



# SLOVENSKI STANDARD

## SIST EN 50289-3-8:2002

01-september-2002

---

### Communication cables - Specifications for test methods - Part 3-8: Mechanical test methods - Abrasion resistance of cable sheath markings

Communication cables - Specifications for test methods -- Part 3-8: Mechanical test methods - Abrasion resistance of cable sheath markings

Kommunikationskabel - Spezifikationen für Prüfverfahren -- Teil 3-8: Mechanische Prüfverfahren - Abriebfestigkeit der Markierung des Kabelmantels

Câbles de communication - Spécifications des méthodes d'essai -- Partie 3-8: Méthodes d'essais mécaniques - Résistance à l'abrasion du marquage de la gaine

[https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-](https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002)

Ta slovenski standard je istoveten z: **EN 50289-3-8:2001**

---

#### **ICS:**

33.120.10      Koaksialni kabli. Valovodi      Coaxial cables. Waveguides

**SIST EN 50289-3-8:2002**

**en**

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 50289-3-8:2002](#)

<https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002>

EUROPEAN STANDARD

**EN 50289-3-8**

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2001

ICS 33.120.10

English version

**Communication cables -  
Specifications for test methods  
Part 3-8: Mechanical test methods -  
Abrasion resistance of cable sheath markings**

Câbles de communication -  
Spécifications des méthodes d'essai  
Partie 3-8: Méthodes d'essais mécaniques  
- Résistance à l'abrasion du marquage de  
la gaine

Kommunikationskabel -  
Spezifikationen für Prüfverfahren  
Teil 3-8: Mechanische Prüfverfahren -  
Abriebfestigkeit der Markierung des  
Kabelmantels

**iTeh STANDARD PREVIEW**  
**(standards.iteh.ai)**

[SIST EN 50289-3-8:2002](https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002)

<https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002>

This European Standard was approved by CENELEC on 2001-05-01. 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 the 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 50289-3-8 on 2001-05-01.

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.

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 50289-3-8:2002](https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002)

<https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002>

## Contents

<b>1</b>	<b>Scope .....</b>	<b>4</b>
<b>2</b>	<b>Normative references.....</b>	<b>4</b>
<b>3</b>	<b>Definitions .....</b>	<b>4</b>
<b>4</b>	<b>Test methods.....</b>	<b>4</b>
<b>4.1</b>	<b>Equipment.....</b>	<b>4</b>
	4.1.1 <i>Method 1</i> .....	4
	4.1.2 <i>Method 2</i> .....	5
<b>4.2</b>	<b>Test sample.....</b>	<b>5</b>
<b>4.3</b>	<b>Procedure.....</b>	<b>5</b>
	4.3.1 <i>Method 1</i> .....	5
	4.3.2 <i>Method 2</i> .....	5
<b>4.4</b>	<b>Requirements .....</b>	<b>5</b>
<b>5</b>	<b>Test report .....</b>	<b>6</b>

## iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN 50289-3-8:2002](https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002)

<https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002>

## 1 Scope

This Part 3-8 of EN 50289 details the method of test to determine the abrasion resistance of cable sheath markings used in analogue and digital communication systems.

It is to be read in conjunction with Part 3-1 of EN 50289, which contains essential provisions for its application.

Depending on the kind of marking and as indicated in the relevant cable specification, one of the following two methods shall be used:

- Method 1: suitable for rigid marking types like embossing, indenting and sintering;
- Method 2: applicable to marking types other than embossing, indenting and sintering.

## 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 50289-3-1	2001	Communication cables - Specifications for test methods -- Part 3-1: Mechanical 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 of EN 50290-1-2 apply.

## 4 Test methods

### 4.1 Equipment

#### 4.1.1 Method 1

A typical apparatus is shown in Figure 1.

The device is designed to abrade the marking of the cable parallel to the longitudinal axis of the cable over a length of 40 mm at a frequency of 55 cycles/min  $\pm$  5 cycles/min. One cycle consists of one abrading edge movement in each direction.

The abrading edge shall be a steel needle with a diameter of 1 mm or as specified in the relevant cable specification.

---

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

#### 4.1.2 Method 2

The apparatus consists of:

- a test set-up, to apply a force to the wool felt. A typical example is shown in Figure 2;
- a wool felt, colour white;
- masses to apply a force to the sample.

#### 4.2 Test sample

The sample shall be of a length sufficient to carry out the test specified. A typical length is 750 mm.

#### 4.3 Procedure

##### 4.3.1 Method 1

Securely attach the cable sample, measuring approximately 750 mm in length, to the supporting plate by means of cable clamps. Carry out the test with the sample mounted so that the marking is directly under the abrading edge. Load the abrading edge with the mass necessary to provide the force specified in the relevant cable specification whilst avoiding shock on the cable.

##### 4.3.2 Method 2

A sample of cable containing markings shall be laid between the two parts of the wool felt.

The wool felt shall be thoroughly impregnated with water.

The normal force ( $F$ ) given in the relevant cable specification shall be applied to the markings on the sample which is moved back and forth over a length of 100 mm. The number of cycles shall be specified in the relevant cable specification.

#### 4.4 Requirements

The marking shall be legible at the completion of the test after the number of cycles specified in the relevant cable specification.

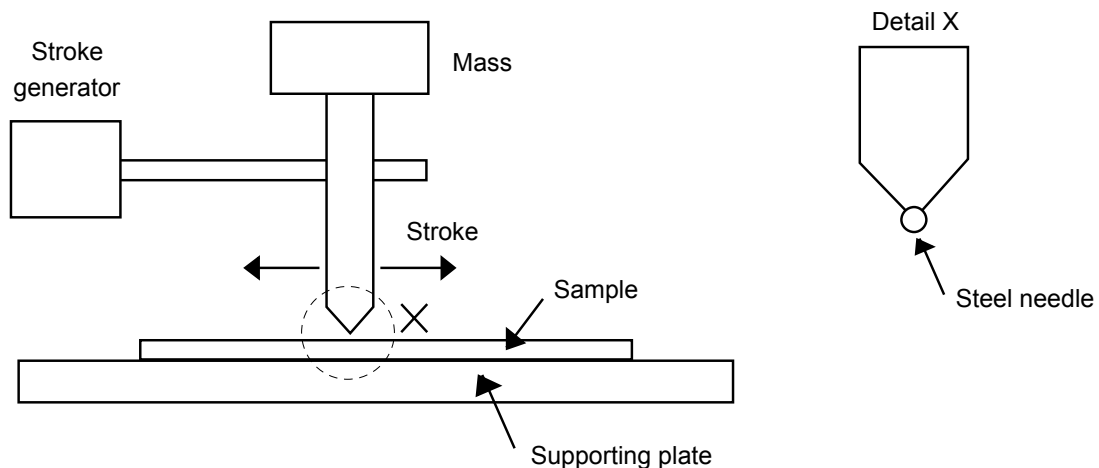


Figure 1 - Typical test set-up for method 1

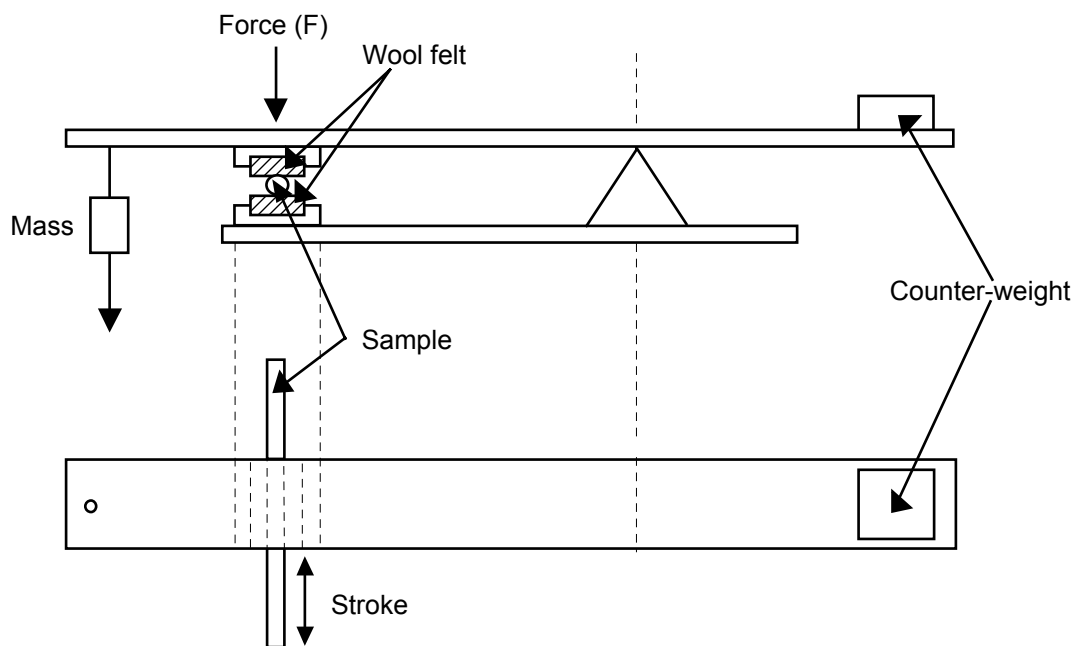


Figure 2 - Typical test set-up for method 2

## 5 Test report

## iTeh STANDARD PREVIEW

The test report shall include: **(standards.iteh.ai)**

- number of cycles;
- method used; [SIST EN 50289-3-8:2002](https://standards.iteh.ai/catalog/standards/sist/89fe82af-6b8d-4833-9cfb-d6d61ec7f7d6/sist-en-50289-3-8-2002)
- diameter of needle (Method 1);
- force applied;
- pass/fail criteria.