

**Textiles - Tensile properties of fabrics - Part 2: Determination of maximum force using the grab method**

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Determination of maximum force using the grab  
method

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 13934-2:2001 sisaldab Euroopa standardi EN ISO 13934-2:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.06.2001 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 13934-2:2001 consists of the English text of the European standard EN ISO 13934-2:1999.</p> <p>This document is endorsed on 18.06.2001 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><b>Käsitlusala:</b></p> <p>This part of EN ISO 13934 describes the determination of maximum force of textile fabrics known as the grab test. Part 1 of EN ISO 13934 will describe the method known as the strip test. The method is mainly applicable to woven textile fabrics. It may be applicable to fabrics produced by other techniques. It is not normally applicable to woven elastic fabrics, geotextiles, nonwovens, coated fabrics, textile-glass woven fabrics and fabrics made from carbon fibres or polyolefin tape yarns. The method deals with test specimens in equilibrium with the standard atmosphere for testing or with test specimens in the wet state.</p>	<p><b>Scope:</b></p> <p>This part of EN ISO 13934 describes the determination of maximum force of textile fabrics known as the grab test. Part 1 of EN ISO 13934 will describe the method known as the strip test. The method is mainly applicable to woven textile fabrics. It may be applicable to fabrics produced by other techniques. It is not normally applicable to woven elastic fabrics, geotextiles, nonwovens, coated fabrics, textile-glass woven fabrics and fabrics made from carbon fibres or polyolefin tape yarns. The method deals with test specimens in equilibrium with the standard atmosphere for testing or with test specimens in the wet state.</p>
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**Võtmesõnad:** breaking load, determination, fabrics, mechanical tests, pull-out tests, specimen preparation, tension tests, textile products, textiles

**English version**

Textiles

**Tensile properties of fabrics**

**Part 2: Determination of maximum force using the grab method  
(ISO 13934-2 : 1999)**

Textiles – Propriétés des étoffes en traction – Partie 2: Détermination de la force maximale par la méthode d'arrachement (Grab test)  
(ISO 13934-2 : 1999)

Textilien – Zugeigenschaften von textilen Flächengebilden – Teil 2: Bestimmung der Höchstzugkraft mit dem Grab-Zugversuch  
(ISO 13934-2 : 1999)

This European Standard was approved by CEN on 1998-11-21.

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.

The European Standards exist 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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

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

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

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## Foreword

The text of EN ISO 13934-2:1999 has been prepared by Technical Committee CEN/TC 248 "Textiles and textile products", the secretariat of which is held by BSI, in collaboration with Technical Committee ISO/TC 38 "Textiles".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 1999, and conflicting national standards shall be withdrawn at the latest by August 1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

This part of EN ISO 13934 has been prepared in the context of several test methods for determination of certain mechanical properties of textiles using mainly tensile testing machines, e.g. tensile properties, seam tensile properties, tear properties, seam slippage. The procedures for these International Standards agree where appropriate. The results obtained by one of the methods should not be compared with those obtained by the other methods. See annex D for informative references.

This edition cancels and replaces ISO 5082:1982.

EN ISO 13934 consists of the following parts, under the general title Textiles - Tensile properties of fabrics:

- Part 1: Determination of maximum force and elongation at maximum force using the strip method
- Part 2: Determination of maximum force using the grab method

Annexes A, B, C and D of this part of EN ISO 13934 are for information only.

## 1 Scope

This part of EN ISO 13934 specifies a procedure for the determination of maximum force of textile fabrics known as the grab test.

Note : Part 1 of EN ISO 13934 describes the method known as the strip test. For informative references see annex D.

The method is mainly applicable to woven textile fabrics. It may be applicable to fabrics produced by other techniques. It is not normally applicable to woven elastic fabrics, geotextiles, nonwovens, coated fabrics, textile-glass woven fabrics and fabrics made from carbon fibres or polyolefin tape yarns (see annex D).

The method specifies the determination of the maximum force of test specimens in equilibrium with the standard atmosphere for testing and of test specimens in the wet state.

The method is restricted to the use of constant rate of extension (CRE) testing machines.

## 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.

EN 20139	Textiles - Standard atmospheres for conditioning and testing (ISO 139:1973)
ISO 3696	Water for analytical laboratory use - Specification and test methods
EN 10002-2	Metallic materials - Tensile testing - Part 2: Verification of the force measuring system of the tensile testing machines
EN 30012-1	Quality assurance requirements for measuring equipment - Part 1: Metrological confirmation system for measuring equipment (ISO 10012-1:1992)