

**Tekstiil. Lõng pakmelt. Ühekordse lõnga
katkevuskoormuse ja katkepikenemise
määramine**

Textiles - Yarns from packages - Determination of
single-end breaking force and elongation at break

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 2062:2000 sisaldab Euroopa standardi EN ISO 2062:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 2062:2000 consists of the English text of the European standard EN ISO 2062:1995.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>See rahvusvaheline standard määrab kindlaks meetodid pakendatud tekstiilõngade katketugevuse ja katkevenivuse määramiseks. On antud neli meetodit: A - käsitsimeetod; materjalinäidis võetakse otse konditsioneeritud pakenditest. B: automaatne; materjalinäidis võetakse otse konditsioneeritud pakenditest; C: käsitsimeetod; relakseeritud proovipasmaseid kasutatakse pärast konditsioneerimist; D: käsitsimeetod; materjalinäidiseid kasutatakse pärast märgamist.</p>	<p>Scope:</p>
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ICS 59.080.20

Võtmesõnad: katkekoormus, katkevenivus, katsed, lõngad, määramine, tekstiil, tõmbekatsed

ICS 59.080.20

Descriptors: Textiles, yarns, testing, tensile testing.

English version

Textiles

Yarns from packages

**Determination of single-end breaking force and elongation at break
(ISO 2062:1993)**

Textiles; fils sur enroulements; détermination de la force de rupture et l'allongement à la rupture du fil individuel (ISO 2062:1993)

Textilien; Garne von Aufmachungseinheiten; Bestimmung der Höchstzugkraft und Höchstzugkraftdehnung von Garnabschnitten (ISO 2062:1993)

This European Standard was approved by CEN on 1994-12-12 and is identical to the ISO Standard as referred to.

CEN 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 CEN 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 CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 2062:1993 Textiles; yarns from packages; determination of single-end breaking force and elongation at break which was prepared by ISO/TC 38 'Textiles' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 248 'Textiles and textile products' as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by October 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of the International Standard ISO 2062:1993 (corrected and reprinted 1995) was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

Introduction

In the 1950s and 1960s when this International Standard was first prepared, three types of tensile tester were in wide use: constant rate of specimen extension (CRE), constant rate of travel (CRT), and constant rate of loading (CRL). It was therefore advisable to state the rate of operation in a way which would be common to all three types of tester. In addition, the best possible agreement was sought between test results of the three types of tester. Consequently, the principle of constant time to break was adopted and 20 s to break was chosen for this International Standard and also for a number of national standards.

In the early 1990s when the present revision was prepared, CRE testers were recognized as the best type, while CRT and CRL testers were quickly becoming obsolete. However, since CRT and CRL testers are still in use internationally, the procedure for using them is included in an informative annex. There is no assurance that the results from the three types of tester will agree.

This International Standard considers CRE testers only, so the time-to-break principle is no longer needed and a simpler statement of rate of displacement is used. The rate of extension of 100 % per minute is adopted as standard, but higher rates are permitted by agreement for automatic testers.

1 Scope

1.1 This International Standard specifies methods for the determination of the breaking force and elongation at break of textile yarns taken from packages.

Four methods are given:

- A: manual; specimens are taken directly from conditioned packages;
- B: automatic; specimens are taken directly from conditioned packages;
- C: manual; relaxed test skeins are used after conditioning;
- D: manual; specimens are used after wetting.

1.2 Method C should be used in cases of dispute regarding elongation at break of the yarn.

NOTE 1 Methods A, B and C are expected to give the same results for yarn strength but method C may give somewhat truer (and higher) values of elongation than A or B. Method D is likely to give results differing, for both breaking force and elongation at break, from those obtained by method A, B or C.

1.3 This International Standard specifies methods using constant rate of specimen extension (CRE) tensile testers. Testing on the now obsolete constant rate of travel (CRT) and constant rate of loading (CRL) instruments is covered, for information, in annex A, in recognition of the fact that these instruments are still popular and may be used by agreement.

1.4 This International Standard applies to all types of yarn except glass yarns, elastomeric yarns, aramid yarns, ceramic yarns, carbon yarns and polyolefin tape yarns.

1) To be published. (Revision of ISO 2060:1972)

NOTE 2 A method for the testing of glass yarns is given in ISO 3341:1984, *Textile glass — Yarns — Determination of breaking force and breaking elongation*.

1.5 This International Standard is applicable to yarns from packages but can be applied to yarns extracted from fabrics, subject to agreement between the interested parties.

1.6 It is intended for the single-end (single-strand) testing of yarns.

NOTE 3 The skein method of testing is given in ISO 6939:1988, *Textiles — Yarns from packages — Method of test for breaking strength of yarn by the skein method*.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 139:1973, *Textiles — Standard atmospheres for conditioning and testing*.

ISO 2060:—¹⁾, *Textiles — Yarn from packages — Determination of linear density (mass per unit length) by the skein method*.

3 Definitions

For the purposes of this International Standard, the following definitions apply.