

**Automaatne
tulekahjusignalisatsioonisüsteem. Osa
12: Suitsudetektorid. Optilist valguskiirt
kasutavad joondetektorid**

Fire detection and fire alarm systems - Part 12:
Smoke detectors - Line detectors using an optical
light beam

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 54-12:2003 sisaldab Euroopa standardi EN 54-12:2002 ingliskeelset teksti. Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 54-12:2003 consists of the English text of the European standard EN 54-12:2002. This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This European Standard specifies requirements, test methods and performance criteria for line smoke detectors utilising the attenuation and/or changes in attenuation of an optical beam, for use in fire detection systems installed in buildings	Scope: This European Standard specifies requirements, test methods and performance criteria for line smoke detectors utilising the attenuation and/or changes in attenuation of an optical beam, for use in fire detection systems installed in buildings
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ICS 13.220.20

Võtmesõnad: detectors, fire equipment, li, marking, measuring instruments, optical, optical equipment, optical instruments, scattered light, smoke, smoke detectors, specification (approval), specifications, testing, transmitted lights, warning devices, warning systems, vibration

ICS 13.220.20

English version

Fire detection and fire alarm systems - Part 12: Smoke detectors - Line detectors using an optical light beam

Systèmes de détection et d'alarme incendie - Partie 12:
DéTECTEURS de fumée - DéTECTEURS linéaires fonctionnant
suivant le principe de la transmission d'un faisceau d'ondes
optiques rayonnées

Brandmeldeanlagen - Teil 12: Rauchmelder -
Linienförmiger Melder nach dem Durchlichtprinzip

This European Standard was approved by CEN on 19 August 2002.

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 Management Centre 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 Management Centre has the same status as the official versions.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document EN 54-12:2002 has been prepared by Technical Committee CEN/TC 72 "Fire detection and fire alarm systems", the secretariat of which is held by BSI.

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 May 2003, and conflicting national standards shall be withdrawn at the latest by November 2005.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This standard has been prepared in cooperation with the CEA (Comité Européen des Assurances) and with EURALARM (Association of European Manufacturers of Fire and Intruder Alarm Systems).

Information on the relationship between this European Standard and other standards of the EN 54 series is given in annex A of EN 54-1:1996.

In this European Standard the annexes A to G are normative.

This document includes a Bibliography.

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, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies requirements, test methods and performance criteria for line smoke detectors utilising the attenuation and/or changes in attenuation of an optical beam, for use in fire detection systems installed in buildings.

This European Standard does not cover:

—Line smoke detectors designed to operate with separations between opposed components of less than 1 m;

—Line smoke detectors whose optical path length is defined or adjusted by an integral mechanical connection;

Line smoke detectors with special characteristics, which cannot be assessed by the test methods in this European Standard.

NOTE The term "optical" is used to describe that part of the electromagnetic spectrum produced by the transmitter to which the receiver is responsive; this is not restricted to visible wavelengths.

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 54-1	1996	<i>Fire detection and fire alarm systems - Part 1: Introduction.</i>
EN 54-7		<i>Fire detection and fire alarm systems - Part 7: Smoke detectors - Point detectors using scattered light, transmitted light or ionization.</i>
EN 50130-4	1995	<i>Alarm systems - Part 4: Electromagnetic compatibility - Product family standard: Immunity requirements for components of fire, intruder and social alarm systems.</i>
EN 60064		<i>Tungsten filament lamps for domestic and similar general lighting purposes. Performance requirements (IEC 60064:1993, modified).</i>
EN 60068-1		<i>Environmental testing - Part 1: General and guidance (IEC 60068-1:1988 + Corrigendum 1988 + A1:1992).</i>
EN 60068-2-1	1993	<i>Environmental testing - Part 2: Tests - Test A: Cold (IEC 60068-2-1:1990).</i>
EN 60068-2-2	1993	<i>Basic environmental testing procedures - Part 2: Tests - Test B: dry heat (IEC 60068-2-2:1974 + IEC 68-2-2A:1976).</i>
EN 60068-2-6	1995	<i>Environmental testing - Part 2: Tests - Test Fc: Vibration, (sinusoidal) (IEC 60068-2-6:1995 + Corrigendum 1995).</i>
EN 60068-2-75		<i>Environmental testing - Part 2: Tests - Test Eh: Hammer tests (IEC 60068-2-75:1997).</i>
EN 60081		<i>Double-capped fluorescent lamps - Performance specifications (IEC 60081:1997).</i>
HD 323.2.3 S2		<i>Basic environmental testing procedures - Part 2: tests; test Ca: damp heat, steady state.</i>

- HD 323.2.56 S1 1990 *Basic environmental testing procedures - Part 2: Tests - Test Cb: Damp heat, steady state, primarily for equipment.*
- IEC 60068-2-42 1982 *Basic environmental testing procedures - Part 2: Tests - Test Kc: Sulphur dioxide test for contacts and connections.*

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