

**Paiksed tulekustutussüsteemid.
Gaasikustutussüsteemide
komponendid. Osa 9: Nõuded ja
kontrollmeetodid spetsiaalsetele
tuledetektoritele**

Fixed firefighting systems - Components for gas
extinguishing systems - Part 9: Requirements and
test methods for special fire detectors

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12094-9:2003 sisaldab Euroopa standardi EN 12094-9:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.04.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12094-9:2003 consists of the English text of the European standard EN 12094-9:2003.</p> <p>This document is endorsed on 15.04.2003 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: This European Standard specifies requirements and test methods for special fire detectors, other than fire detectors covered by EN 54-1, used in CO₂-, Inert gas- or Halocarbon gas and other fire extinguishing systems</p>	<p>Scope: This European Standard specifies requirements and test methods for special fire detectors, other than fire detectors covered by EN 54-1, used in CO₂-, Inert gas- or Halocarbon gas and other fire extinguishing systems</p>
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ICS 13.220.20

Võtmesõnad: f, fire equipment, fire extinguishing apparatus, fire extinguishing equipment, fire fighting, fire safety, firefighting, firefighting equipment, fixed extinguishers, flexible, gaseous, specification (approval), specifications, stationary, test specimens, testing

ICS 13.220.20

English version

Fixed firefighting systems - Components for gas extinguishing systems - Part 9: Requirements and test methods for special fire detectors

Installations fixes de lutte contre l'incendie - Eléments constitutifs pour installations d'extinction à gaz - Partie 9: Exigences et méthodes d'essai pour détecteurs spéciaux

Ortsfeste Brandbekämpfungsanlagen - Bauteile für Löschanlagen mit gasförmigen Löschmitteln - Teil 9: Anforderungen und Prüfverfahren für spezielle Branderkennungselemente

This European Standard was approved by CEN on 10 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 12094-9:2003) has been prepared by Technical Committee CEN/TC 191 "Fixed firefighting 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 September 2003, and conflicting national standards shall be withdrawn at the latest by September 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 89/106/EEC.

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

This part of EN 12094 is one of a number of European Standards prepared by CEN/TC 191 covering components for gas extinguishing systems.

They are included in a series of European Standards planned to cover:

- gas extinguishing systems (EN 12094)
- sprinkler systems (EN 12259:1999+A1 and EN 12845)
- powder systems (EN 12416)
- explosion protection systems (EN 26184)
- foam systems (EN 13565)
- hose systems (EN 671)
- smoke and heat control systems (EN 12101)
- water spray systems¹⁾

This European Standard has the general title "*Fixed firefighting systems – Components for gas extinguishing systems*" and will consist of the following parts:

- Part 1: *Requirements and test methods for electrical automatic control and delay devices*
- Part 2: *Requirements and test methods for non-electrical automatic control and delay devices*
- Part 3: *Requirements and test methods for manual triggering and stop devices*
- Part 4: *Requirements and test methods for high-pressure container valve assemblies and their actuators*
- Part 5: *Requirements and test methods for high and low pressure selector valves and their actuators for CO₂ systems*
- Part 6: *Requirements and test methods for non-electrical disable devices for CO₂ systems*

¹⁾ Under preparation.

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- Part 7: *Requirements and test methods for nozzles for CO₂ systems*
- Part 8: *Requirements and test methods for flexible connectors for CO₂ systems*
- Part 9: *Requirements and test methods for special fire detectors*
- Part 10: *Requirements and test methods for pressure gauges and pressure switches*
- Part 11: *Requirements and test methods for mechanical weighing devices*
- Part 12: *Requirements and test methods for pneumatic alarm devices*
- Part 13: *Requirements and test methods for check valves and non-return valves*
- Part 16: *Requirements and test methods for odorizing devices for CO₂ low pressure systems*
- Part 17: *Pipe hangers*
- Part 20: *Requirements and test methods for the compatibility of components*

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

It has been assumed in the preparation of this European Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people.

All pressure data in this European Standard are given as gauge pressures in bar, unless otherwise stated.

NOTE 1 bar = 10^5 N m^{-2} = 100 kPa.

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1 Scope

This European Standard specifies requirements and test methods for special fire detectors, other than fire detectors covered by EN 54-1, used in CO₂, Inert gas- or Halocarbon gas and other fire extinguishing systems.

This European Standard covers special fire detectors, which react

- by bursting of a glass bulb or
- by melting of a fusible element.

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, *Fire detection and fire alarm systems - Part 1: Introduction*.

EN 12259-1:1999+A1, *Fixed firefighting systems - Components for sprinkler and water spray systems - Part 1: Sprinklers*.

EN 60068-2-6, *Environmental testing - Part 2: Tests - Tests Fc: Vibration (sinusoidal) (IEC 60068-2-6:1995 + Corrigendum 1995)*.

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

3.1

CO₂-high-pressure installation

fire extinguishing installation in which the CO₂ is stored at ambient temperature

NOTE The pressure of the CO₂ in storage is $p_{abs} = 58,6$ bar at 21 °C.

3.2

CO₂-low-pressure installation

fire extinguishing installation in which the CO₂ is stored at low temperature, normally – 19 °C to – 21 °C

3.3

fire detector

component as defined in EN 54-1

3.4

halocarbon gas

extinguishing agent that contains as primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine or iodine

3.5

halocarbon gas installation

fire extinguishing installation in which the halocarbon gas is stored at ambient temperature