard is ratified with the order of Estonian Centre for Standardisation dated 17.01.2007 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 22.11.2006.

The standard is available from Estonian standardisation organisation.

ICS 29.060.20

Võtmesõnad: construction, definition, dimension, electric cable, flexible cable, goods lift, insulated cable, insulation, lift, marking, polyvinyl chloride, sheath, specification, test

Standardite reprodutseerimis- ja levitamisoigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega:
Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Flat polyvinyl chloride sheathed flexible cables

Câbles souples méplats gainés
en polychlorure de vinyle

Flache PVC-ummantelte
Steuerleitungen

This European Standard was approved by CENELEC on 2006-10-01. 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, 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

This European Standard was prepared for Technical Committee CENELEC TC 20, Electric cables, with the agreement of CEN TC 10, Lifts, escalators and moving walks.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50214 on 2006-10-01.

This European Standard supersedes EN 50214:1997 and HD 359 S2:1990.

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) 2007-10-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2008-10-01

The contents of the corrigendum of December 2007 have been included in this copy.

Contents

	Page
1 Scope	5
2 Normative references	5
3 Definitions	6
4 Requirements for the construction of cables	7
4.1 General	7
4.2 Core identification	7
4.3 Telecommunication Units	7
5 Flat PVC sheathed flexible cables for low rise lifts.....	8
5.1 Code designation	8
5.2 Rated voltage.....	8
5.3 Construction	8
5.4 Tests.....	10
6 Flat PVC sheathed flexible cables, of rated voltage 300/500 V, for high rise, high speed lifts	11
6.1 Code designation	11
6.2 Rated voltage.....	11
6.3 Construction	11
6.4 Tests.....	13
7 Flat PVC sheathed flexible cable of rated voltage 450/750 V	16
7.1 Code designation	16
7.2 Rated voltage.....	16
7.3 Construction	16
7.4 Tests.....	18
8 Test methods	19
9 Marking.....	19
9.1 General	19
9.2 Common Marking	19
10 Guide to use.....	19
Annex A (normative) Test methods	20
Annex B (informative) Guide to use	26
Figure 1 – Cable without strain bearing member	10
Figure 2 – Cable with strain bearing member	10
Figure A.1 – Adherence test for strain bearing member (method 1)	23
Figure A.2 – Adherence test for strain bearing member (method 2, showing two examples of clamping device)	24
Figure A.3 – Adherence between cores and sheath	25
Table 1 – Composition of cables.....	8
Table 2 – Grouping of cores.....	9
Table 3 – General data.....	10
Table 4 – Composition of cables.....	12

Table 5 – General data.....	13
Table 6 – List of applicable tests	14
Table 7 – List of additional applicable tests for cables with strain bearing member(s).....	15
Table 8 – Composition of cables.....	16
Table 9 – Grouping of cores.....	17
Table 10 – General Data	18
Table 11 – List of Applicable Tests	18

1 Scope

This European Standard covers the construction, requirements and particular test methods for flat, flexible PVC insulated and PVC sheathed cables, of rated voltage U_0/U 300/500 V, for use in passenger and goods lifts (elevators), and U_0/U 450/750 V for general purposes and for special applications such as hoists and travelling cranes.

Cables of composite construction (for instance, cables with cores of different sizes) are not specified, but conditions are given for the inclusion of telecommunication units into the cables.

NOTE 1 This revision is in accordance with an agreement with CEN TC 10 to specify in the same standard a) flexible cables for lifts as required by EN 81, and b) flexible cable for applications such as hoists and travelling cranes, previously found in HD 359. In accordance with this agreement only those cables in Clauses 5 and 6 are suitable for use with EN 81.

NOTE 2 The limits for the overall diameter of the cables have been calculated in accordance with EN 60719.

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.

EN 81 Series	Safety rules for the construction and installation of lifts
EN 50334	Marking by inscription for the identification of cores of electric cables
EN 50363 Series	Insulating, sheathing and covering materials for low voltage energy cables
EN 50395	Electrical test methods for low voltage energy cables
EN 50396	Non electrical test methods for low voltage energy cables
EN 60228	Conductors of insulated cables (IEC 60228)
EN 60332-1-2	Tests on electric and optical fibre cables under fire conditions - Part 1-2: Test for vertical flame propagation for a single insulated wire or cable - Procedure for 1 kW pre-mixed flame (IEC 60332-1-2)
EN 60719	Calculation of the lower and upper limits for the average outer dimensions of cables with circular copper conductors and of rated voltages up to and including 450/750V (IEC 60719)
EN 60811 Series	Insulating and sheathing materials of electric and optical cables - Common test methods (IEC 60811 series)
HD 21 Series	Cables of rated voltages up to and including 450/750 V and having thermoplastic insulation
HD 308	Identification of cores in cables and flexible cords
IEC 60227-6	Polyvinyl chloride insulated cables of rated voltages up to and including 450/750 V - Part 6: Lift cables and cables for flexible connections