

**Paiksed tulekustutussüsteemid.
Gaasikustutussüsteemide komponendid.
Osa 5: Nõuded ja katsemeetodid kõrg- ja
madalrõhu valikklappidele ja nende
aktivaatoritele**

Fixed firefighting systems - Components for gas
extinguishing systems - Part 5: Requirements and
test methods for high and low pressure selector
valves and their actuators

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12094-5:2006 sisaldab Euroopa standardi EN 12094-5:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 29.05.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12094-5:2006 consists of the English text of the European standard EN 12094-5:2006.</p> <p>This document is endorsed on 29.05.2006 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 describes test methods for selector valves and their actuators used in CO₂ -, Inert Gas- or Halocarbon gas fire extinguishing systems.</p>	<p>Scope: This European Standard specifies requirements and describes test methods for selector valves and their actuators used in CO₂ -, Inert Gas- or Halocarbon gas fire extinguishing systems.</p>
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English Version

Fixed firefighting systems - Components for gas extinguishing systems - Part 5: Requirements and test methods for high and low pressure selector valves and their actuators

Installations fixes de lutte contre l'incendie - Éléments constitutifs des installations d'extinction à gaz - Partie 5: Exigences et méthodes d'essai pour vannes directionnelles haute et basse pression et leurs déclencheurs

Ortsfeste Brandbekämpfungsanlagen - Bauteile für Löschanlagen mit gasförmigen Löschmitteln - Teil 5: Anforderungen und Prüfverfahren für Hoch- und Niederdruck-Bereichsventile und zugehörige Auslöseeinrichtungen

This European Standard was approved by CEN on 9 March 2006.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This European Standard (EN 12094-5:2006) 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 October 2006, and conflicting national standards shall be withdrawn at the latest by April 2009.

This European Standard supersedes EN 12094-5:2000.

This European Standard 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 European Standard.

This European Standard is part of a series concerned with gas extinguishing system components.

The following European Standards are planned to cover:

- gas extinguishing systems (EN 12094),
- sprinkler systems (EN 12259 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 systems (EN 14816).

This 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 container valve assemblies and their actuators,
- Part 5: Requirements and test methods for high and low pressure selector valves and their actuators,
- Part 6: Requirements and test methods for non-electrical disable devices,
- Part 7: Requirements and test methods for nozzles for CO₂ systems,

- Part 8: Requirements and test methods for connectors,
- 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 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and 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.

1 Scope

This European Standard specifies requirements and describes test methods for selector valves and their actuators used in CO₂ -, Inert Gas- or Halocarbon gas fire extinguishing systems.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN ISO 9001:2000, *Quality management systems — Requirements* (ISO 9001:2000)

3 Terms and definitions

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

3.1

actuator

component which causes a valve to operate

3.2

closing time

time for the sealing device of the valve to move from its fully open position to its fully closed position

3.3

CO₂-high-pressure installation

fire extinguishing installation in which the CO₂ is stored at ambient temperature. For example, the pressure of the CO₂ in storage is $p_{abs} = 58,6$ bar at 21 °C

3.4

CO₂-low-pressure installation

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

3.5

fill ratio

mass of extinguishing medium related to the net capacity of a container expressed as kilograms per litre (kg/l)

3.6

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

3.7

Halocarbon Gas installation

fire extinguishing installation in which the Halocarbon Gas is stored at ambient temperature

3.8

Inert Gas

non liquefied gas or mixture of gases which extinguish the fire mainly by reducing the oxygen-concentration in the protected zone, such as Argon, Nitrogen or mixtures of these gases with CO₂