

**Paiksed tulekustutussüsteemid.
Gaasikustutussüsteemide
komponendid. Osa 10: Nõuded ja
katsemeetodid manomeetritele ja
survelülititele.**

Fixed firefighting systems - Components for gas
extinguishing systems - Part 10: Requirements and
test methods for pressure guages and pressure
switches

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12094-10:2003 sisaldab Euroopa standardi EN 12094-10:2003 ingliskeelset teksti. Käesolev dokument on jõustatud 06.06.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12094-10:2003 consists of the English text of the European standard EN 12094-10:2003. This document is endorsed on 06.06.2003 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: Käesolev Euroopa standard määratleb nõuded ja kirjeldab katsemeetodeid manomeetri-tele ja surveülilitele. Manomeetreid kasutatakse näiteks mitteveeldatud inertgaasidega või survestatud halo-geenitud süsivesinikgaasidega täidetud tulekustutussüsteemide piloot-, juhtimis-, häire- ja kustutusainemahutite talitluse jälgimiseks. Surveüliteid kasutatakse näiteks mitteveeldatud inertgaasidega või survestatud halo-geenitud süsivesinikgaasidega täidetud tulekustutussüsteemide piloot-, juhtimis-, häire- ja kustutusainemahutite talitluse jälgimiseks ja lekke kaugavastamiseks.	Scope:
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ICS 13.220.20

Võtmesõnad:

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English version

Fixed firefighting systems - Components for gas extinguishing systems - Part 10: Requirements and test methods for pressure gauges and pressure switches

Installations fixes de lutte contre l'incendie - Eléments constitutifs pour installations d'extinction à gaz - Partie 10: Exigences et méthodes d'essai pour manomètres et contacts à pression

Ortsfeste Brandbekämpfungsanlagen - Bauteile für Löschanlagen mit gasförmigen Löschmitteln - Teil 10: Anforderungen und Prüfverfahren für Druckmessgeräte und Druckschalter

This European Standard was approved by CEN on 13 February 2003.

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 12094-10:2003) 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 October 2003, and conflicting national standards shall be withdrawn at the latest by April 2006.

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 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 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 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
- Part 7: Requirements and test methods for nozzles for CO₂ systems

1) under preparation

- 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: Requirements and test methods for pipe hangers
- Part 20: Requirements and test methods for compatibility of components

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, 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.

1 Scope

This European Standard specifies requirements and describes test methods for pressure gauges and pressure switches.

This European Standard is applicable for pressure gauges for monitoring of pilot, control, alarm and storage containers of fire extinguishing systems filled with non-liquefied inert gases or pressurized halocarbon gases.

This European Standard is applicable for pressure switches for monitoring of pilot, control, alarm and storage containers of fire extinguishing systems filled with non-liquefied inert gases or pressurized halocarbon gases and remote indication of leakage.

This European Standard does not cover discharge indicating pressure switches.

2 Normative references

This European Standard incorporates by dated or undated references, 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 837-1 : 1996, *Pressure gauges - Part 1: Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing*.

EN 60529, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*.

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. For example, 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

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

3.4

halocarbon gas installation

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

3.5

inert gas

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

3.6

inert gas installation

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