

This document is a preview generated by EVS

**Kommunikatsioonikaablid. Katsetusmeetodid.**  
**Osa 1-4: Elektrilised katsetusmeetodid.**  
**Isolatsioonitakistus**

Communication cables - Specifications for test methods - Part 1-4: Electrical test methods - Insulation resistance

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 50289-1-4:2002 sisaldb Euroopa standardi EN 50289-1-4:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 50289-1-4:2002 consists of the English text of the European standard EN 50289-1-4:2001.
Standard on kinnitatud Eesti Standardikeskuse 15.10.2002 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 15.10.2002 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 28.06.2001.	Date of Availability of the European standard text 28.06.2001.
Standard on kätesaadav Eesti standardiorganisatsionist.	The standard is available from Estonian standardisation organisation.

**ICS** 33.120.20

**Võtmesõnad:** analog signals, cables, communication cables, definition, definitions, digital, digital signals, electric cables, electrical engineering, electrical resistance, electrical testing, insulating resistance, insulations, marking, specification, telecommunication, testing

**Standardite reproduutseerimis- ja levitamisõigus 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](http://www.evs.ee); Telefon: 605 5050; E-post: [info@evs.ee](mailto:info@evs.ee)

English version

**Communication cables -  
Specifications for test methods  
Part 1-4: Electrical test methods - Insulation resistance**

Câbles de communication -  
Spécifications des méthodes d'essai  
Partie 1-4: Méthodes d'essais électriques -  
Résistance d'isolement

Kommunikationskabel -  
Spezifikationen für Prüfverfahren  
Teil 1-4: Elektrische Prüfverfahren -  
Isolationswiderstand

This European Standard was approved by CENELEC on 2001-03-01. 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and 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 by SC 46XC, Multicore, Multipair and Quad Data communication cables, of Technical Committee CENELEC TC 46X, Communication cables.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50289-1-4 on 2001-03-01.

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) 2002-04-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2004-04-01

This European Standard has been prepared under the European Mandate M/212 given to CENELEC by the European Commission and the European Free Trade Association.

---

## Contents

<b>Foreword .....</b>	<b>1</b>
<b>1 Scope.....</b>	<b>4</b>
<b>2 Normative references .....</b>	<b>4</b>
<b>3 Definitions .....</b>	<b>4</b>
<b>4 Test method.....</b>	<b>5</b>
<b>4.1 Equipment.....</b>	<b>5</b>
<b>4.2 Test sample .....</b>	<b>5</b>
<b>4.3 Procedure .....</b>	<b>5</b>
<b>4.3.1 Core test .....</b>	<b>5</b>
<b>4.3.2 Group test .....</b>	<b>5</b>
<b>4.3.3 Coaxial cables.....</b>	<b>5</b>
<b>5 Expression of test results .....</b>	<b>6</b>
<b>6 Test report .....</b>	<b>6</b>

## 1 Scope

Part 1-4 of EN 50289 details the test methods to determine the insulation resistance of the finished cables used in analogue and digital communication systems.

It is to be read in conjunction with Part 1-1 of EN 50289, which contains essential provisions for its application.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 50289-1-1      2001      Communication cables – Specifications for tests methods -- Part 1-1: Electrical test methods – General requirements

EN 50290-1-2<sup>1)</sup>      -      Communication cables -- Part 1-2: Definitions

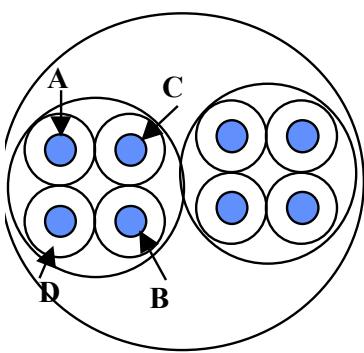
## 3 Definitions

For the purposes of this European Standard, the definitions given in EN 50290-1-2 apply in addition to the following ones.

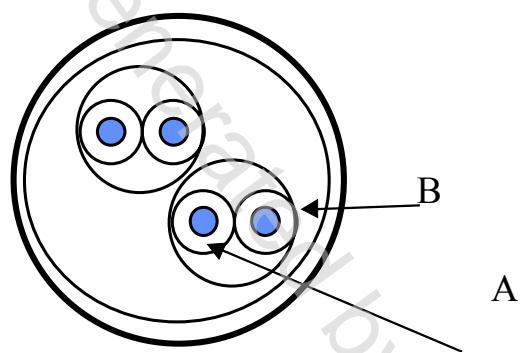
### 3.1

#### group test

the group test for multi-element cables (if applicable) is the test between two specified groups of conductors each of which *has all its conductors connected together*:



**Figure 1 – Starquads**



**Figure 2 – Pairs**

<sup>1)</sup> At draft stage